EASTRIDGE TO BART REGIONAL CONNECTOR PROJECT

CAPITOL EXPRESSWAY LIGHT RAIL PROJECT

SPECIFICATIONS – 95% SUBMITTAL
VOLUME 4
ATTACHMENTS

JUNE 2020

Santa Clara Valley Transportation Authority

Solutions that move you

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END OF SECTION

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VTA – Alum Rock BRT Project

Santa Clara Valley Transportation Authority
X NO EXCEPTIONS TAKEN
_____ MAKE CORRECTIONS NOTED
_____ AMEND AND RESUBMIT
Any action shown above is subject to the terms of the contract and does not relieve the contractor of any of its obligations under the contract, including design and detailing
Contract No. C4130
By: _____ Date: 8/27/15

TOLAR

Primary Shelter

Installation Procedures

Shelter Manufacturer's Installation Instructions

PRIMARY SHELTER – INSTALLATION PROCEDURE

1. Columns.

Sets of columns (3) will be provided based in the master schedule (doc).
Columns A, B & C will be identified (due to dimensional differences in the base plate features) a color marking in the base plate (green for the oversized hole plates) will determine the oversized ones.
Prior to setting the columns please observe that the columns that have cabinet attachment brackets (A & C) should be towards left and iconic column structure (column B) should flare towards the right, from the front elevation of the shelter point of view, (see figure 1).

Each column has to be transported to the jobsite then lifted using a crane or a forklift (see figure 1 for approximated weights, up to 136" tall), install each column observing "setback, elevation and distance between poles" each pole will have a below grade marking which will ease installation. Please observe the recommended procedure order:

1. Level the nuts in the different piers (A, B & C in primary and A & B in the modified); to perform this task is recommended to use a water level or a transit).
2. Install a string running across the three columns in the rear of them to setback boundary in relationship with the center of the work axis and use it as reference of column setback
3. Confirm verticality (front, back and sides) on the columns using a level, adjust if necessary (this step is covered by step "1"), the adjustment will take place only if the nuts had lost their level position established in step during the manipulation of the columns on top of the concrete piers.
4. Adjust the distance between beams using the below grade markings, reference the shelter drawings displaying distance between column centers. Column B will have a marking that projects the distance specified due to its inclination.
5. Fasten the columns to the foundation via eight anchor bolts protruding above each pier.

1a. Electrical cabinets.

Electrical cabinets could be installed as soon as the "A" pole gets installed; having this cabinet installed will allow The Contractor to route the conduit that will feed the electrical metered cabinets.
The PG&E Service conduit has to be extended into the PG&E wire way after the cabinet is installed. See Sheet ET029 Rev D, Section A
Conduit installation to electrical cabinets and coordination with PG&E will be performed by GTGC/Steiny.

2. 3. Horizontal beams.

Horizontal beam assemblies will be shipped based on the master schedule.
There is a total of 16 beam assemblies; one of them varies in one of its sides in length and in quantity of rafters that are welded to its shorter side. (WB Arena station) This station will be the 6th one in the order of station installation.
Transporting horizontal beam to the jobsite, figure 3 illustrates the gravity center of the horizontal beam assembly, beam could be strapped directly to the 12" purlin tube, lifting force shall be applied evenly throughout the length of the beam.
Horizontal beam will have markings/guides that will constrain the position of the horizontal beam with relationship to the columns.
Lift horizontal beam assembly align the markings, verify alignment and secure the horizontal beam assembly and perform welding. Procedures to be performed by a Tolar crew, based on designed welding procedure specifications on Tolar's Quality Control Plan
Connect drainage connection pipe from the bottom of the gutters (1 threaded pipe in each side of the columns A & C), coordinate transition to storm drainage connection with Top Grade Construction.
See figure 2 for spout pipe placement and rafter orientation graphic reference.

PRIMARY SHELTER – INSTALLATION PROCEDURE

See figure 3 for horizontal beam facts (mass and gravity center location).

*Complete the horizontal beam installation (structural part) by grouting underneath the column base plates; task will be performed by GTGC.
"grouting will be performed as the very last step in the erection of the structural members of the shelter, including the horizontal beam welding to the columns, this is to allow any adjustments that might be required via the leveling nuts under the plates on the vertical columns"

4. Architectural pier base (2 per shelter)

Before concrete forms get formed, prepare supporting sub-slab or compact aggregate base under the concrete architectural pier bases.
Form and pour concrete at the base of the electrical and communication piers as per specified in conformed contract drawing documents – reference p/714-ARU515. TGC
When convenient strip forms and install anchors that will hold the transition closure angle above the concrete pier.
Tolar Mfg. will provide closure angle 1-1/2" x 1-1/2" x ¼", to be installed above the concrete architectural pier (2 part components).
At this time set in place the different conduit tubes routing in and out of the shelter, the downspout drainage connection to the storm drainage system as well.
Tolar Mfg will provide the Stainless steel assemblies and mounting hardware, if requested a bolt install pattern-template can be provided, design to be provided and coordinated by GTGC - concrete contractor.

5. Comm cabinets

Cabinets will be installed by a Tolar crew.
Cabinets will be delivered to jobsites as per master schedule.
Rear cladding at communications pier to be installed before installing the communications cabinet, AC unit in the communications cabinet would conflict with doing it in a different order. Install cabinet from back to front, AC unit is in the way if done in the opposite order.
Comm cabinets conduit feeds coordination to be performed by GTGC.
I/O wiring from the Comm. cabinet to the shelter peripheral devices: To be coordinated by GTGC.
Install front pier cladding when the wiring had been completed, any missed electrical work will be difficult to perform after the front cladding is installed.

6. Electrical and communications pier cladding.

Cladding will be delivered to jobsite per master schedule (doc).
Cladding will be installed by a Tolar Mfg. crew. This task will be performed approximately in 6 hrs. per station.
Use suction cups and/or a pallet jack to lift and align components to install.
See figure 6 for mass, dimensions and general information.

PRIMARY SHELTER – INSTALLATION PROCEDURE

7. Electrical and communications access display doors

Doors will be delivered to the jobsite per master schedule
Doors will be installed by a Tolar Mfg. crew. This task will be performed approximately in 4 hrs. per station.
Doors to be installed using a thru rod inserted from above engaging all the hinge components and then secured using the set screws furnished in the hinge components.
Clean, wrap and protect both piers after completing this task.

8. Iconic column cladding

Iconic column cladding to be delivered to the jobsite per master schedule.
Iconic column components will be installed by a R. Ziegenbein Construction crew.
Iconic column wrapping is conformed of 7 components which will be installed in the following order:
Front cladding iconic column wrap. Lift from marked point, set in place the front cladding assembly by aligning the protruding rods in the column with the orifices in the cladding assembly.

a. Temporally brace the assembly to maintain position while the following component is installed.
b. Rear cladding iconic column wrap. Lift from marked point, set in place the rear cladding assembly by aligning the protruding rods in the column with the orifices in the cladding assembly.
c. Engage front and rear cladding to the column by installing 10 bolts 5/8-11 x 2-1/2" in the column sides (5 in each side), when this step is completed the brazing in the front assembly can be removed, both assemblies are secured.
d. Install 4 iconic column side covers each one has a series of keys that engage in existing slots in the edges of the front cladding assembly. Each one of these covers to be secured with 2 torx flat head ¼-20 x 3/4" machine screws.
e. Install top cap using 8 torx ¼-20 X ¾" pan head machine screws.

Clean, wrap and protect components after completing above tasks.
See figure 8 for mass, dimensions and general information.

9. Art panel sub-structures

Art panel sub-structure and all of its elements to be installed in the field, a hardware kit containing 15 sets of rods with setting nuts and washers will be used to mount the structure below the shelter; refer to submittal 347.1for component relationship with the shelter as well as fabrication of the structure details and mounting procedures and tolerances.
All art panel component station theme sequence to be overseen by Merge Conceptual Design
All art panel substructures install to be performed by R. Ziegenbein Construction crew.

PRIMARY SHELTER – INSTALLATION PROCEDURE

10. Roof glazing

Roof glazing and its components will be delivered to the jobsite per master schedule, all components will be delivered in a crate by station, delivery location details to be determined.
Roof glazing and its components will be installed by a R. Ziegenbein Construction crew.
Refer to the following documents to perform this work:
VTA BRT Install instructions (by Deamor) and submittal 337A (by Tolar) will be support documentation for this procedure.

11. Perforated valley gutter screen.

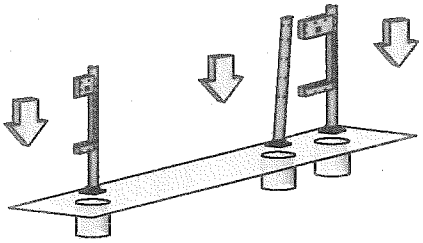
Perforated valley gutter screen and its components will be delivered to the jobsite per master schedule (doc),
All components packed in crates by station, delivery location details to be discussed.
Roof glazing and its components will be installed by a R. Ziegenbein Construction crew.
Refer to the following documents to perform this work:
VTA BRT Install instructions (by Deamor) and submittal 337A (by Tolar) will provide support documentation for this procedure.

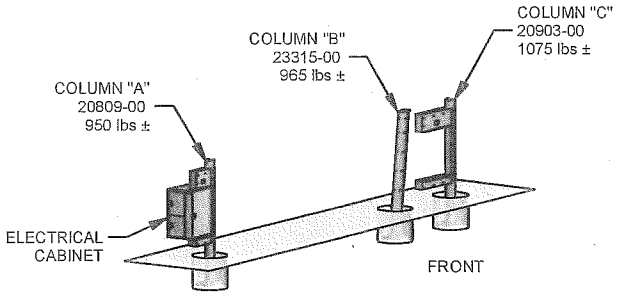
11. End rake assemblies

Electrical rafter raceway covers and flag sign
End rake components will be delivered to the jobsite per master schedule, (most likely with the eaves.
End rake components provide closure to the eaves as well as to partial area that grants access to the electrical wiring path, also provide the esthetical closure at the end of each section of the roof structure sections.
These components will be installed based on sleeve type of fit, into the ends of the eaves and fastening them to the first and second rafters (counting from the end of the roof structure into the shelter from each end), using a hardware kit (supplied).
Refer to submittal 389 – shelter end – rake weldments shop drawings.
With the end rake weldments fastened – secured in place install eight electrical raceway covers (4 in front and 4 in back – rear ones are smaller to fit size of smaller rafters).
Install flag ID using a hardware kit supplied with it. Refer to submittal 344 – bus flag.

Components to be installed in the station installation sites:
Columns A, B & C
Horizontal Beams (primary shelter and modified shelter)
Electrical and Communication cabinets
Transition closure angles on top of concrete architectural pier base
Architectural pier cladding electrical pier, communications pier
Architectural pier display doors at electrical and communications pier
Iconic column cladding
Art panel sub-structure
Roof glazing
Perforated valley gutter screen at gutter
End rake weldments – end cover
Bus flag sign
Back flow preventer

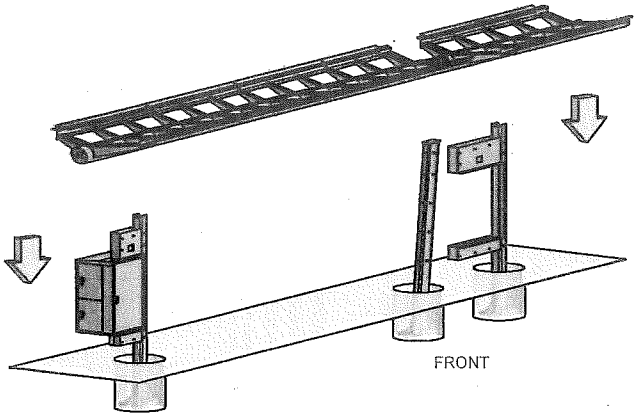
PRIMARY SHELTER - INSTALLATION PROCEDURE

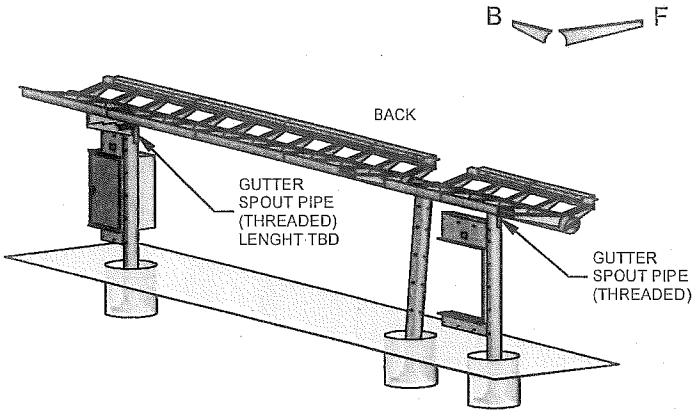




* OBSERVE CUSTOM PLATE HOLE SIZES IN SOME STATIONS
* INSTALL ELECTRICAL CABINET
* POUR GROUT BELOW THE PLATES ONCE THE COLUMNS ARE FASTENED

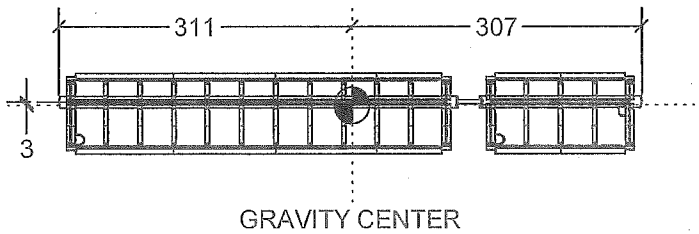
1 COLUMN SET UP

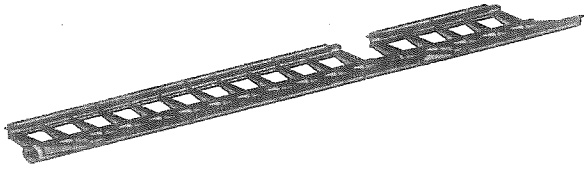




FIELD WELD BEAM TO COLUMNS "A,B & C"

2 BEAM INSTALLATION



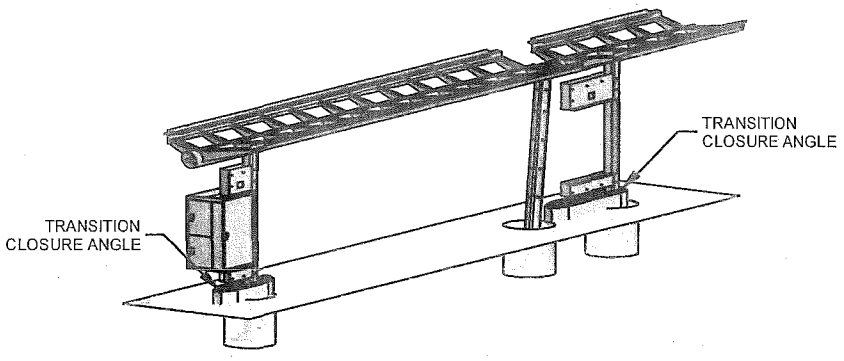


MASS: 7616 lbs

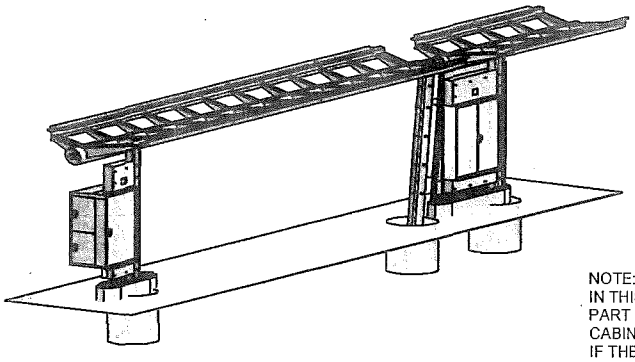
3 BEAM FACTS

PRIMARY SHELTER - INSTALLATION PROCEDURE

PREPARE SUPPORTING SLAB OR COMPACT AGGREGATE BASE UNDER PIER BASE
POUR CONCRETE FOR EACH COMM & ELECTRICAL ARCHITECTURAL BASE PIER
INSTALL INSET ANGLE REVEAL

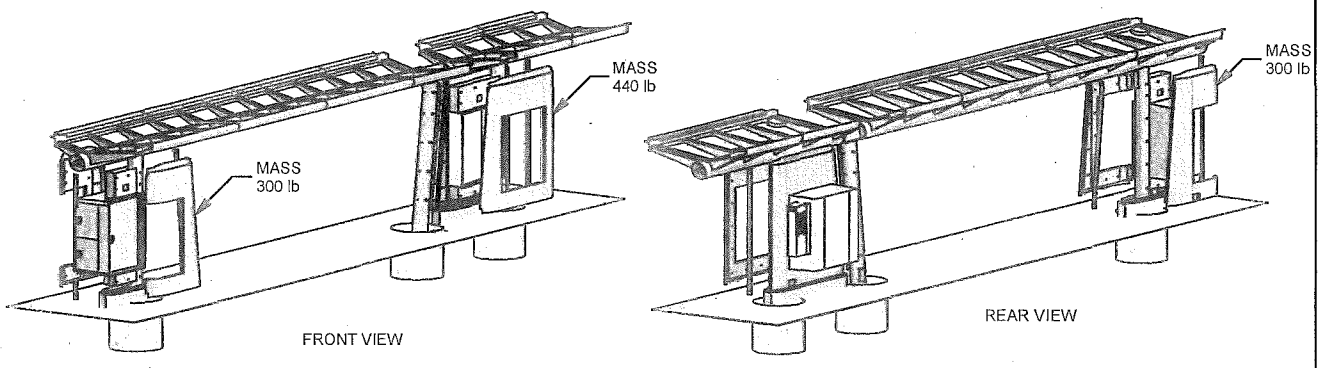


4 ARCHITECTURAL CONCRETE PIER BASE



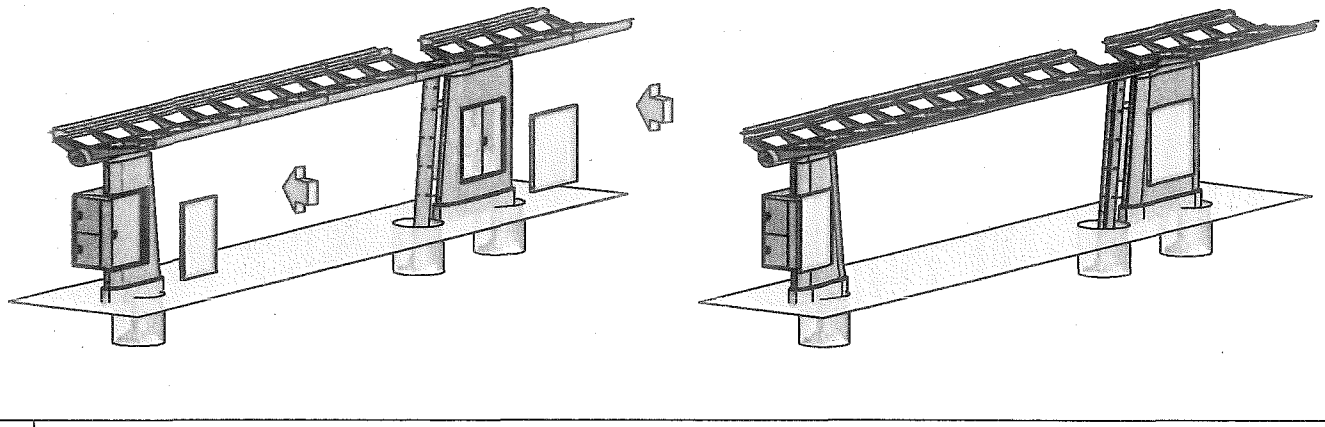
NOTE:
IN THIS STEP INSTALL THE REAR CLADDING PART PRIOR TO THE COMMUNICATIONS CABINET, THE AC UNIT WILL BE AN OBSTACLE IF THE CABINET GETS INSTALLED FIRST
MASS 450 LBS

5 ELECTRICAL AND COMMUNICATION CABINET INSTALLATION

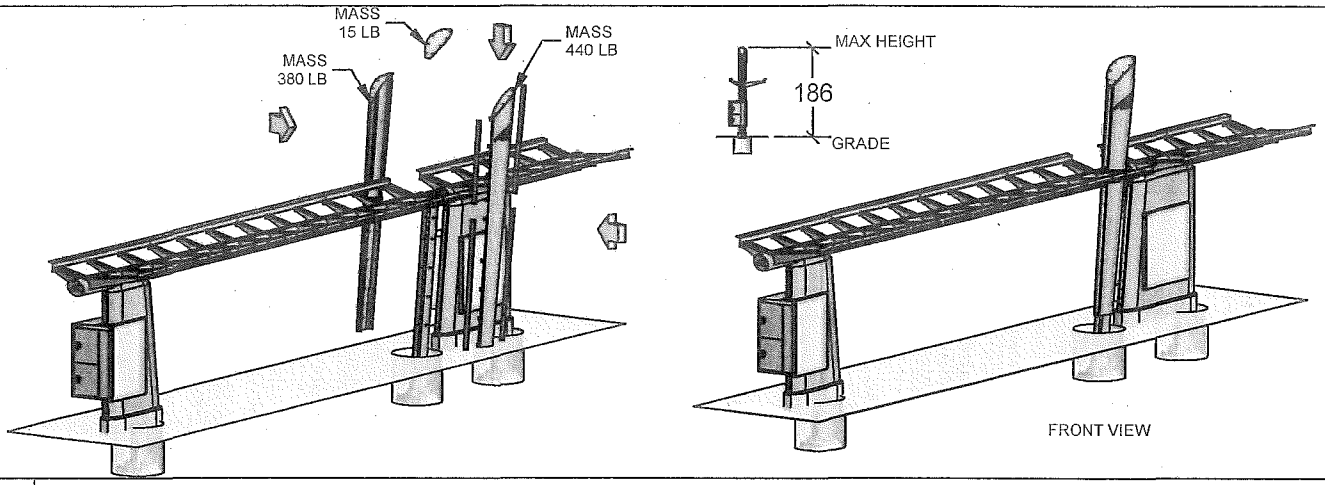


6 CLADDING INSTALLATION

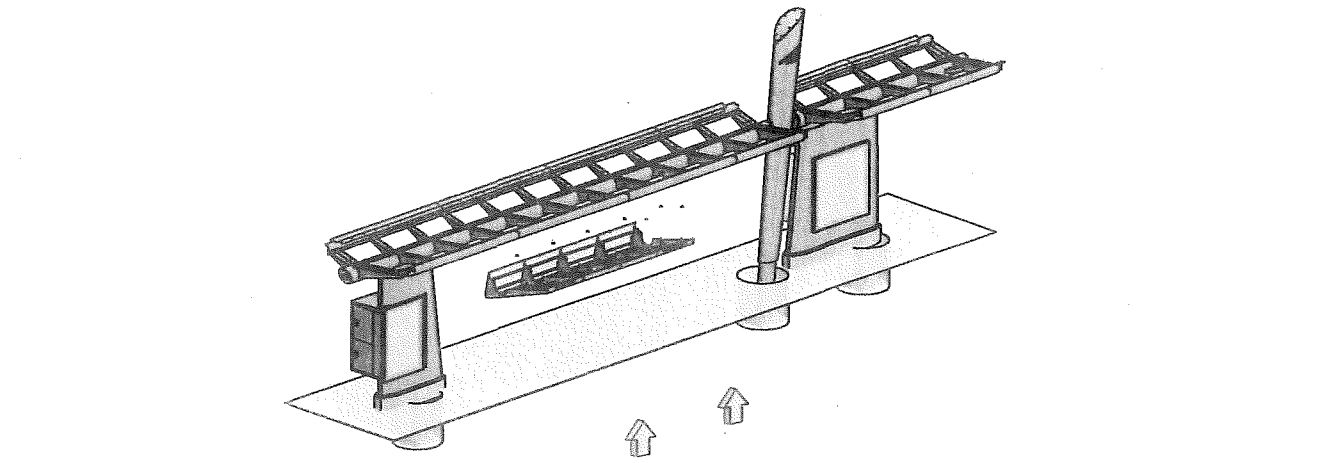
PRIMARY SHELTER - INSTALLATION PROCEDURE



7 DOOR INSTALLATION

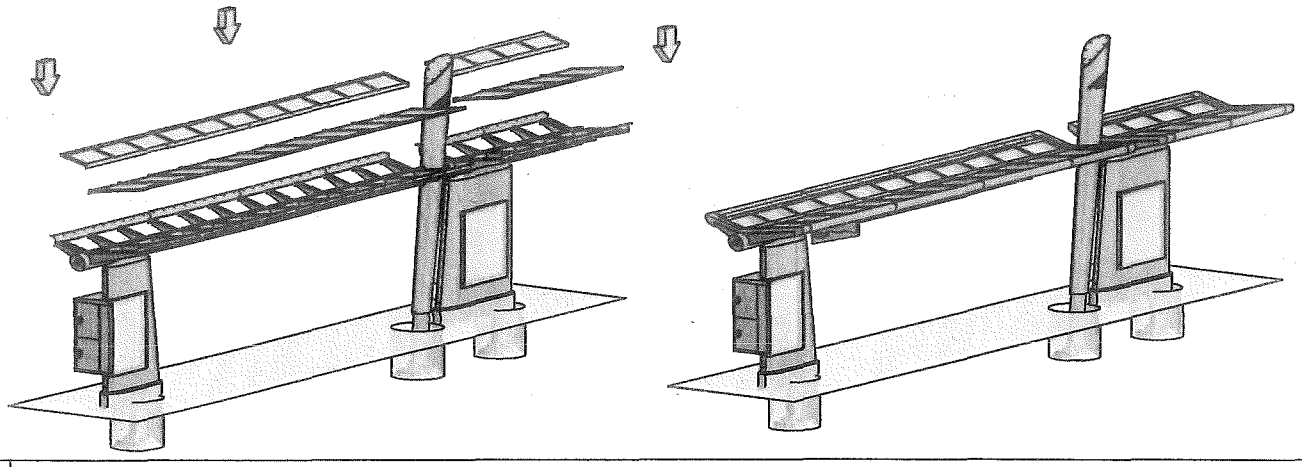


8 ICONIC COLUMN INSTALLATION

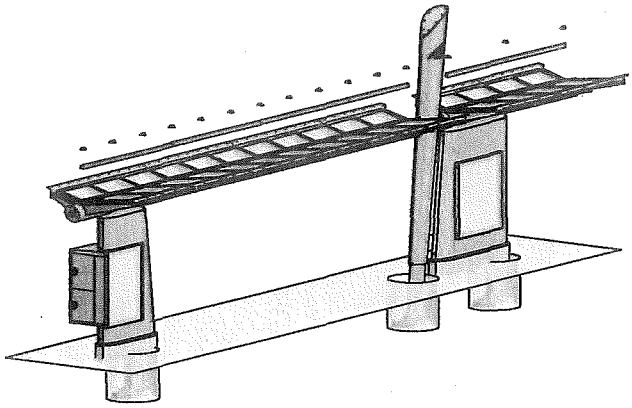


9 ART PANEL SUB-STRUCTURE INSTALL

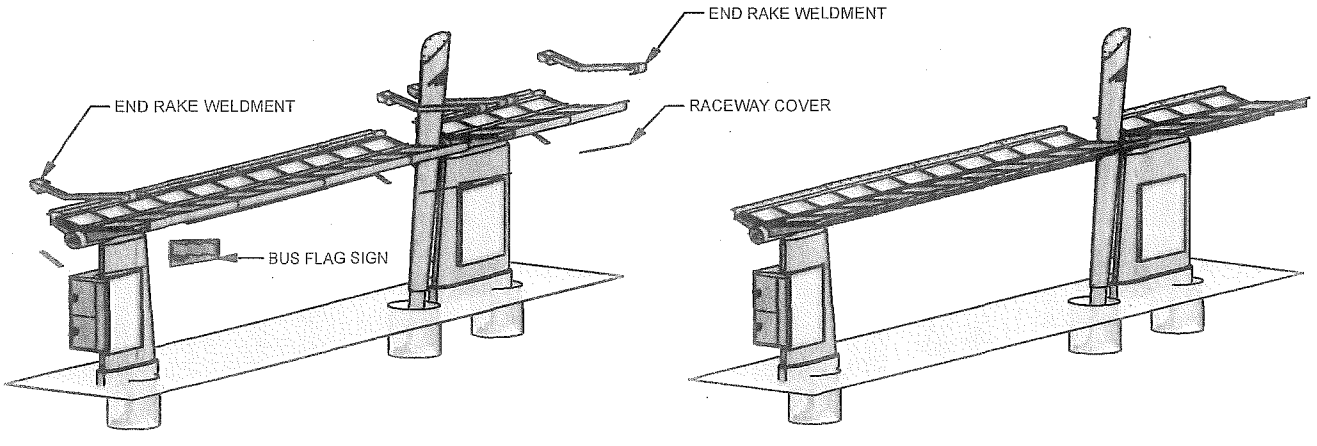
PRIMARY SHELTER - INSTALLATION PROCEDURE



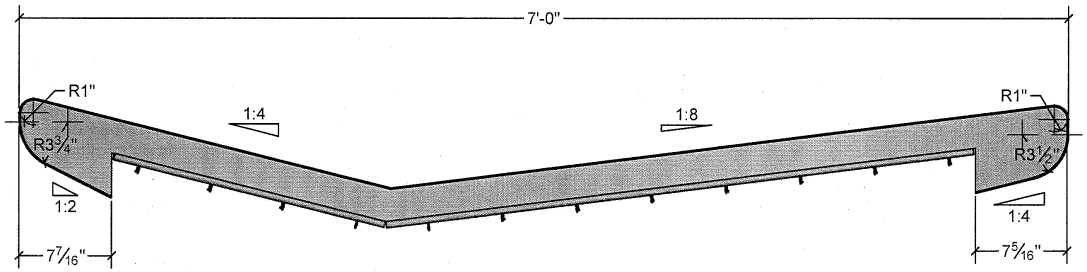
10 ROOF GLAZING INSTALLATION



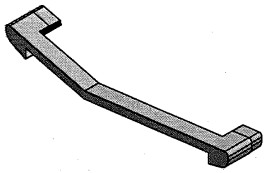
11 PERFORATED VALLEY GUTTER SCREEN INSTALLATION



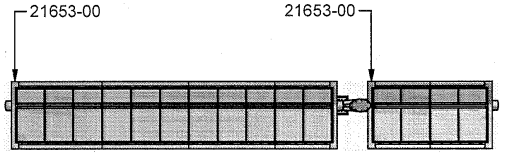
12 CLOSURE TRIM INSTALLATION



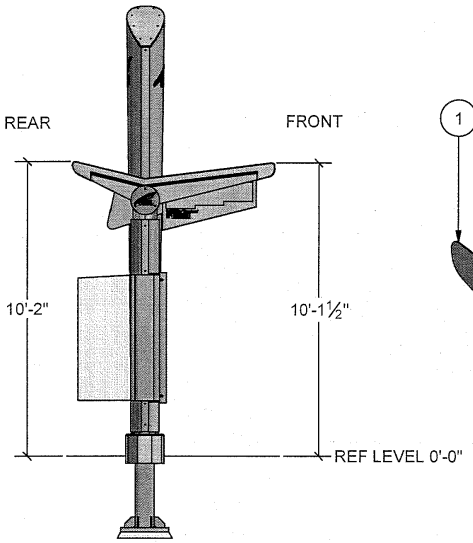
WRAP EDGE COVER - LEFT ELEVATION
SCALE 1 1/4"=1'



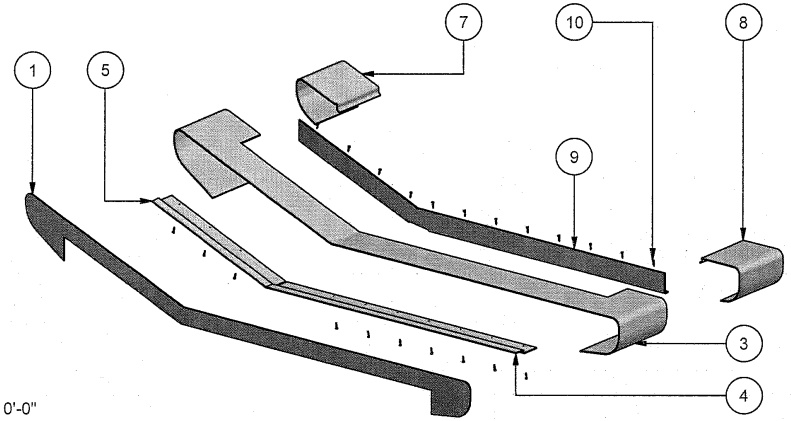
ISOMETRIC VIEW
SCALE 3/8"=1'



WRAP EDGE CAP PLACEMENT - PLAN VIEW
SCALE 1 / 150



SHELTER - LEFT ELEVATION
SCALE 1 / 50



LEFT WRAP EDGE COVER - COMPONENTS
SCALE 3/4"=1'

PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	20891-00	RAKE WLDMNT END PROFILE
3	1	21653-00	FORMED WRAP EDGE (LS)
4	1	21655-00	LONG RAFTER Z BRACKET
5	1	21656-00	SHORT RAFTER Z BRACKET
7	1	21671-00	REAR WRAP EDGE CONN
8	1	21672-00	FRONT WRAP EDGE CONN
9	1	21657-00	WELDMNT - RAKE IN-WALL
10	22	90203A253	SS #6-20 PAN HEAD SCREW

TOLAR
Tolar Manufacturing Company, Inc
258 Mariah Circle, Corona CA. 92879

DESCRIPTION: RAKE WELDMENT - LEFT SIDE			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 4
SIZE: B	MATL.: SS 316L - MISC	DWG NO.: 21663-00	REV. NO.:
SCALE: AS NOTED	DATE: 11/24/2014	DRAWN BY: cgarcia	

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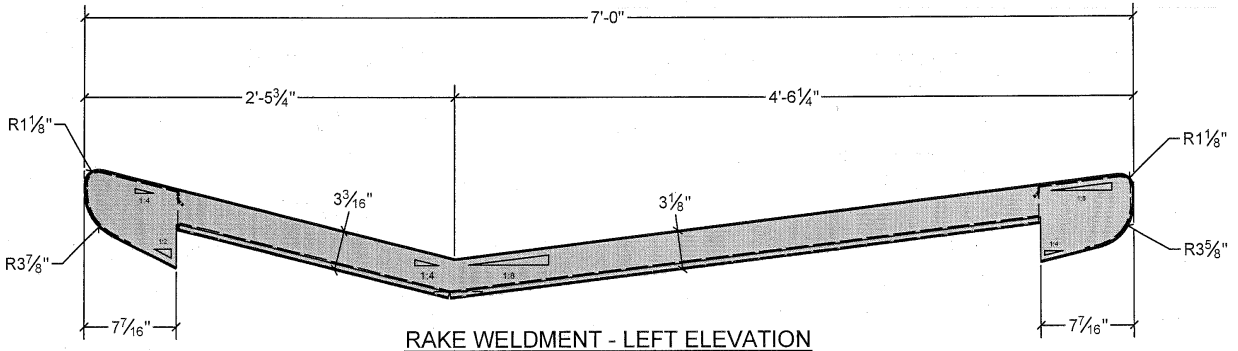
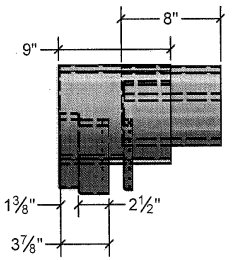
Shelter End - Rake Weldments



RAKE WELDMENT - LEFT ELEVATION
SCALE 1 1/4"=1'



RAKE WELDMENT - FRONT ELEVATION
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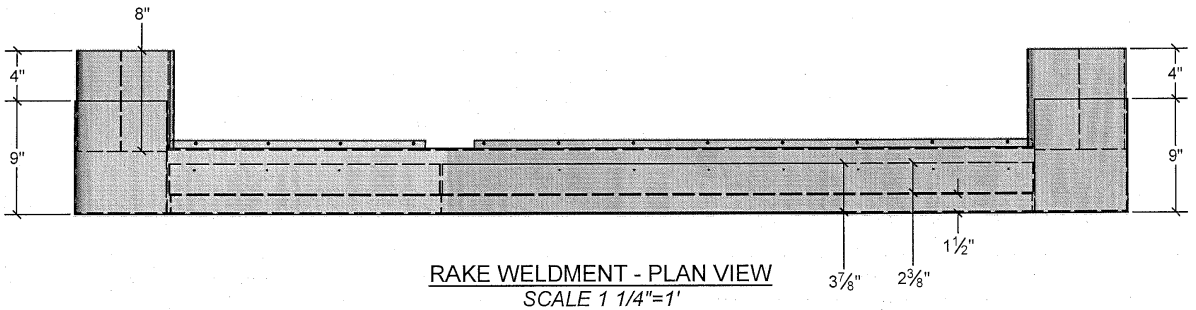

RAKE WELDMENT - PLAN VIEW
SCALE 1 1/4"=1'

TOLAR	Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879		
DESCRIPTION	RAKE WELDMENT - LEFT SIDE		
CUSTOMER/VENDOR	SANTA CLARA - VTA		SHEET NO. 2 OF 4
SIZE B	MATL. SS 316L - 11 GA SH M	DWG NO. 21663-00	REV. NO.
SCALE AS NOTED	DATE 11/24/2014	DRAWN BY: cgarcia	

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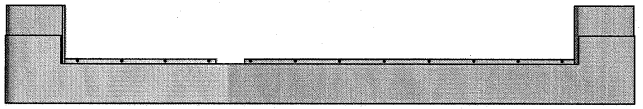
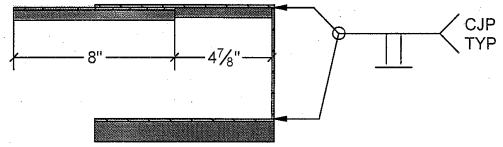
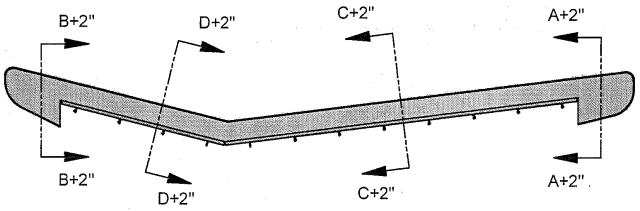
Shelter End - Rake Weldments



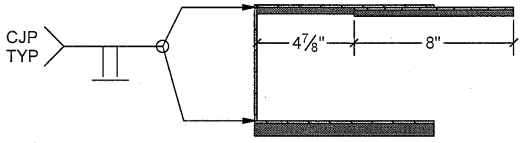
LEFT WRAP EDGE CAP - PLAN VIEW
SCALE 3/4"=1'



SECTION B+2"-B+2"
SCALE 2"=1'



WRAP EDGE COVER - LEFT ELEVATION
SCALE 3/4"=1'



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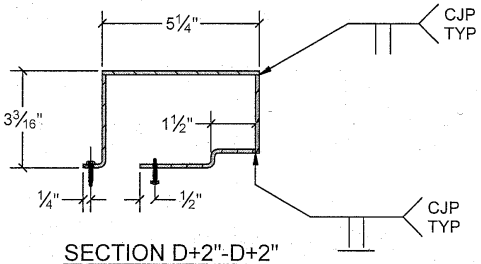
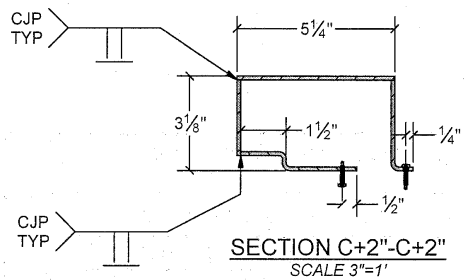
SCALE 2"=1'



SECTION D+2"-D+2"
SCALE 3=1'



SECTION C+2"-C+2"
SCALE 3"=1'

TOLAR	Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879		
DESCRIPTION	RAKE WELDMENT - LEFT SIDE		
CUSTOMER/VENDOR	SANTA CLARA - VTA		SHEET NO. 3 OF 4
SIZE B	MATL. SS 316L - 11 GA SH M	DWG NO. 21663-00	REV. NO.
SCALE AS NOTED	DATE 11/24/2014	DRAWN BY: cgarcia	

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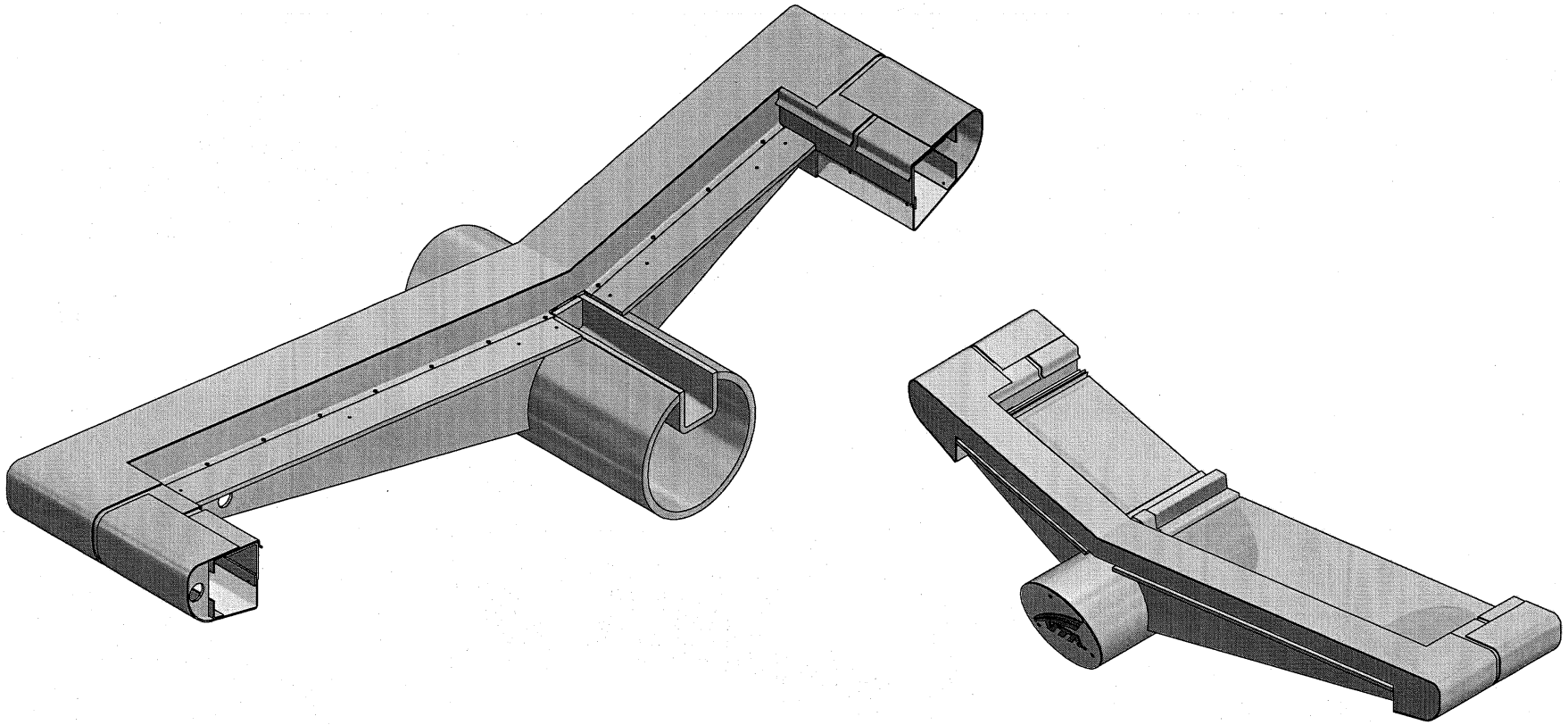
Shelter End - Rake Weldments



TOLAR	Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879		
DESCRIPTION	PRIMARY SHELTER		
CUSTOMER/VENDOR	SANTA CLARA - VTA		SHEET NO. 4 OF 4
SIZE B	MATL. SS 316L - MISC	DWG NO. 20787-00	REV. NO. C
SCALE AS NOTED	DATE 11/24/2014	DRAWN BY: cgarcia	

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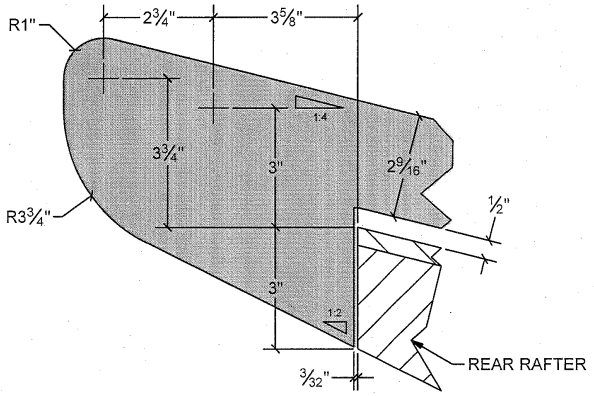
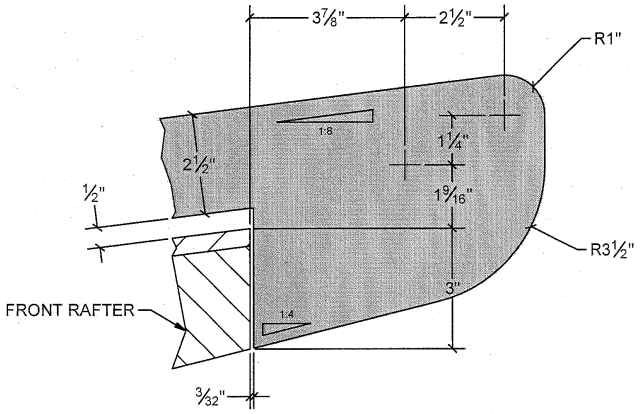
Shelter End - Rake Weldments

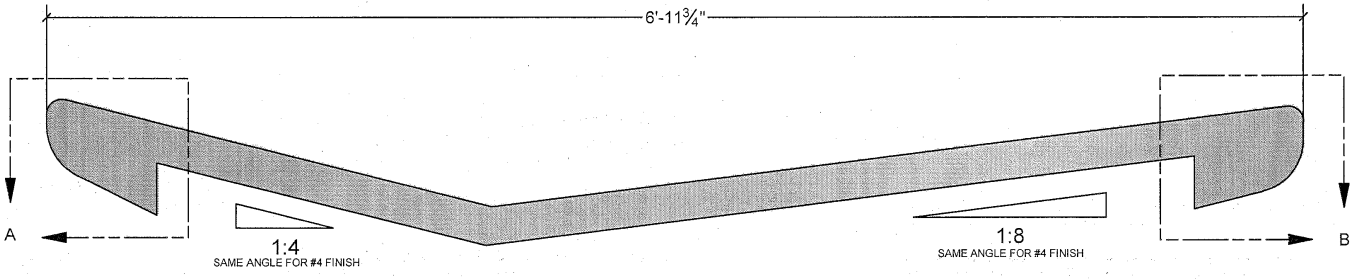
NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. DIRECTIONAL FINISH #4 (LONG EDGES DIRECTION - 1:4 & 1:8)



DETAIL A
SCALE 4" = 1'-0"



DETAIL B
SCALE 4" = 1'-0"



RAKE WELDMENT END PROFILE - ELEVATION
SCALE 1 1/2"=1'

TOLAR	Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879		
DESCRIPTION	RAKE WLDMNT END PROFILE		
CUSTOMER/VENDOR	SANTA CLARA - VTA		SHEET NO. 1 OF 1
SIZE B	MATL. SS 316L - 11 GA SH M	DWG NO. 20891-00	REV. NO.
SCALE AS NOTED	DATE 1/7/2015	DRAWN BY: cgarcia	

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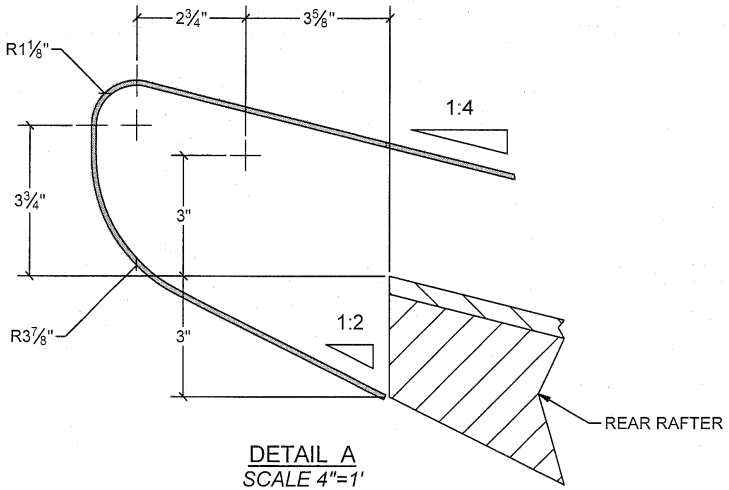
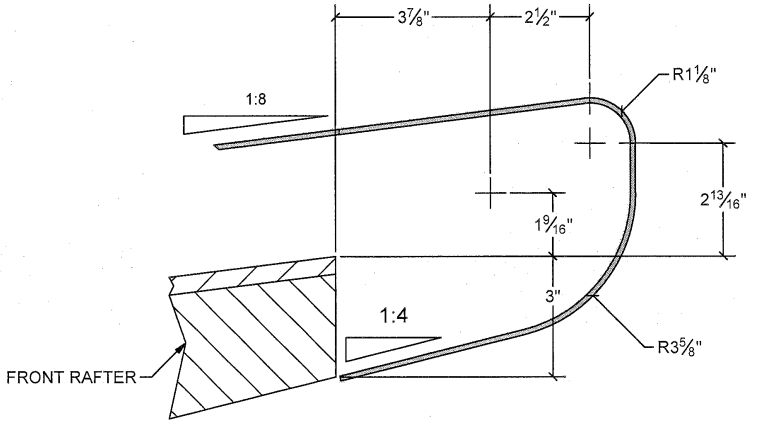
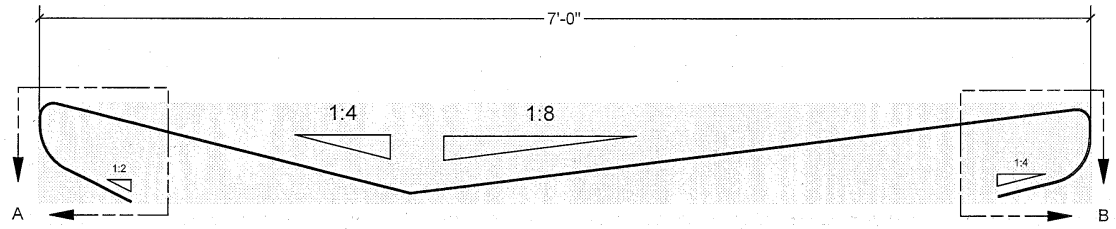
Shelter End - Rake Weldments



DETAIL A
SCALE 4"=1'



DETAIL B
SCALE 4"=1'



FORMED WRAP EDGE - LEFT ELEVATION
SCALE 1 1/4"=1'

TOLAR — Tolar Manufacturing Company, Inc, 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: FORMED WRAP EDGE (LS)			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 2
SIZE: B	MATL.: SS 316L - 11 GA SH M	DWG NO.: 21653-00	REV. NO.:
SCALE: AS NOTED	DATE: 1/7/2015	DRAWN BY: cgarcia	

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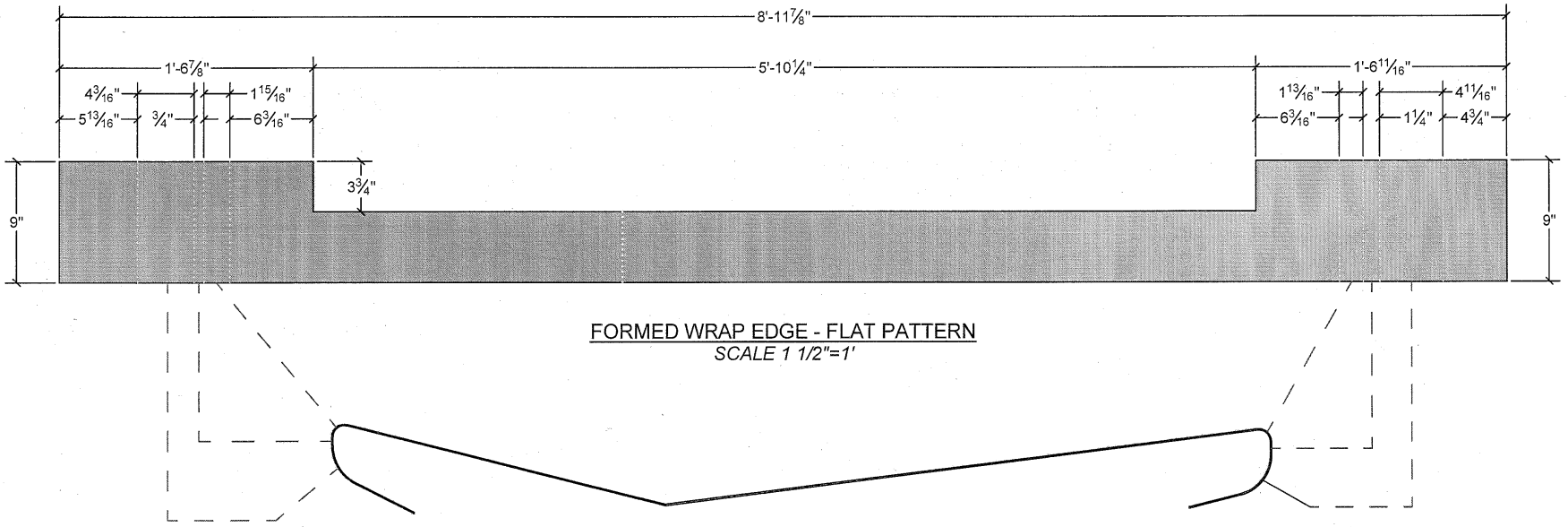
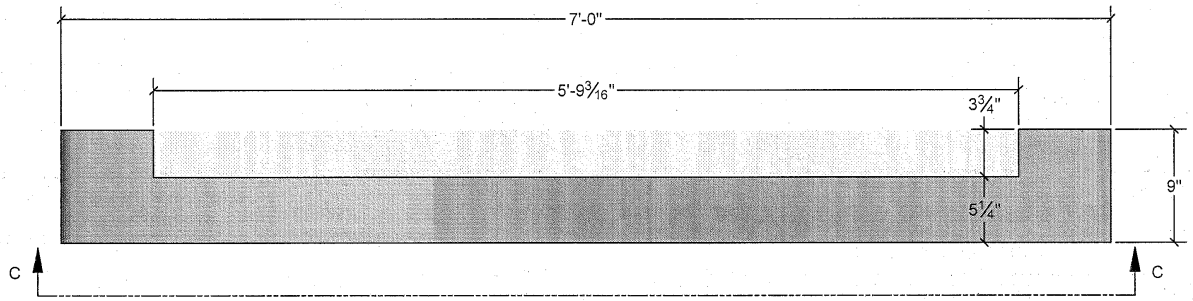
Shelter End - Rake Weldments

NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. DIRECTIONAL FINISH #4 (PARALEL TO RADIUS AXIS - ALL)



FORMED WRAP EDGE - FLAT PATTERN
SCALE 1 1/2"=1'

VIEW C-C
SCALE 1 1/4"=1'



FROMED WRAP EDGE - LEFT SIDE - ELEVATION
SCALE 1 1/4"=1'

TOLAR — STRAIGHT FROM DISTINCTION	Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879		
DESCRIPTION	FORMED WRAP EDGE (LS)		
CUSTOMER/VENDOR	SANTA CLARA - VTA		SHEET NO. 2 OF 2
SIZE B	MATL. SS 316L - 11 GA SH M	DWG NO. 21653-00	REV. NO.
SCALE AS NOTED	DATE 1/7/2015	DRAWN BY: cgarcia	

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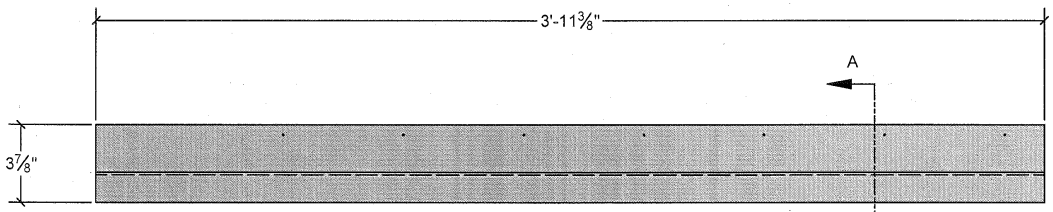
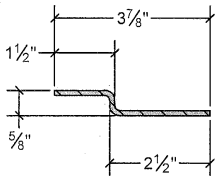
Shelter End - Rake Weldments



LONG Z BRACKET RETURN - PLAN VIEW
SCALE 2"=1'



SECTION A-A
SCALE 4"=1'

TOLAR — Tolar Manufacturing Company, Inc, 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: LONG RAFTER Z BRACKET			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 11 GA SH M	DWG NO.: 21655-00	REV. NO.:
SCALE: AS NOTED	DATE: 1/8/2015	DRAWN BY: cgarcia	

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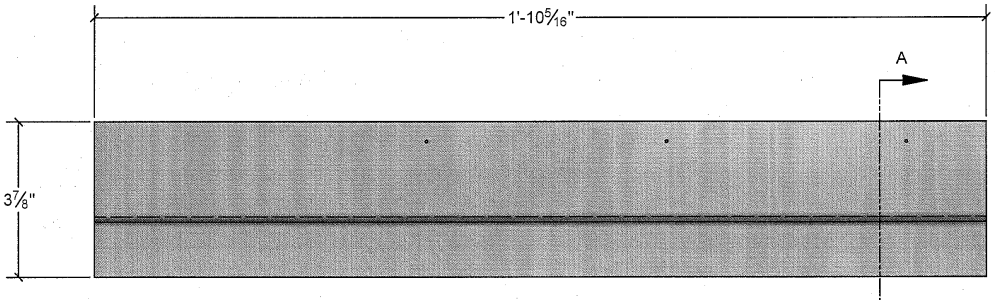
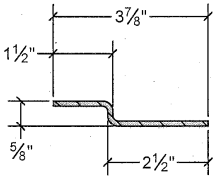
Shelter End - Rake Weldments



SHORT Z BRACKET RETURN - PLAN VIEW
SCALE 4"=1'



SECTION A-A
SCALE 4"=1'

TOLAR — Tolar Manufacturing Company, Inc, 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: SHORT RAFTER Z BRACKET			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 11 GA SH M	DWG NO.: 21656-00	REV. NO.:
SCALE: AS NOTED	DATE: 1/8/2015	DRAWN BY: cgarcia	

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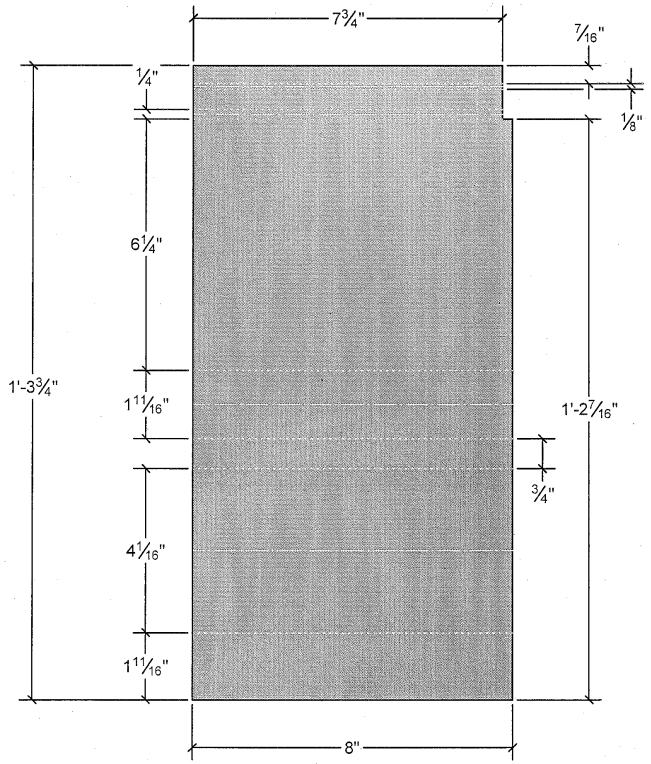
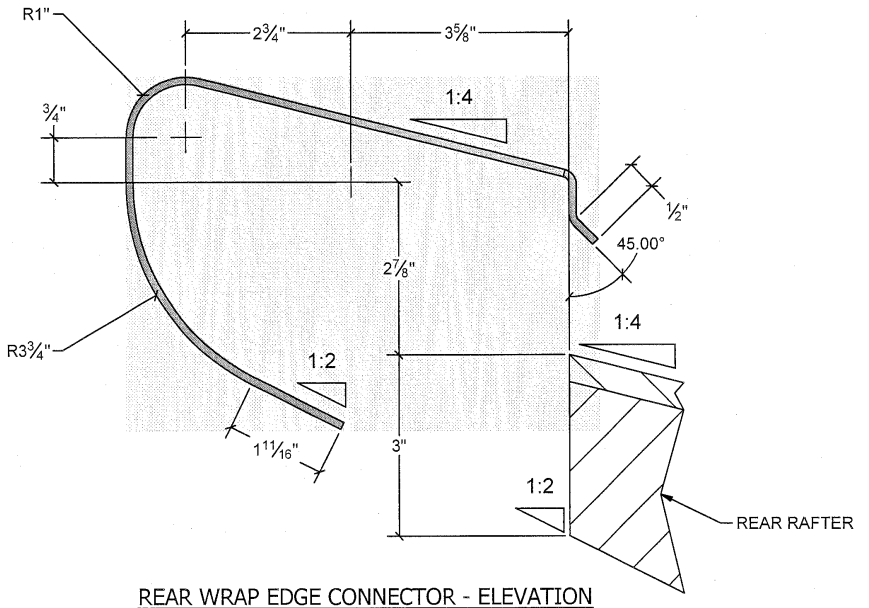
Shelter End - Rake Weldments

NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. DIRECTIONAL FINISH #4 (PARALEL TO RADIUS AXIS - ALL)



REAR WRAP EDGE - FLAT PATTERN
SCALE 4"=1'



REAR WRAP EDGE CONNECTOR - ELEVATION
SCALE 6"=1'

TOLAR — Tolar Manufacturing Company, Inc, 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: REAR WRAP EDGE CONN			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 11 GA SH M	DWG NO.: 21671-00	REV. NO.:
SCALE: AS NOTED	DATE: 1/8/2015	DRAWN BY: cgarcia	

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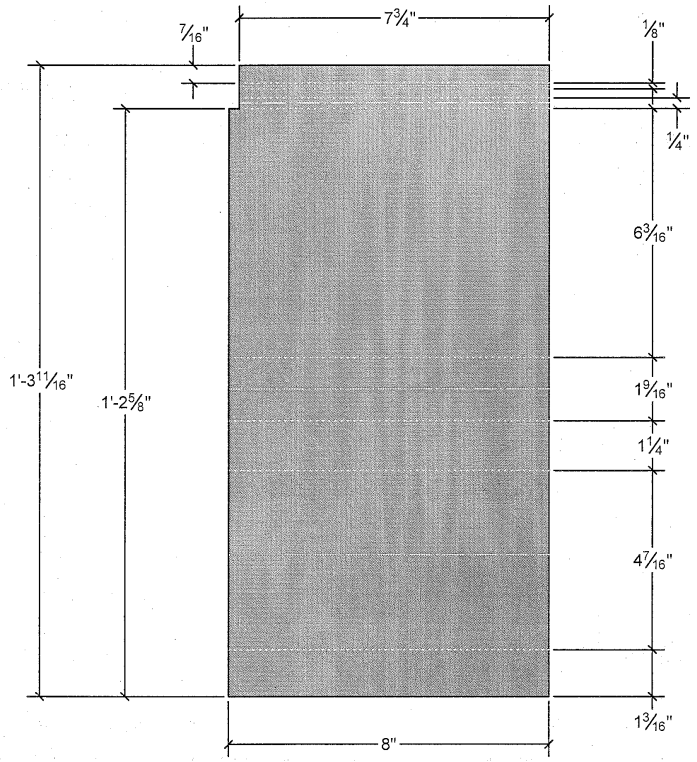
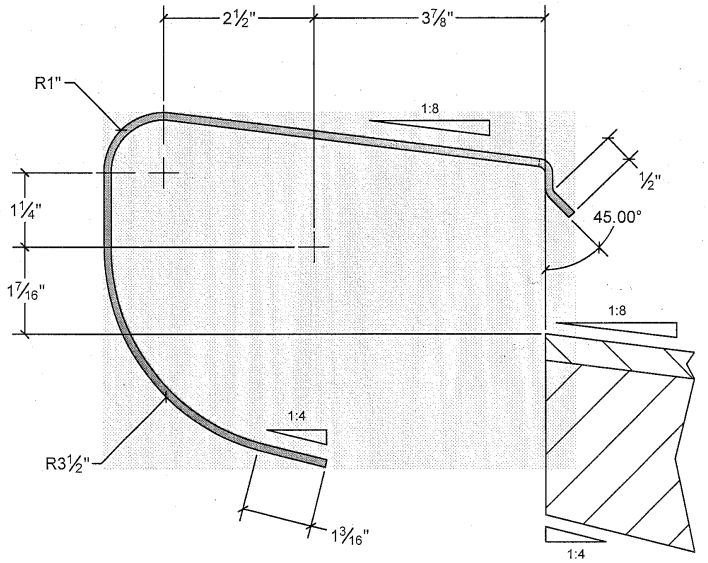
Shelter End - Rake Weldments

NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. DIRECTIONAL FINISH #4 (PARALEL TO RADIUS AXIS - ALL)



FRONT WRAP EDGE - FLAT PATTERN
SCALE 4"=1'



FRONT WRAP EDGE CONNECTOR - ELEVATION
SCALE 6"=1'

Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: FRONT WRAP EDGE CONN			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 11 GA SH M	DWG NO.: 21672-00	REV. NO.
SCALE: AS NOTED	DATE: 1/8/2015	DRAWN BY: cgarcia	

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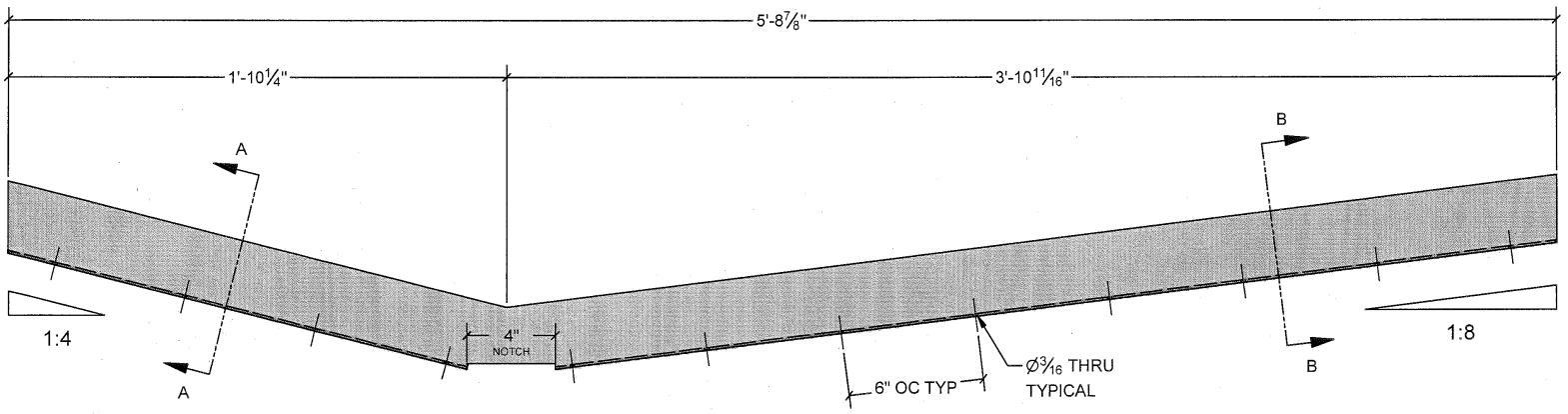
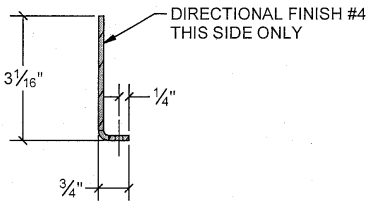
Shelter End - Rake Weldments

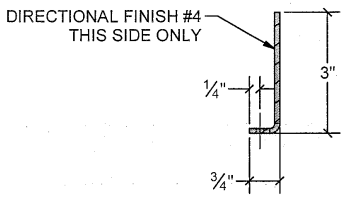
NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. DIRECTIONAL FINISH #4 (LONG EDGES DIRECTION - 1:4 & 1:8 ANGLES)



WELDMENT RACK - INSIDE WALL - LEFT ELEVATION
SCALE 2 1/4"=1'



SECTION A-A
SCALE 4" = 1'-0"



SECTION B-B
SCALE 4" = 1'-0"

TOLAR	Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879		
DESCRIPTION	WELDMNT - RAKE IN-WALL		
CUSTOMER/VENDOR	SANTA CLARA - VTA		SHEET NO. 1 OF 2
SIZE B	MATL. SS 316L - 11 GA SH M	DWG NO. 21657-00	REV. NO.
SCALE AS NOTED	DATE 1/7/2015	DRAWN BY: cgarcia	

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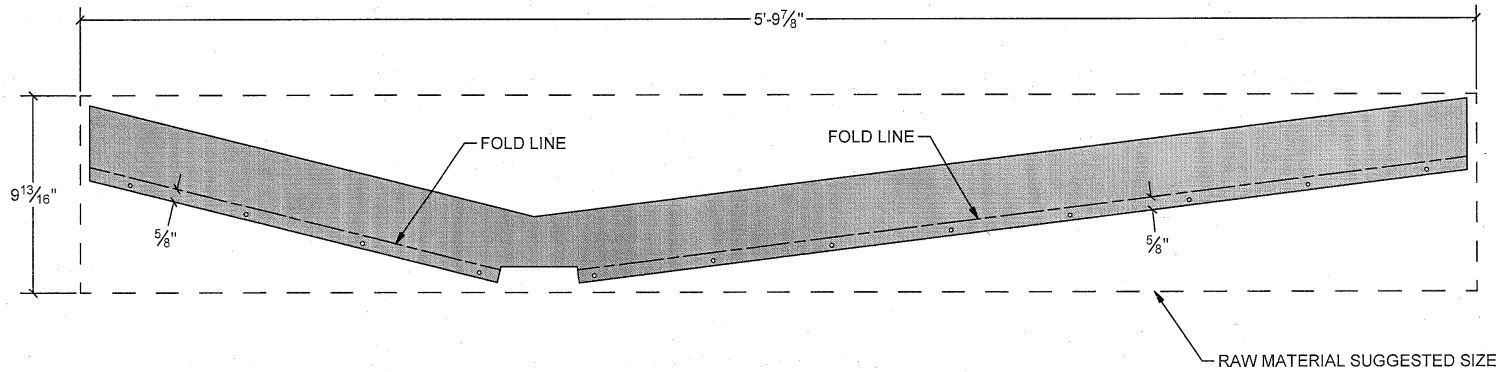
Shelter End - Rake Weldments



SHEET METAL FLAT PATTERN
SCALE 2"=1'

TOLAR MANUFACTURED WITH PERFECTION	Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879		
DESCRIPTION	WELDMNT - RAKE IN-WALL		
CUSTOMER/VENDOR	SANTA CLARA - VTA		SHEET NO. 2 OF 2
SIZE B	MATL. SS 316L - 11GA SH M	DWG NO. 21657-00	REV. NO.
SCALE AS NOTED	DATE 1/7/2015	DRAWN BY: cgarcia	

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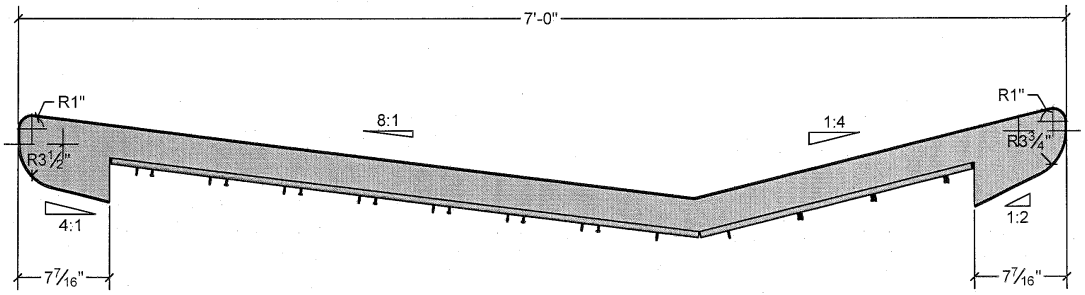
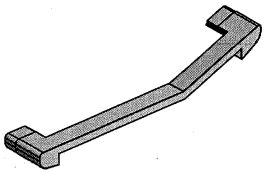
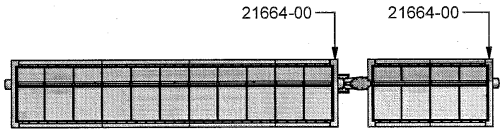
Shelter End - Rake Weldments



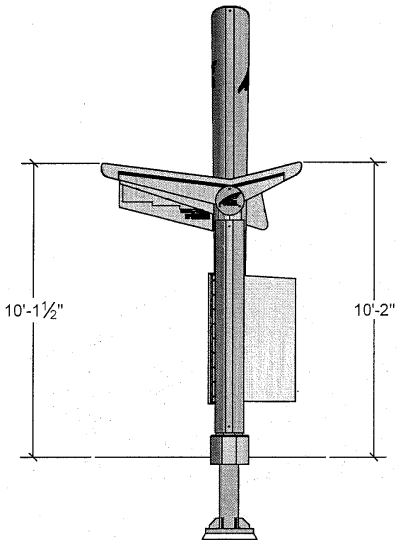
WRAP EDGE COVER - RIGHT ELEVATION
SCALE 1 1/4"=1'



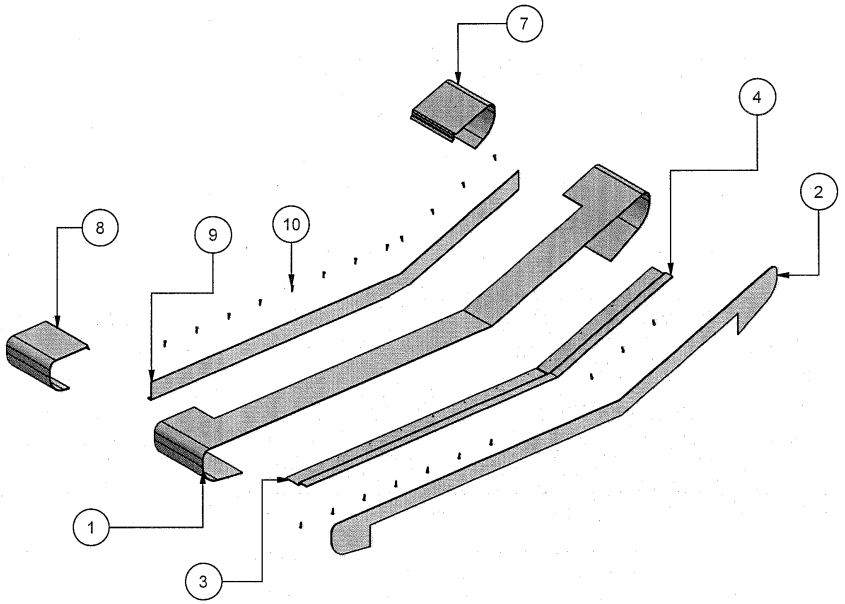
ISOMETRIC VIEW
SCALE 3/8"=1'



WRAP EDGE CAP PLACEMENT - PLAN VIEW
SCALE 1 / 150



SHLETER - RIGHT ELEVATION
SCALE 1 / 50



RIGHT WRAP EDGE COVER - COMPONENTS
SCALE 3/4"=1'

PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	21654-00	FORMED WRAP EDGE (RS)
2	1	20891-00	RAKE WLDMNT END PROFILE
3	1	21655-00	LONG RAFTER Z BRACKET
4	1	21656-00	SHORT RAFTER Z BRACKET
7	1	21662-00	REAR WRAP EDGE CONN
8	1	21661-00	FRONT WRAP EDGE CONN
9	1	21658-00	WELDMNT - RAKE IN-WALL (R)
10	22	90203A253	SS #6-20 PAN HEAD SCREW

TOLAR
Tolar Manufacturing Company, Inc
258 Mariah Circle, Corona CA. 92879

DESCRIPTION: RAKE WELMENT - RIGHT SIDE			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 3
SIZE: B	MATL.: SS 316L - 11 GA SH M	DWG NO.: 21664-00	REV. NO.:
SCALE: AS NOTED	DATE: 11/25/2014	DRAWN BY: cgarcia	

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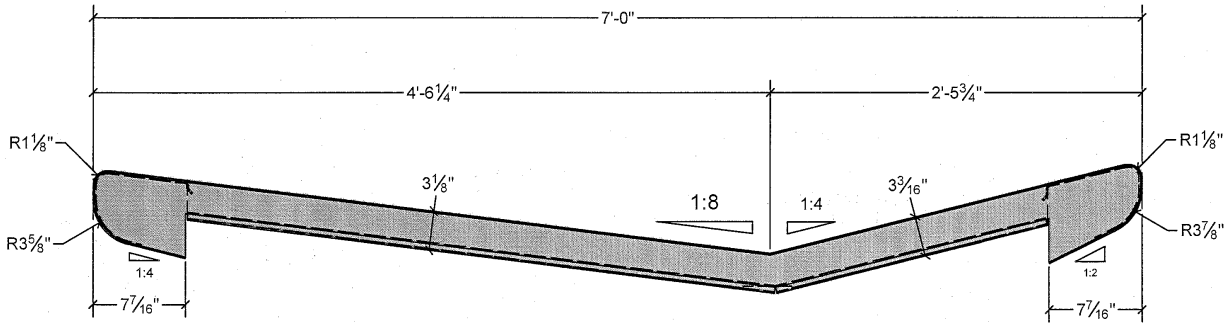
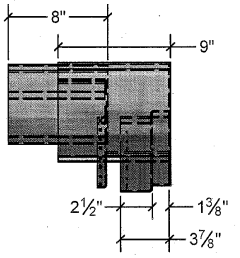
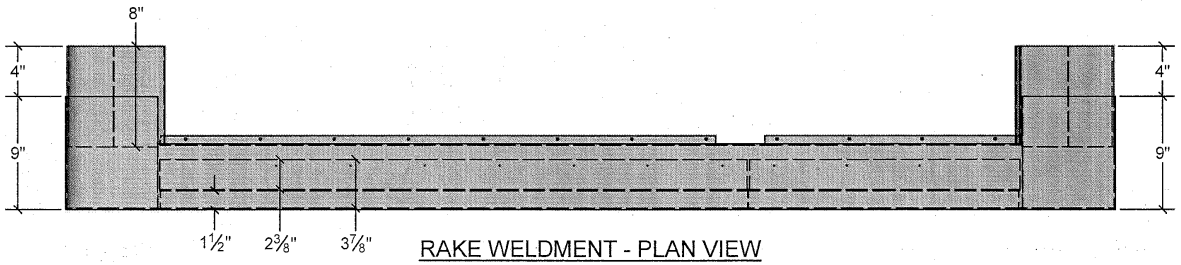
Shelter End - Rake Weldments



RAKE WELDMENT - RIGHT ELEVATION
SCALE 1 1/4"=1'



RAKE WELDMENT - FRONT ELEVATION
SCALE 1 1/4"=1'



RAKE WELDMENT - PLAN VIEW
SCALE 1 1/4"=1'

TOLAR	Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879		
DESCRIPTION	RAKE WELMENT - RIGHT SIDE		
CUSTOMER/VENDOR	SANTA CLARA - VTA		SHEET NO. 2 OF 3
SIZE B	MATL. SS 316L - 11 GA SH M	DWG NO. 21664-00	REV. NO.
SCALE AS NOTED	DATE 11/25/2014	DRAWN BY: cgarcia	

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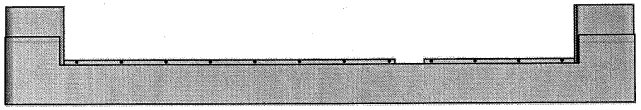
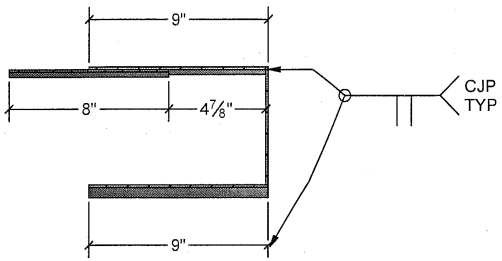
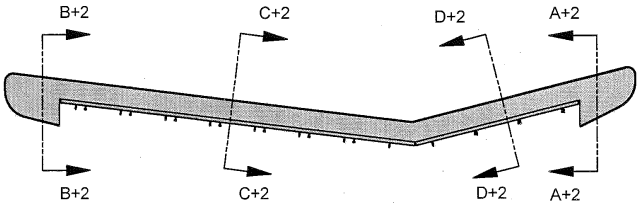
Shelter End - Rake Weldments



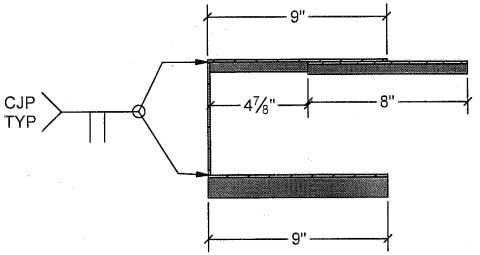
RIGHT WRAP EDGE CAP - PLAN VIEW
SCALE 3/4"=1'



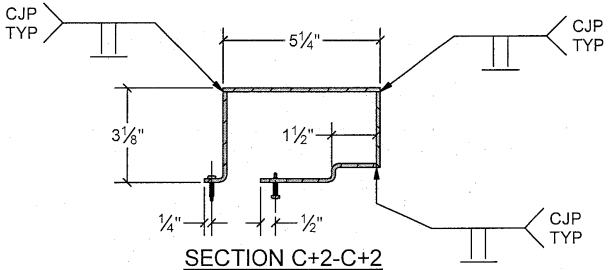
SECTION B+2-B+2
SCALE 2"=1'



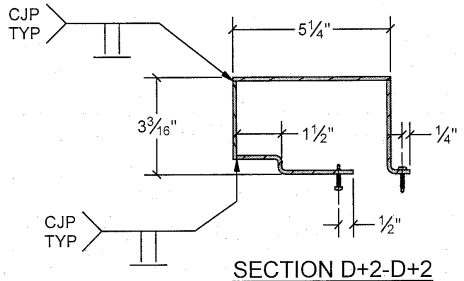
WRAP EDGE COVER - RIGHT ELEVATION
SCALE 3/4"=1'



SECTION A+2-A+2
SCALE 2"=1'



SECTION C+2-C+2
SCALE 3"=1'



SECTION D+2-D+2
SCALE 3"=1'

TOLAR	Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879		
DESCRIPTION	RAKE WELMENT - RIGHT SIDE		
CUSTOMER/VENDOR	SANTA CLARA - VTA		SHEET NO. 3 OF 3
SIZE B	MATL. SS 316L - 11 GA SH M	DWG NO. 21664-00	REV. NO.
SCALE AS NOTED	DATE 11/25/2014	DRAWN BY: cgarcia	

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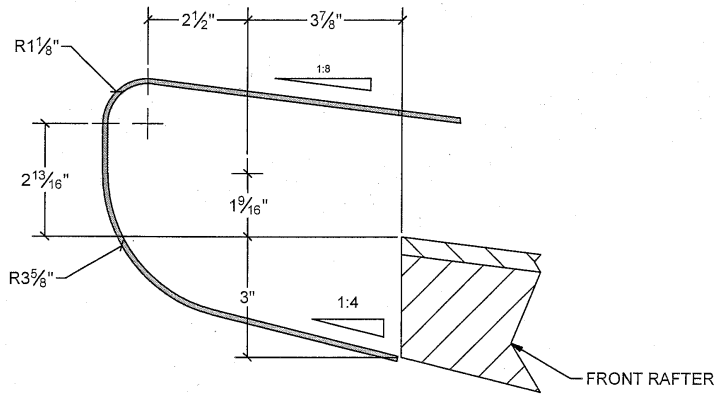
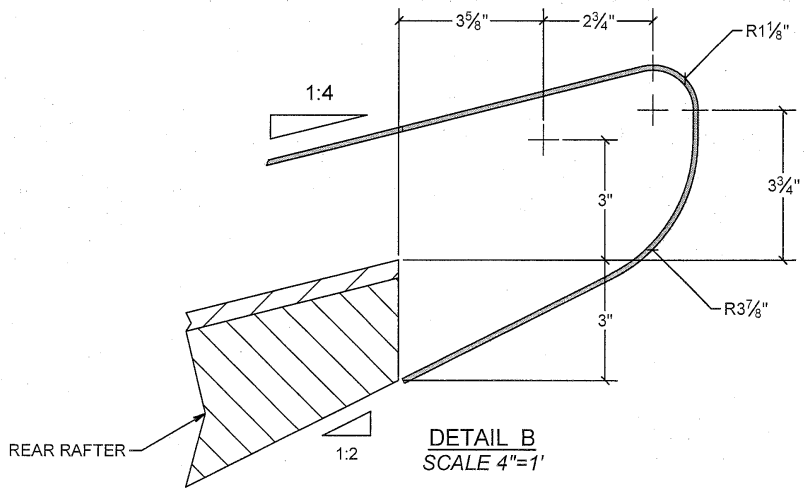
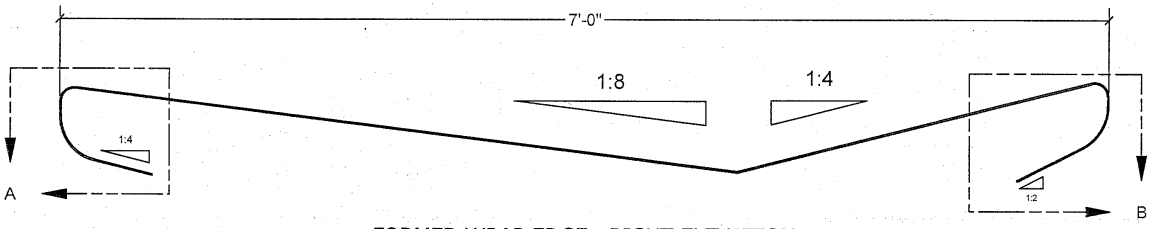
Shelter End - Rake Weldments



DETAIL A
SCALE 4"=1'



DETAIL B
SCALE 4"=1'



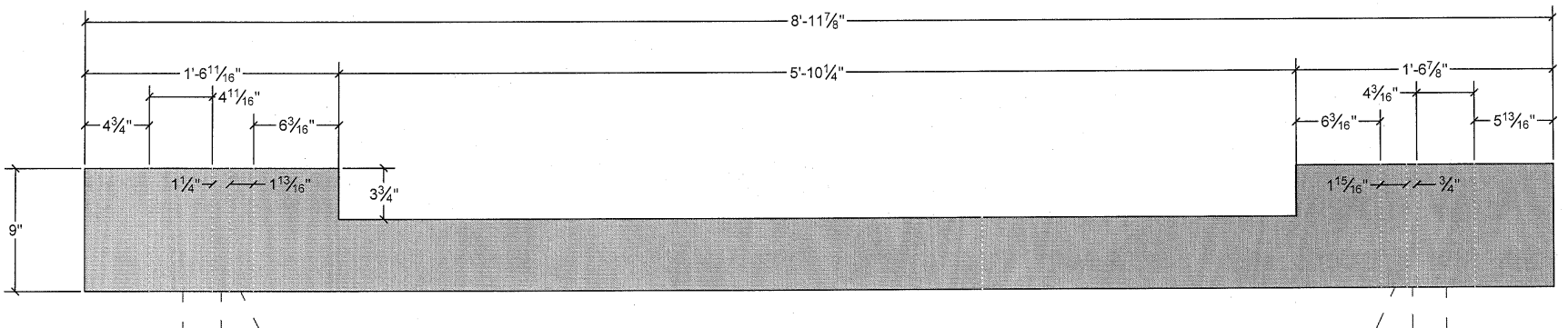
FORMED WRAP EDGE - RIGHT ELEVATION
SCALE 1 1/4"=1'

TOLAR	Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879		
DESCRIPTION	FORMED WRAP EDGE (RS)		
CUSTOMER/VENDOR	SANTA CLARA - VTA		SHEET NO. 1 OF 2
SIZE B	MATL. SS 316L - 11 GA SH M	DWG NO. 21654-00	REV. NO.
SCALE AS NOTED	DATE 1/9/2015	DRAWN BY: cgarcia	

T:\Engineering\CARLOS GARCIA\VTA\21654-00.idw

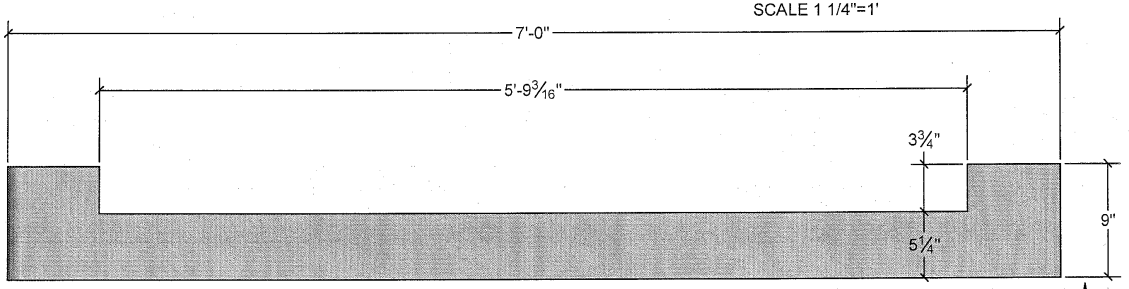
Shelter End - Rake Weldments

NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. DIRECTIONAL FINISH #4 (PARALEL TO RADIUS AXIS - ALL)



FROMED WRAP EDGE - FLAT PATTERN
SCALE 1 1/2"=1'

VIEW C-C
SCALE 1 1/4"=1'



FORMED WRAP EDGE - LEFT SIDE ELEVATION
SCALE 1 1/4"=1'

TOLAR	Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879		
DESCRIPTION	FORMED WRAP EDGE (RS)		
CUSTOMER/VENDOR	SANTA CLARA - VTA		SHEET NO. 2 OF 2
SIZE B	MATL. SS 316L - 11 GA SH M	DWG NO. 21654-00	REV. NO.
SCALE AS NOTED	DATE 1/9/2015	DRAWN BY: cgarcia	

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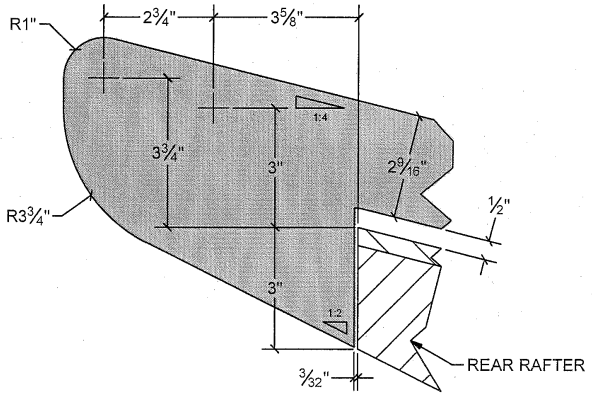
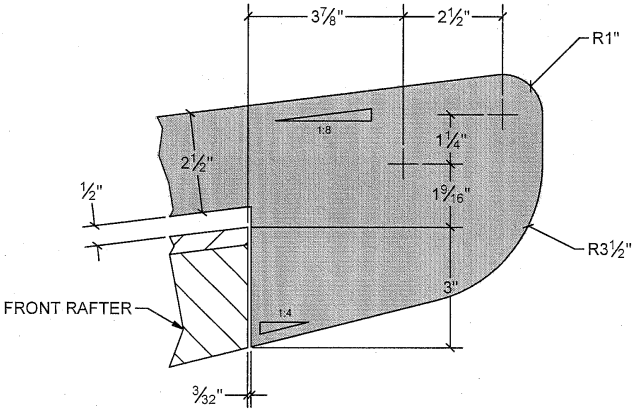
Shelter End - Rake Weldments

Shelter End - Rake Weldments

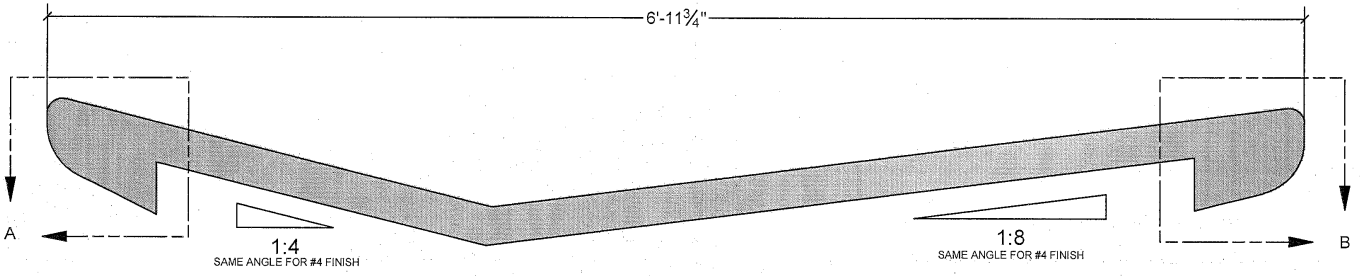
NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. DIRECTIONAL FINISH #4 (LONG EDGES DIRECTION - 1:4 & 1:8)



DETAIL A
SCALE 4" = 1'-0"



DETAIL B
SCALE 4" = 1'-0"



RAKE WELDMENT END PROFILE - ELEVATION
SCALE 1 1/2"=1'

TOLAR	Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879		
DESCRIPTION	RAKE WLDMNT END PROFILE		
CUSTOMER/VENDOR	SANTA CLARA - VTA		SHEET NO. 1 OF 1
SIZE B	MATL. SS 316L - 11 GA SH M	DWG NO. 20891-00	REV. NO.
SCALE AS NOTED	DATE 1/7/2015	DRAWN BY: cgarcia	

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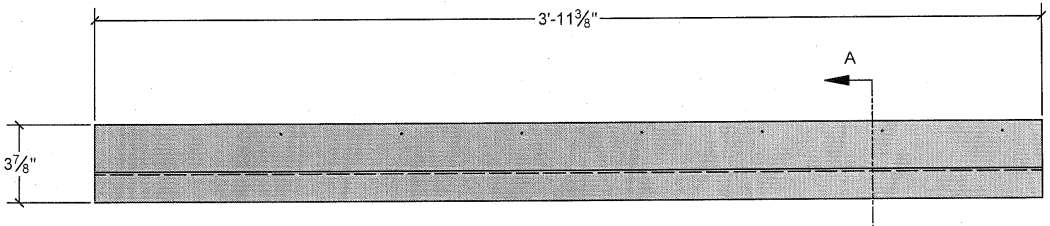
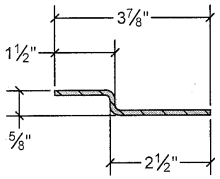
Shelter End - Rake Weldments



LONG Z BRACKET RETURN - PLAN VIEW
SCALE 2"=1'



SECTION A-A
SCALE 4"=1'

TOLAR — Tolar Manufacturing Company, Inc, 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: LONG RAFTER Z BRACKET			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 11 GA SH M	DWG NO.: 21655-00	REV. NO.:
SCALE: AS NOTED	DATE: 1/8/2015	DRAWN BY: cgarcia	

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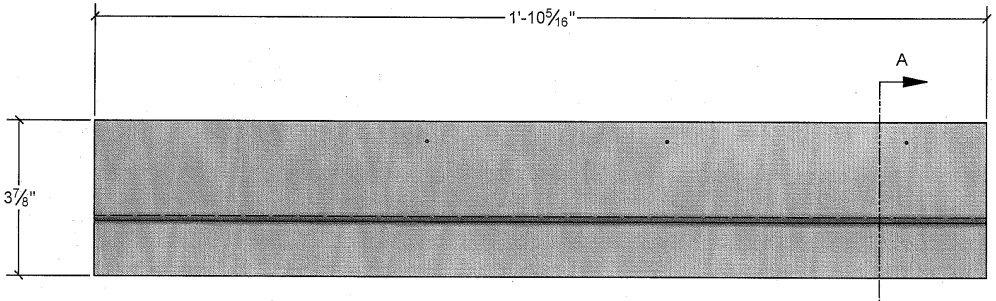
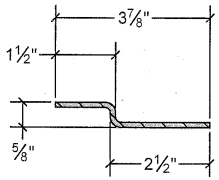
Shelter End - Rake Weldments



SHORT Z BRACKET RETURN - PLAN VIEW
SCALE 4"=1'



SECTION A-A
SCALE 4"=1'

TOLAR — Tolar Manufacturing Company, Inc, 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: SHORT RAFTER Z BRACKET			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 11 GA SH M	DWG NO.: 21656-00	REV. NO.:
SCALE: AS NOTED	DATE: 1/8/2015	DRAWN BY: cgarcia	

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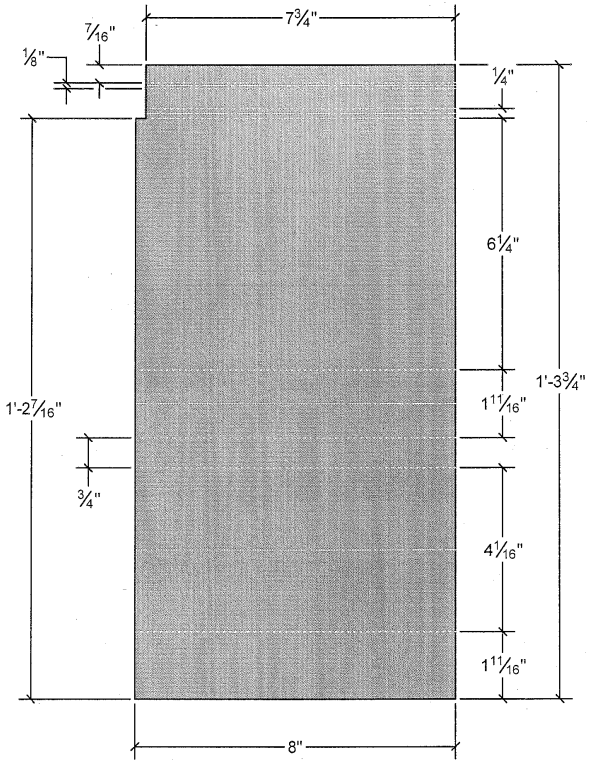
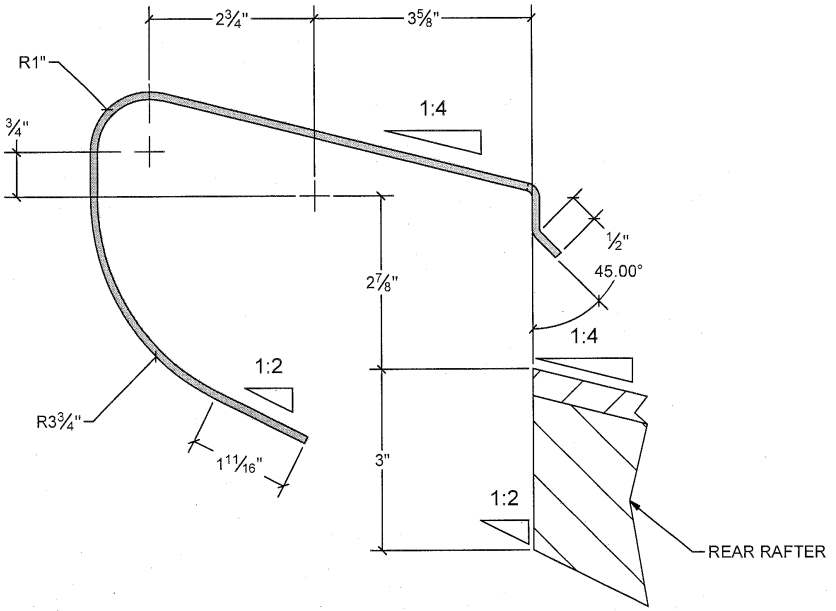
Shelter End - Rake Weldments

NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. DIRECTIONAL FINISH #4 (PARALEL TO RADIUS AXIS - ALL)



RAR WRAP EDGE - FLAT PATTERN
SCALE 4"=1'



REAR WRAP EDGE CONNECTOR - ELEVATION
SCALE 6"=1'

Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: REAR WRAP EDGE CONN			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 11 GA SH M	DWG NO.: 21662-00	REV. NO.
SCALE: AS NOTED	DATE: 1/12/2015	DRAWN BY: cgarcia	

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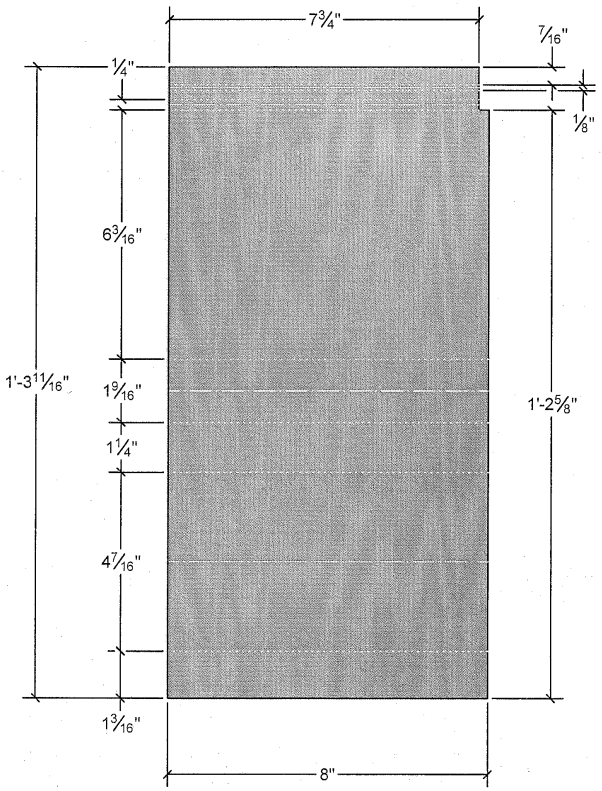
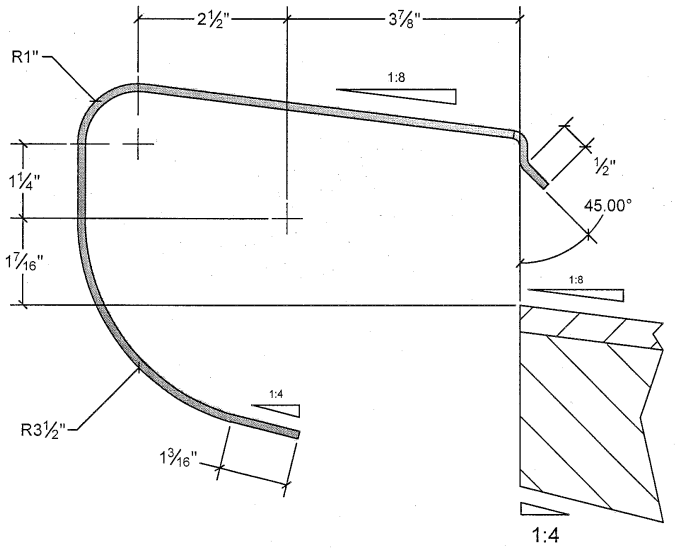
Shelter End - Rake Weldments

NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. DIRECTIONAL FINISH #4 (PARALEL TO RADIUS AXIS - ALL)



FRONT WRAP EDGE - FLAT PATTERN
SCALE 4"=1'



FRONT WRAP EDGE CONNECTOR - ELEVATION
SCALE 6"=1'

Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: FRONT WRAP EDGE CONN			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 11 GA SH M	DWG NO.: 21661-00	REV. NO.:
SCALE: AS NOTED	DATE: 1/12/2015	DRAWN BY: cgarcia	

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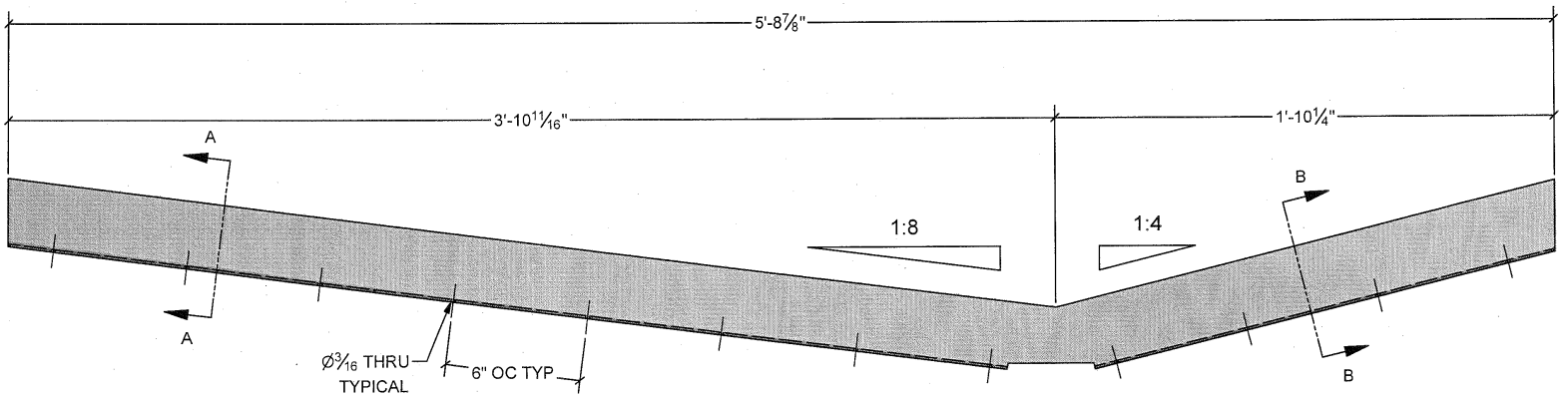
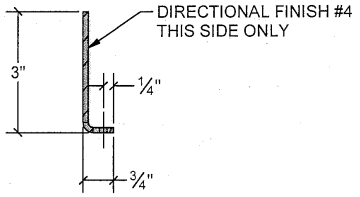
Shelter End - Rake Weldments

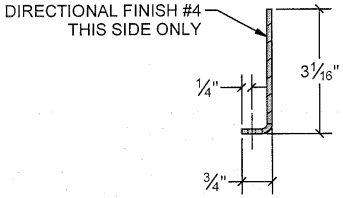
NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. DIRECTIONAL FINISH #4 (LONG EDGES DIRECTION - 1:4 & 1:8 ANGLES)



WELDMENT RACK - INSIDE WALL - RIGHT ELEVATION
SCALE 2 1/4"=1'



SECTION A-A
SCALE 4"=1'



SECTION B-B
SCALE 4"=1'

TOLAR	Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879		
DESCRIPTION	WELDMNT - RAKE IN-WALL (R)		
CUSTOMER/VENDOR	SANTA CLARA - VTA		SHEET NO. 1 OF 2
SIZE B	MATL. SS 316L - 11 GA SH M	DWG NO. 21658-00	REV. NO.
SCALE AS NOTED	DATE 1/12/2015	DRAWN BY: cgarcia	

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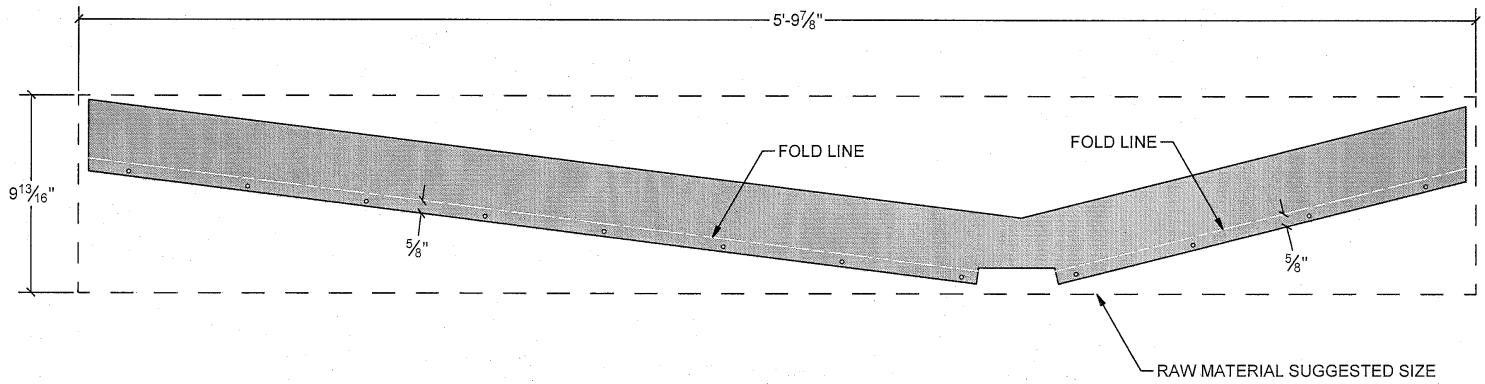
Shelter End - Rake Weldments



SHEET METAL - FLAT PATTERN
SCALE 2"=1'

Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: WELDMNT - RAKE IN-WALL (R)			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 2 OF 2
SIZE: B	MATL.: SS 316L - 11 GA SH M	DWG NO.: 21658-00	REV. NO.:
SCALE: AS NOTED	DATE: 1/12/2015	DRAWN BY: cgarcia	

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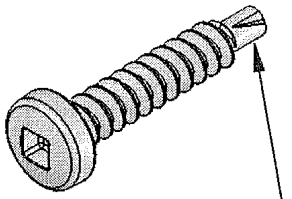
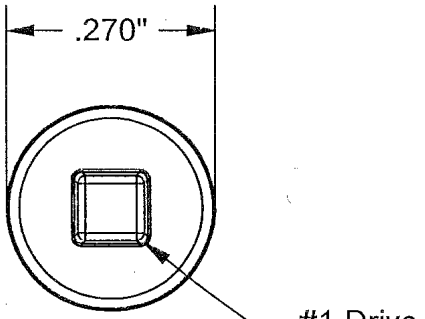
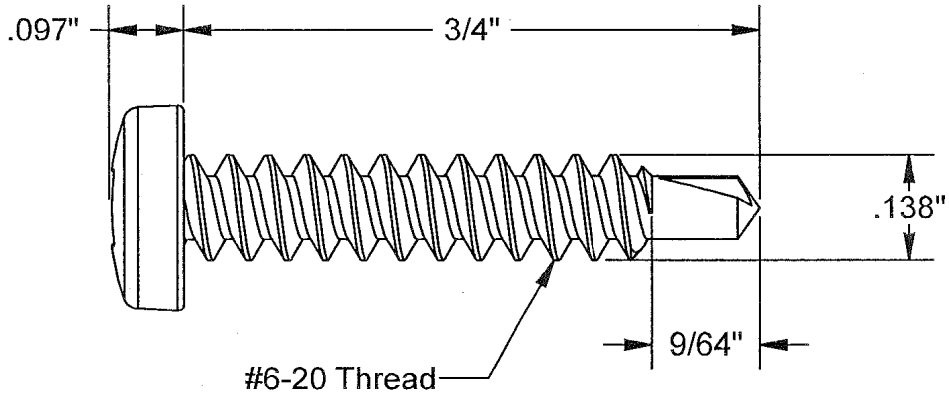
Shelter End - Rake Weldments



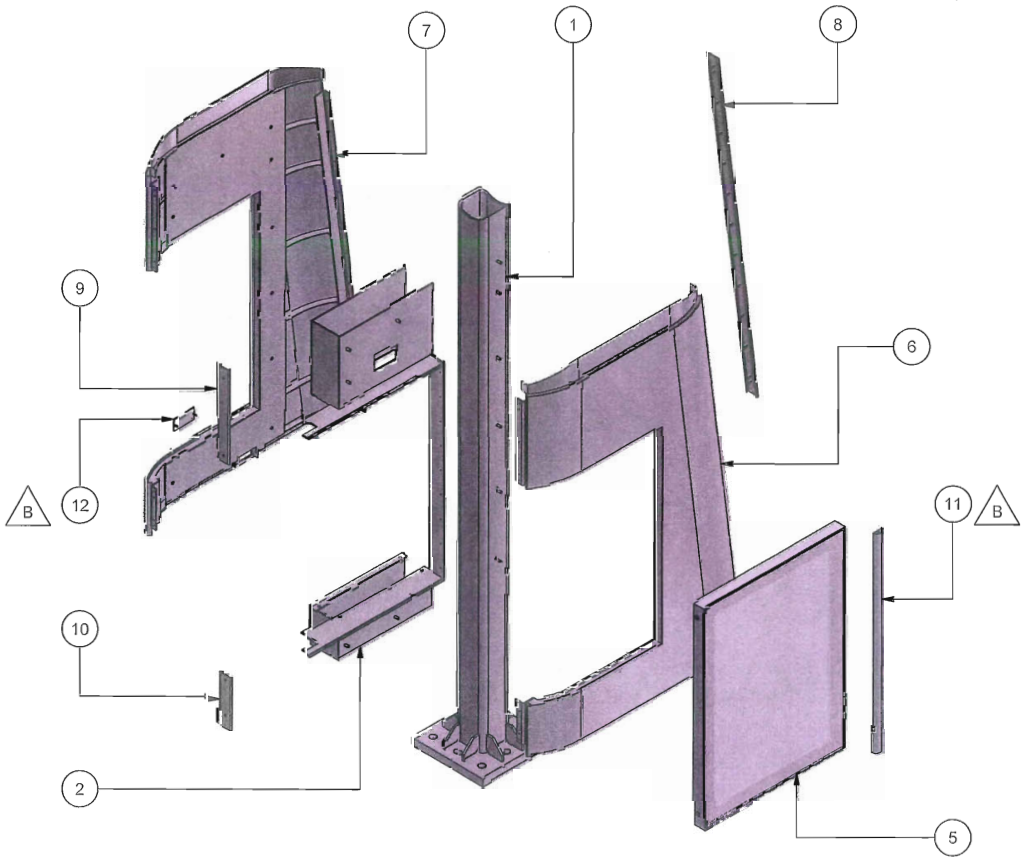




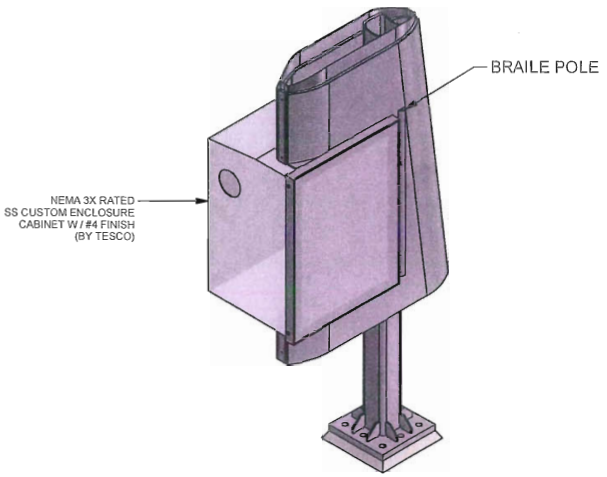
Shelter End - Rake Weldments

McMASTER-CARR® CAD | PART NUMBER 90203A253

REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
ALL	B	331 NOTES	10/28/2014	



ELECTRICAL PIER - PRIMARY SHELTER
SCALE 1/2"=1'



ELECTRICAL PIER - ISO VIEW
SCALE 3/8"=1'

PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	20773-00	COLUMNS A&C WELDMENT
2	1	20809-00	SUPPORT BRACKET - E. PIER
5	1	20946-00	ELECTRICAL PIER DOOR
6	1	20855-00	EP - FRONT PIER WRAP ASSY
7	1	21115-00	EP - BACK PIER WRAP ASSY
8	1	23329-00	ANGLED WRAP EDGE COVER
9	1	23377-00	WRAP EDGE COVER - UPPER
10	1	23379-00	WRAP EDGE COVER - LOWER
11	1	21137-00	BRAILE POLE
12	1	23394-00	PIER REAR ACCESS COVER

TOLAR
Tolar Manufacturing Company, Inc
258 Mariah Circle, Corona CA. 92879

DESCRIPTION	ELECTRICAL PIER - PRIMARY SHELTER		
CUSTOMER/VENDOR	SANTA CLARA - VTA		SHEET NO. 1 OF 3
SIZE B	MATL. SS 316L - MISC	DWG NO. 20809-01	REV. NO. B
SCALE AS NOTED	DATE 9/29/2014	DRAWN BY: cgarcia	

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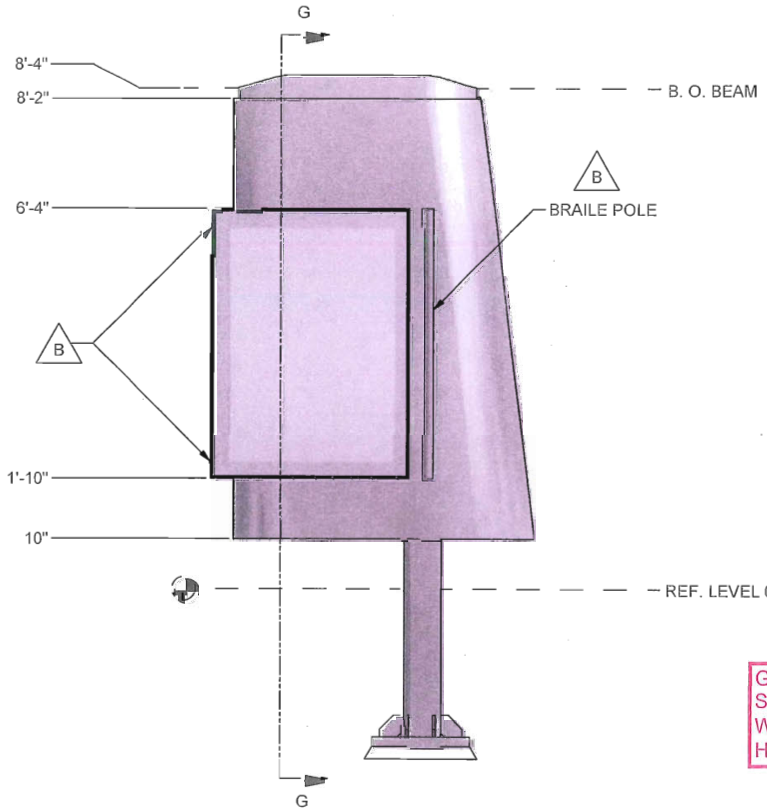
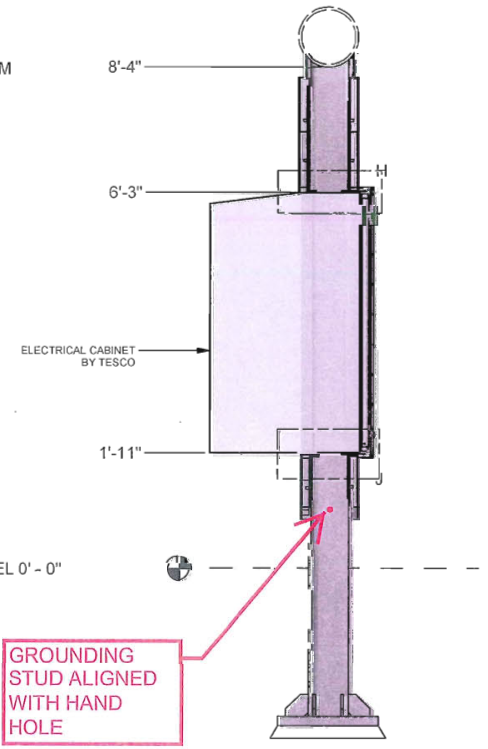
Shelter Electrical Pier

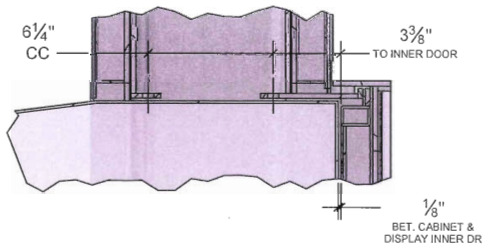
REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
ALL	B	331 NOTES	10/28/2014	



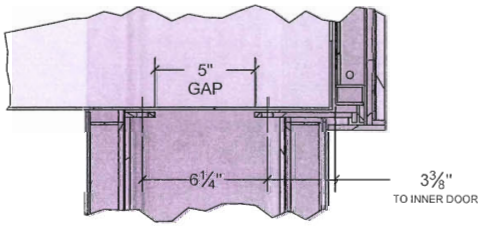
ELECTRICAL PIER - ELEVATION
SCALE 1/2"=1'



SECTION G-G
SCALE 1/2"=1'



DETAIL H
SCALE 2"=1'



DETAIL J
SCALE 2"=1'

TOLAR	Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879		
DESCRIPTION	ELECTRICAL PIER - PRIMARY SHELTER		
CUSTOMER/VENDOR	SANTA CLARA - VTA		SHEET NO. 2 OF 3
SIZE: B	MATL. SS 316L - MISC	DWG NO. 20809-01	REV. NO. B
SCALE AS NOTED	DATE 9/29/2014	DRAWN BY: cgarcia	

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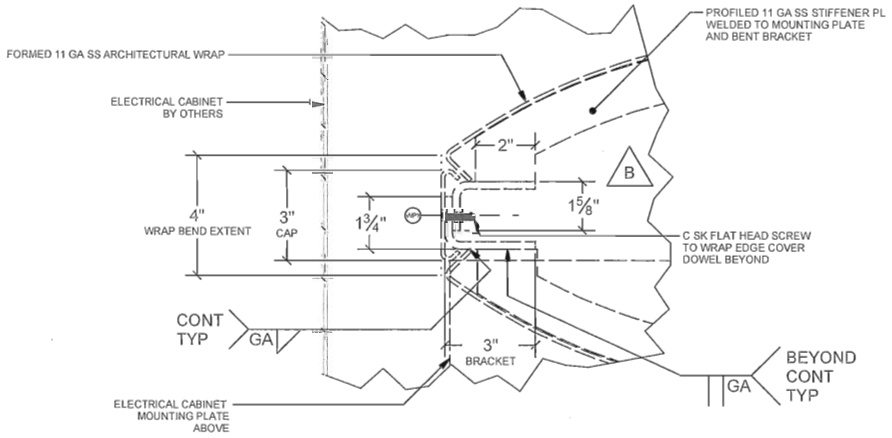
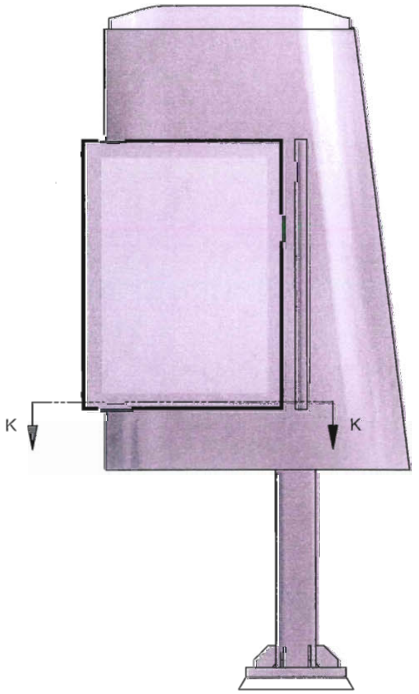
Shelter Electrical Pier

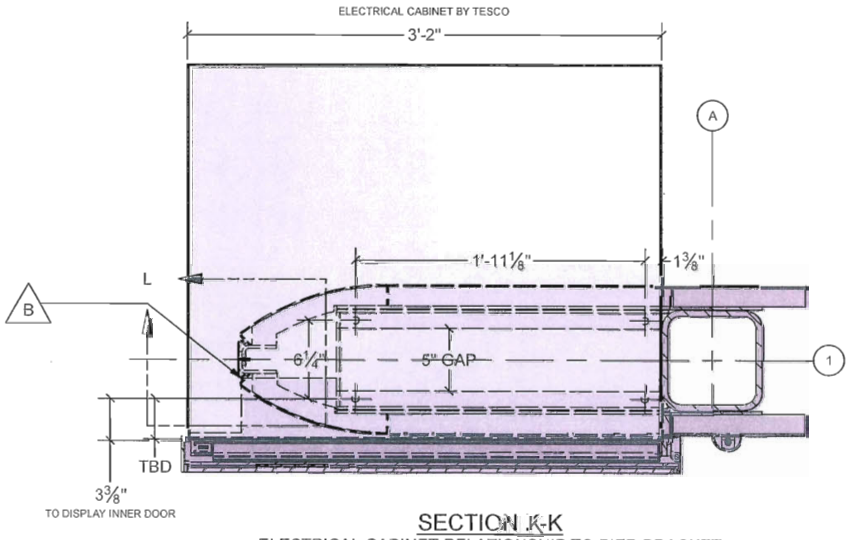
REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
ALL	B	331 NOTES	10/28/2014	



DETAIL L
SCALE 3" = 1'-0"



ELECTRICAL PIER - ELEVATION
SCALE 1/2"=1'



SECTION K-K
ELECTRICAL CABINET RELATIONSHIP TO PIER BRACKET
SCALE 1 1/4"=1'

Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: ELECTRICAL PIER - PRIMARY SHELTER			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 3 OF 3
SIZE: B	MATL.: SS 316L - MISC	DWG NO.: 20809-01	REV. NO.: B
SCALE: AS NOTED	DATE: 9/29/2014	DRAWN BY: cgarcia	

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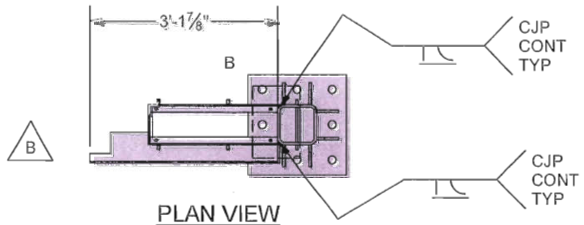
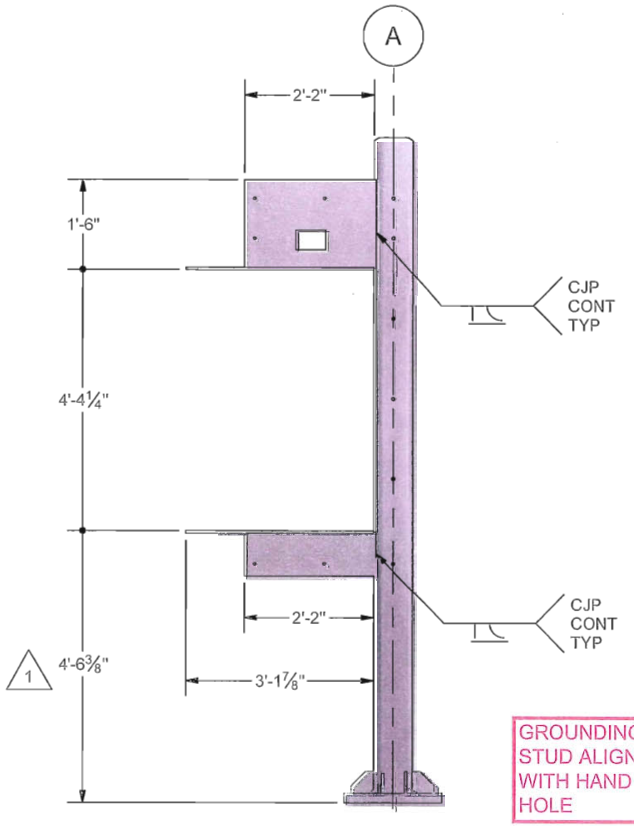
Shelter Electrical Pier

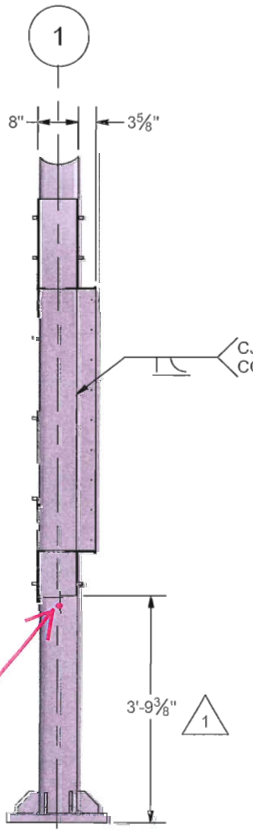
REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
A3-A2	1	GROUT THIKNESSS UPDATED	4/23/2014	
ALL	B	332 NOTES	10/28/2014	



PLAN VIEW
SCALE 1/2"=1'

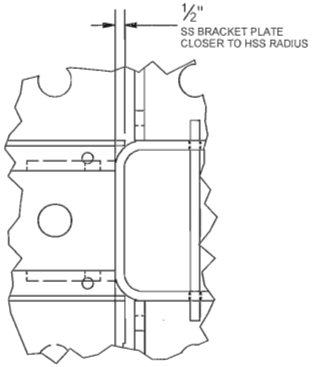


CABINET SUPPORT BRACKET - ELEVATION
SCALE 1/2"=1'

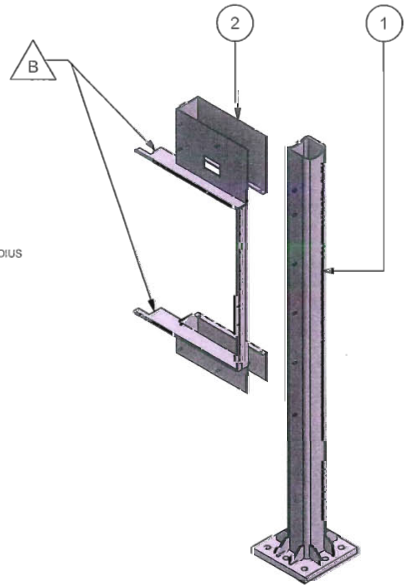


GROUNDING STUD ALIGNED WITH HAND HOLE

LEFT ELEVATION
SCALE 1/2"=1'



DETAIL B
SCALE 2" = 1'-0"



WELMENT PARTS
SCALE 3/8"=1'

NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. MILL FINISH #1

PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	20773-00	COLUMNS A&C WELDMENT
2	1	20809-00	SUPPORT BRACKET - E. PIER

TOLAR
Tolar Manufacturing Company, Inc
258 Mariah Circle, Corona CA. 92879

DESCRIPTION: ELECTRICAL PIER - PRIMARY SHELTER			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 2
SIZE: B	MATL.: SS 316L	DWG NO.: 20809-01	REV NO.: B
SCALE: AS NOTED	DATE: 4/1/2014	DRAWN BY: cgarcia	

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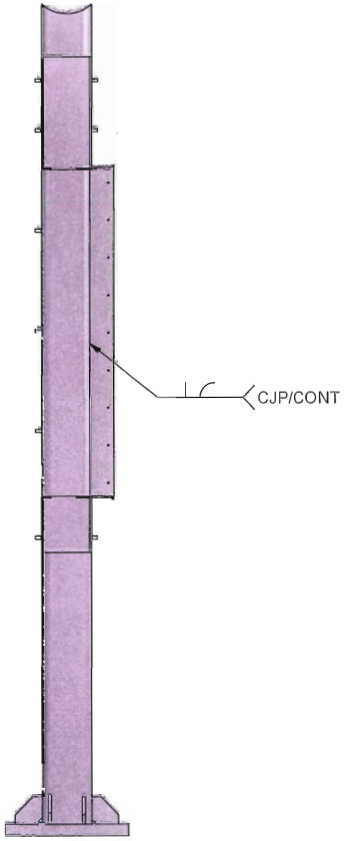
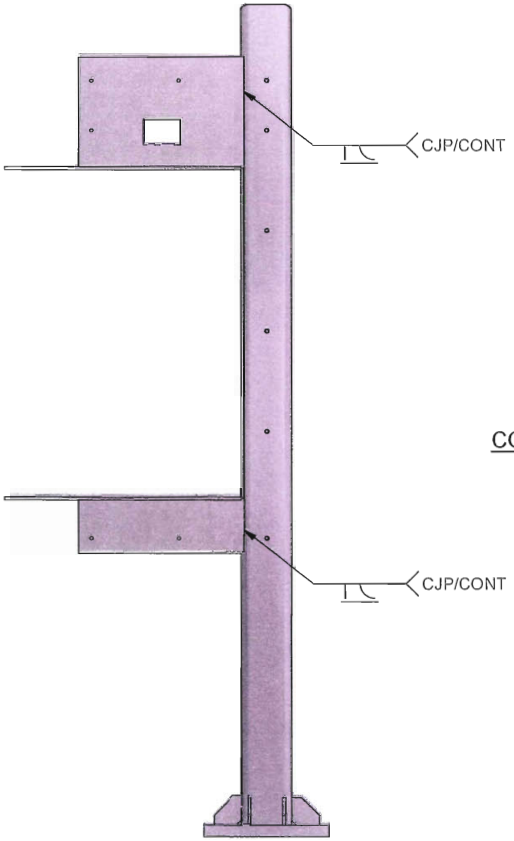
Shelter Electrical Pier

NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. MILL FINISH #1

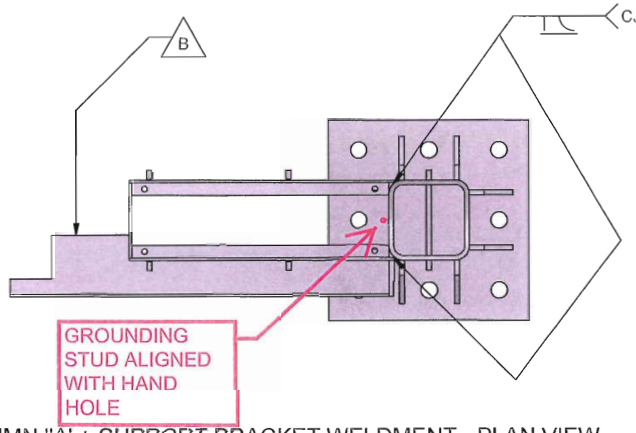
REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
A3-A2	1	GROUT THIKNESSS UPDATED	4/23/2014	
ALL	B	332 NOTES	10/28/2014	



COLUMN "A" - LEFT ELEVATION
SCALE 5/8"=1'



COLUMN "A" FRONT ELEVATION
SCALE 5/8"=1'



COLUMN "A' + SUPPORT BRACKET WELDMENT - PLAN VIEW
SCALE 1"=1'

TOLAR	Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879		
DESCRIPTION	ELECTRICAL PIER - PRIMARY SHELTER		
CUSTOMER/VENDOR	SANTA CLARA - VTA		SHEET NO. 2 OF 2
SIZE B	MATL. SS 316L - MISC	DWG NO. 20809-01	REV. NO. B
SCALE AS NOTED	DATE 4/1/2014	DRAWN BY: cgarcia	

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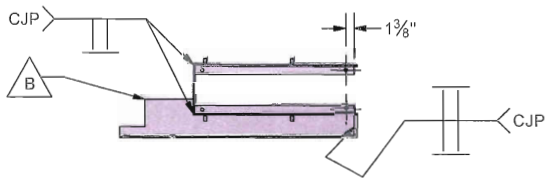
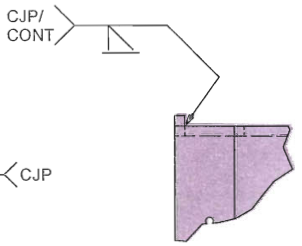
Shelter Electrical Pier

NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. MILL FINISH #1

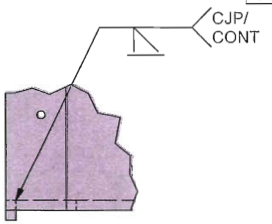
REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
ALL	B	332 NOTES	10/28/2014	



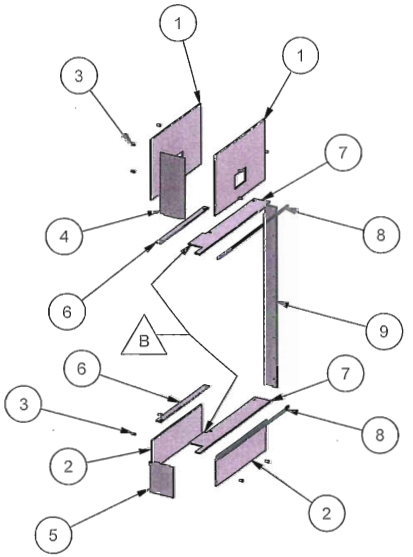
SUPPORT BRACKET PLAN VIEW
SCALE 5/8"=1'



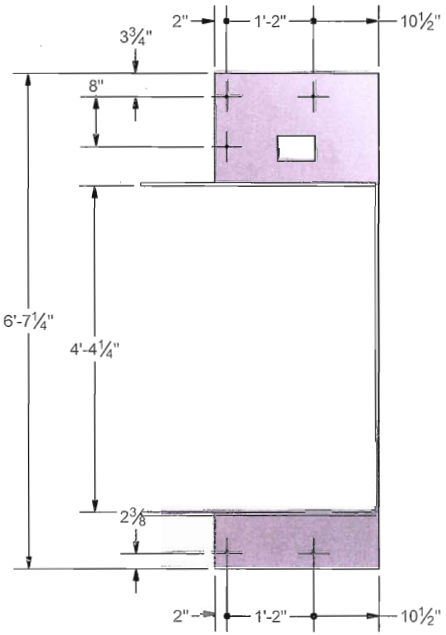
DETAIL B
SCALE 4"=1'



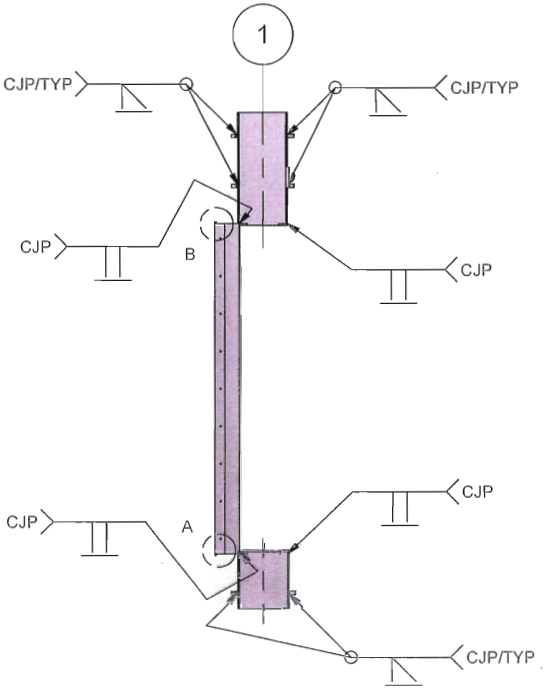
DETAIL A
SCALE 4"=1'



WELDMENTS PARTS
SCALE 3/8"=1'



SUPPORT BRACKET - FRONT ELEVATION
SCALE 5/8"=1'



SUPPORT BRACKET - RIGHT ELEVATION
SCALE 5/8"=1'

ASSEMBLY PART LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	2	20806-00	SUPPORT BRACKET COL 1A - EP
2	2	20807-00	SUPPORT BRACKET COL 1A - EP
3	10	20808-00	1/2" DIA DOWEL
4	1	20806-01	SUPPORT BRACKET COL 1A - EP
5	1	20807-01	SUPPORT BRACKET COL 1A - EP
6	2	20810-00	SUPPORT BRACKET COL 1A - EP
7	2	20850-00	SUPPORT BRACKET COL 1A - EP
8	2	20851-00	DOOR STRIKE PL - RETURN
9	1	20852-00	DOOR HINGE PL

TOLAR
Tolar Manufacturing Company, Inc
258 Mariah Circle, Corona CA. 92879

DESCRIPTION: SUPPORT BRACKET - E. PIER

CUSTOMER/VENDOR: SANTA CLARA - VTA | SHEET NO.: 1 OF 1

SIZE: B | MATL.: SS 316L - 1/4" THK, SS 316L - 1/2 DIA | DWG NO.: 20809-00 | REV. NO.: B

SCALE: AS NOTED | DATE: 4/1/2014 | DRAWN BY: cgarcia

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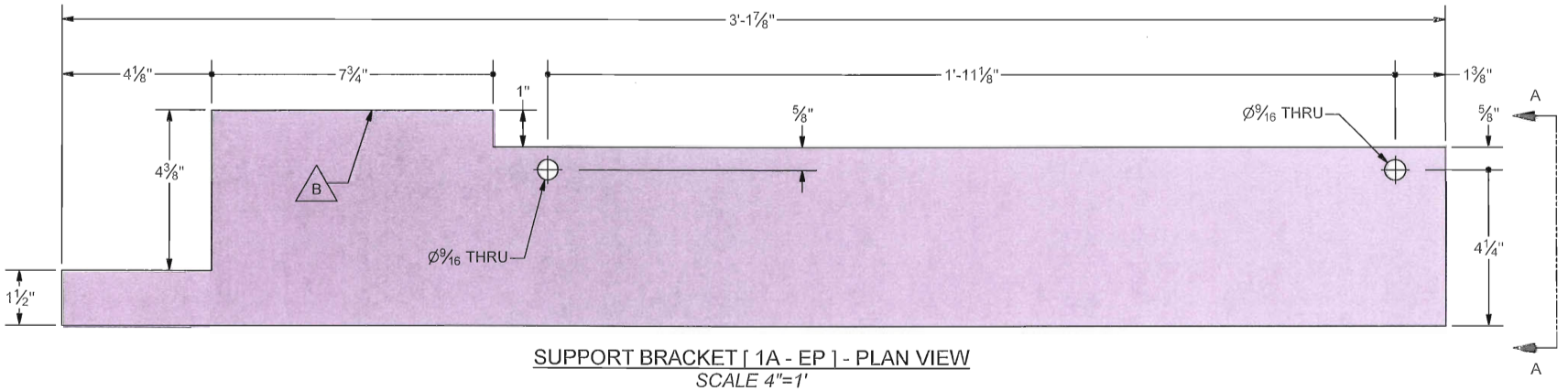
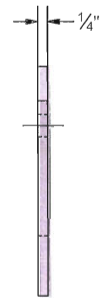
Shelter Electrical Pier

NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. MILL FINISH #1

REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
4	B	332 NOTES	10/28/2014	



SUPPORT BRACKET [1A - EP] - PLAN VIEW
SCALE 4"=1'



VIEW A-A
SCALE 4"=1'

TOLAR	Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879		
DESCRIPTION:	SUPPORT BRACKET COL 1A - EP		
CUSTOMER/VENDOR:	SANTA CLARA - VTA		SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 1/4" THK PL	DWG NO.: 20850-00	REV. NO.: B
SCALE: AS NOTED	DATE: 3/31/2014	DRAWN BY: cgarcia	

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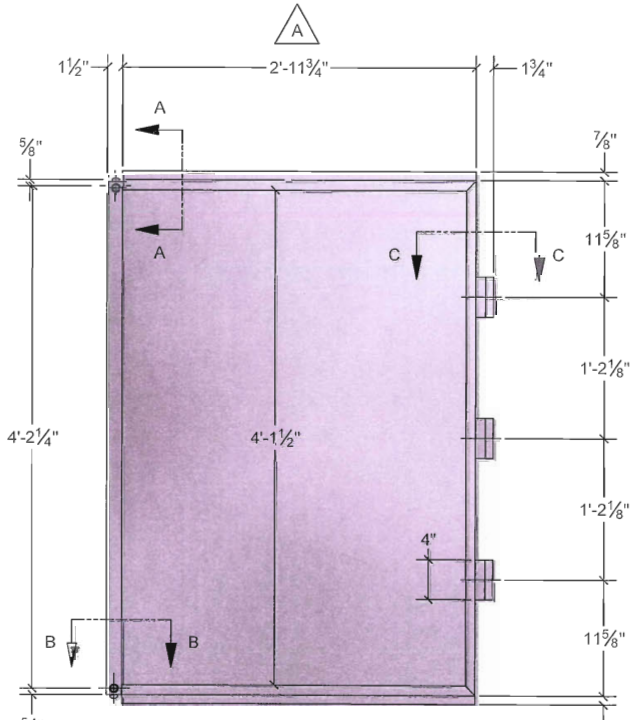
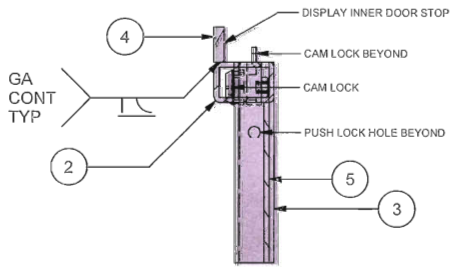
Shelter Electrical Pier

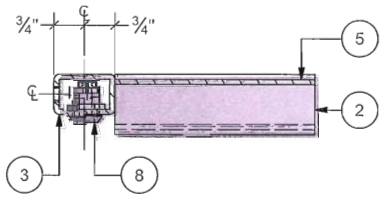
REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
ALL	A	332 NOTES	12/15/2014	



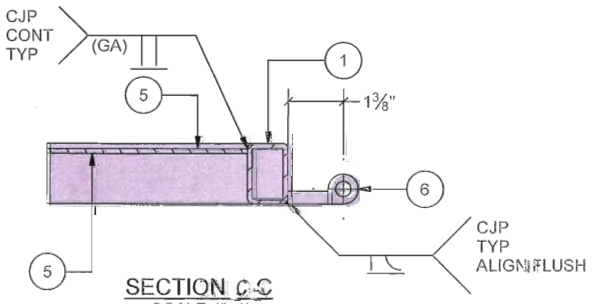
DISPLAY INNER DOOR - ELEVATION
SCALE 1"=1'



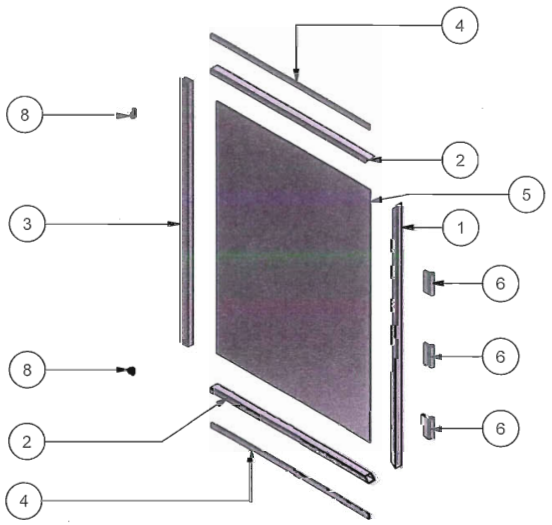
SECTION A-A
SCALE 4"=1'



SECTION B-B
SCALE 4"=1'



SECTION C-C
SCALE 4"=1'



DISPLAY DOOR INNER FRAME - COMPONENTS
SCALE 5/8"=1'

PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	20940-00	VERT INNER DISPLAY DR FRME
2	2	20941-00	HZ INNER DISPLAY DR FRAME
3	1	20943-00	VERT FR TUBE OUTR
4	2	20944-00	DISPLAY INNER DOOR - DR STOP
5	1	20945-00	BACKING PLATE
6	1	23381-00	HINGE ASSEMBLY
8	2	10305A75	SLOTTED CAM LATCH

TOLAR
Tolar Manufacturing Company, Inc
258 Mariah Circle, Corona CA. 92879

DESCRIPTION: DISPLAY DOOR INNER FRAME

CUSTOMER/VENDOR: SANTA CLARA - VTA — SHEET NO.: 1 OF 1

SIZE	MATL	DWG NO.	REV. NO.
B	SS 316L - MISC	20942-00	A

SCALE	DATE	DRAWN BY
AS NOTED	9/29/2014	cgarcia

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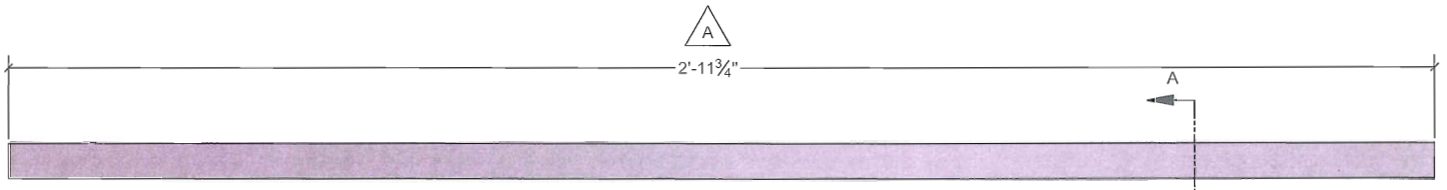
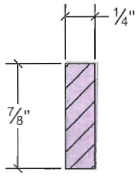
Shelter Electrical Pier

REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
ALL	A	332 NOTES	12/15/2014	



DISPLAY DOOR / INNER DOOR STOP FLAT BAR - ELEVATION
SCALE 4" = 1'-0"



SECTION A-A
SCALE 12" = 1'-0"

Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: DISPLAY INNER DOOR - DR STOP			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 1/4"x7/8" FL BAR	DWG NO.: 20944-00	REV. NO.: A
SCALE: AS NOTED	DATE: 9/30/2014	DRAWN BY: cgarcia	

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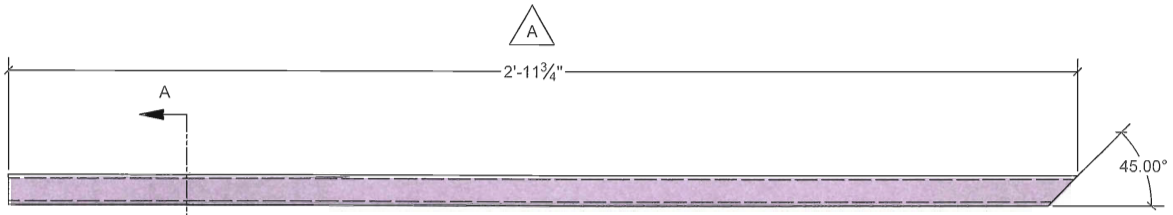
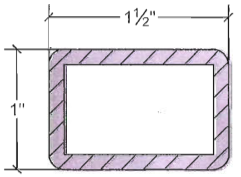
Shelter Electrical Pier

REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
ALL	A	332 NOTES	12/15/2014	



HORIZONTAL DISPLAY DOOR INNER FRAME - ELEVATION
SCALE 3"=1'



SECTION A-A
SCALE 12"=1'

Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: HZ INNER DISPLAY DR FRAME			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL: SS 316L - HSS 1-1/2x1x1/8	DWG NO.: 20941-00	REV. NO.: A
SCALE: AS NOTED	DATE: 9/30/2014	DRAWN BY: cgarcia	

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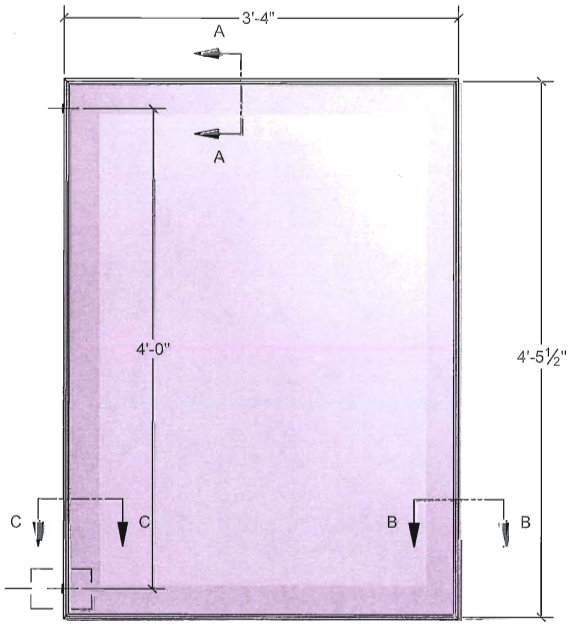
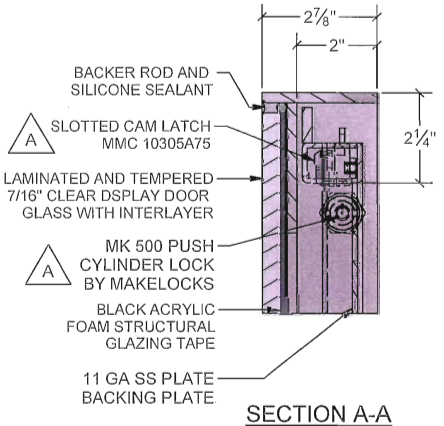
Shelter Electrical Pier

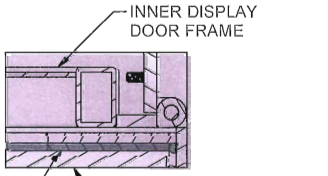
REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
ALL	A	332 NOTES	12/15/2014	



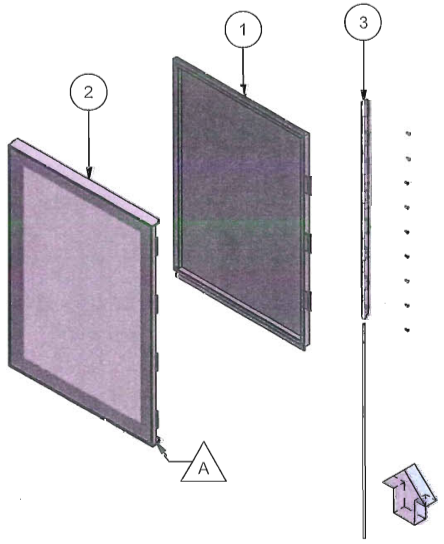
ELECTRICAL PIER DOOR - ELEVATION
SCALE 1"=1'



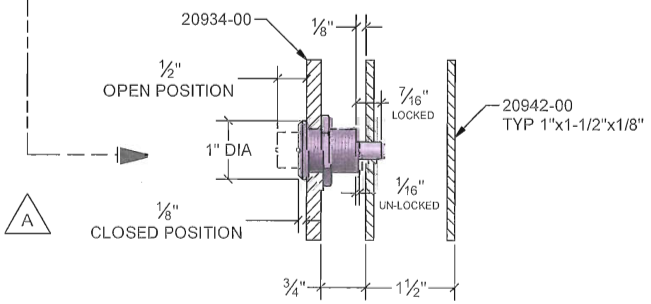
SECTION A-A
SCALE 4"=1'



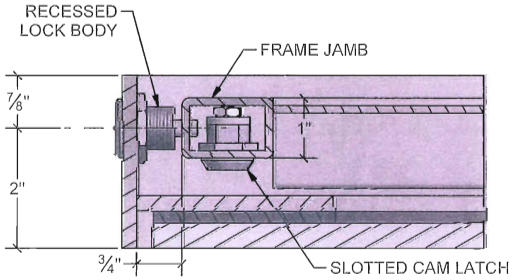
SECTION B-B
SCALE 4"=1'



DOOR COMPONENTS
SCALE 1/2"=1'



MK 500 - MAKELOCKS - ELEVATION
SCALE 6"=1'



SECTION C-C
SCALE 6"=1'

PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	20942-00	DISPLAY DOOR INNER FRAME
2	1	20934-00	DISPLAY DOOR
3	1	23381-00	HINGE ASSEMBLY

TOLAR
Tolar Manufacturing Company, Inc
258 Mariah Circle, Corona CA. 92879

DESCRIPTION: ELECTRICAL PIER DOOR

CUSTOMER/VENDOR: SANTA CLARA - VTA | SHEET NO.: 1 OF 1

SIZE: B | MATL.: SS 316L - MISC | DWG NO.: 20946-00 | REV. NO.: A

SCALE: AS NOTED | DATE: 9/26/2014 | DRAWN BY: cgarcia

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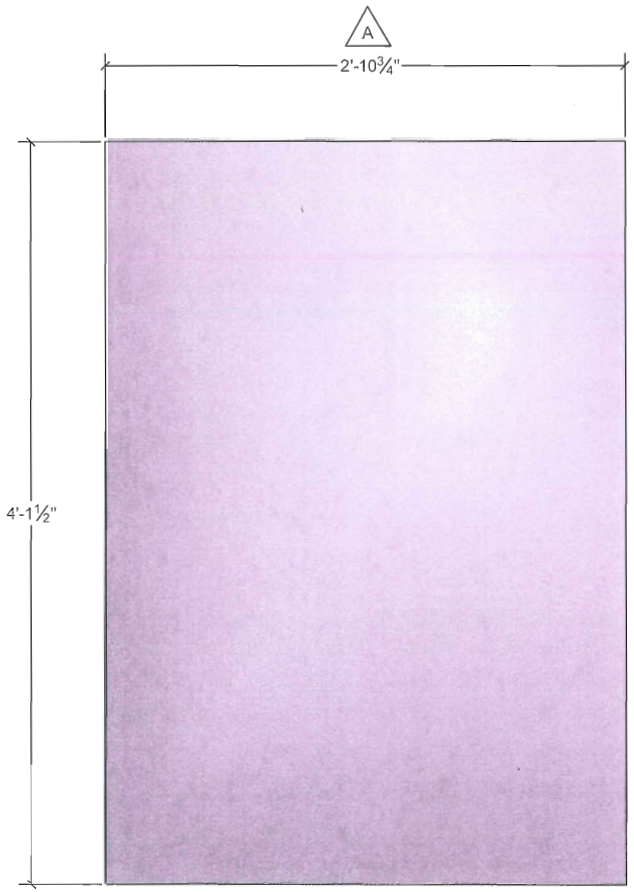
Shelter Electrical Pier

REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
ALL	A	332 NOTES	12/15/2014	



DISPLAY DOOR / INNER DOOR BACKING PLATE
SCALE 1 1/2"=1'

TOLAR	Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879		
DESCRIPTION	BACKING PLATE		
CUSTOMER/VENDOR	SANTA CLARA - VTA		SHEET NO. 1 OF 1
SIZE B	MATL. SS 316L - 11 GA SH M	DWG NO. 20945-00	REV. NO. A
SCALE AS NOTED	DATE 9/30/2014	DRAWN BY: cgarcia	

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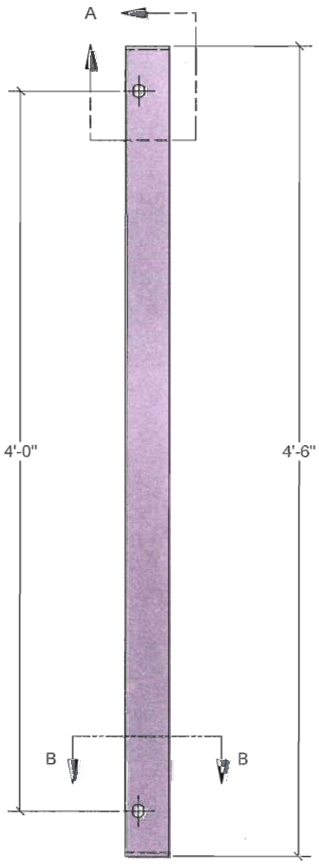
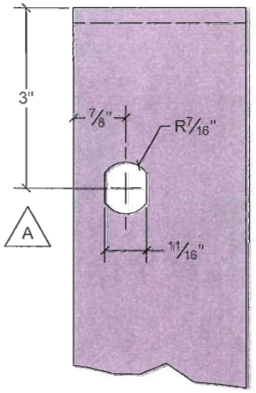
Shelter Electrical Pier

NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. DIRECTIONAL FINISH #4 HORIZONTAL (PARALEL TO 2-7/8" EDGE)

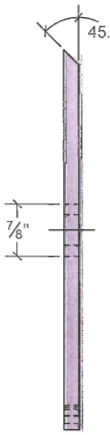
REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
ALL	A	332 NOTES	12/15/2014	



OUTER DISPLAY DOOR FRAME RETURN - LEFT SIDE ELEVATION
SCALE 1 1/2"=1'

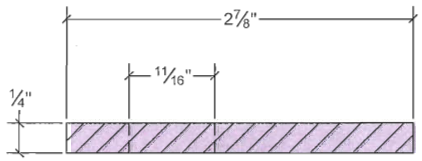


DETAIL A
TYPICAL
SCALE 6"=1'



FRONT ELEVATION
SCALE 6"=1'

ISO VIEW
SCALE 4"=1'



SECTION B-B
SCALE 12"=1'

TOLAR Tolar Manufacturing Company, Inc
258 Mariah Circle, Corona CA. 92879

DESCRIPTION	OUTER DR FRM RTURN		
CUSTOMER/VENDOR	SANTA CLARA - VTA		SHEET NO. 1 OF 1
SIZE: B	MATL. SS 316L - 1/4x2-7/8 FL BAR	DWG NO. 23384-00	REV. NO.
SCALE AS NOTED	DATE 9/30/2014	DRAWN BY: cgarcia	

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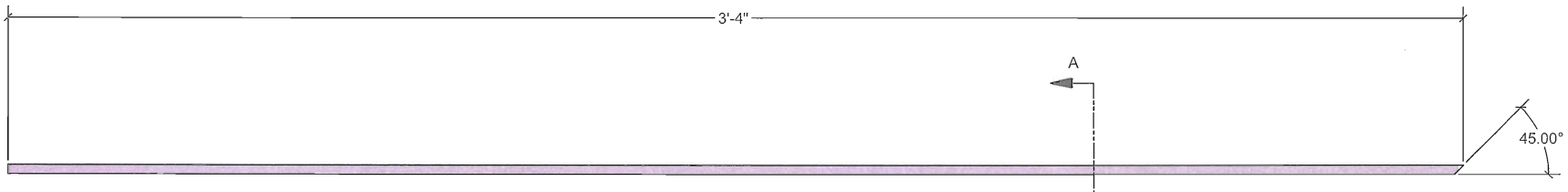
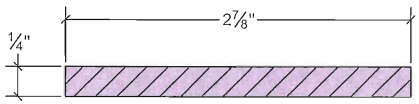
Shelter Electrical Pier

NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. DIRECTIONAL FINISH #4 HORIZONTAL (PARALEL TO THE LONGEST EDGE - ALL SIDES)



HORIZONTAL DISPLAY DOOR RETURN - TOP - ELEVATION
SCALE 4" = 1'-0"



SECTION A-A
SCALE 12" = 1'-0"

TOLAR	Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879		
DESCRIPTION	HZ DISPLAY DOOR FRAME RET		
CUSTOMER/VENDOR	SANTA CLARA - VTA		SHEET NO. 1 OF 1
SIZE B	MATL. SS 316L - 1/4"x2-7/8" FL BAR	DWG NO. 20933-00	REV. NO.
SCALE AS NOTED	DATE 9/30/2014	DRAWN BY: cgarcia	

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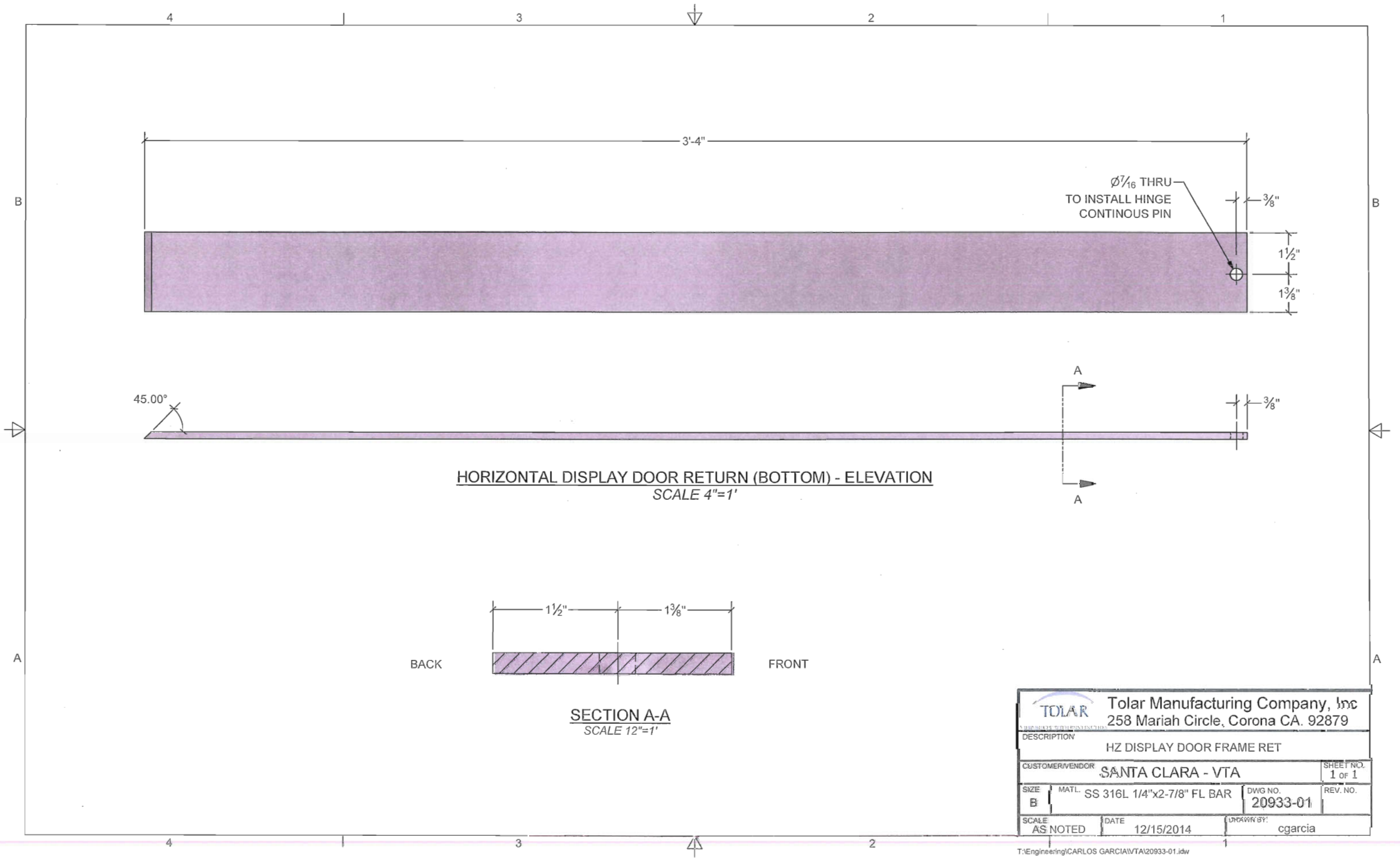
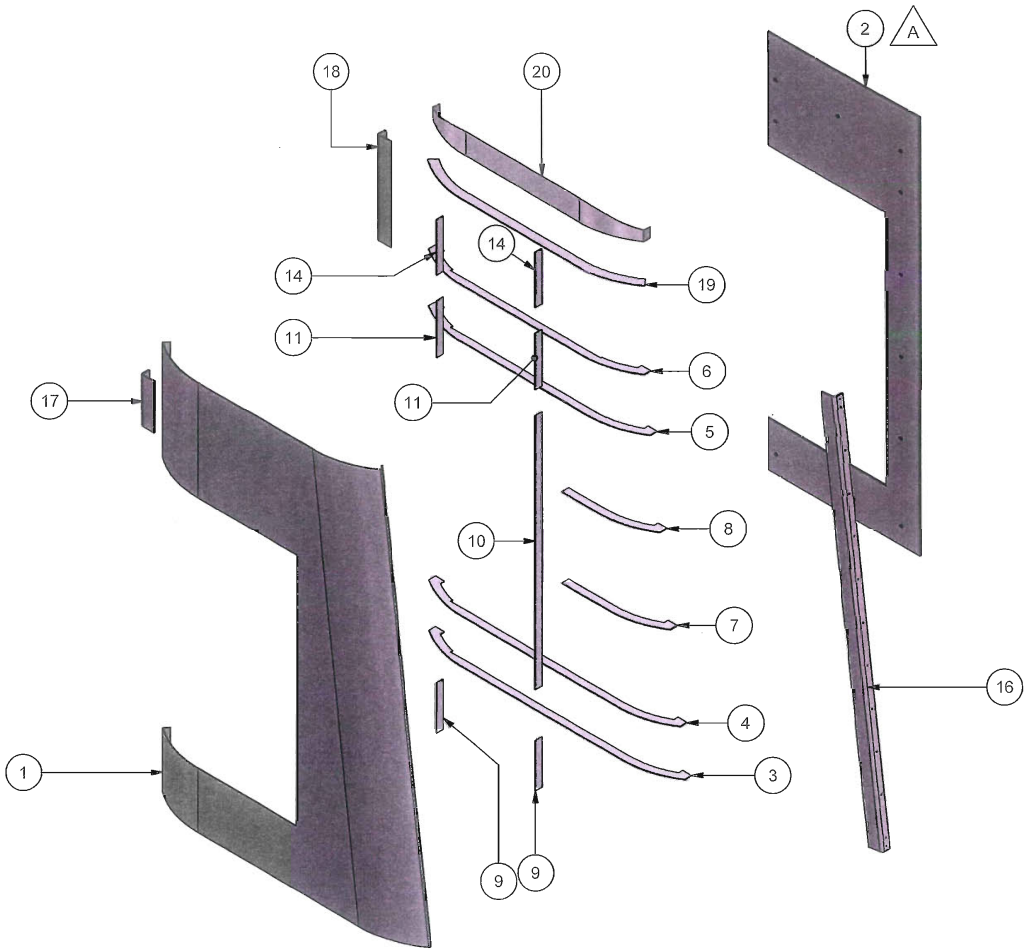
Shelter Electrical Pier



Shelter Electrical Pier

REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
ALL	A	MNTNG PLATE SIZE	10/28/2014	



ELECTRICAL PIER WRAP ASSEMBLY - FRONT
SCALE 5/8"=1'

PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	20853-01	E PIER WRAP - SH MTL FRONT
2	1	21104-00	MOUNTING PLATE - ELEC PIER
3	1	20920-00	STIFFENER LAYER 1
4	1	20921-00	STIFFENER LAYER 2
5	1	20924-00	STIFFENER LAYER 5
6	1	20924-01	STIFFENER LAYER 6
7	1	20922-00	STIFFENER LAYER 3
8	1	20923-00	STIFFENER LAYER 4
9	2	23322-01	VERTICAL STIFFENER R1 - L1
10	1	23321-00	VERTICAL STIFFENER R2
11	2	23324-00	VERTICAL STIFFENER R3
14	2	23323-00	VERTICAL STIFFENER R4
16	1	23375-00	FRONT FORMED MNTNG CLIP
17	1	23326-LW	FRONT FRMD MNTNG CLIP
18	1	23326-UP	FRONT FRMD MNTNG CLIP
19	1	20854-00	TOP STIFFENER-COVER
20	1	20854-01	WRAP REVEAL

TOLAR
Tolar Manufacturing Company, Inc
258 Mariah Circle, Corona CA. 92879

DESCRIPTION: EP - FRONT PIER WRAP ASSY

CUSTOMER/VENDOR			SHEET NO.
SANTA CLARA - VTA			1 OF 3
SIZE: B	MATL: SS 316L - MISC	DWG NO.: 20855-00	REV. NO.: A
SCALE: AS NOTED	DATE: 9/29/2014	DRAWN BY: cgarcia	

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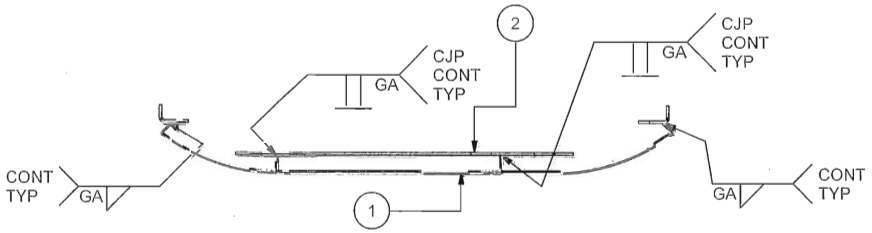
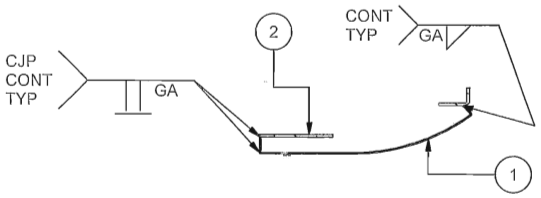
Shelter Electrical Pier

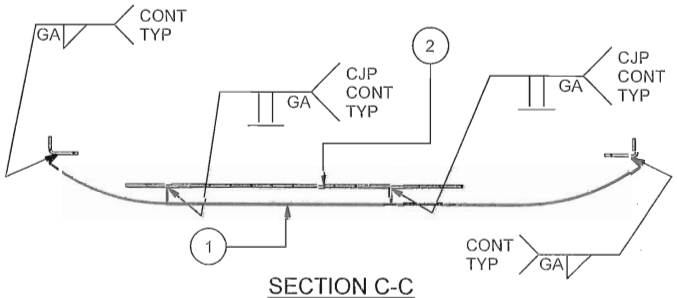
REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
ALL	A	MNTNG PLATE SIZE	10/28/2014	



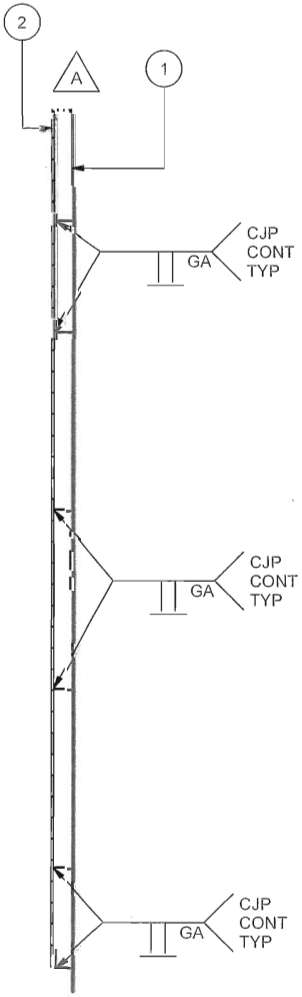
SECTION A-A
SCALE 1"=1'



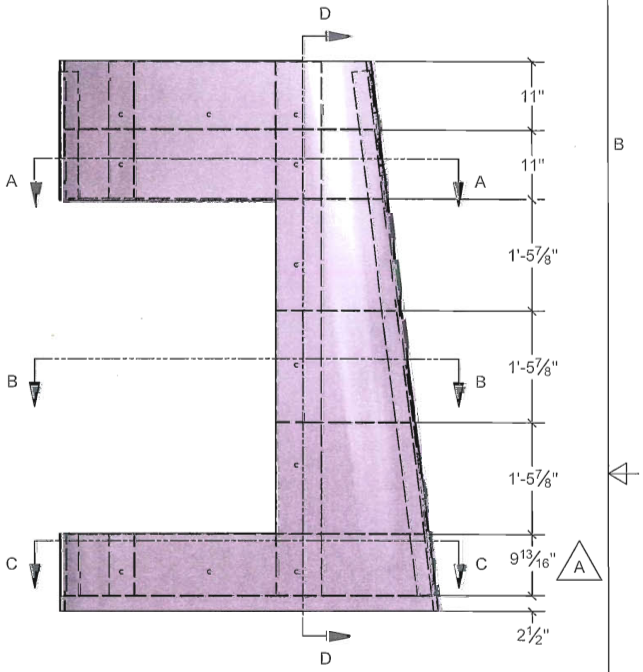
SECTION B-B
SCALE 1"=1'



SECTION C-C
SCALE 1"=1'



SECTION D-D
SCALE 1"=1'



STIFFENER PLACEMENT - ELEVATION
SCALE 5/8"=1'

Tolar Manufacturing Company, Inc
258 Mariah Circle, Corona CA. 92879

DESCRIPTION	EP - FRONT PIER WRAP ASSY		
CUSTOMER/VENDOR	SANTA CLARA - VTA		SHEET NO. 2 OF 3
SIZE: B	MATL: SS 316L - MISC	DWG NO.: 20855-00	REV. NO.: A
SCALE: AS NOTED	DATE: 9/29/2014	DRAWN BY: cgarcia	

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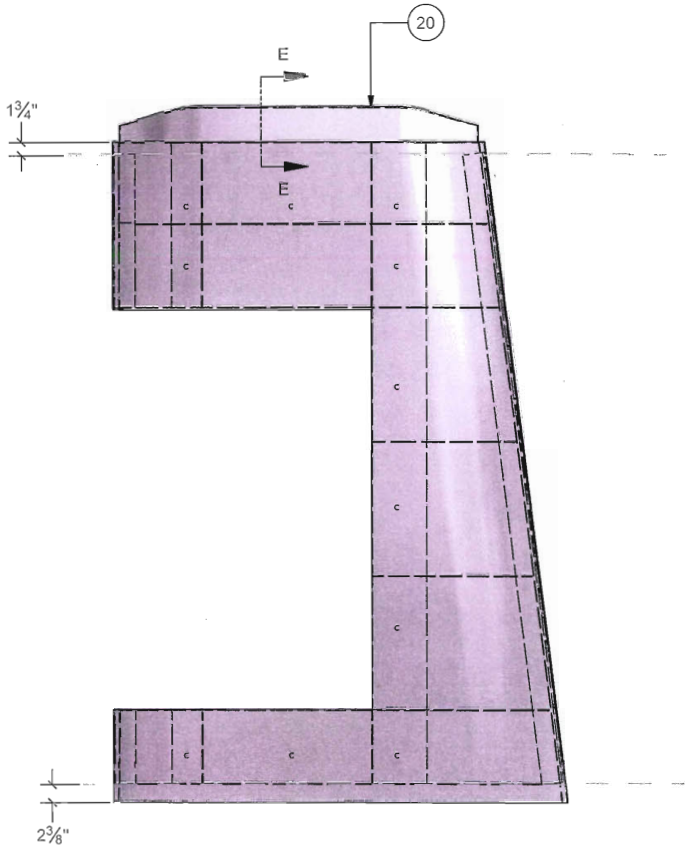
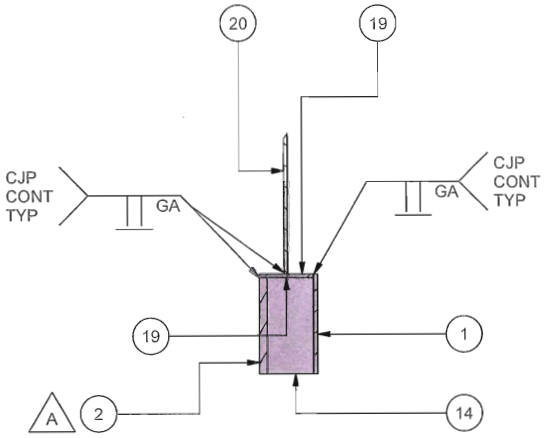
Shelter Electrical Pier

REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
ALL	A	MNTNG PLATE SIZE	10/28/2014	



REAR ELECTRICAL PIER ARCHITECTURAL WRAP - ELEVATION
SCALE 3/4"=1'



SECTION E-E
SCALE 3"=1'

TOLAR	Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879		
DESCRIPTION	EP - FRONT PIER WRAP ASSY.		
CUSTOMER/VENDOR	SANTA CLARA - VTA		SHEET NO. 3 OF 3
SIZE B	MATL. SS 316L - MISC	DWG NO. 20855-00	REV. NO. A
SCALE AS NOTED	DATE 9/29/2014	DRAWN BY: cgarcia	

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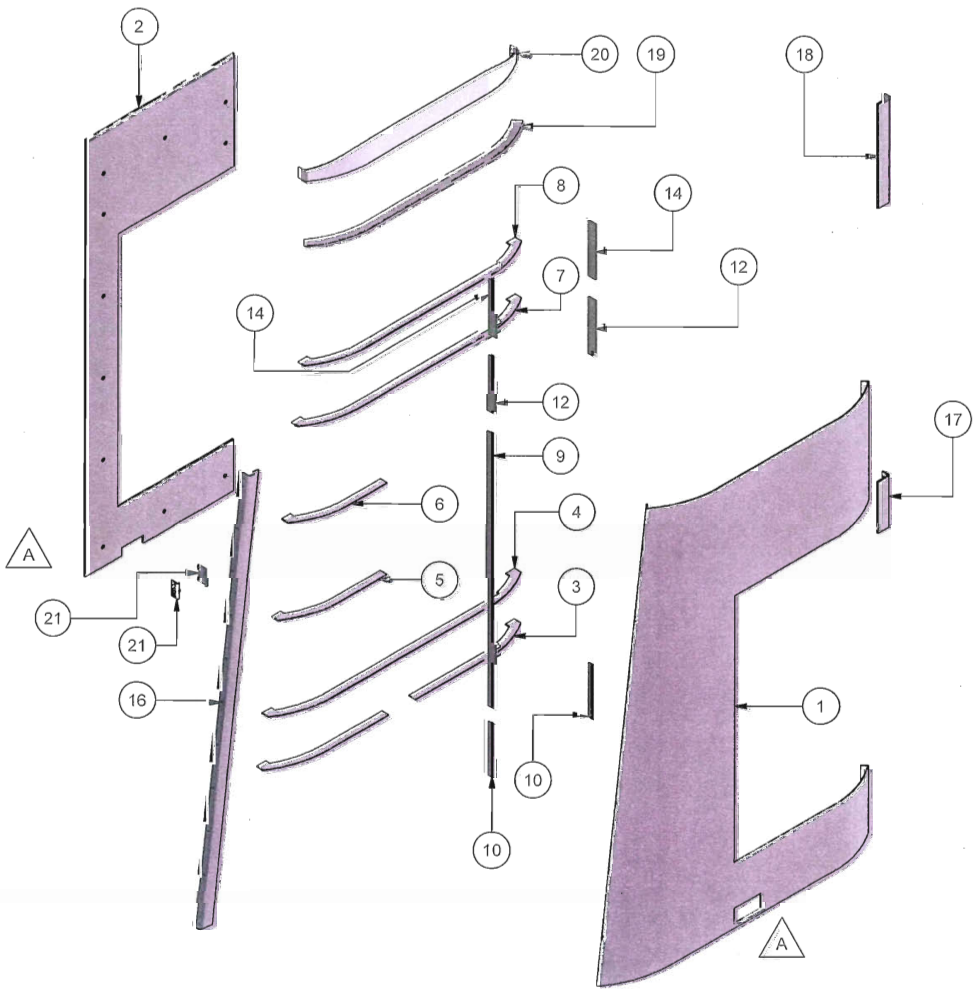
Shelter Electrical Pier

REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
ALL	A	HAND HOLE	10/28/2014	



ELECTRICAL PIER WRAP ASSEMBLY - BACK
SCALE 5/8"=1'

PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	20853-00	E PIER WRAP - SH MTL REAR
2	1	21104-01	MOUNTING PLATE - ELEC PIER
3	1	20920-01	STIFFENER LAYER 1
4	1	20921-00	STIFFENER LAYER 2
5	1	20922-00	STIFFENER LAYER 3
6	1	20923-00	STIFFENER LAYER 4
7	1	20924-00	STIFFENER LAYER 5
8	1	20924-01	STIFFENER LAYER 6
9	1	23321-00	VERTICAL STIFFENER R2
10	2	23322-00	VERTICAL STIFFENER R1 - L1
12	2	23324-00	VERTICAL STIFFENER R3
14	2	23323-00	VERTICAL STIFFENER R4
16	1	23376-00	REAR FRMD MNTG CLIP
17	1	23325-LW	REAR FRMD MNTG CLIP
18	1	23325-UP	REAR FRMD MNTG CLIP
19	1	20854-00	TOP STIFFENER-COVER
20	1	20854-01	WRAP REVEAL
21	2	23392-00	ACCESS COVER FASTENING TAB

TOLAR
Tolar Manufacturing Company, Inc
258 Mariah Circle, Corona CA. 92879

DESCRIPTION: EP - BACK PIER WRAP ASSY			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL: SS 316L - MISC	DWG NO.: 21115-00	REV. NO.: A
SCALE: AS NOTED	DATE: 9/29/2014	DRAWN BY: cgarcia	

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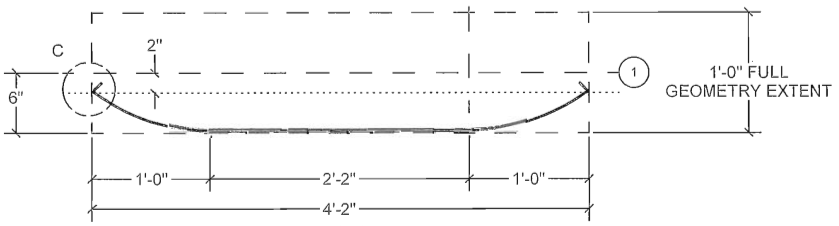
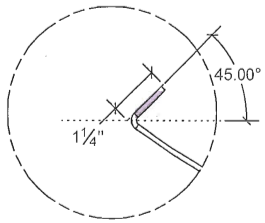
Shelter Electrical Pier

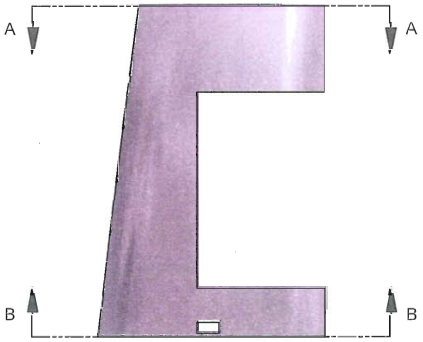
REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
ALL	A	OPENING SIZE	10/28/2014	



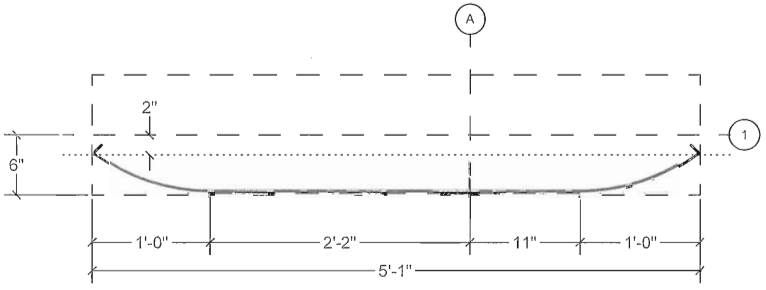
SECTION A-A
SCALE 1"=1'



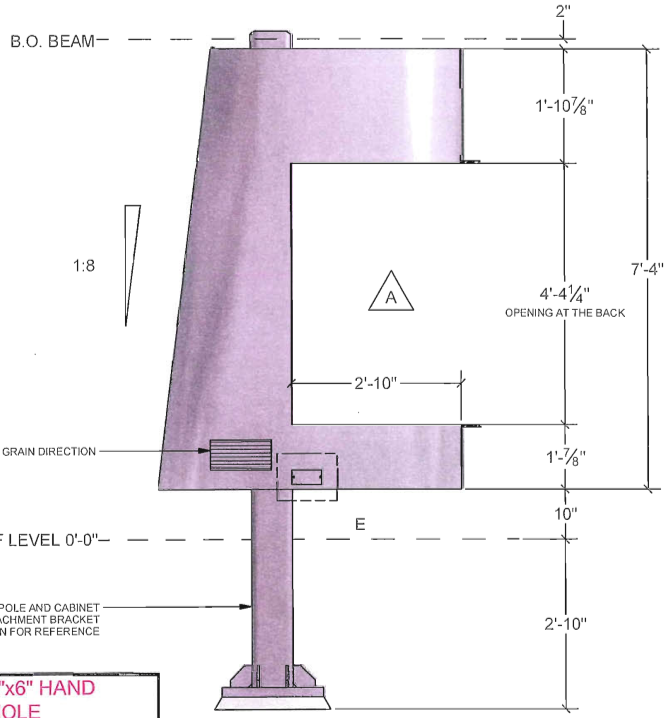
DETAIL C
SCALE 4"=1'



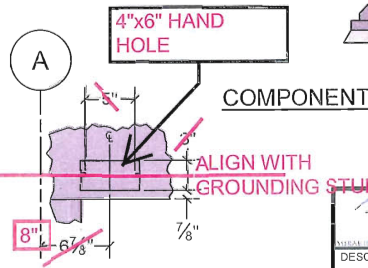
ELECTRICAL PIER ARCHITECTURAL WRAP - REAR ELEVATION
SCALE 3/8"=1'



SECTION B-B
SCALE 1"=1'



COMPONENT ELEVATION RELATIONSHIP
SCALE 1/2"=1'



DETAIL E
SCALE 1" = 1'-0"

TOLAR	Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879		
DESCRIPTION	E PIER WRAP - SH MTL REAR		
CUSTOMER/VENDOR	SANTA CLARA - VTA		SHEET NO. 1 OF 2
SIZE B	MATL. SS 316L - MISC	DWG NO. 20853-00	REV. NO. A
SCALE AS NOTED	DATE 10/1/2014	DRAWN BY: cgarcia	

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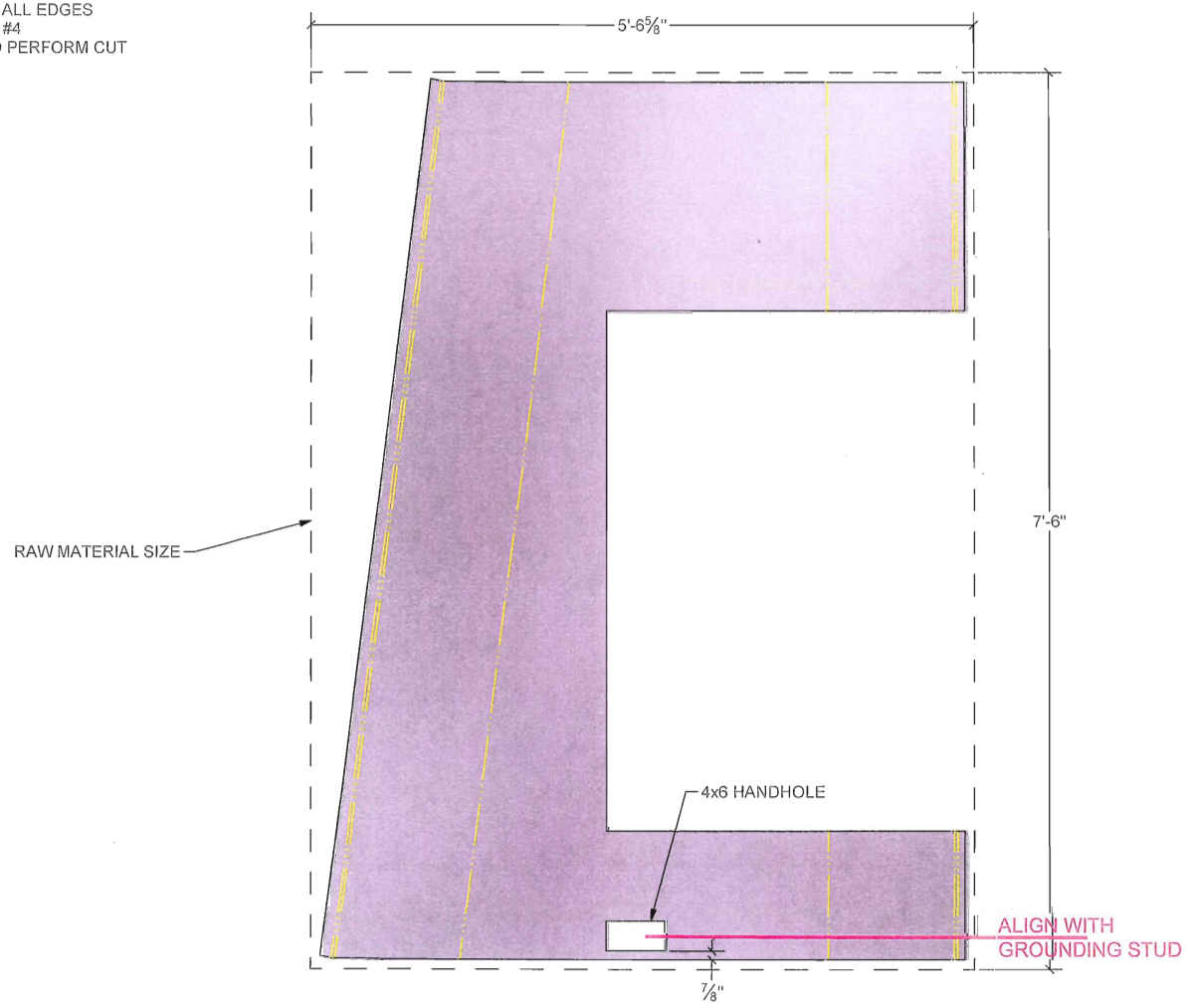
Shelter Electrical Pier

NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. DIRECTIONAL FINISH #4
3. USE 20853-00.DXF TO PERFORM CUT



BACK ARCHITECTURAL WRAP - CUT TEMPLATE
SCALE 1"=1'

	Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879
DESCRIPTION	E PIER WRAP - SH MTL REAR
CUSTOMER/VENDOR	SANTA CLARA - VTA
SHEET NO.	2 OF 2
SIZE	B
MATL.	SS 316L - 11GA SH M
DWG NO.	20853-00
REV. NO.	A
SCALE	AS NOTED
DATE	10/1/2014
DRAWN BY	cgarcia

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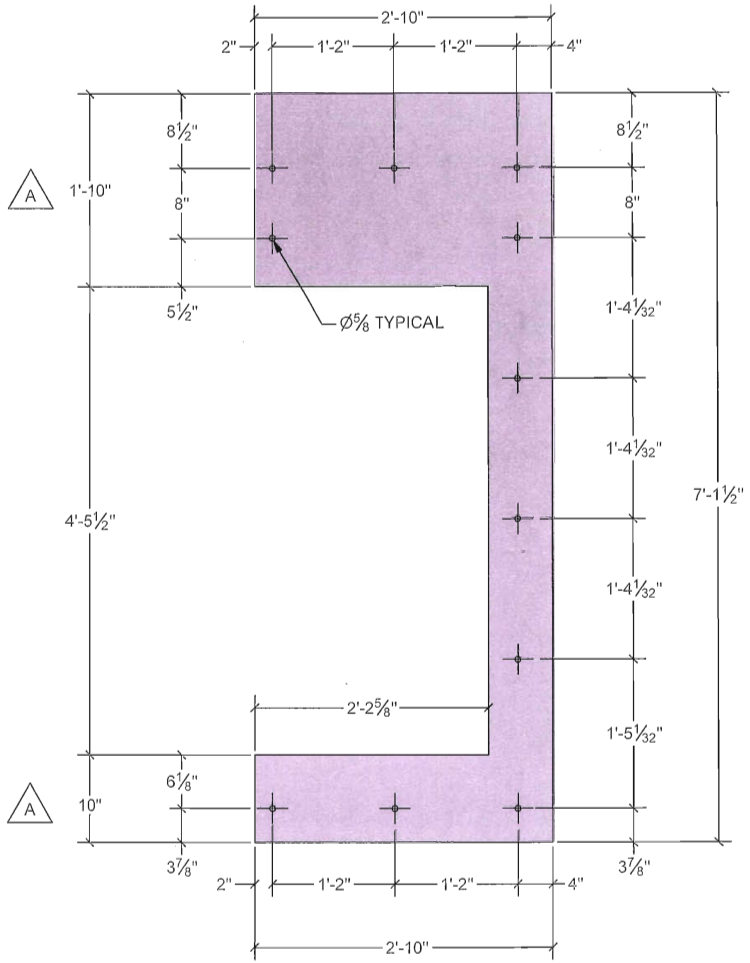
Shelter Electrical Pier

NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. MILL FINISH #1
3. USE 21104-00.DXF TO PERFORM CUT

REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
ALL	A	332 NOTES	10/28/2014	



ARCHITECTURAL WRAP MOUNTING PLATE - ELEVATION
SCALE 7/8"=1'

TOLAR	Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION	MOUNTING PLATE - ELEC PIER			
CUSTOMER/VENDOR	SANTA CLARA - VTA			SHEET NO. 1 OF 1
SIZE B	MATL. SS 316L - 1/4" THK PL		DWG NO. 21104-00	REV. NO. A
SCALE AS NOTED	DATE 10/1/2014	DRAWN BY: cgarcia		

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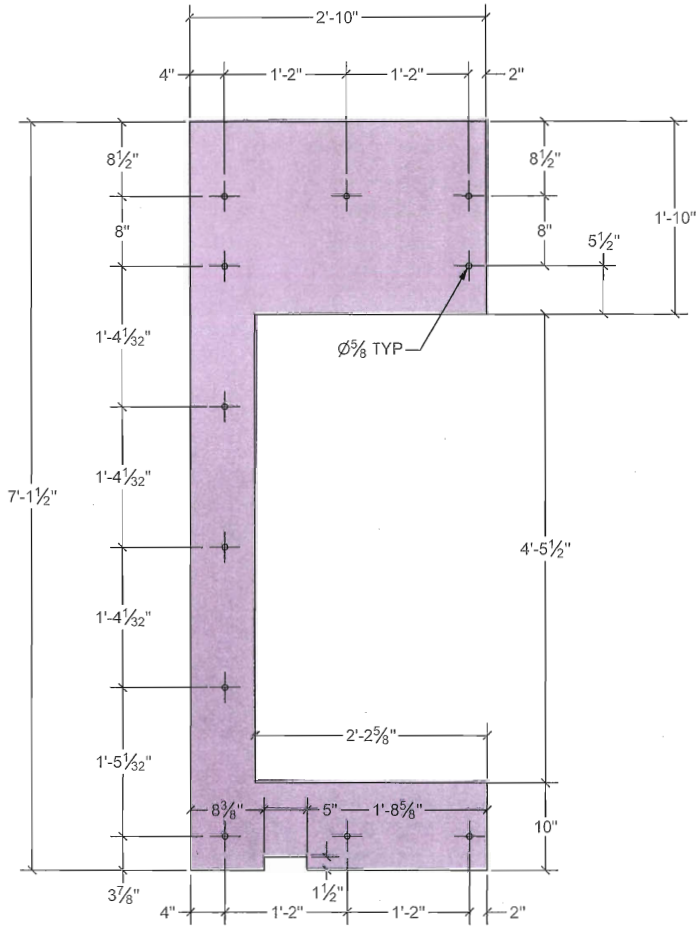
Shelter Electrical Pier

NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. MILL FINISH #1
3. USE 21104-01.DXF TO PERFORM CUT



ARCHITECTURAL WRAP MOUNTING PLATE - ELEVATION
SCALE 7/8"=1'

TOLAR	Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879		
DESCRIPTION	MOUNTING PLATE - ELEC PIER		
CUSTOMER/VENDOR	SANTA CLARA - VTA		SHEET NO. 1 OF 1
SIZE B	MATL. SS 316L - 1/4" THK PL	DWG NO. 21104-01	REV. NO. A
SCALE AS NOTED	DATE 10/29/2014	DRAWN BY: cgarcia	

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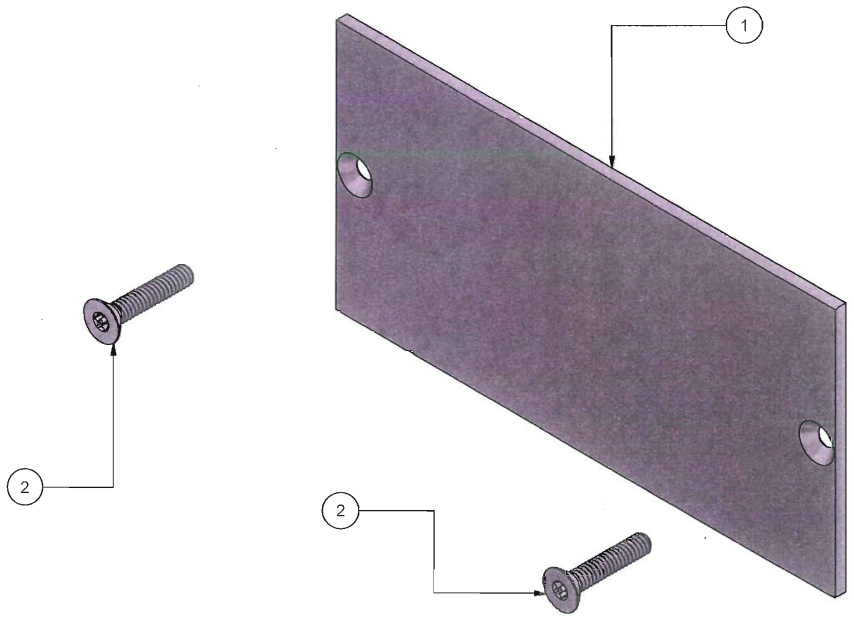
Shelter Electrical Pier



REAR PIER COVER - COMPONENTS
SCALE 1 : 1

PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	23393-00	REAR PIER ACCESS COVER
2	2	91870A247	10-24 x 1" T25 FL HD SCREW

TOLAR

Tolar Manufacturing Company, Inc
258 Mariah Circle, Corona CA. 92879

DESCRIPTION: PIER REAR ACCESS COVER			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - MISC	DWG NO.: 23394-00	REV. NO.:
SCALE: AS NOTED	DATE: 10/29/2014	DRAWN BY: cgarcia	

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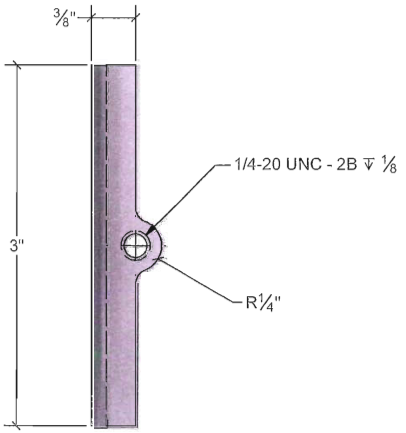
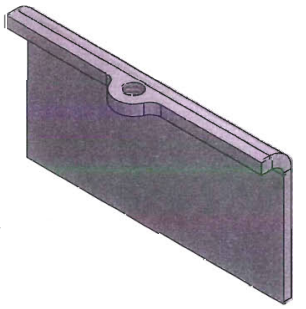
Shelter Electrical Pier

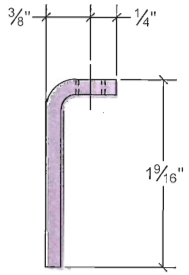


PLAN VIEW
SCALE 1 : 1

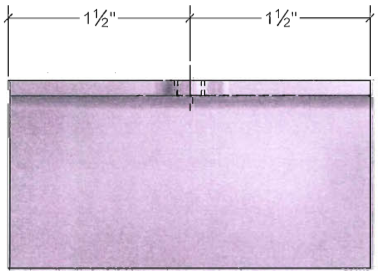


ISO VIEW
SCALE 1 : 1

VERIFY SIZE FOR 4"X6" HOLE



COVER ATTACHMENT TAB - ELEVATION
SCALE 1 : 1



SIDE ELEVATION
SCALE 1 : 1

TOLAR	Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879
DESCRIPTION	ACCESS COVER FASTENING TAB
CUSTOMER/VENDOR	SANTA CLARA - VTA
SHEET NO.	1 OF 2
SIZE: B	MATL. SS 316L - 11 GA SH M
DWG NO.	23392-00
REV. NO.	
SCALE	AS NOTED
DATE	10/29/2014
DRAWN BY:	cgarcia

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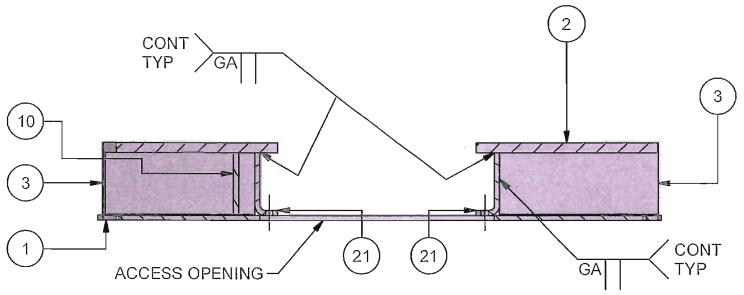
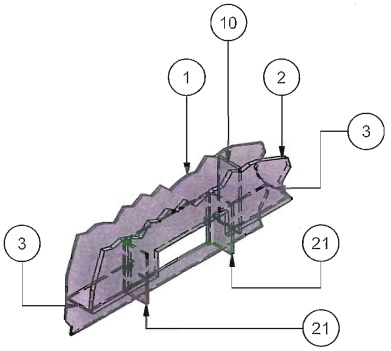
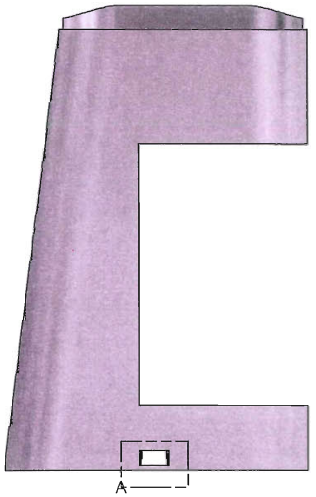
Shelter Electrical Pier



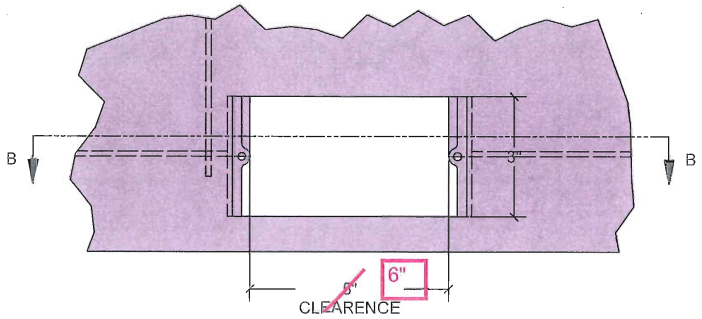
SECTION B-B
SCALE 4"=1'



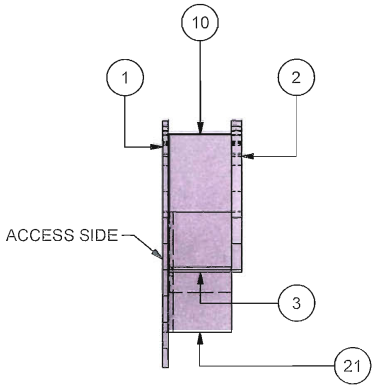
REAR ISO VIEW



BACK PIER WRAP ASSEMBLY
SCALE 1/2"=1'



DETAIL A
SCALE 4"=1'



SECTION VIEW
SCALE 4"=1'

TOLAR	Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879		
DESCRIPTION	EP - BACK PIER WRAP ASSY		
CUSTOMER/VENDOR	SANTA CLARA - VTA		SHEET NO. 2 OF 2
SIZE B	MATL. SS 316L - 11 GA SH M	DWG NO. 21115-00	REV. NO. A
SCALE AS NOTED	DATE 10/29/2014	DRAWN BY: cgarcia	

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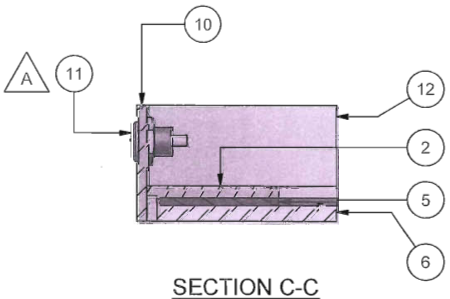
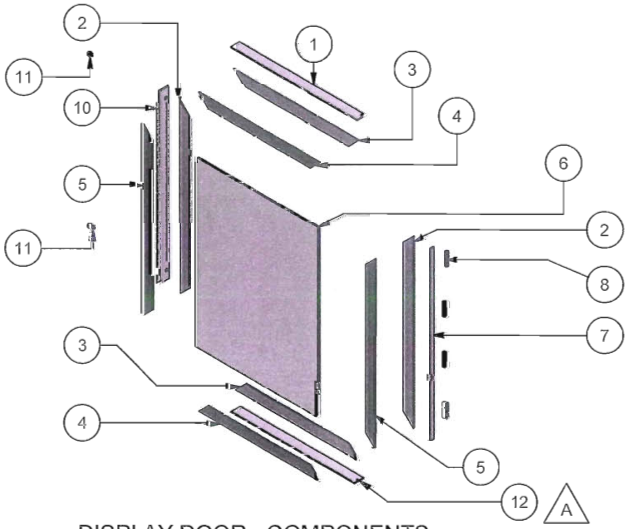
Shelter Electrical Pier

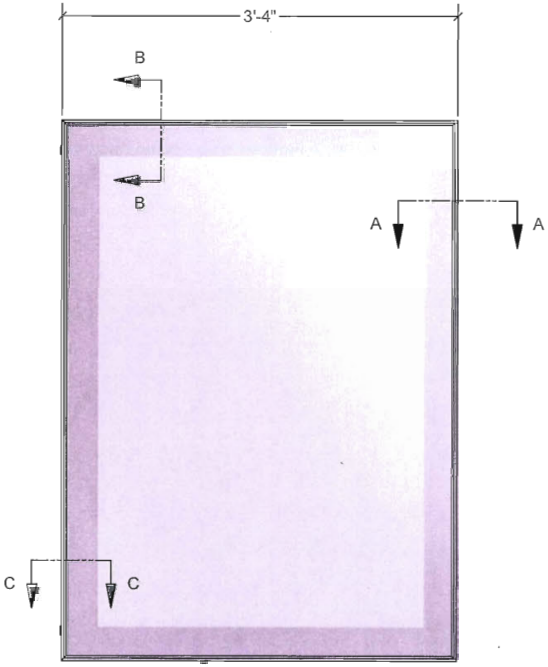
REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
ALL	A	332 NOTES	12/15/2014	



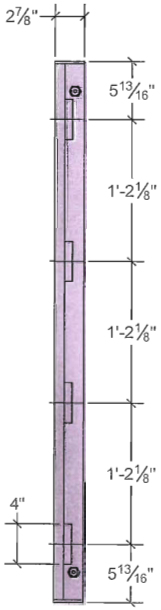
SECTION C-C
SCALE 4"=1'



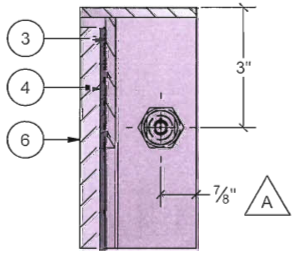
DISPLAY DOOR - COMPONENTS
SCALE 7/16"=1'



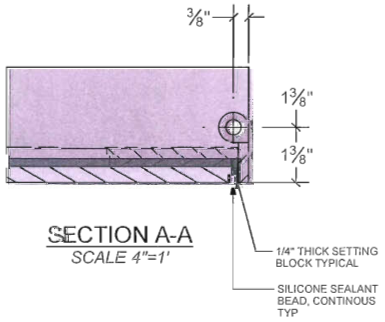
ELECTRICAL PIER DISPLAY DOOR
SCALE 1"=1'



SIDE VIEW
SCALE 1"=1'



SECTION B-B
SCALE 4"=1'



SECTION A-A
SCALE 4"=1'

PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	20933-00	HZ DISPLAY DOOR FRAME RET
2	2	20935-00	VERT DISPLAY DOOR FRAME BK
3	2	20936-00	HZ DISPLAY DOOR FRAME BK
4	2	20937-00	ACRYLIC FOAM STR GLAZING
5	2	20938-00	ACRYLIC FOAM STR GLAZING
6	1	20939-00	LAMINATED & TEMPERED GLASS
7	1	20948-00	VERT DISPLAY DR FRAME RET
8	1	23381-00	HINGE ASSEMBLY
10	1	23384-00	OUTER DR FRM RTURN
11	2	M01030318100	TUBULAR PUSH LOCK
12	1	20933-01	HZ DISPLAY DOOR FRAME RET

TOLAR
Tolar Manufacturing Company, Inc
258 Mariah Circle, Corona CA. 92879

DESCRIPTION	DISPLAY DOOR		
CUSTOMER/VENDOR	SANTA CLARA - VTA		SHEET NO. 1 OF 2
SIZE B	MATL. SS 316 L - MISC	DWG NO. 20934-00	REV. NO. A
SCALE AS NOTED	DATE 9/29/2014	DRAWN BY cgarcia	

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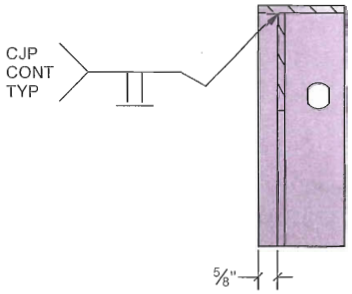
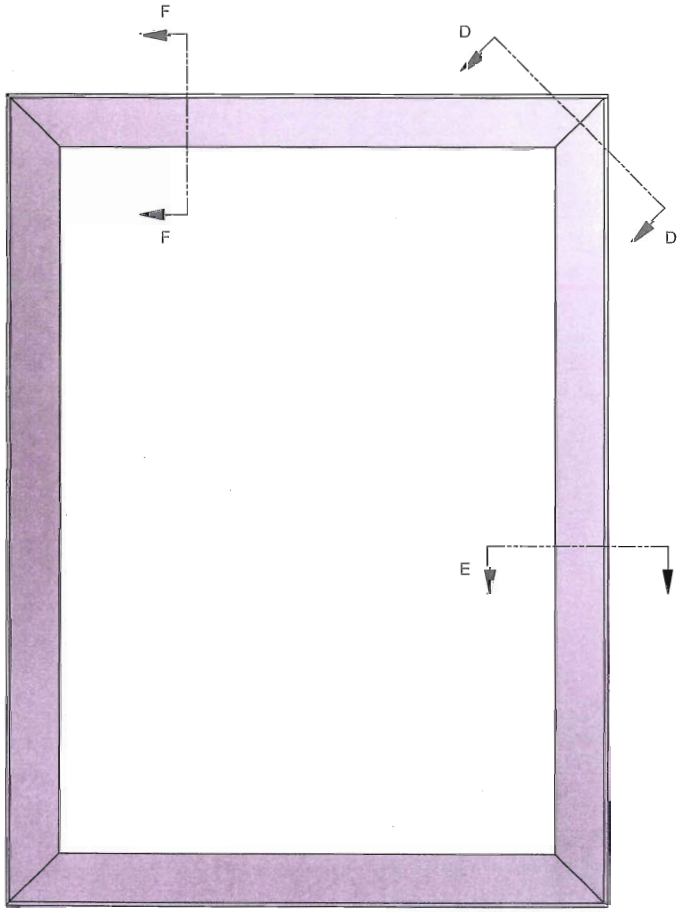
Shelter Electrical Pier

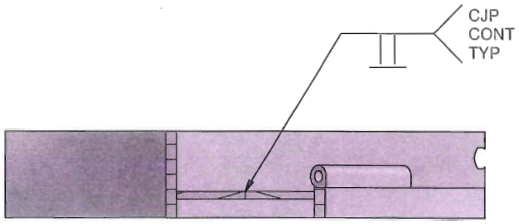
REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
ALL	A	332 NOTES	12/15/2014	



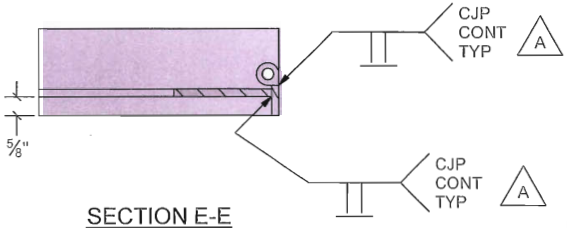
SECTION F-F
SCALE 3"=1'



FRAME WELDMENT - ELEVATION
SCALE 1 1/2"=1'



SECTION D-D
TYPICAL
SCALE 3"=1'



SECTION E-E
SCALE 3"=1'

TOLAR
Tolar Manufacturing Company, Inc
258 Mariah Circle, Corona CA. 92879

DESCRIPTION: DISPLAY DOOR			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 2 OF 2
SIZE: B	MATL.: SS 316L - MISC	DWG NO.: 20934-00	REV. NO.: A
SCALE: AS NOTED	DATE: 9/29/2014	DRAWN BY: cgarcia	

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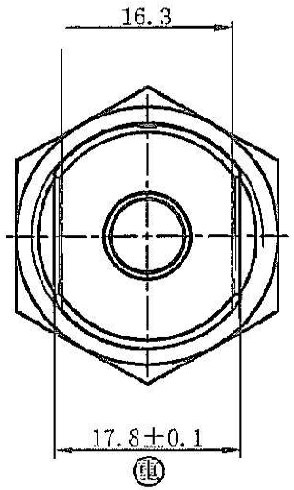
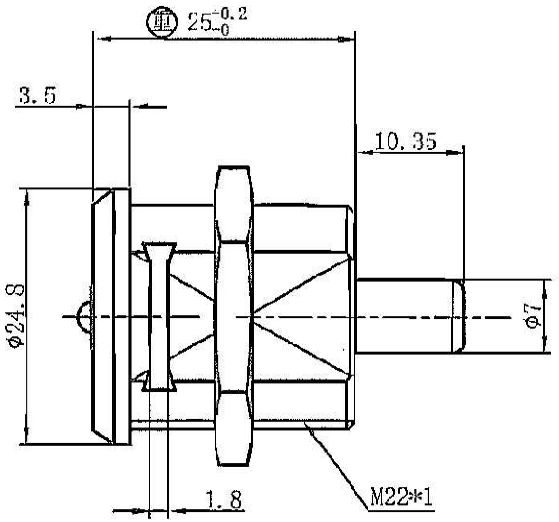
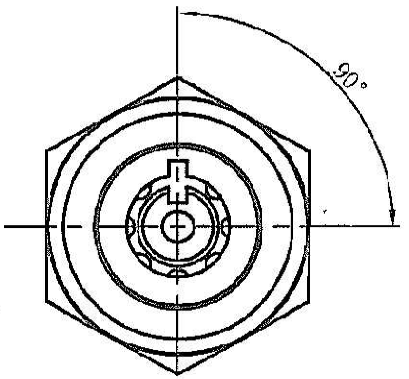
Shelter Electrical Pier

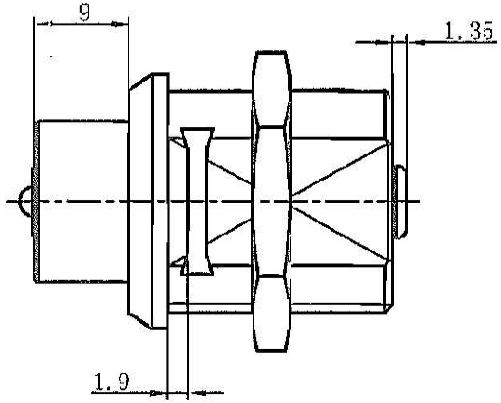
成品图



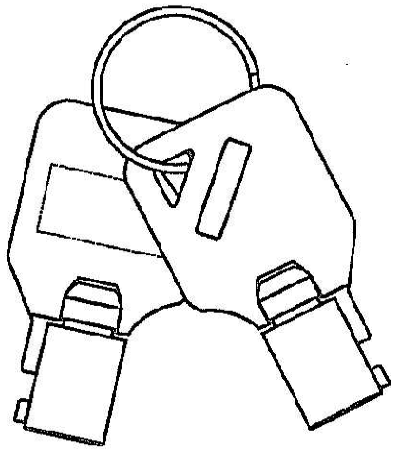


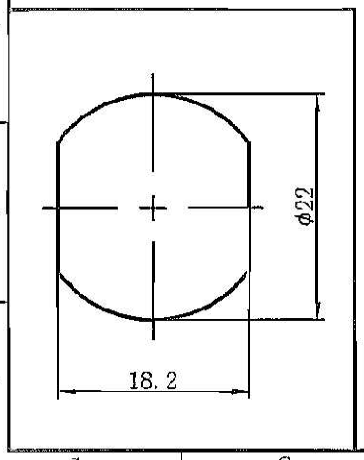
上锁状态
Locked State





开锁状态
Unlocked





标记	变更前	旧版	变更后	新版	日期

厦门美科制锁有限公司
MAKE Locks Manufacturer Co.,Ltd.

	签名 NAME	日期 DATE
制图 DRAWER	黄靖	2013.12.10
校对 CHECKED		
批准 APPROVED		

单位 UNIT	MM
材质 MATERIAL	
品名 TITLE	管状按压锁
图号 DWG. NO.	M0103 0318 100
版本 REV.	A0
比例 SCALE	1.5:1
重量 WEIGHT	g
页数 SHEET	1/1

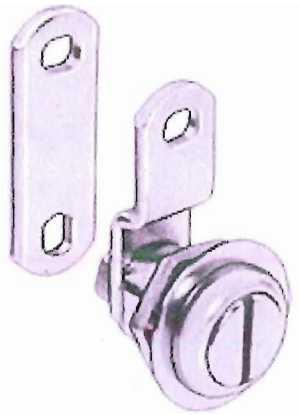
未注公差
0-5:±0.05; 5-15:±0.1
15-30:±0.2; >30:±0.3
角度: ±1° ; 折弯:±2°

McMASTER-CARR. OVER 555,000 PRODUCTS
(562) 692-5911
(562) 695-2323 (fax)
la.sales@mcmaster.com
Text 75930

Slotted Cam Latch

13/16" Maximum Latching Distance, 7/8" Head Diameter

In stock
$5.65 Each
10335A75



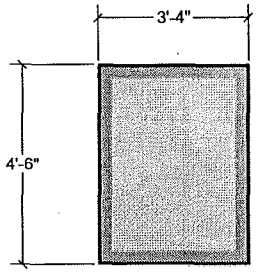
Maximum Door/Drawer Thickness	1/4"
Maximum Latching Distance	13/16"
Mounting Hole Diameter	3/4"
Head Diameter	7/8"

Open the latch with a screwdriver instead of a key. The latch holds doors and drawers closed, but still allows easy access. You select both the direction and the degree of turn (90° or 180°). Latch is zinc; cams are steel.

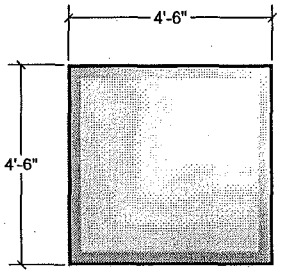
Includes a 1 1/2" Lg. × 5/8" Wd. straight cam, a 1 1/2" Lg. × 5/8" Wd. reversible offset cam (3/16" offset), a lock washer, two stop washers, and a mounting nut. Recommended for mounting in metal and wood.

Santa Clara Valley Transportation Authority
NO EXCEPTIONS TAKEN
MAKE CORRECTIONS NOTED
AMEND AND RESUBMIT
Any action shown above is subject to the terms of the contract and does not relieve the contractor of any of its obligations under the contract, including design and detailing
Contract No.: c830
By: J. Cieguyal Date: 6/10/15

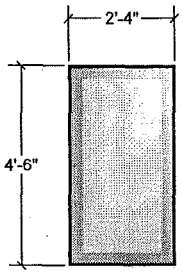
REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
ALL	A	304 E	6/3/2015	



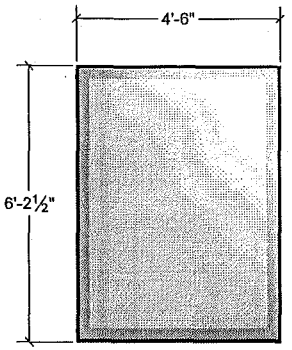
20946-00
PRIMARY SHELTER - ELECTRICAL PIER
SCALE 3/8"=1'



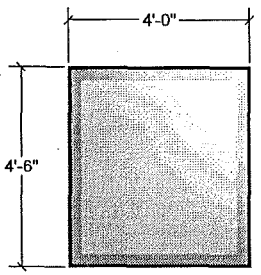
21121-00
PRIMAY SHELTER - COMM PIER
SCALE 3/8"=1'



24280-00
MODIFIED SHELTER - COMM PIER (DS)
SCALE 3/8"=1'



22620-00
AD PANEL
SCALE 3/8"=1'



22978-00
MAP PANEL
SCALE 3/8"=1'

CABINET DIMENSIONS

QTY	DESCRIPTION	A EXTENT OF DOOR (W) x (H)	B CLEARENCE (W) x (H)	C LED FIXTURE (W) x (H)	DOOR ASSEMBLY #	LF QTY
15	ELECTRICAL PIER - PRIMARY SHELTER	3'-4" x 4'-6"	2'-10-3/4" x 4'-1-1/2"	2'-10" x 4' - 1"	20946-00	15
15	COMM PIER - PRIMARY SHELTER	4'-6" x 4'-6"	4'-0-3/4" x 4'-1-1/2"	4'-0" x 4' - 1"	21121-00	15
1	ELECTRICAL PIER - MODIFIED SHELTER (DS)	2'-4" x 4'-6"	1'-10-3/4" x 4'-1-1/2"	1'-10" x 4' - 1"	24280-00	2
9	AD PANEL (SINGLE SIDED)	4'-6" x 6'-2-1/2"	4'-0-3/8" x 5'-10"	4'-0" x 5' - 9-1/2"	22620-00	9
5	AD PANEL (DOUBLE SIDED)	4'-6" x 6'-2-1/2"	4'-0-3/8" x 5'-10"	4'-0" x 5' - 9-1/2"	22620-00	10
1	MAP PANEL	4'-0" x 4'-6"	3'-6-3/8" x 4'-1-1/2"	3'-6" x 4' - 1"	22978-00	2

TOLAR Tolar Manufacturing Company, Inc
258 Mariah Circle, Corona CA. 92879

DESCRIPTION: CABINET LIGHTING MATRIX
CUSTOMER/VENDOR: SANTA CLARA - VTA
SHEET NO.: 1 OF 6
SIZE: B
MATL: SS 316L - MISC
DWG NO.: 25148-00
REV. NO.: A
SCALE: AS NOTED
DATE: 5/12/2015
DRAWN BY: cgarcia

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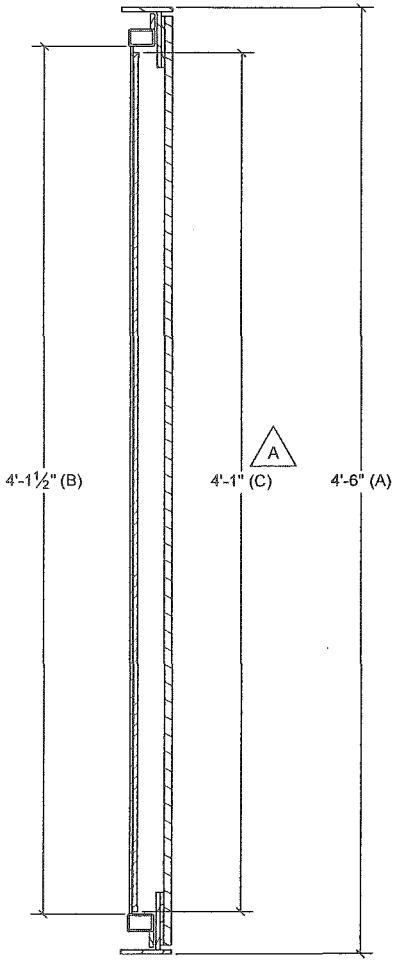
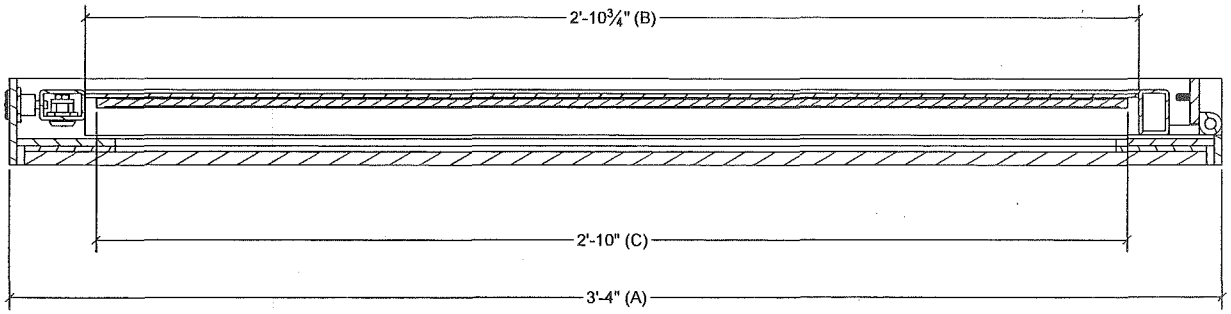
Shelter Cabinet LED Lighting

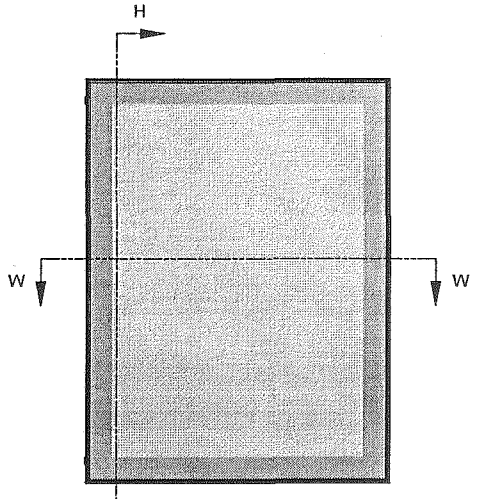
REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
ALL	A	304 E	6/3/2015	



SECTION H-H
SCALE 1 3/4"=1'



SECTION W-W
SCALE 3"=1'



20946-00
PRIMARY ELECT
SCALE 3/4"=1'

TOLAR	Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879
DESCRIPTION	CABINET LIGHTING MATRIX
CUSTOMER/VENDOR	SANTA CLARA - VTA
SHEET NO.	2 OF 6
SIZE	B
MATL.	☐ SS 316L - MISC
DWG NO.	25148-00
REV. NO.	A
SCALE	AS NOTED
DATE	5/12/2015
DRAWN BY:	cgarcia

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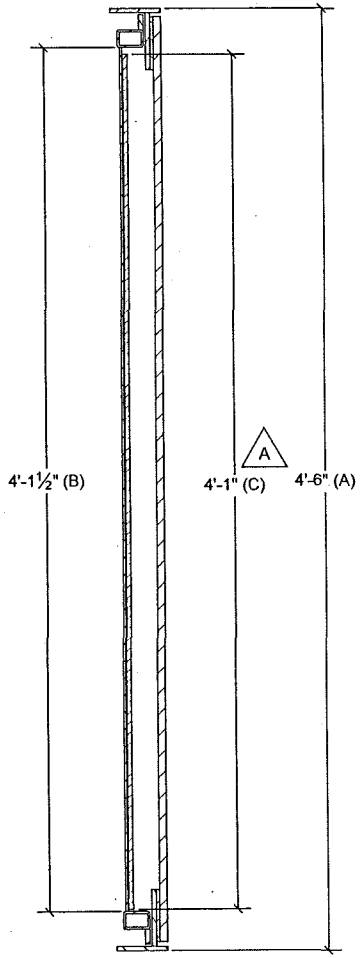
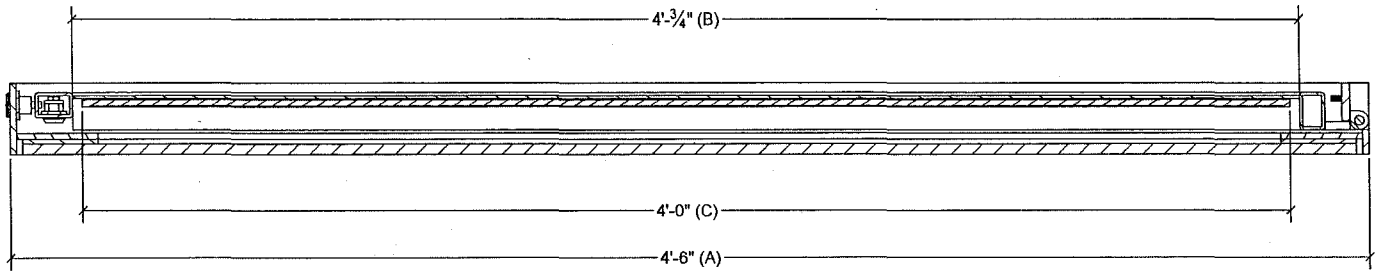
Shelter Cabinet LED Lighting

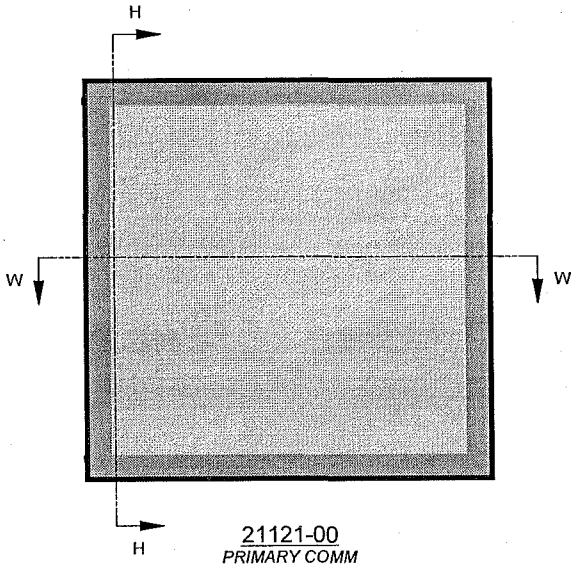
REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
ALL	A	304 E	6/3/2015	



SECTION H-H
SCALE 1 3/4"=1'



SECTION W-W
SCALE 2 1/2"=1'



21121-00
PRIMARY COMM
SCALE 3/4"=1'

TOLAR	Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879		
DESCRIPTION	CABINET LIGHTING MATRIX		
CUSTOMER/VENDOR	SANTA CLARA - VTA		SHEET NO. 3 OF 6
SIZE B	MATL. SS 316L - MISC	DWG NO. 25148-00	REV. NO. A
SCALE AS NOTED	DATE 5/12/2015	DRAWN BY: cgarcia	

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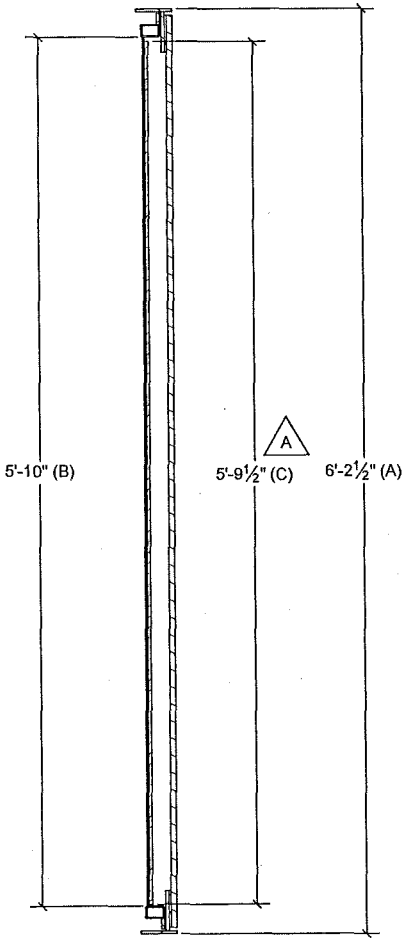
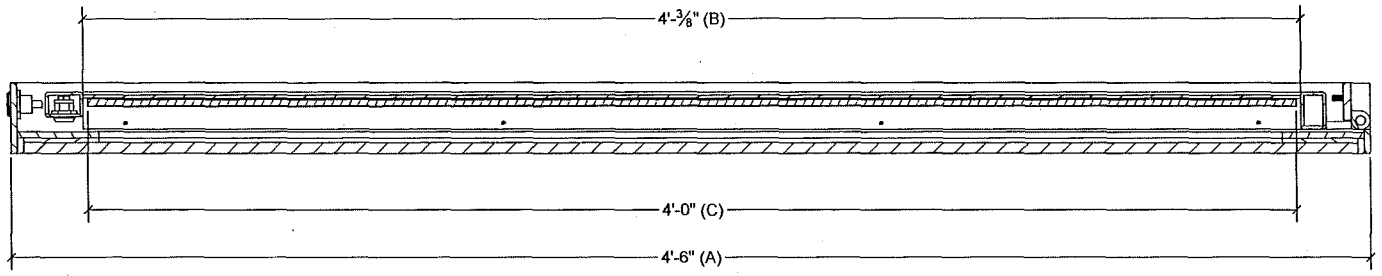
Shelter Cabinet LED Lighting

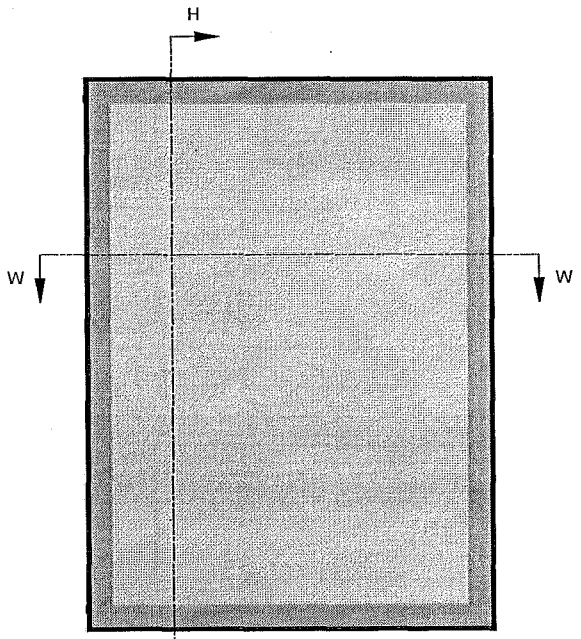
REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
ALL	A	304 E	6/3/2015	



SECTION H-H
SCALE 1 1/4"=1'



SECTION W-W
SCALE 2 1/2"=1'



22620-00
AD PANEL
SCALE 3/4"=1'

ONE SIDED
(F) ARENA WB
KING EB
KING WB
JACKSON EB
JACKSON WB
(F) STORY SB
(F) STORY NB
(F) OCALA SB
(F) OCALA NB

DOUBLE SIDED
ARENA EB
17th STREET EB
17th STREET WB
24th STREET EB
24th STREET WB

TOLAR
Tolar Manufacturing Company, Inc
258 Mariah Circle, Corona CA. 92879

DESCRIPTION: CABINET LIGHTING MATRIX			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 5 OF 6
SIZE: B	MATL.: SS 316L - MISC	DWG NO.: 25148-00	REV. NO.: A
SCALE: AS NOTED	DATE: 5/12/2015	DRAWN BY: cgarcia	

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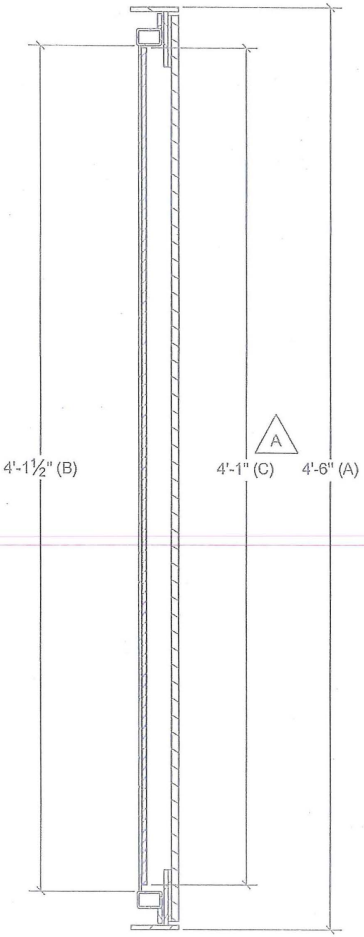
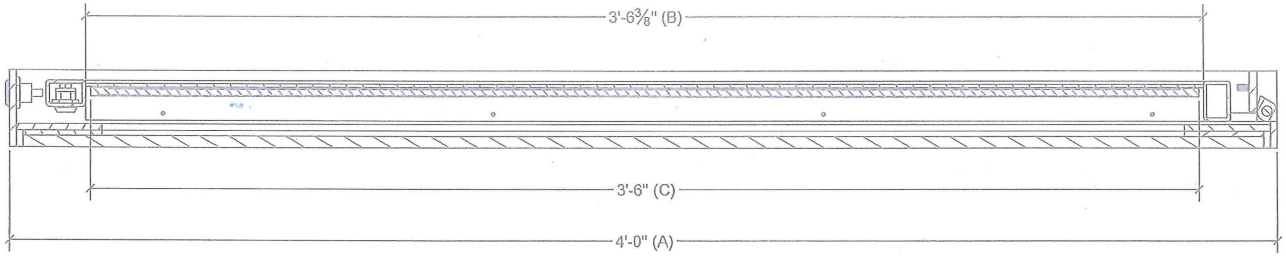
Shelter Cabinet LED Lighting

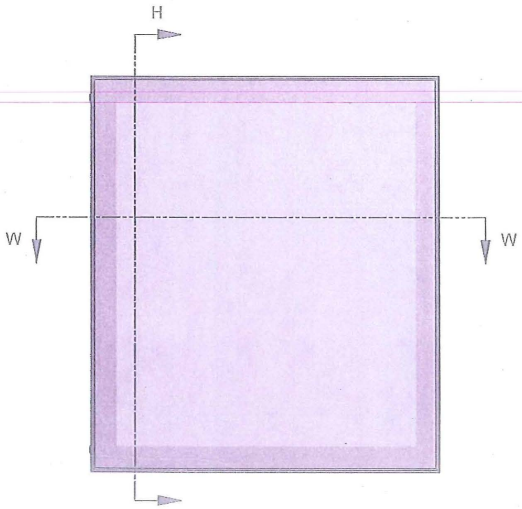
REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
ALL	A	304 E	6/3/2015	



SECTION H-H
SCALE 1 3/4"=1'



SECTION W-W
SCALE 2 3/4"=1'



22978-00
MAP PANEL
SCALE 3/4"=1'

ARENA WB (DS)

TOLAR
Tolar Manufacturing Company, Inc
258 Mariah Circle, Corona CA. 92879

DESCRIPTION: CABINET LIGHTING MATRIX			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 6 OF 6
SIZE: B	MATL.: SS 316L - MISC	DWG NO.: 25148-00	REV. NO.: A
SCALE: AS NOTED	DATE: 5/12/2015	DRAWN BY: cgarcia	

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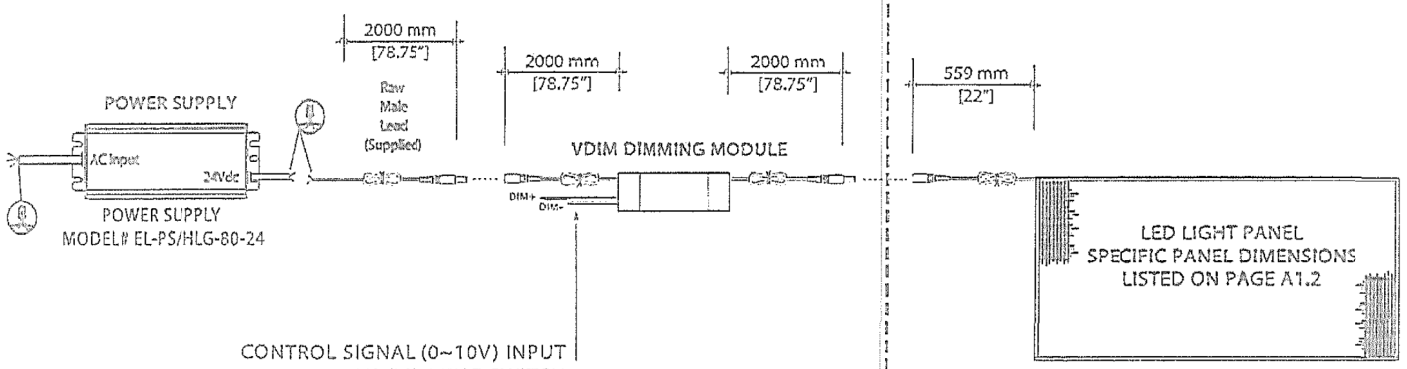
Shelter Cabinet LED Lighting

Tolar Manufacturing - Hardwired Power Supply Option - Wiring Schematics

Santa Clara VTA Project - Ref#3144B - *REVISED 02/06/15

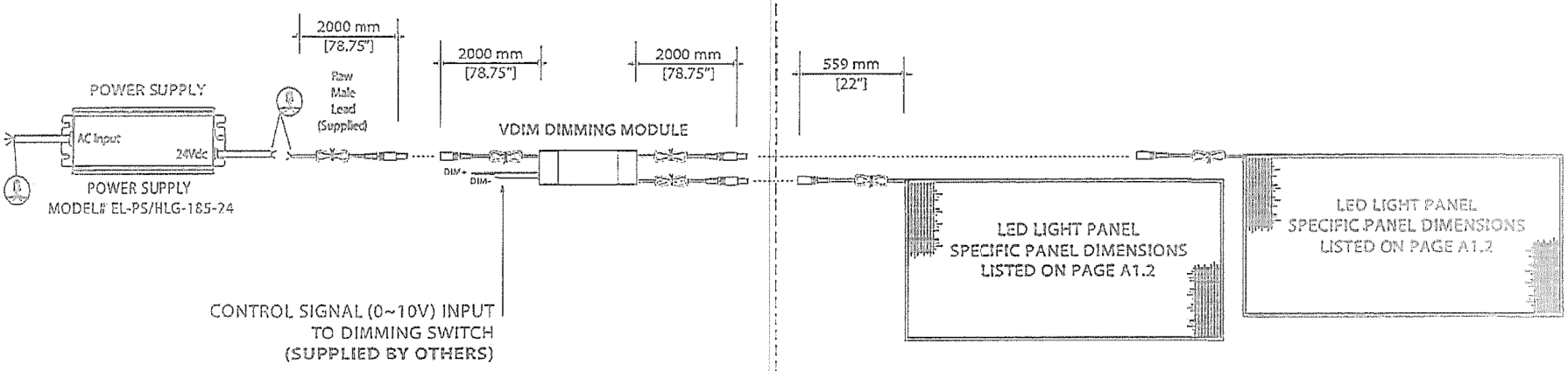
POWER SUPPLY CONFIGURATION A

EL-PS/HLG-80-24



POWER SUPPLY CONFIGURATION B

EL-PS/HLG-185-24



LED LIGHTING SOLUTIONS...

1621-38 McEwen Drive, Lakeview Industrial Park
Whitby, ON, Canada
L1N 9A5

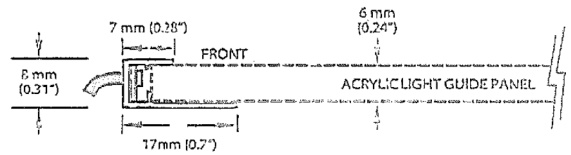
T - 416.225.6400
E - info@elumanation.com
W - www.elumanation.com

SCALE:	CHECKED BY:		NO.	REVISION:	DATE:
NOT TO SCALE	JF				
JOB NUMBER:	DETAILED BY:	DATE:	NO.	REVISION:	DATE:
	CB	02/06/15			

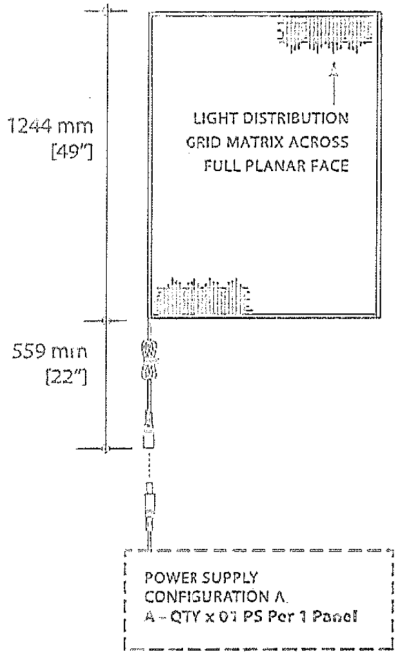
JOB TITLE:	DRAWING TITLE:	DWG. NUMBER:
Tolar Manufacturing - Santa Clara	R3144B - Tolar	A1.1

Tolar Manufacturing -
Hardwired Power Supply Option - Wiring Schematics - *REVISED 02.06.15
Santa Clara VTA Project - Ref#3144B - EL7396

ELsf49 PANEL - EDGE DETAIL

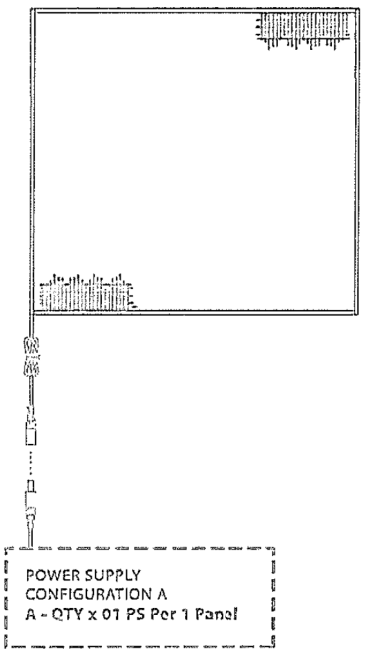


ELUME LED LIGHT PANEL
ELsf49/863x1244
34 x 49" - QTY x 15
PRIMARY SHELTER
- ELECTRICAL PIER
20946-00



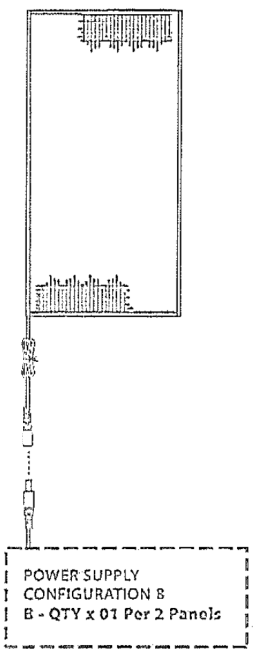
POWER SUPPLY
CONFIGURATION A
A - QTY x 01 PS Per 1 Panel

ELUME LED LIGHT PANEL
ELsf49/1219x1244
48 x 49" - QTY x 15
PRIMARY SHELTER
- COMM PIER
21121-00



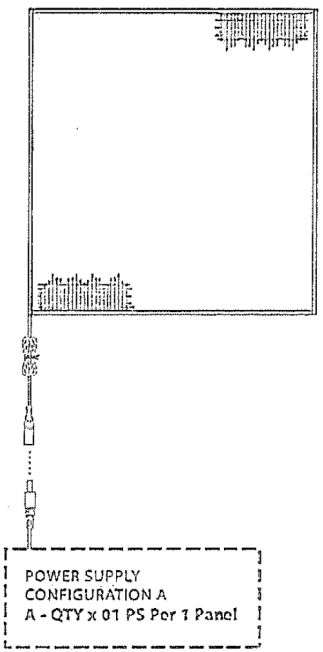
POWER SUPPLY
CONFIGURATION A
A - QTY x 01 PS Per 1 Panel

ELUME LED LIGHT PANEL
ELsf49/558x1244
22 x 49" - QTY x 2
MODIFIED SHELTER
- COMM PIER (DS)
24280-00



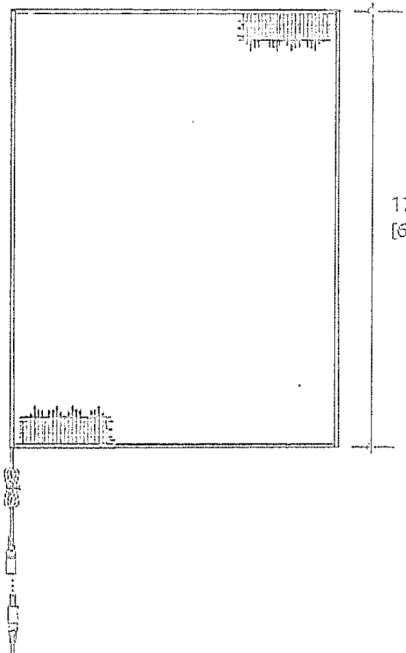
POWER SUPPLY
CONFIGURATION B
B - QTY x 01 Per 2 Panels

ELUME LED LIGHT PANEL
ELsf49/1066x1244
42 x 49" - QTY x 2
MAP PANEL
22978-00



POWER SUPPLY
CONFIGURATION A
A - QTY x 01 PS Per 1 Panel

ELUME LED LIGHT PANEL
ELsf49/1219x1765
48 x 69.5" - QTY x 29
AD PANEL
22620-00



POWER SUPPLY
CONFIGURATION A & B
A - QTY x 01 PS Per 1 Panel x 9
B - QTY x 01 PS Per 2 Panels x 10

ELUMANATION
LED LIGHTING SOLUTIONS...

1621-38 McEwen Drive, Lakeview Industrial Park
Whitby, ON, Canada
L1N 9A5
T - 416.225.6400
E - info@elumanation.com
W - www.elumanation.com

SCALE:	CHECKED BY:		NO.	REVISION:	DATE:
NOT TO SCALE	JF				
JOB NUMBER:	DETAILED BY:	DATE:	NO.	REVISION:	DATE:
	CB	02/06/15			

JOB TITLE:	DRAWING TITLE:	DWG. NUMBER:
Tolar Manufacturing - Santa Clara	R3144B - Tolar	A1.2

Shelter Cabinet LED Lighting

eLumanation

LED Lighting Solutions...

PROJECT :

NOTES :

CUSTOM ELUME LED LIGHT PANEL - MODEL 49 FRAME

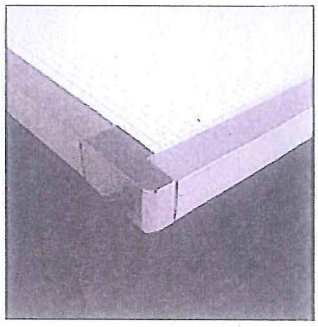
eLume Model 49 LED Light Panels are thin, custom sizable, optical acrylic sheets with high output tier one LEDs embedded along the edge of the LED panels and an engraved light distribution pattern across the back of the panel encased in an aluminum frame. This light distribution pattern is optimized for each specific panel size to ensure uniform and bright illumination over the the face of the panel. With their minimal power consumption, long lifespan, uniform, bright illumination and thin, lightweight characteristics, our Model 49 Frame eLume LED Light Panels are ideal to illuminate any translucent material compared to traditional fluorescent back lit systems.

SPECIFICATIONS.

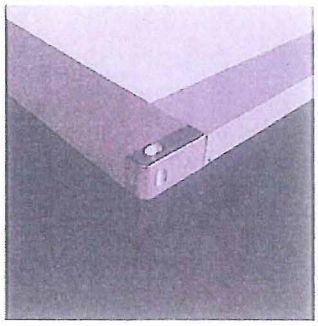
MODEL :	ELsf49/hb or ELsf49/mh
OUTPUT :	HIGH BRIGHTNESS or MAX-HIGH OUTPUT
POWER CONSUMPTION :	HB 13 W/M (7.3 W/Ft) or MH 13 W/M (7.3 W/Ft)
FRAME THICKNESS :	8 MM (0.31") (5/16")
FRAME STYLE :	FLAT RETURN BACK
OPTICAL ACRYLIC THICKNESS :	6MM (0.24")
OPERATING VOLTAGE :	HB 12VDC or MH 24VDC
DIMMABILITY OPTIONS :	0~10V | PWM | DALI | WIRELESS REMOTE
Info available upon request	*Requires additional inline dimming module
OUTPUT LEVEL OPTIONS :	LEDS EMBEDDED ALONG 1, 2 OR ALL 4 EDGES
OUTPUT COLOUR OPTIONS :	DAYLIGHT: 5800K (RECOMMENDED)
5800K 4100K 3000K	NEUTRAL: 4100K
	WARM: 3000k
	RGB (STATIC COLOURS ALSO AVAILABLE)
WEIGHT :	1.8 Lbs (0.8 kg) / SqFt
MIN. SIZE :	4 x 4" (102 x 102 mm)
MAX. SIZE :	50 x 100" (1270 x 2540 mm)
OPERATING LIFESPAN :	50, 000 to 70,000 HOURS (L70)
WARRANTY :	3 YEAR WARRANTY
INPUT CONNECTOR :	2.5mm x 5.5mm PLUG n PLAY BARREL
INPUT LEAD LENGTH :	20" (508 mm) Standard
	*Custom length extensions available
INPUT CONNECTOR EXIT :	EXITS EDGE OF PANEL
INPUT LEAD WIRE SIZE :	18 AWG 2 CONDUCTOR WIRE
OPERATING TEMPERATURE :	-30°C (-22 °F) ~ +40 °C (+104 °F)
POWER SUPPLY SPECS :	AVAILABLE UPON REQUEST

IMAGES :

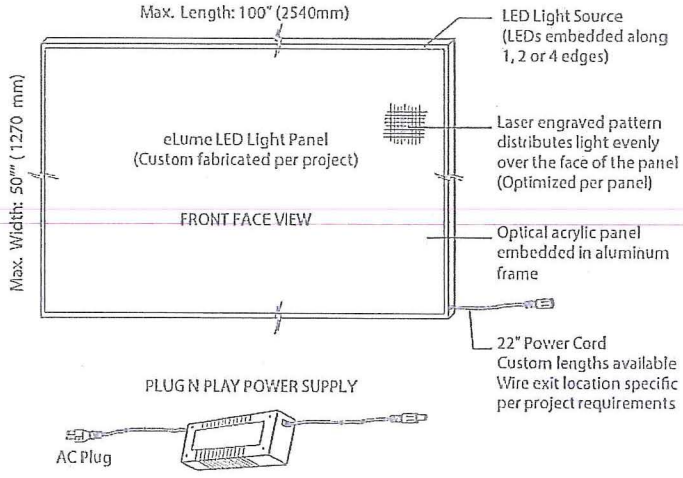
FRONT



REAR

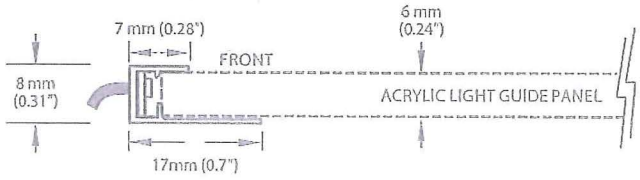


DETAILS :



FRAME PROFILE : MORE DETAILED FRAME DIMENSIONS AVAILABLE

MODEL 49 FRAME



CONTACT INFO.

TEL: 1-416-225-6400

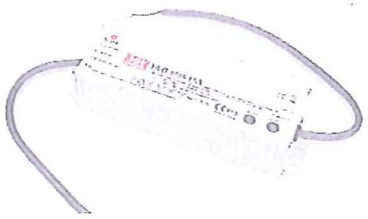
www.elumanation.com

info@elumanation.com

1621-38 McEwen Drive, Lakeview Industrial Plaza, Whitby, ON. Canada L1N 9A5

80W Single Output Switching Power Supply EL-PS/HLG-80H

eLumanation
416-225-6400 | info @elumanation.com



TAIWAN EXCELLENCE 2011

Features :

- Universal AC input / Full range (up to 305VAC)
- Built-in active PFC function
- Protections: Short circuit / Over current / Over voltage / Over temperature
- Cooling by free air convection
- OCP point adjustable through output cable or internal potentiometer
- IP67 / IP65 design for indoor or outdoor installations
- "UL8750 listed" safety approved for HLG-80H-□BL
- Class 2 power unit
- Three in one dimming function (1~10Vdc or PWM signal or resistance)
- Suitable for LED lighting and moving sign applications
- Compliance to worldwide safety regulations for lighting
- Suitable for dry / damp / wet locations
- 5 years warranty (Note.10)

SELV IP65 IP67

HLG-80H-12[A] Blank : IP67 rated. Cable for I/O connection.
A : IP65 rated. Output voltage and constant current level can be adjusted through internal potentiometer.
B : IP67 rated. Constant current level adjustable through output cable with 1~10Vdc or 10V PWM signal or resistance.
BL (option) : Contact MEAN WELL for details.

SPECIFICATION

MODEL		HLG-80H-12□	HLG-80H-15□	HLG-80H-20	HLG-80H-24	HLG-80H-30	HLG-80H-36□	HLG-80H-42□	HLG-80H-48□	HLG-80H-54
OUTPUT	DC VOLTAGE	12V	15V	20V	24V	30V	36V	42V	48V	54V
	CONSTANT CURRENT REGION Note.4	7.2 ~ 12V	9 ~ 15V	12 ~ 20V	14.4 ~ 24V	18 ~ 30V	21.6 ~ 36V	25.2 ~ 42V	28.8 ~ 48V	32.4 ~ 54V
	RATED CURRENT	5A	5A	4A	3.4A	2.7A	2.3A	1.95A	1.7A	1.5A
	RATED POWER	60W	75W	80W	81.6W	81W	82.8W	81.9W	81.6W	81W
	RIPPLE & NOISE (max.) Note.2	150mVp-p	150mVp-p	150mVp-p	150mVp-p	200mVp-p	200mVp-p	200mVp-p	200mVp-p	200mVp-p
	VOLTAGE ADJ. RANGE Note.6	10.8 ~ 13.5V	13.5 ~ 17V	17 ~ 22V	22 ~ 27V	27 ~ 33V	33 ~ 40V	38 ~ 46V	43 ~ 53V	49 ~ 58V
	CURRENT ADJ. RANGE	Can be adjusted by internal potentiometer or through output cable								
		3 ~ 5A	3 ~ 5A	2.4 ~ 4A	2.04 ~ 3.4A	1.62 ~ 2.7A	1.38 ~ 2.3A	1.17 ~ 1.95A	1.02 ~ 1.7A	0.9 ~ 1.5A
	VOLTAGE TOLERANCE Note.3	±2.5%	±2.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%
	LINE REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	LOAD REGULATION	±2.0%	±1.5%	±1.0%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	SETUP, RISE TIME Note.8	2000ms, 60ms / 115VAC at full load 1000ms, 60ms / 230VAC at full load ; B type 2000ms, 200ms at 95% load 230VAC / 115VAC								
	HOLD UP TIME (Typ.)	16ms at full load 230VAC / 115VAC								
INPUT	VOLTAGE RANGE Note.5	90 ~ 305VAC 127 ~ 431VDC								
	FREQUENCY RANGE	47 ~ 63Hz								
	POWER FACTOR (Typ.)	PF>0.96/115VAC, PF>0.98/230VAC, PF>0.94/277VAC at full load (Please refer to "Power Factor Characteristic" curve)								
	EFFICIENCY (Typ.)	88%	89%	90%	90.5%	91%	91%	91%	91%	91%
	AC CURRENT (Typ.)	0.85A / 115VAC 0.425A / 230VAC 0.4A / 277VAC								
	INRUSH CURRENT (Typ.)	COLD START 70A/230VAC								
	LEAKAGE CURRENT	<0.75mA / 277VAC								
PROTECTION	OVER CURRENT Note.7	95 ~ 108%								
		Protection type : Constant current limiting, recovers automatically after fault condition is removed								
	SHORT CIRCUIT	Hiccup mode, recovers automatically after fault condition is removed								
	OVER VOLTAGE	14 ~ 17V	18 ~ 24V	23 ~ 30V	28 ~ 35V	35 ~ 43V	41 ~ 49V	48 ~ 58V	54 ~ 63V	59 ~ 68V
		Protection type : Shut down o/p voltage, re-power on to recover								
	OVER TEMPERATURE	85°C ± 10°C (RTH2)								
		Protection type : Shut down o/p voltage, re-power on to recover								
ENVIRONMENT	WORKING TEMP.	-40 ~ +70°C (Refer to "Derating Curve")								
	WORKING HUMIDITY	20 ~ 95% RH non-condensing								
	STORAGE TEMP., HUMIDITY	-40 ~ +80°C, 10 ~ 95% RH								
	TEMP. COEFFICIENT	±0.03%/°C (0 ~ 60°C)								
	VIBRATION	10 ~ 500Hz, 5G 12min / 1cycle, period for 72min. each along X, Y, Z axes								
SAFETY & EMC	SAFETY STANDARDS Note.7	UL8750, CSA C22.2 No. 250.0-08(except for HLG-80H-48/54V & HLG-80H-48/54BL), UL8750 listed for HLG-80H-□BL EN61347-1, EN61347-2-13 independent, J61347-1, J61347-2-13, IP65 or IP67 approved ; Design refer to UL60950-1, TUV EN60950-1								
	WITHSTAND VOLTAGE	I/P-O/P:3.75KVAC I/P-FG:1.88KVAC O/P-FG:0.5KVAC								
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH								
	EMC EMISSION	Compliance to EN55015, EN61000-3-2 Class C (≥60% load) ; EN61000-3-3								
	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11, EN61547, EN55024, light industry level (surge 4KV), criteria A								
OTHERS	MTBF	357.8Khrs min. MIL-HDBK-217F (25°C)								
	DIMENSION	195.6*61.5*33.8mm (L*W*H)								
	PACKING	0.84Kg; 16pcs/14.4Kg/0.54CUFT								

NOTE

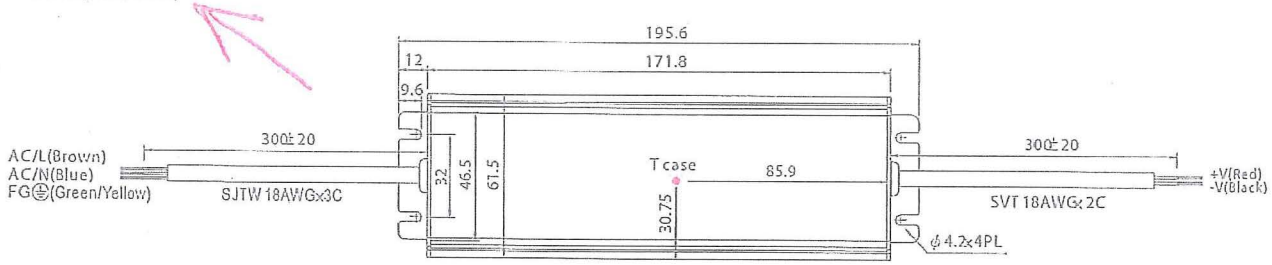
1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.
3. Tolerance : includes set up tolerance, line regulation and load regulation.
4. Constant current operation region is within 60% ~100% rated output voltage. This is the suitable operation region for LED related applications, but please reconfirm special electrical requirements for some specific system design.
5. Derating may be needed under low input voltages. Please check the static characteristics for more details.
6. Type A only.
7. Safety and EMC design refer to EN60598-1, CNS15233, GB7000.1, FCC part18.
8. Length of set up time is measured at cold first start. Turning ON/OFF the power supply may lead to increase of the set up time.
9. The power supply is considered as a component that will be operated in combination with final equipment. Since EMC performance will be affected by the complete installation, the final equipment manufacturers must re-qualify EMC Directive on the complete installation again.
10. Please refer to warranty statement.

ELUMANATION
416-225-6400 | info @elumanation.com

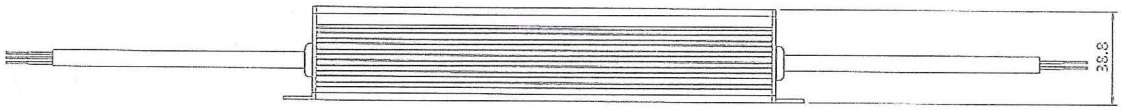
Mechanical Specification

Case No.997A Unit:mm

Blank:(HLG-80H)



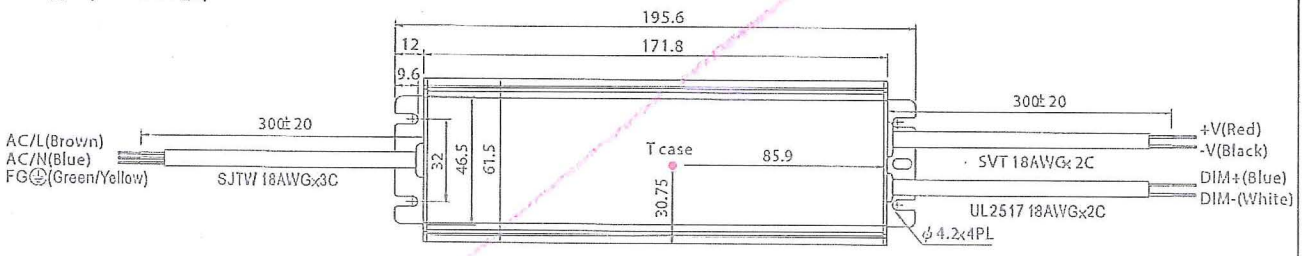
※ T case: Max. Case Temperature.



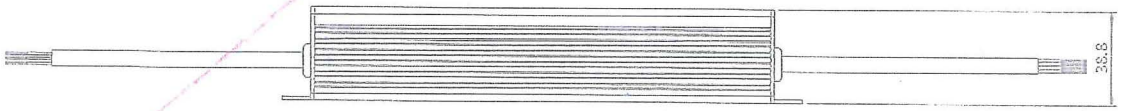
※IP67 rated. Cable for I/O connection.

DIMMABLE

B Type:(HLG-80H-_B)



※ T case: Max. Case Temperature.



185W Single Output Switching Power Supply EL-PS/HLG-185H

- Features :
  - Universal AC input / Full range (up to 305VAC)
  - Built-in active PFC function
  - High efficiency up to 94%
  - Protections: Short circuit / Over current / Over voltage / Over temperature
  - Cooling by free air convection
  - OCP point adjustable through output cable or internal potentiometer
  - IP67 / IP65 design for indoor or outdoor installations
  - Three in one dimming function (1~10Vdc or PWM signal or resistance)
  - Suitable for LED lighting and street lighting applications
  - Compliance to worldwide safety regulations for lighting
  - Suitable for dry / damp / wet locations
  - 5 years warranty (Note.9)

HLG-185H-12[A] Blank : IP67 rated. Cable for I/O connection.
A : IP65 rated. Output voltage and constant current level can be adjusted through internal potentiometer.
B : IP67 rated. Constant current level adjustable through output cable with 1~10Vdc or 10V PWM signal or potentiometer.

SPECIFICATION

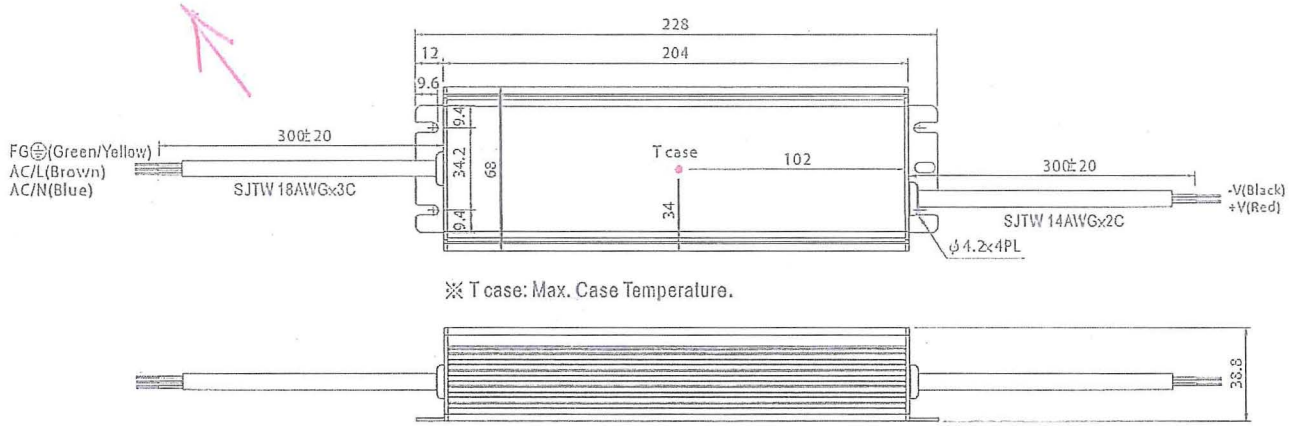
MODEL			HLG-185H-12[ ]	HLG-185H-15[ ]	HLG-185H-20[ ]	HLG-185H-24[ ]	HLG-185H-30[ ]	HLG-185H-36[ ]	HLG-185H-42[ ]	HLG-185H-48[ ]	HLG-185H-54[ ]
OUTPUT	DC VOLTAGE		12V	15V	20V	24V	30V	36V	42V	48V	54V
	RATED CURRENT		13A	11.5A	9.3A	7.8A	6.2A	5.2A	4.4A	3.9A	3.45A
	RATED POWER		156W	172.5W	186W	187.2W	186W	187.2W	184.8W	187.2W	186.3W
	RIPPLE & NOISE (max.) Note.2		150mVp-p	150mVp-p	150mVp-p	150mVp-p	200mVp-p	200mVp-p	200mVp-p	200mVp-p	200mVp-p
	VOLTAGE ADJ. RANGE Note.5		10.8 ~ 13.5V	13.5 ~ 17V	17 ~ 22V	22 ~ 27V	27 ~ 33V	33 ~ 40V	38 ~ 46V	43 ~ 53V	49 ~ 58V
	CURRENT ADJ. RANGE		Can be adjusted by internal potentiometer through output cable								
			6.5 ~ 13A	5.75 ~ 11.5A	4.65 ~ 9.3A	3.9 ~ 7.8A	3.1 ~ 6.2A	2.6 ~ 5.2A	2.2 ~ 4.4A	1.95 ~ 3.9A	1.72 ~ 3.45A
	VOLTAGE TOLERANCE Note.3		±2.5%	±2.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%
	LINE REGULATION		±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	LOAD REGULATION		±2.0%	±1.5%	±1.0%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	SETUP, RISE TIME Note.7		2500ms, 80ms at full load 230VAC / 115VAC ; B type 2500ms, 200ms at 95% load 230VAC / 115VAC								
	HOLD UP TIME (Typ.)		16ms at full load 230VAC / 115VAC								
INPUT	VOLTAGE RANGE Note.4		90 ~ 305VAC 127 ~ 431VDC								
	FREQUENCY RANGE		47 ~ 63Hz								
	POWER FACTOR (Typ.)		PF>0.98/115VAC, PF>0.95/230VAC, PF>0.92/277VAC at full load (Please refer to "Power Factor Characteristic" curve)								
	EFFICIENCY (Typ.)		91.5%	92%	93%	93.5%	93.5%	93.5%	94%	94%	94%
	AC CURRENT (Typ.)	12V	1.8A / 115VAC 0.8A / 230VAC 0.7A / 277VAC								
		15V ~ 54V	2.1A / 115VAC 0.9A / 230VAC 0.8A / 277VAC								
	INRUSH CURRENT (Typ.)		COLD START 75A/230VAC								
	LEAKAGE CURRENT		<0.75mA / 277VAC								
PROTECTION	OVER CURRENT		95 ~ 108%								
			Protection type : Constant current limiting, recovers automatically after fault condition is removed								
	SHORT CIRCUIT		Constant current limiting, recovers automatically after fault condition is removed								
	OVER VOLTAGE		14 ~ 17V	18 ~ 21V	23 ~ 27V	28 ~ 34V	34 ~ 38V	41 ~ 46V	47 ~ 53V	54 ~ 60V	59 ~ 65V
			Protection type : Shut down o/p voltage with auto-recovery or re-power on to recovery								
	OVER TEMPERATURE		100℃ ± 10℃ (RTH2)								
			Protection type : Shut down o/p voltage, recovers automatically after temperature goes down								
ENVIRONMENT	WORKING TEMP.		-40 ~ +70℃ (Refer to "Derating Curve")								
	WORKING HUMIDITY		20 ~ 95% RH non-condensing								
	STORAGE TEMP., HUMIDITY		-40 ~ +80℃, 10 ~ 95% RH								
	TEMP. COEFFICIENT		±0.03%/℃ (0 ~ 50℃)								
	VIBRATION		10 ~ 500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes								
SAFETY & EMC	SAFETY STANDARDS Note.6		UL8750, CSA C22.2 No. 250.0-08, EN61347-1, EN61347-2-13 independent IP65 or IP67, J61347-1, J61347-2-13 approved ; design refer to UL60950-1, TUV EN60950-1								
	WITHSTAND VOLTAGE		I/P-O/P:3.75KVAC I/P-FG:1.88KVAC O/P-FG:0.5KVAC								
	ISOLATION RESISTANCE		I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25℃/ 70% RH								
	EMC EMISSION		Compliance to EN55015, EN55022 (CISPR22) Class B, EN61000-3-2 Class C (≥50% load) ; EN61000-3-3								
	EMC IMMUNITY		Compliance to EN61000-4-2,3,4,5,6,8,11, EN61547, EN55024, light industry level (surge 4KV), criteria A								
OTHERS	MTBF		192.2Khrs min. MIL-HDBK-217F (25℃)								
	DIMENSION		228*68*38.8mm (L*W*H)								
	PACKING		1.15Kg; 12pcs/14.8Kg/0.74CUFT								
NOTE	1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25℃ of ambient temperature. 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. 3. Tolerance : includes set up tolerance, line regulation and load regulation. 4. Derating may be needed under low input voltages. Please check the static characteristics for more details. 5. Type A only. 6. Safety and EMC design refer to EN60598-1, CNS15233, GB7000.1, FCC part18. 7. Length of set up time is measured at cold first start. Turning ON/OFF the power supply may lead to increase of the set up time. 8. This series is considered as a component that will be operated in combination with final equipment. Since EMC performance will be affected by the complete installation, the final equipment manufacturers must re-qualify EMC Directive on the complete installation again. 9. Please refer to warranty statement.										

Lumination

Mechanical Specification

Case No.994D Unit:mm

Blank:(HLG-185H)

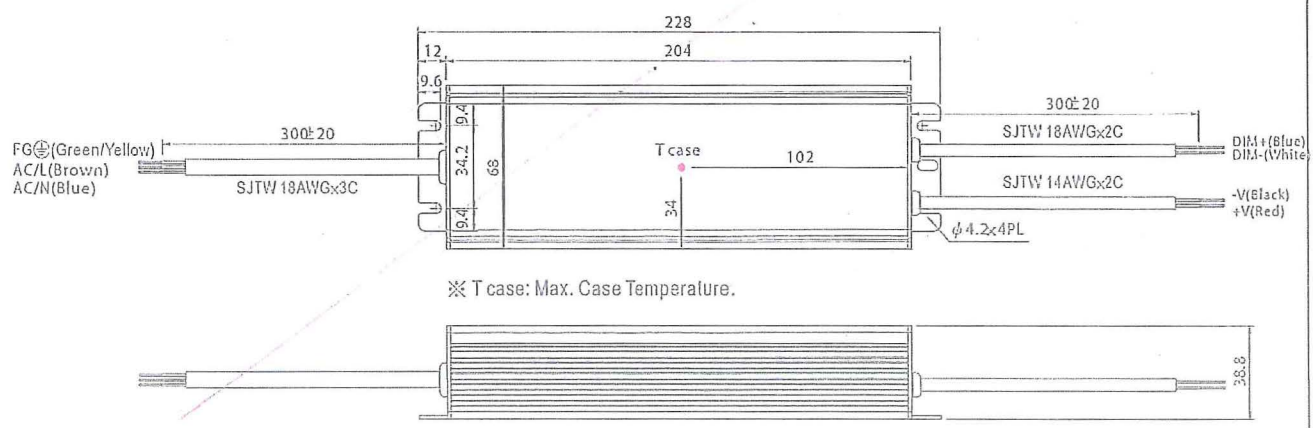


※ T case: Max. Case Temperature.

※IP67 rated. Cable for I/O connection.

DIMMABLE

B Type:(HLG-185H-_B)



※ T case: Max. Case Temperature.

Shelter Cabinet LED Lighting

eLumanation

LED LIGHTING SOLUTIONS ...

PROJECT:

COMMENTS :

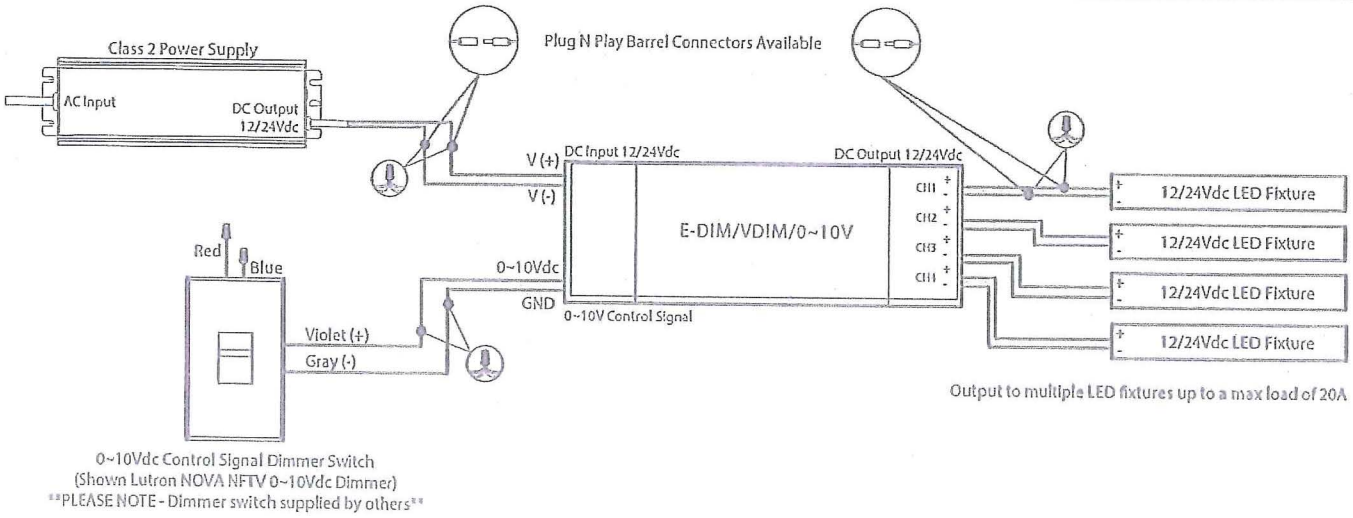
DATA SHEET.

VDIM - 0~10Vdc Control Signal Dimming Module

SPECIFICATIONS.

MODEL NUMBER :	E-DIM/VDIM/0~10V
DIMENSIONS :	178 x 20 x 46mm (7" x 0.8" x 1.8")
VOLTAGE INPUT :	12 or 24Vdc (2x Inputs)
MAX AMPERAGE INPUT :	20A
VOLTAGE OUTPUT :	12 or 24Vdc (4x Channels)
MAX POWER OUTPUT :	20A Total
TEMP RANGE :	-20°C ~ +50 °C
WARRANTY:	1 YEAR
OPERATING ENVIRONMENT :	INDOOR
POWER SUPPLY : (MORE INFO AVAILABLE UPON REQUEST)	12 or 24Vdc CLASS 2 (PLUG N PLAY or HARDWIRED MODELS)
DIMMING SWITCH REQUIRED : (DIMMING SWITCH SUPPLIED BY OTHERS)	0~10Vdc CONTROL SIGNAL DIMMER RECOMMENDED DIMMING SWITCH - Lutron NOVA NFTV 0~10Vdc Dimmer ***SUPPLIED BY OTHERS***

WIRING DIAGRAM



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416.225.6400

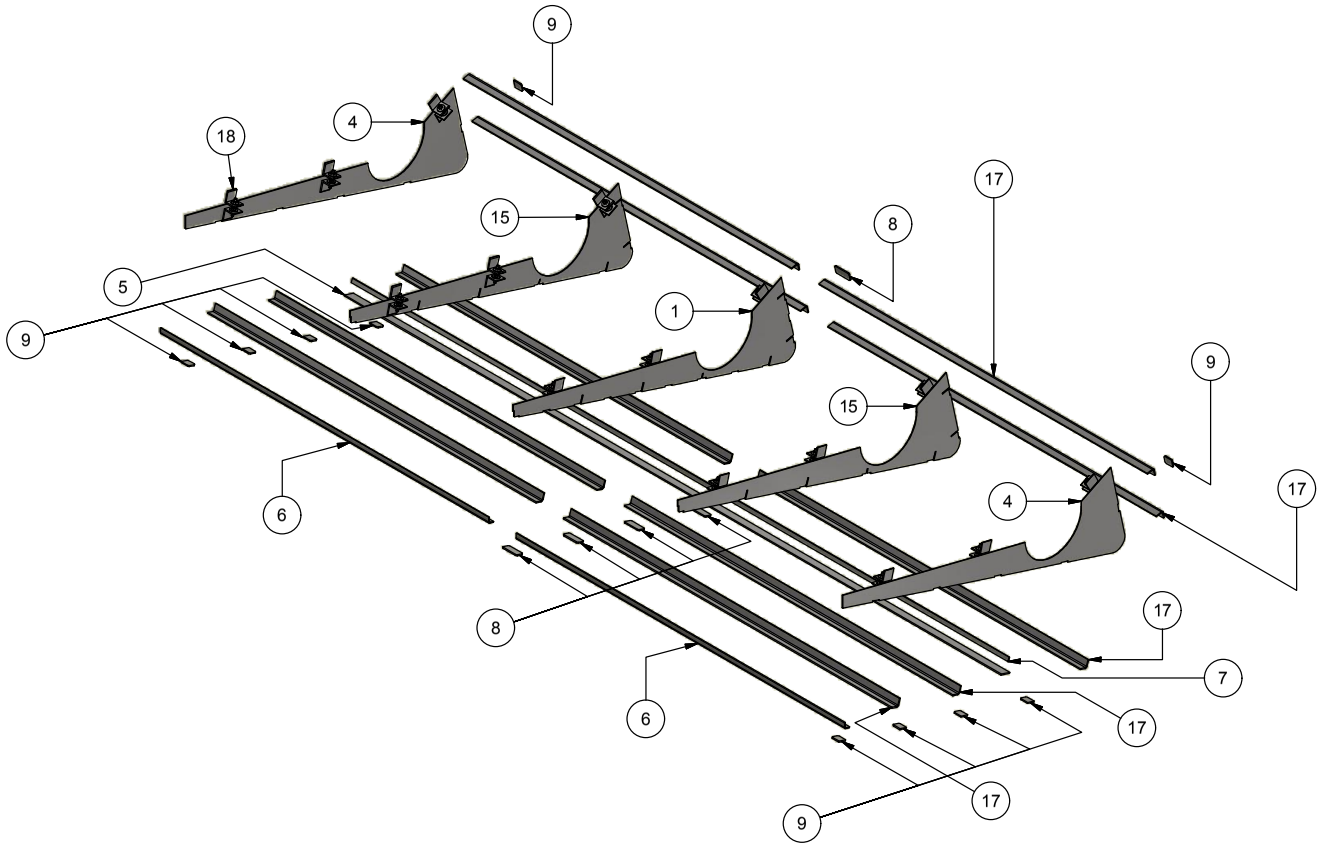
1621-38 McEwen Drive, Lakeview Industrial Park

Whitby, ON. Canada L1N 9A5

NOTES:
INTERMEDIATE EDGE FASTENERS MAY NOT BE REQUIRED - INSTALL TABS BUT DO NOT PLACE THIS FASTENERS IN THE FIRST ARTICLE/MOCK-UP VTA/ARTIST TEAM WILL REVIEW MOCK-UP INSTALLATION TO STABLISH IF THIS FASTENER SCHEME IS ADEQUATE OR IF THE ADDITIONAL FASTENERS ARE REQUIRED; IF THIS SCHEME IS ACCEPTED BY THE VTA/ARTIST TEAM THE INTERMEDIATE EDGE FASTENERS AND ASOCIATED TABS CAN BE OMITTED IN THE REMAINING SHELTERS

C

REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
ALL	A	TABS ADDED	12/3/2014	
ALL	B	347A NOTES	12/17/2014	
ALL	C	347B NOTES	3/13/2015	
ALL	D	MECH INSTALL	6/25/2015	



ART PANEL STRUCTURE SUPPORT - COMPONENTS
SCALE 5/8"=1'

A

PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	21674-00	PANEL MOUNT JOIST (CENTER)
4	2	21674-01	PANEL MOUNT JOIST (SIDES)
5	1	21811-00	PANEL MOUNTING PRFLE (1-2)
6	2	21802-02	FRONT MOUNTING PROFILE
7	1	21811-01	PANEL MOUNTING PROFILE (2-2)
8	5	23598-00	OVRHD INTERMEDIATE TAB
9	10	22943-00	OVRHD SIDE PANEL TAB
15	2	21674-02	ART PANEL MOUNT JOIST (N)
17	10	21675-02	ART PANEL MOUNTING PROFILE
18	15	25428-00	ART PL MECH STR MOUNT ASSY

TOLAR
Tolar Manufacturing Company, Inc
258 Mariah Circle, Corona CA. 92879

DESCRIPTION: STRUCTURE MOUNT ART PANEL			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 8
SIZE: B	MATL.: SS 316L - MISC	DWG NO.: 21675-00	REV. NO.: D
SCALE: AS NOTED	DATE: 10/30/2014	DRAWN BY: cgarcia	

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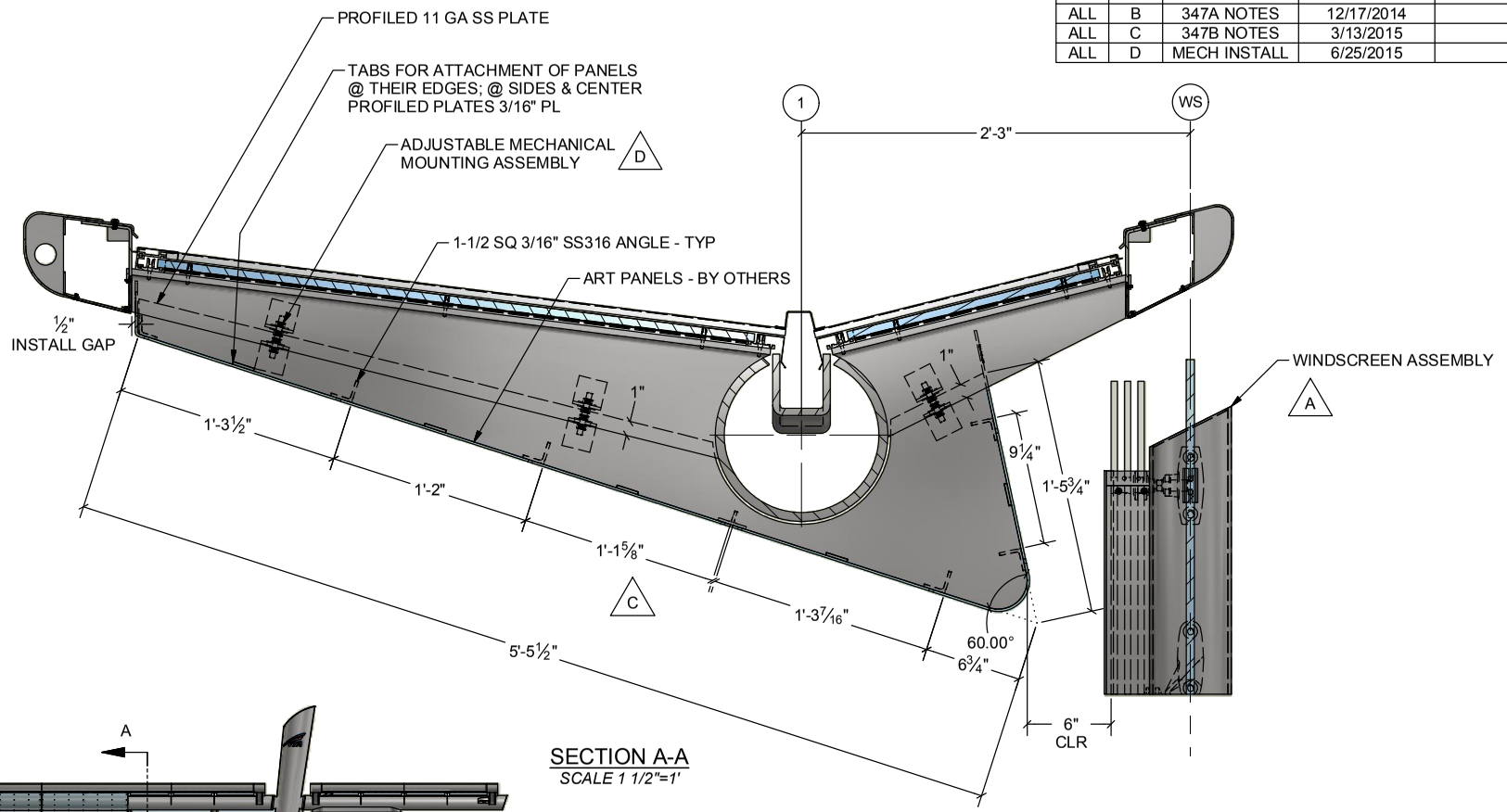
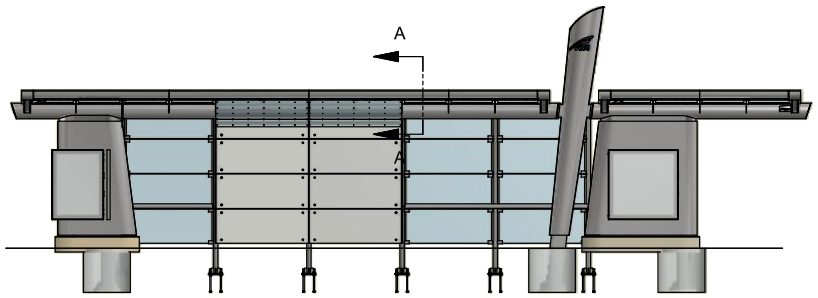
Shelter Art Panel Structure Mechanical Attachment

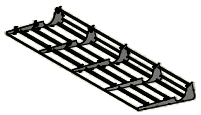
REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
ALL	A	TABS ADDED	12/3/2014	
ALL	B	347A NOTES	12/17/2014	
ALL	C	347B NOTES	3/13/2015	
ALL	D	MECH INSTALL	6/25/2015	



SECTION A-A
SCALE 1 1/2"=1'



PRIMARY SHELTER - FRONTE ELEVATION
SCALE 1/8"=1'



ART PANEL - ISOMETRIC VIEW
SCALE 1/8"=1'

TOLAR — PRECISION WITH DISTINCTION	Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879		
DESCRIPTION	STRUCTURE MOUNT ART PANEL		
CUSTOMER/VENDOR	SANTA CLARA - VTA		SHEET NO. 2 OF 8
SIZE B	MATL. SS 316L - 11 GA - SH M	DWG NO. 21675-00	REV. NO. D
SCALE AS NOTED	DATE 10/30/2014	DRAWN BY: cgarcia	

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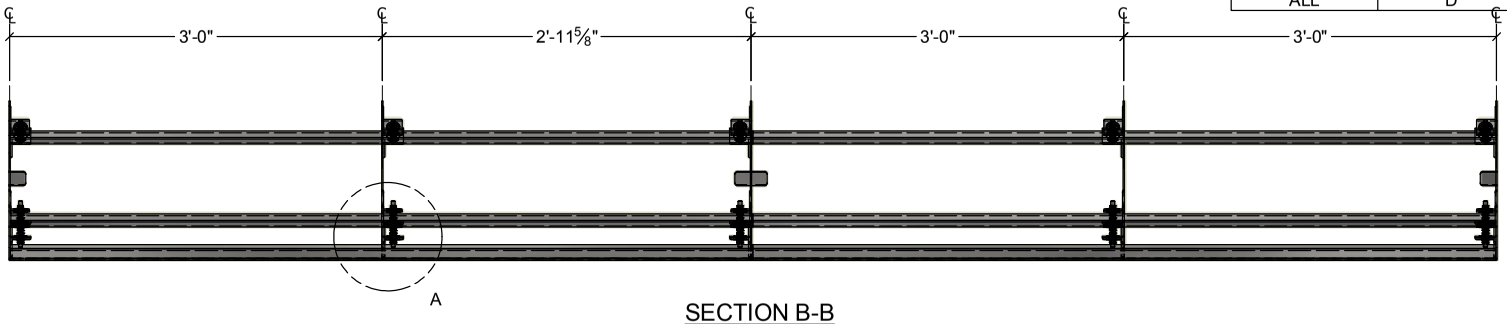
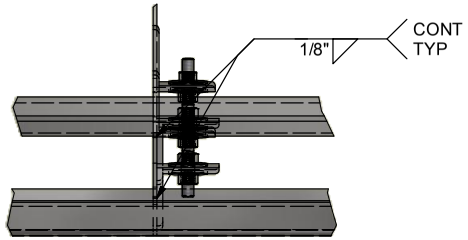
Shelter Art Panel Structure Mechanical Attachment

REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
ALL	A	TABS ADDED	12/3/2014	
ALL	B	347A NOTES	12/17/2014	
ALL	C	347B NOTES	3/13/2015	
ALL	D	MECH INSTALL	6/25/2015	

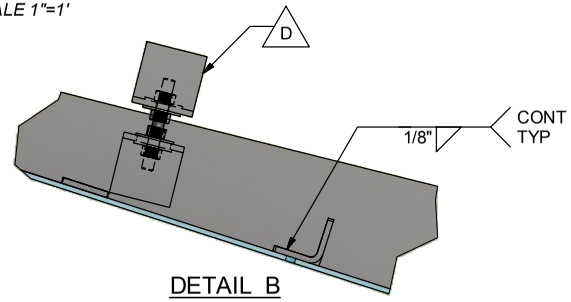


SECTION B-B
SCALE 1"=1'

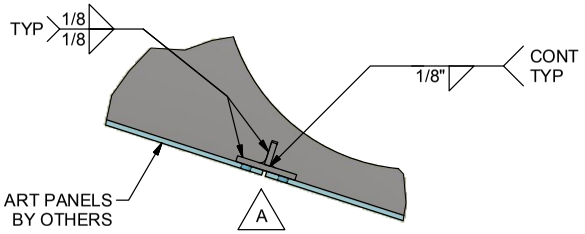
ISO VIEW
SCALE 1/8"=1'



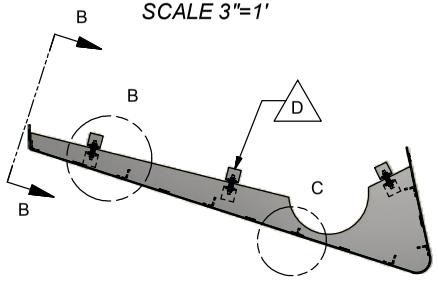
DETAIL A
TYPICAL
SCALE 3"=1'



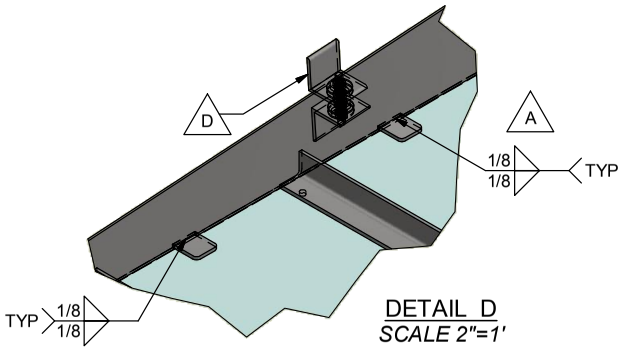
DETAIL B
TYPICAL
SCALE 3"=1'



DETAIL C
TYPICAL
SCALE 3"=1'



ART PANEL HANGING STRUCTURE - -RIGHT ELEVATION
SCALE 5/8"=1'



DETAIL D
SCALE 2"=1'

TOLAR — PRECISION WITH DISTINCTION	Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879		
DESCRIPTION	STRUCTURE MOUNT ART PANEL		
CUSTOMER/VENDOR	SANTA CLARA - VTA		SHEET NO. 3 OF 8
SIZE B	MATL. SS 316L - MISC	DWG NO. 21675-00	REV. NO. D
SCALE AS NOTED	DATE 10/30/2014	DRAWN BY: cgarcia	

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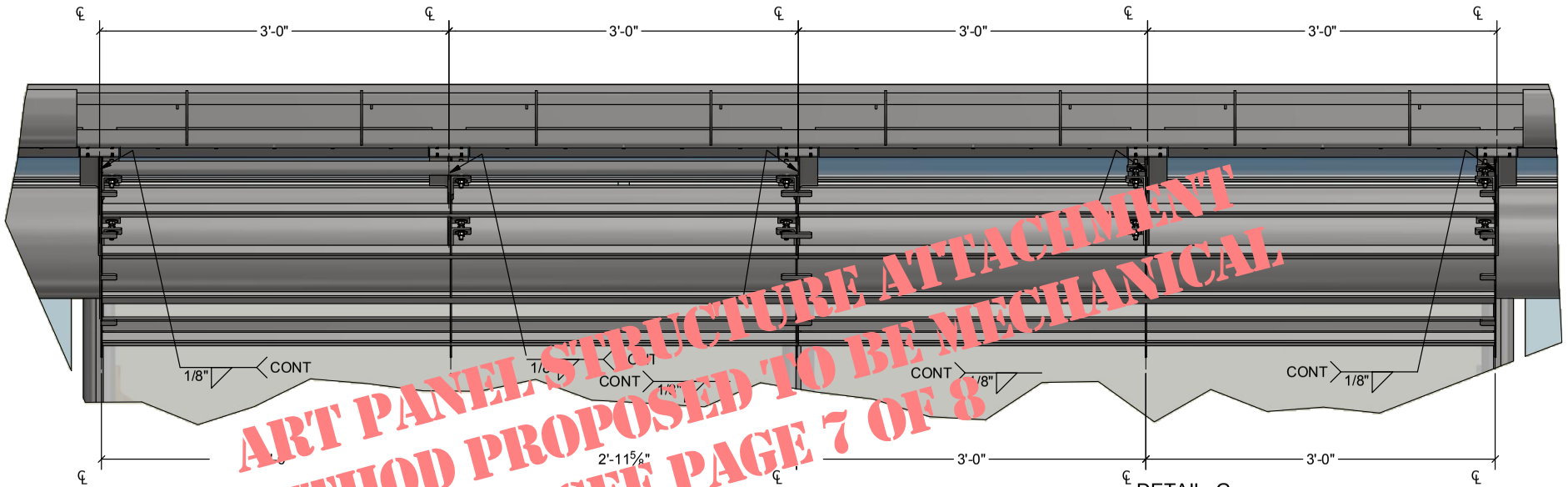
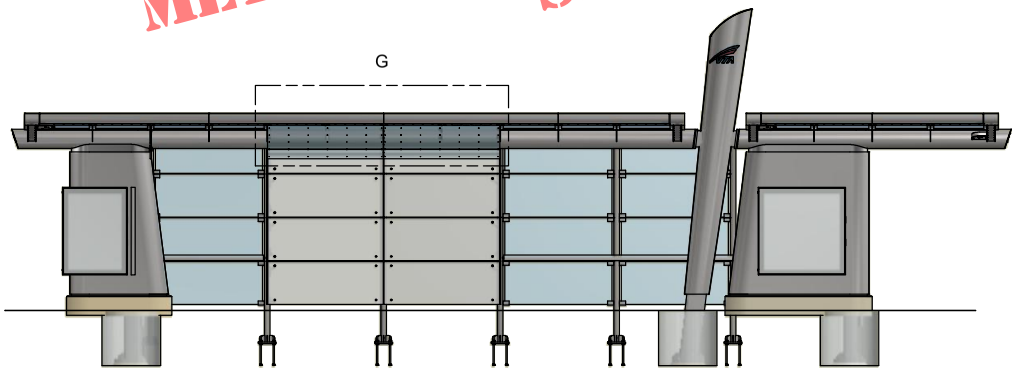
Shelter Art Panel Structure Mechanical Attachment



ART PANEL STRUCTURE ATTACHMENT METHOD PROPOSED TO BE MECHANICAL SEE PAGE 7 OF 8

DETAIL G
SCALE 1 1/8" = 1'-0"



PRIMARY SHELTER - FRONT ELEVATION
SCALE 5/32"=1'

Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: PRIMARY SHELTER			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 4 OF 8
SIZE: B	MATL.: SS 316L - MISC	DWG NO.: 20787-00	REV. NO.: C
SCALE: AS NOTED	DATE: 10/30/2014	DRAWN BY: cgarcia	

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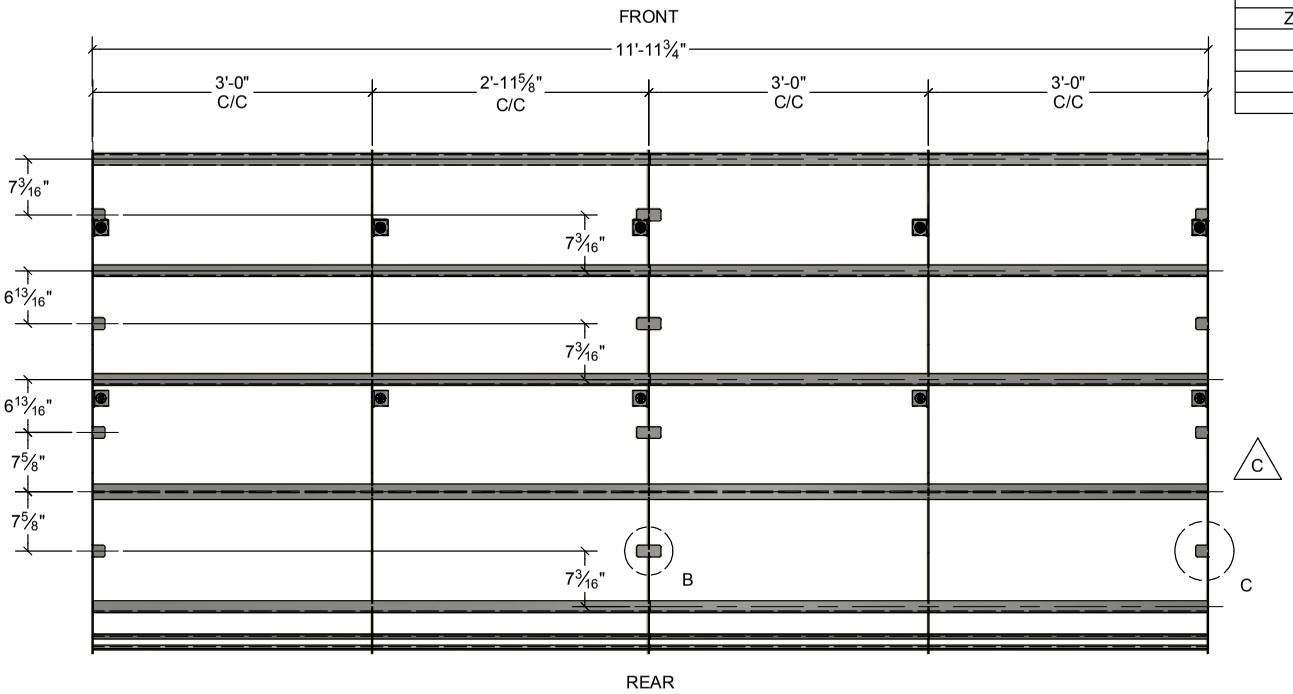
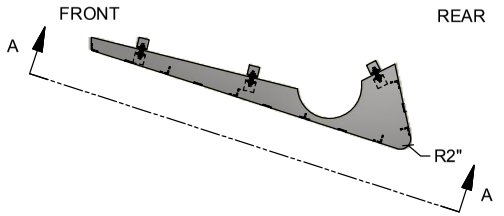
Shelter Art Panel Structure Mechanical Attachment

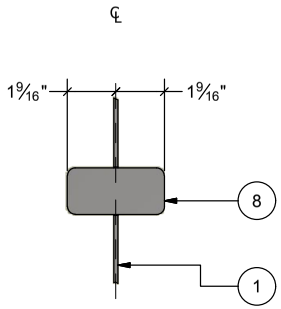
REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
ALL	A	TABS ADDED	12/3/2014	
ALL	B	347A NOTES	12/17/2014	
ALL	C	347B NOTES	3/13/2015	
ALL	D	MECH INSTALL	6/25/2015	



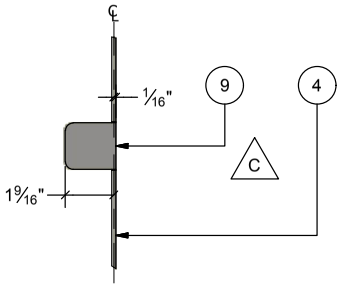
SECTION A-A
SCALE 3/4"=1'



P. S. ART PANEL - HOLE PATTERN VIEW
SCALE 1/2"=1'



DETAIL B
TYPICAL
SCALE 3" = 1'-0"



DETAIL C
SIDES TYPICAL
SCALE 3" = 1'-0"

104 ATTACHMENT POINTS

TOLAR — Tolar Manufacturing Company, Inc, 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: STRUCTURE MOUNT ART PANEL			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 5 OF 8
SIZE: B	MATL.: SS 316L - MISC	DWG NO.: 21675-00	REV. NO.: D
SCALE: AS NOTED	DATE: 10/30/2014	DRAWN BY: cgarcia	

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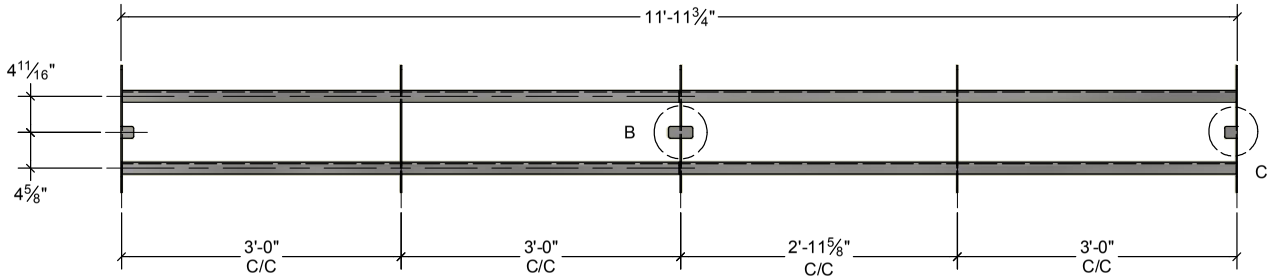
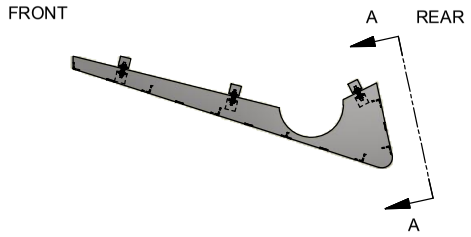
Shelter Art Panel Structure Mechanical Attachment

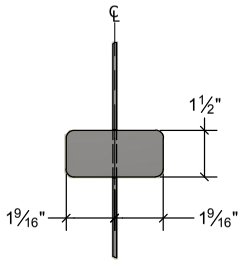
REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
ALL	A	TABS ADDED	12/3/2014	
ALL	B	347A NOTES	12/17/2014	
ALL	C	347B NOTES	3/13/2015	
ALL	D	MECH INSTALL	6/25/2015	



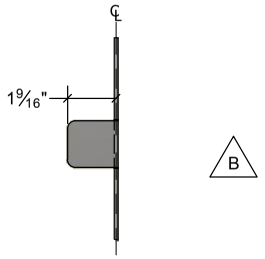
SECTION A-A
SCALE 3/4"=1'



P.S. HOLE PATTERN VIEW
SCALE 1/2"=1'



DETAIL B
TYPICAL
SCALE 3" = 1'-0"



DETAIL C
SIDES TYPICAL
SCALE 3" = 1'-0"

TOLAR — Tolar Manufacturing Company, Inc, 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: STRUCTURE MOUNT ART PANEL			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 6 OF 8
SIZE: B	MATL.: SS 316L - MISC	DWG NO.: 21675-00	REV. NO.: D
SCALE: AS NOTED	DATE: 10/30/2014	DRAWN BY: cgarcia	

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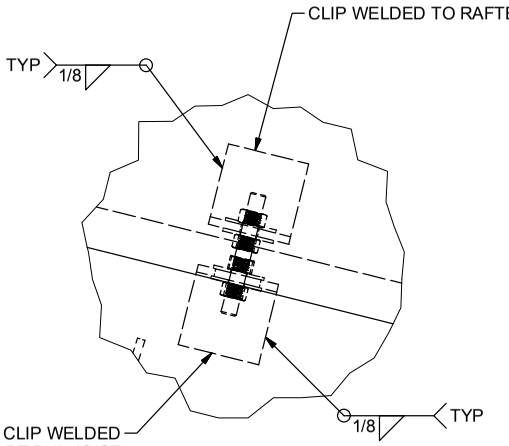
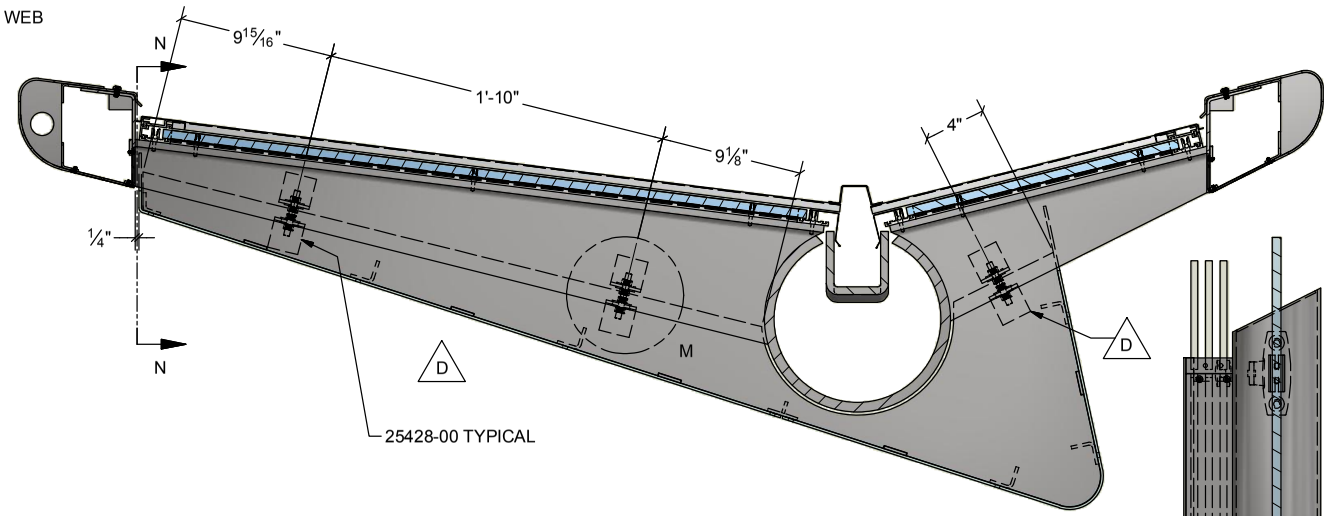
Shelter Art Panel Structure Mechanical Attachment

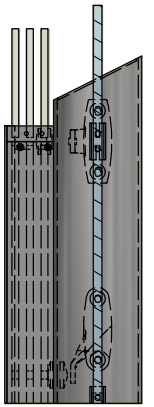
REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
ALL	A	TABS ADDED	12/3/2014	
ALL	B	347A NOTES	12/17/2014	
ALL	C	347B NOTES	3/13/2015	
ALL	D	MECH INSTALL	6/25/2015	

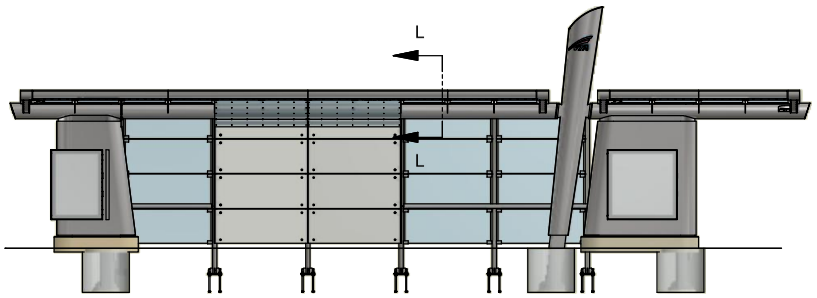


DETAIL M
SCALE 4" = 1'-0"

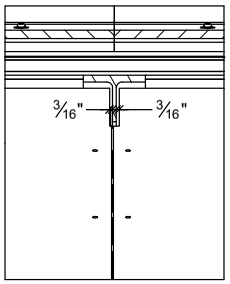


SECTION L-L
SCALE 1 1/2"=1'





PRIMARY SHELTER - FRONTE ELEVATION
SCALE 1/8"=1'



SECTION N-N
TIPICAL CLEARENCE TOLERANCE
BETWEEN RAFTERS AND ART PANELS
SCALE 1 1/2"=1'

TOLAR — Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: PRIMARY SHELTER			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 7 OF 8
SIZE: B	MATL.: SS 316L - MISCELANEOUS	DWG NO.: 20787-00	REV. NO.: C
SCALE: AS NOTED	DATE: 10/30/2014	DRAWN BY: cgarcia	

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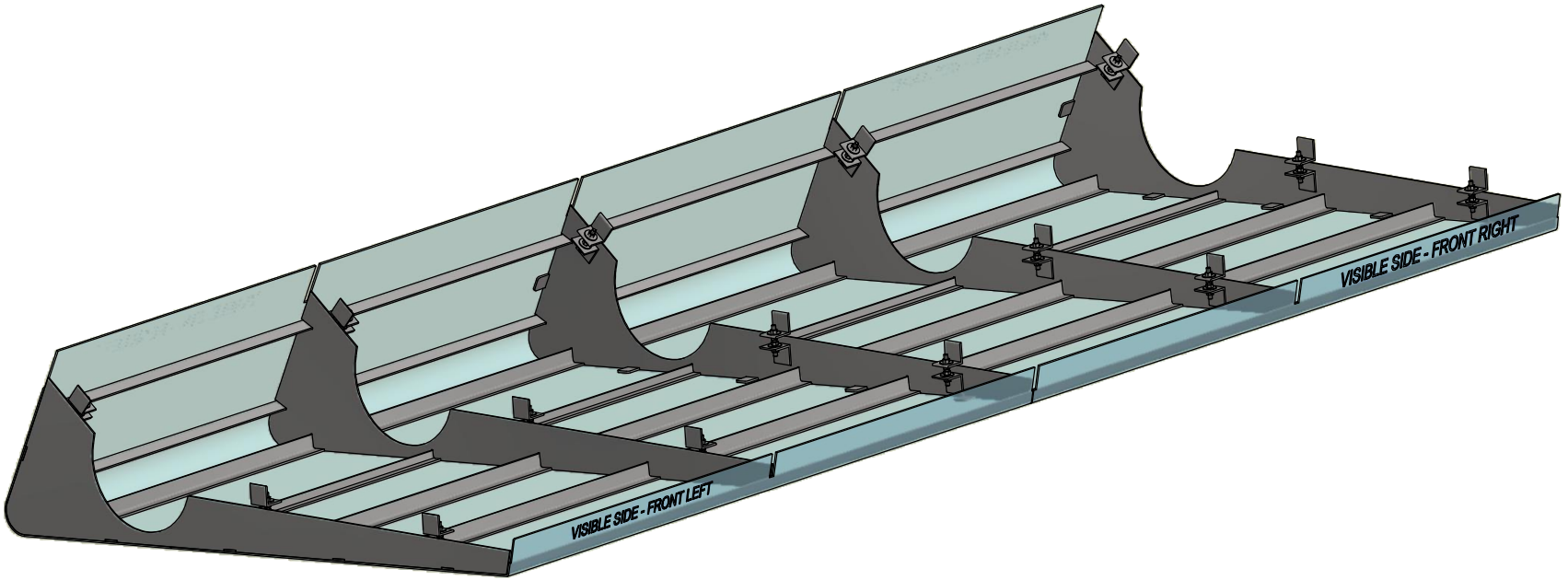
Shelter Art Panel Structure Mechanical Attachment



ISOMETRIC VIEW
SCALE 1 1/8" = 1'-0"

TOLAR — NUMBER ONE WITH DISTINCTION	Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879
DESCRIPTION	STRUCTURE MOUNT ART PANEL
CUSTOMER/VENDOR	SANTA CLARA - VTA
SHEET NO.	8 OF 8
SIZE	B
MATL.	SS 316L - MISC
DWG NO.	21675-00
REV. NO.	D
SCALE	AS NOTED
DATE	10/30/2014
DRAWN BY:	cgarcia

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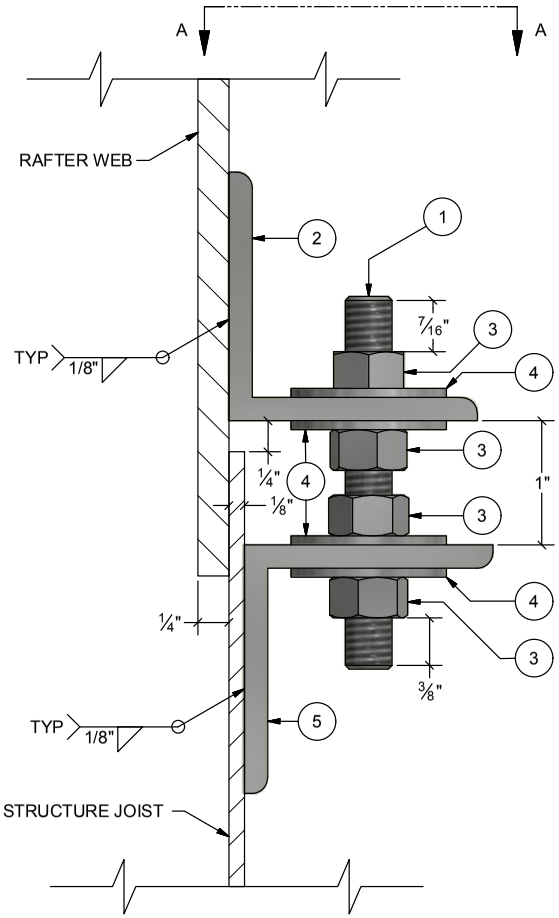
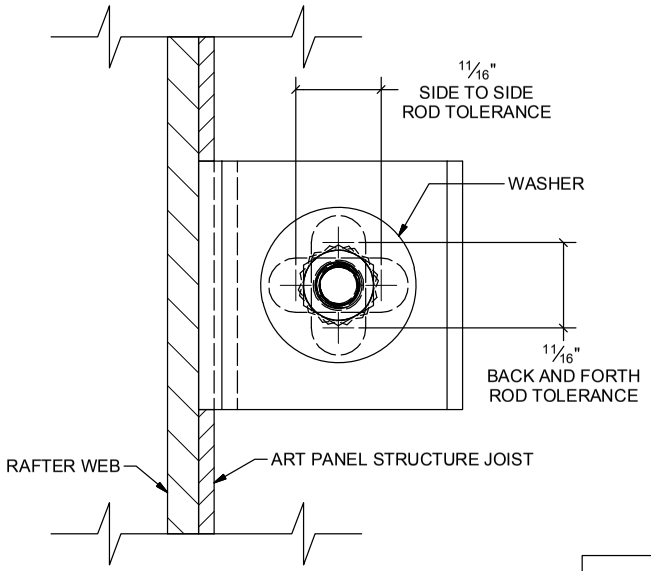
Shelter Art Panel Structure Mechanical Attachment



ART PANEL MECHANICAL ATTACHMENT ASSEMBLY - FRONT ELEVATION
SCALE 1 : 1



VIEW A-A
SCALE 1 : 1

PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	25427-00	ALL THREAD ROD 3/8-16 x 3"
2	1	25426-00	UPPER MECH CONN PROFILE
3	4	94804A320	HEX NUT 3/8-16 ASTM F594
4	4	91525A141	SS 316 FLAT WASHER
5	1	25426-01	BOTTOM MECH CONN PROFILE

TOLAR
Tolar Manufacturing Company, Inc
258 Mariah Circle, Corona CA. 92879

DESCRIPTION: ART PL MECH STR MOUNT ASSY			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - MISCELANEOUS	DWG NO.: 25428-00	REV. NO.:
SCALE: AS NOTED	DATE: 6/25/2015	DRAWN BY: cgarcia	

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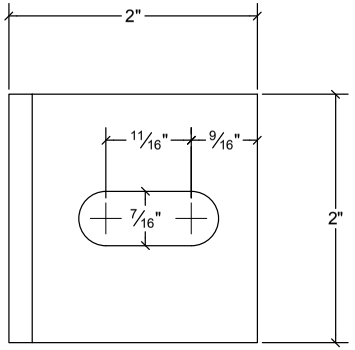
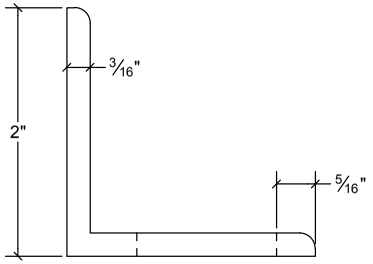
Shelter Art Panel Structure Mechanical Attachment

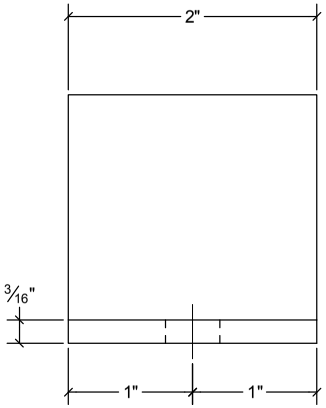
NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. MILL FINISH #1



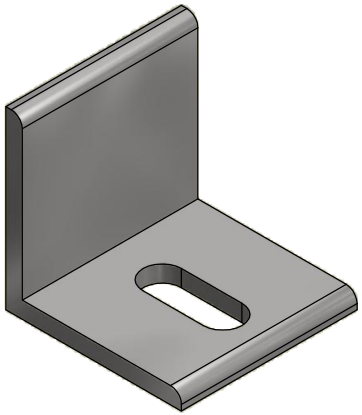
PLAN VIEW
SCALE 1 : 1



FRONT ELEVATION
SCALE 1 : 1



SIDE ELEVATION
SCALE 1 : 1



ISOMETRIC VIEW
SCALE 1 : 1

THIS COMPONENT TO BE WELDED TO THE RAFTER WEB

TOLAR — Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: UPPER MECH CONN PROFILE			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 2" x 2" x 3/16" ASTM A 276	DWG NO.: 25426-00	REV. NO.
SCALE: AS NOTED	DATE: 6/25/2015	DRAWN BY: cgarcia	

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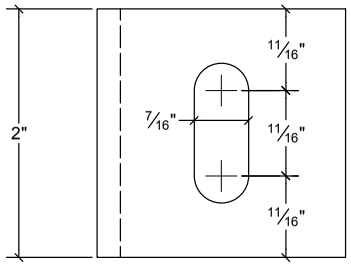
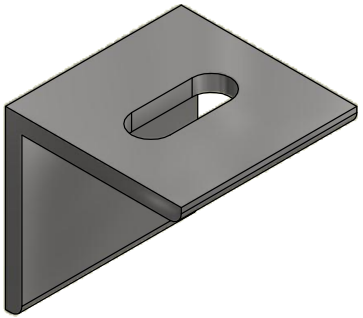
Shelter Art Panel Structure Mechanical Attachment

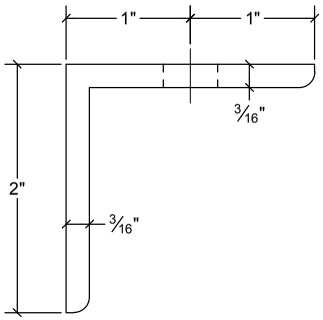


PLAN VIEW
SCALE 1 : 1

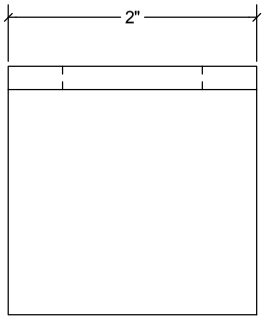


ISOMETRIC VIEW
SCALE 1 : 1

THIS COMPONENT TO BE WELDED TO THE ART PANEL STRUCTURE JOIST



FRONT ELEVATION
SCALE 1 : 1

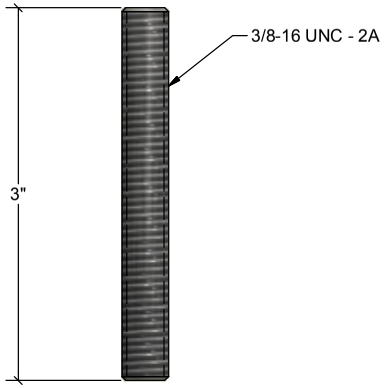


SIDE ELEVATION
SCALE 1 : 1

TOLAR — Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: BOTTOM MECH CONN PROFILE			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 2" x 2" x 3/16" ASTM A276	DWG NO.: 25426-01	REV. NO.:
SCALE: AS NOTED	DATE: 6/25/2015	DRAWN BY: cgarcia	

T:\Engineering\CARLOS GARCIA\VTA\25426-01.idw

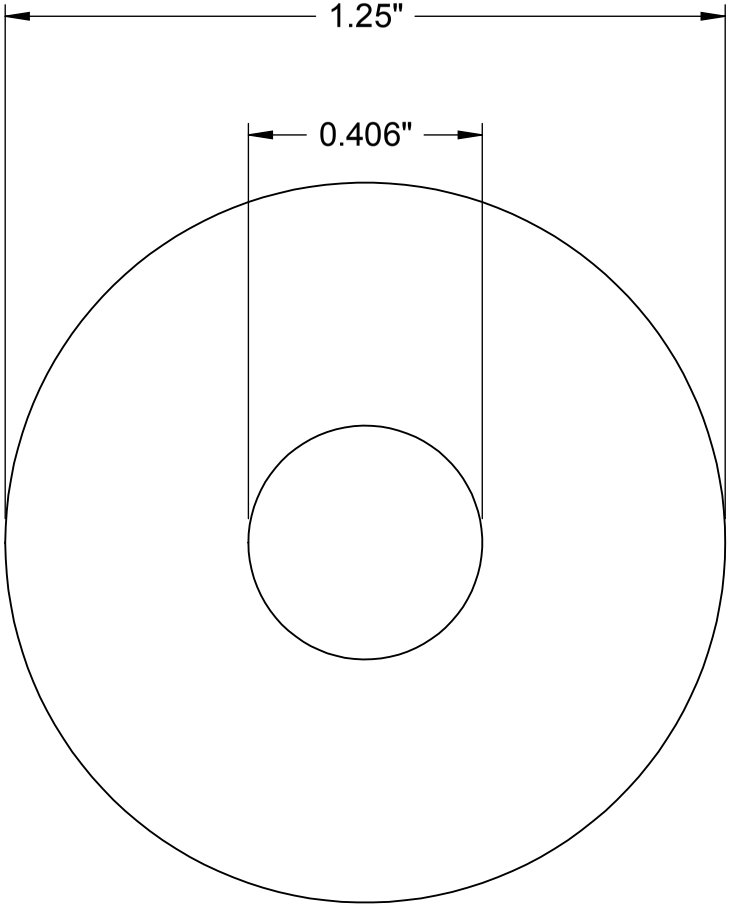
Shelter Art Panel Structure Mechanical Attachment

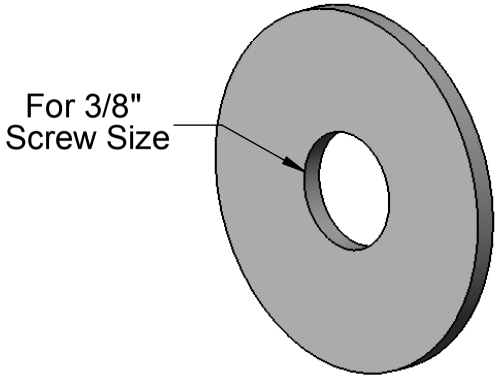


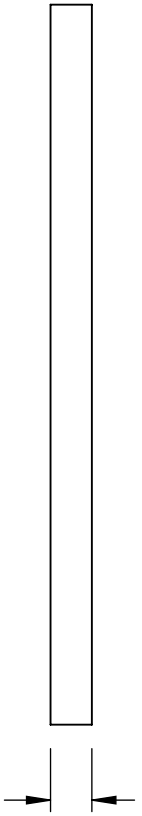
Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879	
DESCRIPTION: ALL THREAD ROD 3/8-16 x 3"	
CUSTOMER/VENDOR: SANTA CLARA - VTA	SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 3/8-16 A-T ROD ASTM F593
DWG NO.: 25427-00	REV. NO.:
SCALE: AS NOTED	DATE: 6/25/2015
DRAWN BY: cgarcia	

T:\Engineering\CARLOS GARCIA\VTA\25427-00.idw

Shelter Art Panel Structure Mechanical Attachment





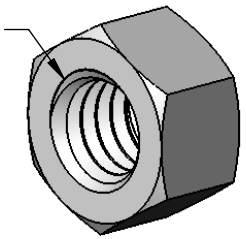


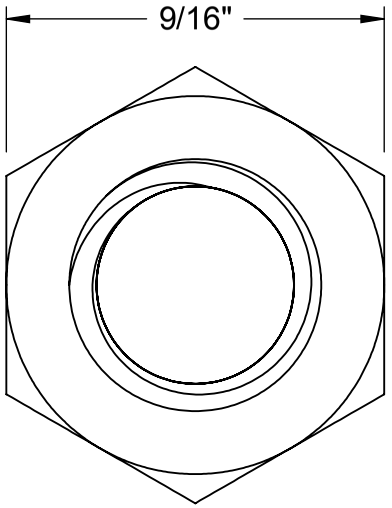
Washer may vary from
0.052" to 0.072" in thickness.

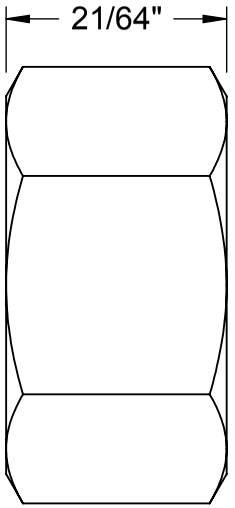
Shelter Art Panel Structure Mechanical Attachment

PART NUMBER **91525A141**

Oversized
Washer







Shelter Art Panel Structure Mechanical Attachment

McMASTER-CARR® CAD

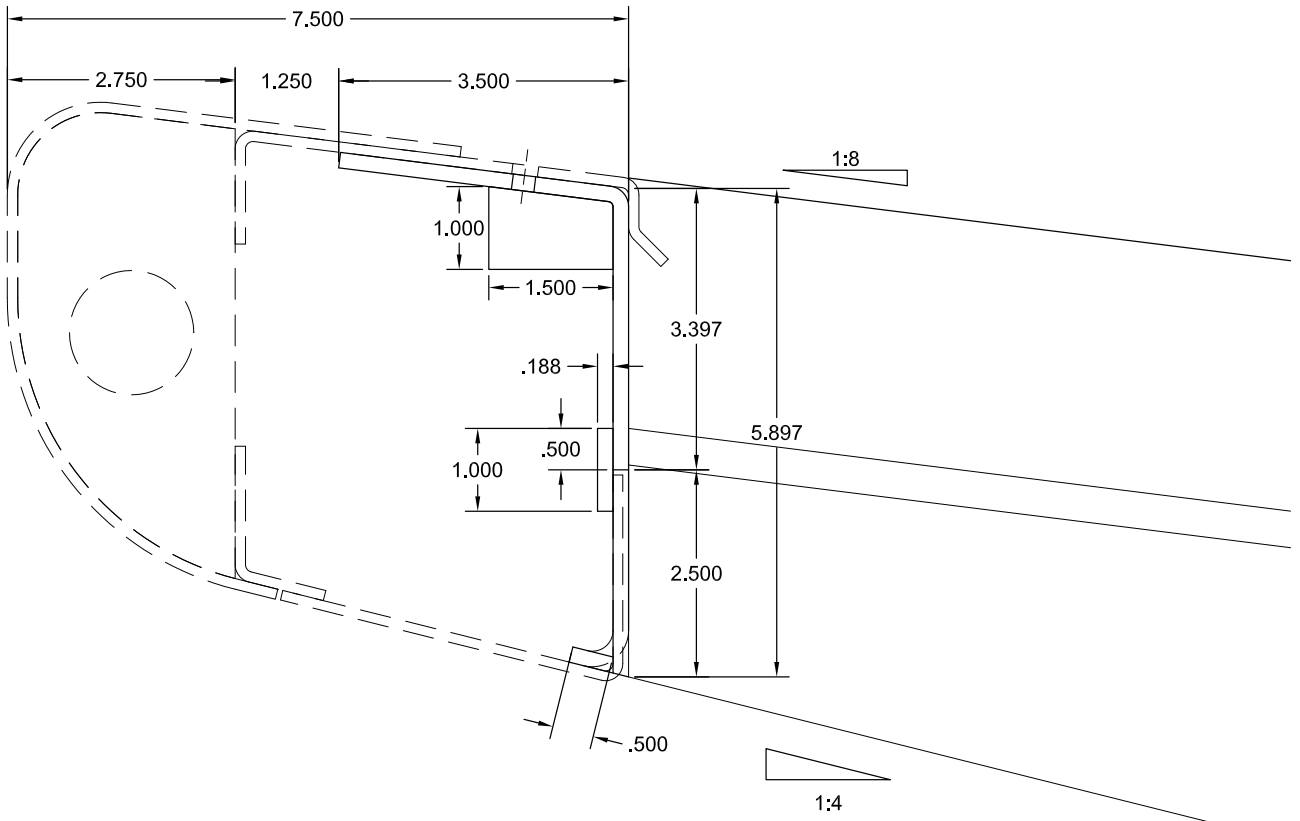
http://www.mcmaster.com

PART NUMBER **94804A320**

Hex Nut

THIS DRAWING HAS BEEN GENERATED AND IS MAINTAINED BY A CAD SYSTEM. CHANGES SHALL ONLY BE INCORPORATED AS DIRECTED BY TOLAR MANUFACTURING CO., INC.'S ENGINEERING DEPT.

REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED



UNLESS OTHERWISE SPECIFIED:
ALL DIMENSIONS ARE IN INCHES

TOLERANCES:
HOLES SIZE: ±1/32
X <6': ±1/32
X >6': ±1/16
ANGLES: ±1/2°

REMOVE ALL BURRS AND BREAK SHARP EDGES 1/64 MAX.

THIRD ANGLE PROJECTION

TOLAR
DURABILITY WITH DISTINCTION

Tolar Manufacturing Company, Inc
258 Mariah Circle,Corona,CA 92879

DESCRIPTION: BENT AND NOTCHED BRACKET PROFILE

CUSTOMER/VENDOR: SANTA CLARA – VTA

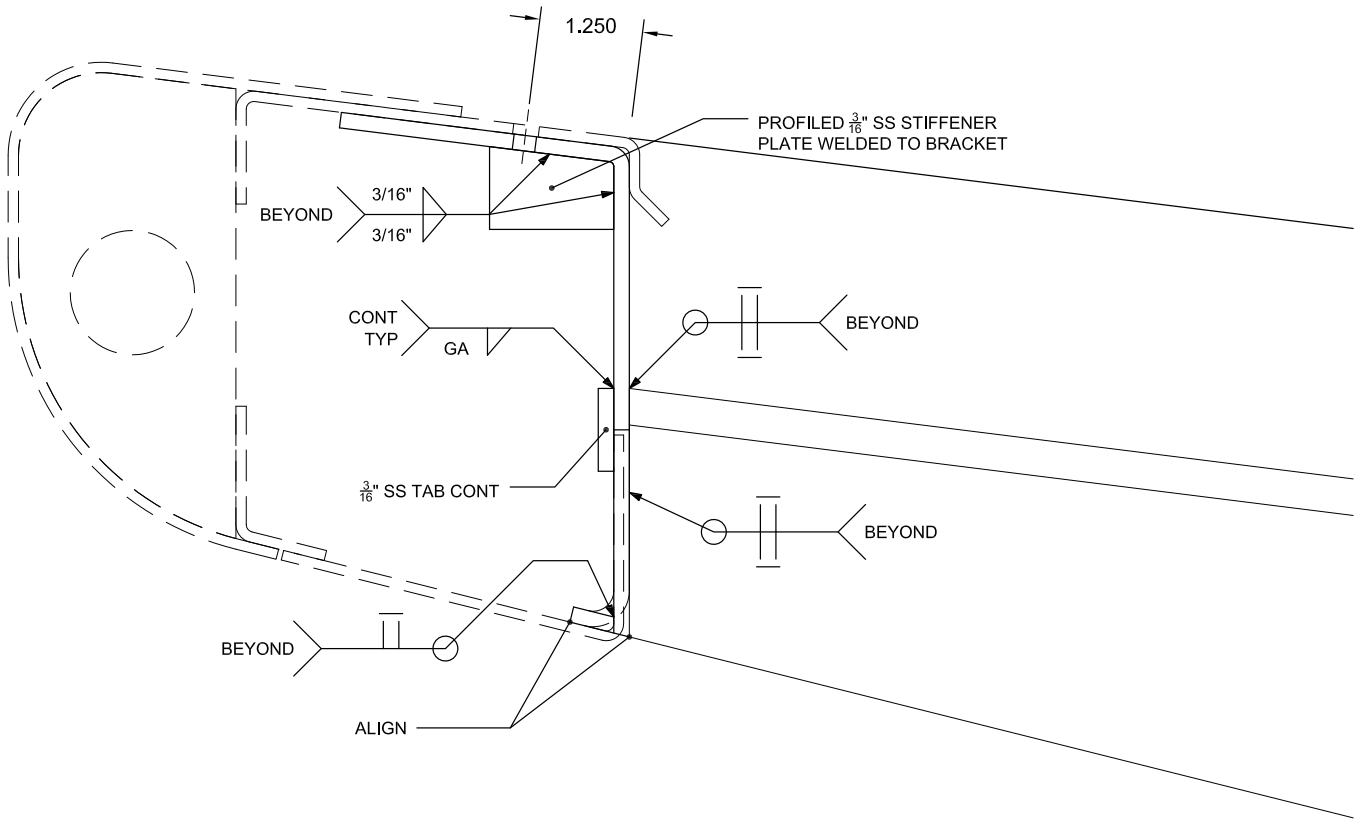
SIZE	MATL.	DWG NO.	REV
B	SS 316L – 3/16" PL	23390-00	

SCALE | DATE 10-16-2014 | DRAWN BY: CGARCIA

Shelter Front Eave

THIS DRAWING HAS BEEN GENERATED AND IS MAINTAINED BY A CAD SYSTEM. CHANGES SHALL ONLY BE INCORPORATED AS DIRECTED BY TOLAR MANUFACTURING CO., INC.'S ENGINEERING DEPT.

REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED



UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES

TOLERANCES:
HOLES SIZE: ±1/32
X <6': ±1/32
X >6': ±1/16
ANGLES: ±1/2°

REMOVE ALL BURRS AND BREAK SHARP EDGES 1/64 MAX.

THIRD ANGLE PROJECTION

TOLAR DURABILITY WITH DISTINCTION

Tolar Manufacturing Company, Inc
258 Mariah Circle,Corona,CA 92879

DESCRIPTION: BRAKET PROFILE – WELD DETAILS

CUSTOMER/VENDOR: SANTA CLARA – VTA

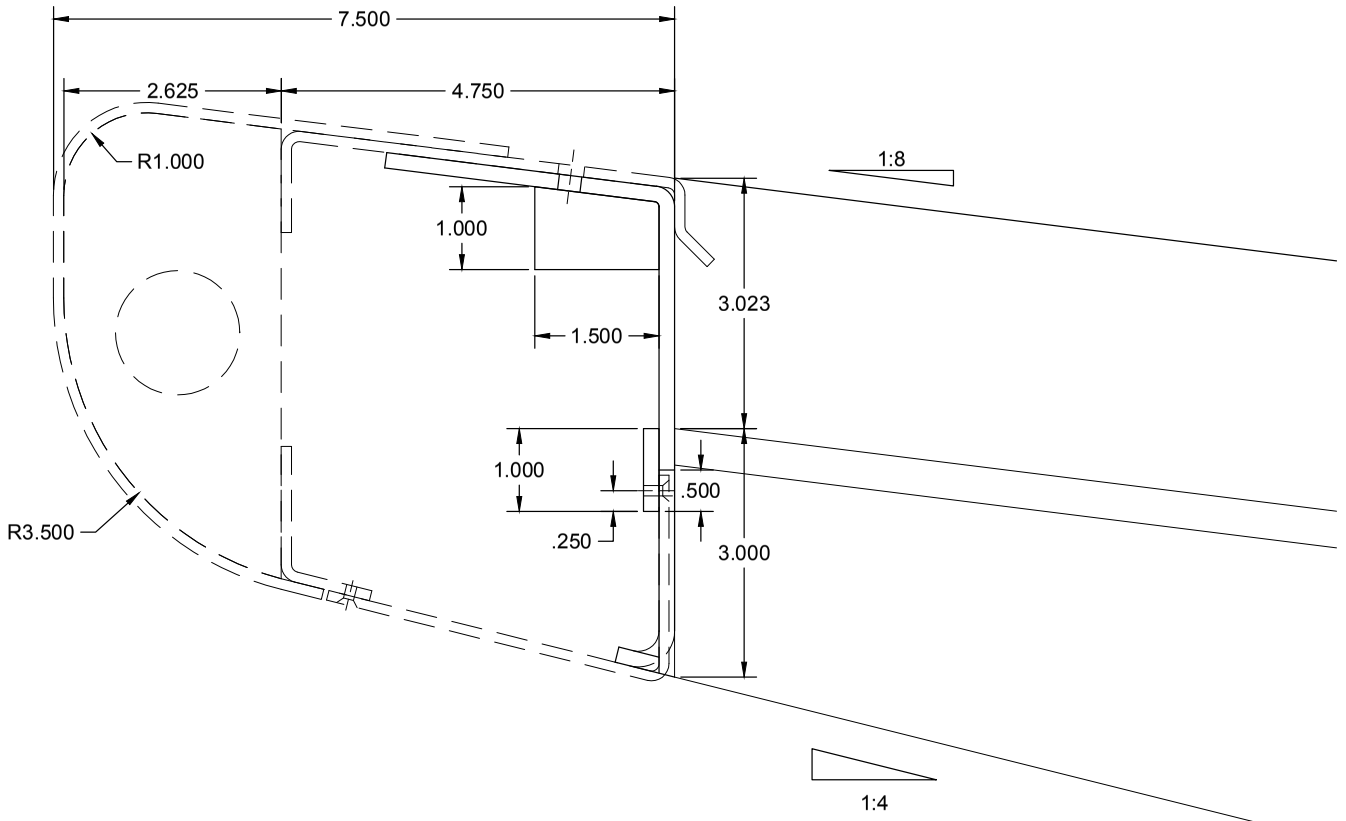
SIZE	MATL.	DWG NO.	REV
B	SS 313L – 3/16" PL	23390-00	

SCALE 8"=1' | DATE 10-16-2014 | DRAWN BY: CGARCIA

Shelter Front Eave

THIS DRAWING HAS BEEN GENERATED AND IS MAINTAINED BY A CAD SYSTEM. CHANGES SHALL ONLY BE INCORPORATED AS DIRECTED BY TOLAR MANUFACTURING CO., INC.'S ENGINEERING DEPT.

REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED



UNLESS OTHERWISE SPECIFIED:
ALL DIMENSIONS ARE IN INCHES

TOLERANCES:

HOLES SIZE:	±1/32
X <6':	±1/32
X >6':	±1/16
ANGLES:	±1/2°

REMOVE ALL BURRS AND BREAK SHARP EDGES 1/64 MAX.

THIRD ANGLE PROJECTION

TOLAR DURABILITY WITH DISTINCTION

Tolar Manufacturing Company, Inc
258 Mariah Circle,Corona,CA 92879

DESCRIPTION: FRONT EAVE SMALL STIFFENER

CUSTOMER/VENDOR: SANTA CLARA – VTA

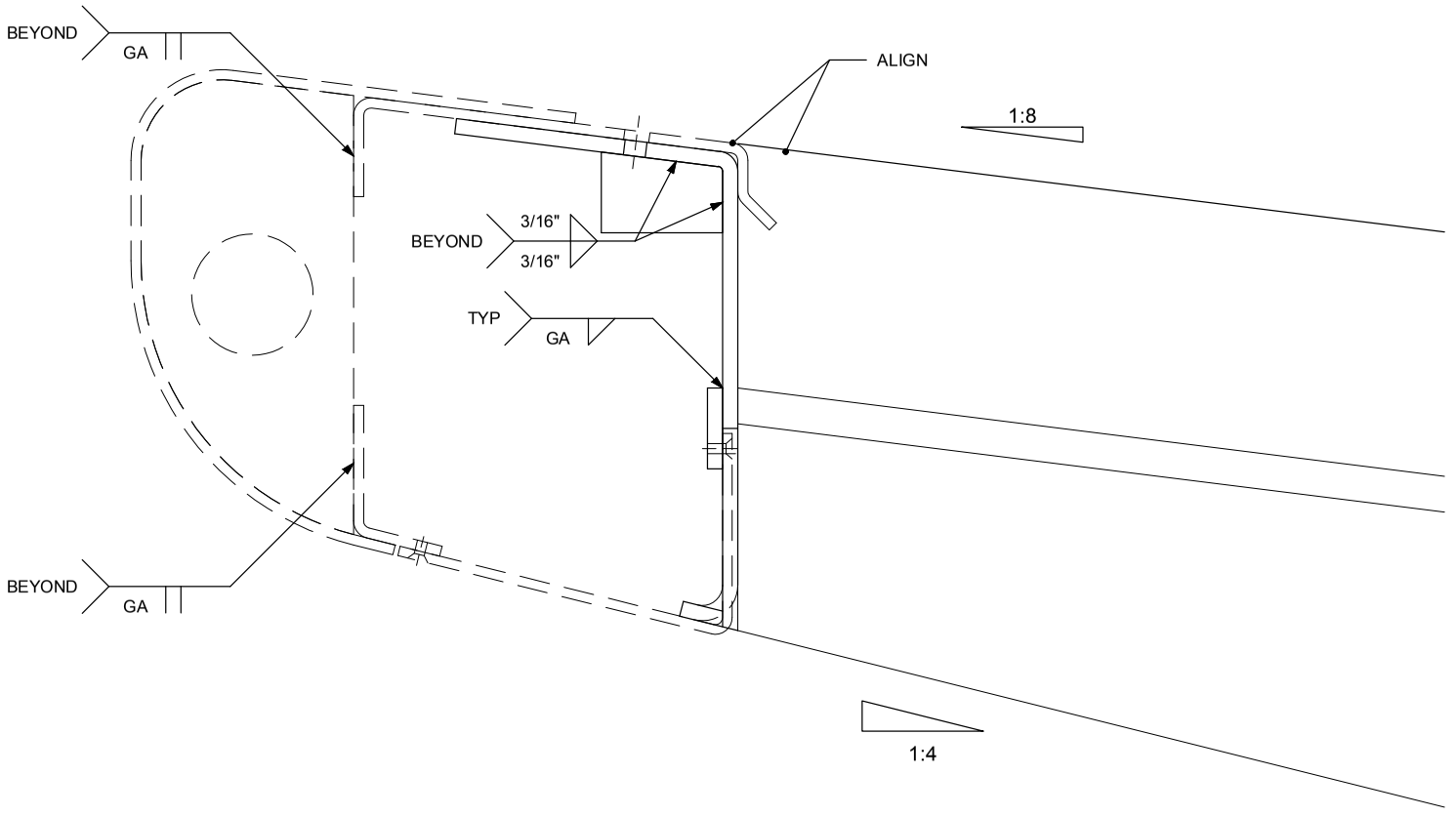
SIZE	MATL.	DWG NO.	REV
B	SS 316L – 3/16" PL	20858-00	

SCALE	DATE	DRAWN BY:
8"=1'	10-21-2014	CGARCIA

Shelter Front Eave

THIS DRAWING HAS BEEN GENERATED AND IS MAINTAINED BY A CAD SYSTEM. CHANGES SHALL ONLY BE INCORPORATED AS DIRECTED BY TOLAR MANUFACTURING CO., INC.'S ENGINEERING DEPT.

REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED



UNLESS OTHERWISE SPECIFIED:
ALL DIMENSIONS ARE IN INCHES

TOLERANCES:

HOLES SIZE:	±1/32
X <6':	±1/32
X >6':	±1/16
ANGLES:	±1/2'

REMOVE ALL BURRS AND BREAK SHARP EDGES 1/64 MAX.

THIRD ANGLE PROJECTION

TOLAR
DURABILITY WITH DISTINCTION

Tolar Manufacturing Company, Inc
258 Mariah Circle,Corona,CA 92879

DESCRIPTION
FRONT EAVE SMALL STIFFENER

CUSTOMER/VENDOR
SANTA CLARA – VTA

SIZE	MATL.	DWG NO.	REV
B	316L – 3/16" PL	20858-00	

SCALE	DATE	DRAWN BY:
8"=1'	10-21-2014	CGARCIA

Shelter Front Eave

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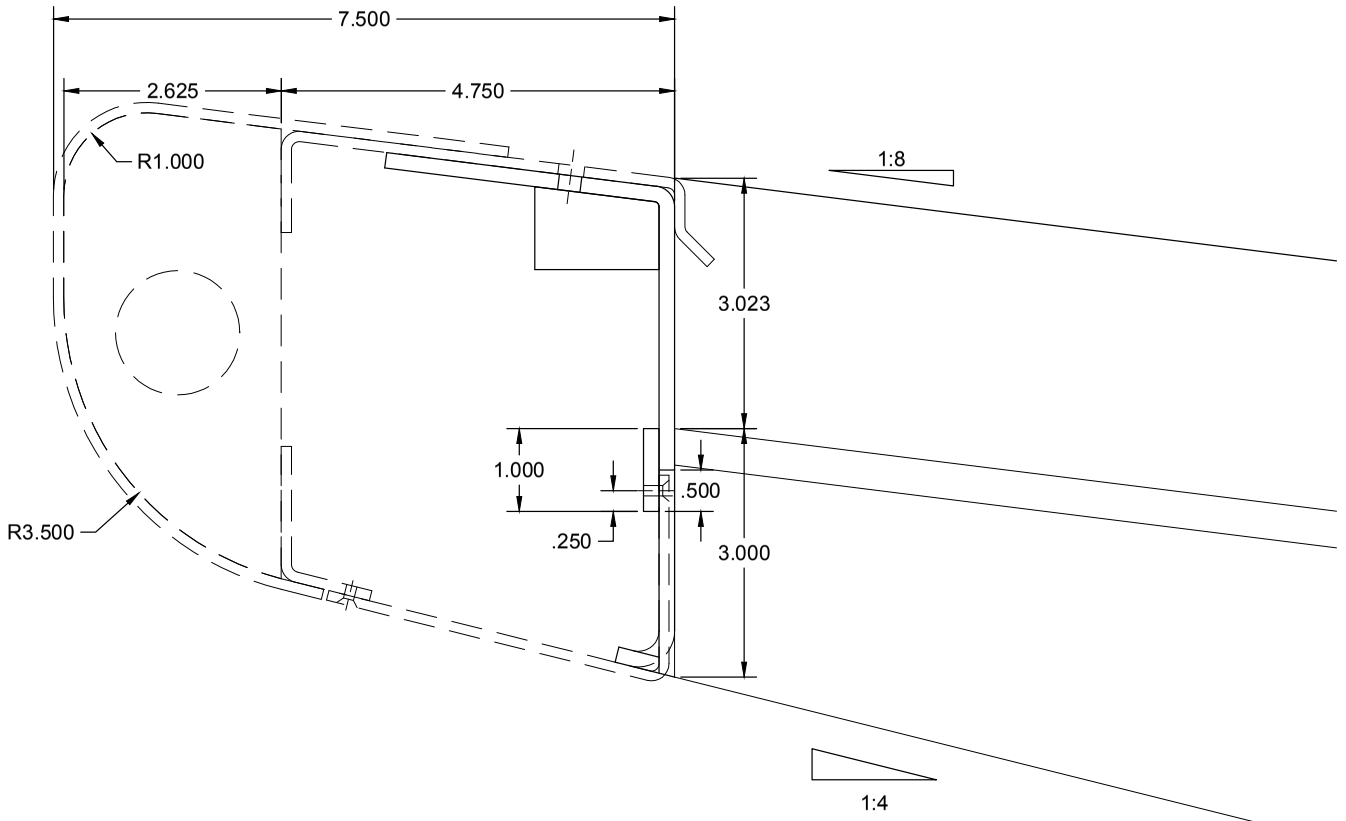
REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED



UNLESS OTHERWISE SPECIFIED:
ALL DIMENSIONS ARE IN INCHES
TOLERANCES:
HOLES SIZE: ±1/32
X <6': ±1/32
X >6': ±1/16
ANGLES: ±1/2°

REMOVE ALL BURRS AND BREAK SHARP EDGES 1/64 MAX.

THIRD ANGLE PROJECTION

TOLAR DURABILITY WITH DISTINCTION

Tolar Manufacturing Company, Inc
258 Mariah Circle,Corona,CA 92879

DESCRIPTION: FRONT EAVE – DIFUSION LENS TAB

CUSTOMER/VENDOR: SANTA CLARA – VTA

SIZE	MATL.	DWG NO.	REV
B	SS 316L – 3/16" PL	20861-00	

SCALE 8"=1' | DATE 10-20-2014 | DRAWN BY: CGARCIA

Shelter Front Eave

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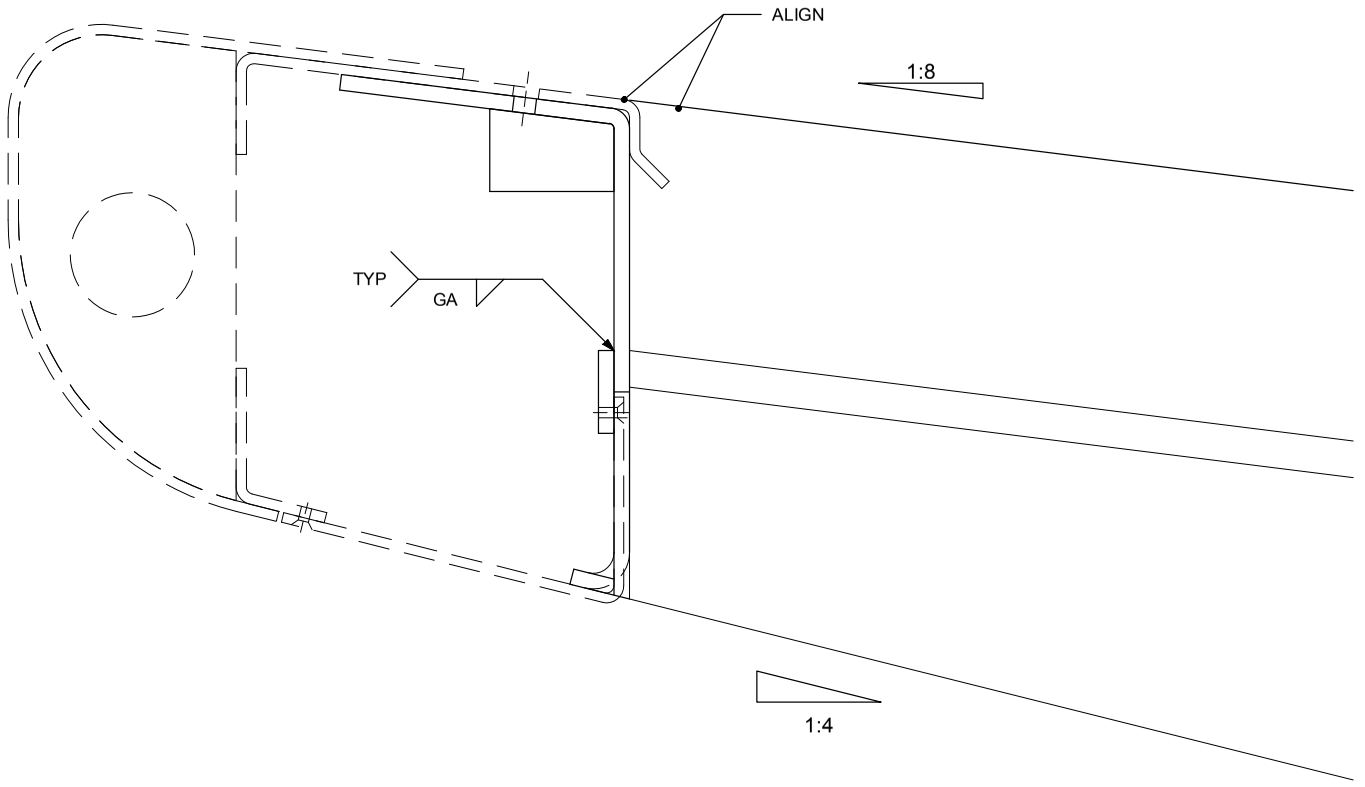
REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED



UNLESS OTHERWISE SPECIFIED:
ALL DIMENSIONS ARE IN INCHES

TOLERANCES:

HOLES SIZE:	±1/32
X <6':	±1/32
X >6':	±1/16
ANGLES:	±1/2°

REMOVE ALL BURRS AND BREAK SHARP EDGES 1/64 MAX.

THIRD ANGLE PROJECTION

TOLAR
DURABILITY WITH DISTINCTION

Tolar Manufacturing Company, Inc
258 Mariah Circle,Corona,CA 92879

DESCRIPTION: FRONT EAVE – DIFFUSION LENS TAB

CUSTOMER/VENDOR: SANTA CLARA – VTA

SIZE	MATL.	DWG NO.	REV
B	316L – 3/16" THK PL	20861-00	

SCALE 8"=1' | DATE 10-21-2014 | DRAWN BY: CGARCIA

Shelter Front Eave

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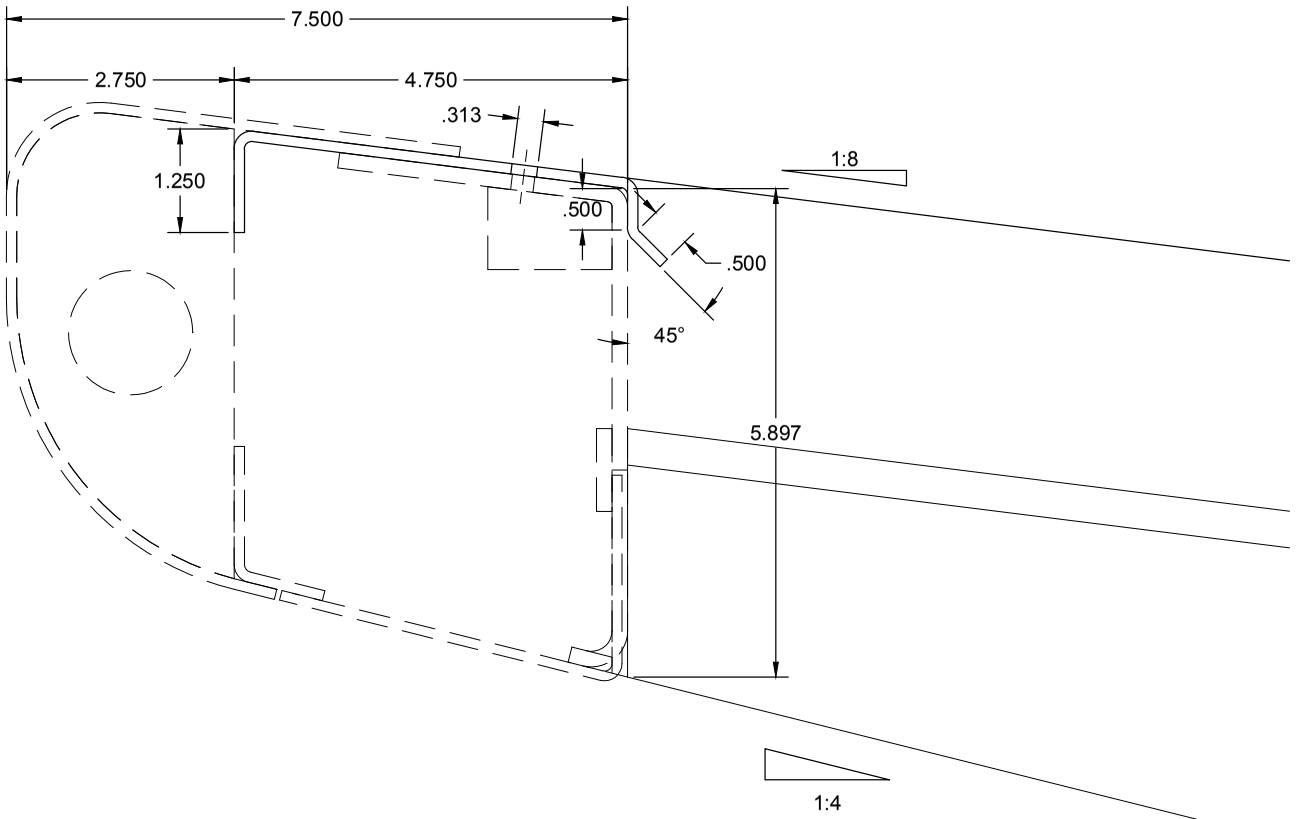
REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED



UNLESS OTHERWISE SPECIFIED:
ALL DIMENSIONS ARE IN INCHES

TOLERANCES:
HOLES SIZE: ±1/32
X <6': ±1/32
X >6': ±1/16
ANGLES: ±1/2°

REMOVE ALL BURRS AND BREAK SHARP EDGES 1/64 MAX.

THIRD ANGLE PROJECTION

TOLAR DURABILITY WITH DISTINCTION

Tolar Manufacturing Company, Inc
258 Mariah Circle,Corona,CA 92879

DESCRIPTION: FRONT EAVE – SLOTTED TOP COVER

CUSTOMER/VENDOR: SANTA CLARA – VTA

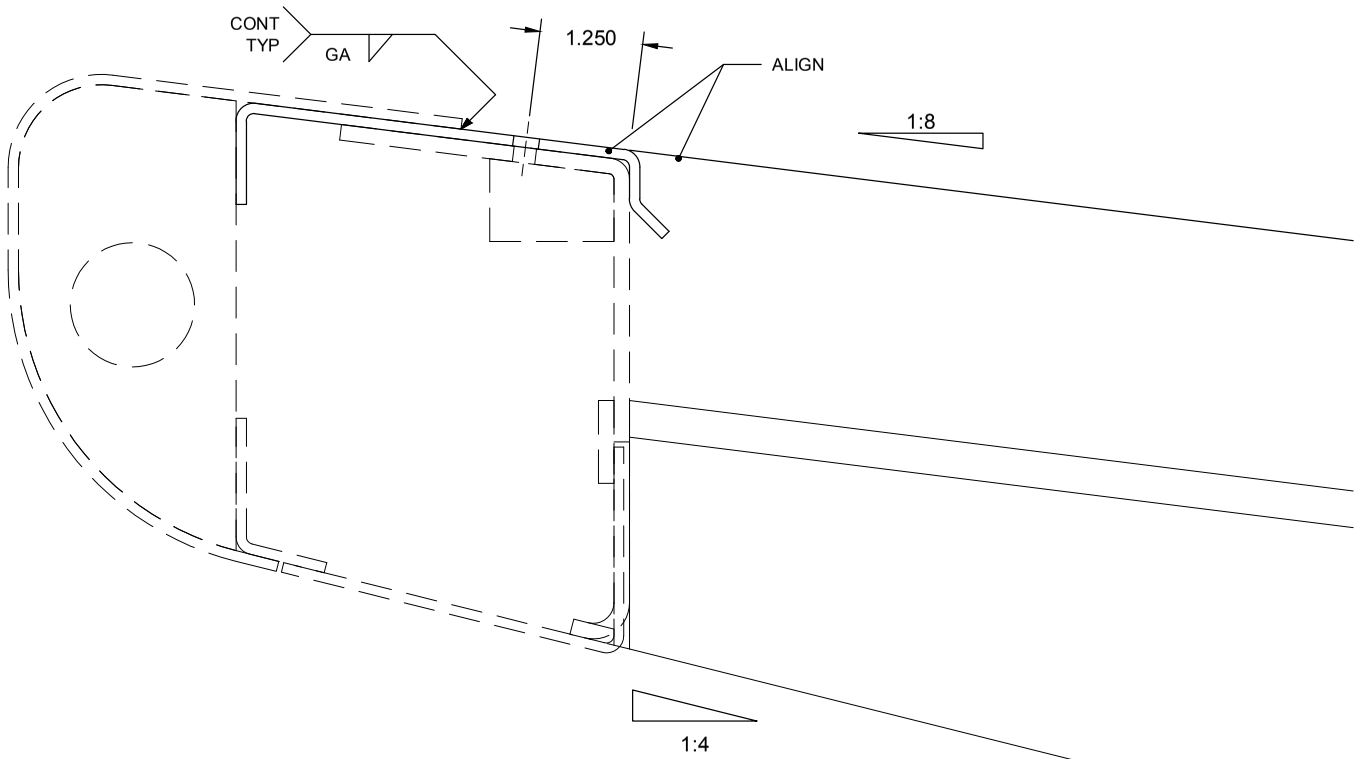
SIZE	MATL.	DWG NO.	REV
B	SS 316L-11GA SM	23391-00	

SCALE | DATE 10-16-2014 | DRAWN BY: CGARCIA

Shelter Front Eave

THIS DRAWING HAS BEEN GENERATED AND IS MAINTAINED BY A CAD SYSTEM. CHANGES SHALL ONLY BE INCORPORATED AS DIRECTED BY TOLAR MANUFACTURING CO., INC.'S ENGINEERING DEPT.

REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED



UNLESS OTHERWISE SPECIFIED:
ALL DIMENSIONS ARE IN INCHES

TOLERANCES:

HOLES SIZE:	±1/32
X <6':	±1/32
X >6':	±1/16
ANGLES:	±1/2°

REMOVE ALL BURRS AND BREAK SHARP EDGES 1/64 MAX.

THIRD ANGLE PROJECTION

TOLAR — DURABILITY WITH DISTINCTION

Tolar Manufacturing Company, Inc
258 Mariah Circle,Corona,CA 92879

DESCRIPTION: FRONT EAVE – SLOTTED TOP COVER

CUSTOMER/VENDOR: SANTA CLARA – VTA

SIZE	MATL.	DWG NO.	REV
B	SS 313L–11GA SM	23391–00	

SCALE	DATE	DRAWN BY:
8"=1'	10–16–2014	CGARCIA

Shelter Front Eave

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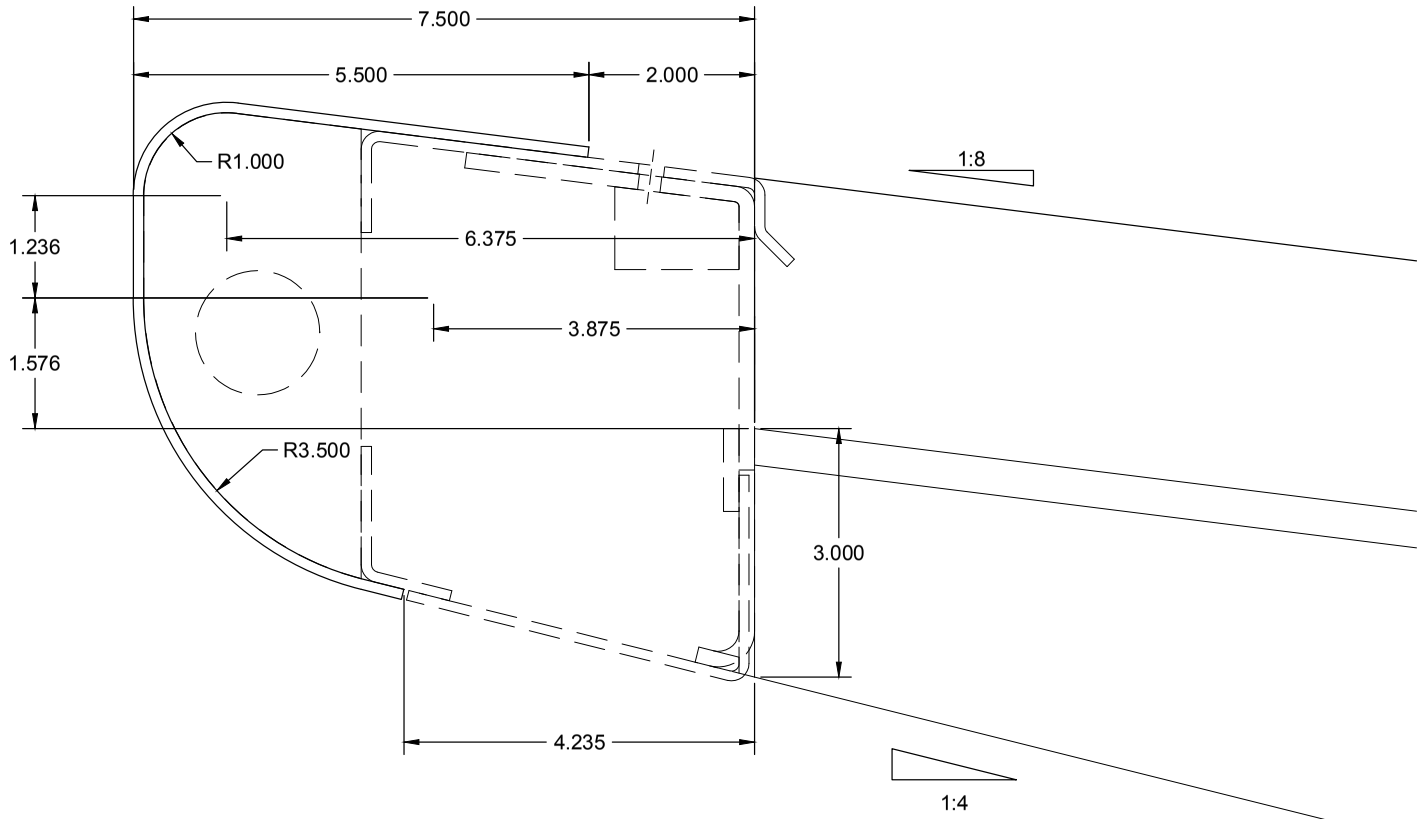
REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED



UNLESS OTHERWISE SPECIFIED:
ALL DIMENSIONS ARE IN INCHES
TOLERANCES:
HOLES SIZE: ±1/32
X <6': ±1/32
X >6': ±1/16
ANGLES: ±1/2°

REMOVE ALL BURRS AND BREAK SHARP EDGES 1/64 MAX.

THIRD ANGLE PROJECTION

TOLAR DURABILITY WITH DISTINCTION

Tolar Manufacturing Company, Inc
258 Mariah Circle,Corona,CA 92879

DESCRIPTION: CANOPY EAVE WRAP

CUSTOMER/VENDOR: SANTA CLARA – VTA

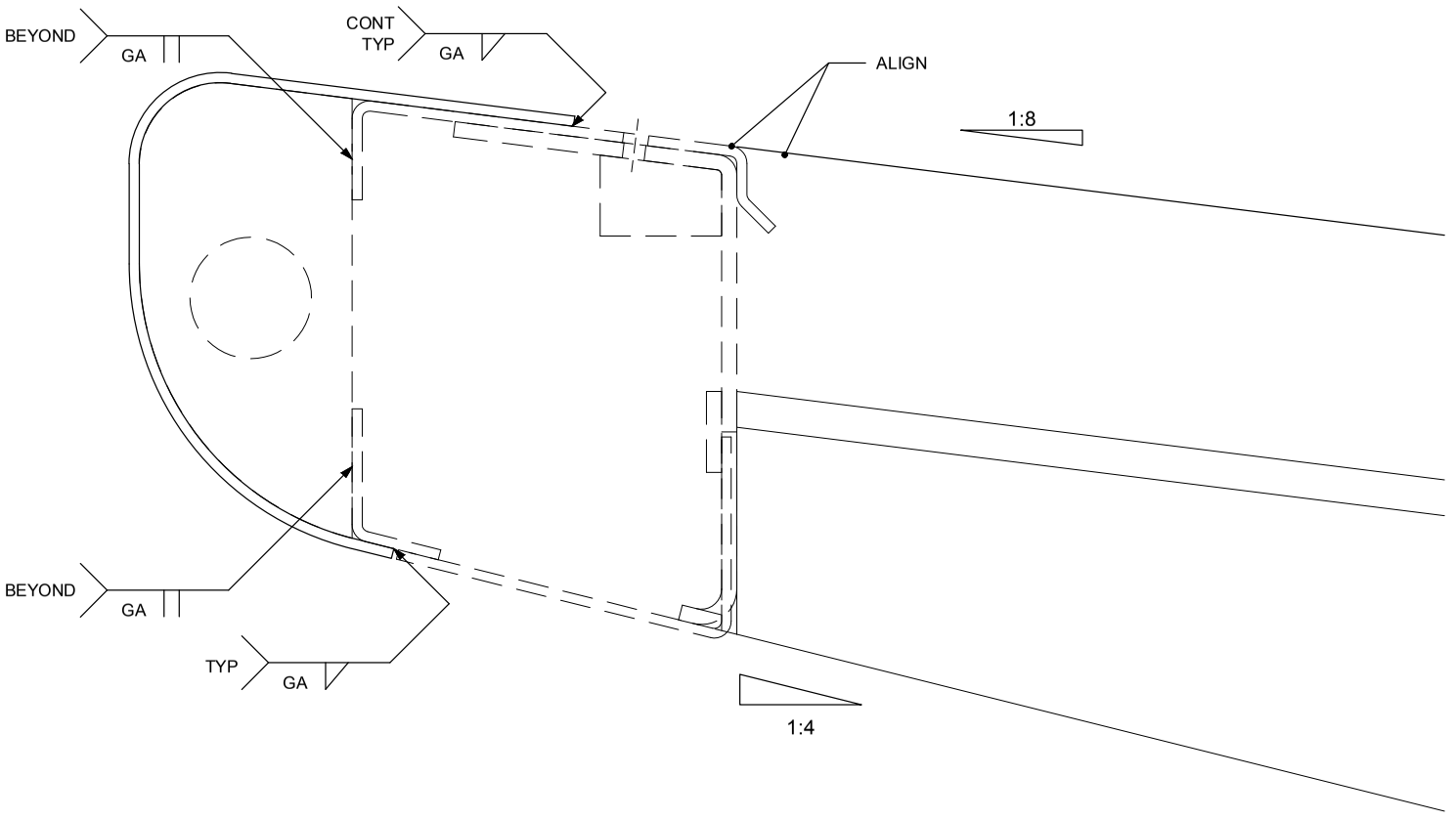
SIZE	MATL.	DWG NO.	REV
B	SS 316L-11GA SM	23392-00	

SCALE | DATE 10-20-2014 | DRAWN BY: CGARCIA

Shelter Front Eave

THIS DRAWING HAS BEEN GENERATED AND IS MAINTAINED BY A CAD SYSTEM. CHANGES SHALL ONLY BE INCORPORATED AS DIRECTED BY TOLAR MANUFACTURING CO., INC.'S ENGINEERING DEPT.

REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED



UNLESS OTHERWISE SPECIFIED:
ALL DIMENSIONS ARE IN INCHES

TOLERANCES:

HOLES SIZE:	±1/32
X <6':	±1/32
X >6':	±1/16
ANGLES:	±1/2'

REMOVE ALL BURRS AND BREAK SHARP EDGES 1/64 MAX.

THIRD ANGLE PROJECTION

TOLAR DURABILITY WITH DISTINCTION

Tolar Manufacturing Company, Inc
258 Mariah Circle,Corona,CA 92879

DESCRIPTION: CANOPY EAVE WRAP

CUSTOMER/VENDOR: SANTA CLARA – VTA

SIZE	MATL.	DWG NO.	REV
B	SS 316L-11GA SM	23392-00	

SCALE	DATE	DRAWN BY:
8"=1'	10-20-2014	CGARCIA

Shelter Front Eave

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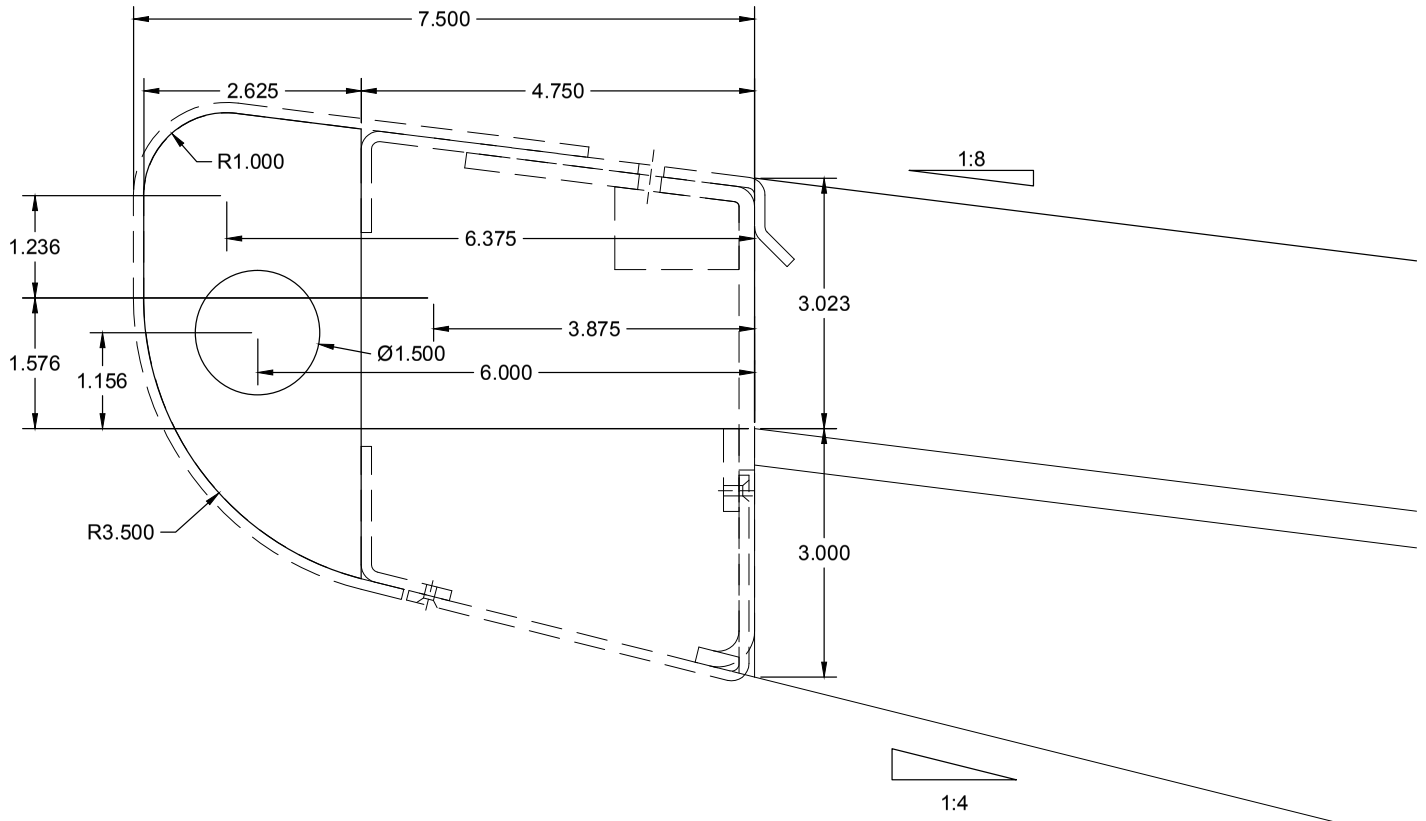
REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED



UNLESS OTHERWISE SPECIFIED:
ALL DIMENSIONS ARE IN INCHES
TOLERANCES:
HOLES SIZE: ±1/32
X <6': ±1/32
X >6': ±1/16
ANGLES: ±1/2°

REMOVE ALL BURRS AND BREAK SHARP EDGES 1/64 MAX.

THIRD ANGLE PROJECTION

TOLAR DURABILITY WITH DISTINCTION

Tolar Manufacturing Company, Inc
258 Mariah Circle,Corona,CA 92879

DESCRIPTION: FRONT EAVE STIFFENER

CUSTOMER/VENDOR: SANTA CLARA – VTA

SIZE	MATL.	DWG NO.	REV
B	SS 316L 11 GA SM	20874-01	

SCALE 8"=1' | DATE 10-20-2014 | DRAWN BY: CGARCIA

Shelter Front Eave

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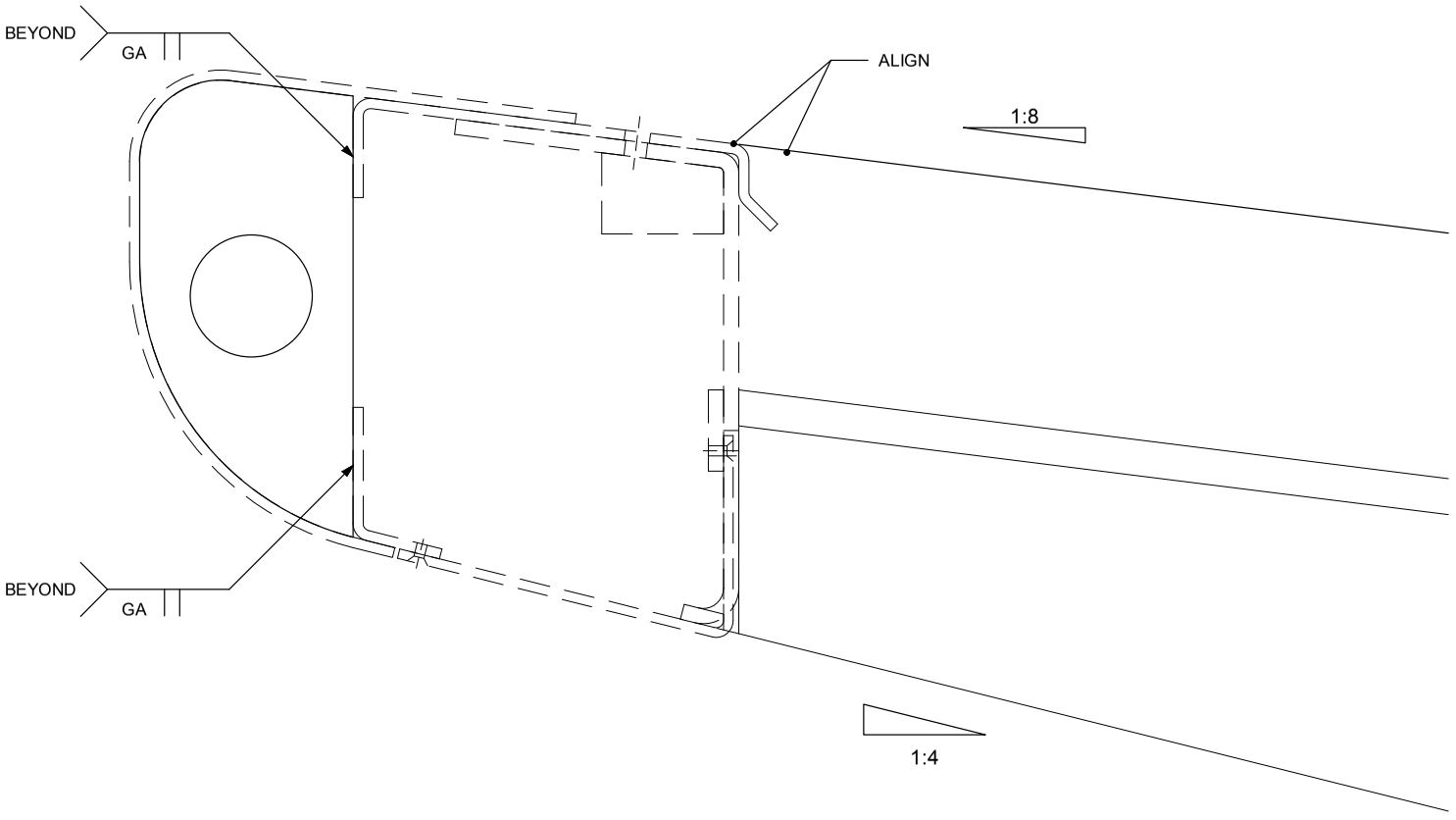
REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED



UNLESS OTHERWISE SPECIFIED:
ALL DIMENSIONS ARE IN INCHES

TOLERANCES:

HOLES SIZE:	±1/32
X <6':	±1/32
X >6':	±1/16
ANGLES:	±1/2'

REMOVE ALL BURRS AND BREAK SHARP EDGES 1/64 MAX.

THIRD ANGLE PROJECTION

TOLAR — DURABILITY WITH DISTINCTION

Tolar Manufacturing Company, Inc
258 Mariah Circle,Corona,CA 92879

DESCRIPTION: FRONT EAVE STIFFENER

CUSTOMER/VENDOR: SANTA CLARA – VTA

SIZE	MATL.	DWG NO.	REV
B	316L – 11 GA SM	20874-00	

SCALE	DATE	DRAWN BY:
8"=1'	10-20-2014	CGARCIA

Shelter Front Eave

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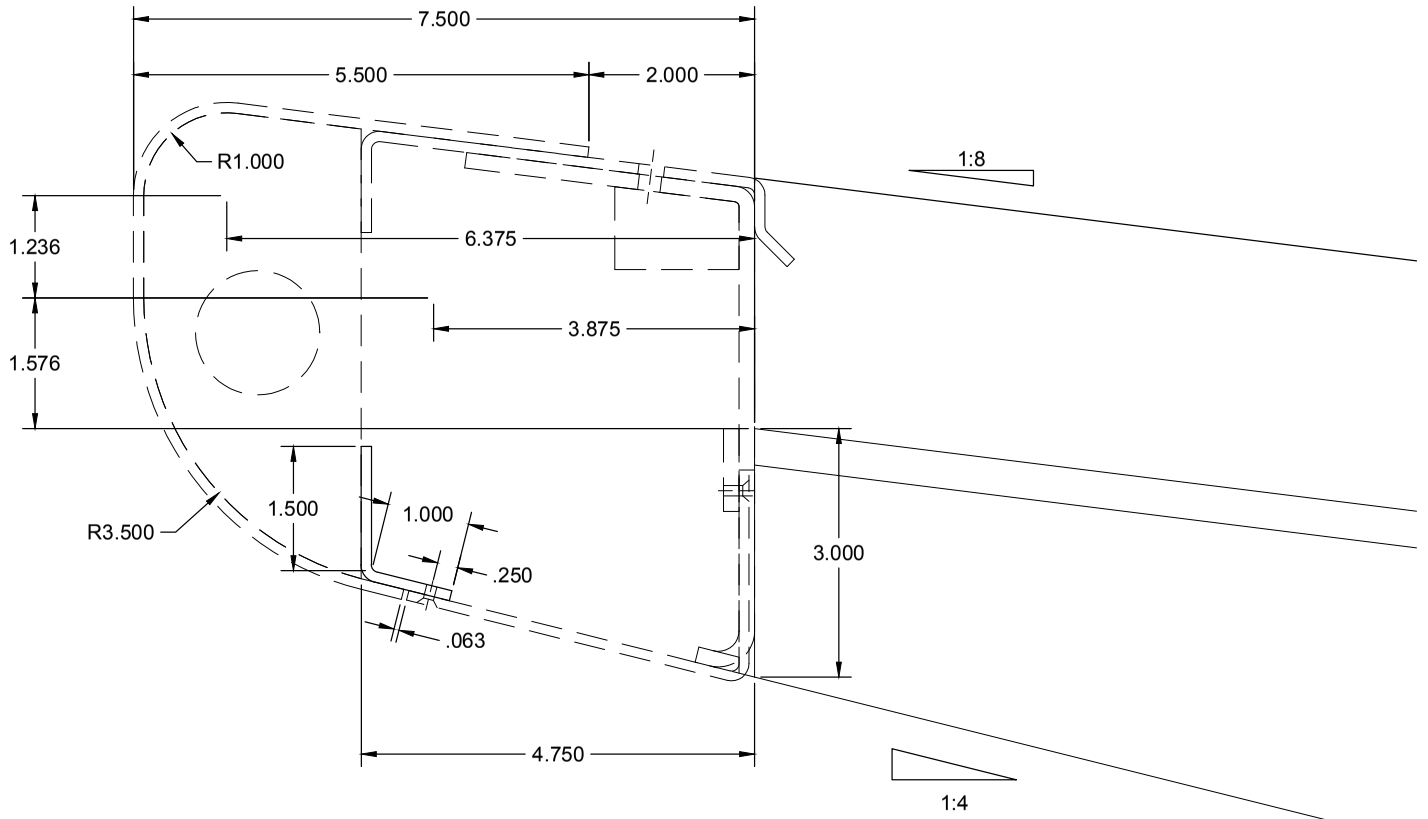
REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED



UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES TOLERANCES: HOLES SIZE: ±1/32 X <6': ±1/32 X >6': ±1/16 ANGLES: ±1/2° REMOVE ALL BURRS AND BREAK SHARP EDGES 1/64 MAX. THIRD ANGLE PROJECTION	TOLAR DURABILITY WITH DISTINCTION Tolar Manufacturing Company, Inc 258 Mariah Circle,Corona,CA 92879 DESCRIPTION: 11 GA CONT BENT PLATE CUSTOMER/VENDOR: SANTA CLARA – VTA SIZE: B · MATL.: SS 316L-11GA SM · DWG NO.: 23393-00 · REV: SCALE: 8"=1' · DATE: 10-20-2014 · DRAWN BY: CGARCIA	This document contains proprietary information and is not to be reproduced or used for manufacturing others for any purpose or used for manufacturing without written permission from Tolar Manufacturing Company, Inc.

Shelter Front Eave

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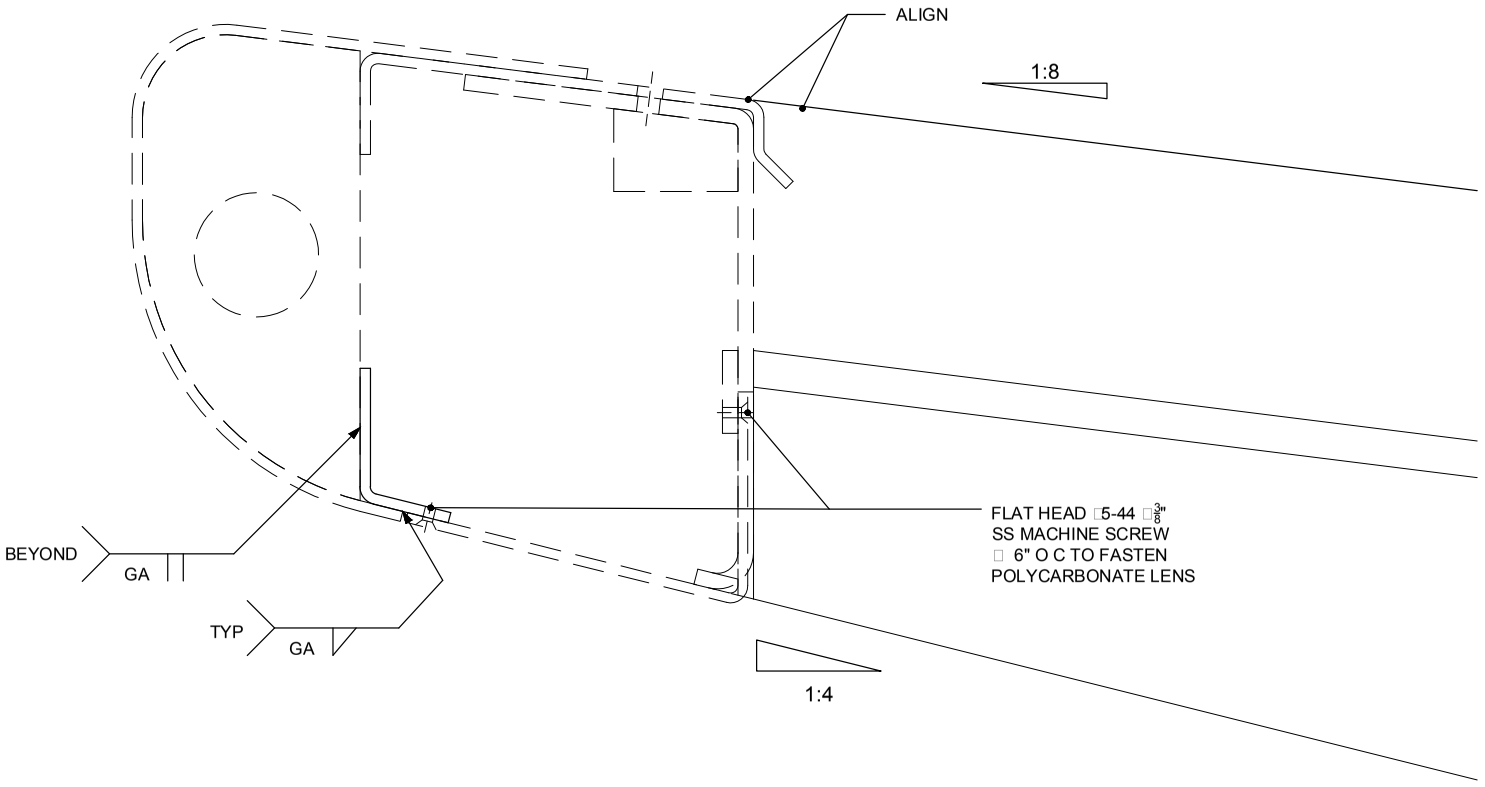
REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED



UNLESS OTHERWISE SPECIFIED:
ALL DIMENSIONS ARE IN INCHES

TOLERANCES:

HOLES SIZE:	±1/32
X <6':	±1/32
X >6':	±1/16
ANGLES:	±1/2'

REMOVE ALL BURRS AND BREAK SHARP EDGES 1/64 MAX.

THIRD ANGLE PROJECTION

TOLAR DURABILITY WITH DISTINCTION

Tolar Manufacturing Company, Inc
258 Mariah Circle,Corona,CA 92879

DESCRIPTION: 11 GA CONT BENT PLATE

CUSTOMER/VENDOR: SANTA CLARA – VTA

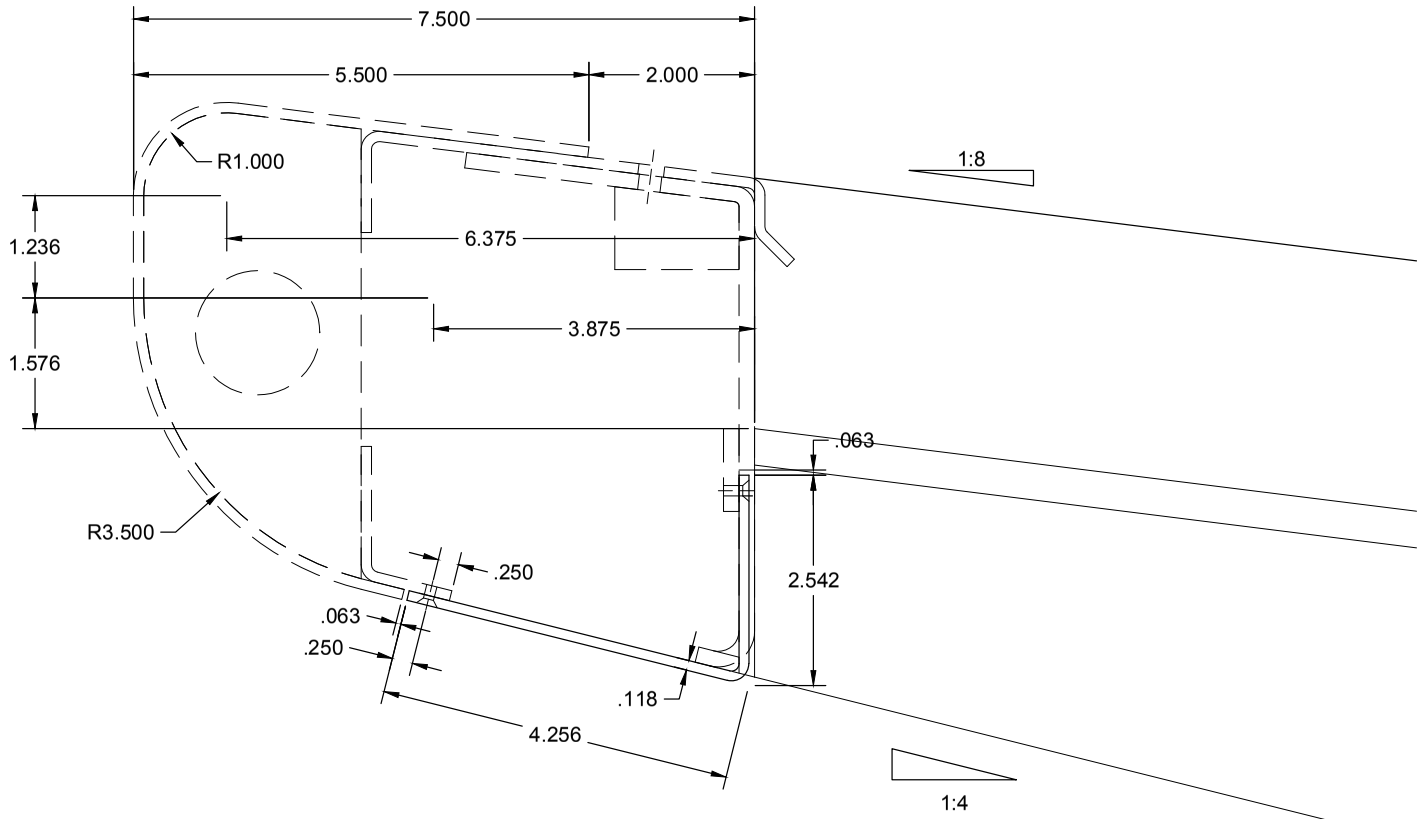
SIZE	MATL.	DWG NO.	REV
B	SS 316L–11GA SM	23393–00	

SCALE 8"=1' | DATE 10–20–2014 | DRAWN BY: CGARCIA

Shelter Front Eave

THIS DRAWING HAS BEEN GENERATED AND IS MAINTAINED BY A CAD SYSTEM. CHANGES SHALL ONLY BE INCORPORATED AS DIRECTED BY TOLAR MANUFACTURING CO., INC.'S ENGINEERING DEPT.

REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED



UNLESS OTHERWISE SPECIFIED:
ALL DIMENSIONS ARE IN INCHES
TOLERANCES:
HOLES SIZE: ±1/32
X <6': ±1/32
X >6': ±1/16
ANGLES: ±1/2°

REMOVE ALL BURRS AND BREAK SHARP EDGES 1/64 MAX.

THIRD ANGLE PROJECTION

TOLAR DURABILITY WITH DISTINCTION

Tolar Manufacturing Company, Inc
258 Mariah Circle,Corona,CA 92879

DESCRIPTION: DIFFUSION LENS

CUSTOMER/VENDOR: SANTA CLARA – VTA

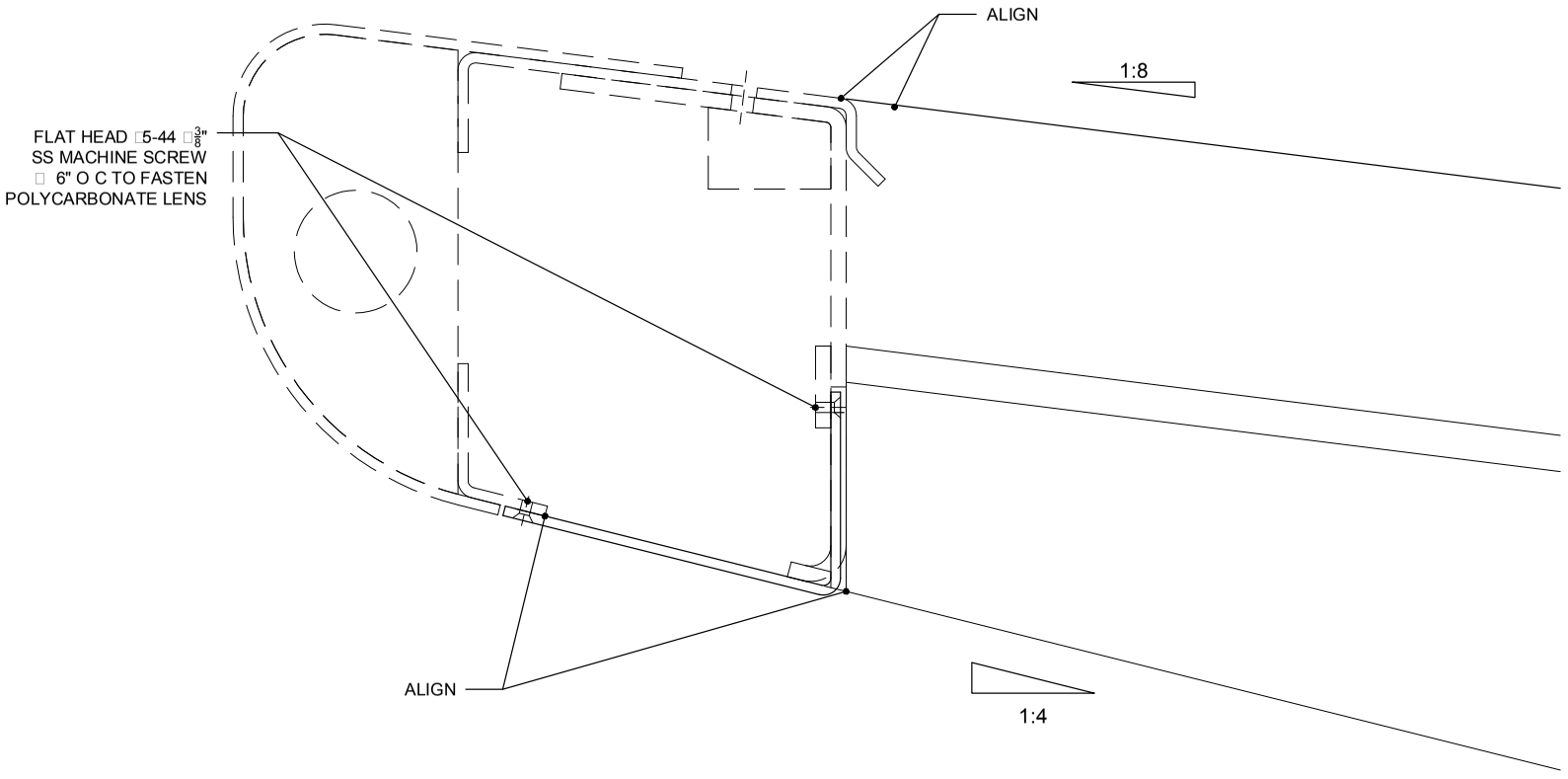
SIZE	MATL.	DWG NO.	REV
B	POLICARB .118"	23394-00	

SCALE 8"=1' | DATE 10-20-2014 | DRAWN BY: CGARCIA

Shelter Front Eave

THIS DRAWING HAS BEEN GENERATED AND IS MAINTAINED BY A CAD SYSTEM. CHANGES SHALL ONLY BE INCORPORATED AS DIRECTED BY TOLAR MANUFACTURING CO., INC.'S ENGINEERING DEPT.

REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED



UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES

TOLERANCES:
HOLES SIZE: ±1/32
X <6': ±1/32
X >6': ±1/16
ANGLES: ±1/2°

REMOVE ALL BURRS AND BREAK SHARP EDGES 1/64 MAX.

THIRD ANGLE PROJECTION

TOLAR DURABILITY WITH DISTINCTION

Tolar Manufacturing Company, Inc
258 Mariah Circle,Corona,CA 92879

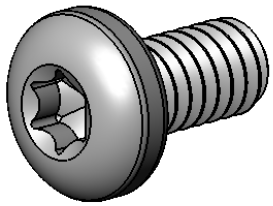
DESCRIPTION: DIFFUSION LENS

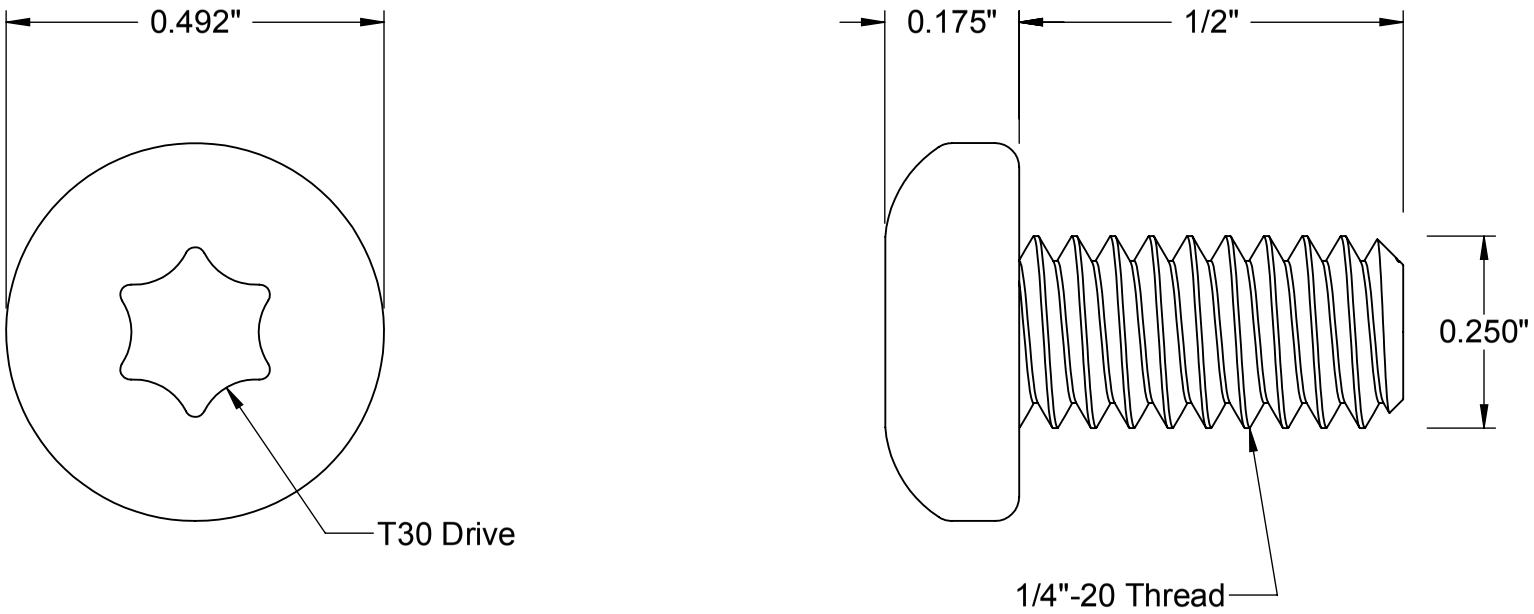
CUSTOMER/VENDOR: SANTA CLARA – VTA

SIZE	MATL.	DWG NO.	REV
B	POLYCARB .118"	23394-00	

SCALE	DATE	DRAWN BY:
8"=1'	10-20-2014	CGARCIA

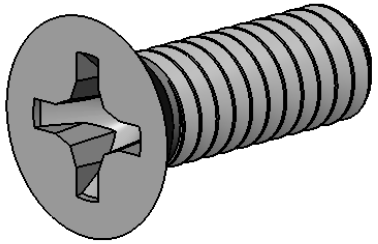
Shelter Front Eave

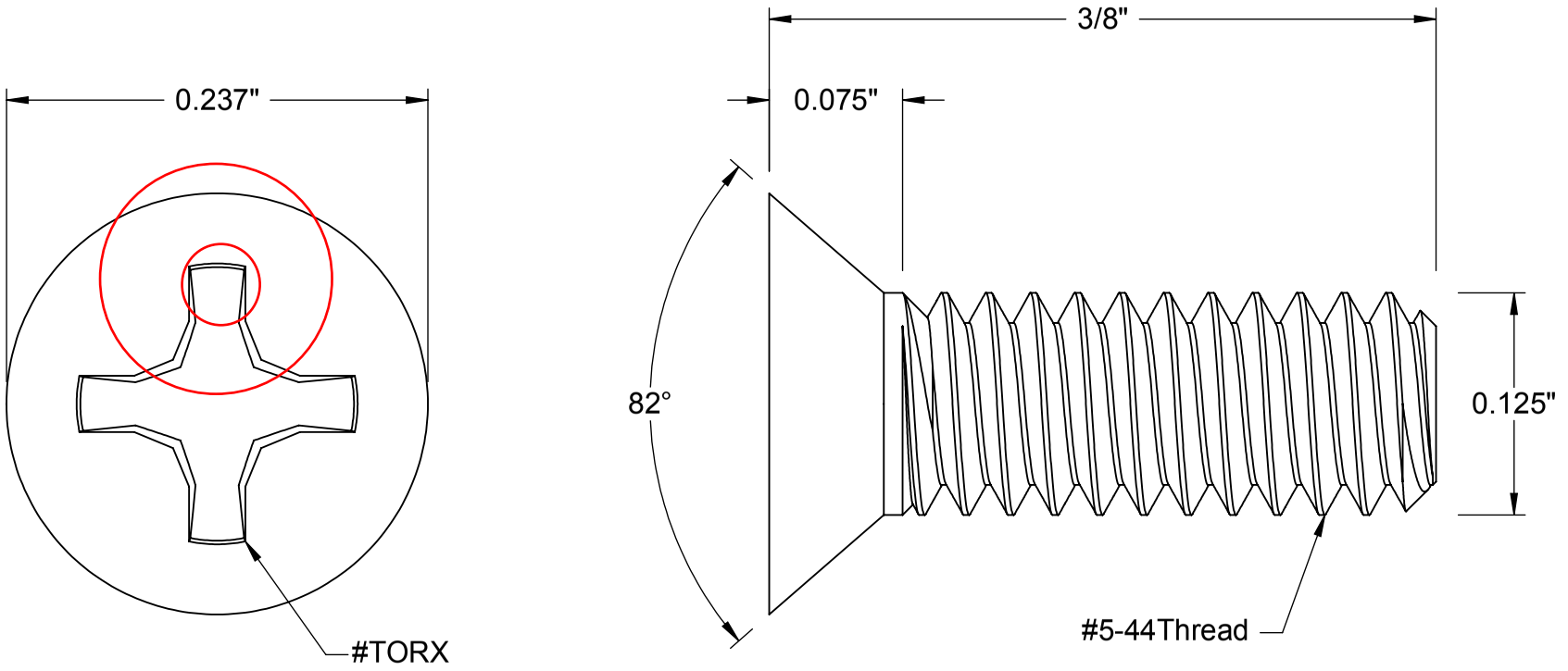




Shelter Front Eave

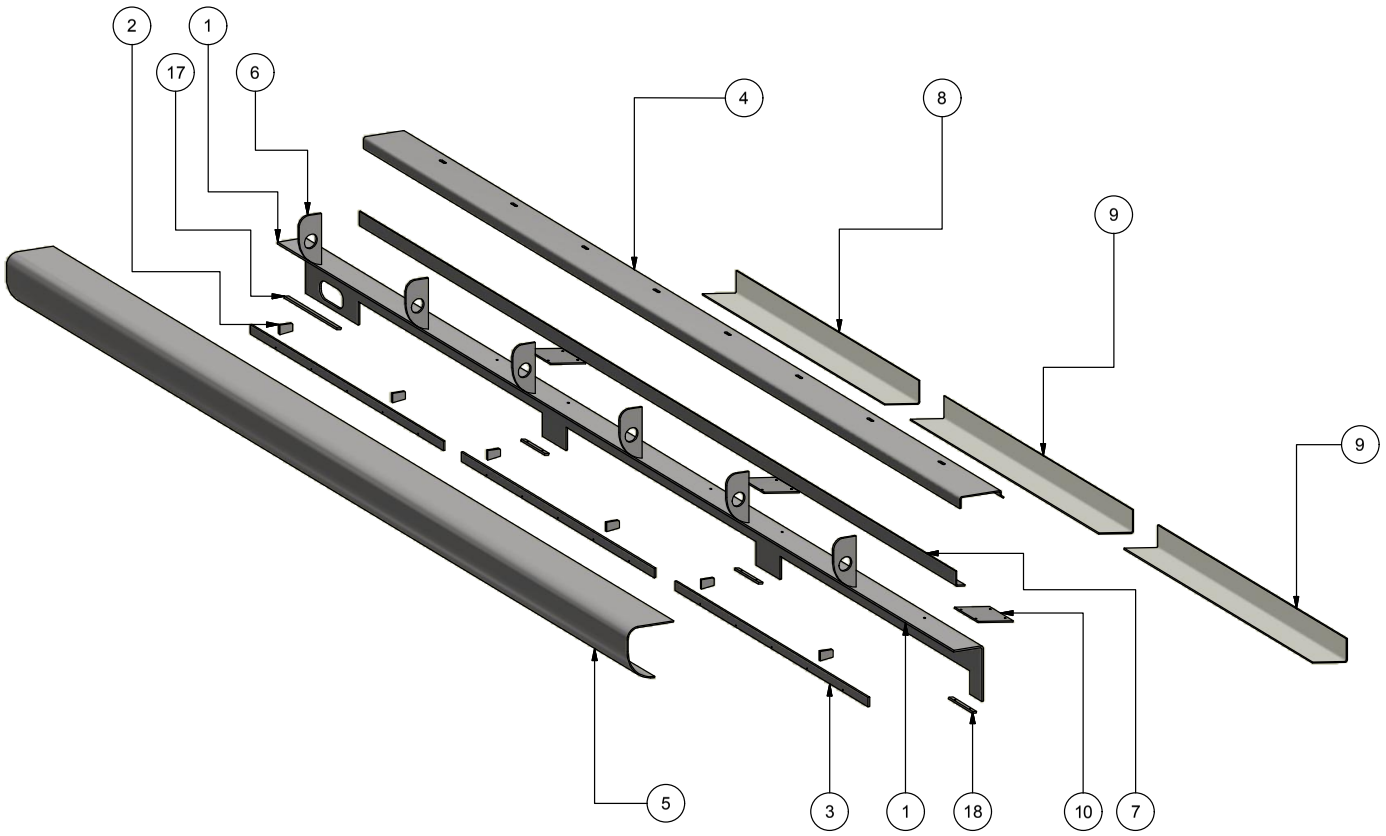
McMASTER-CARR® CAD | PART NUMBER 96710A733



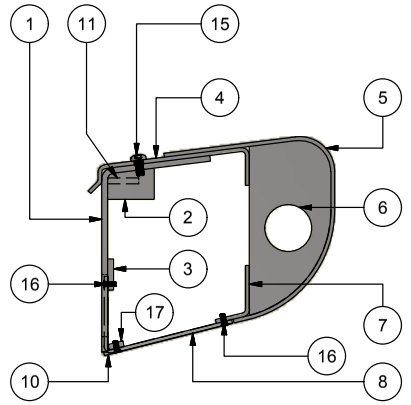


Shelter Front Eave

McMASTER-CARR® CAD | PART NUMBER



EAVE ASSEMBLY F1 - COMPONENTS
SCALE 1"=1'



SECTION VIEW
SCALE 3"=1'

PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	20856-00	BENT NOTCHED BRACKET F1
2	6	20858-00	FRONT EAVE SMALL STIFFENER
3	3	20861-00	ATTMNT TAB DIFF LENS
4	1	20868-00	SLOTTED EAVE TOP COVER F1
5	1	20873-00	CANOPY EAVE WRAP F1
6	6	20874-00	11 GA STIFFENER
7	1	20878-00	CONTINOUS BENT PLATE F1
8	1	20882-00	DIFFUSION LENS SIDE
9	2	20883-00	DIFUSSION LENS COMMON
10	3	20884-00	EAVE ACCESS COVER
11	1	21673-00	LF MOUNTING TAB
15	8	96710A733	1/4-20 1/2" PAN HEAD TOR
16	41	91771A126	5-44 3/8" FLAT HEAD TOR
17	1	23390-00	BENT BRACKET BOTT - RETURN
18	3	23391-00	BENT BRACKET BOTT - RETURN

TOLAR
NUMBER WITH DISTINCTION

Tolar Manufacturing Company, Inc
258 Mariah Circle, Corona CA. 92879

DESCRIPTION: EAVE ASSEMBLY F1			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - MISC	DWG NO.: 20859-00	REV. NO.
SCALE: AS NOTED	DATE: 10/16/2014	DRAWN BY: cgarcia	

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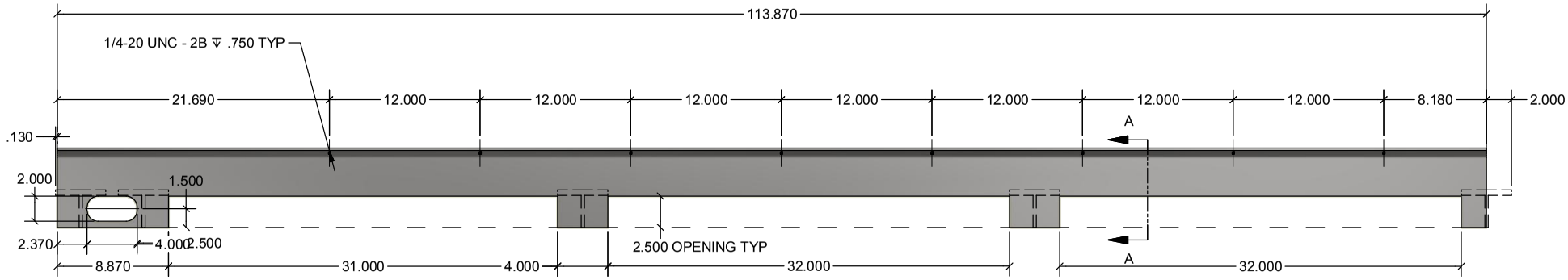
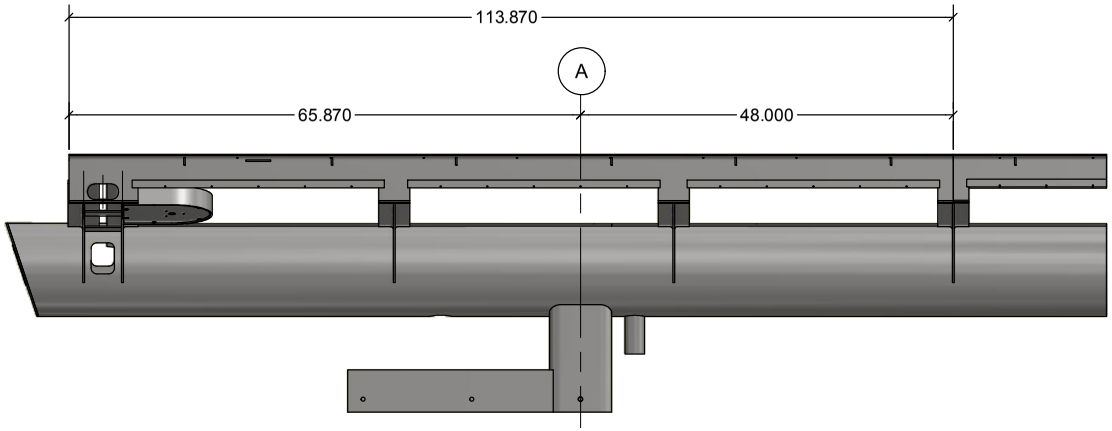
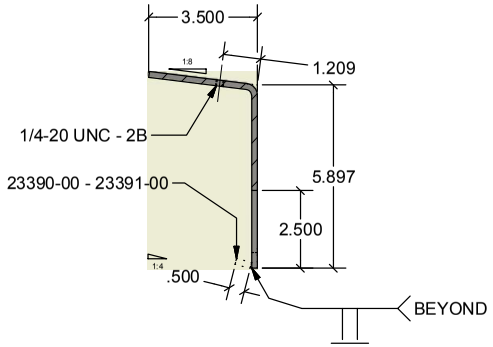
Shelter Front Eave



FRONT EAVE BRACKET FRONT - ELEVATION
SCALE 1 1/2"=1'



PRIMARY SHELTER - FRONT ELEVATION
SCALE 3/4"=1'



SECTION A-A
SEE DRAWING 23390-00
SCALE 3"=1'

TOLAR — Tolar Manufacturing Company, Inc, 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: BENT □ NOTCHED BRACKET F1			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 3/16" PL	DWG NO.: 20856-00	REV. NO.:
SCALE: AS NOTED	DATE: 10/16/2014	DRAWN BY: cgarcia	

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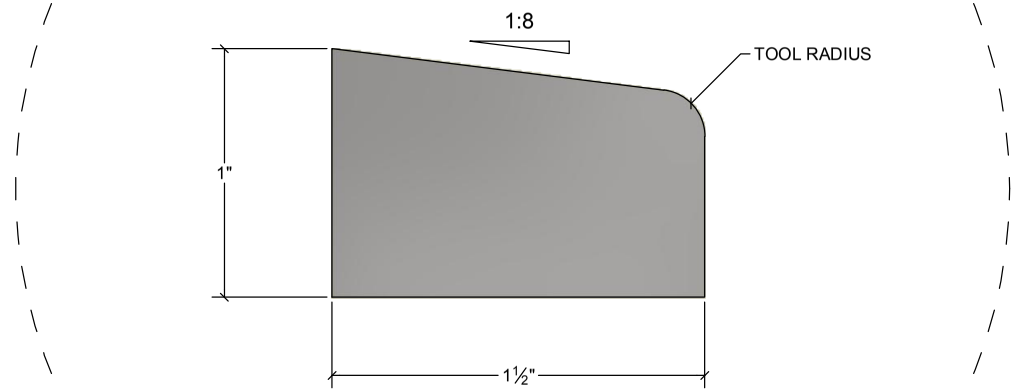
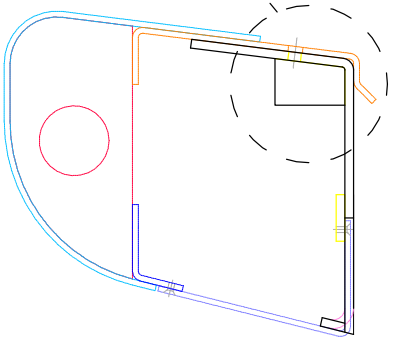
Shelter Front Eave



STIFFENER - FRONT ELEVATION
SCALE 2 : 1



FRONT EAVE - SECTION VIEW
SEE SKETCH

TOLAR — Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: FRONT EAVE SMALL STIFFENER			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 3/16" TH PL	DWG NO.: 20858-00	REV. NO.
SCALE: AS NOTED	DATE: 10/21/2014	DRAWN BY: cgarcia	

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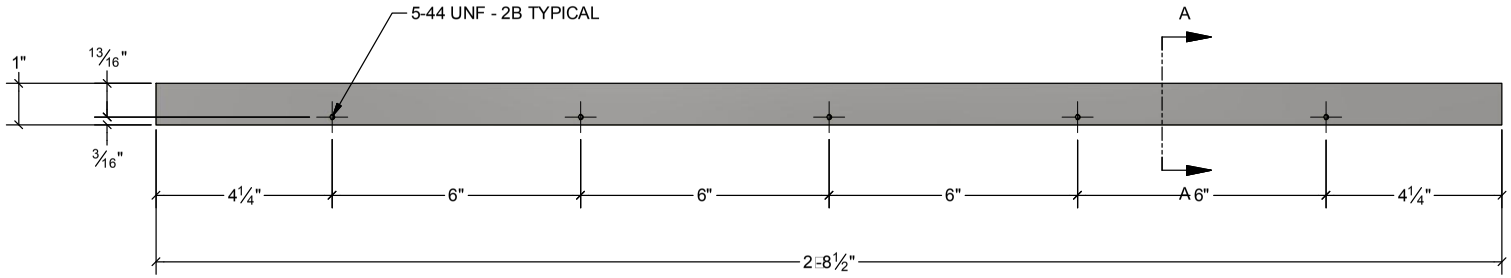
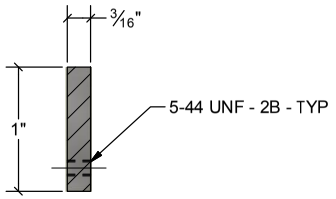
Shelter Front Eave



DIFFUSION LENS ATTACHMENT TAB - FRONT ELEVATION
SCALE 4"=1'



SECTION A-A
SEE DRAWING 20858-00
SCALE 12"=1'

TOLAR — Tolar Manufacturing Company, Inc, 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: ATTMNT TAB DIFF LENS			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 2
SIZE: B	MATL.: SS 316L - 3/16" THK PL	DWG NO.: 20861-00	REV. NO.:
SCALE: AS NOTED	DATE: 10/21/2014	DRAWN BY: cgarcia	

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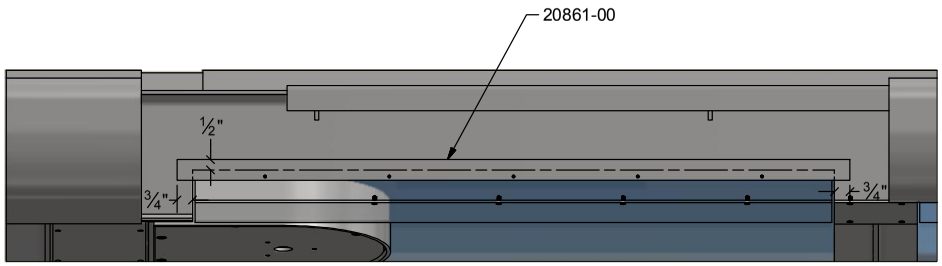
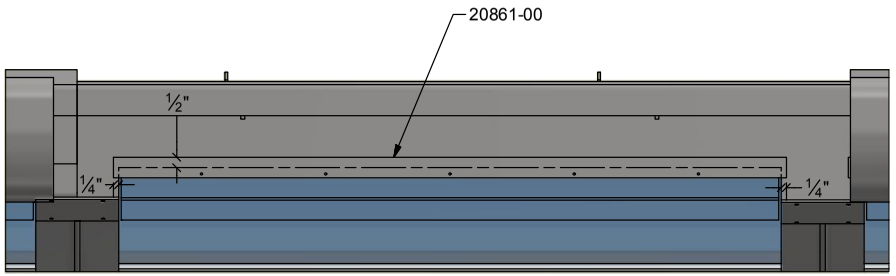
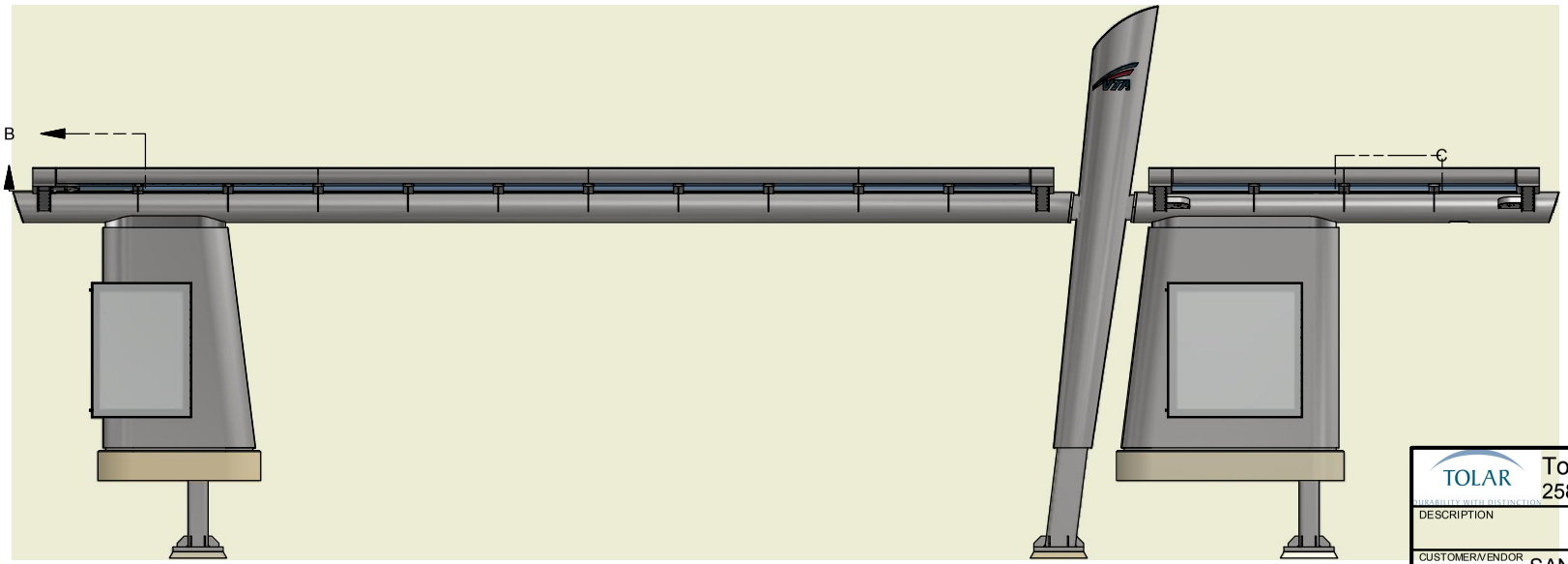
Shelter Front Eave



DETAIL B
OCCURS AT 4 SIDES
SCALE 2"=1'



DETAIL C
OCCURS AT 11 PLACES BETWEEN SIDES
SCALE 2"=1'



PRIMARY SHELTER - FRONT ELEVATION
SCALE 1/4"=1'

TOLAR	Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879
DESCRIPTION	ATTMNT TAB DIFF LENS
CUSTOMER/VENDOR	SANTA CLARA - VTA
SHEET NO.	2 OF 2
SIZE	B
MATL.	SS 316L - 3/16" PL
DWG NO.	20861-00
REV. NO.	
SCALE	AS NOTED
DATE	10/21/2014
DRAWN BY:	cgarcia

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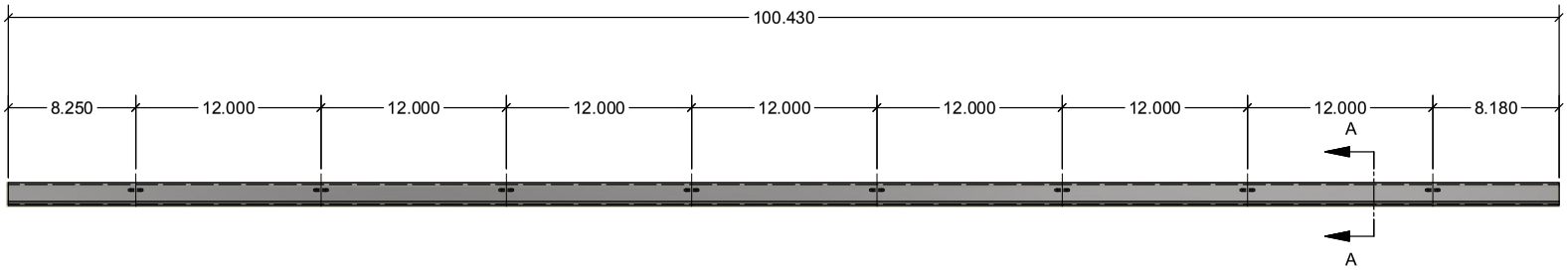
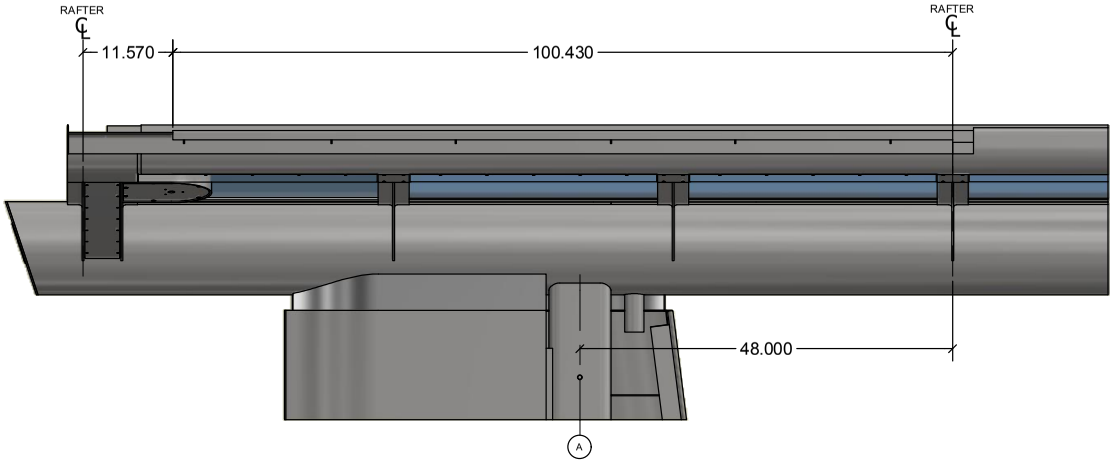
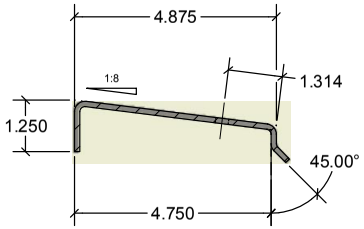
Shelter Front Eave



SLOTTED EAVE TOP COVER - FRONT ELEVATION
SCALE 1 1/2"=1'



PRIMARY SHELTER - FRONT ELEVATION
SCALE 3/4"=1'

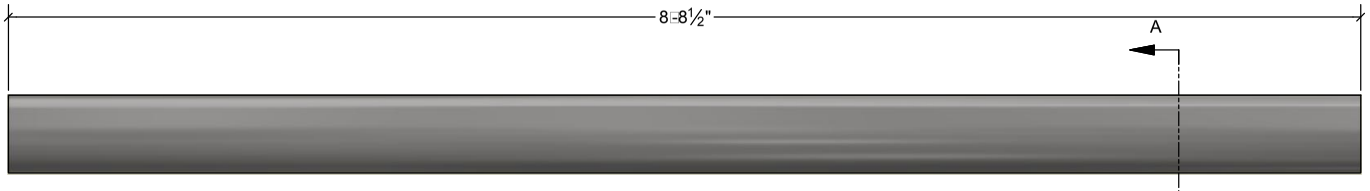


SECTION A-A
SEE DRAWING 23391-00
SCALE 4"=1'

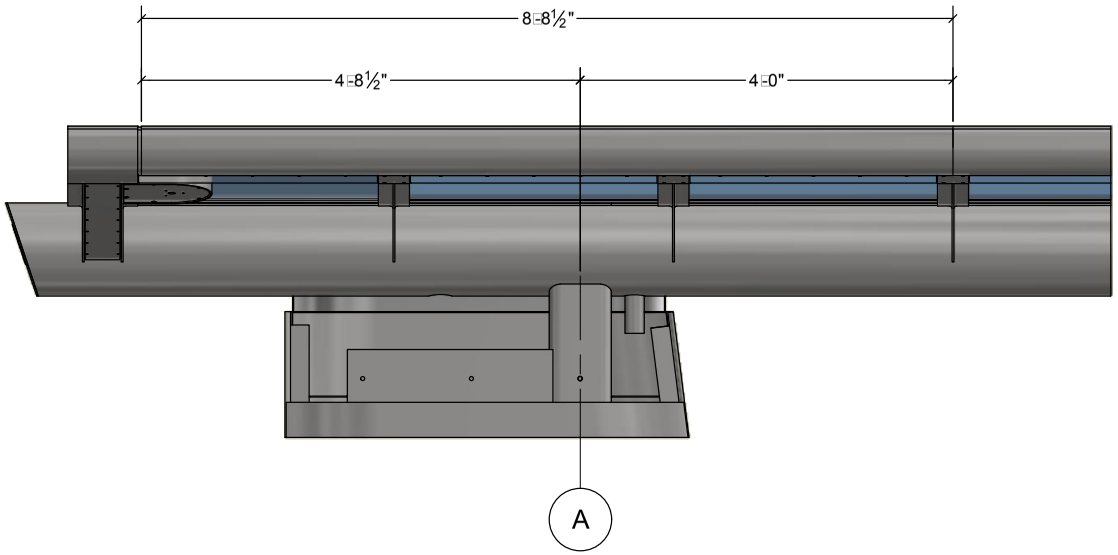
TOLAR — Tolar Manufacturing Company, Inc, 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: SLOTTED EAVE TOP COVER F1			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 11 GA SH M	DWG NO.: 20868-00	REV. NO.:
SCALE: AS NOTED	DATE: 10/17/2014	DRAWN BY: cgarcia	

T:\Engineering\CARLOS GARCIA\VTA\20868-00.idw

Shelter Front Eave



FRONT EAVE F1 - FRONT ELEVATION
SCALE 1 1/4"=1'



PRIMARY SHELTER - FRONT ELEVATION
SCALE 3/4"=1'

SECTION A-A
SEE DRAWING 23392-00
SCALE 3"=1'

TOLAR — Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: CANOPY EAVE WRAP F1			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 11 GA SH M	DWG NO.: 20873-00	REV. NO.:
SCALE: AS NOTED	DATE: 10/20/2014	DRAWN BY: cgarcia	

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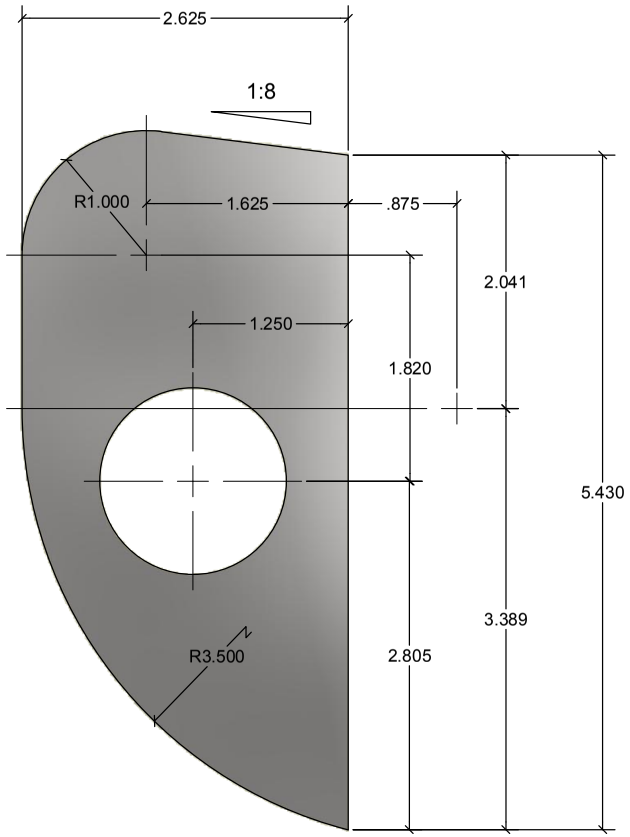
Shelter Front Eave



11 GA EAVE STIFFENER - ELEVATION
SEE DRAWING 20784-01
SCALE 1 : 1

TOLAR — Tolar Manufacturing Company, Inc, 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: 11 GA STIFFENER			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 11 GA SH M	DWG NO.: 20874-00	REV. NO.:
SCALE: AS NOTED	DATE: 10/22/2014	DRAWN BY: cgarcia	

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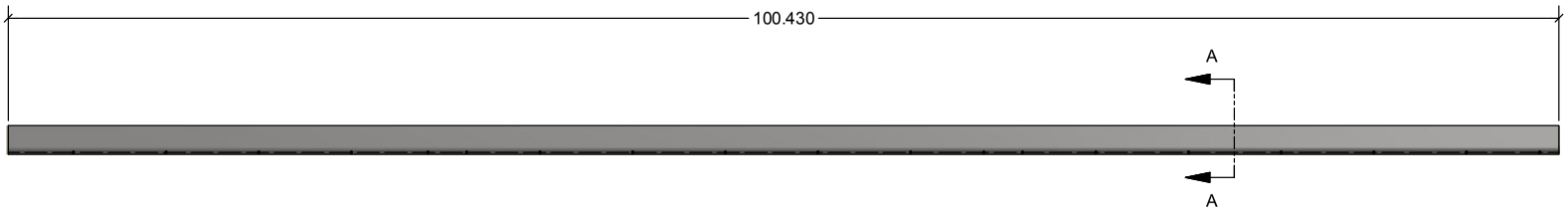
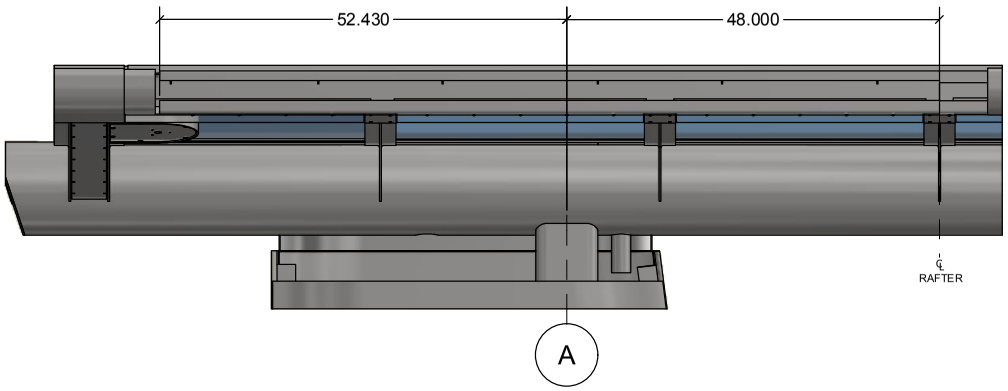
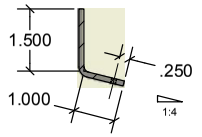
Shelter Front Eave



CONTINOUS BENT PLATE - FRONT ELEVATION
SCALE 1 1/2"=1'



PRIMARY SHELTER - FRONT ELEVATION
SCALE 3/4"=1'



SECTION A-A
SEE DRAWING 23393-00
SCALE 4"=1'

TOLAR — Tolar Manufacturing Company, Inc, 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: CONTINOUS BENT PLATE F1			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 11 GA SH M	DWG NO.: 20878-00	REV. NO.:
SCALE: AS NOTED	DATE: 10/20/2014	DRAWN BY: cgarcia	

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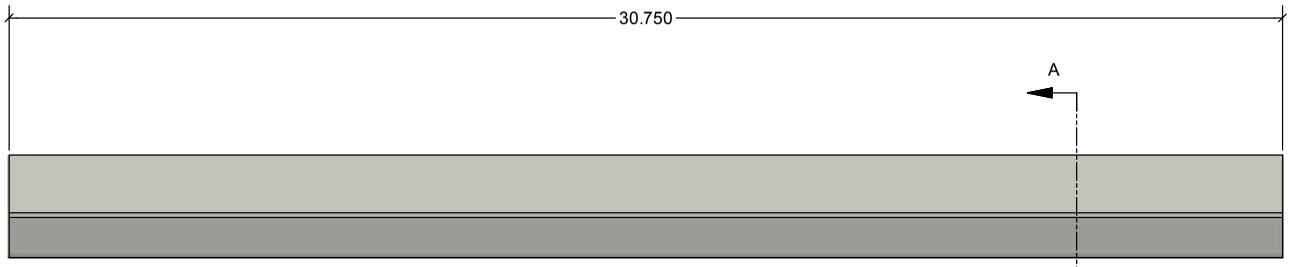
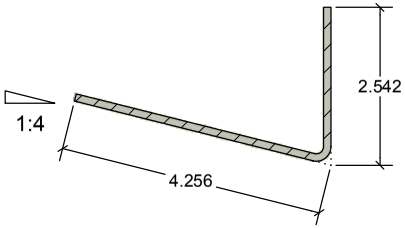
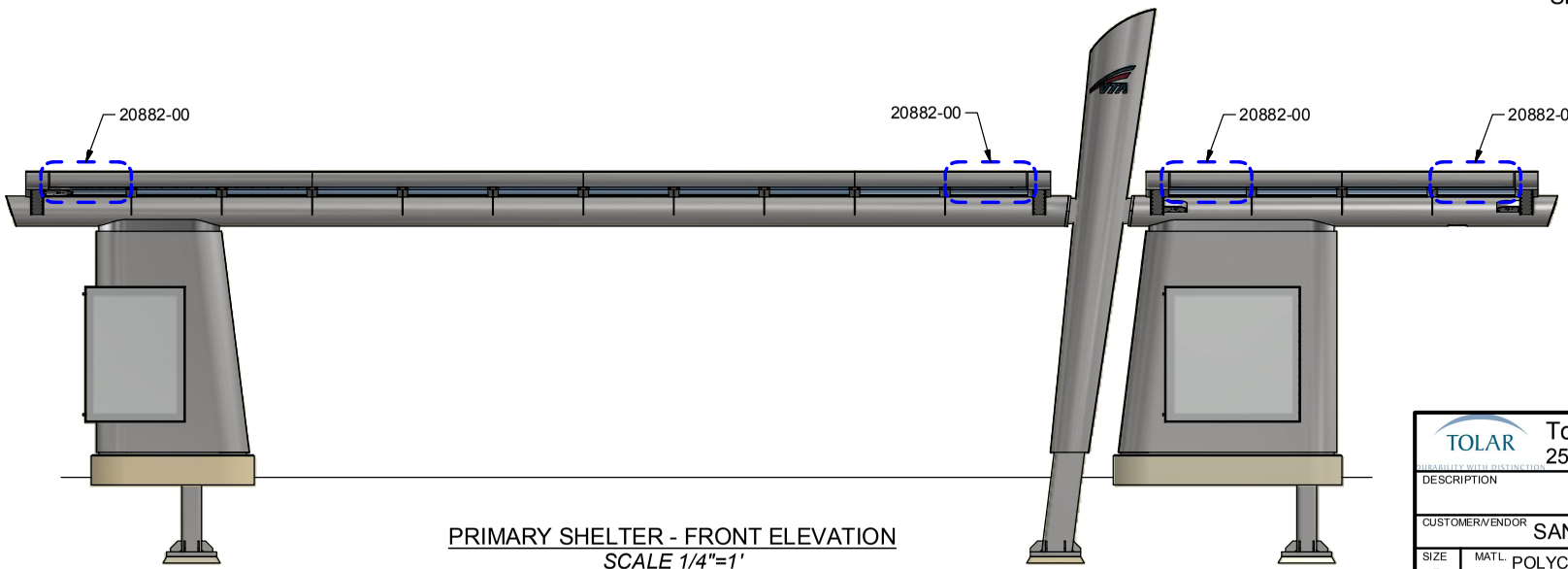
Shelter Front Eave



SIDE DIFFUSION LENS - FRONT ELEVATION
SCALE 4"=1'



SECTION A-A
SEE DRAWING 23394-00
SCALE 6"=1'



PRIMARY SHELTER - FRONT ELEVATION
SCALE 1/4"=1'

TOLAR — Tolar Manufacturing Company, Inc, 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: DIFFUSION LENS [SIDE]			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: POLYCARBONATE - 0.118"	DWG NO.: 20882-00	REV. NO.:
SCALE: AS NOTED	DATE: 10/20/2014	DRAWN BY: cgarcia	

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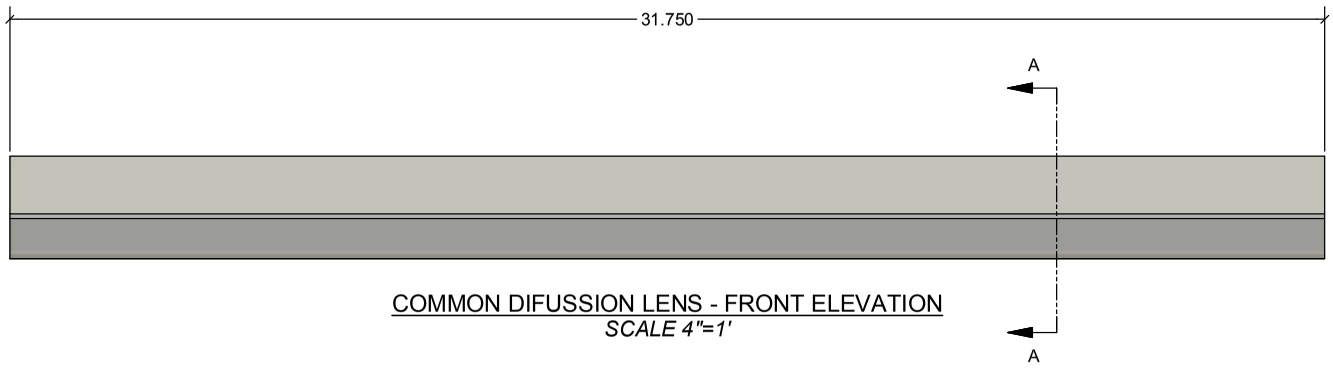
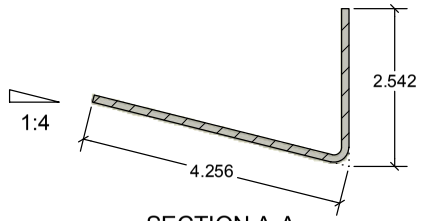
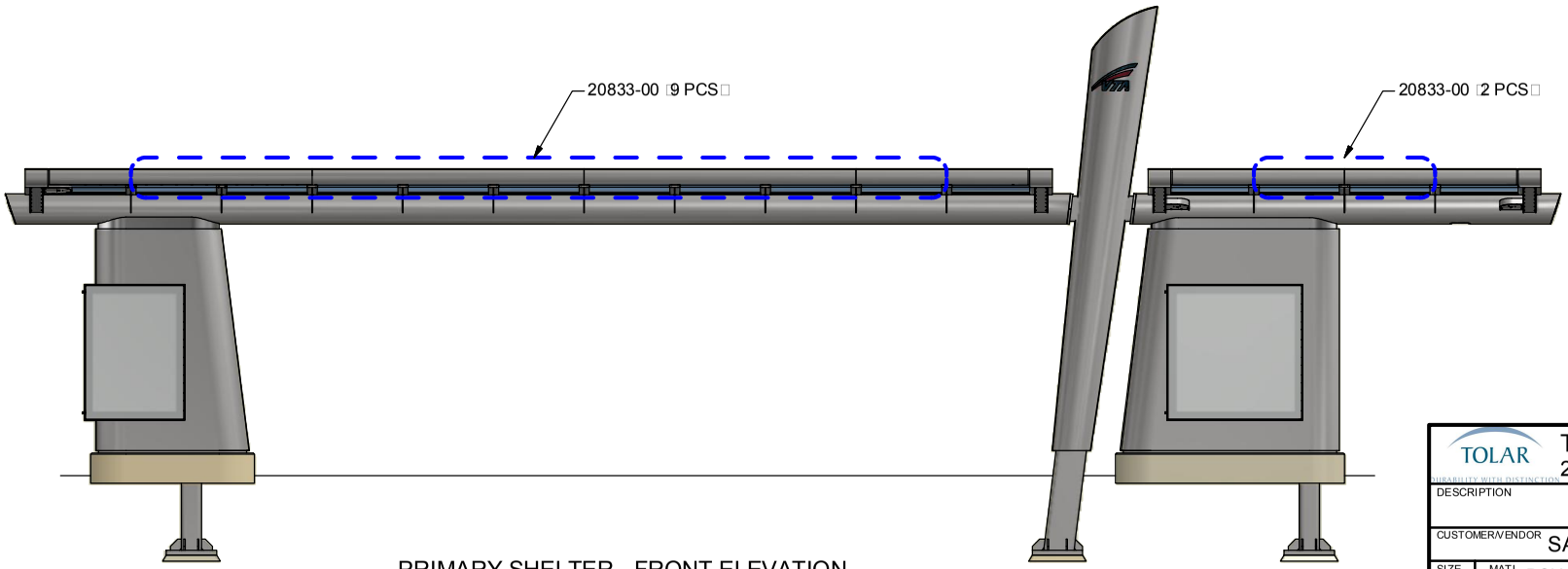
Shelter Front Eave



COMMON DIFUSSION LENS - FRONT ELEVATION
SCALE 4"=1'



SECTION A-A
SEE DRAWING 23394-00
SCALE 6"=1'



PRIMARY SHELTER - FRONT ELEVATION
SCALE 1/4"=1'

TOLAR
PERFECTION WITH DISTINCTION

Tolar Manufacturing Company, Inc
258 Mariah Circle, Corona CA. 92879

DESCRIPTION: DIFUSSION LENS [COMMON]			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: POLYCARBONATE 0.118"	DWG NO.: 20883-00	REV. NO.
SCALE: AS NOTED	DATE: 10/20/2014	DRAWN BY: cgarcia	

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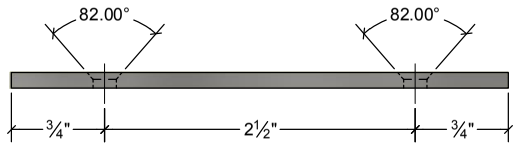
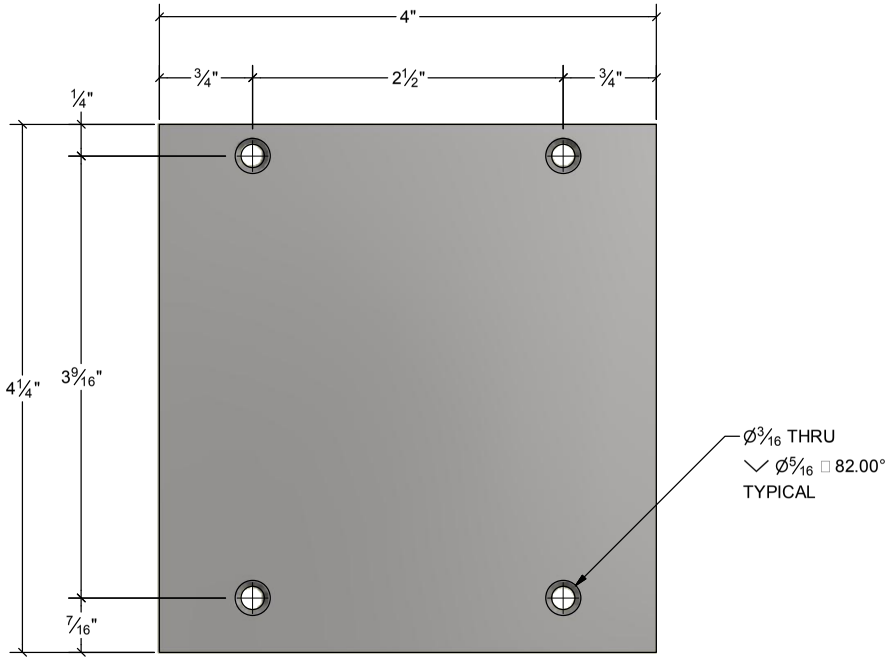
Shelter Front Eave



ELEVATION
SCALE 1 : 1



EAVE ACCESS COVER - PLAN VIEW
SCALE 1 : 1

TOLAR — PERFORMANCE WITH DISTINCTION	Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879
DESCRIPTION	EAVE ACCESS COVER
CUSTOMER/VENDOR	SANTA CLARA - VTA
SHEET NO.	1 OF 1
SIZE	B
MATL.	SS 316L - 11 GA SH M
DWG NO.	20884-00
REV. NO.	
SCALE	AS NOTED
DATE	10/22/2014
DRAWN BY:	cgarcia

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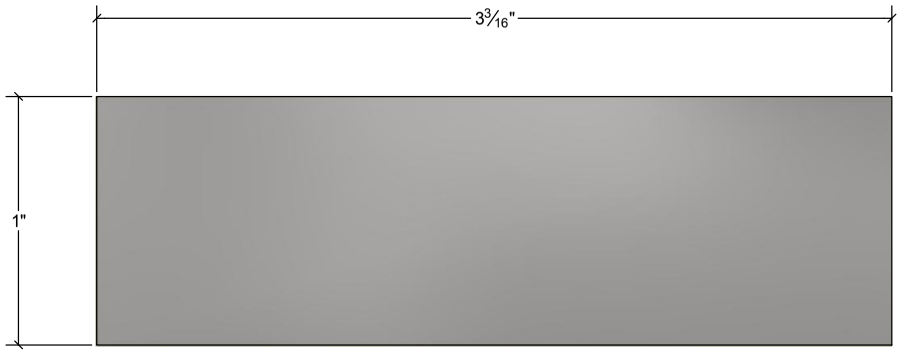
Shelter Front Eave



LIGHT FI□TURE MOUNTING TAB - PLAN VIEW

SCALE 2 : 1

NOTE - LIGHT FI□TURE HOLES
TO BE DETERMINED - RELATE
TO LIGHT FI□TURE HOLE PATTERN

TOLAR — NURSERY WITH DISTINCTION	Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879
DESCRIPTION	LF MOUNTING TAB
CUSTOMER/VENDOR	SANTA CLARA - VTA
SHEET NO.	1 OF 1
SIZE	B
MATL.	SS 316L - 3/16" THK PL
DWG NO.	21673-00
REV. NO.	
SCALE	AS NOTED
DATE	10/22/2014
DRAWN BY:	cgarcia

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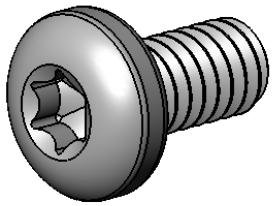
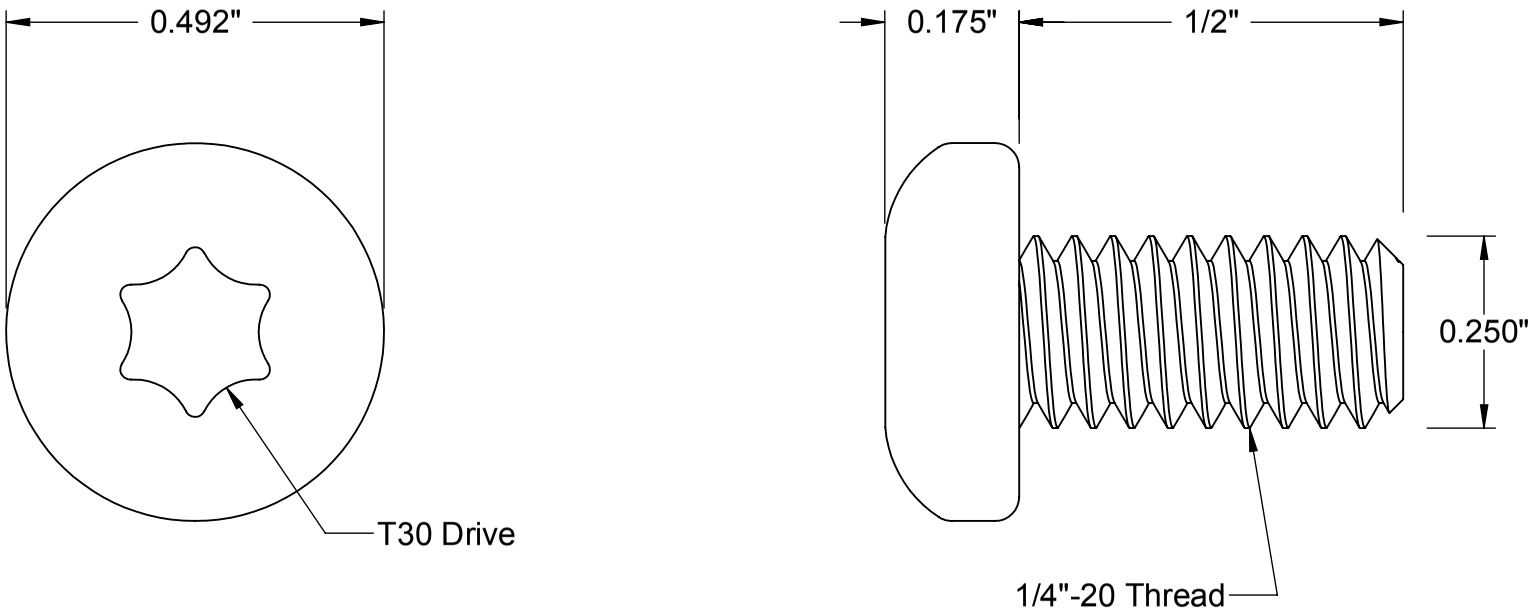
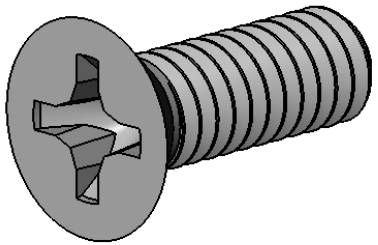
Shelter Front Eave

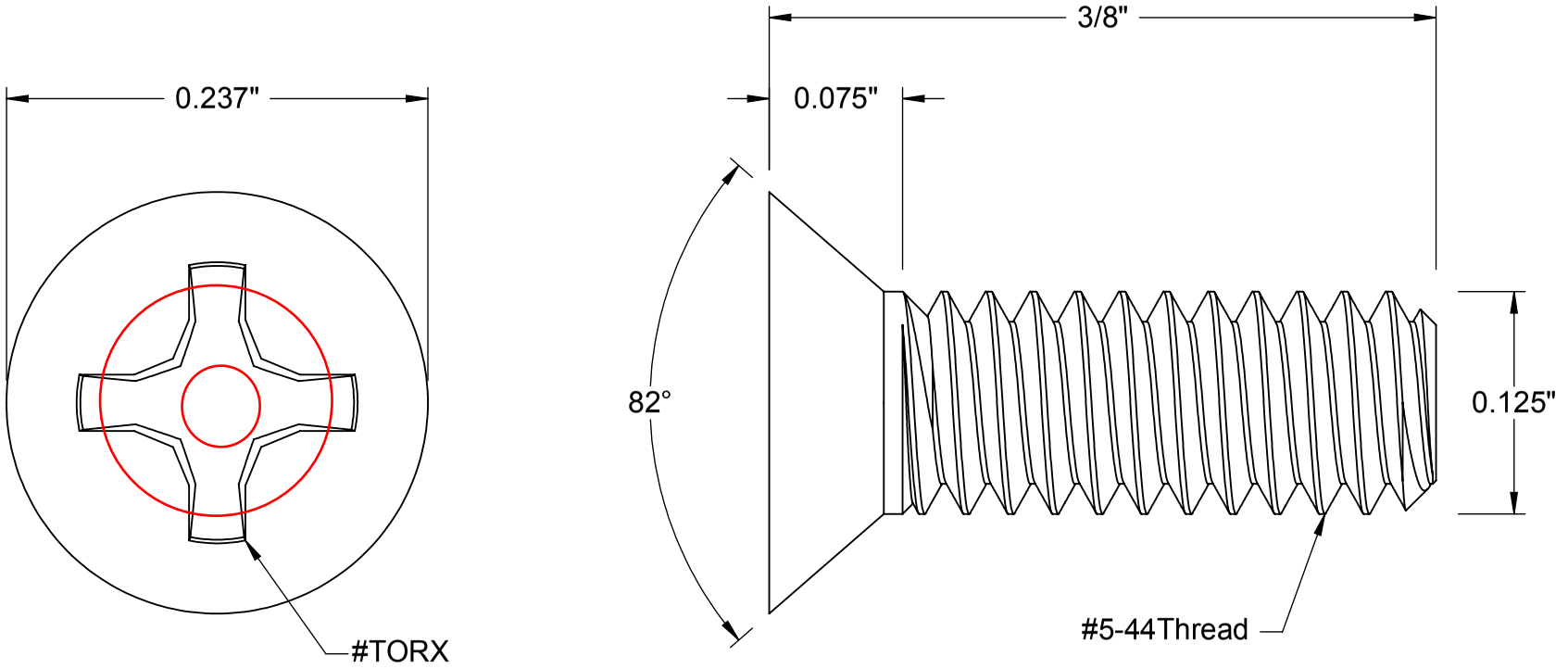




Shelter Front Eave

McMASTER-CARR® CAD | PART NUMBER 96710A733





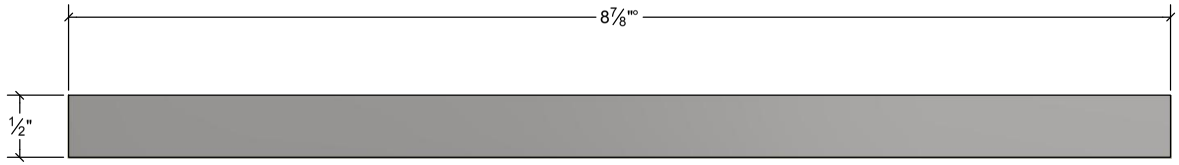
Shelter Front Eave

McMASTER-CARR® CAD

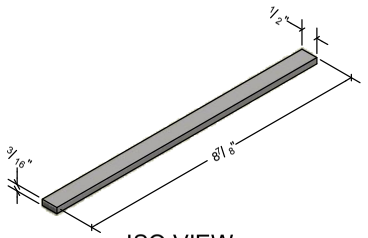
http://www.mcmaster.com

PART NUMBER

Flat Head TORX Machine Screw



BOTTOM BENT BRACKET RETURN - PLAN VIEW
SCALE 1 : 1



ISO VIEW
SCALE 4"=1'

Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: BENT BRACKET BOTT - RETURN			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 3/16" THK PL	DWG NO.: 23390-00	REV. NO.:
SCALE: AS NOTED	DATE: 10/22/2014	DRAWN BY: cgarcia	

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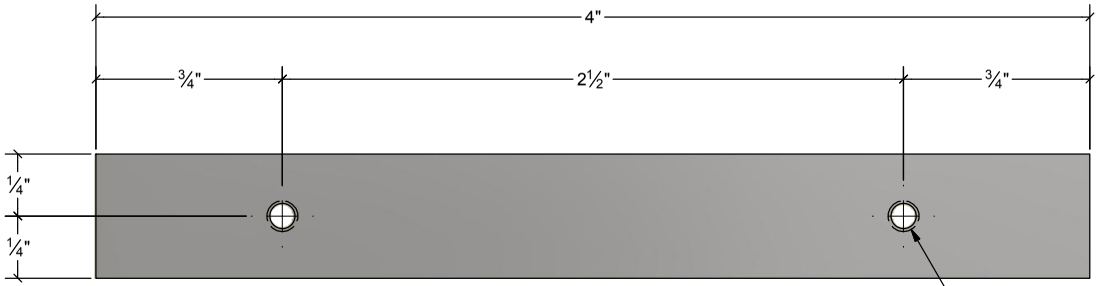
Shelter Front Eave



BENT BRACKET BOTTOM RETURN - PLAN VIEW
SCALE 2 : 1

Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: BENT BRACKET BOTT - RETURN			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 3/16" THK PL	DWG NO.: 23391-00	REV. NO.:
SCALE: AS NOTED	DATE: 10/22/2014	DRAWN BY: cgarcia	

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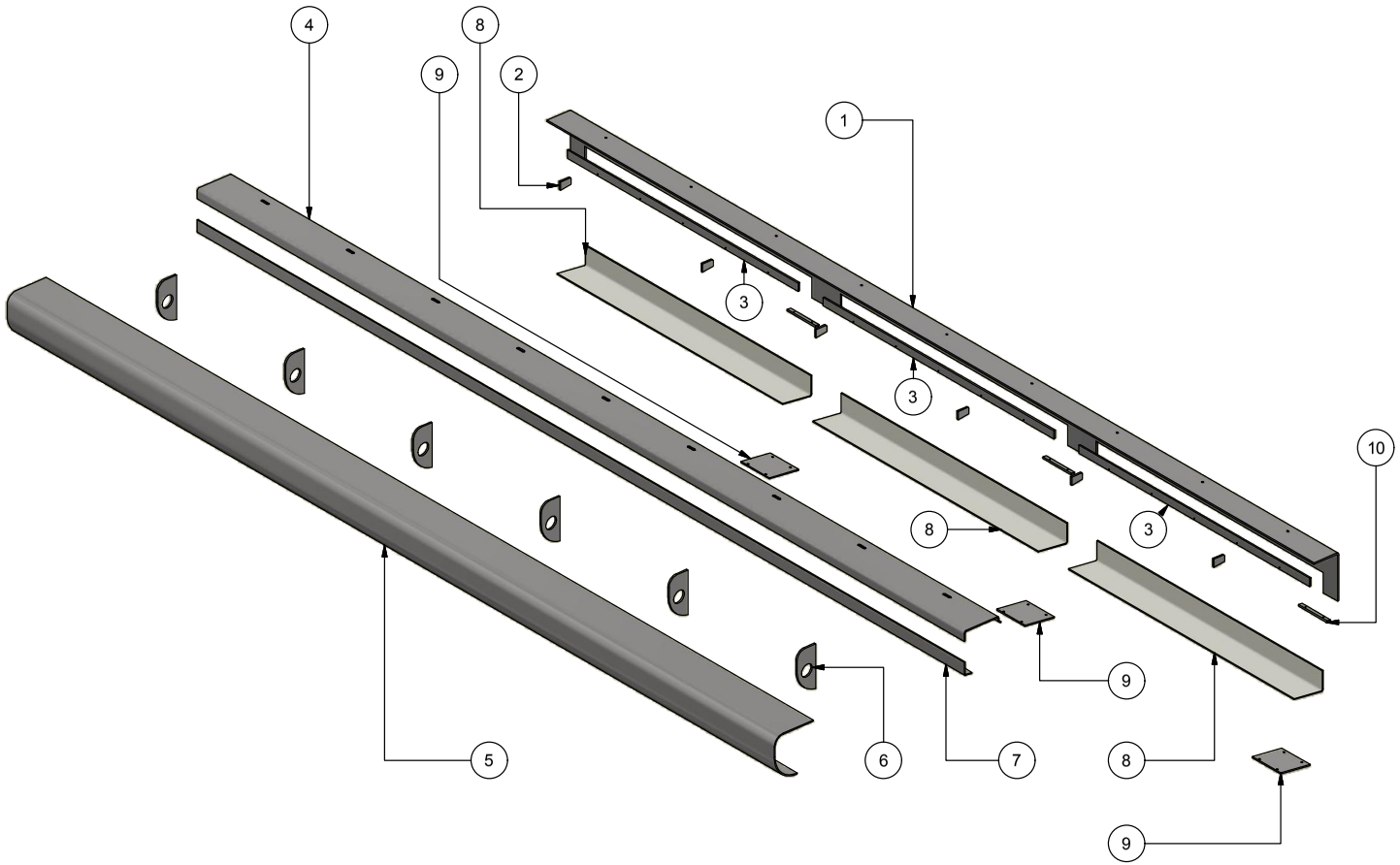
Shelter Front Eave



EAVE ASSEMBLY F2 □ F3 - COMPONENTS

SCALE 1"=1'

PARTS LIST			
ITEM	□TY	PART NUMBER	DESCRIPTION
1	1	20857-00	BENT □ NTCHD BRACKET F2 - F3
2	6	20858-00	FRONT EAVE SMALL STIFFENER
3	3	20861-00	ATTMNT TAB DIFF LENS
4	1	20869-00	EAVE SLOTTED COVER F2 - F3
5	1	20875-00	CANOPY EAVE WRAP F2 - F3
6	6	20874-00	11 GA STIFFENER
7	1	20879-00	CONTINOUS BENT PLATE F2 □ F3
8	3	20883-00	DIFUSSION LENS □COMMON□
9	3	20884-00	EAVE ACCESS COVER
10	3	23391-00	BENT BRACKET BOTT - RETURN

TOLAR
NURTURED WITH DISTINCTION

Tolar Manufacturing Company, Inc
258 Mariah Circle, Corona CA. 92879

DESCRIPTION: EAVE ASSEMBLY F2 □ F3			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - MISC	DWG NO.: 20860-00	REV. NO.
SCALE: AS NOTED	DATE: 10/22/2014	DRAWN BY: cgarcia	

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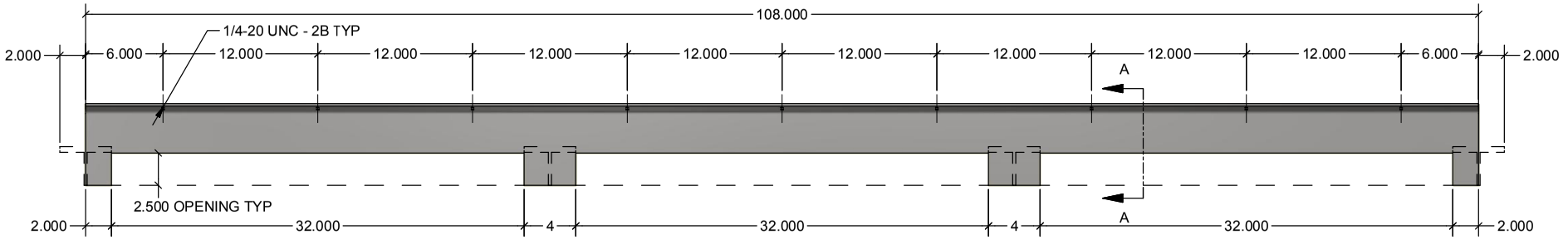
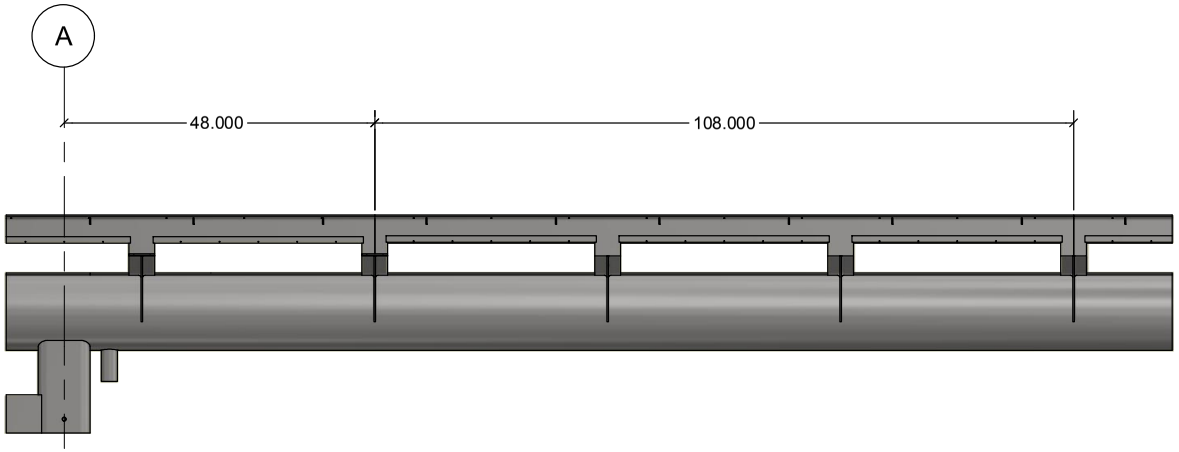
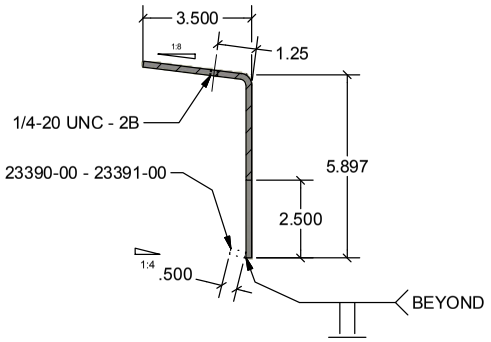
Shelter Front Eave



FRONT EAVE BRACKET - FRONT ELEVATION
SCALE 1 1/2"=1'



PRIMARY SHELTER - FRONT ELEVATION
SCALE 5/8"=1'



SECTION A-A
SEE DRAWING 23390-00
SCALE 3"=1'

TOLAR — Tolar Manufacturing Company, Inc, 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: BENT □ NTCHD BRACKET F2 - F3			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 3/16" PL	DWG NO.: 20857-00	REV. NO.:
SCALE: AS NOTED	DATE: 10/16/2014	DRAWN BY: cgarcia	

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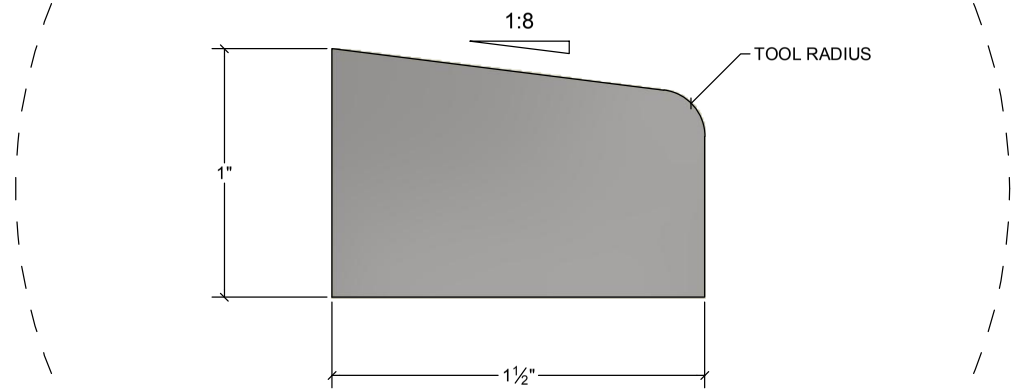
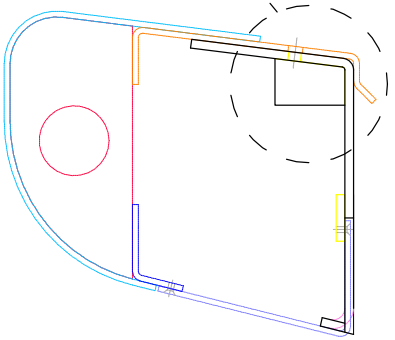
Shelter Front Eave



STIFFENER - FRONT ELEVATION
SCALE 2 : 1



FRONT EAVE - SECTION VIEW
SEE SKETCH

TOLAR — Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: FRONT EAVE SMALL STIFFENER			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 3/16" TH PL	DWG NO.: 20858-00	REV. NO.
SCALE: AS NOTED	DATE: 10/21/2014	DRAWN BY: cgarcia	

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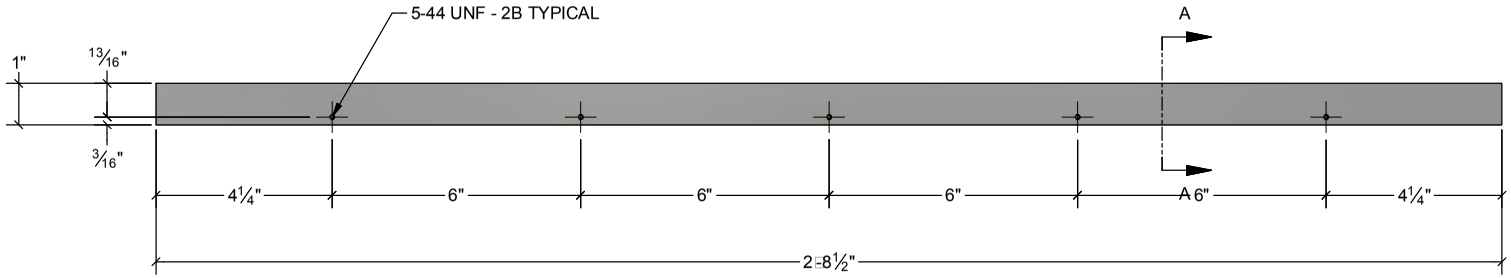
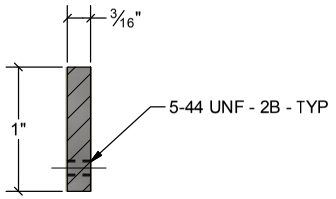
Shelter Front Eave



DIFFUSION LENS ATTACHMENT TAB - FRONT ELEVATION
SCALE 4"=1'



SECTION A-A
SEE DRAWING 20858-00
SCALE 12"=1'

TOLAR — Tolar Manufacturing Company, Inc, 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: ATTMNT TAB DIFF LENS			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 2
SIZE: B	MATL.: SS 316L - 3/16" THK PL	DWG NO.: 20861-00	REV. NO.:
SCALE: AS NOTED	DATE: 10/21/2014	DRAWN BY: cgarcia	

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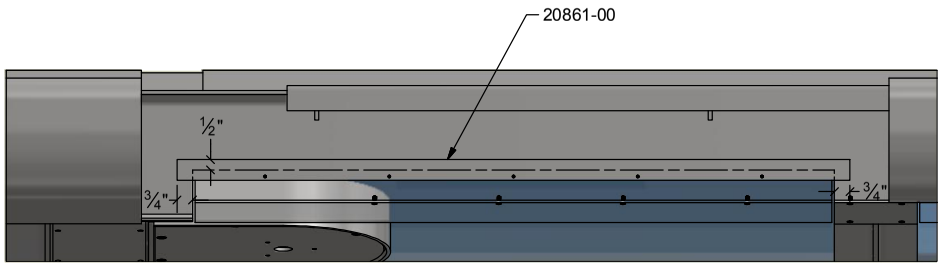
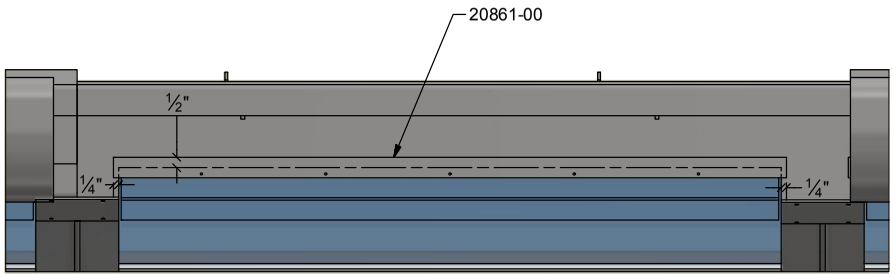
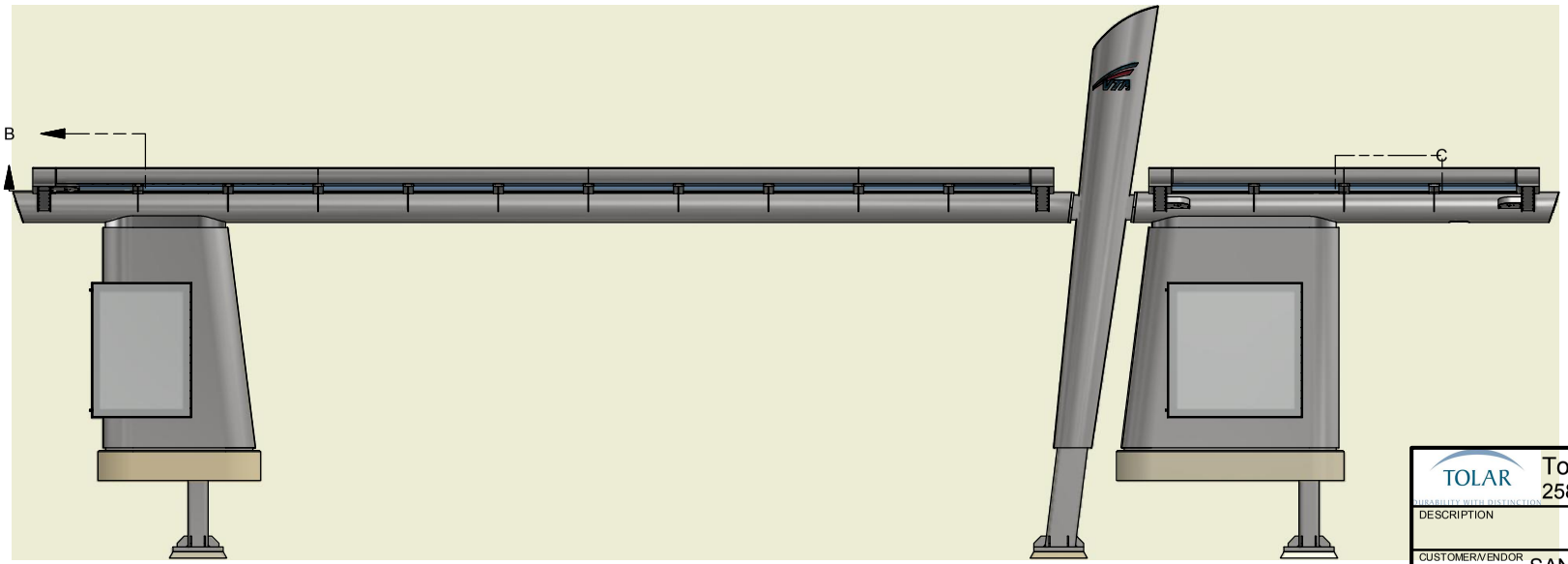
Shelter Front Eave



DETAIL B
OCCURS AT 4 SIDES
SCALE 2"=1'



DETAIL C
OCCURS AT 11 PLACES BETWEEN SIDES
SCALE 2"=1'



PRIMARY SHELTER - FRONT ELEVATION
SCALE 1/4"=1'

TOLAR	Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879
DESCRIPTION	ATTMNT TAB DIFF LENS
CUSTOMER/VENDOR	SANTA CLARA - VTA
SHEET NO.	2 OF 2
SIZE	B
MATL.	SS 316L - 3/16" PL
DWG NO.	20861-00
REV. NO.	
SCALE	AS NOTED
DATE	10/21/2014
DRAWN BY:	cgarcia

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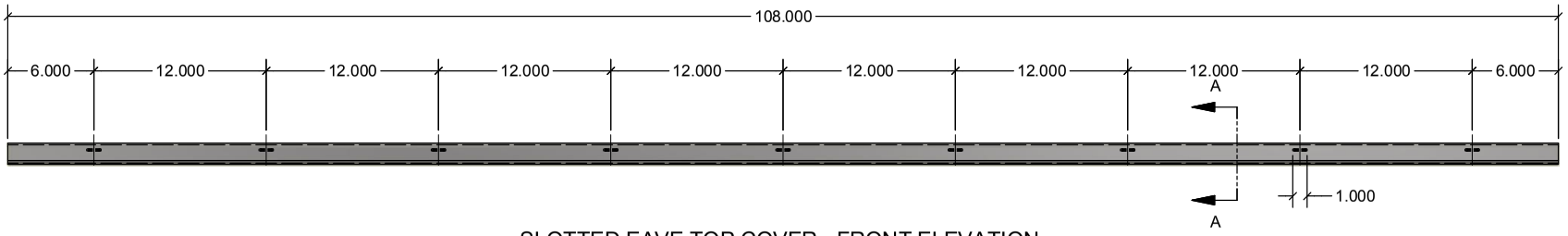
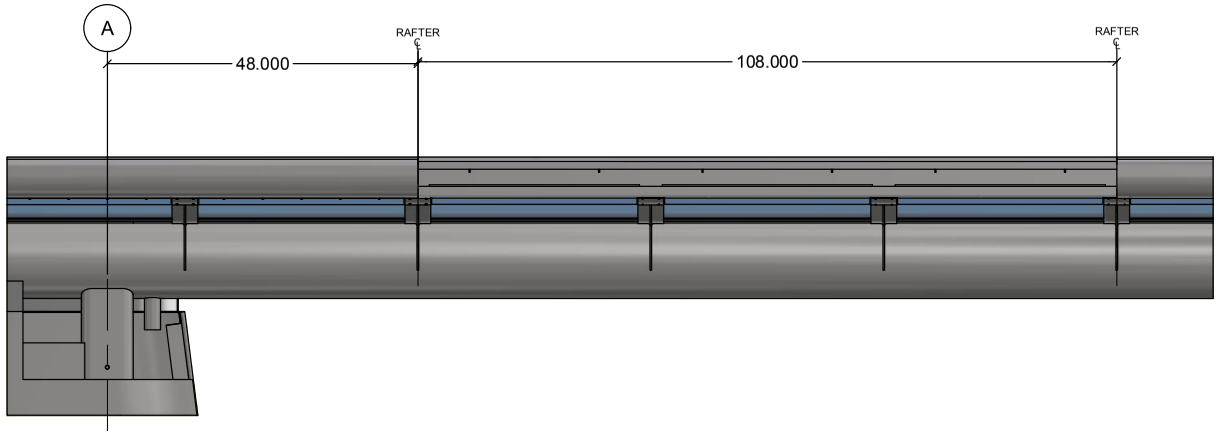
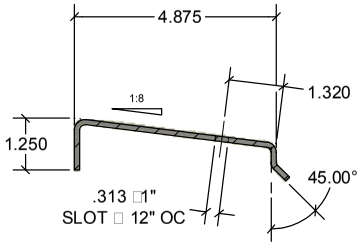
Shelter Front Eave



SLOTTED EAVE TOP COVER - FRONT ELEVATION
SCALE 1 1/2"=1'



PRIMARY SHELTER - FRONT ELEVATION
SCALE 5/8"=1'



SECTION A-A
SEE DRAWING 23391-00
SCALE 4"=1'

Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: SLOTTED EAVE TOP COVER F2 - F3			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 2
SIZE: B	MATL.: SS 316L - 11 GA SH M	DWG NO.: 20869-00	REV. NO.
SCALE: AS NOTED	DATE: 10/20/2014	DRAWN BY: cgarcia	

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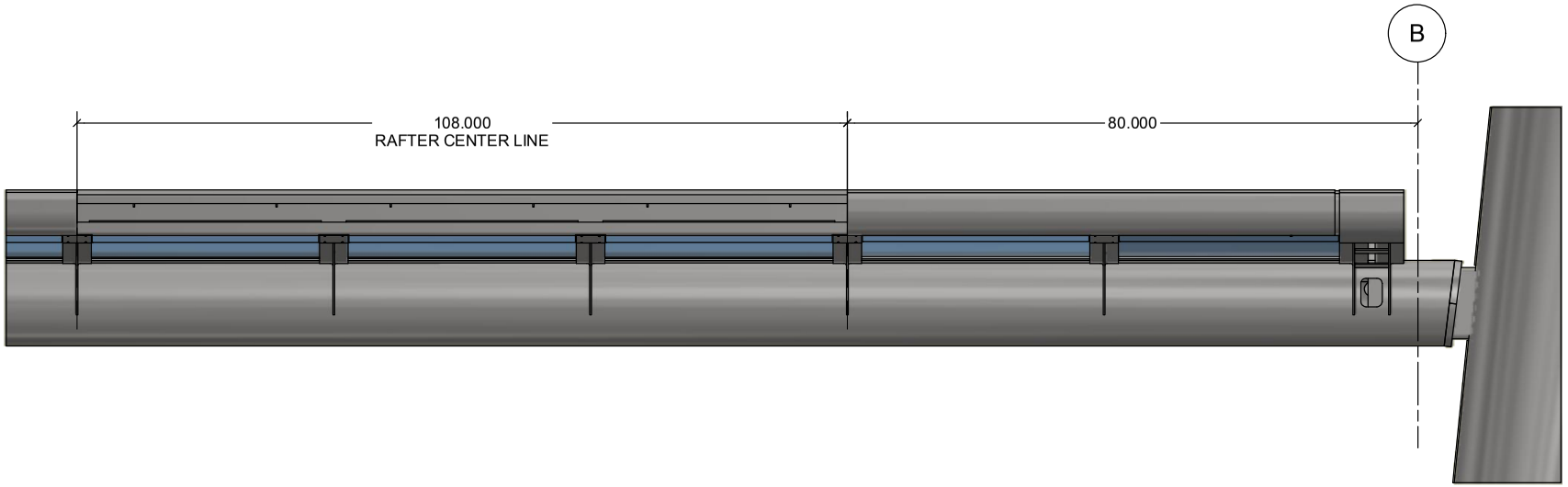
Shelter Front Eave



SLOTTED EAVE TOP COVER F2 F3 - PRIMARY SHELTER - FRONT ELEVATION

SCALE 3/4"=1'

TOLAR — Tolar Manufacturing Company, Inc, 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: PRIMARY SHELTER			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 2 OF 2
SIZE: B	MATL.: SS 316L - 11 GA SH M	DWG NO.: 20787-00	REV. NO.: C
SCALE: AS NOTED	DATE: 10/20/2014	DRAWN BY: cgarcia	

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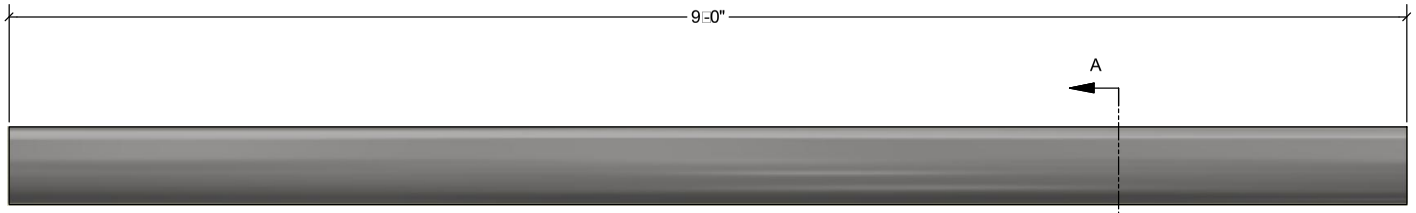
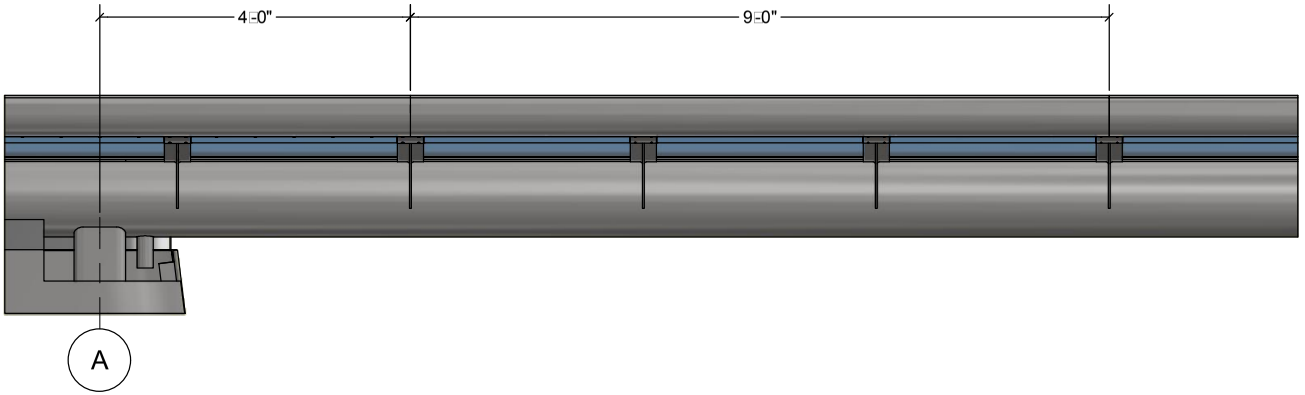
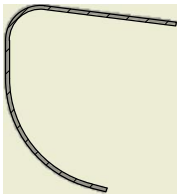
Shelter Front Eave



FRONT EAVE F2 - F3 - FRONT ELEVATION
SCALE 1 1/4"=1'



PRIMARY SHELTER - FRONT ELEVATION
SCALE 5/8"=1'



SECTION A-A
SEE DRAWING 23392-00
SCALE 3"=1'

TOLAR — Tolar Manufacturing Company, Inc, 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: CANOPY EAVE WRAP F2 - F3			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 2
SIZE: B	MATL.: SS 316L - 11 GA SH M	DWG NO.: 20875-00	REV. NO.:
SCALE: AS NOTED	DATE: 10/20/2014	DRAWN BY: cgarcia	

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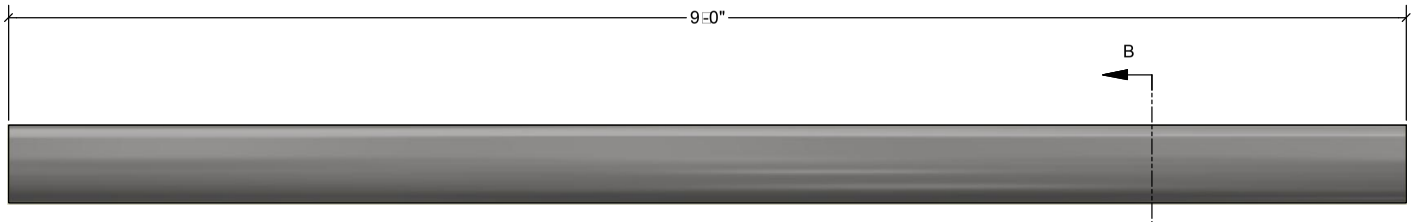
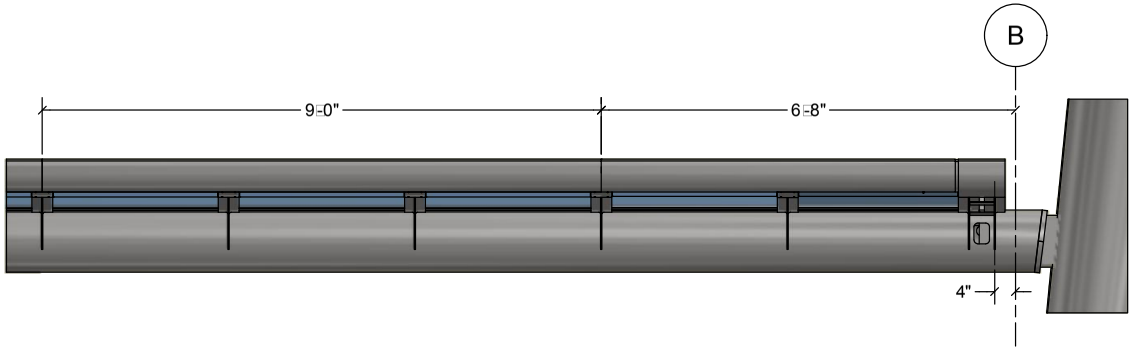
Shelter Front Eave



FRONT EAVE F2 - F3 - FRONT ELEVATION
SCALE 1 1/4"=1'



PRIMARY SHELTER - FRONT ELEVATION
SCALE 1/2"=1'

SECTION B-B
SEE DRAWING 23392-00
SCALE 3"=1'

TOLAR — Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: CANOPY EAVE WRAP F2 - F3			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 2 OF 2
SIZE: B	MATL.: SS 316L - 11 GA SH M	DWG NO.: 20875-00	REV. NO.:
SCALE: AS NOTED	DATE: 10/20/2014	DRAWN BY: cgarcia	

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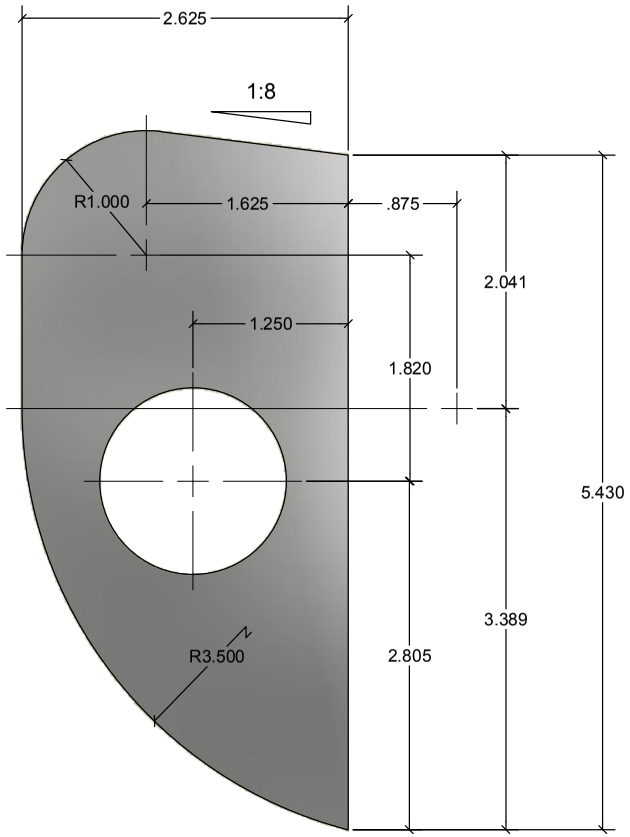
Shelter Front Eave



11 GA EAVE STIFFENER - ELEVATION
SEE DRAWING 20784-01
SCALE 1 : 1

TOLAR — Tolar Manufacturing Company, Inc, 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: 11 GA STIFFENER			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 11 GA SH M	DWG NO.: 20874-00	REV. NO.:
SCALE: AS NOTED	DATE: 10/22/2014	DRAWN BY: cgarcia	

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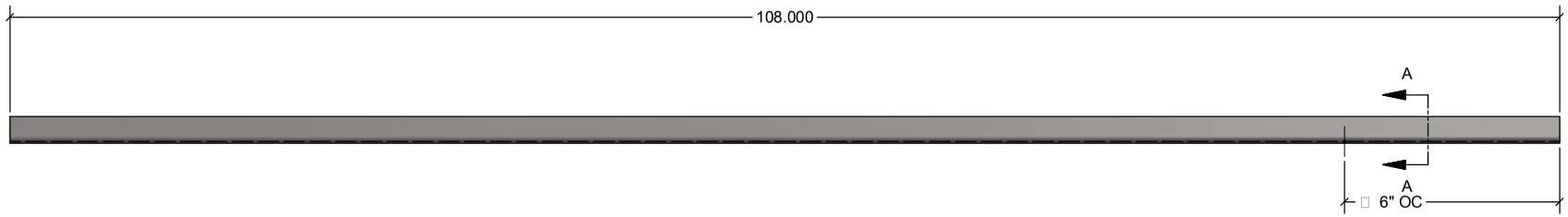
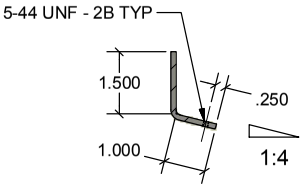
Shelter Front Eave



CONTINOUS BENT PLATE F2 □ F3 - FRONT ELEVATION

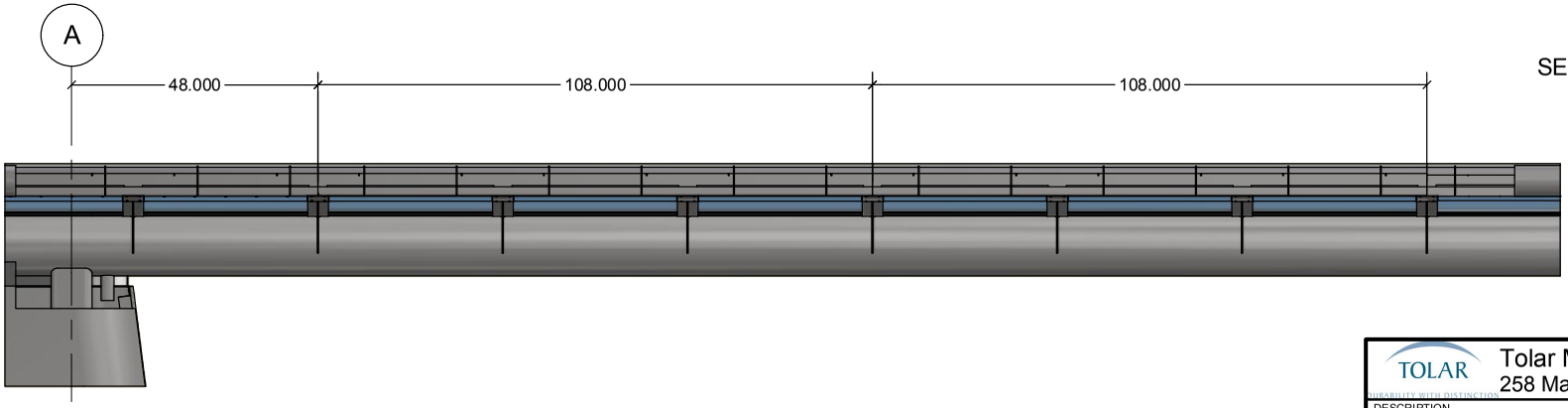
SCALE 1 1/2"=1'



SECTION A-A

SEE DRAWING 23393-00

SCALE 4"=1'



PRIMARY SHLETER - FRONT ELEVATION

SCALE 1/2"=1'

TOLAR — NUMBER WITH DISTINCTION	Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879		
DESCRIPTION	CONTINOUS BENT PLATE F2 □ F3		
CUSTOMER/VENDOR	SANTA CLARA - VTA		SHEET NO. 1 OF 1
SIZE B	MATL. SS 316L - 11 GA SH M	DWG NO. 20879-00	REV. NO.
SCALE AS NOTED	DATE 10/20/2014	DRAWN BY: cgarcia	

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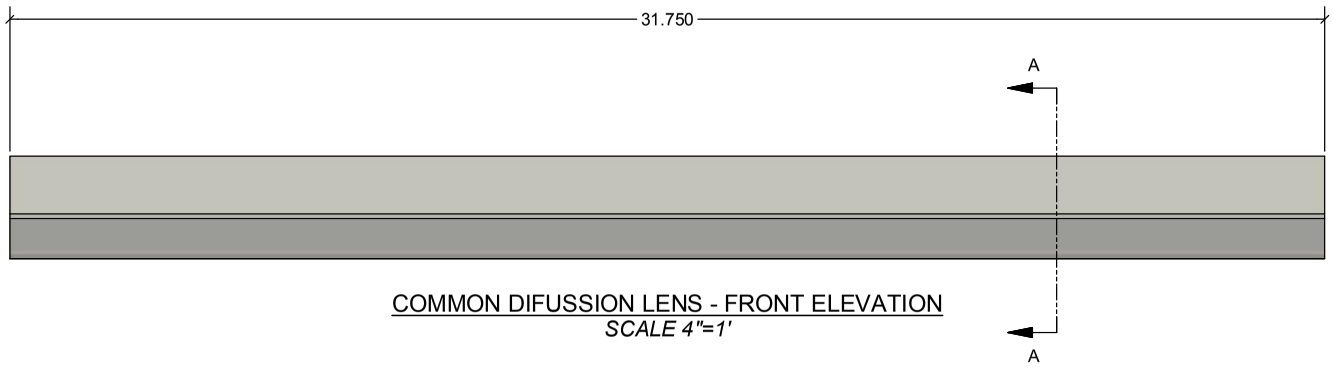
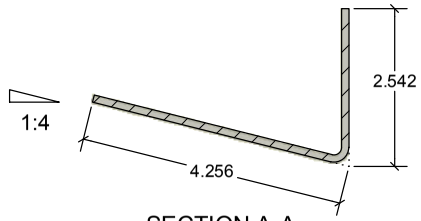
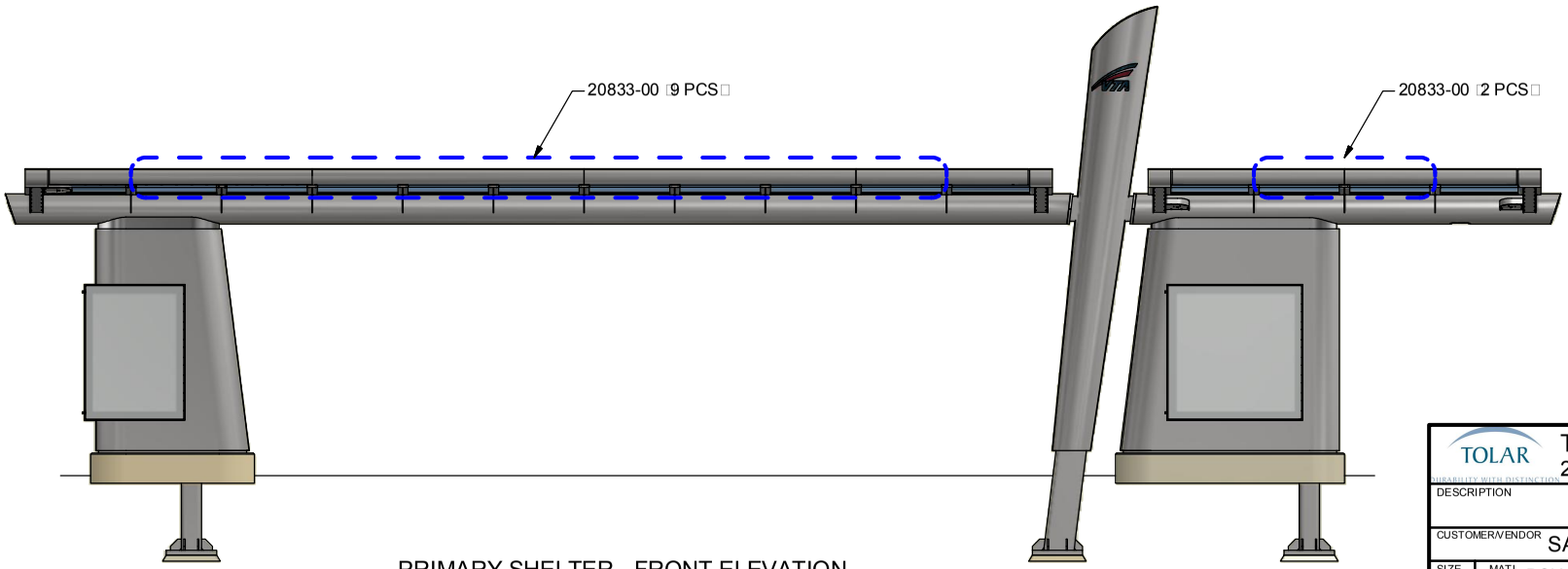
Shelter Front Eave



COMMON DIFUSSION LENS - FRONT ELEVATION
SCALE 4"=1'



SECTION A-A
SEE DRAWING 23394-00
SCALE 6"=1'



PRIMARY SHELTER - FRONT ELEVATION
SCALE 1/4"=1'

TOLAR
PERFECTION WITH DISTINCTION

Tolar Manufacturing Company, Inc
258 Mariah Circle, Corona CA. 92879

DESCRIPTION: DIFUSSION LENS [COMMON]			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: POLYCARBONATE 0.118"	DWG NO.: 20883-00	REV. NO.
SCALE: AS NOTED	DATE: 10/20/2014	DRAWN BY: cgarcia	

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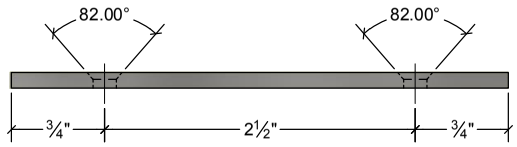
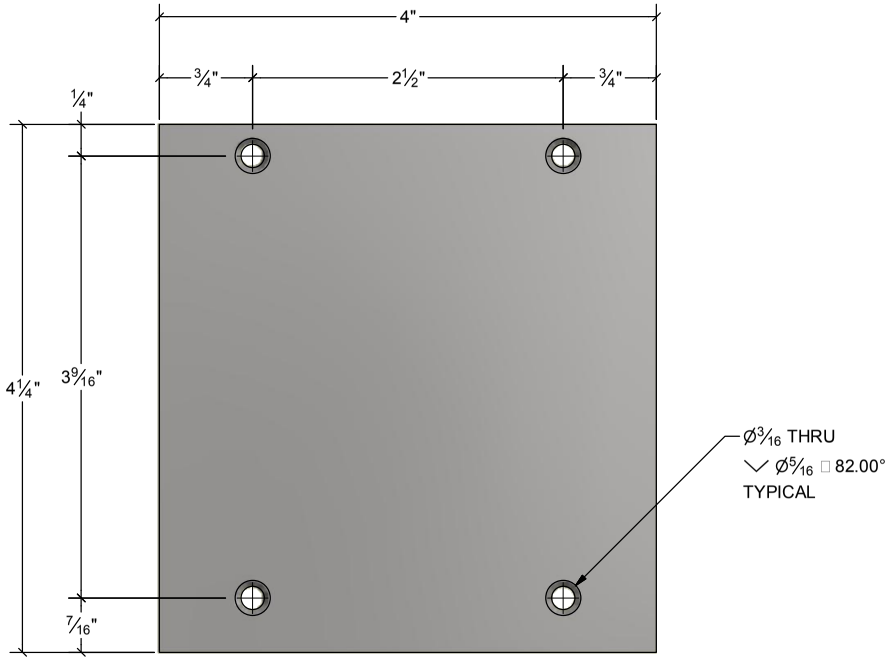
Shelter Front Eave



ELEVATION
SCALE 1 : 1



EAVE ACCESS COVER - PLAN VIEW
SCALE 1 : 1

TOLAR — PERFORMANCE WITH DISTINCTION	Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879
DESCRIPTION	EAVE ACCESS COVER
CUSTOMER/VENDOR	SANTA CLARA - VTA
SHEET NO.	1 OF 1
SIZE	B
MATL.	SS 316L - 11 GA SH M
DWG NO.	20884-00
REV. NO.	
SCALE	AS NOTED
DATE	10/22/2014
DRAWN BY:	cgarcia

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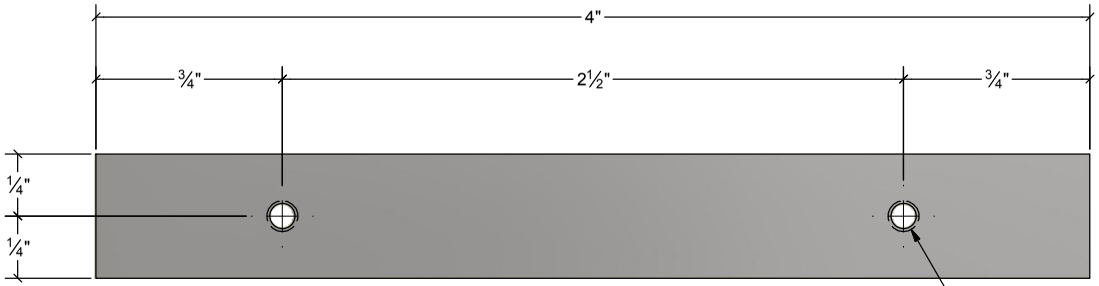
Shelter Front Eave



BENT BRACKET BOTTOM RETURN - PLAN VIEW
SCALE 2 : 1

Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: BENT BRACKET BOTT - RETURN			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 3/16" THK PL	DWG NO.: 23391-00	REV. NO.:
SCALE: AS NOTED	DATE: 10/22/2014	DRAWN BY: cgarcia	

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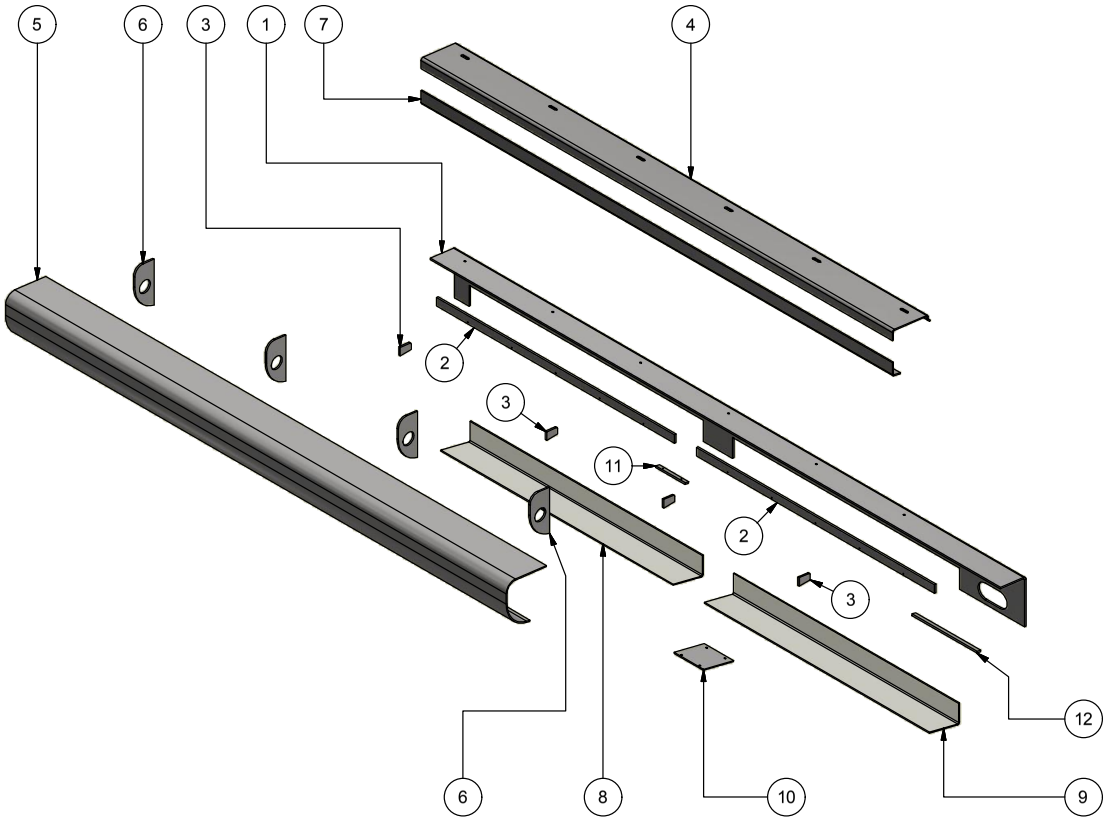
Shelter Front Eave



EAVE ASSEMBLY F4 - COMPONENTS
SCALE 1"=1'

PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	20862-00	BENT W/ NOTCHED BRACKET F4
2	2	20861-00	ATTMNT TAB DIFF LENS
3	4	20858-00	FRONT EAVE SMALL STIFFENER
4	1	20870-00	SLOTTED EAVE TOP COVER - F4
5	1	20876-00	CANOPY EAVE WRAP F4
6	4	20874-00	11 GA STIFFENER
7	1	20880-00	CONTINOUS PLATE F4
8	1	20883-00	DIFUSSION LENS (COMMON)
9	1	20882-00	DIFFUSION LENS (SIDE)
10	1	20884-00	EAVE ACCESS COVER
11	1	23391-00	BENT BRACKET BOTT - RETURN
12	1	23390-00	BENT BRACKET BOTT - RETURN

TOLAR
STRAIGHT WITH DISTINCTION

Tolar Manufacturing Company, Inc
258 Mariah Circle, Corona CA. 92879

DESCRIPTION: EAVE ASSEMBLY F4			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - MISC	DWG NO.: 20863-00	REV. NO.
SCALE: AS NOTED	DATE: 10/22/2014	DRAWN BY: cgarcia	

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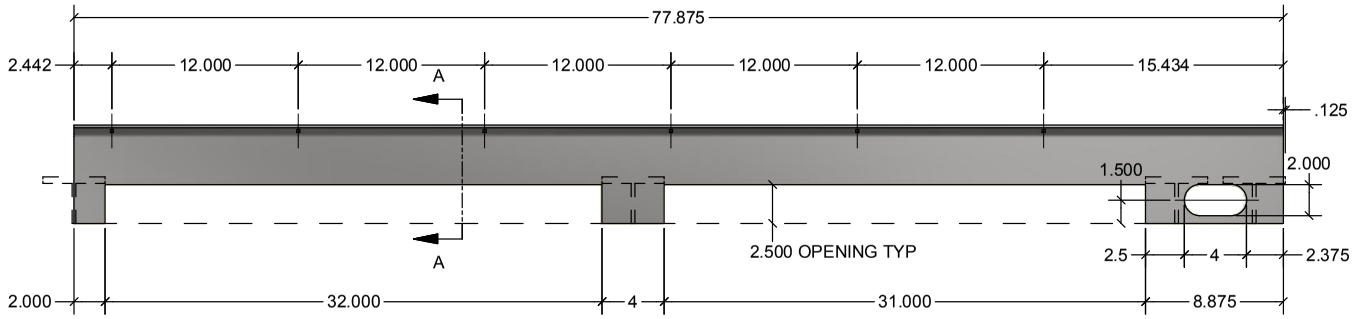
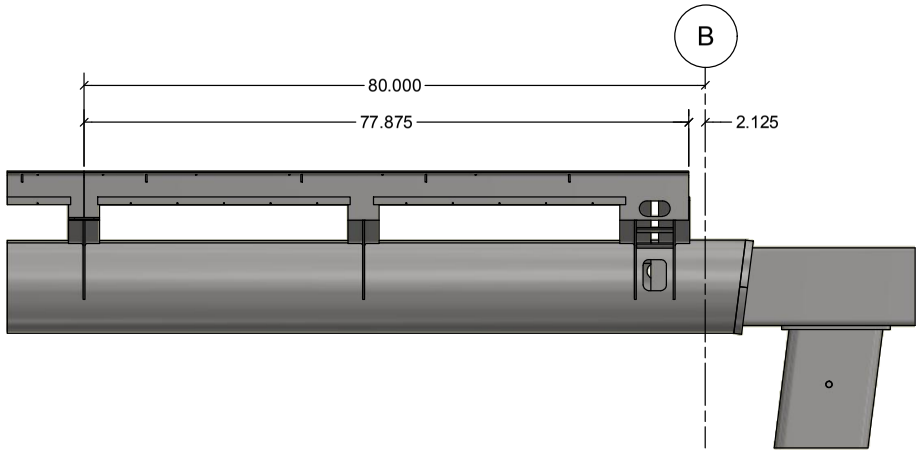
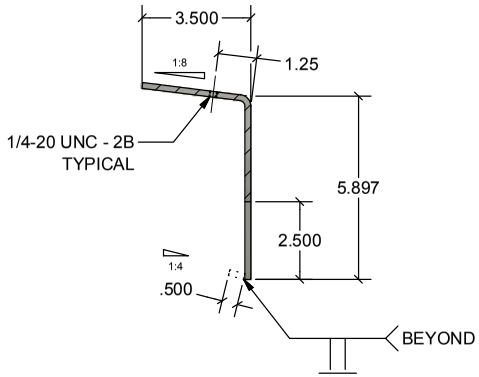
Shelter Front Eave



FRONT EAVE BRACKET - FRONT ELEVATION
SCALE 1 1/2"=1'



PRIMARY SHELTER - FRONT ELEVATION
SCALE 3/4"=1'



SECTION A-A
SEE DRAWING 23390-00
SCALE 3"=1'

TOLAR — Tolar Manufacturing Company, Inc, 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: BENT □ NOTCHED BRACKET F4			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 3/16" PL	DWG NO.: 20862-00	REV. NO.:
SCALE: AS NOTED	DATE: 10/16/2014	DRAWN BY: cgarcia	

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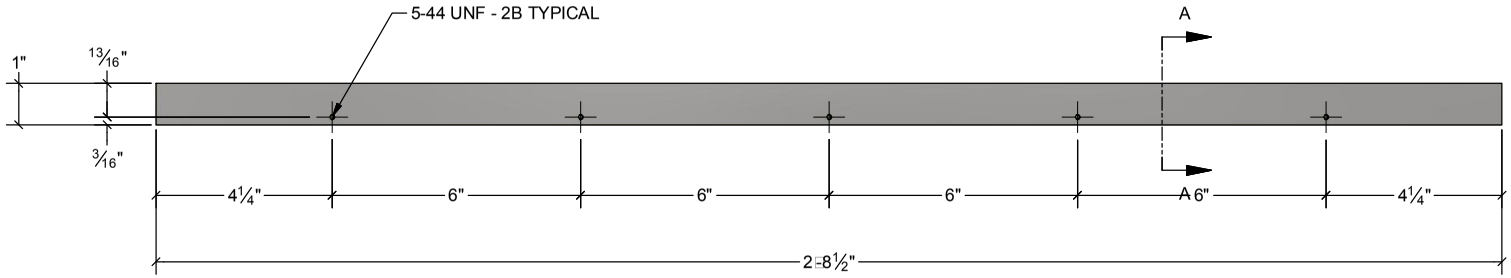
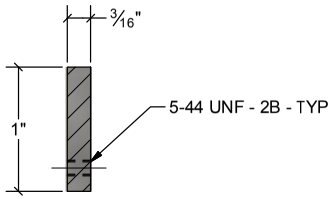
Shelter Front Eave



DIFFUSION LENS ATTACHMENT TAB - FRONT ELEVATION
SCALE 4"=1'



SECTION A-A
SEE DRAWING 20858-00
SCALE 12"=1'

TOLAR — Tolar Manufacturing Company, Inc, 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: ATTMNT TAB DIFF LENS			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 2
SIZE: B	MATL.: SS 316L - 3/16" THK PL	DWG NO.: 20861-00	REV. NO.:
SCALE: AS NOTED	DATE: 10/21/2014	DRAWN BY: cgarcia	

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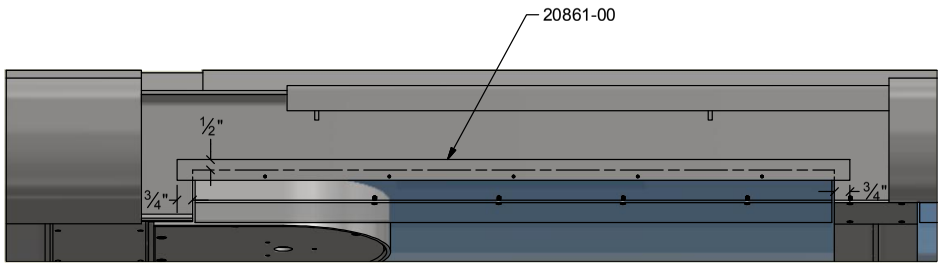
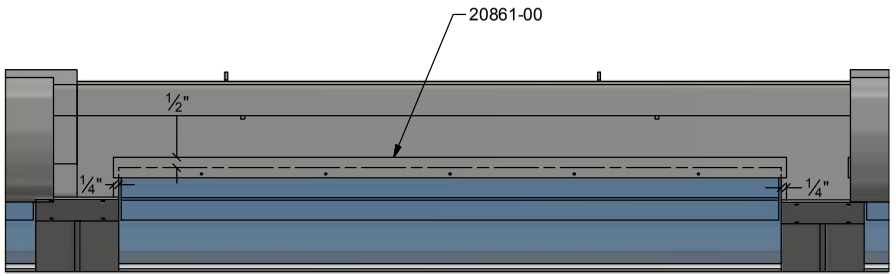
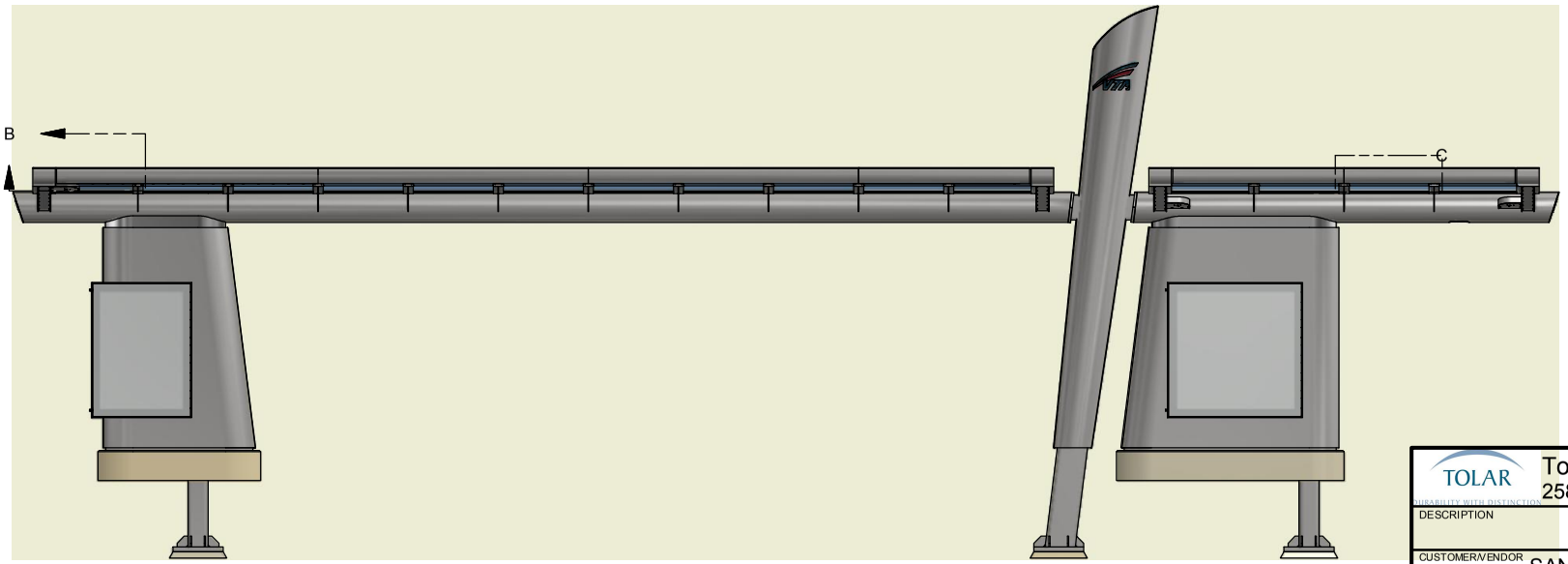
Shelter Front Eave



DETAIL B
OCCURS AT 4 SIDES
SCALE 2"=1'



DETAIL C
OCCURS AT 11 PLACES BETWEEN SIDES
SCALE 2"=1'



PRIMARY SHELTER - FRONT ELEVATION
SCALE 1/4"=1'

TOLAR	Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879
DESCRIPTION	ATTMNT TAB DIFF LENS
CUSTOMER/VENDOR	SANTA CLARA - VTA
SHEET NO.	2 OF 2
SIZE	B
MATL.	SS 316L - 3/16" PL
DWG NO.	20861-00
REV. NO.	
SCALE	AS NOTED
DATE	10/21/2014
DRAWN BY:	cgarcia

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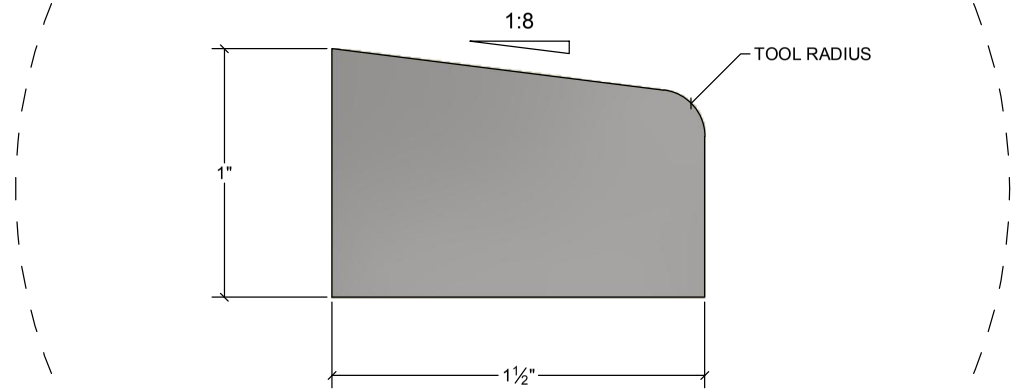
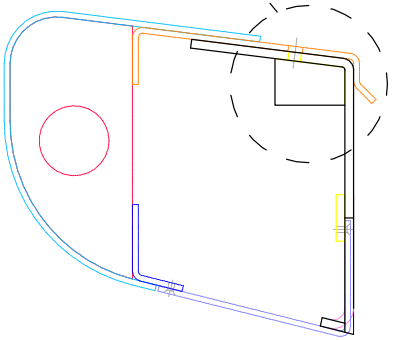
Shelter Front Eave



STIFFENER - FRONT ELEVATION
SCALE 2 : 1



FRONT EAVE - SECTION VIEW
SEE SKETCH

TOLAR — Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: FRONT EAVE SMALL STIFFENER			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 3/16" TH PL	DWG NO.: 20858-00	REV. NO.
SCALE: AS NOTED	DATE: 10/21/2014	DRAWN BY: cgarcia	

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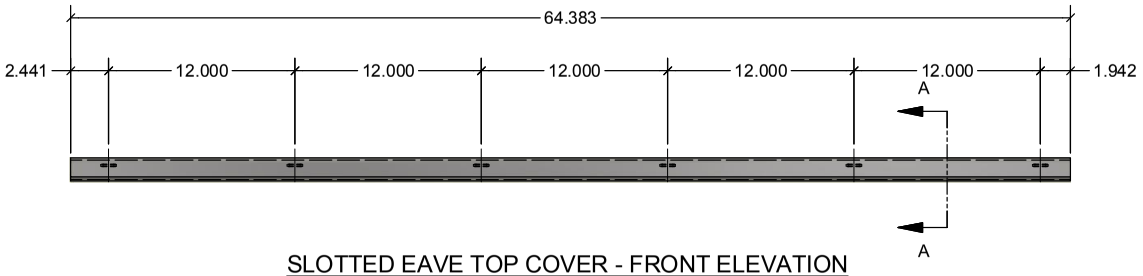
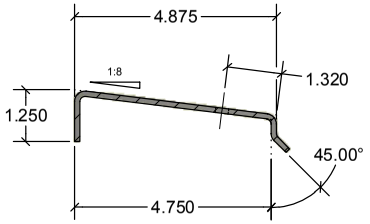
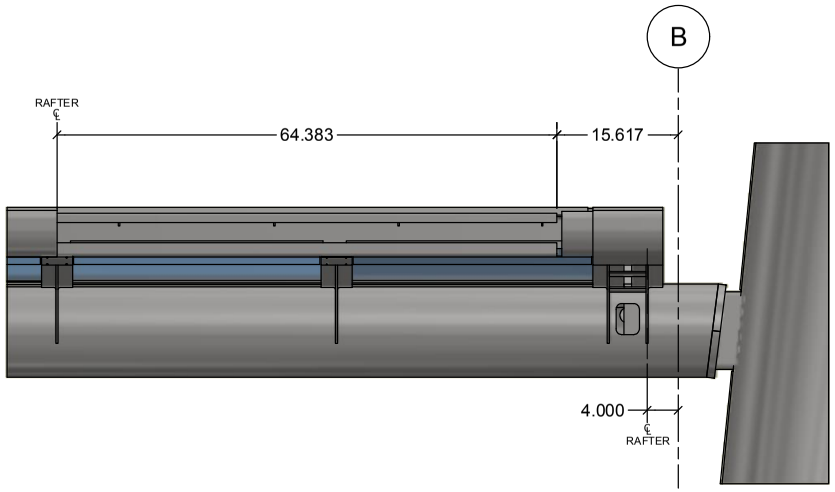
Shelter Front Eave



SLOTTED EAVE TOP COVER - FRONT ELEVATION
SCALE 1 1/2"=1'



SECTION A-A
SEE DRAWING 23391-00
SCALE 4"=1'



PRIMARY SHELTER - FRONT ELEVATION
SCALE 3/4"=1'

Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: SLOTTED EAVE TOP COVER - F4			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 11 GA SH M	DWG NO.: 20870-00	REV. NO.:
SCALE: AS NOTED	DATE: 10/20/2014	DRAWN BY: cgarcia	

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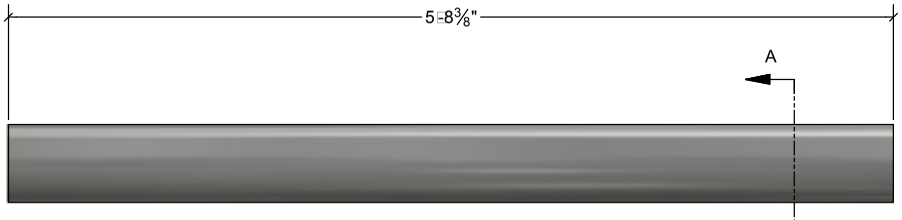
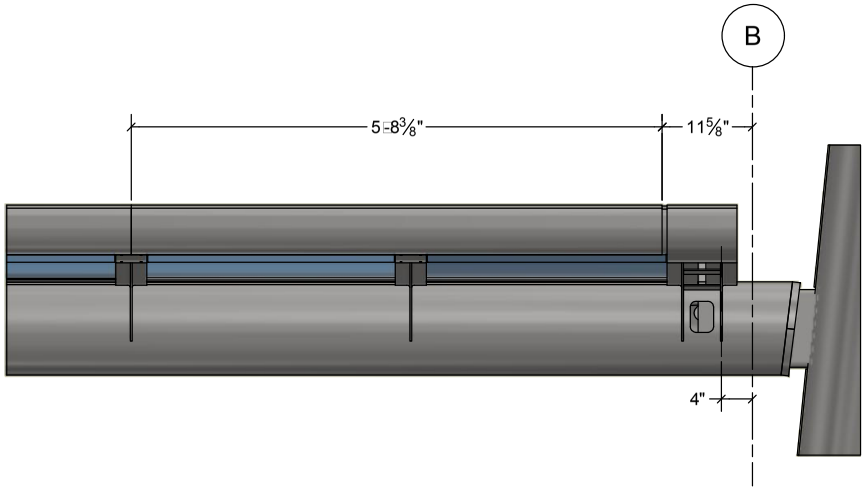
Shelter Front Eave



FRONT EAVE F4 - FRONT ELEVATION
SCALE 1 1/4"=1'

SECTION A-A
SEE DRAWING 23392-00
SCALE 3"=1'



PRIMARY SHLETER - ELEVATION
SCALE 3/4"=1'

TOLAR — Tolar Manufacturing Company, Inc, 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: CANOPY EAVE WRAP F4			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 11 GA SH M	DWG NO.: 20876-00	REV. NO.:
SCALE: AS NOTED	DATE: 10/20/2014	DRAWN BY: cgarcia	

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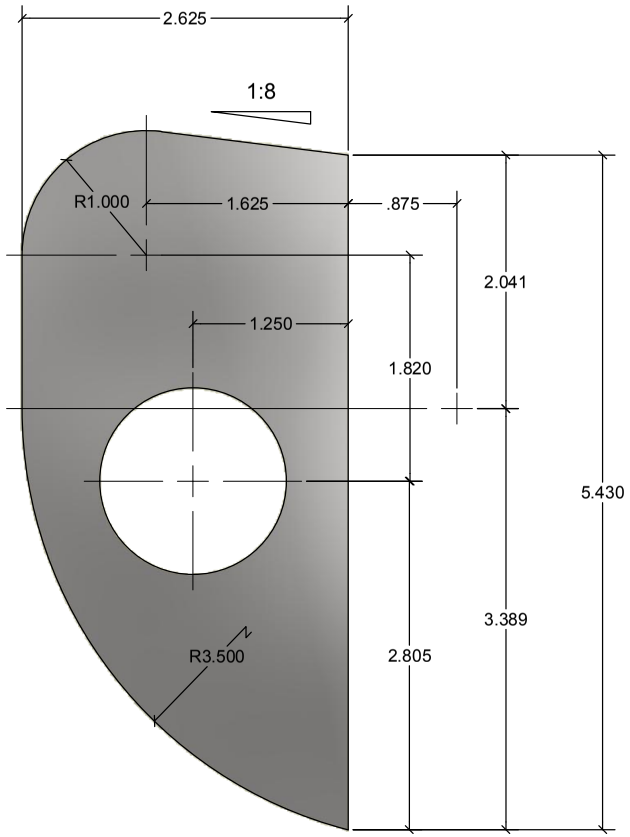
Shelter Front Eave



11 GA EAVE STIFFENER - ELEVATION
SEE DRAWING 20784-01
SCALE 1 : 1

TOLAR — Tolar Manufacturing Company, Inc, 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: 11 GA STIFFENER			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 11 GA SH M	DWG NO.: 20874-00	REV. NO.:
SCALE: AS NOTED	DATE: 10/22/2014	DRAWN BY: cgarcia	

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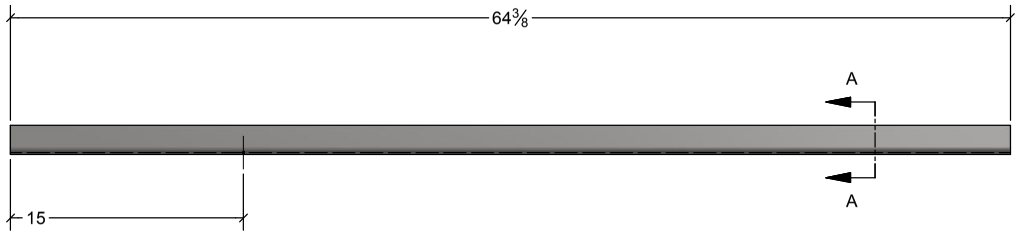
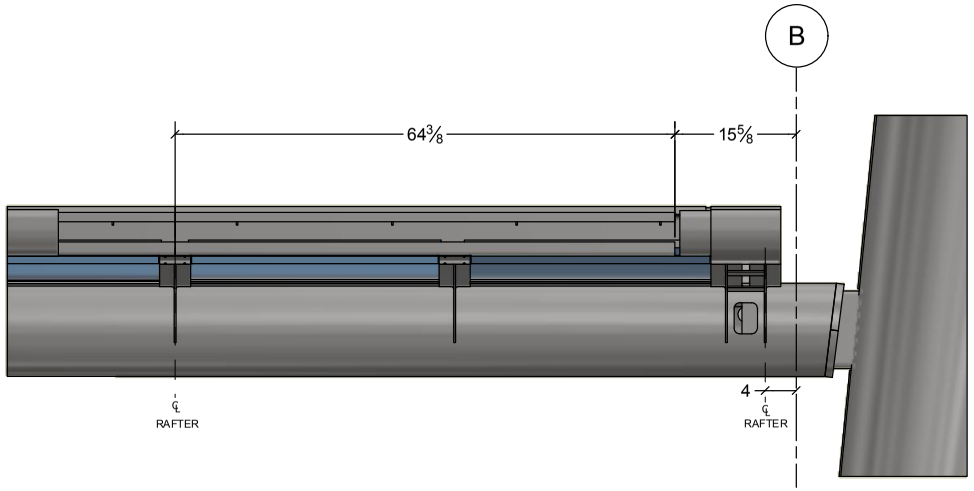
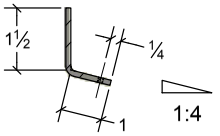
Shelter Front Eave



CONTINOUS BENT PLATE - FRONT ELEVATION
SCALE 1 1/2"=1'



PRIMARY SHELTER - FRONT ELEVATION
SCALE 3/4"=1'



SECTION A-A
SEE DRAWING 23393-00
SCALE 4"=1'

TOLAR — Tolar Manufacturing Company, Inc, 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: CONTINOUS PLATE F4			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 11 GA SH M	DWG NO.: 20880-00	REV. NO.:
SCALE: AS NOTED	DATE: 10/20/2014	DRAWN BY: cgarcia	

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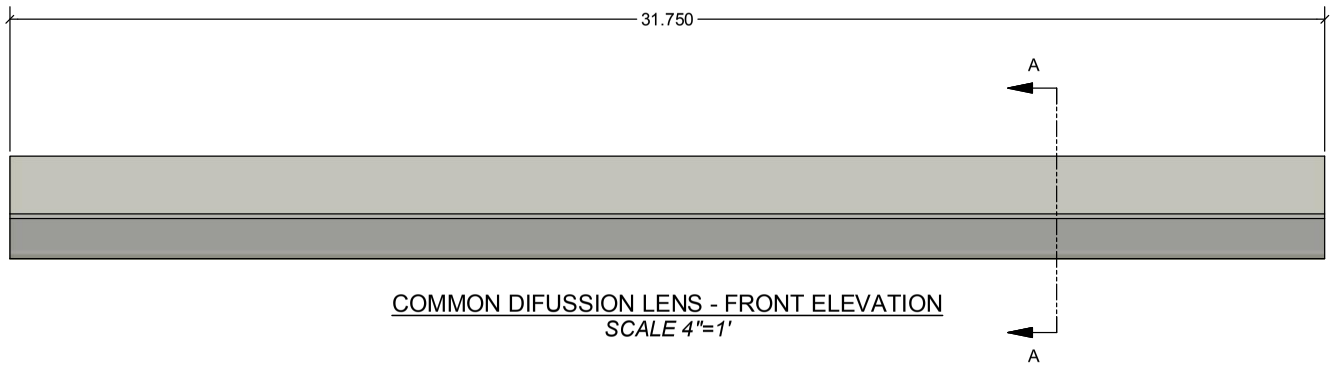
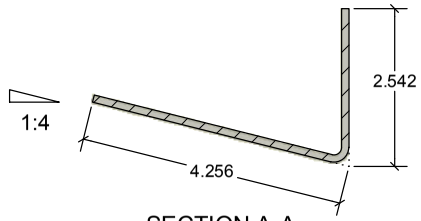
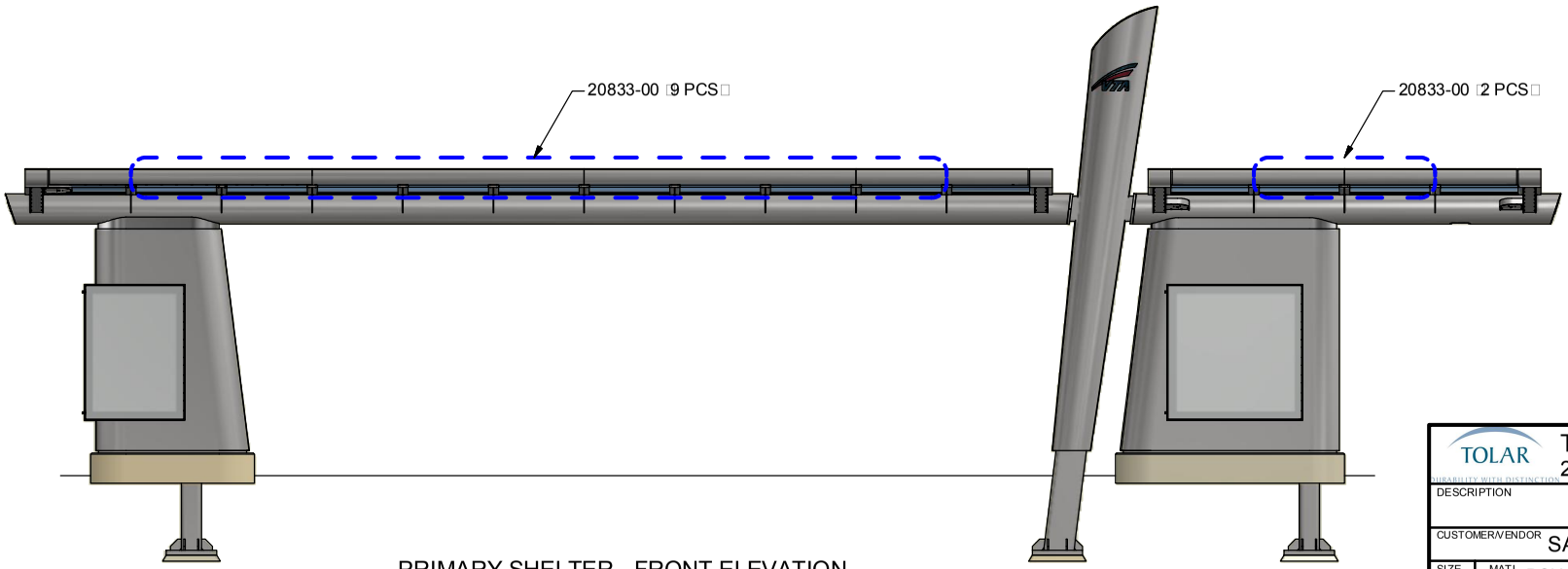
Shelter Front Eave



COMMON DIFUSSION LENS - FRONT ELEVATION
SCALE 4"=1'



SECTION A-A
SEE DRAWING 23394-00
SCALE 6"=1'



PRIMARY SHELTER - FRONT ELEVATION
SCALE 1/4"=1'

TOLAR
PERFECTION WITH DISTINCTION

Tolar Manufacturing Company, Inc
258 Mariah Circle, Corona CA. 92879

DESCRIPTION: DIFUSSION LENS [COMMON]			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: POLYCARBONATE 0.118"	DWG NO.: 20883-00	REV. NO.
SCALE: AS NOTED	DATE: 10/20/2014	DRAWN BY: cgarcia	

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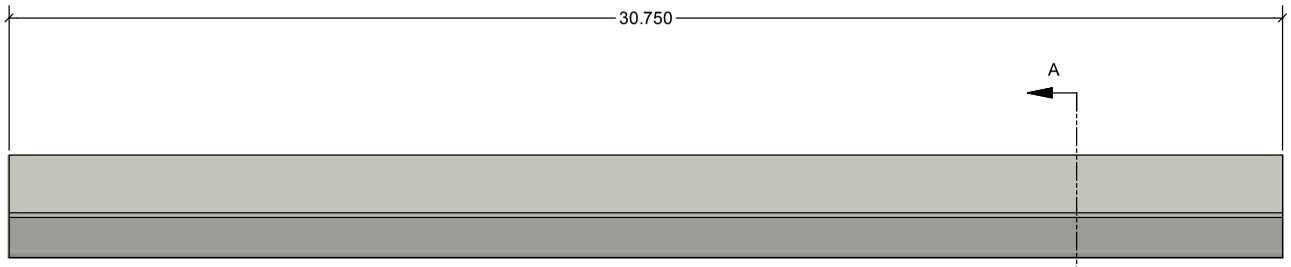
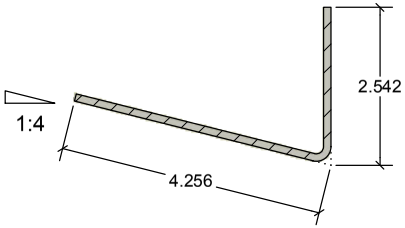
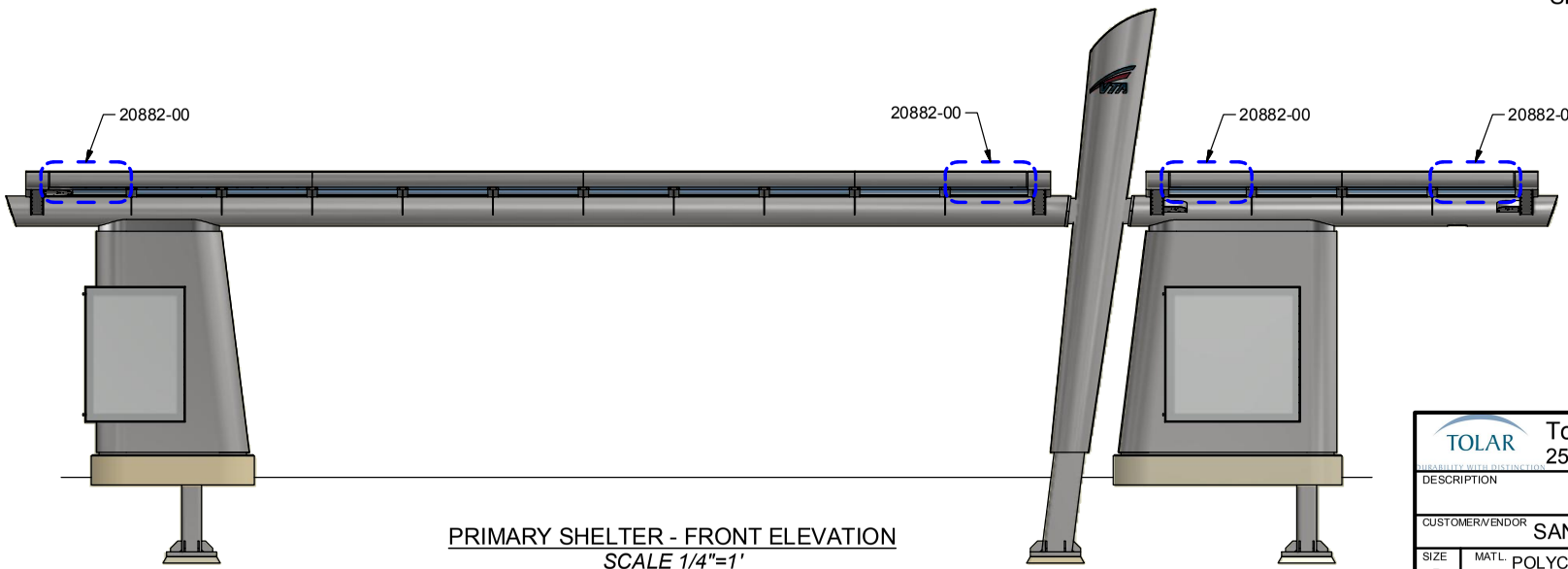
Shelter Front Eave



SIDE DIFFUSION LENS - FRONT ELEVATION
SCALE 4"=1'



SECTION A-A
SEE DRAWING 23394-00
SCALE 6"=1'



PRIMARY SHELTER - FRONT ELEVATION
SCALE 1/4"=1'

TOLAR — Tolar Manufacturing Company, Inc, 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: DIFFUSION LENS [SIDE]			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: POLYCARBONATE - 0.118"	DWG NO.: 20882-00	REV. NO.:
SCALE: AS NOTED	DATE: 10/20/2014	DRAWN BY: cgarcia	

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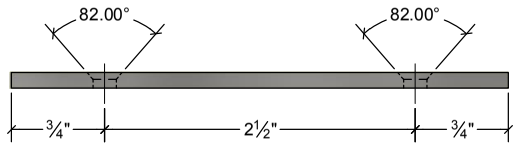
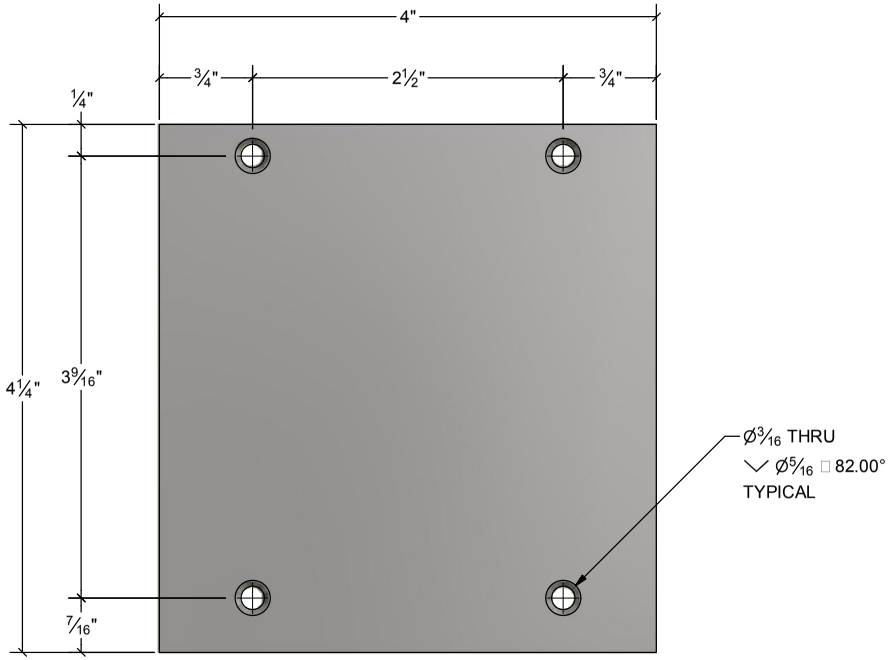
Shelter Front Eave



ELEVATION
SCALE 1 : 1



EAVE ACCESS COVER - PLAN VIEW
SCALE 1 : 1

TOLAR — PERFORMANCE WITH DISTINCTION	Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879
DESCRIPTION	EAVE ACCESS COVER
CUSTOMER/VENDOR	SANTA CLARA - VTA
SHEET NO.	1 OF 1
SIZE	B
MATL.	SS 316L - 11 GA SH M
DWG NO.	20884-00
REV. NO.	
SCALE	AS NOTED
DATE	10/22/2014
DRAWN BY:	cgarcia

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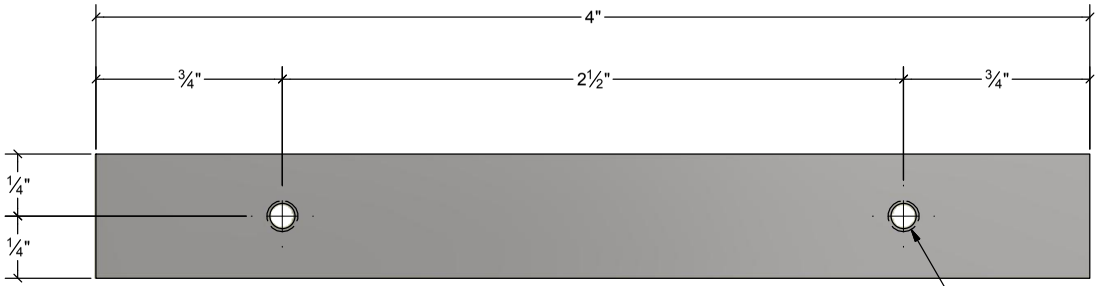
Shelter Front Eave



BENT BRACKET BOTTOM RETURN - PLAN VIEW
SCALE 2 : 1

Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: BENT BRACKET BOTT - RETURN			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 3/16" THK PL	DWG NO.: 23391-00	REV. NO.:
SCALE: AS NOTED	DATE: 10/22/2014	DRAWN BY: cgarcia	

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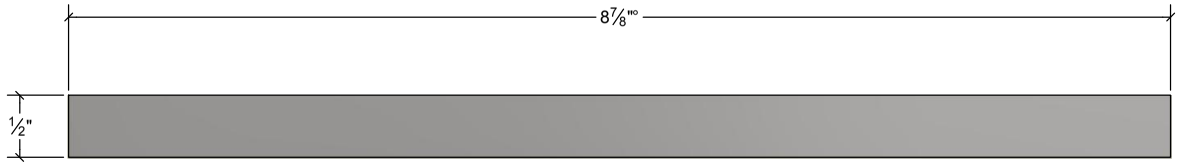
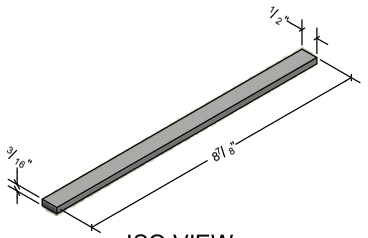
Shelter Front Eave



BOTTOM BENT BRACKET RETURN - PLAN VIEW
SCALE 1 : 1



ISO VIEW
SCALE 4"=1'

Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: BENT BRACKET BOTT - RETURN			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 3/16" THK PL	DWG NO.: 23390-00	REV. NO.:
SCALE: AS NOTED	DATE: 10/22/2014	DRAWN BY: cgarcia	

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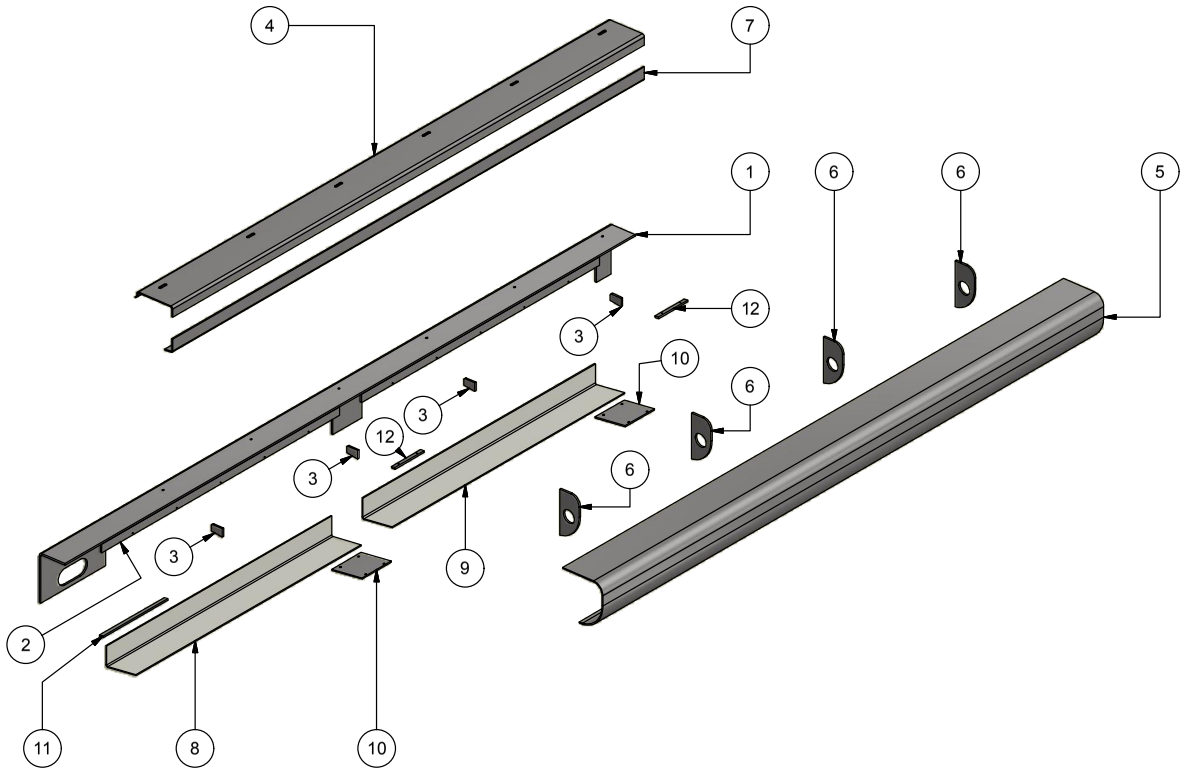
Shelter Front Eave



EAVE ASSEMBLY F5 - COMPONENTS
SCALE 1"=1'

PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	20864-00	BENT NOTCHED BRACKET F5
2	2	20861-00	ATTMNT TAB DIFF LENS
3	4	20858-00	FRONT EAVE SMALL STIFFENER
4	1	20871-00	SLOTTED EAVE TOP CVR F5-F6
5	1	20877-00	CANOPY EAVE WRAP F5 - F6
6	4	20874-00	11 GA STIFFENER
7	1	20881-00	CONTINOUS BENT PLATE F5 - F6
8	1	20882-00	DIFFUSION LENS SIDE
9	1	20883-00	DIFUSSION LENS COMMON
10	2	20884-00	EAVE ACCESS COVER
11	1	23390-00	BENT BRACKET BOTT - RETURN
12	2	23391-00	BENT BRACKET BOTT - RETURN

TOLAR
NUMBER ONE WITH DISTINCTION

Tolar Manufacturing Company, Inc
258 Mariah Circle, Corona CA. 92879

DESCRIPTION: EAVE ASSEMBLY F5			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - MISC	DWG NO.: 20865-00	REV. NO.
SCALE: AS NOTED	DATE: 10/22/2014	DRAWN BY: cgarcia	

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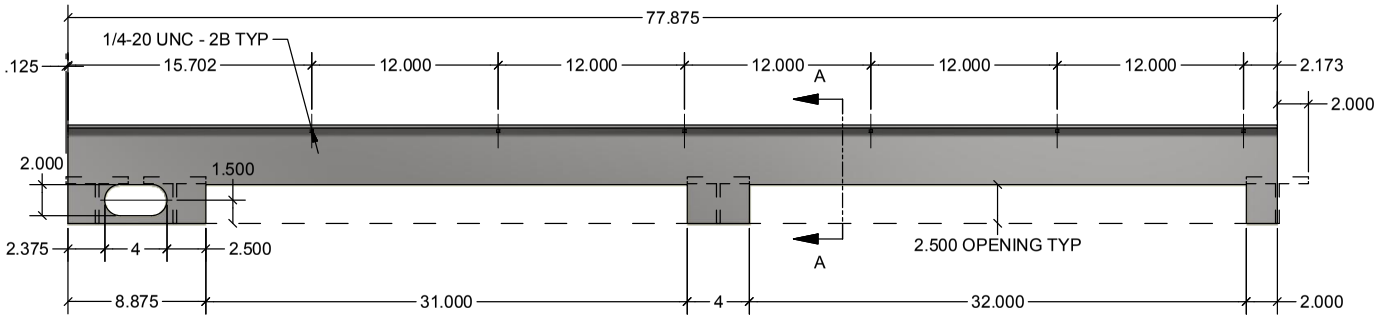
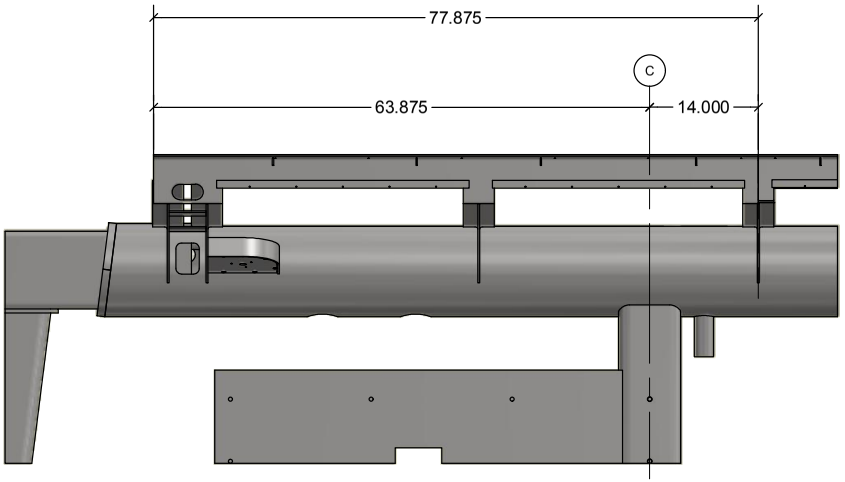
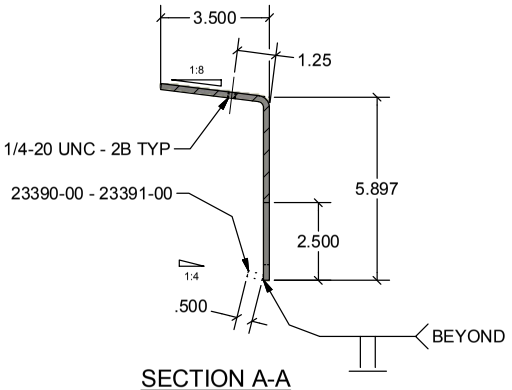
Shelter Front Eave



FRONT EAVE BRACKET - FRONT ELEVATION
SCALE 1 1/2"=1'



PRIMARY SHELTER - FRONT ELEVATION
SCALE 3/4"=1'



SECTION A-A
SEE DRAWING 23390-00
SCALE 3"=1'

TOLAR — Tolar Manufacturing Company, Inc, 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: BENT □ NOTCHED BRACKET F5			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 3/16" PL	DWG NO.: 20864-00	REV. NO.:
SCALE: AS NOTED	DATE: 10/17/2014	DRAWN BY: cgarcia	

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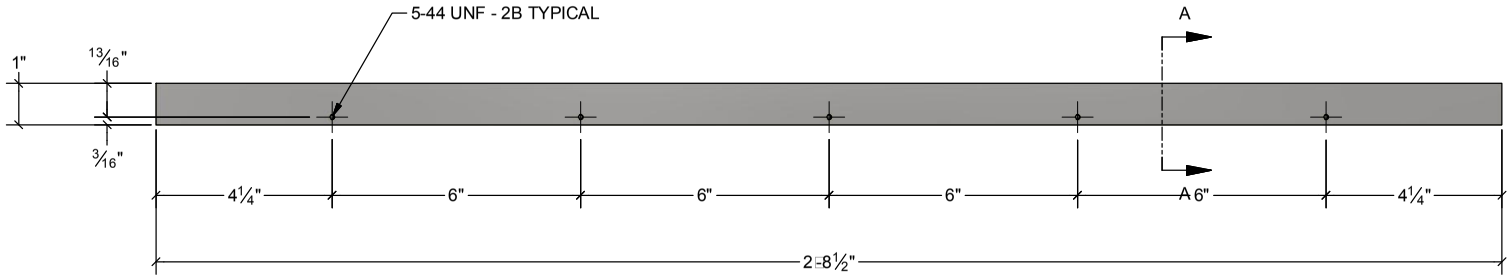
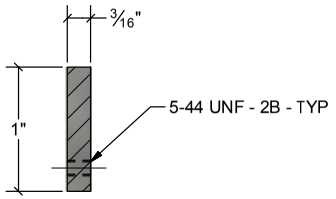
Shelter Front Eave



DIFFUSION LENS ATTACHMENT TAB - FRONT ELEVATION
SCALE 4"=1'



SECTION A-A
SEE DRAWING 20858-00
SCALE 12"=1'

TOLAR — Tolar Manufacturing Company, Inc, 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: ATTMNT TAB DIFF LENS			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 2
SIZE: B	MATL.: SS 316L - 3/16" THK PL	DWG NO.: 20861-00	REV. NO.:
SCALE: AS NOTED	DATE: 10/21/2014	DRAWN BY: cgarcia	

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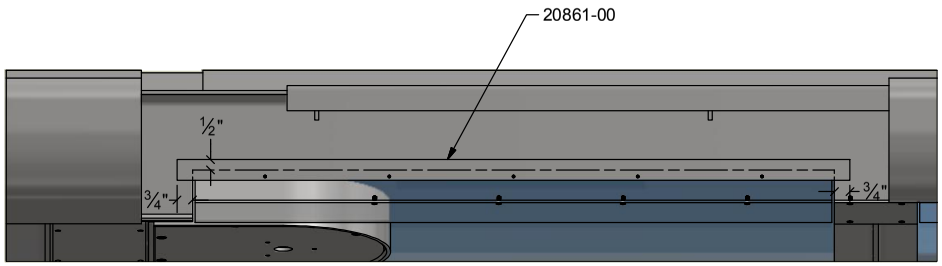
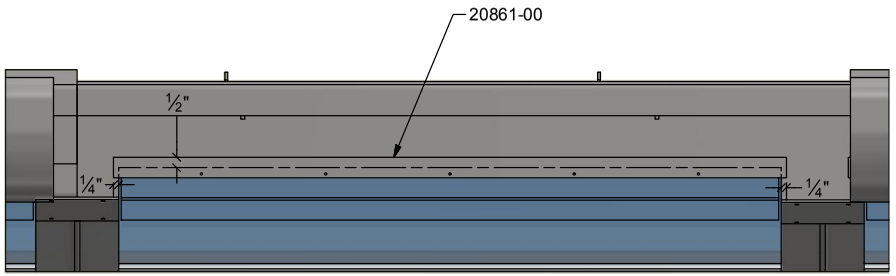
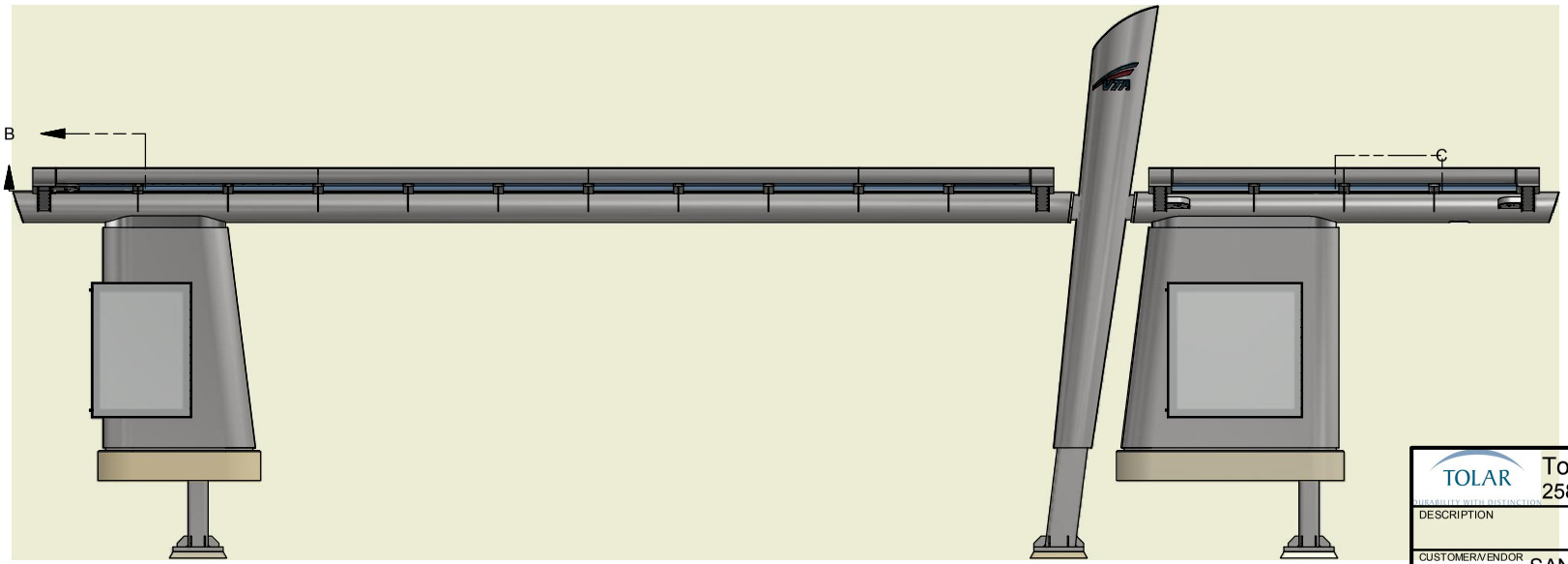
Shelter Front Eave



DETAIL B
OCCURS AT 4 SIDES
SCALE 2"=1'



DETAIL C
OCCURS AT 11 PLACES BETWEEN SIDES
SCALE 2"=1'



PRIMARY SHELTER - FRONT ELEVATION
SCALE 1/4"=1'

TOLAR	Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879
DESCRIPTION	ATTMNT TAB DIFF LENS
CUSTOMER/VENDOR	SANTA CLARA - VTA
SHEET NO.	2 OF 2
SIZE	B
MATL.	SS 316L - 3/16" PL
DWG NO.	20861-00
REV. NO.	
SCALE	AS NOTED
DATE	10/21/2014
DRAWN BY:	cgarcia

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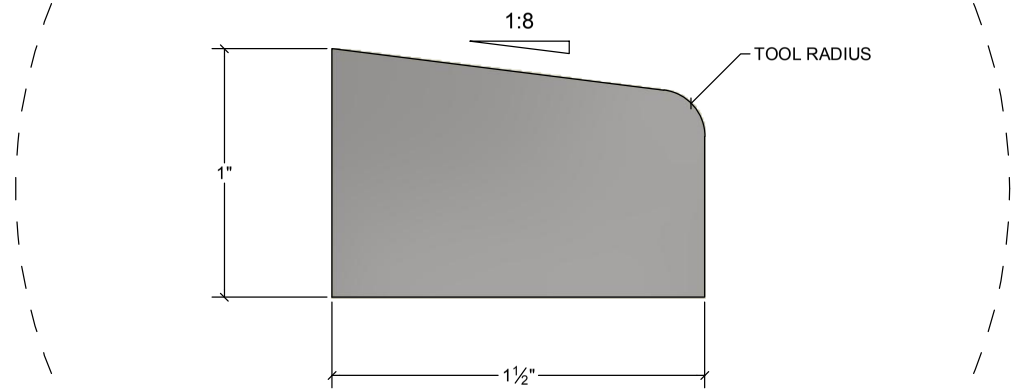
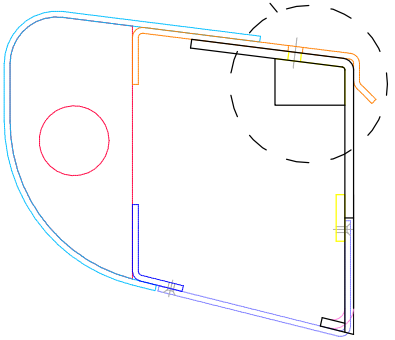
Shelter Front Eave



STIFFENER - FRONT ELEVATION
SCALE 2 : 1



FRONT EAVE - SECTION VIEW
SEE SKETCH

TOLAR — Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: FRONT EAVE SMALL STIFFENER			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 3/16" TH PL	DWG NO.: 20858-00	REV. NO.
SCALE: AS NOTED	DATE: 10/21/2014	DRAWN BY: cgarcia	

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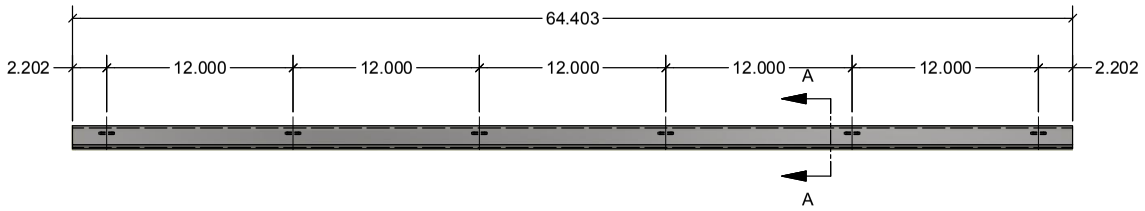
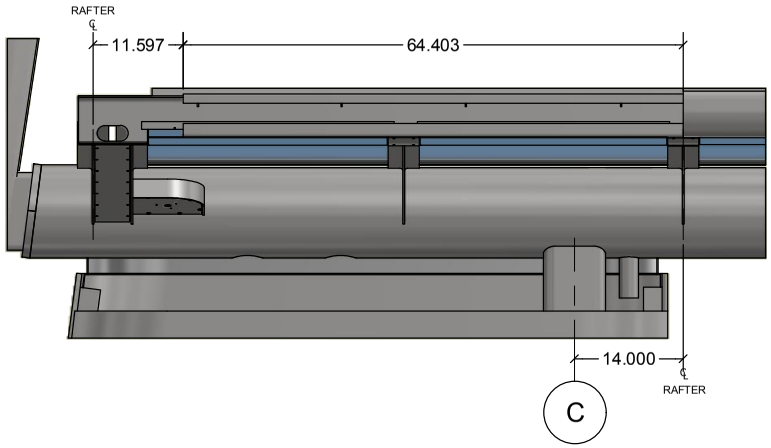
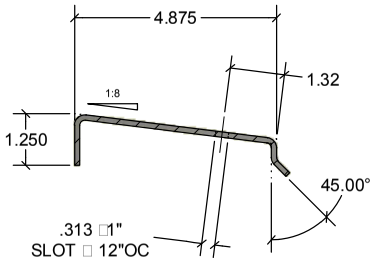
Shelter Front Eave



SLOTTED TOP COVER - FRONT ELEVATION
SCALE 1 1/2"=1'



PRIMARY SHELTER - FRONT ELEVATION
SCALE 3/4"=1'



SECTION A-A
SEE DRAWING 23391-00
SCALE 4"=1'

Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: SLOTTED EAVE TOP CVR F5-F6			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 2
SIZE: B	MATL.: SS 316L - 11 GA SH M	DWG NO.: 20871-00	REV. NO.:
SCALE: AS NOTED	DATE: 10/20/2014	DRAWN BY: cgarcia	

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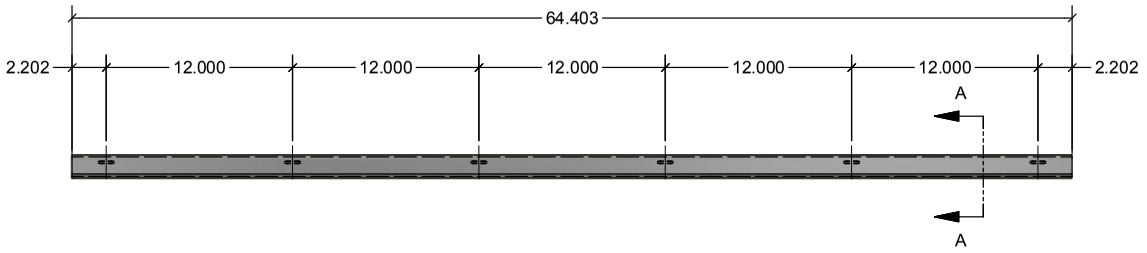
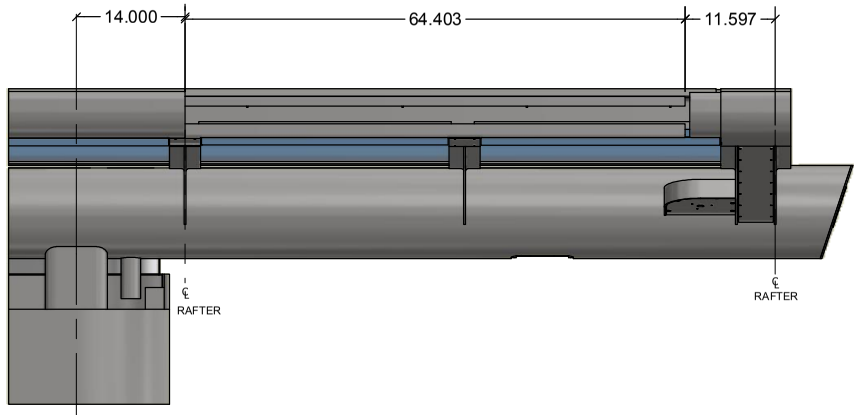
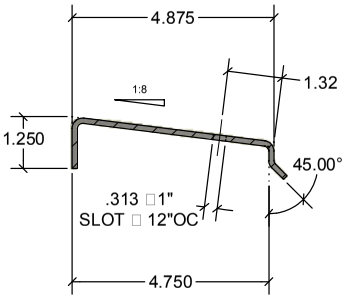
Shelter Front Eave



SLOTTED EAVE TOP COVER - FROTN ELEVATION
SCALE 1 1/2"=1'



PRIMARY SHELTER - FRONT ELEVATION
SCALE 3/4"=1'



SECTION A-A
SEE DRAWING 23391-00
SCALE 4"=1'

TOLAR — Tolar Manufacturing Company, Inc, 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: SLOTTED EAVE TOP CVR F5-F6			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 2 OF 2
SIZE: B	MATL.: SS 316L - 11 GA SH M	DWG NO.: 20871-00	REV. NO.:
SCALE: AS NOTED	DATE: 10/20/2014	DRAWN BY: cgarcia	

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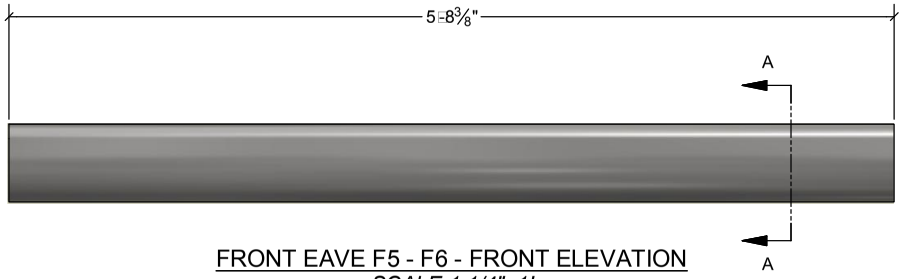
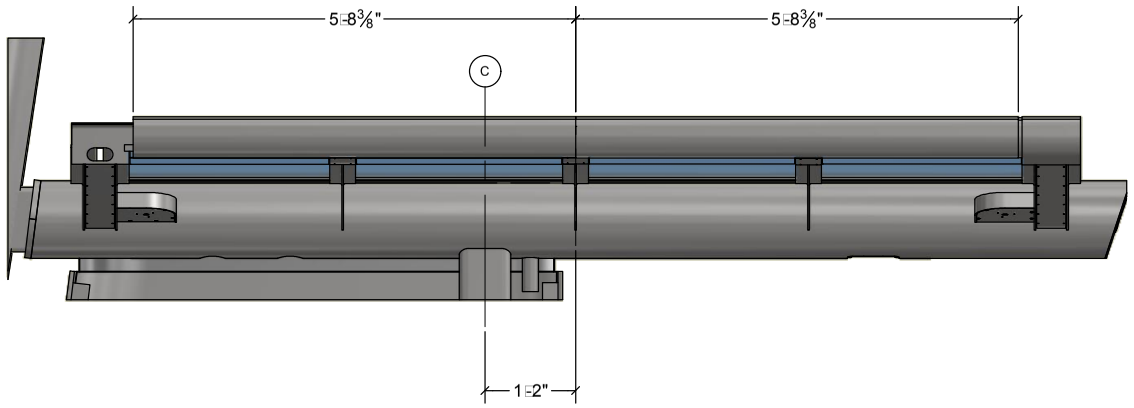
Shelter Front Eave



FRONT EAVE F5 - F6 - FRONT ELEVATION
SCALE 1 1/4"=1'



PRIMARY SHELTER - FRONT ELEVATION
SCALE 5/8"=1'

SECTION A-A
SEE DRAWING 23392-00
SCALE 3"=1'

TOLAR — Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: CANOPY EAVE WRAP F5 - F6			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 11 GA SH M	DWG NO.: 20877-00	REV. NO.:
SCALE: AS NOTED	DATE: 10/20/2014	DRAWN BY: cgarcia	

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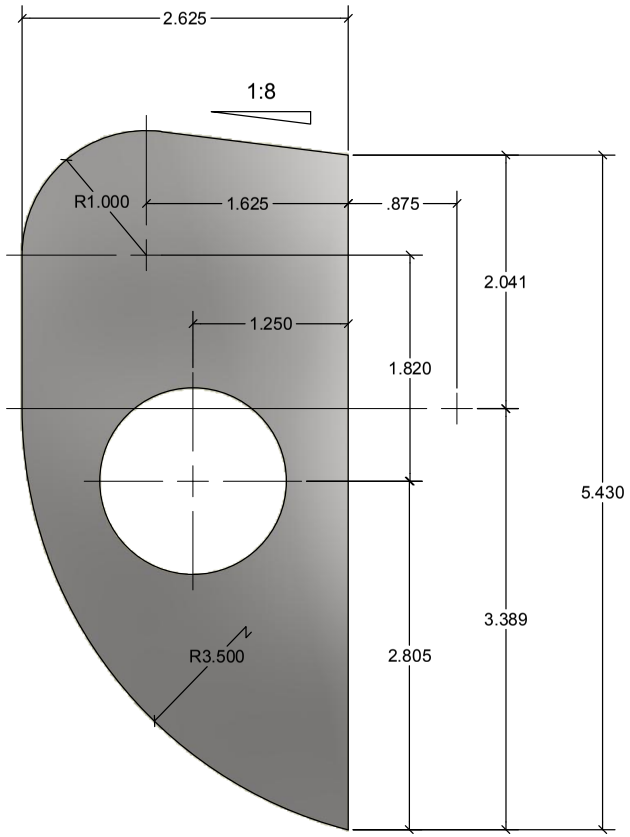
Shelter Front Eave



11 GA EAVE STIFFENER - ELEVATION
SEE DRAWING 20784-01
SCALE 1 : 1

TOLAR — Tolar Manufacturing Company, Inc, 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: 11 GA STIFFENER			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 11 GA SH M	DWG NO.: 20874-00	REV. NO.:
SCALE: AS NOTED	DATE: 10/22/2014	DRAWN BY: cgarcia	

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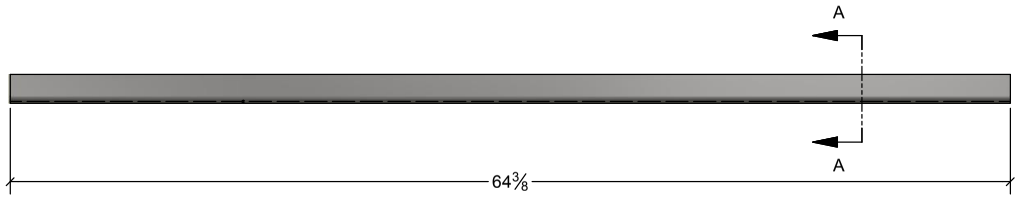
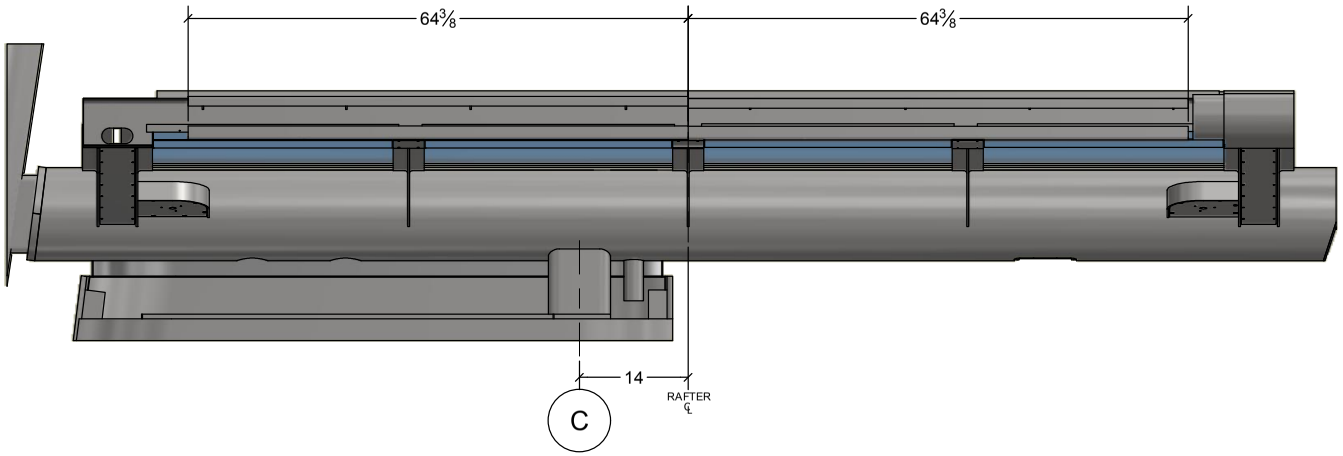
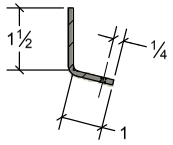
Shelter Front Eave



CONTINOUS BENT PLATE - FRONT ELEVATION
SCALE 1 1/2"=1'



PRIMARY SHELTER - FRONT ELEVATION
SCALE 3/4"=1'



SECTION A-A
SEE DRAWING 23393-00
SCALE 4"=1'

TOLAR — Tolar Manufacturing Company, Inc, 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: CONTINOUS BENT PLATE F5 - F6			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 11 GA SH M	DWG NO.: 20881-00	REV. NO.:
SCALE: AS NOTED	DATE: 10/20/2014	DRAWN BY: cgarcia	

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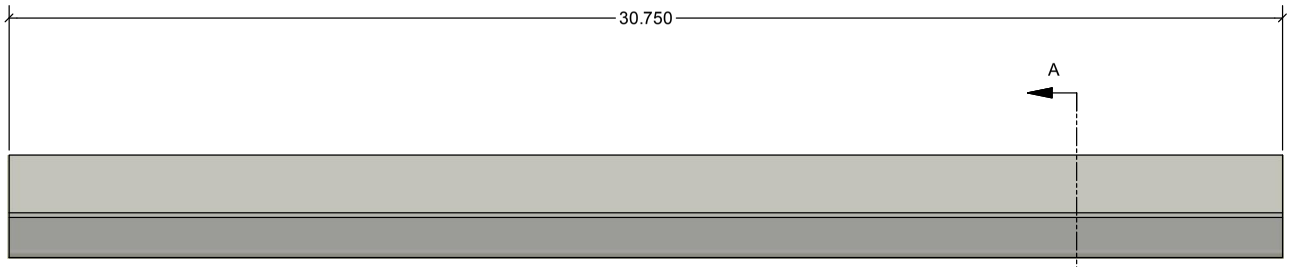
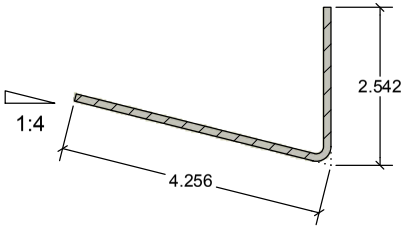
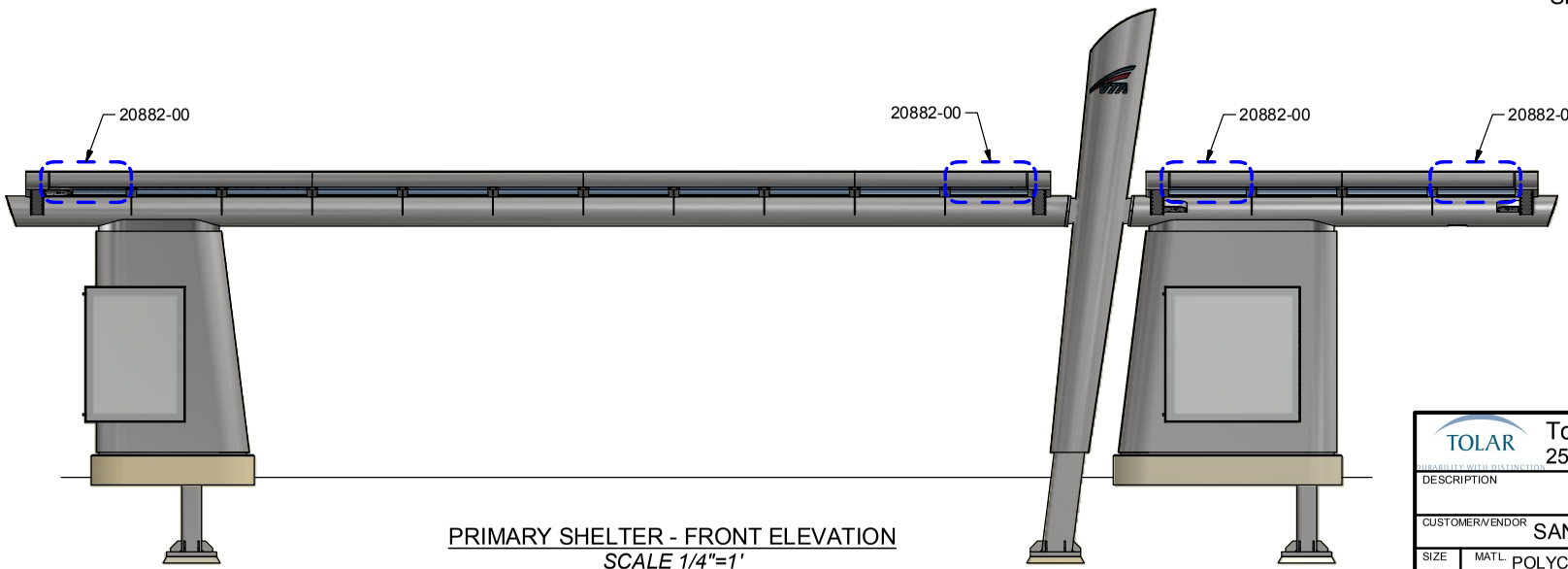
Shelter Front Eave



SIDE DIFFUSION LENS - FRONT ELEVATION
SCALE 4"=1'



SECTION A-A
SEE DRAWING 23394-00
SCALE 6"=1'



PRIMARY SHELTER - FRONT ELEVATION
SCALE 1/4"=1'

TOLAR — Tolar Manufacturing Company, Inc, 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: DIFFUSION LENS [SIDE]			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: POLYCARBONATE - 0.118"	DWG NO.: 20882-00	REV. NO.:
SCALE: AS NOTED	DATE: 10/20/2014	DRAWN BY: cgarcia	

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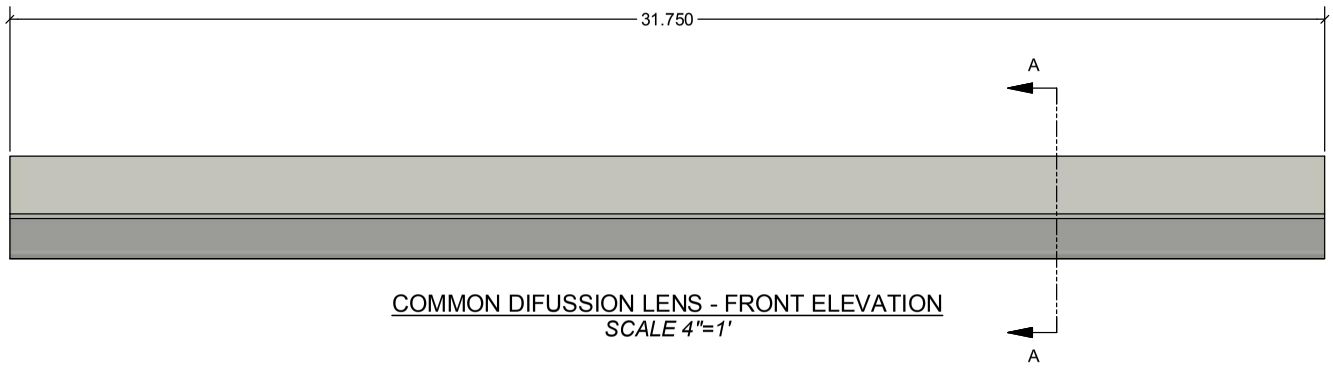
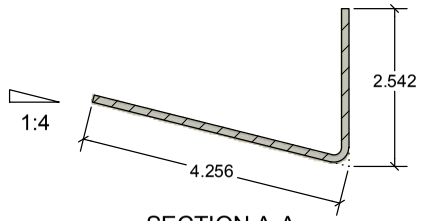
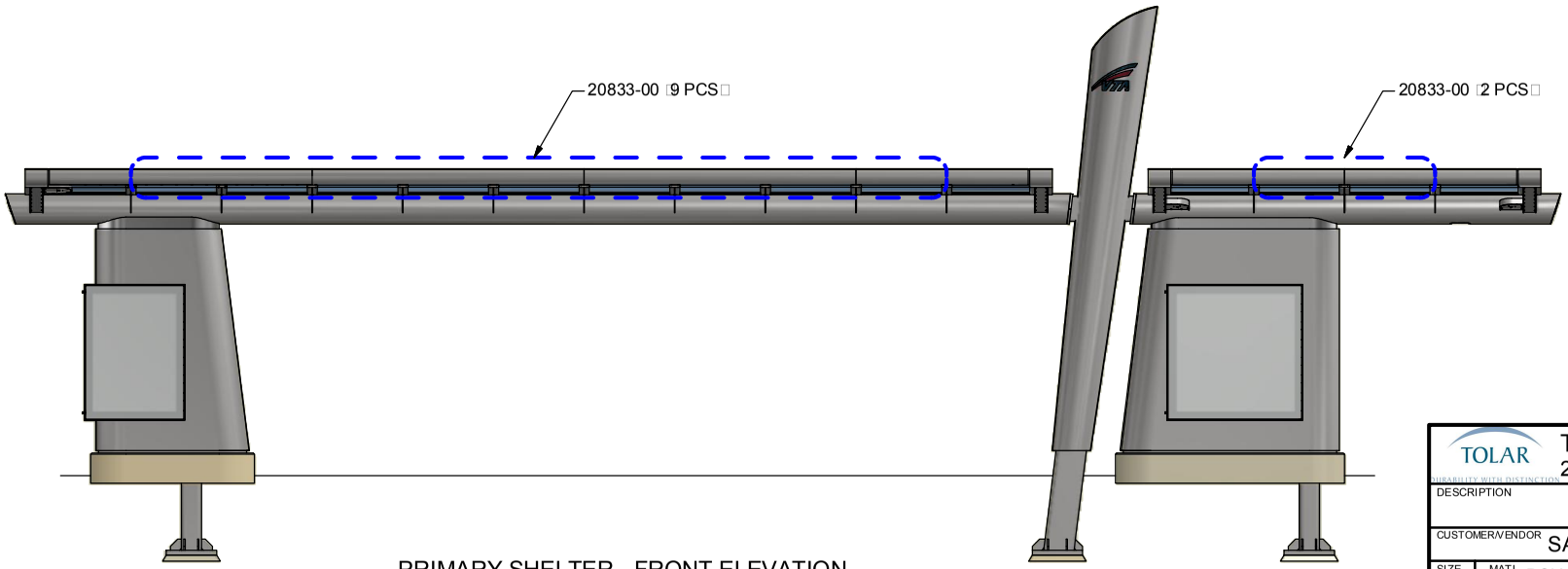
Shelter Front Eave



COMMON DIFUSSION LENS - FRONT ELEVATION
SCALE 4"=1'



SECTION A-A
SEE DRAWING 23394-00
SCALE 6"=1'



PRIMARY SHELTER - FRONT ELEVATION
SCALE 1/4"=1'

TOLAR
PERFECTION WITH DISTINCTION

Tolar Manufacturing Company, Inc
258 Mariah Circle, Corona CA. 92879

DESCRIPTION: DIFUSSION LENS [COMMON]			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: POLYCARBONATE 0.118"	DWG NO.: 20883-00	REV. NO.
SCALE: AS NOTED	DATE: 10/20/2014	DRAWN BY: cgarcia	

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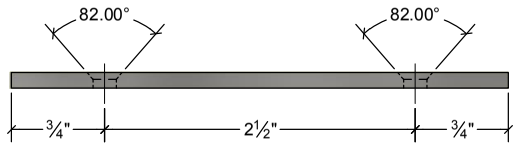
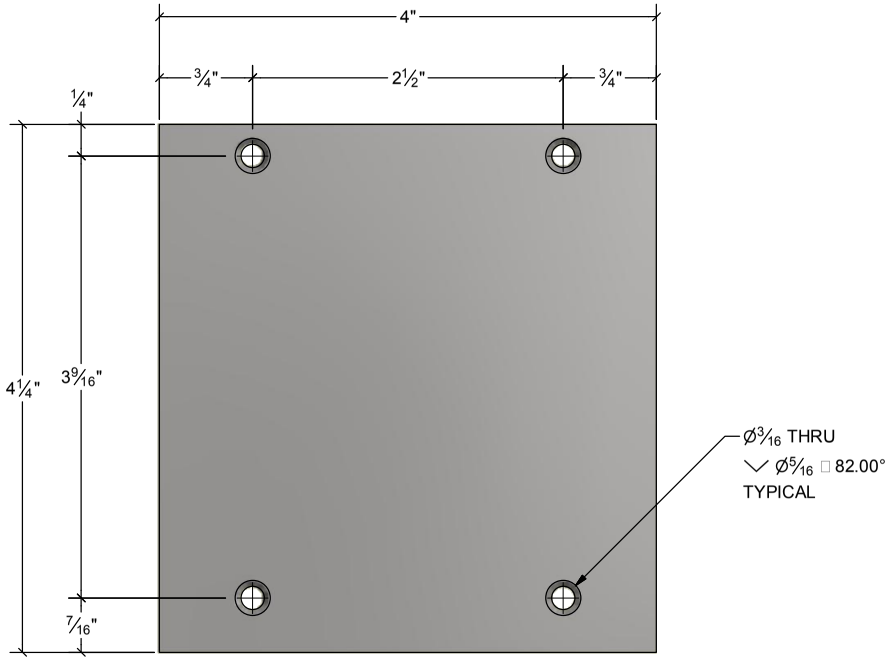
Shelter Front Eave



ELEVATION
SCALE 1 : 1



EAVE ACCESS COVER - PLAN VIEW
SCALE 1 : 1

TOLAR — PERFORMANCE WITH DISTINCTION	Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879
DESCRIPTION	EAVE ACCESS COVER
CUSTOMER/VENDOR	SANTA CLARA - VTA
SHEET NO.	1 OF 1
SIZE	B
MATL.	SS 316L - 11 GA SH M
DWG NO.	20884-00
REV. NO.	
SCALE	AS NOTED
DATE	10/22/2014
DRAWN BY:	cgarcia

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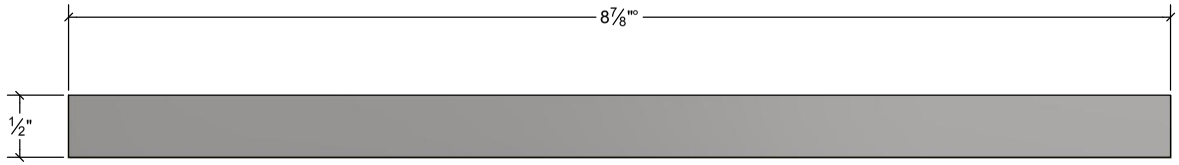
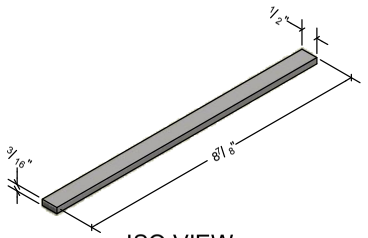
Shelter Front Eave



BOTTOM BENT BRACKET RETURN - PLAN VIEW
SCALE 1 : 1



ISO VIEW
SCALE 4"=1'

Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: BENT BRACKET BOTT - RETURN			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 3/16" THK PL	DWG NO.: 23390-00	REV. NO.:
SCALE: AS NOTED	DATE: 10/22/2014	DRAWN BY: cgarcia	

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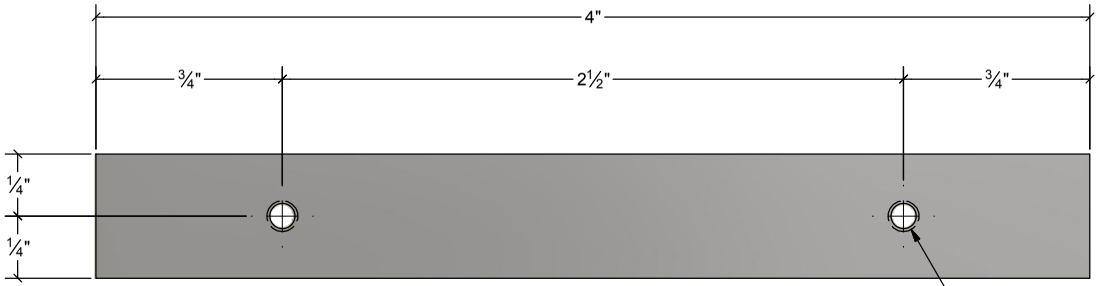
Shelter Front Eave



BENT BRACKET BOTTOM RETURN - PLAN VIEW
SCALE 2 : 1

Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: BENT BRACKET BOTT - RETURN			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 3/16" THK PL	DWG NO.: 23391-00	REV. NO.:
SCALE: AS NOTED	DATE: 10/22/2014	DRAWN BY: cgarcia	

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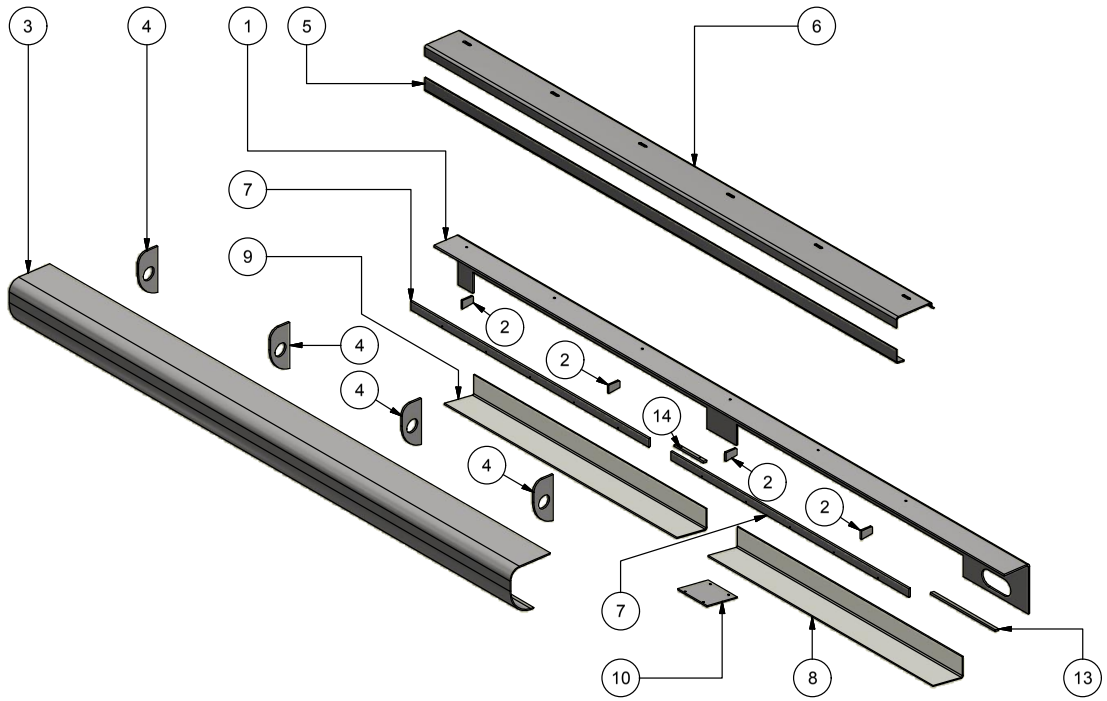
Shelter Front Eave



EAVE ASSEMBLY F6 - COMPONENTS
SCALE 1"=1'

PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	20866-00	BENT AND NOTCHED BRACKET F6
2	4	20858-00	FRONT EAVE SMALL STIFFENER
3	1	20877-00	CANOPY EAVE WRAP F5 - F6
4	4	20874-00	11 GA STIFFENER
5	1	20881-00	CONTINOUS BENT PLATE F5 - F6
6	1	20871-00	SLOTTED EAVE TOP CVR F5-F6
7	2	20861-00	ATTMNT TAB DIFF LENS
8	1	20882-00	DIFFUSION LENS (SIDE)
9	1	20883-00	DIFUSSION LENS (COMMON)
10	1	20884-00	EAVE ACCESS COVER
11	1	21673-00	LF MOUNTING TAB
13	1	23390-00	BENT BRACKET BOTT - RETURN
14	1	23391-00	BENT BRACKET BOTT - RETURN

TOLAR
NURTURED WITH DISTINCTION

Tolar Manufacturing Company, Inc
258 Mariah Circle, Corona CA. 92879

DESCRIPTION: EAVE ASSEMBLY F6			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - MISC	DWG NO.: 20867-00	REV. NO.
SCALE: AS NOTED	DATE: 10/23/2014	DRAWN BY: cgarcia	

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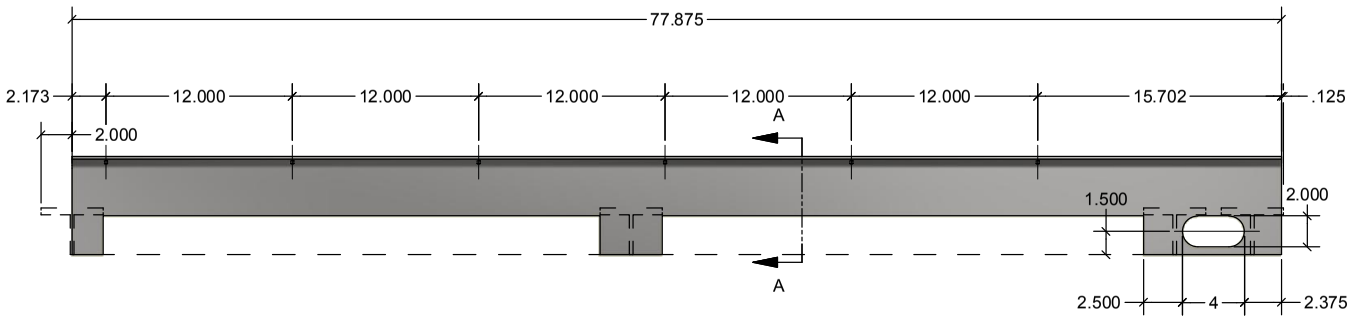
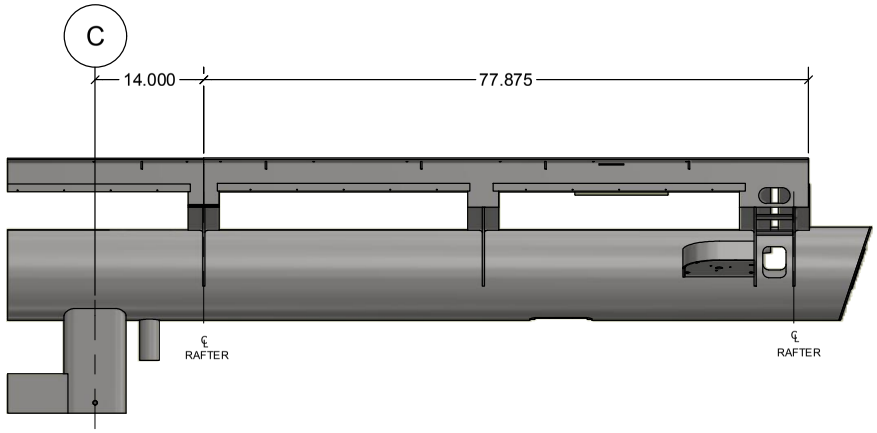
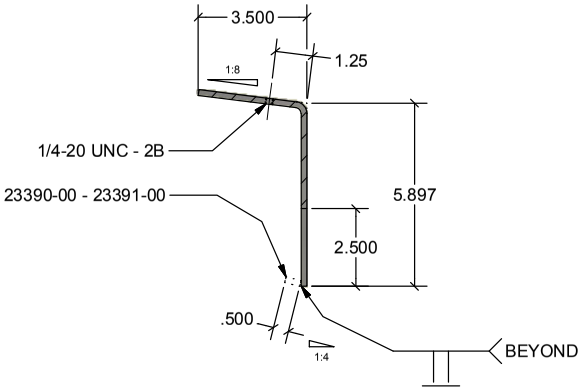
Shelter Front Eave



FRONT EAVE BRACKET - FRONT ELEVATION
SCALE 1 1/2"=1'



PRIMARY SHELTER - FRONT ELEVATION
SCALE 3/4"=1'



SECTION A-A
SEE DRAWING 23390-00
SCALE 3"=1'

TOLAR — Tolar Manufacturing Company, Inc, 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: BENT AND NOTCHED BRACKET F6			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 3/16" PL	DWG NO.: 20866-00	REV. NO.:
SCALE: AS NOTED	DATE: 10/17/2014	DRAWN BY: cgarcia	

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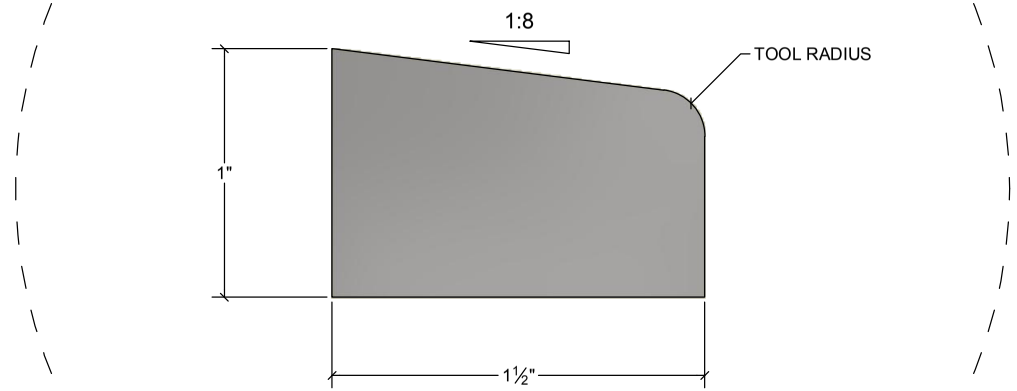
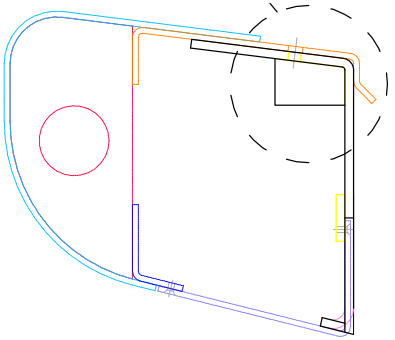
Shelter Front Eave



STIFFENER - FRONT ELEVATION
SCALE 2 : 1



FRONT EAVE - SECTION VIEW
SEE SKETCH

TOLAR — Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: FRONT EAVE SMALL STIFFENER			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 3/16" TH PL	DWG NO.: 20858-00	REV. NO.:
SCALE: AS NOTED	DATE: 10/21/2014	DRAWN BY: cgarcia	

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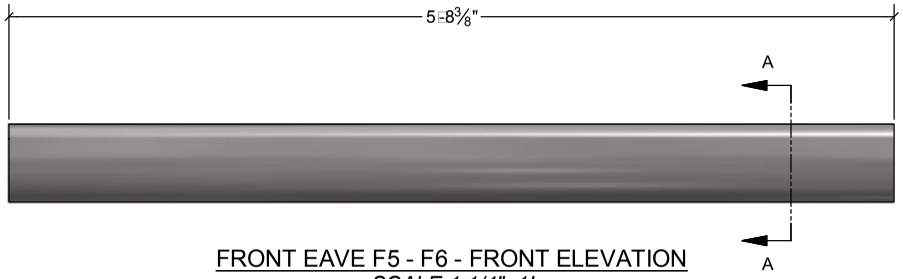
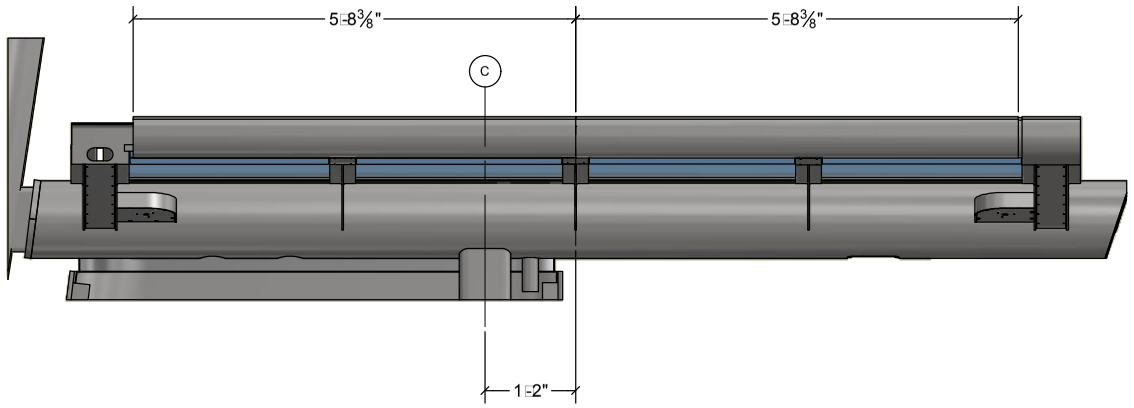
Shelter Front Eave



FRONT EAVE F5 - F6 - FRONT ELEVATION
SCALE 1 1/4"=1'



PRIMARY SHELTER - FRONT ELEVATION
SCALE 5/8"=1'

SECTION A-A
SEE DRAWING 23392-00
SCALE 3"=1'

TOLAR — Tolar Manufacturing Company, Inc, 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: CANOPY EAVE WRAP F5 - F6			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 11 GA SH M	DWG NO.: 20877-00	REV. NO.:
SCALE: AS NOTED	DATE: 10/20/2014	DRAWN BY: cgarcia	

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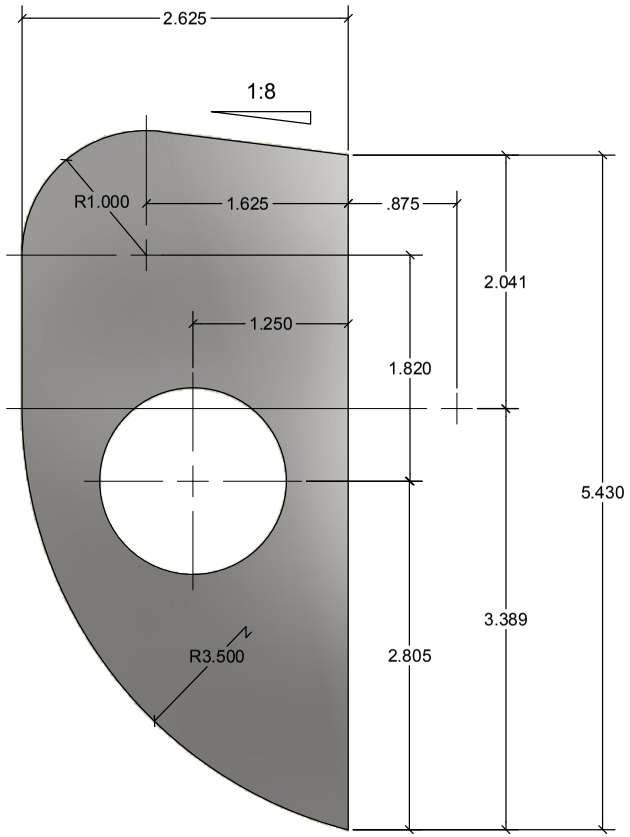
Shelter Front Eave



11 GA EAVE STIFFENER - ELEVATION
SEE DRAWING 20784-01
SCALE 1 : 1

TOLAR — Tolar Manufacturing Company, Inc, 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: 11 GA STIFFENER			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 11 GA SH M	DWG NO.: 20874-00	REV. NO.:
SCALE: AS NOTED	DATE: 10/22/2014	DRAWN BY: cgarcia	

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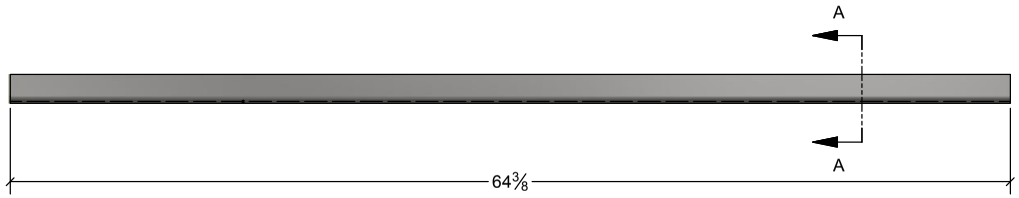
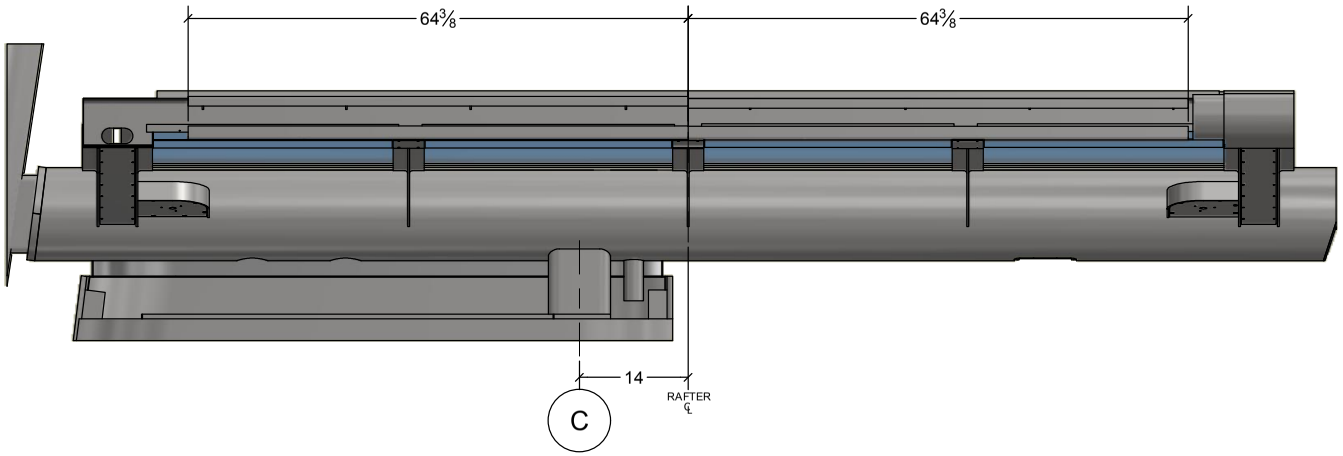
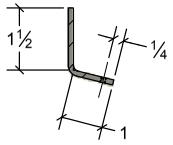
Shelter Front Eave



CONTINOUS BENT PLATE - FRONT ELEVATION
SCALE 1 1/2"=1'



PRIMARY SHELTER - FRONT ELEVATION
SCALE 3/4"=1'



SECTION A-A
SEE DRAWING 23393-00
SCALE 4"=1'

TOLAR — Tolar Manufacturing Company, Inc, 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: CONTINOUS BENT PLATE F5 - F6			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 11 GA SH M	DWG NO.: 20881-00	REV. NO.:
SCALE: AS NOTED	DATE: 10/20/2014	DRAWN BY: cgarcia	

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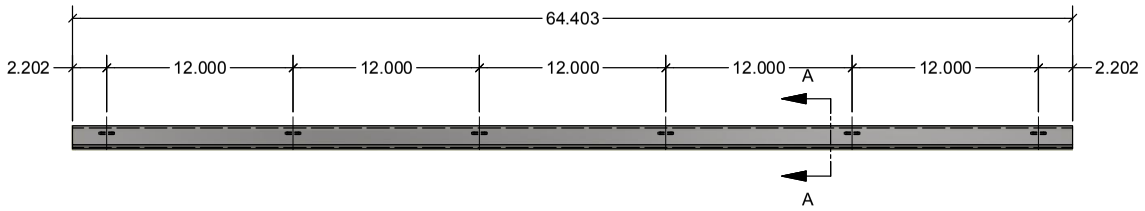
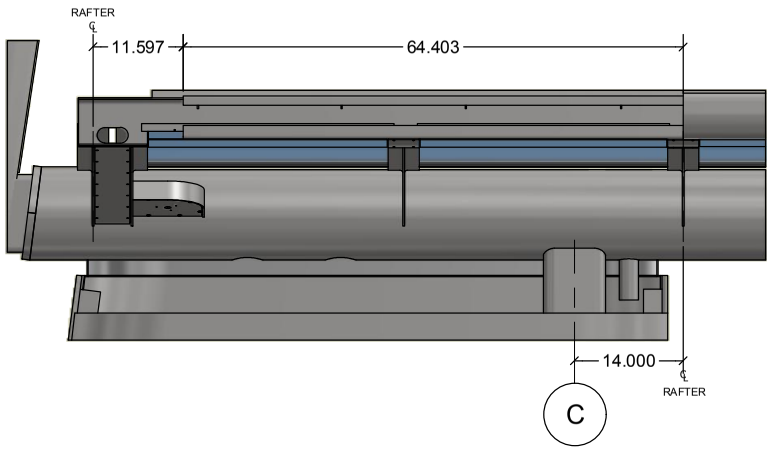
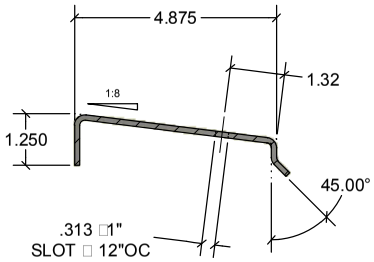
Shelter Front Eave



SLOTTED TOP COVER - FRONT ELEVATION
SCALE 1 1/2"=1'



PRIMARY SHELTER - FRONT ELEVATION
SCALE 3/4"=1'



SECTION A-A
SEE DRAWING 23391-00
SCALE 4"=1'

Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: SLOTTED EAVE TOP CVR F5-F6			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 2
SIZE: B	MATL.: SS 316L - 11 GA SH M	DWG NO.: 20871-00	REV. NO.:
SCALE: AS NOTED	DATE: 10/20/2014	DRAWN BY: cgarcia	

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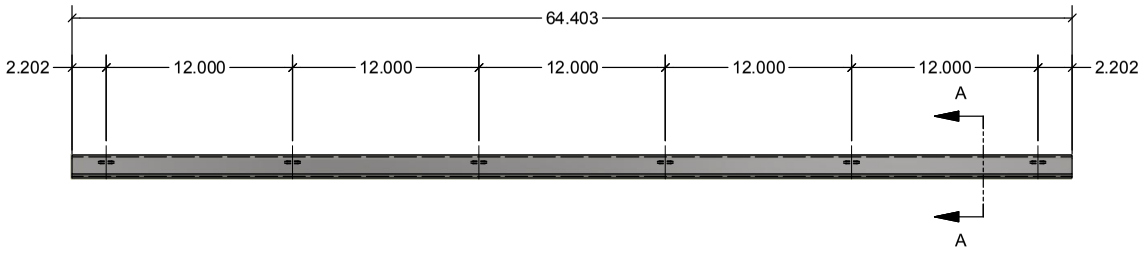
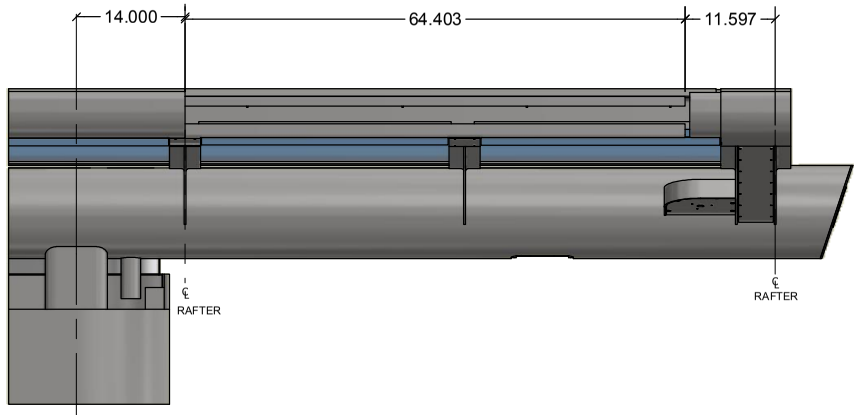
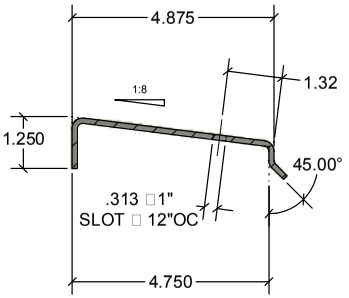
Shelter Front Eave



SLOTTED EAVE TOP COVER - FROTN ELEVATION
SCALE 1 1/2"=1'



PRIMARY SHELTER - FRONT ELEVATION
SCALE 3/4"=1'



SECTION A-A
SEE DRAWING 23391-00
SCALE 4"=1'

TOLAR — Tolar Manufacturing Company, Inc, 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: SLOTTED EAVE TOP CVR F5-F6			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 2 OF 2
SIZE: B	MATL.: SS 316L - 11 GA SH M	DWG NO.: 20871-00	REV. NO.:
SCALE: AS NOTED	DATE: 10/20/2014	DRAWN BY: cgarcia	

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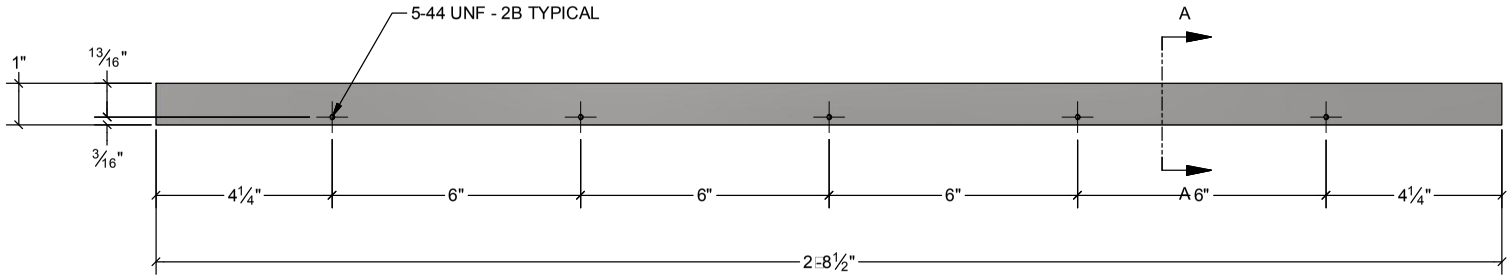
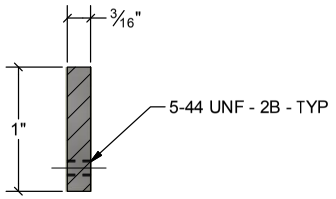
Shelter Front Eave



DIFFUSION LENS ATTACHMENT TAB - FRONT ELEVATION
SCALE 4"=1'



SECTION A-A
SEE DRAWING 20858-00
SCALE 12"=1'

Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: ATTMNT TAB DIFF LENS			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 2
SIZE: B	MATL.: SS 316L - 3/16" THK PL	DWG NO.: 20861-00	REV. NO.:
SCALE: AS NOTED	DATE: 10/21/2014	DRAWN BY: cgarcia	

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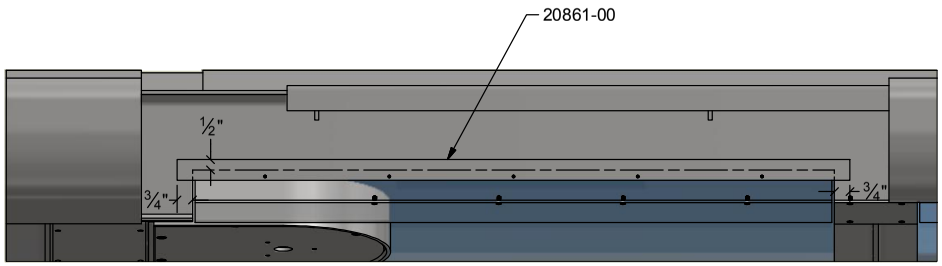
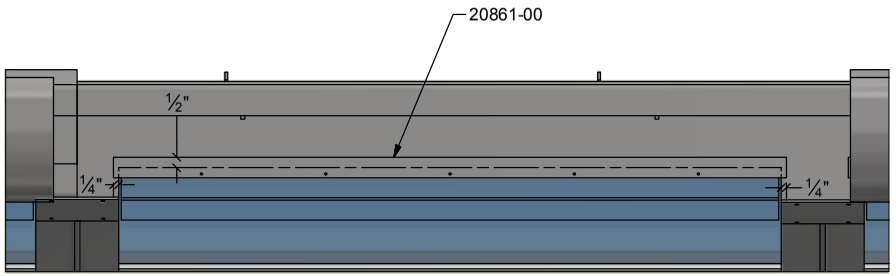
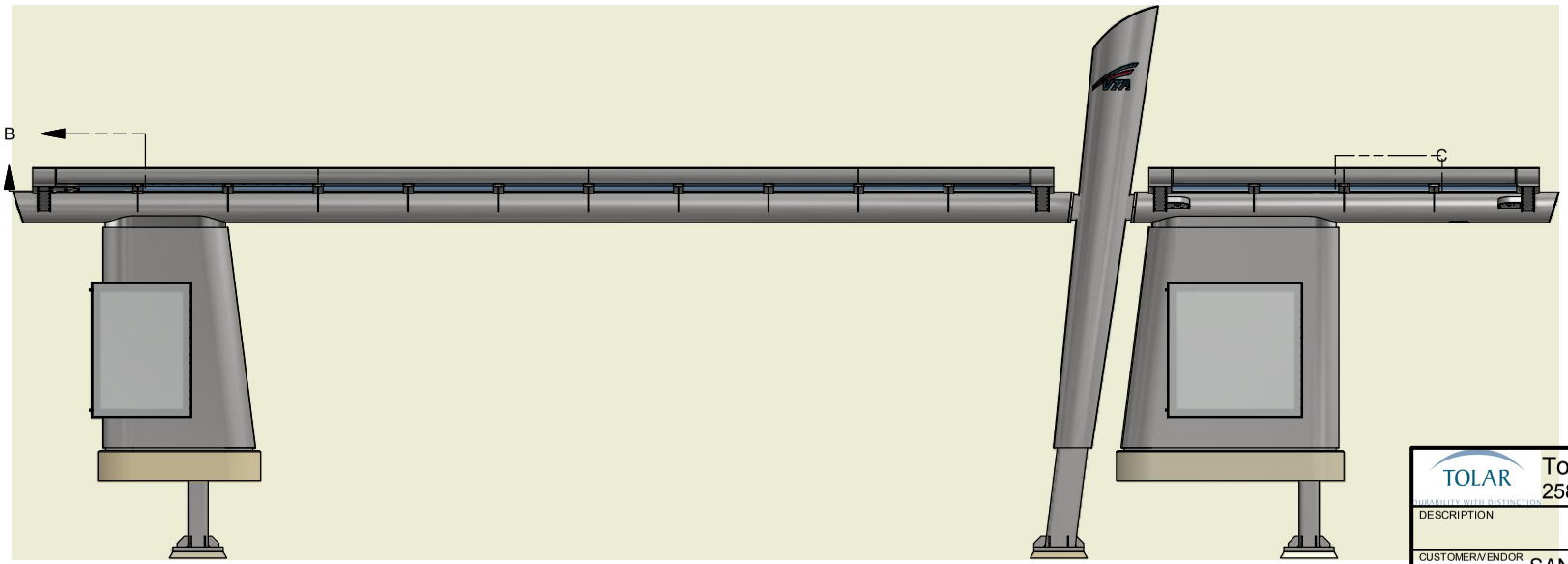
Shelter Front Eave



DETAIL B
OCCURS AT 4 SIDES
SCALE 2"=1'



DETAIL C
OCCURS AT 11 PLACES BETWEEN SIDES
SCALE 2"=1'



PRIMARY SHELTER - FRONT ELEVATION
SCALE 1/4"=1'

TOLAR	Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879
DESCRIPTION	ATTMNT TAB DIFF LENS
CUSTOMER/VENDOR	SANTA CLARA - VTA
SHEET NO.	2 OF 2
SIZE	B
MATL.	SS 316L - 3/16" PL
DWG NO.	20861-00
REV. NO.	
SCALE	AS NOTED
DATE	10/21/2014
DRAWN BY:	cgarcia

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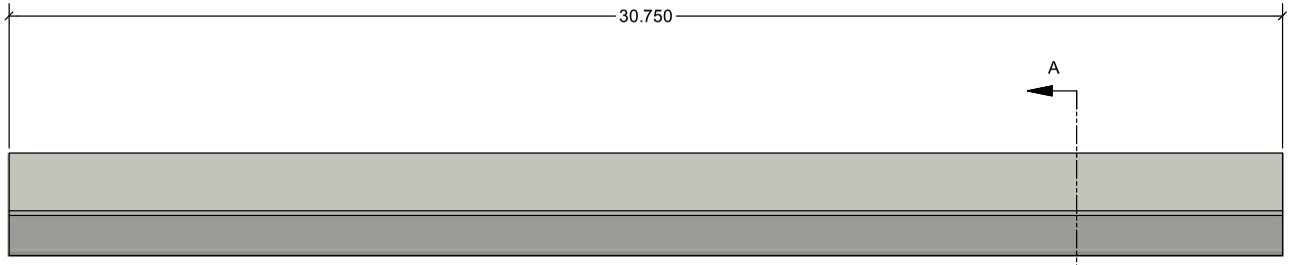
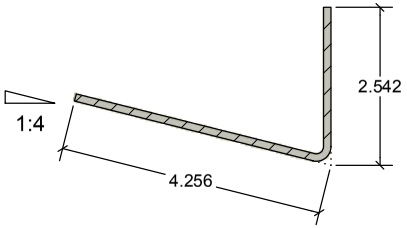
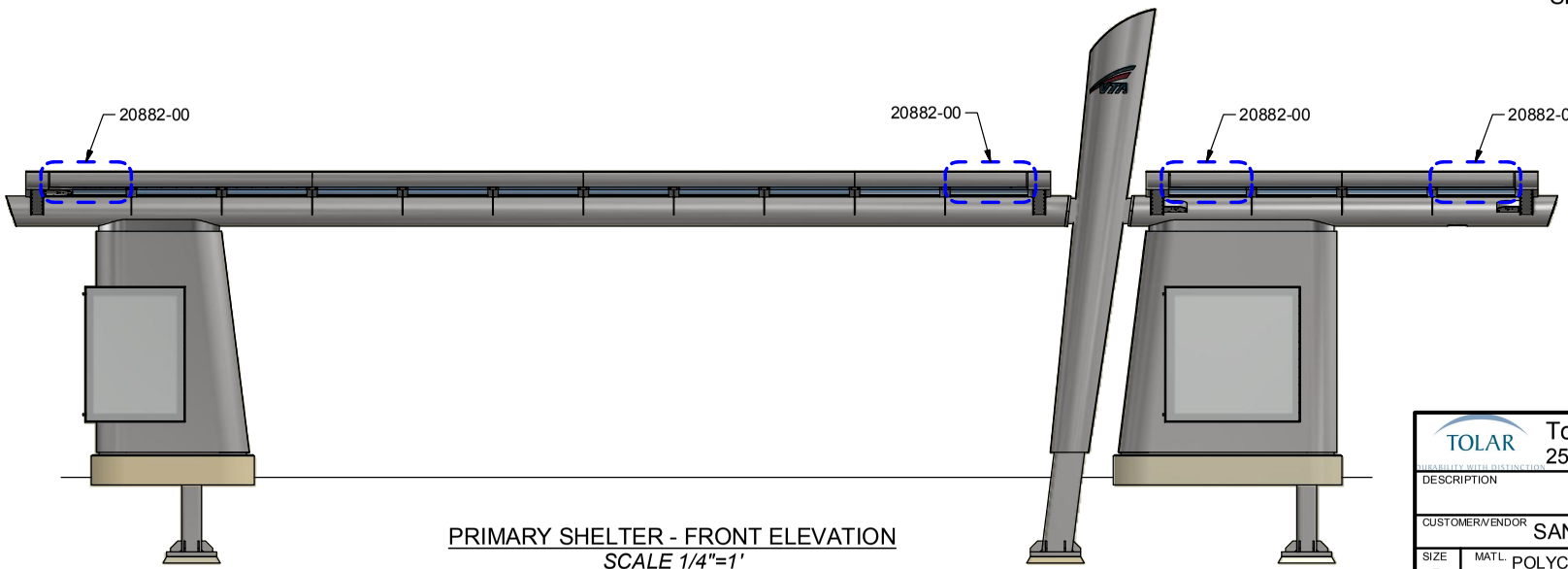
Shelter Front Eave



SIDE DIFFUSION LENS - FRONT ELEVATION
SCALE 4"=1'



SECTION A-A
SEE DRAWING 23394-00
SCALE 6"=1'



PRIMARY SHELTER - FRONT ELEVATION
SCALE 1/4"=1'

TOLAR — Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: DIFFUSION LENS [SIDE]			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: POLYCARBONATE - 0.118"	DWG NO.: 20882-00	REV. NO.:
SCALE: AS NOTED	DATE: 10/20/2014	DRAWN BY: cgarcia	

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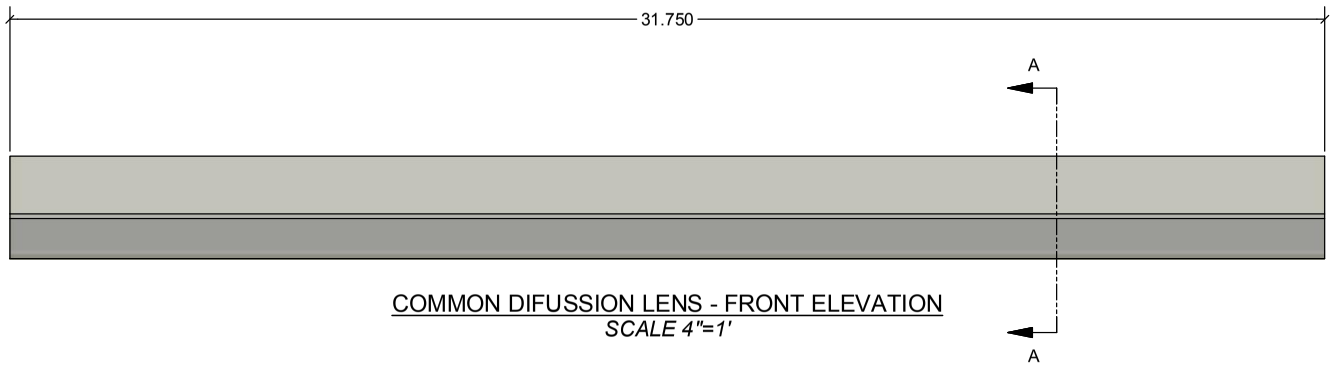
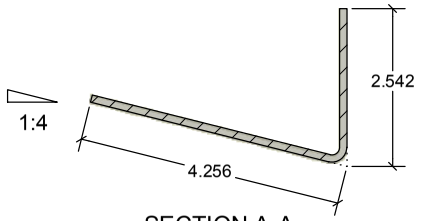
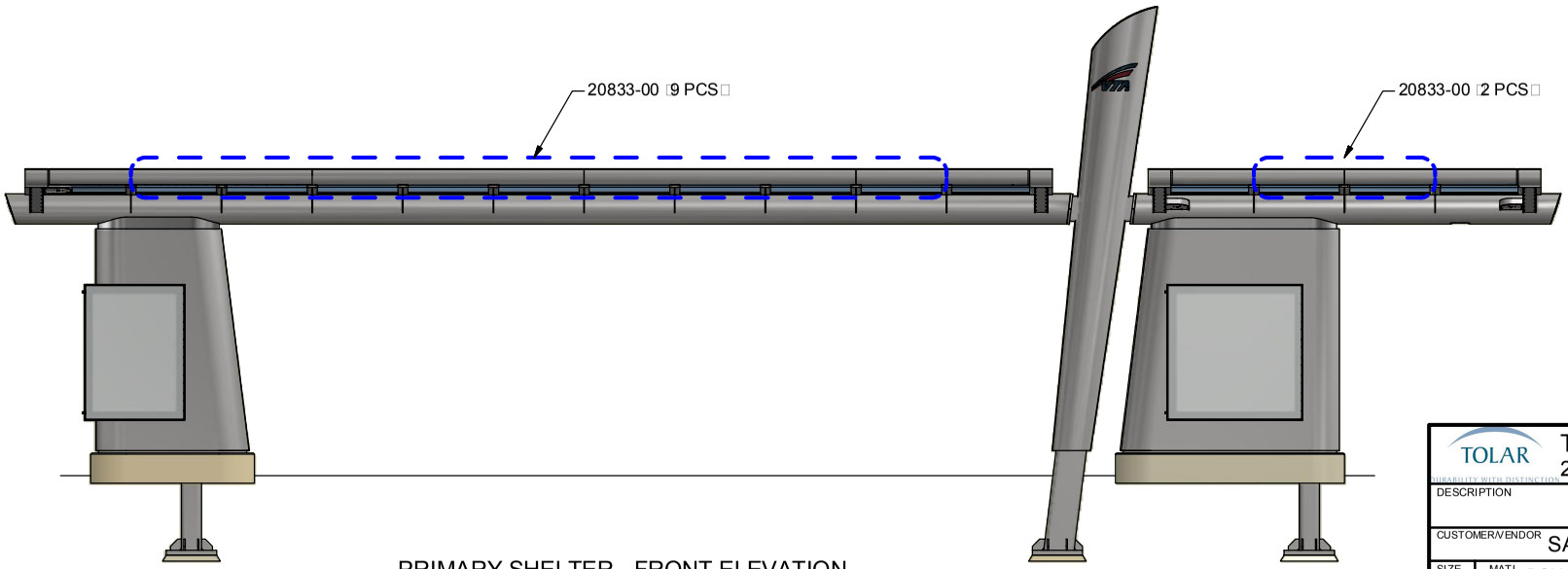
Shelter Front Eave



COMMON DIFUSSION LENS - FRONT ELEVATION
SCALE 4"=1'



SECTION A-A
SEE DRAWING 23394-00
SCALE 6"=1'



PRIMARY SHELTER - FRONT ELEVATION
SCALE 1/4"=1'

	Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879
DESCRIPTION	DIFUSSION LENS [COMMON]
CUSTOMER/VENDOR	SANTA CLARA - VTA
SHEET NO.	1 OF 1
SIZE	B
MATL.	POLYCARBONATE 0.118"
DWG NO.	20883-00
REV. NO.	
SCALE	AS NOTED
DATE	10/20/2014
DRAWN BY:	cgarcia

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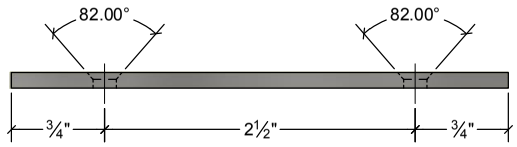
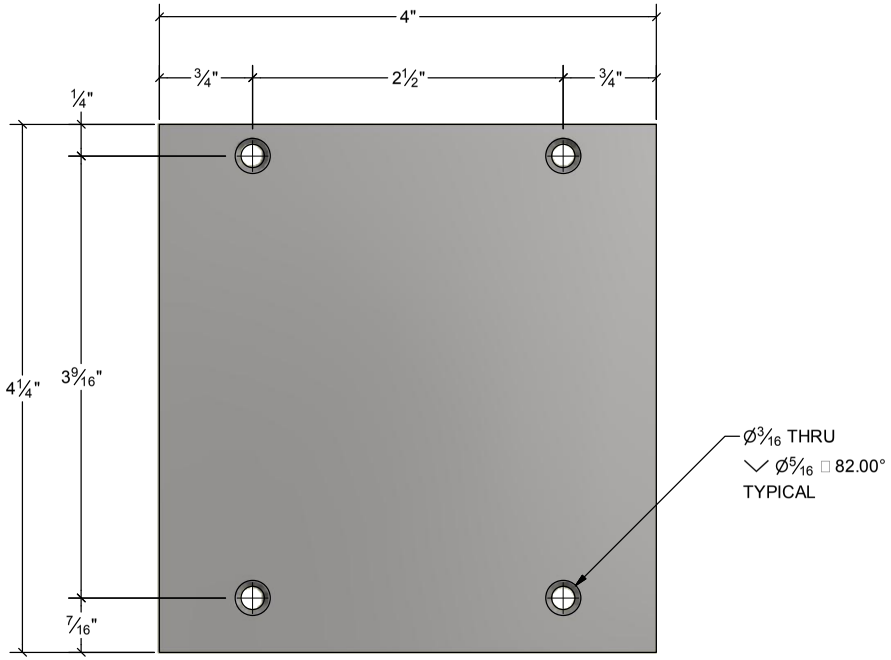
Shelter Front Eave



ELEVATION
SCALE 1 : 1



EAVE ACCESS COVER - PLAN VIEW
SCALE 1 : 1

TOLAR — DURABILITY WITH DISTINCTION	Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879
DESCRIPTION	EAVE ACCESS COVER
CUSTOMER/VENDOR	SANTA CLARA - VTA
SHEET NO.	1 OF 1
SIZE	B
MATL.	SS 316L - 11 GA SH M
DWG NO.	20884-00
REV. NO.	
SCALE	AS NOTED
DATE	10/22/2014
DRAWN BY:	cgarcia

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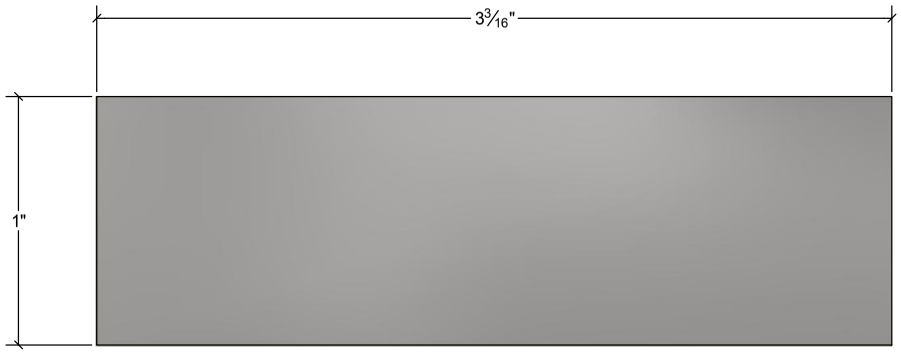
Shelter Front Eave



LIGHT FI□TURE MOUNTING TAB - PLAN VIEW

SCALE 2 : 1

NOTE - LIGHT FI□TURE HOLES
TO BE DETERMINED - RELATE
TO LIGHT FI□TURE HOLE PATTERN

TOLAR — NURSERY WITH DISTINCTION	Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879
DESCRIPTION	LF MOUNTING TAB
CUSTOMER/VENDOR	SANTA CLARA - VTA
SHEET NO.	1 OF 1
SIZE	B
MATL.	SS 316L - 3/16" THK PL
DWG NO.	21673-00
REV. NO.	
SCALE	AS NOTED
DATE	10/22/2014
DRAWN BY:	cgarcia

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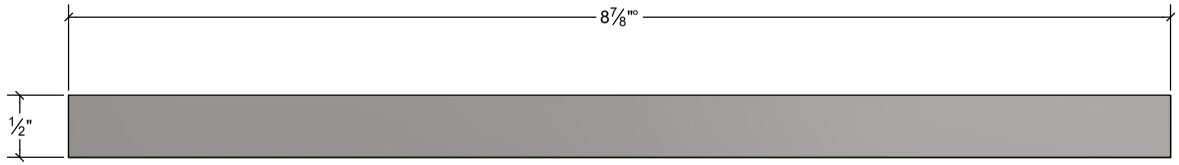
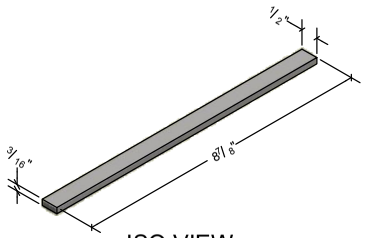
Shelter Front Eave



BOTTOM BENT BRACKET RETURN - PLAN VIEW
SCALE 1 : 1



ISO VIEW
SCALE 4"=1'

Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: BENT BRACKET BOTT - RETURN			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 3/16" THK PL	DWG NO.: 23390-00	REV. NO.:
SCALE: AS NOTED	DATE: 10/22/2014	DRAWN BY: cgarcia	

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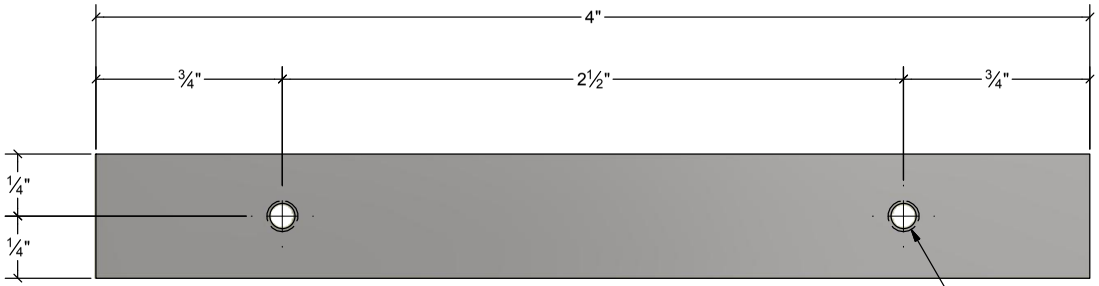
Shelter Front Eave



BENT BRACKET BOTTOM RETURN - PLAN VIEW
SCALE 2 : 1

Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: BENT BRACKET BOTT - RETURN			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 3/16" THK PL	DWG NO.: 23391-00	REV. NO.:
SCALE: AS NOTED	DATE: 10/22/2014	DRAWN BY: cgarcia	

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Shelter Front Eave

THIS DRAWING HAS BEEN GENERATED AND IS MAINTAINED BY A CAD SYSTEM. CHANGES SHALL ONLY BE INCORPORATED AS DIRECTED BY TOLAR MANUFACTURING CO., INC'S ENGINEERING DEPT.

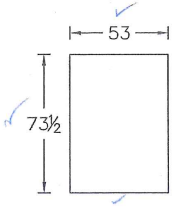
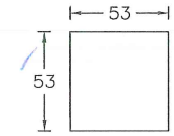
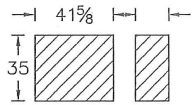
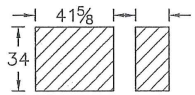
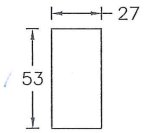
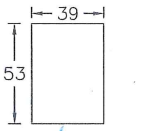
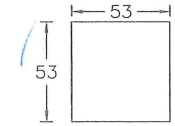
7/16" FOR DISPLAY DOOR FACES

9/16" THK LAMINATED AND TEMPERED GLASS WITH INTERLAYER

FT LAM TYPE / 1/4" – 1/4" w/A CLEAR "IONOPLAST" TYPE INTERLAYER NO METAL EDGE PROTECTION

9/16" ▨ SLOPED GLAZING – LAMINATED TO BE POLAR WHITE PVB AND A STRUCTURAL INTERLAYER – NO EXPOSED EDGES

7/16" ▭ TRANSPARENT GLAZING – CLEAR IONOPLAST STRUCTURAL INTERLAYER – NO EXPOSED EDGES

28 PCS		1 PER SINGLE SIDE AD PANEL (INCL (F))	10	10
		2 PER DOUBLE SIDE AD PANEL	9	18
14 PCS		2 PER SECONDARY SHELTER	4	8
		2 PER DOUBLE SIDED MAP PANEL	3	6
225 PCS		11 PER PRIMARY SHELTER	16	176
		9 PER PRIMARY MODIFIED SHELTER	5	45
		3 PER SECONDARY SHELTER	4	4
92 PCS		4 PER SHELTER (PRIMARY AND MODIFIED)	21	84
		2 PER SECONDARY SHELTER	4	8
10 PCS		2 PER PRIMARY MODIFIED SHELTER (ELECTRICAL PIER)	5	10
16 PCS		1 PER PRIMARY SHELTER (ELECTRICAL PIER)	16	16
16 PCS		1 PER PRIMARY SHELTER (COMM PIER)	16	16

REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED

SPARES ?
SEE 13,73,43 2,03

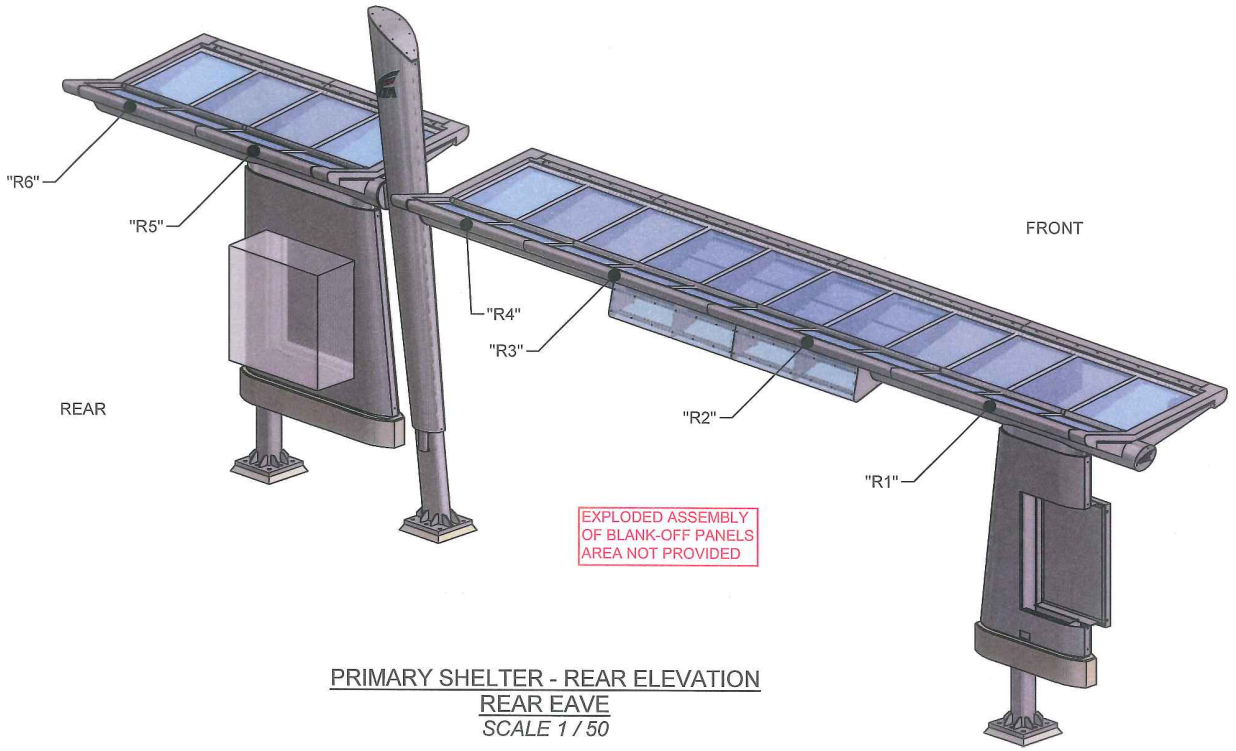
Santa Clara Valley Transportation Authority
___ NO EXCEPTIONS TAKEN
V MAKE CORRECTIONS NOTED
___ AMEND AND RESUBMIT
Any action shown above is subject to the terms of the contract and does not relieve the contractor of any of its obligations under the contract, including design and detailing
Contract No.: C830
By: JShigyo Date: 10/27/14

UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES
TOLERANCES:
HOLES SIZE: ±1/32
X <6": ±1/32
X >6": ±1/16
ANGLES: ±1/2°
REMOVE ALL BURRS AND BREAK SHARP EDGES 1/64 MAX.
THIRD ANGLE PROJECTION

TOLAR DURABILITY WITH DISTINCTION
Tolar Manufacturing Company, Inc
258 Mariah Circle,Corona,CA 92879

DESCRIPTION: GLASS MATRIX
CUSTOMER/VENDOR: SANTA CLARA – VTA
SIZE: B | MATL.: AS NOTED | DWG NO.: 23399-00 | REV:
SCALE: | DATE: 10-23-14 | DRAWN BY: CGARCIA

Shelter Glass Matrix



PRIMARY SHELTER - REAR ELEVATION
REAR EAVE
SCALE 1 / 50

TOLAR — Tolar Manufacturing Company, Inc, 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: PRIMARY SHELTER			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - MISC	DWG NO.: 20787-00	REV. NO.: C
SCALE: AS NOTED	DATE: 1/7/2015	DRAWN BY: cgarcia	

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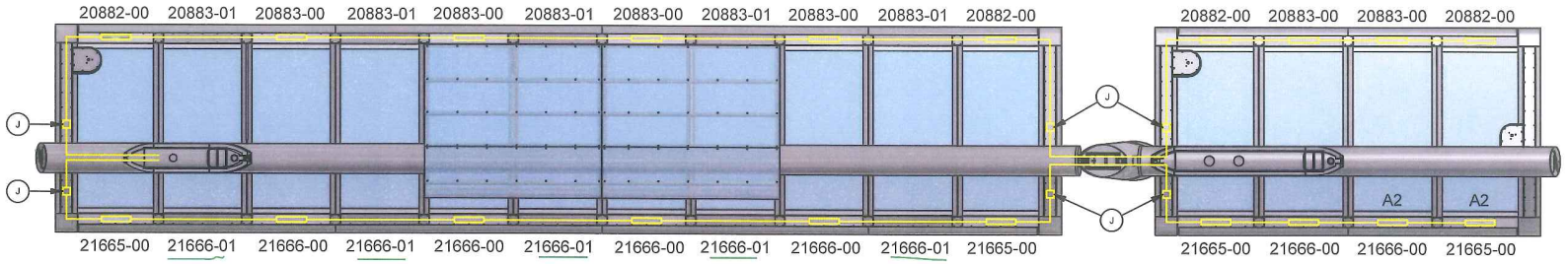
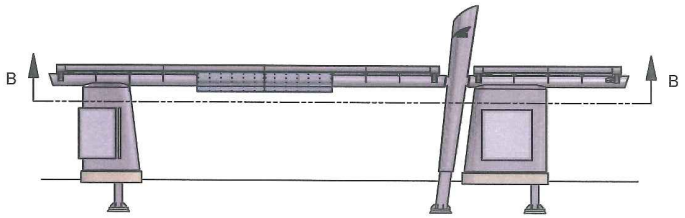
Shelter Rear Eave



SECTION B-B
SCALE 1/4"=1'



PRIMARY SHELTER TYPICAL LIGHTING CONFIGURATION - ELEVATION
SCALE 3/32"=1'

COMPONENT SHCEDULE			
QTY	TYPE	COMPONENT	DESCRIPTION
18	A	EW GRAZE POWER CORE	12" LONG 30°-60° 4000K
2	A2	EW GRAZE POWER CORE	12" LONG 10°-60° 4000K - 33°
4		21665-00	SHORT ACRILYC COVER REAR
6		21666-00	LONG ACRILYC COVER REAR
5		21666-01	LONG BLANK OFF PANEL REAR
4		20882-00	SHORT ACRYLIC COVER FRONT
6		20883-00	LONG ACRYLIC COVER FRONT
5		20883-01	LONG BLANK OFF PANEL FRONT

SB - ALUM ROCK
EB - ARENA
WB - 17th
EB - 17th
WB - 24th
EB - 24th

TOLAR
DURABILITY WITH DISTINCTION

Tolar Manufacturing Company, Inc
258 Mariah Circle, Corona CA. 92879

DESCRIPTION: TYPICAL PRIMARY SHELTER LIGHTING CONFIGURATION

CUSTOMER/VENDOR: SANTA CLARA - VTA | SHEET NO.: 1 OF 1

SIZE: B | MATL.: SS 316L - MISC | DWG NO.: 24627-00 | REV. NO.:

SCALE: AS NOTED | DATE: 2/23/2015 | DRAWN BY: cgarcia

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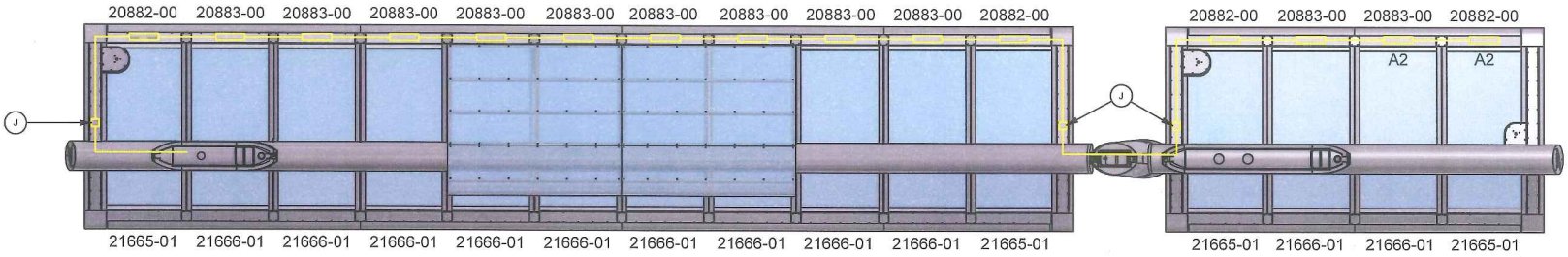
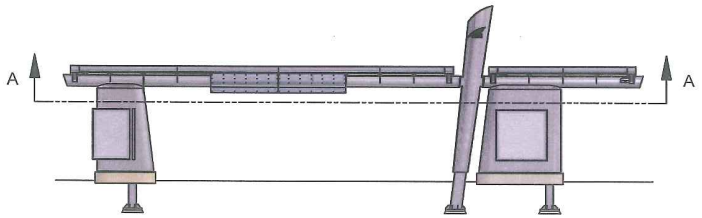
Shelter Rear Eave



SECTION A-A
SCALE 1/4"=1'



PRIMARY SHELTER LTG WITH NO BACKLIGHT - ELEVATION
SCALE 3/32"=1'

COMPONENT SHCEDULE			
QTY	TYPE	COMPONENT	DESCRIPTION
13	A1	EW GRAZE POWER CORE	12" LONG 30°-60° 4000K - 10°
2	A2	EW GRAZE POWER CORE	12" LONG 10°-60° 4000K - 33°
4		21665-01	SHORT BLANK OFF PANEL REAR
11		21666-01	LONG BLANK OFF PANEL REAR
4		20882-00	SHORT ACRYLIC COVER FRONT
11		20883-00	LONG ACRYLIC COVER FRONT

NB - STORY STATION
SB - STORY STATION
NB - OCALA STATION
SB - OCALA STATION
NB - ALUM ROCK STATION

TOLAR
DURABILITY WITH DISTINCTION

Tolar Manufacturing Company, Inc
258 Mariah Circle, Corona CA. 92879

DESCRIPTION: PRIMARY SHELTER LTG NO BACKLIGHT			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - MISC	DWG NO.: 24627-01	REV. NO.:
SCALE: AS NOTED	DATE: 2/23/2015	DRAWN BY: cgarcia	

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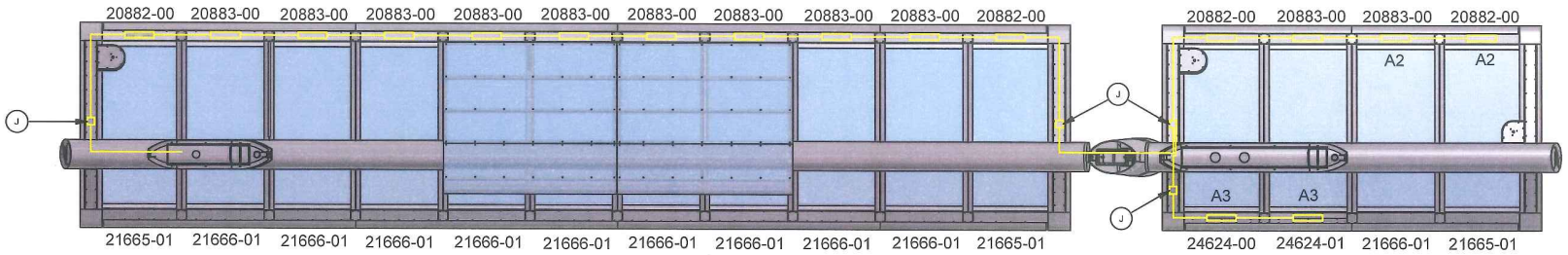
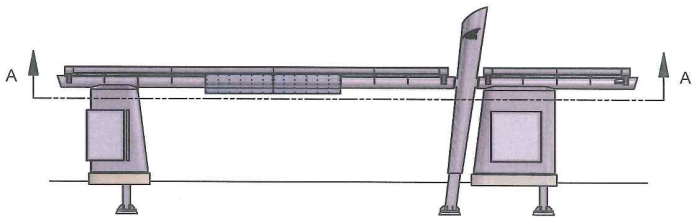
Shelter Rear Eave



SECTION A-A
SCALE 1/4"=1'



PRIMARY SHELTER LTG WITH NO BACKLIGHT J&K
SCALE 3/32"=1'

COMPONENT SHCEDULE			
QTY	TYPE	COMPONENT	DESCRIPTION
13	A1	EW GRAZE POWER CORE	12" LONG 30°-60° 4000K - 10°
2	A2	EW GRAZE POWER CORE	12" LONG 10°-60° 4000K - 33°
2	A3	EW GRAZE POWER CORE	12" LONG 10°-60° 4000K - 30.5°
3		21665-01	SHORT BLANK OFF PANEL REAR
1		24624-00	REDUCED OPENING ASSEMBLY SH
1		24624-01	REDUCED OPENING ASSEMBLY LG
10		21666-01	LONG BLANK OFF PANEL REAR
4		20882-00	SHORT ACRYLIC COVER FRONT
11		20883-00	LONG ACRYLIC COVER FRONT

WB - KING
EB - KING
WB - JACKSON
EB - JACKSON

TOLAR
DURABILITY WITH DISTINCTION

Tolar Manufacturing Company, Inc
258 Mariah Circle, Corona CA. 92879

DESCRIPTION: PRIMARY SHELTER LTG - JACKSON/KING

CUSTOMER/VENDOR: SANTA CLARA - VTA | SHEET NO.: 1 OF 1

SIZE: B | MATL.: SS 316L - MISC | DWG NO.: 24627-02 | REV. NO.:

SCALE: AS NOTED | DATE: 2/23/2015 | DRAWN BY: cgarcia

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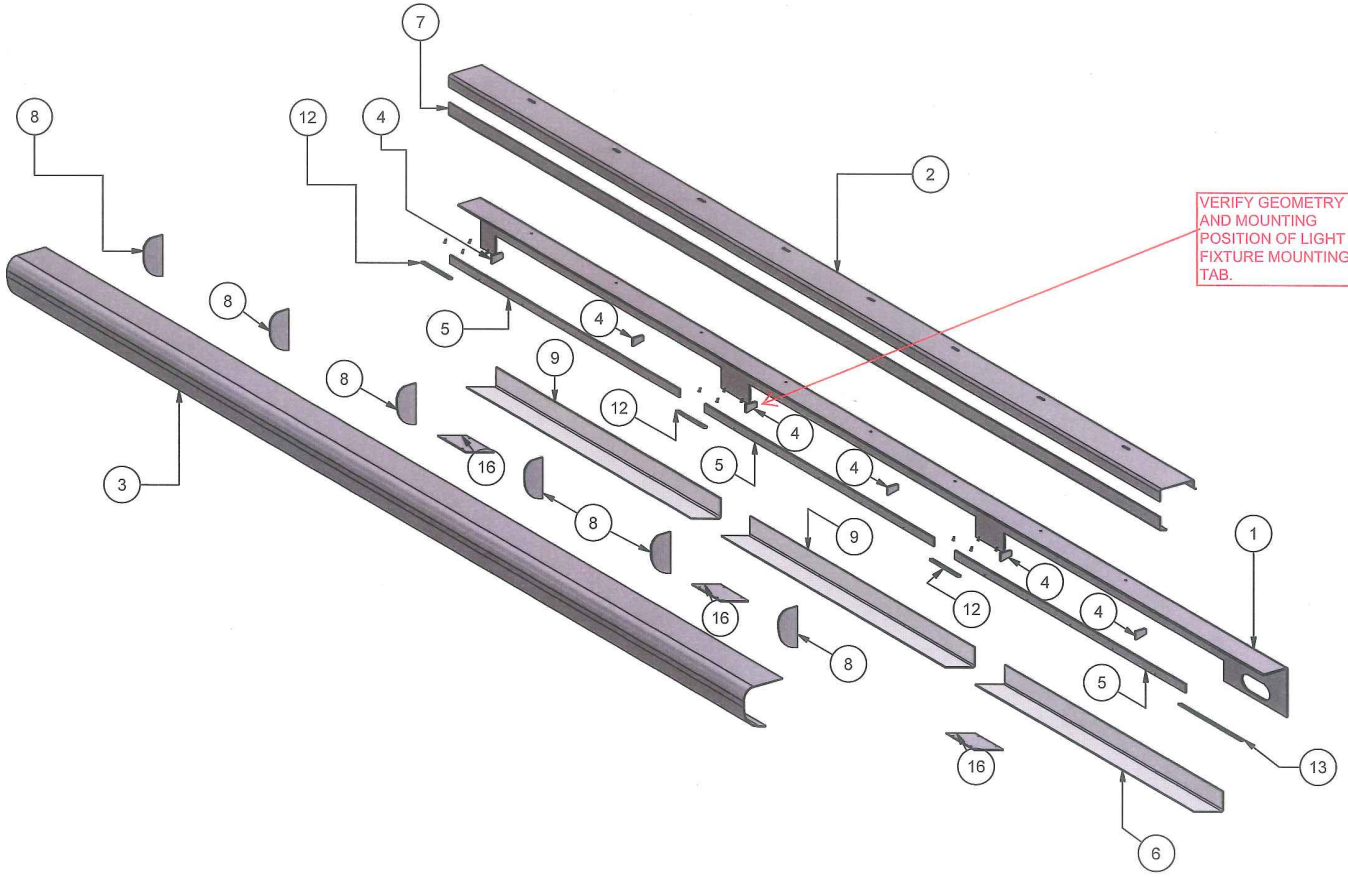
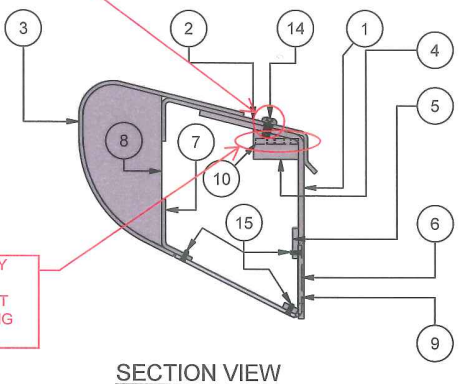
Shelter Rear Eave



EAVE ASSEMBLY R1 - COMPONENTS
SCALE 1"=1'



SECTION VIEW
SCALE 3"=1'

CONFIGURE AS PER LIGHTING LAYOUTS
SEE DRAWINGS:
24627-00 - TYPICAL
24627-01 - NO BACK LTG
24627-02 - NO BACK LTG - JACKSON & KING

PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	20885-00	BENT & NOTCHED BRACKET R1
2	1	20886-00	SLOTTED EAVE TOP COVER R1
3	1	20887-00	CANOPY EAVE WRAP R1
4	6	20893-00	REAR EAVE STIFFENER
5	3	20861-00	ATTMNT TAB DIFF LENS
6	1	21665-00	DIFFUSION LENS (SIDE) R
7	1	21667-00	CONTINOUS BENT PLATE - R1
8	6	21668-00	REAR GUSSET STIFFENER
9	2	21666-00	DIFFUSION LENS (COMMON) R
10	1	21673-00	LF MOUNTING TAB
12	3	23391-00	BENT BRACKET BOTT - RETURN
13	1	23390-00	BENT BRACKET BOTT - RETURN
14	16	96710A733	1/4-20x1/2" PAN HEAD TORX
15	83	91771A126	#5-44 x 3/8" FLAT HEAD TORX
16	3	20884-01	EAVE ACCESS COVER REAR

TOLAR
DURABILITY WITH DISTINCTION

Tolar Manufacturing Company, Inc
258 Mariah Circle, Corona CA. 92879

DESCRIPTION	EAVE ASSEMBLY R1		
CUSTOMER/VENDOR	SANTA CLARA - VTA		SHEET NO. 1 OF 1
SIZE B	MATL. SS 316L - MISC	DWG NO. 20888-00	REV. NO.
SCALE AS NOTED	DATE 11/19/2014	DRAWN BY: cgarcia	

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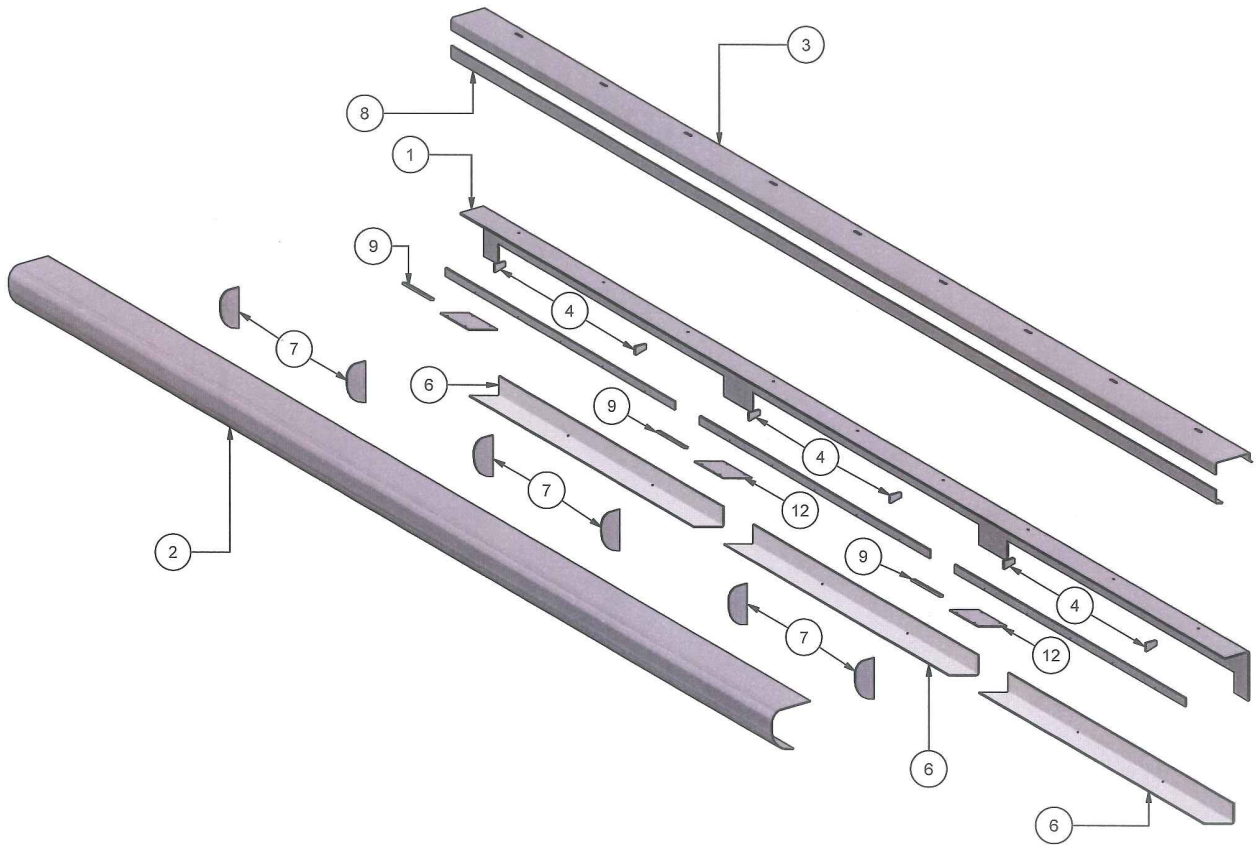
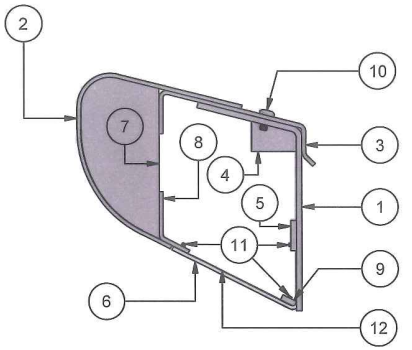
Shelter Rear Eave



EAVE ASSEMBLY R2 & R3 - COMPONENTS
SCALE 1"=1'



SECTION VIEW
SCALE 3"=1'

CONFIGURE AS PER LIGHTING LAYOUTS
SEE DRAWINGS:
24627-00 - TYPICAL
24627-01 - NO BACK LTG
24627-02 - NO BACK LTG - JACKSON & KING

PARTS LIST

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	21149-00	BENT NOTCHED BRACKET R2&R3
2	1	21150-00	CANOPI EAVE WRAP R2&R3
3	1	21155-00	SLOTTED EAVE TOP CVR R2&R3
4	6	20893-00	REAR EAVE STIFFENER
5	3	20861-00	ATTMNT TAB DIFF LENS
6	3	21666-00	DIFFUSION LENS (COMMON) R
7	6	21668-00	REAR GUSSET STIFFENER
8	1	21670-00	CONTINOUS BENT PLATE R2&R3
9	3	23391-00	BENT BRACKET BOTT - RETURN
10	9	96710A733	1/4-20x1/2" PAN HEAD TORX
11	42	91771A126	#5-44 x 3/8" FLAT HEAD TORX
12	3	20884-01	EAVE ACCESS COVER REAR

TOLAR
DURABILITY WITH DISTINCTION

Tolar Manufacturing Company, Inc
258 Mariah Circle, Corona CA. 92879

DESCRIPTION: EAVE ASSEMBLY R2 & R3			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - MISC	DWG NO.: 21151-00	REV. NO.
SCALE: AS NOTED	DATE: 11/24/2014	DRAWN BY: cgarcia	

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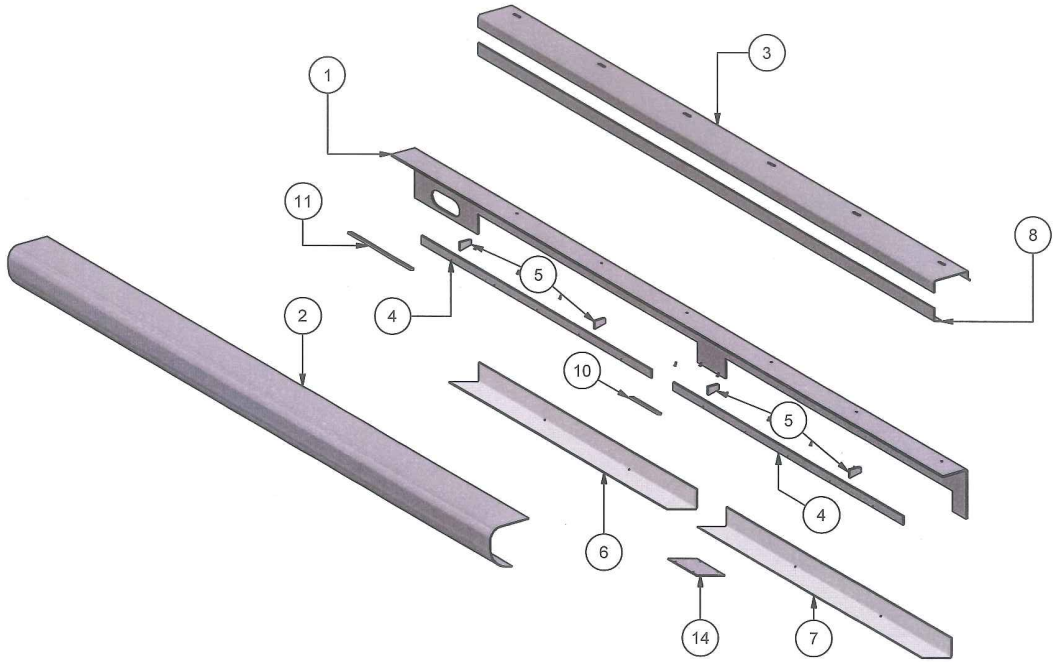
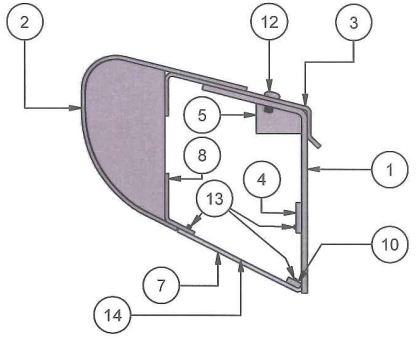
Shelter Rear Eave



EAVE ASSEMBLY - R4
SCALE 1"=1'



SECTION VIEW
SCALE 3"=1'

PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	21153-00	BENT & NOTCHED BRACKET R4
2	1	21152-00	CANOPY EAVE WRAP
3	1	21156-00	SLOTTED EAVE TOP CVR R4
4	2	20861-00	ATTMNT TAB DIFF LENS
5	4	20893-00	REAR EAVE STIFFENER
6	1	21665-00	DIFFUSION LENS (SIDE) R
7	1	21666-00	DIFFUSION LENS (COMMON) R
8	1	21669-00	CONTINOUS BENT PLATE R4
9	4	21668-00	REAR GUSSET STIFFENER
10	1	23391-00	BENT BRACKET BOTT - RETURN
11	1	23390-00	BENT BRACKET BOTT - RETURN
12	6	96710A733	1/4-20x1/2" PAN HEAD TORX
13	24	91771A126	#5-44 x 3/8" FLAT HEAD TORX
14	1	20884-01	EAVE ACCESS COVER REAR

TOLAR
DURABILITY WITH DISTINCTION

Tolar Manufacturing Company, Inc
258 Mariah Circle, Corona CA. 92879

DESCRIPTION: EAVE ASSEMBLY R4			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - MISC	DWG NO.: 21154-00	REV. NO.:
SCALE: AS NOTED	DATE: 11/24/2014	DRAWN BY: cgarcia	

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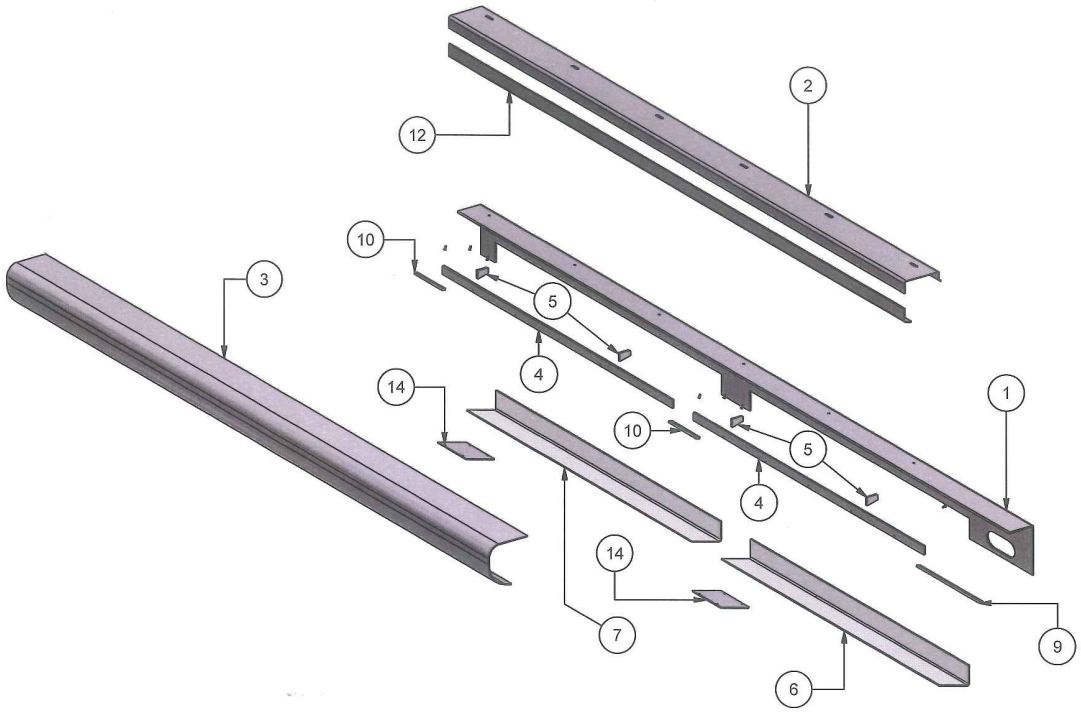
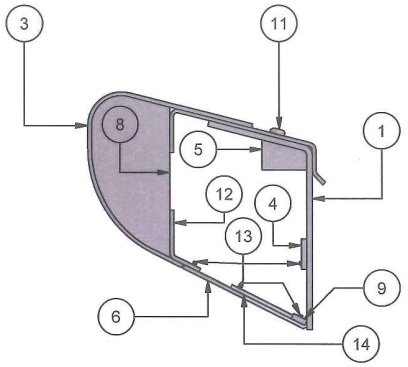
CONFIGURE AS PER LIGHTING LAYOUTS
SEE DRAWINGS:
24627-00 - TYPICAL
24627-01 - NO BACK LTG
24627-02 - NO BACK LTG - JACKSON & KING

Shelter Rear Eave



EAVE ASSEMBLY R5
SCALE 1"=1'



SECTION VIEW
SCALE 3"=1'

PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	21157-00	EAVE ASSEMBLY R5
2	1	21162-00	SLOTTED EAVE TOP CVR R5-R6
3	1	21159-00	CANOPY EAVE WRAP R5-R6
4	2	20861-00	ATTMNT TAB DIFF LENS
5	4	20893-00	REAR EAVE STIFFENER
6	1	21665-00	DIFFUSION LENS (SIDE) R
7	1	21666-00	DIFFUSION LENS (COMMON) R
8	4	21668-00	REAR GUSSET STIFFENER
9	1	23390-00	BENT BRACKET BOTT - RETURN
10	2	23391-00	BENT BRACKET BOTT - RETURN
11	6	96710A733	1/4-20x1/2" PAN HEAD TORX
12	1	21669-01	CONTINOUS BENT PLATE R5
13	27	91771A126	#5-44 x 3/8" FLAT HEAD TORX
14	2	20884-01	EAVE ACCESS COVER REAR

TOLAR
DURABILITY WITH DISTINCTION

Tolar Manufacturing Company, Inc
258 Mariah Circle, Corona CA. 92879

DESCRIPTION: EAVE ASSEMBLY R5			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - MISC	DWG NO.: 21163-00	REV. NO.:
SCALE: AS NOTED	DATE: 11/24/2014	DRAWN BY: cgarcia	

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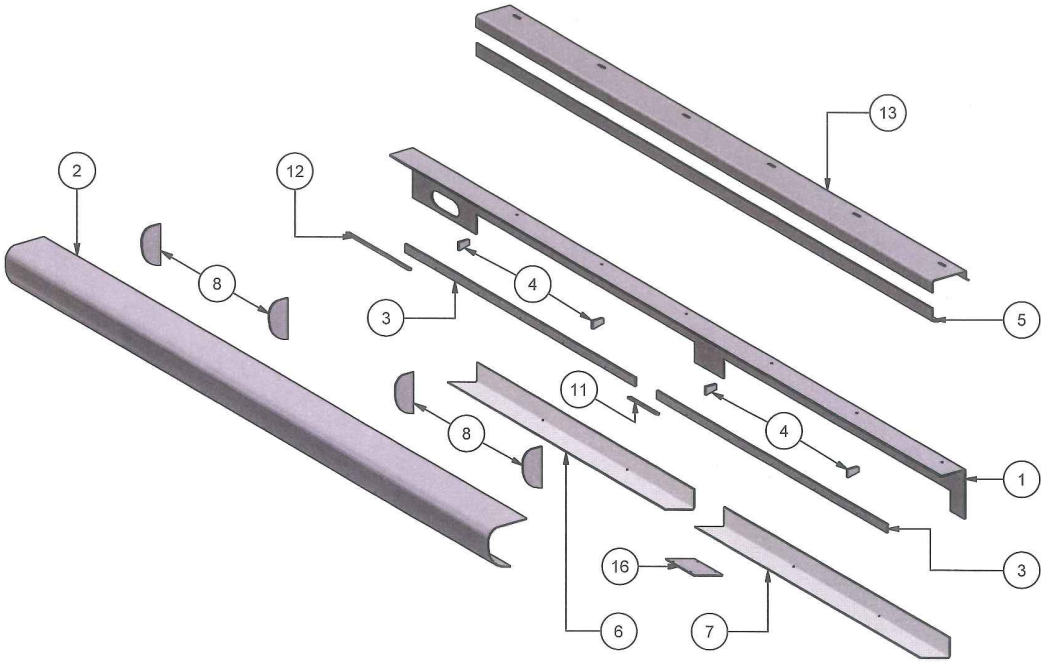
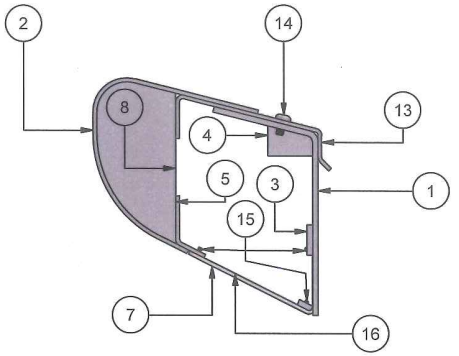
CONFIGURE AS PER LIGHTING LAYOUTS
SEE DRAWINGS:
24627-00 - TYPICAL
24627-01 - NO BACK LTG
24627-02 - NO BACK LTG - JACKSON & KING

Shelter Rear Eave



EAVE ASSEMBLY R6 - COMPONENTS
SCALE 1"=1'



SECTION VIEW
SCALE 3"=1'

PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	21158-00	BENT & NOTCHED BRACKET R6
2	1	21159-00	CANOPY EAVE WRAP R5-R6
3	2	20861-00	ATTMNT TAB DIFF LENS
4	4	20893-00	REAR EAVE STIFFENER
5	1	21669-00	CONTINOUS BENT PLATE R4
6	1	21665-00	DIFFUSION LENS (SIDE) R
7	1	21666-00	DIFFUSION LENS (COMMON) R
8	4	21668-00	REAR GUSSET STIFFENER
9	1	21673-00	LF MOUNTING TAB
11	1	23391-00	BENT BRACKET BOTT - RETURN
12	1	23390-00	BENT BRACKET BOTT - RETURN
13	1	21162-00	SLOTTED EAVE TOP CVR R5-R6
14	6	96710A733	1/4-20x1/2" PAN HEAD TORX
15	24	91771A126	#5-44 x 3/8" FLAT HEAD TORX
16	1	20884-01	EAVE ACCESS COVER REAR

CONFIGURE AS PER LIGHTING LAYOUTS
SEE DRAWINGS:
24627-00 - TYPICAL
24627-01 - NO BACK LTG
24627-02 - NO BACK LTG - JACKSON & KING

TOLAR
DURABILITY WITH DISTINCTION

Tolar Manufacturing Company, Inc
258 Mariah Circle, Corona CA. 92879

DESCRIPTION: EAVE ASSEMBLY R6			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - MISC	DWG NO.: 21161-00	REV. NO.:
SCALE: AS NOTED	DATE: 11/24/2014	DRAWN BY: cgarcia	

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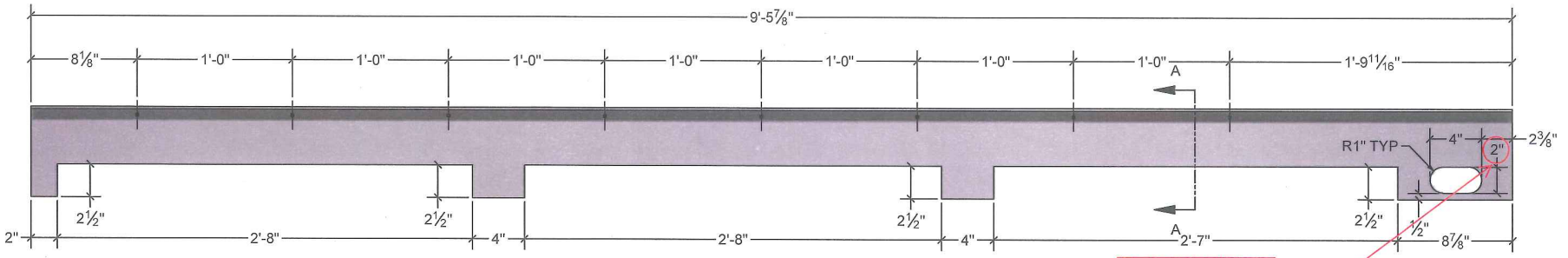
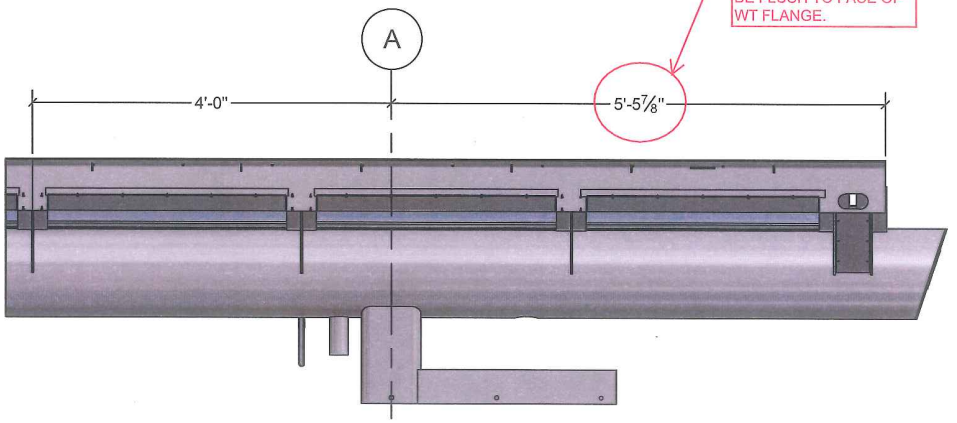
Shelter Rear Eave

NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. MILL FINISH #1



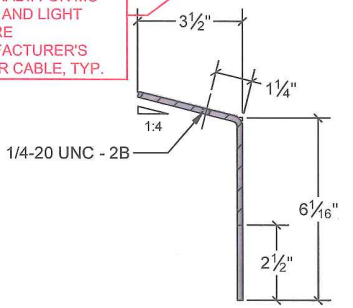
REAR EAVE BRACKET "R1" - ELEVATION
SCALE 1 1/2"=1'



CONFIRM DIM. END RAKE PLATE SHOULD BE FLUSH TO FACE OF WT FLANGE.

PRIMARY SHELTER - REAR ELEVATION
SCALE 3/4"=1'

VERIFY DIMENSION ACCOMMODATES BEND RADII FOR MC CABLE AND LIGHT FIXTURE MANUFACTURER'S LEADER CABLE, TYP.



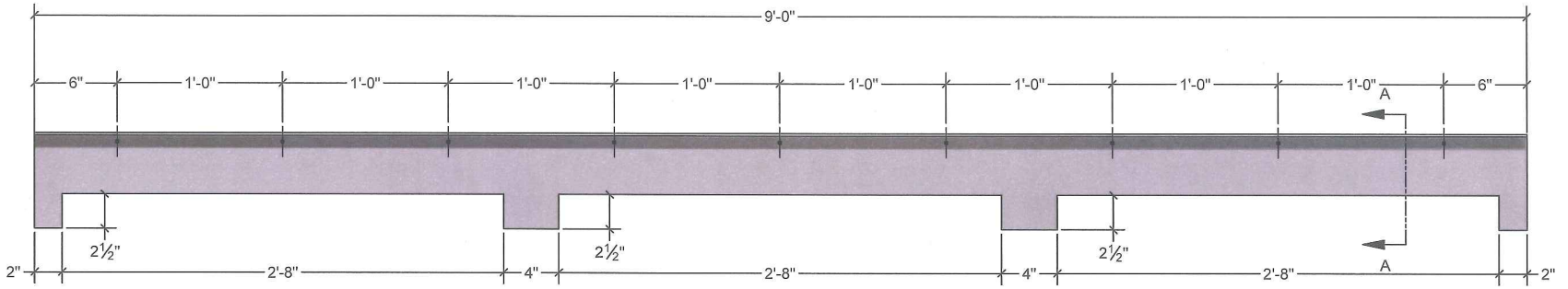
SECTION A-A
SEE DRAWING 23800-05
SCALE 3"=1'

TOLAR — DURABILITY WITH DISTINCTION	Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879		
DESCRIPTION	BENT & NOTCHED BRACKET R1		
CUSTOMER/VENDOR	SANTA CLARA - VTA		SHEET NO. 1 OF 1
SIZE B	MATL. SS 316L - 3/16" THL PL	DWG NO. 20885-00	REV. NO.
SCALE AS NOTED	DATE 12/22/2014	DRAWN BY: cgarcia	

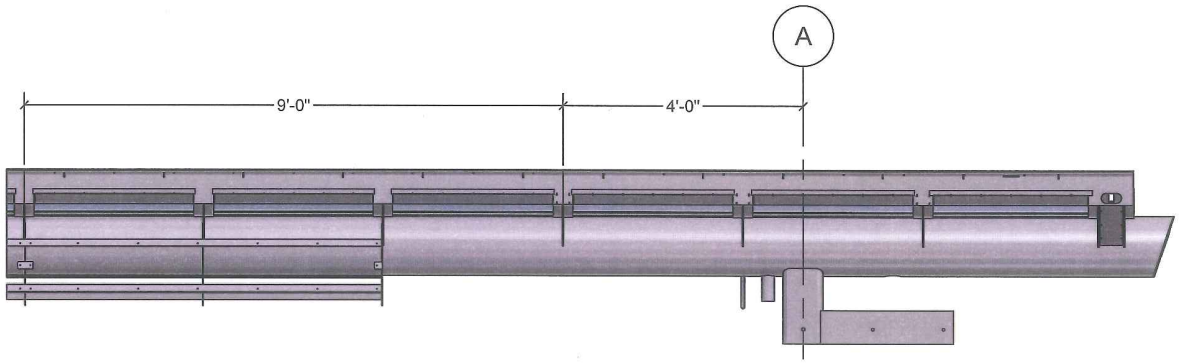
T:\Engineering\CARLOS GARCIA\VTA\20885-00.idw

Shelter Rear Eave

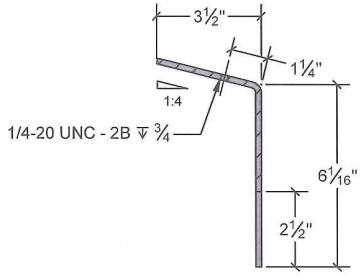
NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. MILL FINISH #1



REAR EAVE BRACKET - ELEVATION
SCALE 1 1/2"=1'



PRIMARY SHELTER - REAR ELEVATION
SCALE 1/2"=1'



SECTION A-A
SEE DRAWING 23800-05
SCALE 3"=1'

TOLAR — Tolar Manufacturing Company, Inc, 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: BENT NOTCHED BRACKET R2&R3			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 2
SIZE: B	MATL.: SS 316L - 3/16 THK PL	DWG NO.: 21149-00	REV. NO.:
SCALE: AS NOTED	DATE: 12/24/2014	DRAWN BY: cgarcia	

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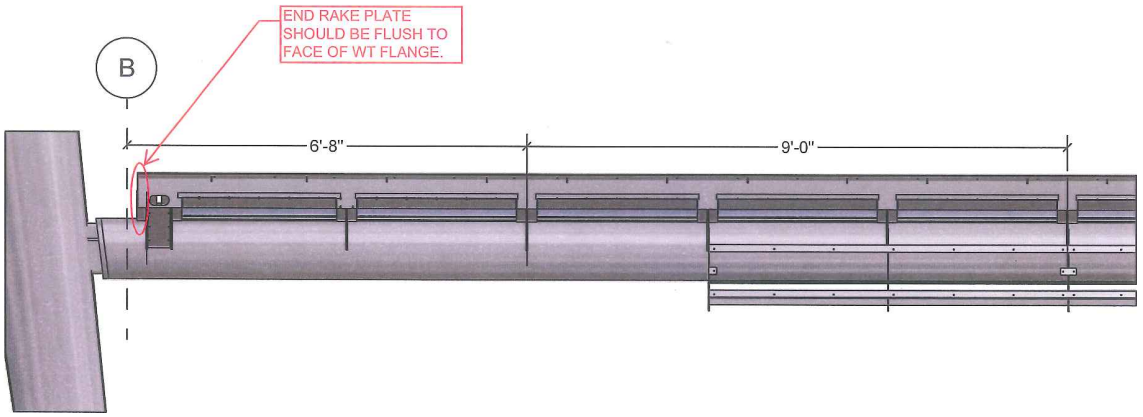
Shelter Rear Eave



PRIMARY SHELTER - REAR ELEVATION
SCALE 1/2"=1'

TOLAR — Tolar Manufacturing Company, Inc, 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: PRIMARY SHELTER			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 2 OF 2
SIZE: B	MATL.: SS 316L - 3/16" THK PL	DWG NO.: 20787-00	REV. NO.: C
SCALE: AS NOTED	DATE: 12/24/2014	DRAWN BY: cgarcia	

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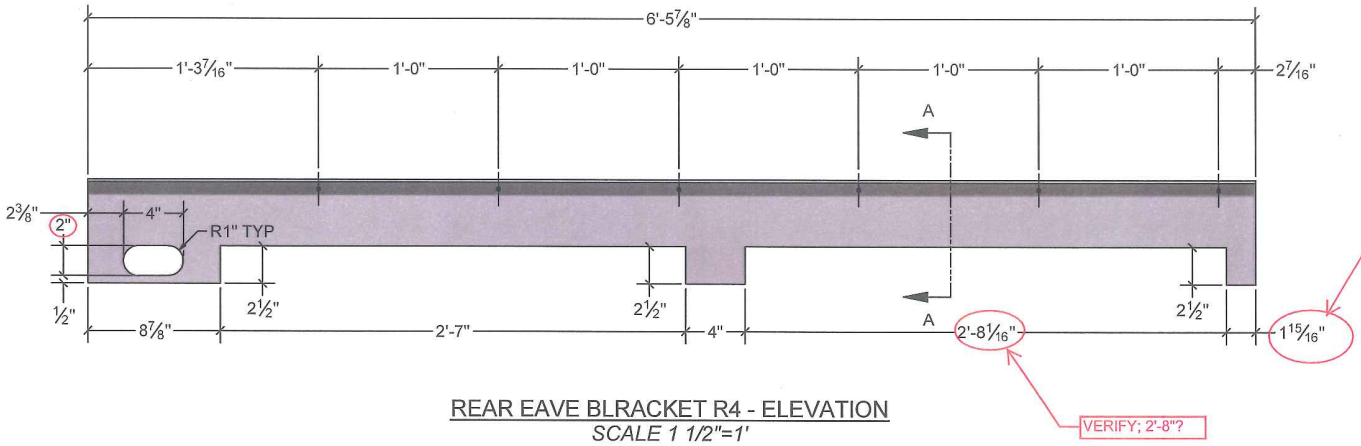
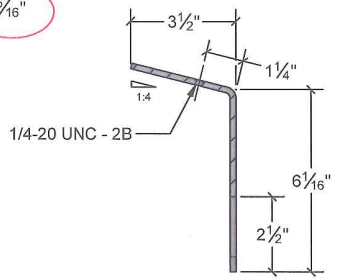
Shelter Rear Eave

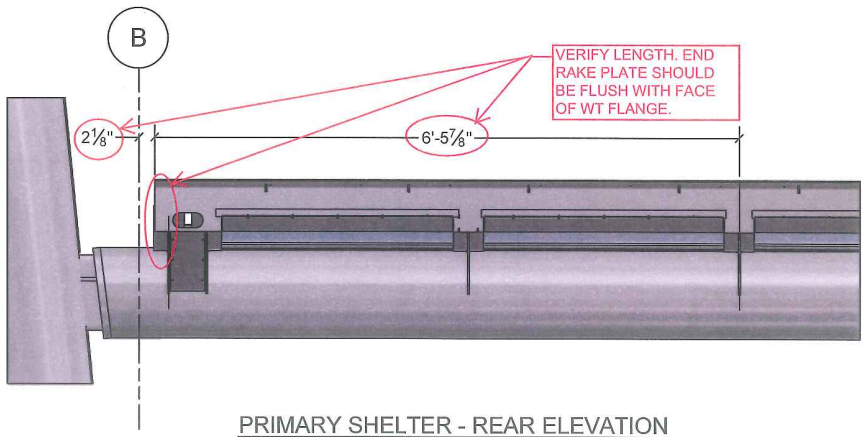
NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. MILL FINISH #1



REAR EAVE BLRACKET R4 - ELEVATION
SCALE 1 1/2"=1'



SECTION A-A
SEE DRAWING 23800-05
SCALE 3"=1'



PRIMARY SHELTER - REAR ELEVATION
SCALE 3/4"=1'

TOLAR — DURABILITY WITH DISTINCTION	Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879		
DESCRIPTION	BENT & NOTCHED BRACKET R4		
CUSTOMER/VENDOR	SANTA CLARA - VTA		SHEET NO. 1 OF 1
SIZE B	MATL. SS 316L - 3/16" THK PL	DWG NO. 21153-00	REV. NO.
SCALE AS NOTED	DATE 1/5/2015	DRAWN BY: cgarcia	

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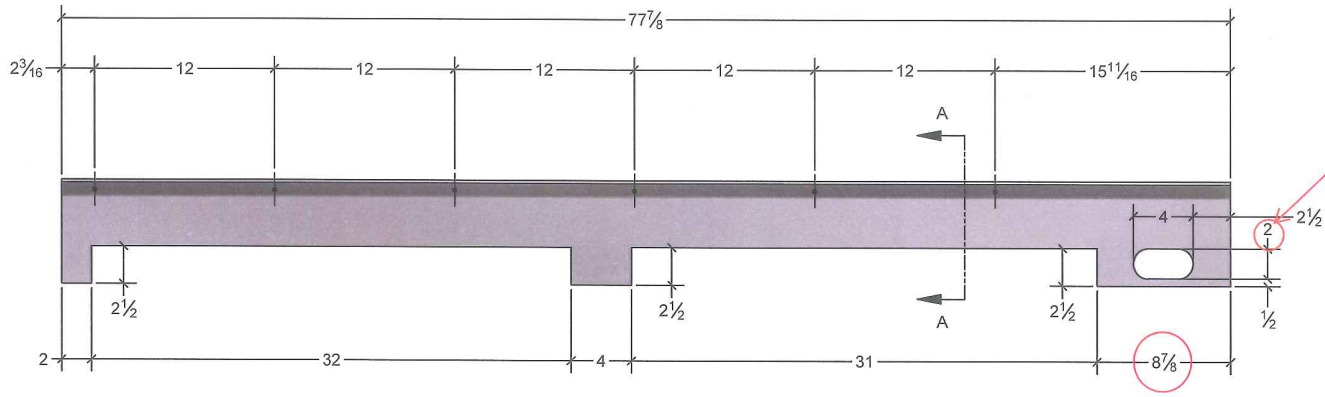
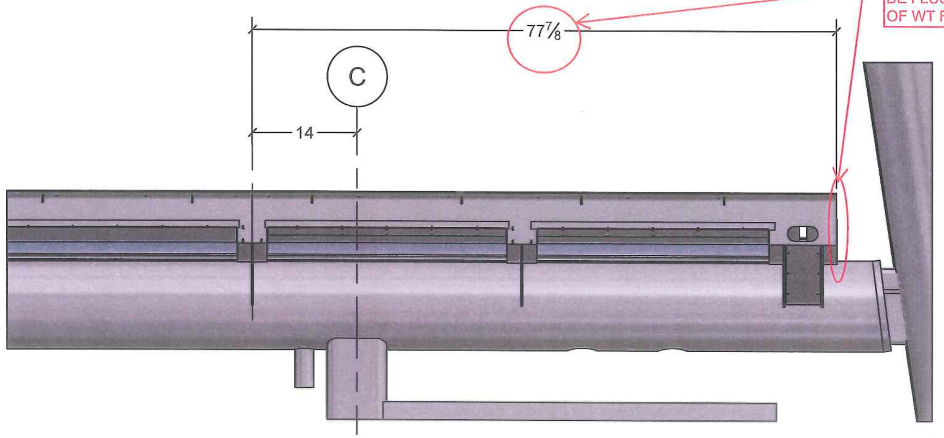
Shelter Rear Eave

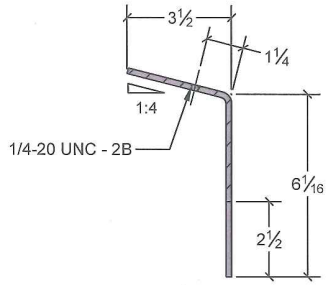
NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. MILL FINISH #1



REAR EAVE BRACKET "R5" - ELEVATION
SCALE 1 1/2"=1'



PRIMARY SHELTER - REAR ELEVATION
SCALE 3/4"=1'



SECTION A-A
SEE DRAWING3800-05
SCALE 3"=1'

Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: EAVE ASSEMBLY R5			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 3/16" THK PL	DWG NO.: 21157-00	REV. NO.
SCALE: AS NOTED	DATE: 1/6/2015	DRAWN BY: cgarcia	

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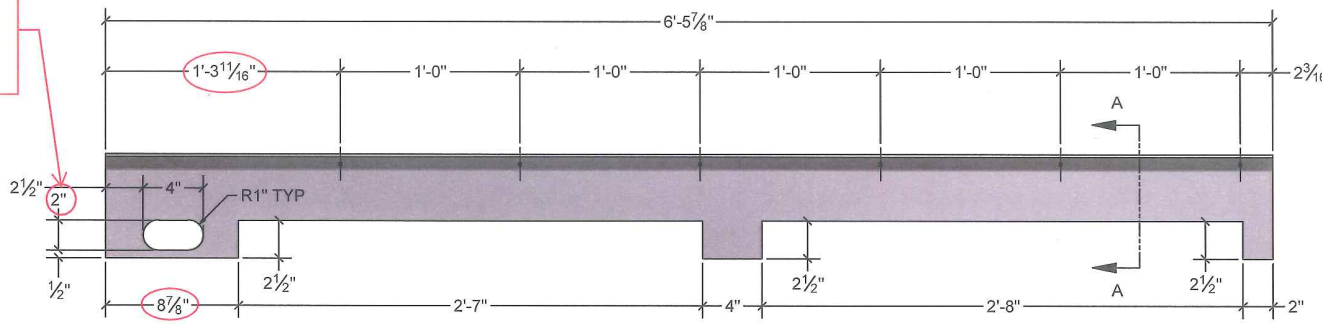
Shelter Rear Eave

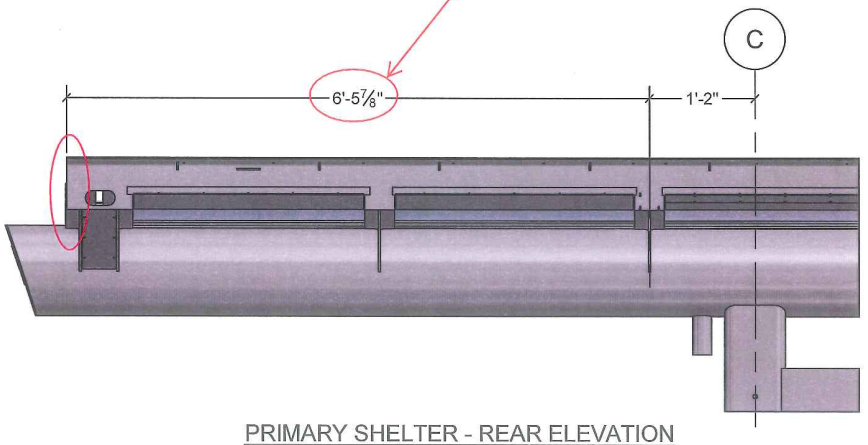
NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. MILL FINISH #1

VERIFY DIMENSION ACCOMMODATES BEND RADII FOR MC CABLE AND LIGHT FIXTURE MANUFACTURER'S LEADER CABLE.

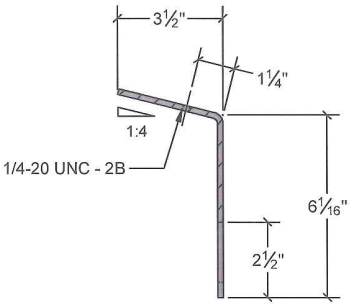


REAR EAVE BRACKET "R6" - ELEVATION
SCALE 1 1/2"=1'

END RAKE PLATE SHOULD BE FLUSH TO FACE OF WT FLANGE.



PRIMARY SHELTER - REAR ELEVATION
SCALE 3/4"=1'



SECTION A-A
SEE DRAWING 23800-05
SCALE 3"=1'

TOLAR DURABILITY WITH DISTINCTION	Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879		
DESCRIPTION	BENT & NOTCHED BRACKET R6		
CUSTOMER/VENDOR	SANTA CLARA - VTA		SHEET NO. 1 OF 1
SIZE B	MATL. SS 316L - 3/16" THK PL	DWG NO. 21158-00	REV. NO.
SCALE AS NOTED	DATE 1/6/2015	DRAWN BY: cgarcia	

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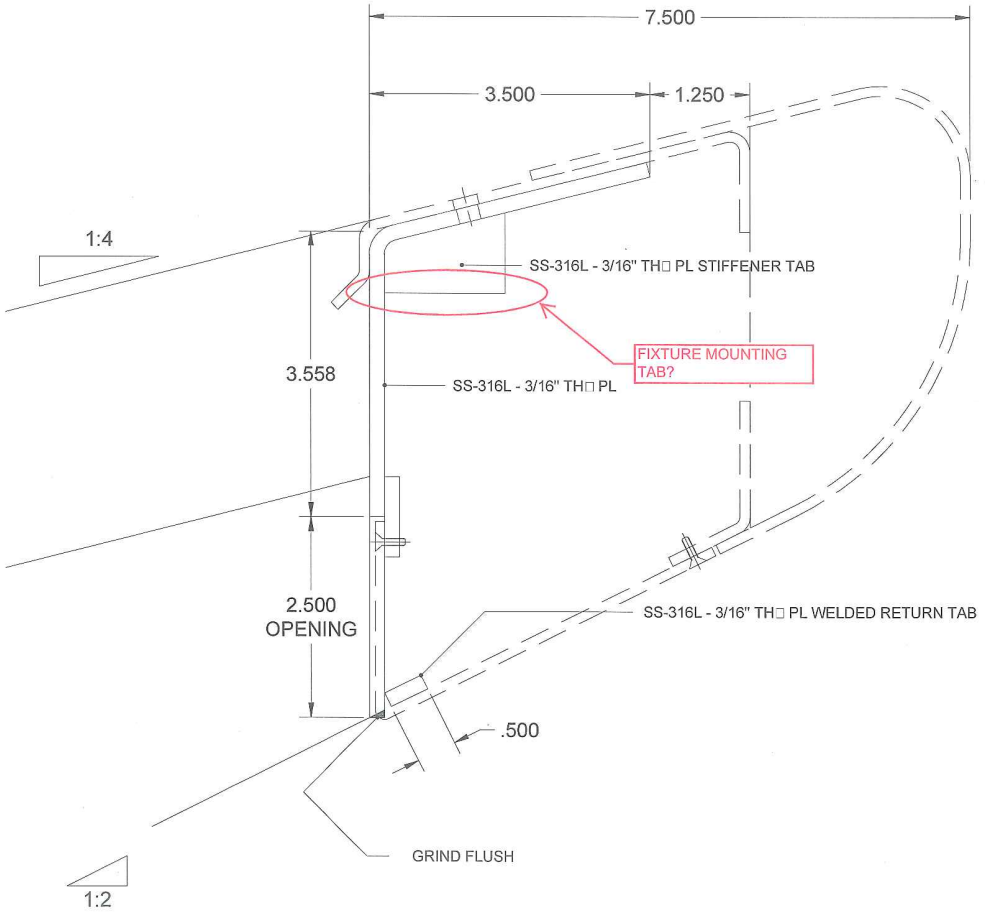
Shelter Rear Eave

THIS DRAWING HAS BEEN GENERATED AND IS MAINTAINED BY A CAD SYSTEM. CHANGES SHALL ONLY BE INCORPORATED AS DIRECTED BY TOLAR MANUFACTURING CO., INC.'S ENGINEERING DEPT.

REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED



1 STRUCTURAL BRACKET - REAR EAVE - SECTION VIEW
SCALE 8"=1'

UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES
TOLERANCES:
HOLES SIZE: ±1/32
X <6': ±1/32
X >6': ±1/16
ANGLES: ±1/2°
REMOVE ALL BURRS AND BREAK SHARP EDGES 1/64 MAX.
THIRD ANGLE PROJECTION

TOLAR DURABILITY WITH DISTINCTION
Tolar Manufacturing Company, Inc
258 Mariah Circle,Corona,CA 92879

DESCRIPTION: BENT AND NOTCHED BRACKET PROFILE
CUSTOMER/VENDOR: SANTA CLARA – VTA

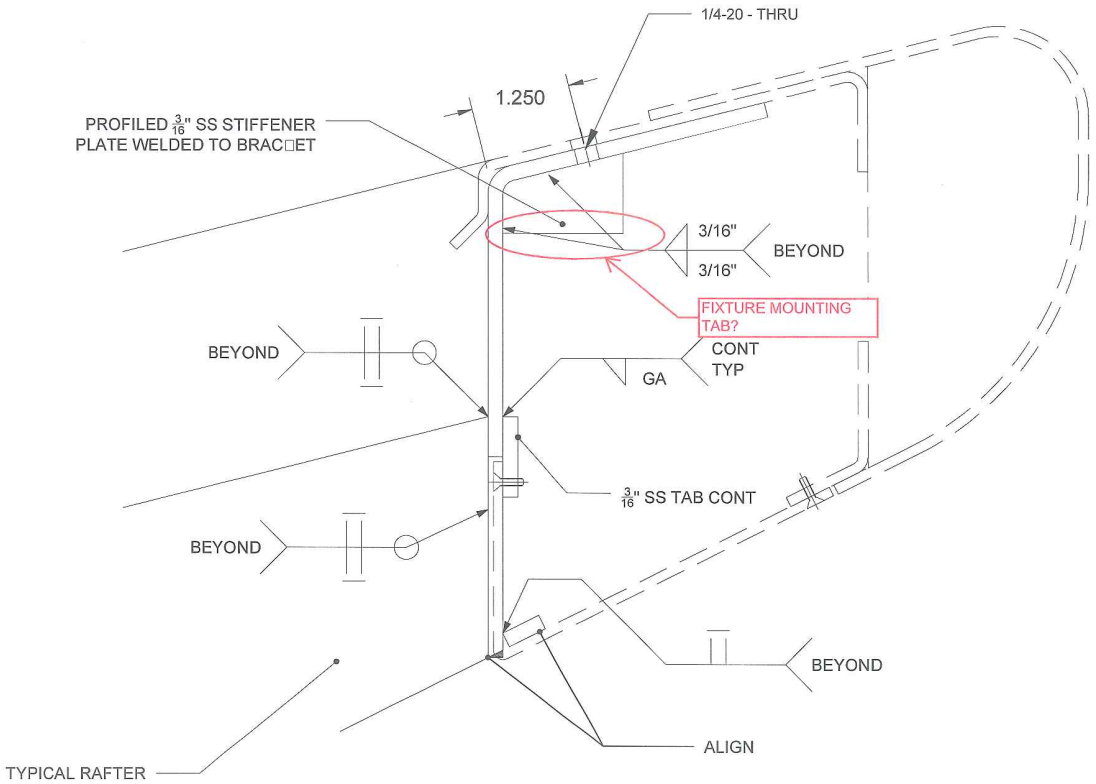
SIZE	MATL.	DWG NO.	REV
B	SS 316L – 3/16" PL	23800-05	

SCALE | DATE 11-17-2014 | DRAWN BY: CGARCIA

Shelter Rear Eave

THIS DRAWING HAS BEEN GENERATED AND IS MAINTAINED BY A CAD SYSTEM. CHANGES SHALL ONLY BE INCORPORATED AS DIRECTED BY TOLAR MANUFACTURING CO., INC.'S ENGINEERING DEPT.

REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED



2 STRUCTURAL BRACKET - REAR EAVE - SECTION VIEW
SCALE 8"=1'

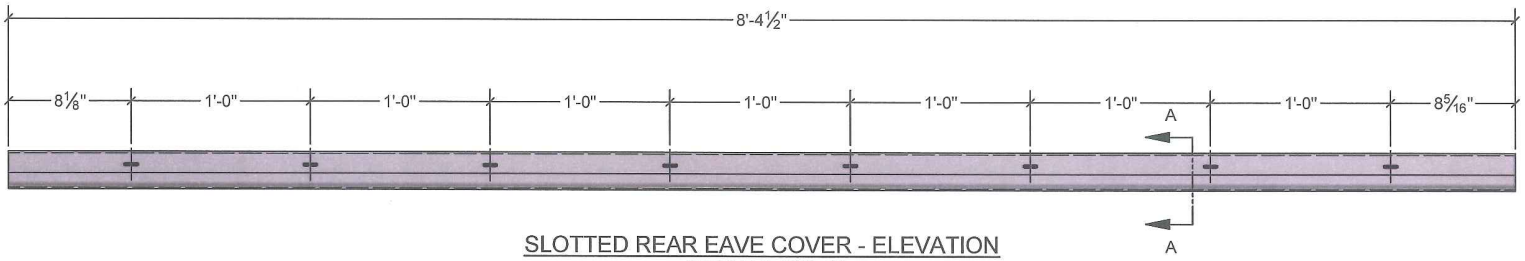
UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES
TOLERANCES:
HOLES SIZE: ±1/32
X <6': ±1/32
X >6': ±1/16
ANGLES: ±1/2°
REMOVE ALL BURRS AND BREAK SHARP EDGES 1/64 MAX.
THIRD ANGLE PROJECTION

TOLAR DURABILITY WITH DISTINCTION
Tolar Manufacturing Company, Inc
258 Mariah Circle,Corona,CA 92879

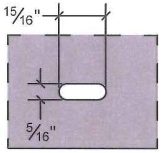
DESCRIPTION: BRAKET PROFILE – WELD DETAILS
CUSTOMER/VENDOR: SANTA CLARA – VTA
SIZE: B | MATL.: SS 313L – 3/16" PL | DWG NO.: 23800-05 | REV:
SCALE: 8"=1" | DATE: 11-17-2014 | DRAWN BY: CGARCIA

Shelter Rear Eave

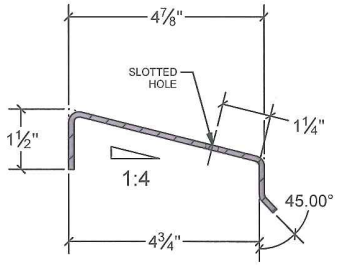
NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. MILL FINISH #1



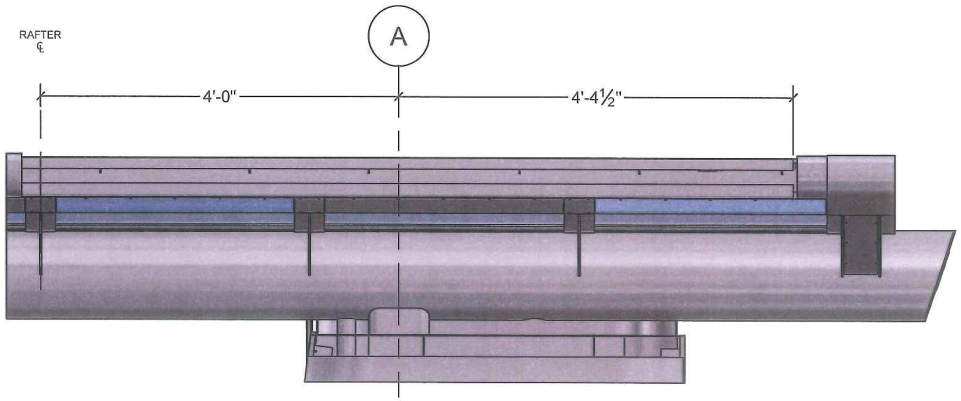
SLOTTED REAR EAVE COVER - ELEVATION
SCALE 1 1/2"=1'



SLOT DIM - PLAN VIEW
SCALE 5"=1'



SECTION A-A
SEE DRAWING 23800-06
SCALE 4"=1'



PRIMARY SHELTER - REAR ELEVATION
SCALE 3/4"=1'

TOLAR — Tolar Manufacturing Company, Inc, 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: SLOTTED EAVE TOP COVER R1			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 11 GA SH M	DWG NO.: 20886-00	REV. NO.:
SCALE: AS NOTED	DATE: 12/23/2014	DRAWN BY: cgarcia	

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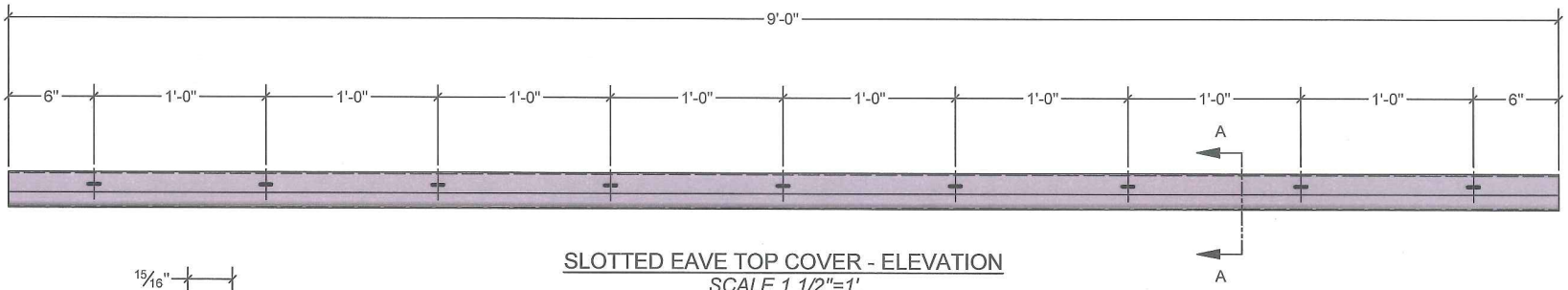
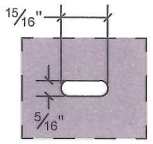
Shelter Rear Eave

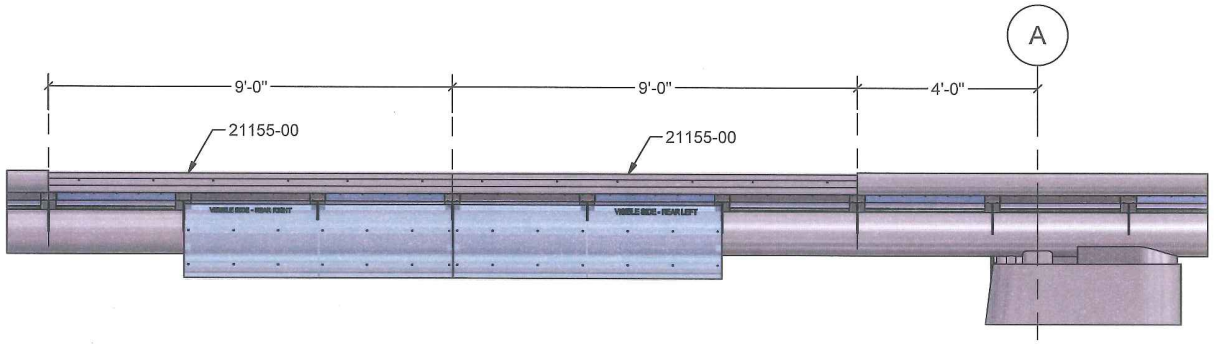
NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. MILL FINISH #1



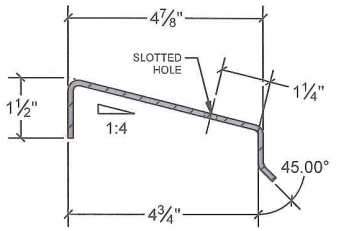
SLOTTED EAVE TOP COVER - ELEVATION
SCALE 1 1/2"=1'



SLOT DIM - PLAN VIEW
SCALE 5"=1'



PRIMARY SHELTER - REAR ELEVATION
SCALE 3/8"=1'



SECTION A-A
SEE DRAWING 23800-06
SCALE 4"=1'

TOLAR — Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: SLOTTED EAVE TOP CVR R2&R3			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 11 GA SH M	DWG NO.: 21155-00	REV. NO.
SCALE: AS NOTED	DATE: 1/5/2015	DRAWN BY: cgarcia	

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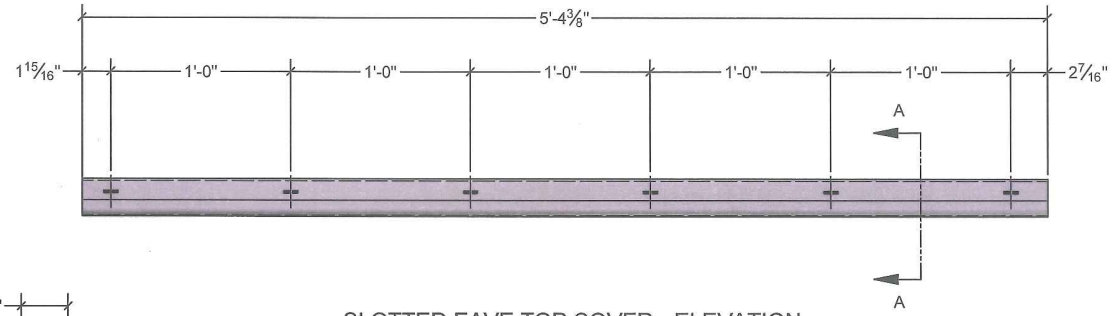
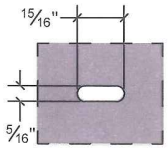
Shelter Rear Eave

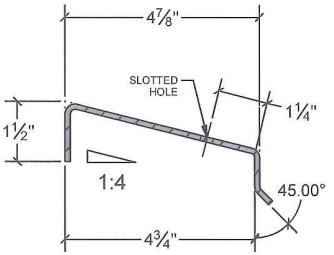
NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. MILL FINISH #1



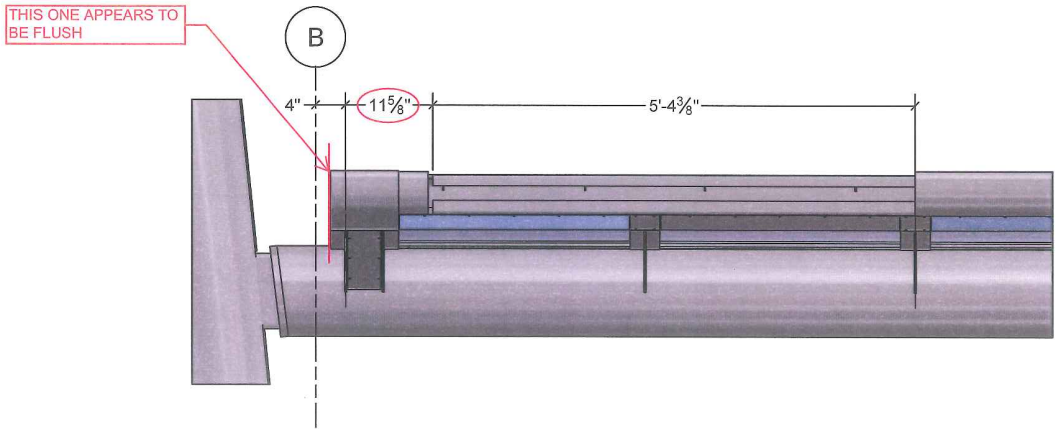
SLOTTED EAVE TOP COVER - ELEVATION
SCALE 1 1/2"=1'



SLOTTED HOLE - PLAN VIEW
SCALE 5"=1'



SECTION A-A
SEE DRAWING 23800-06
SCALE 4"=1'



PRIMARY SHELTER - REAR ELEVATION
SCALE 3/4"=1'

TOLAR — Tolar Manufacturing Company, Inc, 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: SLOTTED EAVE TOP CVR R4			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 11 GA SH M	DWG NO.: 21156-00	REV. NO.:
SCALE: AS NOTED	DATE: 1/5/2015	DRAWN BY: cgarcia	

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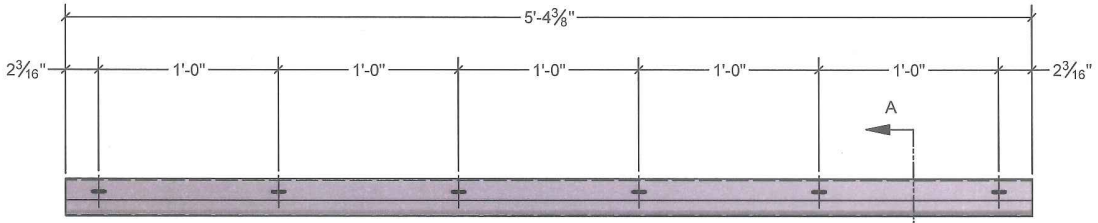
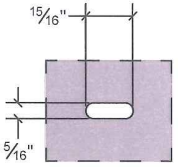
Shelter Rear Eave

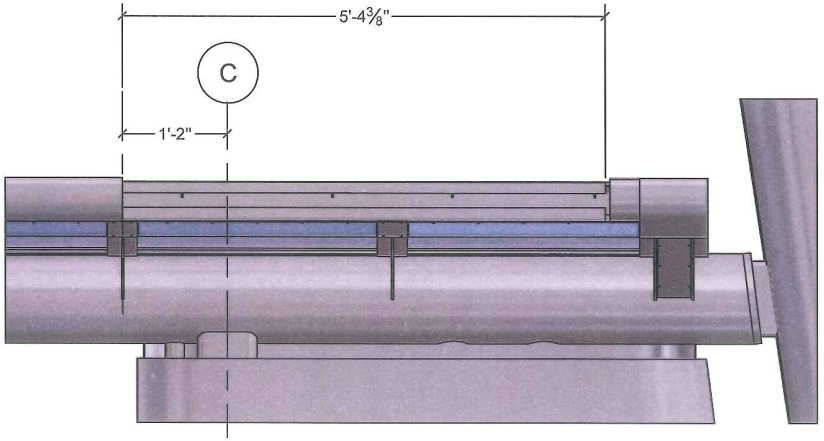
NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. MILL FINISH #1



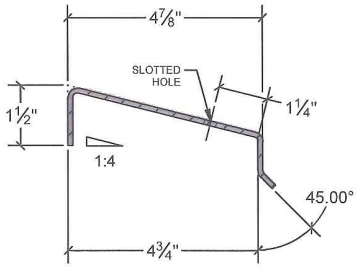
SLOTTED EAVE TOP COVER - ELEVATION
SCALE 1 1/2"=1'



SLOTTED HOLE - PLAN VIEW
SCALE 5"=1'



PRIMARY SHELTER - REAR ELEVATION
SCALE 3/4"=1'



SECTION A-A
SEE DRAWING 23800-06
SCALE 4"=1'

TOLAR	Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879
DESCRIPTION	SLOTTED EAVE TOP CVR R5-R6
CUSTOMER/VENDOR	SANTA CLARA - VTA
SHEET NO.	1 OF 1
SIZE	B
MATL.	SS 316L - 11 GA SH M
DWG NO.	21162-00
REV. NO.	
SCALE	AS NOTED
DATE	1/6/2015
DRAWN BY:	cgarcia

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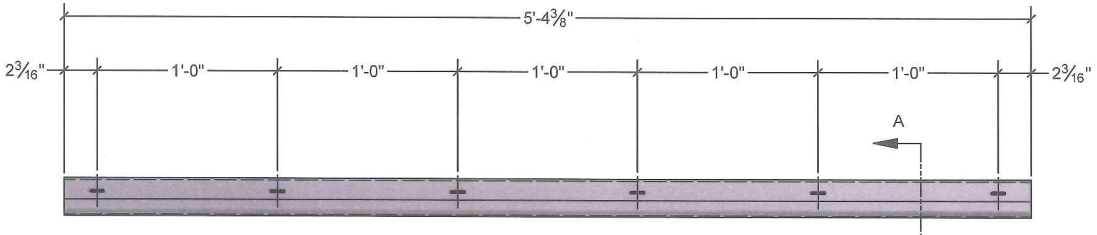
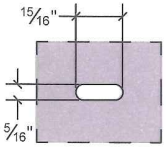
Shelter Rear Eave

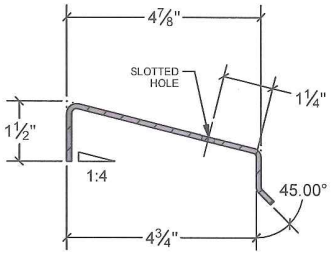
NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. MILL FINISH #1



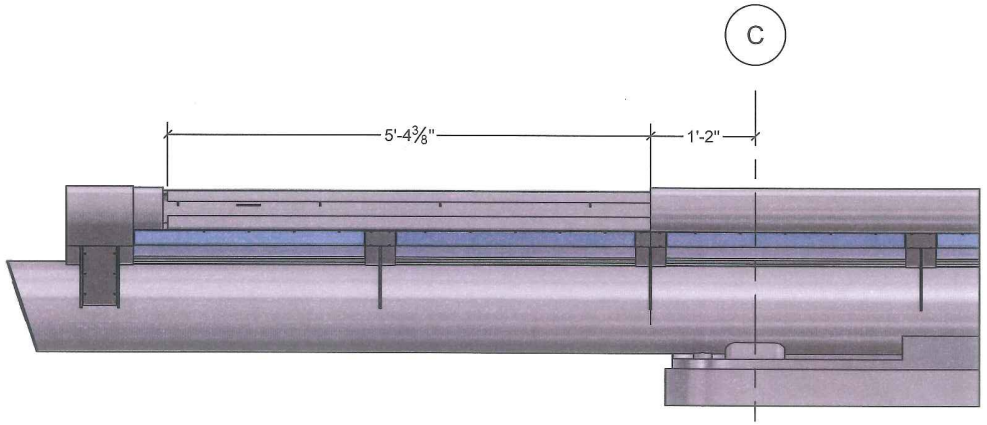
SLOTTED EAVE TOP COVER - ELEVATION
SCALE 1 1/2"=1'



SLOTTED HOLE - PLAN VIEW
SCALE 5"=1'



SECTION A-A
SEE DRAWING 23800-06
SCALE 4"=1'



PRMARY SHELTER - REAR ELEVATION
SCALE 3/4"=1'

TOLAR — Tolar Manufacturing Company, Inc, 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: SLOTTED EAVE TOP CVR R5-R6			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 11 GA SH M	DWG NO.: 21162-01	REV. NO.:
SCALE: AS NOTED	DATE: 1/6/2015	DRAWN BY: cgarcia	

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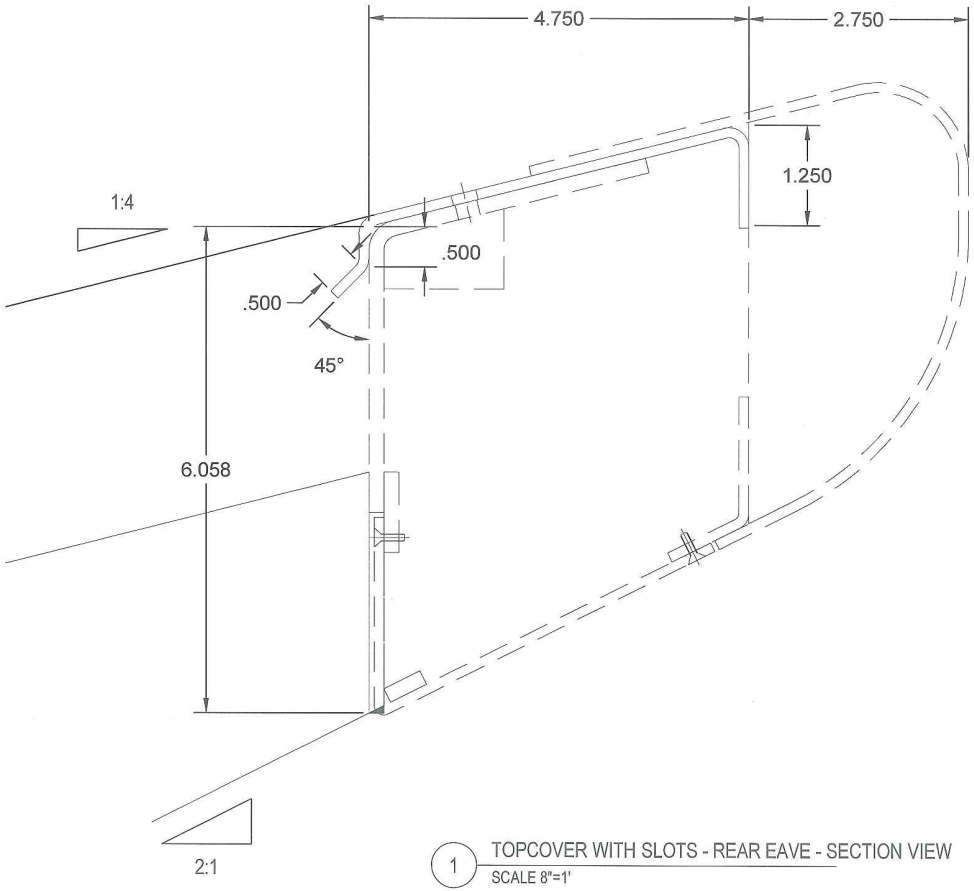
Shelter Rear Eave

THIS DRAWING HAS BEEN GENERATED AND IS MAINTAINED BY A CAD SYSTEM. CHANGES SHALL ONLY BE INCORPORATED AS DIRECTED BY TOLAR MANUFACTURING CO., INC.'S ENGINEERING DEPT.

REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED



1 TOPCOVER WITH SLOTS - REAR EAVE - SECTION VIEW
SCALE 8"=1'

UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES
TOLERANCES:
HOLES SIZE: ±1/32
X <6': ±1/32
X >6': ±1/16
ANGLES: ±1/2°
REMOVE ALL BURRS AND BREAK SHARP EDGES 1/64 MAX.
THIRD ANGLE PROJECTION

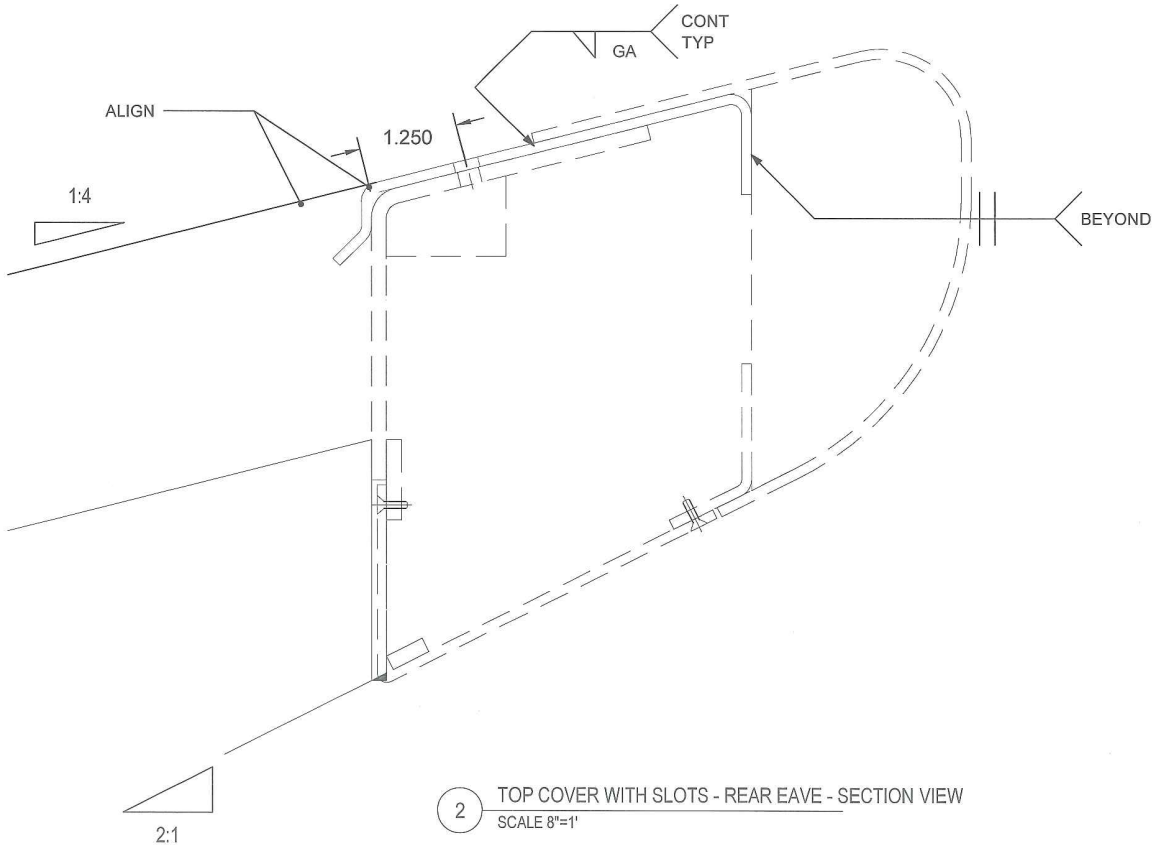
TOLAR DURABILITY WITH DISTINCTION
Tolar Manufacturing Company, Inc
258 Mariah Circle,Corona,CA 92879

DESCRIPTION: BENT 11 GA TOP COVER W/SLOTS
CUSTOMER/VENDOR: SANTA CLARA – VTA
SIZE: B | MATL.: SS 316L – 11GA SM | DWG NO.: 23800-06 | REV:
SCALE: 8"=1' | DATE: 11-17-2014 | DRAWN BY: CGARCIA

Shelter Rear Eave

THIS DRAWING HAS BEEN GENERATED AND IS MAINTAINED BY A CAD SYSTEM. CHANGES SHALL ONLY BE INCORPORATED AS DIRECTED BY TOLAR MANUFACTURING CO., INC.'S ENGINEERING DEPT.

REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED



2 TOP COVER WITH SLOTS - REAR EAVE - SECTION VIEW
SCALE 8"=1'

UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES
TOLERANCES:
HOLES SIZE: ±1/32
X <6': ±1/32
X >6': ±1/16
ANGLES: ±1/2°

REMOVE ALL BURRS AND BREAK SHARP EDGES 1/64 MAX.

THIRD ANGLE PROJECTION

TOLAR DURABILITY WITH DISTINCTION
Tolar Manufacturing Company, Inc
258 Mariah Circle,Corona,CA 92879

DESCRIPTION: BENT 11 GA TOP COVER W/SLOTS

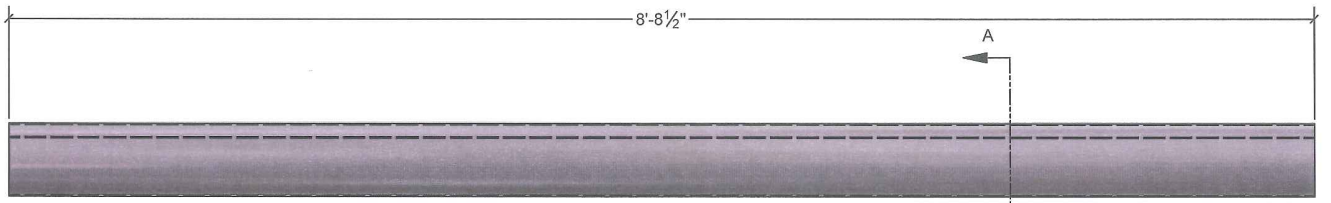
CUSTOMER/VENDOR: SANTA CLARA – VTA

SIZE: B | MATL.: SS 313L – 11GA SM | DWG NO.: 23800-06 | REV:

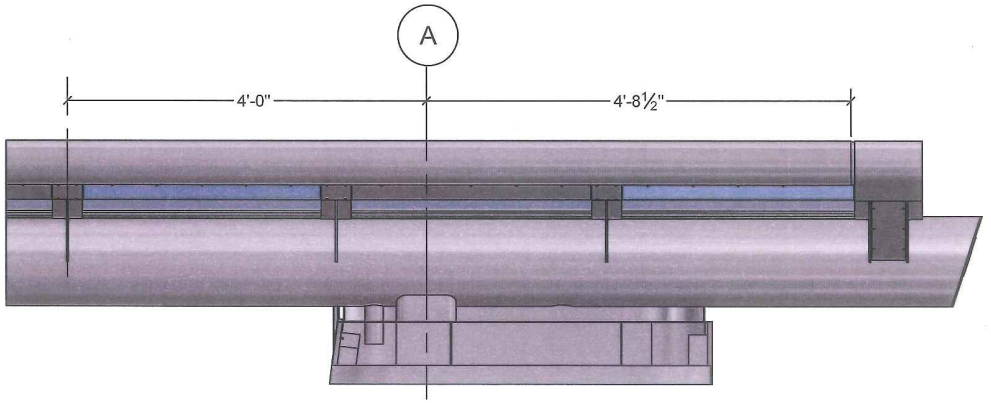
SCALE: 8"=1' | DATE: 11-17-2014 | DRAWN BY: CGARCIA

Shelter Rear Eave

NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. DIRECTIONAL FINISH #4 (LONG EDGE DIRECTION)



REAR EAVE R1 - ELEVATION
SCALE 1 1/4"=1'



PRIMARY SHLETER - REAR ELEVATION
SCALE 3/4"=1'

SECTION A-A
SEE DRAWING 23800-07
SCALE 3"=1'

TOLAR — DURABILITY WITH DISTINCTION	Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879		
DESCRIPTION	CANOPY EAVE WRAP R1		
CUSTOMER/VENDOR	SANTA CLARA - VTA		SHEET NO. 1 OF 1
SIZE B	MATL: SS 316L - 11 GA SH M	DWG NO. 20887-00	REV. NO.
SCALE AS NOTED	DATE 12/23/2014	DRAWN BY: cgarcia	

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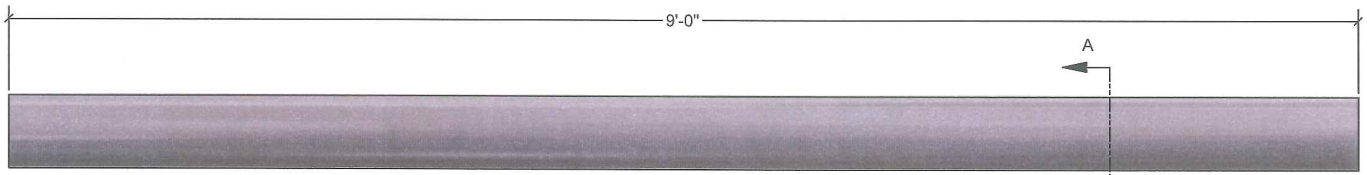
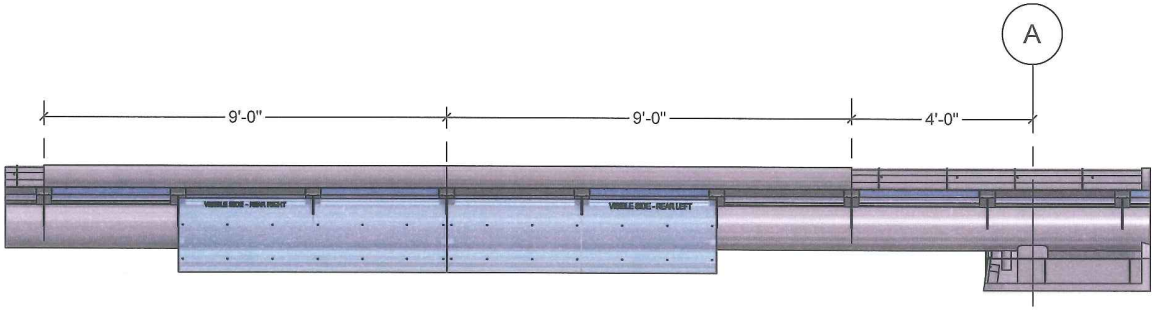
Shelter Rear Eave

NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. DIRECTIONAL FINISH #4 (LONG EDGE DIRECTION)



REAR EAVE - R2 & R3 - ELEVATION
SCALE 1 1/4"=1'

SECTION A-A
SEE DRAWING 23800-07
SCALE 3"=1'



PRIMARY SHELTER - REAR ELEVATION
SCALE 3/8"=1'

TOLAR DURABILITY WITH DISTINCTION	Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879		
DESCRIPTION	CANOPI EAVE WRAP R2&R3		
CUSTOMER/VENDOR	SANTA CLARA - VTA		SHEET NO. 1 OF 1
SIZE B	MATL. SS 316L - 11 GA SH M	DWG NO. 21150-00	REV. NO.
SCALE AS NOTED	DATE 1/5/2015	DRAWN BY: cgarcia	

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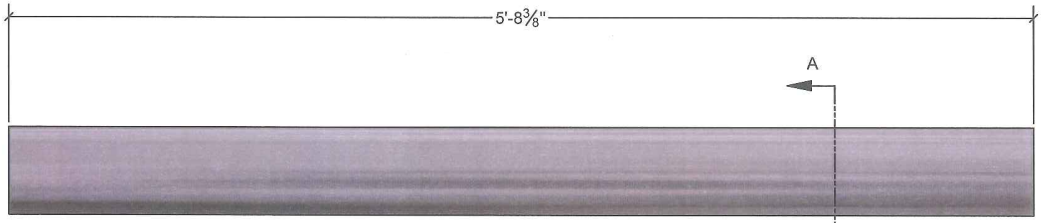
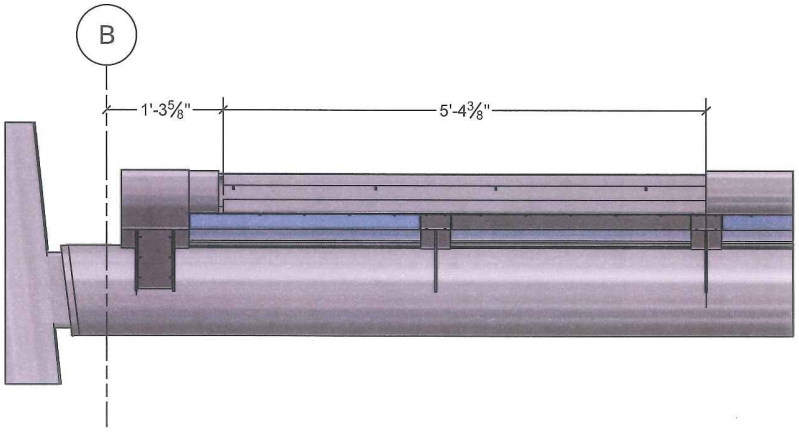
Shelter Rear Eave

NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. DIRECTIONAL FINISH #4 (LONG EDGE DIRECTION)



REAR EAVE R4 - ELEVATION
SCALE 1 1/2"=1'



PRIMARY SHELTER - REAR ELEVATION
SCALE 3/4"=1'

SECTION A-A
SEE DRAWING 23800-07
SCALE 3"=1'

TOLAR — Tolar Manufacturing Company, Inc, 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: CANOPY EAVE WRAP			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 11 GA SH M	DWG NO.: 21152-00	REV. NO.:
SCALE: AS NOTED	DATE: 1/6/2015	DRAWN BY: cgarcia	

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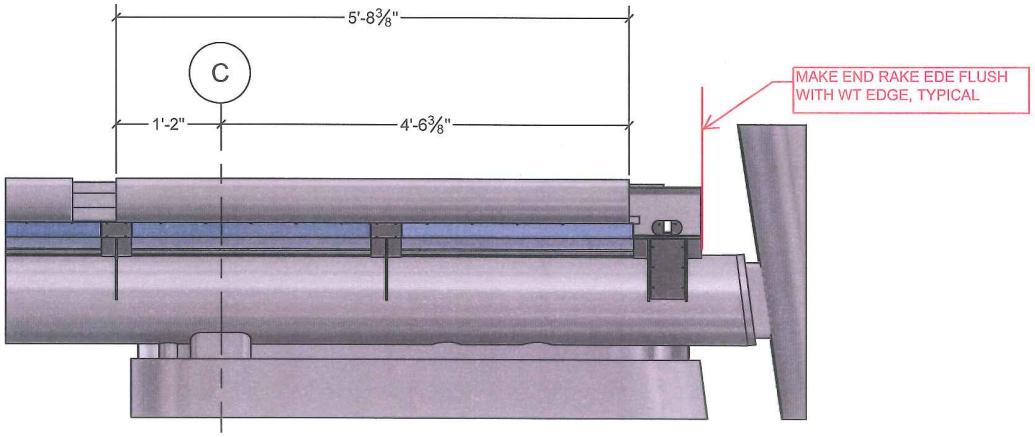
Shelter Rear Eave

NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. DIRECTIONAL FINISH #4 (LONG EDGE DIRECTION)

REAR EAVE "R5" - ELEVATION
SCALE 1 1/2"=1'



PRIMARY SHELTER - REAR ELEVATION
SCALE 3/4"=1'

SECTION A-A
SEE DRAWING 23800-07
SCALE 3"=1'

TOLAR — Tolar Manufacturing Company, Inc, 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: CANOPY EAVE WRAP R5-R6			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 11 GA SH M	DWG NO.: 21159-00	REV. NO.:
SCALE: AS NOTED	DATE: 1/6/2015	DRAWN BY: cgarcia	

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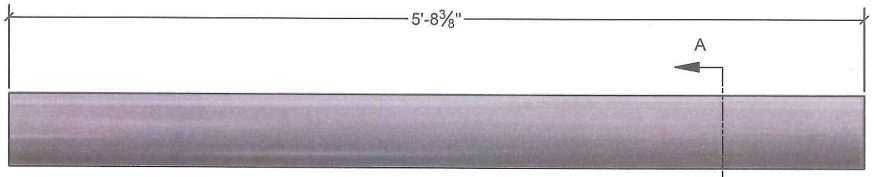
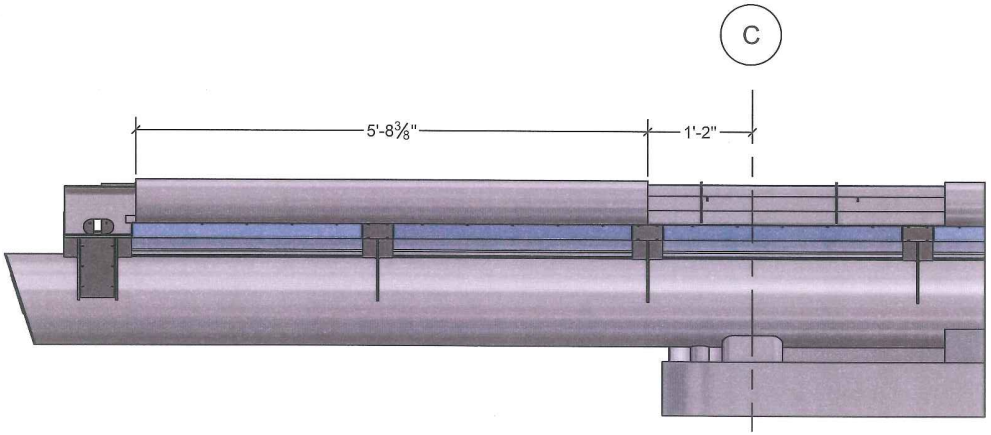
Shelter Rear Eave

NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. DIRECTIONAL FINISH #4 (LONG EDGE DIRECTION)



REAR EAVE "R6" - ELEVATION
SCALE 1 1/4"=1'



PRIMARY SHELTER - REAR ELEVATION
SCALE 3/4"=1'

SECTION A-A
SEE DRAWING 23800-07
SCALE 3"=1'

TOLAR — DURABILITY WITH DISTINCTION	Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879		
DESCRIPTION	CANOPY EAVE WRAP R5-R6		
CUSTOMER/VENDOR	SANTA CLARA - VTA		SHEET NO. 1 OF 1
SIZE B	MATL. SS 316L - 11 GA SH M	DWG NO. 21159-01	REV. NO.
SCALE AS NOTED	DATE 1/6/2015	DRAWN BY: cgarcia	

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Shelter Rear Eave

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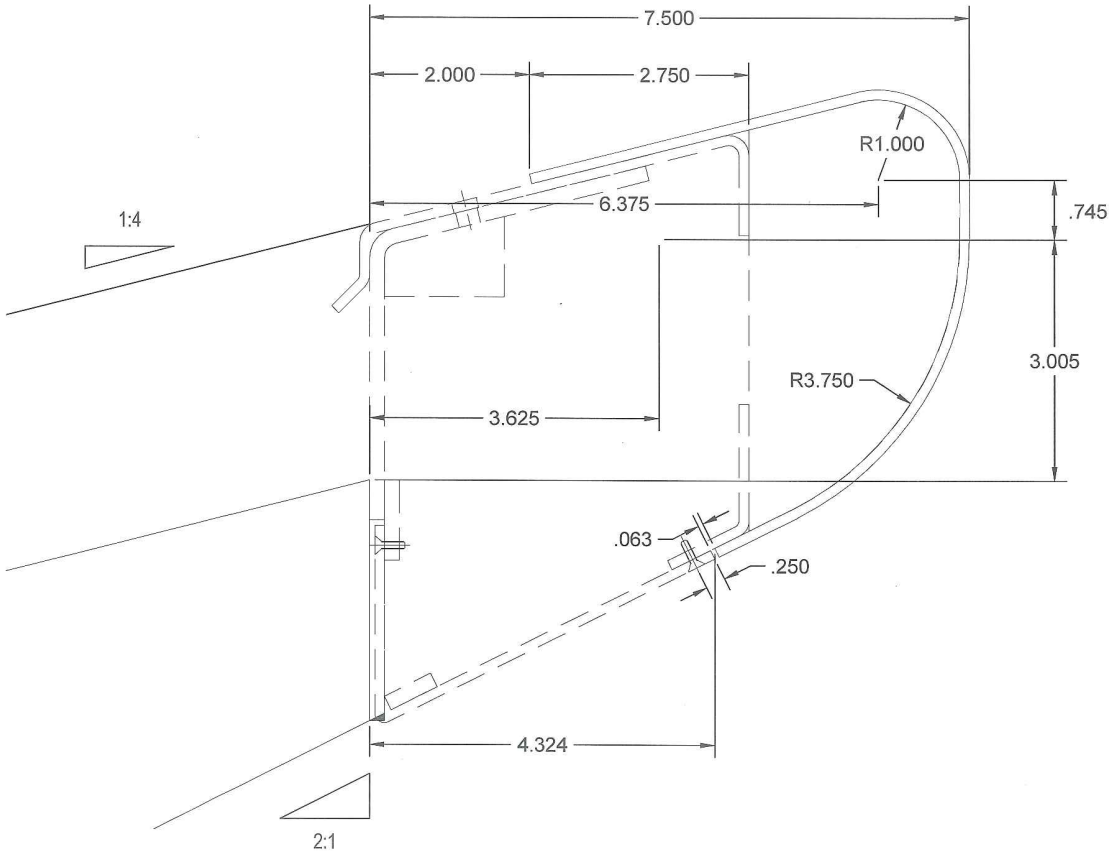
REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED



1 REAR EAVE WRAP - SECTION
SCALE 8"=1'

UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES

TOLERANCES:
HOLES SIZE: ±1/32
X < 6': ±1/32
X > 6': ±1/16
ANGLES: ±1/2°

REMOVE ALL BURRS AND BREAK SHARP EDGES 1/64 MAX.

THIRD ANGLE PROJECTION

TOLAR DURABILITY WITH DISTINCTION

Tolar Manufacturing Company, Inc
258 Mariah Circle,Corona,CA 92879

DESCRIPTION: CANOPY REAR EAVE WRAP

CUSTOMER/VENDOR: SANTA CLARA – VTA

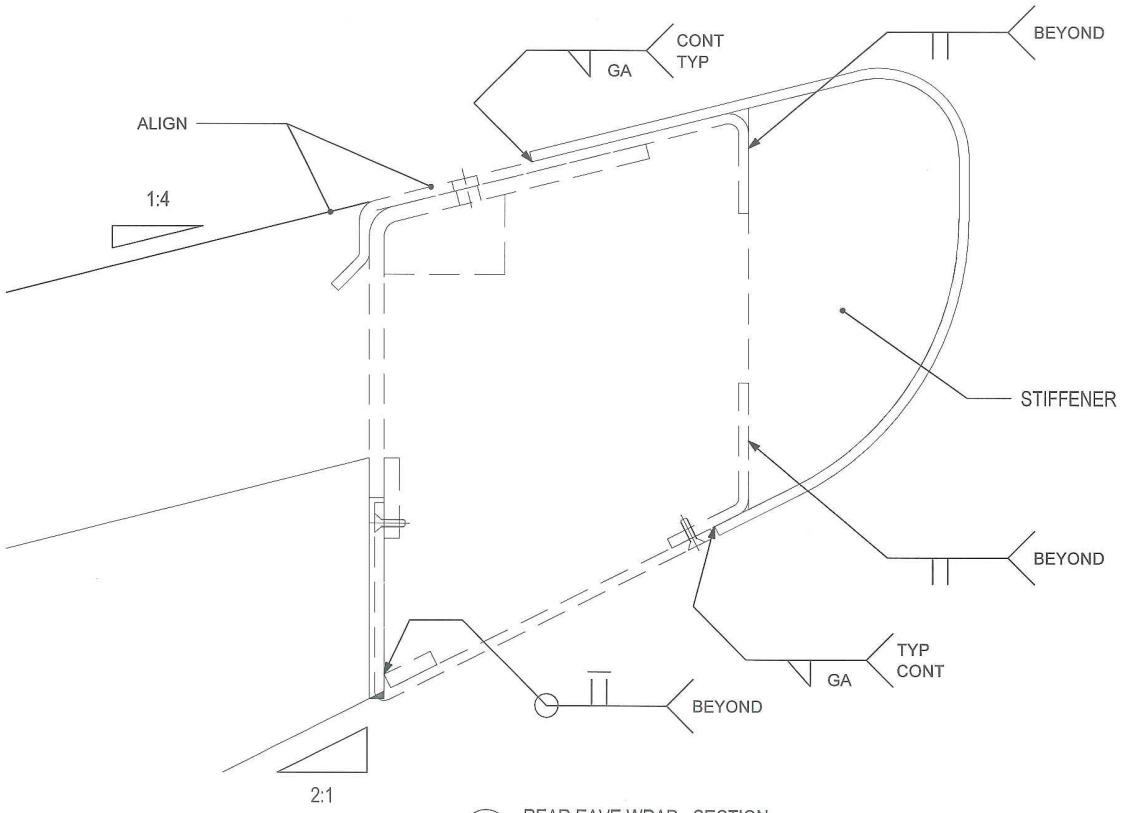
SIZE	MATL.	DWG NO.	REV
B	SS 313L – 11GA SM	23800-07	

SCALE 8"=1' | DATE 11-17-2014 | DRAWN BY: CGARCIA

Shelter Rear Eave

THIS DRAWING HAS BEEN GENERATED AND IS MAINTAINED BY A CAD SYSTEM. CHANGES SHALL ONLY BE INCORPORATED AS DIRECTED BY TOLAR MANUFACTURING CO., INC.'S ENGINEERING DEPT.

REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED



2 REAR EAVE WRAP - SECTION
SCALE 8"=1'

UNLESS OTHERWISE SPECIFIED:
ALL DIMENSIONS ARE IN INCHES
TOLERANCES:
HOLES SIZE: ±1/32
X <6': ±1/32
X >6': ±1/16
ANGLES: ±1/2'

REMOVE ALL BURRS AND BREAK SHARP EDGES 1/64 MAX.

THIRD ANGLE PROJECTION

TOLAR
DURABILITY WITH DISTINCTION

Tolar Manufacturing Company, Inc
258 Mariah Circle,Corona,CA 92879

DESCRIPTION: CANOPY REAR EAVE WRAP

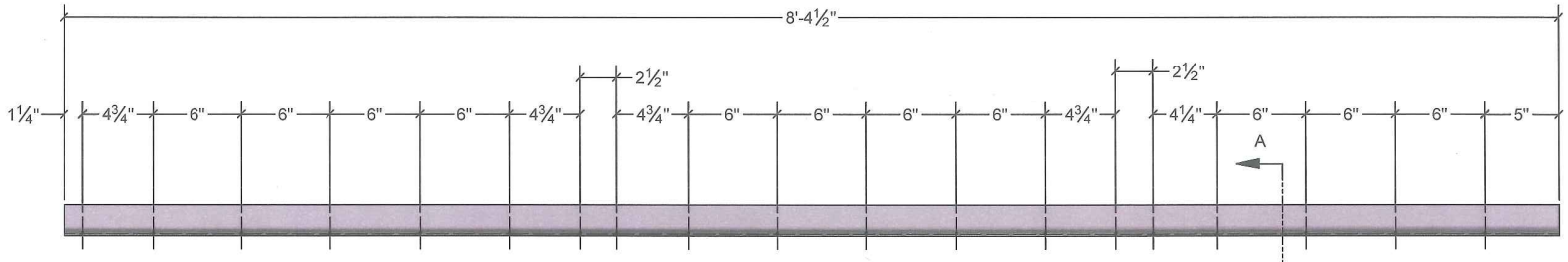
CUSTOMER/VENDOR: SANTA CLARA – VTA

SIZE	MATL.	DWG NO.	REV
B	SS 313L – 11GA SM	23800-07	

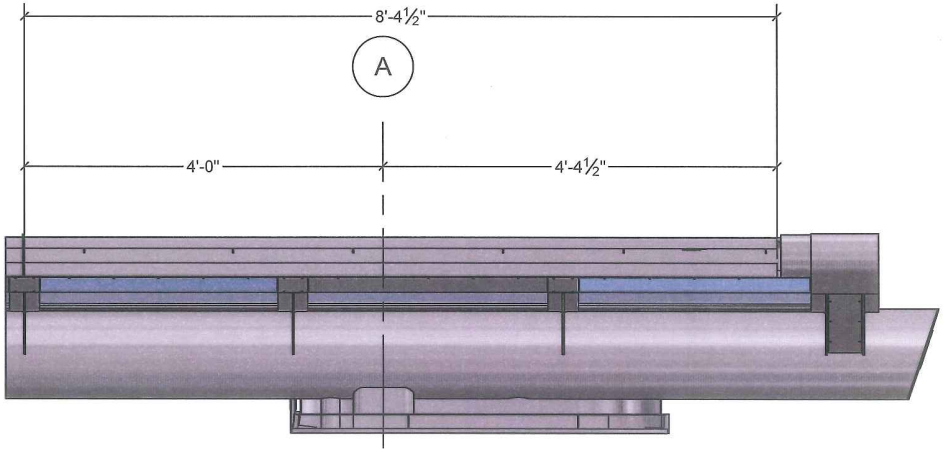
SCALE	DATE	DRAWN BY:
8"=1'	11-17-2014	CGARCIA

Shelter Rear Eave

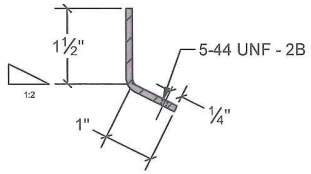
NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. MILL FINISH #1



CONTINOUS BENT PLATE
SCALE 1 1/2"=1'



PRIMARY SHELTER - REAR ELEVATION
SCALE 3/4"=1'



SECTION A-A
SEE DRAWING 23800-08
SCALE 5"=1'

TOLAR — DURABILITY WITH DISTINCTION	Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879		
DESCRIPTION	CONTINOUS BENT PLATE - R1		
CUSTOMER/VENDOR	SANTA CLARA - VTA		SHEET NO. 1 OF 1
SIZE B	MATL. SS 316L - 11 GA SH M	DWG NO. 21667-00	REV. NO.
SCALE AS NOTED	DATE 12/23/2014	DRAWN BY: cgarcia	

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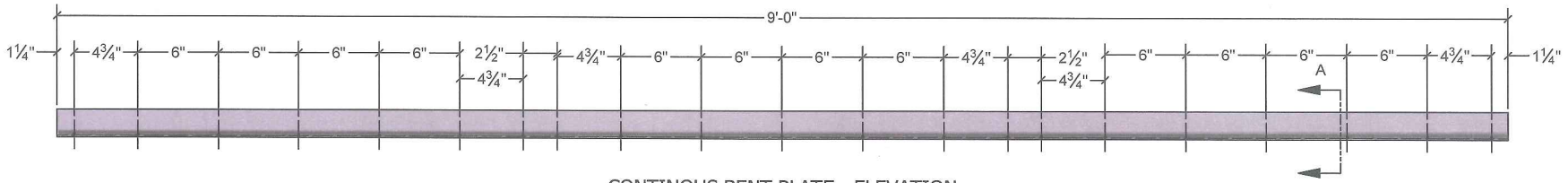
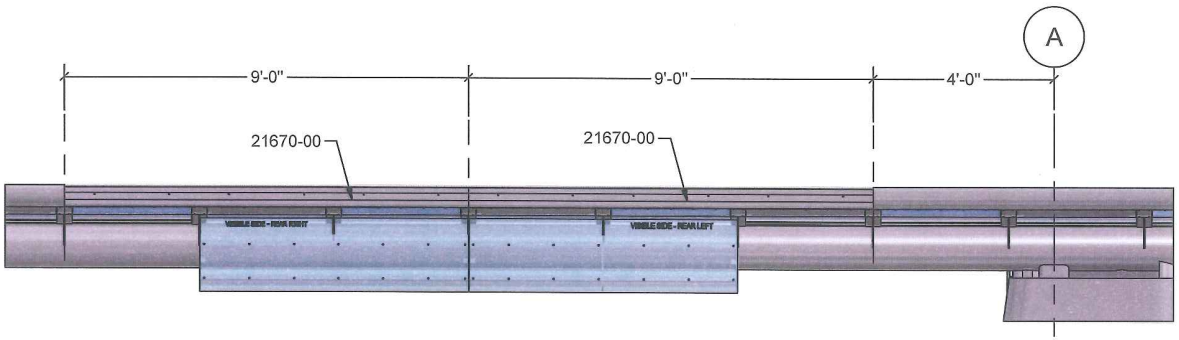
Shelter Rear Eave

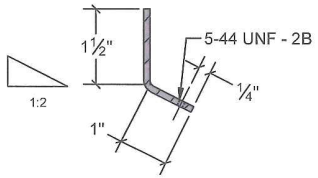
NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. MILL FINISH #1



CONTINOUS BENT PLATE - ELEVATION
SCALE 1 1/2"=1'



PRIMARY SHELTER - REAR ELEVATION
SCALE 3/8"=1'



SECTION A-A
SEE DRAWING 23800-08
SCALE 5"=1'

TOLAR	Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879		
DESCRIPTION	CONTINOUS BENT PLATE R2&R3		
CUSTOMER/VENDOR	SANTA CLARA - VTA		SHEET NO. 1 OF 1
SIZE B	MATL. SS 316L - 11 GA SH M	DWG NO. 21670-00	REV. NO.
SCALE AS NOTED	DATE 1/5/2015	DRAWN BY: cgarcia	

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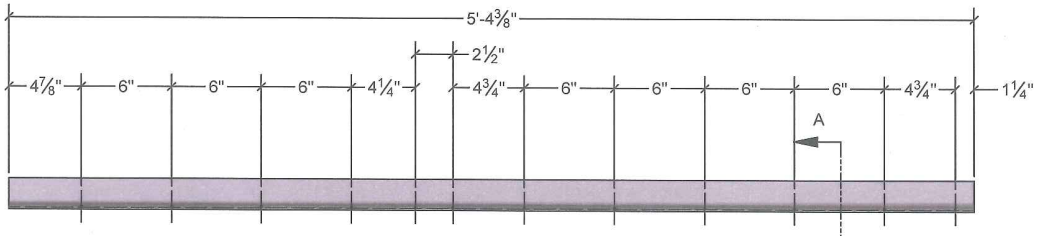
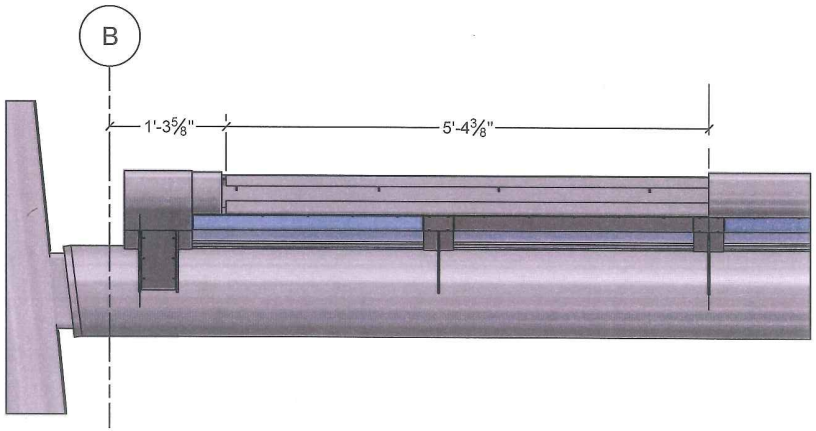
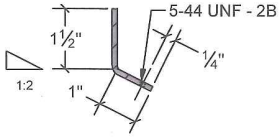
Shelter Rear Eave

NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. MILL FINISH #1



CONTINOUS BENT PLATE - ELEVATION
SCALE 1 1/2"=1'





SECTION A-A
SEE DRAWING 23800-08
SCALE 4"=1'

SHELTER - REAR ELEVATION
SCALE 3/4"=1'

Shelter Rear Eave

TOLAR — Tolar Manufacturing Company, Inc, 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: CONTINOUS BENT PLATE R4			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 11 GA SH M	DWG NO.: 21669-00	REV. NO.:
SCALE: AS NOTED	DATE: 1/6/2015	DRAWN BY: cgarcia	

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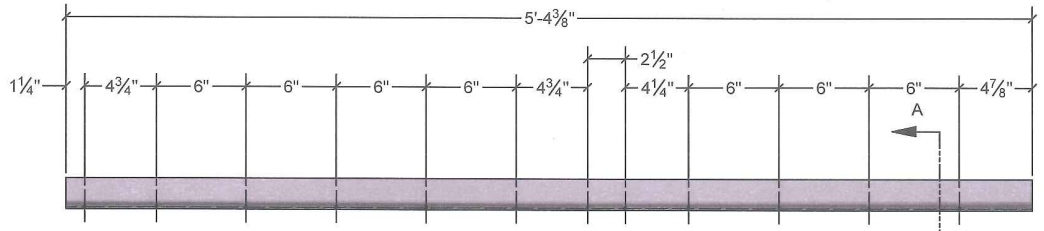
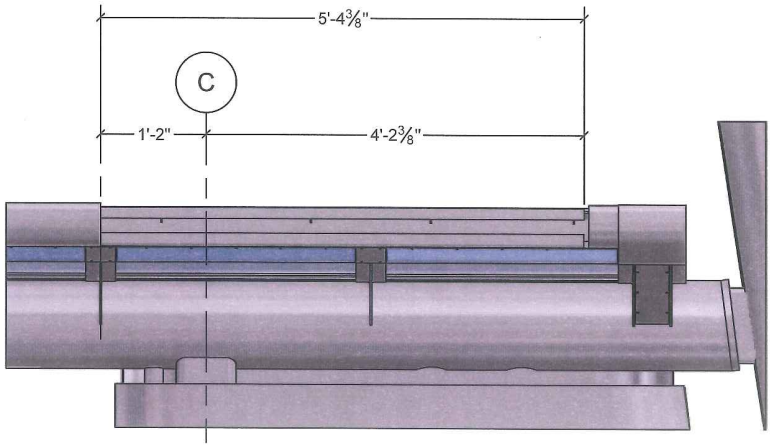
Shelter Rear Eave

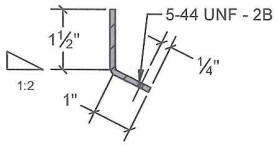
NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. MILL FINISH #1



CONTINOUS BENT PLATE - ELEVATION
SCALE 1 1/2"=1'



PRIMARY SHELTER - REAR ELEVATION
SCALE 3/4"=1'



SECTION A-A
SEE DRAWING 23800-08
SCALE 4"=1'

TOLAR	Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879		
DESCRIPTION	CONTINOUS BENT PLATE R5		
CUSTOMER/VENDOR	SANTA CLARA - VTA		SHEET NO. 1 OF 1
SIZE B	MATL. SS 316L - 11 GA SH M	DWG NO. 21669-01	REV. NO.
SCALE AS NOTED	DATE 1/6/2015	DRAWN BY: cgarcia	

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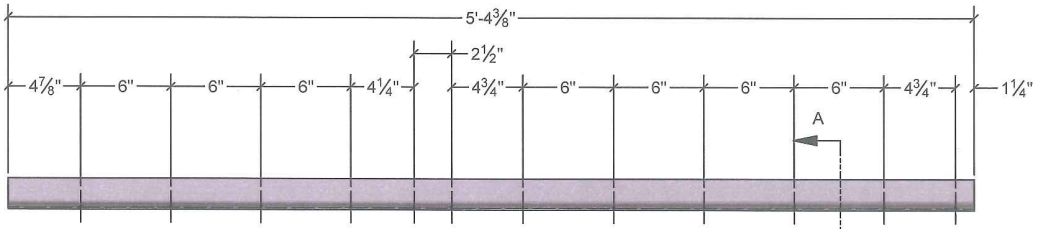
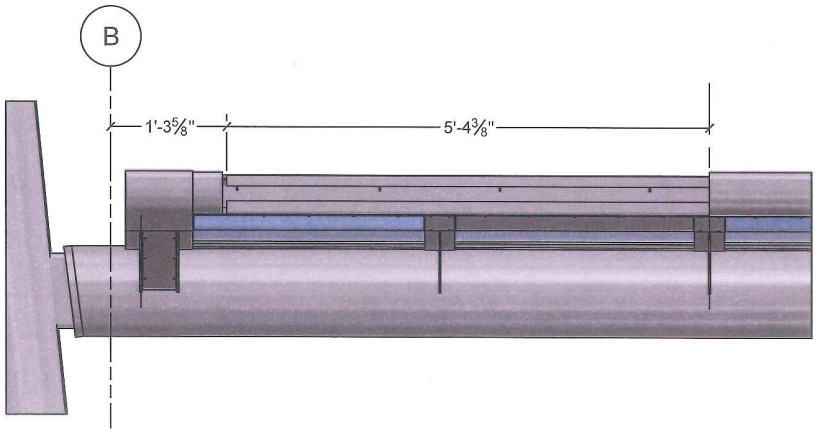
Shelter Rear Eave

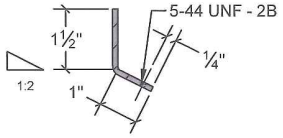
NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. MILL FINISH #1



CONTINOUS BENT PLATE - ELEVATION
SCALE 1 1/2"=1'



PRIMARY SHELTER - REAR ELEVATION
SCALE 3/4"=1'



SECTION A-A
SEE DRAWING 23800-08
SCALE 4"=1'

TOLAR — Tolar Manufacturing Company, Inc, 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: CONTINOUS BENT PLATE R4			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 11 GA SH M	DWG NO.: 21669-00	REV. NO.:
SCALE: AS NOTED	DATE: 1/6/2015	DRAWN BY: cgarcia	

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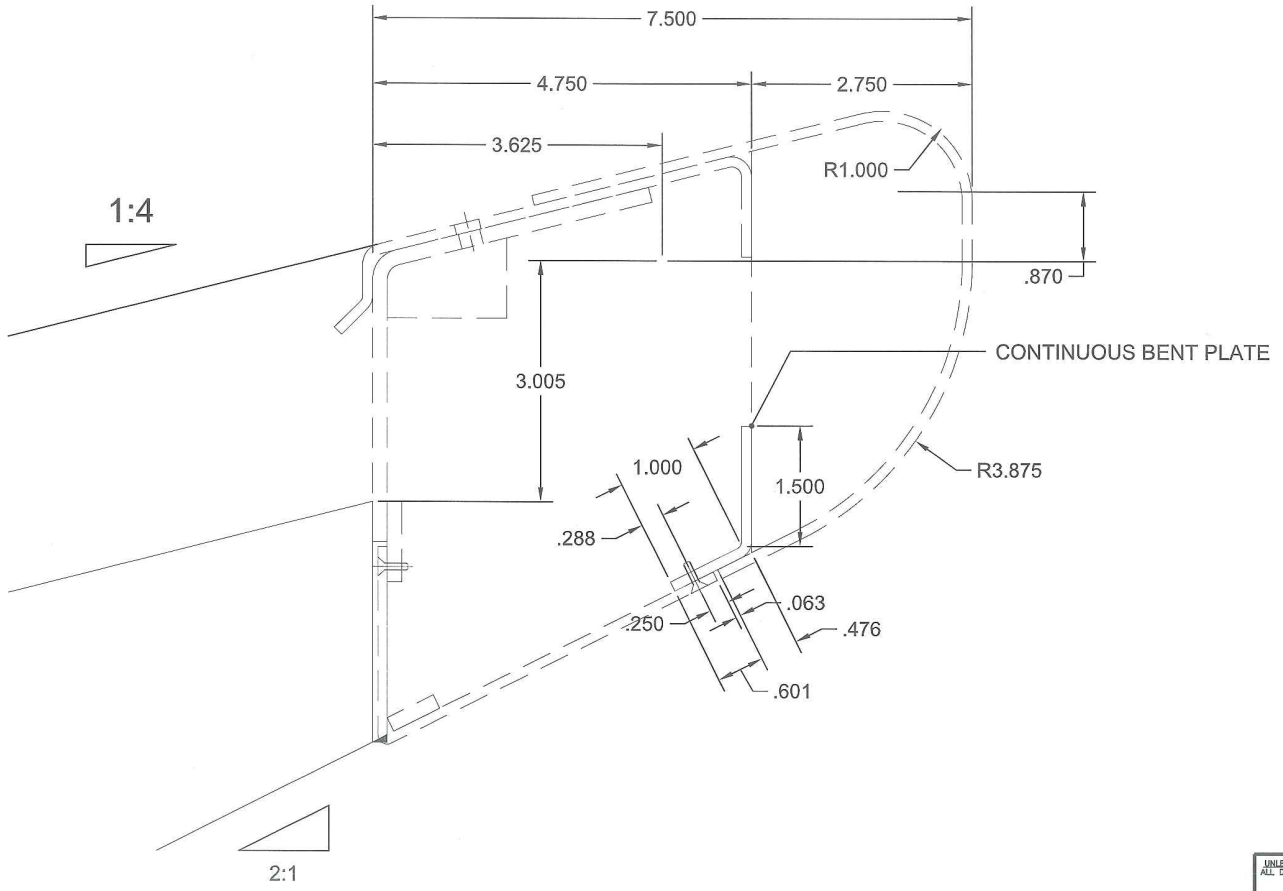
REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED



1 REAR EAVE CONT. BENT PLATE - SECTION
SCALE 8"=1'

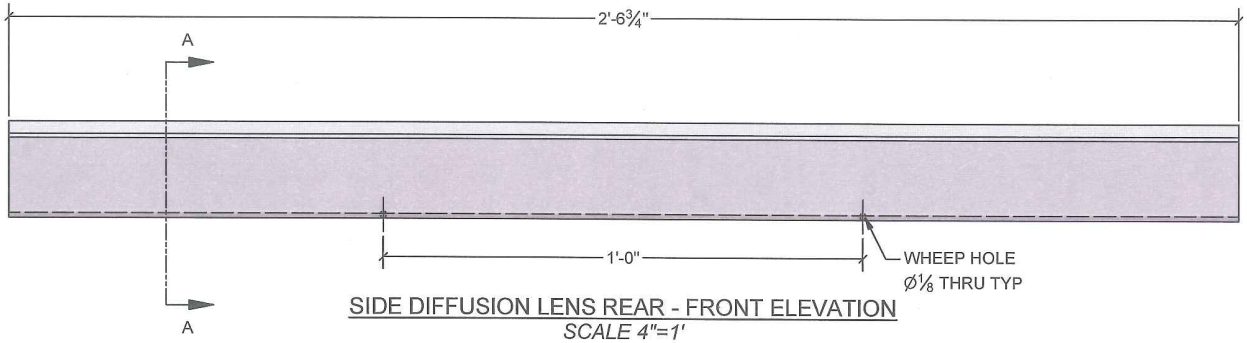
UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES
TOLERANCES:
HOLES SIZE: ±1/32
X < 8': ±1/32
X > 8': ±1/16
ANGLES: ±1/2'
REMOVE ALL BURRS AND BREAK SHARP EDGES 1/64 MAX.
THIRD ANGLE PROJECTION

TOLAR DURABILITY WITH DISTINCTION
Tolar Manufacturing Company, Inc
258 Mariah Circle,Corona,CA 92879

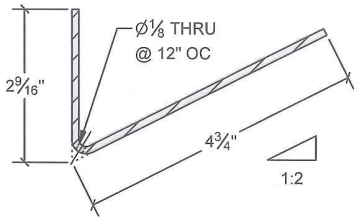
DESCRIPTION: CONTINOUS BENT PLATE
CUSTOMER/VENDOR: SANTA CLARA – VTA
SIZE: B | MATL.: SS 316L – 11GA SM | DWG NO.: 23800–08 | REV:
SCALE: 8"=1' | DATE: 11–17–2014 | DRAWN BY: CGARCIA

Shelter Rear Eave

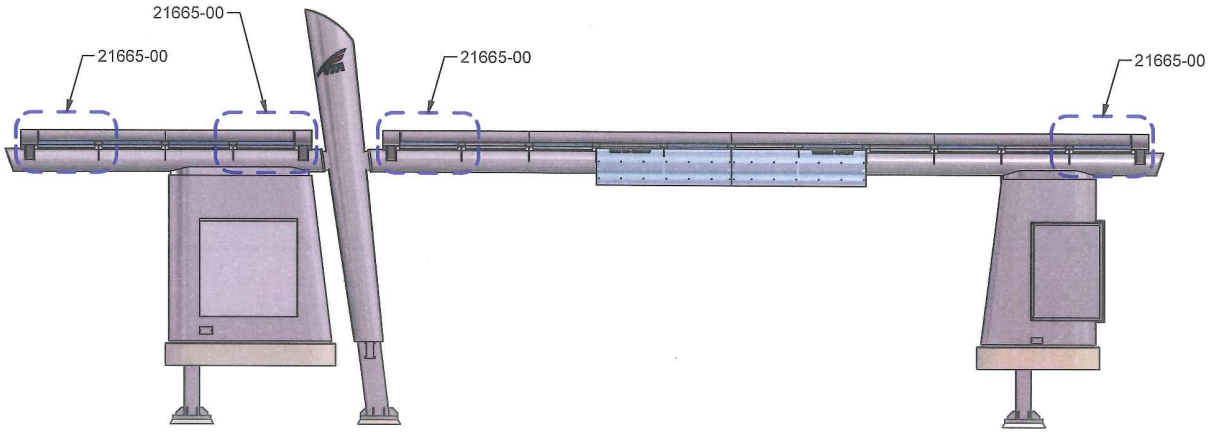
REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
ALL	A	384A	2/24/2015	



SIDE DIFFUSION LENS REAR - FRONT ELEVATION
SCALE 4"=1'



SECTION A-A
SEE DRAWING 23800-09
SCALE 6"=1'



PRIMARY SHELTER - REAR ELEVATION
SCALE 3/16"=1'

A
APPLY AS PER LIGHTING LAYOUTS
SEE DRAWINGS:
24627-00 - TYPICAL
24627-01 - NO BACK LTG
24627-02 - NO BACK LTG - JACKSON & KING

TOLAR — Tolar Manufacturing Company, Inc, 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: DIFFUSION LENS (SIDE) R			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: POLYCARBONATE - 0.118"	DWG NO.: 21665-00	REV. NO.: A
SCALE: AS NOTED	DATE: 12/23/2014	DRAWN BY: cgarcia	

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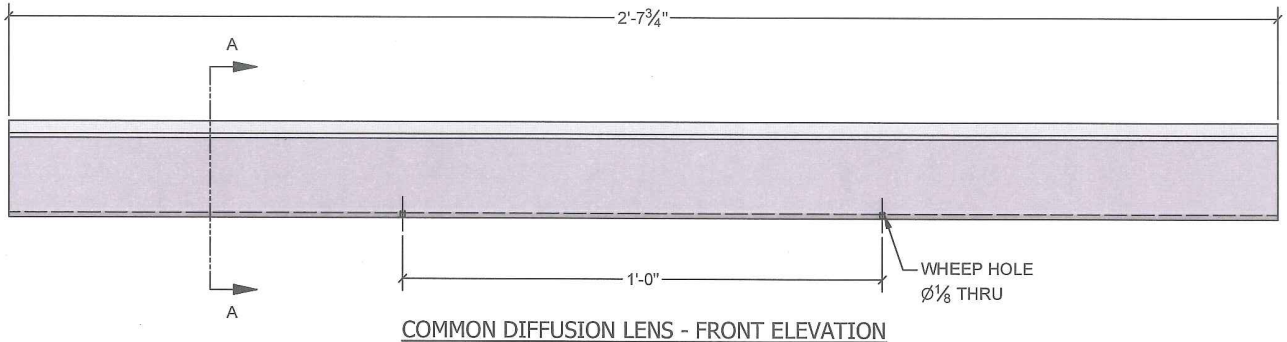
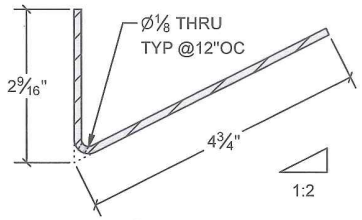
Shelter Rear Eave

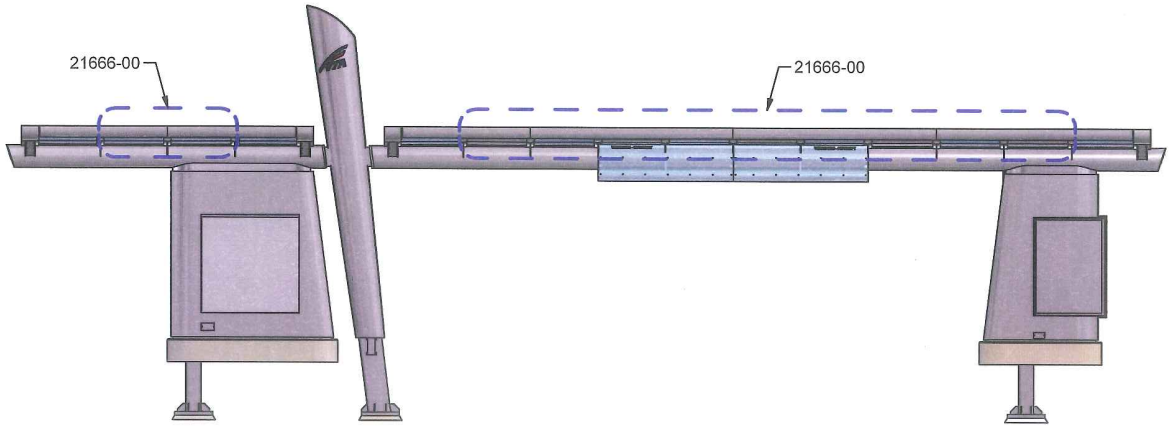
REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
ALL	A	384A	2/24/2015	



COMMON DIFFUSION LENS - FRONT ELEVATION
SCALE 4"=1'



SECTION A-A
SEE DRAWING 23800-09
SCALE 6"=1'



PRIMARY SHELTER - REAR ELEVATION
SCALE 3/16"=1'

A
APPLY AS PER LIGHTING LAYOUTS
SEE DRAWINGS:
24627-00 - TYPICAL
24627-01 - NO BACK LTG
24627-02 - NO BACK LTG - JACKSON & KING

TOLAR DURABILITY WITH DISTINCTION	Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879		
DESCRIPTION	DIFFUSION LENS (COMMON) R		
CUSTOMER/VENDOR	SANTA CLARA - VTA		SHEET NO. 1 OF 1
SIZE B	MATL. POLYCARBONATE - 0.118"	DWG NO. 21666-00	REV. NO. A
SCALE AS NOTED	DATE 12/23/2014	DRAWN BY: cgarcia	

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Shelter Rear Eave

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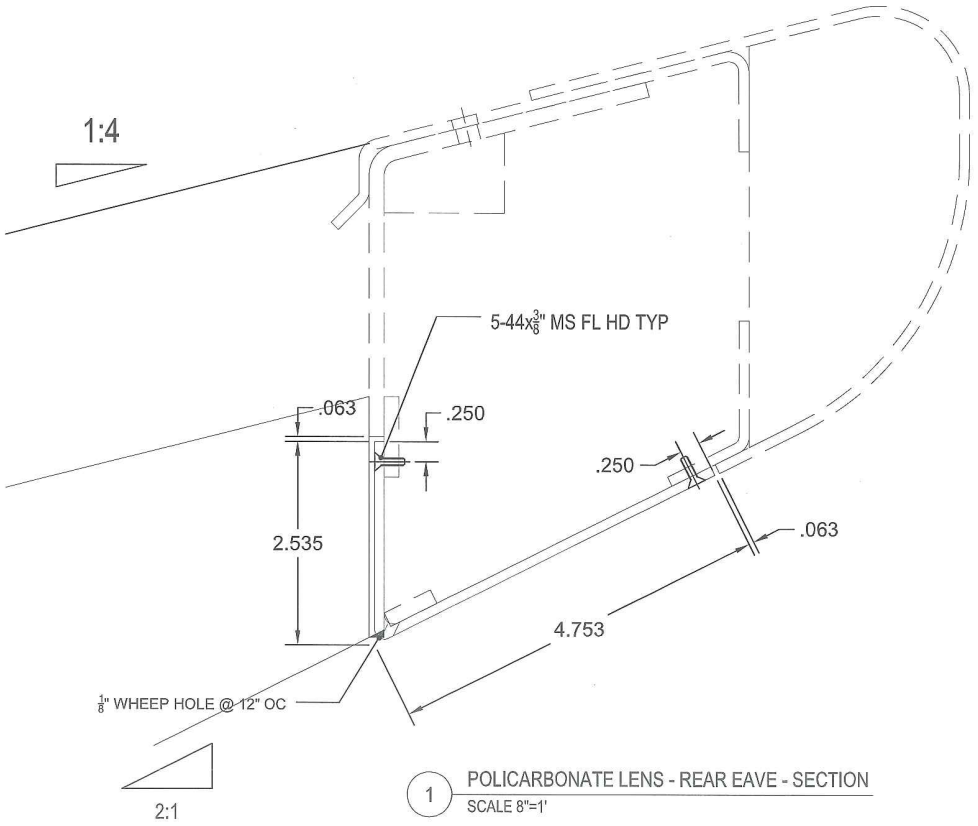
REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED



1 POLICARBONATE LENS - REAR EAVE - SECTION
SCALE 8"=1'

UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES
TOLERANCES:
HOLES SIZE: ±1/32
X <6': ±1/32
X >6': ±1/16
ANGLES: ±1/2°
REMOVE ALL BURRS AND BREAK SHARP EDGES 1/64 MAX.
THIRD ANGLE PROJECTION

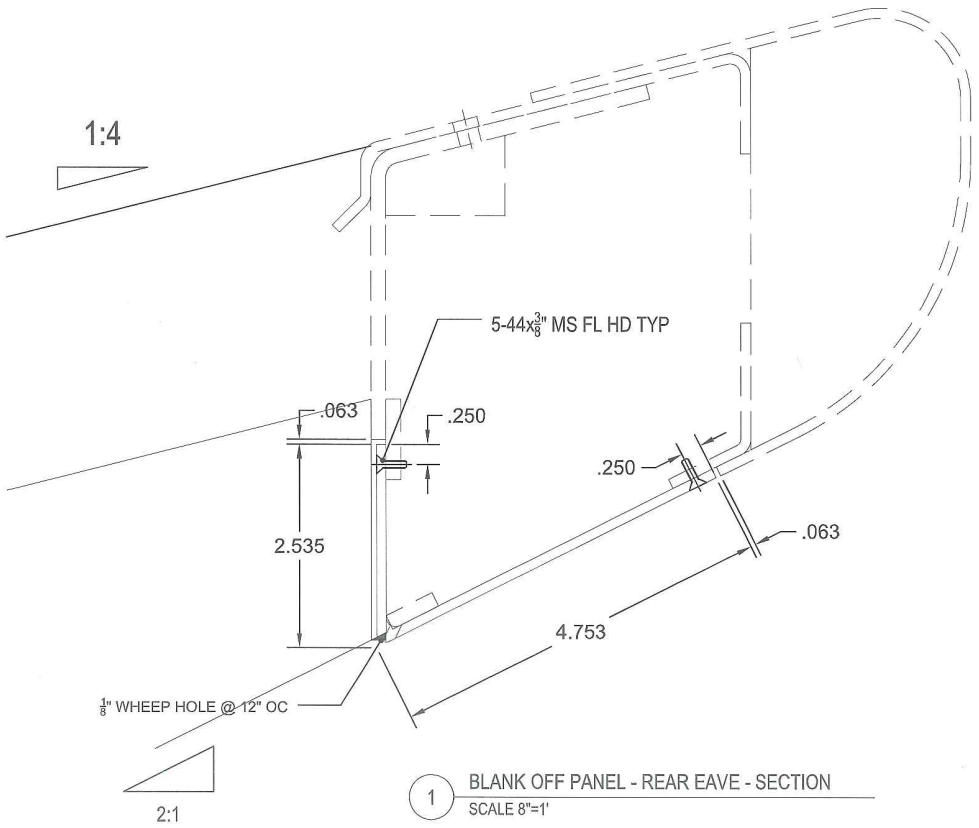
TOLAR DURABILITY WITH DISTINCTION
Tolar Manufacturing Company, Inc
258 Mariah Circle,Corona,CA 92879

DESCRIPTION: POLICARBONATE LENS – REAR EAVE
CUSTOMER/VENDOR: SANTA CLARA – VTA
SIZE: B | MATL.: FRMD 0.118 POLYCARB | DWG NO.: 23800-09 | REV:
SCALE | DATE: 11-17-2014 | DRAWN BY: CGARCIA

Shelter Rear Eave

THIS DRAWING HAS BEEN GENERATED AND IS MAINTAINED BY A CAD SYSTEM. CHANGES SHALL ONLY BE INCORPORATED AS DIRECTED BY TOLAR MANUFACTURING CO., INC.'S ENGINEERING DEPT.

REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED



1 BLANK OFF PANEL - REAR EAVE - SECTION
SCALE 8"=1'

UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES
TOLERANCES:
HOLES SIZE: ±1/32
X <6': ±1/32
X >6': ±1/16
ANGLES: ±1/2°
REMOVE ALL BURRS AND BREAK SHARP EDGES 1/64 MAX.
THIRD ANGLE PROJECTION

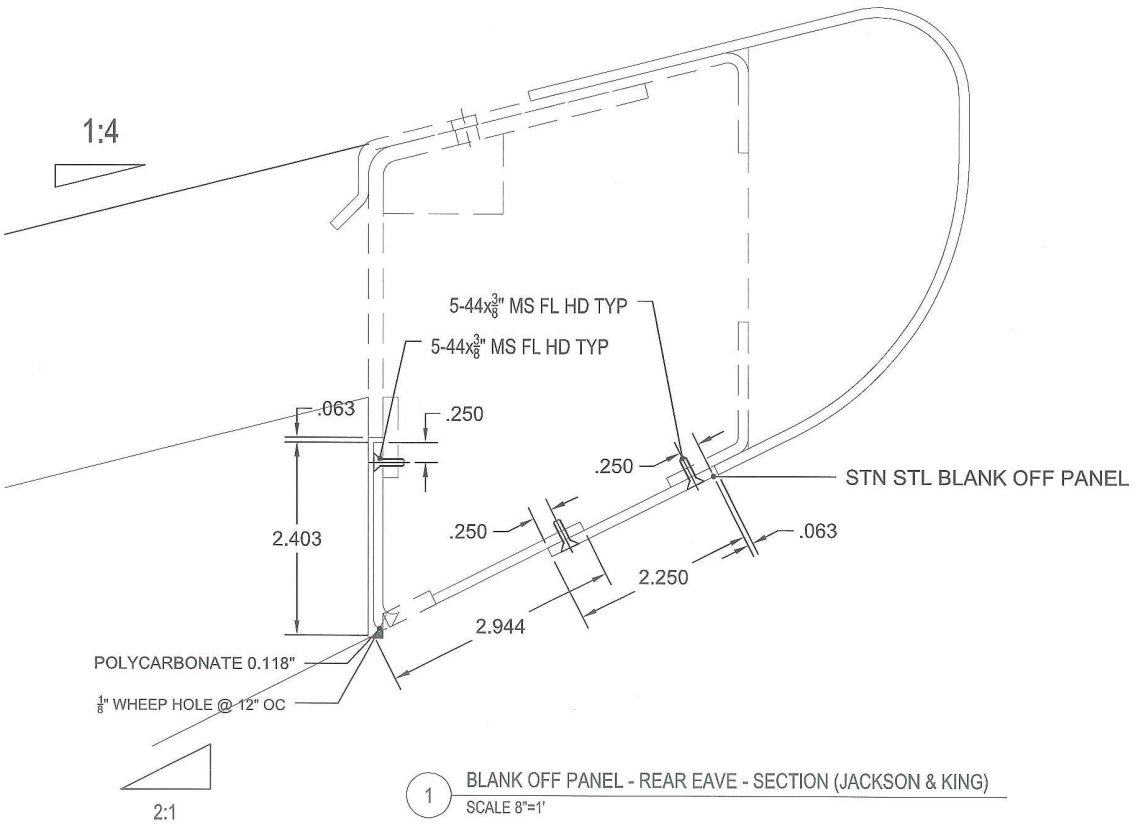
TOLAR DURABILITY WITH DISTINCTION
Tolar Manufacturing Company, Inc
258 Mariah Circle,Corona,CA 92879

DESCRIPTION: BLANK OFF PANEL – REAR EAVE
CUSTOMER/VENDOR: SANTA CLARA – VTA
SIZE: B | MATL.: SS316L – 11 GA SHM | DWG NO.: 23800–10 | REV:
SCALE | DATE: 02–23–2015 | DRAWN BY: CGARCIA

Shelter Rear Eave

THIS DRAWING HAS BEEN GENERATED AND IS MAINTAINED BY A CAD SYSTEM. CHANGES SHALL ONLY BE INCORPORATED AS DIRECTED BY TOLAR MANUFACTURING CO., INC.'S ENGINEERING DEPT.

REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED



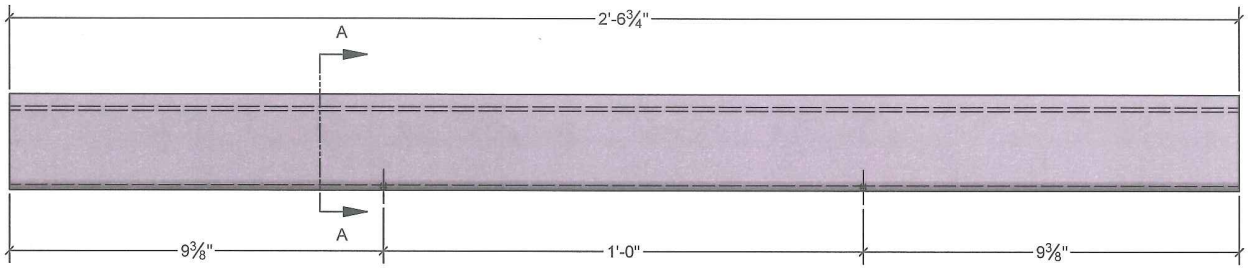
1 BLANK OFF PANEL - REAR EAVE - SECTION (JACKSON & KING)
SCALE 8"=1'

UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES
TOLERANCES:
HOLES SIZE: ±1/32
X < 6': ±1/32
X > 6': ±1/16
ANGLES: ±1/2°
REMOVE ALL BURRS AND BREAK SHARP EDGES 1/64 MAX.
THIRD ANGLE PROJECTION

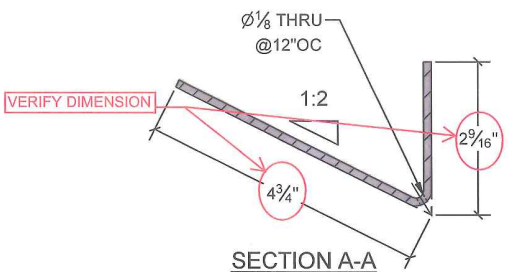
TOLAR DURABILITY WITH DISTINCTION
Tolar Manufacturing Company, Inc
258 Mariah Circle,Corona,CA 92879

DESCRIPTION: STN STL AND POLYCRB – REAR EAVE
CUSTOMER/VENDOR: SANTA CLARA – VTA
SIZE: B | MATL.: SS316L – 11GA SHM | DWG NO.: 23800-11 | REV:
SCALE | DATE: 02-23-2015 | DRAWN BY: CGARCIA

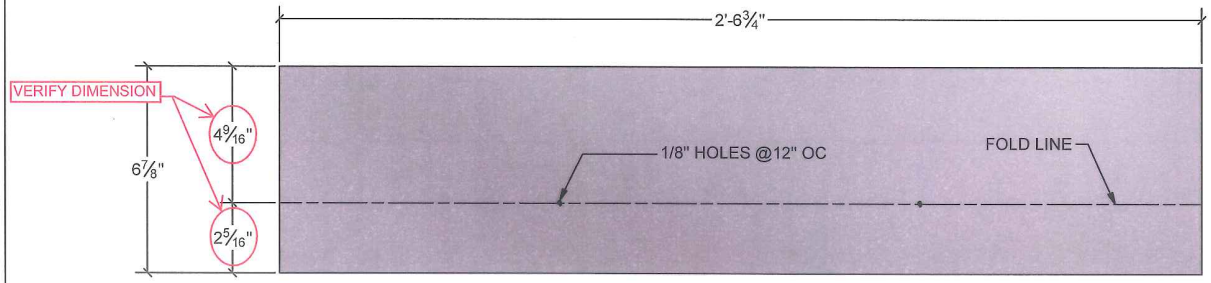
Shelter Rear Eave



BLAN OFF PANEL (SIDE) - ELEVATION
SCALE 4"=1'



SECTION A-A
SEE DRAWING 23800-10
SCALE 6"=1'



FLAT PATTERN
SCALE 3"=1'

APPLY AS PER LIGHTING LAYOUTS
SEE DRAWINGS:
24627-00 - TYPICAL
24627-01 - NO BACK LTG
24627-02 - NO BACK LTG - JACKSON & KING

TOLAR — DURABILITY WITH DISTINCTION	Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879		
DESCRIPTION	BLANK OFF PANEL (SIDE) R		
CUSTOMER/VENDOR	SANTA CLARA - VTA		SHEET NO. 1 OF 1
SIZE B	MATL. SS 316L - 11 GA SH M	DWG NO. 21665-01	REV. NO.
SCALE AS NOTED	DATE 2/24/2015	DRAWN BY: cgarcia	

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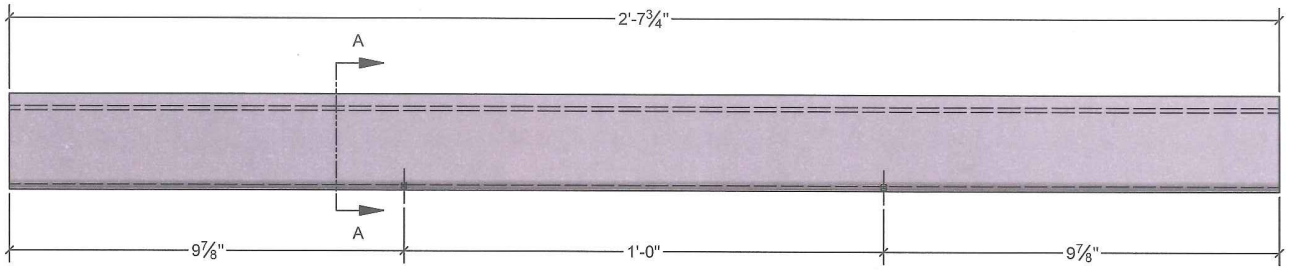
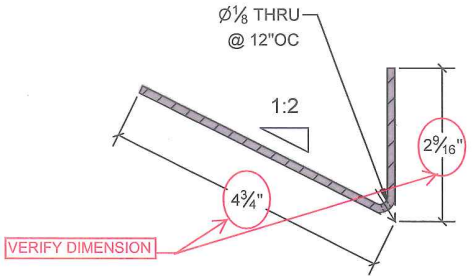
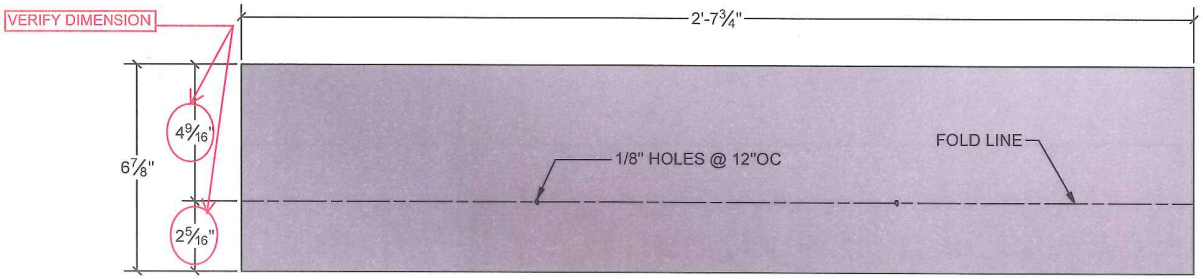
Shelter Rear Eave



BLANK OFF PANEL (REAR) - ELEVATION
SCALE 4"=1'



SECTION A-A
SEE DRAWING 23800-10
SCALE 6"=1'



FLAT PATTERN
SCALE 3"=1'

APPLY AS PER LIGHTING LAYOUTS
SEE DRAWINGS:
24627-00 - TYPICAL
24627-01 - NO BACK LTG
24627-02 - NO BACK LTG - JACKSON & KING

TOLAR — Tolar Manufacturing Company, Inc, 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: BLANK OFF PANEL (COMMON) R			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 11 GA SH M	DWG NO.: 21666-01	REV. NO.:
SCALE: AS NOTED	DATE: 2/24/2015	DRAWN BY: cgarcia	

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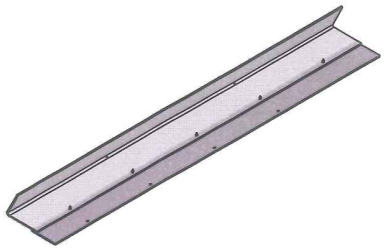
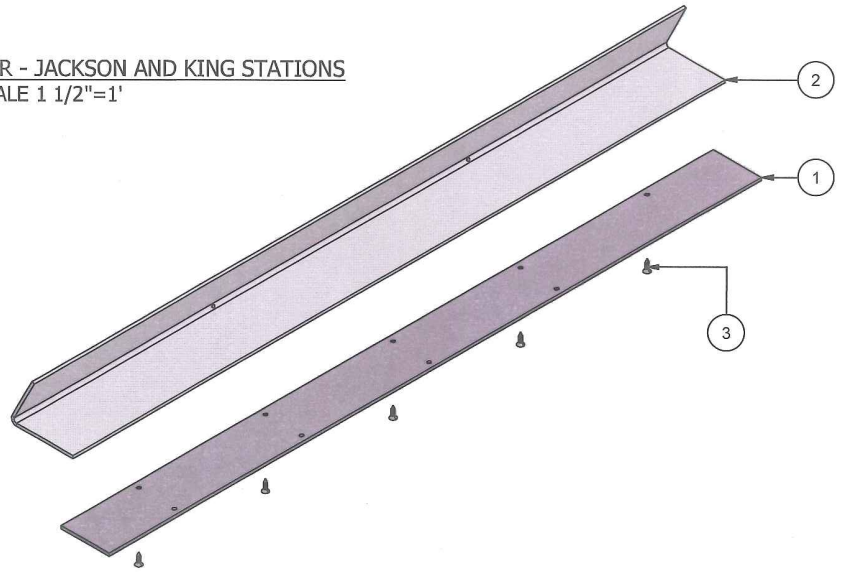
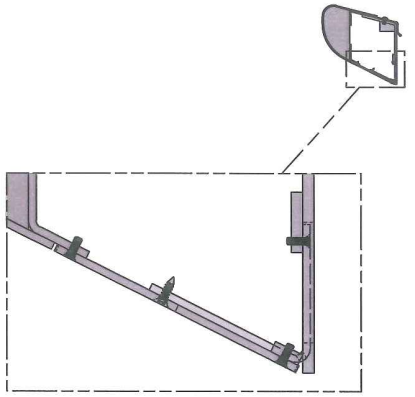
Shelter Rear Eave



SHORT REAR EAVE COVER - JACKSON AND KING STATIONS
SCALE 1 1/2"=1'



MEDIAN STATION SPECIAL REAR EAVE CONFIGURATION (SHORT) - COMPONENTS
SCALE 3"=1'



DETAIL A
SEE DRAWING 23800-10
SCALE 6"=1'

APPLY AS PER LIGHTING LAYOUTS
SEE DRAWING:
24627-02 - NO BACK LTG - JACKSON & KING

PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	24622-00	REAR EAVE LT CVR (SH)
2	1	24625-00	DIFFUSION LENS (SIDE) R
3	5	95015A292	TAMPER RESISTANT SCREW

TOLAR
DURABILITY WITH DISTINCTION

Tolar Manufacturing Company, Inc
258 Mariah Circle, Corona CA. 92879

DESCRIPTION: REAR EAVE ASSEMBLY - SHORT			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 11 GA SH M 0.118" POLYCARBONATE	DWG NO.: 24624-00	REV. NO.:
SCALE: AS NOTED	DATE: 2/23/2015	DRAWN BY: cgarcia	

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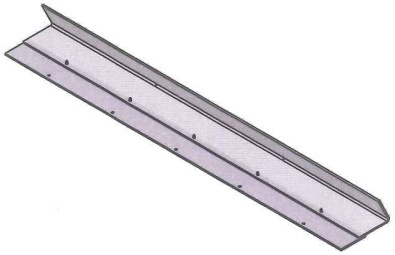
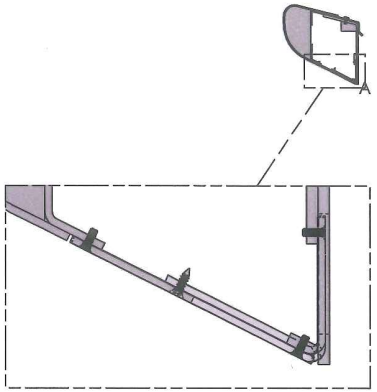
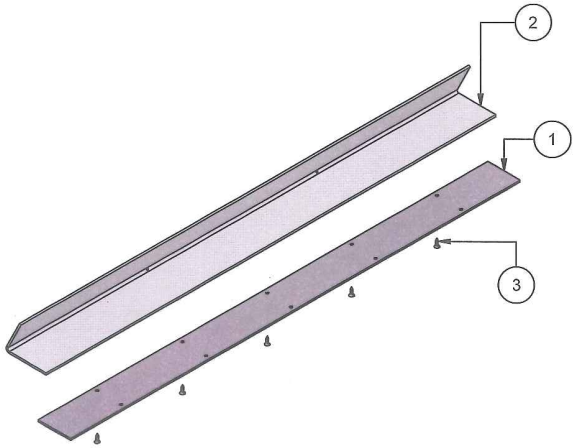
Shelter Rear Eave



LONG REAR EAVE COVER - JACKSON AND KING STATIONS
SCALE 1 1/2"=1'



DETAIL A
SCALE 6"=1'



MEDIAN STATION SPECIAL REAR EAVE CONFIGURATION (LONG) - COMPONENTS
SCALE 2"=1'

APPLY AS PER LIGHTING LAYOUTS
SEE DRAWING:
24627-02 - NO BACK LTG - JACKSON & KING

PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	24623-00	REAR EAVE LT CVR (SH)
2	1	24626-00	DIFFUSION LENS (COMMON) R
3	5	95015A292	TAMPER RESISTANT SCREW

TOLAR
DURABILITY WITH DISTINCTION

Tolar Manufacturing Company, Inc
258 Mariah Circle, Corona CA. 92879

DESCRIPTION	REAR EAVE ASSEMBLY - LONG		
CUSTOMER/VENDOR	SANTA CLARA - VTA		SHEET NO. 1 OF 1
SIZE B	MATL. SS 316L - 11 GA SH M 0.118" POLYCARBONATE	DWG NO. 24624-01	REV. NO.
SCALE AS NOTED	DATE 2/23/2015	DRAWN BY: cgarcia	

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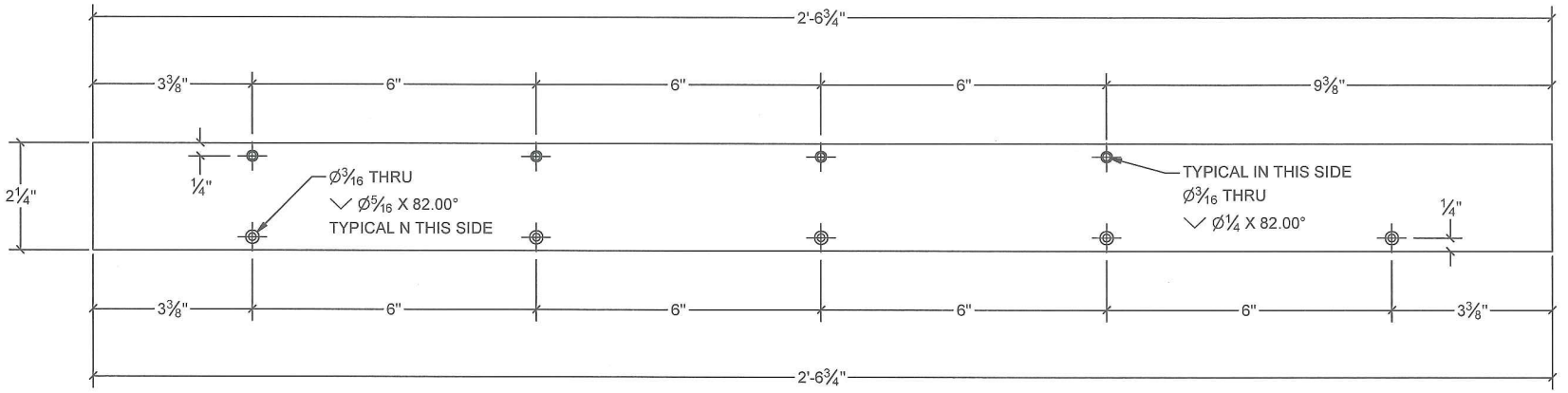
Shelter Rear Eave

NOTE:
1. CLEAN AND DEBURR ALL EDGES
2. USE 24622-00.DXF TO PERFORM CUT



SHORT REAR EAVE COVER - PLAN VIEW
SCALE 5"=1'

APPLY AS PER LIGHTING LAYOUTS
SEE DRAWING:
24627-02 - NO BACK LTG - JACKSON & KING

TOLAR DURABILITY WITH DISTINCTION	Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879		
DESCRIPTION	REAR EAVE LT CVR (SH)		
CUSTOMER/VENDOR	SANTA CLARA - VTA		SHEET NO. 1 OF 1
SIZE B	MATL. SS 316L - 11 GA SH M	DWG NO. 24622-00	REV. NO.
SCALE AS NOTED	DATE 2/23/2015	DRAWN BY: cgarcia	

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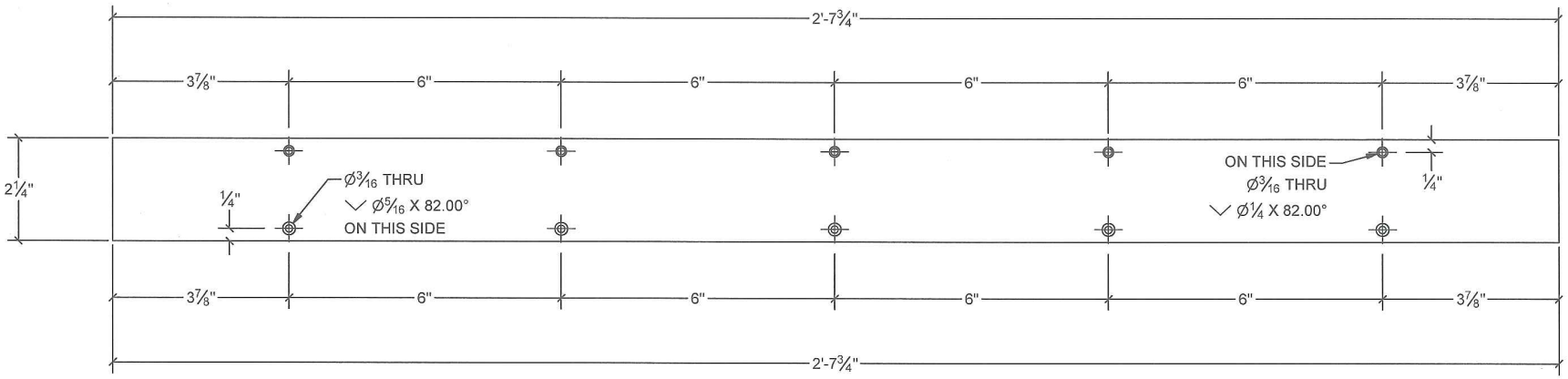
Shelter Rear Eave

NOTE:
1. CLEAN AND DEBURR ALL EDGES
2. USE 24623-00.DXF TO PERFORM CUT



LONG REAR EAVE COVER - PLAN VIEW
SCALE 5"=1'

APPLY AS PER LIGHTING LAYOUTS
SEE DRAWING:
24627-02 - NO BACK LTG - JACKSON & KING

TOLAR DURABILITY WITH DISTINCTION	Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879		
DESCRIPTION	REAR EAVE LT CVR (SH)		
CUSTOMER/VENDOR	SANTA - CLARA VTA		SHEET NO. 1 OF 1
SIZE B	MATL. SS 316L - 11 GA SH M	DWG NO. 24623-00	REV. NO.
SCALE AS NOTED	DATE 2/23/2015	DRAWN BY: cgarcia	

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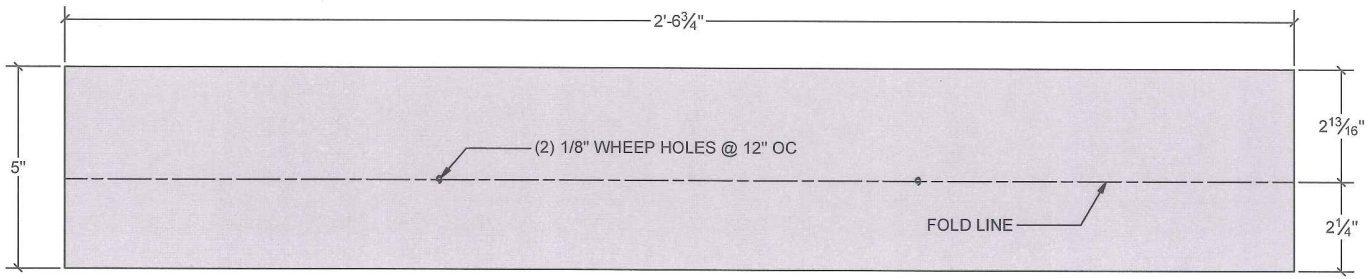
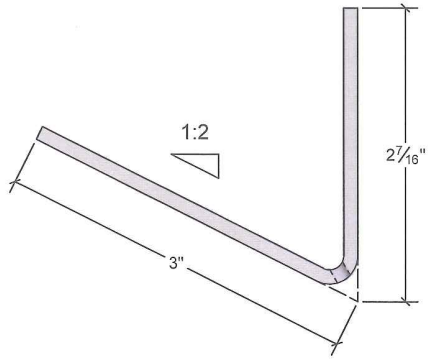
Shelter Rear Eave



POLYCARBONATE DIFUSER - FLAT PATTERN
SCALE 4"=1'



POLYCARBONATE LIGHT DIFUSER - SECTION
SEE DRAWING 23800-10
SCALE 1 : 1

APPLY AS PER LIGHTING LAYOUTS
SEE DRAWING:
24627-02 - NO BACK LTG - JACKSON & KING

TOLAR DURABILITY WITH DISTINCTION	Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879		
DESCRIPTION	DIFFUSION LENS (SIDE) R		
CUSTOMER/VENDOR	SANTA CLARA - VTA		SHEET NO. 1 OF 1
SIZE B	MATL. 0.118" POLYCARBONATE	DWG NO. 24625-00	REV. NO.
SCALE AS NOTED	DATE 2/23/2015	DRAWN BY: cgarcia	

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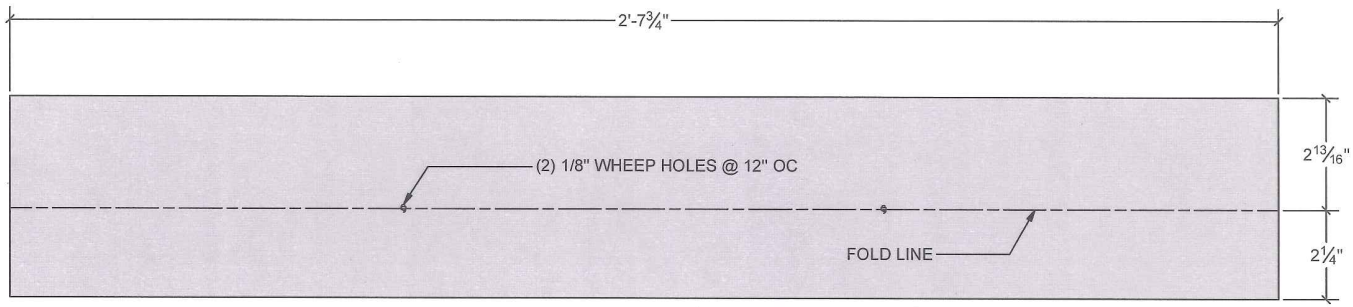
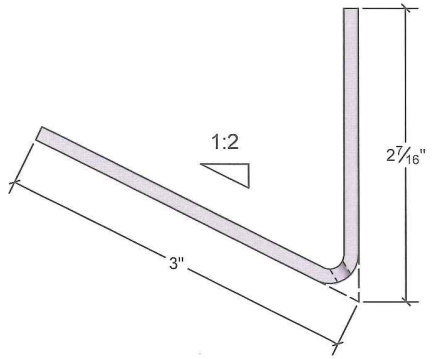
Shelter Rear Eave



POLYCARBONATE DIFUSER - FLAT PATTERN
SCALE 4"=1'



POLYCARBONATE LIGHT DIFFUSER - SECTION
SCALE 1 : 1

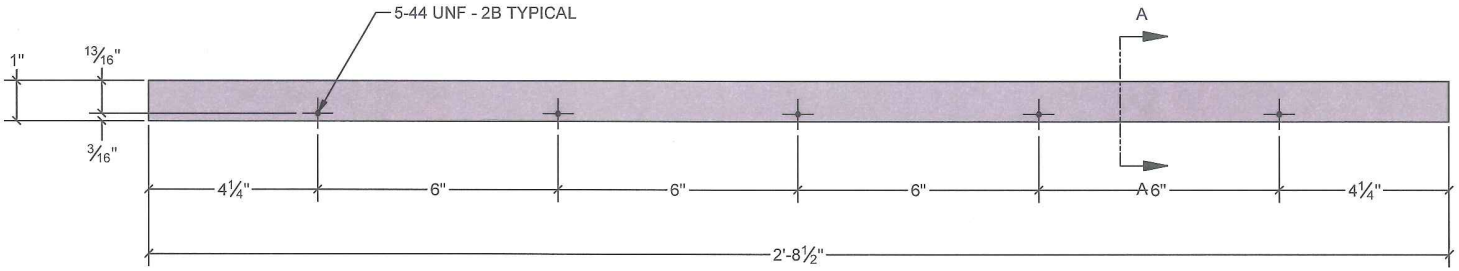
APPLY AS PER LIGHTING LAYOUTS
SEE DRAWING:
24627-02 - NO BACK LTG - JACKSON & KING

TOLAR — DURABILITY WITH DISTINCTION	Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879		
DESCRIPTION	DIFFUSION LENS (COMMON) R		
CUSTOMER/VENDOR	SANTA CLARA - VTA		SHEET NO. 1 OF 1
SIZE B	MATL. 0.118" POLYCARBONATE	DWG NO. 24626-00	REV. NO.
SCALE AS NOTED	DATE 2/23/2015	DRAWN BY: cgarcia	

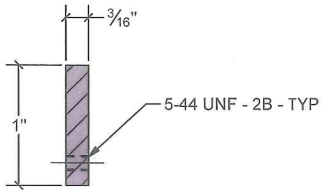
T:\Engineering\CARLOS GARCIA\VTA\24626-00.idw

Shelter Rear Eave

NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. MILL FINISH #1



DIFFUSION LENS ATTACHMENT TAB - FRONT ELEVATION
SCALE 4"=1'



SECTION A-A
SEE DRAWING 20858-00
SCALE 12"=1'

TOLAR — Tolar Manufacturing Company, Inc, 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: ATTMNT TAB DIFF LENS			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 2
SIZE: B	MATL.: SS 316L - 3/16" THK PL	DWG NO.: 20861-00	REV. NO.:
SCALE: AS NOTED	DATE: 10/21/2014	DRAWN BY: cgarcia	

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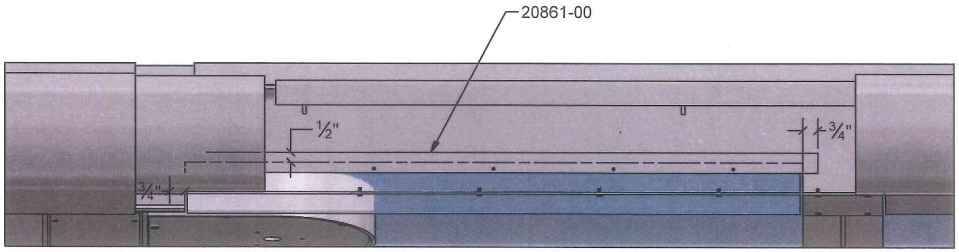
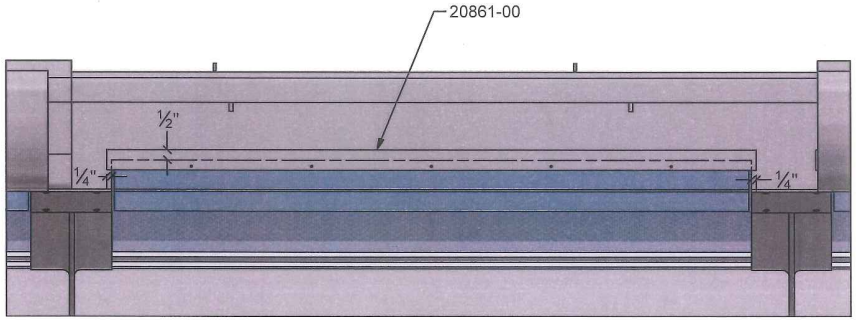
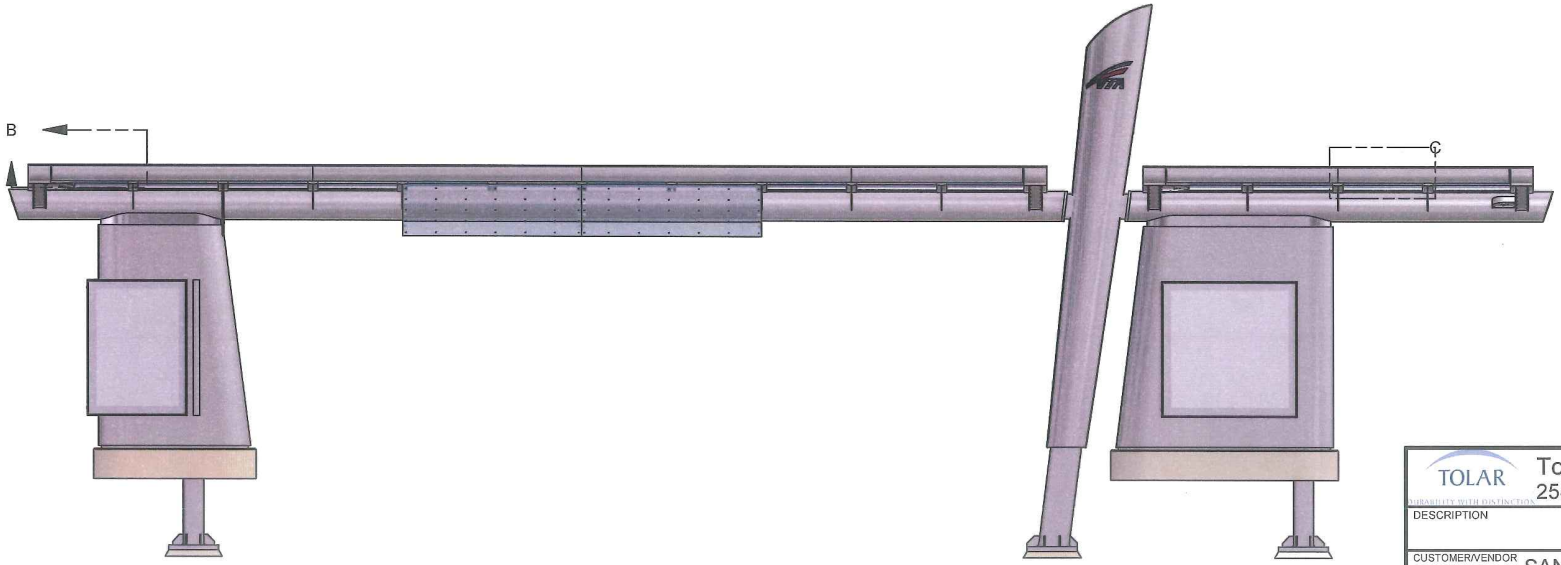
Shelter Rear Eave



DETAIL B
OCCURS AT 4 SIDES
SCALE 2"=1'



DETAIL C
OCCURS AT 11 PLACES (BETWEEN SIDES)
SCALE 2"=1'



PRIMARY SHELTER - FRONT ELEVATION
TYPICAL FOR FRONT AND REAR
SCALE 1/4"=1'

TOLAR — Tolar Manufacturing Company, Inc, 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: ATTMNT TAB DIFF LENS			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 2 OF 2
SIZE: B	MATL.: SS 316L - 3/16" PL	DWG NO.: 20861-00	REV. NO.:
SCALE: AS NOTED	DATE: 10/21/2014	DRAWN BY: cgarcia	

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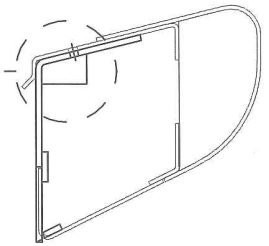
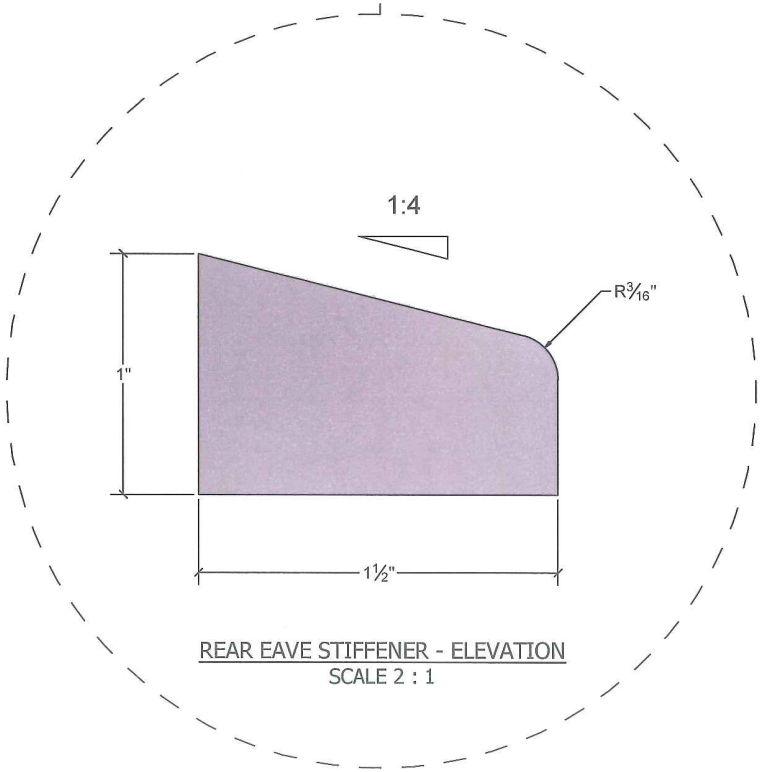
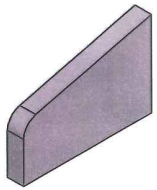
Shelter Rear Eave



REAR EAVE PROFILE
N.T.S.



REAR EAVE STIFFENER - ELEVATION
SCALE 2 : 1



ISO VIEW
SCALE 1 : 1

TOLAR — Tolar Manufacturing Company, Inc, 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: REAR EAVE STIFFENER			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 3/16" THK PL	DWG NO.: 20893-00	REV. NO.
SCALE: AS NOTED	DATE: 12/23/2014	DRAWN BY: cgarcia	

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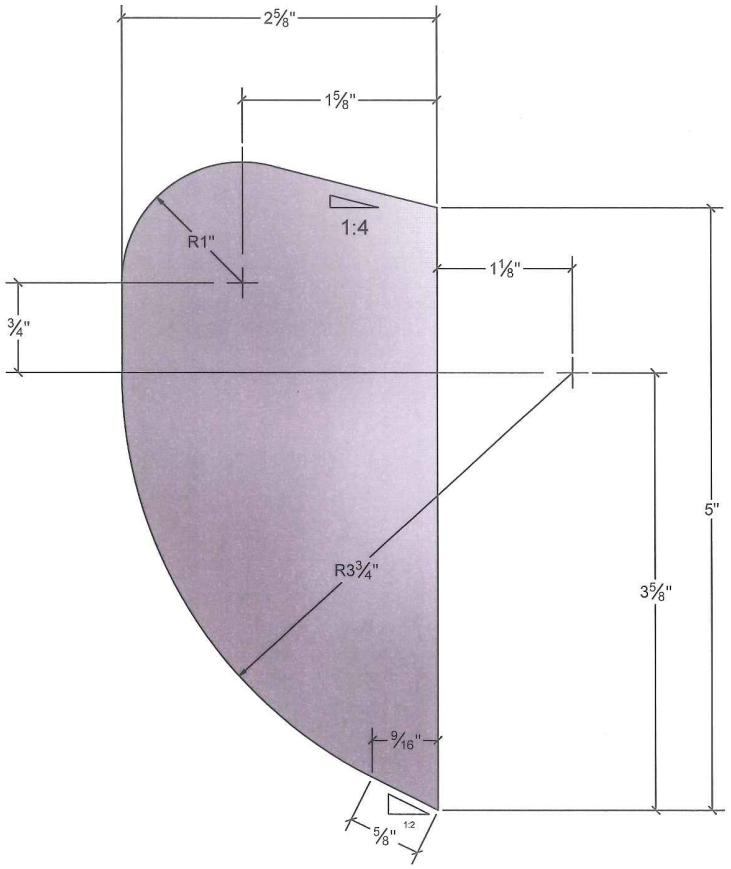
Shelter Rear Eave



11 GA REAR EAVE STIFFENER - ELEVATION
SCALE 1 : 1

TOLAR — Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: REAR GUSSET STIFFENER			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL: SS 316L - 11 GA SH M	DWG NO.: 21668-00	REV. NO.:
SCALE: AS NOTED	DATE: 12/23/2014	DRAWN BY: cgarcia	

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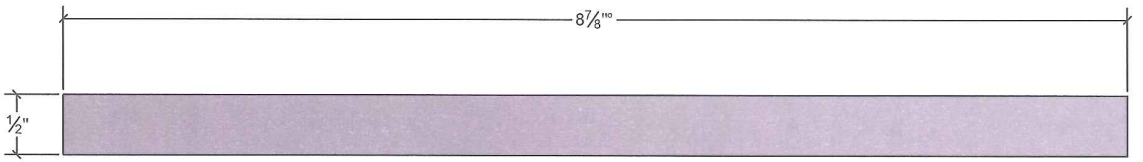
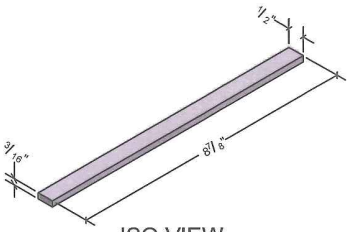
Shelter Rear Eave



BOTTOM BENT BRACKET RETURN - PLAN VIEW
SCALE 1 : 1



ISO VIEW
SCALE 4"=1'

Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: BENT BRACKET BOTT - RETURN			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 3/16" THK PL	DWG NO.: 23390-00	REV. NO.:
SCALE: AS NOTED	DATE: 10/22/2014	DRAWN BY: cgarcia	

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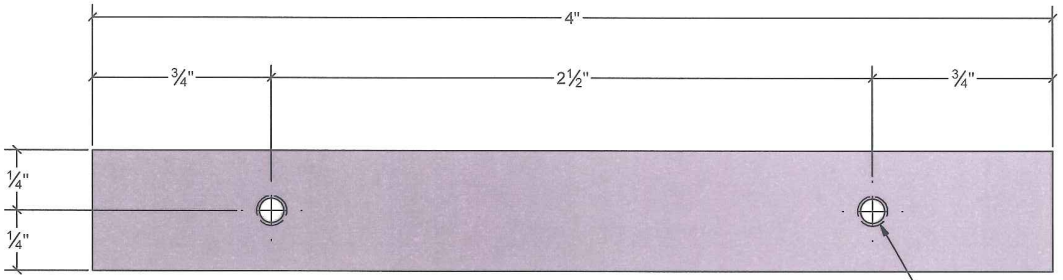
Shelter Rear Eave



BENT BRACKET BOTTOM RETURN - PLAN VIEW
SCALE 2 : 1

TOLAR — DURABILITY WITH DISTINCTION	Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879
DESCRIPTION	BENT BRACKET BOTT - RETURN
CUSTOMER/VENDOR	SANTA CLARA - VTA
SHEET NO.	1 OF 1
SIZE	B
MATL.	SS 316L - 3/16" THK PL
DWG NO.	23391-00
REV. NO.	
SCALE	AS NOTED
DATE	10/22/2014
DRAWN BY:	cgarcia

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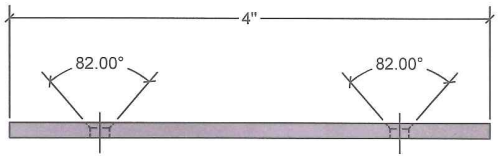
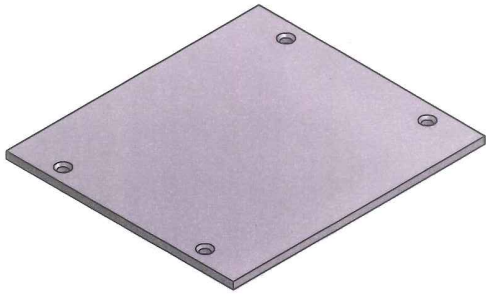
Shelter Rear Eave

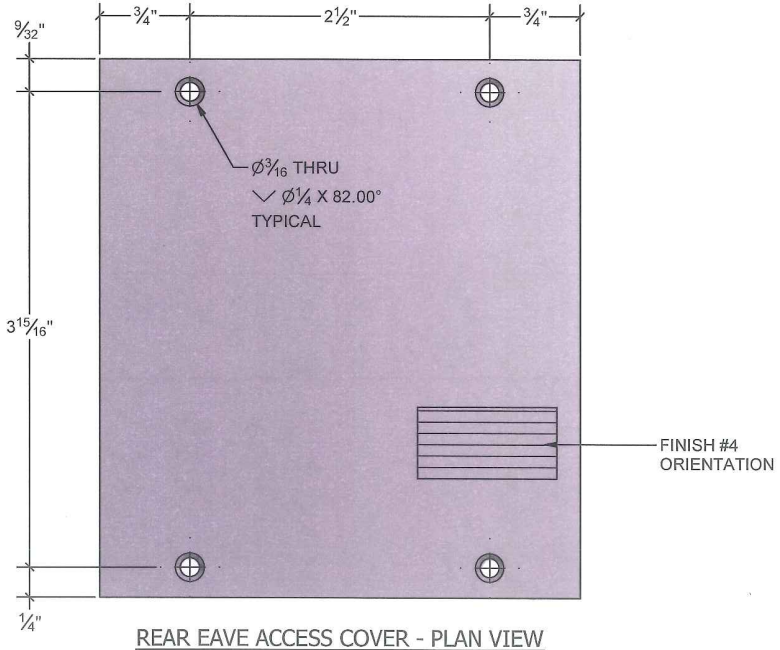
NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. DIRECTIONAL FINISH #4 (PARALLEL TO SMALL SIDE EDGE)



REAR EAVE COVER - SECTION
SCALE 1 : 1



ISO VIEW
SCALE 8"=1'



REAR EAVE ACCESS COVER - PLAN VIEW
SCALE 1 : 1

Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879	
DESCRIPTION: EAVE ACCESS COVER REAR	
CUSTOMER/VENDOR: SANTA CLARA - VTA	SHEET NO.: 1 OF 1
SIZE: B / MATL.: SS 316L - 11 GA SH M / DWG NO.: 20884-01	REV. NO.
SCALE: AS NOTED / DATE: 12/24/2014 / DRAWN BY: cgarcia	

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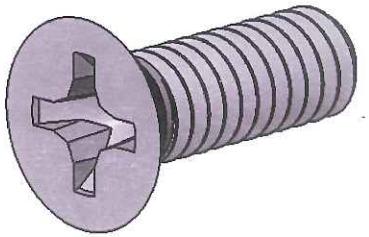
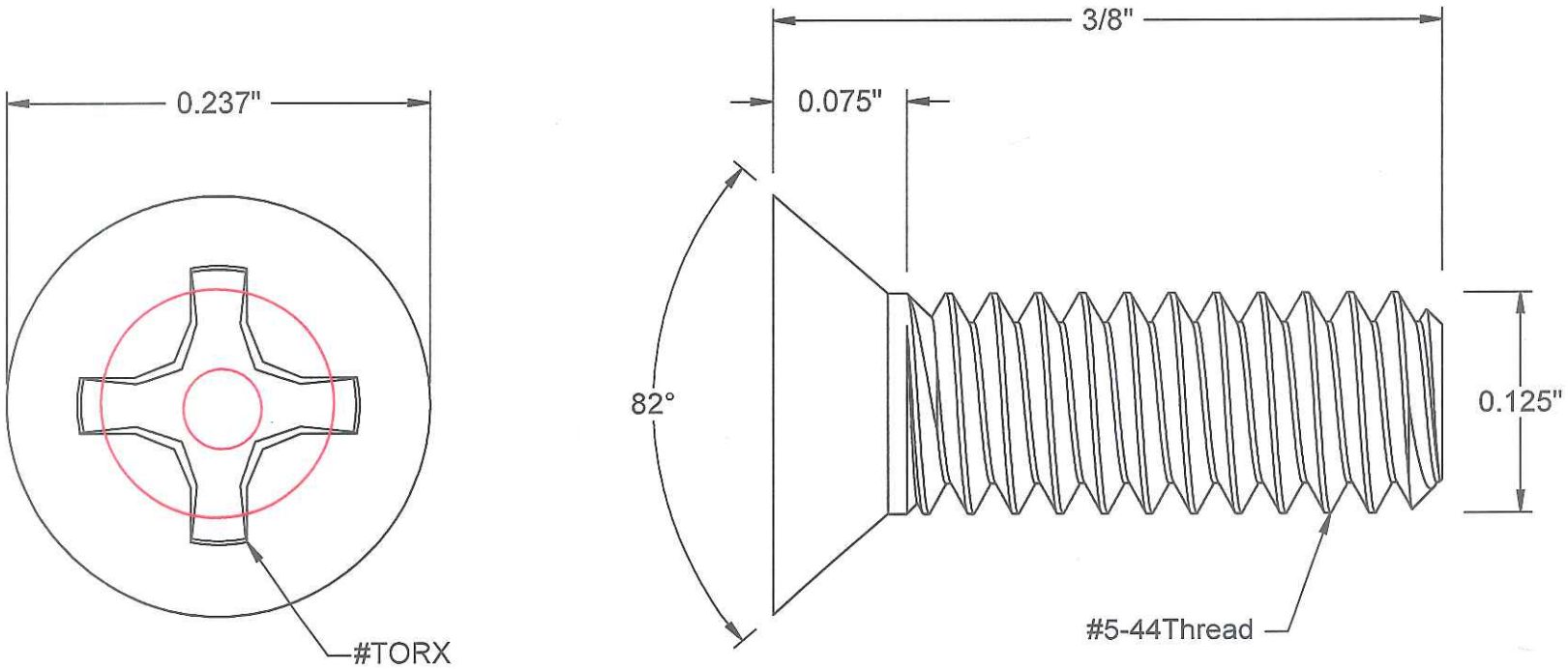
Shelter Rear Eave



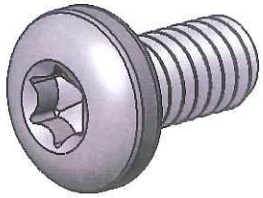


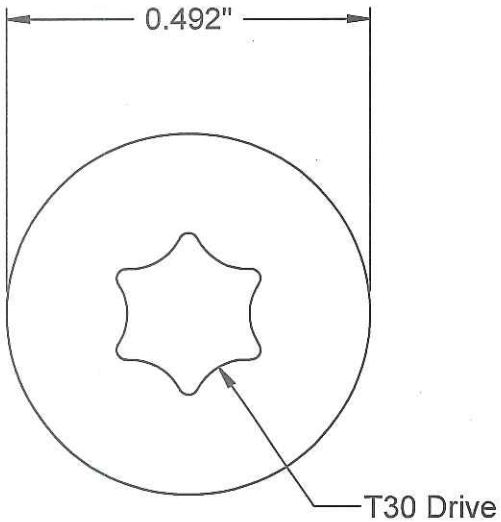
Shelter Rear Eave

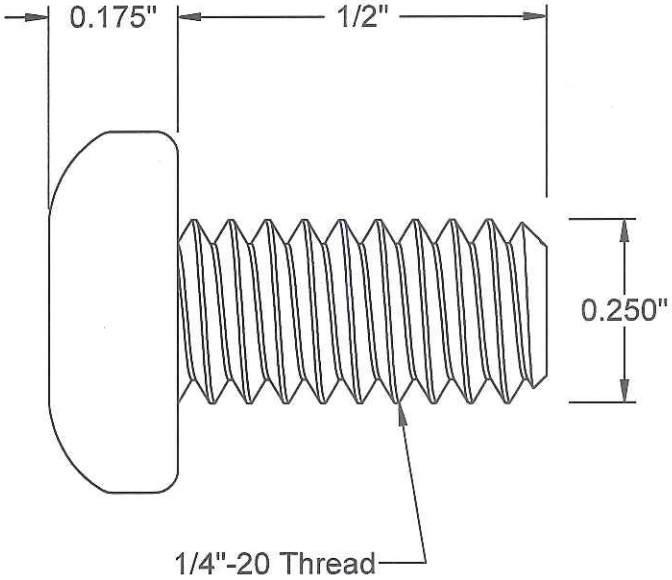
McMASTER-CARR® CAD

http://www.mcmaster.com

PART NUMBER

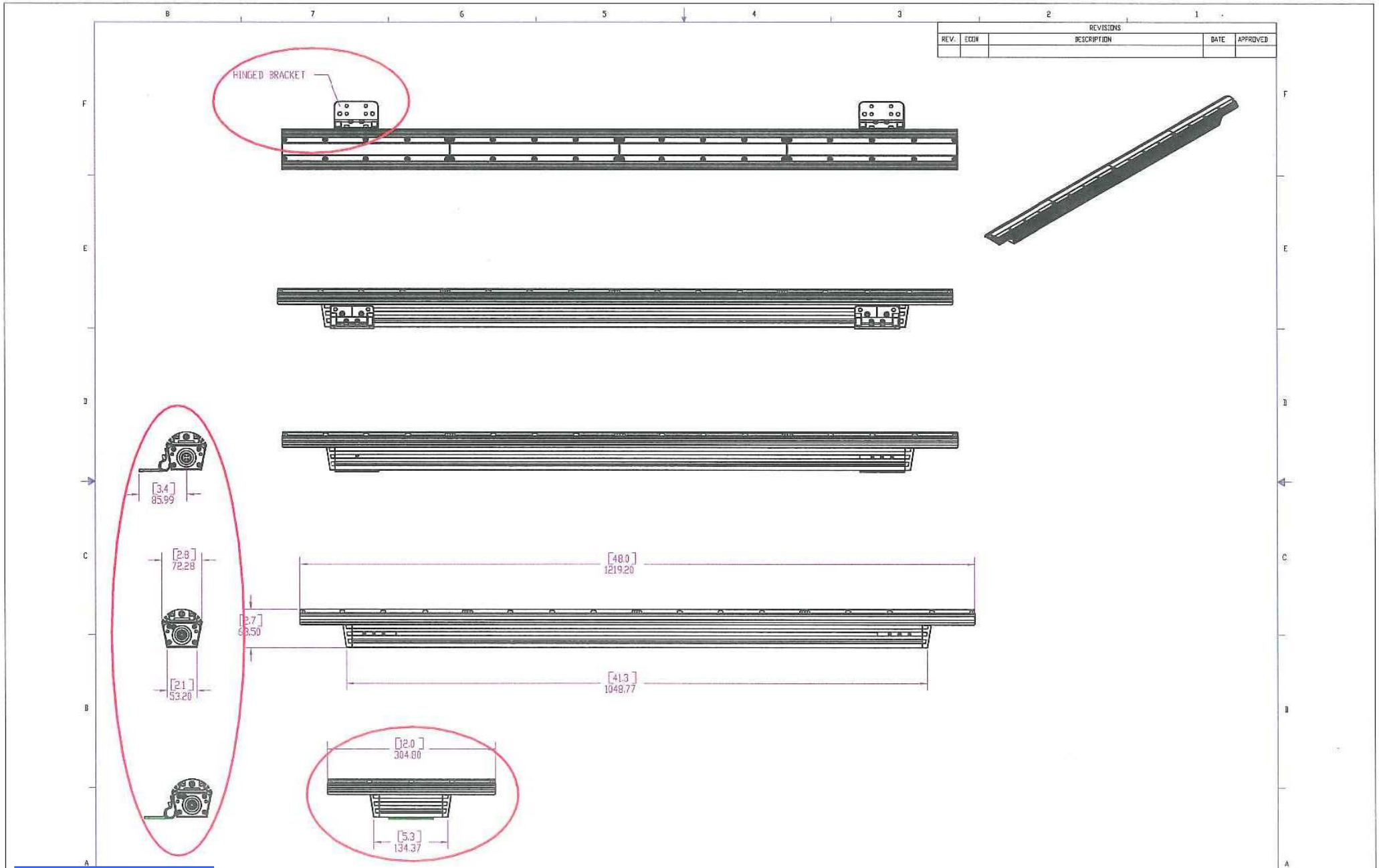






Shelter Rear Eave

McMASTER-CARR® CAD	PART NUMBER 96710A733
http://www.mcmaster.com	Pan Head Torx


REVISIONS
REV.
ECO#
DESCRIPTION
DATE
APPROVED
HINGED BRACKET
[3.4]
85.99
[2.8]
72.28
[2.1]
53.20
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68.50
[48.0]
1219.20
[41.3]
1048.77
[12.0]
304.80
[5.3]
134.37
Shelter Rear Eave
BETWEEN FIXTURES: 3.1mm (1/8").
PROPRIETARY AND CONFIDENTIAL
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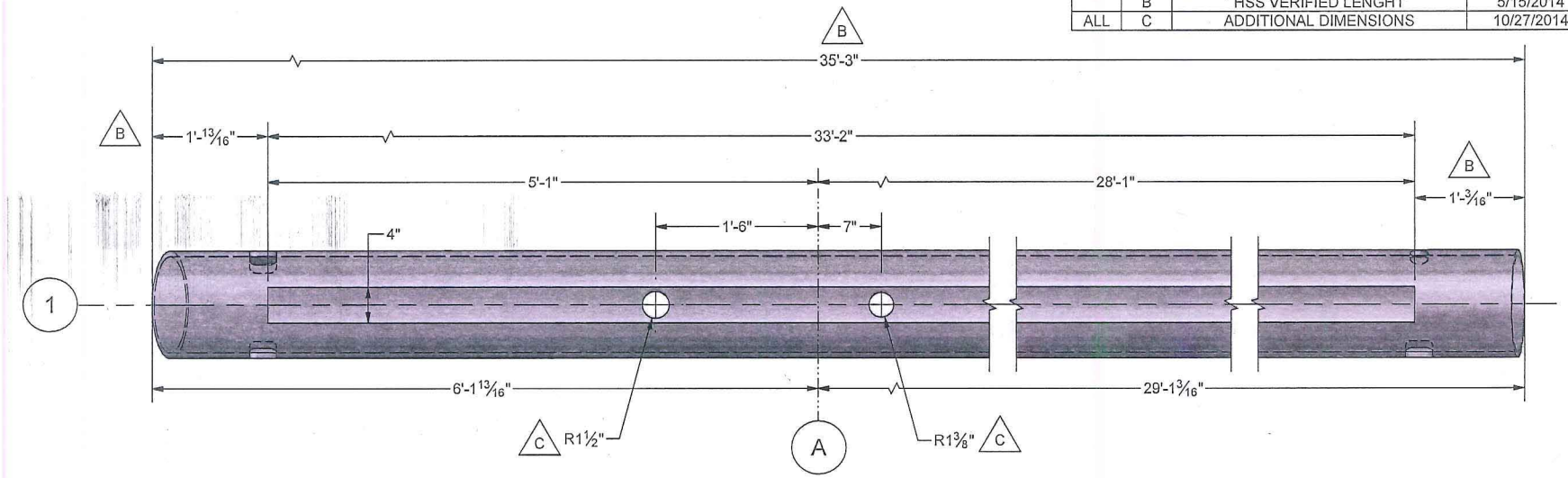
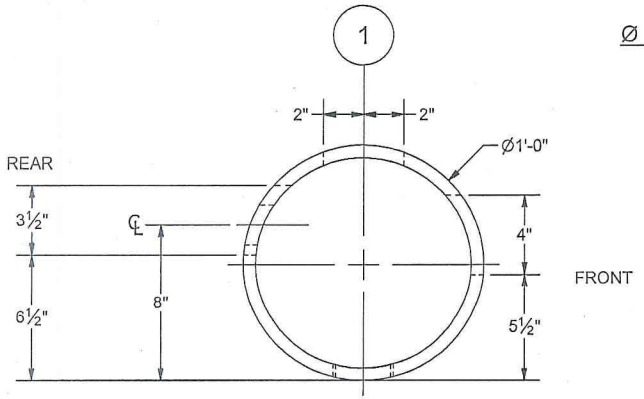
SEE NOTES
SEE NOTES
-UNLESS OTHERWISE SPECIFIED-
DESCRIPTION
ew GRAZE, 4' LENGTH
SIZE
C
DWG. NO.
ASY-000645
REV
00

NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. DIRECTIONAL FINISH #4 - HSS 12x5/8 AXIS

REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
B4	1	HSS LENGHT/CAP THICKNESS REPL. PENETRATIONS ISOLATED	4/24/2014	
	B	HSS VERIFIED LENGHT	5/15/2014	
ALL	C	ADDITIONAL DIMENSIONS	10/27/2014	



Ø 12"x5/8" - HSS - PLAN VIEW - TOP GUTTER CUT
SCALE 1"=1'



LEFT SIDE - ELEVATION
SCALE 2" = 1'-0"

Santa Clara Valley Transportation Authority

✓ NO EXCEPTIONS TAKEN
_____ MAKE CORRECTIONS NOTED
_____ AMEND AND RESUBMIT

Any action shown above is subject to the terms of the contract and does not relieve the contractor of any of its obligations under the contract, including design and detailing.

Contract No. C830
By: JDRegnyal Date: 10/28/14

TOLAR — Tolar Manufacturing Company, Inc
258 Mariah Circle, Corona CA. 92879

DESCRIPTION: HSS 12x5/8 - LONG BEAM			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 4
SIZE: B	MATL.: SS 316L - HSS 12 x 5/8	DWG NO.: 20779-00	REV. NO.: B
SCALE: AS NOTED	DATE: 4/3/2014	DRAWN BY: cgarcia	

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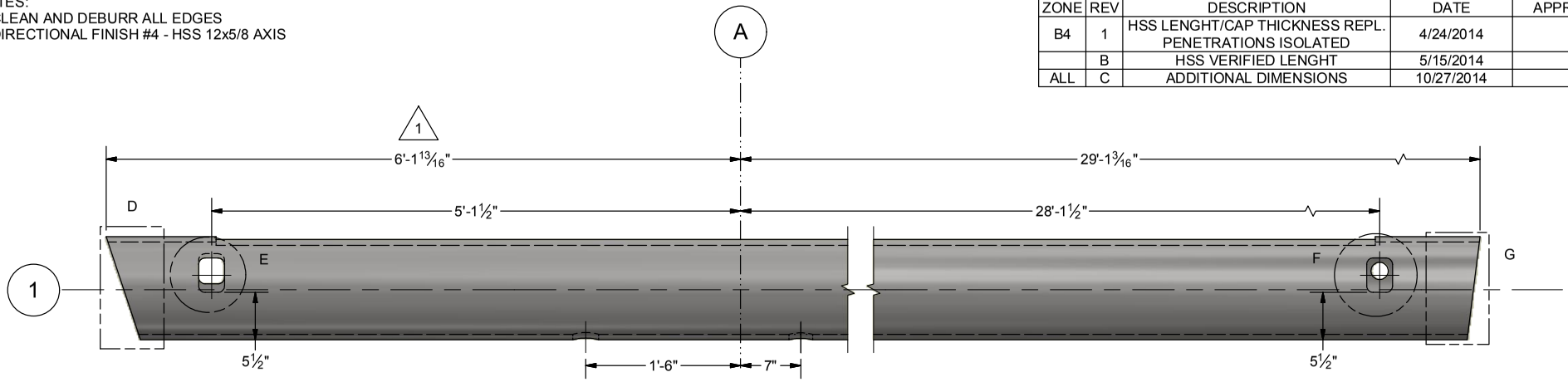
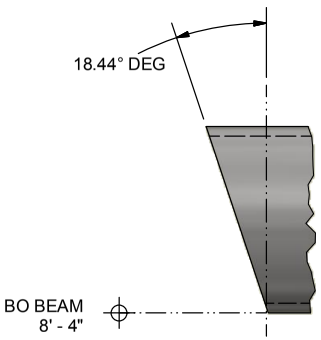
Long Beam

NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. DIRECTIONAL FINISH #4 - HSS 12x5/8 AXIS

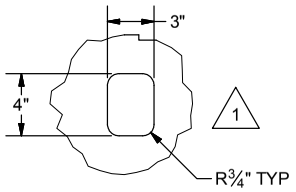
REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
B4	1	HSS LENGHT/CAP THICKNESS REPL. PENETRATIONS ISOLATED	4/24/2014	
	B	HSS VERIFIED LENGHT	5/15/2014	
ALL	C	ADDITIONAL DIMENSIONS	10/27/2014	



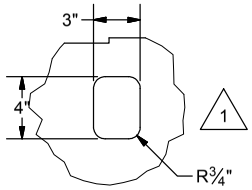
Ø 12"x5/8" - HSS - FRONT ELEVATION - PENETRATIONS
SCALE 1"=1'



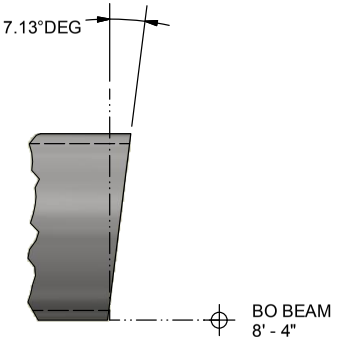
DETAIL D
CUT AT FRONT LEFT ELEVATION
SCALE 1 1/2" = 1'-0"



DETAIL E
PENETRATION AT DOUBLE JOIST
SCALE 1 1/2" = 1'-0"



DETAIL F
PENETRATION AT DOUBLE JOIST
SCALE 1 1/2" = 1'-0"



DETAIL G
CUT AT FRONT RIGHT ELEVATION
SCALE 1 1/2" = 1'-0"

TOLAR
Tolar Manufacturing Company, Inc
258 Mariah Circle, Corona CA. 92879

DESCRIPTION: HSS 12x5/8 - LONG BEAM			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 2 OF 4
SIZE: B	MATL.: SS 316L - HSS 12 x 5/8"	DWG NO.: 20779-00	REV. NO.: B
SCALE: AS NOTED	DATE: 4/3/2014	DRAWN BY: cgarcia	

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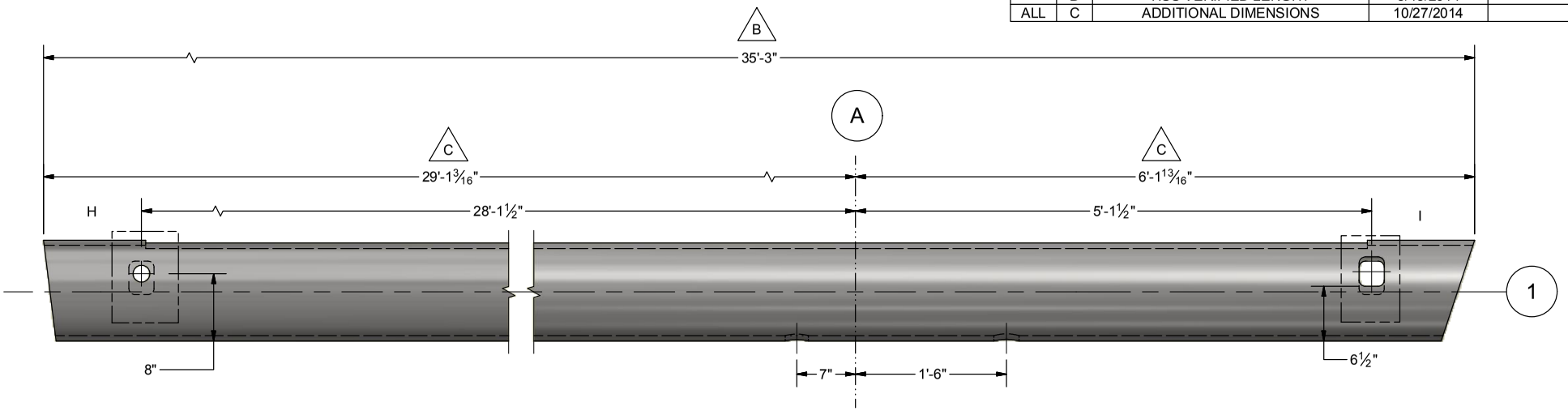
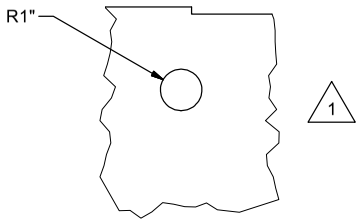
Shelter Long Beam

NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. DIRECTIONAL FINISH #4 - HSS 12x5/8 AXIS

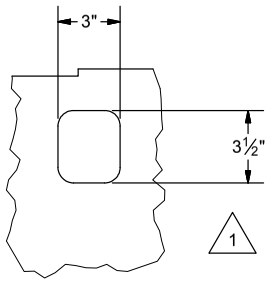
REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
B4	1	HSS LENGHT/CAP THICKNESS REPL. PENETRATIONS ISOLATED	4/24/2014	
	B	HSS VERIFIED LENGHT	5/15/2014	
ALL	C	ADDITIONAL DIMENSIONS	10/27/2014	



Ø 12"x5/8" - HSS - REAR ELEVATION - PENETRATIONS
SCALE 1"=1'



DETAIL H
SCALE 2" = 1'-0"



DETAIL I
SCALE 2" = 1'-0"

TOLAR
Tolar Manufacturing Company, Inc
258 Mariah Circle, Corona CA. 92879

DESCRIPTION: HSS 12x5/8 - LONG BEAM			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 3 OF 4
SIZE: B	MATL.: SS 316L - HSS 12" X 5/8"	DWG NO.: 20779-00	REV. NO.: B
SCALE: AS NOTED	DATE: 4/3/2014	DRAWN BY: cgarcia	

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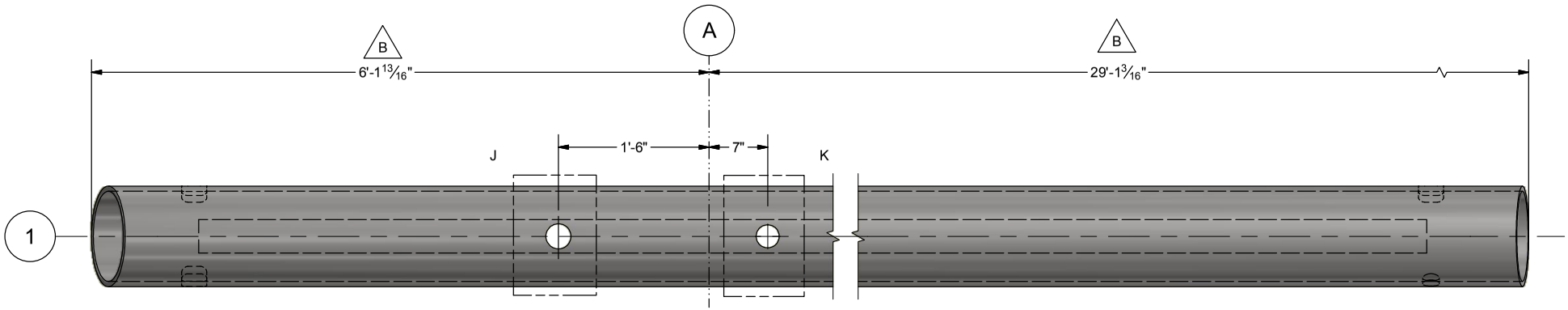
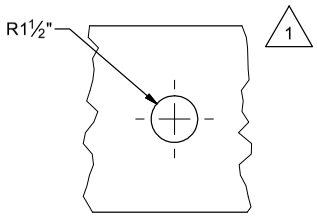
Shelter Long Beam

NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. DIRECTIONAL FINISH #4 - HSS 12x5/8 AXIS

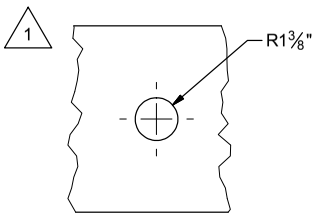
REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
B4	1	HSS LENGHT/CAP THICKNESS REPL. PENETRATIONS ISOLATED	4/24/2014	
	B	HSS VERIFIED LENGHT	5/15/2014	
ALL	C	ADDITIONAL DIMENSIONS	10/27/2014	



Ø 12"x5/8" - HSS - BOTTOM VIEW - PENETRATIONS
SCALE 1"=1'



DETAIL J
A TYPE PENETRATION
SCALE 1 1/2" = 1'-0"



DETAIL K
HSS 2 1/2 SPOUT FOR DRAINAGE
SCALE 1 1/2" = 1'-0"

TOLAR — PERFECTION WITH DISTINCTION	Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879		
DESCRIPTION	HSS 12x5/8 - LONG BEAM		
CUSTOMER/VENDOR	SANTA CLARA - VTA		SHEET NO. 4 OF 4
SIZE B	MATL. SS 316L HSS 12" x 5/8"	DWG NO. 20779-00	REV. NO. B
SCALE AS NOTED	DATE 4/3/2014	DRAWN BY: cgarcia	

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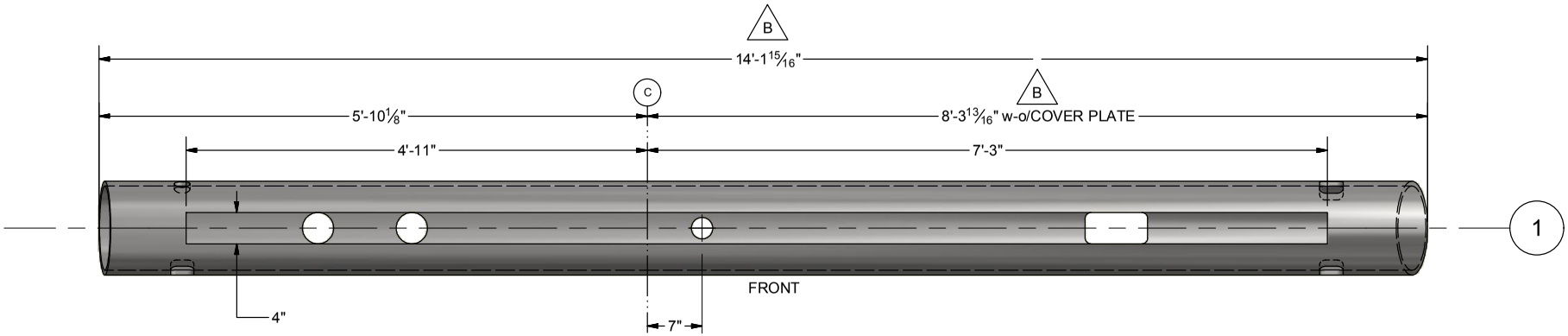
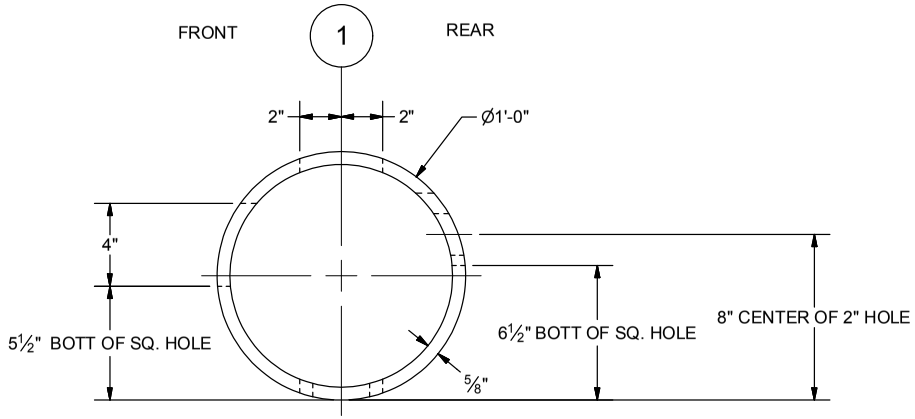
Shelter Long Beam

NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. DIRECTIONAL FINISH #4 (AXIS DIRECTION)

REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
B3	B	SIZE ADJUSTMENT	5/27/2014	
ALL	C	AXIS CORRECTION	10/27/2014	



Ø12"x5/8" HSS - TOP GUTTER CUT - PLAN VIEW
SCALE 7/8"=1'



SECTION - ELEVATION
SCALE 2"=1'

TOLAR — PUBLIC WORKS WITH DISTINCTION	Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879		
DESCRIPTION	HSS Ø12"x5/8"w - SHORT BEAM		
CUSTOMER/VENDOR	SANTA CLARA - VTA		SHEET NO. 1 OF 4
SIZE B	MATL. SS 316L - HSS-Ø12"x5/8" w	DWG NO. 20786-00	REV. NO. B
SCALE AS NOTED	DATE 4/7/2014	DRAWN BY: cgarcia	

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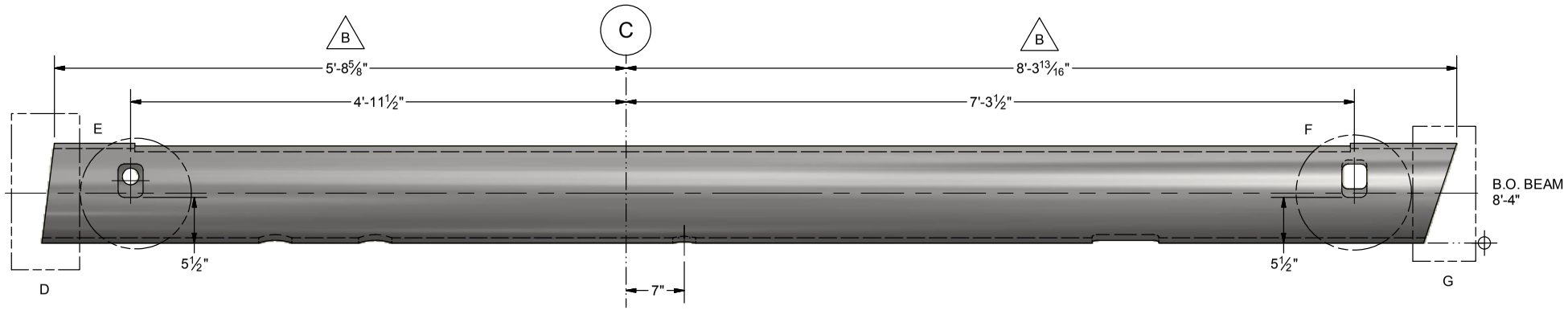
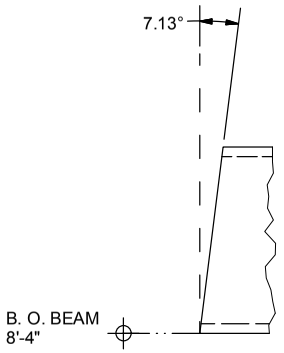
Shelter Long Beam

NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. DIRECTIONAL FINISH #4 (AXIS DIRECTION)

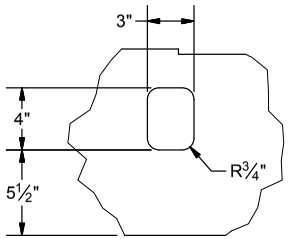
REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
B3	B	SIZE ADJUSTMENT	5/27/2014	
ALL	C	AXIS CORRECTION	10/27/2014	



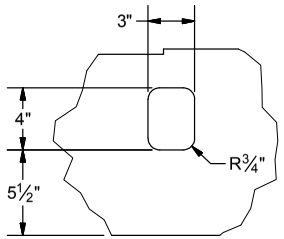
HSS Ø12"x5/8" FRONT ELEVATION - BEAM PENETRATIONS
SCALE 1"=1'



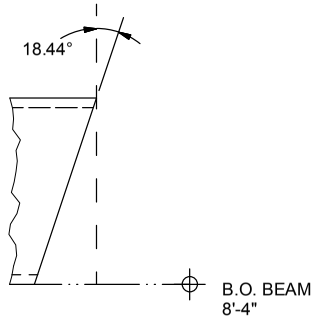
DETAIL D
CUT AT FRONT LEFT ELEVATION
SCALE 1 1/2"=1'



DETAIL E
PENETRATION AT DOUBLE JOIST
SCALE 1 1/2"=1'



DETAIL F
PENETRATION AT DOUBLE JOIST
SCALE 1 1/2"=1'



DETAIL G
PENETRATION AT DOUBLE JOIST
SCALE 1 1/2"=1'

TOLAR
PREMIER WITH DISTINCTION

Tolar Manufacturing Company, Inc
258 Mariah Circle, Corona CA. 92879

DESCRIPTION: HSS Ø12"x5/8"w - SHORT BEAM			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 2 OF 4
SIZE: B	MATL.: SS 316L - HSS Ø12"x5/8"w	DWG NO.: 20786-00	REV. NO.: B
SCALE: AS NOTED	DATE: 4/7/2014	DRAWN BY: cgarcia	

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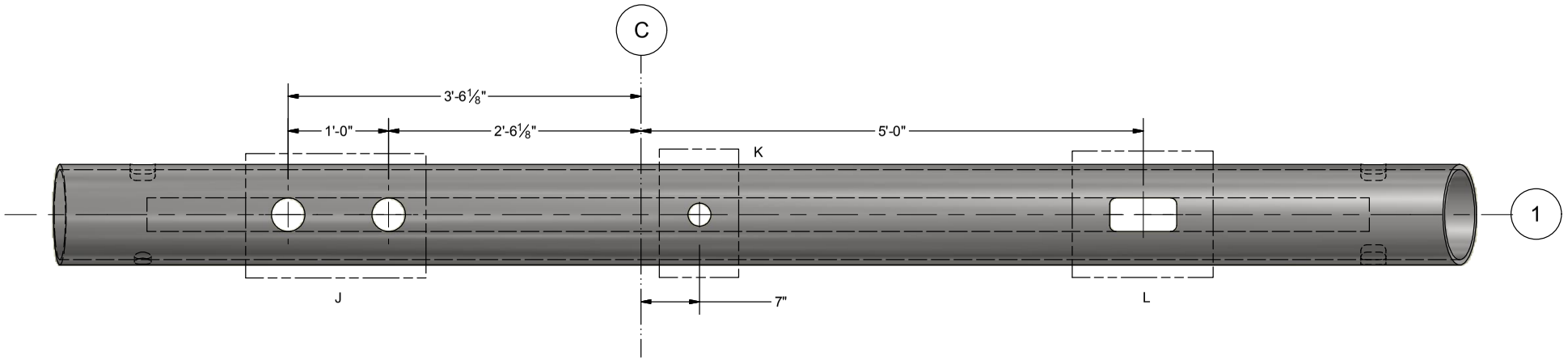
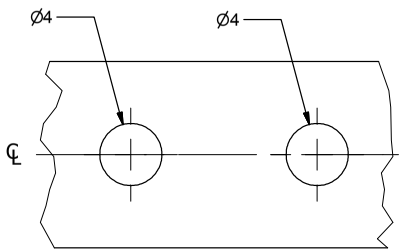
Shelter Long Beam

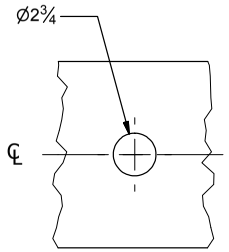
NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. DIRECTIONAL FINISH #4 (AXIS DIRECTION)



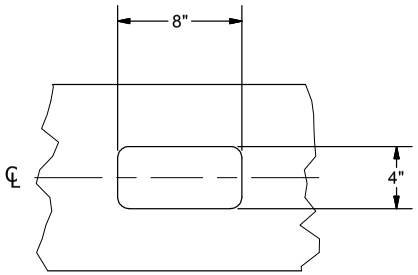
HSS Ø12"x5/8"w - BEAM PENETRATIONS - BOTTOM VIEW
SCALE 1"=1'



DETAIL J
A TYPE PENETRATIONS
SCALE 1 1/2"=1'



DETAIL K
HSS 2-1/2 SPOUT FOR DRAINAGE
SCALE 1 1/2"=1'



DETAIL L
B TYPE PENETRATION
SCALE 1 1/2"=1'

TOLAR — Tolar Manufacturing Company, Inc, 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: HSS Ø12"x5/8"w - SHORT BEAM			
CUSTOMER/VENDOR: SANTA CLARA -VTA			SHEET NO.: 3 OF 4
SIZE: B	MATL.: SS 316L - HSS Ø12"x5/8"w	DWG NO.: 20786-00	REV. NO.: B
SCALE: AS NOTED	DATE: 4/7/2014	DRAWN BY: cgarcia	

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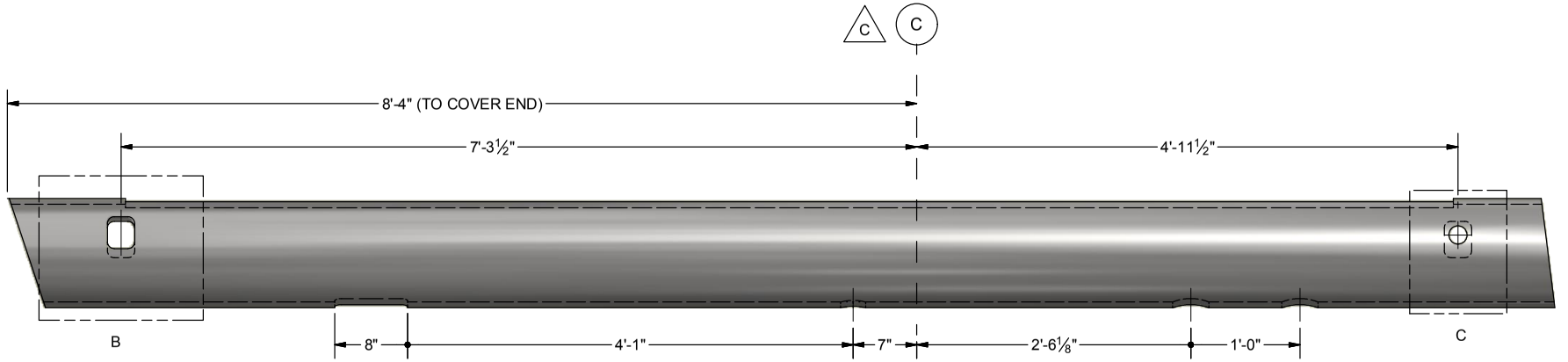
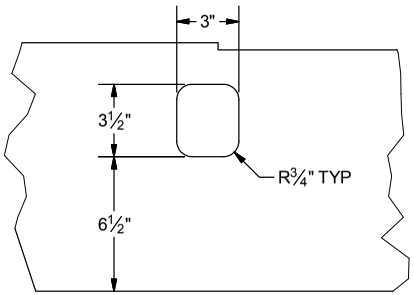
Shelter Long Beam

NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. DIRECTIONAL FINISH #4 IN THE DIRECTION OF THE LONG AXIS

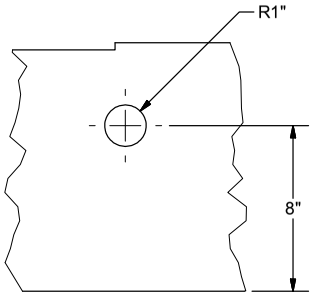
REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
B3	B	SIZE ADJUSTMENT	5/27/2014	
ALL	C	AXIS CORRECTION	10/27/2014	



HSS 12x5/8 CUTS - REAR ELEVATION
SCALE 1"=1'



DETAIL B
SCALE 2" = 1'-0"



DETAIL C
SCALE 2" = 1'-0"

TOLAR	Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879		
DESCRIPTION	HSS Ø12"x5/8"w - SHORT BEAM		
CUSTOMER/VENDOR	SANTA CLARA - VTA		SHEET NO. 4 OF 4
SIZE B	MATL. SS 316L - HSS 12x5/8	DWG NO. 20786-00	REV. NO. B
SCALE AS NOTED	DATE 4/7/2014	DRAWN BY: cgarcia	

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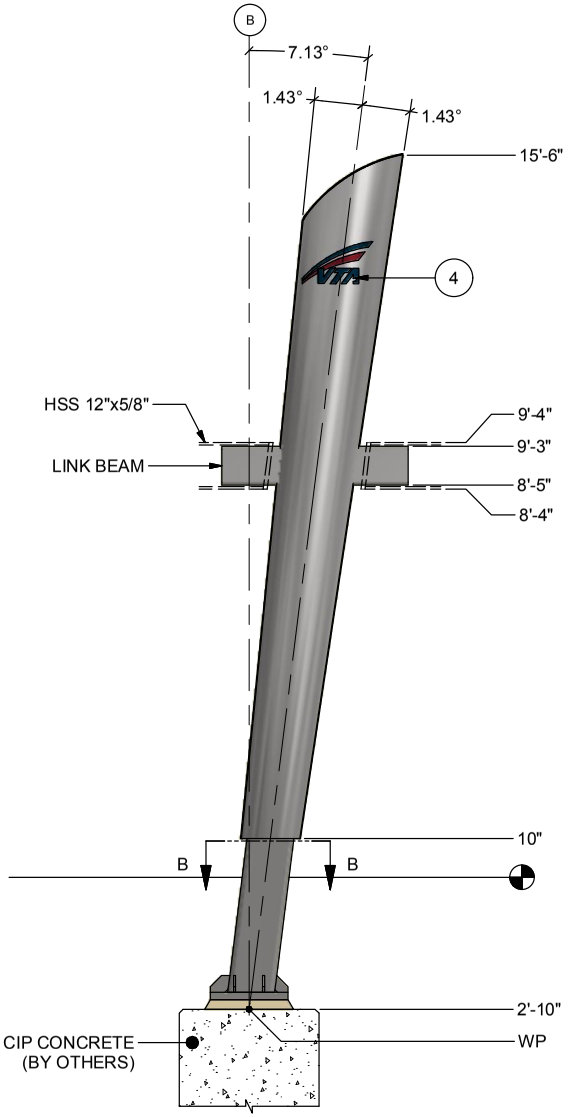
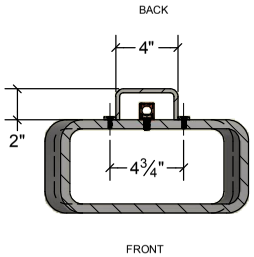
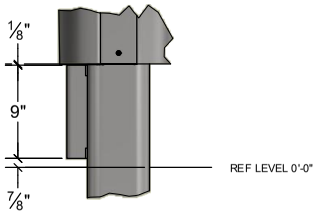
Shelter Long Beam



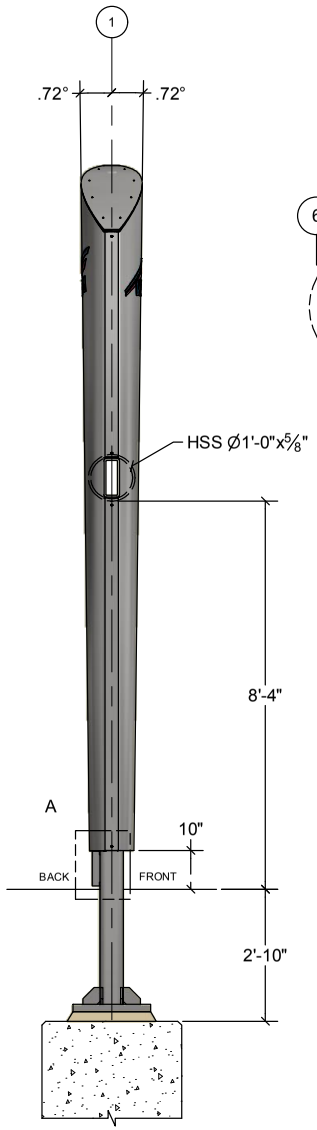
ICONIC COLUMN - FRONT ELEVATION
SCALE 3/8"=1'



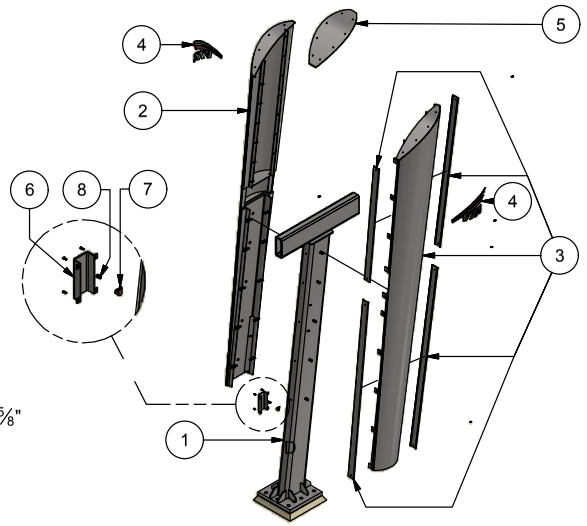
SECTION B-B
SCALE 1 1/2"=1'



DETAIL A
SCALE 1"=1'



ICONIC COLUMN - SIDE ELEVATION
SCALE 3/8"=1'



ICONIC COLUMN - COMPONENTS
SCALE 7/32"=1'

PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	23002-00	ICONIC COLUMN STRUCTURE
2	1	23003-01	REAR IC ARCH WRAP
3	1	23003-00	FRONT IC ARCH WRAP
4	2	23316-00	VTA LOGO FR+ BK
5	1	23313-00	TOP ICONIC COLUMN COVER
6	1	6923K64	CONDUIT COVER
7	1	6923K64	COPPER SET SCREW LUG
8	1	93190A622	3/8"-16 x 3/4" HEX CAP SCRW

TOLAR
Tolar Manufacturing Company, Inc
258 Mariah Circle, Corona CA. 92879

DESCRIPTION: ICONIC COLUMN ASSEMBLY

CUSTOMER/VENDOR: SANTA CLARA - VTA — SHEET NO.: 1 OF 1

SIZE: B — MATL.: SS 316L - MISC — DWG NO.: 23315-00 — REV. NO.:

SCALE: AS NOTED — DATE: 9/10/2014 — DRAWN BY: cgarcia

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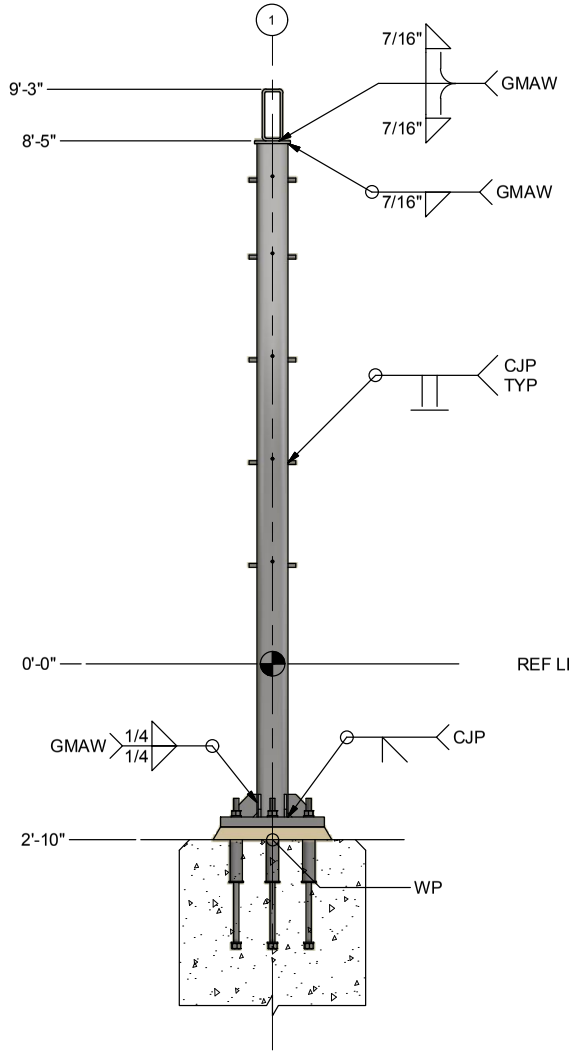
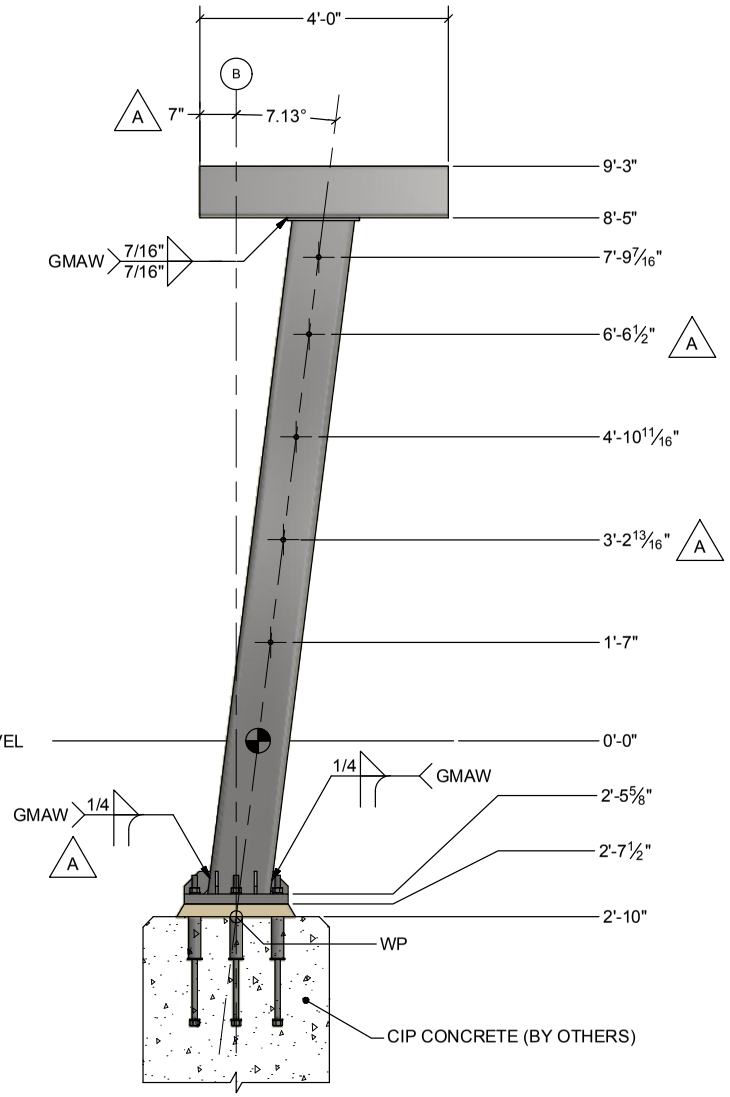
Shelter Columns Assemblies & Horizontal Beam

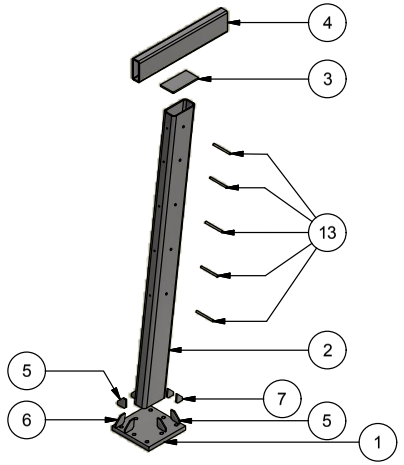
REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
3	A	WELD SYMBOL & ADD DIMENSION	10/13/2014	



ICONIC COLUMN - SIDE ELEVATION
SCALE 1/2" = 1'-0"



ICONIC COLUMN STRUCTURE
SCALE 1/2" = 1'-0"



COMPONENTS - ISO
SCALE 1/4" = 1'-0"

PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	20774-00	BASE PLATE B
2	1	20775-00	ICONIC COLUMN
3	1	20776-00	COLUMN CAP PLATE
4	2	20778-00	LINK BEAM - PRIMARY
5	4	20771-00	GUSSET PLATE
6	2	21189-00	GUSSET PLATE - ACUTE ANGLE
7	2	21190-00	GUSSET PLATE - OBTUSE ANGLE
13	5	23314-00	SETTING DOWEL

TOLAR
PUREPLEY WITH DISTINCTION

Tolar Manufacturing Company, Inc
258 Mariah Circle, Corona CA. 92879

DESCRIPTION: ICONIC COLUMN STRUCTURE			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - MISC	DWG NO.: 23002-00	REV. NO.:
SCALE: AS NOTED	DATE: 9/9/2014	DRAWN BY: cgarcia	

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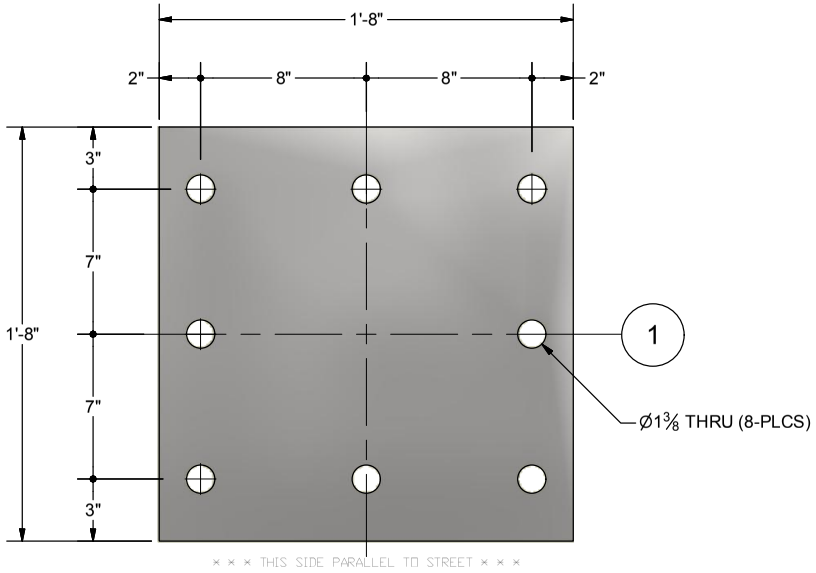
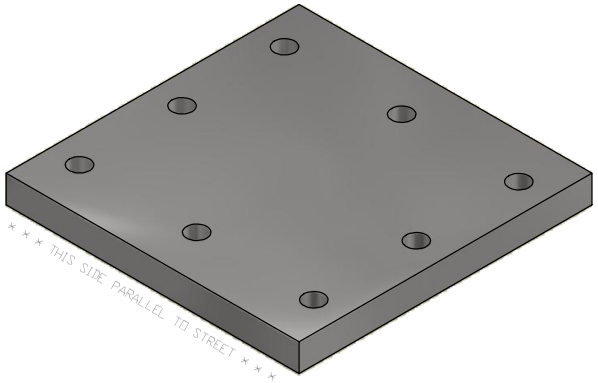
Shelter Columns Assemblies & Horizontal Beam

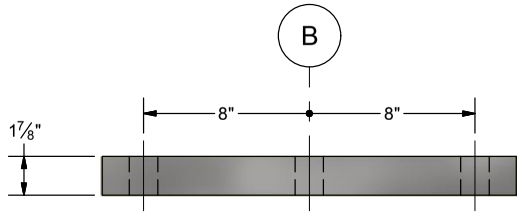
NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. MILL FINISH #1



BASE PLATE B - PLAN VIEW
SCALE 2" = 1'-0"



ISO VIEW
SCALE 2" = 1'-0"



BASE PLATE B - FRONT ELEVATION
SCALE 2" = 1'-0"

TOLAR — Tolar Manufacturing Company, Inc, 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: BASE PLATE B			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 1 7/8" THK	DWG NO.: 20774-00	REV. NO.:
SCALE: AS NOTED	DATE: 4/1/2014	DRAWN BY: cgarcia	

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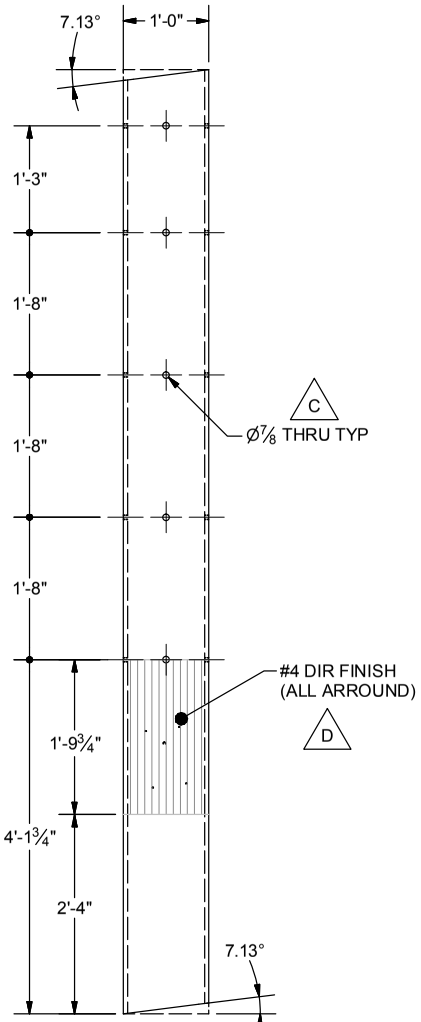
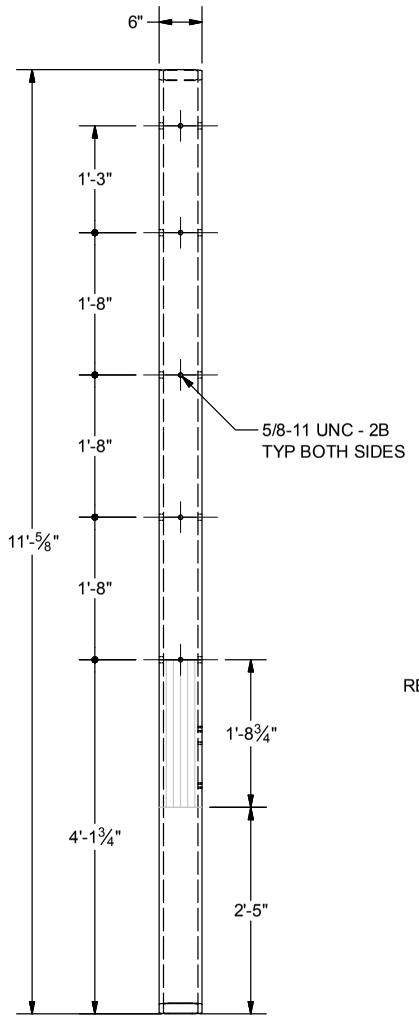
Shelter Columns Assemblies & Horizontal Beam

NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. MILL FINISH #4 (DIRECTION AND AREA PER SKETCH)

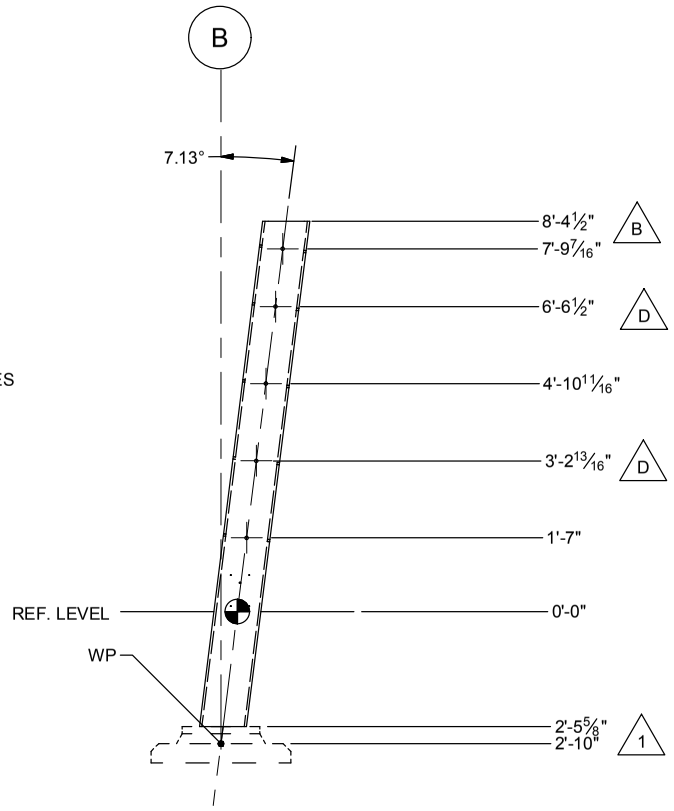
REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
A2	1	GROUT THICKNESS UPDATE	4/24/2014	
B4-B2	B	HEIGHT DIMM & LENGHTS	5/14/2014	
ALL	C	IC - REDESIGN	9/10/2014	
ALL	D	FINISH AREA - HOLE LAYOUT	10/13/2014	



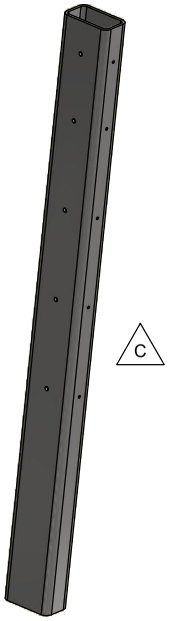
CUT LAYOUT - FRONT
SCALE 11/16"=1'



CUT LAYOUT - SIDE
SCALE 11/16"=1'



IC - FRONT ELEVATION
SCALE 3/8"=1'



ISO VIEW
SCALE 1/2"=1'

TOLAR — PURSUED WITH DISTINCTION	Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879		
DESCRIPTION	ICONIC COLUMN		
CUSTOMER/VENDOR	SANTA CLARA - VTA		SHEET NO. 1 OF 2
SIZE B	MATL. SS 316L - HSS 12"x6"x5/8"	DWG NO. 20775-00	REV. NO. B
SCALE AS NOTED	DATE 4/1/2014	DRAWN BY: cgarcia	

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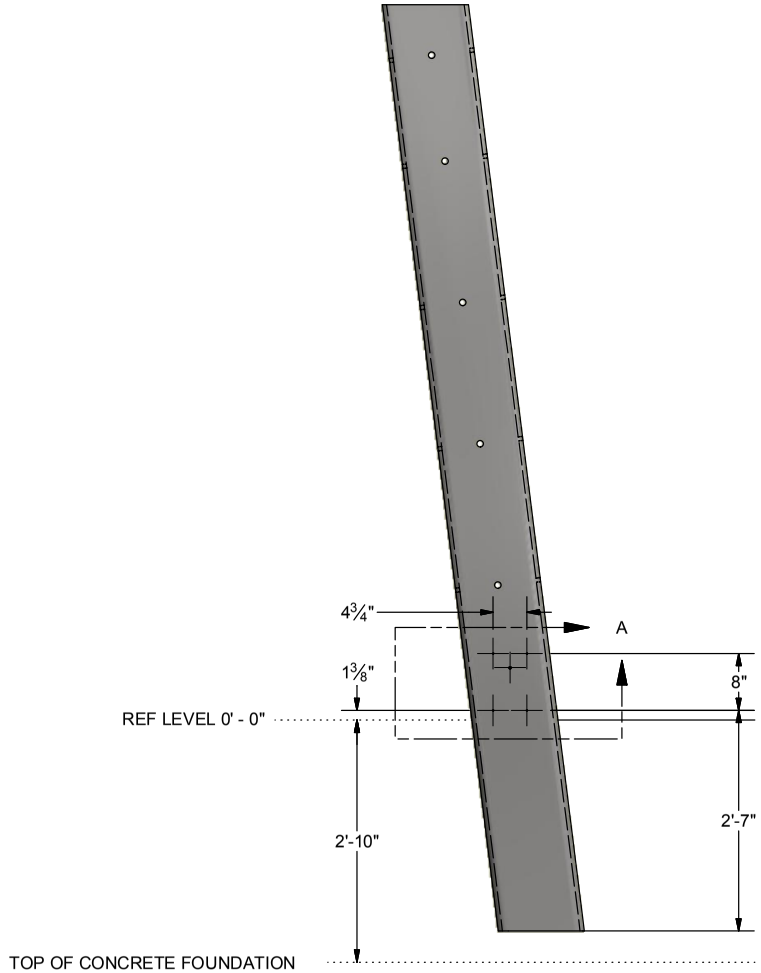
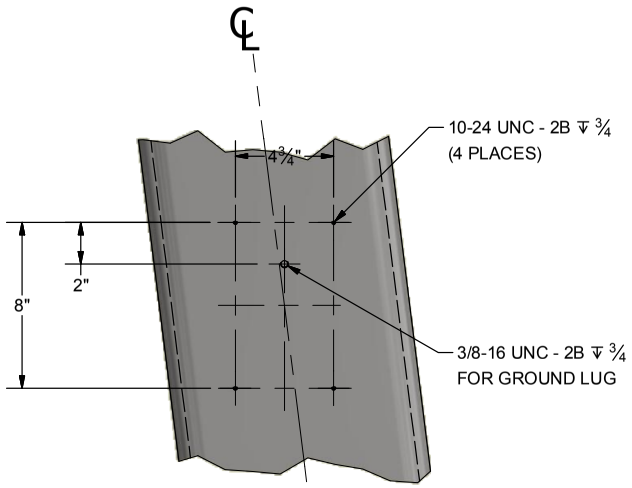
Shelter Columns Assemblies & Horizontal Beam



COLUMN REAR ELEVATION
SCALE 11/16"=1'



DETAIL A
CONDUIT COVER MOUNTING
SCALE 2"=1'

TOLAR — Tolar Manufacturing Company, Inc, 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: ICONIC COLUMN			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 2 OF 2
SIZE: B	MATL.: SS 316L - 12x6x5/8	DWG NO.: 20775-00	REV. NO.: B
SCALE: AS NOTED	DATE: 4/1/2014	DRAWN BY: cgarcia	

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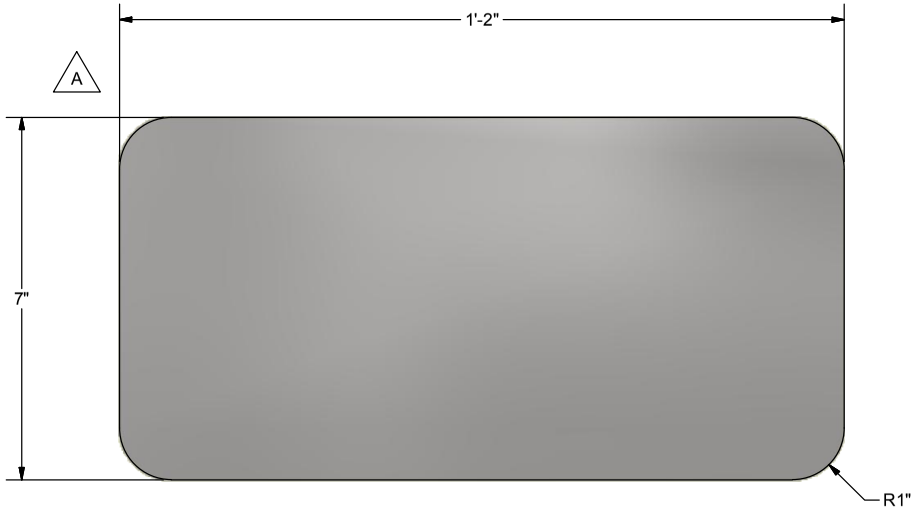
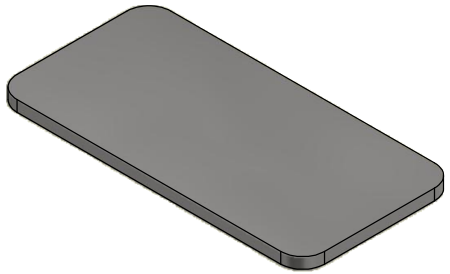
Shelter Columns Assemblies & Horizontal Beam

NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. MILL FINISH #1

REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
ALL	A	PLATE DIMENSION PLCMNT	10/13/2014	



COLUMN CAP PLATE - PLAN VIEW
SCALE 5"=1'



ISO VIEW
SCALE 3"=1'

COLUMN CAP PLATE - ELEVATION
SCALE 5"=1'

TOLAR
PREMIER WITH DISTINCTION

Tolar Manufacturing Company, Inc
258 Mariah Circle, Corona CA. 92879

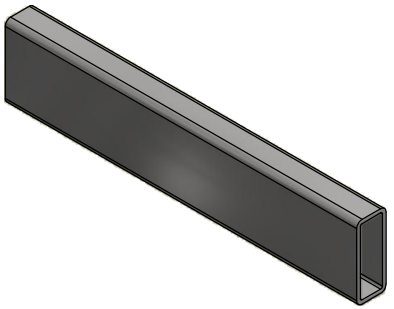
DESCRIPTION: COLUMN CAP PLATE			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 1/2" THK PL	DWG NO.: 20776-00	REV. NO.
SCALE: AS NOTED	DATE: 4/1/2014	DRAWN BY: cgarcia	

T:\Engineering\CARLOS GARCIA\VTA\20776-00.idw

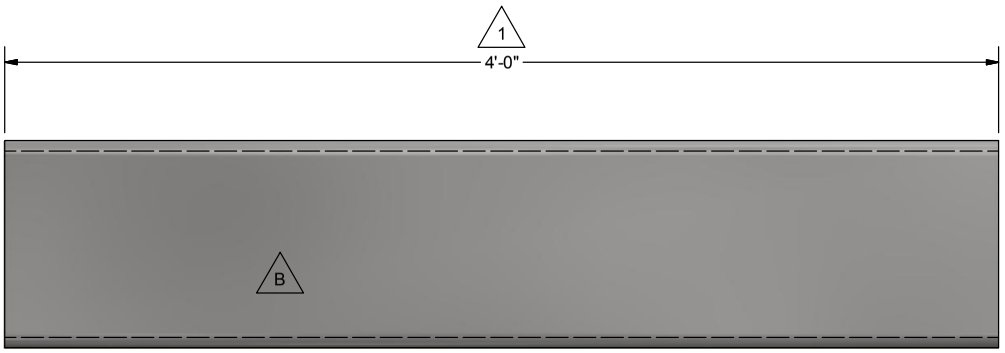
Shelter Columns Assemblies & Horizontal Beam

NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. DIRECTIONAL HORIZONTAL FINISH #4 (LONGEST EDGE)

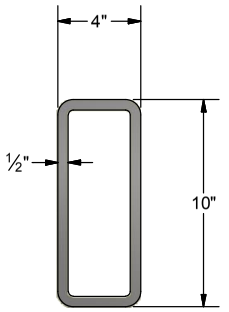
REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
B3	1	LENGHT OF BEAM	4/24/2014	
A4	B	FIELD CONN HOLES (DELETED)	5/27/2014	



ISO VIEW
SCALE 1"=1'



BEAM LINK - ELEVATION
SCALE 2"=1'



BEAM LINK - SECTION
SCALE 2"=1'

Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: LINK BEAM - PRIMARY			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - HSS 10"x4"x1/2"	DWG NO.: 20778-00	REV. NO.: B
SCALE: AS NOTED	DATE: 4/2/2014	DRAWN BY: cgarcia	

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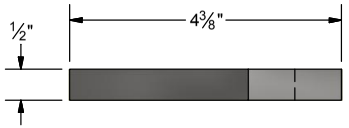
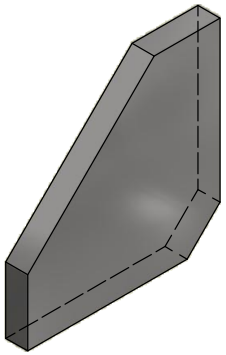
Shelter Columns Assemblies & Horizontal Beam

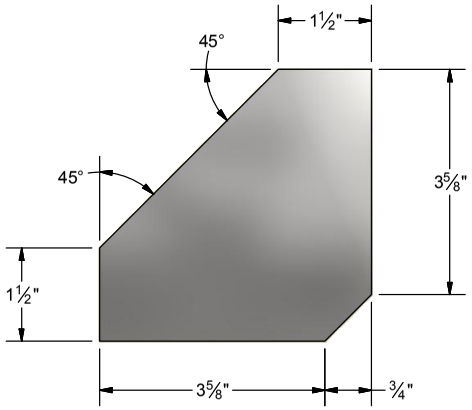
NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. MILL FINISH #1



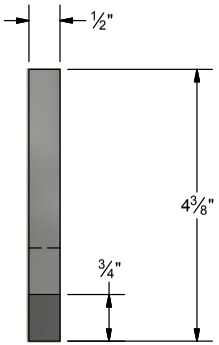
GUSSET PLATE - PLAN VIEW
SCALE 6"=1'



ISO VIEW
SCALE 6"=1'



GUSSET PLATE - ELEVATION
SCALE 6"=1'



GUSSET PLATE - SECTION
SCALE 6"=1'

TOLAR — Tolar Manufacturing Company, Inc, 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: GUSSET PLATE			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L	DWG NO.: 20771-00	REV. NO.: B
SCALE: AS NOTED	DATE: 3/31/2014	DRAWN BY: cgarcia	

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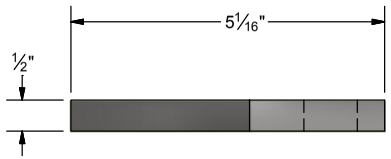
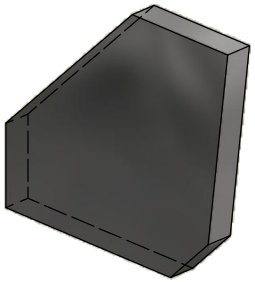
Shelter Columns Assemblies & Horizontal Beam

NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. MILL FINISH #1

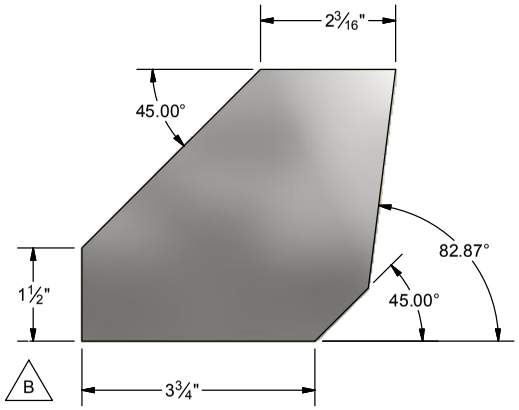
REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
A4	B	SHAPE SIZE	5/16/2014	



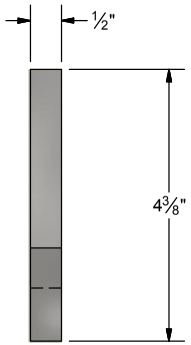
GUSSET PLATE - PLAN VIEW
SCALE 6"=1'



ISO VIEW
SCALE 6"=1'



GUSSET PLATE - ACUTE ANGLE - ELEVATION
SCALE 6"=1'



GUSSET PLATE - FRONT ELEVATION
SCALE 6"=1'

TOLAR
SHEARINGLY WITH DISTINCTION

Tolar Manufacturing Company, Inc
258 Mariah Circle, Corona CA. 92879

DESCRIPTION: GUSSET PLATE - ACUTE ANGLE			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 1/2" THK	DWG NO.: 21189-00	REV. NO.: B
SCALE: AS NOTED	DATE: 4/1/2014	DRAWN BY: cgarcia	

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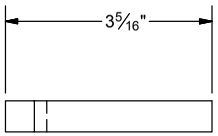
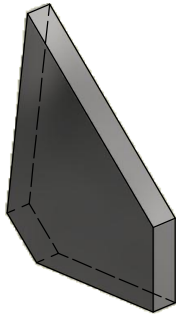
Shelter Columns Assemblies & Horizontal Beam

NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. MILL FINISH #1

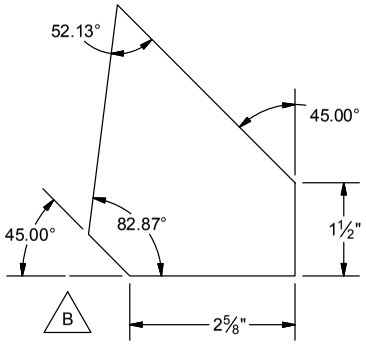
REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
A4	B	SHAPE SIZE	5/16/2014	



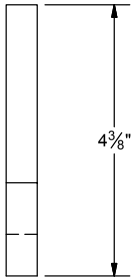
GUSSET PLATE - PLAN VIEW
SCALE 6"=1'



ISO VIEW
SCALE 6"=1'



GUSSET PLATE - OBTUSE ANGLE - ELEVATION
SCALE 6"=1'



GUSSET PLATE - FRONT ELEVATION
SCALE 6"=1'

TOLAR
Tolar Manufacturing Company, Inc
258 Mariah Circle, Corona CA. 92879

DESCRIPTION: GUSSET PLATE - OBTUSE ANGLE			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 1/2" THK	DWG NO.: 21190-00	REV. NO.:
SCALE: AS NOTED	DATE: 4/1/2014	DRAWN BY: cgarcia	

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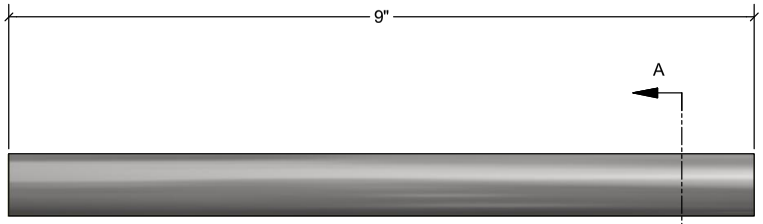
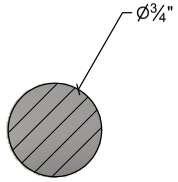
Shelter Columns Assemblies & Horizontal Beam



DOWEL SETTING BAR - SIDE VIEW
SCALE 8"=1'



SECTION A-A
SCALE 12"=1'

Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: SETTING DOWEL			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 3/4" ROD - BAR	DWG NO.: 23314-00	REV. NO.:
SCALE: AS NOTED	DATE: 9/18/2014	DRAWN BY: cgarcia	

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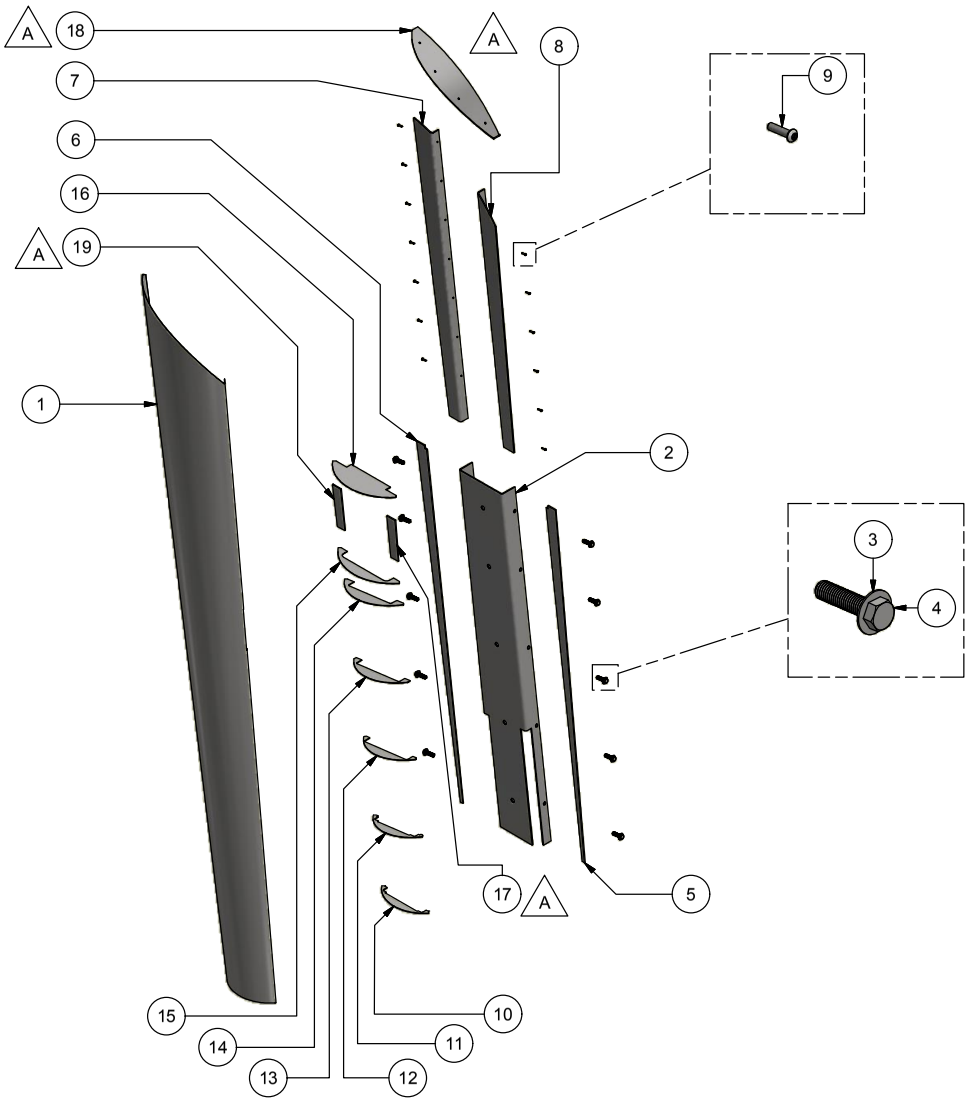
Shelter Columns Assemblies & Horizontal Beam

REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
3	A	ADDED 23011-01	10/14/2014	



ARCHITECTURAL WRAP - COMPONENTS
SCALE 7/16"=1'

PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	23001-00	REAR FRMD I.C. WRAP
2	1	23005-00	FORMED MNTNG BRACKET
3	10	90107A035	NOM 5/8" WASHER - 1-1/2 OD
4	10	93190A852	5/8-11x2-1/2 SS HEXCAPSCRW
5	1	23008-00	PROFILED EDGE PLATE "L"
6	1	23008-01	PROFILED EDGE PLATE "R"
7	1	23008-U1	PROF EDGE PL REAR-UP "R"
8	1	23008-U0	PROF EDGE PL REAR-UP "L"
9	13	8403100	1/4-20 x 1" SCREW
10	1	23021-01	REAR STIFFENER LAYER 1
11	1	23022-01	REAR STIFFENER LAYER 2
12	1	23023-01	REAR STIFFENER LAYER 2
13	1	23024-01	REAR STIFFENER LAYER 4
14	1	23025-01	REAR STIFFENER LAYER 5
15	1	23310-01	REAR STIFFENER LAYER 6
16	1	23311-00	REAR STIFFENER LAYER 7
17	1	23312-00	EDGE PL PRFLD @ LINK-BM
18	1	23011-01	I. C. CAP STIFFENER (BK)
19	1	23312-01	EDGE PL PRFLD @ LINK-BM (R)

TOLAR
HEADQUARTERED WITH DISTINCTION

Tolar Manufacturing Company, Inc
258 Mariah Circle, Corona CA. 92879

DESCRIPTION: REAR IC ARCH WRAP			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 4
SIZE: B	MATL.: SS 316L - MISC	DWG NO.: 23003-01	REV. NO.: A
SCALE: AS NOTED	DATE: 9/10/2014	DRAWN BY: cgarcia	

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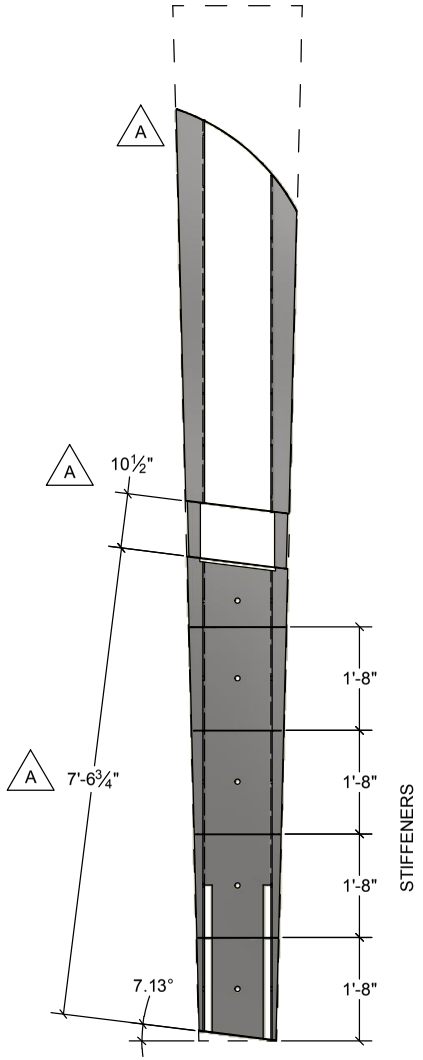
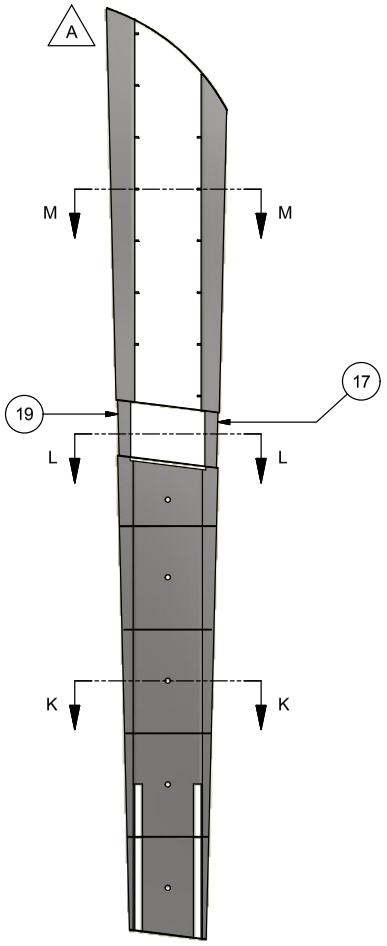
Shelter Columns Assemblies & Horizontal Beam

REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
ALL	A	DIM - STIFFENER	10/14/2014	

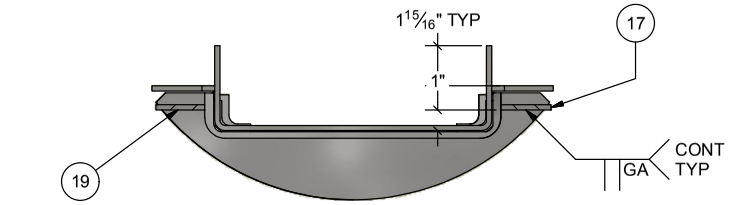


REAR ARCHITECTURAL WRAP - ELEVATION
(STIFFENER PLACEMENT)
SCALE 1/2"=1'



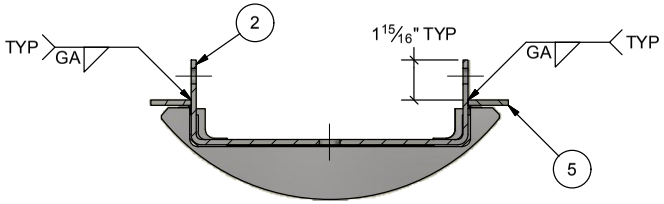
REPRESENTATION w/o CLADING
SCALE 1/2"=1'

SECTION M-M
SCALE 2"=1'



WELD PLATE 17 & 19 TO WRAP - SEE DETAIL L6-L6 PAGE 23003-01 3 OF 4

SECTION L-L
TYPICAL
SCALE 2"=1'



SECTION K-K
SCALE 2"=1'

Tolar Manufacturing Company, Inc
258 Mariah Circle, Corona CA. 92879

DESCRIPTION: REAR IC ARCH WRAP			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 2 OF 4
SIZE: B	MATL.: SS 316L - MISC	DWG NO.: 23003-01	REV. NO.: A
SCALE: AS NOTED	DATE: 9/10/2014	DRAWN BY: cgarcia	

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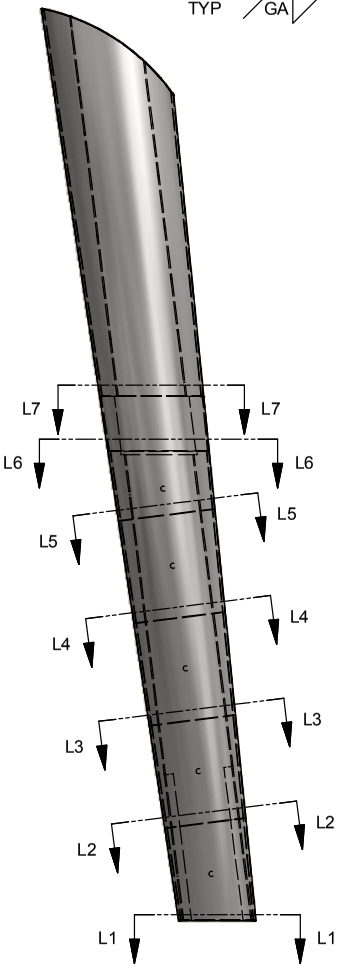
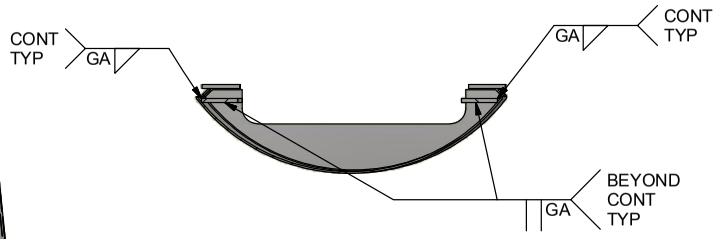
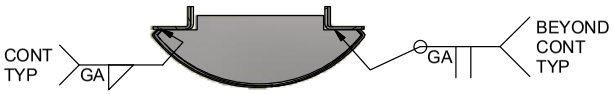
Shelter Columns Assemblies & Horizontal Beam



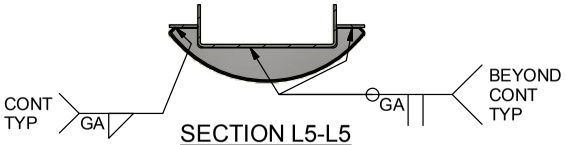
WRAP ASSEMBLY - NO CLADING
SCALE 1/2"=1'



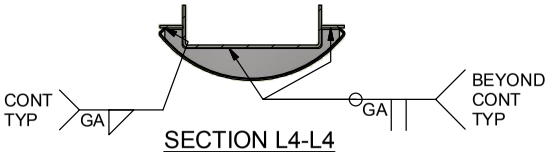
SECTION L6-L6
SCALE 1 1/2"=1'



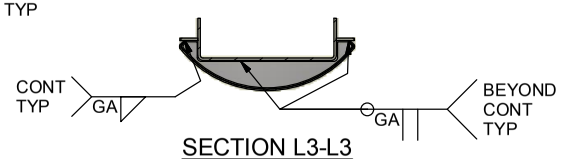
SECTION L7-L7
SCALE 1"=1'



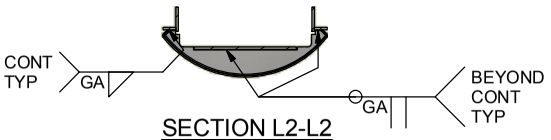
SECTION L5-L5
SCALE 1"=1'



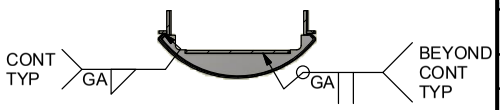
SECTION L4-L4
SCALE 1"=1'



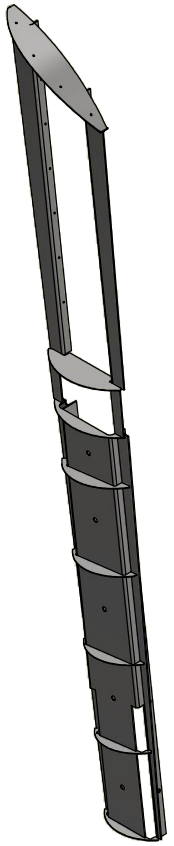
SECTION L3-L3
SCALE 1"=1'



SECTION L2-L2
SCALE 1"=1'



SECTION L1-L1
SCALE 1"=1'



ISO VIEW
(NO SHEET METAL CLADDING)
SCALE 1/2"=1'

TOLAR — Tolar Manufacturing Company, Inc, 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: REAR IC ARCH WRAP			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 3 OF 4
SIZE: B	MATL.: SS 316L - MISC	DWG NO.: 23003-01	REV. NO.: A
SCALE: AS NOTED	DATE: 9/10/2014	DRAWN BY: cgarcia	

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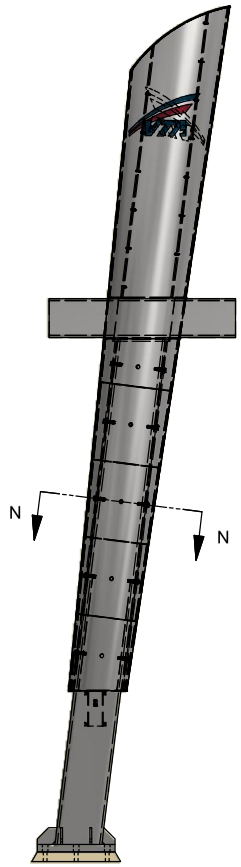
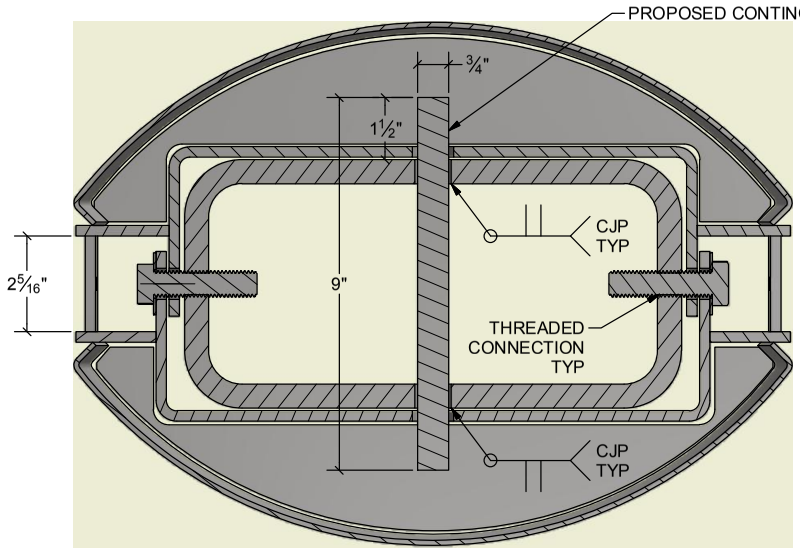
Shelter Columns Assemblies & Horizontal Beam



ICONIC COLUMN - ELEVATION
SCALE 3/8"=1'



SECTION N-N
SCALE 4"=1'

NOTE: THIS PAGE ILLUSTRATES THE PROPOSED DOWEL DESIGN, IT GOES ALL THE WAY THRU THE WALLS OF THE FLARED HSS 6X12X1/2. THE PROPOSED DESIGN WILL ALLOW:
REDUCE THE DOWEL FABRICATION TIME
EASIER AND FASTER ALIGNMENT WHILE SETTING DOWEL IN PLACE
THERE IS A HIGHER LOAD SHEAR VALUE BY USING THIS METHOD
THIS CONNECTION TYPE IS ALSO USED IN OTHER PARTS OF THE SHELTER AND WE WOULD LIKE TO APPLY IT IN THOSE SECTIONS, (E PIER / COMM PIER).

TOLAR	Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879		
DESCRIPTION	ICONIC COLUMN ASSEMBLY		
CUSTOMER/VENDOR	SANTA CLARA - VTA		SHEET NO. 4 OF 4
SIZE B	MATL. S 316L - MISC	DWG NO. 23315-00	REV. NO.
SCALE AS NOTED	DATE 9/10/2014	DRAWN BY: cgarcia	

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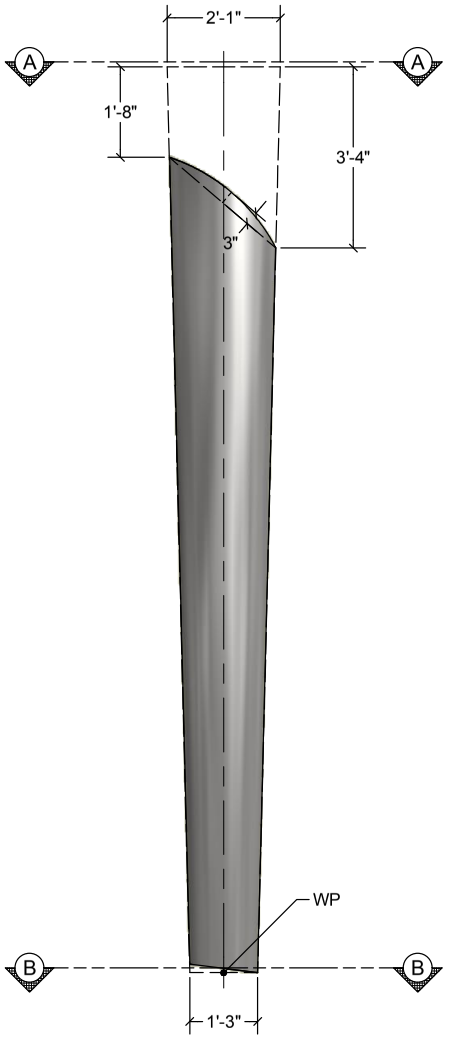
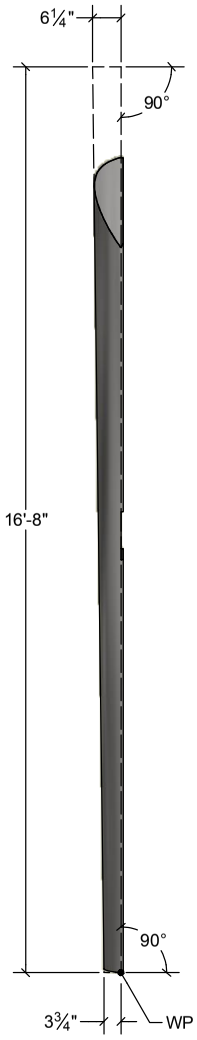
Shelter Columns Assemblies & Horizontal Beam

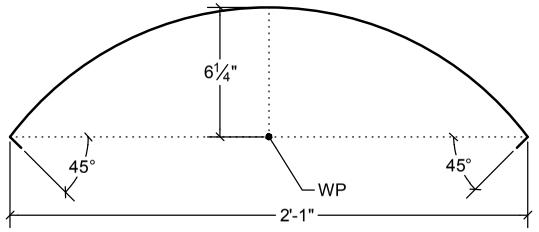
NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. DIRECTIONAL FINISH #4 (AXIS DIRECTION)



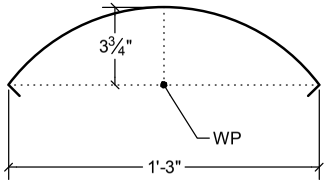
"REAR" FORMED SHEET METAL WRAP - ELEVATION
SCALE 7/16"=1'



LEFT SIDE ELEVATION
SCALE 7/16"=1'



A WRAP TOP LAYOUT
SCALE 2"=1'



B WRAP BASE LAYOUT
SCALE 2"=1'

TOLAR — Tolar Manufacturing Company, Inc, 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: REAR FRMD I.C. WRAP			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 2
SIZE: B	MATL.: SS 316L - 11GA SH M	DWG NO.: 23001-00	REV. NO.:
SCALE: AS NOTED	DATE: 9/10/2014	DRAWN BY: cgarcia	

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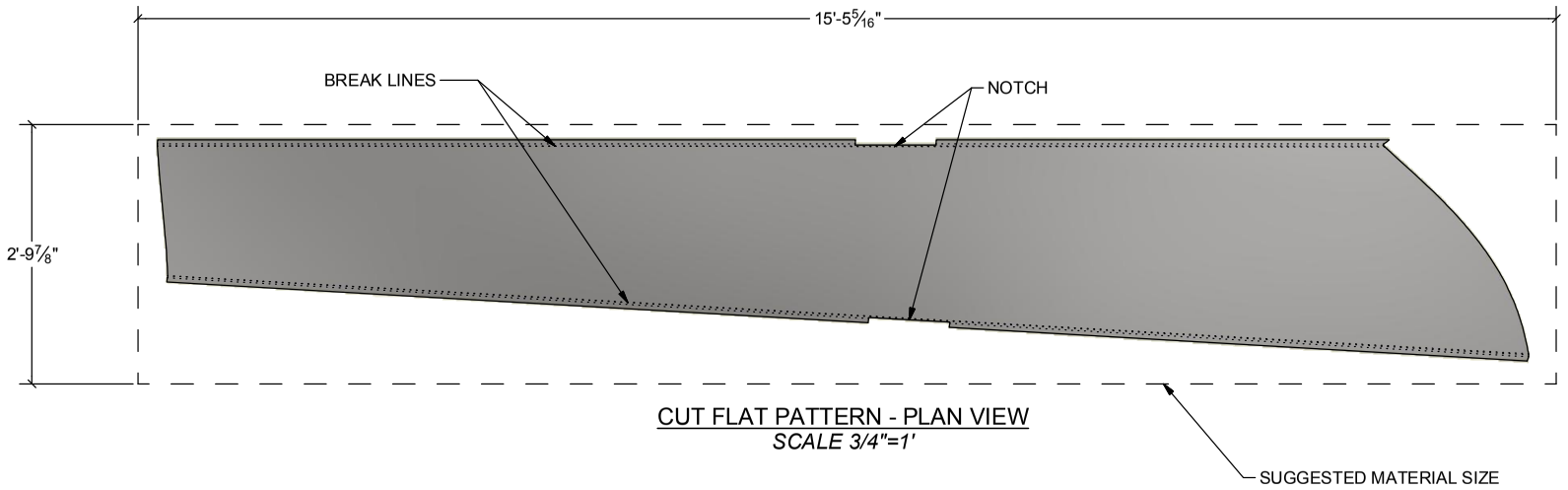
Shelter Columns Assemblies & Horizontal Beam

NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. DIRECTIONAL FINISH #4 (FORMED GEOMETRY SHAPE AXIS DIRECTION)
3. USE 23001-00.DXF TO PERFORM CUT



CUT FLAT PATTERN - PLAN VIEW
SCALE 3/4"=1'

Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879	
DESCRIPTION: REAR FRMD I.C. WRAP	
CUSTOMER/VENDOR: SANTA CLARA - VTA	SHEET NO.: 2 OF 2
SIZE: B / MATL.: SS 316L - 11 GA SH M / DWG NO.: 23001-00	REV. NO.:
SCALE: AS NOTED / DATE: 9/10/2014 / DRAWN BY: cgarcia	

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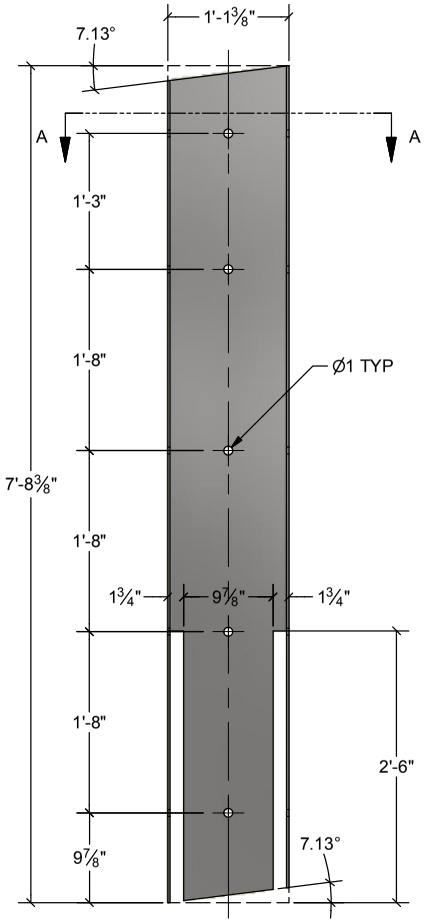
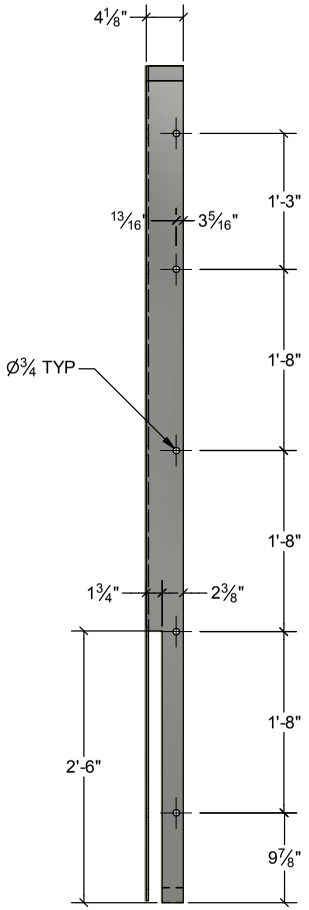
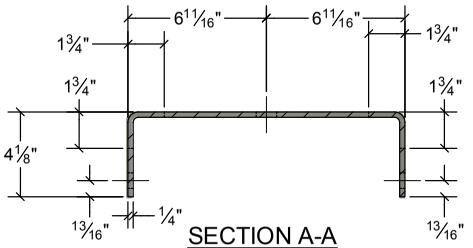
Shelter Columns Assemblies & Horizontal Beam



WRAP MOUNTING BRACKET
SCALE 7/8"=1'



SIDE ELEVATION
SCALE 7/8"=1'



SECTION A-A
SCALE 2"=1'

ISO VIEW
SCALE 3/8"=1'

TOLAR — Tolar Manufacturing Company, Inc, 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: FORMED MNTNG BRACKET			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 2
SIZE: B	MATL.: SS 316L - 1/4" THK PLATE	DWG NO.: 23005-00	REV. NO.:
SCALE: AS NOTED	DATE: 9/11/2014	DRAWN BY: cgarcia	

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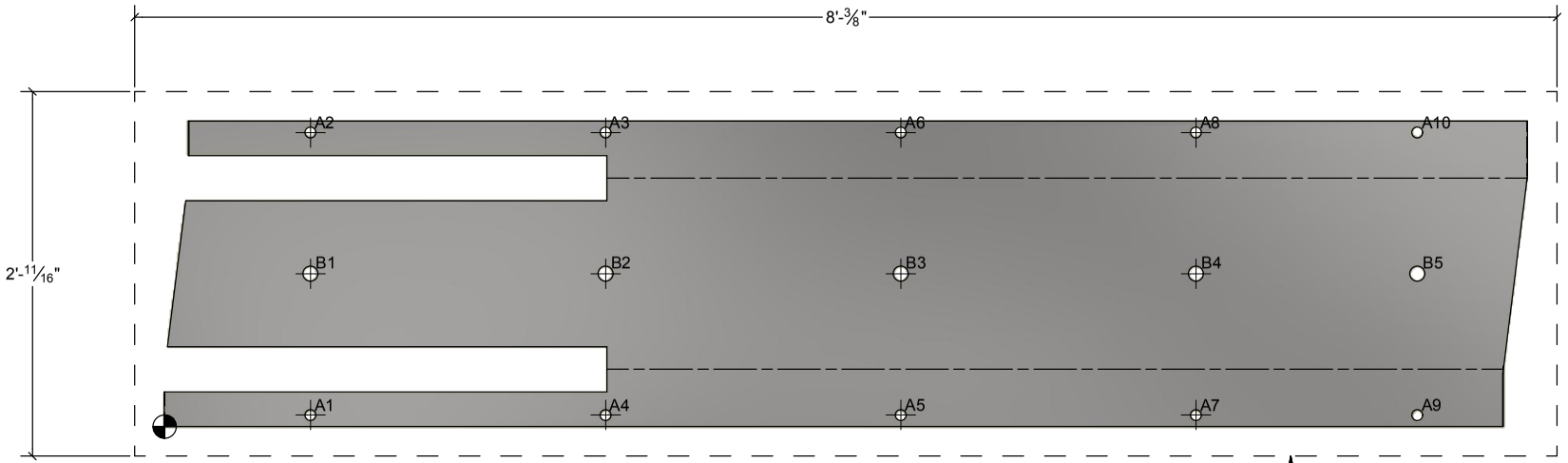
Shelter Columns Assemblies & Horizontal Beam

NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. MILL FINISH #1
3. USE 23005-00.DXF TO PERFORM CUT



WRAP MOUNTING BRACKET - CUT TEMPLATE PLAN VIEW
SCALE 1 1/2"=1'

HOLE TABLE			
HOLE	XDIM	YDIM	DESCRIPTION
A1	9.87	.78	Ø¾ THRU
A2	9.87	19.91	Ø¾ THRU
A3	29.87	19.91	Ø¾ THRU
A4	29.87	.78	Ø¾ THRU
A5	49.87	.78	Ø¾ THRU
A6	49.87	19.91	Ø¾ THRU
A7	69.87	.78	Ø¾ THRU
A8	69.87	19.91	Ø¾ THRU
A9	84.87	.78	Ø¾ THRU
A10	84.87	19.91	Ø¾ THRU
B1	9.87	10.35	Ø1 ↧ ¼
B2	29.87	10.35	Ø1 ↧ ¼
B3	49.87	10.35	Ø1 ↧ ¼
B4	69.87	10.35	Ø1 ↧ ¼
B5	84.87	10.35	Ø1 ↧ ¼

TOLAR
PERFECTION WITH DISTINCTION

Tolar Manufacturing Company, Inc
258 Mariah Circle, Corona CA. 92879

DESCRIPTION: FORMED MNTNG BRACKET			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 2 OF 2
SIZE: B	MATL.: SS 316L - 1/4" THK PL	DWG NO.: 23005-00	REV. NO.:
SCALE: AS NOTED	DATE: 9/11/2014	DRAWN BY: cgarcia	

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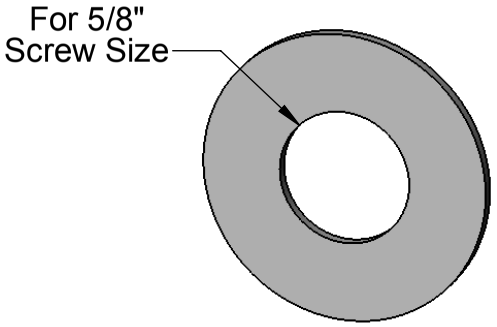
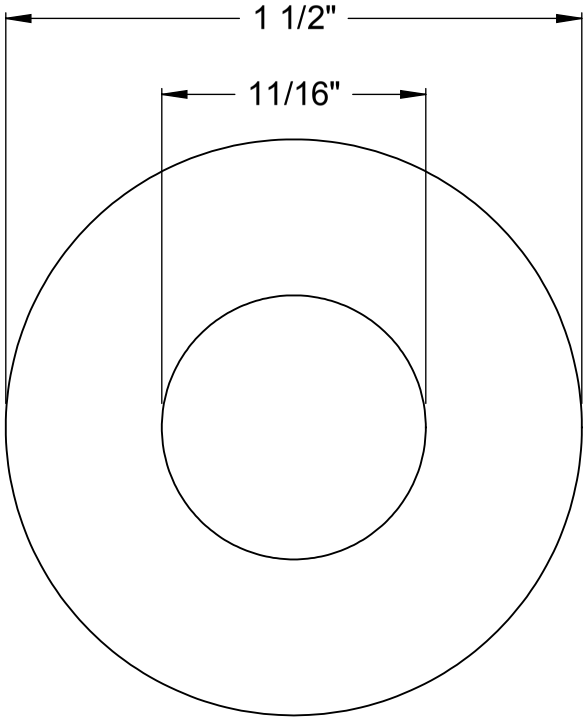
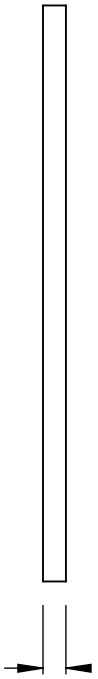
Shelter Columns Assemblies & Horizontal Beam







Washer thickness may vary from
0.06" to 0.09" in thickness.

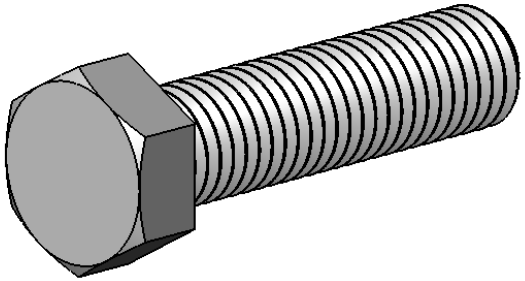
Shelter Columns Assemblies & Horizontal Beam

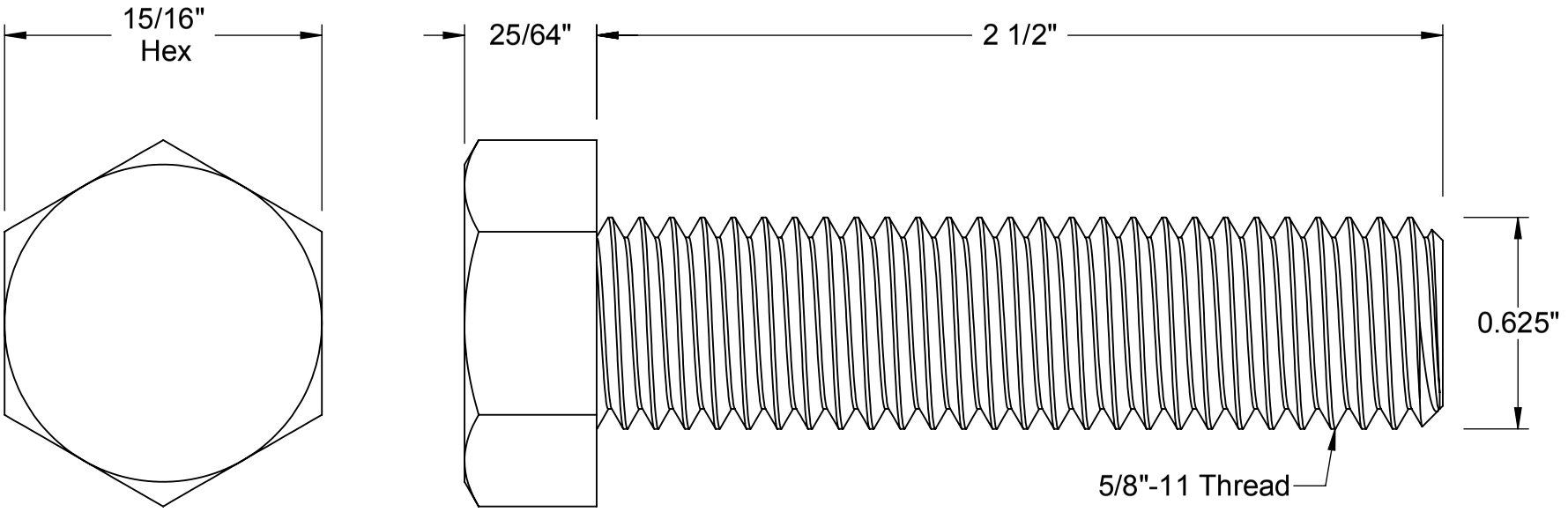
McMASTER-CARR® CAD

http://www.mcmaster.com

PART NUMBER **90107A035**

Type 316 Stainless Steel
General Purpose Washer





Shelter Columns Assemblies & Horizontal Beam

McMASTER-CARR® CAD

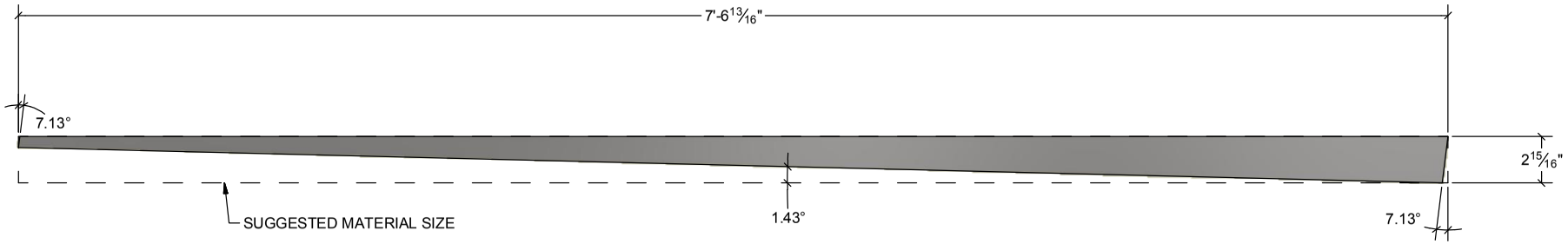
http://www.mcmaster.com

Information in this drawing is provided for reference only.

PART NUMBER **93190A852**

Stainless Steel
Cap Screw

NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. MILL FINISH #1
3. USE 23008-00-00.DXF TO PERFORM CUT



PROFILED EDGE PLATE - PLAN VIEW
SCALE 1 3/4"=1'

Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: PROFILED EDGE PLATE "L"			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 1/4" THK PL	DWG NO.: 23008-00	REV. NO.
SCALE: AS NOTED	DATE: 9/11/2014	DRAWN BY: cgarcia	

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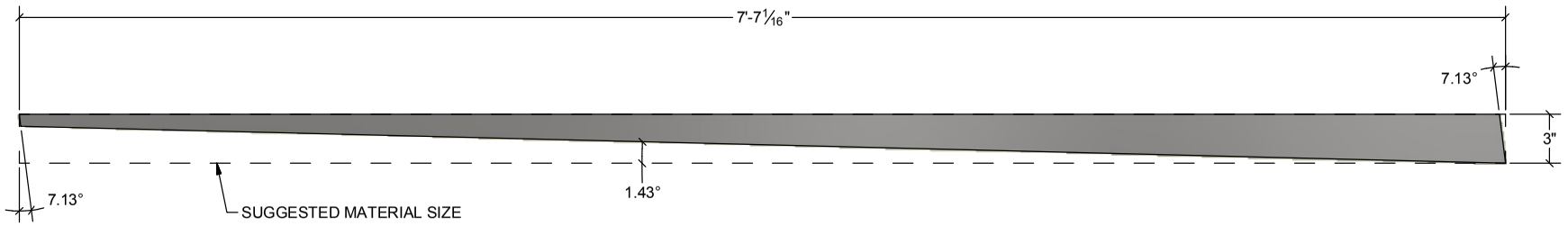
Shelter Columns Assemblies & Horizontal Beam

NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. MILL FINISH #1
3. USE 23008-01.DXF TO PERFORM CUT



PROFILED EDGE PLATE - PLAN VIEW
SCALE 1 3/4"=1'

TOLAR — DURABILITY WITH DISTINCTION	Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879		
DESCRIPTION	PROFILED EDGE PLATE "R"		
CUSTOMER/VENDOR	SANTA CLARA - VTA		SHEET NO. 1 OF 1
SIZE B	MATL. SS 316L - 1/4" THK PL	DWG NO. 23008-01	REV. NO.
SCALE AS NOTED	DATE 9/11/2014	DRAWN BY: cgarcia	

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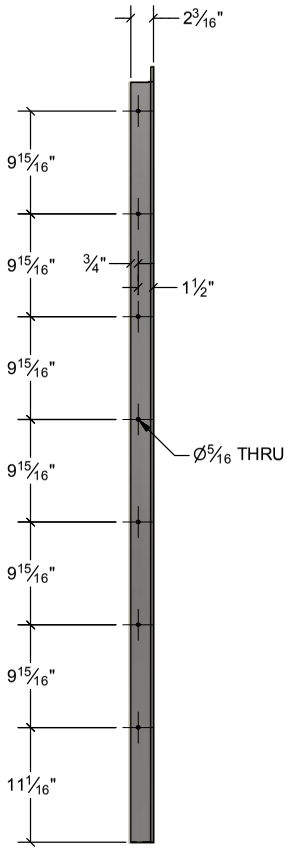
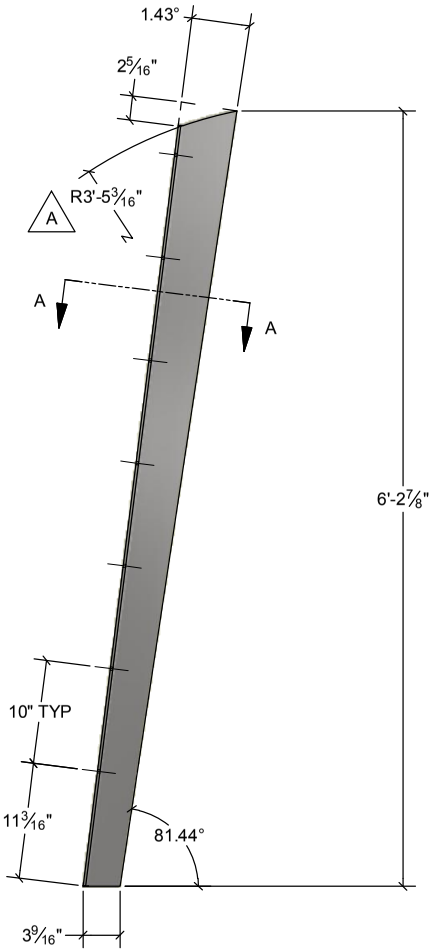
Shelter Columns Assemblies & Horizontal Beam

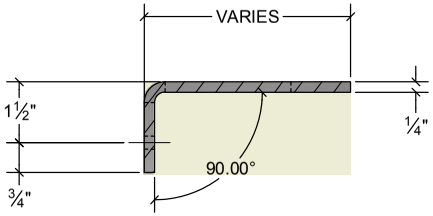
NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. MILL FINISH #1
3. USE 23008-U1.DXF TO PERFORM CUT

REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
3	A	STIFFENER EXTENSION	10/13/2014	

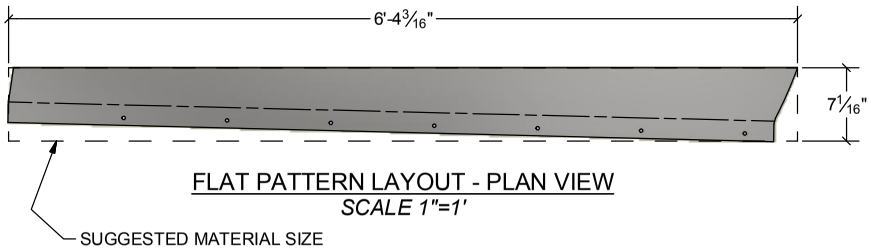




FORMED FRONT EDGE PLATE - "R" - ELEVATION
SCALE 1"=1'



SECTION A-A
SCALE 4"=1'



FLAT PATTERN LAYOUT - PLAN VIEW
SCALE 1"=1'

TOLAR — Tolar Manufacturing Company, Inc, 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: PROF EDGE PL REAR-UP "R"			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 1/4" THK PL	DWG NO.: 23008-U1	REV. NO.: A
SCALE: AS NOTED	DATE: 9/11/2014	DRAWN BY: cgarcia	

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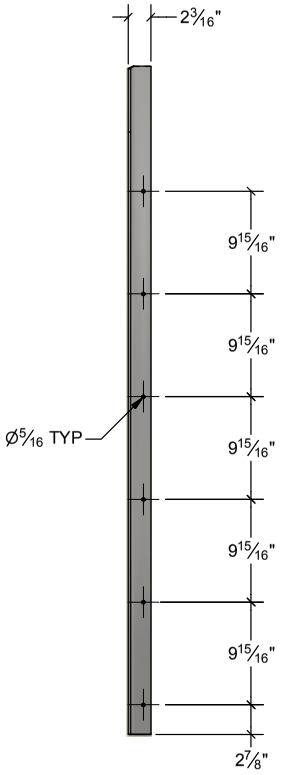
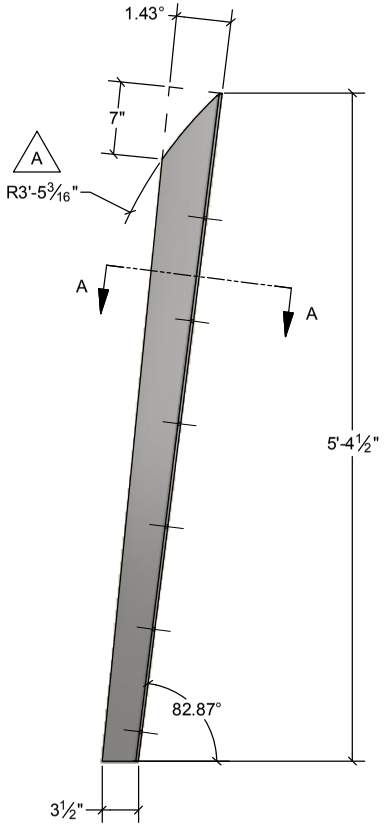
Shelter Columns Assemblies & Horizontal Beam

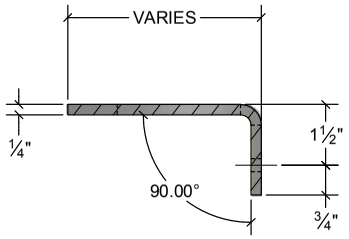
NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. MILL FINISH #1
3. USE 23008-U0.DXF TO PERFORM CUT

REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
3	A	STIFFENER EXTENSION	10/13/2014	

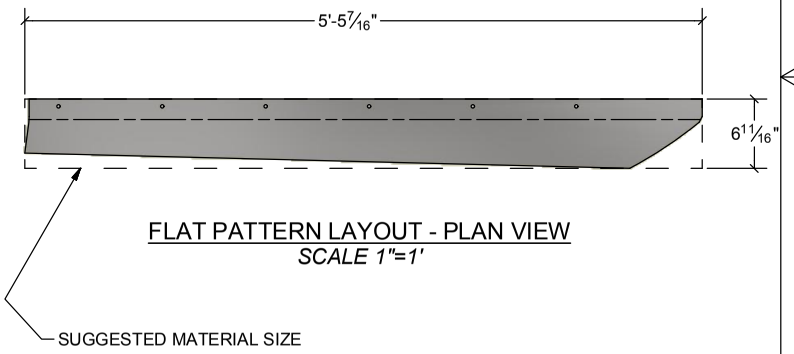




FORMED EDGE PLATE "FR" - ELEVATION
SCALE 1"=1'



SECTION A-A
SCALE 4"=1'



FLAT PATTERN LAYOUT - PLAN VIEW
SCALE 1"=1'

TOLAR — PURSUED WITH DISTINCTION	Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879		
DESCRIPTION	PROF EDGE PL REAR-UP "L"		
CUSTOMER/VENDOR	SANTA CLARA - VTA		SHEET NO. 1 OF 1
SIZE B	MATL. SS 316L - 1/4" THK PL	DWG NO. 23008-U0	REV. NO. A
SCALE AS NOTED	DATE 9/11/2014	DRAWN BY: cgarcia	

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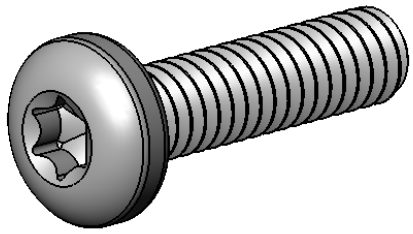
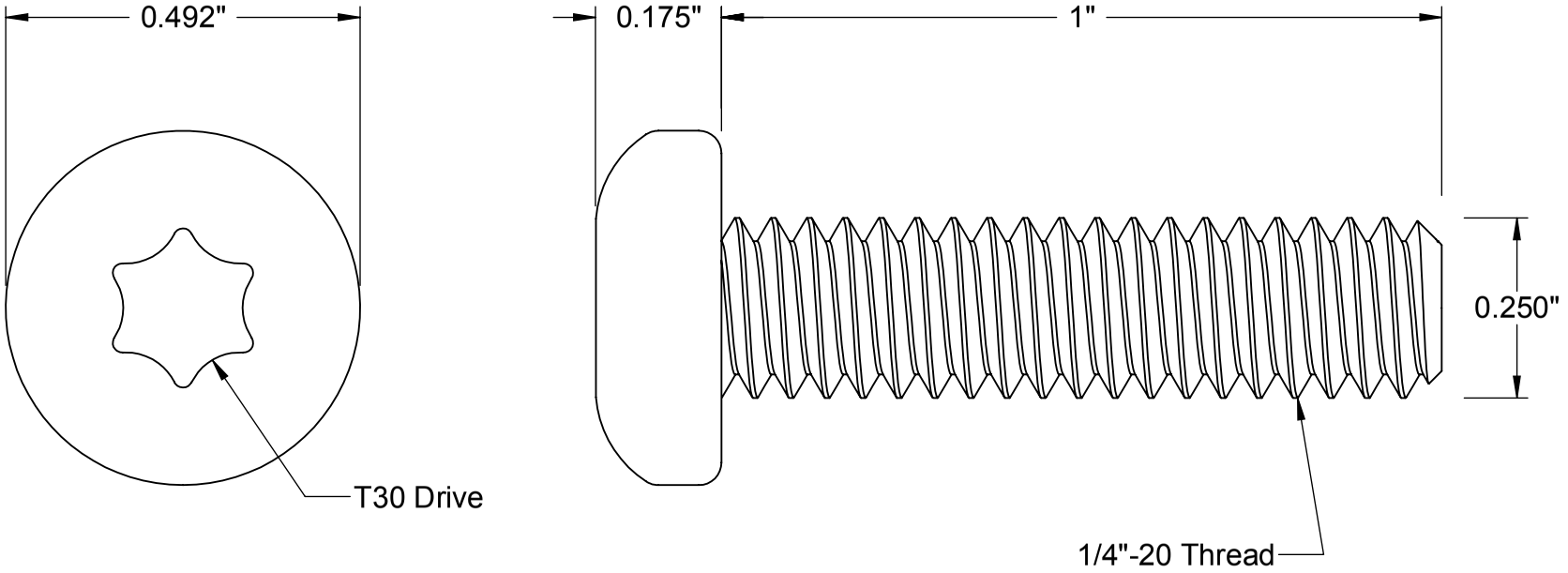
Shelter Columns Assemblies & Horizontal Beam





Shelter Columns Assemblies & Horizontal Beam

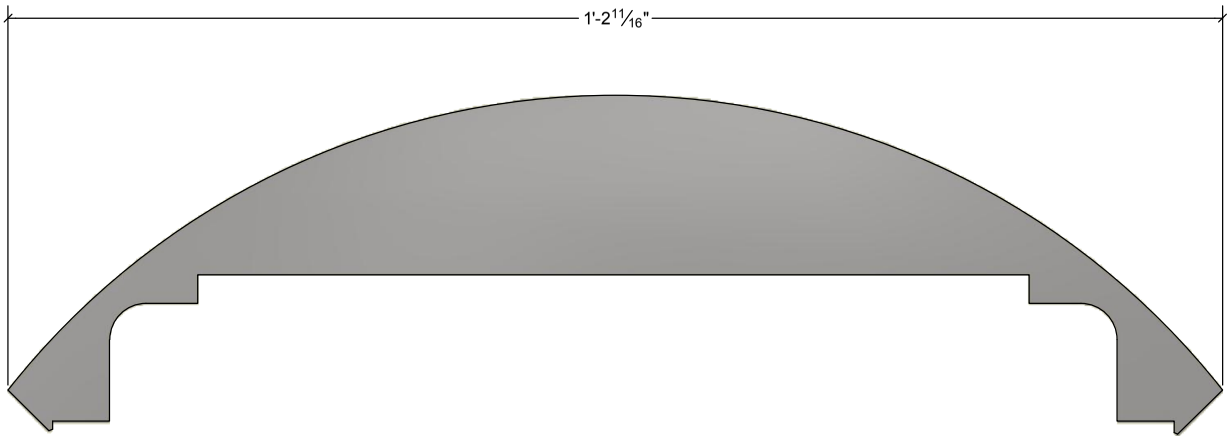
McMASTER-CARR® CAD

http://www.mcmaster.com

PART NUMBER **96710A742**

Pan Head Torx Machine Screw

NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. MILL FINISH #1
3. USE 23021-01.DXF TO PERFORM CUT



REAR STIFFENER L1 - PLAN VIEW
SCALE 8"=1'

TOLAR — Tolar Manufacturing Company, Inc, 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: REAR STIFFENER LAYER 1			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 11 GA SH M	DWG NO.: 23021-01	REV. NO.:
SCALE: AS NOTED	DATE: 9/11/2014	DRAWN BY: cgarcia	

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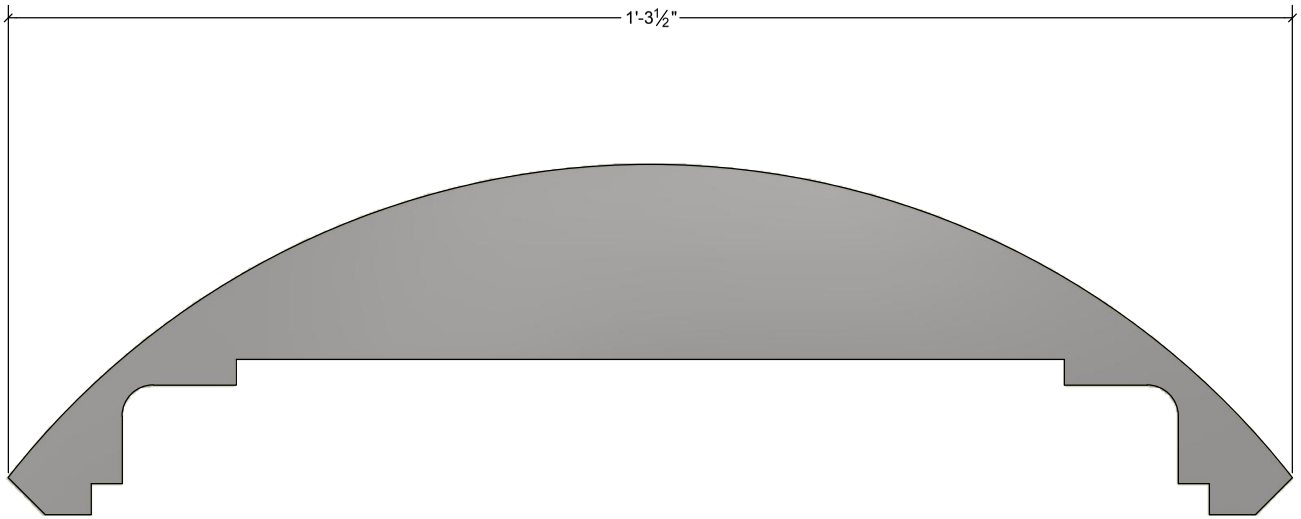
Shelter Columns Assemblies & Horizontal Beam

NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. MILL FINISH #1
3. USE 23022-01.DXF TO PERFORM CUT



REAR STIFFENER L2 - ELEVATION
SCALE 8"=1'

TOLAR — Tolar Manufacturing Company, Inc, 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: REAR STIFFENER LAYER 2			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 11 GA SH M	DWG NO.: 23022-01	REV. NO.:
SCALE: AS NOTED	DATE: 9/11/2014	DRAWN BY: cgarcia	

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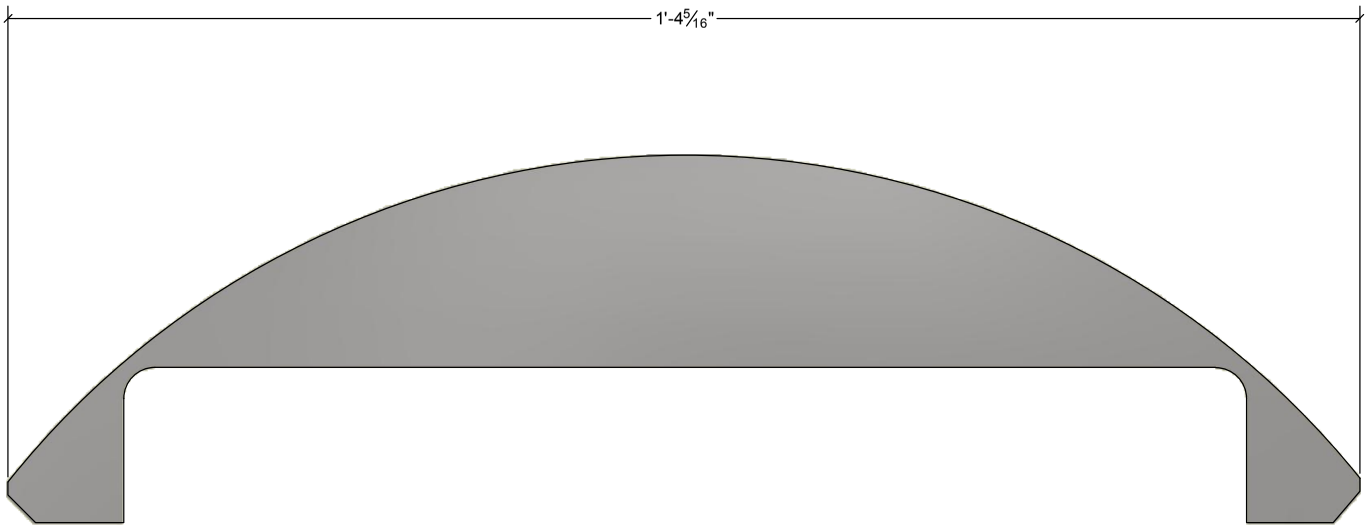
Shelter Columns Assemblies & Horizontal Beam

NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. MILL FINISH #1
3. USE 23023-01.DXF TO PERFORM CUT



REAR STIFFENER L3 - PLAN VIEW
SCALE 8"=1'

Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: REAR STIFFENER LAYER 2			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 11GA SH M	DWG NO.: 23023-01	REV. NO.:
SCALE: AS NOTED	DATE: 9/11/2014	DRAWN BY: cgarcia	

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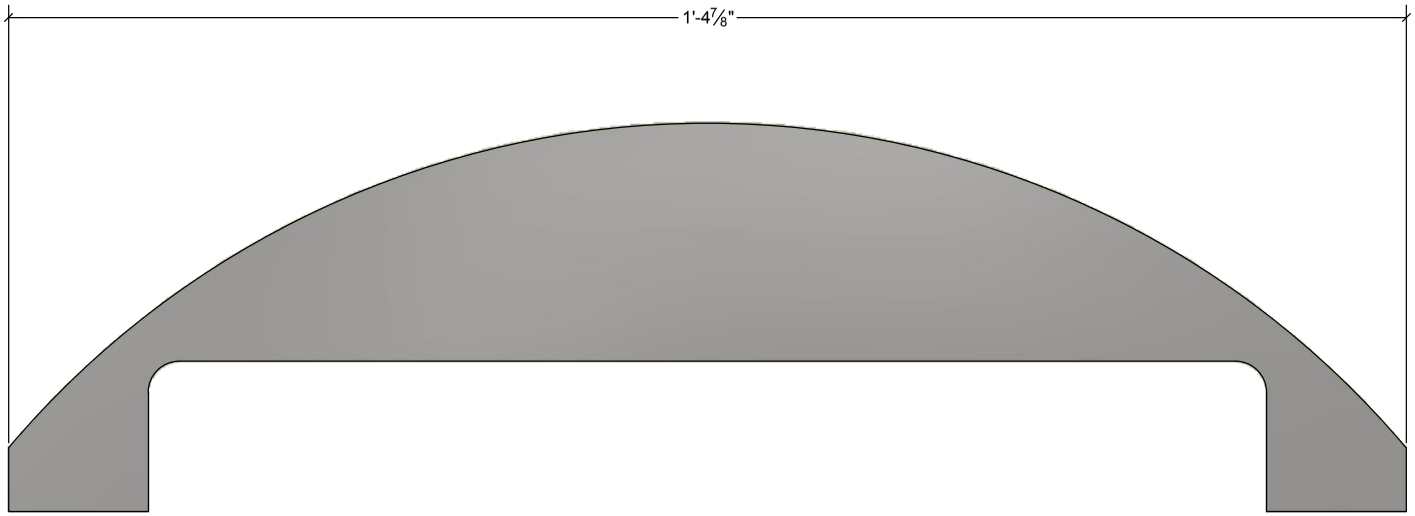
Shelter Columns Assemblies & Horizontal Beam

NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. MILL FINISH #1
3. USE 23024-01.DXF TO PERFORM CUT



REAR STIFFENER LAYER 4 - PLAN VIEW
SCALE 8"=1'

TOLAR — Tolar Manufacturing Company, Inc, 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: REAR STIFFENER LAYER 4			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 11 GA SH M	DWG NO.: 23024-01	REV. NO.:
SCALE: AS NOTED	DATE: 9/11/2014	DRAWN BY: cgarcia	

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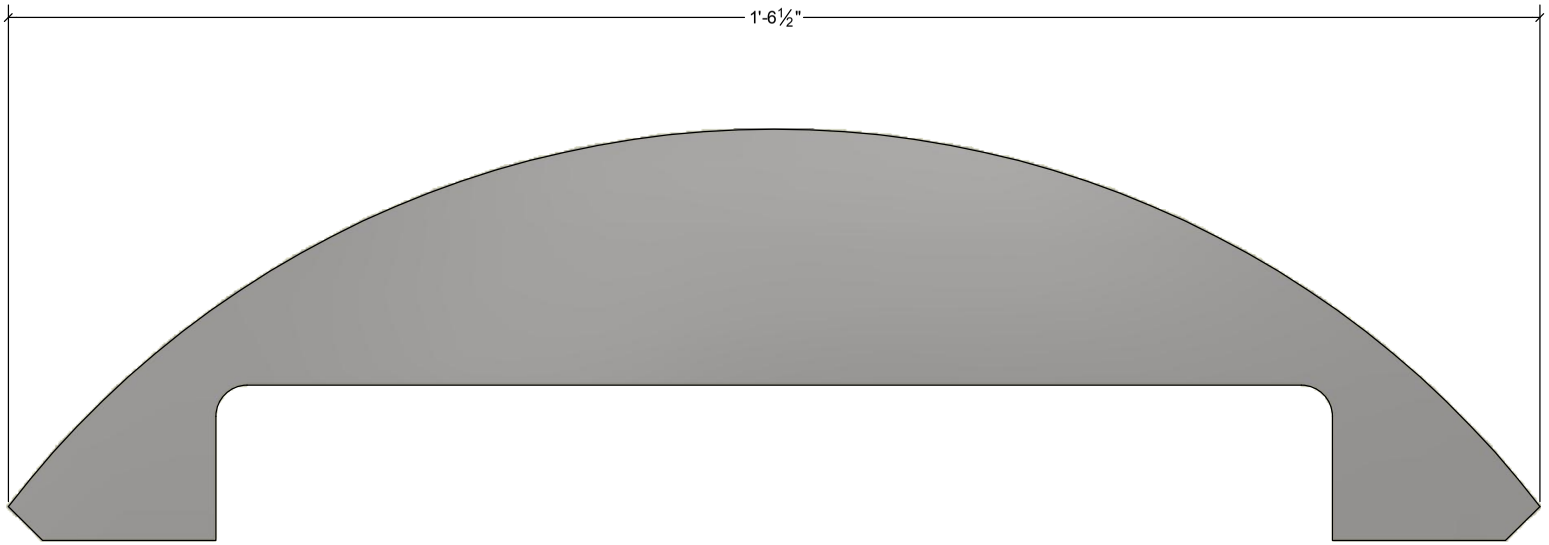
Shelter Columns Assemblies & Horizontal Beam

NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. MILL FINISH #1
3. USE 23025-01.DXF TO PERFORM CUT



REAR STIFFENER L5 - ELEVATION
SCALE 8"=1'

TOLAR — Tolar Manufacturing Company, Inc, 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: REAR STIFFENER LAYER 5			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 11 GA SH M	DWG NO.: 23025-01	REV. NO.:
SCALE: AS NOTED	DATE: 9/11/2014	DRAWN BY: cgarcia	

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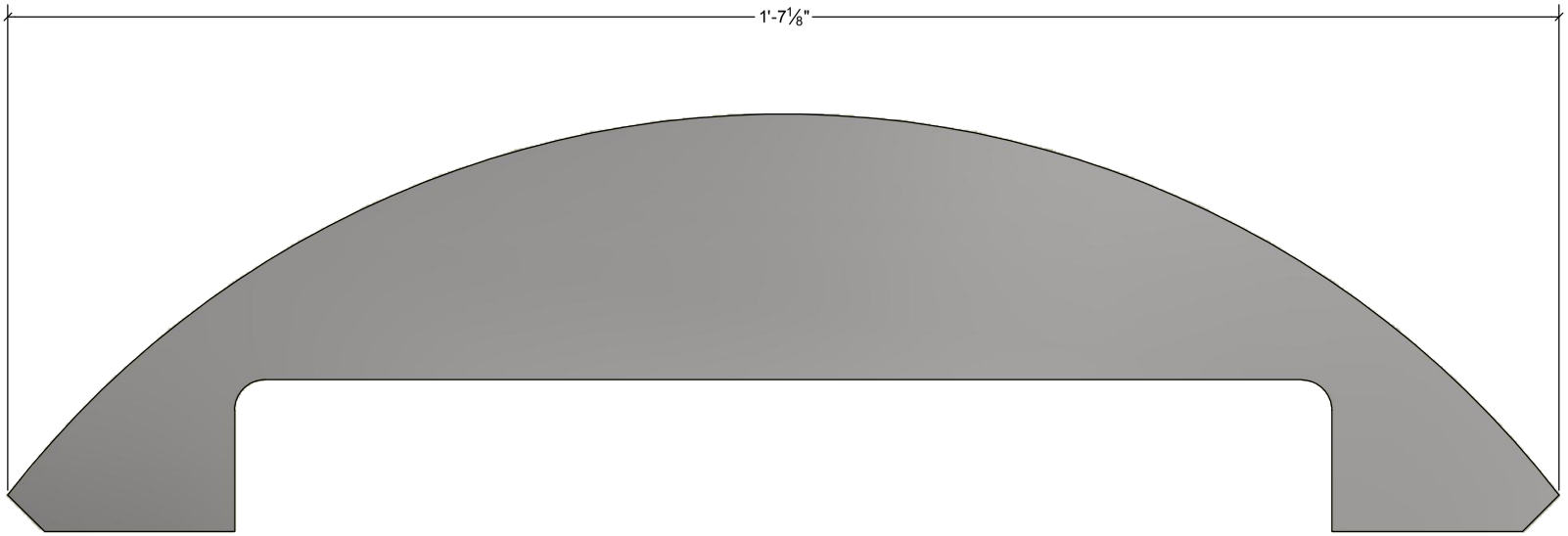
Shelter Columns Assemblies & Horizontal Beam

NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. MILL FINISH #1
3. USE 23310-01.DXF TO PERFORM CUT



REAR STIFFENER L6 - PLAN VIEW
SCALE 8"=1'

TOLAR — Tolar Manufacturing Company, Inc, 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: REAR STIFFENER LAYER 6			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 11 GA SH M	DWG NO.: 23310-01	REV. NO.:
SCALE: AS NOTED	DATE: 9/11/2014	DRAWN BY: cgarcia	

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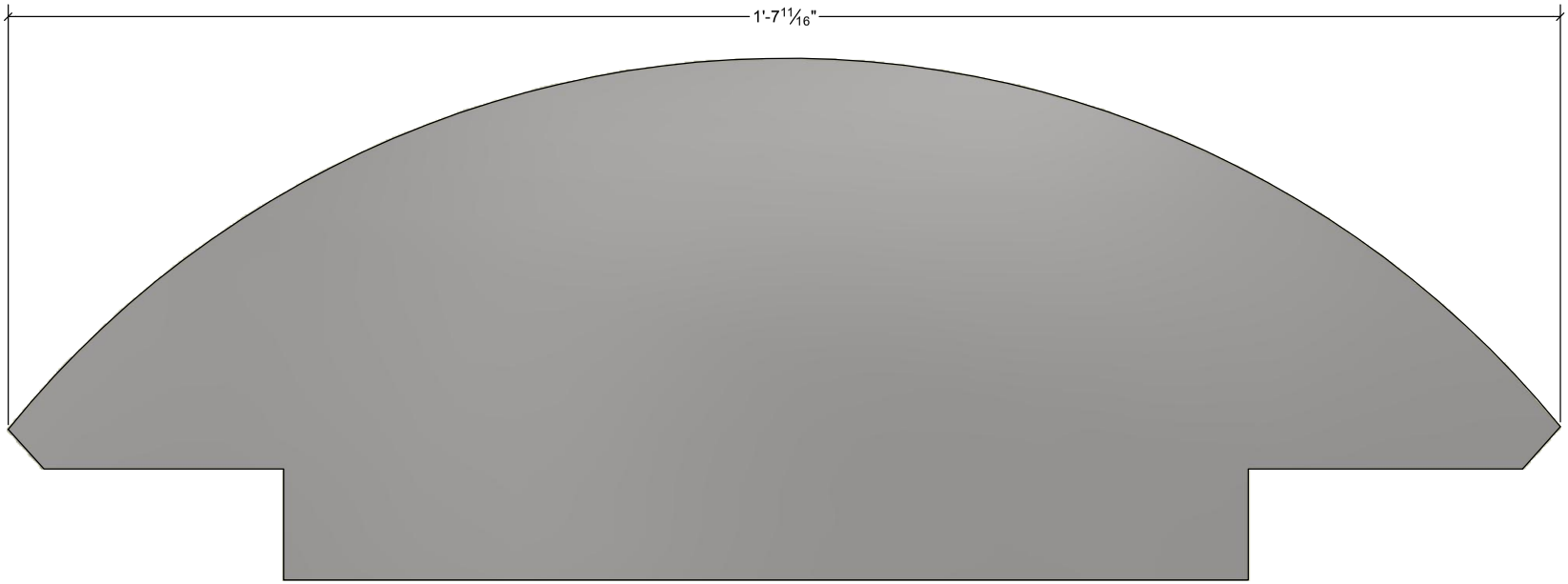
Shelter Columns Assemblies & Horizontal Beam

NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. MILL FINISH #1
3. USE 23311-00.DXF TO PERFORM CUT



STIFFENER L7 - PLAN VIEW
SCALE 8"=1'

TOLAR — Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: STIFFENER LAYER 7.			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 11GA SH M	DWG NO.: 23311-00	REV. NO.:
SCALE: AS NOTED	DATE: 9/11/2014	DRAWN BY: cgarcia	

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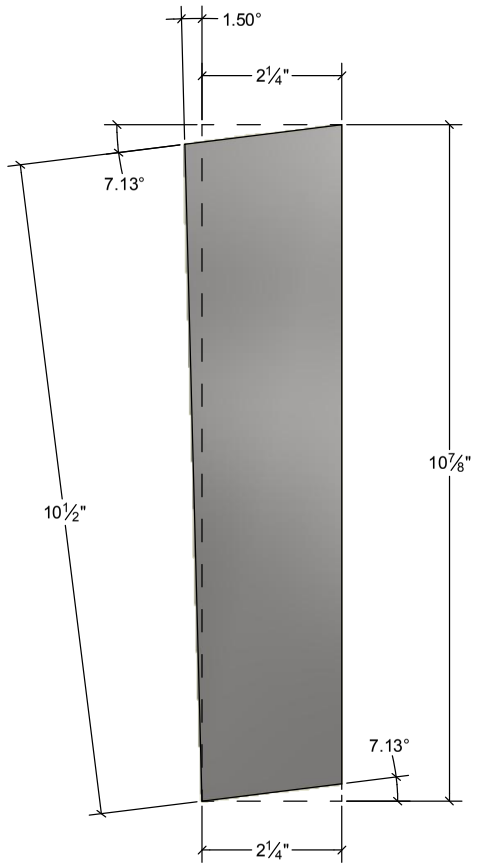
Shelter Columns Assemblies & Horizontal Beam

REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
ALL	A	SIZE AND CONFIG	10/15/2014	



PROFILED LINK EDGE PLATE - CUT LAYOUT
SCALE 6"=1'

TOLAR — NUMBER WITH DISTINCTION	Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879		
DESCRIPTION	EDGE PL PRFLD @ LINK-BM		
CUSTOMER/VENDOR	SANTA CLARA - VTA		SHEET NO. 1 OF 1
SIZE B	MATL. SS 316L - 1/4" THK PL	DWG NO. 23312-00	REV. NO.
SCALE AS NOTED	DATE 9/11/2014	DRAWN BY: cgarcia	

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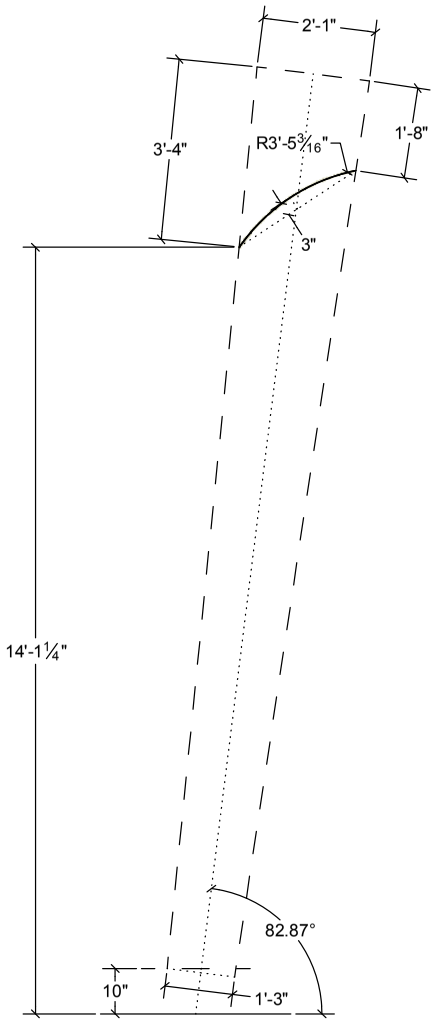
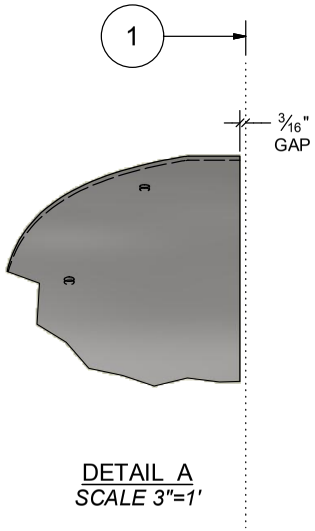
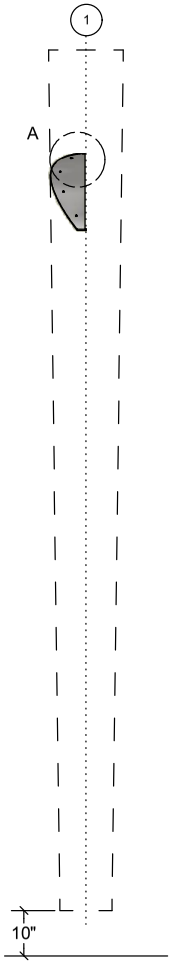
Shelter Columns Assemblies & Horizontal Beam



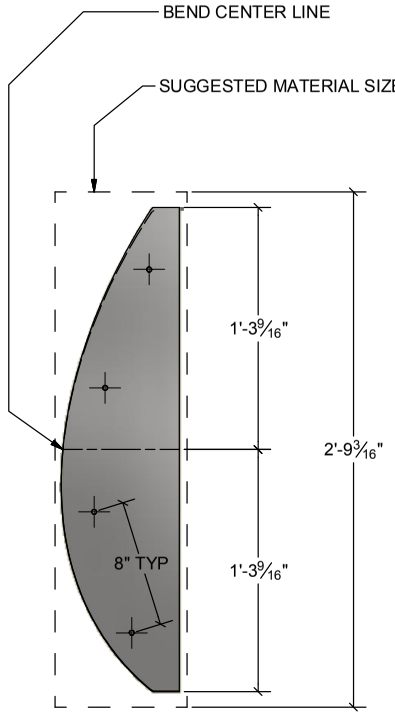
REAR STIFFENER - FRONT ELEVATION
SCALE 7/16"=1'



DETAIL A
SCALE 3"=1'



LEFT ELEVATION
SCALE 7/16"=1'



FLAT PATTERN - PLAN VIEW
SCALE 1 1/2"=1'

TOLAR — Tolar Manufacturing Company, Inc, 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: I. C. CAP STIFFENER (BK)			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 11 GA SH M	DWG NO.: 23011-01	REV. NO.:
SCALE: AS NOTED	DATE: 10/14/2014	DRAWN BY: cgarcia	

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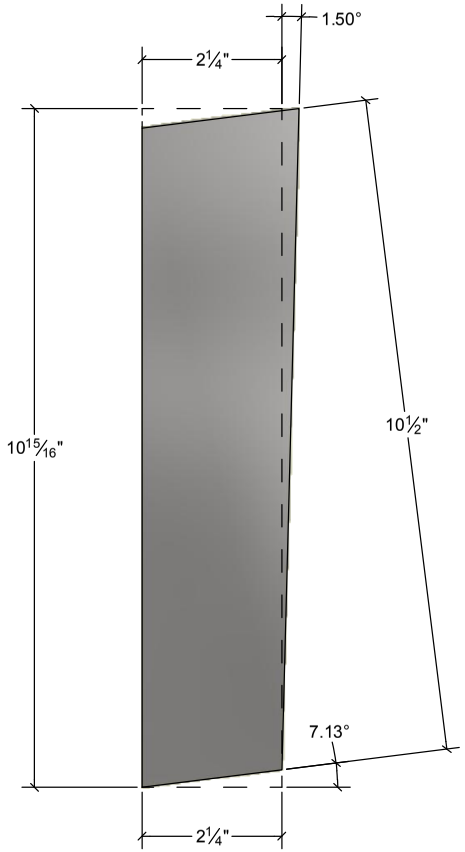
Shelter Columns Assemblies & Horizontal Beam



PROFILED LINK EDGE PLATE - CUT LAYOUT
SCALE 6"=1'

TOLAR — Tolar Manufacturing Company, Inc, 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: EDGE PL PRFLD @ LINK-BM (R)			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 1/4" THK PL	DWG NO.: 23312-01	REV. NO.:
SCALE: AS NOTED	DATE: 10/15/2014	DRAWN BY: cgarcia	

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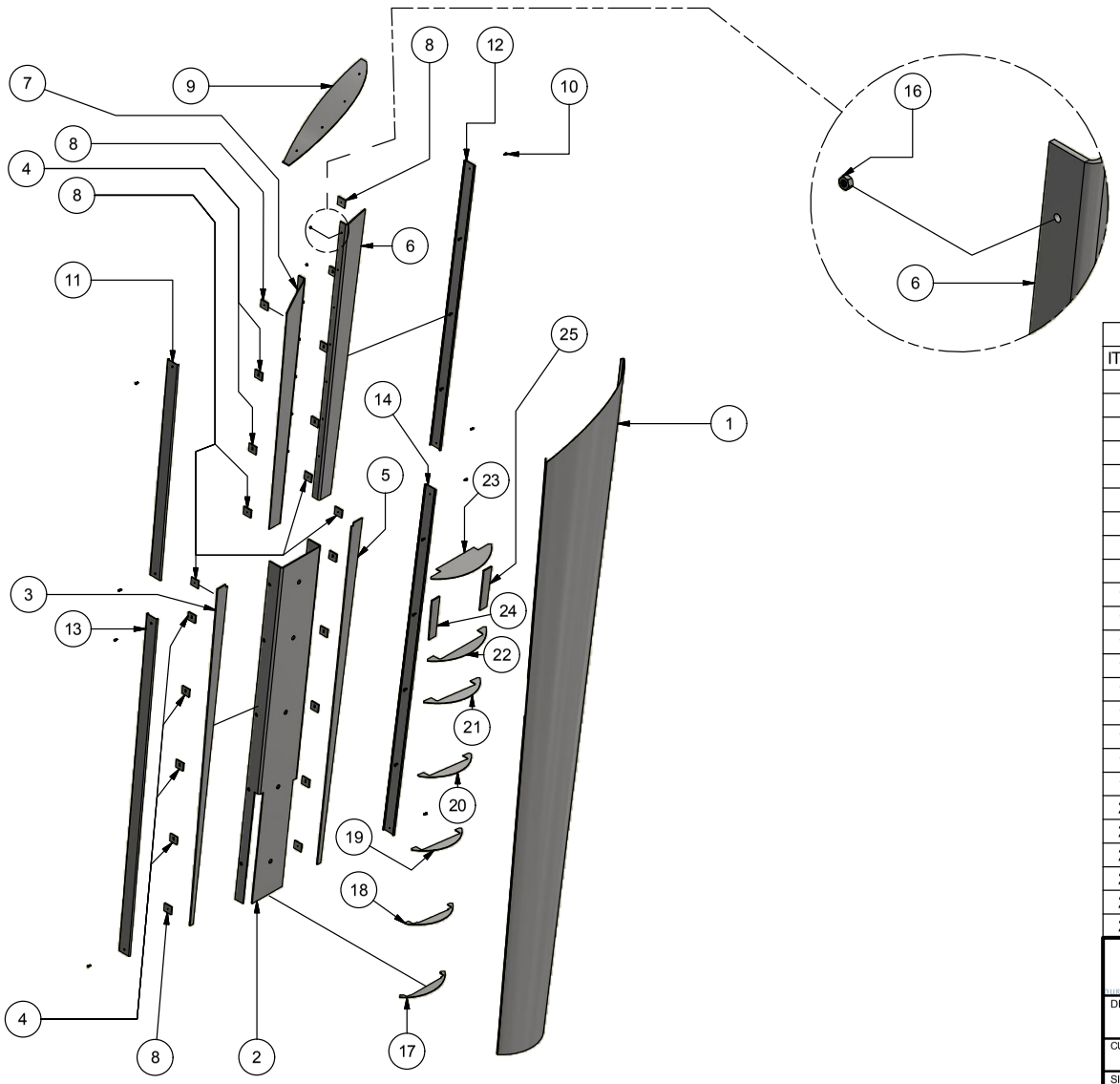
Shelter Columns Assemblies & Horizontal Beam



ARCHITECTURAL WRAP - COMPONENTS
SCALE 7/16"=1'

PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	23001-01	FR FORMED SHEET METAL WRAP
2	1	23004-00	FORMED MNTNG BRACKET "R"
3	1	23007-00	PROFILED EDGE PLATE - "L"
4	13	23009-00	SLOTED TAB BRACKET
5	1	23007-01	PROFILED EDGE PLATE "R"
6	1	23007-U1	PROFLD EDGE PL FR-UP "R"
7	1	23007-U0	PROFILE EDGE PL FR-UP "L"
8	8	23010-00	TAB BRACKET - 10-24
9	1	23011-00	I. C. CAP STIFFENER (FR)
10	8	91870A245	10-24 x 3/4" PIN-IN TORX SS FH MS
11	1	23017-00	EDGE TRIM CAP "L"
12	1	23018-00	EDGE TRIM CAP UP "R"
13	1	23019-00	EDGE TRIM CAP CVR "L"
14	1	23020-00	EDGE TRIM CAP LOWER "R"
16	13	94819A043	1/4-20 HEX NUT
17	1	23021-00	FRONT STIFFENER LAYER 1
18	1	23022-00	FRONT STIFFENER LAYER 2
19	1	23023-00	FRONT STIFFENER LAYER 3
20	1	23024-000	FRONT STIFFENER LAYER 4
21	1	23025-00	FRONT STIFFENER LAYER 5
22	1	23310-00	STIFFENER LAYER 6
23	1	23311-00	REAR STIFFENER LAYER 7
24	1	23312-00	EDGE PL PRFLD @ LINK-BM
25	1	23312-01	EDGE PL PRFLD @ LINK-BM (R)

TOLAR
Tolar Manufacturing Company, Inc
258 Mariah Circle, Corona CA. 92879

DESCRIPTION: FRONT IC ARCH WRAP			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 4
SIZE: B	MATL.: SS 316L - MISC	DWG NO.: 23003-00	REV. NO.: A
SCALE: AS NOTED	DATE: 9/15/2014	DRAWN BY: cgarcia	

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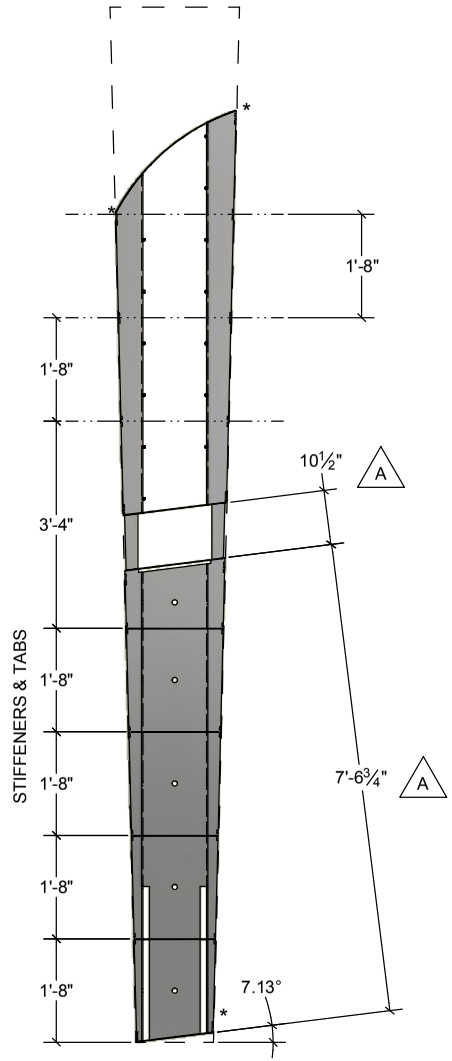
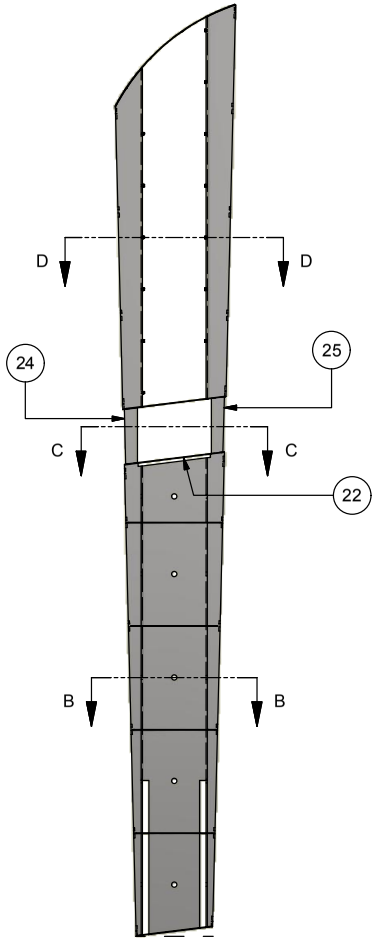
Shelter Columns Assemblies & Horizontal Beam

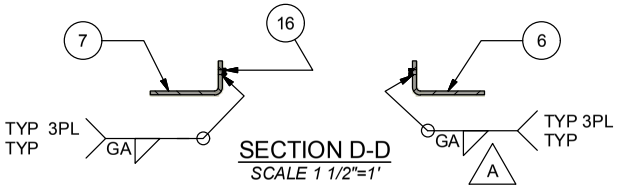
REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
ALL	A	DIM - STIFFENER	10/15/2014	



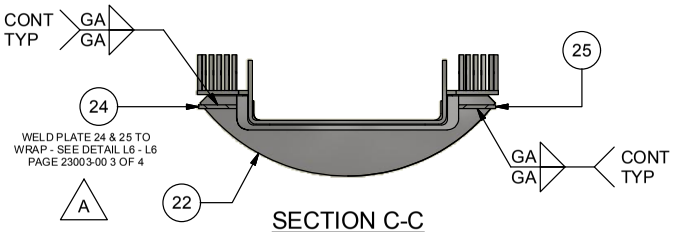
FRONT ARCHITECTURAL WRAP - ELEVATION
(STIFFENER PLACEMENT)
SCALE 1/2"=1'



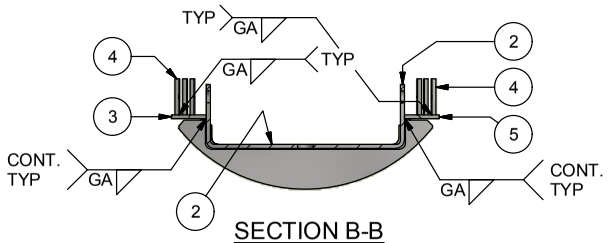
REPRESENTATION w/o CLADING
SCALE 1/2"=1'



SECTION D-D
SCALE 1 1/2"=1'



SECTION C-C
TYPICAL
SCALE 1 1/2"=1'



SECTION B-B
TYPICAL
SCALE 1 1/2"=1'

TOLAR — Tolar Manufacturing Company, Inc, 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: FRONT IC ARCH WRAP			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 2 OF 4
SIZE: B	MATL.: SS 316L - MISC	DWG NO.: 23003-00	REV. NO.: A
SCALE: AS NOTED	DATE: 9/15/2014	DRAWN BY: cgarcia	

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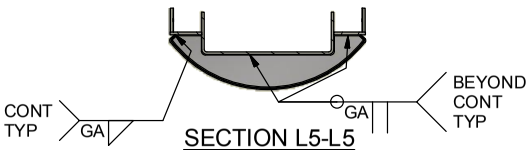
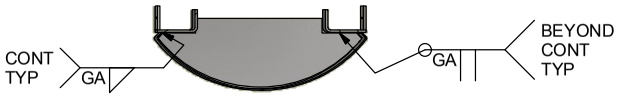
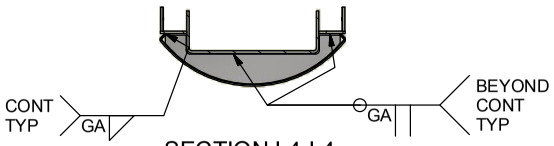
Shelter Columns Assemblies & Horizontal Beam



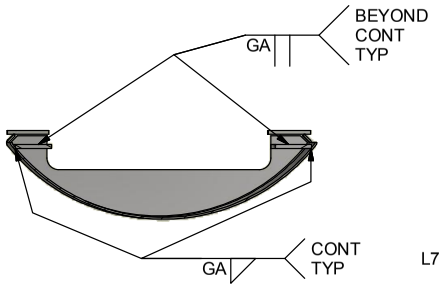
SECTION L5-L5
SCALE 1"=1'



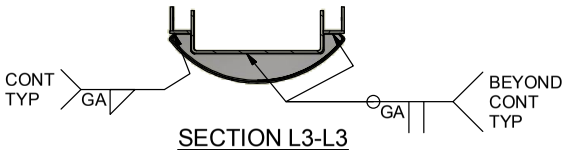
SECTION L7-L7
SCALE 1"=1'



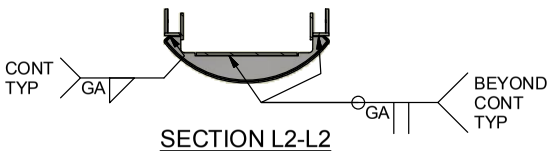
SECTION L4-L4
SCALE 1"=1'



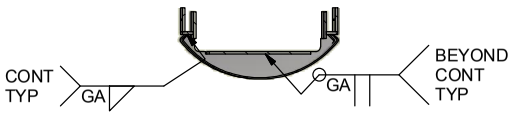
SECTION L6-L6
SCALE 1 1/2"=1'



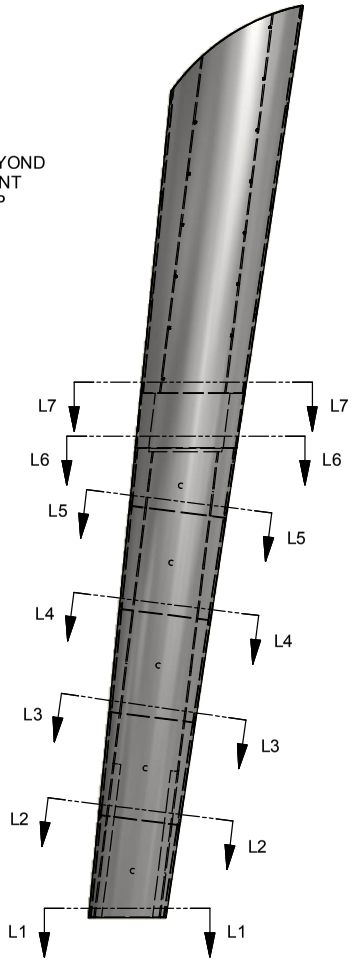
SECTION L3-L3
SCALE 1"=1'



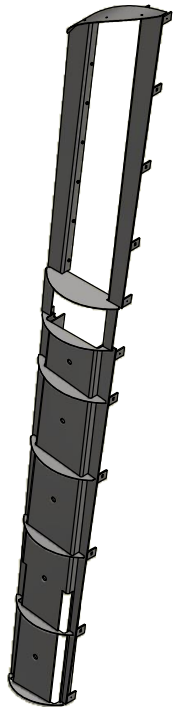
SECTION L2-L2
SCALE 1"=1'



SECTION L1-L1
SCALE 1"=1'



WRAP ASSEMBLY - STIFFENER PLACEMENT
SCALE 1/2"=1'



ISO VIEW
NO SHEET METAL CLADING
SCALE 1/2"=1'

TOLAR — Tolar Manufacturing Company, Inc, 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: FRONT IC ARCH WRAP			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 3 OF 4
SIZE: B	MATL.: SS 316L - MISC	DWG NO.: 23003-00	REV. NO.: A
SCALE: AS NOTED	DATE: 9/15/2014	DRAWN BY: cgarcia	

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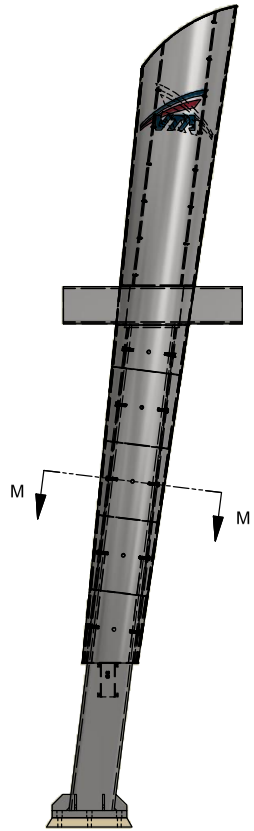
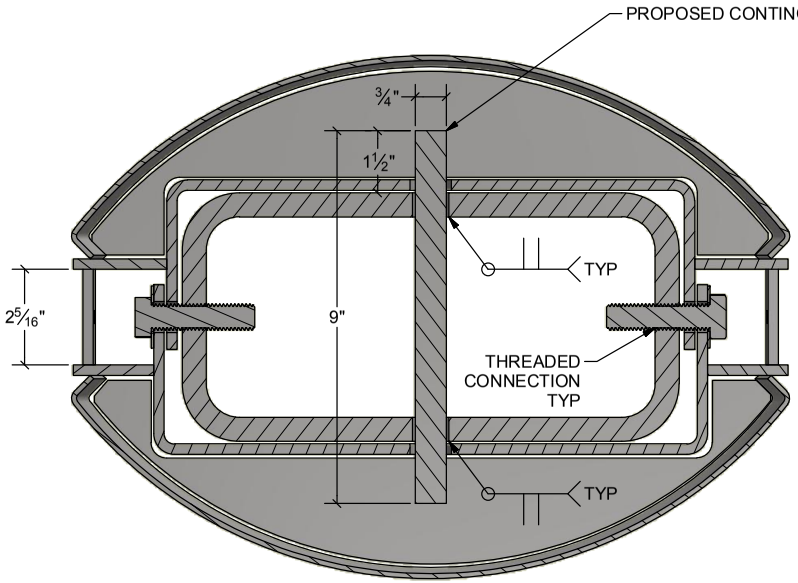
Shelter Columns Assemblies & Horizontal Beam





SECTION M-M
SCALE 4"=1'

NOTE: THIS PAGE ILLUSTRATES THE PROPOSED DOWEL DESIGN, IT GOES ALL THE WAY THRU THE WALLS OF THE FLARED HSS 6X12X1/2.
THE PROPOSED DESIGN WILL ALLOW:
REDUCE THE DOWEL FABRICATION TIME
EASIER AND FASTER ALIGNMENT WHILE SETTING DOWEL IN PLACE
THERE IS A HIGHER LOAD SHEAR VALUE BY USING THIS METHOD
THIS CONNECTION TYPE IS ALSO USED IN OTHER PARTS OF THE SHELTER AND WE WOULD LIKE TO APPLY IT IN THOSE SECTIONS, (E PIER / COMM PIER).

TOLAR — Tolar Manufacturing Company, Inc, 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: ICONIC COLUMN ASSEMBLY			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 4 OF 4
SIZE: B	MATL.: SS 316L - MISC	DWG NO.: 23315-00	REV. NO.:
SCALE: AS NOTED	DATE: 9/15/2014	DRAWN BY: cgarcia	

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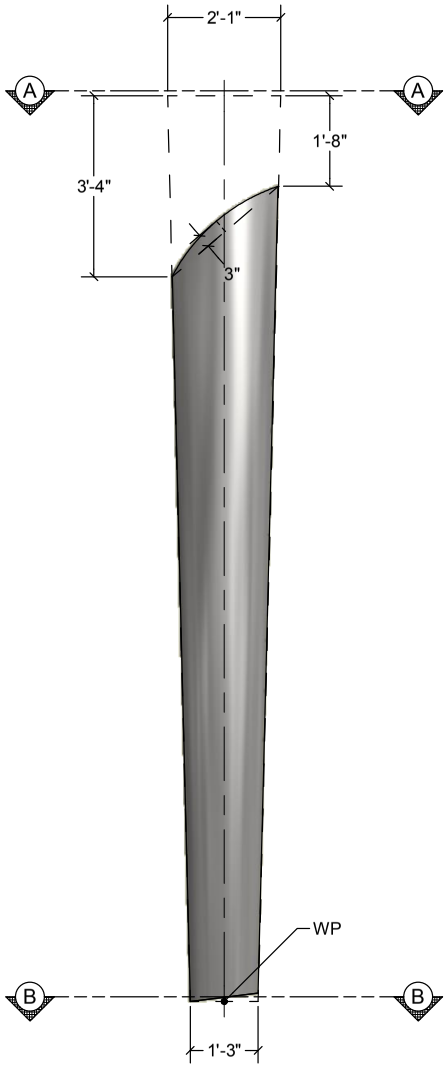
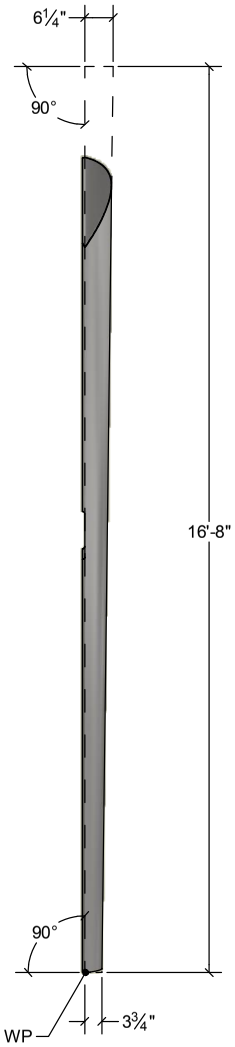
Shelter Columns Assemblies & Horizontal Beam

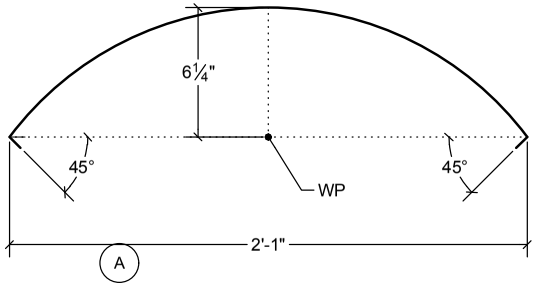
NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. DIRECTIONAL FINISH #4 (AXIS DIRECTION)



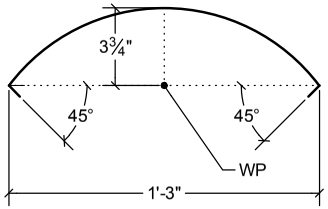
"FRONT" FORMED SHEET METAL WRAP - ELEVATION
SCALE 7/16"=1'



LEFT ELEVATION
SCALE 7/16"=1'



WRAP TOP LAYOUT
SCALE 2"=1'



B WRAP BOTTOM LAYOUT
SCALE 2"=1'

TOLAR — NUMBER ONE WITH DISTINCTION	Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879		
DESCRIPTION: FR FORMED SHEET METAL WRAP			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 2
SIZE: B	MATL.: SS 316L - 11GA SH M	DWG NO.: 23001-01	REV. NO.
SCALE: AS NOTED	DATE: 9/15/2014	DRAWN BY: cgarcia	

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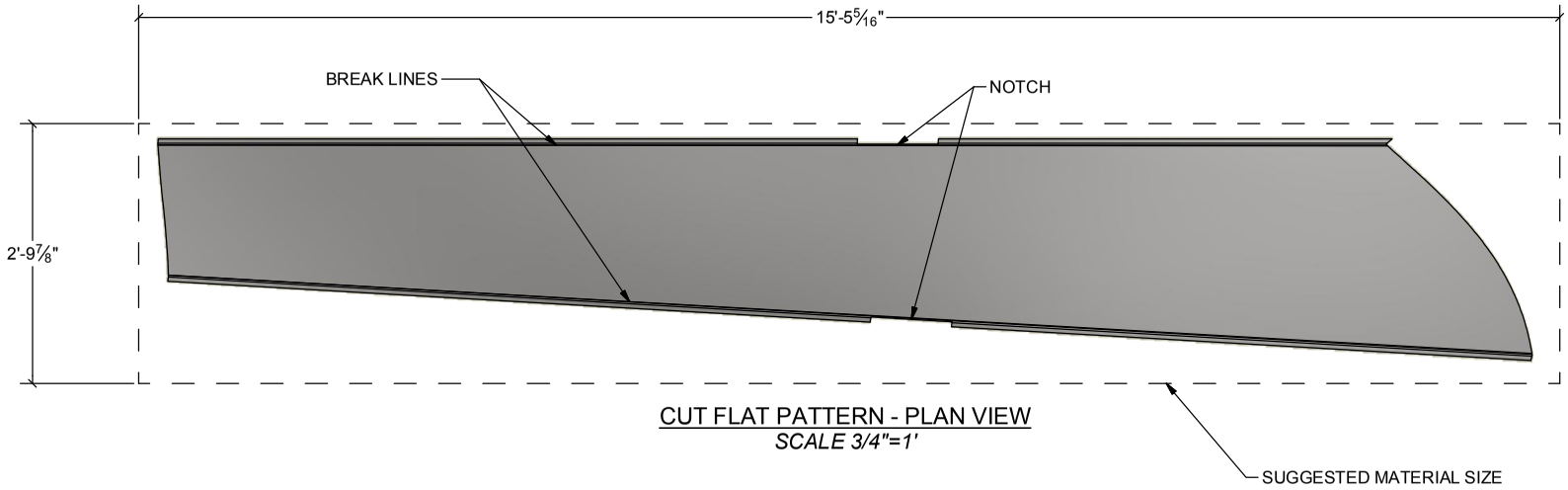
Shelter Columns Assemblies & Horizontal Beam

NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. DIRECTIONAL FINISH #4 (FORMED GEOMETRY SHAPE AXIS DIRECTION)
3. USE 23001-00.DXF TO PERFORM CUT



CUT FLAT PATTERN - PLAN VIEW
SCALE 3/4"=1'

Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879	
DESCRIPTION: REAR FRMD I.C. WRAP	
CUSTOMER/VENDOR: SANTA CLARA - VTA	SHEET NO.: 2 OF 2
SIZE: B / MATL.: SS 316L - 11 GA SH M / DWG NO.: 23001-00	REV. NO.:
SCALE: AS NOTED / DATE: 9/15/2014 / DRAWN BY: cgarcia	

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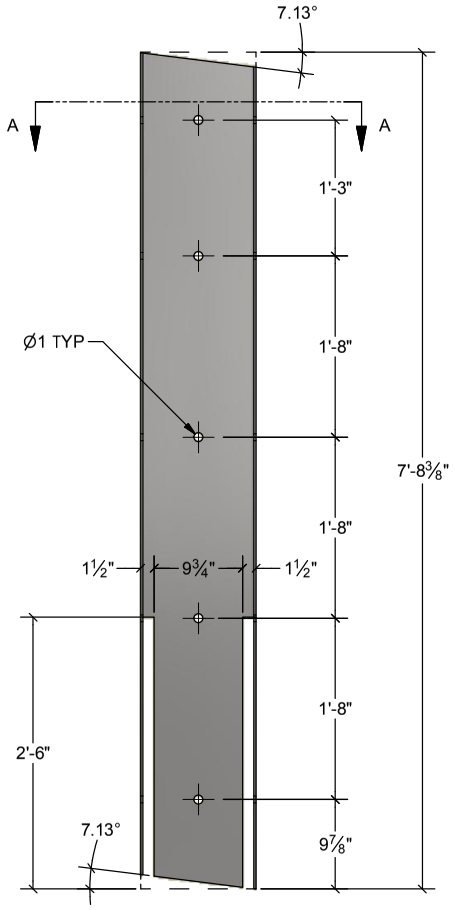
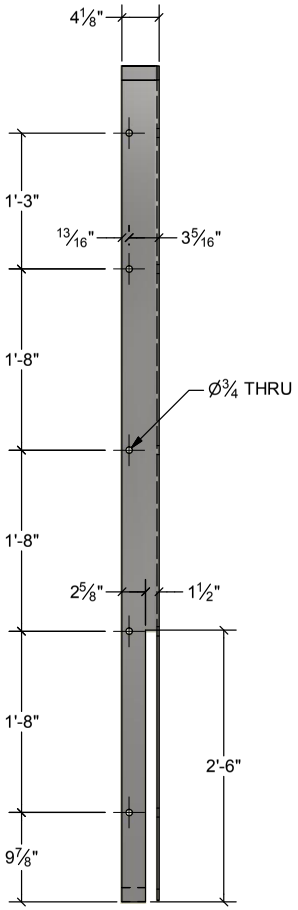
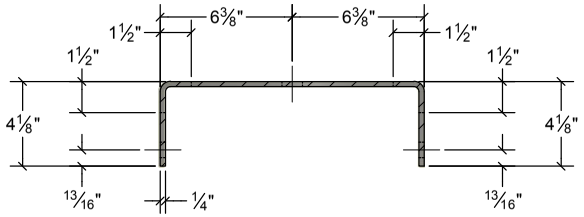
Shelter Columns Assemblies & Horizontal Beam



WRAP MOUNTING BRACKET
SCALE 7/8"=1'



SIDE ELEVATION
SCALE 7/8"=1'



SECTION A-A
SCALE 2"=1'

ISO VIEW
SCALE 3/8"=1'

TOLAR — Tolar Manufacturing Company, Inc, 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: FORMED MNTNG BRACKET "R"			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 2
SIZE: B	MATL.: SS 316L - 1/4" THK PL	DWG NO.: 23004-00	REV. NO.:
SCALE: AS NOTED	DATE: 9/15/2014	DRAWN BY: cgarcia	

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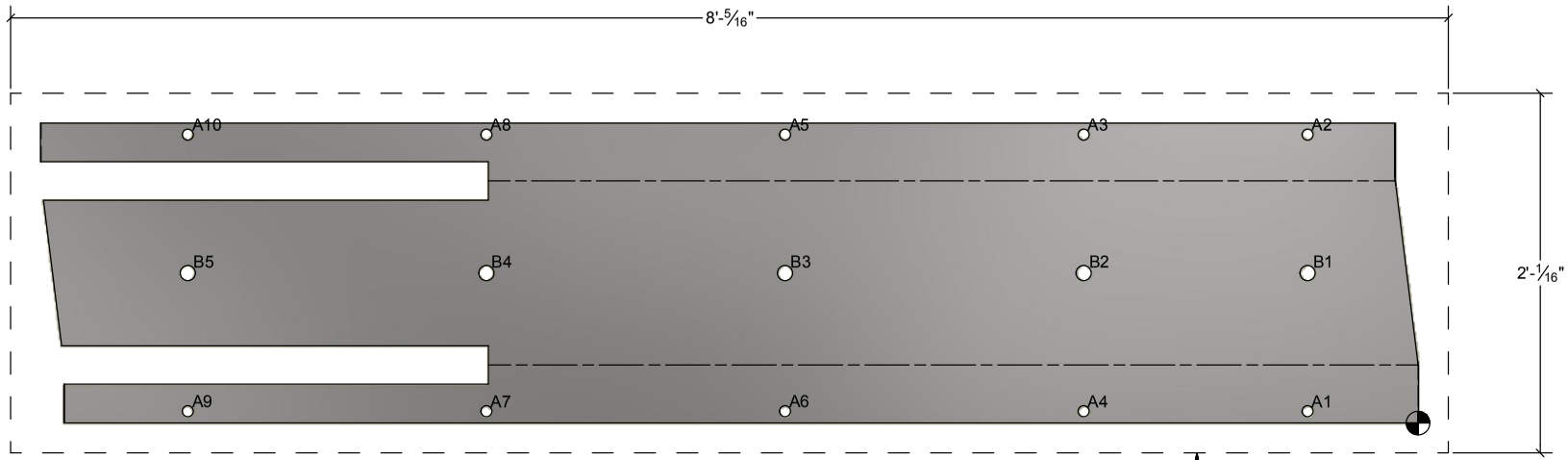
Shelter Columns Assemblies & Horizontal Beam

NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. MILL FINISH #1
3. USE 23004-00.DXF TO PERFORM CUT



WRAP MOUNTING BRACKET - CUT TEMPLATE PLAN VIEW
SCALE 1 1/2"=1'

SUGGESTED MATERIAL SIZE

HOLE TABLE			
HOLE	XDIM	YDIM	DESCRIPTION
A1	-7.40	.78	Ø¾ THRU
A2	-7.40	19.29	Ø¾ THRU
A3	-22.40	19.29	Ø¾ THRU
A4	-22.40	.78	Ø¾ THRU
A5	-42.40	19.29	Ø¾ THRU
A6	-42.40	.78	Ø¾ THRU
A7	-62.40	.78	Ø¾ THRU
A8	-62.40	19.29	Ø¾ THRU
A9	-82.40	.78	Ø¾ THRU
A10	-82.40	19.29	Ø¾ THRU
B1	-7.40	10.03	Ø1 ↧ ¼
B2	-22.40	10.03	Ø1 ↧ ¼
B3	-42.40	10.03	Ø1 ↧ ¼
B4	-62.40	10.03	Ø1 ↧ ¼
B5	-82.40	10.03	Ø1 ↧ ¼

TOLAR
DEPENDABILITY WITH DISTINCTION

Tolar Manufacturing Company, Inc
258 Mariah Circle, Corona CA. 92879

DESCRIPTION: FORMED MNTNG BRACKET "R"			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 2 OF 2
SIZE: B	MATL.: SS 316L - 1/4" THK PL	DWG NO.: 23004-00	REV. NO.:
SCALE: AS NOTED	DATE: 9/15/2014	DRAWN BY: cgarcia	

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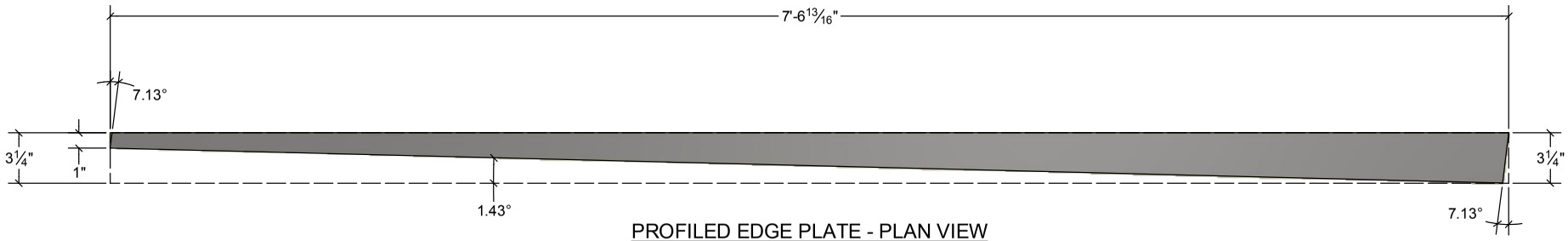
Shelter Columns Assemblies & Horizontal Beam

NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. MILL FINISH #1
3. USE 23007-00-00.DXF TO PERFORM CUT



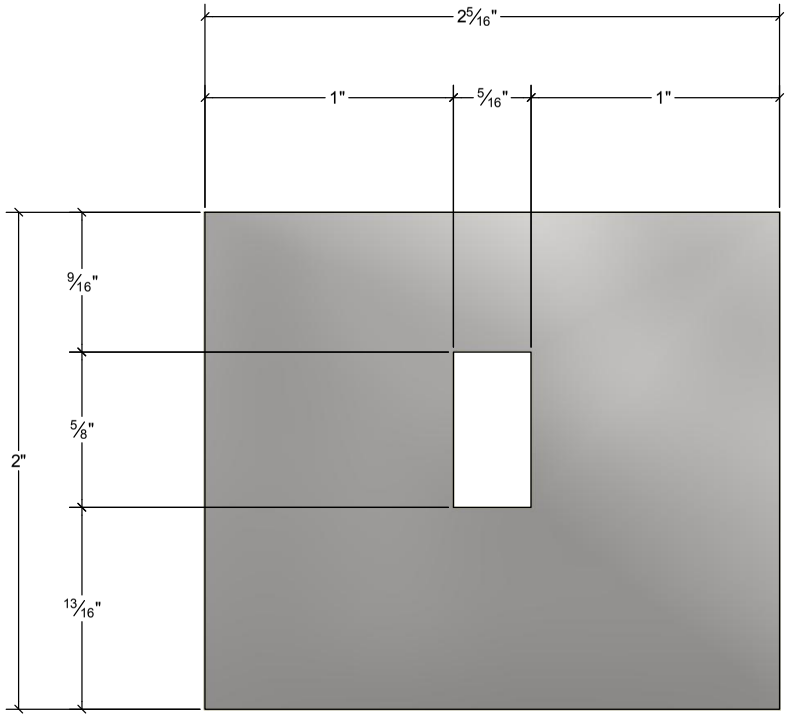
PROFILED EDGE PLATE - PLAN VIEW
SCALE 1 3/4"=1'

Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: PROFILED EDGE PLATE - "L"			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 1/4" THK PL	DWG NO.: 23007-00	REV. NO.:
SCALE: AS NOTED	DATE: 9/15/2014	DRAWN BY: cgarcia	

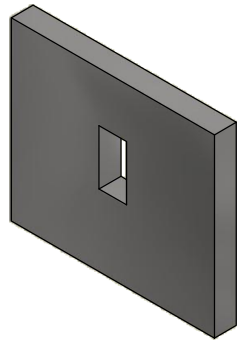
T:\Engineering\CARLOS GARCIA\VTA\23007-00.idw

Shelter Columns Assemblies & Horizontal Beam

NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. MILL FINISH #1



SLOTED TAB BRACKET - PLAN VIEW
SCALE 2 : 1



ISO VIEW
SCALE 1 : 1

TOLAR — PERFORMANCE WITH DISTINCTION	Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879		
DESCRIPTION	SLOTED TAB BRACKET		
CUSTOMER/VENDOR	SANTA CLARA - VTA		SHEET NO. 1 OF 1
SIZE B	MATL. SS 316L - 1/4" THK PL	DWG NO. 23009-00	REV. NO.
SCALE AS NOTED	DATE 9/15/2014	DRAWN BY: cgarcia	

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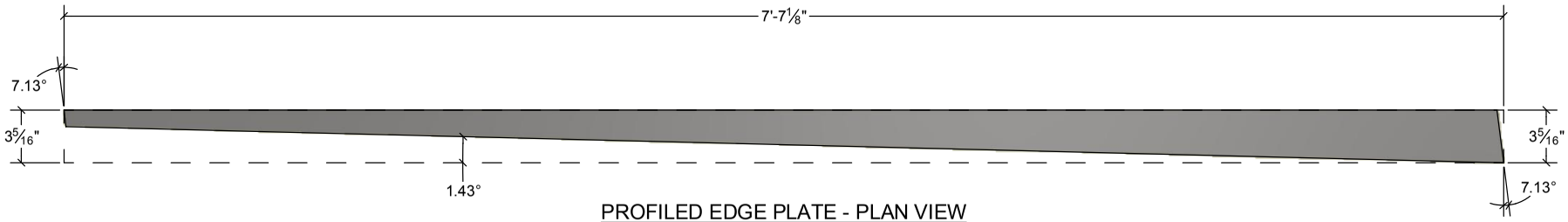
Shelter Columns Assemblies & Horizontal Beam

NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. MILL FINISH #1
3. USE 23007-01-00.DXF TO PERFORM CUT



PROFILED EDGE PLATE - PLAN VIEW
SCALE 1 3/4"=1'

TOLAR — Tolar Manufacturing Company, Inc, 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: PROFILED EDGE PLATE "R"			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 1/4" THK PL	DWG NO.: 23007-01	REV. NO.:
SCALE: AS NOTED	DATE: 9/15/2014	DRAWN BY: cgarcia	

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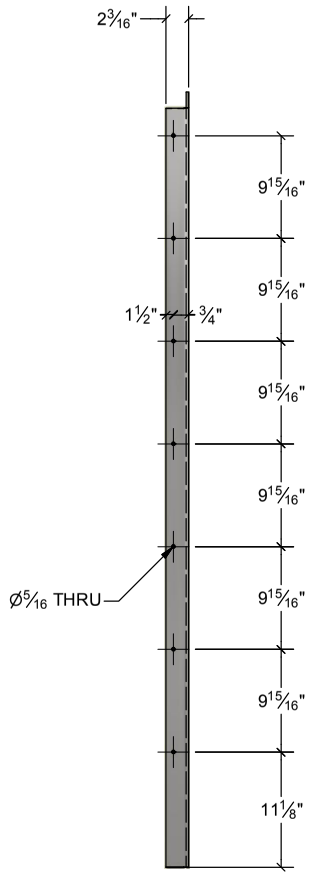
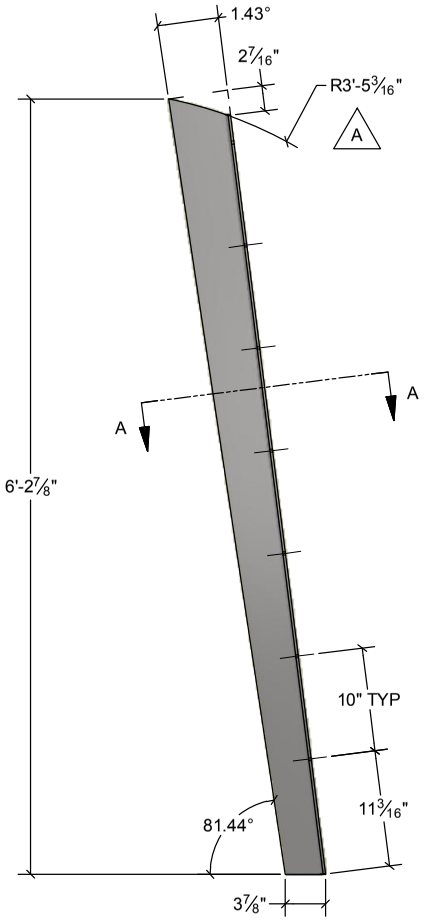
Shelter Columns Assemblies & Horizontal Beam

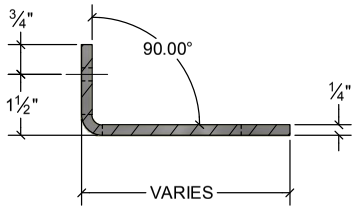
NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. MILL FINISH #1
3. USE 23007-U1.DXF TO PERFORM CUT

REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
3	A	PART EXTENSION	10/13/2014	

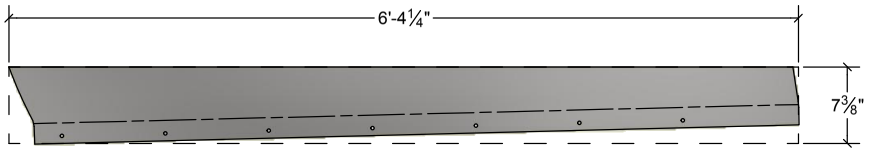




FORMED FRONT EDGE PLATE "R": ELEVATION
SCALE 1"=1'



SECTION A-A
SCALE 4"=1'



FLAT PATTERN - PLAN VIEW
SCALE 1"=1'

TOLAR — DURABILITY WITH DISTINCTION	Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879		
DESCRIPTION	PROFLD EDGE PL FR-UP "R"		
CUSTOMER/VENDOR	SANTA CLARA - VTA		SHEET NO. 1 OF 1
SIZE B	MATL. SS 316L - 1/4" THK PL	DWG NO. 23007-U1	REV. NO. A
SCALE AS NOTED	DATE 9/15/2014	DRAWN BY: cgarcia	

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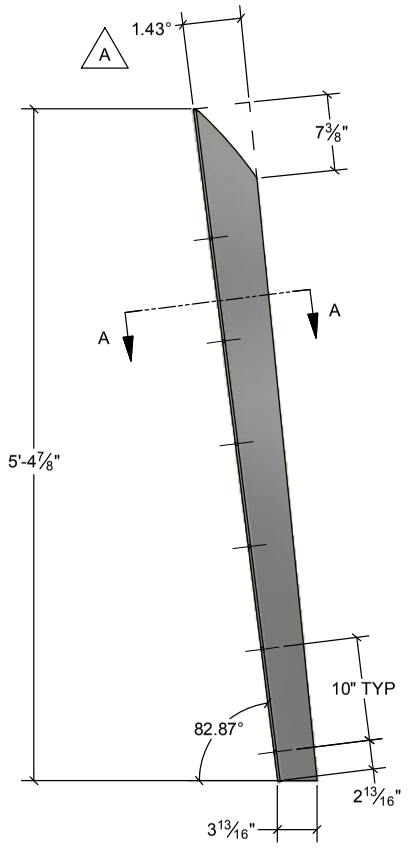
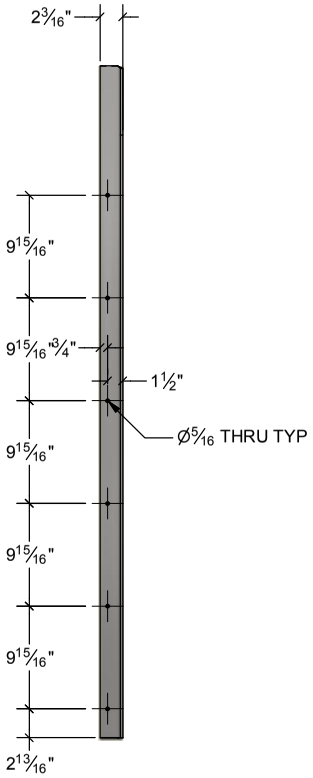
Shelter Columns Assemblies & Horizontal Beam

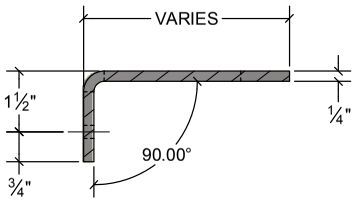
NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. MILL FINISH #1
3. USE 23007-U0.DXF TO PERFORM CUT

REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
ALL	A	STIFFENER EXTENSION	10/14/2014	

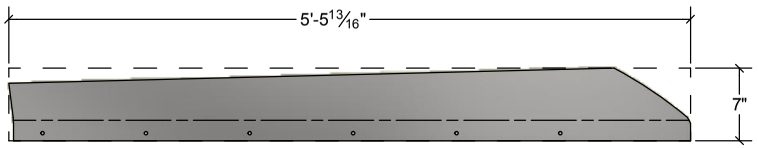


FORMED FRONT EDGE PLATE - "L" ELEVATION
SCALE 1"=1'





SECTION A-A
SCALE 4"=1'



FLAT PATTERN - PLAN VIEW
SCALE 1"=1'

Tolar Manufacturing Company, Inc
258 Mariah Circle, Corona CA. 92879

DESCRIPTION: PROFILE EDGE PL FR-UP "L"			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 1/4" THK PL	DWG NO.: 23007-U0	REV. NO.: A
SCALE: AS NOTED	DATE: 9/15/2014	DRAWN BY: cgarcia	

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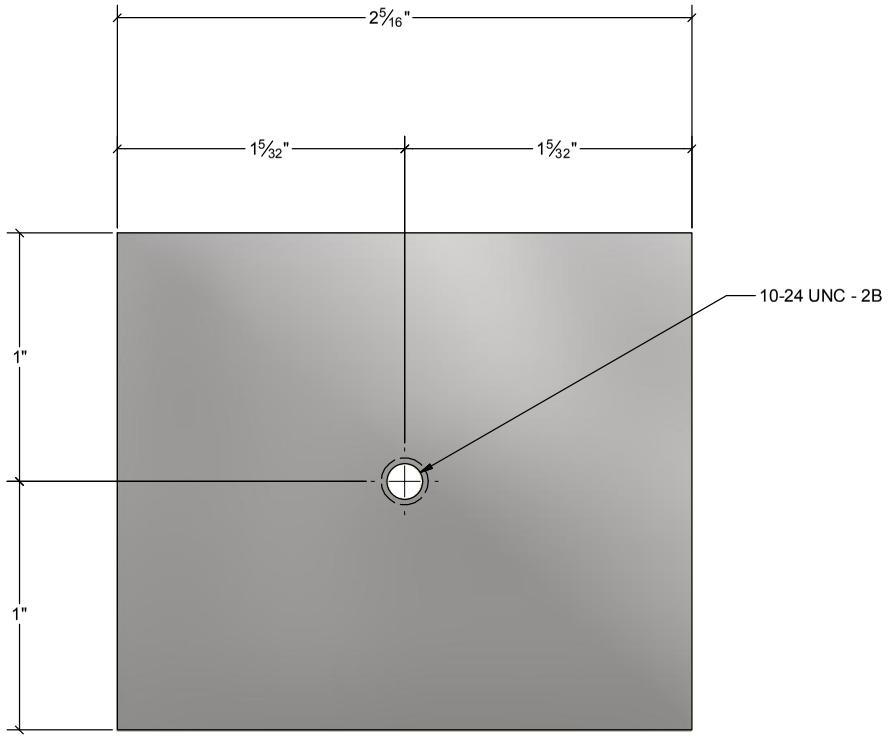
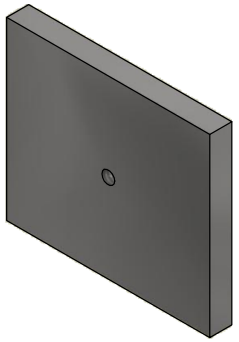
Shelter Columns Assemblies & Horizontal Beam

NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. MILL FINISH #1



EDGE WRAP FASTENING PL - ELEVATION
SCALE 2 : 1



ISO VIEW
SCALE 12"=1'

TOLAR — Tolar Manufacturing Company, Inc, 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: TAB BRACKET - 10-24			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 1/4" THK PL	DWG NO.: 23010-00	REV. NO.:
SCALE: AS NOTED	DATE: 9/16/2014	DRAWN BY: cgarcia	

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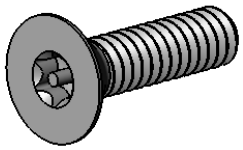
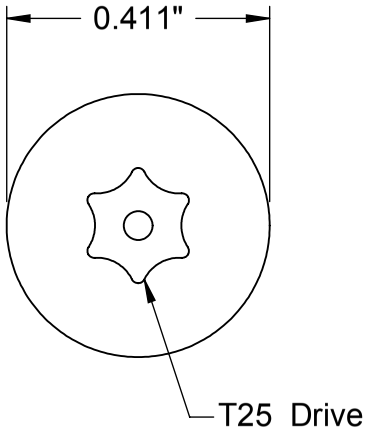
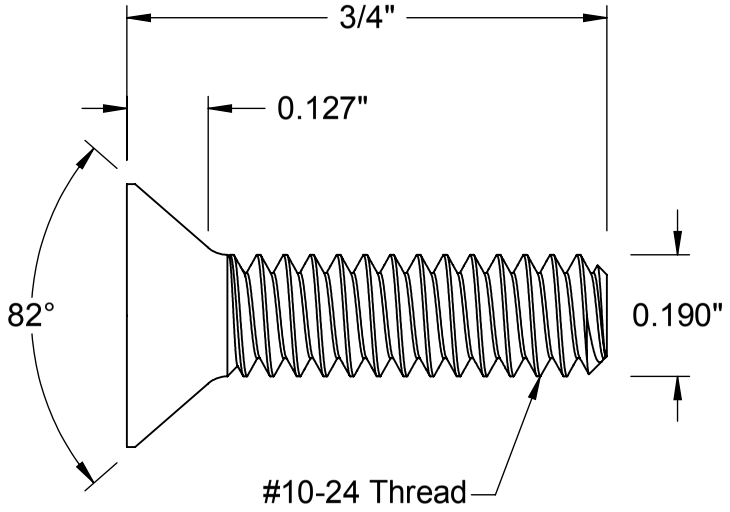
Shelter Columns Assemblies & Horizontal Beam







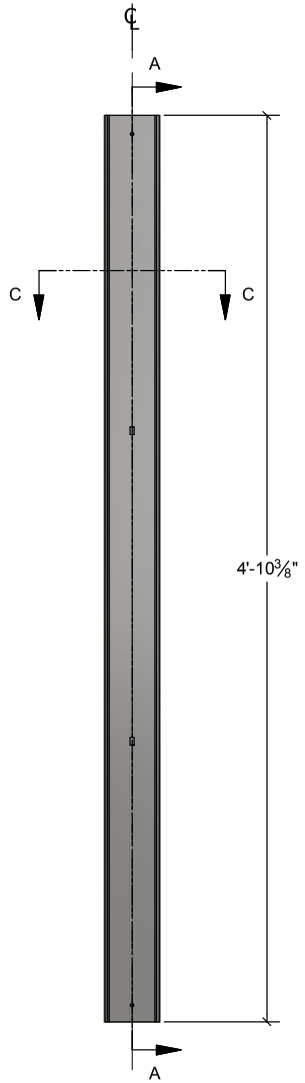
Shelter Columns Assemblies & Horizontal Beam

McMASTER-CARR® CAD

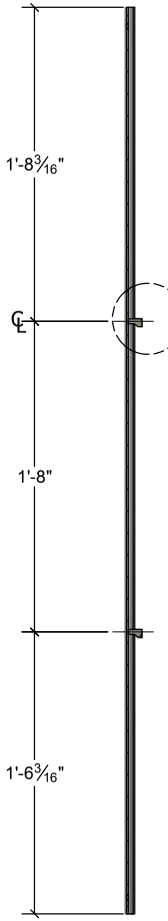
PART NUMBER **91870A245**

Tamper Resistant Pin-in-Torx
Flat Head Machine Screw

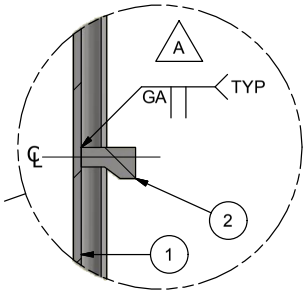
REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
2	A	WELD SYM	10/14/2014	



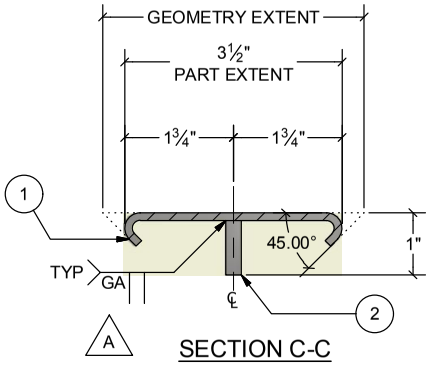
- BACK ELEVATION
SCALE 1 1/2"=1'



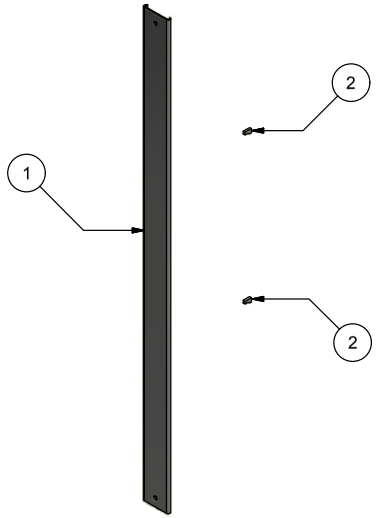
SECTION A-A
SCALE 1 1/2"=1'



DETAIL B
SCALE 6" = 1'-0"



SECTION C-C
SCALE 6"=1'



EDGE TRIM CAP - COMPONENTS
SCALE 1"=1'

PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	23015-00	FRMD EDGE CVR UP "L"
2	2	23016-00	PROFILED MOUNTING HOOK

Tolar Manufacturing Company, Inc
258 Mariah Circle, Corona CA. 92879

DESCRIPTION: EDGE TRIM CAP "L"			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - MISC	DWG NO.: 23017-00	REV. NO.: A
SCALE: AS NOTED	DATE: 9/16/2014	DRAWN BY: cgarcia	

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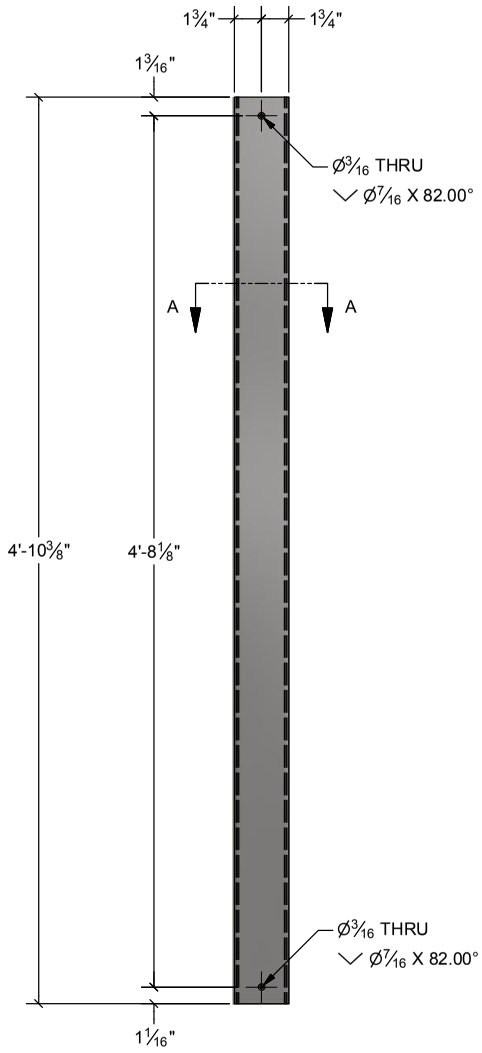
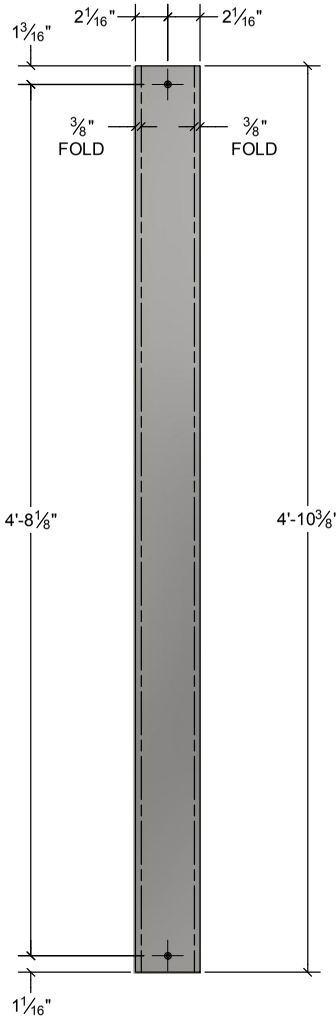
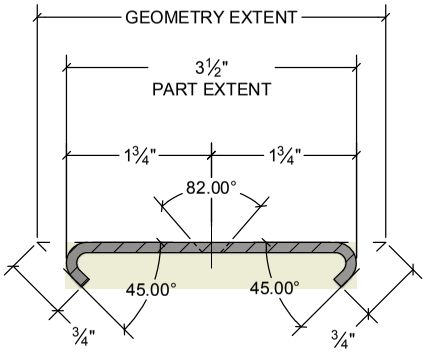
Shelter Columns Assemblies & Horizontal Beam



WRAP EDGE COVER - ELEVATION
SCALE 1 1/2"=1'



FLAT PATTERN - PLAN VIEW
SCALE 1 1/2"=1'



SECTION A-A
SCALE 8"=1'

Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: FRMD EDGE CVR UP "L"			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 11 GA SH M	DWG NO.: 23015-00	REV. NO.:
SCALE: AS NOTED	DATE: 9/16/2014	DRAWN BY: cgarcia	

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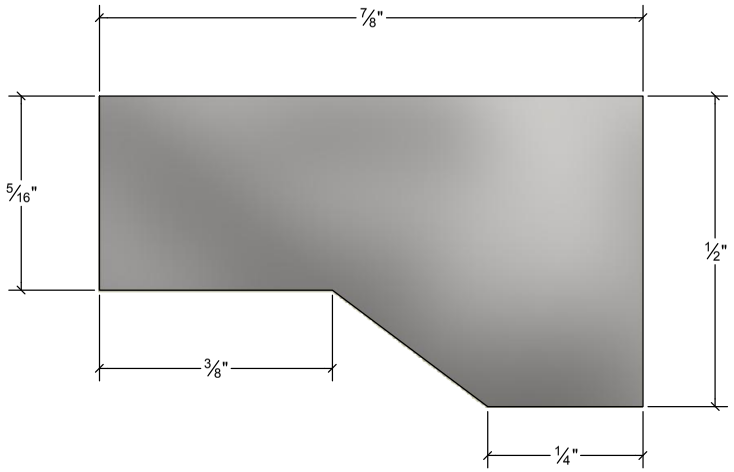
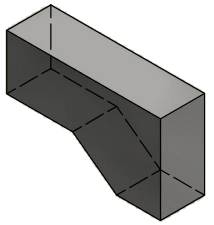
Shelter Columns Assemblies & Horizontal Beam



PROFILED MOUNTING HOOK - ELEVATION
SCALE 5 : 1



ISO VIEW
SCALE 2: 1

TOLAR — Tolar Manufacturing Company, Inc, 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: PROFILED MOUNTING HOOK			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 1/4" THK PL	DWG NO.: 23016-00	REV. NO.:
SCALE: AS NOTED	DATE: 9/16/2014	DRAWN BY: cgarcia	

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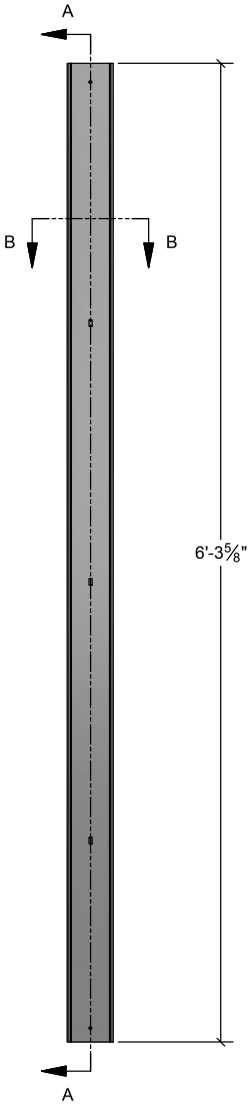
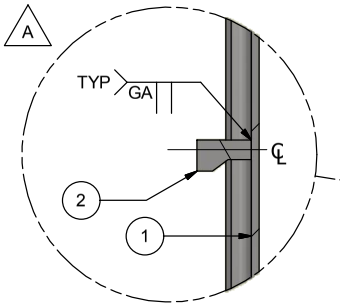
Shelter Columns Assemblies & Horizontal Beam

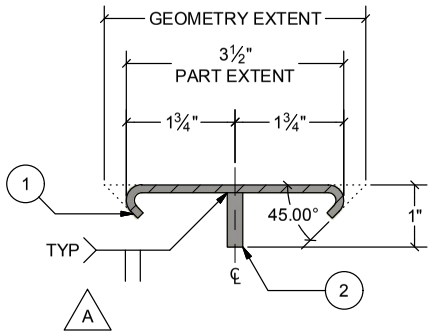
REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
2	A	WELD SYM	10/14/2014	



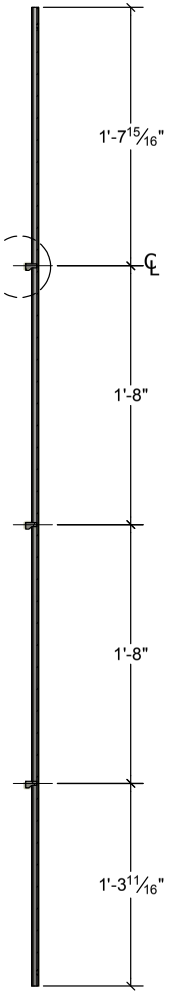
PROFILE EDGE TRIM - BACK ELEVATION
SCALE 1 1/4"=1'



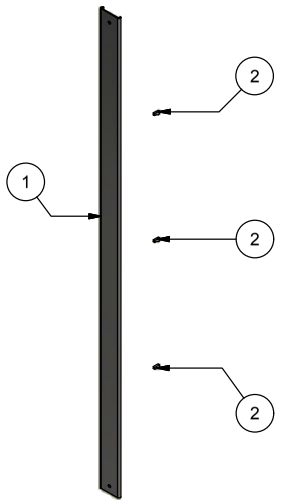
DETAIL C
SCALE 6"=1'



SECTION B-B
SCALE 6"=1'



SECTION A-A
SCALE 1 1/4"=1'



EDGE TRIM CAP - COMPONENTS
SCALE 3/4"=1'

PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	23014-00	FRMD EDGE CVR UP "R"
2	3	23016-00	PROFILED MOUNTING HOOK

Tolar Manufacturing Company, Inc
258 Mariah Circle, Corona CA. 92879

DESCRIPTION: EDGE TRIM CAP UP "R"

CUSTOMER/VENDOR: SANTA CLARA - VTA | SHEET NO.: 1 OF 1

SIZE: B | MATL.: SS 316L - MISC | DWG NO.: 23018-00 | REV. NO.: A

SCALE: AS NOTED | DATE: 9/16/2014 | DRAWN BY: cgarcia

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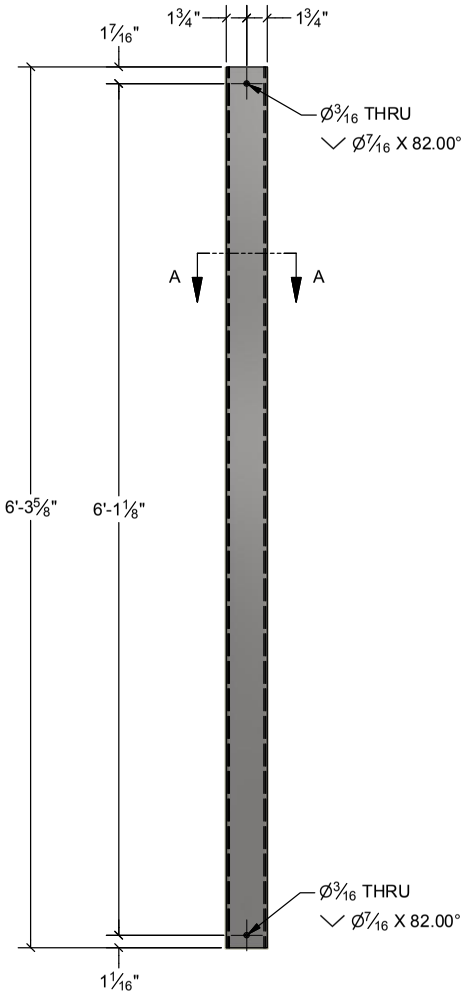
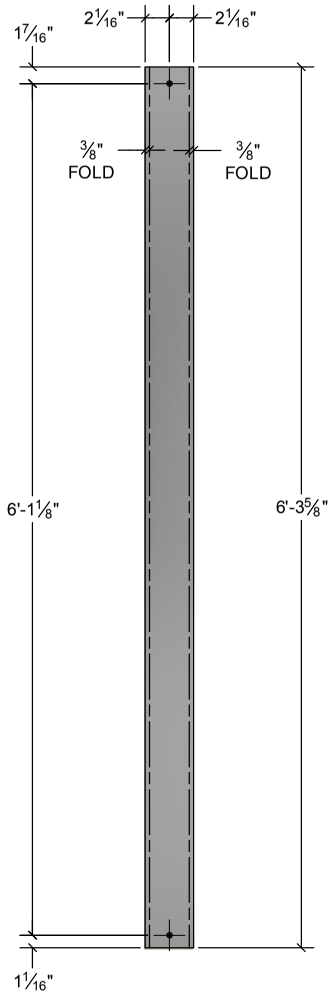
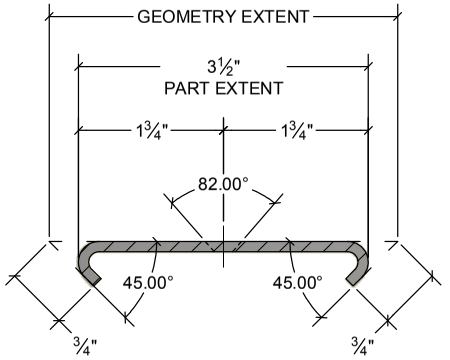
Shelter Columns Assemblies & Horizontal Beam



WRAP EDGE COVER - ELEVATION
SCALE 1 1/8"=1'



FLAT PATTERN - PLAN VIEW
SCALE 1 1/8"=1'



SECTION A-A
SCALE 8"=1'

Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: FRMD EDGE CVR UP "R"			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 11 GA SH M	DWG NO.: 23014-00	REV. NO.
SCALE: AS NOTED	DATE: 9/16/2014	DRAWN BY: cgarcia	

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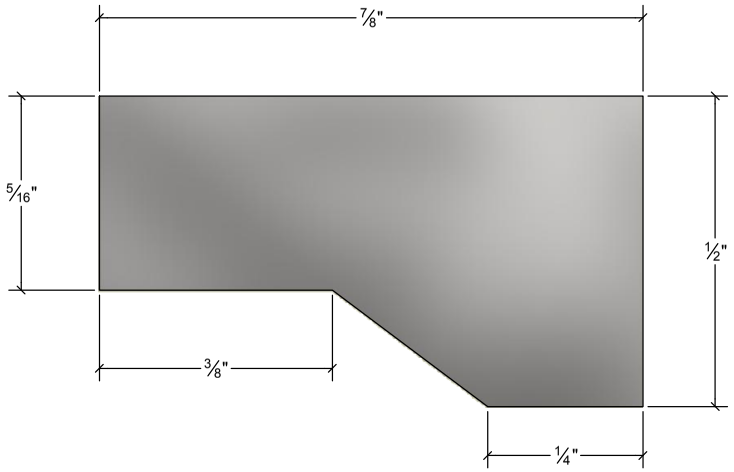
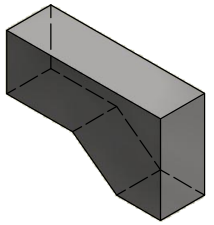
Shelter Columns Assemblies & Horizontal Beam



PROFILED MOUNTING HOOK - ELEVATION
SCALE 5 : 1



ISO VIEW
SCALE 2: 1

TOLAR — Tolar Manufacturing Company, Inc, 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: PROFILED MOUNTING HOOK			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 1/4" THK PL	DWG NO.: 23016-00	REV. NO.:
SCALE: AS NOTED	DATE: 9/16/2014	DRAWN BY: cgarcia	

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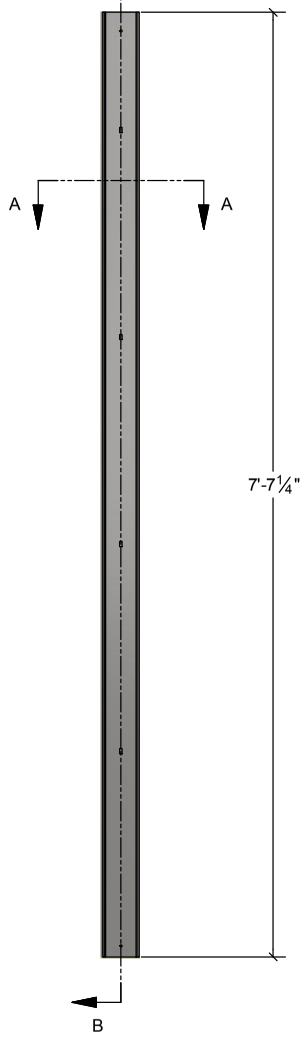
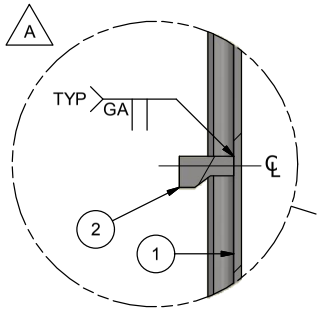
Shelter Columns Assemblies & Horizontal Beam

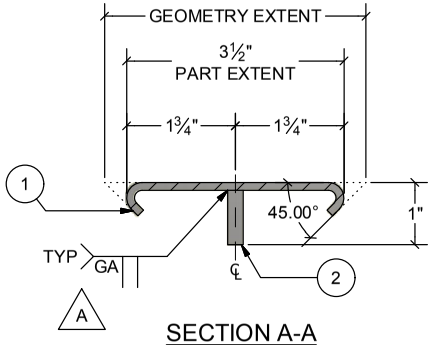
REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
2	A	WELD SYM	10/14/2014	



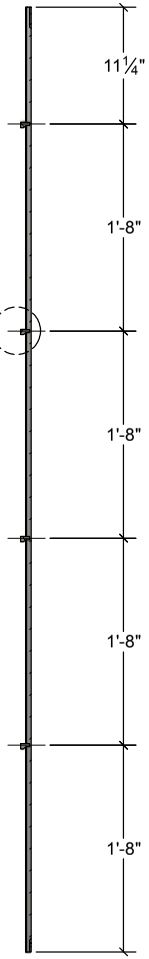
PROFILED EDGE TRIM - BACK ELEVATION
SCALE 1"=1'



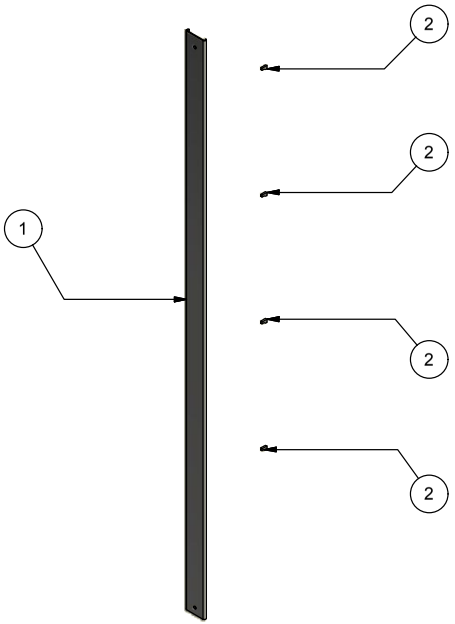
DETAIL C
SCALE 6"=1'



SECTION A-A
SCALE 6"=1'



SECTION B-B
SCALE 1"=1'



EDGE TRIM CAP - COMPONENTS
SCALE 3/4"=1'

PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	23012-00	FRMD EDGE CVR LOWER "L"
2	4	23016-00	PROFILED MOUNTING HOOK

TOLAR
PREARTIFACT WITH DISTINCTION

Tolar Manufacturing Company, Inc
258 Mariah Circle, Corona CA. 92879

DESCRIPTION: EDGE TRIM CAP CVR "L"			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 11 GA SH M	DWG NO.: 23019-00	REV. NO.: A
SCALE: AS NOTED	DATE: 9/17/2014	DRAWN BY: cgarcia	

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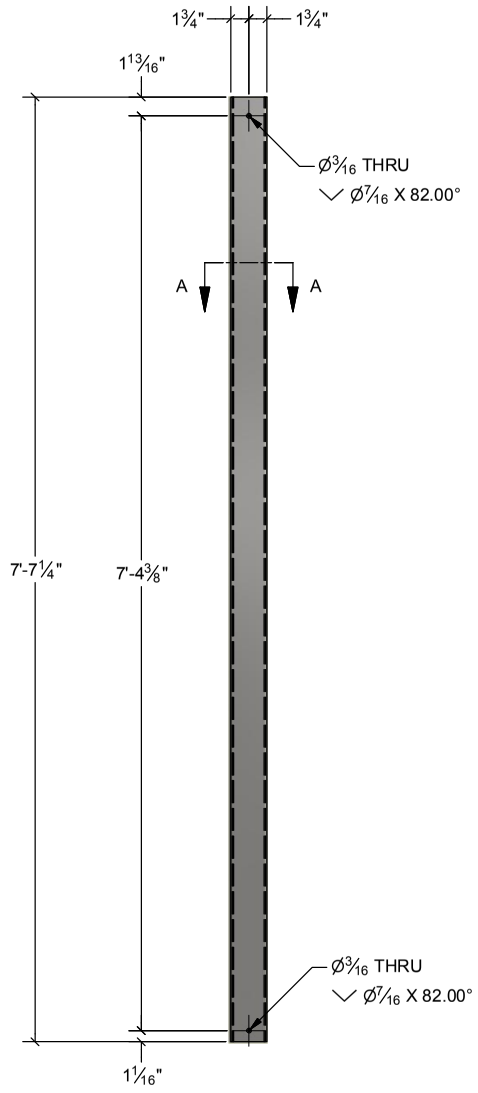
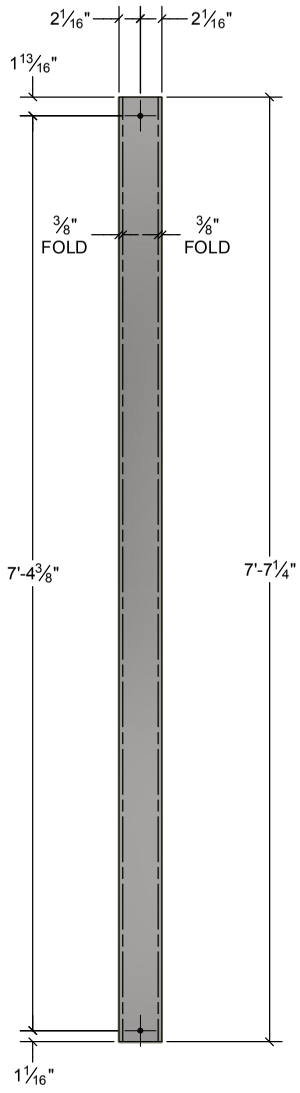
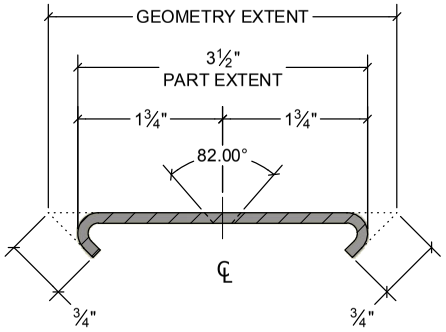
Shelter Columns Assemblies & Horizontal Beam



WRAP EDGE COVER - ELEVATION
SCALE 1"=1'



FLAT PATTERN - PLAN VIEW
SCALE 1"=1'



SECTION A-A
SCALE 8"=1'

TOLAR — Tolar Manufacturing Company, Inc, 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: FRMD EDGE CVR LOWER "L"			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - SH M	DWG NO.: 23012-00	REV. NO.
SCALE: AS NOTED	DATE: 9/17/2014	DRAWN BY: cgarcia	

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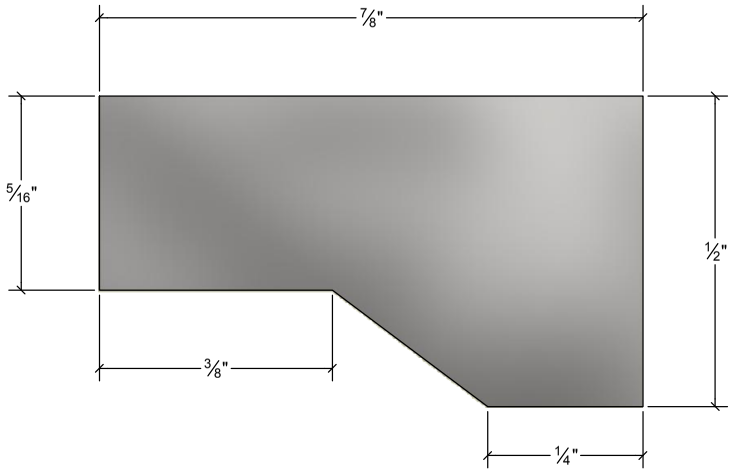
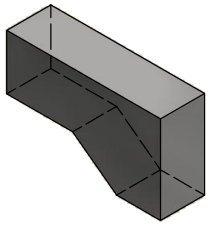
Shelter Columns Assemblies & Horizontal Beam



PROFILED MOUNTING HOOK - ELEVATION
SCALE 5 : 1



ISO VIEW
SCALE 2: 1

TOLAR — Tolar Manufacturing Company, Inc, 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: PROFILED MOUNTING HOOK			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 1/4" THK PL	DWG NO.: 23016-00	REV. NO.:
SCALE: AS NOTED	DATE: 9/16/2014	DRAWN BY: cgarcia	

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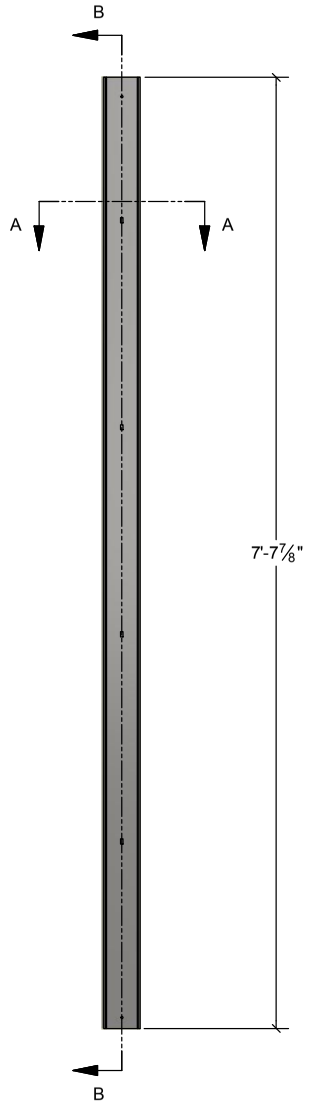
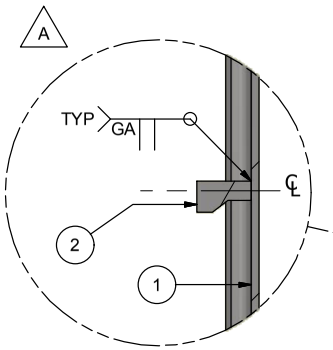
Shelter Columns Assemblies & Horizontal Beam

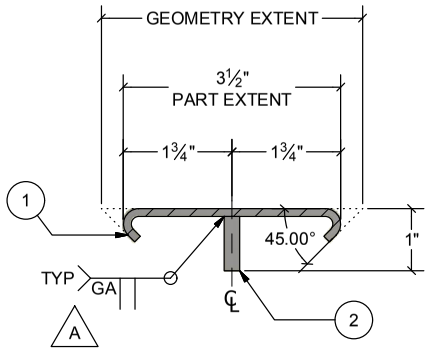
REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
2	A	WELD SYM	10/14/2014	



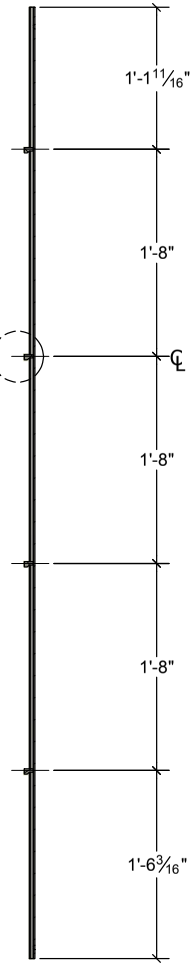
PROFILED EDGE TRIM - BACK ELEVATION
SCALE 1"=1'



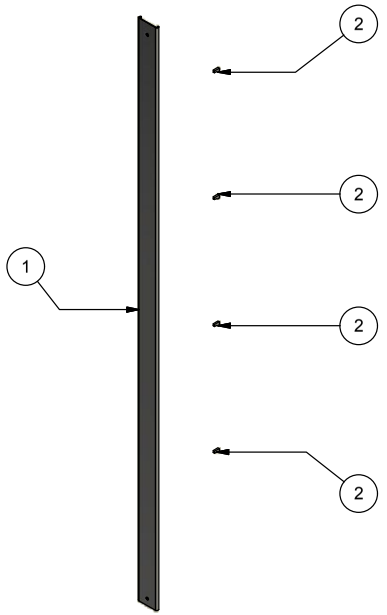
DETAIL C
SCALE 6"=1'



SECTION A-A
SCALE 6"=1'



SECTION B-B
SCALE 1"=1'



EDGE TRIM CAP - COMPONENTS
SCALE 3/4"=1'

PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	23013-00	FRMD EDGE CVR LOWER "R"
2	4	23016-00	PROFILED MOUNTING HOOK

TOLAR
PUREARTH WITH DISTINCTION

Tolar Manufacturing Company, Inc
258 Mariah Circle, Corona CA. 92879

DESCRIPTION: EDGE TRIM CAP LOWER "R"			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - MISC	DWG NO.: 23020-00	REV. NO.: A
SCALE: AS NOTED	DATE: 9/17/2014	DRAWN BY: cgarcia	

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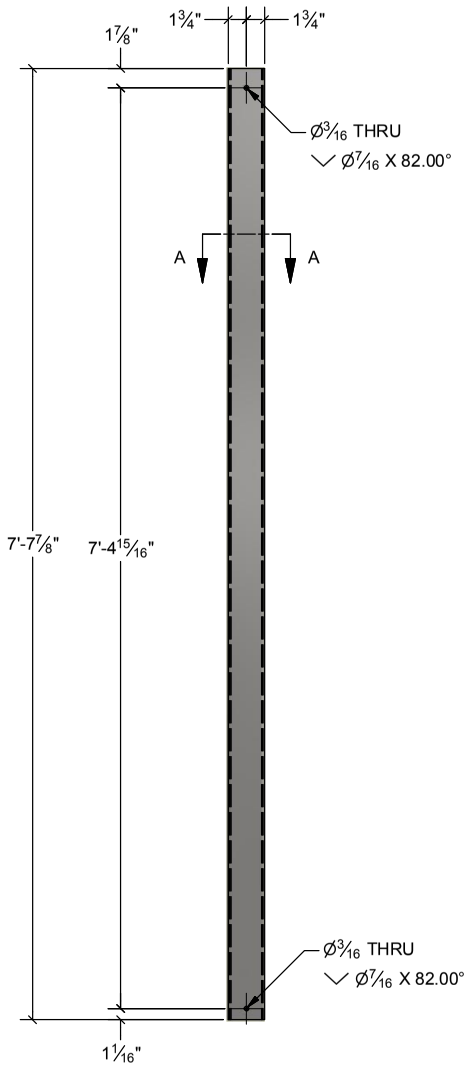
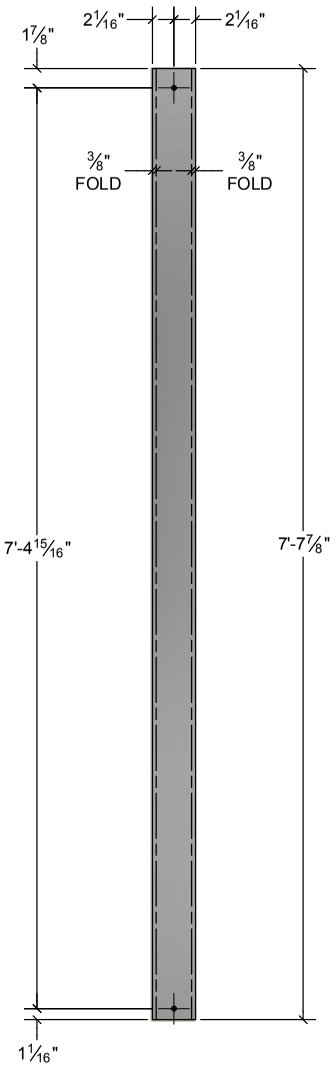
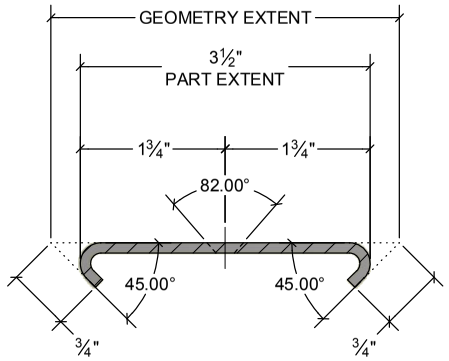
Shelter Columns Assemblies & Horizontal Beam



WRAP EDGE COVER - ELEVATION
SCALE 1"=1'



FLAT PATTERN - ELEVATION
SCALE 1"=1'



SECTION A-A
SCALE 8"=1'

Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: FRMD EDGE CVR LOWER "R"			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 11GA SH M	DWG NO.: 23013-00	REV. NO.
SCALE: AS NOTED	DATE: 9/17/2014	DRAWN BY: cgarcia	

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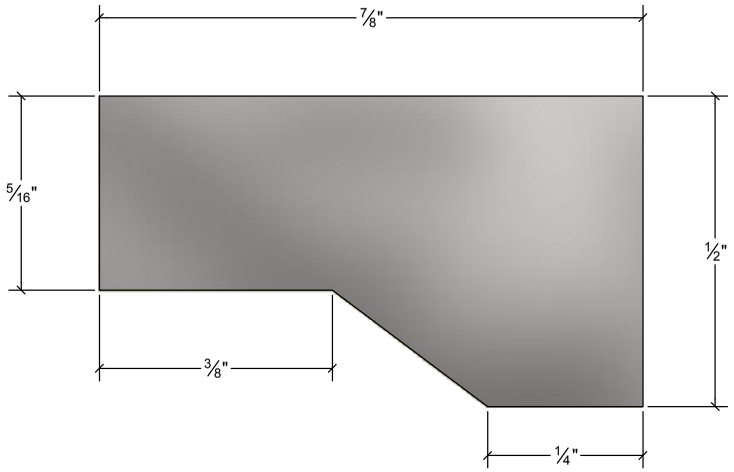
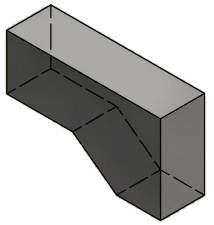
Shelter Columns Assemblies & Horizontal Beam



PROFILED MOUNTING HOOK - ELEVATION
SCALE 5 : 1



ISO VIEW
SCALE 2: 1

TOLAR — Tolar Manufacturing Company, Inc, 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: PROFILED MOUNTING HOOK			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 1/4" THK PL	DWG NO.: 23016-00	REV. NO.:
SCALE: AS NOTED	DATE: 9/16/2014	DRAWN BY: cgarcia	

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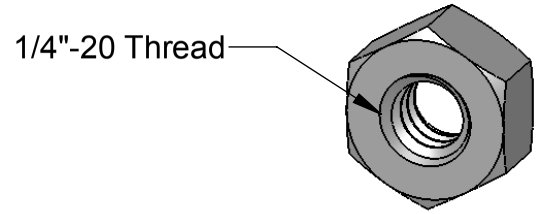
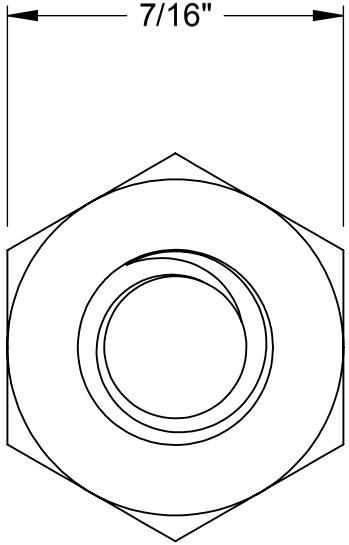
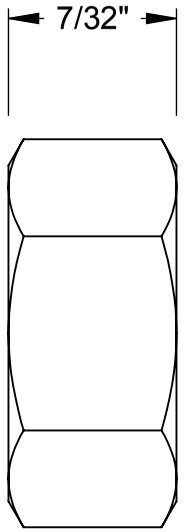
Shelter Columns Assemblies & Horizontal Beam







Shelter Columns Assemblies & Horizontal Beam

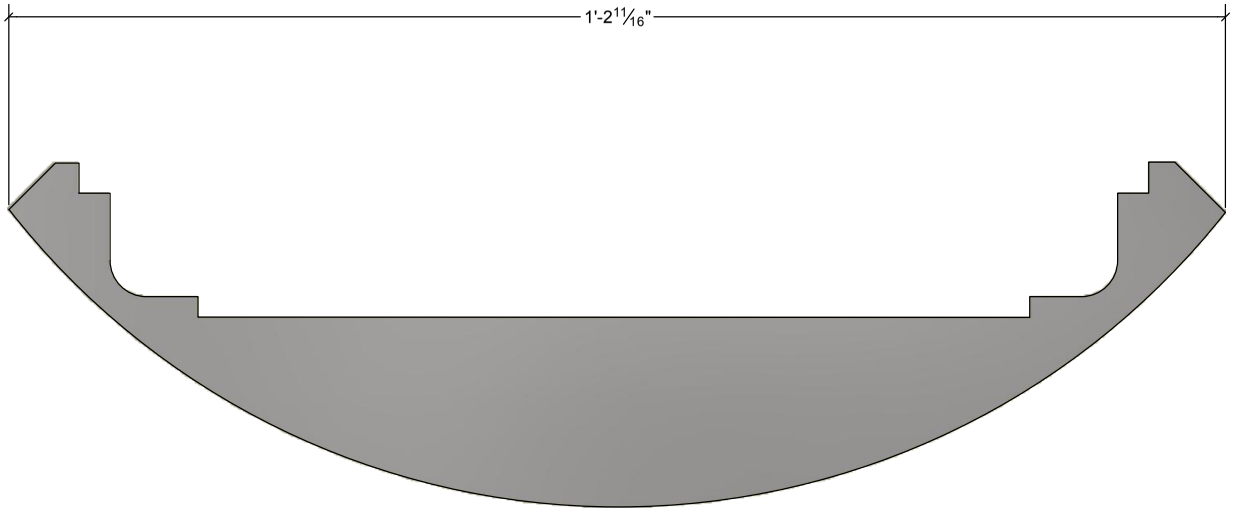
McMASTER-CARR® CAD

http://www.mcmaster.com

PART NUMBER **94819A043**

ASTM F594 Type 316 Stainless Steel Hex Nut

NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. MILL FINISH #1
3. USE 23021-00.DXF TO PERFORM CUT



FRONT STIFFENER L1 - PLAN VEIW
SCALE 8"=1'

TOLAR — Tolar Manufacturing Company, Inc, 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: FRONT STIFFENER LAYER 1			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 11 GA SH M	DWG NO.: 23021-00	REV. NO.:
SCALE: AS NOTED	DATE: 9/11/2014	DRAWN BY: cgarcia	

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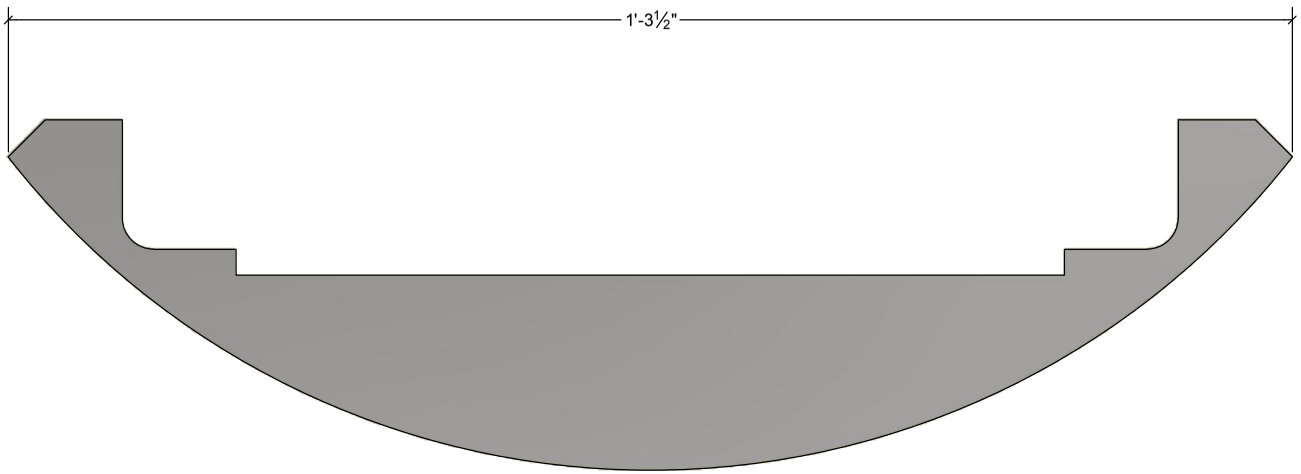
Shelter Columns Assemblies & Horizontal Beam

NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. MILL FINISH #1
3. USE 23022-00.DXF TO PERFORM CUT



FRONT STIFFENER L2 - PLAN VIEW
SCALE 8"=1'

TOLAR — SHEARHEAT WITH DISTINCTION	Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879
DESCRIPTION	FRONT STIFFENER LAYER 2
CUSTOMER/VENDOR	SANTA CLARA - VTA
SHEET NO.	1 OF 1
SIZE	B
MATL.	SS 316L - 11 GA SH M
DWG NO.	23022-00
REV. NO.	
SCALE	AS NOTED
DATE	9/17/2014
DRAWN BY:	cgarcia

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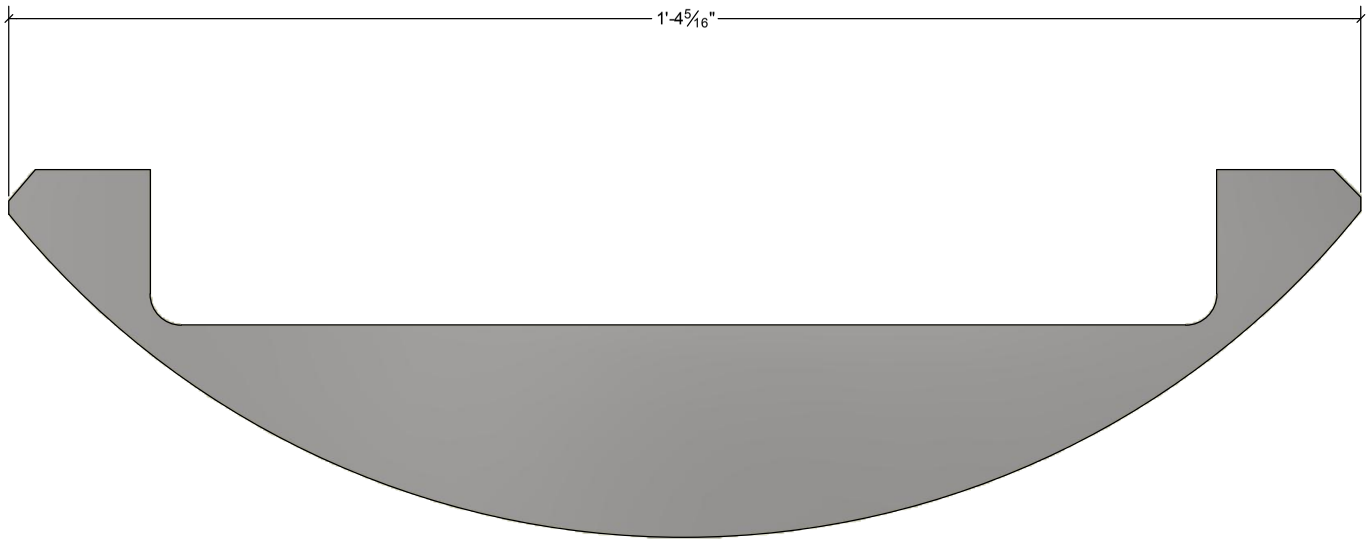
Shelter Columns Assemblies & Horizontal Beam

NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. MILL FINISH #1
3. USE 23023-00.DXF TO PERFORM CUT



FRONT STIFFENER L3 - PLAN VIEW
SCALE 8"=1'

Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: FRONT STIFFENER LAYER 3			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 11 GA SH M	DWG NO.: 23023-00	REV. NO.:
SCALE: AS NOTED	DATE: 9/17/2014	DRAWN BY: cgarcia	

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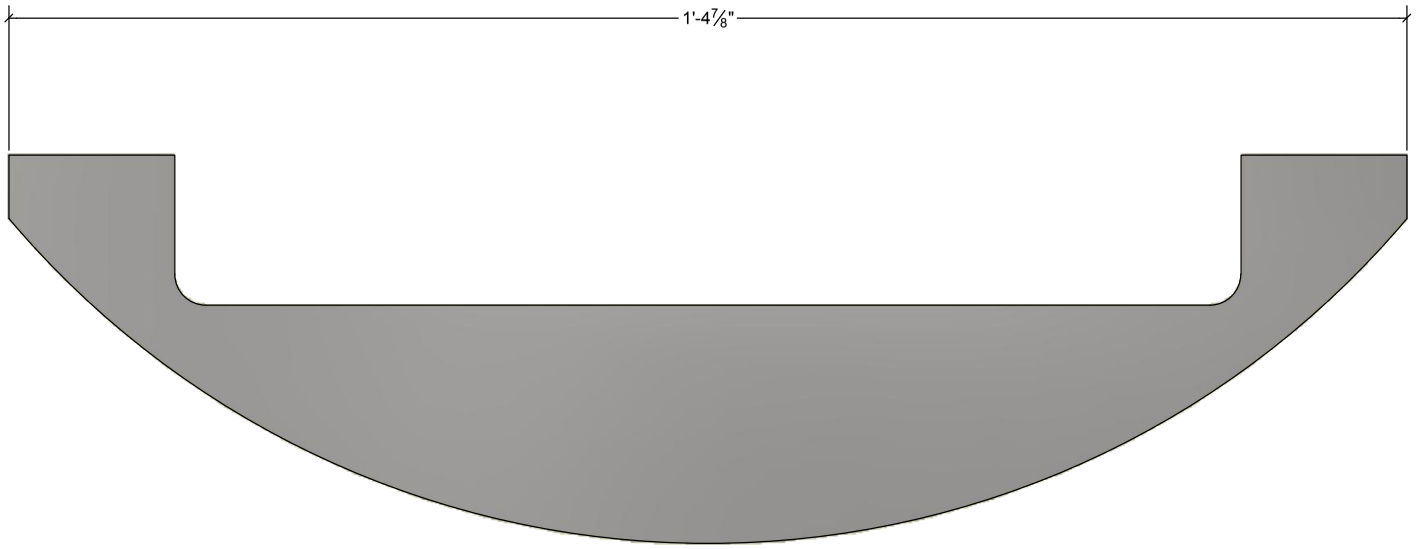
Shelter Columns Assemblies & Horizontal Beam

NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. MILL FINISH #1
3. USE 23021-00.DXF TO PERFORM CUT



FRONT STIFFENER L4 - PLAN VIEW
SCALE 8"=1'

Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: FRONT STIFFENER LAYER 4			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 11 GA SH M	DWG NO.: 23024-00	REV. NO.:
SCALE: AS NOTED	DATE: 9/17/2014	DRAWN BY: cgarcia	

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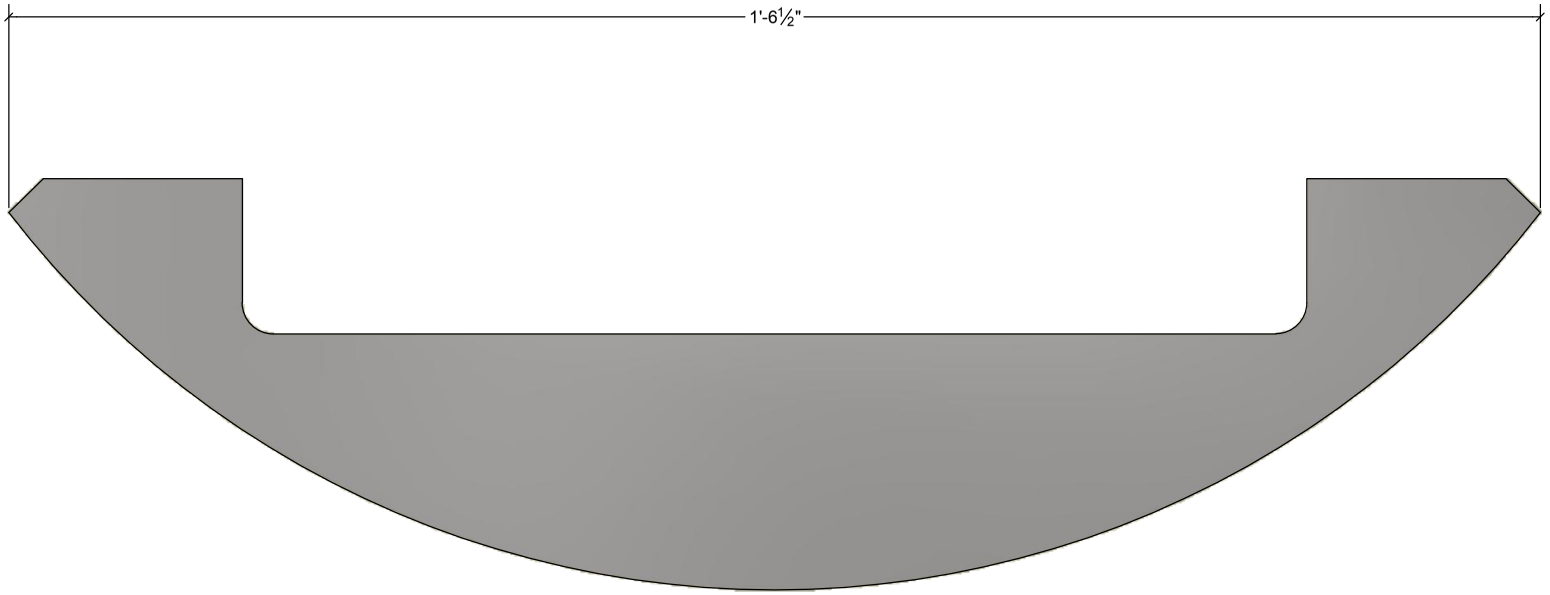
Shelter Columns Assemblies & Horizontal Beam

NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. MILL FINISH #1
3. USE 23025-00.DXF TO PERFORM CUT



FRONT STIFFENER L5 - PLAN VIEW
SCALE 8"=1'

TOLAR — Tolar Manufacturing Company, Inc, 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: FRONT STIFFENER LAYER 5			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 11 GA SH M	DWG NO.: 23025-00	REV. NO.:
SCALE: AS NOTED	DATE: 9/17/2014	DRAWN BY: cgarcia	

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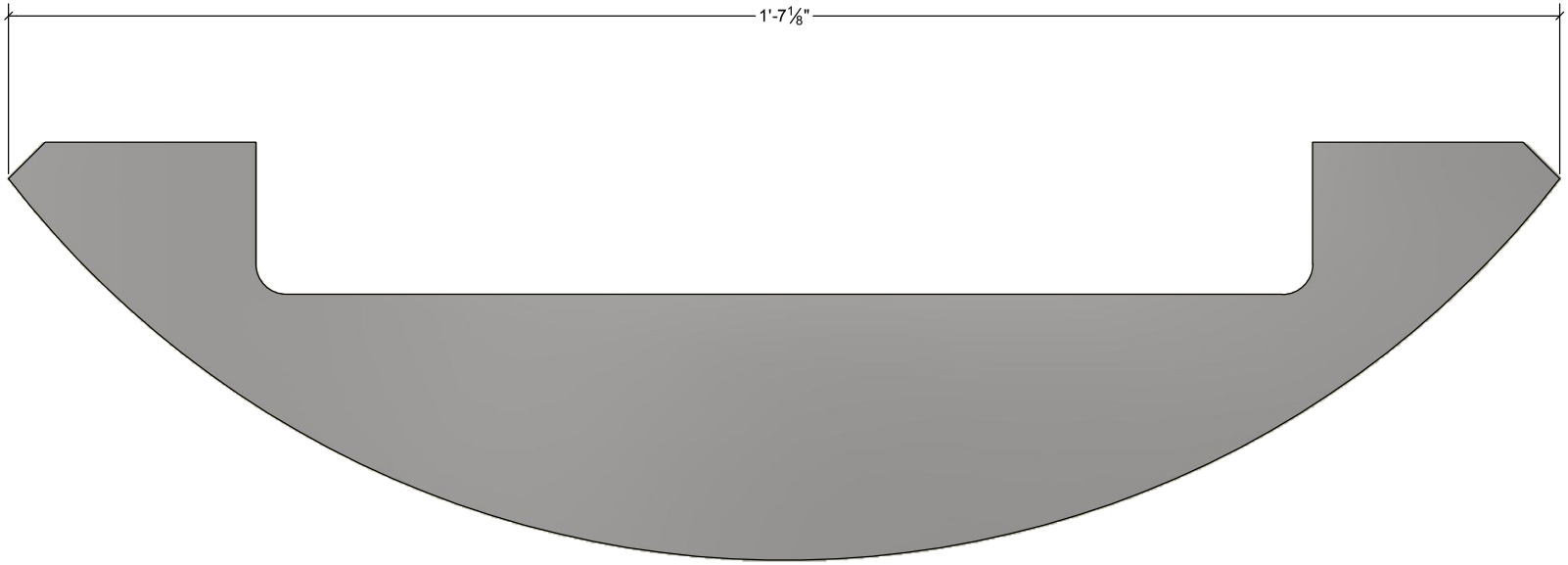
Shelter Columns Assemblies & Horizontal Beam

NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. MILL FINISH #1
3. USE 23310-00.DXF TO PERFORM CUT



STIFFENER L6 - PLAN VIEW
SCALE 8"=1'

Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: STIFFENER LAYER 6			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 11 GA SH M	DWG NO.: 23310-00	REV. NO.:
SCALE: AS NOTED	DATE: 9/17/2014	DRAWN BY: cgarcia	

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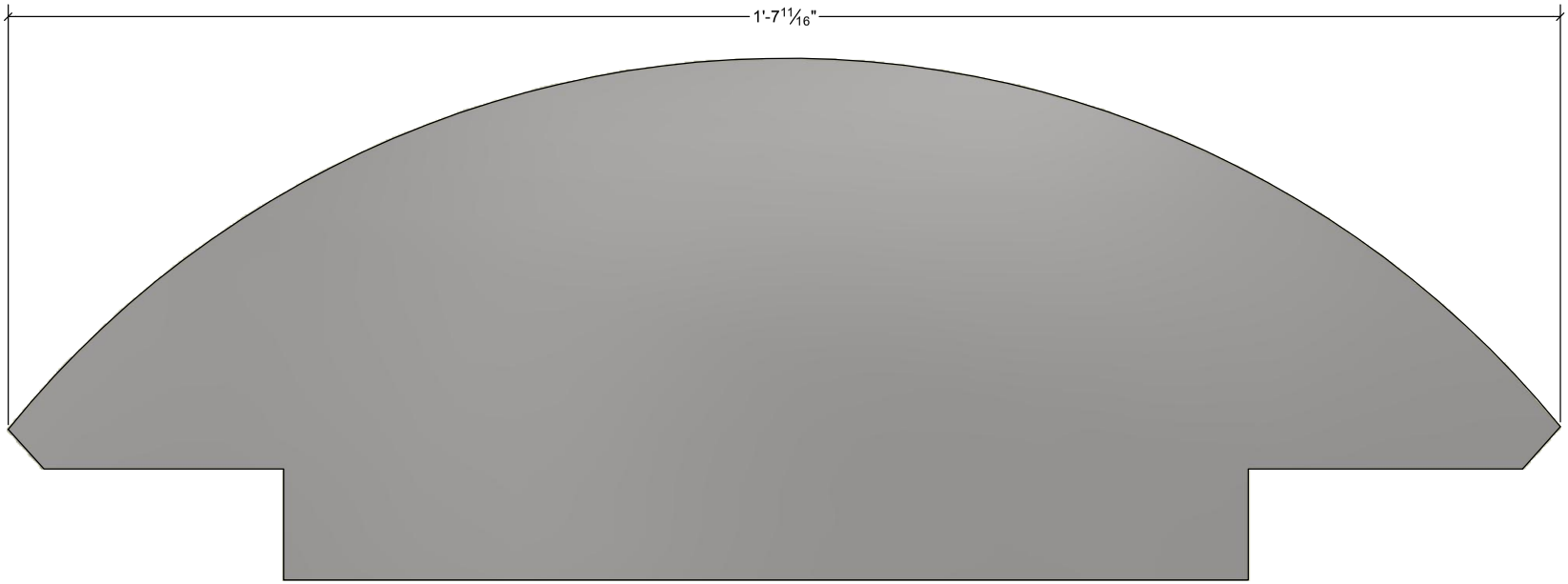
Shelter Columns Assemblies & Horizontal Beam

NOTES:
1. CLEAN AND DEBURR ALL EDGES
2. MILL FINISH #1
3. USE 23311-00.DXF TO PERFORM CUT



STIFFENER L7 - PLAN VIEW
SCALE 8"=1'

TOLAR — Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: STIFFENER LAYER 7.			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 11GA SH M	DWG NO.: 23311-00	REV. NO.:
SCALE: AS NOTED	DATE: 9/11/2014	DRAWN BY: cgarcia	

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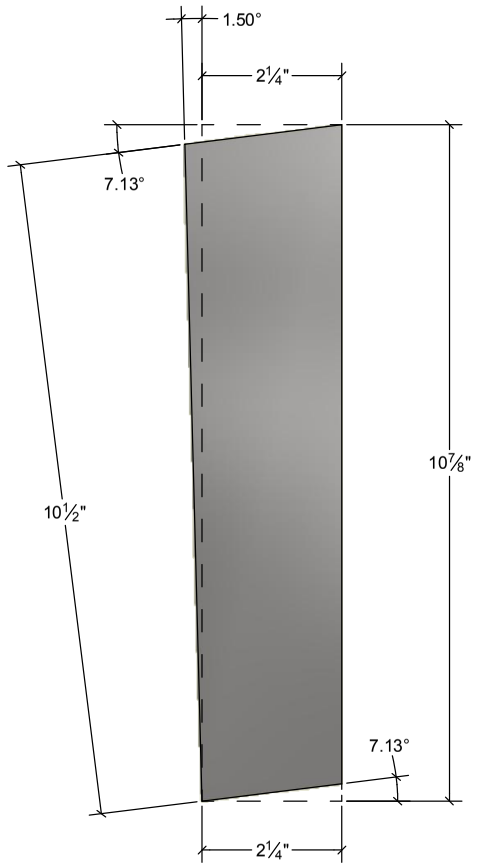
Shelter Columns Assemblies & Horizontal Beam

REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
ALL	A	SIZE AND CONFIG	10/15/2014	



PROFILED LINK EDGE PLATE - CUT LAYOUT
SCALE 6"=1'

TOLAR — NUMBER WITH DISTINCTION	Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879		
DESCRIPTION	EDGE PL PRFLD @ LINK-BM		
CUSTOMER/VENDOR	SANTA CLARA - VTA		SHEET NO. 1 OF 1
SIZE B	MATL. SS 316L - 1/4" THK PL	DWG NO. 23312-00	REV. NO.
SCALE AS NOTED	DATE 9/11/2014	DRAWN BY: cgarcia	

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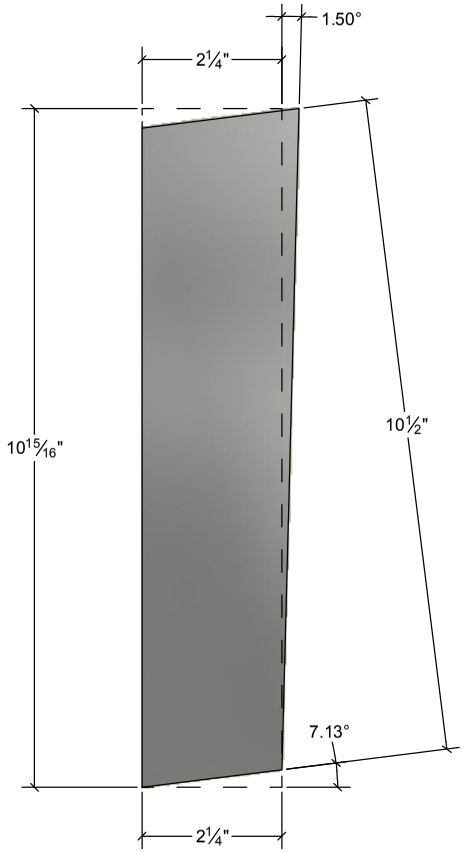
Shelter Columns Assemblies & Horizontal Beam

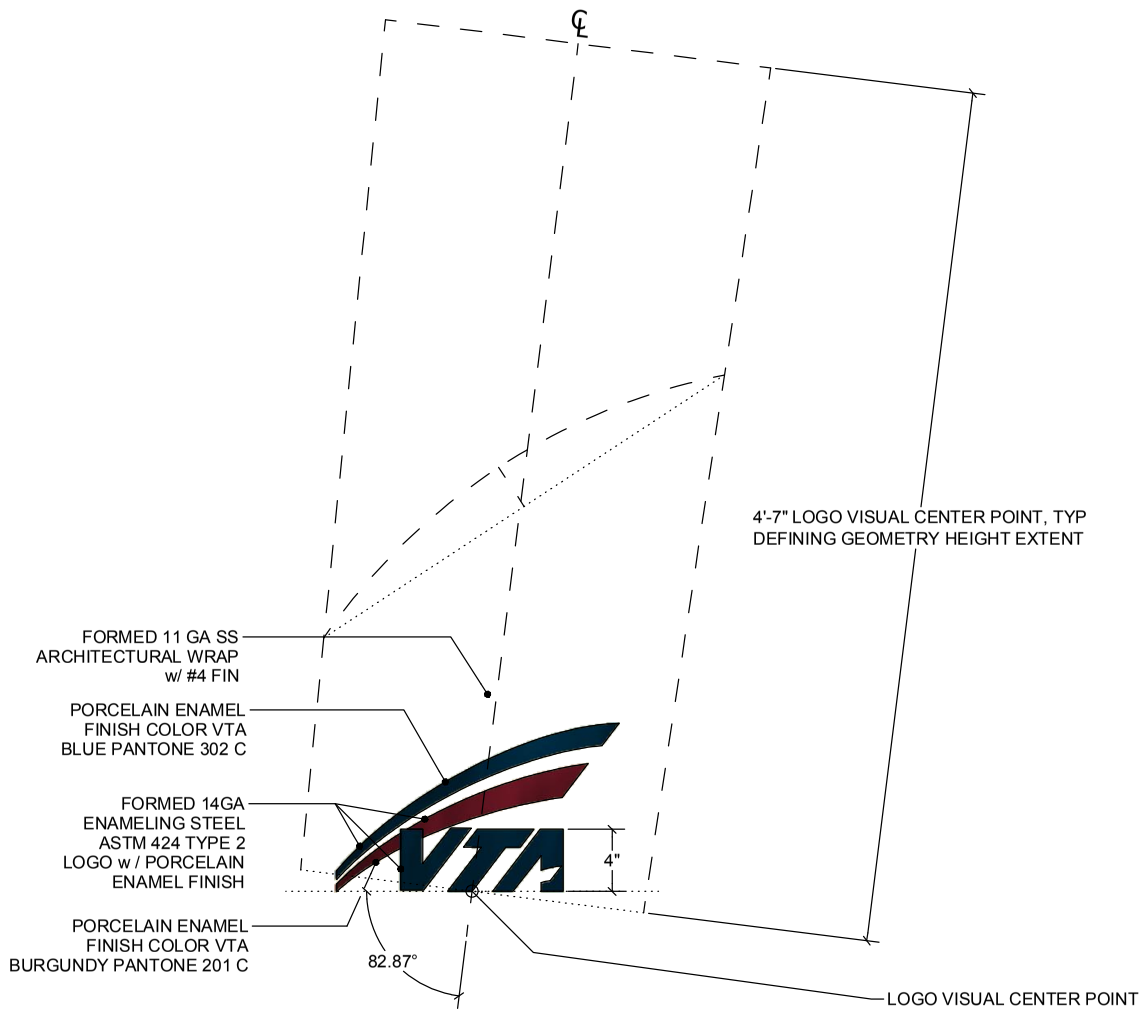


PROFILED LINK EDGE PLATE - CUT LAYOUT
SCALE 6"=1'

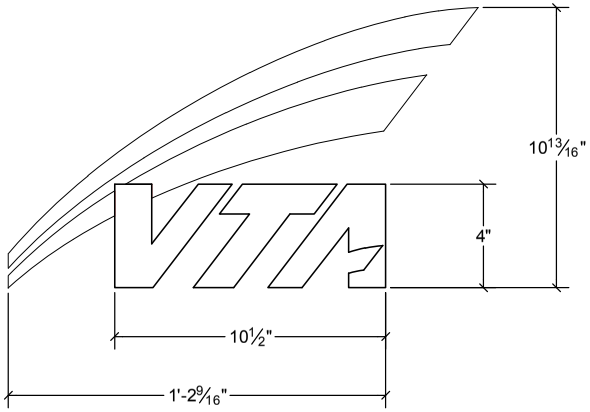
TOLAR — Tolar Manufacturing Company, Inc, 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: EDGE PL PRFLD @ LINK-BM (R)			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 1/4" THK PL	DWG NO.: 23312-01	REV. NO.:
SCALE: AS NOTED	DATE: 10/15/2014	DRAWN BY: cgarcia	

T:\Engineering\CARLOS GARCIA\VTA\23312-01.idw

Shelter Columns Assemblies & Horizontal Beam



VTA LOGO AT ICONIC COLUMN - FRONT ELEVATION
SCALE 1 1/2"=1'



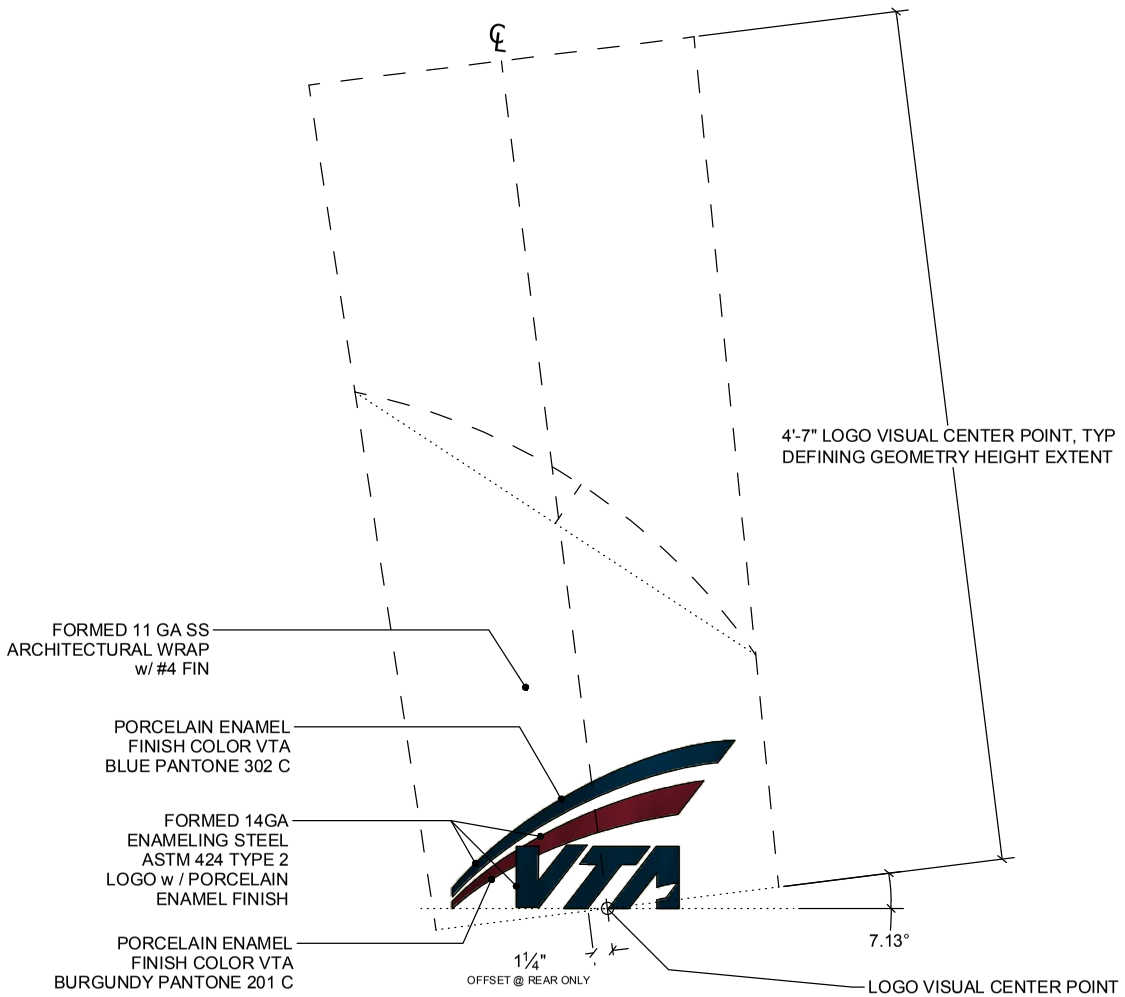
LOGO LAYOUT
SCALE 2 1/2"=1'

NOTE: ADHERE TO ARCHITECTURAL WRAP USING PROFILED BLACK HIGH BOND ACRYLIC FOAM TAPE

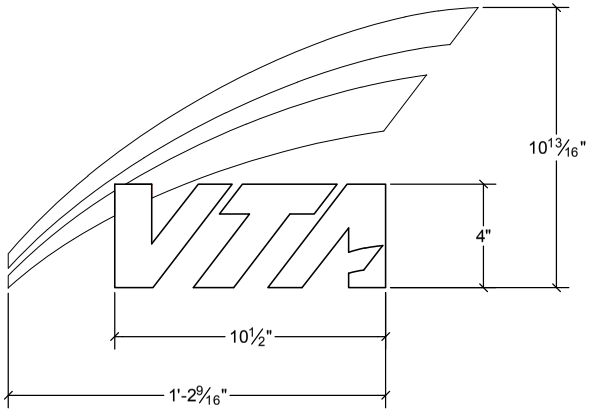
TOLAR — Tolar Manufacturing Company, Inc, 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: VTA LOGO			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 11 GA SH M	DWG NO.: 23316-00	REV. NO.:
SCALE: AS NOTED	DATE: 9/22/2014	DRAWN BY: cgarcia	

T:\Engineering\CARLOS GARCIA\VTA\23316-00.idw

Shelter Columns Assemblies & Horizontal Beam



VTA LOGO AT ICONIC COLUMN - REAR ELEVATION
SCALE 1 1/2"=1'

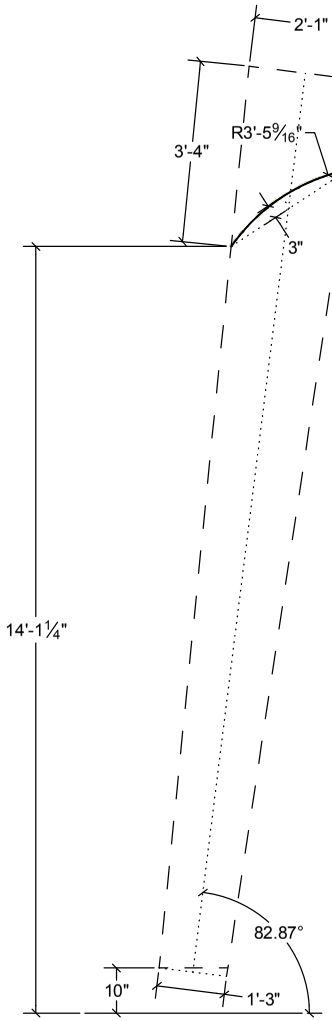


LOGO LAYOUT
SCALE 2 1/2"=1'
NOTE: ADHERE TO ARCHITECTURAL WRAP USING PROFILED BLACK HIGH BOND ACRYLIC FOAM TAPE

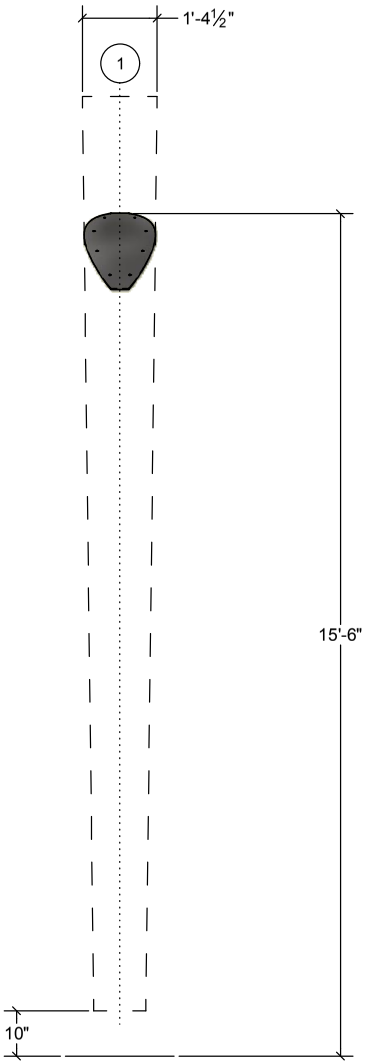
TOLAR — Tolar Manufacturing Company, Inc, 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: VTA LOGO FR+ BK			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 11 GA SH M	DWG NO.: 23316-00	REV. NO.:
SCALE: AS NOTED	DATE: 9/22/2014	DRAWN BY: cgarcia	

T:\Engineering\CARLOS GARCIA\VTA\23316-01.idw

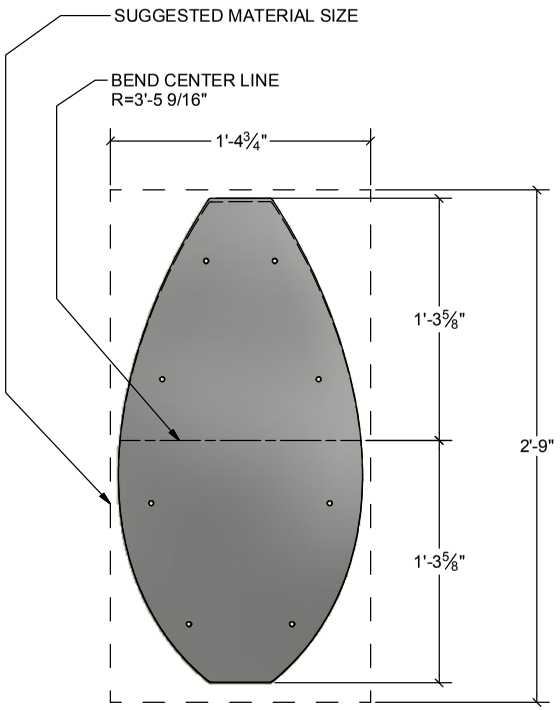
Shelter Columns Assemblies & Horizontal Beam



TOP ICONIC COLUMN COVER - FRONT ELEVATION
SCALE 7/16"=1'



LEFT ELEVATION
SCALE 7/16"=1'



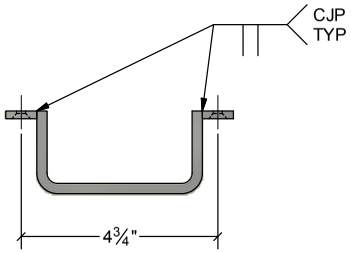
FLAT PATTERN - PLAN VIEW
SCALE 1 1/2"=1'

TOLAR
Tolar Manufacturing Company, Inc
258 Mariah Circle, Corona CA. 92879

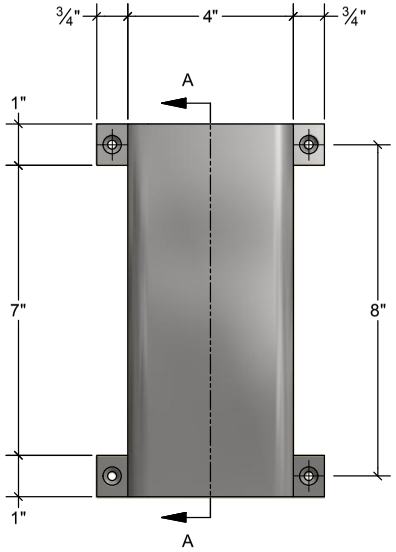
DESCRIPTION: TOP ICONIC COLUMN COVER			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 11 GA SH M	DWG NO.: 23313-00	REV. NO.:
SCALE: AS NOTED	DATE: 10/15/2014	DRAWN BY: cgarcia	

T:\Engineering\CARLOS GARCIA\VTA\23313-00.idw

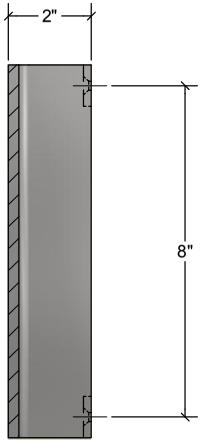
Shelter Columns Assemblies & Horizontal Beam



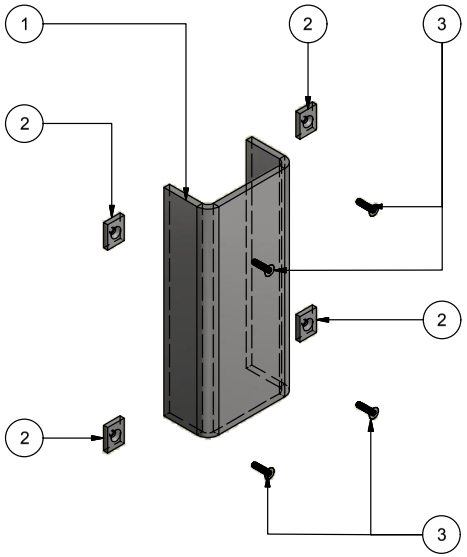
CONDUIT COVER - PLAN VIEW
SCALE 4"=1'



CONDUIT COVER - FRONT ELEVATION
SCALE 4"=1'



SECTION A-A
SCALE 4"=1'



COMPONENTS - ISO VIEW
SCALE 3"=1'

PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	23387-00	CONDUIT COVER
2	4	23388-00	CONDUIT COVER TAB
3	4	91870A245	10-24 x 3/4" PIN-IN TORX SS FH MS

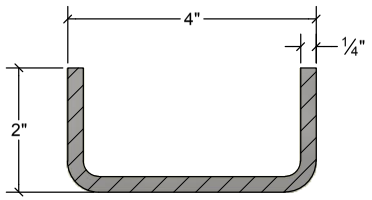
TOLAR
DURABILITY WITH DISTINCTION

Tolar Manufacturing Company, Inc
258 Mariah Circle, Corona CA. 92879

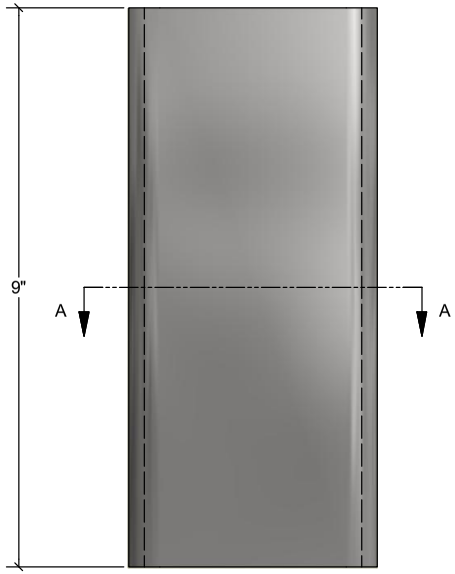
DESCRIPTION: CONDUIT COVER			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - MISC	DWG NO.: 23389-00	REV. NO.
SCALE: AS NOTED	DATE: 10/15/2014	DRAWN BY: cgarcia	

T:\Engineering\CARLOS GARCIA\VTA\23389-00.idw

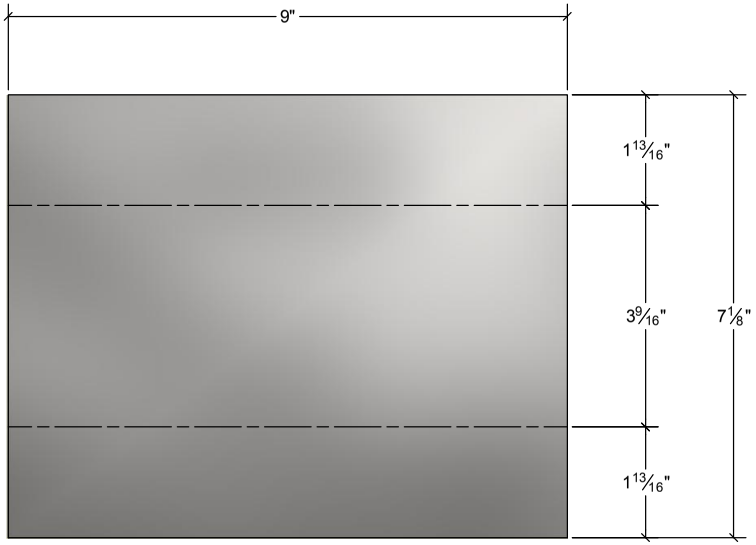
Shelter Columns Assemblies & Horizontal Beam



SECTION A-A
SCALE 6"=1'



CONDUIT COVER BODY - FRONT ELEVATION
SCALE 6"=1'

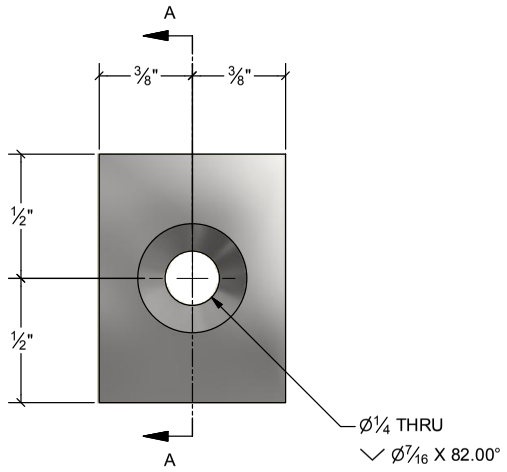


FLAT PATTERN
SCALE 6"=1'

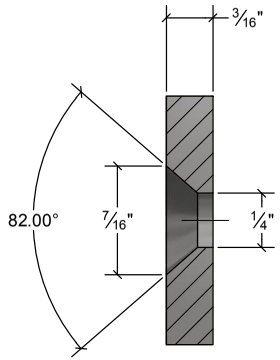
TOLAR — Tolar Manufacturing Company, Inc, 258 Mariah Circle, Corona CA. 92879			
DESCRIPTION: CONDUIT COVER			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 1/4" THK PL	DWG NO.: 23387-00	REV. NO.:
SCALE: AS NOTED	DATE: 10/15/2014	DRAWN BY: cgarcia	

T:\Engineering\CARLOS GARCIA\VTA\23387-00.idw

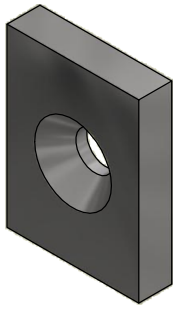
Shelter Columns Assemblies & Horizontal Beam



CONDUIT COVER TAB - ELEVATION
SCALE 2 : 1



SECTION A-A
SCALE 2 : 1



ISO VIEW
SCALE 2 : 1

TOLAR — PUBLISHED WITH DISTINCTION	Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879		
DESCRIPTION: CONDUIT COVER TAB			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: SS 316L - 3/16" THK SH M	DWG NO.: 23388-00	REV. NO.:
SCALE: AS NOTED	DATE: 10/15/2014	DRAWN BY: cgarcia	

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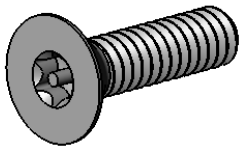
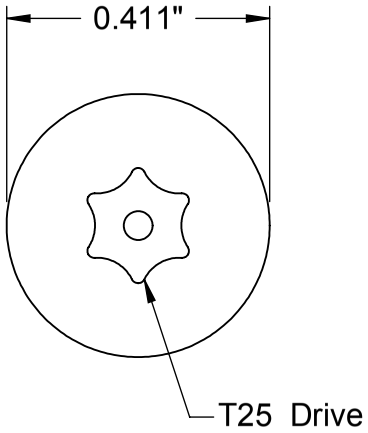
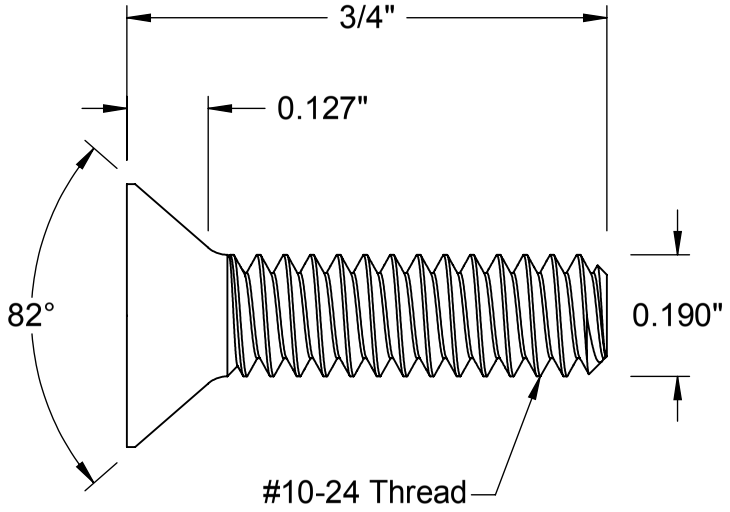
Shelter Columns Assemblies & Horizontal Beam







Shelter Columns Assemblies & Horizontal Beam

McMASTER-CARR® CAD

PART NUMBER **91870A245**

Tamper Resistant Pin-in-Torx
Flat Head Machine Screw

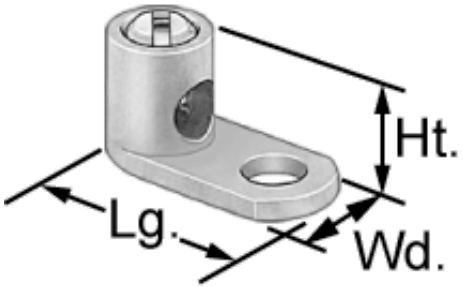
McMASTER-CARR. OVER 555,000 PRODUCTS
(562) 692-5911
(562) 695-2323 (fax)
la.sales@mcmaster.com
Text 75930

* * * 93190A622 COPPER SET CREW LUG * * *

Copper Set Screw Lug

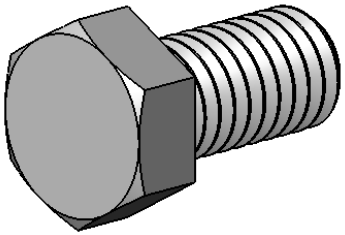
Straight Tongue, 6-250 MCM AWG, 3/8" Stud

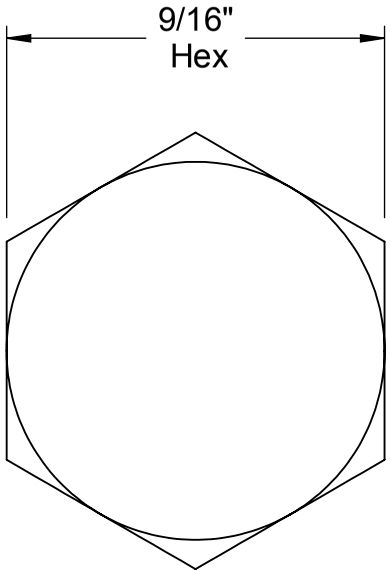
In stock
$10.30 Each
6923K64

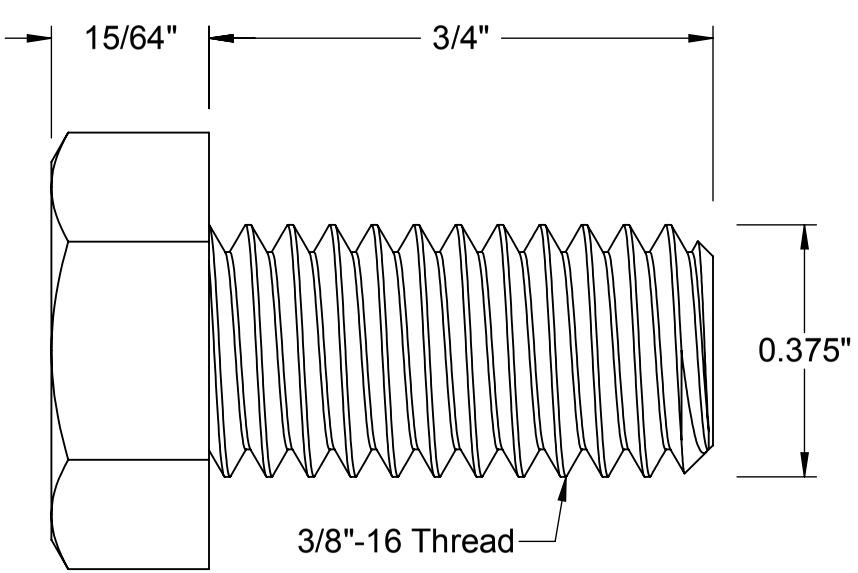


For Wire Size	6-250 MCM
For Stud Size	3/8"
Length	1.97"
Width	0.94"
Height	1.06"
Additional Specifications	Straight Tongue

To make a connection, tighten the set screw down onto stranded copper wire. No crimping tools required. These lugs are used in power distribution systems and with large motors and generators. Rated to 600 volts and 194° F. UL listed and CSA certified, unless noted. Straight-tongue lugs allow more surface contact for improved conductivity. Made of copper alloy.







Shelter Columns Assemblies & Horizontal Beam

McMASTER-CARR® CAD

http://www.mcmaster.com

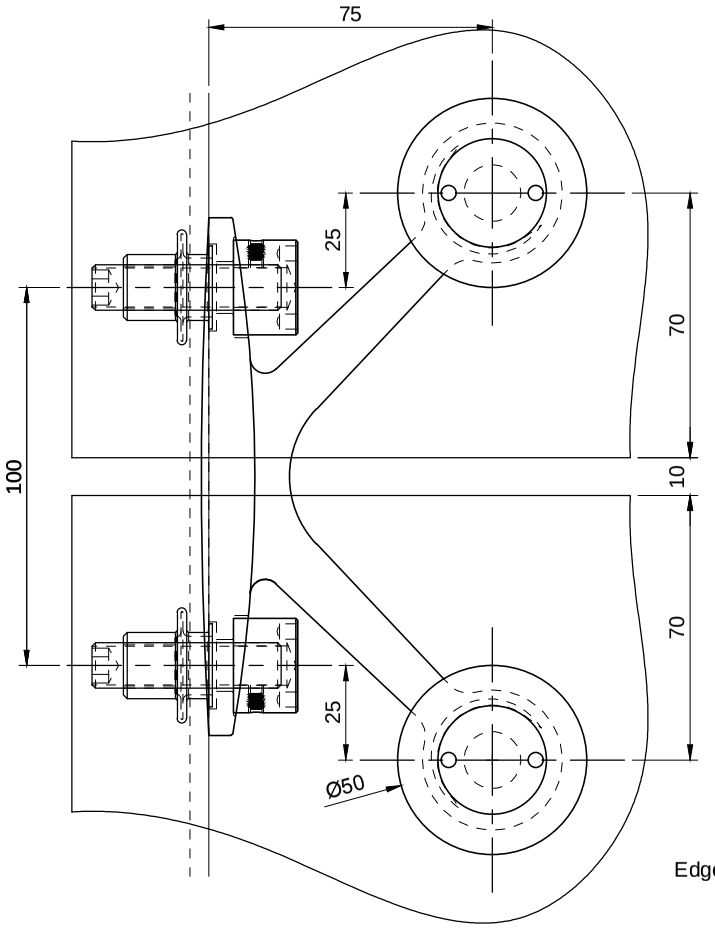
Information in this drawing is provided for reference only.

PART NUMBER **93190A622**

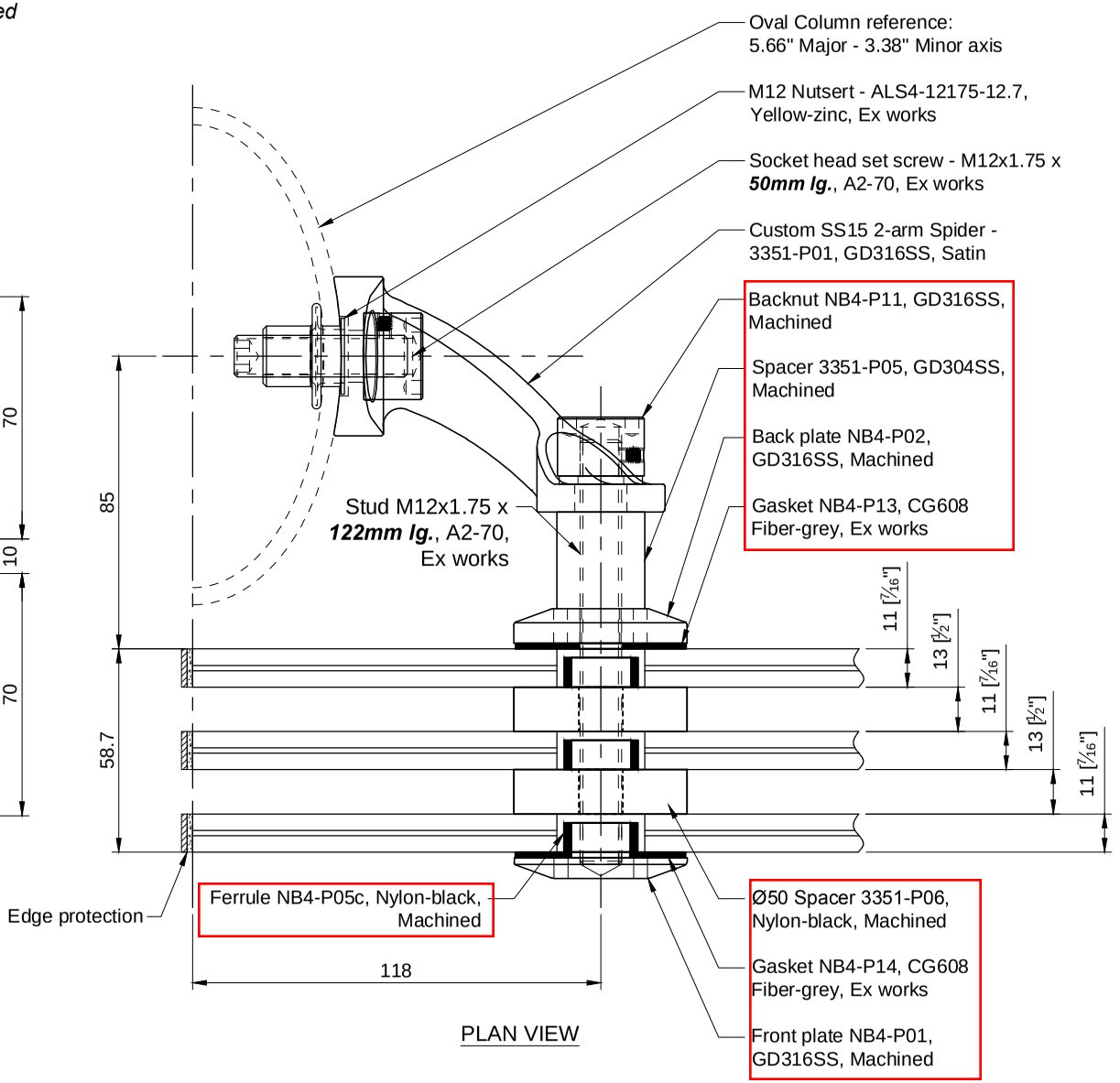
Stainless Steel
Cap Screw

GLASS MAKE UP - ART WALL ONLY: *All Glazing is Fully tempered*

- 1st Panel: 3/16” + 3/16” w 0.060” Ionoplast interlayer
- Art Panel: 3/16” + 3/16” w 0.035” Ionoplast interlayer
- 2nd Panel: 3/16” + 3/16” w 0.060” Ionoplast interlayer



FRONT VIEW



PLAN VIEW

Rev 1 - Ferrule updated to NB4-P05c and stud length modified - FEB 17-2017

Quantity: See PO.
Material: See above
Finish: See above

Hole in glass min. Ø22.2mm [Ø7/8"]
Dimensions millimeter unless otherwise shown
Apply loctite 243 to all threads during assembly
(To increase curing speed, please apply activator 7649)
Details are typical and are subject to change to meet project requirement

Third Angle Projection

Drawn	Drawn date
NY	DEC 09-2014
Approved	Approved date
-	-
Scale	Rev.
1:2	1
DWG No	
3351-A03	

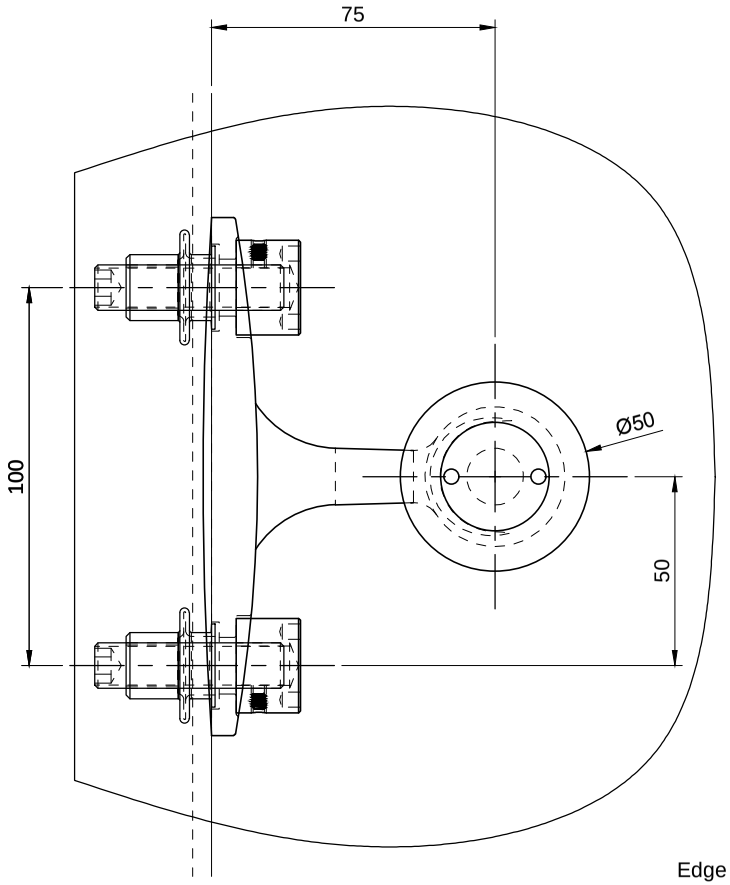
PUBLIC ARTWORK - BRT PROJECT - ASSEMBLY DRAWINGS
CUSTOM 1-ARM S15-1S SIDE MOUNTED SPIDER
WITH NON-ARTICULATING BOLT FOR 3 LAYERS OF GLASS

Windscreen

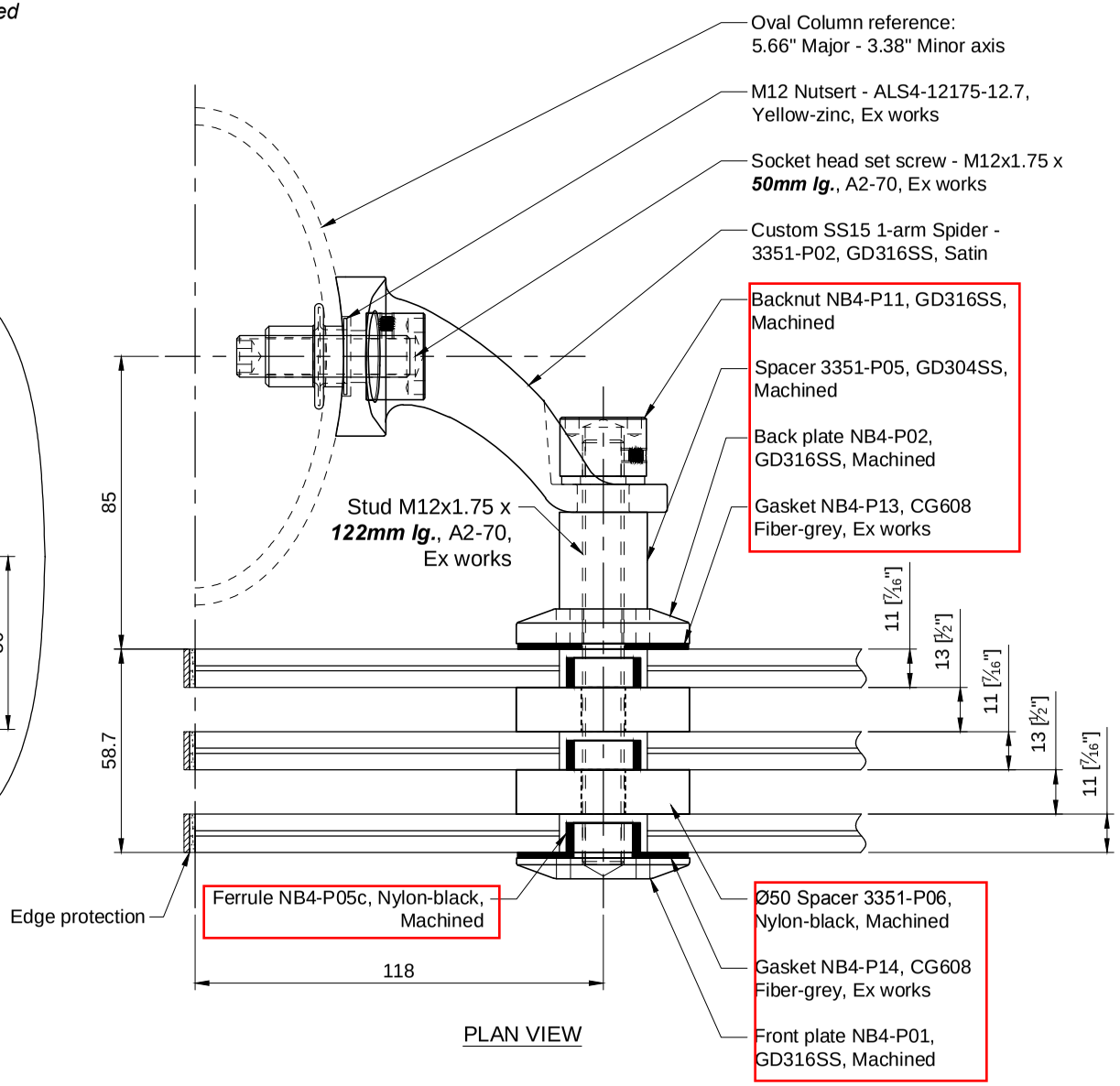
stella
[t] (604) 231 5892
[f] (604) 231 5893
[e] info@stellaglasshardware.com

GLASS MAKE UP - ART WALL ONLY: *All Glazing is Fully tempered*

- 1st Panel: 3/16” + 3/16” w 0.060” Ionoplast interlayer
- Art Panel: 3/16” + 3/16” w 0.035” Ionoplast interlayer
- 2nd Panel: 3/16” + 3/16” w 0.060” Ionoplast interlayer



FRONT VIEW



PLAN VIEW

Rev 1 - Ferrule updated to NB4-P05c and stud length modified - FEB 17-2017

Quantity: See PO.
Material: See above
Finish: See above

Hole in glass min. Ø22.2mm [Ø7/8"]
Dimensions millimeter unless otherwise shown
Apply loctite 243 to all threads during assembly
(To increase curing speed, please apply activator 7649)
Details are typical and are subject to change to meet project requirement

Third Angle Projection

Drawn	Drawn date
NY	DEC 09-2014
Approved	Approved date
-	-
Scale	Rev.
1:2	1
DWG No	
3351-A04	

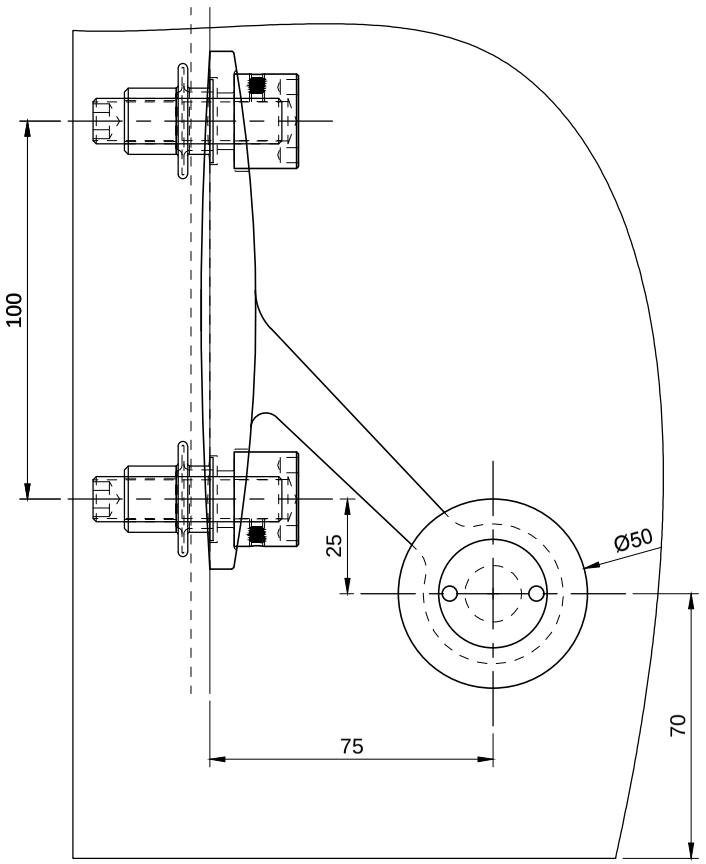
PUBLIC ARTWORK - BRT PROJECT - ASSEMBLY DRAWINGS
CUSTOM 1-ARM S15-1S SIDE MOUNTED SPIDER
WITH NON-ARTICULATING BOLT FOR 3 LAYERS OF GLASS

Windscreen

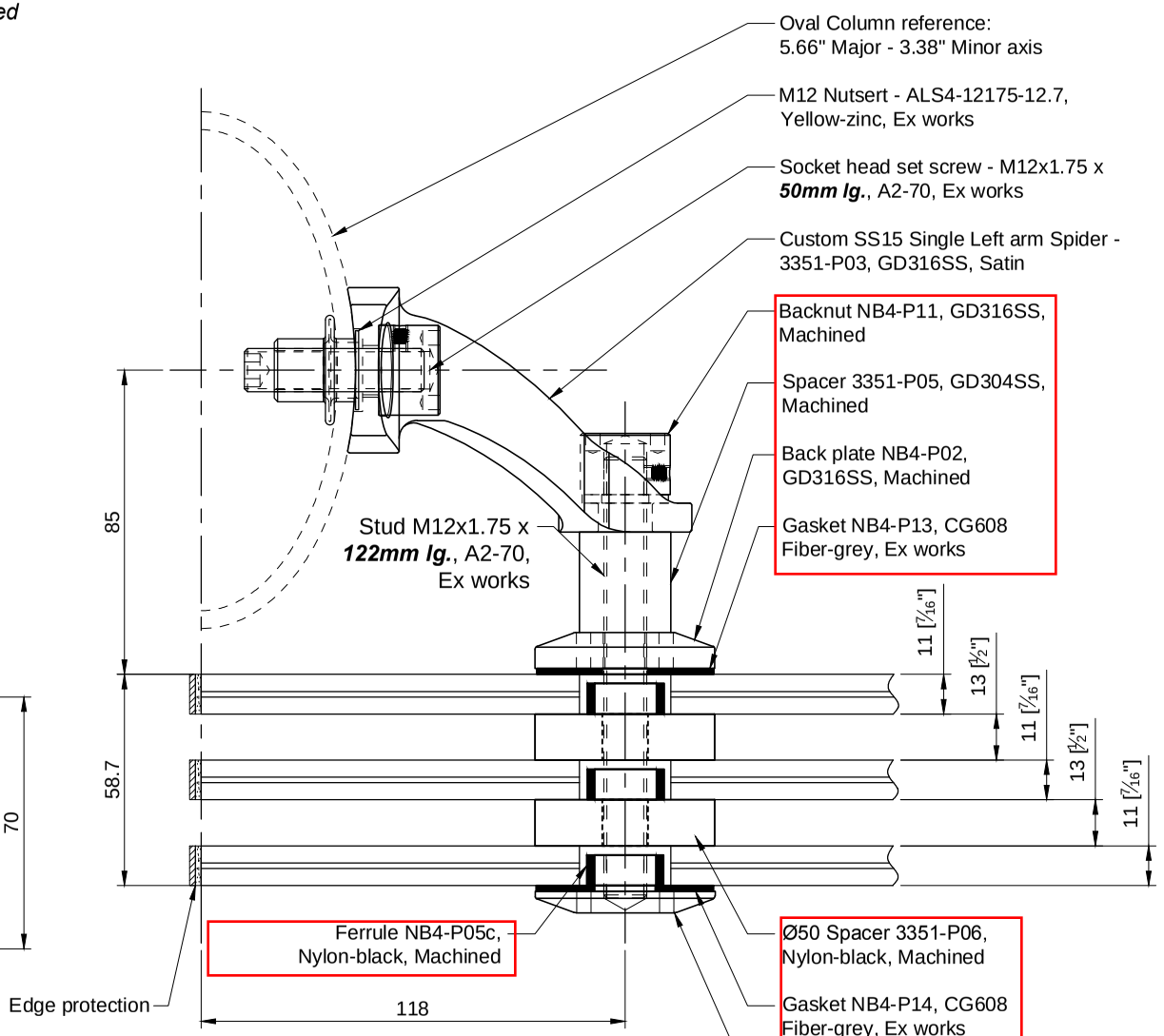
stella
[t] (604) 231 5892
[f] (604) 231 5893
[e] info@stellaglasshardware.com

GLASS MAKE UP - ART WALL ONLY: *All Glazing is Fully tempered*

- 1st Panel: 3/16” + 3/16” w 0.060” Ionoplast interlayer
- Art Panel: 3/16” + 3/16” w 0.035” Ionoplast interlayer
- 2nd Panel: 3/16” + 3/16” w 0.060” Ionoplast interlayer



FRONT VIEW



PLAN VIEW

Rev 1 - Ferrule updated to NB4-P05c and stud length modified - FEB 17-2017

Quantity: See PO.
Material: See above
Finish: See above

Hole in glass min. Ø22.2mm [Ø7/8"]
Dimensions millimeter unless otherwise shown
Apply loctite 243 to all threads during assembly
(To increase curing speed, please apply activator 7649)
Details are typical and are subject to change to meet project requirement

Third Angle Projection

Drawn	Drawn date
NY	DEC 09-2014
Approved	Approved date
-	-
Scale	Rev.
1:2	1
DWG No	
3351-A05	

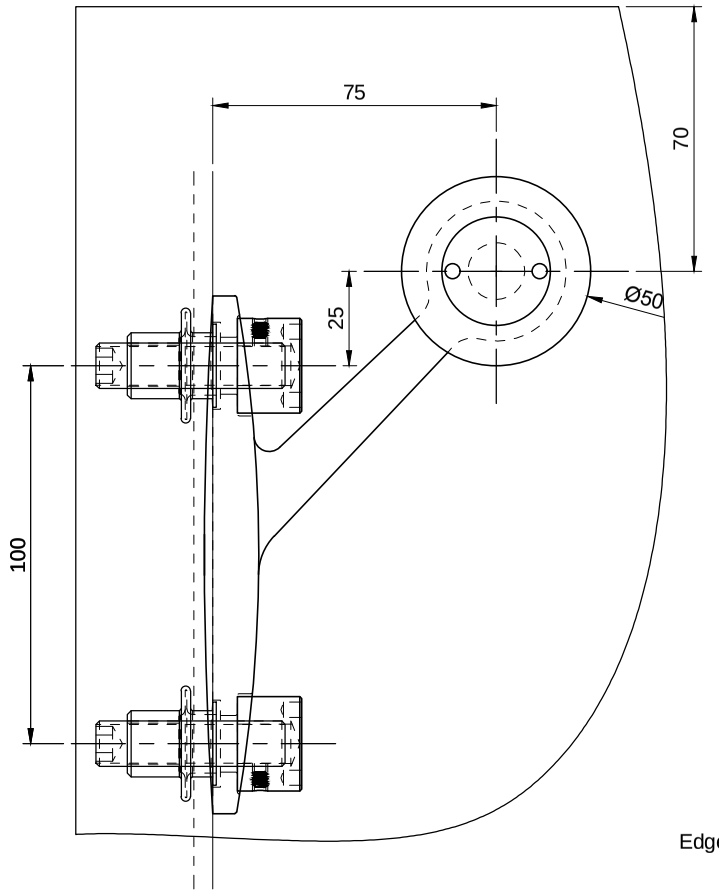
PUBLIC ARTWORK - BRT PROJECT - ASSEMBLY DRAWINGS
CUSTOM S15-1VSa-L SINGLE LEFT ARM "V" SHAPED SIDE MOUNTED SPIDER
WITH NON-ARTICULATING BOLT FOR 3 LAYERS OF GLASS

Windscreen

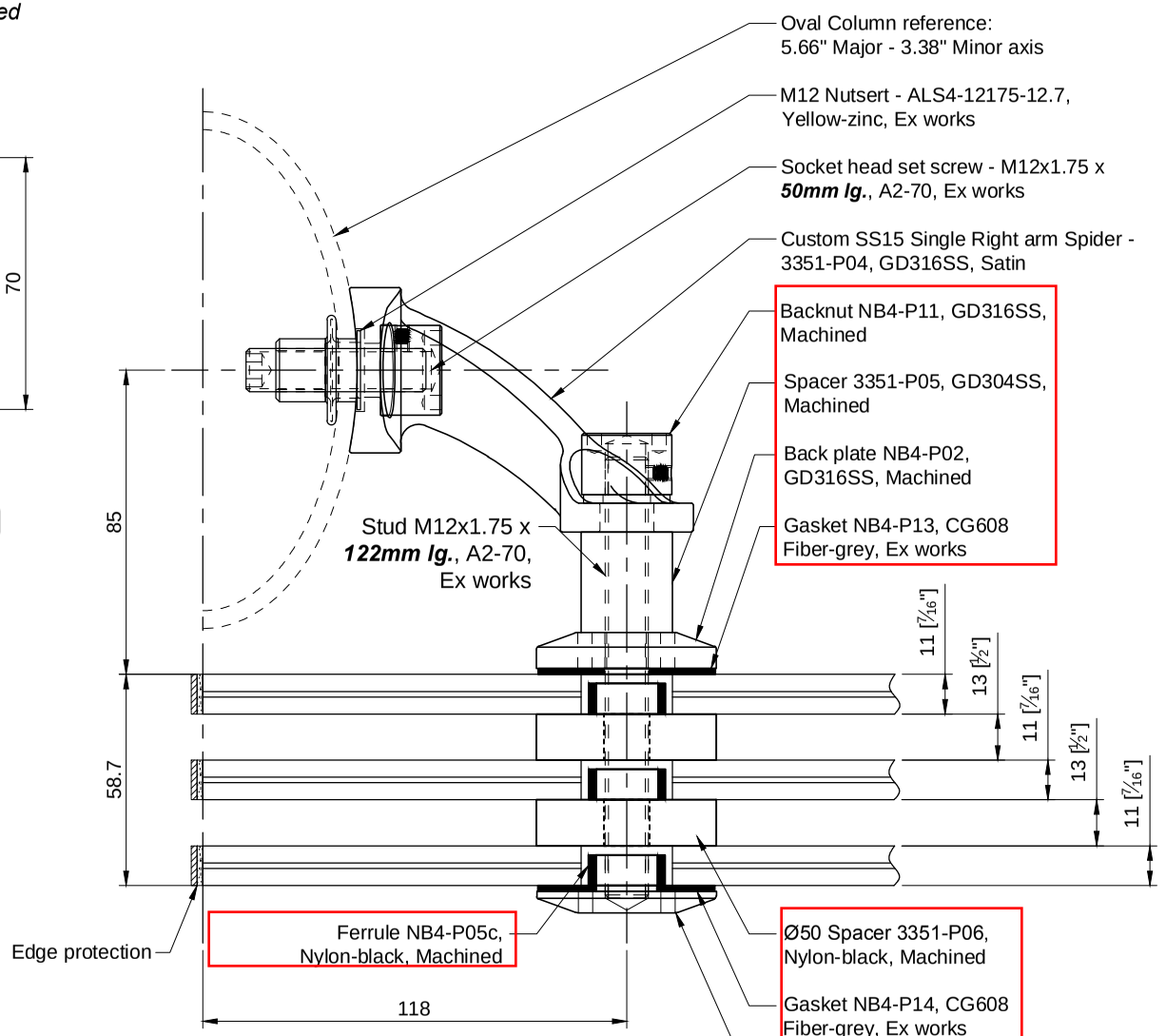
stella
[t] (604) 231 5892
[f] (604) 231 5893
[e] info@stellaglasshardware.com

GLASS MAKE UP - ART WALL ONLY: *All Glazing is Fully tempered*

- 1st Panel: 3/16” + 3/16” w 0.060” Ionoplast interlayer
- Art Panel: 3/16” + 3/16” w 0.035” Ionoplast interlayer
- 2nd Panel: 3/16” + 3/16” w 0.060” Ionoplast interlayer



FRONT VIEW



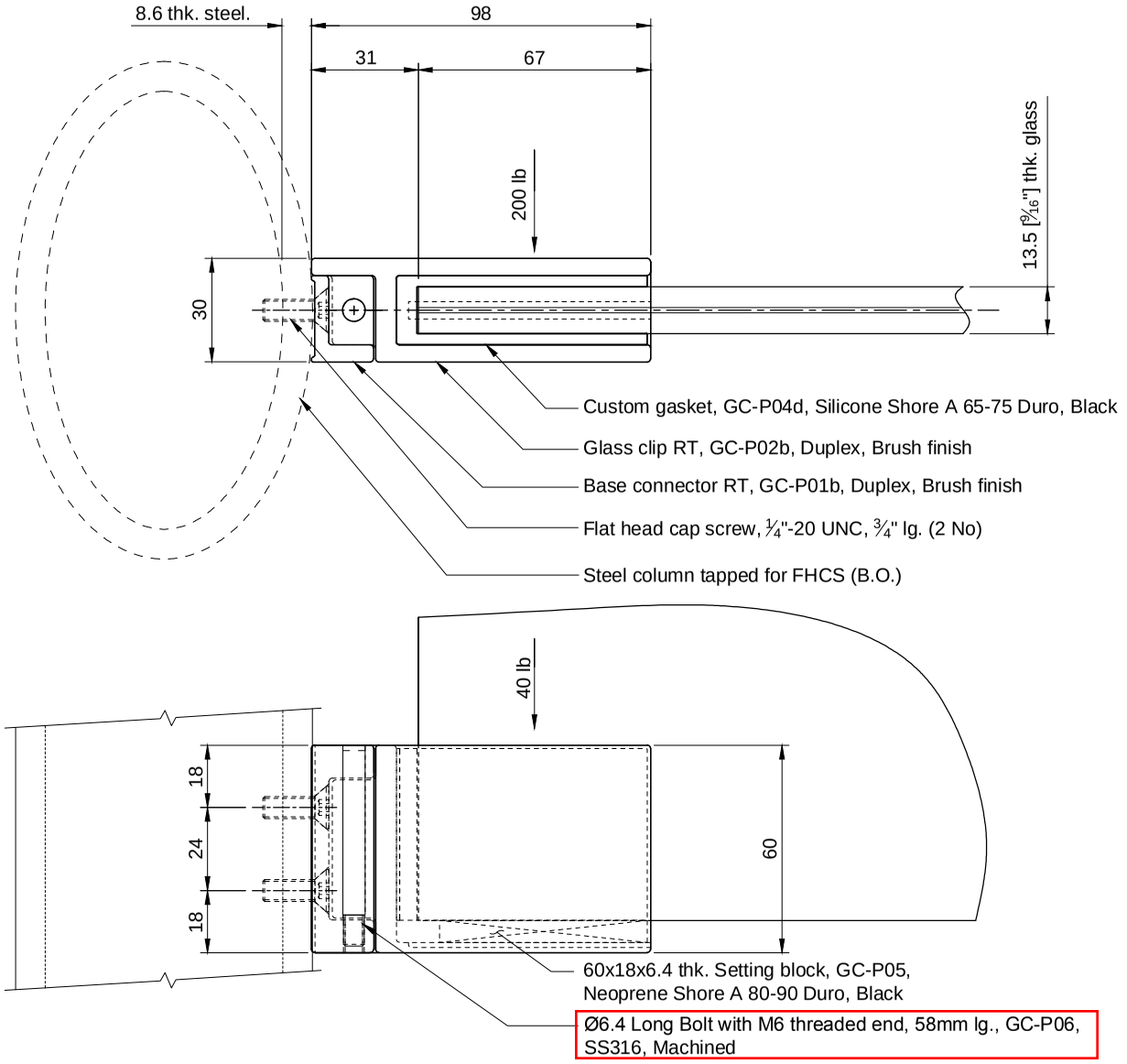
PLAN VIEW

Rev 1 - Ferrule updated to NB4-P05c and stud length modified - FEB 17-2017

Quantity: See PO. Material: See above Finish: See above	Hole in glass min. Ø22.2mm [Ø7/8"] Dimensions millimeter unless otherwise shown Apply loctite 243 to all threads during assembly (To increase curing speed, please apply activator 7649) Details are typical and are subject to change to meet project requirement	Third Angle Projection	Drawn: NY / Drawn date: DEC 09-2014 Approved: - / Approved date: - Scale: 1:2 / Rev.: 1 DWG No: 3351-A06	stella [t] (604) 231 5892 [f] (604) 231 5893 [e] info@stellaglasshardware.com

PUBLIC ARTWORK - BRT PROJECT - ASSEMBLY DRAWINGS
CUSTOM S15-1VSa-R SINGLE RIGHT ARM "V" SHAPED SIDE MOUNTED SPIDER
WITH NON-ARTICULATING BOLT FOR 3 LAYERS OF GLASS

Windscreen



Quantity: SEE P.O.
Material: See above
Finish: See above

Dimensions millimeter unless otherwise shown
Apply loctite 243 to all threads during assembly
(To increase curing speed, please apply activator 7649)
Details are typical and are subject to change to meet project requirement

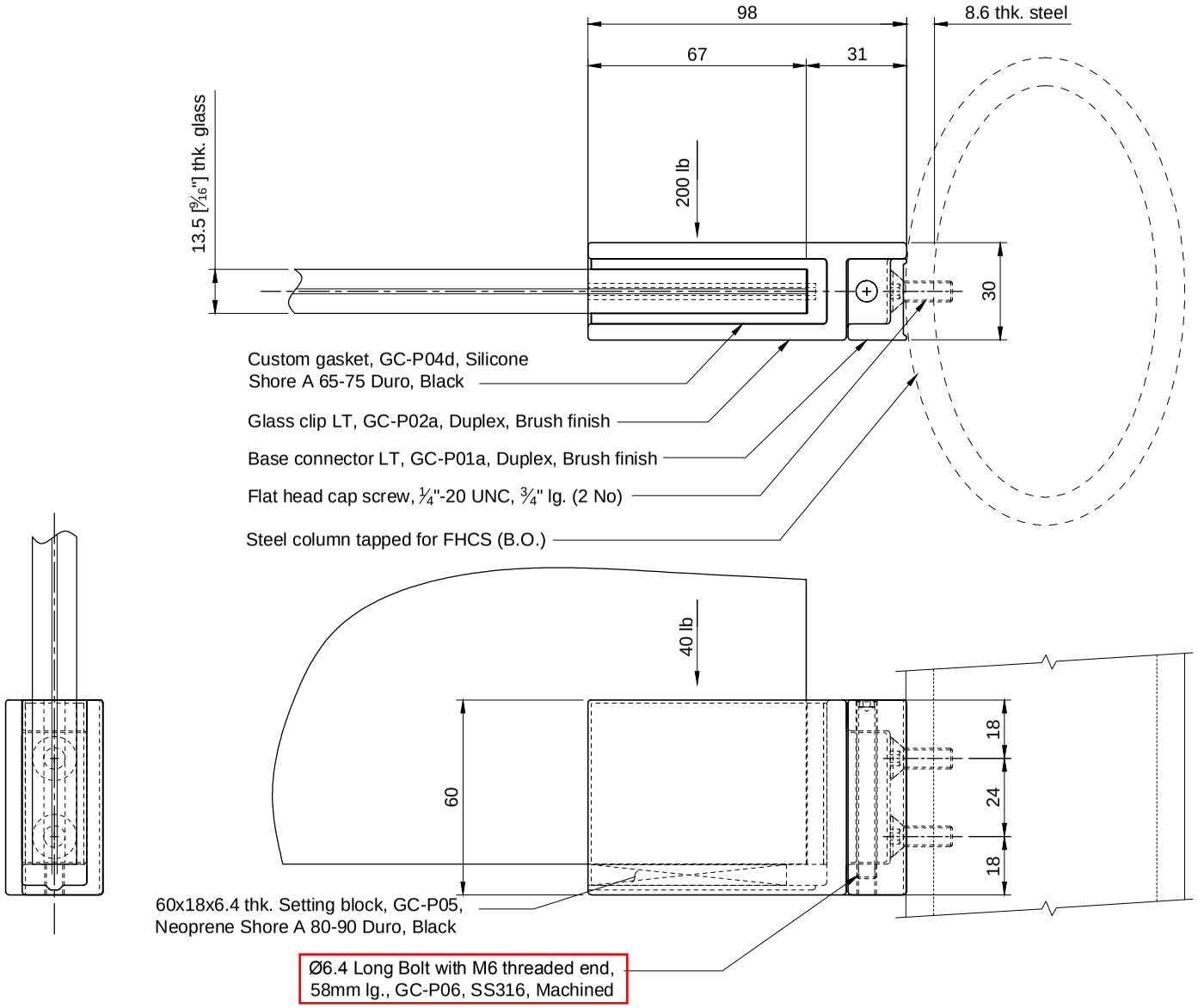
Third Angle Projection

Drawn	Drawn date
JT	FEB 03-15
Approved	Approved date
RL	FEB 05-15
Scale	Rev.
1:2	3
DWG No	
3351-A10	

PUBLIC ARTWORK - BRT PROJECT - ASSEMBLY DRAWINGS
DEAD LOAD GLASS CLIP
RIGHT HAND

stella
[t] (604) 231 5892
[f] (604) 231 5893
[e] info@stellaglasshardware.com

Windscreen



Quantity: SEE P.O.
Material: See above
Finish: See above

Dimensions millimeter unless otherwise shown
Apply loctite 243 to all threads during assembly
(To increase curing speed, please apply activator 7649)
Details are typical and are subject to change to meet project requirement

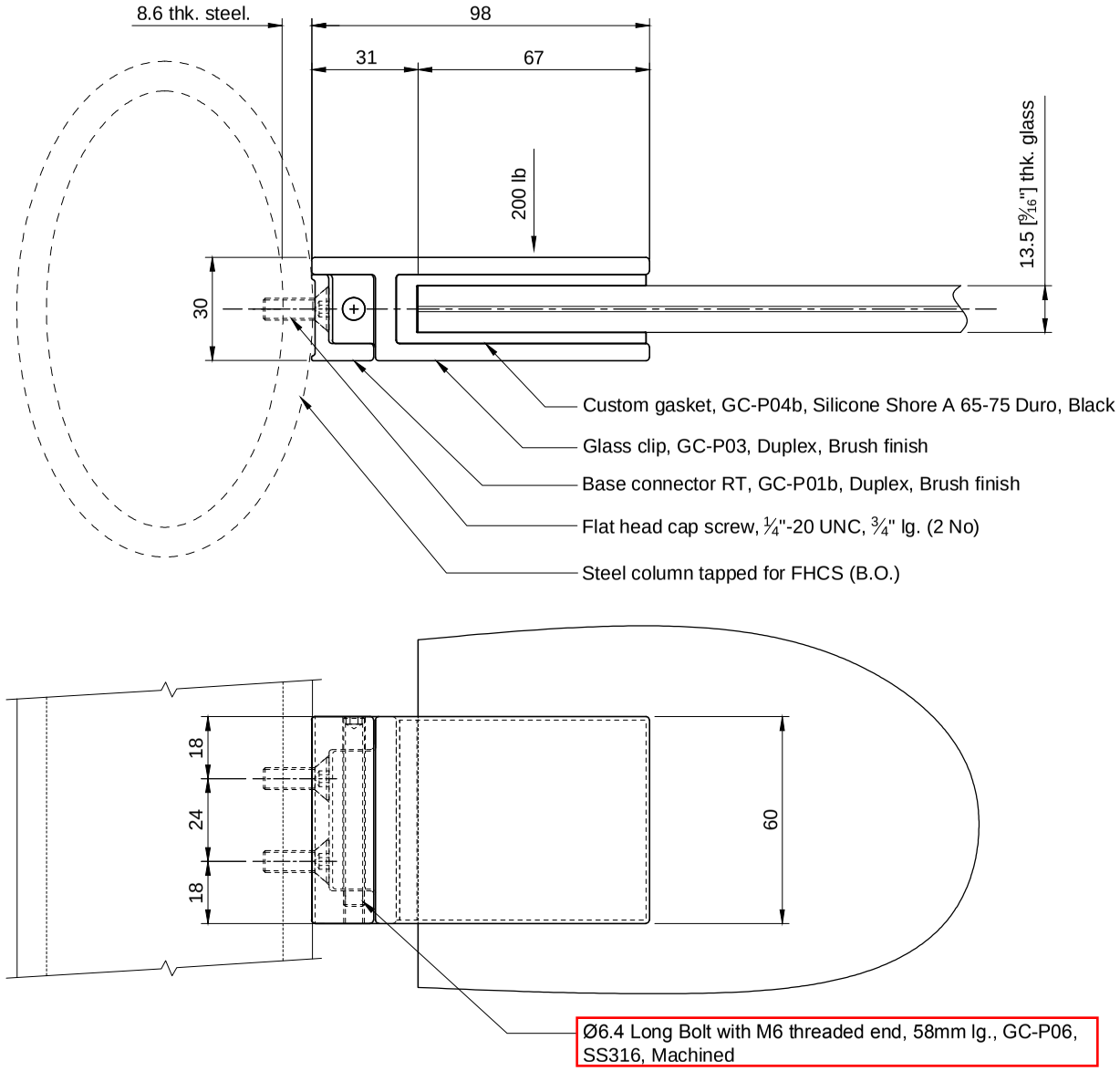
Third Angle Projection

Drawn	Drawn date
JT	FEB 03-15
Approved	Approved date
RL	FEB 05-15
Scale	Rev.
1:2	3
DWG No	
3351-A11	

PUBLIC ARTWORK - BRT PROJECT - ASSEMBLY DRAWINGS
DEAD LOAD GLASS CLIP
LEFT HAND

stella
[t] (604) 231 5892
[f] (604) 231 5893
[e] info@stellaglasshardware.com

Windscreen



Quantity: SEE P.O.
Material: See above
Finish: See above

Hole in glass min. Ø22.2mm [Ø7/8"]
Dimensions millimeter unless otherwise shown
Apply loctite 243 to all threads during assembly
(To increase curing speed, please apply activator 7649)
Details are typical and are subject to change to meet project requirement

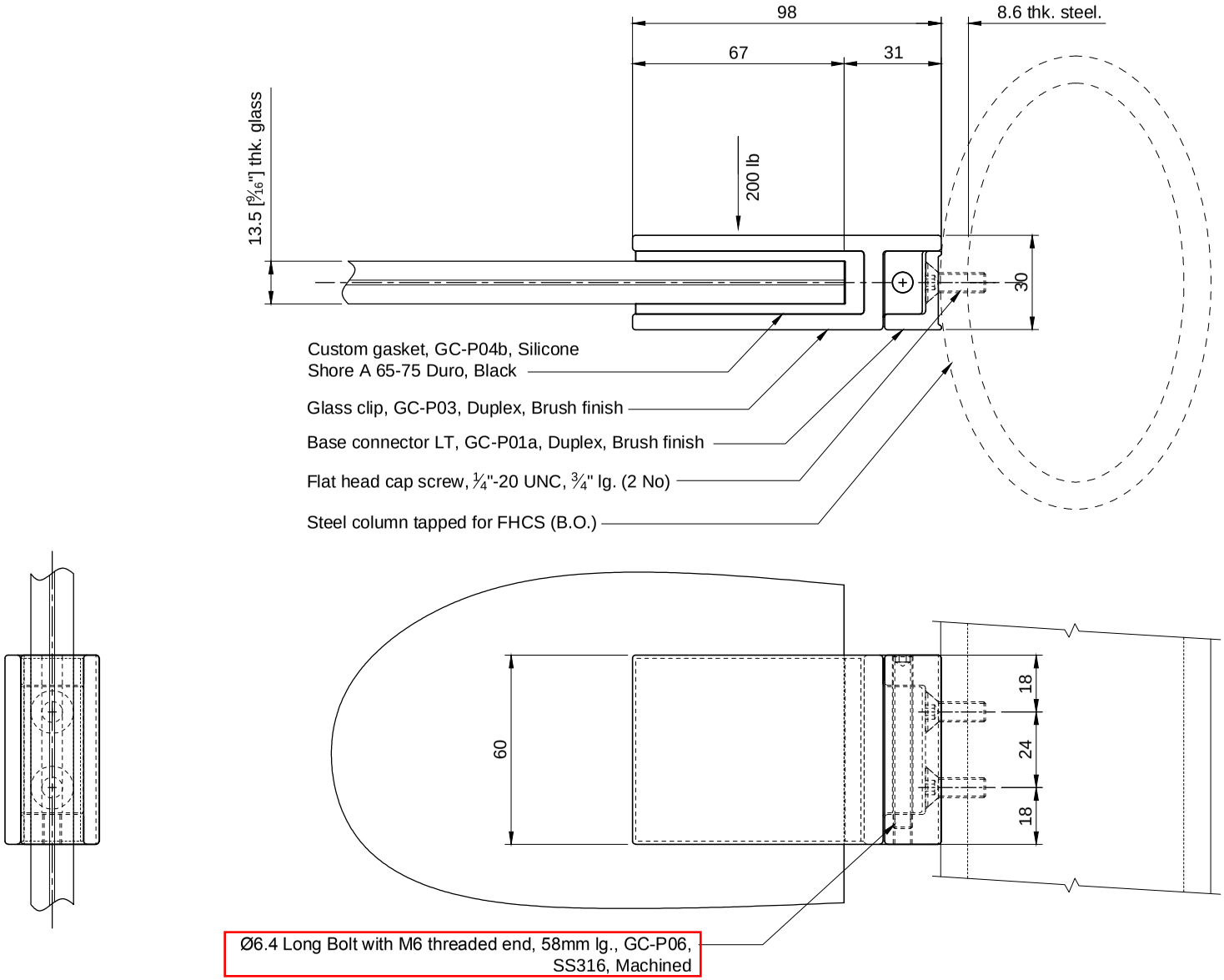
Third Angle Projection

Drawn	Drawn date
JT	FEB 03-15
Approved	Approved date
RL	FEB 05-15
Scale	Rev.
1:2	3
DWG No	
3351-A12	

PUBLIC ARTWORK - BRT PROJECT - ASSEMBLY DRAWINGS
WIND LOAD GLASS CLIP
RIGHT HAND

stella
[t] (604) 231 5892
[f] (604) 231 5893
[e] info@stellaglasshardware.com

Windscreen



Quantity: SEE P.O.
Material: See above
Finish: See above

Dimensions millimeter unless otherwise shown
Apply loctite 243 to all threads during assembly
(To increase curing speed, please apply activator 7649)
Details are typical and are subject to change to meet project requirement

Third Angle Projection

Drawn	Drawn date
JH	MAR 12-2015
Approved	Approved date
JT	MAR 12-2015
Scale	Rev.
1:2	1
DWG No	
3351-A13	

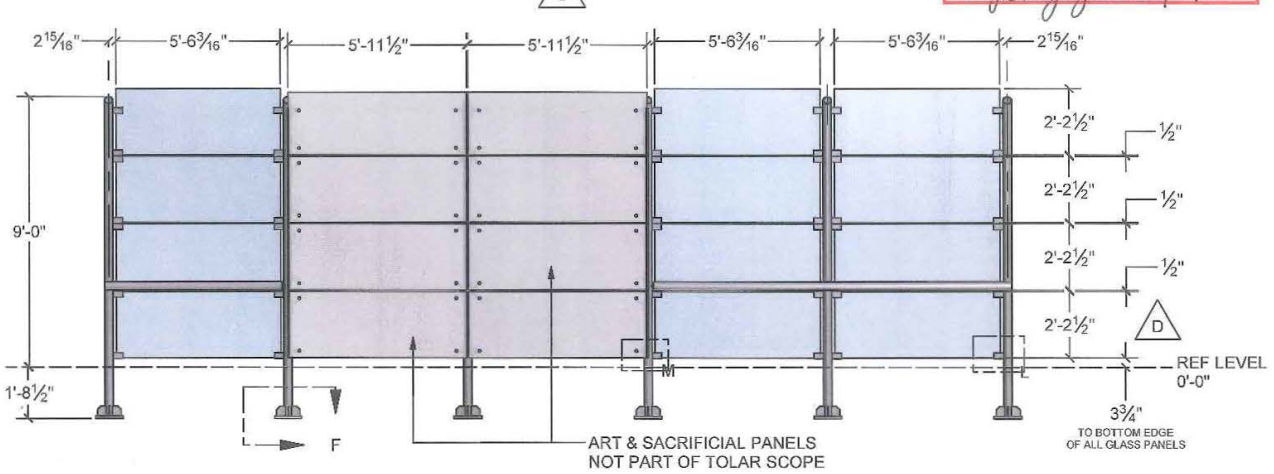
PUBLIC ARTWORK - BRT PROJECT - ASSEMBLY DRAWINGS
WIND LOAD GLASS CLIP
LEFT HAND

stella
[t] (604) 231 5892
[f] (604) 231 5893
[e] info@stellaglasshardware.com

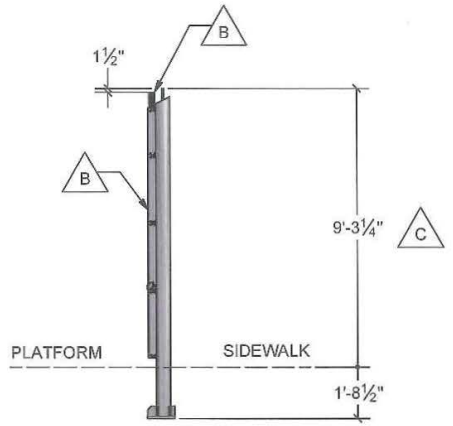
Windscreen

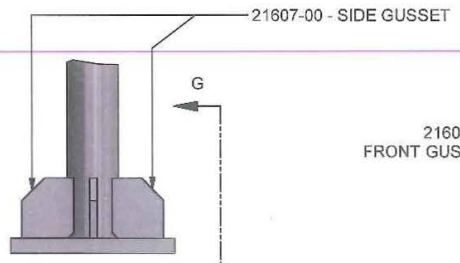
Santa Clara Valley Transportation Authority
NO EXCEPTIONS TAKEN
MAKE CORRECTIONS NOTED
AMEND AND RESUBMIT
Any action shown above is subject to the terms of the contract and does not relieve the contractor of any of its obligations under the contract, including design and detailing.
Contract No. C83B
By: GDeguzman Date: 2/23/15

REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
ALL	A	SMTTL 187	6/25/2014	
ALL	B	CN 24	11/6/2014	
ALL	C	183A	12/4/2014	
B2,3	D	183B	12/19/2014	

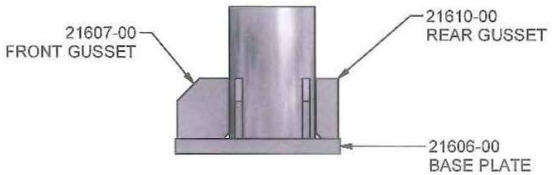


WIND SCREEN ELEVATION
SCALE 1/4"=1'

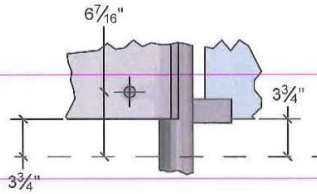




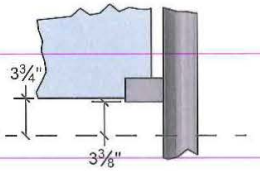
DETAIL F
SCALE 1 1/2" = 1'-0"



VIEW G-G
SCALE 1 1/2" = 1'-0"



DETAIL M
SCALE 1" = 1'-0"

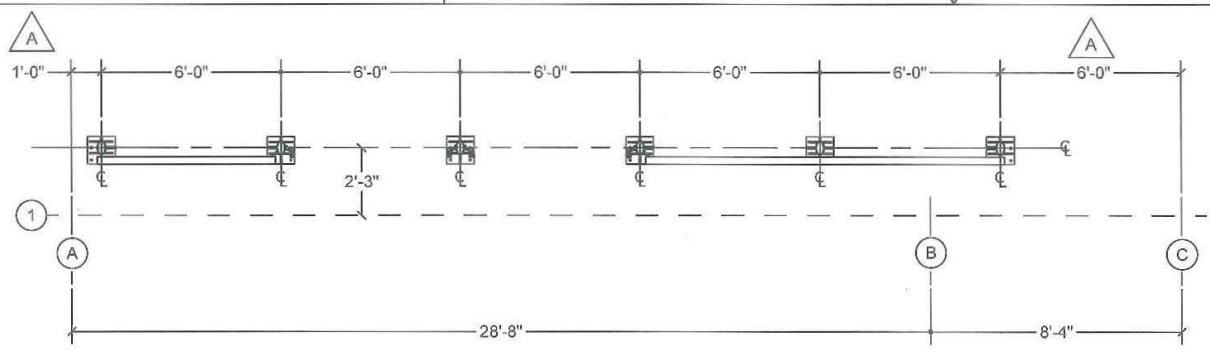


DETAIL L
SCALE 1" = 1'-0"

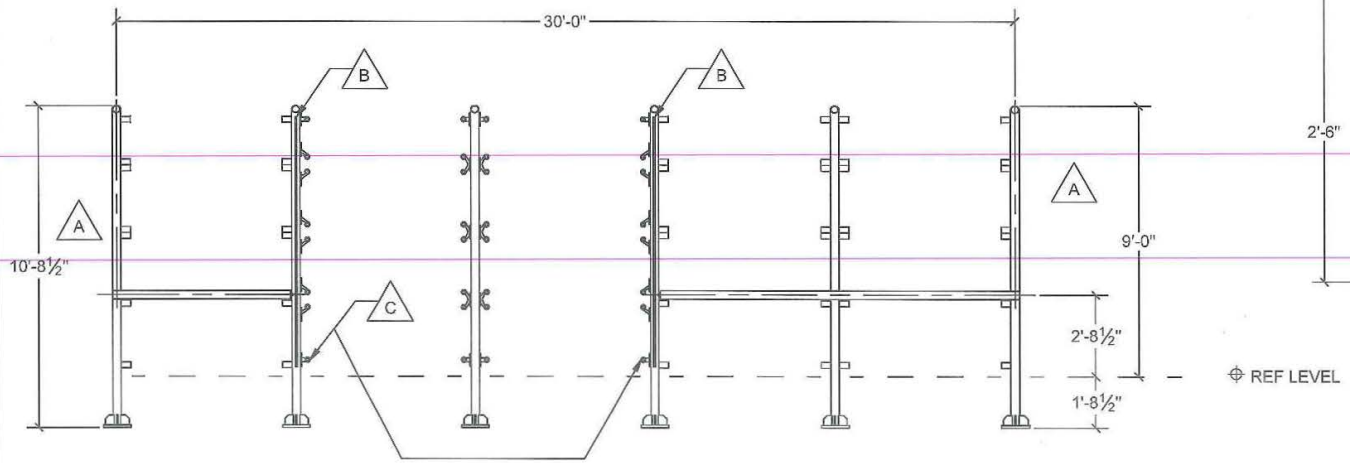
TOLAR	Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879		
DESCRIPTION	WIND SCREEN		
CUSTOMER/VENDOR	SANTA CLARA - VTA		SHEET NO. 1 OF 6
SIZE B	MATL. SS 316L - MISC	DWG NO. 21611-00	REV. NO. D
SCALE AS NOTED	DATE 4/16/2014	DRAWN BY: cgarcia	

T:\Engineering\CARLOS GARCIA\VTA\21611-00.ldw

Windscreen Assembly

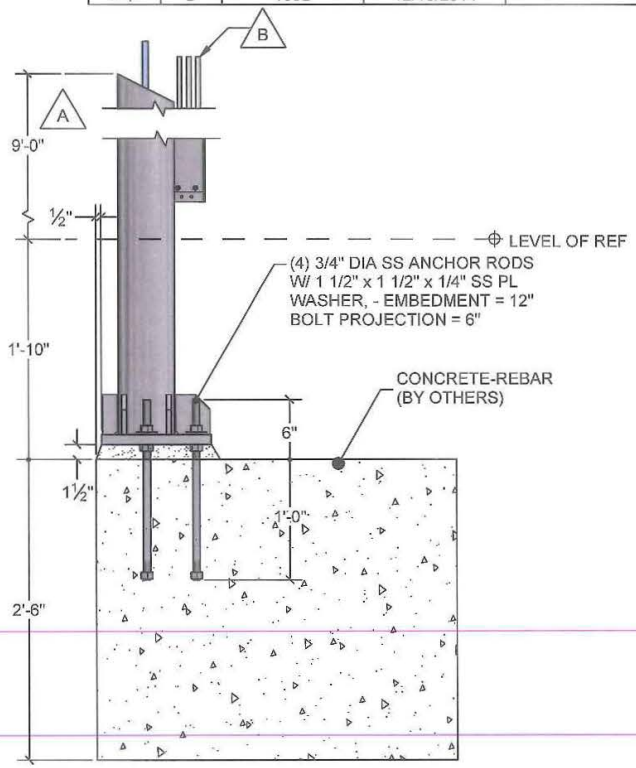


WIND SCREEN FOUNDATION LAYOUT
SCALE 1/4"=1'



WIND SCREEN STRUCTURE - ELEVATION
SCALE 1/4"=1'

REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
ALL	A	SMTTL 187	6/25/2014	
ALL	B	CN 24	11/6/2014	
ALL	C	183A	12/4/2014	
B2,3	D	183B	12/19/2014	



WIND SCREEN FOUNDATION
SCALE 1"=1'

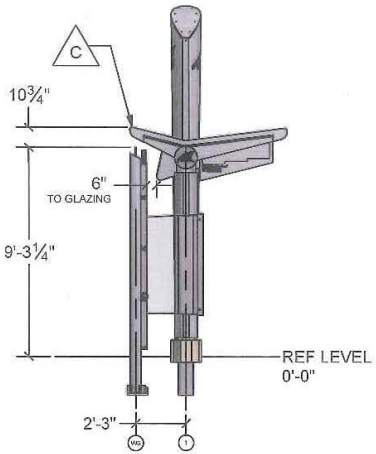
TOLAR Tolar Manufacturing Company, Inc
258 Mariah Circle, Corona CA. 92879

DESCRIPTION: WIND SCREEN			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 2 OF 6
SIZE: B	MATL: SS 316L - MISC	DWG NO.: 21611-00	REV. NO.: D
SCALE: AS NOTED	DATE: 4/16/2014	DRAWN BY: cgarcia	

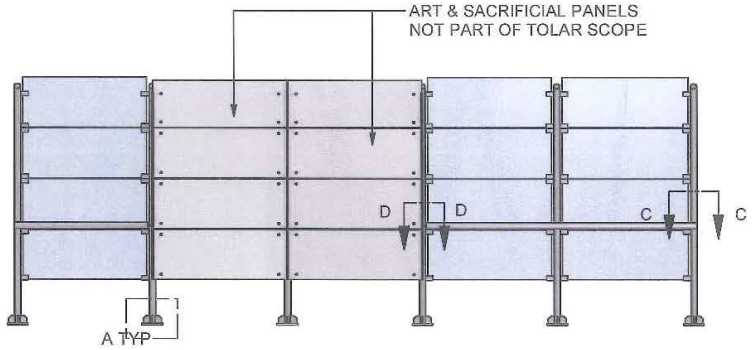
T:\Engineering\CARLOS GARCIA\VTA\21611-00.idw

Windscreen Assembly

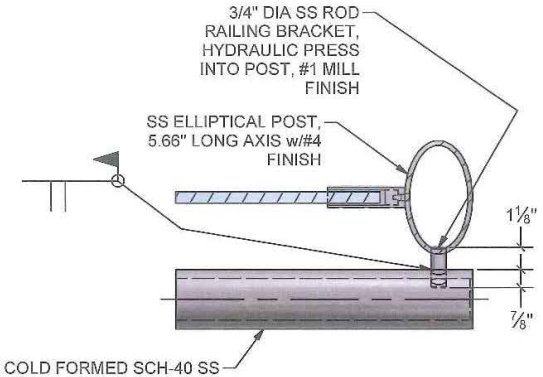
REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
ALL	A	SMTTL 187	6/25/2014	
ALL	B	CN 24	11/6/2014	
ALL	C	183A	12/4/2014	
B2,3	D	183B	12/19/2014	



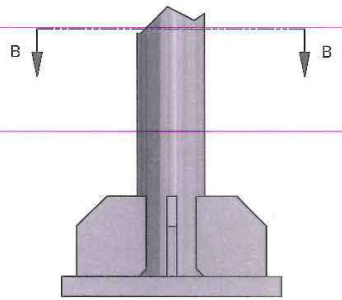
SIDE ELEVATION
SCALE 3/16"=1'



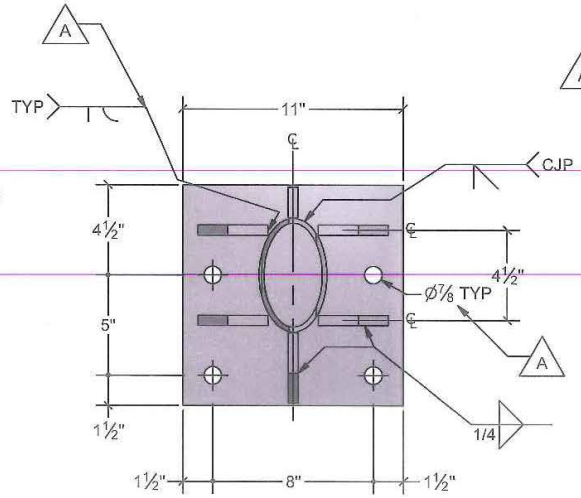
WIND SCREEN - ELEVATION
SCALE 3/16"=1'



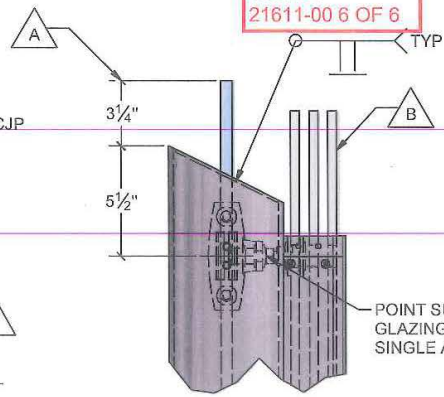
SECTION C-C
SCALE 2"=1'



DETAIL A
SCALE 2" = 1'-0"

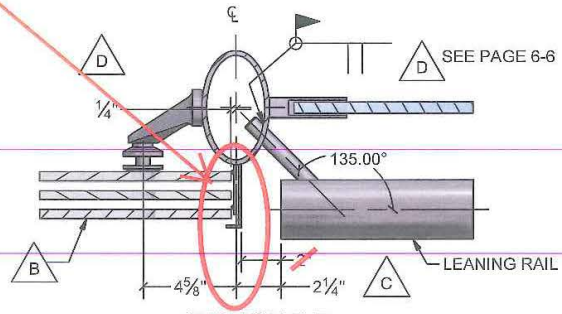


VIEW B-B
SCALE 2" = 1'-0"



DETAIL E
SCALE 2"=1'

SEE NOTES ON FOLLOWING SHEET: 21611-00 6 OF 6



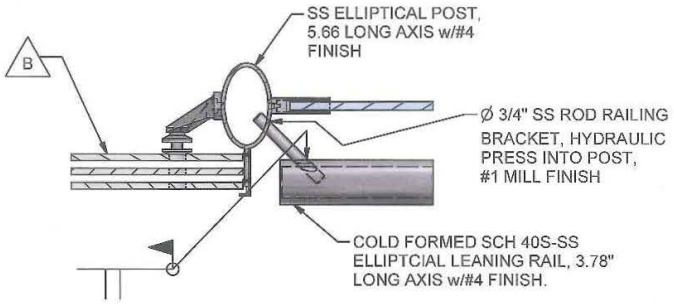
SECTION D-D
SCALE 2"=1'

TOLAR	Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879		
DESCRIPTION	WIND SCREEN		
CUSTOMER/VENDOR	SANTA CLARA - VTA		SHEET NO. 3 OF 6
SIZE B	MATL. SS 316L - MISC	DWG NO. 21611-00	REV. NO. D
SCALE AS NOTED	DATE 4/16/2014	DRAWN BY: cgarcia	

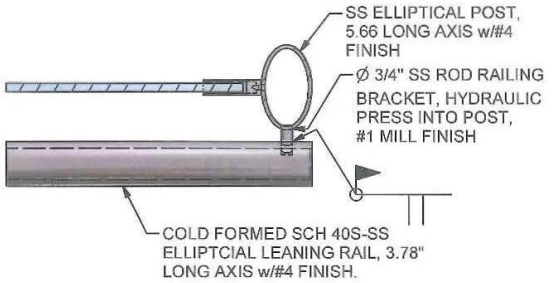
T:\Engineering\CARLOS GARCIA\VTA\21611-00.idw

Windscreen Assembly

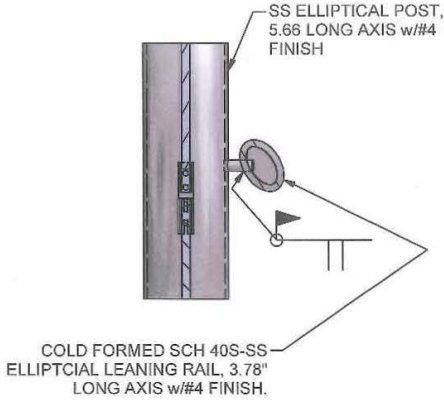
REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
ALL	A	SMTTL 187	6/25/2014	
ALL	B	CN 24	11/6/2014	
ALL	C	183A	12/4/2014	
B2,3	D	183B	12/19/2014	



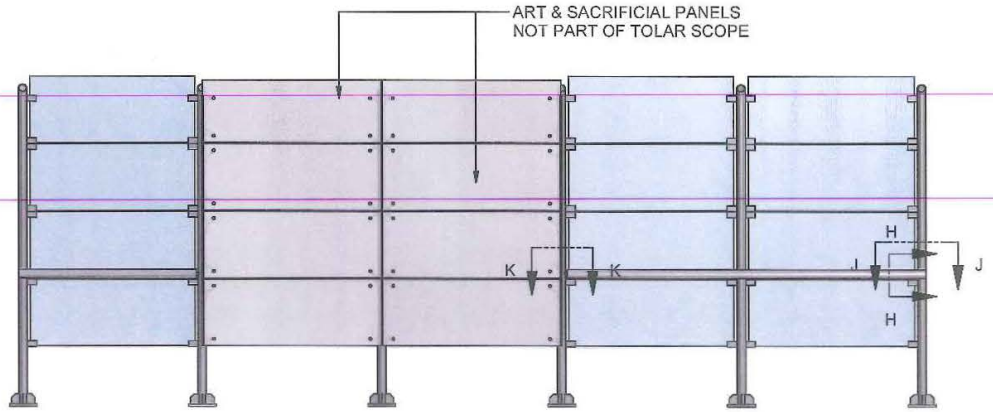
SECTION K-K
SCALE 1 1/2"=1'



SECTION J-J
SCALE 1 1/2"=1'



SECTION H-H
SCALE 1 1/2"=1'

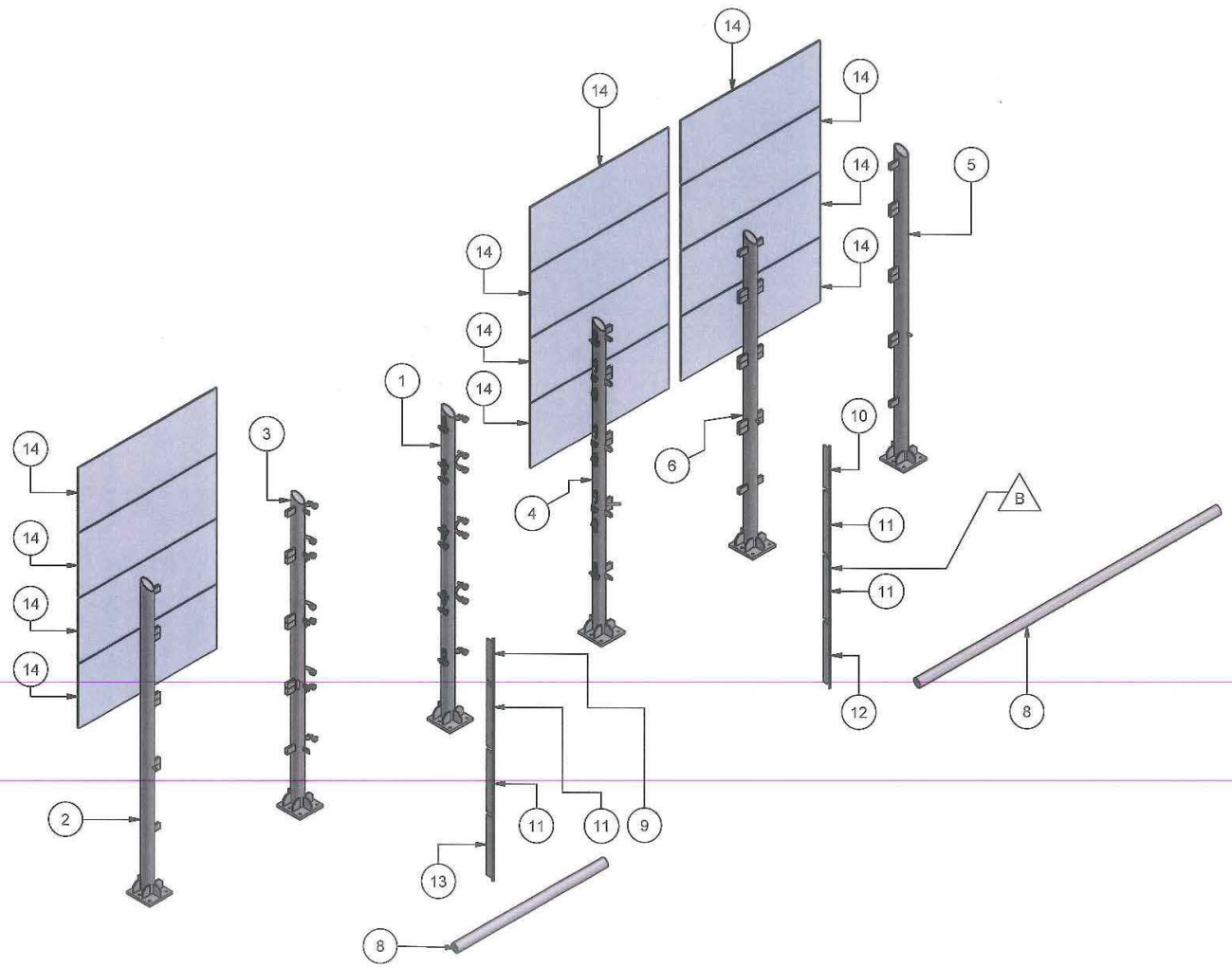


WIND SCREEN FRONT ELEVATION
SCALE 1/4"=1'

TOLAR	Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879		
DESCRIPTION	WIND SCREEN		
CUSTOMER/VENDOR	SANTA CLARA - VTA		SHEET NO. 4 OF 6
SIZE B	MATL. SS 316L - MISC	DWG NO. 21611-00	REV. NO. D
SCALE AS NOTED	DATE 4/16/2014	DRAWN BY: cgarcia	

T:\Engineering\CARLOS GARCIA\VTA\21611-00.idw

Windscreen Assembly



WINDSCREEN ISO VIEW - COMPONENTS
SCALE 5/16"=1'

REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
ALL	A	SMTTL 187	6/25/2014	
ALL	B	CN 24	11/6/2014	
ALL	C	183A	12/4/2014	
B2,3	D	183B	12/19/2014	

PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	21609-00	WS - COLUMN #3 ASSY
2	1	21609-05	WS - COLUMN #1 ASSY
3	1	21609-02	WS - COLUMN #2 ASSY
4	1	21609-04	WS - COLUMN #4 ASSY
5	1	21609-03	WS - COLUMN #6 ASSY
6	1	21609-01	WS - COLUMN #5 ASSY
8	1	21808-01	HANDRAIL ASSEMBLY
9	1	23591-00	WS - END COVER ASSY (A)
10	1	23591-01	WS - END COVER ASSY (B)
11	4	23595-00	WS - END COVER ASSY (C)
12	1	23599-00	WS - END COVER ASSY (E)
13	1	23599-01	WS - END COVER ASSY (D)
14	12	21618-00	WS - GLAZING (A)

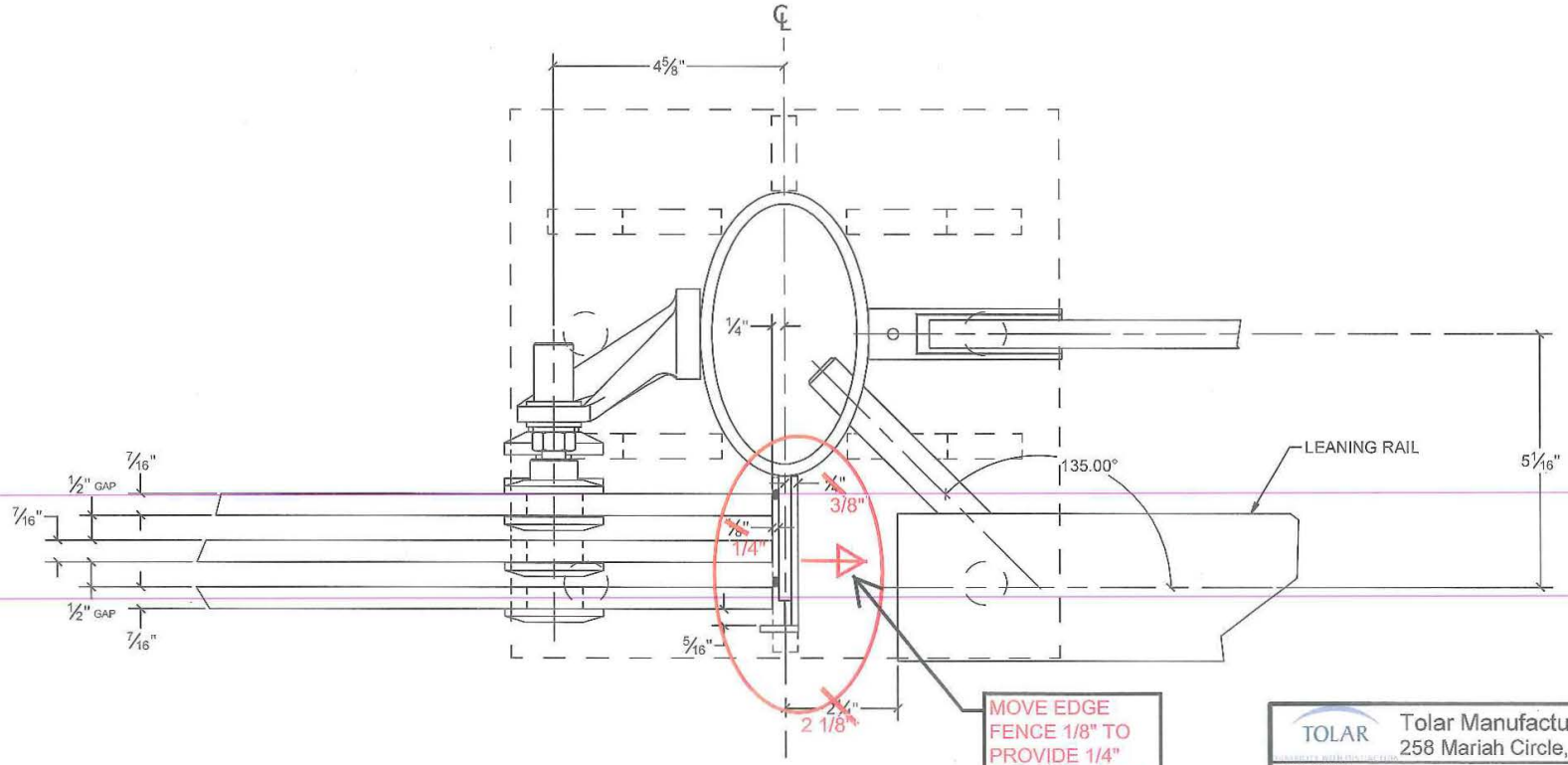
TOLAR
Tolar Manufacturing Company, Inc
258 Mariah Circle, Corona CA. 92879

DESCRIPTION	WIND SCREEN		
CUSTOMER/VENDOR	SANTA CLARA - VTA		SHEET NO. 5 OF 6
SIZE B	MATL. SS 316L - MISC 1/4"-1/4" w/CLEAR I-LAYER	DWG NO. 21611-00	REV. NO. D
SCALE AS NOTED	DATE 4/16/2014	DRAWN BY: cgarcia	

T:\Engineering\CARLOS GARCIA\VTA\21611-00.idw

Windscreen Assembly

WIND SCREEN ASSEMBLY - PLAN VIEW
SCALE 1/2"=1'



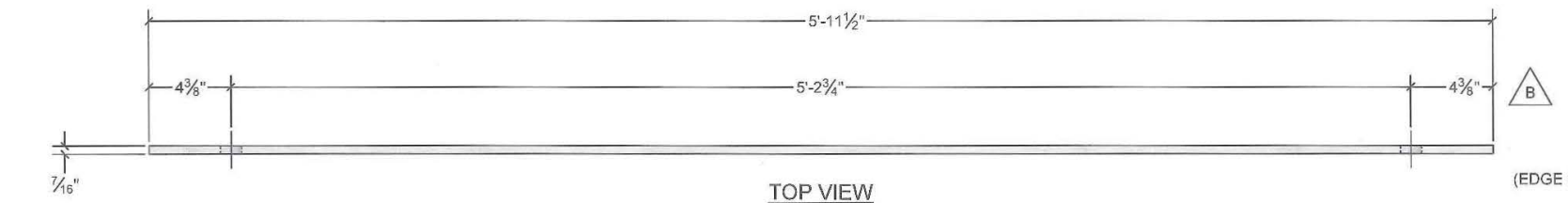
DETAIL DD
SCALE 5" = 1'-0"

TOLAR	Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879
DESCRIPTION	WIND SCREEN
CUSTOMER/VENDOR	SANTA CLARA - VTA
SHEET NO.	6 OF 6
SIZE	B
MATL.	SS 316L - MISC
DWG NO.	21611-00
REV. NO.	D
SCALE	AS NOTED
DATE	4/16/2014
DRAWN BY:	cgarcia

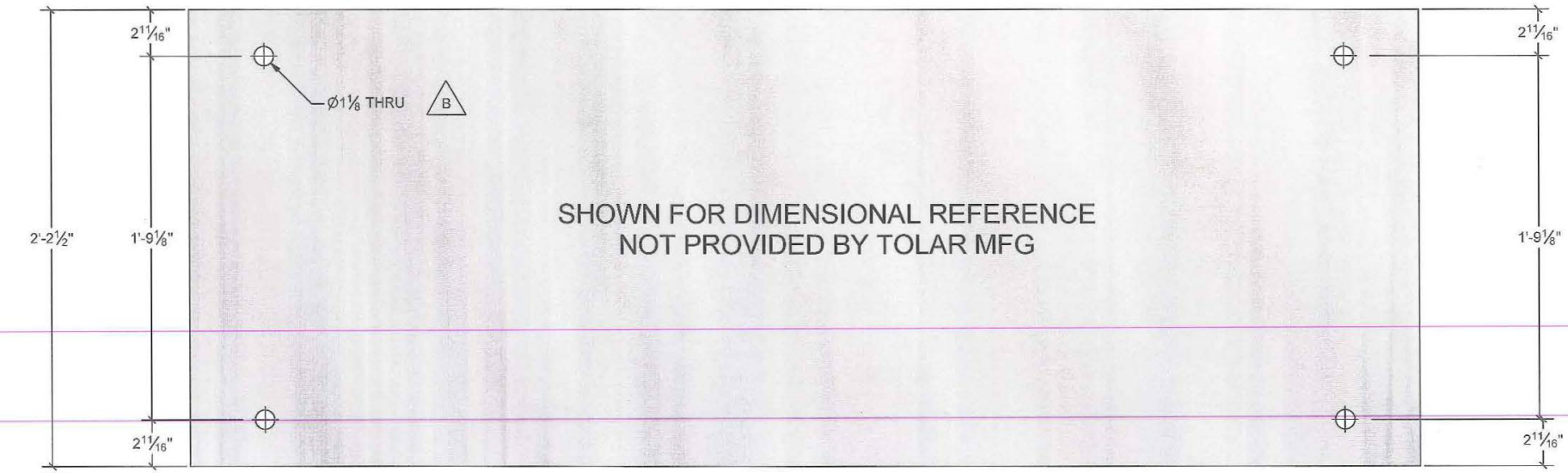
T:\Engineering\CARLOS GARCIA\VTA\21611-00.dw

Windscreen Assembly

REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
ALL	A	183A	12/8/2014	
	B	MEMO 69	2/2/2015	



TOP VIEW
SCALE 2"=1'



ART SECTION GLAZING - ELEVATION
SCALE 2"=1'

NOTES:
1. ALL WINDSCREEN GLAZING SHALL BE:
FT LAM TYPE, 3/16" + 0.060" PVB INTERLAYER + 3/16" B
NO METAL EDGE PROTECTION

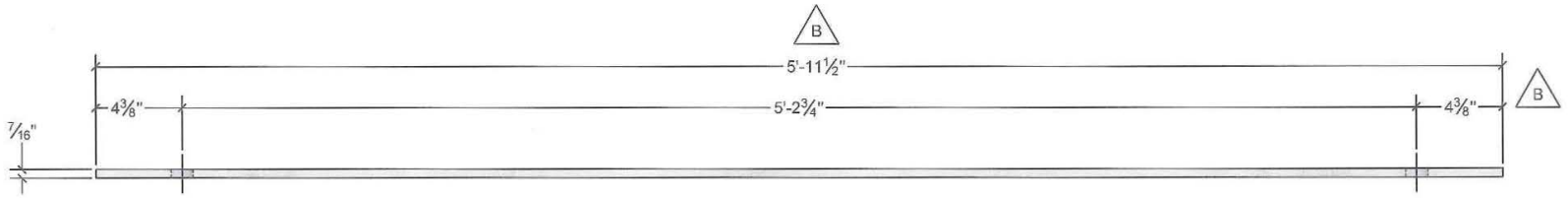
TOLAR Tolar Manufacturing Company, Inc
258 Mariah Circle, Corona CA. 92879

DESCRIPTION: WS - ART SECTION - GLAZING (A)			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL.: 3/16"+3/16"+IO LYR	DWG NO.: 21617-00	REV. NO.: B
SCALE: AS NOTED	DATE: 5/9/2014	DRAWN BY: cgarcia	

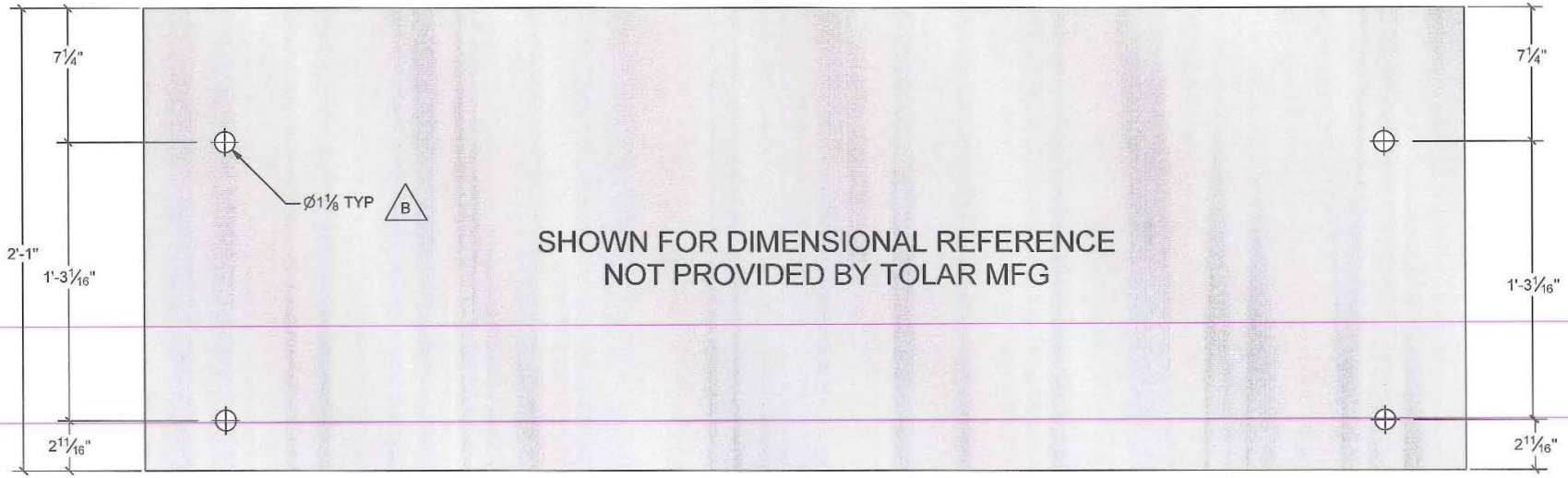
T:\Engineering\CARLOS GARCIA\VTA\21617-00.idw

Windscreen Assembly

REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
ALL	A	183A	12/8/2014	
	B	MEMO 069	2/2/2015	



TOP VIEW
SCALE 2"=1'



ART SECTION GLAZING - ELEVATION
SCALE 2"=1'

NOTES:
1. ALL WINDSCREEN GLAZING SHALL BE:
FT LAM TYPE, 3/16" + 0.060" PVB INTERLAYER + 3/16"
NO METAL EDGE PROTECTION

B

TOLAR Tolar Manufacturing Company, Inc
258 Mariah Circle, Corona CA. 92879

DESCRIPTION: WS - ART SECTION - GLAZING (B)			
CUSTOMER/VENDOR: SANTA CLARA - VTA			SHEET NO.: 1 OF 1
SIZE: B	MATL: 3/16"+3/16"+IO LYR	DWG NO.: 21619-00	REV. NO.: B
SCALE: AS NOTED	DATE: 5/9/2014	DRAWN BY: cgarcia	

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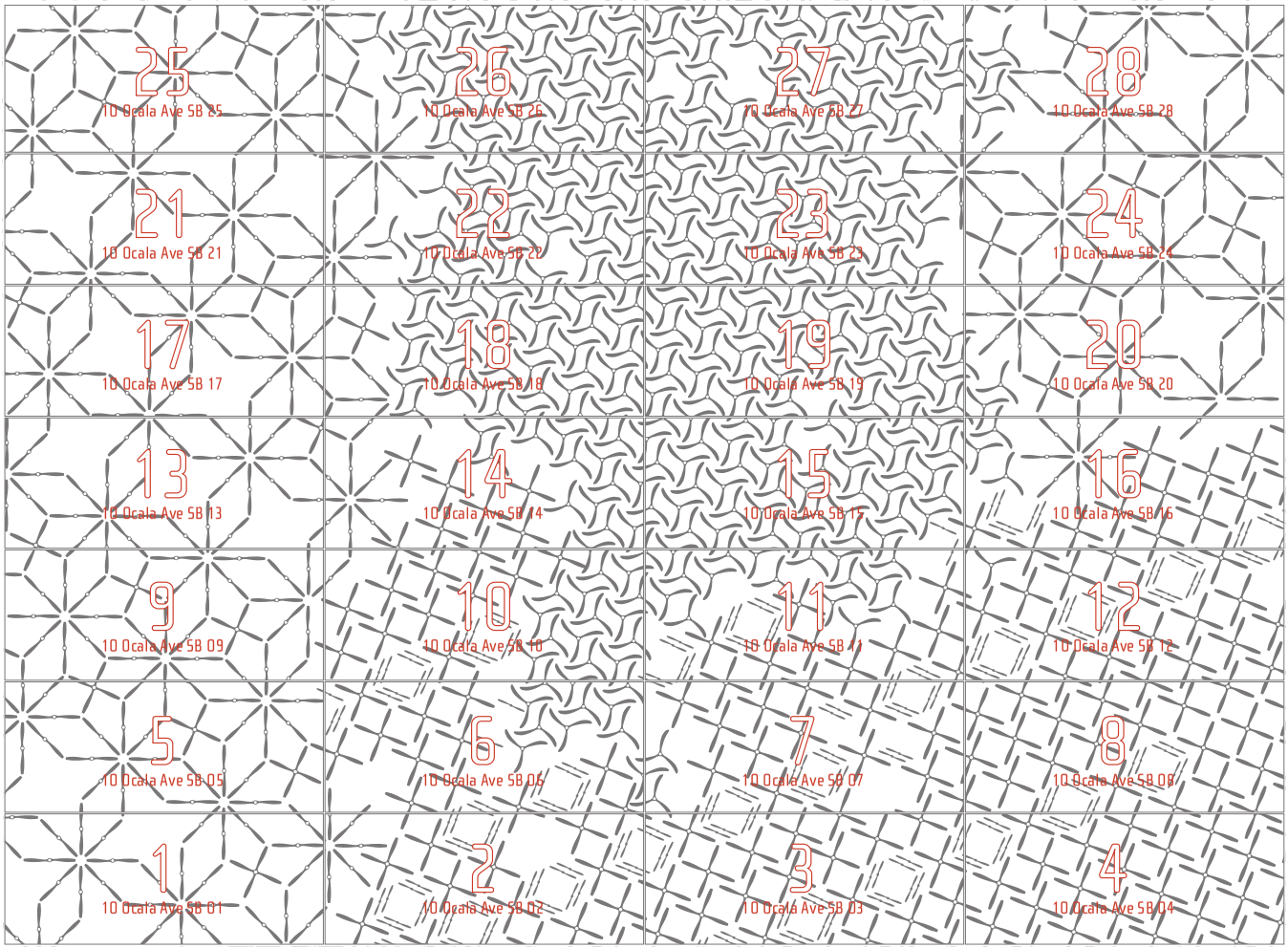
Windscreen Assembly



Legend:

1. Paver numbering system i.e. 10 Ocala Ave SB 01
   - "10 Ocala Ave" for station # and name
   - "SB" for South Bound and "NB" for North Bound
   - "01" for paver location as seen in Overview PA 10.00/1

Typical size of paver is 35 3/4" x 14 5/8" for field and 35 3/4" x 16 1/2" for top row .
Typ. grout joint is 3/16".

Base color similiar to
SW 6801 Regale Blue
(WHITE in layout)
refer to approved concrete sample

Fill color similiar to
SW6804 Dignity Blue
(BLACK in layout)
refer to approved concrete sample

1 Overview 10 Ocala Ave SB
no scale

merge
conceptual design
216 pico blvd, suite 8
santa monica,ca 90405
p/f 310 581 5343

Public art enhancements for the
VTA SANTA CLARA - ALUM ROCK
BUS RAPID TRANSIT Project
San Jose, California

Construction Documents

remarks

04.06.15
date

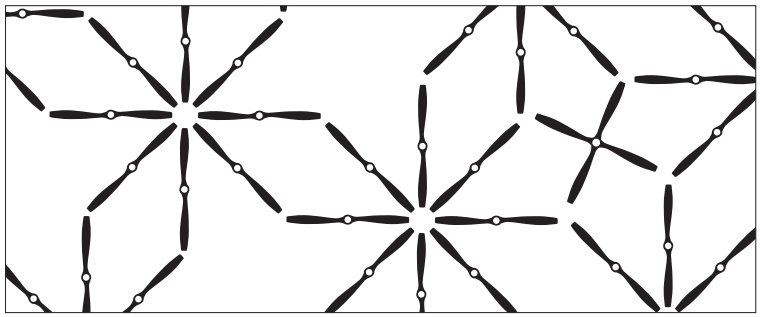
1204
job number

as noted
scale

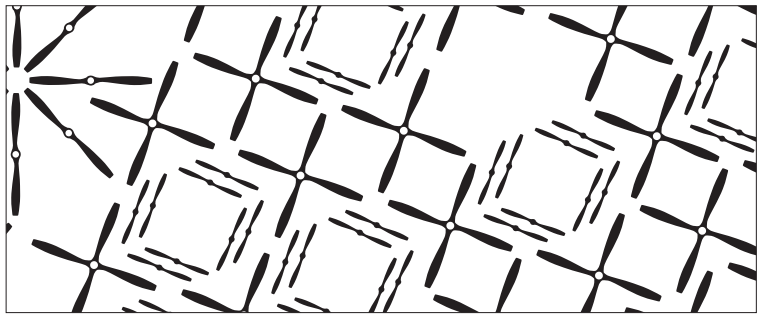
PAVEMENT
FABRICATION
OVERVIEW

PA 10.00
10 Ocala SB

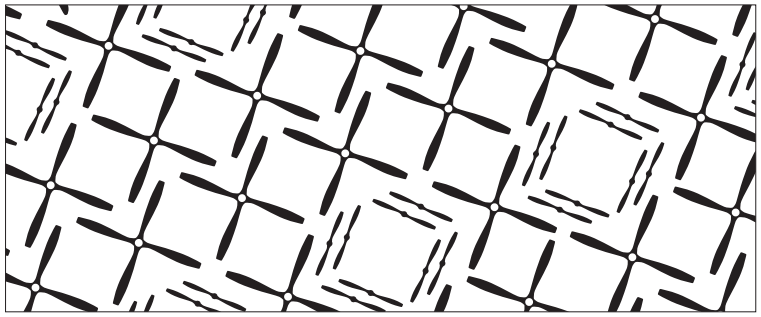
Art Panels



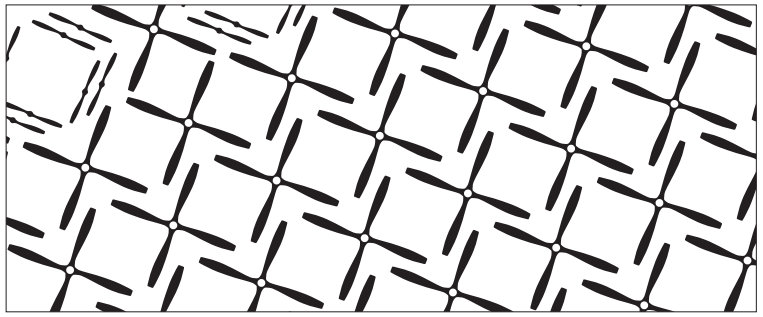
1 10 Ocala Ave SB Paver 01
Scale 2”=1’-o”



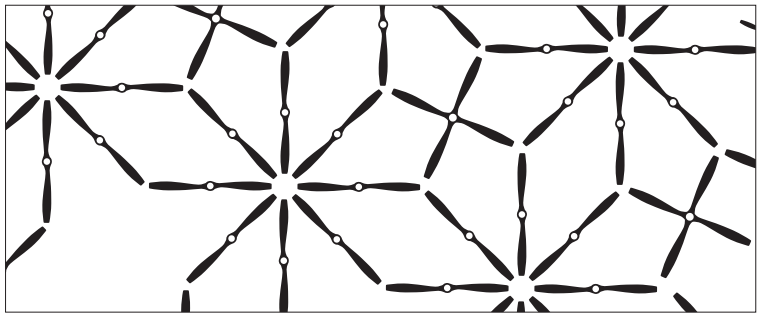
2 10 Ocala Ave SB Paver 02
Scale 2”=1’-o”



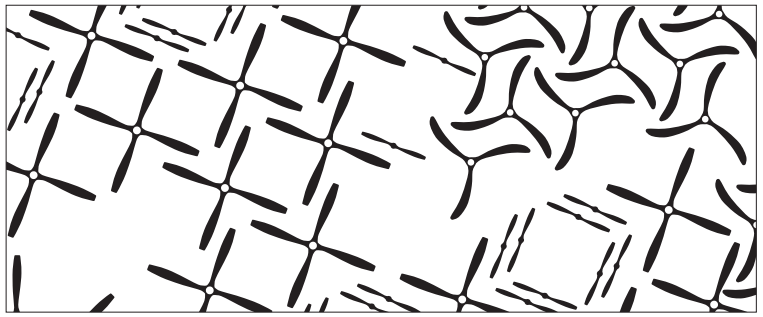
3 10 Ocala Ave SB Paver 03
Scale 2”=1’-o”



4 10 Ocala Ave SB Paver 04
Scale 2”=1’-o”



5 10 Ocala Ave SB Paver 05
Scale 2”=1’-o”



6 10 Ocala Ave SB Paver 06
Scale 2”=1’-o”

Legend:
1. Paver numbering system i.e.
“10 Ocala Ave SB 01”:
- “10 Ocala Ave” for station # and name
- “SB” for South Bound and “NB” for North Bound
- “01” for paver location as seen in Overview PA 10.00/1
2. Typ. paver size is 35 3/4” x 14 5/8” for field and 35 3/4” x 16 1/2” for top row.

merge
conceptual design
216 pico blvd, suite 8
santa monica,ca 90405
p/f 310 581 5343

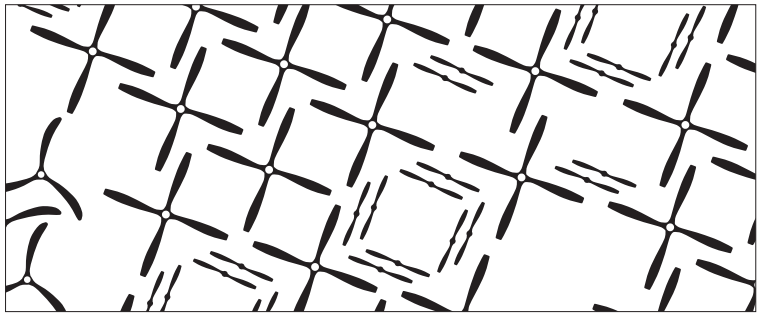
Public art enhancements for the
VTA SANTA CLARA - ALUM ROCK
BUS RAPID TRANSIT Project
San Jose, California

Construction Documents
remarks
04.06.15
date
1204
job number
as noted
scale

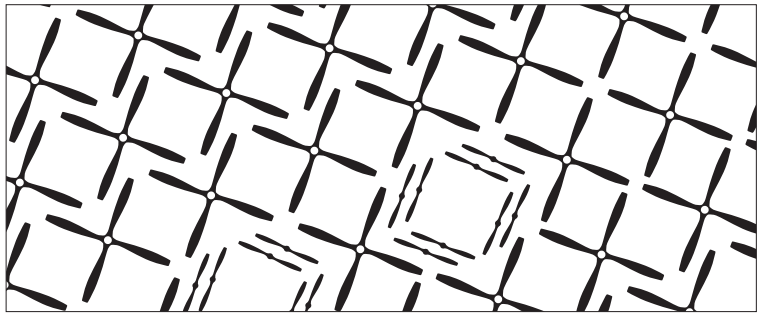
PAVEMENT
paver overview

PA 10.02
10 Ocala SB

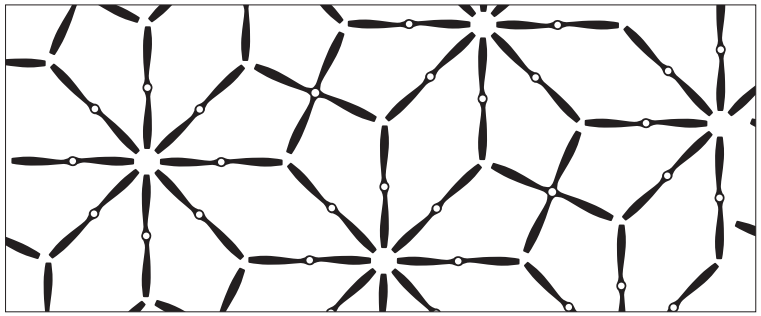
Art Panels



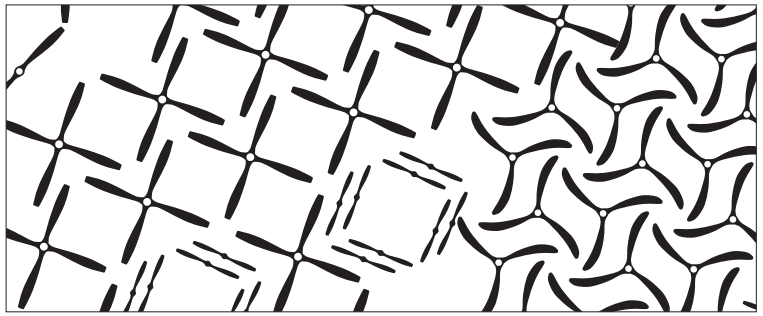
1 10 Ocala Ave SB Paver 07
Scale 2”=1’-o”



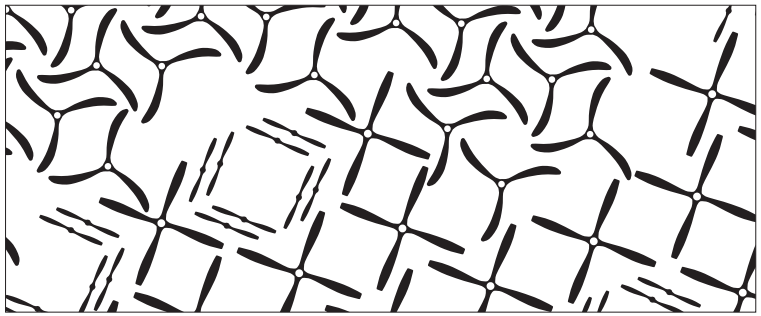
2 10 Ocala Ave SB Paver 08
Scale 2”=1’-o”



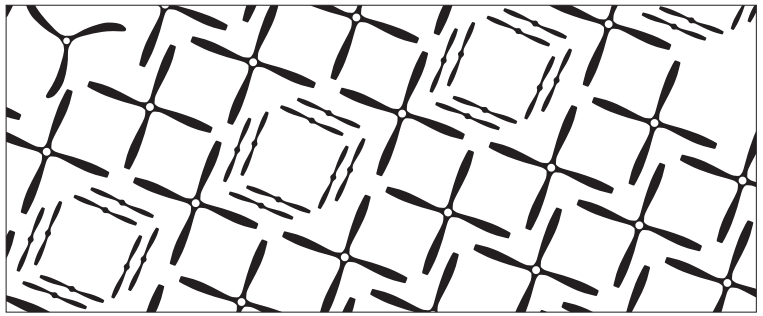
3 10 Ocala Ave SB Paver 09
Scale 2”=1’-o”



4 10 Ocala Ave SB Paver 10
Scale 2”=1’-o”



5 10 Ocala Ave SB Paver 11
Scale 2”=1’-o”



6 10 Ocala Ave SB Paver 12
Scale 2”=1’-o”

Legend:
1. Paver numbering system i.e. “10 Ocala Ave SB 01”:
- “10 Ocala Ave” for station # and name
- “SB” for South Bound and “NB” for North Bound
- “01” for paver location as seen in Overview PA 10.00/1
2. Typ. paver size is 35 3/4” x 14 5/8” for field and 35 3/4” x 16 1/2” for top row.

merge
conceptual design
216 pico blvd, suite 8
santa monica,ca 90405
p/f 310 581 5343

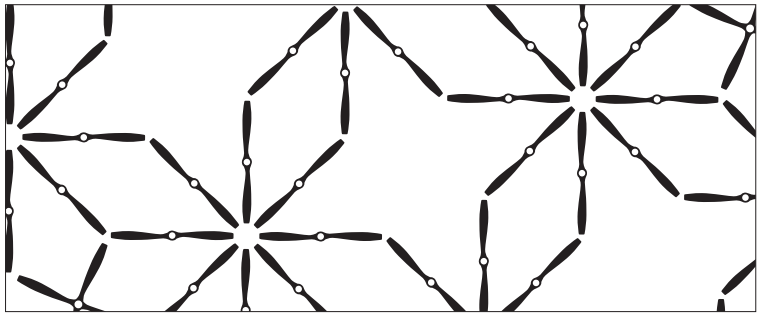
Public art enhancements for the
VTA SANTA CLARA - ALUM ROCK
BUS RAPID TRANSIT Project
San Jose, California

Construction Documents
remarks
04.06.15
date
1204
job number
as noted
scale

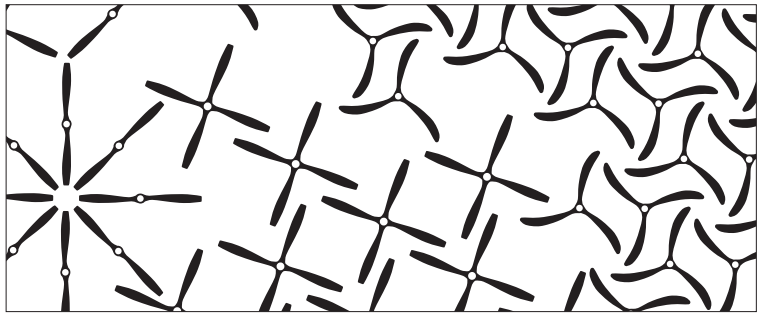
PAVEMENT
paver overview

PA 10.03
10 Ocala SB

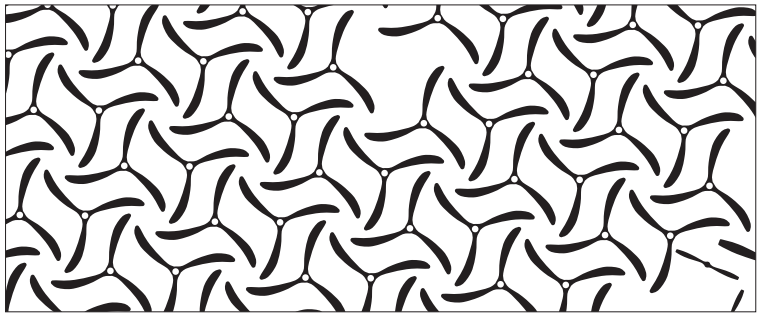
Art Panels



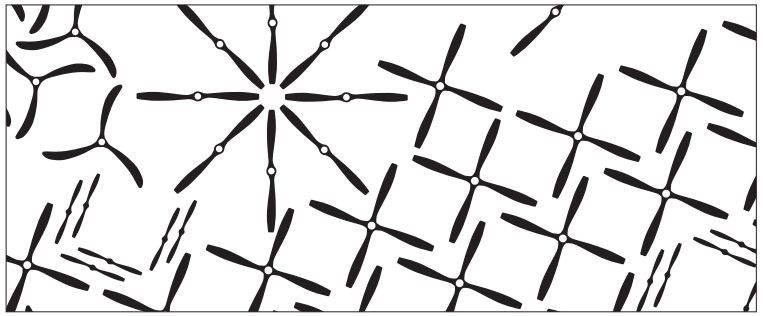
1 10 Ocala Ave SB Paver 13
Scale 2”=1’-o”



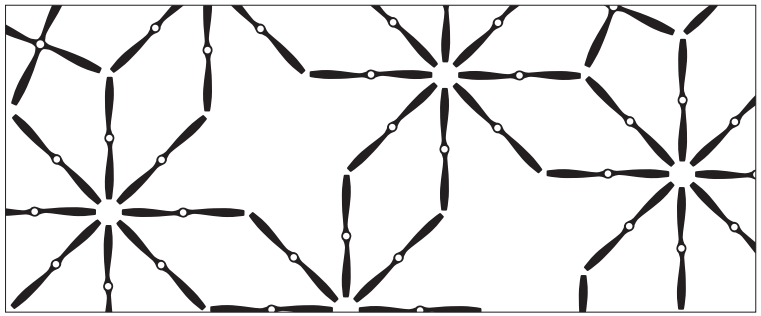
2 10 Ocala Ave SB Paver 14
Scale 2”=1’-o”



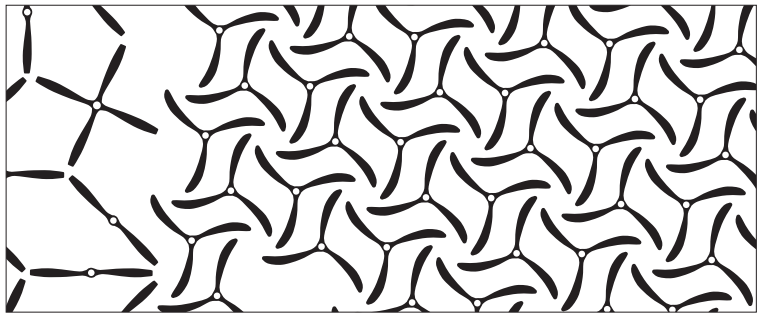
3 10 Ocala Ave SB Paver 15
Scale 2”=1’-o”



4 10 Ocala Ave SB Paver 16
Scale 2”=1’-o”



5 10 Ocala Ave SB Paver 17
Scale 2”=1’-o”



6 10 Ocala Ave SB Paver 18
Scale 2”=1’-o”

Legend:
1. Paver numbering system i.e.
“10 Ocala Ave SB 01”:
- “10 Ocala Ave” for station # and name
- “SB” for South Bound and “NB” for North Bound
- “01” for paver location as seen in Overview PA 10.00/1
2. Typ. paver size is 35 3/4” x 14 5/8” for field and 35 3/4” x 16 1/2” for top row.

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conceptual design
216 pico blvd, suite 8
santa monica,ca 90405
p/f 310 581 5343

Public art enhancements for the
VTA SANTA CLARA - ALUM ROCK
BUS RAPID TRANSIT Project
San Jose, California

Construction Documents

remarks

04.06.15
date

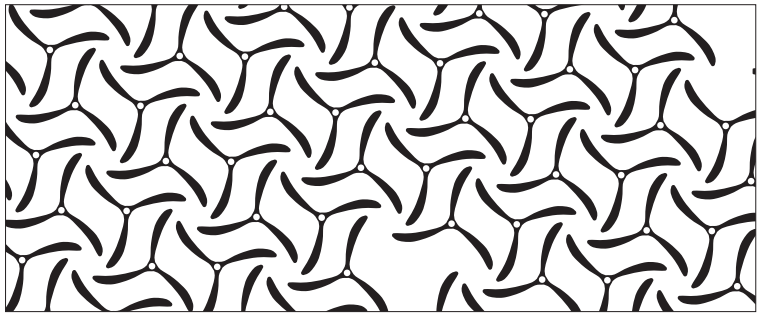
1204
job number

as noted
scale

PAVEMENT
paver overview

PA 10.04
10 Ocala SB

Art Panels



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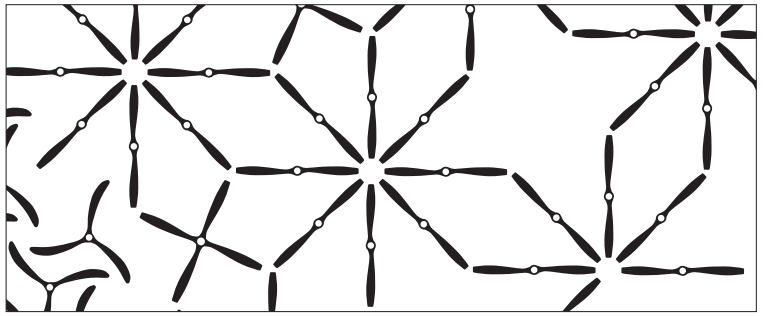
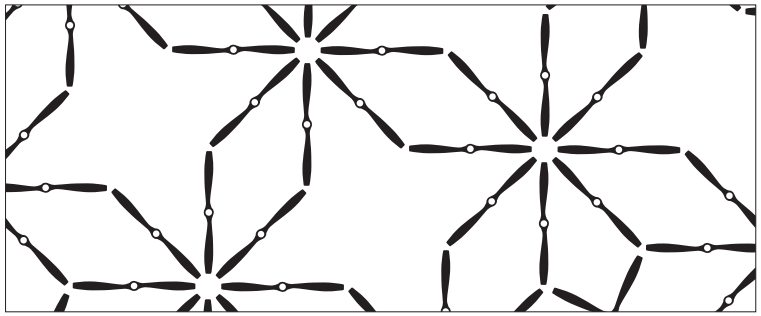
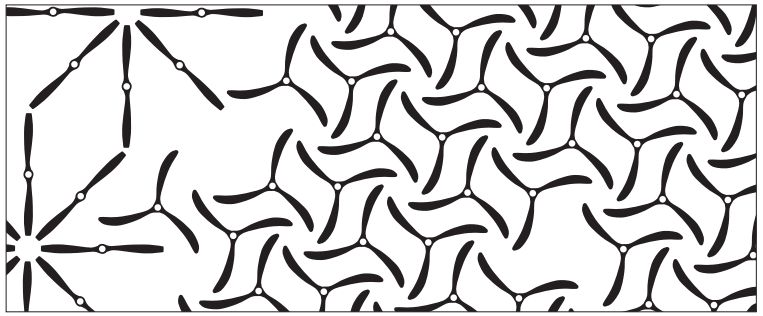
Scale 2”=1’-o”



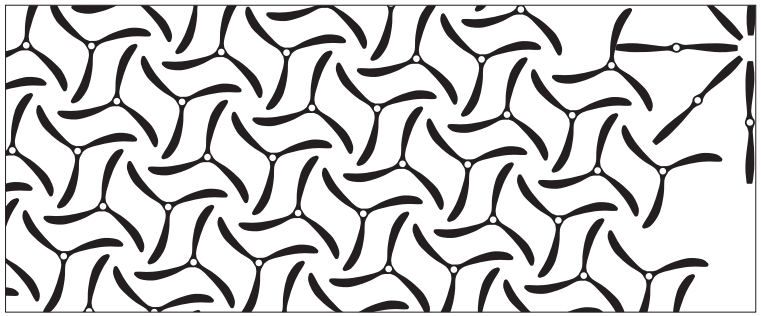
2 10 Ocala Ave SB Paver 20
Scale 2”=1’-o”



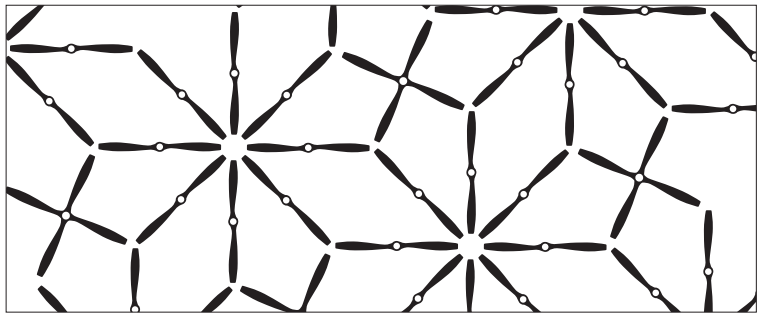
3 10 Ocala Ave SB Paver 21
Scale 2”=1’-o”



4 10 Ocala Ave SB Paver 22
Scale 2”=1’-o”



5 10 Ocala Ave SB Paver 23
Scale 2”=1’-o”



6 10 Ocala Ave SB Paver 24
Scale 2”=1’-o”

Legend:
1. Paver numbering system i.e.
“10 Ocala Ave SB 01”:
- “10 Ocala Ave” for station # and name
- “SB” for South Bound and “NB” for North Bound
- “01” for paver location as seen in Overview PA 10.00/1
2. Typ. paver size is 35 3/4” x 14 5/8” for field and 35 3/4” x 16 1/2” for top row.

merge
conceptual design
216 pico blvd, suite 8
santa monica,ca 90405
p/f 310 581 5343

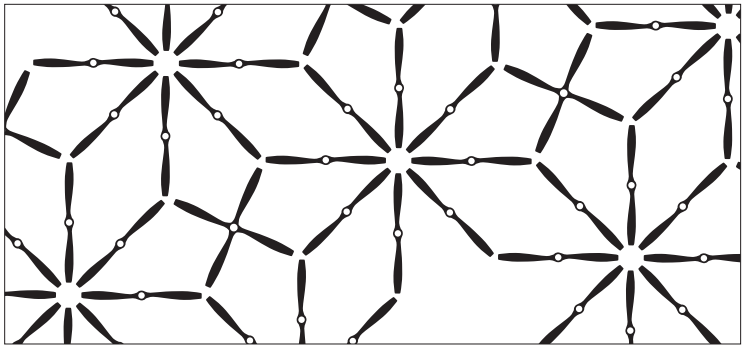
Public art enhancements for the
VTA SANTA CLARA - ALUM ROCK
BUS RAPID TRANSIT Project
San Jose, California

Construction Documents
remarks
04.06.15
date
1204
job number
as noted
scale

PAVEMENT
paver overview

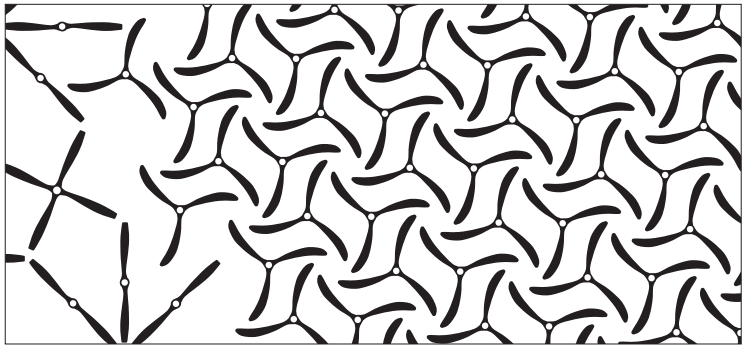
PA 10.05
10 Ocala SB

Art Panels



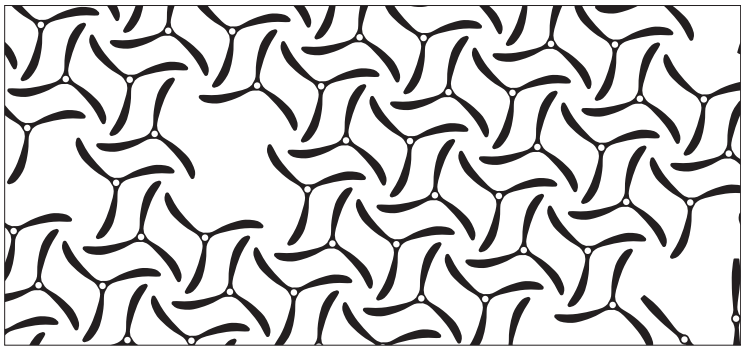
1 10 Ocala Ave SB Paver 25

Scale 2"=1'-o"



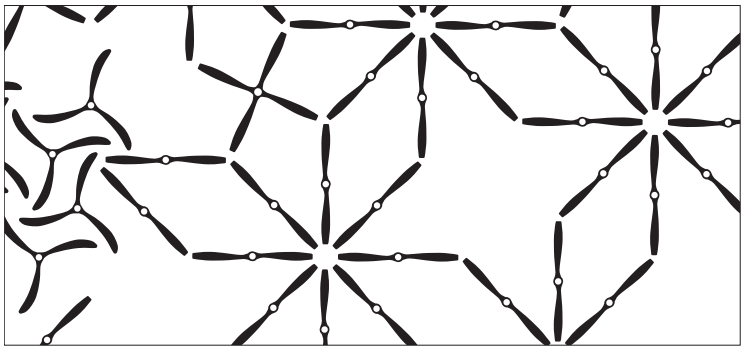
2 10 Ocala Ave SB Paver 26

Scale 2"=1'-o"



3 10 Ocala Ave SB Paver 27

Scale 2"=1'-o"



4 10 Ocala Ave SB Paver 28

Scale 2"=1'-o"

Legend:

1. Paver numbering system i.e. "10 Ocala Ave SB 01":
- "10 Ocala Ave" for station # and name
- "SB" for South Bound and "NB" for North Bound
- "01" for paver location as seen in Overview PA 10.00/1
2. Typ. paver size is 35 3/4" x 14 5/8" for field and 35 3/4" x 16 1/2" for top row.

merge
conceptual design
216 pico blvd, suite 8
santa monica,ca 9o4o5
p/f 31o 581 5343

Public art enhancements for the
VTA SANTA CLARA - ALUM ROCK
BUS RAPID TRANSIT Project
San Jose, California

Construction Documents

remarks

04.06.15

date

12o4

job number

as noted

scale

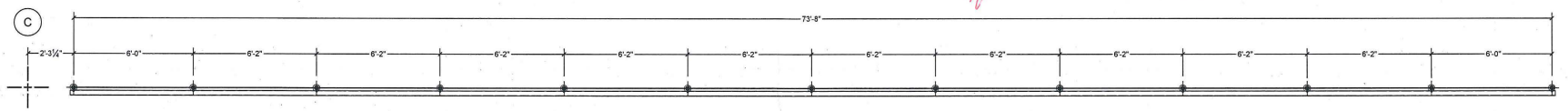
PAVEMENT
paver overview

PA 10.06
10 Ocala SB

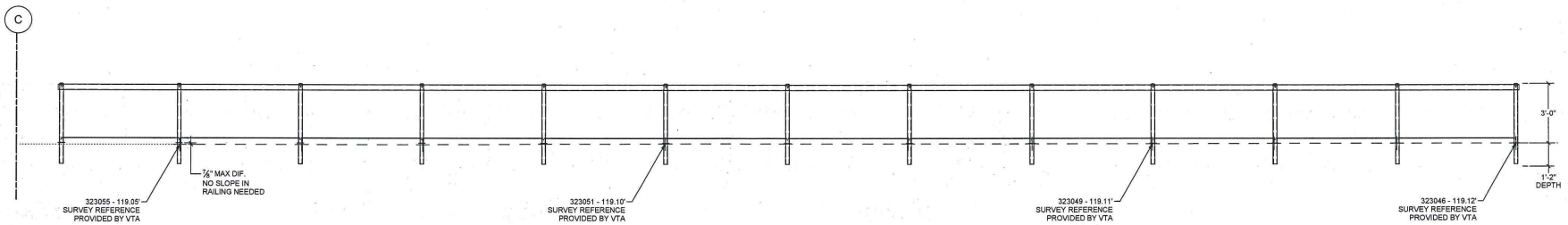
Art Panels

RAILING & POST NOTES:
1. ALL RAILINGS AND POSTS SHALL RECEIVE A #4 ARCHITECTURAL STAINLESS STEEL DIRECTIONAL FINISH WITH GRAINS PERPENDICULAR TO LONG AXIS OF PIPE. 160/200
2. ALL RAILING BRACKETS SHALL RECEIVE A #1 MILL STAINLESS STEEL FINISH WITH HIGH DURATION PASIVATION FOR A MATTED APPEARANCE.
3. ALL POSTS SHALL BE CAST INTO PVC SLEEVES AND GROUTED IN PLACE, UNO.
4.CORE DRILL AND GROUT SOLID FULL DEPTH OF SECTION WHERE HANDRAILING IS SCHEDULED TO BE PLACED IN EXISTING CAST IN PLACE CONCRETE.
5. PLANS DIMENSIONS INDICATING LAYOUT OF RAILINGS ARE FROM CENTERLINE OF POST, UNO.

Santa Clara Valley Transportation Authority
X NO EXCEPTIONS TAKEN
___ MAKE CORRECTIONS NOTED
___ AMEND AND RESUBMIT
Any action shown above is subject to the terms of the contract and does not relieve the contractor of any of its obligations under the contract, including design and detailing
Contract No.: 1 (830)
By: _____ Date: 6/7/16



OCALA STATION RAILING - PLAN VIEW
SCALE 3/8"=1'



OCALA STATION RAILING - FRONT ELEVATION
SCALE 3/8"=1'

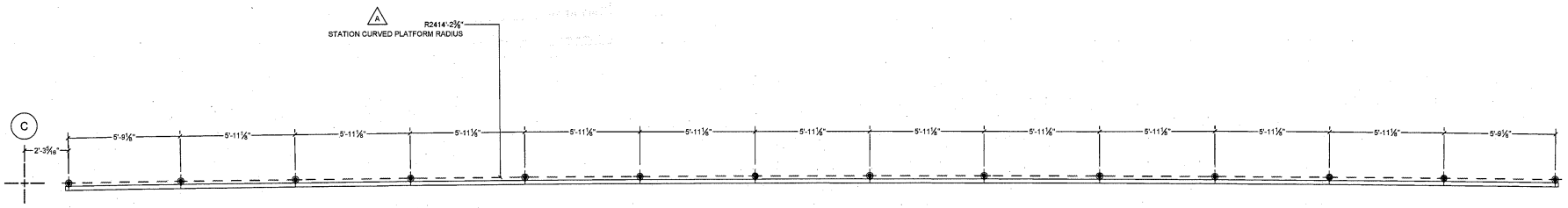
TOLAR	Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879
DESCRIPTION	OCALA STATION NORTHBOUND
CUSTOMER/VENDOR	SANTA CLARA - VTA
SHEET NO.	1 or 1
SIZE	D
MATL.	STN STL 316L - MISC
DWG NO.	27795-00
REV. NO.	
SCALE	AS NOTED
DATE	6/9/2016
DRAWN BY	cgarcia

T:\Engineering\CARLOS GARCIA\VTA\27795-00.dwv

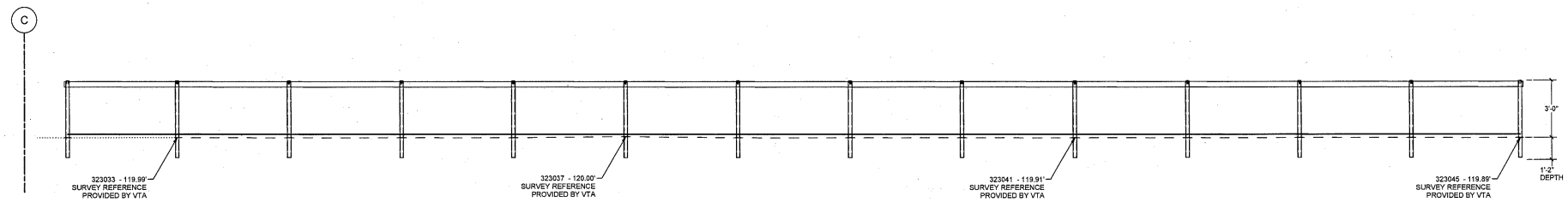
Ocala Road Railings

RAILING & POST NOTES:
1. ALL RAILINGS AND POSTS SHALL RECEIVE A #4 ARCHITECTURAL STAINLESS STEEL DIRECTIONAL FINISH WITH GRAINS PERPENDICULAR TO LONG AXIS OF PIPE. 160/200
2. ALL RAILING BRACKETS SHALL RECEIVE A #1 MILL STAINLESS STEEL FINISH WITH HIGH DURATION PASIVATION FOR A MATTED APPEARANCE.
3. ALL POSTS SHALL BE CAST INTO PVC SLEEVES AND GROUTED IN PLACE, UNO.
4.CORE DRILL AND GROUT SOLID FULL DEPTH OF SECTION WHERE HANDRAILING IS SCHEDULED TO BE PLACED IN EXISTING CAST IN PLACE CONCRETE.
5. PLANS DIMENSIONS INDICATING LAYOUT OF RAILINGS ARE FROM CENTERLINE OF POST, UNO.

REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
ALL	A	STATION RADIUS	6/29/2016	



OCALA STATION RAILING - PLAN VIEW
SCALE 3/8"=1'



OCALA STATION RAILING - FRONT ELEVATION
SCALE 3/8"=1'

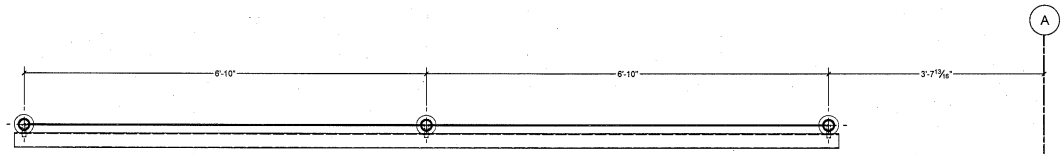
TOLAR
Tolar Manufacturing Company, Inc
258 Mariah Circle, Corona CA. 92879

DESCRIPTION	OCALA STATION SOUTHBOUND		
CUSTOMER/VENDOR	SANTA CLARA - VTA		SHEET NO. 1 of 1
SIZE D	MATL. STN STL 316L - MISC	DWG NO. 27796-00	REV. NO. A
SCALE AS NOTED	DATE 6/10/2016	DRAWN BY cgarcia	

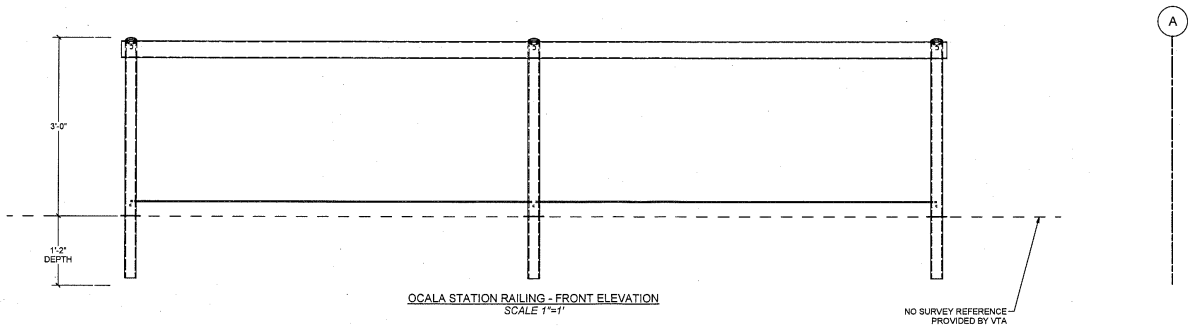
T:\Eng\www\hg\CAROLOS GARCIA\VTA\27796-00.idw

Ocala Road Railings

RAILING & POST NOTES:
1. ALL RAILINGS AND POSTS SHALL RECEIVE A #4 ARCHITECTURAL STAINLESS STEEL DIRECTIONAL FINISH WITH GRAINS PERPENDICULAR TO LONG AXIS OF PIPE. 160/200
2. ALL RAILING BRACKETS SHALL RECEIVE A #1 MILL STAINLESS STEEL FINISH WITH HIGH DURATION PASIVATION FOR A MATTED APPEARANCE.
3. ALL POSTS SHALL BE CAST INTO PVC SLEEVES AND GROUTED IN PLACE, UNO.
4.CORE DRILL AND GROUT SOLID FULL DEPTH OF SECTION WHERE HANDRAILING IS SCHEDULED TO BE PLACED IN EXISTING CAST IN PLACE CONCRETE.
5. PLANS DIMENSIONS INDICATING LAYOUT OF RAILINGS ARE FROM CENTERLINE OF POST, UNO.



OCALA STATION RAILING - PLAN VIEW
SCALE 1"=1'

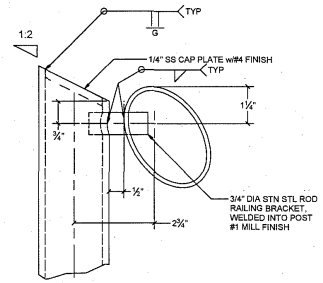


OCALA STATION RAILING - FRONT ELEVATION
SCALE 1"=1'

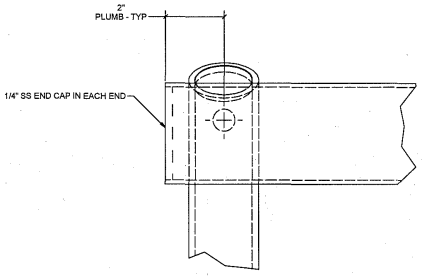
Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA. 92879	
DESCRIPTION: OCALA STATION SOUTHBOUND - SHORT	
CUSTOMER/VENDOR: SANTA CLARA - VTA	SHEET NO.: 1 or 1
SIZE: D / MATL.: STN STL 316L - MISC	DWG NO.: 27796-0B / REV. NO.
SCALE: AS NOTED / DATE: 6/29/2016	DRAWN BY: ogarcia

T:\Engineering\CARLOS GARCIA\VTA\27796-0B.idw

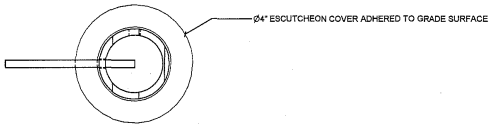
Ocala Road Railings

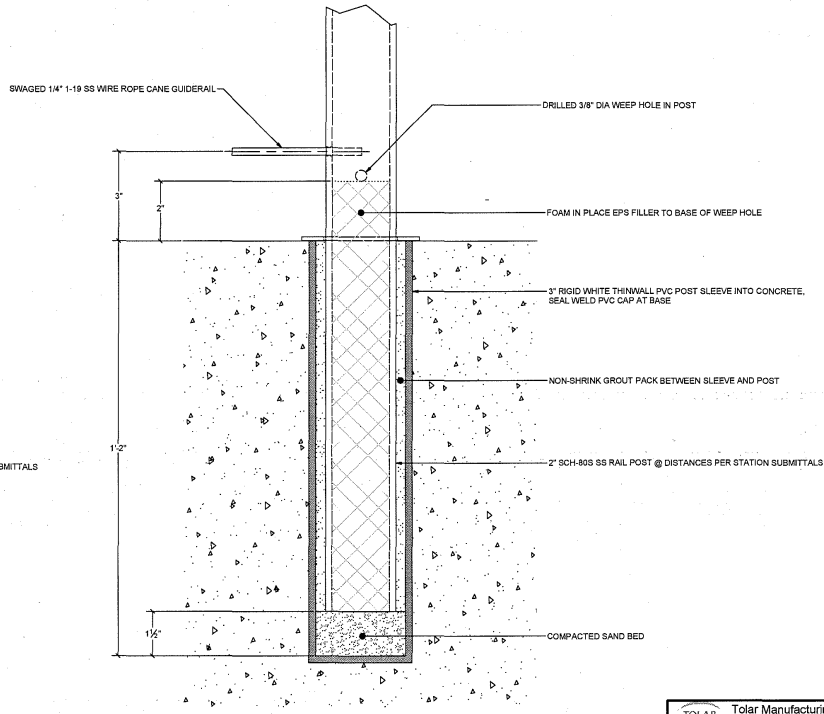


DETAIL A
SCALE 6"=1'

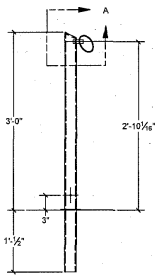


DETAIL B
SCALE 6"=1'

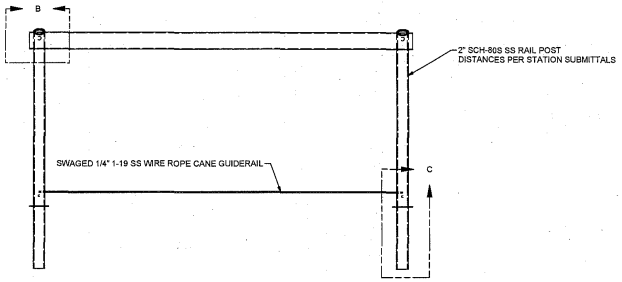




DETAIL C
SCALE 6"=1'



SIDE ELEVETION
SCALE 1"=1'



TYPICAL SECTION - FRONT ELEVATION
SCALE 1"=1'

TOLAR	Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona CA, 92879		
DESCRIPTION	TYPICAL ELEMENTS OF THE OFFSET RAILING		
CUSTOMER/VENDOR	SANTA CLARA - VTA		SHEET NO. 1 of 1
SIZE D	MATL. STN STL 316L - MISC	DWG NO. 27973-00	REV. NO.
SCALE AS NOTED	DATE 5/25/2016	DRAWN BY cgarcia	

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Ocala Road Railings

Valley Transportation Authority

Solutions that move you

Eastridge to BART Regional Connector
Capitol Expressway Light Rail Project

PRELIMINARY SITE INVESTIGATION AND HAZARDOUS MATERIALS EVALUATION

Prepared by:

GEOCON

March 2019
Updated January 2020

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1. Introduction

This Preliminary Site Investigation and Hazardous Materials Evaluation Report for the Eastridge Avenue to Bay Area Rapid Transit (BART) Regional Connector/Capitol Expressway Light Rail Extension Project (EBRC/CELR) in Santa Clara County, California was prepared by Geocon Consultants, Inc. (Geocon) for BKF Engineers.

1.1 Project Description and Proposed Improvements

The project consists of approximately 2.3 miles of light rail extension along Capitol Expressway from the existing Alum Rock Station to the proposed Eastridge Mall Station platform as part of a continuing effort to provide a regional connector to the BART system in the city of San Jose, Santa Clara County, California. Work will take place within County of Santa Clara right-of-way. The project area is depicted on the Vicinity Map, Figure 1.

1.2 General Objectives

The purpose of this site investigation was to evaluate concentrations of California Assessment Manual 17 (CAM 17) metals, including aerially deposited lead (ADL), total petroleum hydrocarbons as diesel (TPHd), as motor oil (TPHmo), and as gasoline (TPHg), benzene, toluene, ethylbenzene, and total xylenes (BTEX), methyl tert-butyl ether (MTBE), organochlorine pesticides, and naturally occurring asbestos (NOA) in soil, and CAM 17 metals, TPHd, TPHmo, TPHg, BTEX, MTBE, volatile organic compounds (VOCs), and polychlorinated biphenyls (PCBs) in groundwater within the project limits.

Portions of this report were previously included in investigations conducted by Geocon in 2005. Geocon's *Hazardous Materials Evaluation Report*, dated March 29, 2006, addressed sampling conducted in project segments included in a preliminary design and provided an evaluation of potential hazardous materials associated with properties adjacent to the project area. Additional work performed in August 2018 is reported for the first time in this updated report, and portions of the earlier data have been redacted to reflect a modified project scope.

The information obtained from this investigation will be used by BKF to evaluate soil and groundwater handling practices, disposal options, worker health and safety, and soil reuse options.

2. Background

2.1 Hazardous Materials Assessment Report

The *Hazardous Materials Assessment Report*, prepared by Parikh Consultants, Inc. identified ADL as a potential environmental concern and recommended that surface soil samples be collected and analyzed for lead. Ongoing testing by Caltrans has indicated that ADL exists along major transportation corridors due to emissions from vehicles powered by leaded gasoline. Caltrans reports that total lead concentrations in soil adjacent to the corridors have typically ranged between 50 and 3,000 milligrams per kilogram (mg/kg). At sites where soil has not been disturbed, ADL is generally limited to the upper 2 feet of soil within unpaved shoulder and median areas.

In addition to ADL, the *Hazardous Materials Assessment Report* identified five leaking underground storage tank (LUST) sites in the project area. The LUST sites are located at the intersection of Capitol Expressway and Story Road (4 sites) and near the Eastridge Mall (1 site), and have the potential to impact the project due to known soil and groundwater contamination. These sites are discussed in Section 5.3.

2.2 Hazardous Waste Determination Criteria

Regulatory criteria to classify a waste as California hazardous for handling and disposal purposes are contained in the CCR, Title 22, Division 4.5, Chapter 11, Article 3, §66261.24. Criteria to classify a waste as Resource, Conservation, and Recovery Act (RCRA) hazardous are contained in Chapter 40 of the Code of Federal Regulations (40 CFR), Section 261.

For waste containing metals, the waste is classified as California hazardous when: 1) the representative total metal content equals or exceeds the respective Total Threshold Limit Concentration (TTLC); or 2) the representative soluble metal content equals or exceeds the respective Soluble Threshold Limit Concentration (STLC) based on the standard Waste Extraction Test (WET). A waste has the potential of exceeding the STLC when the waste's total metal content is greater than or equal to 10 times the respective STLC value since the WET uses a 1:10 dilution ratio. Hence, when a total metal is detected at a concentration greater than or equal to 10 times the respective STLC, and assuming that 100 percent of the total metals are soluble, soluble metal analysis is required. A material is classified as RCRA hazardous, or Federal hazardous, when the representative soluble metal content equals or

exceeds the Federal regulatory level based on the Toxicity Characteristic Leaching Procedure (TCLP).

The above regulatory criteria are based on chemical concentrations. Wastes may also be classified as hazardous based on other criteria such as ignitability and corrosivity; however, for the purposes of this investigation, toxicity (i.e., representative lead concentrations) is the primary factor considered for waste classification since waste generated during the construction activities would not likely warrant testing for ignitability or other criteria. Waste that is classified as either California hazardous or RCRA hazardous requires management as a hazardous waste.

2.3 Environmental Screening Levels

The San Francisco Bay Regional Water Quality Control Board (SFRWQCB) has published Environmental Screening Levels (ESLs) for commonly found contaminants in soil, groundwater, soil gas, and surface water, to assist in evaluating sites impacted by releases of hazardous chemicals. The ESLs are commonly used by contractors, soil trucking companies, and private and commercial land owners as default acceptance criteria to evaluate suitability of import soil material. The respective ESLs are listed at the end of Tables 3, 4, 6, and 7 for comparative purposes.

2.4 Naturally Occurring Asbestos (NOA)

As defined in current California Air Resources Board (CARB) rules, serpentine material refers to any material that contains at least 10% serpentine, and asbestos-containing serpentine refers to serpentine materials with an asbestos content greater than 5% as determined by CARB Test Method 435 (CARB 435). The use of serpentine material for road surfacing is prohibited in California by Title 17 of the California Code of Regulations (CCR) Section 93106, Asbestos Airborne Toxic Control Measure (ATCM) for Surfacing Application (ATCM 93106), unless the material has been tested and determined to have an asbestos content of less than 0.25%. Materials found to contain asbestos of 0.25% or more are considered to be designated waste if transported offsite, requiring disposal at a landfill facility designated to accept asbestos waste. Alternatively, asbestos-containing materials may be reused onsite if buried beneath a minimum 6 inches of soil.

The CARB specifies mitigation practices for construction, grading, quarrying, and surface mining operations that contain natural occurrences of asbestos outlined in

Title 17, Section 93105, Asbestos ATCM for Construction, Grading, Quarrying, and Surface Mining Operations (ATCM 93105). Based on Part (e) Subpart (2) of ATCM 93105 an asbestos dust mitigation plan is required and must be implemented for a project if NOA is disturbed after the start of construction. Additionally, ATCM 93105 specifies that the air pollution control district (APCD) must be notified and an asbestos dust mitigation plan submitted to the APCD. The ATCM states that air monitoring may be required on the property. NOA potentially poses a health hazard when it becomes an airborne particulate.

The construction/maintenance activities mentioned above could disturb NOA-laden debris and soil, thereby potentially creating an airborne hazard. Mitigation practices can reduce the risk of exposure to airborne NOA containing dust. Dust suppression practices include wetting the materials being disturbed and wearing approved respirators with high-efficiency particulate air (HEPA) filters during construction activities.

3. Scope of Services

The following scope of services was performed:

3.1 Pre-Field Activities

- Reviewed the *Hazardous Materials Assessment Report*.
- Prepared figures on March 11, 2005 showing proposed boring locations for client review. Revised boring locations were provided on March 23, 2005, to correspond with changes in geotechnical boring locations.
- Retained the services of Gregg Drilling and Testing, a California-licensed driller, to advance direct push borings in 2005.
- Provided recommendations for additional testing in August 2018 at the request of the client following changes in project scope.
- Retained the services of Advance Technology Laboratories (ATL), a California-licensed and Caltrans-approved laboratory, to provide the chemical analyses of soil and groundwater samples.
- Retained the services of EMSL Laboratories in San Leandro, California, to provide NOA analysis of soil samples.

3.2 Field Activities

- Between March 31 and April 13, 2005, advanced 10 direct push borings (GD1 to GD5 and GD8 to GD12) along the proposed alignment to approximately 10 feet below ground surface (bgs). Collected two soil and one grab-groundwater sample from each boring. Approximate boring locations are shown on the Site Plan, Figures 2A and 2C.
- On April 28, 2005, advanced eight hand-auger borings (GH1 to GH8) to approximately 1.5 feet bgs in unpaved areas along the proposed alignment. Collected two soil samples from each boring. Approximate boring locations are shown on the Site Plan, Figures 2A to 2C.
- On November 17, 2005, advanced four confirmation hand-auger borings (GH1A/B and GD3A/B) to further define potential lead impacts to shallow soil based on the March/April 2005 results. Approximate boring locations are shown on the Site Plan, Figures 2A to 2C.
- On December 14, 2005, advanced six confirmation hand-auger borings (GD11A to GD11F) in the VTA parking lot near Station 45+75. The purpose of the borings was to further define shallow soil impacts from TPHd and TPHmo based on the March/April 2005 results. Approximate boring locations are shown on the Site Plan, Figure 2C.
- On September 16, 2006, advanced two direct-push borings (GD7A and GD7B) adjacent to the former Shell Service Station located at 2690 Story Avenue (currently operating as an AutoZone store and discussed further in Section 5.3.1). The purpose was to evaluate metal and hydrocarbon compounds in groundwater. Approximate boring locations are shown on the Site Plan, Figure 2A.
- In August 2018, advanced 10 boring locations in the median of Capitol Expressway to further investigate areas within the project alignment and include testing for organochlorine pesticides. Approximate boring locations are shown on the Site Plan, Figures 2A to 2C.
- In November 2018, advanced two confirmation hand-auger borings (GH12A/B) to further define potential lead impacts to shallow soil based on the August 2018 results.
- Transferred all samples to appropriate sample containers after collection. Labeled and transported samples to ATL or EMSL utilizing standard chain-of-custody procedures.

- Provided quality assurance/quality control (QA/QC) procedures during the field activities. These procedures included cleaning the sampling equipment between each boring. Chain-of-custody documentation was maintained for each sample collected and transferred to the laboratory for analytical testing.

4. Investigative Methods

4.1 Boring Location Rationale

Borings were located along the length of the proposed alignment to pre-characterize overall soil and groundwater conditions that may be encountered during construction. The direct push boring locations were generally adjacent to the geotechnical borings so both could be advanced using the same lane closures and traffic control.

Three direct push borings (GD5, GD6, and GD7) were specifically located at the proposed Story Road Station (intersection of Story Road and Capitol Expressway) for the primary purpose of determining petroleum hydrocarbon impacts to soil and groundwater related to the gas stations at this location. Borings GD6 and GD7 were to be advanced on private property at the proposed Story Road Station Pedestrian Overcrossing landings at the gas stations located at 2690 and 2710 Story Road, respectively; however, access to advance borings GD6 and GD7 was not granted by the property owners and these borings were not completed. Boring GD5 was located in public right-of-way and was successfully completed (see Figure 2B). Borings GD7A and GD7B were advanced in September 2006 adjacent to 2690 Story Road.

4.2 Soil Sampling Procedures

Direct Push Borings

Ten soil borings (GD1 to GD5 and GD8 to GD12) were advanced using direct push methods. The soil borings were advanced using a truck-mounted Geoprobe direct-push sampling rig. Soil samples were collected from each soil boring utilizing a hydraulically-driven 5-foot-long soil sampler equipped with acetate sample tubes to facilitate sample collection and handling.

Soil samples were collected from each boring for laboratory analysis from the surface and four feet bgs. The shallow soil samples from adjacent borings were

composited together and the deeper soil samples were composited together by the laboratory prior to analysis. Each boring was backfilled to the ground surface with cement slurry.

Hand Auger Borings

The 18 "GH" borings and 12 confirmation borings (GH1A/B, GD3A/B, GD11A/F, and GH12A/B) were advanced using hand-auger methods. A concrete coring machine was used to core boring locations GD11A to GD11F prior to soil sampling. Each boring was advanced using stainless steel hand auger equipment and soil samples were transferred directly from the hand auger bucket into four-ounce glass jars with Teflon-coated lids. Sample jars were labeled and placed in containers for transport to the analytical laboratory.

Completed borings in unpaved areas were backfilled to surface grade with soil cuttings. Borings GD11A to GD11F were backfilled with soil cuttings and then capped with asphalt patch. The soil samples were transported to analytical laboratories utilizing standard chain-of-custody documentation. Sampling equipment was cleansed by washing the equipment with an Alconox solution followed by two successive rinses with deionized water. The fieldwork was performed under the responsible charge of a California Professional Geologist employed by Geocon.

4.3 Grab-Groundwater Sampling Procedures

A grab-groundwater sample was collected from each direct push boring by placing a ¾-inch-diameter polyvinyl chloride (PVC) casing with a 5-foot section of 0.020-inch slotted screen to the termination depth of the boring. A grab-groundwater sample was collected with ¼-inch-diameter PVC tubing fitted with a check valve to draw water toward ground surface. Groundwater discharged from the tubing was transferred to appropriate laboratory-supplied containers. Following the collection of the groundwater samples, the sample containers were labeled and placed into a chilled container for transport to ATL following standard chain-of-custody protocol.

4.4 Laboratory Analyses

Geocon instructed the analytical laboratory to perform laboratory analyses under standard turn-around-times. The laboratory testing performed is summarized below:

4.4.1 Soil Samples

- Twenty-four discrete soil samples and eight composite soil samples were analyzed for California Assessment Manual (CAM 17) metals following EPA Test Methods 6010/7471.
- Twenty-six discrete soil samples were analyzed for total lead following EPA Test Method 6010.
- Two discrete soil samples and eight composite soil samples were analyzed for pH following EPA Test Method 9045.
- Thirty-six discrete soil samples and eight composite soil samples were analyzed for TPHd and TPHmo following EPA Method 8015.
- Thirty-six discrete soil samples and eight composite soil samples were analyzed for TPHg following EPA Test Methods 8015/8020.
- Four discrete and eight composite samples were analyzed for benzene, toluene, ethylbenzene, and xylenes (BTEX); and methyl tert-butyl ether (MTBE) following EPA Test Methods 8015/8020.
- Twenty discrete samples were analyzed for BTEX following EPA Test Method 8021.
- Twenty discrete samples were analyzed for organochlorine pesticides following EPA Test Method 8081.
- Seven discrete and two composite samples were analyzed for WET chromium following EPA Test Method 6010B.
- Nine discrete and one composite soil samples were further analyzed for WET lead following EPA Test Method 6010B.
- One discrete soil sample was further analyzed for TCLP lead following EPA Test Method 6010B.
- Three discrete and two composite soil samples were analyzed for WET nickel following EPA Test Method 6010B.
- Ten samples were analyzed for pH using EPA Test Method 9045C.
- Ten samples were analyzed for NOA using CARB 435.

4.4.2 Grab-Groundwater Samples

- Grab-groundwater samples were analyzed for TPHd and TPHmo following EPA Test Method 8015; and TPHg, BTEX, and MTBE following EPA Test Methods 8015/8020.
- Eight grab-groundwater samples were analyzed for VOCs following EPA Test Method 8260.
- Four grab-groundwater samples were analyzed for polychlorinated biphenyls (PCBs) following EPA Test Method 8082.
- Grab groundwater samples were analyzed for total (unfiltered) and dissolved (filtered) CAM 17 metals following EPA Test Methods 6010/7471.

4.4.3 Laboratory QA/QC

QA/QC procedures were performed for each method of analysis with specificity for each analyte listed in the test method's QA/QC. The laboratory QA/QC procedures included the following:

- One method blank for every 10 samples, batch of samples or type of matrix, whichever was more frequent.
- One sample analyzed in duplicate for every 10 samples, batch of samples or type of matrix, whichever was more frequent.
- One spiked sample for every 10 samples, batch of samples or type of matrix, whichever was more frequent, with spike made at 10 times the detection limit or at the analyte level.
- One laboratory control sample for every instrument operation to check the standard used in the calibration curve.

5. Field Observations and Investigative Results

5.1 Laboratory Analytical Results

The analytical results are presented in Tables 2 through 7 and summarized below:

Soil Sample results:

- The following metals were not detected above their respective laboratory reporting limits: beryllium, cadmium, molybdenum, and silver:
- Total chromium was reported at concentrations ranging from 37 mg/kg to 160 mg/kg.
- WET chromium was not detected at or above the laboratory reporting of 1.0 mg/l.
- Total lead was reported at concentrations ranging from 4.8 mg/kg to 600 mg/kg.
- WET lead was reported at concentrations ranging from 0.82 mg/l to 38 mg/l.
- TCLP lead was not detected at or above the laboratory reporting limit of 0.25 mg/l.
- Total nickel was reported at concentrations ranging from 49 mg/kg to 560 mg/kg.
- WET nickel was reported at concentrations ranging from 1.6 mg/l to 5.3 mg/l.
- Remaining CAM 17 metals were reported in the samples at total concentrations below 10 times their respective STLCs.
- TPHd was reported at concentrations ranging from not detected (laboratory reporting limit of 1.0 mg/kg) to 1,500 mg/kg.
- TPHmo was reported at concentrations ranging from not detected (laboratory reporting limit of 1.0 mg/kg) to 4,000 mg /kg.
- TPHg was not detected at or above the laboratory reporting limit of 1.0 mg/kg.
- BTEX compounds were not detected at or above the laboratory reporting limits.
- MTBE was not detected at or above the laboratory reporting limits.
- Pesticides 4,4'-DDE and 4,4'-DDT were reported at concentrations of up to 14 micrograms per kilogram (µg/kg) and 7.3 µg/kg, respectively. Remaining pesticides were not detected at or above the laboratory reporting limits.
- pH ranged from 7.93 to 9.16 pH units.
- NOA was observed in 5 of 10 samples at less than 0.25% Chrysotile.

Groundwater Sample Results:

- Total CAM 17 metals were reported at concentrations ranging from not detected to 19 mg/l.
- Dissolved CAM 17 metals were reported at concentrations ranging from not detected to 0.57 mg/l.
- TPHd was reported at concentrations ranging from not detected to 0.092 mg/l.
- TPHmo was reported at concentrations ranging from not detected to 0.18 mg/l.
- TPHg was reported at concentrations ranging from not detected to 0.14 mg/l.
- VOCs were not detected at or above the laboratory reporting limits.
- BTEX compounds were not detected at or above the laboratory reporting limits.
- MTBE was reported at concentrations ranging from not detected to 5.7 µg/l.
- PCBs were not detected at or above the laboratory reporting limits.

5.2 Laboratory Quality Assurance/Quality Control

We reviewed the QA/QC results provided with the laboratory analytical reports (Appendix A). Based on this limited data review, no additional qualifications of the soil data are necessary, and the data are of sufficient quality for the purposes of this report.

5.3 Regulatory File Review

5.3.1 2690 Story Road – Former Shell

The 2690 Story Road parcel is located at the southwest corner of the Story Road/Capitol Expressway intersection and is the proposed location of the Story Road Station POC western landing. The site was a former Shell gas station that operated from 1971 to 1985, immediately downgradient of Capitol Expressway. Site closure was granted by the Santa Clara Valley Water District (SCVWD) on February 20, 1996. The site no longer operates as a gas station, and is currently an AutoZone auto parts store.

Based on a review of the site reports and data, Geocon does not anticipate that impacted soil or groundwater from this site will be encountered during project construction. Monitoring wells are depicted as being destroyed in available documents; however, documentation of the destruction was not located. One of these wells, MW-7, is adjacent to Capitol Expressway and will likely be encountered in the project right-of-way acquisition. A map showing the approximate location of well MW-7 is included in Appendix B.

5.3.2 2695 Story Road – Former Texaco

The 2695 Story Road parcel is at the northwest corner of the Story Road/Capitol Expressway intersection. The site is a former Texaco gas station, immediately downgradient from Capitol Expressway.

Based on a review of the site reports and data, the site was granted closure effective July 29, 2010, and Geocon does not anticipate that impacted soil or groundwater from this site will be encountered during project construction. A map showing the approximate location of the site wells from the *Fourth Quarter 2009 Status Report* is included in Appendix B. Two destroyed groundwater monitoring wells (MW-8 and MW-11) located in Capitol Expressway and three destroyed wells (EA-4, #1, and MW-5) adjacent to Capitol Expressway may be encountered during project construction.

5.3.3 2701 Story Road – Capitol Car Wash

The 2701 Story Road parcel is at the northeast corner of the Story Road/Capitol Expressway intersection. The site is currently operated by Capitol Touchless, a car wash and gas station, immediately upgradient of Capitol Expressway.

Based on a review of the site reports and data, Geocon anticipates that impacted groundwater from this site will be encountered during project construction. The *Well Destruction Report* shows the locations of five destroyed groundwater monitoring wells and one groundwater extraction well associated with hydrocarbon monitoring and cleanup activities from removed underground gasoline storage tanks. Destroyed wells and associated piping may be encountered during project construction. A map showing the approximate location of former wells and associated piping is included in Appendix B.

The site was granted closure as of April 7, 2015, according to a County of Santa Clara Department of Environmental Health letter. It was noted that residual

hydrocarbon contamination in soil and groundwater remains at the site that could pose an unacceptable risk under certain site development activities such as site grading, excavation, or the installation of water wells.

5.3.4 2710 Story Road – Chevron

The 2710 Story Road parcel is at the southeast corner of the Story Road/Capitol Expressway intersection and is the proposed location of the Story Road Station POC eastern landing. The site is currently a Chevron gas station, immediately upgradient of Capitol Expressway.

Based on a review of the site reports and data, Geocon anticipates that abandoned wells, underground extraction piping, and impacted soil and groundwater may be encountered during project construction from this site. According to information available on the California State Water Resources Control Board GeoTracker website (http://geotracker.waterboards.ca.gov), a groundwater remediation and extraction system operated both on and offsite from approximately 1990 until 2016 with up to 40 wells installed at various times. A map showing the approximate location of the site wells and hydrocarbon concentrations reported in December 2015 from the *Fourth Quarter 2015 Groundwater Monitoring Report and Request for Low-Threat Closure* is included in Appendix B. Because concentrations of TPHg, benzene, toluene, ethylbenzene, total xylenes and MTBE had attenuated sufficiently over time, the site was eligible for low-threat closure and site wells were destroyed ending in September 2016. The multi-phase extraction remediation system was removed in April and May 2018.

The site was granted closure as of February 27, 2017, according to a County of Santa Clara Department of Environmental Health letter. It was noted that residual hydrocarbon contamination in soil and groundwater remains at the site that could pose an unacceptable risk under certain site development activities such as site grading, excavation, or the installation of water wells.

5.3.5 2242 Tully Road – Former J. C. Penney TBA Facility

The 2242 Tully Road site was formerly used by J. C. Penney as a Tire, Battery, and Automotive (TBA) facility and a petroleum hydrocarbon release from the site's USTs was discovered in 1979. A groundwater interceptor trench was installed and operated in the early 1980s and the USTs were removed from the site in 1984. Between 1993 and 1996, a groundwater and soil vapor extraction system

operated at the site. Quarterly groundwater monitoring was performed at the site from 2003 until 2012. Additional soil vapor samples were collected between January 2007 and March 2009, and a soil vapor extraction system operated with newly-installed soil vapor extraction wells from January 2010 through January 2011.

In April 2007, URS Corporation (site environmental consultant for J. C. Penney) submitted the *Subsurface Vapor Intrusion Assessment Report* to the Santa Clara County Environmental Health Department (SCCEHD) and recommended that regulatory closure be granted for the site. The closure recommendation was based on 1) acceptable risk levels for air intrusion to indoor air at the dialysis center, 2) contaminant sources have been removed, 3) groundwater plume has been shrinking since 1999, 4) no nearby receptors that use shallow groundwater, and 5) limited surface water infiltration due to paved surfaces.

The report entitled, "Decommissioning of Groundwater Interceptor Trench, J. C. Penney Co. Former TBA Facility, Eastridge Mall, 2242 Tully Road, San Jose, California," dated April 9, 2012, documented the decommissioning of the groundwater interceptor trench at the site. Associated piping was also removed and the area backfilled with clean soil. In a letter report dated November 12, 2012, URS Corporation noted that monitoring and/or extraction wells associated with the site had been destroyed in 1998, 2008, and 2009, with the final wells destroyed in October 2012. Maps showing the former location of the features and concentrations of TPHg and benzene in site groundwater in January 2012 presented in the URS report dated April 30, 2012 and entitled, "First Quarter 2012 Groundwater Monitoring, J. C. Penney Co. Former TBA Facility, Eastridge Mall, 2242 Tully Road, San Jose, California" are included in Appendix B.

The site was granted closure as of November 14, 2012, according to a County of Santa Clara Department of Environmental Health letter. Groundwater at the site contained 3,100 ug/l TPHg, 36 ug/l benzene, 8 ug/l ethylbenzene, and 0.70 ug/l xylenes. Soil was reported to contain 11.7 mg/kg TPHg, 0.42 mg/kg benzene, 0.305 mg/kg toluene, 0.26 mg/kg ethylbenzene, and 0.7 mg/kg xylenes at the time of closure. It was noted that residual hydrocarbon contamination in soil and groundwater remains at the site that could pose an unacceptable risk under certain site development activities such as site grading, excavation, or the installation of water wells. Based on a review of the site reports and data, and the spatial relationship to the proposed improvements, Geocon anticipates that

impacted groundwater from this site will not be encountered during project construction.

5.3.6 Anticipated LUST-Related Impacts

Based on the regulatory file review, groundwater impacted with petroleum hydrocarbons will be encountered in the proposed Story Road Station area. The two sources of impacted groundwater are the Chevron gas station at 2710 Story Road and Capitol Touchless gas station at 2701 Story Road. Geocon also anticipates that impacted soil adjacent to the former USTs at 2710 Story Road may be encountered during construction of the proposed Story Road Station POC eastern landing.

6. Conclusions

6.1 Lead in Soil

Elevated total and soluble lead concentrations were not confirmed in the vicinity of GD3, GH1, or GH12. Geocon recommends that excavated soil from these areas be separately stockpiled during construction and resampled to confirm lead content prior to reuse or disposal. Based on the total and soluble lead results, excavated soil is expected to be classified as non-hazardous.

6.2 CAM 17 Metals in Soil

With the exceptions of chromium and nickel, CAM 17 metals other than lead were reported in the samples at total concentrations below 10 times their respective STLCs. WET chromium was not detected at or above the reporting limit of 1.0 mg/l, below its STLC of 5.0 mg/l. WET nickel was reported at a maximum concentration of 5.3 mg/l, below the STLC of 20 mg/l. Accordingly, soil would be classified as non-hazardous based chromium and nickel content.

The CAM 17 metals concentrations in site soil were compared to ESLs. Arsenic, cobalt, lead, nickel, and thallium were reported at concentrations greater than one or more ESL value. Statistical methods were used to were used to calculate the 95% upper confidence limits (UCLs) for total arsenic, cobalt, lead, nickel, and thallium. The upper one-sided 95% UCL of the arithmetic mean is defined as the value that, when calculated repeatedly for randomly drawn subsets of site data, equals or exceeds the true mean 95% of the time.

The UCL results are included in Appendix C. ESLs, UCLs, and published background concentrations for arsenic, cobalt, lead, and nickel are summarized in the following table.

Metal	Maximum	95% UCL	Residential Direct Exposure ESL	Commercial/ Industrial Direct Exposure ESL	Construction Worker Direct Exposure ESL	Published Background Mean[1]	Published Background Range[1]
Arsenic	17	7.58	0.067	0.31	0.98	3.5	0.6 to 11
Cobalt	40	15.1	23	350	28	14.9	2.7 to 46.9
Lead	600	83.6	80	320	160	23.9	12.4 to 97.1
Nickel	560	200	820	11,000	86	57	9.0 to 509
Thallium	2.8	0.86	0.78	12	3.5	0.56	0.17 to 1.10

Concentrations reported in mg/kg
[1] Kearney Foundation of Soil Science, March 1996

Based on the maximum and/or the 95% UCL concentrations for arsenic, cobalt, lead, nickel, and thallium, reuse or disposal of excavated soil may be restricted depending on proposed use.

Metals results for soil samples are summarized in Table 3.

6.3 Organic Compounds in Soil

TPHg was not detected in the samples at or above the laboratory reporting limit of 1.0 mg/kg.

MTBE and BTEX compounds were not detected at or above the laboratory reporting limits.

TPHd was reported at concentrations ranging from not detected (laboratory reporting limit of 1.0 mg/kg) to 1,500 mg/kg, above the residential direct exposure ESL of 260 mg/kg and the commercial/industrial direct exposure ESL of 1,200 mg/kg. TPHd has a 95% UCL of 349 mg/kg for the site.

TPHmo was reported at concentrations ranging from not detected (laboratory reporting limit of 1.0 mg/kg) to 4,000 mg/kg, below the ESLs.

Concentrations of TPHd in excess of ESLs were limited to borings GD11 and GD12 (and subsequent confirmation sample locations), GH14, and GH15. Based on the results of the initial and confirmation soil sampling, TPHd/mo impacts to soil appear

to be limited to near-surface soil, within three feet of the surface in the area of borings GD11 and GD12. Concentrations of TPHd in samples collected from GH14 and GH15 reported a maximum concentration of 500 mg/kg at a depth of 1.5 feet in boring GH14. Soil deeper than 2 feet was not sampled in this area.

Organochlorine pesticides 4,4'-DDE and 4,4'-DDT were reported at concentrations ranging from not detected (laboratory reporting limit of 1.0 µg/kg) to 14 µg/kg, below the ESLs. Remaining organochlorine pesticides were not detected at or above the laboratory reporting limits.

A summary of organic compound concentrations in site soil is presented in Table 4.

6.4 Naturally Occurring Asbestos (NOA) in Soil

CCR Title 17, § 93105 sets forth measures to be followed for the investigation and control of naturally occurring asbestos (NOA) for construction sites. Areas with NOA at concentrations equal to or greater than 0.25% are above the regulatory threshold. Ten soil samples were analyzed for asbestos by CARB Test Method 435 using polarized light microscopy (PLM) and at a target sensitivity of 0.25% asbestos. Asbestos was observed in five samples at less than 0.25% asbestos and not observed in the remaining samples. Concentrations of NOA at the site are therefore below the regulatory threshold.

It is recommended that a contractor have an asbestos compliance plan in place on projects where personnel may be in contact with materials known to contain NOA and that wet methods be employed to minimize the potential for airborne asbestos.

A summary of NOA results is included in Table 5.

6.5 Metals in Groundwater

Grab-groundwater samples were collected from borings GD1 to GD5, and GD8 to GD12 and analyzed for total (unfiltered) CAM 17 metals and dissolved (filtered) CAM 17 metals.

Total Metals

Antimony, beryllium, cadmium, and silver were not detected in the samples at or above the laboratory reporting limits. Arsenic, barium, chromium, cobalt, copper, lead, mercury, molybdenum, nickel, selenium, thallium, vanadium, and zinc were reported at concentrations equal to or exceeding one or more ESL.

Dissolved Metals

Antimony, beryllium, cadmium, and silver were not detected in the samples at or above the laboratory reporting limits. Barium and mercury were reported at concentrations below the ESLs. Arsenic, chromium, cobalt, copper, lead, molybdenum, nickel, selenium, thallium, vanadium, and zinc were reported at concentrations equal to or exceeding one or more ESL.

The reported total (unfiltered) and dissolved (filtered) metal concentrations in grab-groundwater samples are consistent with ambient concentrations in the Bay Area; however, Geocon anticipates that treatment will be required to reduce turbidity prior to discharge. Water contained for sediment removal will need to be sampled for constituents of concern prior to discharge in order to ensure compliance with applicable discharge requirements.

A summary of CAM 17 metals concentrations in groundwater is presented in Table 6.

6.6 Organic Compounds in Groundwater

The groundwater samples collected from borings GD1 to GD5, and GD7A to GD12 were analyzed for TPHd, TPHmo, TPHg, VOCs and BTEX/MTBE. Groundwater samples collected from borings GD3 to GD10 were also analyzed for VOCs. Groundwater samples collected from borings GD1, GD2, GD11, and GD12 were also analyzed for PCBs.

VOCs, PCB, and BTEX compounds were not detected at or above the laboratory reporting limits.

MTBE was reported in one sample (GD5) at a concentration of 5.3 µg/l, above the direct exposure ESL of 5.0 µg/l. MTBE was not detected in remaining samples at or above the laboratory reporting limits.

TPHd was reported in samples GD7A and GD7B at concentrations of 0.081 mg/l and 0.092 mg/l, respectively, below the ESLs. TPHd was not detected in remaining samples at or above the laboratory reporting limits.

TPHmo was reported in samples collected from borings GD7A, GD7B, and GD11 at concentrations of up to 0.18 mg/l. TPHmo was not detected (minimum laboratory reporting limit of 0.050 mg/l) in the remaining samples. TPHmo-specific ESLs are not listed because TPHmo is not soluble and detections in groundwater are most

likely petroleum degradates. The SFRWQCB recommends that concentrations of detectable TPHmo be combined with TPHd results and compared to the TPHd criterion. Using the combined detections, the reported TPHmo concentrations for groundwater samples collected from borings GD7A and GD7B exceed the direct exposure human health ESL but are below the remaining ESLs. GD11 concentrations are below the ESLs for TPHd. Accordingly, groundwater generated during construction from these areas may require treatment to reduce petroleum hydrocarbon content prior to discharge or disposal.

A summary of organic compound concentrations for the groundwater sample is presented in Table 7.

6.7 Worker Protection

The contractor(s) should prepare a project-specific health and safety plan to prevent or minimize worker exposure to metals and petroleum hydrocarbons in soil and groundwater. The plan should include protocols for environmental and personnel monitoring, requirements for personal protective equipment, and other health and safety protocols and procedures for the handling of soil and groundwater.

7. References

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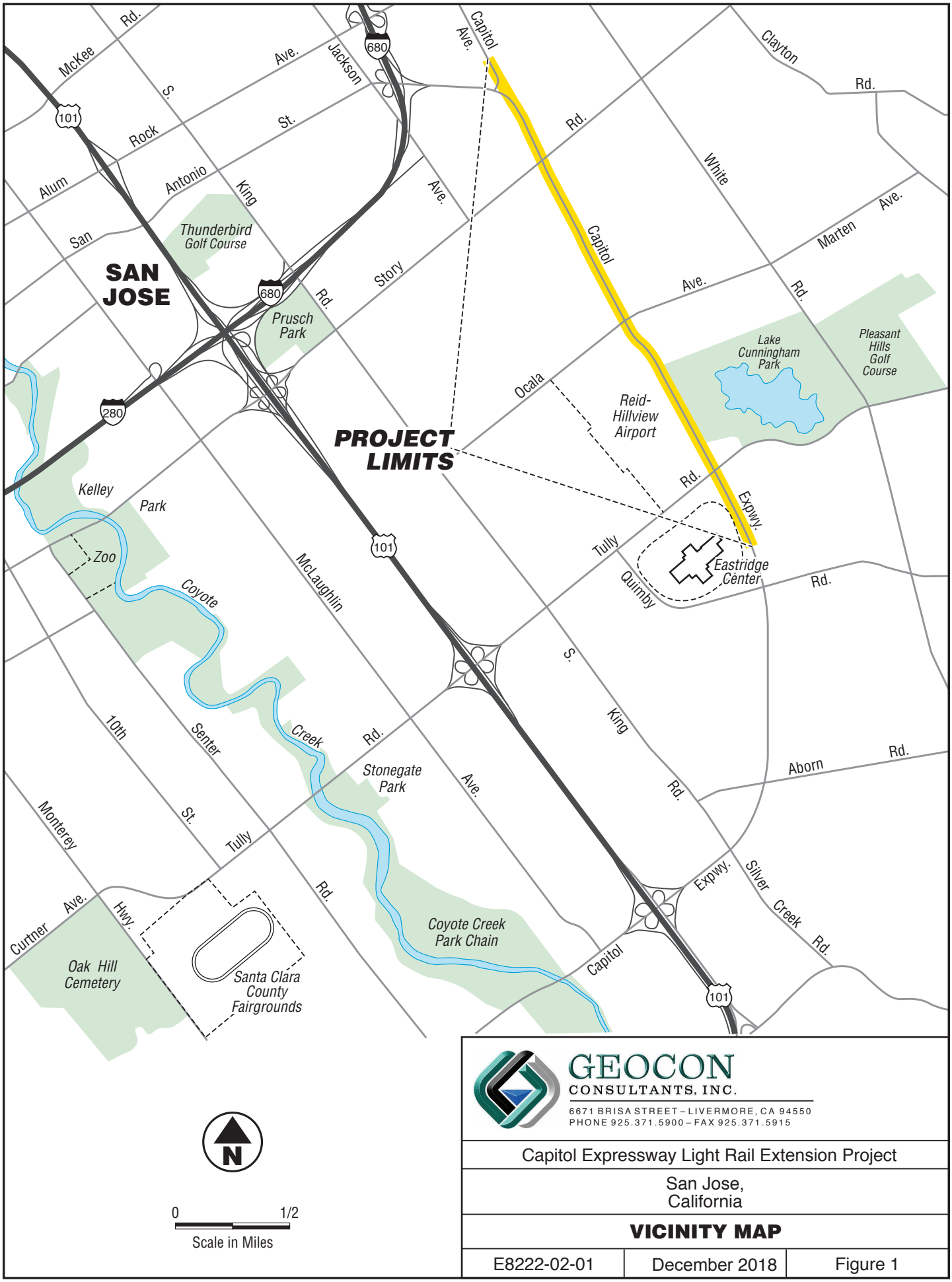

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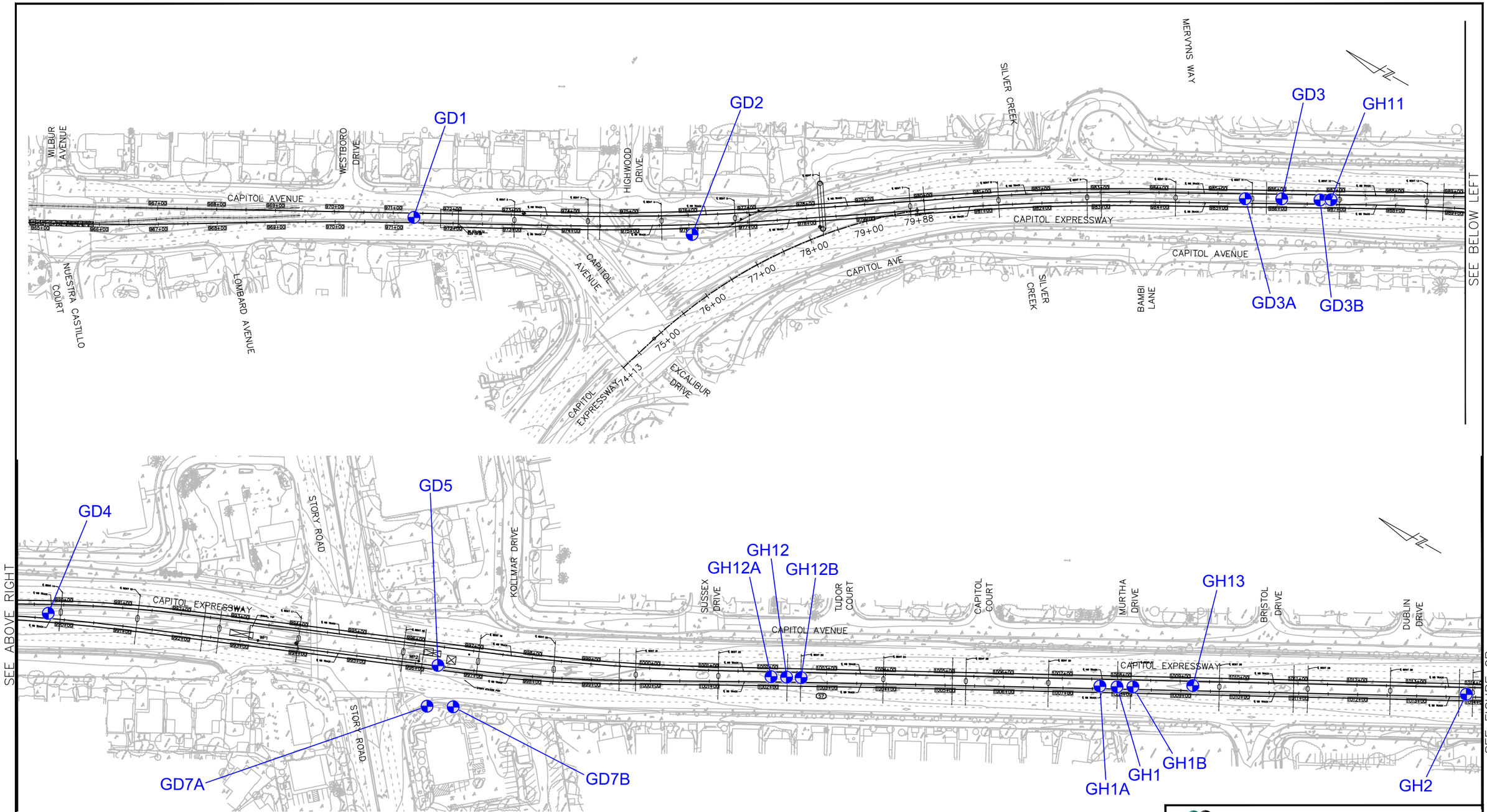
Capitol Expressway Light Rail Extension Project

San Jose,
California

VICINITY MAP

E8222-02-01	December 2018	Figure 1



80' 0' 80' 160'

GRAPHIC SCALE

LEGEND:

Approximate Boring Location

Reference: PARIKH, 35% Submittal Set, 06/18.

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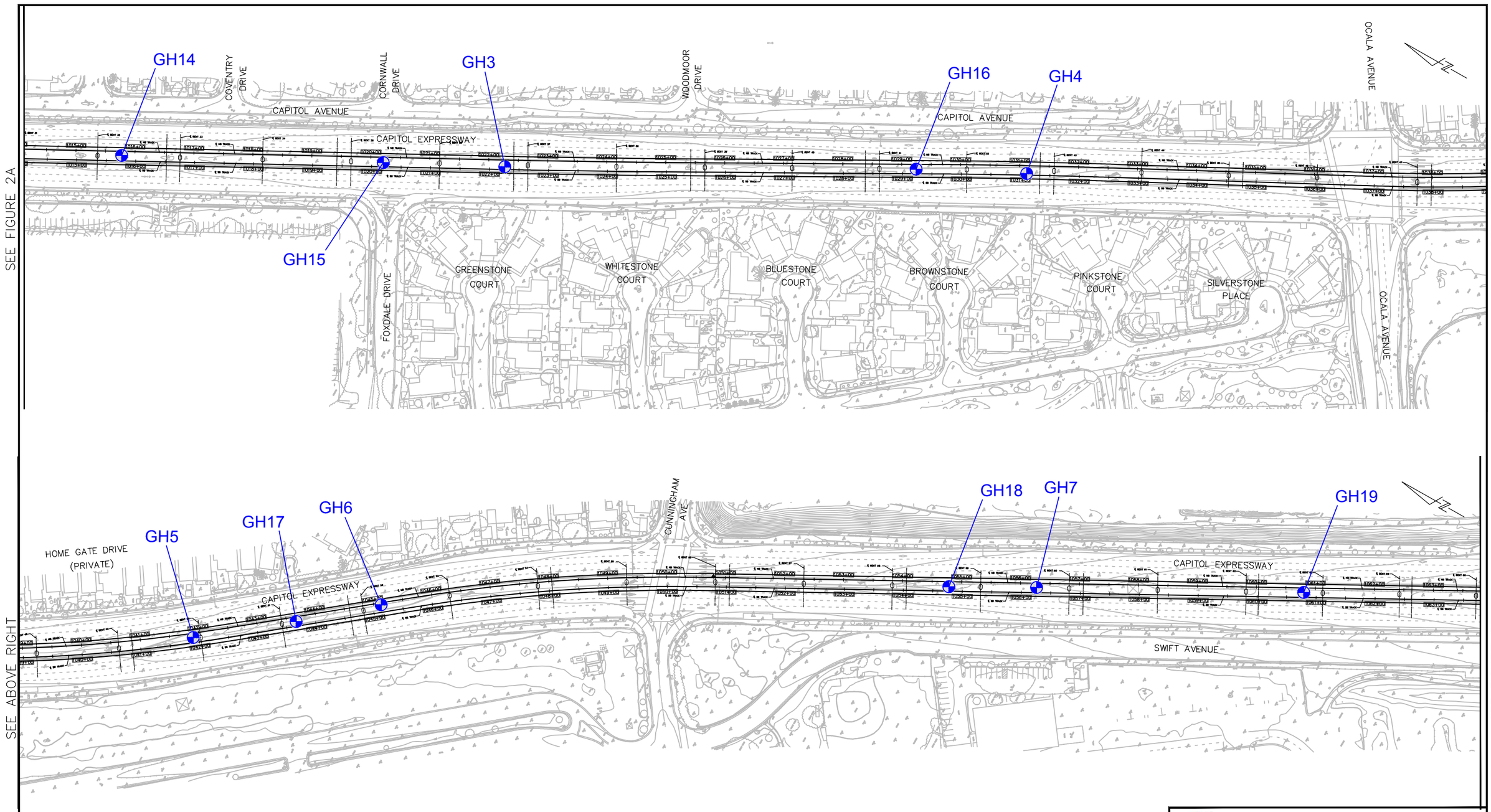
Capitol Expressway Light Rail Project

San Jose, California

SITE PLAN

GEOCON Proj. No. E8222-02-01 | December 2018 | Figure 2A



80' 0' 80' 160'

GRAPHIC SCALE

LEGEND:

Approximate Boring Location

Reference: PARIKH, 35% Submittal Set, 06/18.

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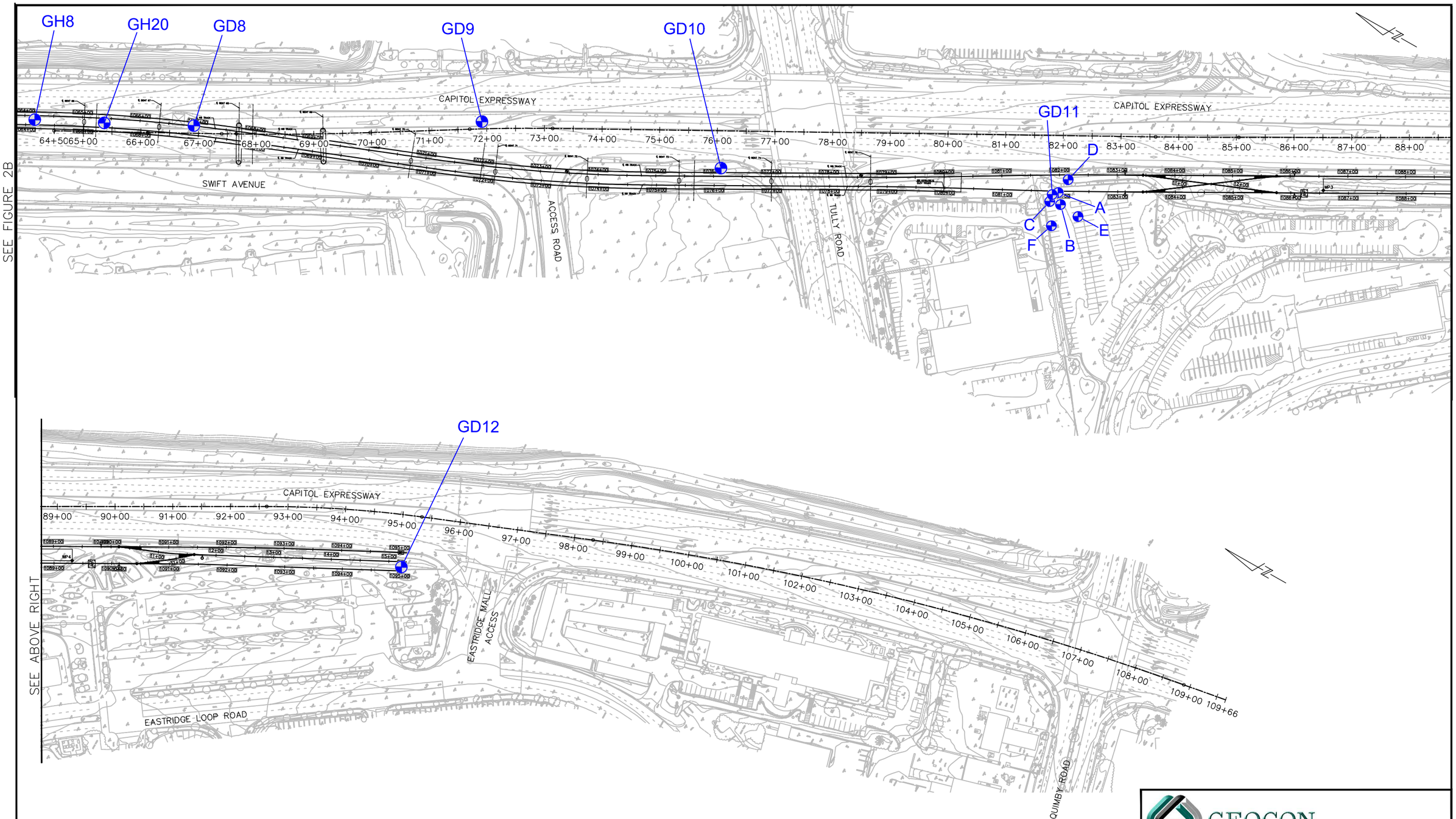
Capitol Expressway Light Rail Project

San Jose, California

SITE PLAN

GEOCON Proj. No. E8222-02-01 | December 2018 | Figure 2B



80' 0' 80' 160'

GRAPHIC SCALE

LEGEND:

Approximate Boring Location

Reference: PARIKH, 35% Submittal Set, 06/18.

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Capitol Expressway Light Rail Project

San Jose, California

SITE PLAN

GEOCON Proj. No. E8222-02-01 | December 2018 | Figure 2C

TABLE 1
List of Borings
Eastridge Ave. to BART Connector/Capitol Expressway Light Rail Extension
San Jose, California

Boring	Figure Number	Date Sampled
GD1	2A	Apr-05
GD2	2A	Apr-05
GD3	2A	Apr-05
GD3A	2A	Nov-05
GD3B	2A	Nov-05
GD4	2A	Apr-05
GD5	2A	Apr-05
GD7A	2A	Sep-06
GD7B	2A	Sep-06
GD8	2C	Apr-05
GD9	2C	Apr-05
GD10	2C	Apr-05
GD11	2C	Apr-05
GD11A	2C	Dec-05
GD11B	2C	Dec-05
GD11C	2C	Dec-05
GD11D	2C	Dec-05
GD11E	2C	Dec-05
GD11F	2C	Dec-05
GD12	2C	Apr-05
GD13	Outside Project Boundaries	Apr-05
GD14	Outside Project Boundaries	Apr-05
GD15	Outside Project Boundaries	Apr-05
GH1	2A	Apr-05
GH1A	2A	Nov-05
GH1B	2A	Nov-05
GH2	2A	Apr-05
GH3	2B	Apr-05
GH4	2B	Apr-05
GH5	2B	Apr-05
GH6	2B	Apr-05
GH7	2B	Apr-05
GH8	2C	Apr-05
GH9	Outside Project Boundaries	Apr-05
GH9A	Outside Project Boundaries	Nov-05
GH9B	Outside Project Boundaries	Nov-05
GH10	Outside Project Boundaries	Apr-05
GH11	2A	Aug-18
GH12	2A	Aug-18
GH12A	2A	Nov-18

TABLE 1
List of Borings
Eastridge Ave. to BART Connector/Capitol Expressway Light Rail Extension
San Jose, California

Boring	Figure Number	Date Sampled
GH12B	2A	Nov-18
GH13	2A	Aug-18
GH14	2B	Aug-18
GH15	2B	Aug-18
GH16	2B	Aug-18
GH17	2B	Aug-18
GH18	2B	Aug-18
GH19	2B	Aug-18
GH20	2C	Aug-18

TABLE 2
Summary of Lead and pH Results - Soil
Eastridge Ave. to BART Connector/Capitol Expressway Light Rail Extension
San Jose, California

Sample ID	Sample Date	Sample Depth (feet)	Total Lead (mg/kg)	WET Lead (mg/l)	TCLP Lead (mg/l)	pH
Comp (GD1, GD2-0)	Apr-05	0 to 0.5	14	---	---	8.40
Comp (GD1, GD2-4)	Apr-05	4 to 4.5	8.2	---	---	7.97
Comp (GD3, GD4-0)	Apr-05	0 to 0.5	100	9.9	---	8.29
Comp (GD3, GD4-4)	Apr-05	4 to 4.5	30	---	---	8.60
GD3A-0	Nov-05	0 to 0.5	8.4	---	---	---
GD3B-0	Nov-05	0 to 0.5	97	3.5	---	---
GD5-0	Apr-05	0 to 0.5	47	---	---	8.32
GD5-4	Apr-05	4 to 4.5	8.3	---	---	8.57
GD7A-8	Sep-06	8 to 8.5	6.6	---	---	---
GD7B-6.5	Sep-06	6.5 to 7	6.4	---	---	---
Comp (GD8, GD9, GD10-0)	Apr-05	0 to 0.5	28	---	---	7.93
Comp (GD8, GD9, GD10-4)	Apr-05	4 to 4.5	7.5	---	---	9.16
Comp (GD11, GD12-0)	Apr-05	0 to 0.5	19	---	---	8.03
Comp (GD11, GD12-4)	Apr-05	4 to 4.5	8.8	---	---	8.01
Comp (GD13, GD14, GD15-0)	Apr-05	0 to 0.5	5.9	---	---	8.23
Comp (GD13, GD14, GD15-4)	Apr-05	4 to 4.5	7.0	---	---	7.77
GH1-0	Apr-05	0 to 0.5	29	---	---	---
GH1-1	Apr-05	1 to 1.5	600	38	---	---
GH1A-0	Nov-05	0 to 0.5	28	---	---	---
GH1A-1	Nov-05	1 to 1.5	12	---	---	---
GH1B-0	Nov-05	0 to 0.5	13	---	---	---
GH1B-1	Nov-05	1 to 1.5	7.7	---	---	---
GH2-0	Apr-05	0 to 0.5	30	---	---	---
GH2-1	Apr-05	1 to 1.5	28	---	---	---
GH3-0	Apr-05	0 to 0.5	29	---	---	---
GH3-1	Apr-05	1 to 1.5	7.2	---	---	---
GH4-0	Apr-05	0 to 0.5	47	---	---	---

TABLE 2
Summary of Lead and pH Results - Soil
Eastridge Ave. to BART Connector/Capitol Expressway Light Rail Extension
San Jose, California

Sample ID	Sample Date	Sample Depth (feet)	Total Lead (mg/kg)	WET Lead (mg/l)	TCLP Lead (mg/l)	pH
GH4-1	Apr-05	1 to 1.5	8.6	---	---	---
GH5-0	Apr-05	0 to 0.5	9.5	---	---	---
GH5-1	Apr-05	1 to 1.5	8.8	---	---	---
GH6-0	Apr-05	0 to 0.5	55	0.82	---	---
GH6-1	Apr-05	1 to 1.5	6.8	---	---	---
GH7-0	Apr-05	0 to 0.5	29	---	---	---
GH7-1	Apr-05	1 to 1.5	<5	---	---	---
GH8-0	Apr-05	0 to 0.5	36	---	---	---
GH8-1	Apr-05	1 to 1.5	7.0	---	---	---
GH9-0	Apr-05	0 to 0.5	160	8.3	---	---
GH9-1	Apr-05	1 to 1.5	160	9.8	---	---
GH9A-0	Nov-05	0 to 0.5	100	6.3	---	---
GH9A-1	Nov-05	1 to 1.5	9.3	---	---	---
GH9A-2	Nov-05	2 to 2.5	11	---	---	---
GH9B-0	Nov-05	0 to 0.5	36	---	---	---
GH9B-1	Nov-05	1 to 1.5	11	---	---	---
GH9B-2	Nov-05	2 to 2.5	7.1	---	---	---
GH10-0	Apr-05	0 to 0.5	13	---	---	---
GH10-1.5	Apr-05	1.5 to 2	9.0	---	---	---
GH11-0	Aug-18	0 to 0.5	4.8	---	---	---
GH11-1.5	Aug-18	1.5 to 2	18	---	---	---
GH12-0	Aug-18	0 to 0.5	40	---	---	---
GH12-1.5	Aug-18	1.5 to 2	200	15	<0.25	---
GH12-1.5DUP	Nov-18	1.5 to 2	38	---	---	---
GH12-2.5	Nov-18	2.5 to 3	9.5	---	---	---
GH12A-1.5	Nov-18	1.5 to 2	35	---	---	---
GH12B-1.5	Nov-18	1.5 to 2	30	---	---	---

TABLE 2
Summary of Lead and pH Results - Soil
Eastridge Ave. to BART Connector/Capitol Expressway Light Rail Extension
San Jose, California

Sample ID	Sample Date	Sample Depth (feet)	Total Lead (mg/kg)	WET Lead (mg/l)	TCLP Lead (mg/l)	pH
GH13-0	Aug-18	0 to 0.5	44	---	---	---
GH13-1.5	Aug-18	1.5 to 2	6.2	---	---	---
GH14-0	Aug-18	0 to 0.5	13	---	---	---
GH14-1.5	Aug-18	1.5 to 2	30	---	---	---
GH15-0	Aug-18	0 to 0.5	18	---	---	---
GH15-1.5	Aug-18	1.5 to 2	6.5	---	---	---
GH16-0	Aug-18	0 to 0.5	11	---	---	---
GH16-1.5	Aug-18	1.5 to 2	7.3	---	---	---
GH17-0	Aug-18	0 to 0.5	27	---	---	---
GH17-1.5	Aug-18	1.5 to 2	7.4	---	---	---
GH18-0	Aug-18	0 to 0.5	20	---	---	---
GH18-1.5	Aug-18	1.5 to 2	96	3.8	---	---
GH19-0	Aug-18	0 to 0.5	15	---	---	---
GH19-1.5	Aug-18	1.5 to 2	8.2	---	---	---
GH20-0	Aug-18	0 to 0.5	55	2.3	---	---
GH20-1.5	Aug-18	1.5 to 2	7.6	---	---	---
Hazardous Waste Criteria						
TTLC (mg/kg)			1,000	---	---	---
STLC (mg/l)			---	5.0	---	---
TCLP (mg/l)			---	---	5.0	---

Notes:
mg/kg = Milligrams per kilogram
mg/l = Milligrams per liter
WET = Waste Extraction Test using citric acid as the extraction fluid
TCLP = Toxicity leaching procedure
STLC = Soluble Threshold Limit Concentration
TTLC = Total Threshold Limit Concentration
Shaded borings are located outside planned excavation area and are not included in report discussion or statistical calculations

Table 3
Summary of CAM 17 Metals Results - Soil
Eastridge Ave. to BART Connector/Capitol Expressway Light Rail Extension
San Jose, California

Sample ID	Sample Date	Sample Depth (ft)	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
Comp (GD1, GD2-0)	Apr-05	0 to 0.5	<1.0	17.0	190	<1.0	<1.0	160 *<1.0*	33	18	14	<0.10	<1.0	560 *5.3*	2.0	<1.0	<1.0	35	39
Comp (GD1, GD2-4)	Apr-05	4 to 4.5	<1.0	1.1	140	<1.0	<1.0	51	11	26	8.2	<0.10	<1.0	70	1.5	<1.0	<1.0	36	49
Comp (GD3, GD4-0)	Apr-05	0 to 0.5	<1.0	6.7	150	<1.0	<1.0	47	11	25	100	0.21	<1.0	70	<1.0	<1.0	1.3	33	82
Comp (GD3, GD4-4)	Apr-05	4 to 4.5	<1.0	14	230	<1.0	<1.0	40	11	24	30	0.19	<1.0	55	<1.0	<1.0	1.6	33	57
GD5-0	Apr-05	0 to 0.5	<1.0	6.6	130	<1.0	<1.0	37	9.1	22	47	0.45	<1.0	49	1.5	<1.0	1.8	28	50
GD5-4	Apr-05	4 to 4.5	<1.0	6.2	190	<1.0	<1.0	49	13	30	8.3	0.12	<1.0	73	<1.0	<1.0	1.1	38	57
GD7A-8	Sep-06	8 to 8.5	<2.0	4.3	170	<1.0	<1.0	44	11	29	6.6	<0.10	<1.0	73	<1.0	<1.0	<1.0	29	47
GD7B-6.5	Sep-06	6.5 to 7	<2.0	3.3	98	<1.0	<1.0	47	11	26	6.4	<0.10	<1.0	74	<1.0	<1.0	<1.0	29	44
Comp (GD8, GD9, GD10-0)	Apr-05	0 to 0.5	<1.0	8.4	150	<1.0	<1.0	60	12	31	28	0.31	<1.0	87	<1.0	<1.0	2.1	38	73
Comp (GD8, GD9, GD10-4)	Apr-05	4 to 4.5	<1.0	8.3	160	<1.0	<1.0	45	11	26	7.5	0.16	<1.0	67	<1.0	<1.0	1.9	32	51
Comp (GD11, GD12-0)	Apr-05	0 to 0.5	<1.0	<1.0	180	<1.0	<1.0	120 *<1.0*	23	29	19	0.31	<1.0	230 *2.1*	2.0	<1.0	<1.0	42	65
Comp (GD11, GD12-4)	Apr-05	4 to 4.5	<1.0	3.0	180	<1.0	<1.0	54	13	34	8.8	<0.10	<1.0	80	1.9	<1.0	<1.0	41	61
Comp (GD13, GD14, GD15-0)	Apr-05	0 to 0.5	1.7	4.7	85	<1.0	<1.0	160 *<1.0*	40	26	5.9	0.17	<1.0	670 *10*	<1.0	<1.0	2.8	31	44
Comp (GD13, GD14, GD15-4)	Apr-05	4 to 4.5	<1.0	11.0	160	<1.0	<1.0	66	15	37	7.0	0.34	<1.0	100	<1.0	<1.0	2.0	45	67
GH11-0	Aug-18	0 to 0.5	<2.0	4.2	120	<1.0	<1.0	42	11	29	4.8	<0.10	<1.0	61	<1.0	<1.0	<1.0	35	49
GH11-1.5	Aug-18	1.5 to 2	<2.0	4.6	150	<1.0	<1.0	39	10	23	18	0.12	<1.0	58	<1.0	<1.0	<1.0	31	55
GH12-0	Aug-18	0 to 0.5	<2.0	4.6	130	<1.0	<1.0	47	12	32	40	<0.10	<1.0	94	<1.0	<1.0	<1.0	31	63
GH12-1.5	Aug-18	1.5 to 2	<2.0	3.4	110	<1.0	<1.0	74 *<1.0*	20	29	200	<0.10	<1.0	240 *1.6*	<1.0	<1.0	<1.0	35	59
GH13-0	Aug-18	0 to 0.5	<2.0	4.7	140	<1.0	<1.0	64 *<1.0*	15	34	44	<0.10	<1.0	130	<1.0	<1.0	<1.0	37	61
GH13-1.5	Aug-18	1.5 to 2	<2.0	5.6	150	<1.0	<1.0	49	12	33	6.2	<0.10	<1.0	72	<1.0	<1.0	<1.0	37	55
GH14-0	Aug-18	0 to 0.5	<2.0	<1.0	83	<1.0	<1.0	130 *<1.0*	28	25	13	<0.10	<1.0	400 *3.2*	<1.0	<1.0	<1.0	29	40
GH14-1.5	Aug-18	1.5 to 2	<2.0	4.0	130	<1.0	<1.0	120 *<1.0*	12	30	30	0.23	<1.0	100	<1.0	<1.0	<1.0	30	100

Table 3
Summary of CAM 17 Metals Results - Soil
Eastridge Ave. to BART Connector/Capitol Expressway Light Rail Extension
San Jose, California

Sample ID	Sample Date	Sample Depth (ft)	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
GH15-0	Aug-18	0 to 0.5	<2.0	3.4	140	<1.0	<1.0	71 *<1.0*	20	36	18	<0.10	<1.0	240 *1.9*	<1.0	<1.0	<1.0	31	49
GH15-1.5	Aug-18	1.5 to 2	<2.0	4.1	140	<1.0	<1.0	42	10	23	6.5	<0.10	<1.0	63	<1.0	<1.0	<1.0	29	44
GH16-0	Aug-18	0 to 0.5	<2.0	4.7	150	<1.0	<1.0	42	10	27	11	<0.10	<1.0	64	<1.0	<1.0	<1.0	32	56
GH16-1.5	Aug-18	1.5 to 2	<2.0	4.0	150	<1.0	<1.0	45	10	24	7.3	0.17	<1.0	68	<1.0	<1.0	<1.0	30	47
GH17-0	Aug-18	0 to 0.5	<2.0	4.3	160	<1.0	<1.0	55 *<1.0*	13	35	27	<0.10	<1.0	100	<1.0	<1.0	<1.0	35	65
GH17-1.5	Aug-18	1.5 to 2	<2.0	4.7	190	<1.0	<1.0	49	13	32	7.4	<0.10	<1.0	70	1.4	<1.0	<1.0	36	51
GH18-0	Aug-18	0 to 0.5	<2.0	4.2	140	<1.0	<1.0	66 *<1.0*	14	33	20	<0.10	<1.0	120	1.0	<1.0	<1.0	34	59
GH18-1.5	Aug-18	1.5 to 2	<2.0	4.4	160	<1.0	<1.0	46	11	28	96	<0.10	<1.0	66	<1.0	<1.0	<1.0	33	56
GH19-0	Aug-18	0 to 0.5	<2.0	4.5	140	<1.0	<1.0	44	11	38	15	<0.10	<1.0	66	<1.0	<1.0	<1.0	34	47
GH19-1.5	Aug-18	1.5 to 2	<2.0	4.3	160	<1.0	<1.0	43	10	27	8.2	<0.10	<1.0	65	<1.0	<1.0	<1.0	30	43
GH20-0	Aug-18	0 to 0.5	<2.0	4.4	130	<1.0	<1.0	44	11	30	55	<0.10	<1.0	67	<1.0	<1.0	<1.0	31	57
GH20-1.5	Aug-18	1.5 to 2	<2.0	4.2	130	<1.0	<1.0	40	9.8	27	7.6	<0.10	<1.0	61	<1.0	<1.0	<1.0	30	44
Hazardous Waste Criteria																			
TTLC (mg/kg)			500	500	10,000	75	100	2,500	8,000	2,500	1,000	20	3,500	2,000	100	500	700	2,400	5,000
STLC (mg/l)			15	5.0	100	0.75	1.0	5.0	80	25	5.0	0.2	350	20	1.0	5.0	7.0	24	250
TCLP (mg/l)			---	5.0	100	---	1.0	6.0	---	---	5.0	0.2	---	---	1.0	5.0	---	---	---
2019 (Rev 2) ESLs																			
Residential Direct Exposure			11	0.067	15,000	16	78	120,000	23	3,100	80	13	390	820	390	390	0.78	390	23,000
Commercial/Industrial Direct Exposure			160	0.31	220,000	230	1,100	1,800,000	350	47,000	320	190	5,800	11,000	5,800	5,800	12	5,800	350,000
Consruction Worker Direct Exposure			50	0.98	3,000	27	51	530,000	28	14,000	160	44	1,800	86	1,700	1,800	3.5	470	110,000
Background Concentrations [1]																			
Minimum			0.15	0.6	133	0.25	0.05	23	2.7	9.1	12.4	0.10	0.1	9.0	0.015	0.10	0.17	39	88
Mean			0.60	3.5	509	1.28	0.36	122	14.9	28.7	23.9	0.26	1.3	57	0.058	0.80	0.56	112	149
Maximum			1.95	11	1,400	2.70	1.70	1,579	46.9	96.4	97.1	0.90	9.6	509	0.430	8.30	1.10	288	236
Landfill Waste Acceptance Criteria																			
Dumbarton Quarry - Class III [2]			---	15	750	4.0	---	50/2.9[6]	23	230	50	6.7	40	150	---	---	---	200	600
Newby Landfill - Class III [3]			---	500	10,000	75	---	2,500/50[6]	8,000	2,500	1,000	20	3,500	2,000	---	---	---	2,400	5,000
Kirby Canyon or Altamont - Class III [4]			---	500	10,000	75	---	2,500/5.0[6]	800	2,000	50	2.0	3,500	100	---	---	---	2,400	2,500
Kirby Canyon or Altamont - Class II [4]			---	500	10,000	75	---	2,500/5.0[6]	8,000	2,500	1,000	20	3,500	2,000	---	---	---	2,400	5,000
Ox Mountain Landfill - Class II [5]			---	500	10,000	75	---	2,500/50[6]	8,000	2,500	1,000	20	3,500	2,000	---	---	---	2,400	5,000

Table 3
Summary of CAM 17 Metals Results - Soil
Eastridge Ave. to BART Connector/Capitol Expressway Light Rail Extension
San Jose, California

Sample ID	Sample Date	Sample Depth (ft)	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc

Notes:

Results are shown in milligrams per kilogram (mg/kg)

< = not detected at or above laboratory reporting limit

Results shown in italics are soluble results in milligrams per liter (mg/l)

(1) = Background Concentrations of Trace and Major Elements in California Soils (Kearney Foundation of Soil Science, Division of Agricultural and Natural Resources, University of California, March 1996)

(2) Dumbarton Quarry Landfill (Class III, landfill ground cover material as specified by Pacific States, Dublin)

(3) Newby Landfill (Class III, as specified by Republic Services, Milpitas)

(4) Kirby Canyon or Altamont Landfill (Class II or Class III material as specified by Waste Management, Livermore), Waste Acceptance Criteria, Revised November 8, 2011

(5) Ox Mountain Landfill (Class II, as specified by Republic Services, Milpitas)

(6) Total Chromium/Hexavalent Chromium

--- No value provided

Shaded borings are located outside planned excavation area and are not included in report discussion or statistical calculations

ESLs = Environmental Screening Levels, SFRWQCB, 2019 (Rev 2)

TTLC = Total Threshold Limit Concentration

STLC = Soluble Threshold Limit Concentration

TCLP = Toxicity Characteristic Leaching Procedure

TABLE 4
Summary of Organic Compounds Results - Soil
Eastridge Ave. to BART Connector/Capitol Expressway Light Rail Extension
San Jose, California

Sample ID	Sample Date	Sample Depth (ft)	TPHd (mg/kg)	TPHmo (mg/kg)	TPHg (mg/kg)	BTEX (mg/kg)	BTEX/MTBE (µg/kg)	Organochlorine Pesticides (µg/kg)
Comp (GD1, GD2-0)	Apr-05	0 to 0.5	24	67	<1.0	---	<5.0	---
Comp (GD1, GD2-4)	Apr-05	4 to 4.5	2.9	5.5	<1.0	---	<5.0	---
Comp (GD3, GD4-0)	Apr-05	0 to 0.5	120	360	<1.0	---	<5.0	---
Comp (GD3, GD4-4)	Apr-05	4 to 4.5	55	150	<1.0	---	<5.0	---
GD5-0	Apr-05	0 to 0.5	22	54	<1.0	---	<5.0	---
GD5-4	Apr-05	4 to 4.5	4.7	5.1	<1.0	---	<5.0	---
GD7A-8	Sep-06	8 to 8.5	<1.0	<1.0	<1.0	---	<5.0	---
GD7B-6.5	Sep-06	6.5 to 7	<1.0	<1.0	<1.0	---	<5.0	---
Comp (GD8, GD9, GD10-0)	Apr-05	0 to 0.5	13	30	<1.0	---	<5.0	---
Comp (GD8, GD9, GD10-4)	Apr-05	4 to 4.5	4.1	2.8	<1.0	---	<5.0	---
Comp (GD11, GD12-0)	Apr-05	0 to 0.5	1,500	4,000	<1.0	---	<5.0	---
Comp (GD11, GD12-4)	Apr-05	4 to 4.5	3.5	6.8	<1.0	---	<5.0	---
GD11A-1	Dec-05	1 to 1.5	480	1,200	---	---	---	---
GD11A-3	Dec-05	3 to 3.5	<1.0	1.2	---	---	---	---
GD11B-1	Dec-05	1 to 1.5	580	1,400	---	---	---	---
GD11B-3	Dec-05	3 to 3.5	9.4	22	---	---	---	---
GD11C-1	Dec-05	1 to 1.5	320	770	---	---	---	---
GD11C-3	Dec-05	3 to 3.5	8.8	21	---	---	---	---
GD11D-1	Dec-05	1 to 1.5	100	270	---	---	---	---
GD11D-3	Dec-05	3 to 3.5	5.0	13	---	---	---	---
GD11E-1	Dec-05	1 to 1.5	31	76	---	---	---	---
GD11E-3	Dec-05	3 to 3.5	<1.0	<1.0	---	---	---	---
GD11F-1	Dec-05	1 to 1.5	16	37	---	---	---	---
GD11F-3	Dec-05	3 to 3.5	<1.0	<1.0	---	---	---	---
Comp (GD13, GD14, GD15-0)	Apr-05	0 to 0.5	4.0	4.2	<1.0	---	<5.0	---
Comp (GD13, GD14, GD15-4)	Apr-05	4 to 4.5	3.9	4.1	<1.0	---	<5.0	---

TABLE 4
Summary of Organic Compounds Results - Soil
Eastridge Ave. to BART Connector/Capitol Expressway Light Rail Extension
San Jose, California

Sample ID	Sample Date	Sample Depth (ft)	TPHd (mg/kg)	TPHmo (mg/kg)	TPHg (mg/kg)	BTEX (mg/kg)	BTEX/MTBE (µg/kg)	Organochlorine Pesticides (µg/kg)
GH11-0	Aug-18	0 to 0.5	13	28	<1.0	ND	---	ND
GH11-1.5	Aug-18	1.5 to 2	8.3	19	<1.0	ND	---	4,4′-DDE=5.8
GH12-0	Aug-18	0 to 0.5	34	110	<1.0	ND	---	4,4′-DDE=3.0
GH12-1.5	Aug-18	1.5 to 2	40	84	<1.0	ND	---	4,4′-DDE=2.4
GH13-0	Aug-18	0 to 0.5	29	63	<1.0	ND	---	4,4′-DDE=7.1 4,4′-DDT=3.3
GH13-1.5	Aug-18	1.5 to 2	5.0	5.5	<1.0	ND	---	ND
GH14-0	Aug-18	0 to 0.5	230	630	<1.0	ND	---	ND
GH14-1.5	Aug-18	1.5 to 2	500	1,600	<1.0	ND	---	4,4′-DDE=14 4,4′-DDT=7.3
GH15-0	Aug-18	0 to 0.5	310	980	<1.0	ND	---	ND
GH15-1.5	Aug-18	1.5 to 2	1.3	1.9	<1.0	ND	---	ND
GH16-0	Aug-18	0 to 0.5	9.9	35	<1.0	ND	---	4,4′-DDE=2.1
GH16-1.5	Aug-18	1.5 to 2	5.3	7.1	<1.0	ND	---	ND
GH17-0	Aug-18	0 to 0.5	40	99	<1.0	ND	---	4,4′-DDE=4.6
GH17-1.5	Aug-18	1.5 to 2	<1.0	<1.0	<1.0	ND	---	ND
GH18-0	Aug-18	0 to 0.5	49	150	<1.0	ND	---	4,4′-DDE=10
GH18-1.5	Aug-18	1.5 to 2	49	160	<1.0	ND	---	4,4′-DDE=3.6 4,4′-DDT=3.9
GH19-0	Aug-18	0 to 0.5	43	88	<1.0	ND	---	4,4′-DDE=6.3
GH19-1.5	Aug-18	1.5 to 2	5.0	7.1	<1.0	ND	---	ND
GH20-0	Aug-18	0 to 0.5	14	28	<1.0	ND	---	4,4′-DDE=7.7
GH20-1.5	Aug-18	1.5 to 2	<1.0	<1.0	<1.0	ND	---	ND
	2019 (Rev 2) ESLs [1]							
	Residential Direct Exposure		260	12,000	430	---	---	4,4′-DDE=1,800 4,4′-DDT=1,900
	Commercial/Industrial Direct Exposure		1,200	180,000	2,000	---	---	4,4′-DDE=8,300 4,4′-DDT=8,500
	Construction Worker Direct Exposure		1,100	54,000	1,800	---	---	4,4′-DDE=57,000 4,4′-DDT=57,000

TABLE 4
Summary of Organic Compounds Results - Soil
Eastridge Ave. to BART Connector/Capitol Expressway Light Rail Extension
San Jose, California

Sample ID	Sample Date	Sample Depth (ft)	TPHd (mg/kg)	TPHmo (mg/kg)	TPHg (mg/kg)	BTEX (mg/kg)	BTEX/MTBE (µg/kg)	Organochlorine Pesticides (µg/kg)
Landfill Waste Acceptance Criteria								
Dumbarton Quarry - Class III [2]			100	500	---	---	---	4,4´-DDE=1,000 4,4´-DDT=1,000
Newby Landfill - Class III [3]			---	---	---	---	---	4,4´-DDE=1,000 4,4´-DDT=1,000
Kirby Canyon or Altamont - Class III [4]			100	100	---	---	---	4,4´-DDE=--- 4,4´-DDT=---
Kirby Canyon or Altamont - Class II [4]			20,000[6]	10,000[6]	---	---	---	4,4´-DDE=1,000 4,4´-DDT=1,000
Ox Mountain Landfill - Class II [5]			3,000	3,000	---	---	---	4,4´-DDE=1,000

Notes:

mg/kg = Milligrams per kilogram

µg/kg = Micrograms per kilogram

TPHd = Total petroleum hydrocarbons as diesel

TPHmo = Total petroleum hydrocarbons as motor oil

TPHg = Total petroleum hydrocarbons as gasoline

[1] = Environmental Screening Levels, SFRWQCB, 2019 (Rev 2)

[2] Dumbarton Quarry Landfill (Class III, landfill ground cover material as specified by Pacific States, Dublin)

[3] Newby Landfill (Class III, as specified by Republic Services, Milpitas)

[4] Kirby Canyon or Altamont Landfill (Class II or Class III material as specified by Waste Management, Livermore), Waste Acceptance Criteria, Revised November 8, 2011

[5] Ox Mountain Landfill (Class II, as specified by Republic Services, Milpitas)

[6] Material which contain TPH above these levels are acceptable if they pass the 96 hour static aquatic test (fish bioassay)

--- No value provided

Shaded borings are located outside planned excavation area and are not included in report discussion or statistical calculations

TABLE 5
Summary of NOA Results - Soil
Eastridge Ave. to BART Connector/Capitol Expressway Light Rail Extension
San Jose, California

Sample ID	Sample Interval (feet)	Asbestos Content
GH9-0	0 to 0.5	<0.25% Chrysotile
GH10-1.5	1.5 to 2	ND
GH11-0	0 to 0.5	<0.25% Chrysotile
GH12-1.5	1.5 to 2	ND
GH13-0	0 to 0.5	<0.25% Chrysotile
GH14-1.5	1.5 to 2	ND
GH15-0	0 to 0.5	<0.25% Chrysotile
GH16-1.5	1.5 to 2	ND
GH17-0	0 to 0.5	<0.25% Chrysotile
GH18-1.5	1.5 to 2	ND

ND - None Detected at a target analytical sensitivity of 0.25%.

TABLE 6
Summary of CAM 17 Metals Results - Groundwater
Eastridge Ave. to BART Connector/Capitol Expressway Light Rail Extension
San Jose, California

Sample ID	Analysis Type	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
GD1-W	Total	<0.0050	0.075	0.22	<0.0030	<0.0030	0.019	0.0042	0.0064	<0.0050	0.00079	0.013	0.019	0.038	<0.0030	0.037	0.016	0.028
GD1-W	Dissolved	<0.025	<0.050	0.27	<0.015	<0.015	0.034	<0.015	<0.025	<0.025	0.00023	<0.025	0.040	0.080	<0.015	<0.075	0.027	<0.050
GD2-W	Total	<0.0050	0.078	0.23	<0.0030	<0.0030	0.023	0.0048	0.0091	<0.0050	0.0013	0.011	0.028	0.054	<0.0030	0.036	0.020	0.031
GD2-W	Dissolved	<0.025	<0.050	0.21	<0.015	<0.015	0.025	<0.015	<0.025	<0.025	<0.0002	0.029	0.030	0.11	<0.015	<0.075	0.018	<0.050
GD3-W	Total	<0.12	0.26	9.2	<0.075	<0.075	1.7	0.54	1.1	0.36	0.0054	<0.12	3.0	0.55	<0.075	<0.38	1.3	1.9
GD3-W	Dissolved	<0.025	0.093	0.51	<0.015	<0.015	0.080	0.020	<0.025	<0.025	<0.0002	0.034	0.11	0.19	<0.015	<0.075	0.069	0.10
GD4-W	Total	<0.12	0.58	19	<0.075	<0.075	6.1	1.6	4.4	0.95	0.014	<0.12	10	0.43	<0.075	<0.38	4.5	7.1
GD4-W	Dissolved	<0.025	0.057	0.48	<0.015	<0.015	0.11	0.026	0.060	0.034	<0.0002	0.054	0.17	<0.050	<0.015	<0.075	0.088	0.21
GD5-W	Total	<0.12	0.38	14	<0.075	<0.075	4.1	1.0	2.2	0.46	0.0063	0.12	6.5	0.45	<0.075	<0.38	2.8	4.3
GD5-W	Dissolved	<0.025	<0.050	0.55	<0.015	<0.015	0.091	0.024	0.069	<0.025	<0.0002	0.12	0.15	<0.050	<0.015	<0.075	0.079	0.13
GD8-W	Total	<0.12	0.26	9.3	<0.075	<0.075	2.5	0.59	1.4	0.26	0.0059	<0.12	3.7	<0.25	<0.075	<0.38	1.7	2.5
GD8-W	Dissolved	<0.025	0.070	0.12	<0.015	<0.015	0.030	<0.015	<0.025	<0.025	0.00062	0.11	<0.025	0.13	<0.015	<0.075	0.019	<0.050
GD9-W	Total	<0.12	<0.25	4.3	<0.075	<0.075	1.8	0.24	0.54	<0.12	0.002	0.14	1.7	<0.25	<0.075	<0.38	0.69	1.1
GD9-W	Dissolved	<0.025	0.053	0.43	<0.015	<0.015	0.57	0.017	0.039	<0.025	<0.0002	0.090	0.099	0.059	<0.015	<0.075	0.060	0.11
GD10-W	Total	<0.12	<0.25	5.5	<0.075	<0.075	1.5	0.44	0.88	<0.12	0.003	<0.12	2.5	0.30	<0.075	<0.38	1.0	1.6
GD10-W	Dissolved	<0.025	0.10	0.20	<0.015	<0.015	0.027	<0.015	<0.025	<0.025	<0.0002	0.033	0.034	0.33	<0.015	0.086	0.025	0.065
GD11-W	Total	<0.0050	0.041	0.48	<0.0030	<0.0030	0.065	0.017	0.035	0.015	0.00025	0.051	0.10	0.035	<0.0030	<0.015	0.053	0.081
GD11-W	Dissolved	<0.025	<0.050	0.54	<0.015	<0.015	0.076	0.022	0.048	<0.025	<0.0002	0.078	0.13	0.077	<0.015	<0.075	0.059	<0.050
GD12-W	Total	<0.0050	0.076	0.38	<0.0030	<0.0030	0.013	0.0047	0.0078	<0.0050	0.00046	0.011	0.018	0.047	<0.0030	0.042	0.015	0.025
GD12-W	Dissolved	<0.025	<0.050	0.33	<0.015	<0.015	<0.015	<0.015	<0.025	<0.025	<0.0002	0.025	0.026	0.074	<0.015	<0.075	<0.015	<0.050

TABLE 6
Summary of CAM 17 Metals Results - Groundwater
Eastridge Ave. to BART Connector/Capitol Expressway Light Rail Extension
San Jose, California

Sample ID	Analysis Type	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
GD13-W	Total	<0.12	<0.25	6.8	<0.075	<0.075	2.0	0.37	0.85	<0.12	0.0024	<0.12	2.7	<0.25	<0.075	<0.38	0.97	1.4
GD13-W	Dissolved	<0.025	0.098	0.29	<0.015	<0.015	0.053	<0.015	<0.025	0.028	<0.0002	<0.025	0.044	0.38	<0.015	0.12	0.027	0.070
GD14-W	Total	<0.12	<0.25	3.0	<0.075	<0.075	1.9	0.18	0.42	<0.12	<0.001	0.18	1.9	0.35	<0.075	<0.38	0.47	0.69
GD14-W	Dissolved	<0.025	0.076	0.27	<0.015	<0.015	0.098	<0.015	<0.025	<0.025	<0.0002	<0.025	0.081	0.30	<0.015	0.083	0.029	0.060
GD15-W	Total	<0.12	<0.25	3.1	<0.075	<0.075	0.85	0.36	0.40	<0.12	0.0017	<0.12	2.1	0.27	<0.075	<0.38	0.52	0.66
GD15-W	Dissolved	<0.025	0.091	0.17	<0.015	<0.015	0.018	<0.015	<0.025	<0.025	<0.0002	<0.025	<0.025	0.26	<0.015	0.110	<0.015	<0.050
2019 (Rev 2) ESLs																		
Direct Exposure Human Health		0.001	0.000004	1.0	0.001	0.00004	22	0.006	0.3	0.0002	0.000061	0.1	0.012	0.03	0.094	0.0001	0.05	5.0
Fresh Water Aquatic Habitat		0.03	0.15	---	0.0027	0.00025	0.18	0.003	0.009	0.0025	0.000025	0.24	0.052	0.005	0.00034	0.02	0.019	0.12
Saltwater Aquatic Habitat		0.5	0.036	---	---	0.0093	1.0	---	0.0031	0.0081	0.000025	---	0.0082	0.0005	0.00019	0.21	---	0.081

Notes:

Results shown in milligrams per liter (mg/l)

< = Not detected above laboratory reporting limit

Shaded borings are located outside planned excavation area and are not included in report discussion or statistical calculations

TABLE 7
Summary of Organic Compounds Results - Groundwater
Eastridge Ave. to BART Connector/Capitol Expressway Light Rail Extension
San Jose, California

Sample ID	TPHd (mg/l)	TPHmo (mg/l)	TPHg (mg/l)	VOCs (ug/l)	BTEX/MTBE (ug/l)	PCBs (ug/l)
GD1-W	<0.056	<0.056	<0.050	---	<0.50	ND
GD2-W	<0.067	<0.067	<0.050	---	<0.50	ND
GD3-W	<0.068	<0.068	<0.050	ND	<0.50	---
GD4-W	<0.074	<0.074	<0.050	ND	<0.50	---
GD5-W	<0.083	<0.083	0.14	ND	MTBE=5.3	---
GD7A-W	0.081	0.16	<0.050	ND	ND	---
GD7B-W	0.092	0.18	<0.050	ND	ND	---
GD8-W	<0.069	<0.069	<0.050	ND	<0.50	---
GD9-W	<0.059	<0.059	<0.050	ND	<0.50	---
GD10-W	<0.061	<0.061	<0.050	ND	<0.50	---
GD11-W	<0.067	0.12	<0.050	---	<0.50	ND
GD12-W	<0.056	<0.056	<0.050	---	<0.50	ND
GD13-W	<0.062	<0.062	0.14	ND	MTBE=5.7	---
GD14-W	<0.050	<0.050	<0.050	ND	<0.50	---
GD15-W	<0.064	<0.064	<0.050	ND	<0.50	---
2019 (Rev 2) ESLs						
Direct Exposure Human Health	0.2	See Note (1)	0.76	---	MTBE=5	---
Fresh Water Aquatic Habitat	0.64	---	0.44	---	MTBE=66,000	---
Saltwater Aquatic Habitat	0.64	---	3.7	---	MTBE=8,000	---

Notes:

TPHd = Total petroleum hydrocarbons as diesel
TPHmo = Total petroleum hydrocarbons as motor oil
TPHg = Total petroleum hydrocarbons as gasoline
VOCs = Volatile Organic Compounds
BTEX = Benzene, toluene, ethylbenzene, and xylenes
MTBE = Methyl tert-butyl ether
PCBs = Polychlorinated biphenyls
mg/l = Milligrams per liter
µg/l = Micrograms per liter
< = Not detected above laboratory reporting limit
ND = Not detected
--- = Not analyzed or no standard exists
(1) = TPHmo is not soluble and detections in groundwater are most likely petroleum degradates.
If detections are degradates, add TPHd and TPHmo results and compare to TPHd criterion.

Shaded borings are located outside planned excavation area and are not included in report discussion or statistical calculations

APPENDIX A

April 25, 2005

ACCREDITED IN ACCORDANCE WITH nelac

ELAP No.: 1838
NELAP No.: 02107CA
CSDLAC No.: 10196

Rick Day
Geocon Consultants, Inc.
2356 Research Drive
Livermore, CA 94550
TEL: (925) 371-5900
FAX: (925) 371-5915

Workorder No.: 075659

RE: DTEV LIGHT RAIL, E8222-06-01

Attention: Rick Day

Enclosed are the results for sample(s) received on April 06, 2005 by Advanced Technology Laboratories . The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (562)989-4045 if I can be of further assistance to your company.

Sincerely,

Eddie F. Rodriguez
Laboratory Director

Advanced Technology Laboratories

Date: *25-Apr-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	GD9-W
Lab Order:	075659		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	3/31/2005 10:55:00 AM
Lab ID:	075659-007A	**Matrix:**	GROUND WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID (EPA 3510C)				**EPA 8015B(M)**		
RunID: GC7_BACK_050407A	QC Batch: 22173			PrepDate	4/7/2005	Analyst: **CBR**
Diesel	ND	0.059		mg/L	1	4/7/2005
Motor Oil	ND	0.059		mg/L	1	4/7/2005

Qualifiers:

- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- DO - Surrogate Diluted Out
- S - Spike/Surrogate outside of limits due to matrix interfere
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories

3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *25-Apr-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	GD9-W
Lab Order:	075659		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	3/31/2005 10:55:00 AM
Lab ID:	075659-007B	**Matrix:**	GROUND WATER

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS11_050408B QC Batch: A05VW103 PrepDate Analyst: **MFR**

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND	0.50		µg/L	1	4/9/2005
1,1,1-Trichloroethane	ND	0.50		µg/L	1	4/9/2005
1,1,2,2-Tetrachloroethane	ND	0.50		µg/L	1	4/9/2005
1,1,2-Trichloroethane	ND	0.50		µg/L	1	4/9/2005
1,1-Dichloroethane	ND	0.50		µg/L	1	4/9/2005
1,1-Dichloroethene	ND	0.50		µg/L	1	4/9/2005
1,1-Dichloropropene	ND	0.50		µg/L	1	4/9/2005
1,2,3-Trichlorobenzene	ND	0.50		µg/L	1	4/9/2005
1,2,3-Trichloropropane	ND	0.50		µg/L	1	4/9/2005
1,2,4-Trichlorobenzene	ND	0.50		µg/L	1	4/9/2005
1,2,4-Trimethylbenzene	ND	0.50		µg/L	1	4/9/2005
1,2-Dibromo-3-chloropropane	ND	0.50		µg/L	1	4/9/2005
1,2-Dibromoethane	ND	0.50		µg/L	1	4/9/2005
1,2-Dichlorobenzene	ND	0.50		µg/L	1	4/9/2005
1,2-Dichloroethane	ND	0.50		µg/L	1	4/9/2005
1,2-Dichloropropane	ND	0.50		µg/L	1	4/9/2005
1,3,5-Trimethylbenzene	ND	0.50		µg/L	1	4/9/2005
1,3-Dichlorobenzene	ND	0.50		µg/L	1	4/9/2005
1,3-Dichloropropane	ND	0.50		µg/L	1	4/9/2005
1,4-Dichlorobenzene	ND	0.50		µg/L	1	4/9/2005
2,2-Dichloropropane	ND	0.50		µg/L	1	4/9/2005
2-Chlorotoluene	ND	0.50		µg/L	1	4/9/2005
4-Chlorotoluene	ND	0.50		µg/L	1	4/9/2005
4-Isopropyltoluene	ND	0.50		µg/L	1	4/9/2005
Benzene	ND	0.50		µg/L	1	4/9/2005
Bromobenzene	ND	0.50		µg/L	1	4/9/2005
Bromodichloromethane	ND	0.50		µg/L	1	4/9/2005
Bromoform	ND	0.50		µg/L	1	4/9/2005
Bromomethane	ND	0.50		µg/L	1	4/9/2005
Carbon tetrachloride	ND	0.50		µg/L	1	4/9/2005
Chlorobenzene	ND	0.50		µg/L	1	4/9/2005
Chloroethane	ND	0.50		µg/L	1	4/9/2005
Chloroform	ND	0.50		µg/L	1	4/9/2005
Chloromethane	ND	0.50		µg/L	1	4/9/2005
cis-1,2-Dichloroethene	ND	0.50		µg/L	1	4/9/2005
cis-1,3-Dichloropropene	ND	0.50		µg/L	1	4/9/2005

Qualifiers:

- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- DO - Surrogate Diluted Out
- S - Spike/Surrogate outside of limits due to matrix interfere
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories *3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040*

Advanced Technology Laboratories

Date: *25-Apr-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	GD9-W
Lab Order:	075659		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	3/31/2005 10:55:00 AM
Lab ID:	075659-007B	**Matrix:**	GROUND WATER

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS11_050408B QC Batch: A05VW103 PrepDate Analyst: **MFR**

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
Dibromochloromethane	ND	0.50		µg/L	1	4/9/2005
Dibromomethane	ND	0.50		µg/L	1	4/9/2005
Dichlorodifluoromethane	ND	0.50		µg/L	1	4/9/2005
Ethylbenzene	ND	0.50		µg/L	1	4/9/2005
Hexachlorobutadiene	ND	0.50		µg/L	1	4/9/2005
Isopropylbenzene	ND	0.50		µg/L	1	4/9/2005
m,p-Xylene	ND	1.0		µg/L	1	4/9/2005
Methylene chloride	ND	0.50		µg/L	1	4/9/2005
n-Butylbenzene	ND	0.50		µg/L	1	4/9/2005
n-Propylbenzene	ND	0.50		µg/L	1	4/9/2005
Naphthalene	ND	0.50		µg/L	1	4/9/2005
o-Xylene	ND	0.50		µg/L	1	4/9/2005
sec-Butylbenzene	ND	0.50		µg/L	1	4/9/2005
Styrene	ND	0.50		µg/L	1	4/9/2005
tert-Butylbenzene	ND	0.50		µg/L	1	4/9/2005
Tetrachloroethene	ND	0.50		µg/L	1	4/9/2005
Toluene	ND	0.50		µg/L	1	4/9/2005
trans-1,2-Dichloroethene	ND	0.50		µg/L	1	4/9/2005
Trichloroethene	ND	0.50		µg/L	1	4/9/2005
Trichlorofluoromethane	ND	0.50		µg/L	1	4/9/2005
Vinyl chloride	ND	0.50		µg/L	1	4/9/2005

Qualifiers:

- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- DO - Surrogate Diluted Out
- S - Spike/Surrogate outside of limits due to matrix interfere
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *25-Apr-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	GD9-W
Lab Order:	075659		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	3/31/2005 10:55:00 AM
Lab ID:	075659-007C	**Matrix:**	GROUND WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
GASOLINE RANGE ORGANICS BY GC/FID						
		EPA 8015B(M)				
RunID: GC1_050408A	QC Batch: D05VW073			PrepDate		Analyst: **JPC**
GRO	ND	0.050		mg/L	1	4/8/2005
VOLATILE ORGANIC COMPOUNDS BY GC/PID						
		EPA 8020A				
RunID: GC1_050408A	QC Batch: D05VW073			PrepDate		Analyst: **JPC**
Benzene	ND	0.50		µg/L	1	4/8/2005
Ethylbenzene	ND	0.50		µg/L	1	4/8/2005
m,p-Xylene	ND	0.50		µg/L	1	4/8/2005
MTBE	ND	0.50		µg/L	1	4/8/2005
o-Xylene	ND	0.50		µg/L	1	4/8/2005
Toluene	ND	0.50		µg/L	1	4/8/2005

Qualifiers:

- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quantitation limits
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- DO - Surrogate Diluted Out
- S - Spike/Surrogate outside of limits due to matrix interfere
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories

3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *25-Apr-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	GD9-W
Lab Order:	075659		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	3/31/2005 10:55:00 AM
Lab ID:	075659-007D	**Matrix:**	GROUND WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS						
	(EPA 3010A)			**EPA 6010B**		
RunID: ICP6_050411I	QC Batch: 22202			PrepDate	4/8/2005	Analyst: **RQ**
Antimony	ND	0.12		mg/L	5	4/11/2005
Arsenic	ND	0.25		mg/L	5	4/11/2005
Barium	4.3	0.075		mg/L	5	4/11/2005
Beryllium	ND	0.075		mg/L	5	4/11/2005
Cadmium	ND	0.075		mg/L	5	4/11/2005
Chromium	1.8	0.075		mg/L	5	4/11/2005
Cobalt	0.24	0.075		mg/L	5	4/11/2005
Copper	0.54	0.12		mg/L	5	4/11/2005
Lead	ND	0.12		mg/L	5	4/11/2005
Molybdenum	0.14	0.12		mg/L	5	4/11/2005
Nickel	1.7	0.12		mg/L	5	4/11/2005
Selenium	ND	0.25		mg/L	5	4/11/2005
Silver	ND	0.075		mg/L	5	4/11/2005
Thallium	ND	0.38		mg/L	5	4/11/2005
Vanadium	0.69	0.075		mg/L	5	4/11/2005
Zinc	1.1	0.25		mg/L	5	4/11/2005
MERCURY BY COLD VAPOR TECHNIQUE						
	(EPA 7470)			**EPA 7470A**		
RunID: AA1_050408E	QC Batch: 22201			PrepDate	4/8/2005	Analyst: **JT**
Mercury	2.0	1.0		µg/L	1	4/8/2005

Qualifiers:

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- S - Spike/Surrogate outside of limits due to matrix interfere
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories

3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *25-Apr-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	GD9-W
Lab Order:	075659		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	3/31/2005 10:55:00 AM
Lab ID:	075659-007E	**Matrix:**	GROUND WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP						
	(EPA 3010A)			**EPA 6010B**		
RunID: ICP5_050412A	QC Batch: 22229			PrepDate	4/12/2005	Analyst: **RQ**
Antimony	ND	0.025		mg/L	5	4/12/2005
Arsenic	0.053	0.050		mg/L	5	4/12/2005
Barium	0.43	0.015		mg/L	5	4/12/2005
Beryllium	ND	0.015		mg/L	5	4/12/2005
Cadmium	ND	0.015		mg/L	5	4/12/2005
Chromium	0.57	0.015		mg/L	5	4/12/2005
Cobalt	0.017	0.015		mg/L	5	4/12/2005
Copper	0.039	0.025		mg/L	5	4/12/2005
Lead	ND	0.025		mg/L	5	4/12/2005
Molybdenum	0.090	0.025		mg/L	5	4/12/2005
Nickel	0.099	0.025		mg/L	5	4/12/2005
Selenium	0.059	0.050		mg/L	5	4/12/2005
Silver	ND	0.015		mg/L	5	4/12/2005
Thallium	ND	0.075		mg/L	5	4/12/2005
Vanadium	0.060	0.015		mg/L	5	4/12/2005
Zinc	0.11	0.050		mg/L	5	4/12/2005
MERCURY BY COLD VAPOR TECHNIQUE						
	(EPA 7470)			**EPA 7470A**		
RunID: AA1_050412B	QC Batch: 22230			PrepDate	4/12/2005	Analyst: **JT**
Mercury	ND	0.20		µg/L	1	4/12/2005

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
DO - Surrogate Diluted Out
S - Spike/Surrogate outside of limits due to matrix interfere
H - Sample exceeded analytical holding time
E - Value above quantitation range
R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *25-Apr-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	GD8-W
Lab Order:	075659		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	3/31/2005 12:00:00 PM
Lab ID:	075659-008A	**Matrix:**	GROUND WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID (EPA 3510C)				**EPA 8015B(M)**		
RunID: GC7_BACK_050407A	QC Batch: 22173			PrepDate	4/7/2005	Analyst: **CBR**
Diesel	ND	0.069		mg/L	1	4/7/2005
Motor Oil	ND	0.069		mg/L	1	4/7/2005

Qualifiers:

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- S - Spike/Surrogate outside of limits due to matrix interfere
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- R - RPD outside acceptable recovery limits

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Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *25-Apr-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	GD8-W
Lab Order:	075659		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	3/31/2005 12:00:00 PM
Lab ID:	075659-008B	**Matrix:**	GROUND WATER

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS11_050408B QC Batch: A05VW103 PrepDate Analyst: **MFR**

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND	0.50		µg/L	1	4/9/2005
1,1,1-Trichloroethane	ND	0.50		µg/L	1	4/9/2005
1,1,2,2-Tetrachloroethane	ND	0.50		µg/L	1	4/9/2005
1,1,2-Trichloroethane	ND	0.50		µg/L	1	4/9/2005
1,1-Dichloroethane	ND	0.50		µg/L	1	4/9/2005
1,1-Dichloroethene	ND	0.50		µg/L	1	4/9/2005
1,1-Dichloropropene	ND	0.50		µg/L	1	4/9/2005
1,2,3-Trichlorobenzene	ND	0.50		µg/L	1	4/9/2005
1,2,3-Trichloropropane	ND	0.50		µg/L	1	4/9/2005
1,2,4-Trichlorobenzene	ND	0.50		µg/L	1	4/9/2005
1,2,4-Trimethylbenzene	ND	0.50		µg/L	1	4/9/2005
1,2-Dibromo-3-chloropropane	ND	0.50		µg/L	1	4/9/2005
1,2-Dibromoethane	ND	0.50		µg/L	1	4/9/2005
1,2-Dichlorobenzene	ND	0.50		µg/L	1	4/9/2005
1,2-Dichloroethane	ND	0.50		µg/L	1	4/9/2005
1,2-Dichloropropane	ND	0.50		µg/L	1	4/9/2005
1,3,5-Trimethylbenzene	ND	0.50		µg/L	1	4/9/2005
1,3-Dichlorobenzene	ND	0.50		µg/L	1	4/9/2005
1,3-Dichloropropane	ND	0.50		µg/L	1	4/9/2005
1,4-Dichlorobenzene	ND	0.50		µg/L	1	4/9/2005
2,2-Dichloropropane	ND	0.50		µg/L	1	4/9/2005
2-Chlorotoluene	ND	0.50		µg/L	1	4/9/2005
4-Chlorotoluene	ND	0.50		µg/L	1	4/9/2005
4-Isopropyltoluene	ND	0.50		µg/L	1	4/9/2005
Benzene	ND	0.50		µg/L	1	4/9/2005
Bromobenzene	ND	0.50		µg/L	1	4/9/2005
Bromodichloromethane	ND	0.50		µg/L	1	4/9/2005
Bromoform	ND	0.50		µg/L	1	4/9/2005
Bromomethane	ND	0.50		µg/L	1	4/9/2005
Carbon tetrachloride	ND	0.50		µg/L	1	4/9/2005
Chlorobenzene	ND	0.50		µg/L	1	4/9/2005
Chloroethane	ND	0.50		µg/L	1	4/9/2005
Chloroform	ND	0.50		µg/L	1	4/9/2005
Chloromethane	ND	0.50		µg/L	1	4/9/2005
cis-1,2-Dichloroethene	ND	0.50		µg/L	1	4/9/2005
cis-1,3-Dichloropropene	ND	0.50		µg/L	1	4/9/2005

Qualifiers:

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- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- DO - Surrogate Diluted Out
- S - Spike/Surrogate outside of limits due to matrix interfere
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories 3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *25-Apr-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	GD8-W
Lab Order:	075659		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	3/31/2005 12:00:00 PM
Lab ID:	075659-008B	**Matrix:**	GROUND WATER

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS11_050408B QC Batch: A05VW103 PrepDate Analyst: **MFR**

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
Dibromochloromethane	ND	0.50		µg/L	1	4/9/2005
Dibromomethane	ND	0.50		µg/L	1	4/9/2005
Dichlorodifluoromethane	ND	0.50		µg/L	1	4/9/2005
Ethylbenzene	ND	0.50		µg/L	1	4/9/2005
Hexachlorobutadiene	ND	0.50		µg/L	1	4/9/2005
Isopropylbenzene	ND	0.50		µg/L	1	4/9/2005
m,p-Xylene	ND	1.0		µg/L	1	4/9/2005
Methylene chloride	ND	0.50		µg/L	1	4/9/2005
n-Butylbenzene	ND	0.50		µg/L	1	4/9/2005
n-Propylbenzene	ND	0.50		µg/L	1	4/9/2005
Naphthalene	ND	0.50		µg/L	1	4/9/2005
o-Xylene	ND	0.50		µg/L	1	4/9/2005
sec-Butylbenzene	ND	0.50		µg/L	1	4/9/2005
Styrene	ND	0.50		µg/L	1	4/9/2005
tert-Butylbenzene	ND	0.50		µg/L	1	4/9/2005
Tetrachloroethene	ND	0.50		µg/L	1	4/9/2005
Toluene	ND	0.50		µg/L	1	4/9/2005
trans-1,2-Dichloroethene	ND	0.50		µg/L	1	4/9/2005
Trichloroethene	ND	0.50		µg/L	1	4/9/2005
Trichlorofluoromethane	ND	0.50		µg/L	1	4/9/2005
Vinyl chloride	ND	0.50		µg/L	1	4/9/2005

Qualifiers:

- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- DO - Surrogate Diluted Out
- S - Spike/Surrogate outside of limits due to matrix interfere
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories *3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040*

Advanced Technology Laboratories

Date: *25-Apr-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	GD8-W
Lab Order:	075659		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	3/31/2005 12:00:00 PM
Lab ID:	075659-008C	**Matrix:**	GROUND WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
GASOLINE RANGE ORGANICS BY GC/FID						
		EPA 8015B(M)				
RunID: GC1_050408A	QC Batch: D05VW073			PrepDate		Analyst: **JPC**
GRO	ND	0.050		mg/L	1	4/8/2005
VOLATILE ORGANIC COMPOUNDS BY GC/PID						
		EPA 8020A				
RunID: GC1_050408A	QC Batch: D05VW073			PrepDate		Analyst: **JPC**
Benzene	ND	0.50		µg/L	1	4/8/2005
Ethylbenzene	ND	0.50		µg/L	1	4/8/2005
m,p-Xylene	ND	0.50		µg/L	1	4/8/2005
MTBE	ND	0.50		µg/L	1	4/8/2005
o-Xylene	ND	0.50		µg/L	1	4/8/2005
Toluene	ND	0.50		µg/L	1	4/8/2005

Qualifiers:

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- DO - Surrogate Diluted Out
- S - Spike/Surrogate outside of limits due to matrix interfere
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *25-Apr-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	GD8-W
Lab Order:	075659		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	3/31/2005 12:00:00 PM
Lab ID:	075659-008D	**Matrix:**	GROUND WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS						
	(EPA 3010A)			**EPA 6010B**		
RunID: ICP6_050411I	QC Batch: 22202			PrepDate	4/8/2005	Analyst: **RQ**
Antimony	ND	0.12		mg/L	5	4/11/2005
Arsenic	0.26	0.25		mg/L	5	4/11/2005
Barium	9.3	0.075		mg/L	5	4/11/2005
Beryllium	ND	0.075		mg/L	5	4/11/2005
Cadmium	ND	0.075		mg/L	5	4/11/2005
Chromium	2.5	0.075		mg/L	5	4/11/2005
Cobalt	0.59	0.075		mg/L	5	4/11/2005
Copper	1.4	0.12		mg/L	5	4/11/2005
Lead	0.26	0.12		mg/L	5	4/11/2005
Molybdenum	ND	0.12		mg/L	5	4/11/2005
Nickel	3.7	0.12		mg/L	5	4/11/2005
Selenium	ND	0.25		mg/L	5	4/11/2005
Silver	ND	0.075		mg/L	5	4/11/2005
Thallium	ND	0.38		mg/L	5	4/11/2005
Vanadium	1.7	0.075		mg/L	5	4/11/2005
Zinc	2.5	0.25		mg/L	5	4/11/2005
MERCURY BY COLD VAPOR TECHNIQUE						
	(EPA 7470)			**EPA 7470A**		
RunID: AA1_050408E	QC Batch: 22201			PrepDate	4/8/2005	Analyst: **JT**
Mercury	5.9	1.0		µg/L	1	4/8/2005

Qualifiers:

- ND - Not Detected at the Reporting Limit
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- DO - Surrogate Diluted Out
- S - Spike/Surrogate outside of limits due to matrix interfere
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories

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Advanced Technology Laboratories

Date: *25-Apr-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	GD8-W
Lab Order:	075659		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	3/31/2005 12:00:00 PM
Lab ID:	075659-008E	**Matrix:**	GROUND WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP						
	(EPA 3010A)			**EPA 6010B**		
RunID: ICP5_050412A	QC Batch: 22229			PrepDate	4/12/2005	Analyst: **RQ**
Antimony	ND	0.025		mg/L	5	4/12/2005
Arsenic	0.070	0.050		mg/L	5	4/12/2005
Barium	0.12	0.015		mg/L	5	4/12/2005
Beryllium	ND	0.015		mg/L	5	4/12/2005
Cadmium	ND	0.015		mg/L	5	4/12/2005
Chromium	0.030	0.015		mg/L	5	4/12/2005
Cobalt	ND	0.015		mg/L	5	4/12/2005
Copper	ND	0.025		mg/L	5	4/12/2005
Lead	ND	0.025		mg/L	5	4/12/2005
Molybdenum	0.11	0.025		mg/L	5	4/12/2005
Nickel	ND	0.025		mg/L	5	4/12/2005
Selenium	0.13	0.050		mg/L	5	4/12/2005
Silver	ND	0.015		mg/L	5	4/12/2005
Thallium	ND	0.075		mg/L	5	4/12/2005
Vanadium	0.019	0.015		mg/L	5	4/12/2005
Zinc	ND	0.050		mg/L	5	4/12/2005
MERCURY BY COLD VAPOR TECHNIQUE						
	(EPA 7470)			**EPA 7470A**		
RunID: AA1_050412B	QC Batch: 22230			PrepDate	4/12/2005	Analyst: **JT**
Mercury	0.62	0.20		µg/L	1	4/12/2005

Qualifiers:

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- S - Spike/Surrogate outside of limits due to matrix interfere
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *25-Apr-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	GD13-W
Lab Order:	075659		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	3/31/2005 1:15:00 PM
Lab ID:	075659-009A	**Matrix:**	GROUND WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID (EPA 3510C)				**EPA 8015B(M)**		
RunID: GC7_BACK_050407A	QC Batch: 22173			PrepDate	4/7/2005	Analyst: **CBR**
Diesel	ND	0.062		mg/L	1	4/7/2005
Motor Oil	ND	0.062		mg/L	1	4/7/2005

Qualifiers:

- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- DO - Surrogate Diluted Out
- S - Spike/Surrogate outside of limits due to matrix interfere
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- R - RPD outside acceptable recovery limits

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Advanced Technology Laboratories

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Advanced Technology Laboratories

Date: *25-Apr-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	GD13-W
Lab Order:	075659		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	3/31/2005 1:15:00 PM
Lab ID:	075659-009B	**Matrix:**	GROUND WATER

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS11_050408B | QC Batch: A05VW103 | PrepDate | Analyst: **MFR**

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND	0.50		µg/L	1	4/9/2005
1,1,1-Trichloroethane	ND	0.50		µg/L	1	4/9/2005
1,1,2,2-Tetrachloroethane	ND	0.50		µg/L	1	4/9/2005
1,1,2-Trichloroethane	ND	0.50		µg/L	1	4/9/2005
1,1-Dichloroethane	ND	0.50		µg/L	1	4/9/2005
1,1-Dichloroethene	ND	0.50		µg/L	1	4/9/2005
1,1-Dichloropropene	ND	0.50		µg/L	1	4/9/2005
1,2,3-Trichlorobenzene	ND	0.50		µg/L	1	4/9/2005
1,2,3-Trichloropropane	ND	0.50		µg/L	1	4/9/2005
1,2,4-Trichlorobenzene	ND	0.50		µg/L	1	4/9/2005
1,2,4-Trimethylbenzene	ND	0.50		µg/L	1	4/9/2005
1,2-Dibromo-3-chloropropane	ND	0.50		µg/L	1	4/9/2005
1,2-Dibromoethane	ND	0.50		µg/L	1	4/9/2005
1,2-Dichlorobenzene	ND	0.50		µg/L	1	4/9/2005
1,2-Dichloroethane	ND	0.50		µg/L	1	4/9/2005
1,2-Dichloropropane	ND	0.50		µg/L	1	4/9/2005
1,3,5-Trimethylbenzene	ND	0.50		µg/L	1	4/9/2005
1,3-Dichlorobenzene	ND	0.50		µg/L	1	4/9/2005
1,3-Dichloropropane	ND	0.50		µg/L	1	4/9/2005
1,4-Dichlorobenzene	ND	0.50		µg/L	1	4/9/2005
2,2-Dichloropropane	ND	0.50		µg/L	1	4/9/2005
2-Chlorotoluene	ND	0.50		µg/L	1	4/9/2005
4-Chlorotoluene	ND	0.50		µg/L	1	4/9/2005
4-Isopropyltoluene	ND	0.50		µg/L	1	4/9/2005
Benzene	ND	0.50		µg/L	1	4/9/2005
Bromobenzene	ND	0.50		µg/L	1	4/9/2005
Bromodichloromethane	ND	0.50		µg/L	1	4/9/2005
Bromoform	ND	0.50		µg/L	1	4/9/2005
Bromomethane	ND	0.50		µg/L	1	4/9/2005
Carbon tetrachloride	ND	0.50		µg/L	1	4/9/2005
Chlorobenzene	ND	0.50		µg/L	1	4/9/2005
Chloroethane	ND	0.50		µg/L	1	4/9/2005
Chloroform	ND	0.50		µg/L	1	4/9/2005
Chloromethane	ND	0.50		µg/L	1	4/9/2005
cis-1,2-Dichloroethene	ND	0.50		µg/L	1	4/9/2005
cis-1,3-Dichloropropene	ND	0.50		µg/L	1	4/9/2005

Qualifiers:

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- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories 3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *25-Apr-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	GD13-W
Lab Order:	075659		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	3/31/2005 1:15:00 PM
Lab ID:	075659-009B	**Matrix:**	GROUND WATER

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS11_050408B QC Batch: A05VW103 PrepDate Analyst: **MFR**

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
Dibromochloromethane	ND	0.50		µg/L	1	4/9/2005
Dibromomethane	ND	0.50		µg/L	1	4/9/2005
Dichlorodifluoromethane	ND	0.50		µg/L	1	4/9/2005
Ethylbenzene	ND	0.50		µg/L	1	4/9/2005
Hexachlorobutadiene	ND	0.50		µg/L	1	4/9/2005
Isopropylbenzene	ND	0.50		µg/L	1	4/9/2005
m,p-Xylene	ND	1.0		µg/L	1	4/9/2005
Methylene chloride	ND	0.50		µg/L	1	4/9/2005
n-Butylbenzene	ND	0.50		µg/L	1	4/9/2005
n-Propylbenzene	ND	0.50		µg/L	1	4/9/2005
Naphthalene	ND	0.50		µg/L	1	4/9/2005
o-Xylene	ND	0.50		µg/L	1	4/9/2005
sec-Butylbenzene	ND	0.50		µg/L	1	4/9/2005
Styrene	ND	0.50		µg/L	1	4/9/2005
tert-Butylbenzene	ND	0.50		µg/L	1	4/9/2005
Tetrachloroethene	ND	0.50		µg/L	1	4/9/2005
Toluene	ND	0.50		µg/L	1	4/9/2005
trans-1,2-Dichloroethene	ND	0.50		µg/L	1	4/9/2005
Trichloroethene	ND	0.50		µg/L	1	4/9/2005
Trichlorofluoromethane	ND	0.50		µg/L	1	4/9/2005
Vinyl chloride	ND	0.50		µg/L	1	4/9/2005

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
DO - Surrogate Diluted Out
S - Spike/Surrogate outside of limits due to matrix interfere
H - Sample exceeded analytical holding time
E - Value above quantitation range
R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *25-Apr-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	GD13-W
Lab Order:	075659		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	3/31/2005 1:15:00 PM
Lab ID:	075659-009C	**Matrix:**	GROUND WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
GASOLINE RANGE ORGANICS BY GC/FID						
		EPA 8015B(M)				
RunID: GC1_050408A	QC Batch: D05VW073			PrepDate		Analyst: **JPC**
GRO	0.14	0.050		mg/L	1	4/8/2005
VOLATILE ORGANIC COMPOUNDS BY GC/PID						
		EPA 8020A				
RunID: GC1_050408A	QC Batch: D05VW073			PrepDate		Analyst: **JPC**
Benzene	ND	0.50		µg/L	1	4/8/2005
Ethylbenzene	ND	0.50		µg/L	1	4/8/2005
m,p-Xylene	ND	0.50		µg/L	1	4/8/2005
MTBE	5.7	0.50		µg/L	1	4/8/2005
o-Xylene	ND	0.50		µg/L	1	4/8/2005
Toluene	ND	0.50		µg/L	1	4/8/2005

Qualifiers:

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- J - Analyte detected below quantitation limits
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- DO - Surrogate Diluted Out
- S - Spike/Surrogate outside of limits due to matrix interfere
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories

3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *25-Apr-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	GD13-W
Lab Order:	075659		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	3/31/2005 1:15:00 PM
Lab ID:	075659-009D	**Matrix:**	GROUND WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS						
	(EPA 3010A)			**EPA 6010B**		
RunID: ICP6_050411I	QC Batch: 22202			PrepDate	4/8/2005	Analyst: **RQ**
Antimony	ND	0.12		mg/L	5	4/11/2005
Arsenic	ND	0.25		mg/L	5	4/11/2005
Barium	6.8	0.075		mg/L	5	4/11/2005
Beryllium	ND	0.075		mg/L	5	4/11/2005
Cadmium	ND	0.075		mg/L	5	4/11/2005
Chromium	2.0	0.075		mg/L	5	4/11/2005
Cobalt	0.37	0.075		mg/L	5	4/11/2005
Copper	0.85	0.12		mg/L	5	4/11/2005
Lead	ND	0.12		mg/L	5	4/11/2005
Molybdenum	ND	0.12		mg/L	5	4/11/2005
Nickel	2.7	0.12		mg/L	5	4/11/2005
Selenium	ND	0.25		mg/L	5	4/11/2005
Silver	ND	0.075		mg/L	5	4/11/2005
Thallium	ND	0.38		mg/L	5	4/11/2005
Vanadium	0.97	0.075		mg/L	5	4/11/2005
Zinc	1.4	0.25		mg/L	5	4/11/2005
MERCURY BY COLD VAPOR TECHNIQUE						
	(EPA 7470)			**EPA 7470A**		
RunID: AA1_050408E	QC Batch: 22201			PrepDate	4/8/2005	Analyst: **JT**
Mercury	2.4	1.0		µg/L	1	4/8/2005

Qualifiers:

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- DO - Surrogate Diluted Out
- S - Spike/Surrogate outside of limits due to matrix interfere
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories

3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *25-Apr-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	GD13-W
Lab Order:	075659		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	3/31/2005 1:15:00 PM
Lab ID:	075659-009E	**Matrix:**	GROUND WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP						
	(EPA 3010A)			**EPA 6010B**		
RunID: ICP5_050412A	QC Batch: 22229			PrepDate	4/12/2005	Analyst: **RQ**
Antimony	ND	0.025		mg/L	5	4/12/2005
Arsenic	0.098	0.050		mg/L	5	4/12/2005
Barium	0.29	0.015		mg/L	5	4/12/2005
Beryllium	ND	0.015		mg/L	5	4/12/2005
Cadmium	ND	0.015		mg/L	5	4/12/2005
Chromium	0.053	0.015		mg/L	5	4/12/2005
Cobalt	ND	0.015		mg/L	5	4/12/2005
Copper	ND	0.025		mg/L	5	4/12/2005
Lead	0.028	0.025		mg/L	5	4/12/2005
Molybdenum	ND	0.025		mg/L	5	4/12/2005
Nickel	0.044	0.025		mg/L	5	4/12/2005
Selenium	0.38	0.050		mg/L	5	4/12/2005
Silver	ND	0.015		mg/L	5	4/12/2005
Thallium	0.12	0.075		mg/L	5	4/12/2005
Vanadium	0.027	0.015		mg/L	5	4/12/2005
Zinc	0.070	0.050		mg/L	5	4/12/2005
MERCURY BY COLD VAPOR TECHNIQUE						
	(EPA 7470)			**EPA 7470A**		
RunID: AA1_050412B	QC Batch: 22230			PrepDate	4/12/2005	Analyst: **JT**
Mercury	ND	0.20		µg/L	1	4/12/2005

Qualifiers:

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- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- DO - Surrogate Diluted Out
- S - Spike/Surrogate outside of limits due to matrix interfere
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories

3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *25-Apr-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	GD5-0
Lab Order:	075659		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	4/1/2005 1:25:00 PM
Lab ID:	075659-014A	**Matrix:**	SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS						
	(EPA 3050B)			**EPA 6010B**		
RunID: ICP5_050413D	QC Batch: 22242			PrepDate	4/12/2005	Analyst: **RQ**
Antimony	ND	1.0		mg/Kg	1	4/13/2005
Arsenic	6.6	1.0		mg/Kg	1	4/13/2005
Barium	130	1.0		mg/Kg	1	4/13/2005
Beryllium	ND	1.0		mg/Kg	1	4/13/2005
Cadmium	ND	1.0		mg/Kg	1	4/13/2005
Chromium	37	1.0		mg/Kg	1	4/13/2005
Cobalt	9.1	1.0		mg/Kg	1	4/13/2005
Copper	22	1.0		mg/Kg	1	4/13/2005
Lead	47	1.0		mg/Kg	1	4/13/2005
Molybdenum	ND	1.0		mg/Kg	1	4/13/2005
Nickel	49	1.0		mg/Kg	1	4/13/2005
Selenium	1.5	1.0		mg/Kg	1	4/13/2005
Silver	ND	1.0		mg/Kg	1	4/13/2005
Thallium	1.8	1.0		mg/Kg	1	4/13/2005
Vanadium	28	1.0		mg/Kg	1	4/13/2005
Zinc	50	1.0		mg/Kg	1	4/13/2005
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID						
	(EPA 3550B)			**EPA 8015B(M)**		
RunID: GC7_050411B	QC Batch: 22233			PrepDate	4/11/2005	Analyst: **CBR**
Diesel	22	1.0		mg/Kg	1	4/14/2005
Motor Oil	54	1.0		mg/Kg	1	4/14/2005
GASOLINE RANGE ORGANICS BY GC/FID						
				EPA 8015B(M)		
RunID: GC2_050408A	QC Batch: E05VS082			PrepDate		Analyst: **CGM**
GRO	ND	1.0		mg/Kg	1	4/8/2005
VOLATILE ORGANIC COMPOUNDS BY GC/PID						
				EPA 8020A		
RunID: GC2_050408A	QC Batch: E05VS082			PrepDate		Analyst: **CGM**
Benzene	ND	5.0		µg/Kg	1	4/8/2005
Ethylbenzene	ND	5.0		µg/Kg	1	4/8/2005
m,p-Xylene	ND	5.0		µg/Kg	1	4/8/2005

Qualifiers:

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- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- DO - Surrogate Diluted Out
- S - Spike/Surrogate outside of limits due to matrix interfere
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories

3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *25-Apr-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	GD5-0
Lab Order:	075659		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	4/1/2005 1:25:00 PM
Lab ID:	075659-014A	**Matrix:**	SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/PID				**EPA 8020A**		
RunID: GC2_050408A	QC Batch: E05VS082			PrepDate		Analyst: **CGM**
MTBE	ND	5.0		µg/Kg	1	4/8/2005
o-Xylene	ND	5.0		µg/Kg	1	4/8/2005
Toluene	ND	5.0		µg/Kg	1	4/8/2005
MERCURY BY COLD VAPOR TECHNIQUE (EPA 7471)				**EPA 7471A**		
RunID: AA1_050412A	QC Batch: 22244			PrepDate	4/12/2005	Analyst: **JT**
Mercury	0.45	0.10		mg/Kg	1	4/12/2005
PH				**EPA 9045C**		
RunID: WETCHEM_050408E	QC Batch: R48824			PrepDate	4/8/2005	Analyst: **EG**
pH	8.32	0.10		pH Units	1	4/8/2005

Qualifiers:

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- DO - Surrogate Diluted Out
- S - Spike/Surrogate outside of limits due to matrix interfere
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories

3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *25-Apr-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	GD5-4
Lab Order:	075659		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	4/1/2005 1:31:00 PM
Lab ID:	075659-015A	**Matrix:**	SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS						
	(EPA 3050B)			**EPA 6010B**		
RunID: ICP5_050413D	QC Batch: 22242			PrepDate	4/12/2005	Analyst: **RQ**
Antimony	ND	1.0		mg/Kg	1	4/13/2005
Arsenic	6.2	1.0		mg/Kg	1	4/13/2005
Barium	190	1.0		mg/Kg	1	4/13/2005
Beryllium	ND	1.0		mg/Kg	1	4/13/2005
Cadmium	ND	1.0		mg/Kg	1	4/13/2005
Chromium	49	1.0		mg/Kg	1	4/13/2005
Cobalt	13	1.0		mg/Kg	1	4/13/2005
Copper	30	1.0		mg/Kg	1	4/13/2005
Lead	8.3	1.0		mg/Kg	1	4/13/2005
Molybdenum	ND	1.0		mg/Kg	1	4/13/2005
Nickel	73	1.0		mg/Kg	1	4/13/2005
Selenium	ND	1.0		mg/Kg	1	4/13/2005
Silver	ND	1.0		mg/Kg	1	4/13/2005
Thallium	1.1	1.0		mg/Kg	1	4/13/2005
Vanadium	38	1.0		mg/Kg	1	4/13/2005
Zinc	57	1.0		mg/Kg	1	4/13/2005
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID						
	(EPA 3550B)			**EPA 8015B(M)**		
RunID: GC7_050411B	QC Batch: 22233			PrepDate	4/11/2005	Analyst: **CBR**
Diesel	4.7	1.0		mg/Kg	1	4/13/2005
Motor Oil	5.1	1.0		mg/Kg	1	4/13/2005
GASOLINE RANGE ORGANICS BY GC/FID						
				EPA 8015B(M)		
RunID: GC2_050408A	QC Batch: E05VS082			PrepDate		Analyst: **CGM**
GRO	ND	1.0		mg/Kg	1	4/8/2005
VOLATILE ORGANIC COMPOUNDS BY GC/PID						
				EPA 8020A		
RunID: GC2_050408A	QC Batch: E05VS082			PrepDate		Analyst: **CGM**
Benzene	ND	5.0		µg/Kg	1	4/8/2005
Ethylbenzene	ND	5.0		µg/Kg	1	4/8/2005
m,p-Xylene	ND	5.0		µg/Kg	1	4/8/2005

Qualifiers:

- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- DO - Surrogate Diluted Out
- S - Spike/Surrogate outside of limits due to matrix interfere
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories

3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *25-Apr-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	GD5-4
Lab Order:	075659		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	4/1/2005 1:31:00 PM
Lab ID:	075659-015A	**Matrix:**	SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/PID				**EPA 8020A**		
RunID: GC2_050408A	QC Batch: E05VS082			PrepDate		Analyst: **CGM**
MTBE	ND	5.0		µg/Kg	1	4/8/2005
o-Xylene	ND	5.0		µg/Kg	1	4/8/2005
Toluene	ND	5.0		µg/Kg	1	4/8/2005
MERCURY BY COLD VAPOR TECHNIQUE (EPA 7471)				**EPA 7471A**		
RunID: AA1_050412A	QC Batch: 22244			PrepDate	4/12/2005	Analyst: **JT**
Mercury	0.12	0.10		mg/Kg	1	4/12/2005
PH				**EPA 9045C**		
RunID: WETCHEM_050408E	QC Batch: R48824			PrepDate	4/8/2005	Analyst: **EG**
pH	8.57	0.10		pH Units	1	4/8/2005

Qualifiers:

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- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- DO - Surrogate Diluted Out
- S - Spike/Surrogate outside of limits due to matrix interfere
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *25-Apr-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	GD10-W
Lab Order:	075659		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	4/1/2005 8:30:00 AM
Lab ID:	075659-016A	**Matrix:**	GROUND WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID (EPA 3510C)				**EPA 8015B(M)**		
RunID: GC7_BACK_050407A	QC Batch: 22173			PrepDate	4/7/2005	Analyst: **CBR**
Diesel	ND	0.061		mg/L	1	4/7/2005
Motor Oil	ND	0.061		mg/L	1	4/7/2005

Qualifiers:

- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- DO - Surrogate Diluted Out
- S - Spike/Surrogate outside of limits due to matrix interfere
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories

3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *25-Apr-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	GD10-W
Lab Order:	075659		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	4/1/2005 8:30:00 AM
Lab ID:	075659-016B	**Matrix:**	GROUND WATER

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS11_050408B QC Batch: A05VW103 PrepDate Analyst: **MFR**

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND	0.50		µg/L	1	4/9/2005
1,1,1-Trichloroethane	ND	0.50		µg/L	1	4/9/2005
1,1,2,2-Tetrachloroethane	ND	0.50		µg/L	1	4/9/2005
1,1,2-Trichloroethane	ND	0.50		µg/L	1	4/9/2005
1,1-Dichloroethane	ND	0.50		µg/L	1	4/9/2005
1,1-Dichloroethene	ND	0.50		µg/L	1	4/9/2005
1,1-Dichloropropene	ND	0.50		µg/L	1	4/9/2005
1,2,3-Trichlorobenzene	ND	0.50		µg/L	1	4/9/2005
1,2,3-Trichloropropane	ND	0.50		µg/L	1	4/9/2005
1,2,4-Trichlorobenzene	ND	0.50		µg/L	1	4/9/2005
1,2,4-Trimethylbenzene	ND	0.50		µg/L	1	4/9/2005
1,2-Dibromo-3-chloropropane	ND	0.50		µg/L	1	4/9/2005
1,2-Dibromoethane	ND	0.50		µg/L	1	4/9/2005
1,2-Dichlorobenzene	ND	0.50		µg/L	1	4/9/2005
1,2-Dichloroethane	ND	0.50		µg/L	1	4/9/2005
1,2-Dichloropropane	ND	0.50		µg/L	1	4/9/2005
1,3,5-Trimethylbenzene	ND	0.50		µg/L	1	4/9/2005
1,3-Dichlorobenzene	ND	0.50		µg/L	1	4/9/2005
1,3-Dichloropropane	ND	0.50		µg/L	1	4/9/2005
1,4-Dichlorobenzene	ND	0.50		µg/L	1	4/9/2005
2,2-Dichloropropane	ND	0.50		µg/L	1	4/9/2005
2-Chlorotoluene	ND	0.50		µg/L	1	4/9/2005
4-Chlorotoluene	ND	0.50		µg/L	1	4/9/2005
4-Isopropyltoluene	ND	0.50		µg/L	1	4/9/2005
Benzene	ND	0.50		µg/L	1	4/9/2005
Bromobenzene	ND	0.50		µg/L	1	4/9/2005
Bromodichloromethane	ND	0.50		µg/L	1	4/9/2005
Bromoform	ND	0.50		µg/L	1	4/9/2005
Bromomethane	ND	0.50		µg/L	1	4/9/2005
Carbon tetrachloride	ND	0.50		µg/L	1	4/9/2005
Chlorobenzene	ND	0.50		µg/L	1	4/9/2005
Chloroethane	ND	0.50		µg/L	1	4/9/2005
Chloroform	ND	0.50		µg/L	1	4/9/2005
Chloromethane	ND	0.50		µg/L	1	4/9/2005
cis-1,2-Dichloroethene	ND	0.50		µg/L	1	4/9/2005
cis-1,3-Dichloropropene	ND	0.50		µg/L	1	4/9/2005

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- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories *3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040*

Advanced Technology Laboratories

Date: *25-Apr-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	GD10-W
Lab Order:	075659		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	4/1/2005 8:30:00 AM
Lab ID:	075659-016B	**Matrix:**	GROUND WATER

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS11_050408B QC Batch: A05VW103 PrepDate Analyst: **MFR**

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
Dibromochloromethane	ND	0.50		µg/L	1	4/9/2005
Dibromomethane	ND	0.50		µg/L	1	4/9/2005
Dichlorodifluoromethane	ND	0.50		µg/L	1	4/9/2005
Ethylbenzene	ND	0.50		µg/L	1	4/9/2005
Hexachlorobutadiene	ND	0.50		µg/L	1	4/9/2005
Isopropylbenzene	ND	0.50		µg/L	1	4/9/2005
m,p-Xylene	ND	1.0		µg/L	1	4/9/2005
Methylene chloride	ND	0.50		µg/L	1	4/9/2005
n-Butylbenzene	ND	0.50		µg/L	1	4/9/2005
n-Propylbenzene	ND	0.50		µg/L	1	4/9/2005
Naphthalene	ND	0.50		µg/L	1	4/9/2005
o-Xylene	ND	0.50		µg/L	1	4/9/2005
sec-Butylbenzene	ND	0.50		µg/L	1	4/9/2005
Styrene	ND	0.50		µg/L	1	4/9/2005
tert-Butylbenzene	ND	0.50		µg/L	1	4/9/2005
Tetrachloroethene	ND	0.50		µg/L	1	4/9/2005
Toluene	ND	0.50		µg/L	1	4/9/2005
trans-1,2-Dichloroethene	ND	0.50		µg/L	1	4/9/2005
Trichloroethene	ND	0.50		µg/L	1	4/9/2005
Trichlorofluoromethane	ND	0.50		µg/L	1	4/9/2005
Vinyl chloride	ND	0.50		µg/L	1	4/9/2005

Qualifiers:

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- J - Analyte detected below quantitation limits
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- DO - Surrogate Diluted Out
- S - Spike/Surrogate outside of limits due to matrix interfere
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories *3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040*

Advanced Technology Laboratories

Date: *25-Apr-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	GD10-W
Lab Order:	075659		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	4/1/2005 8:30:00 AM
Lab ID:	075659-016C	**Matrix:**	GROUND WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
GASOLINE RANGE ORGANICS BY GC/FID						
		EPA 8015B(M)				
RunID: GC1_050408A	QC Batch: D05VW073			PrepDate		Analyst: **JPC**
GRO	ND	0.050		mg/L	1	4/8/2005
VOLATILE ORGANIC COMPOUNDS BY GC/PID						
		EPA 8020A				
RunID: GC1_050408A	QC Batch: D05VW073			PrepDate		Analyst: **JPC**
Benzene	ND	0.50		µg/L	1	4/8/2005
Ethylbenzene	ND	0.50		µg/L	1	4/8/2005
m,p-Xylene	ND	0.50		µg/L	1	4/8/2005
MTBE	ND	0.50		µg/L	1	4/8/2005
o-Xylene	ND	0.50		µg/L	1	4/8/2005
Toluene	ND	0.50		µg/L	1	4/8/2005

Qualifiers:

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- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- DO - Surrogate Diluted Out
- S - Spike/Surrogate outside of limits due to matrix interfere
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories *3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040*

Advanced Technology Laboratories

Date: *25-Apr-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	GD10-W
Lab Order:	075659		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	4/1/2005 8:30:00 AM
Lab ID:	075659-016D	**Matrix:**	GROUND WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS						
	(EPA 3010A)			**EPA 6010B**		
RunID: ICP6_050411I	QC Batch: 22202			PrepDate	4/8/2005	Analyst: **RQ**
Antimony	ND	0.12		mg/L	5	4/11/2005
Arsenic	ND	0.25		mg/L	5	4/11/2005
Barium	5.5	0.075		mg/L	5	4/11/2005
Beryllium	ND	0.075		mg/L	5	4/11/2005
Cadmium	ND	0.075		mg/L	5	4/11/2005
Chromium	1.5	0.075		mg/L	5	4/11/2005
Cobalt	0.44	0.075		mg/L	5	4/11/2005
Copper	0.88	0.12		mg/L	5	4/11/2005
Lead	ND	0.12		mg/L	5	4/11/2005
Molybdenum	ND	0.12		mg/L	5	4/11/2005
Nickel	2.5	0.12		mg/L	5	4/11/2005
Selenium	0.30	0.25		mg/L	5	4/11/2005
Silver	ND	0.075		mg/L	5	4/11/2005
Thallium	ND	0.38		mg/L	5	4/11/2005
Vanadium	1.0	0.075		mg/L	5	4/11/2005
Zinc	1.6	0.25		mg/L	5	4/11/2005
MERCURY BY COLD VAPOR TECHNIQUE						
	(EPA 7470)			**EPA 7470A**		
RunID: AA1_050408E	QC Batch: 22201			PrepDate	4/8/2005	Analyst: **JT**
Mercury	3.0	1.0		µg/L	1	4/8/2005

Qualifiers:

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- S - Spike/Surrogate outside of limits due to matrix interfere
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *25-Apr-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	GD10-W
Lab Order:	075659		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	4/1/2005 8:30:00 AM
Lab ID:	075659-016E	**Matrix:**	GROUND WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP						
	(EPA 3010A)			**EPA 6010B**		
RunID: ICP5_050412A	QC Batch: 22229			PrepDate	4/12/2005	Analyst: **RQ**
Antimony	ND	0.025		mg/L	5	4/12/2005
Arsenic	0.10	0.050		mg/L	5	4/12/2005
Barium	0.20	0.015		mg/L	5	4/12/2005
Beryllium	ND	0.015		mg/L	5	4/12/2005
Cadmium	ND	0.015		mg/L	5	4/12/2005
Chromium	0.027	0.015		mg/L	5	4/12/2005
Cobalt	ND	0.015		mg/L	5	4/12/2005
Copper	ND	0.025		mg/L	5	4/12/2005
Lead	ND	0.025		mg/L	5	4/12/2005
Molybdenum	0.033	0.025		mg/L	5	4/12/2005
Nickel	0.034	0.025		mg/L	5	4/12/2005
Selenium	0.33	0.050		mg/L	5	4/12/2005
Silver	ND	0.015		mg/L	5	4/12/2005
Thallium	0.086	0.075		mg/L	5	4/12/2005
Vanadium	0.025	0.015		mg/L	5	4/12/2005
Zinc	0.065	0.050		mg/L	5	4/12/2005
MERCURY BY COLD VAPOR TECHNIQUE						
	(EPA 7470)			**EPA 7470A**		
RunID: AA1_050412B	QC Batch: 22230			PrepDate	4/12/2005	Analyst: **JT**
Mercury	ND	0.20		µg/L	1	4/12/2005

Qualifiers:

- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- DO - Surrogate Diluted Out
- S - Spike/Surrogate outside of limits due to matrix interfere
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *25-Apr-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	GD14-W
Lab Order:	075659		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	4/1/2005 12:10:00 PM
Lab ID:	075659-017A	**Matrix:**	GROUND WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID (EPA 3510C) EPA 8015B(M)						
RunID: GC7_BACK_050407A QC Batch: 22173 PrepDate 4/7/2005 Analyst: **CBR**						
Diesel	ND	0.050		mg/L	1	4/7/2005
Motor Oil	ND	0.050		mg/L	1	4/7/2005

Qualifiers:

- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- DO - Surrogate Diluted Out
- S - Spike/Surrogate outside of limits due to matrix interfere
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories

3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *25-Apr-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	GD14-W
Lab Order:	075659		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	4/1/2005 12:10:00 PM
Lab ID:	075659-017B	**Matrix:**	GROUND WATER

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS11_050408B QC Batch: A05VW103 PrepDate Analyst: **MFR**

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND	0.50		µg/L	1	4/9/2005
1,1,1-Trichloroethane	ND	0.50		µg/L	1	4/9/2005
1,1,2,2-Tetrachloroethane	ND	0.50		µg/L	1	4/9/2005
1,1,2-Trichloroethane	ND	0.50		µg/L	1	4/9/2005
1,1-Dichloroethane	ND	0.50		µg/L	1	4/9/2005
1,1-Dichloroethene	ND	0.50		µg/L	1	4/9/2005
1,1-Dichloropropene	ND	0.50		µg/L	1	4/9/2005
1,2,3-Trichlorobenzene	ND	0.50		µg/L	1	4/9/2005
1,2,3-Trichloropropane	ND	0.50		µg/L	1	4/9/2005
1,2,4-Trichlorobenzene	ND	0.50		µg/L	1	4/9/2005
1,2,4-Trimethylbenzene	ND	0.50		µg/L	1	4/9/2005
1,2-Dibromo-3-chloropropane	ND	0.50		µg/L	1	4/9/2005
1,2-Dibromoethane	ND	0.50		µg/L	1	4/9/2005
1,2-Dichlorobenzene	ND	0.50		µg/L	1	4/9/2005
1,2-Dichloroethane	ND	0.50		µg/L	1	4/9/2005
1,2-Dichloropropane	ND	0.50		µg/L	1	4/9/2005
1,3,5-Trimethylbenzene	ND	0.50		µg/L	1	4/9/2005
1,3-Dichlorobenzene	ND	0.50		µg/L	1	4/9/2005
1,3-Dichloropropane	ND	0.50		µg/L	1	4/9/2005
1,4-Dichlorobenzene	ND	0.50		µg/L	1	4/9/2005
2,2-Dichloropropane	ND	0.50		µg/L	1	4/9/2005
2-Chlorotoluene	ND	0.50		µg/L	1	4/9/2005
4-Chlorotoluene	ND	0.50		µg/L	1	4/9/2005
4-Isopropyltoluene	ND	0.50		µg/L	1	4/9/2005
Benzene	ND	0.50		µg/L	1	4/9/2005
Bromobenzene	ND	0.50		µg/L	1	4/9/2005
Bromodichloromethane	ND	0.50		µg/L	1	4/9/2005
Bromoform	ND	0.50		µg/L	1	4/9/2005
Bromomethane	ND	0.50		µg/L	1	4/9/2005
Carbon tetrachloride	ND	0.50		µg/L	1	4/9/2005
Chlorobenzene	ND	0.50		µg/L	1	4/9/2005
Chloroethane	ND	0.50		µg/L	1	4/9/2005
Chloroform	ND	0.50		µg/L	1	4/9/2005
Chloromethane	ND	0.50		µg/L	1	4/9/2005
cis-1,2-Dichloroethene	ND	0.50		µg/L	1	4/9/2005
cis-1,3-Dichloropropene	ND	0.50		µg/L	1	4/9/2005

Qualifiers:

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- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- DO - Surrogate Diluted Out
- S - Spike/Surrogate outside of limits due to matrix interfere
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories 3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *25-Apr-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	GD14-W
Lab Order:	075659		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	4/1/2005 12:10:00 PM
Lab ID:	075659-017B	**Matrix:**	GROUND WATER

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS11_050408B QC Batch: A05VW103 PrepDate Analyst: **MFR**

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
Dibromochloromethane	ND	0.50		µg/L	1	4/9/2005
Dibromomethane	ND	0.50		µg/L	1	4/9/2005
Dichlorodifluoromethane	ND	0.50		µg/L	1	4/9/2005
Ethylbenzene	ND	0.50		µg/L	1	4/9/2005
Hexachlorobutadiene	ND	0.50		µg/L	1	4/9/2005
Isopropylbenzene	ND	0.50		µg/L	1	4/9/2005
m,p-Xylene	ND	1.0		µg/L	1	4/9/2005
Methylene chloride	ND	0.50		µg/L	1	4/9/2005
n-Butylbenzene	ND	0.50		µg/L	1	4/9/2005
n-Propylbenzene	ND	0.50		µg/L	1	4/9/2005
Naphthalene	ND	0.50		µg/L	1	4/9/2005
o-Xylene	ND	0.50		µg/L	1	4/9/2005
sec-Butylbenzene	ND	0.50		µg/L	1	4/9/2005
Styrene	ND	0.50		µg/L	1	4/9/2005
tert-Butylbenzene	ND	0.50		µg/L	1	4/9/2005
Tetrachloroethene	ND	0.50		µg/L	1	4/9/2005
Toluene	ND	0.50		µg/L	1	4/9/2005
trans-1,2-Dichloroethene	ND	0.50		µg/L	1	4/9/2005
Trichloroethene	ND	0.50		µg/L	1	4/9/2005
Trichlorofluoromethane	ND	0.50		µg/L	1	4/9/2005
Vinyl chloride	ND	0.50		µg/L	1	4/9/2005

Qualifiers:

- ND - Not Detected at the Reporting Limit
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- DO - Surrogate Diluted Out
- S - Spike/Surrogate outside of limits due to matrix interfere
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *25-Apr-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	GD14-W
Lab Order:	075659		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	4/1/2005 12:10:00 PM
Lab ID:	075659-017C	**Matrix:**	GROUND WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
GASOLINE RANGE ORGANICS BY GC/FID						
		EPA 8015B(M)				
RunID: GC1_050408A	QC Batch: D05VW073			PrepDate		Analyst: **JPC**
GRO	ND	0.050		mg/L	1	4/8/2005
VOLATILE ORGANIC COMPOUNDS BY GC/PID						
		EPA 8020A				
RunID: GC1_050408A	QC Batch: D05VW073			PrepDate		Analyst: **JPC**
Benzene	ND	0.50		µg/L	1	4/8/2005
Ethylbenzene	ND	0.50		µg/L	1	4/8/2005
m,p-Xylene	ND	0.50		µg/L	1	4/8/2005
MTBE	ND	0.50		µg/L	1	4/8/2005
o-Xylene	ND	0.50		µg/L	1	4/8/2005
Toluene	ND	0.50		µg/L	1	4/8/2005

Qualifiers:

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- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- DO - Surrogate Diluted Out
- S - Spike/Surrogate outside of limits due to matrix interfere
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *25-Apr-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	GD14-W
Lab Order:	075659		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	4/1/2005 12:10:00 PM
Lab ID:	075659-017D	**Matrix:**	GROUND WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS						
	(EPA 3010A)			**EPA 6010B**		
RunID: ICP6_050411I	QC Batch: 22202			PrepDate	4/8/2005	Analyst: **RQ**
Antimony	ND	0.12		mg/L	5	4/11/2005
Arsenic	ND	0.25		mg/L	5	4/11/2005
Barium	3.0	0.075		mg/L	5	4/11/2005
Beryllium	ND	0.075		mg/L	5	4/11/2005
Cadmium	ND	0.075		mg/L	5	4/11/2005
Chromium	1.9	0.075		mg/L	5	4/11/2005
Cobalt	0.18	0.075		mg/L	5	4/11/2005
Copper	0.42	0.12		mg/L	5	4/11/2005
Lead	ND	0.12		mg/L	5	4/11/2005
Molybdenum	0.18	0.12		mg/L	5	4/11/2005
Nickel	1.9	0.12		mg/L	5	4/11/2005
Selenium	0.35	0.25		mg/L	5	4/11/2005
Silver	ND	0.075		mg/L	5	4/11/2005
Thallium	ND	0.38		mg/L	5	4/11/2005
Vanadium	0.47	0.075		mg/L	5	4/11/2005
Zinc	0.69	0.25		mg/L	5	4/11/2005
MERCURY BY COLD VAPOR TECHNIQUE						
	(EPA 7470)			**EPA 7470A**		
RunID: AA1_050408E	QC Batch: 22201			PrepDate	4/8/2005	Analyst: **JT**
Mercury	ND	1.0		µg/L	1	4/8/2005

Qualifiers:

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- DO - Surrogate Diluted Out
- S - Spike/Surrogate outside of limits due to matrix interfere
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories

3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *25-Apr-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	GD14-W
Lab Order:	075659		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	4/1/2005 12:10:00 PM
Lab ID:	075659-017E	**Matrix:**	GROUND WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP						
	(EPA 3010A)			**EPA 6010B**		
RunID: ICP5_050412A	QC Batch: 22229			PrepDate	4/12/2005	Analyst: **RQ**
Antimony	ND	0.025		mg/L	5	4/12/2005
Arsenic	0.076	0.050		mg/L	5	4/12/2005
Barium	0.27	0.015		mg/L	5	4/12/2005
Beryllium	ND	0.015		mg/L	5	4/12/2005
Cadmium	ND	0.015		mg/L	5	4/12/2005
Chromium	0.098	0.015		mg/L	5	4/12/2005
Cobalt	ND	0.015		mg/L	5	4/12/2005
Copper	ND	0.025		mg/L	5	4/12/2005
Lead	ND	0.025		mg/L	5	4/12/2005
Molybdenum	ND	0.025		mg/L	5	4/12/2005
Nickel	0.081	0.025		mg/L	5	4/12/2005
Selenium	0.30	0.050		mg/L	5	4/12/2005
Silver	ND	0.015		mg/L	5	4/12/2005
Thallium	0.083	0.075		mg/L	5	4/12/2005
Vanadium	0.029	0.015		mg/L	5	4/12/2005
Zinc	0.060	0.050		mg/L	5	4/12/2005
MERCURY BY COLD VAPOR TECHNIQUE						
	(EPA 7470)			**EPA 7470A**		
RunID: AA1_050412B	QC Batch: 22230			PrepDate	4/12/2005	Analyst: **JT**
Mercury	ND	0.20		µg/L	1	4/12/2005

Qualifiers:

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- J - Analyte detected below quantitation limits
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- DO - Surrogate Diluted Out
- S - Spike/Surrogate outside of limits due to matrix interfere
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories *3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040*

Advanced Technology Laboratories

Date: *25-Apr-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	GD5-W
Lab Order:	075659		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	4/1/2005 1:55:00 PM
Lab ID:	075659-018A	**Matrix:**	GROUND WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID (EPA 3510C)				**EPA 8015B(M)**		
RunID: GC7_BACK_050407A	QC Batch: 22173			PrepDate	4/7/2005	Analyst: **CBR**
Diesel	ND	0.083		mg/L	1	4/7/2005
Motor Oil	ND	0.083		mg/L	1	4/7/2005

Qualifiers:

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- H - Sample exceeded analytical holding time
- E - Value above quantitation range
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Results are wet unless otherwise specified

Advanced Technology Laboratories

3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *25-Apr-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	GD5-W
Lab Order:	075659		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	4/1/2005 1:55:00 PM
Lab ID:	075659-018B	**Matrix:**	GROUND WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS						
			EPA 8260B			
RunID: MS11_050408B	QC Batch: A05VW103			PrepDate		Analyst: **MFR**
1,1,1,2-Tetrachloroethane	ND	0.50		µg/L	1	4/9/2005
1,1,1-Trichloroethane	ND	0.50		µg/L	1	4/9/2005
1,1,2,2-Tetrachloroethane	ND	0.50		µg/L	1	4/9/2005
1,1,2-Trichloroethane	ND	0.50		µg/L	1	4/9/2005
1,1-Dichloroethane	ND	0.50		µg/L	1	4/9/2005
1,1-Dichloroethene	ND	0.50		µg/L	1	4/9/2005
1,1-Dichloropropene	ND	0.50		µg/L	1	4/9/2005
1,2,3-Trichlorobenzene	ND	0.50		µg/L	1	4/9/2005
1,2,3-Trichloropropane	ND	0.50		µg/L	1	4/9/2005
1,2,4-Trichlorobenzene	ND	0.50		µg/L	1	4/9/2005
1,2,4-Trimethylbenzene	ND	0.50		µg/L	1	4/9/2005
1,2-Dibromo-3-chloropropane	ND	0.50		µg/L	1	4/9/2005
1,2-Dibromoethane	ND	0.50		µg/L	1	4/9/2005
1,2-Dichlorobenzene	ND	0.50		µg/L	1	4/9/2005
1,2-Dichloroethane	ND	0.50		µg/L	1	4/9/2005
1,2-Dichloropropane	ND	0.50		µg/L	1	4/9/2005
1,3,5-Trimethylbenzene	ND	0.50		µg/L	1	4/9/2005
1,3-Dichlorobenzene	ND	0.50		µg/L	1	4/9/2005
1,3-Dichloropropane	ND	0.50		µg/L	1	4/9/2005
1,4-Dichlorobenzene	ND	0.50		µg/L	1	4/9/2005
2,2-Dichloropropane	ND	0.50		µg/L	1	4/9/2005
2-Chlorotoluene	ND	0.50		µg/L	1	4/9/2005
4-Chlorotoluene	ND	0.50		µg/L	1	4/9/2005
4-Isopropyltoluene	ND	0.50		µg/L	1	4/9/2005
Benzene	ND	0.50		µg/L	1	4/9/2005
Bromobenzene	ND	0.50		µg/L	1	4/9/2005
Bromodichloromethane	ND	0.50		µg/L	1	4/9/2005
Bromoform	ND	0.50		µg/L	1	4/9/2005
Bromomethane	ND	0.50		µg/L	1	4/9/2005
Carbon tetrachloride	ND	0.50		µg/L	1	4/9/2005
Chlorobenzene	ND	0.50		µg/L	1	4/9/2005
Chloroethane	ND	0.50		µg/L	1	4/9/2005
Chloroform	ND	0.50		µg/L	1	4/9/2005
Chloromethane	ND	0.50		µg/L	1	4/9/2005
cis-1,2-Dichloroethene	ND	0.50		µg/L	1	4/9/2005
cis-1,3-Dichloropropene	ND	0.50		µg/L	1	4/9/2005

Qualifiers:

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J - Analyte detected below quantitation limits
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DO - Surrogate Diluted Out
S - Spike/Surrogate outside of limits due to matrix interfere
H - Sample exceeded analytical holding time
E - Value above quantitation range
R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories 3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *25-Apr-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	GD5-W
Lab Order:	075659		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	4/1/2005 1:55:00 PM
Lab ID:	075659-018B	**Matrix:**	GROUND WATER

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS11_050408B QC Batch: A05VW103 PrepDate Analyst: **MFR**

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
Dibromochloromethane	ND	0.50		µg/L	1	4/9/2005
Dibromomethane	ND	0.50		µg/L	1	4/9/2005
Dichlorodifluoromethane	ND	0.50		µg/L	1	4/9/2005
Ethylbenzene	ND	0.50		µg/L	1	4/9/2005
Hexachlorobutadiene	ND	0.50		µg/L	1	4/9/2005
Isopropylbenzene	ND	0.50		µg/L	1	4/9/2005
m,p-Xylene	ND	1.0		µg/L	1	4/9/2005
Methylene chloride	ND	0.50		µg/L	1	4/9/2005
n-Butylbenzene	ND	0.50		µg/L	1	4/9/2005
n-Propylbenzene	ND	0.50		µg/L	1	4/9/2005
Naphthalene	ND	0.50		µg/L	1	4/9/2005
o-Xylene	ND	0.50		µg/L	1	4/9/2005
sec-Butylbenzene	ND	0.50		µg/L	1	4/9/2005
Styrene	ND	0.50		µg/L	1	4/9/2005
tert-Butylbenzene	ND	0.50		µg/L	1	4/9/2005
Tetrachloroethene	ND	0.50		µg/L	1	4/9/2005
Toluene	ND	0.50		µg/L	1	4/9/2005
trans-1,2-Dichloroethene	ND	0.50		µg/L	1	4/9/2005
Trichloroethene	ND	0.50		µg/L	1	4/9/2005
Trichlorofluoromethane	ND	0.50		µg/L	1	4/9/2005
Vinyl chloride	ND	0.50		µg/L	1	4/9/2005

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
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DO - Surrogate Diluted Out
S - Spike/Surrogate outside of limits due to matrix interfere
H - Sample exceeded analytical holding time
E - Value above quantitation range
R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories *3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040*

Advanced Technology Laboratories

Date: *25-Apr-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	GD5-W
Lab Order:	075659		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	4/1/2005 1:55:00 PM
Lab ID:	075659-018C	**Matrix:**	GROUND WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
GASOLINE RANGE ORGANICS BY GC/FID						
		EPA 8015B(M)				
RunID: GC1_050408A	QC Batch: D05VW073			PrepDate		Analyst: **JPC**
GRO	0.14	0.050		mg/L	1	4/8/2005
VOLATILE ORGANIC COMPOUNDS BY GC/PID						
		EPA 8020A				
RunID: GC1_050408A	QC Batch: D05VW073			PrepDate		Analyst: **JPC**
Benzene	ND	0.50		µg/L	1	4/8/2005
Ethylbenzene	ND	0.50		µg/L	1	4/8/2005
m,p-Xylene	ND	0.50		µg/L	1	4/8/2005
MTBE	5.3	0.50		µg/L	1	4/8/2005
o-Xylene	ND	0.50		µg/L	1	4/8/2005
Toluene	ND	0.50		µg/L	1	4/8/2005

Qualifiers:

- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- DO - Surrogate Diluted Out
- S - Spike/Surrogate outside of limits due to matrix interfere
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories

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Advanced Technology Laboratories

Date: *25-Apr-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	GD5-W
Lab Order:	075659		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	4/1/2005 1:55:00 PM
Lab ID:	075659-018D	**Matrix:**	GROUND WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS						
	(EPA 3010A)			**EPA 6010B**		
RunID: ICP6_050411I	QC Batch: 22202			PrepDate	4/8/2005	Analyst: **RQ**
Antimony	ND	0.12		mg/L	5	4/11/2005
Arsenic	0.38	0.25		mg/L	5	4/11/2005
Barium	14	0.075		mg/L	5	4/11/2005
Beryllium	ND	0.075		mg/L	5	4/11/2005
Cadmium	ND	0.075		mg/L	5	4/11/2005
Chromium	4.1	0.075		mg/L	5	4/11/2005
Cobalt	1.0	0.075		mg/L	5	4/11/2005
Copper	2.2	0.12		mg/L	5	4/11/2005
Lead	0.46	0.12		mg/L	5	4/11/2005
Molybdenum	0.12	0.12		mg/L	5	4/11/2005
Nickel	6.5	0.12		mg/L	5	4/11/2005
Selenium	0.45	0.25		mg/L	5	4/11/2005
Silver	ND	0.075		mg/L	5	4/11/2005
Thallium	ND	0.38		mg/L	5	4/11/2005
Vanadium	2.8	0.075		mg/L	5	4/11/2005
Zinc	4.3	0.25		mg/L	5	4/11/2005
MERCURY BY COLD VAPOR TECHNIQUE						
	(EPA 7470)			**EPA 7470A**		
RunID: AA1_050408E	QC Batch: 22201			PrepDate	4/8/2005	Analyst: **JT**
Mercury	6.3	1.0		µg/L	1	4/8/2005

Qualifiers:

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- S - Spike/Surrogate outside of limits due to matrix interfere
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories

3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *25-Apr-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	GD5-W
Lab Order:	075659		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	4/1/2005 1:55:00 PM
Lab ID:	075659-018E	**Matrix:**	GROUND WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP						
	(EPA 3010A)			**EPA 6010B**		
RunID: ICP5_050412A	QC Batch: 22229			PrepDate	4/12/2005	Analyst: **RQ**
Antimony	ND	0.025		mg/L	5	4/12/2005
Arsenic	ND	0.050		mg/L	5	4/12/2005
Barium	0.55	0.015		mg/L	5	4/12/2005
Beryllium	ND	0.015		mg/L	5	4/12/2005
Cadmium	ND	0.015		mg/L	5	4/12/2005
Chromium	0.091	0.015		mg/L	5	4/12/2005
Cobalt	0.024	0.015		mg/L	5	4/12/2005
Copper	0.069	0.025		mg/L	5	4/12/2005
Lead	ND	0.025		mg/L	5	4/12/2005
Molybdenum	0.12	0.025		mg/L	5	4/12/2005
Nickel	0.15	0.025		mg/L	5	4/12/2005
Selenium	ND	0.050		mg/L	5	4/12/2005
Silver	ND	0.015		mg/L	5	4/12/2005
Thallium	ND	0.075		mg/L	5	4/12/2005
Vanadium	0.079	0.015		mg/L	5	4/12/2005
Zinc	0.13	0.050		mg/L	5	4/12/2005
MERCURY BY COLD VAPOR TECHNIQUE						
	(EPA 7470)			**EPA 7470A**		
RunID: AA1_050412B	QC Batch: 22230			PrepDate	4/12/2005	Analyst: **JT**
Mercury	ND	0.20		µg/L	1	4/12/2005

Qualifiers:

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- DO - Surrogate Diluted Out
- S - Spike/Surrogate outside of limits due to matrix interfere
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories

3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *25-Apr-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	GD4-W
Lab Order:	075659		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	4/2/2005
Lab ID:	075659-023A	**Matrix:**	GROUND WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID (EPA 3510C)				**EPA 8015B(M)**		
RunID: GC7_BACK_050407A	QC Batch: 22173			PrepDate	4/7/2005	Analyst: **CBR**
Diesel	ND	0.074		mg/L	1	4/7/2005
Motor Oil	ND	0.074		mg/L	1	4/7/2005

Qualifiers:

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- DO - Surrogate Diluted Out
- S - Spike/Surrogate outside of limits due to matrix interfere
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories

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Advanced Technology Laboratories

Date: *25-Apr-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	GD4-W
Lab Order:	075659		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	4/2/2005
Lab ID:	075659-023B	**Matrix:**	GROUND WATER

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS11_050408B QC Batch: A05VW103 PrepDate Analyst: **MFR**

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND	0.50		µg/L	1	4/9/2005
1,1,1-Trichloroethane	ND	0.50		µg/L	1	4/9/2005
1,1,2,2-Tetrachloroethane	ND	0.50		µg/L	1	4/9/2005
1,1,2-Trichloroethane	ND	0.50		µg/L	1	4/9/2005
1,1-Dichloroethane	ND	0.50		µg/L	1	4/9/2005
1,1-Dichloroethene	ND	0.50		µg/L	1	4/9/2005
1,1-Dichloropropene	ND	0.50		µg/L	1	4/9/2005
1,2,3-Trichlorobenzene	ND	0.50		µg/L	1	4/9/2005
1,2,3-Trichloropropane	ND	0.50		µg/L	1	4/9/2005
1,2,4-Trichlorobenzene	ND	0.50		µg/L	1	4/9/2005
1,2,4-Trimethylbenzene	ND	0.50		µg/L	1	4/9/2005
1,2-Dibromo-3-chloropropane	ND	0.50		µg/L	1	4/9/2005
1,2-Dibromoethane	ND	0.50		µg/L	1	4/9/2005
1,2-Dichlorobenzene	ND	0.50		µg/L	1	4/9/2005
1,2-Dichloroethane	ND	0.50		µg/L	1	4/9/2005
1,2-Dichloropropane	ND	0.50		µg/L	1	4/9/2005
1,3,5-Trimethylbenzene	ND	0.50		µg/L	1	4/9/2005
1,3-Dichlorobenzene	ND	0.50		µg/L	1	4/9/2005
1,3-Dichloropropane	ND	0.50		µg/L	1	4/9/2005
1,4-Dichlorobenzene	ND	0.50		µg/L	1	4/9/2005
2,2-Dichloropropane	ND	0.50		µg/L	1	4/9/2005
2-Chlorotoluene	ND	0.50		µg/L	1	4/9/2005
4-Chlorotoluene	ND	0.50		µg/L	1	4/9/2005
4-Isopropyltoluene	ND	0.50		µg/L	1	4/9/2005
Benzene	ND	0.50		µg/L	1	4/9/2005
Bromobenzene	ND	0.50		µg/L	1	4/9/2005
Bromodichloromethane	ND	0.50		µg/L	1	4/9/2005
Bromoform	ND	0.50		µg/L	1	4/9/2005
Bromomethane	ND	0.50		µg/L	1	4/9/2005
Carbon tetrachloride	ND	0.50		µg/L	1	4/9/2005
Chlorobenzene	ND	0.50		µg/L	1	4/9/2005
Chloroethane	ND	0.50		µg/L	1	4/9/2005
Chloroform	ND	0.50		µg/L	1	4/9/2005
Chloromethane	ND	0.50		µg/L	1	4/9/2005
cis-1,2-Dichloroethene	ND	0.50		µg/L	1	4/9/2005
cis-1,3-Dichloropropene	ND	0.50		µg/L	1	4/9/2005

Qualifiers:

- ND - Not Detected at the Reporting Limit
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- B - Analyte detected in the associated Method Blank
- DO - Surrogate Diluted Out
- S - Spike/Surrogate outside of limits due to matrix interfere
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories 3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *25-Apr-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	GD4-W
Lab Order:	075659		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	4/2/2005
Lab ID:	075659-023B	**Matrix:**	GROUND WATER

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS11_050408B QC Batch: A05VW103 PrepDate Analyst: **MFR**

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
Dibromochloromethane	ND	0.50		µg/L	1	4/9/2005
Dibromomethane	ND	0.50		µg/L	1	4/9/2005
Dichlorodifluoromethane	ND	0.50		µg/L	1	4/9/2005
Ethylbenzene	ND	0.50		µg/L	1	4/9/2005
Hexachlorobutadiene	ND	0.50		µg/L	1	4/9/2005
Isopropylbenzene	ND	0.50		µg/L	1	4/9/2005
m,p-Xylene	ND	1.0		µg/L	1	4/9/2005
Methylene chloride	ND	0.50		µg/L	1	4/9/2005
n-Butylbenzene	ND	0.50		µg/L	1	4/9/2005
n-Propylbenzene	ND	0.50		µg/L	1	4/9/2005
Naphthalene	ND	0.50		µg/L	1	4/9/2005
o-Xylene	ND	0.50		µg/L	1	4/9/2005
sec-Butylbenzene	ND	0.50		µg/L	1	4/9/2005
Styrene	ND	0.50		µg/L	1	4/9/2005
tert-Butylbenzene	ND	0.50		µg/L	1	4/9/2005
Tetrachloroethene	ND	0.50		µg/L	1	4/9/2005
Toluene	ND	0.50		µg/L	1	4/9/2005
trans-1,2-Dichloroethene	ND	0.50		µg/L	1	4/9/2005
Trichloroethene	ND	0.50		µg/L	1	4/9/2005
Trichlorofluoromethane	ND	0.50		µg/L	1	4/9/2005
Vinyl chloride	ND	0.50		µg/L	1	4/9/2005

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
DO - Surrogate Diluted Out
S - Spike/Surrogate outside of limits due to matrix interfere
H - Sample exceeded analytical holding time
E - Value above quantitation range
R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *25-Apr-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	GD4-W
Lab Order:	075659		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	4/2/2005
Lab ID:	075659-023C	**Matrix:**	GROUND WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
GASOLINE RANGE ORGANICS BY GC/FID						
		EPA 8015B(M)				
RunID: GC1_050408A	QC Batch: D05VW073			PrepDate		Analyst: **JPC**
GRO	ND	0.050		mg/L	1	4/8/2005
VOLATILE ORGANIC COMPOUNDS BY GC/PID						
		EPA 8020A				
RunID: GC1_050408A	QC Batch: D05VW073			PrepDate		Analyst: **JPC**
Benzene	ND	0.50		µg/L	1	4/8/2005
Ethylbenzene	ND	0.50		µg/L	1	4/8/2005
m,p-Xylene	ND	0.50		µg/L	1	4/8/2005
MTBE	ND	0.50		µg/L	1	4/8/2005
o-Xylene	ND	0.50		µg/L	1	4/8/2005
Toluene	ND	0.50		µg/L	1	4/8/2005

Qualifiers:

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- J - Analyte detected below quantitation limits
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- DO - Surrogate Diluted Out
- S - Spike/Surrogate outside of limits due to matrix interfere
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories

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Advanced Technology Laboratories

Date: *25-Apr-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	GD4-W
Lab Order:	075659		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	4/2/2005
Lab ID:	075659-023D	**Matrix:**	GROUND WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS						
	(EPA 3010A)			**EPA 6010B**		
RunID: ICP6_050411I	QC Batch: 22202			PrepDate	4/8/2005	Analyst: **RQ**
Antimony	ND	0.12		mg/L	5	4/11/2005
Arsenic	0.58	0.25		mg/L	5	4/11/2005
Barium	19	0.075		mg/L	5	4/11/2005
Beryllium	ND	0.075		mg/L	5	4/11/2005
Cadmium	ND	0.075		mg/L	5	4/11/2005
Chromium	6.1	0.075		mg/L	5	4/11/2005
Cobalt	1.6	0.075		mg/L	5	4/11/2005
Copper	4.4	0.12		mg/L	5	4/11/2005
Lead	0.95	0.12		mg/L	5	4/11/2005
Molybdenum	ND	0.12		mg/L	5	4/11/2005
Nickel	10	0.12		mg/L	5	4/11/2005
Selenium	0.43	0.25		mg/L	5	4/11/2005
Silver	ND	0.075		mg/L	5	4/11/2005
Thallium	ND	0.38		mg/L	5	4/11/2005
Vanadium	4.5	0.075		mg/L	5	4/11/2005
Zinc	7.1	0.25		mg/L	5	4/11/2005
MERCURY BY COLD VAPOR TECHNIQUE						
	(EPA 7470)			**EPA 7470A**		
RunID: AA1_050408E	QC Batch: 22201			PrepDate	4/8/2005	Analyst: **JT**
Mercury	14	1.0		µg/L	1	4/8/2005

Qualifiers:

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- S - Spike/Surrogate outside of limits due to matrix interfere
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories

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Advanced Technology Laboratories

Date: *25-Apr-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	GD4-W
Lab Order:	075659		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	4/2/2005
Lab ID:	075659-023E	**Matrix:**	GROUND WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP						
	(EPA 3010A)			**EPA 6010B**		
RunID: ICP5_050412A	QC Batch: 22229			PrepDate	4/12/2005	Analyst: **RQ**
Antimony	ND	0.025		mg/L	5	4/12/2005
Arsenic	0.057	0.050		mg/L	5	4/12/2005
Barium	0.48	0.015		mg/L	5	4/12/2005
Beryllium	ND	0.015		mg/L	5	4/12/2005
Cadmium	ND	0.015		mg/L	5	4/12/2005
Chromium	0.11	0.015		mg/L	5	4/12/2005
Cobalt	0.026	0.015		mg/L	5	4/12/2005
Copper	0.060	0.025		mg/L	5	4/12/2005
Lead	0.034	0.025		mg/L	5	4/12/2005
Molybdenum	0.054	0.025		mg/L	5	4/12/2005
Nickel	0.17	0.025		mg/L	5	4/12/2005
Selenium	ND	0.050		mg/L	5	4/12/2005
Silver	ND	0.015		mg/L	5	4/12/2005
Thallium	ND	0.075		mg/L	5	4/12/2005
Vanadium	0.088	0.015		mg/L	5	4/12/2005
Zinc	0.21	0.050		mg/L	5	4/12/2005
MERCURY BY COLD VAPOR TECHNIQUE						
	(EPA 7470)			**EPA 7470A**		
RunID: AA1_050412B	QC Batch: 22230			PrepDate	4/12/2005	Analyst: **JT**
Mercury	ND	0.20		µg/L	1	4/12/2005

Qualifiers:

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- DO - Surrogate Diluted Out
- S - Spike/Surrogate outside of limits due to matrix interfere
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories

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Advanced Technology Laboratories

Date: *25-Apr-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	GD3-W
Lab Order:	075659		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	4/2/2005
Lab ID:	075659-024A	**Matrix:**	GROUND WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID (EPA 3510C)				**EPA 8015B(M)**		
RunID: GC7_BACK_050407A	QC Batch: 22173			PrepDate	4/7/2005	Analyst: **CBR**
Diesel	ND	0.068		mg/L	1	4/7/2005
Motor Oil	ND	0.068		mg/L	1	4/7/2005

Qualifiers:

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- J - Analyte detected below quantitation limits
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- DO - Surrogate Diluted Out
- S - Spike/Surrogate outside of limits due to matrix interfere
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories

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Advanced Technology Laboratories

Date: *25-Apr-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	GD3-W
Lab Order:	075659		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	4/2/2005
Lab ID:	075659-024B	**Matrix:**	GROUND WATER

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS11_050408B QC Batch: A05VW103 PrepDate Analyst: **MFR**

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND	0.50		µg/L	1	4/9/2005
1,1,1-Trichloroethane	ND	0.50		µg/L	1	4/9/2005
1,1,2,2-Tetrachloroethane	ND	0.50		µg/L	1	4/9/2005
1,1,2-Trichloroethane	ND	0.50		µg/L	1	4/9/2005
1,1-Dichloroethane	ND	0.50		µg/L	1	4/9/2005
1,1-Dichloroethene	ND	0.50		µg/L	1	4/9/2005
1,1-Dichloropropene	ND	0.50		µg/L	1	4/9/2005
1,2,3-Trichlorobenzene	ND	0.50		µg/L	1	4/9/2005
1,2,3-Trichloropropane	ND	0.50		µg/L	1	4/9/2005
1,2,4-Trichlorobenzene	ND	0.50		µg/L	1	4/9/2005
1,2,4-Trimethylbenzene	ND	0.50		µg/L	1	4/9/2005
1,2-Dibromo-3-chloropropane	ND	0.50		µg/L	1	4/9/2005
1,2-Dibromoethane	ND	0.50		µg/L	1	4/9/2005
1,2-Dichlorobenzene	ND	0.50		µg/L	1	4/9/2005
1,2-Dichloroethane	ND	0.50		µg/L	1	4/9/2005
1,2-Dichloropropane	ND	0.50		µg/L	1	4/9/2005
1,3,5-Trimethylbenzene	ND	0.50		µg/L	1	4/9/2005
1,3-Dichlorobenzene	ND	0.50		µg/L	1	4/9/2005
1,3-Dichloropropane	ND	0.50		µg/L	1	4/9/2005
1,4-Dichlorobenzene	ND	0.50		µg/L	1	4/9/2005
2,2-Dichloropropane	ND	0.50		µg/L	1	4/9/2005
2-Chlorotoluene	ND	0.50		µg/L	1	4/9/2005
4-Chlorotoluene	ND	0.50		µg/L	1	4/9/2005
4-Isopropyltoluene	ND	0.50		µg/L	1	4/9/2005
Benzene	ND	0.50		µg/L	1	4/9/2005
Bromobenzene	ND	0.50		µg/L	1	4/9/2005
Bromodichloromethane	ND	0.50		µg/L	1	4/9/2005
Bromoform	ND	0.50		µg/L	1	4/9/2005
Bromomethane	ND	0.50		µg/L	1	4/9/2005
Carbon tetrachloride	ND	0.50		µg/L	1	4/9/2005
Chlorobenzene	ND	0.50		µg/L	1	4/9/2005
Chloroethane	ND	0.50		µg/L	1	4/9/2005
Chloroform	ND	0.50		µg/L	1	4/9/2005
Chloromethane	ND	0.50		µg/L	1	4/9/2005
cis-1,2-Dichloroethene	ND	0.50		µg/L	1	4/9/2005
cis-1,3-Dichloropropene	ND	0.50		µg/L	1	4/9/2005

Qualifiers:

- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- DO - Surrogate Diluted Out
- S - Spike/Surrogate outside of limits due to matrix interfere
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories *3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040*

Advanced Technology Laboratories

Date: *25-Apr-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	GD3-W
Lab Order:	075659		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	4/2/2005
Lab ID:	075659-024B	**Matrix:**	GROUND WATER

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS11_050408B QC Batch: A05VW103 PrepDate Analyst: **MFR**

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
Dibromochloromethane	ND	0.50		µg/L	1	4/9/2005
Dibromomethane	ND	0.50		µg/L	1	4/9/2005
Dichlorodifluoromethane	ND	0.50		µg/L	1	4/9/2005
Ethylbenzene	ND	0.50		µg/L	1	4/9/2005
Hexachlorobutadiene	ND	0.50		µg/L	1	4/9/2005
Isopropylbenzene	ND	0.50		µg/L	1	4/9/2005
m,p-Xylene	ND	1.0		µg/L	1	4/9/2005
Methylene chloride	ND	0.50		µg/L	1	4/9/2005
n-Butylbenzene	ND	0.50		µg/L	1	4/9/2005
n-Propylbenzene	ND	0.50		µg/L	1	4/9/2005
Naphthalene	ND	0.50		µg/L	1	4/9/2005
o-Xylene	ND	0.50		µg/L	1	4/9/2005
sec-Butylbenzene	ND	0.50		µg/L	1	4/9/2005
Styrene	ND	0.50		µg/L	1	4/9/2005
tert-Butylbenzene	ND	0.50		µg/L	1	4/9/2005
Tetrachloroethene	ND	0.50		µg/L	1	4/9/2005
Toluene	ND	0.50		µg/L	1	4/9/2005
trans-1,2-Dichloroethene	ND	0.50		µg/L	1	4/9/2005
Trichloroethene	ND	0.50		µg/L	1	4/9/2005
Trichlorofluoromethane	ND	0.50		µg/L	1	4/9/2005
Vinyl chloride	ND	0.50		µg/L	1	4/9/2005

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
DO - Surrogate Diluted Out
S - Spike/Surrogate outside of limits due to matrix interfere
H - Sample exceeded analytical holding time
E - Value above quantitation range
R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *25-Apr-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	GD3-W
Lab Order:	075659		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	4/2/2005
Lab ID:	075659-024C	**Matrix:**	GROUND WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
GASOLINE RANGE ORGANICS BY GC/FID						
		EPA 8015B(M)				
RunID: GC1_050408A	QC Batch: D05VW073			PrepDate		Analyst: **JPC**
GRO	ND	0.050		mg/L	1	4/8/2005
VOLATILE ORGANIC COMPOUNDS BY GC/PID						
		EPA 8020A				
RunID: GC1_050408A	QC Batch: D05VW073			PrepDate		Analyst: **JPC**
Benzene	ND	0.50		µg/L	1	4/8/2005
Ethylbenzene	ND	0.50		µg/L	1	4/8/2005
m,p-Xylene	ND	0.50		µg/L	1	4/8/2005
MTBE	ND	0.50		µg/L	1	4/8/2005
o-Xylene	ND	0.50		µg/L	1	4/8/2005
Toluene	ND	0.50		µg/L	1	4/8/2005

Qualifiers:

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- S - Spike/Surrogate outside of limits due to matrix interfere
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *25-Apr-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	GD3-W
Lab Order:	075659		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	4/2/2005
Lab ID:	075659-024D	**Matrix:**	GROUND WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS						
	(EPA 3010A)			**EPA 6010B**		
RunID: ICP6_050411I	QC Batch: 22202			PrepDate	4/8/2005	Analyst: **RQ**
Antimony	ND	0.12		mg/L	5	4/11/2005
Arsenic	0.26	0.25		mg/L	5	4/11/2005
Barium	9.2	0.075		mg/L	5	4/11/2005
Beryllium	ND	0.075		mg/L	5	4/11/2005
Cadmium	ND	0.075		mg/L	5	4/11/2005
Chromium	1.7	0.075		mg/L	5	4/11/2005
Cobalt	0.54	0.075		mg/L	5	4/11/2005
Copper	1.1	0.12		mg/L	5	4/11/2005
Lead	0.36	0.12		mg/L	5	4/11/2005
Molybdenum	ND	0.12		mg/L	5	4/11/2005
Nickel	3.0	0.12		mg/L	5	4/11/2005
Selenium	0.55	0.25		mg/L	5	4/11/2005
Silver	ND	0.075		mg/L	5	4/11/2005
Thallium	ND	0.38		mg/L	5	4/11/2005
Vanadium	1.3	0.075		mg/L	5	4/11/2005
Zinc	1.9	0.25		mg/L	5	4/11/2005
MERCURY BY COLD VAPOR TECHNIQUE						
	(EPA 7470)			**EPA 7470A**		
RunID: AA1_050408E	QC Batch: 22201			PrepDate	4/8/2005	Analyst: **JT**
Mercury	5.4	1.0		µg/L	1	4/8/2005

Qualifiers:

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- S - Spike/Surrogate outside of limits due to matrix interfere
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories

3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *25-Apr-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	GD3-W
Lab Order:	075659		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	4/2/2005
Lab ID:	075659-024E	**Matrix:**	GROUND WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP						
	(EPA 3010A)			**EPA 6010B**		
RunID: ICP5_050412A	QC Batch: 22229			PrepDate	4/12/2005	Analyst: **RQ**
Antimony	ND	0.025		mg/L	5	4/12/2005
Arsenic	0.093	0.050		mg/L	5	4/12/2005
Barium	0.51	0.015		mg/L	5	4/12/2005
Beryllium	ND	0.015		mg/L	5	4/12/2005
Cadmium	ND	0.015		mg/L	5	4/12/2005
Chromium	0.080	0.015		mg/L	5	4/12/2005
Cobalt	0.020	0.015		mg/L	5	4/12/2005
Copper	ND	0.025		mg/L	5	4/12/2005
Lead	ND	0.025		mg/L	5	4/12/2005
Molybdenum	0.034	0.025		mg/L	5	4/12/2005
Nickel	0.11	0.025		mg/L	5	4/12/2005
Selenium	0.19	0.050		mg/L	5	4/12/2005
Silver	ND	0.015		mg/L	5	4/12/2005
Thallium	ND	0.075		mg/L	5	4/12/2005
Vanadium	0.069	0.015		mg/L	5	4/12/2005
Zinc	0.10	0.050		mg/L	5	4/12/2005
MERCURY BY COLD VAPOR TECHNIQUE						
	(EPA 7470)			**EPA 7470A**		
RunID: AA1_050412B	QC Batch: 22230			PrepDate	4/12/2005	Analyst: **JT**
Mercury	ND	0.20		µg/L	1	4/12/2005

Qualifiers:

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- S - Spike/Surrogate outside of limits due to matrix interfere
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories

3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *25-Apr-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	GD15-W
Lab Order:	075659		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	4/5/2005 10:30:00 AM
Lab ID:	075659-027A	**Matrix:**	GROUND WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID (EPA 3510C)				**EPA 8015B(M)**		
RunID: GC7_BACK_050407A	QC Batch: 22173			PrepDate	4/7/2005	Analyst: **CBR**
Diesel	ND	0.064		mg/L	1	4/7/2005
Motor Oil	ND	0.064		mg/L	1	4/7/2005

Qualifiers:

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- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- DO - Surrogate Diluted Out
- S - Spike/Surrogate outside of limits due to matrix interfere
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories

3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *25-Apr-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	GD15-W
Lab Order:	075659		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	4/5/2005 10:30:00 AM
Lab ID:	075659-027B	**Matrix:**	GROUND WATER

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS11_050408B QC Batch: A05VW103 PrepDate Analyst: **MFR**

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND	0.50		µg/L	1	4/9/2005
1,1,1-Trichloroethane	ND	0.50		µg/L	1	4/9/2005
1,1,2,2-Tetrachloroethane	ND	0.50		µg/L	1	4/9/2005
1,1,2-Trichloroethane	ND	0.50		µg/L	1	4/9/2005
1,1-Dichloroethane	ND	0.50		µg/L	1	4/9/2005
1,1-Dichloroethene	ND	0.50		µg/L	1	4/9/2005
1,1-Dichloropropene	ND	0.50		µg/L	1	4/9/2005
1,2,3-Trichlorobenzene	ND	0.50		µg/L	1	4/9/2005
1,2,3-Trichloropropane	ND	0.50		µg/L	1	4/9/2005
1,2,4-Trichlorobenzene	ND	0.50		µg/L	1	4/9/2005
1,2,4-Trimethylbenzene	ND	0.50		µg/L	1	4/9/2005
1,2-Dibromo-3-chloropropane	ND	0.50		µg/L	1	4/9/2005
1,2-Dibromoethane	ND	0.50		µg/L	1	4/9/2005
1,2-Dichlorobenzene	ND	0.50		µg/L	1	4/9/2005
1,2-Dichloroethane	ND	0.50		µg/L	1	4/9/2005
1,2-Dichloropropane	ND	0.50		µg/L	1	4/9/2005
1,3,5-Trimethylbenzene	ND	0.50		µg/L	1	4/9/2005
1,3-Dichlorobenzene	ND	0.50		µg/L	1	4/9/2005
1,3-Dichloropropane	ND	0.50		µg/L	1	4/9/2005
1,4-Dichlorobenzene	ND	0.50		µg/L	1	4/9/2005
2,2-Dichloropropane	ND	0.50		µg/L	1	4/9/2005
2-Chlorotoluene	ND	0.50		µg/L	1	4/9/2005
4-Chlorotoluene	ND	0.50		µg/L	1	4/9/2005
4-Isopropyltoluene	ND	0.50		µg/L	1	4/9/2005
Benzene	ND	0.50		µg/L	1	4/9/2005
Bromobenzene	ND	0.50		µg/L	1	4/9/2005
Bromodichloromethane	ND	0.50		µg/L	1	4/9/2005
Bromoform	ND	0.50		µg/L	1	4/9/2005
Bromomethane	ND	0.50		µg/L	1	4/9/2005
Carbon tetrachloride	ND	0.50		µg/L	1	4/9/2005
Chlorobenzene	ND	0.50		µg/L	1	4/9/2005
Chloroethane	ND	0.50		µg/L	1	4/9/2005
Chloroform	ND	0.50		µg/L	1	4/9/2005
Chloromethane	ND	0.50		µg/L	1	4/9/2005
cis-1,2-Dichloroethene	ND	0.50		µg/L	1	4/9/2005
cis-1,3-Dichloropropene	ND	0.50		µg/L	1	4/9/2005

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H - Sample exceeded analytical holding time
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R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories 3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *25-Apr-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	GD15-W
Lab Order:	075659		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	4/5/2005 10:30:00 AM
Lab ID:	075659-027B	**Matrix:**	GROUND WATER

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS11_050408B QC Batch: A05VW103 PrepDate Analyst: **MFR**

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
Dibromochloromethane	ND	0.50		µg/L	1	4/9/2005
Dibromomethane	ND	0.50		µg/L	1	4/9/2005
Dichlorodifluoromethane	ND	0.50		µg/L	1	4/9/2005
Ethylbenzene	ND	0.50		µg/L	1	4/9/2005
Hexachlorobutadiene	ND	0.50		µg/L	1	4/9/2005
Isopropylbenzene	ND	0.50		µg/L	1	4/9/2005
m,p-Xylene	ND	1.0		µg/L	1	4/9/2005
Methylene chloride	ND	0.50		µg/L	1	4/9/2005
n-Butylbenzene	ND	0.50		µg/L	1	4/9/2005
n-Propylbenzene	ND	0.50		µg/L	1	4/9/2005
Naphthalene	ND	0.50		µg/L	1	4/9/2005
o-Xylene	ND	0.50		µg/L	1	4/9/2005
sec-Butylbenzene	ND	0.50		µg/L	1	4/9/2005
Styrene	ND	0.50		µg/L	1	4/9/2005
tert-Butylbenzene	ND	0.50		µg/L	1	4/9/2005
Tetrachloroethene	ND	0.50		µg/L	1	4/9/2005
Toluene	ND	0.50		µg/L	1	4/9/2005
trans-1,2-Dichloroethene	ND	0.50		µg/L	1	4/9/2005
Trichloroethene	ND	0.50		µg/L	1	4/9/2005
Trichlorofluoromethane	ND	0.50		µg/L	1	4/9/2005
Vinyl chloride	ND	0.50		µg/L	1	4/9/2005

Qualifiers:

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H - Sample exceeded analytical holding time
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R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories 3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *25-Apr-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	GD15-W
Lab Order:	075659		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	4/5/2005 10:30:00 AM
Lab ID:	075659-027C	**Matrix:**	GROUND WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
GASOLINE RANGE ORGANICS BY GC/FID						
		EPA 8015B(M)				
RunID: GC1_050408A	QC Batch: D05VW073			PrepDate		Analyst: **JPC**
GRO	ND	0.050		mg/L	1	4/8/2005
VOLATILE ORGANIC COMPOUNDS BY GC/PID						
		EPA 8020A				
RunID: GC1_050408A	QC Batch: D05VW073			PrepDate		Analyst: **JPC**
Benzene	ND	0.50		µg/L	1	4/8/2005
Ethylbenzene	ND	0.50		µg/L	1	4/8/2005
m,p-Xylene	ND	0.50		µg/L	1	4/8/2005
MTBE	ND	0.50		µg/L	1	4/8/2005
o-Xylene	ND	0.50		µg/L	1	4/8/2005
Toluene	ND	0.50		µg/L	1	4/8/2005

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Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *25-Apr-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	GD15-W
Lab Order:	075659		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	4/5/2005 10:30:00 AM
Lab ID:	075659-027D	**Matrix:**	GROUND WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS						
	(EPA 3010A)			**EPA 6010B**		
RunID: ICP6_050411I	QC Batch: 22202			PrepDate	4/8/2005	Analyst: **RQ**
Antimony	ND	0.12		mg/L	5	4/11/2005
Arsenic	ND	0.25		mg/L	5	4/11/2005
Barium	3.1	0.075		mg/L	5	4/11/2005
Beryllium	ND	0.075		mg/L	5	4/11/2005
Cadmium	ND	0.075		mg/L	5	4/11/2005
Chromium	0.85	0.075		mg/L	5	4/11/2005
Cobalt	0.36	0.075		mg/L	5	4/11/2005
Copper	0.40	0.12		mg/L	5	4/11/2005
Lead	ND	0.12		mg/L	5	4/11/2005
Molybdenum	ND	0.12		mg/L	5	4/11/2005
Nickel	2.1	0.12		mg/L	5	4/11/2005
Selenium	0.27	0.25		mg/L	5	4/11/2005
Silver	ND	0.075		mg/L	5	4/11/2005
Thallium	ND	0.38		mg/L	5	4/11/2005
Vanadium	0.52	0.075		mg/L	5	4/11/2005
Zinc	0.66	0.25		mg/L	5	4/11/2005
MERCURY BY COLD VAPOR TECHNIQUE						
	(EPA 7470)			**EPA 7470A**		
RunID: AA1_050408E	QC Batch: 22201			PrepDate	4/8/2005	Analyst: **JT**
Mercury	1.7	1.0		µg/L	1	4/8/2005

Qualifiers:

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Results are wet unless otherwise specified

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *25-Apr-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	GD15-W
Lab Order:	075659		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	4/5/2005 10:30:00 AM
Lab ID:	075659-027E	**Matrix:**	GROUND WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP						
	(EPA 3010A)			**EPA 6010B**		
RunID: ICP5_050412A	QC Batch: 22229			PrepDate	4/12/2005	Analyst: **RQ**
Antimony	ND	0.025		mg/L	5	4/12/2005
Arsenic	0.091	0.050		mg/L	5	4/12/2005
Barium	0.17	0.015		mg/L	5	4/12/2005
Beryllium	ND	0.015		mg/L	5	4/12/2005
Cadmium	ND	0.015		mg/L	5	4/12/2005
Chromium	0.018	0.015		mg/L	5	4/12/2005
Cobalt	ND	0.015		mg/L	5	4/12/2005
Copper	ND	0.025		mg/L	5	4/12/2005
Lead	ND	0.025		mg/L	5	4/12/2005
Molybdenum	ND	0.025		mg/L	5	4/12/2005
Nickel	ND	0.025		mg/L	5	4/12/2005
Selenium	0.26	0.050		mg/L	5	4/12/2005
Silver	ND	0.015		mg/L	5	4/12/2005
Thallium	0.11	0.075		mg/L	5	4/12/2005
Vanadium	ND	0.015		mg/L	5	4/12/2005
Zinc	ND	0.050		mg/L	5	4/12/2005
MERCURY BY COLD VAPOR TECHNIQUE						
	(EPA 7470)			**EPA 7470A**		
RunID: AA1_050412B	QC Batch: 22230			PrepDate	4/12/2005	Analyst: **JT**
Mercury	ND	0.20		µg/L	1	4/12/2005

Qualifiers:

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- DO - Surrogate Diluted Out
- S - Spike/Surrogate outside of limits due to matrix interfere
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories

3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *25-Apr-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	Composite GD3-0, GD4-0
Lab Order:	075659		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	4/2/2005
Lab ID:	075659-028A	**Matrix:**	SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS						
	(EPA 3050B)			**EPA 6010B**		
RunID: ICP5_050413D	QC Batch: 22242			PrepDate 4/12/2005		Analyst: **RQ**
Antimony	ND	1.0		mg/Kg	1	4/13/2005
Arsenic	6.7	1.0		mg/Kg	1	4/13/2005
Barium	150	1.0		mg/Kg	1	4/13/2005
Beryllium	ND	1.0		mg/Kg	1	4/13/2005
Cadmium	ND	1.0		mg/Kg	1	4/13/2005
Chromium	47	1.0		mg/Kg	1	4/13/2005
Cobalt	11	1.0		mg/Kg	1	4/13/2005
Copper	25	1.0		mg/Kg	1	4/13/2005
Lead	100	1.0		mg/Kg	1	4/13/2005
Molybdenum	ND	1.0		mg/Kg	1	4/13/2005
Nickel	70	1.0		mg/Kg	1	4/13/2005
Selenium	ND	1.0		mg/Kg	1	4/13/2005
Silver	ND	1.0		mg/Kg	1	4/13/2005
Thallium	1.3	1.0		mg/Kg	1	4/13/2005
Vanadium	33	1.0		mg/Kg	1	4/13/2005
Zinc	82	1.0		mg/Kg	1	4/13/2005
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID						
	(EPA 3550B)			**EPA 8015B(M)**		
RunID: GC7_BACK_050421B	QC Batch: 22233			PrepDate 4/11/2005		Analyst: **CBR**
Diesel	120	10		mg/Kg	10	4/21/2005
Motor Oil	360	10		mg/Kg	10	4/21/2005
GASOLINE RANGE ORGANICS BY GC/FID						
				EPA 8015B(M)		
RunID: GC2_050408A	QC Batch: E05VS082			PrepDate		Analyst: **CGM**
GRO	ND	1.0		mg/Kg	1	4/8/2005
VOLATILE ORGANIC COMPOUNDS BY GC/PID						
				EPA 8020A		
RunID: GC2_050408A	QC Batch: E05VS082			PrepDate		Analyst: **CGM**
Benzene	ND	5.0		µg/Kg	1	4/8/2005
Ethylbenzene	ND	5.0		µg/Kg	1	4/8/2005
m,p-Xylene	ND	5.0		µg/Kg	1	4/8/2005

Qualifiers:

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- DO - Surrogate Diluted Out
- S - Spike/Surrogate outside of limits due to matrix interfere
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories 3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	Composite GD3-0, GD4-0
Lab Order:	075659		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	4/2/2005
Lab ID:	075659-028A	**Matrix:**	SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/PID				**EPA 8020A**		
RunID: GC2_050408A	QC Batch: E05VS082			PrepDate		Analyst: **CGM**
MTBE	ND	5.0		µg/Kg	1	4/8/2005
o-Xylene	ND	5.0		µg/Kg	1	4/8/2005
Toluene	ND	5.0		µg/Kg	1	4/8/2005
MERCURY BY COLD VAPOR TECHNIQUE (EPA 7471)				**EPA 7471A**		
RunID: AA1_050412A	QC Batch: 22244			PrepDate	4/12/2005	Analyst: **JT**
Mercury	0.21	0.10		mg/Kg	1	4/12/2005
PH				**EPA 9045C**		
RunID: WETCHEM_050408E	QC Batch: R48824			PrepDate	4/8/2005	Analyst: **EG**
pH	8.29	0.10		pH Units	1	4/8/2005

Qualifiers:

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- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- DO - Surrogate Diluted Out
- S - Spike/Surrogate outside of limits due to matrix interfere
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories *3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040*

Advanced Technology Laboratories

Date: *25-Apr-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	Composite GD3-4, GD4-4
Lab Order:	075659		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	4/2/2005
Lab ID:	075659-029A	**Matrix:**	SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS						
	(EPA 3050B)			**EPA 6010B**		
RunID: ICP5_050413D	QC Batch: 22242			PrepDate	4/12/2005	Analyst: **RQ**
Antimony	ND	1.0		mg/Kg	1	4/13/2005
Arsenic	14	1.0		mg/Kg	1	4/13/2005
Barium	230	1.0		mg/Kg	1	4/13/2005
Beryllium	ND	1.0		mg/Kg	1	4/13/2005
Cadmium	ND	1.0		mg/Kg	1	4/13/2005
Chromium	40	1.0		mg/Kg	1	4/13/2005
Cobalt	11	1.0		mg/Kg	1	4/13/2005
Copper	24	1.0		mg/Kg	1	4/13/2005
Lead	30	1.0		mg/Kg	1	4/13/2005
Molybdenum	ND	1.0		mg/Kg	1	4/13/2005
Nickel	55	1.0		mg/Kg	1	4/13/2005
Selenium	ND	1.0		mg/Kg	1	4/13/2005
Silver	ND	1.0		mg/Kg	1	4/13/2005
Thallium	1.6	1.0		mg/Kg	1	4/13/2005
Vanadium	33	1.0		mg/Kg	1	4/13/2005
Zinc	57	1.0		mg/Kg	1	4/13/2005
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID						
	(EPA 3550B)			**EPA 8015B(M)**		
RunID: GC7_050411B	QC Batch: 22233			PrepDate	4/11/2005	Analyst: **CBR**
Diesel	55	5.0		mg/Kg	5	4/14/2005
Motor Oil	150	5.0		mg/Kg	5	4/14/2005
GASOLINE RANGE ORGANICS BY GC/FID						
				EPA 8015B(M)		
RunID: GC2_050408A	QC Batch: E05VS082			PrepDate		Analyst: **CGM**
GRO	ND	1.0		mg/Kg	1	4/8/2005
VOLATILE ORGANIC COMPOUNDS BY GC/PID						
				EPA 8020A		
RunID: GC2_050408A	QC Batch: E05VS082			PrepDate		Analyst: **CGM**
Benzene	ND	5.0		µg/Kg	1	4/8/2005
Ethylbenzene	ND	5.0		µg/Kg	1	4/8/2005
m,p-Xylene	ND	5.0		µg/Kg	1	4/8/2005

Qualifiers:

- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- DO - Surrogate Diluted Out
- S - Spike/Surrogate outside of limits due to matrix interfere
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories

3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *25-Apr-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	Composite GD3-4, GD4-4
Lab Order:	075659		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	4/2/2005
Lab ID:	075659-029A	**Matrix:**	SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/PID				**EPA 8020A**		
RunID: GC2_050408A	QC Batch: E05VS082			PrepDate		Analyst: **CGM**
MTBE	ND	5.0		µg/Kg	1	4/8/2005
o-Xylene	ND	5.0		µg/Kg	1	4/8/2005
Toluene	ND	5.0		µg/Kg	1	4/8/2005
MERCURY BY COLD VAPOR TECHNIQUE (EPA 7471)				**EPA 7471A**		
RunID: AA1_050412A	QC Batch: 22244			PrepDate	4/12/2005	Analyst: **JT**
Mercury	0.19	0.10		mg/Kg	1	4/12/2005
PH				**EPA 9045C**		
RunID: WETCHEM_050408E	QC Batch: R48824			PrepDate	4/8/2005	Analyst: **EG**
pH	8.60	0.10		pH Units	1	4/8/2005

Qualifiers:

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- DO - Surrogate Diluted Out
- S - Spike/Surrogate outside of limits due to matrix interfere
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- R - RPD outside acceptable recovery limits

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Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *25-Apr-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	Composite GD8, GD9, GD10-0
Lab Order:	075659		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	3/31/2005
Lab ID:	075659-030A	**Matrix:**	SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS						
	(EPA 3050B)			**EPA 6010B**		
RunID: ICP5_050413D	QC Batch: 22242			PrepDate	4/12/2005	Analyst: **RQ**
Antimony	ND	1.0		mg/Kg	1	4/13/2005
Arsenic	8.4	1.0		mg/Kg	1	4/13/2005
Barium	150	1.0		mg/Kg	1	4/13/2005
Beryllium	ND	1.0		mg/Kg	1	4/13/2005
Cadmium	ND	1.0		mg/Kg	1	4/13/2005
Chromium	60	1.0		mg/Kg	1	4/13/2005
Cobalt	12	1.0		mg/Kg	1	4/13/2005
Copper	31	1.0		mg/Kg	1	4/13/2005
Lead	28	1.0		mg/Kg	1	4/13/2005
Molybdenum	ND	1.0		mg/Kg	1	4/13/2005
Nickel	87	1.0		mg/Kg	1	4/13/2005
Selenium	ND	1.0		mg/Kg	1	4/13/2005
Silver	ND	1.0		mg/Kg	1	4/13/2005
Thallium	2.1	1.0		mg/Kg	1	4/13/2005
Vanadium	38	1.0		mg/Kg	1	4/13/2005
Zinc	73	1.0		mg/Kg	1	4/13/2005
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID						
	(EPA 3550B)			**EPA 8015B(M)**		
RunID: GC7_050411B	QC Batch: 22233			PrepDate	4/11/2005	Analyst: **CBR**
Diesel	13	1.0		mg/Kg	1	4/13/2005
Motor Oil	30	1.0		mg/Kg	1	4/13/2005
GASOLINE RANGE ORGANICS BY GC/FID						
				EPA 8015B(M)		
RunID: GC2_050408A	QC Batch: E05VS082			PrepDate		Analyst: **CGM**
GRO	ND	1.0		mg/Kg	1	4/8/2005
VOLATILE ORGANIC COMPOUNDS BY GC/PID						
				EPA 8020A		
RunID: GC2_050408A	QC Batch: E05VS082			PrepDate		Analyst: **CGM**
Benzene	ND	5.0		µg/Kg	1	4/8/2005
Ethylbenzene	ND	5.0		µg/Kg	1	4/8/2005
m,p-Xylene	ND	5.0		µg/Kg	1	4/8/2005

Qualifiers:

- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- DO - Surrogate Diluted Out
- S - Spike/Surrogate outside of limits due to matrix interfere
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories

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Advanced Technology Laboratories

Date: *25-Apr-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	Composite GD8, GD9, GD10-0
Lab Order:	075659		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	3/31/2005
Lab ID:	075659-030A	**Matrix:**	SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/PID				**EPA 8020A**		
RunID: GC2_050408A	QC Batch: E05VS082			PrepDate		Analyst: **CGM**
MTBE	ND	5.0		µg/Kg	1	4/8/2005
o-Xylene	ND	5.0		µg/Kg	1	4/8/2005
Toluene	ND	5.0		µg/Kg	1	4/8/2005
MERCURY BY COLD VAPOR TECHNIQUE (EPA 7471)				**EPA 7471A**		
RunID: AA1_050412A	QC Batch: 22244			PrepDate	4/12/2005	Analyst: **JT**
Mercury	0.31	0.10		mg/Kg	1	4/12/2005
PH				**EPA 9045C**		
RunID: WETCHEM_050407A	QC Batch: R48823			PrepDate	4/7/2005	Analyst: **EG**
pH	7.93	0.10		pH Units	1	4/7/2005

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Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *25-Apr-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	Composite GD8, GD9, GD10-4
Lab Order:	075659		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	3/31/2005
Lab ID:	075659-031A	**Matrix:**	SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS						
	(EPA 3050B)			**EPA 6010B**		
RunID: ICP5_050413D	QC Batch: 22242			PrepDate	4/12/2005	Analyst: **RQ**
Antimony	ND	1.0		mg/Kg	1	4/13/2005
Arsenic	8.3	1.0		mg/Kg	1	4/13/2005
Barium	160	1.0		mg/Kg	1	4/13/2005
Beryllium	ND	1.0		mg/Kg	1	4/13/2005
Cadmium	ND	1.0		mg/Kg	1	4/13/2005
Chromium	45	1.0		mg/Kg	1	4/13/2005
Cobalt	11	1.0		mg/Kg	1	4/13/2005
Copper	26	1.0		mg/Kg	1	4/13/2005
Lead	7.5	1.0		mg/Kg	1	4/13/2005
Molybdenum	ND	1.0		mg/Kg	1	4/13/2005
Nickel	67	1.0		mg/Kg	1	4/13/2005
Selenium	ND	1.0		mg/Kg	1	4/13/2005
Silver	ND	1.0		mg/Kg	1	4/13/2005
Thallium	1.9	1.0		mg/Kg	1	4/13/2005
Vanadium	32	1.0		mg/Kg	1	4/13/2005
Zinc	51	1.0		mg/Kg	1	4/13/2005
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID						
	(EPA 3550B)			**EPA 8015B(M)**		
RunID: GC7_050411B	QC Batch: 22233			PrepDate	4/11/2005	Analyst: **CBR**
Diesel	4.1	1.0		mg/Kg	1	4/13/2005
Motor Oil	2.8	1.0		mg/Kg	1	4/13/2005
GASOLINE RANGE ORGANICS BY GC/FID						
				EPA 8015B(M)		
RunID: GC2_050408A	QC Batch: E05VS082			PrepDate		Analyst: **CGM**
GRO	ND	1.0		mg/Kg	1	4/8/2005
VOLATILE ORGANIC COMPOUNDS BY GC/PID						
				EPA 8020A		
RunID: GC2_050408A	QC Batch: E05VS082			PrepDate		Analyst: **CGM**
Benzene	ND	5.0		µg/Kg	1	4/8/2005
Ethylbenzene	ND	5.0		µg/Kg	1	4/8/2005
m,p-Xylene	ND	5.0		µg/Kg	1	4/8/2005

Qualifiers:

- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- DO - Surrogate Diluted Out
- S - Spike/Surrogate outside of limits due to matrix interfere
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories

3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *25-Apr-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	Composite GD8, GD9, GD10-4
Lab Order:	075659		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	3/31/2005
Lab ID:	075659-031A	**Matrix:**	SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/PID				**EPA 8020A**		
RunID: GC2_050408A	QC Batch: E05VS082			PrepDate		Analyst: **CGM**
MTBE	ND	5.0		µg/Kg	1	4/8/2005
o-Xylene	ND	5.0		µg/Kg	1	4/8/2005
Toluene	ND	5.0		µg/Kg	1	4/8/2005
MERCURY BY COLD VAPOR TECHNIQUE (EPA 7471)				**EPA 7471A**		
RunID: AA1_050412A	QC Batch: 22244			PrepDate	4/12/2005	Analyst: **JT**
Mercury	0.16	0.10		mg/Kg	1	4/12/2005
PH				**EPA 9045C**		
RunID: WETCHEM_050407A	QC Batch: R48823			PrepDate	4/7/2005	Analyst: **EG**
pH	9.16	0.10		pH Units	1	4/7/2005

Qualifiers:

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- DO - Surrogate Diluted Out
- S - Spike/Surrogate outside of limits due to matrix interfere
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
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Results are wet unless otherwise specified

Advanced Technology Laboratories *3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040*

Advanced Technology Laboratories

Date: *25-Apr-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	Composite GD13, GD14, GD15-0
Lab Order:	075659		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	3/31/2005
Lab ID:	075659-032A	**Matrix:**	SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS						
	(EPA 3050B)			**EPA 6010B**		
RunID: ICP5_050413D	QC Batch: 22242			PrepDate	4/12/2005	Analyst: **RQ**
Antimony	1.7	1.0		mg/Kg	1	4/13/2005
Arsenic	4.7	1.0		mg/Kg	1	4/13/2005
Barium	85	1.0		mg/Kg	1	4/13/2005
Beryllium	ND	1.0		mg/Kg	1	4/13/2005
Cadmium	ND	1.0		mg/Kg	1	4/13/2005
Chromium	160	1.0		mg/Kg	1	4/13/2005
Cobalt	40	1.0		mg/Kg	1	4/13/2005
Copper	26	1.0		mg/Kg	1	4/13/2005
Lead	5.9	1.0		mg/Kg	1	4/13/2005
Molybdenum	ND	1.0		mg/Kg	1	4/13/2005
Nickel	670	1.0		mg/Kg	1	4/13/2005
Selenium	ND	1.0		mg/Kg	1	4/13/2005
Silver	ND	1.0		mg/Kg	1	4/13/2005
Thallium	2.8	1.0		mg/Kg	1	4/13/2005
Vanadium	31	1.0		mg/Kg	1	4/13/2005
Zinc	44	1.0		mg/Kg	1	4/13/2005
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID						
	(EPA 3550B)			**EPA 8015B(M)**		
RunID: GC7_050411B	QC Batch: 22233			PrepDate	4/11/2005	Analyst: **CBR**
Diesel	4.0	1.0		mg/Kg	1	4/13/2005
Motor Oil	4.2	1.0		mg/Kg	1	4/13/2005
GASOLINE RANGE ORGANICS BY GC/FID						
				EPA 8015B(M)		
RunID: GC2_050408A	QC Batch: E05VS082			PrepDate		Analyst: **CGM**
GRO	ND	1.0		mg/Kg	1	4/8/2005
VOLATILE ORGANIC COMPOUNDS BY GC/PID						
				EPA 8020A		
RunID: GC2_050408A	QC Batch: E05VS082			PrepDate		Analyst: **CGM**
Benzene	ND	5.0		µg/Kg	1	4/8/2005
Ethylbenzene	ND	5.0		µg/Kg	1	4/8/2005
m,p-Xylene	ND	5.0		µg/Kg	1	4/8/2005

Qualifiers:

- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- DO - Surrogate Diluted Out
- S - Spike/Surrogate outside of limits due to matrix interfere
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories *3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040*

Advanced Technology Laboratories

Date: *25-Apr-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	Composite GD13, GD14, GD15-0
Lab Order:	075659		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	3/31/2005
Lab ID:	075659-032A	**Matrix:**	SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/PID				**EPA 8020A**		
RunID: GC2_050408A	QC Batch: E05VS082			PrepDate		Analyst: **CGM**
MTBE	ND	5.0		µg/Kg	1	4/8/2005
o-Xylene	ND	5.0		µg/Kg	1	4/8/2005
Toluene	ND	5.0		µg/Kg	1	4/8/2005
MERCURY BY COLD VAPOR TECHNIQUE (EPA 7471)				**EPA 7471A**		
RunID: AA1_050412A	QC Batch: 22244			PrepDate	4/12/2005	Analyst: **JT**
Mercury	0.17	0.10		mg/Kg	1	4/12/2005
PH				**EPA 9045C**		
RunID: WETCHEM_050407A	QC Batch: R48823			PrepDate	4/7/2005	Analyst: **EG**
pH	8.23	0.10		pH Units	1	4/7/2005

Qualifiers:

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- J - Analyte detected below quantitation limits
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- DO - Surrogate Diluted Out
- S - Spike/Surrogate outside of limits due to matrix interfere
- H - Sample exceeded analytical holding time
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Results are wet unless otherwise specified

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *25-Apr-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	Composite GD13, GD14, GD15-4
Lab Order:	075659		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	3/31/2005
Lab ID:	075659-033A	**Matrix:**	SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS						
	(EPA 3050B)			**EPA 6010B**		
RunID: ICP5_050413D	QC Batch: 22242			PrepDate	4/12/2005	Analyst: **RQ**
Antimony	ND	1.0		mg/Kg	1	4/13/2005
Arsenic	11	1.0		mg/Kg	1	4/13/2005
Barium	160	1.0		mg/Kg	1	4/13/2005
Beryllium	ND	1.0		mg/Kg	1	4/13/2005
Cadmium	ND	1.0		mg/Kg	1	4/13/2005
Chromium	66	1.0		mg/Kg	1	4/13/2005
Cobalt	15	1.0		mg/Kg	1	4/13/2005
Copper	37	1.0		mg/Kg	1	4/13/2005
Lead	7.0	1.0		mg/Kg	1	4/13/2005
Molybdenum	ND	1.0		mg/Kg	1	4/13/2005
Nickel	100	1.0		mg/Kg	1	4/13/2005
Selenium	ND	1.0		mg/Kg	1	4/13/2005
Silver	ND	1.0		mg/Kg	1	4/13/2005
Thallium	2.0	1.0		mg/Kg	1	4/13/2005
Vanadium	45	1.0		mg/Kg	1	4/13/2005
Zinc	67	1.0		mg/Kg	1	4/13/2005
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID						
	(EPA 3550B)			**EPA 8015B(M)**		
RunID: GC7_050411B	QC Batch: 22233			PrepDate	4/11/2005	Analyst: **CBR**
Diesel	3.9	1.0		mg/Kg	1	4/13/2005
Motor Oil	4.1	1.0		mg/Kg	1	4/13/2005
GASOLINE RANGE ORGANICS BY GC/FID						
				EPA 8015B(M)		
RunID: GC2_050408A	QC Batch: E05VS082			PrepDate		Analyst: **CGM**
GRO	ND	1.0		mg/Kg	1	4/8/2005
VOLATILE ORGANIC COMPOUNDS BY GC/PID						
				EPA 8020A		
RunID: GC2_050408A	QC Batch: E05VS082			PrepDate		Analyst: **CGM**
Benzene	ND	5.0		µg/Kg	1	4/8/2005
Ethylbenzene	ND	5.0		µg/Kg	1	4/8/2005
m,p-Xylene	ND	5.0		µg/Kg	1	4/8/2005

Qualifiers:

- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- DO - Surrogate Diluted Out
- S - Spike/Surrogate outside of limits due to matrix interfere
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories

3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *25-Apr-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	Composite GD13, GD14, GD15-4
Lab Order:	075659		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	3/31/2005
Lab ID:	075659-033A	**Matrix:**	SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/PID				**EPA 8020A**		
RunID: GC2_050408A	QC Batch: E05VS082			PrepDate		Analyst: **CGM**
MTBE	ND	5.0		µg/Kg	1	4/8/2005
o-Xylene	ND	5.0		µg/Kg	1	4/8/2005
Toluene	ND	5.0		µg/Kg	1	4/8/2005
MERCURY BY COLD VAPOR TECHNIQUE (EPA 7471)				**EPA 7471A**		
RunID: AA1_050412A	QC Batch: 22244			PrepDate	4/12/2005	Analyst: **JT**
Mercury	0.34	0.10		mg/Kg	1	4/12/2005
PH				**EPA 9045C**		
RunID: WETCHEM_050407A	QC Batch: R48823			PrepDate	4/7/2005	Analyst: **EG**
pH	7.77	0.10		pH Units	1	4/7/2005

Qualifiers:

- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- DO - Surrogate Diluted Out
- S - Spike/Surrogate outside of limits due to matrix interfere
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

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3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *25-Apr-05*

CLIENT: Geocon Consultants, Inc.
Work Order: 075659
Project: DTEV LIGHT RAIL, E8222-06-01

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_S

Sample ID **MB-22242**	SampType: **MBLK**	TestCode: **6010_S**	Units: **mg/Kg**	Prep Date: **4/12/2005**	Run ID: **ICP5_050413D**
Client ID: **ZZZZZ**	Batch ID: **22242**	TestNo: **EPA 6010B**	**(EPA 3050B)**	Analysis Date: **4/13/2005**	SeqNo: **717412**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	2.0									
Arsenic	ND	1.0									
Barium	ND	1.0									
Beryllium	ND	1.0									
Cadmium	ND	1.0									
Chromium	ND	1.0									
Cobalt	ND	1.0									
Copper	ND	2.0									
Lead	ND	1.0									
Molybdenum	ND	1.0									
Nickel	ND	1.0									
Selenium	ND	1.0									
Silver	ND	1.0									
Thallium	ND	1.0									
Vanadium	ND	1.0									
Zinc	ND	1.0									

Sample ID **LCS-22242**	SampType: **LCS**	TestCode: **6010_S**	Units: **mg/Kg**	Prep Date: **4/12/2005**	Run ID: **ICP5_050413D**
Client ID: **ZZZZZ**	Batch ID: **22242**	TestNo: **EPA 6010B**	**(EPA 3050B)**	Analysis Date: **4/13/2005**	SeqNo: **717413**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	46.41	2.0	50	0	92.8	80	120	0	0		
Arsenic	48.45	1.0	50	0	96.9	80	120	0	0		
Barium	48.96	1.0	50	0	97.9	80	120	0	0		
Beryllium	46.01	1.0	50	0	92	80	120	0	0		
Cadmium	45.96	1.0	50	0	91.9	80	120	0	0		
Chromium	47.61	1.0	50	0	95.2	80	120	0	0		
Cobalt	45.43	1.0	50	0	90.9	80	120	0	0		
Copper	52.58	2.0	50	0	105	80	120	0	0		

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
R - RPD outside accepted recovery limits
S - Spike Recovery outside accepted recovery limits
B - Analyte detected in the associated Method Blank
Calculations are based on raw values
DO- Surrogate dilute out
H - Sample exceeded holding time

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

CLIENT: Geocon Consultants, Inc.
Work Order: 075659
Project: DTEV LIGHT RAIL, E8222-06-01

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_S

Sample ID	LCS-22242	SampType:	LCS	TestCode:	6010_S	Units:	mg/Kg	Prep Date:	4/12/2005	Run ID:	ICP5_050413D
Client ID:	ZZZZZ	Batch ID:	22242	TestNo:	EPA 6010B	(EPA 3050B)		Analysis Date:	4/13/2005	SeqNo:	717413

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	47.07	1.0	50	0	94.1	80	120	0	0		
Molybdenum	49.47	1.0	50	0	98.9	80	120	0	0		
Nickel	46.76	1.0	50	0	93.5	80	120	0	0		
Selenium	44.95	1.0	50	0	89.9	80	120	0	0		
Silver	44.3	1.0	50	0	88.6	80	120	0	0		
Thallium	46.93	1.0	50	0	93.9	80	120	0	0		
Vanadium	48.2	1.0	50	0	96.4	80	120	0	0		
Zinc	46.27	1.0	50	0	92.5	80	120	0	0		

Sample ID	075659-014AMS	SampType:	MS	TestCode:	6010_S	Units:	mg/Kg	Prep Date:	4/12/2005	Run ID:	ICP5_050413D
Client ID:	GD5-0	Batch ID:	22242	TestNo:	EPA 6010B	(EPA 3050B)		Analysis Date:	4/13/2005	SeqNo:	717439

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	76.34	1.0	125	0	61.1	23	118	0	0		
Arsenic	106.5	1.0	125	6.633	79.9	64	111	0	0		
Barium	245.5	1.0	125	131.8	91	36	146	0	0		
Beryllium	98.92	1.0	125	0	79.1	50	120	0	0		
Cadmium	95.71	1.0	125	0	76.6	62	107	0	0		
Chromium	138.4	1.0	125	37.42	80.8	63	119	0	0		
Cobalt	104.7	1.0	125	9.058	76.5	63	111	0	0		
Copper	130	1.0	125	21.74	86.6	58	136	0	0		
Lead	133.6	1.0	125	46.78	69.5	47	125	0	0		
Molybdenum	99.24	1.0	125	0	79.4	63	116	0	0		
Nickel	146.5	1.0	125	48.62	78.3	57	116	0	0		
Selenium	89.44	1.0	125	1.516	70.3	47	118	0	0		
Silver	95.79	1.0	125	0	76.6	48	125	0	0		
Thallium	92.75	1.0	125	1.75	72.8	49	116	0	0		
Vanadium	132.1	1.0	125	28.36	83	65	122	0	0		
Zinc	142.8	1.0	125	50.46	73.9	36	140	0	0		

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
R - RPD outside accepted recovery limits
S - Spike Recovery outside accepted recovery limits
B - Analyte detected in the associated Method Blank
Calculations are based on raw values
DO- Surrogate dilute out
H - Sample exceeded holding time

Advanced Technology Laboratories
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CLIENT: Geocon Consultants, Inc.
Work Order: 075659
Project: DTEV LIGHT RAIL, E8222-06-01

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_S

Sample ID	075659-014AMSD	SampType:	MSD	TestCode:	6010_S	Units:	mg/Kg	Prep Date:	4/12/2005	Run ID:	ICP5_050413D
Client ID:	GD5-0	Batch ID:	22242	TestNo:	EPA 6010B	(EPA 3050B)		Analysis Date:	4/13/2005	SeqNo:	717440

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	78.9	1.0	125	0	63.1	23	118	76.34	3.31	20	
Arsenic	109.5	1.0	125	6.633	82.3	64	111	106.5	2.76	20	
Barium	249.5	1.0	125	131.8	94.2	36	146	245.5	1.60	20	
Beryllium	100.7	1.0	125	0	80.5	50	120	98.92	1.76	20	
Cadmium	97.32	1.0	125	0	77.9	62	107	95.71	1.67	20	
Chromium	138.4	1.0	125	37.42	80.8	63	119	138.4	0.0368	20	
Cobalt	105.7	1.0	125	9.058	77.3	63	111	104.7	0.946	20	
Copper	133.5	1.0	125	21.74	89.4	58	136	130	2.61	20	
Lead	134.6	1.0	125	46.78	70.2	47	125	133.6	0.731	20	
Molybdenum	101.8	1.0	125	0	81.5	63	116	99.24	2.58	20	
Nickel	147.9	1.0	125	48.62	79.4	57	116	146.5	0.964	20	
Selenium	93.89	1.0	125	1.516	73.9	47	118	89.44	4.86	20	
Silver	99.25	1.0	125	0	79.4	48	125	95.79	3.55	20	
Thallium	94.47	1.0	125	1.75	74.2	49	116	92.75	1.84	20	
Vanadium	131.8	1.0	125	28.36	82.7	65	122	132.1	0.274	20	
Zinc	142	1.0	125	50.46	73.2	36	140	142.8	0.580	20	

Qualifiers:
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R - RPD outside accepted recovery limits
S - Spike Recovery outside accepted recovery limits
B - Analyte detected in the associated Method Blank
Calculations are based on raw values
DO- Surrogate dilute out
H - Sample exceeded holding time

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

CLIENT: Geocon Consultants, Inc.
Work Order: 075659
Project: DTEV LIGHT RAIL, E8222-06-01

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_W

Sample ID	MB-22202	SampType:	MBLK	TestCode:	6010_W	Units:	mg/L	Prep Date:	4/8/2005	Run ID:	ICP6_050411I
Client ID:	ZZZZZ	Batch ID:	22202	TestNo:	EPA 6010B	(EPA 3010A)		Analysis Date:	4/11/2005	SeqNo:	716416

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	0.0050									
Arsenic	ND	0.010									
Barium	ND	0.0030									
Beryllium	ND	0.0030									
Cadmium	ND	0.0030									
Chromium	ND	0.0030									
Cobalt	ND	0.0030									
Copper	ND	0.0050									
Lead	ND	0.0050									
Molybdenum	ND	0.0050									
Nickel	ND	0.0050									
Selenium	ND	0.010									
Silver	ND	0.0030									
Thallium	ND	0.015									
Vanadium	ND	0.0030									
Zinc	ND	0.010									

Sample ID	LCS-22202	SampType:	LCS	TestCode:	6010_W	Units:	mg/L	Prep Date:	4/8/2005	Run ID:	ICP6_050411I
Client ID:	ZZZZZ	Batch ID:	22202	TestNo:	EPA 6010B	(EPA 3010A)		Analysis Date:	4/11/2005	SeqNo:	716417

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.9558	0.0050	1	0	95.6	85	115	0	0		
Arsenic	1.009	0.010	1	0	101	85	115	0	0		
Barium	0.9976	0.0030	1	0	99.8	85	115	0	0		
Beryllium	0.972	0.0030	1	0	97.2	85	115	0	0		
Cadmium	0.9661	0.0030	1	0	96.6	85	115	0	0		
Chromium	0.9814	0.0030	1	0	98.1	85	115	0	0		
Cobalt	0.9395	0.0030	1	0	93.9	85	115	0	0		
Copper	1.065	0.0050	1	0	107	85	115	0	0		
Lead	0.9709	0.0050	1	0	97.1	85	115	0	0		

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
R - RPD outside accepted recovery limits
S - Spike Recovery outside accepted recovery limits
B - Analyte detected in the associated Method Blank
Calculations are based on raw values
DO- Surrogate dilute out
H - Sample exceeded holding time

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

CLIENT: Geocon Consultants, Inc.
Work Order: 075659
Project: DTEV LIGHT RAIL, E8222-06-01

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_W

Sample ID	LCS-22202	SampType:	LCS	TestCode:	6010_W	Units:	mg/L	Prep Date:	4/8/2005	Run ID:	ICP6_050411I
Client ID:	ZZZZZ	Batch ID:	22202	TestNo:	EPA 6010B	(EPA 3010A)		Analysis Date:	4/11/2005	SeqNo:	716417

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Molybdenum	0.9934	0.0050	1	0	99.3	85	115	0	0		
Nickel	0.9696	0.0050	1	0	97	85	115	0	0		
Selenium	0.9334	0.010	1	0	93.3	85	115	0	0		
Silver	0.9253	0.0030	1	0	92.5	85	115	0	0		
Thallium	0.9805	0.015	1	0	98	85	115	0	0		
Vanadium	0.9868	0.0030	1	0	98.7	85	115	0	0		
Zinc	0.9687	0.010	1	0	96.9	85	115	0	0		

Sample ID	075667-006AMS	SampType:	MS	TestCode:	6010_W	Units:	mg/L	Prep Date:	4/8/2005	Run ID:	ICP6_050411I
Client ID:	ZZZZZ	Batch ID:	22202	TestNo:	EPA 6010B	(EPA 3010A)		Analysis Date:	4/11/2005	SeqNo:	716435

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	2.42	0.010	2.5	0.0108	96.4	73	124	0	0		
Cadmium	2.326	0.0030	2.5	0	93.1	72	116	0	0		
Chromium	2.264	0.0030	2.5	0.003	90.5	72	123	0	0		
Copper	2.426	0.0050	2.5	0.02903	95.9	76	133	0	0		
Lead	2.248	0.0050	2.5	0	89.9	67	120	0	0		
Nickel	2.303	0.0050	2.5	0.01067	91.7	66	124	0	0		
Silver	2.277	0.0030	2.5	0.01297	90.6	78	119	0	0		
Zinc	2.293	0.010	2.5	0.01809	91	72	120	0	0		

Sample ID	075667-006AMSD	SampType:	MSD	TestCode:	6010_W	Units:	mg/L	Prep Date:	4/8/2005	Run ID:	ICP6_050411I
Client ID:	ZZZZZ	Batch ID:	22202	TestNo:	EPA 6010B	(EPA 3010A)		Analysis Date:	4/11/2005	SeqNo:	716436

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	2.531	0.010	2.5	0.0108	101	73	124	2.42	4.50	20	
Cadmium	2.436	0.0030	2.5	0	97.5	72	116	2.326	4.62	20	
Chromium	2.386	0.0030	2.5	0.003	95.3	72	123	2.264	5.24	20	
Copper	2.553	0.0050	2.5	0.02903	101	76	133	2.426	5.08	20	
Lead	2.359	0.0050	2.5	0	94.4	67	120	2.248	4.83	20	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
R - RPD outside accepted recovery limits
S - Spike Recovery outside accepted recovery limits
B - Analyte detected in the associated Method Blank
Calculations are based on raw values
DO- Surrogate dilute out
H - Sample exceeded holding time

Advanced Technology Laboratories

3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

CLIENT: Geocon Consultants, Inc.
Work Order: 075659
Project: DTEV LIGHT RAIL, E8222-06-01

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_W

Sample ID	075667-006AMSD	SampType:	MSD	TestCode:	6010_W	Units:	mg/L	Prep Date:	4/8/2005	Run ID:	ICP6_050411I
Client ID:	ZZZZZ	Batch ID:	22202	TestNo:	EPA 6010B	(EPA 3010A)		Analysis Date:	4/11/2005	SeqNo:	716436

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nickel	2.415	0.0050	2.5	0.01067	96.2	66	124	2.303	4.73	20	
Silver	2.397	0.0030	2.5	0.01297	95.3	78	119	2.277	5.13	20	
Zinc	2.396	0.010	2.5	0.01809	95.1	72	120	2.293	4.41	20	

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
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S - Spike Recovery outside accepted recovery limits
B - Analyte detected in the associated Method Blank
Calculations are based on raw values
DO- Surrogate dilute out
H - Sample exceeded holding time

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

CLIENT: Geocon Consultants, Inc.
Work Order: 075659
Project: DTEV LIGHT RAIL, E8222-06-01

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WD

Sample ID **MB-22229**	SampType: **MBLK**	TestCode: **6010_WD**	Units: **mg/L**	Prep Date: **4/12/2005**	Run ID: **ICP5_050412A**
Client ID: **ZZZZZ**	Batch ID: **22229**	TestNo: **EPA 6010B**	**(EPA 3010A)**	Analysis Date: **4/12/2005**	SeqNo: **717035**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	0.0050									
Arsenic	ND	0.010									
Barium	ND	0.0030									
Beryllium	ND	0.0030									
Cadmium	ND	0.0030									
Chromium	ND	0.0030									
Cobalt	ND	0.0030									
Copper	ND	0.0050									
Lead	ND	0.0050									
Molybdenum	ND	0.0050									
Nickel	ND	0.0050									
Selenium	ND	0.010									
Silver	ND	0.0030									
Thallium	ND	0.015									
Vanadium	ND	0.0030									
Zinc	ND	0.010									

Sample ID **LCS-22229**	SampType: **LCS**	TestCode: **6010_WD**	Units: **mg/L**	Prep Date: **4/12/2005**	Run ID: **ICP5_050412A**
Client ID: **ZZZZZ**	Batch ID: **22229**	TestNo: **EPA 6010B**	**(EPA 3010A)**	Analysis Date: **4/12/2005**	SeqNo: **717036**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	1.001	0.0050	1	0	100	85	115	0	0		
Arsenic	1.04	0.010	1	0	104	85	115	0	0		
Barium	1.066	0.0030	1	0	107	85	115	0	0		
Beryllium	1.003	0.0030	1	0	100	85	115	0	0		
Cadmium	1.013	0.0030	1	0	101	85	115	0	0		
Chromium	1.037	0.0030	1	0	104	85	115	0	0		
Cobalt	0.988	0.0030	1	0	98.8	85	115	0	0		
Copper	1.124	0.0050	1	0	112	85	115	0	0		
Lead	1.02	0.0050	1	0	102	85	115	0	0		

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
R - RPD outside accepted recovery limits
S - Spike Recovery outside accepted recovery limits
B - Analyte detected in the associated Method Blank
Calculations are based on raw values
DO- Surrogate dilute out
H - Sample exceeded holding time

Advanced Technology Laboratories
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CLIENT: Geocon Consultants, Inc.
Work Order: 075659
Project: DTEV LIGHT RAIL, E8222-06-01

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WD

Sample ID LCS-22229	SampType: LCS	TestCode: 6010_WD	Units: mg/L	Prep Date: 4/12/2005	Run ID: ICP5_050412A
Client ID: ZZZZZ	Batch ID: 22229	TestNo: EPA 6010B	(EPA 3010A)	Analysis Date: 4/12/2005	SeqNo: 717036

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Molybdenum	1.031	0.0050	1	0	103	85	115	0	0		
Nickel	1.012	0.0050	1	0	101	85	115	0	0		
Selenium	0.9583	0.010	1	0	95.8	85	115	0	0		
Silver	0.9575	0.0030	1	0	95.7	85	115	0	0		
Thallium	1.004	0.015	1	0	100	85	115	0	0		
Vanadium	1.044	0.0030	1	0	104	85	115	0	0		
Zinc	1.035	0.010	1	0	103	85	115	0	0		

Sample ID 075693-003CMS	SampType: MS	TestCode: 6010_WD	Units: mg/L	Prep Date: 4/12/2005	Run ID: ICP5_050412A
Client ID: ZZZZZ	Batch ID: 22229	TestNo: EPA 6010B	(EPA 3010A)	Analysis Date: 4/12/2005	SeqNo: 717049

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	2.603	0.0050	2.5	0	104	67	129	0	0		
Arsenic	2.678	0.010	2.5	0.05181	105	73	124	0	0		
Barium	2.598	0.0030	2.5	0.0249	103	67	127	0	0		
Beryllium	2.53	0.0030	2.5	0	101	76	122	0	0		
Cadmium	2.512	0.0030	2.5	0	100	72	116	0	0		
Chromium	2.519	0.0030	2.5	0.00788	100	72	123	0	0		
Cobalt	2.486	0.0030	2.5	0	99.5	72	119	0	0		
Copper	2.64	0.0050	2.5	0	106	76	133	0	0		
Lead	2.458	0.0050	2.5	0.00494	98.1	67	120	0	0		
Molybdenum	2.638	0.0050	2.5	0.03406	104	76	124	0	0		
Nickel	2.47	0.0050	2.5	0	98.8	66	124	0	0		
Selenium	2.479	0.010	2.5	0.1802	91.9	75	121	0	0		
Silver	2.425	0.0030	2.5	0	97	78	119	0	0		
Thallium	2.423	0.015	2.5	0.03578	95.5	66	124	0	0		
Vanadium	2.628	0.0030	2.5	0.002622	105	75	122	0	0		
Zinc	2.518	0.010	2.5	0	101	72	120	0	0		

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
R - RPD outside accepted recovery limits
S - Spike Recovery outside accepted recovery limits
B - Analyte detected in the associated Method Blank
Calculations are based on raw values
DO- Surrogate dilute out
H - Sample exceeded holding time

Advanced Technology Laboratories
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CLIENT: Geocon Consultants, Inc.
Work Order: 075659
Project: DTEV LIGHT RAIL, E8222-06-01

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WD

Sample ID	075693-003CMSD	SampType:	MSD	TestCode:	6010_WD	Units:	mg/L	Prep Date:	4/12/2005	Run ID:	ICP5_050412A
Client ID:	ZZZZZ	Batch ID:	22229	TestNo:	EPA 6010B	(EPA 3010A)		Analysis Date:	4/12/2005	SeqNo:	717050

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	2.69	0.0050	2.5	0	108	67	129	2.603	3.28	20	
Arsenic	2.766	0.010	2.5	0.05181	109	73	124	2.678	3.24	20	
Barium	2.664	0.0030	2.5	0.0249	106	67	127	2.598	2.50	20	
Beryllium	2.641	0.0030	2.5	0	106	76	122	2.53	4.32	20	
Cadmium	2.592	0.0030	2.5	0	104	72	116	2.512	3.13	20	
Chromium	2.617	0.0030	2.5	0.00788	104	72	123	2.519	3.82	20	
Cobalt	2.573	0.0030	2.5	0	103	72	119	2.486	3.40	20	
Copper	2.69	0.0050	2.5	0	108	76	133	2.64	1.90	20	
Lead	2.536	0.0050	2.5	0.00494	101	67	120	2.458	3.14	20	
Molybdenum	2.74	0.0050	2.5	0.03406	108	76	124	2.638	3.80	20	
Nickel	2.548	0.0050	2.5	0	102	66	124	2.47	3.09	20	
Selenium	2.577	0.010	2.5	0.1802	95.9	75	121	2.479	3.88	20	
Silver	2.533	0.0030	2.5	0	101	78	119	2.425	4.34	20	
Thallium	2.513	0.015	2.5	0.03578	99.1	66	124	2.423	3.65	20	
Vanadium	2.729	0.0030	2.5	0.002622	109	75	122	2.628	3.78	20	
Zinc	2.602	0.010	2.5	0	104	72	120	2.518	3.28	20	

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Calculations are based on raw values
DO- Surrogate dilute out
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Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

CLIENT: Geocon Consultants, Inc.
Work Order: 075659
Project: DTEV LIGHT RAIL, E8222-06-01

ANALYTICAL QC SUMMARY REPORT

TestCode: 7470_W

Sample ID	MB-22201	SampType:	MBLK	TestCode:	7470_W	Units:	µg/L	Prep Date:	4/8/2005	Run ID:	AA1_050408E
Client ID:	ZZZZZ	Batch ID:	22201	TestNo:	EPA 7470A	(EPA 7470)		Analysis Date:	4/8/2005	SeqNo:	715362

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.20									

Sample ID	LCS-22201	SampType:	LCS	TestCode:	7470_W	Units:	µg/L	Prep Date:	4/8/2005	Run ID:	AA1_050408E
Client ID:	ZZZZZ	Batch ID:	22201	TestNo:	EPA 7470A	(EPA 7470)		Analysis Date:	4/8/2005	SeqNo:	715361

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	26.72	0.20	25	0	107	85	115	0	0		

Sample ID	075651-002AMS	SampType:	MS	TestCode:	7470_W	Units:	µg/L	Prep Date:	4/8/2005	Run ID:	AA1_050408E
Client ID:	ZZZZZ	Batch ID:	22201	TestNo:	EPA 7470A	(EPA 7470)		Analysis Date:	4/8/2005	SeqNo:	715349

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	25.75	0.20	25	0.2631	102	70	130	0	0		

Sample ID	075651-002AMSD	SampType:	MSD	TestCode:	7470_W	Units:	µg/L	Prep Date:	4/8/2005	Run ID:	AA1_050408E
Client ID:	ZZZZZ	Batch ID:	22201	TestNo:	EPA 7470A	(EPA 7470)		Analysis Date:	4/8/2005	SeqNo:	715350

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	26.54	0.20	25	0.2631	105	70	130	25.75	2.99	20	

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Work Order: 075659
Project: DTEV LIGHT RAIL, E8222-06-01

ANALYTICAL QC SUMMARY REPORT

TestCode: 7470_W_DISS

Sample ID	MB-22230	SampType:	MBLK	TestCode:	7470_W_DIS	Units:	µg/L	Prep Date:	4/12/2005	Run ID:	AA1_050412B
Client ID:	ZZZZZ	Batch ID:	22230	TestNo:	EPA 7470A	(EPA 7470)		Analysis Date:	4/12/2005	SeqNo:	716917

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.20									

Sample ID	LCS-22230	SampType:	LCS	TestCode:	7470_W_DIS	Units:	µg/L	Prep Date:	4/12/2005	Run ID:	AA1_050412B
Client ID:	ZZZZZ	Batch ID:	22230	TestNo:	EPA 7470A	(EPA 7470)		Analysis Date:	4/12/2005	SeqNo:	716916

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	26.31	0.20	25	0	105	85	115	0	0		

Sample ID	075659-027EMS	SampType:	MS	TestCode:	7470_W_DIS	Units:	µg/L	Prep Date:	4/12/2005	Run ID:	AA1_050412B
Client ID:	GD15-W	Batch ID:	22230	TestNo:	EPA 7470A	(EPA 7470)		Analysis Date:	4/12/2005	SeqNo:	716914

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	25.27	0.20	25	0.07216	101	70	130	0	0		

Sample ID	075659-027EMSD	SampType:	MSD	TestCode:	7470_W_DIS	Units:	µg/L	Prep Date:	4/12/2005	Run ID:	AA1_050412B
Client ID:	GD15-W	Batch ID:	22230	TestNo:	EPA 7470A	(EPA 7470)		Analysis Date:	4/12/2005	SeqNo:	716915

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	24.32	0.20	25	0.07216	97	70	130	25.27	3.83	20	

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Project: DTEV LIGHT RAIL, E8222-06-01

ANALYTICAL QC SUMMARY REPORT

TestCode: 7471_S

Sample ID	MB-22244	SampType:	MBLK	TestCode:	7471_S	Units:	mg/Kg	Prep Date:	4/12/2005	Run ID:	AA1_050412A
Client ID:	ZZZZZ	Batch ID:	22244	TestNo:	EPA 7471A	(EPA 7471)		Analysis Date:	4/12/2005	SeqNo:	716843

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.10									

Sample ID	LCS-22244	SampType:	LCS	TestCode:	7471_S	Units:	mg/Kg	Prep Date:	4/12/2005	Run ID:	AA1_050412A
Client ID:	ZZZZZ	Batch ID:	22244	TestNo:	EPA 7471A	(EPA 7471)		Analysis Date:	4/12/2005	SeqNo:	716842

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.804	0.10	2.08	0	86.7	80	120	0	0		

Sample ID	075755-005AMS	SampType:	MS	TestCode:	7471_S	Units:	mg/Kg	Prep Date:	4/12/2005	Run ID:	AA1_050412A
Client ID:	ZZZZZ	Batch ID:	22244	TestNo:	EPA 7471A	(EPA 7471)		Analysis Date:	4/12/2005	SeqNo:	716840

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.8307	0.10	0.83	0.1049	87.4	62	146	0	0		

Sample ID	075755-005AMSD	SampType:	MSD	TestCode:	7471_S	Units:	mg/Kg	Prep Date:	4/12/2005	Run ID:	AA1_050412A
Client ID:	ZZZZZ	Batch ID:	22244	TestNo:	EPA 7471A	(EPA 7471)		Analysis Date:	4/12/2005	SeqNo:	716841

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.8025	0.10	0.83	0.1049	84	62	146	0.8307	3.46	30	

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CLIENT: Geocon Consultants, Inc.
Work Order: 075659
Project: DTEV LIGHT RAIL, E8222-06-01

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_S_DM LL

Sample ID	MB-22233	SampType:	MBLK	TestCode:	8015_S_DM	Units:	mg/Kg	Prep Date:	4/11/2005	Run ID:	GC7_050411B
Client ID:	ZZZZZ	Batch ID:	22233	TestNo:	EPA 8015B(M	(EPA 3550B)		Analysis Date:	4/13/2005	SeqNo:	717842

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	1.0									
Motor Oil	ND	1.0									

Sample ID	MB-22233	SampType:	MBLK	TestCode:	8015_S_DM	Units:	mg/Kg	Prep Date:	4/11/2005	Run ID:	GC7_050411B
Client ID:	ZZZZZ	Batch ID:	22233	TestNo:	EPA 8015B(M	(EPA 3550B)		Analysis Date:	4/13/2005	SeqNo:	717849

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	1.0									
Motor Oil	ND	1.0									

Sample ID	MB-22233	SampType:	MBLK	TestCode:	8015_S_DM	Units:	mg/Kg	Prep Date:	4/11/2005	Run ID:	GC7_BACK_050421B
Client ID:	ZZZZZ	Batch ID:	22233	TestNo:	EPA 8015B(M	(EPA 3550B)		Analysis Date:	4/21/2005	SeqNo:	721701

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	1.0									
Motor Oil	ND	1.0									

Sample ID	LCS-22233	SampType:	LCS	TestCode:	8015_S_DM	Units:	mg/Kg	Prep Date:	4/11/2005	Run ID:	GC7_050411B
Client ID:	ZZZZZ	Batch ID:	22233	TestNo:	EPA 8015B(M	(EPA 3550B)		Analysis Date:	4/13/2005	SeqNo:	717843

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	25.21	1.0	33	0	76.4	44	123	0	0		

Sample ID	LCS-22233	SampType:	LCS	TestCode:	8015_S_DM	Units:	mg/Kg	Prep Date:	4/11/2005	Run ID:	GC7_050411B
Client ID:	ZZZZZ	Batch ID:	22233	TestNo:	EPA 8015B(M	(EPA 3550B)		Analysis Date:	4/13/2005	SeqNo:	717850

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	27.6	1.0	33	0	83.6	44	123	0	0		

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Work Order: 075659
Project: DTEV LIGHT RAIL, E8222-06-01

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_S_DM LL

Sample ID	LCS-22233	SampType:	LCS	TestCode:	8015_S_DM	Units:	mg/Kg	Prep Date:	4/11/2005	Run ID:	GC7_BACK_050421B
Client ID:	ZZZZZ	Batch ID:	22233	TestNo:	EPA 8015B(M	(EPA 3550B)		Analysis Date:	4/21/2005	SeqNo:	721702

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	22.84	1.0	33	0	69.2	44	123	0	0		

Sample ID	075675-023AMS	SampType:	MS	TestCode:	8015_S_DM	Units:	mg/Kg	Prep Date:	4/11/2005	Run ID:	GC7_050411B
Client ID:	ZZZZZ	Batch ID:	22233	TestNo:	EPA 8015B(M	(EPA 3550B)		Analysis Date:	4/13/2005	SeqNo:	717848

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	20.31	1.0	33	4.176	48.9	26	106	0	0		

Sample ID	075675-023AMSD	SampType:	MSD	TestCode:	8015_S_DM	Units:	mg/Kg	Prep Date:	4/11/2005	Run ID:	GC7_050411B
Client ID:	ZZZZZ	Batch ID:	22233	TestNo:	EPA 8015B(M	(EPA 3550B)		Analysis Date:	4/13/2005	SeqNo:	717851

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	19.76	1.0	33	4.176	47.2	26	106	20.31	2.74	0	

Sample ID	075675-023ADUP	SampType:	DUP	TestCode:	8015_S_DM	Units:	mg/Kg	Prep Date:	4/11/2005	Run ID:	GC7_050411B
Client ID:	ZZZZZ	Batch ID:	22233	TestNo:	EPA 8015B(M	(EPA 3550B)		Analysis Date:	4/13/2005	SeqNo:	717853

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	3.863	1.0	0	0	0	0	0	4.176	7.80	30	
Motor Oil	10.06	1.0	0	0	0	0	0	10.91	8.12	30	

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CLIENT: Geocon Consultants, Inc.
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ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_S_GAS

Sample ID E040805MB1	SampType: MBLK	TestCode: 8015_S_GAS	Units: mg/Kg	Prep Date:	Run ID: GC2_050408A
Client ID: ZZZZZ	Batch ID: E05VS082	TestNo: EPA 8015B(M		Analysis Date: 4/8/2005	SeqNo: 715520

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	ND	1.0									

Sample ID E040805LC1	SampType: LCS	TestCode: 8015_S_GAS	Units: mg/Kg	Prep Date:	Run ID: GC2_050408A
Client ID: ZZZZZ	Batch ID: E05VS082	TestNo: EPA 8015B(M		Analysis Date: 4/8/2005	SeqNo: 715524

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	5.021	1.0	5	0	100	75	120	0	0		

Sample ID 075683-001AMS	SampType: MS	TestCode: 8015_S_GAS	Units: mg/Kg	Prep Date:	Run ID: GC2_050408A
Client ID: ZZZZZ	Batch ID: E05VS082	TestNo: EPA 8015B(M		Analysis Date: 4/8/2005	SeqNo: 715522

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	3.391	1.0	5	0	67.8	33	139	0	0		

Sample ID 075683-001AMSD	SampType: MSD	TestCode: 8015_S_GAS	Units: mg/Kg	Prep Date:	Run ID: GC2_050408A
Client ID: ZZZZZ	Batch ID: E05VS082	TestNo: EPA 8015B(M		Analysis Date: 4/8/2005	SeqNo: 715523

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	3.791	1.0	5	0	75.8	33	139	3.391	11.1	30	

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ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_W_DM_LL

Sample ID	MB-22173	SampType:	MBLK	TestCode:	8015_W_DM_	Units:	mg/L	Prep Date:	4/7/2005	Run ID:	GC7_BACK_050407A
Client ID:	ZZZZZ	Batch ID:	22173	TestNo:	EPA 8015B(M	(EPA 3510C)		Analysis Date:	4/7/2005	SeqNo:	714703

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	0.050									
Motor Oil	ND	0.050									

Sample ID	MB-22173	SampType:	MBLK	TestCode:	8015_W_DM_	Units:	mg/L	Prep Date:	4/7/2005	Run ID:	GC7_BACK_050407A
Client ID:	ZZZZZ	Batch ID:	22173	TestNo:	EPA 8015B(M	(EPA 3510C)		Analysis Date:	4/7/2005	SeqNo:	715022

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	0.050									
Motor Oil	ND	0.050									

Sample ID	LCS-22173	SampType:	LCS	TestCode:	8015_W_DM_	Units:	mg/L	Prep Date:	4/7/2005	Run ID:	GC7_BACK_050407A
Client ID:	ZZZZZ	Batch ID:	22173	TestNo:	EPA 8015B(M	(EPA 3510C)		Analysis Date:	4/7/2005	SeqNo:	714702

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	0.7003	0.050	1	0	70	62	127	0	0		

Sample ID	LCS-22173	SampType:	LCS	TestCode:	8015_W_DM_	Units:	mg/L	Prep Date:	4/7/2005	Run ID:	GC7_BACK_050407A
Client ID:	ZZZZZ	Batch ID:	22173	TestNo:	EPA 8015B(M	(EPA 3510C)		Analysis Date:	4/7/2005	SeqNo:	715024

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	0.7617	0.050	1	0	76.2	62	127	0	0		

Sample ID	MB-22173MS	SampType:	MS	TestCode:	8015_W_DM_	Units:	mg/L	Prep Date:	4/7/2005	Run ID:	GC7_BACK_050407A
Client ID:	ZZZZZ	Batch ID:	22173	TestNo:	EPA 8015B(M	(EPA 3510C)		Analysis Date:	4/7/2005	SeqNo:	714705

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	0.584	0.050	1	0	58.4	50	120	0	0		

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ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_W_DM_LL

Sample ID	MB-22173MSD	SampType:	MSD	TestCode:	8015_W_DM_	Units:	mg/L	Prep Date:	4/7/2005	Run ID:	GC7_BACK_050407A
Client ID:	ZZZZZ	Batch ID:	22173	TestNo:	EPA 8015B(M	(EPA 3510C)		Analysis Date:	4/7/2005	SeqNo:	714706

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	0.5697	0.050	1	0	57	50	120	0	0		

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ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_W_GP LL

Sample ID	D040805MB2	SampType:	MBLK	TestCode:	8015_W_GP	Units:	mg/L	Prep Date:		Run ID:	GC1_050408A
Client ID:	ZZZZZ	Batch ID:	D05VW073	TestNo:	EPA 8015B(M			Analysis Date:	4/8/2005	SeqNo:	715868

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	ND	0.050									

Sample ID	D040805LC2	SampType:	LCS	TestCode:	8015_W_GP	Units:	mg/L	Prep Date:		Run ID:	GC1_050408A
Client ID:	ZZZZZ	Batch ID:	D05VW073	TestNo:	EPA 8015B(M			Analysis Date:	4/8/2005	SeqNo:	715878

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	0.903	0.050	1	0	90.3	70	115	0	0		

Sample ID	D040805MB1MS	SampType:	MS	TestCode:	8015_W_GP	Units:	mg/L	Prep Date:		Run ID:	GC1_050408A
Client ID:	ZZZZZ	Batch ID:	D05VW073	TestNo:	EPA 8015B(M			Analysis Date:	4/8/2005	SeqNo:	715866

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	0.953	0.050	1	0	95.3	64	117	0	0		

Sample ID	D040805MB1MSD	SampType:	MSD	TestCode:	8015_W_GP	Units:	mg/L	Prep Date:		Run ID:	GC1_050408A
Client ID:	ZZZZZ	Batch ID:	D05VW073	TestNo:	EPA 8015B(M			Analysis Date:	4/8/2005	SeqNo:	715867

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	0.977	0.050	1	0	97.7	64	117	0.953	2.49	30	

Qualifiers:
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H - Sample exceeded holding time

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

CLIENT: Geocon Consultants, Inc.
Work Order: 075659
Project: DTEV LIGHT RAIL, E8222-06-01

ANALYTICAL QC SUMMARY REPORT

TestCode: 8020_S_FULL

Sample ID E040805MB1	SampType: MBLK	TestCode: 8020_S_FUL	Units: µg/Kg	Prep Date:	Run ID: GC2_050408A
Client ID: ZZZZZ	Batch ID: E05VS082	TestNo: EPA 8020A		Analysis Date: 4/8/2005	SeqNo: 715506

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	5.0									
Ethylbenzene	ND	5.0									
m,p-Xylene	ND	5.0									
MTBE	ND	5.0									
o-Xylene	ND	5.0									
Toluene	ND	5.0									

Sample ID E040805LC1	SampType: LCS	TestCode: 8020_S_FUL	Units: µg/Kg	Prep Date:	Run ID: GC2_050408A
Client ID: ZZZZZ	Batch ID: E05VS082	TestNo: EPA 8020A		Analysis Date: 4/8/2005	SeqNo: 715510

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	38.14	5.0	27	0	141	89	152	0	0		
Ethylbenzene	55.56	5.0	42	0	132	92	138	0	0		
m,p-Xylene	171.7	5.0	193	0	89	71	105	0	0		
MTBE	572.1	5.0	543	0	105	68	122	0	0		
o-Xylene	69.09	5.0	65	0	106	90	124	0	0		
Toluene	147.6	5.0	134	0	110	85	139	0	0		

Sample ID E040805LC2	SampType: LCS	TestCode: 8020_S_FUL	Units: µg/Kg	Prep Date:	Run ID: GC2_050408A
Client ID: ZZZZZ	Batch ID: E05VS082	TestNo: EPA 8020A		Analysis Date: 4/8/2005	SeqNo: 715519

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	93.53	5.0	100	0	93.5	89	152	0	0		
Ethylbenzene	96.03	5.0	100	0	96	92	138	0	0		
m,p-Xylene	196.7	5.0	200	0	98.3	71	105	0	0		
MTBE	97.92	5.0	100	0	97.9	68	122	0	0		
o-Xylene	97.39	5.0	100	0	97.4	90	124	0	0		
Toluene	94.97	5.0	100	0	95	85	139	0	0		

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CLIENT: Geocon Consultants, Inc.
Work Order: 075659
Project: DTEV LIGHT RAIL, E8222-06-01

ANALYTICAL QC SUMMARY REPORT

TestCode: 8020_S_FULL

Sample ID 075683-001AMS	SampType: MS	TestCode: 8020_S_FUL	Units: µg/Kg	Prep Date:	Run ID: GC2_050408A
Client ID: ZZZZZ	Batch ID: E05VS082	TestNo: EPA 8020A		Analysis Date: 4/8/2005	SeqNo: 715508

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	25.1	5.0	27	0	93	47	174	0	0		
Ethylbenzene	40.49	5.0	42	3.122	89	27	143	0	0		
m,p-Xylene	108.5	5.0	193	1.67	55.4	30	120	0	0		
MTBE	399.6	5.0	543	0	73.6	40	137	0	0		
o-Xylene	47.97	5.0	65	1.955	70.8	28	155	0	0		
Toluene	101.3	5.0	134	2.979	73.3	30	161	0	0		

Sample ID 075683-001AMSD	SampType: MSD	TestCode: 8020_S_FUL	Units: µg/Kg	Prep Date:	Run ID: GC2_050408A
Client ID: ZZZZZ	Batch ID: E05VS082	TestNo: EPA 8020A		Analysis Date: 4/8/2005	SeqNo: 715509

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	31.77	5.0	27	0	118	47	174	25.1	23.4	30	
Ethylbenzene	44.52	5.0	42	3.122	98.6	27	143	40.49	9.46	30	
m,p-Xylene	134.9	5.0	193	1.67	69	30	120	108.5	21.7	30	
MTBE	543.6	5.0	543	0	100	40	137	399.6	30.5	30	R
o-Xylene	56.68	5.0	65	1.955	84.2	28	155	47.97	16.6	30	
Toluene	129.1	5.0	134	2.979	94.1	30	161	101.3	24.2	30	

Qualifiers:
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CLIENT: Geocon Consultants, Inc.
Work Order: 075659
Project: DTEV LIGHT RAIL, E8222-06-01

ANALYTICAL QC SUMMARY REPORT

TestCode: 8020_W_PRES

Sample ID **D040805MB2** SampType: **MBLK** TestCode: **8020_W_PRE** Units: **µg/L** Prep Date: Run ID: **GC1_050408A**
Client ID: **ZZZZZ** Batch ID: **D05VW073** TestNo: **EPA 8020A** Analysis Date: **4/8/2005** SeqNo: **715838**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.50									
Ethylbenzene	ND	0.50									
m,p-Xylene	ND	0.50									
MTBE	ND	0.50									
o-Xylene	ND	0.50									
Toluene	ND	0.50									

Sample ID **D040805LC2** SampType: **LCS** TestCode: **8020_W_PRE** Units: **µg/L** Prep Date: Run ID: **GC1_050408A**
Client ID: **ZZZZZ** Batch ID: **D05VW073** TestNo: **EPA 8020A** Analysis Date: **4/8/2005** SeqNo: **715848**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	6.149	0.50	5.5	0	112	79	145	0	0		
Ethylbenzene	8.359	0.50	8.6	0	97.2	77	126	0	0		
m,p-Xylene	31.57	0.50	35	0	90.2	80	113	0	0		
MTBE	93.21	0.50	101	0	92.3	75	111	0	0		
o-Xylene	11.49	0.50	12	0	95.7	83	122	0	0		
Toluene	26.18	0.50	30	0	87.3	78	120	0	0		

Sample ID **D040805MB1MS** SampType: **MS** TestCode: **8020_W_PRE** Units: **µg/L** Prep Date: Run ID: **GC1_050408A**
Client ID: **ZZZZZ** Batch ID: **D05VW073** TestNo: **EPA 8020A** Analysis Date: **4/8/2005** SeqNo: **715836**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	6.324	0.50	5.5	0	115	81	160	0	0		
Ethylbenzene	6.923	0.50	8.6	0.173	78.5	59	141	0	0		
m,p-Xylene	30.27	0.50	35	0.483	85.1	63	122	0	0		
MTBE	96.96	0.50	101	0	96	58	121	0	0		
o-Xylene	10.9	0.50	12	0	90.9	64	145	0	0		
Toluene	30.71	0.50	30	0.15	102	60	138	0	0		

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Work Order: 075659
Project: DTEV LIGHT RAIL, E8222-06-01

ANALYTICAL QC SUMMARY REPORT

TestCode: 8020_W_PRES

Sample ID **D040805MB1MSD** SampType: **MSD** TestCode: **8020_W_PRE** Units: **µg/L** Prep Date: Run ID: **GC1_050408A**
Client ID: **ZZZZZ** Batch ID: **D05VW073** TestNo: **EPA 8020A** Analysis Date: **4/8/2005** SeqNo: **715837**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	6.642	0.50	5.5	0	121	81	160	6.324	4.91	30	
Ethylbenzene	7.479	0.50	8.6	0.173	85	59	141	6.923	7.72	30	
m,p-Xylene	33.07	0.50	35	0.483	93.1	63	122	30.27	8.82	30	
MTBE	105.7	0.50	101	0	105	58	121	96.96	8.64	30	
o-Xylene	12.08	0.50	12	0	101	64	145	10.9	10.2	30	
Toluene	32.75	0.50	30	0.15	109	60	138	30.71	6.43	30	

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Project: DTEV LIGHT RAIL, E8222-06-01

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_LL

Sample ID **A040805MB6** SampType: **MBLK** TestCode: **8260_WP_LL** Units: **µg/L** Prep Date: Run ID: **MS11_050408B**
Client ID: **ZZZZZ** Batch ID: **A05VW103** TestNo: **EPA 8260B** Analysis Date: **4/9/2005** SeqNo: **716597**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	ND	0.50									
1,1,1-Trichloroethane	ND	0.50									
1,1,2,2-Tetrachloroethane	ND	0.50									
1,1,2-Trichloroethane	ND	0.50									
1,1-Dichloroethane	ND	0.50									
1,1-Dichloroethene	ND	0.50									
1,1-Dichloropropene	ND	0.50									
1,2,3-Trichlorobenzene	ND	0.50									
1,2,3-Trichloropropane	ND	0.50									
1,2,4-Trichlorobenzene	ND	0.50									
1,2,4-Trimethylbenzene	ND	0.50									
1,2-Dibromo-3-chloropropane	ND	0.50									
1,2-Dibromoethane	ND	0.50									
1,2-Dichlorobenzene	ND	0.50									
1,2-Dichloroethane	ND	0.50									
1,2-Dichloropropane	ND	0.50									
1,3,5-Trimethylbenzene	ND	0.50									
1,3-Dichlorobenzene	ND	0.50									
1,3-Dichloropropane	ND	0.50									
1,4-Dichlorobenzene	ND	0.50									
2,2-Dichloropropane	ND	0.50									
2-Chlorotoluene	ND	0.50									
4-Chlorotoluene	ND	0.50									
4-Isopropyltoluene	ND	0.50									
Benzene	ND	0.50									
Bromobenzene	ND	0.50									
Bromodichloromethane	ND	0.50									
Bromoform	ND	0.50									
Bromomethane	ND	0.50									
Carbon tetrachloride	ND	0.50									

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CLIENT: Geocon Consultants, Inc.
Work Order: 075659
Project: DTEV LIGHT RAIL, E8222-06-01

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_LL

Sample ID **A040805MB6** SampType: **MBLK** TestCode: **8260_WP_LL** Units: **µg/L** Prep Date: Run ID: **MS11_050408B**
Client ID: **ZZZZZ** Batch ID: **A05VW103** TestNo: **EPA 8260B** Analysis Date: **4/9/2005** SeqNo: **716597**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chlorobenzene	ND	0.50									
Chloroethane	ND	0.50									
Chloroform	ND	0.50									
Chloromethane	ND	0.50									
cis-1,2-Dichloroethene	ND	0.50									
cis-1,3-Dichloropropene	ND	0.50									
Dibromochloromethane	ND	0.50									
Dibromomethane	ND	0.50									
Dichlorodifluoromethane	ND	0.50									
Ethylbenzene	ND	0.50									
Hexachlorobutadiene	ND	0.50									
Isopropylbenzene	ND	0.50									
m,p-Xylene	ND	1.0									
Methylene chloride	ND	0.50									
n-Butylbenzene	ND	0.50									
n-Propylbenzene	ND	0.50									
Naphthalene	ND	0.50									
o-Xylene	ND	0.50									
sec-Butylbenzene	ND	0.50									
Styrene	ND	0.50									
tert-Butylbenzene	ND	0.50									
Tetrachloroethene	ND	0.50									
Toluene	ND	0.50									
trans-1,2-Dichloroethene	ND	0.50									
Trichloroethene	ND	0.50									
Trichlorofluoromethane	ND	0.50									
Vinyl chloride	ND	0.50									

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ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_LL

Sample ID **A040805LC3**	SampType: **LCS**	TestCode: **8260_WP_LL**	Units: **µg/L**	Prep Date:	Run ID: **MS11_050408B**
Client ID: **ZZZZZ**	Batch ID: **A05VW103**	TestNo: **EPA 8260B**		Analysis Date: **4/8/2005**	SeqNo: **716594**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	21.82	0.50	20	0	109	83	126	0	0		
Benzene	22	0.50	20	0	110	96	128	0	0		
Chlorobenzene	19.42	0.50	20	0	97.1	81	119	0	0		
Toluene	23.33	0.50	20	0	117	96	128	0	0		
Trichloroethene	22.77	0.50	20	0	114	93	128	0	0		

Sample ID **A040805MB6MS**	SampType: **MS**	TestCode: **8260_WP_LL**	Units: **µg/L**	Prep Date:	Run ID: **MS11_050408B**
Client ID: **ZZZZZ**	Batch ID: **A05VW103**	TestNo: **EPA 8260B**		Analysis Date: **4/8/2005**	SeqNo: **716595**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	21.97	0.50	20	0	110	81	128	0	0		
Benzene	23.91	0.50	20	0	120	95	129	0	0		
Chlorobenzene	20.71	0.50	20	0	104	82	119	0	0		
Toluene	25.14	0.50	20	0	126	96	128	0	0		
Trichloroethene	24.51	0.50	20	0	123	84	135	0	0		

Sample ID **A040805MB6MSD**	SampType: **MSD**	TestCode: **8260_WP_LL**	Units: **µg/L**	Prep Date:	Run ID: **MS11_050408B**
Client ID: **ZZZZZ**	Batch ID: **A05VW103**	TestNo: **EPA 8260B**		Analysis Date: **4/8/2005**	SeqNo: **716596**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	21.96	0.50	20	0	110	81	128	21.97	0.0455	30	
Benzene	24.08	0.50	20	0	120	95	129	23.91	0.708	30	
Chlorobenzene	21.15	0.50	20	0	106	82	119	20.71	2.10	30	
Toluene	25.2	0.50	20	0	126	96	128	25.14	0.238	30	
Trichloroethene	24.18	0.50	20	0	121	84	135	24.51	1.36	30	

Qualifiers:
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CLIENT: Geocon Consultants, Inc.
Work Order: 075659
Project: DTEV LIGHT RAIL, E8222-06-01

ANALYTICAL QC SUMMARY REPORT

TestCode: 9045_S

Sample ID	075659-033ADUP	SampType:	DUP	TestCode:	9045_S	Units:	pH Units	Prep Date:	4/7/2005	Run ID:	WETCHEM_050407A
Client ID:	Composite GD13, G	Batch ID:	R48823	TestNo:	EPA 9045C			Analysis Date:	4/7/2005	SeqNo:	715888

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
pH	7.79	0.10	0	0	0	0	0	7.77	0.257	20	

Sample ID	075675-020ADUP	SampType:	DUP	TestCode:	9045_S	Units:	pH Units	Prep Date:	4/8/2005	Run ID:	WETCHEM_050408E
Client ID:	ZZZZZ	Batch ID:	R48824	TestNo:	EPA 9045C			Analysis Date:	4/8/2005	SeqNo:	715910

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
pH	7.21	0.10	0	0	0	0	0	7.44	3.14	20	

Qualifiers:

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CHAIN OF CUSTODY RECORD

Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755
(562) 989-4045 • Fax (562) 989-4040

FOR LABORATORY USE ONLY:

P.O.#: _____
Logged By: N Date: 4/6/05

Method of Transport: Client ☐ ATL ☐ CA OverN ☐ FEDEX ☐ Other: GSO

Sample Condition Upon Receipt:
1. CHILLED 12.1 Y☑ N☐ 4. SEALED Y☐ N☑
2. HEADSPACE (VOA) Y☐ N☑ 5. # OF SPLS MATCH COC Y☑ N☐
3. CONTAINER INTACT Y☑ N☐ 6. PRESERVED Y☐ N☑

Client: GEOCON
Attn: RICK DAY \ CHRIS MERRITT
Address: 2356 RESEARCH DR
City LIVERMORE State CA Zip Code 94550
TEL: (925) 371-5900
FAX: ( ) 371-5915

Project Name: DTEV LIGHT RAIL Project #: E8222-06-01 Sampler: (Printed Name) CHRIS MERRITT (Signature)

Relinquished by: (Signature and Printed Name) CHRIS MERRITT Date: 4/5/05 Time: 1730 Received by: (Signature and Printed Name) Date: 4/6/05 Time: 15:17
Relinquished by: (Signature and Printed Name) Date: Time: Received by: (Signature and Printed Name) Date: Time:
Relinquished by: (Signature and Printed Name) Date: Time: Received by: (Signature and Printed Name) Date: Time:

I hereby authorize ATL to perform the work indicated below:
Project Mgr /Submitter:
4-5-05 (Date)
CHRIS MERRITT (Print Name)
(Signature)

Send Report To:
Attn: _____
Co: AA 1
Address _____
City _____ State _____ Zip _____

Bill To:
Attn: _____
Co: A1A 1
Address _____
City _____ State _____ Zip _____

Special Instructions/Comments:
* SOME HOLD TIMES ARE SHORT!
* SOIL - COMPOSITE GD3-0 AND GD4-0 (2-1)
GD3-4 AND GD4-4 (2-1)
GD8, GD9, GD10-0 (3-1)
GD8, GD9, GD10-4 (3-1)
DISCRETE - GD5-0, GD5-4
CONT P2

Sample/Records - Archival & Disposal
Unless otherwise requested by client, all samples will be disposed 45 days after receipt and records will be disposed 1 year after submittal of final report.

Storage Fees (applies when storage is requested):
- Sample : $2.00 / sample / mo (after 45 days)
- Records : $1.00 / ATL workorder / mo (after 1 year)

Circle or Add Analysis(es) Requested: 8081A (Pesticides); 8082 (PCB); 8260B (Volatiles); 8270C (BNA); 6010B (Total Metal); 8015B (GRO) / 8020 (BTEX) & MTBE; 8015B (DRO) TPH diesel; 8021 (BTEX); TITLE 22 / CAM 17 (6010 / 7000); pH

SPECIFY APPROPRIATE MATRIX: SOIL; WATER; GROUND WATER; WASTEWATER

ITEM	LAB USE ONLY: Batch #: / Lab No.	Sample Description: Sample I.D. / Location	Date	Time	TAT	Container(s): #	Type	PRESERVATION	REMARKS
	075659-001	GD9-0	3/31/05	1025	*E	1			
	-002	GD9-4		1030		1			
	-003	GD8-0		1140		1			
	-004	GD8-4		1143		1			
	-005	GD13-0		1240		1			
	-006	GD13-4		1250		1			
	-007	GD9-W		1055		10	6/1/2	3/1/0	4/1/2
	-008	GD8-W		1200		10	6/1/2		
	-009	GD13-W		1315		10			

QA/QC: RTNE ☐ CT ☐ SWRCB ☐ Logcode ____ OTHER ____

- TAT starts 8 a.m. following day if samples received after 3 p.m.

TAT: A= Overnight ≤ 24 hr; B= Emergency Next workday; C= Critical 2 Workdays; D= Urgent 3 Workdays; E= Routine 7 Workdays

Container Types: T=Tube V=VOA L=Liter P=Pint J=Jar B=Tedlar G=Glass P=Plastic M=Metal

Preservatives: H=Hcl N=HNO_3 S=H_2SO_4 C=4°C Z=$Zn(AC)_2$ O=NaOH T=$Na_2S_2O_3$

DISTRIBUTION: **White** with report, **Yellow** to folder, **Pink** to submitter.

CHAIN OF CUSTODY RECORD

Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755
(562) 989-4045 • Fax (562) 989-4040

FOR LABORATORY USE ONLY:

P.O.#: _____

Logged By: _____ Date: _____

Method of Transport: Client ☐ ATL ☐ CA OverN ☐ FEDEX ☐ Other: _____

Sample Condition Upon Receipt: 1. CHILLED Y☐ N☐ 4. SEALED Y☐ N☐ 2. HEADSPACE (VOA) Y☐ N☐ 5. # OF SPLS MATCH COC Y☐ N☐ 3. CONTAINER INTACT Y☐ N☐ 6. PRESERVED Y☐ N☐

Client: GEOCON
Attn: RICK DAY \ CHRIS MERRITT
Address: 2356 RESEARCH DR
City LIVERMORE State CA Zip Code 94550
TEL: (925) 371-5900
FAX: ( ) 5915

Project Name: DTEV LIGHT RAIL Project #: E8222-06-01 Sampler: (Printed Name) CHRIS MERRITT (Signature)

Relinquished by: (Signature and Printed Name) CHRIS MERRITT Date: 4-5-05 Time: 1730 Received by: (Signature and Printed Name) Date: 4/6/05 Time: 7:18
Relinquished by: (Signature and Printed Name) Date: Time: Received by: (Signature and Printed Name) Date: Time:
Relinquished by: (Signature and Printed Name) Date: Time: Received by: (Signature and Printed Name) Date: Time:

I hereby authorize ATL to perform the work indicated below:
Project Mgr /Submitter:
4-5-05 (Date)
CHRIS MERRITT (Print Name)
(Signature)

Send Report To:
Attn: _____
Co: A/A 1
Address _____
City _____ State _____ Zip _____

Bill To:
Attn: _____
Co: A/A 1
Address _____
City _____ State _____ Zip _____

Special Instructions/Comments:
*SOME HOLD TIMES ARE SHORT!
* SOIL COMPOSITE GD13, GD14, GD15-0 (3-1)
GD13, GD14, GD15-4 (3-1)
H_2O CAM 17 - 1 FILTERED @ 1 UNFILTERED
CONTINUED P3

Sample/Records - Archival & Disposal
Unless otherwise requested by client, all samples will be disposed 45 days after receipt and records will be disposed 1 year after submittal of final report.

Storage Fees (applies when storage is requested):
- Sample : $2.00 / sample / mo (after 45 days)
- Records : $1.00 / ATL workorder / mo (after 1 year)

Circle or Add Analysis(es) Requested

SPECIFY APPROPRIATE MATRIX: SOIL, WATER, GROUND WATER, WASTEWATER

ITEM	LAB USE ONLY: Batch #: / Lab No.	Sample Description: Sample I.D. / Location	Date	Time	8081A (Pesticides)	8082 (PCB)	8260B (Volatiles)	8270C (BNA)	6010B (Total Metal)	8015B (GRO) / 8020 (BTEX) TPHg/BTEX	8015B (DRO) TPHd/mo	8021 (BTEX)	TITLE 22 / CAM 17 (6010 / 7000)	pH	SOIL	WATER	GROUND WATER	WASTEWATER	TAT	Container(s) #	Container(s) Type	PRESERVATION	REMARKS
	075679 - 010	GD10-0	4/1/05	0822					X	X		X	X		X					E*	1			
	-011	GD10-4		0726					X	X		X	X		X						1			
	-012	GD14-0		1048					X	X		X	X		X						1			
	-013	GD14-4		1051					X	X		X	X		X						1			
	-014	GD5-0		1325					X	X		X	X		X						1			
	-015	GD5-4		1331					X	X		X	X		X						1			
	-016	GD10-W		0830		X			X	X		X2					X				10	6/1L	Y/HCl	X/NaOH
	-017	GD14-W		1210		X			X	X		X2					X				10			
	-018	GD5-W		1355		X			X	X		X2					X				10			

QA/QC: RTNE ☐ CT ☐ SWRCB ☐ Logcode ____ OTHER ____

- TAT starts 8 a.m. following day if samples received after 3 p.m.

TAT: A= Overnight ≤ 24 hr B= Emergency Next workday C= Critical 2 Workdays D= Urgent 3 Workdays E= Routine 7 Workdays

Container Types: T=Tube V=VOA L=Liter P=Pint J=Jar B=Tedlar G=Glass P=Plastic M=Metal

Preservatives: H=Hcl N=HNO_3 S=H_2SO_4 C=4°C Z=$Zn(AC)_2$ O=NaOH T=$Na_2S_2O_3$

DISTRIBUTION: **White** with report, **Yellow** to folder, **Pink** to submitter.

CHAIN OF CUSTODY RECORD

Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755
(562) 989-4045 • Fax (562) 989-4040

FOR LABORATORY USE ONLY:

P.O.#: _____
Logged By: _____ Date: _____

Method of Transport: Client ☐ ATL ☐ CA OverN ☐ FEDEX ☐ Other: _____

Sample Condition Upon Receipt
1. CHILLED Y☐ N☐ 4. SEALED Y☐ N☐
2. HEADSPACE (VOA) Y☐ N☐ 5. # OF SPLS MATCH COC Y☐ N☐
3. CONTAINER INTACT Y☐ N☐ 6. PRESERVED Y☐ N☐

Client: GEOCON
Attn: RICK DAY / CHRIS MERRITT
Address: 2356 RESEARCH DR
City LIVERMORE State CA Zip Code 94550
TEL: (925) 371-5900
FAX: ( ) 5915

Project Name: DTEV LIGHT RAIL Project #: E8222-06-01 Sampler: (Printed Name) CHRIS MERRITT (Signature)

Relinquished by: (Signature and Printed Name) CHRIS MERRITT Date: 4-5-05 Time: 1730 Received by: (Signature and Printed Name) Date: 4/6/05 Time: 7:15
Relinquished by: (Signature and Printed Name) Date: Time: Received by: (Signature and Printed Name) Date: Time:
Relinquished by: (Signature and Printed Name) Date: Time: Received by: (Signature and Printed Name) Date: Time:

I hereby authorize ATL to perform the work indicated below:
Project Mgr /Submitter:
4-5-05 (Date)
CHRIS MERRITT (Print Name)
(Signature)

Send Report To:
Attn: _____
Co: A/A
Address _____
City _____ State _____ Zip _____

Bill To:
Attn: _____
Co: A/A
Address _____
City _____ State _____ Zip _____

Special Instructions/Comments:
*SOME HOLD TIMES ARE SHORT!
* WATER - RUN 1 CAM 17 FROM EACH SET (ALL) UNFILTERED AND 1 CAM 17 FILTERED

Sample/Records - Archival & Disposal
Unless otherwise requested by client, all samples will be disposed 45 days after receipt and records will be disposed 1 year after submittal of final report.

Storage Fees (applies when storage is requested):
- Sample : $2.00 / sample / mo (after 45 days)
- Records : $1.00 / ATL workorder / mo (after 1 year)

Circle or Add Analysis(es) Requested: 8081A (Pesticides); 8082 (PCB); 8260B (Volatiles); 8270C (BNA); 6010B (Total Metal); 8015B (GRO) / 8020 (BTEX) + MTBE; 8015B (DRO) TPH d/mo; 8021 (BTEX); TITLE 22 / CAM 17 (6010 / 7000); pH

SPECIFY APPROPRIATE MATRIX: SOIL; WATER; GROUND WATER; WASTEWATER

PRESERVATION

Q A / Q C: RTNE ☐ CT ☐ SWRCB ☐ Logcode ____ OTHER ____

ITEM	LAB USE ONLY: Batch #: / Lab No.	Sample Description: Sample I.D. / Location	Date	Time	TAT	Container(s) #	Container(s) Type	PRESERVATION	REMARKS
	6J9 -019	GO4-0	4-2-05		E*	1	T 8		
	-020	GO4-4				1			
	-021	GO3-0				1			
	-022	GO3-4				1			
	-023	GO4-W				10	G/A; U/A; Y/A		
	-024	GO3-W				10			
	-025	GO15-0	4/5/05	1005		1	T 8		
	-026	GO15-4		1010		1	T 8		
	-027	GO15-W		1030		10	G/A; U/A; Y/A		

- TAT starts 8 a.m. following day if samples received after 3 p.m.

TAT: A= Overnight ≤ 24 hr; B= Emergency Next workday; C= Critical 2 Workdays; D= Urgent 3 Workdays; E= Routine 7 Workdays

Container Types: T=Tube V=VOA L=Liter P=Pint J=Jar B=Tedlar G=Glass P=Plastic M=Metal

Preservatives: H=Hcl N=HNO_3 S=H_2SO_4 C=4°C Z=$Zn(AC)_2$ O=NaOH T=$Na_2S_2O_3$

DISTRIBUTION: **White** with report, **Yellow** to folder, **Pink** to submitter.

June 08, 2005

ACCREDITED IN ACCORDANCE WITH nelac

ELAP No.: 1838
NELAP No.: 02107CA
CSDLAC No.: 10196

Rick Day
Geocon Consultants, Inc.
2356 Research Drive
Livermore, CA 94550

TEL: (925) 371-5900
FAX: (925) 371-5915

Workorder No.: 075659

RE: DTEV LIGHT RAIL, E8222-06-01

Attention: Rick Day

Enclosed are the results for sample(s) received on April 06, 2005 by Advanced Technology Laboratories . The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

This is an addendum report. Please incorporate with documentation previously submitted.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (562)989-4045 if I can be of further assistance to your company.

Sincerely,

Eddie F. Rodriguez
Laboratory Director

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *08-Jun-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	Composite GD3-0, GD4-0
Lab Order:	075659		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	4/2/2005
Lab ID:	075659-028A	**Matrix:**	SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS BY STLC				**WET/ EPA 6010B**		
RunID: ICP6_050606D	QC Batch: R50718			PrepDate:		Analyst: **RQ**
Lead	9.9	1.0		mg/L	20	6/6/2005

Qualifiers:

- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- DO - Surrogate Diluted Out
- S - Spike/Surrogate outside of limits due to matrix interferen
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *08-Jun-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	Composite GD13, GD14, GD15-0
Lab Order:	075659		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	3/31/2005
Lab ID:	075659-032A	**Matrix:**	SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS BY STLC						
		WET/ EPA 6010B				
RunID: ICP6_050606D	QC Batch: R50718			PrepDate:		Analyst: **RQ**
Chromium	ND	1.0		mg/L	20	6/6/2005
Nickel	10	1.0		mg/L	20	6/6/2005

Qualifiers:

- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- DO - Surrogate Diluted Out
- S - Spike/Surrogate outside of limits due to matrix interferen
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Date: *08-Jun-05*

CLIENT: Geocon Consultants, Inc.
Work Order: 075659
Project: DTEV LIGHT RAIL, E8222-06-01

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_ST

Sample ID: **MB-22954**	SampType: **MBLK**	TestCode: **6010_ST**	Units: **mg/L**	Prep Date:	Run ID: **ICP6_050606D**
Client ID: **ZZZZZ**	Batch ID: **R50718**	TestNo: **WET/ EPA 60**		Analysis Date: **6/6/2005**	SeqNo: **744234**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	ND	0.050									
Lead	ND	0.050									
Nickel	ND	0.050									

Sample ID: **LCS-22954**	SampType: **LCS**	TestCode: **6010_ST**	Units: **mg/L**	Prep Date:	Run ID: **ICP6_050606D**
Client ID: **ZZZZZ**	Batch ID: **R50718**	TestNo: **WET/ EPA 60**		Analysis Date: **6/6/2005**	SeqNo: **744235**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	0.9943	0.050	1	0	99.4	85	115	0	0		
Lead	1.007	0.050	1	0	101	85	115	0	0		
Nickel	0.9985	0.050	1	0	99.9	85	115	0	0		

Sample ID: **075831-015AMS**	SampType: **MS**	TestCode: **6010_ST**	Units: **mg/L**	Prep Date:	Run ID: **ICP6_050606D**
Client ID: **ZZZZZ**	Batch ID: **R50718**	TestNo: **WET/ EPA 60**		Analysis Date: **6/6/2005**	SeqNo: **744240**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	2.819	1.0	2.5	0.4995	92.8	72	123	0	0		
Lead	2.53	1.0	2.5	0.2254	92.2	67	120	0	0		
Nickel	7.198	1.0	2.5	5.299	76	66	124	0	0		

Sample ID: **075831-015AMSD**	SampType: **MSD**	TestCode: **6010_ST**	Units: **mg/L**	Prep Date:	Run ID: **ICP6_050606D**
Client ID: **ZZZZZ**	Batch ID: **R50718**	TestNo: **WET/ EPA 60**		Analysis Date: **6/6/2005**	SeqNo: **744241**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	2.869	1.0	2.5	0.4995	94.8	72	123	2.819	1.75	20	
Lead	2.526	1.0	2.5	0.2254	92	67	120	2.53	0.175	20	
Nickel	7.014	1.0	2.5	5.299	68.6	66	124	7.198	2.60	20	

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
R - RPD outside accepted recovery limits
S - Spike Recovery outside accepted recovery limits
B - Analyte detected in the associated Method Blank
Calculations are based on raw values
DO- Surrogate dilute out
H - Sample exceeded holding time

Galvan, Diane

From: Rick Day [day@geoconinc.com]
Sent: Tuesday, May 31, 2005 12:07 PM
To: Galvan, Diane
Subject: WET Analysis for DTEV Light Rail

DTEV Light Rail - Geocon Project No. E8222-06-02

Diane -

Please run the following WET analyses:

Chromium and Nickel 075831-015A Comp (GD1-0, GD2-0)

Chromium and Nickel 075831-013A Comp (GD11-0, GD12-0)

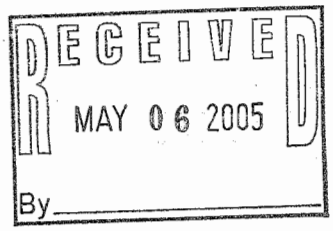
Lead 075659-028A Comp (GD3-0. GD4-0)

Chromium and Nickel 075659-032A Comp (GD13-0, GD14-0, GD15-0)

Thanks,
Rick.

****
Richard Day, CEG, CHG
Geocon Consultants, Inc.
2356 Research Drive
Livermore, CA 94550
(925) 371-5900 - voice
(925) 872-5860 - cell
(925) 371-5915 – fax
day@geoconinc.com
www.geoconinc.com
****

May 02, 2005



ELAP No.: 1838
NELAP No.: 02107CA
CSDLAC No.: 10196

Chris Merritt
Geocon Consultants, Inc.
2356 Research Drive
Livermore, CA 94550
TEL: (925) 371-5900
FAX: (925) 371-5915

Workorder No.: 075831

RE: DTEV LIGHT RAIL, E8222-06-01

Attention: Chris Merritt

Enclosed are the results for sample(s) received on April 14, 2005 by Advanced Technology Laboratories . The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (562)989-4045 if I can be of further assistance to your company.

Sincerely,

Eddie F. Rodriguez
Laboratory Director

CLIENT: Geocon Consultants, Inc.
Project: DTEV LIGHT RAIL, E8222-06-01
Lab Order: 075831

CASE NARRATIVE

Analytical Comments for Method 8015 (Diesel/Motor Oil)

Samples 075831-013A, 075831-014A, 075831-015A and 075831-016A contain hydrocarbons within the diesel range that do not martch the diesel pattern. Quantitation was based on a diesel standard.

Sample 075831-005B contains hydrocarbons within the motor oil range that do not match the motor oil pattern. Quantitation was based on a motor oil standard.

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *02-May-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	GD11-W
Lab Order:	075831		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	4/11/2005 9:40:00 AM
Lab ID:	075831-005A	**Matrix:**	GROUND WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
PCB BY GC/ECD						
	(EPA 3510C)			**EPA 8082**		
RunID: GC4_050429A	QC Batch: 22305			PrepDate	4/18/2005	Analyst: **EES**
Aroclor 1016	ND	0.67		µg/L	1	4/30/2005
Aroclor 1221	ND	1.3		µg/L	1	4/30/2005
Aroclor 1232	ND	0.67		µg/L	1	4/30/2005
Aroclor 1242	ND	0.67		µg/L	1	4/30/2005
Aroclor 1248	ND	0.67		µg/L	1	4/30/2005
Aroclor 1254	ND	0.67		µg/L	1	4/30/2005
Aroclor 1260	ND	0.67		µg/L	1	4/30/2005
Aroclor 1262	ND	0.67		µg/L	1	4/30/2005
Aroclor 1268	ND	0.67		µg/L	1	4/30/2005

Qualifiers:

- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- DO - Surrogate Diluted Out
- S - Spike/Surrogate outside of limits due to matrix interfere
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories

3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *02-May-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	GD11-W
Lab Order:	075831		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	4/11/2005 9:40:00 AM
Lab ID:	075831-005B	**Matrix:**	GROUND WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID (EPA 3510C)				**EPA 8015B(M)**		
RunID: GC7_BACK_050421E	QC Batch: 22306			PrepDate	4/18/2005	Analyst: **CBR**
Diesel	ND	0.067		mg/L	1	4/22/2005
Motor Oil	0.12	0.067		mg/L	1	4/22/2005

Qualifiers:

- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- DO - Surrogate Diluted Out
- S - Spike/Surrogate outside of limits due to matrix interfere
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories

3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *02-May-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	GD11-W
Lab Order:	075831		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	4/11/2005 9:40:00 AM
Lab ID:	075831-005C	**Matrix:**	GROUND WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS						
	(EPA 3010A)			**EPA 6010B**		
RunID: ICP5_050420A	QC Batch: 22354			PrepDate	4/19/2005	Analyst: **RQ**
Antimony	ND	0.0050		mg/L	1	4/20/2005
Arsenic	0.041	0.010		mg/L	1	4/20/2005
Barium	0.48	0.0030		mg/L	1	4/20/2005
Beryllium	ND	0.0030		mg/L	1	4/20/2005
Cadmium	ND	0.0030		mg/L	1	4/20/2005
Chromium	0.065	0.0030		mg/L	1	4/20/2005
Cobalt	0.017	0.0030		mg/L	1	4/20/2005
Copper	0.035	0.0050		mg/L	1	4/20/2005
Lead	0.015	0.0050		mg/L	1	4/20/2005
Molybdenum	0.051	0.0050		mg/L	1	4/20/2005
Nickel	0.10	0.0050		mg/L	1	4/20/2005
Selenium	0.035	0.010		mg/L	1	4/20/2005
Silver	ND	0.0030		mg/L	1	4/20/2005
Thallium	ND	0.015		mg/L	1	4/20/2005
Vanadium	0.053	0.0030		mg/L	1	4/20/2005
Zinc	0.081	0.010		mg/L	1	4/20/2005
MERCURY BY COLD VAPOR TECHNIQUE						
	(EPA 7470)			**EPA 7470A**		
RunID: AA1_050425B	QC Batch: 22356			PrepDate	4/21/2005	Analyst: **JT**
Mercury	0.25	0.20		µg/L	1	4/25/2005

Qualifiers:

- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- DO - Surrogate Diluted Out
- S - Spike/Surrogate outside of limits due to matrix interfere
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories

3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *02-May-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	GD11-W
Lab Order:	075831		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	4/11/2005 9:40:00 AM
Lab ID:	075831-005D	**Matrix:**	GROUND WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP						
	(EPA 3010A)			**EPA 6010B**		
RunID: ICP6_050426E	QC Batch: 22394			PrepDate	4/25/2005	Analyst: **RQ**
Antimony	ND	0.025		mg/L	5	4/26/2005
Arsenic	ND	0.050		mg/L	5	4/26/2005
Barium	0.54	0.015		mg/L	5	4/26/2005
Beryllium	ND	0.015		mg/L	5	4/26/2005
Cadmium	ND	0.015		mg/L	5	4/26/2005
Chromium	0.076	0.015		mg/L	5	4/26/2005
Cobalt	0.022	0.015		mg/L	5	4/26/2005
Copper	0.048	0.025		mg/L	5	4/26/2005
Lead	ND	0.025		mg/L	5	4/26/2005
Molybdenum	0.078	0.025		mg/L	5	4/26/2005
Nickel	0.13	0.025		mg/L	5	4/26/2005
Selenium	0.077	0.050		mg/L	5	4/26/2005
Silver	ND	0.015		mg/L	5	4/26/2005
Thallium	ND	0.075		mg/L	5	4/26/2005
Vanadium	0.059	0.015		mg/L	5	4/26/2005
Zinc	ND	0.050		mg/L	5	4/26/2005
MERCURY BY COLD VAPOR TECHNIQUE						
	(EPA 7470)			**EPA 7470A**		
RunID: AA1_050425C	QC Batch: 22404			PrepDate	4/21/2005	Analyst: **JT**
Mercury	ND	0.20		µg/L	1	4/25/2005

Qualifiers:

- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- DO - Surrogate Diluted Out
- S - Spike/Surrogate outside of limits due to matrix interfere
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories

3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *02-May-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	GD11-W
Lab Order:	075831		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	4/11/2005 9:40:00 AM
Lab ID:	075831-005E	**Matrix:**	GROUND WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS				**EPA 8260B**		
RunID: MS11_050415A	QC Batch: A05VW111			PrepDate		Analyst: **MFR**
MTBE	ND	0.50		µg/L	1	4/15/2005

Qualifiers:

- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- DO - Surrogate Diluted Out
- S - Spike/Surrogate outside of limits due to matrix interfere
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories

3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *02-May-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	GD11-W
Lab Order:	075831		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	4/11/2005 9:40:00 AM
Lab ID:	075831-005F	**Matrix:**	GROUND WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
GASOLINE RANGE ORGANICS BY GC/FID				**EPA 8015B(M)**		
RunID: GC1_050415B	QC Batch: D05VW081			PrepDate		Analyst: **CGM**
GRO	ND	0.050		mg/L	1	4/15/2005
VOLATILE ORGANIC COMPOUNDS BY GC/PID				**EPA 8021B**		
RunID: GC1_050415B	QC Batch: D05VW081			PrepDate		Analyst: **CGM**
Benzene	ND	0.50		µg/L	1	4/15/2005
Toluene	ND	0.50		µg/L	1	4/15/2005
Ethylbenzene	ND	0.50		µg/L	1	4/15/2005
m,p-Xylene	ND	0.50		µg/L	1	4/15/2005
o-Xylene	ND	0.50		µg/L	1	4/15/2005

Qualifiers:

- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- DO - Surrogate Diluted Out
- S - Spike/Surrogate outside of limits due to matrix interfere
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories 3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-404

Advanced Technology Laboratories

Date: *02-May-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	GD12-W
Lab Order:	075831		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	4/11/2005 11:30:00 AM
Lab ID:	075831-006A	**Matrix:**	GROUND WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
PCB BY GC/ECD						
	(EPA 3510C)			**EPA 8082**		
RunID: GC4_050429A	QC Batch: 22305			PrepDate	4/18/2005	Analyst: **EES**
Aroclor 1016	ND	0.56		µg/L	1	4/30/2005
Aroclor 1221	ND	1.1		µg/L	1	4/30/2005
Aroclor 1232	ND	0.56		µg/L	1	4/30/2005
Aroclor 1242	ND	0.56		µg/L	1	4/30/2005
Aroclor 1248	ND	0.56		µg/L	1	4/30/2005
Aroclor 1254	ND	0.56		µg/L	1	4/30/2005
Aroclor 1260	ND	0.56		µg/L	1	4/30/2005
Aroclor 1262	ND	0.56		µg/L	1	4/30/2005
Aroclor 1268	ND	0.56		µg/L	1	4/30/2005

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
DO - Surrogate Diluted Out
S - Spike/Surrogate outside of limits due to matrix interfere
H - Sample exceeded analytical holding time
E - Value above quantitation range
R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *02-May-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	GD12-W
Lab Order:	075831		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	4/11/2005 11:30:00 AM
Lab ID:	075831-006B	**Matrix:**	GROUND WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID (EPA 3510C)				**EPA 8015B(M)**		
RunID: GC7_BACK_050421E	QC Batch: 22306			PrepDate	4/18/2005	Analyst: **CBR**
Diesel	ND	0.056		mg/L	1	4/22/2005
Motor Oil	ND	0.056		mg/L	1	4/22/2005

Qualifiers:

- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- DO - Surrogate Diluted Out
- S - Spike/Surrogate outside of limits due to matrix interfere
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories

3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *02-May-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	GD12-W
Lab Order:	075831		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	4/11/2005 11:30:00 AM
Lab ID:	075831-006C	**Matrix:**	GROUND WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS						
	(EPA 3010A)			**EPA 6010B**		
RunID: ICP5_050420A	QC Batch: 22354			PrepDate	4/19/2005	Analyst: **RQ**
Antimony	ND	0.0050		mg/L	1	4/20/2005
Arsenic	0.076	0.010		mg/L	1	4/20/2005
Barium	0.38	0.0030		mg/L	1	4/20/2005
Beryllium	ND	0.0030		mg/L	1	4/20/2005
Cadmium	ND	0.0030		mg/L	1	4/20/2005
Chromium	0.013	0.0030		mg/L	1	4/20/2005
Cobalt	0.0047	0.0030		mg/L	1	4/20/2005
Copper	0.0078	0.0050		mg/L	1	4/20/2005
Lead	ND	0.0050		mg/L	1	4/20/2005
Molybdenum	0.011	0.0050		mg/L	1	4/20/2005
Nickel	0.018	0.0050		mg/L	1	4/20/2005
Selenium	0.047	0.010		mg/L	1	4/20/2005
Silver	ND	0.0030		mg/L	1	4/20/2005
Thallium	0.042	0.015		mg/L	1	4/20/2005
Vanadium	0.015	0.0030		mg/L	1	4/20/2005
Zinc	0.025	0.010		mg/L	1	4/20/2005
MERCURY BY COLD VAPOR TECHNIQUE						
	(EPA 7470)			**EPA 7470A**		
RunID: AA1_050425B	QC Batch: 22356			PrepDate	4/21/2005	Analyst: **JT**
Mercury	0.46	0.20		µg/L	1	4/25/2005

Qualifiers:

- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- DO - Surrogate Diluted Out
- S - Spike/Surrogate outside of limits due to matrix interfere
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories

3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *02-May-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	GD12-W
Lab Order:	075831		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	4/11/2005 11:30:00 AM
Lab ID:	075831-006D	**Matrix:**	GROUND WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP						
	(EPA 3010A)			**EPA 6010B**		
RunID: ICP6_050426E	QC Batch: 22394			PrepDate	4/25/2005	Analyst: **RQ**
Antimony	ND	0.025		mg/L	5	4/26/2005
Arsenic	ND	0.050		mg/L	5	4/26/2005
Barium	0.33	0.015		mg/L	5	4/26/2005
Beryllium	ND	0.015		mg/L	5	4/26/2005
Cadmium	ND	0.015		mg/L	5	4/26/2005
Chromium	ND	0.015		mg/L	5	4/26/2005
Cobalt	ND	0.015		mg/L	5	4/26/2005
Copper	ND	0.025		mg/L	5	4/26/2005
Lead	ND	0.025		mg/L	5	4/26/2005
Molybdenum	0.025	0.025		mg/L	5	4/26/2005
Nickel	0.026	0.025		mg/L	5	4/26/2005
Selenium	0.074	0.050		mg/L	5	4/26/2005
Silver	ND	0.015		mg/L	5	4/26/2005
Thallium	ND	0.075		mg/L	5	4/26/2005
Vanadium	ND	0.015		mg/L	5	4/26/2005
Zinc	ND	0.050		mg/L	5	4/26/2005
MERCURY BY COLD VAPOR TECHNIQUE						
	(EPA 7470)			**EPA 7470A**		
RunID: AA1_050425C	QC Batch: 22404			PrepDate	4/21/2005	Analyst: **JT**
Mercury	ND	0.20		µg/L	1	4/25/2005

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
DO - Surrogate Diluted Out
S - Spike/Surrogate outside of limits due to matrix interfere
H - Sample exceeded analytical holding time
E - Value above quantitation range
R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *02-May-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	GD12-W
Lab Order:	075831		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	4/11/2005 11:30:00 AM
Lab ID:	075831-006E	**Matrix:**	GROUND WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS				**EPA 8260B**		
RunID: MS11_050415A	QC Batch: A05VW111			PrepDate		Analyst: **MFR**
MTBE	ND	0.50		µg/L	1	4/15/2005

Qualifiers:

- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- DO - Surrogate Diluted Out
- S - Spike/Surrogate outside of limits due to matrix interfere
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories *3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040*

Advanced Technology Laboratories

Date: *02-May-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	GD12-W
Lab Order:	075831		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	4/11/2005 11:30:00 AM
Lab ID:	075831-006F	**Matrix:**	GROUND WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
GASOLINE RANGE ORGANICS BY GC/FID				**EPA 8015B(M)**		
RunID: GC1_050415B	QC Batch: D05VW081			PrepDate		Analyst: **CGM**
GRO	ND	0.050		mg/L	1	4/15/2005
VOLATILE ORGANIC COMPOUNDS BY GC/PID				**EPA 8021B**		
RunID: GC1_050415B	QC Batch: D05VW081			PrepDate		Analyst: **CGM**
Benzene	ND	0.50		µg/L	1	4/15/2005
Toluene	ND	0.50		µg/L	1	4/15/2005
Ethylbenzene	ND	0.50		µg/L	1	4/15/2005
m,p-Xylene	ND	0.50		µg/L	1	4/15/2005
o-Xylene	ND	0.50		µg/L	1	4/15/2005

Qualifiers:

- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- DO - Surrogate Diluted Out
- S - Spike/Surrogate outside of limits due to matrix interfere
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories *3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040*

Advanced Technology Laboratories

Date: *02-May-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	GD2-W
Lab Order:	075831		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	4/11/2005 1:10:00 PM
Lab ID:	075831-009A	**Matrix:**	GROUND WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
PCB BY GC/ECD						
	(EPA 3510C)			**EPA 8082**		
RunID: GC4_050429A	QC Batch: 22305			PrepDate 4/18/2005		Analyst: **EES**
Aroclor 1016	ND	0.67		µg/L	1	4/30/2005
Aroclor 1221	ND	1.3		µg/L	1	4/30/2005
Aroclor 1232	ND	0.67		µg/L	1	4/30/2005
Aroclor 1242	ND	0.67		µg/L	1	4/30/2005
Aroclor 1248	ND	0.67		µg/L	1	4/30/2005
Aroclor 1254	ND	0.67		µg/L	1	4/30/2005
Aroclor 1260	ND	0.67		µg/L	1	4/30/2005
Aroclor 1262	ND	0.67		µg/L	1	4/30/2005
Aroclor 1268	ND	0.67		µg/L	1	4/30/2005

Qualifiers:

- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- DO - Surrogate Diluted Out
- S - Spike/Surrogate outside of limits due to matrix interfere
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories

3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *02-May-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	GD2-W
Lab Order:	075831		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	4/11/2005 1:10:00 PM
Lab ID:	075831-009B	**Matrix:**	GROUND WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID (EPA 3510C)				**EPA 8015B(M)**		
RunID: GC7_BACK_050421E	QC Batch: 22306			PrepDate	4/18/2005	Analyst: **CBR**
Diesel	ND	0.067		mg/L	1	4/22/2005
Motor Oil	ND	0.067		mg/L	1	4/22/2005

Qualifiers:

- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- DO - Surrogate Diluted Out
- S - Spike/Surrogate outside of limits due to matrix interfere
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories

3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *02-May-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	GD2-W
Lab Order:	075831		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	4/11/2005 1:10:00 PM
Lab ID:	075831-009C	**Matrix:**	GROUND WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS						
	(EPA 3010A)			**EPA 6010B**		
RunID: ICP5_050420A	QC Batch: 22354			PrepDate	4/19/2005	Analyst: **RQ**
Antimony	ND	0.0050		mg/L	1	4/20/2005
Arsenic	0.078	0.010		mg/L	1	4/20/2005
Barium	0.23	0.0030		mg/L	1	4/20/2005
Beryllium	ND	0.0030		mg/L	1	4/20/2005
Cadmium	ND	0.0030		mg/L	1	4/20/2005
Chromium	0.023	0.0030		mg/L	1	4/20/2005
Cobalt	0.0048	0.0030		mg/L	1	4/20/2005
Copper	0.0091	0.0050		mg/L	1	4/20/2005
Lead	ND	0.0050		mg/L	1	4/20/2005
Molybdenum	0.011	0.0050		mg/L	1	4/20/2005
Nickel	0.028	0.0050		mg/L	1	4/20/2005
Selenium	0.054	0.010		mg/L	1	4/20/2005
Silver	ND	0.0030		mg/L	1	4/20/2005
Thallium	0.036	0.015		mg/L	1	4/20/2005
Vanadium	0.020	0.0030		mg/L	1	4/20/2005
Zinc	0.031	0.010		mg/L	1	4/20/2005
MERCURY BY COLD VAPOR TECHNIQUE						
	(EPA 7470)			**EPA 7470A**		
RunID: AA1_050425B	QC Batch: 22356			PrepDate	4/21/2005	Analyst: **JT**
Mercury	1.3	0.50		µg/L	1	4/25/2005

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
DO - Surrogate Diluted Out
S - Spike/Surrogate outside of limits due to matrix interfere
H - Sample exceeded analytical holding time
E - Value above quantitation range
R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *02-May-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	GD2-W
Lab Order:	075831		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	4/11/2005 1:10:00 PM
Lab ID:	075831-009D	**Matrix:**	GROUND WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP						
	(EPA 3010A)			**EPA 6010B**		
RunID: ICP6_050426E	QC Batch: 22394			PrepDate	4/25/2005	Analyst: **RQ**
Antimony	ND	0.025		mg/L	5	4/26/2005
Arsenic	ND	0.050		mg/L	5	4/26/2005
Barium	0.21	0.015		mg/L	5	4/26/2005
Beryllium	ND	0.015		mg/L	5	4/26/2005
Cadmium	ND	0.015		mg/L	5	4/26/2005
Chromium	0.025	0.015		mg/L	5	4/26/2005
Cobalt	ND	0.015		mg/L	5	4/26/2005
Copper	ND	0.025		mg/L	5	4/26/2005
Lead	ND	0.025		mg/L	5	4/26/2005
Molybdenum	0.029	0.025		mg/L	5	4/26/2005
Nickel	0.030	0.025		mg/L	5	4/26/2005
Selenium	0.11	0.050		mg/L	5	4/26/2005
Silver	ND	0.015		mg/L	5	4/26/2005
Thallium	ND	0.075		mg/L	5	4/26/2005
Vanadium	0.018	0.015		mg/L	5	4/26/2005
Zinc	ND	0.050		mg/L	5	4/26/2005
MERCURY BY COLD VAPOR TECHNIQUE						
	(EPA 7470)			**EPA 7470A**		
RunID: AA1_050425C	QC Batch: 22404			PrepDate	4/21/2005	Analyst: **JT**
Mercury	ND	0.20		µg/L	1	4/25/2005

Qualifiers:

- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- DO - Surrogate Diluted Out
- S - Spike/Surrogate outside of limits due to matrix interfere
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories *3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040*

Advanced Technology Laboratories

Date: *02-May-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	GD2-W
Lab Order:	075831		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	4/11/2005 1:10:00 PM
Lab ID:	075831-009E	**Matrix:**	GROUND WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS				**EPA 8260B**		
RunID: MS11_050415A	QC Batch: A05VW111			PrepDate		Analyst: **MFR**
MTBE	ND	0.50		µg/L	1	4/15/2005

Qualifiers:

- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- DO - Surrogate Diluted Out
- S - Spike/Surrogate outside of limits due to matrix interfere
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories *3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040*

Advanced Technology Laboratories

Date: *02-May-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	GD2-W
Lab Order:	075831		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	4/11/2005 1:10:00 PM
Lab ID:	075831-009F	**Matrix:**	GROUND WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
GASOLINE RANGE ORGANICS BY GC/FID						
		EPA 8015B(M)				
RunID: GC1_050415B	QC Batch: D05VW081			PrepDate		Analyst: **CGM**
GRO	ND	0.050		mg/L	1	4/15/2005
VOLATILE ORGANIC COMPOUNDS BY GC/PID						
		EPA 8021B				
RunID: GC1_050415B	QC Batch: D05VW081			PrepDate		Analyst: **CGM**
Benzene	ND	0.50		µg/L	1	4/15/2005
Toluene	ND	0.50		µg/L	1	4/15/2005
Ethylbenzene	ND	0.50		µg/L	1	4/15/2005
m,p-Xylene	ND	0.50		µg/L	1	4/15/2005
o-Xylene	ND	0.50		µg/L	1	4/15/2005

Qualifiers:

- ND - Not Detected at the Reporting Limit
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- B - Analyte detected in the associated Method Blank
- DO - Surrogate Diluted Out
- S - Spike/Surrogate outside of limits due to matrix interfere
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories

3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *02-May-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	GD1-W
Lab Order:	075831		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	4/13/2005
Lab ID:	075831-012A	**Matrix:**	GROUND WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
PCB BY GC/ECD						
	(EPA 3510C)			**EPA 8082**		
RunID: GC4_050429A	QC Batch: 22305			PrepDate	4/18/2005	Analyst: **EES**
Aroclor 1016	ND	0.56		µg/L	1	4/30/2005
Aroclor 1221	ND	1.1		µg/L	1	4/30/2005
Aroclor 1232	ND	0.56		µg/L	1	4/30/2005
Aroclor 1242	ND	0.56		µg/L	1	4/30/2005
Aroclor 1248	ND	0.56		µg/L	1	4/30/2005
Aroclor 1254	ND	0.56		µg/L	1	4/30/2005
Aroclor 1260	ND	0.56		µg/L	1	4/30/2005
Aroclor 1262	ND	0.56		µg/L	1	4/30/2005
Aroclor 1268	ND	0.56		µg/L	1	4/30/2005

Qualifiers:

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- S - Spike/Surrogate outside of limits due to matrix interfere
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories *3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040*

Advanced Technology Laboratories

Date: *02-May-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	GD1-W
Lab Order:	075831		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	4/13/2005
Lab ID:	075831-012B	**Matrix:**	GROUND WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID (EPA 3510C)				**EPA 8015B(M)**		
RunID: GC7_BACK_050421E	QC Batch: 22306			PrepDate	4/18/2005	Analyst: **CBR**
Diesel	ND	0.056		mg/L	1	4/22/2005
Motor Oil	ND	0.056		mg/L	1	4/22/2005

Qualifiers:

- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- DO - Surrogate Diluted Out
- S - Spike/Surrogate outside of limits due to matrix interfere
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories

3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *02-May-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	GD1-W
Lab Order:	075831		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	4/13/2005
Lab ID:	075831-012C	**Matrix:**	GROUND WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS						
	(EPA 3010A)			**EPA 6010B**		
RunID: ICP5_050420A	QC Batch: 22354			PrepDate	4/19/2005	Analyst: **RQ**
Antimony	ND	0.0050		mg/L	1	4/20/2005
Arsenic	0.075	0.010		mg/L	1	4/20/2005
Barium	0.22	0.0030		mg/L	1	4/20/2005
Beryllium	ND	0.0030		mg/L	1	4/20/2005
Cadmium	ND	0.0030		mg/L	1	4/20/2005
Chromium	0.019	0.0030		mg/L	1	4/20/2005
Cobalt	0.0042	0.0030		mg/L	1	4/20/2005
Copper	0.0064	0.0050		mg/L	1	4/20/2005
Lead	ND	0.0050		mg/L	1	4/20/2005
Molybdenum	0.013	0.0050		mg/L	1	4/20/2005
Nickel	0.019	0.0050		mg/L	1	4/20/2005
Selenium	0.038	0.010		mg/L	1	4/20/2005
Silver	ND	0.0030		mg/L	1	4/20/2005
Thallium	0.037	0.015		mg/L	1	4/20/2005
Vanadium	0.016	0.0030		mg/L	1	4/20/2005
Zinc	0.028	0.010		mg/L	1	4/20/2005
MERCURY BY COLD VAPOR TECHNIQUE						
	(EPA 7470)			**EPA 7470A**		
RunID: AA1_050425B	QC Batch: 22356			PrepDate	4/21/2005	Analyst: **JT**
Mercury	0.79	0.50		µg/L	1	4/25/2005

Qualifiers:

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H - Sample exceeded analytical holding time
E - Value above quantitation range
R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *02-May-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	GD1-W
Lab Order:	075831		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	4/13/2005
Lab ID:	075831-012D	**Matrix:**	GROUND WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
DISSOLVED METALS BY ICP						
	(EPA 3010A)			**EPA 6010B**		
RunID: ICP6_050426E	QC Batch: 22394			PrepDate	4/25/2005	Analyst: **RQ**
Antimony	ND	0.025		mg/L	5	4/26/2005
Arsenic	ND	0.050		mg/L	5	4/26/2005
Barium	0.27	0.015		mg/L	5	4/26/2005
Beryllium	ND	0.015		mg/L	5	4/26/2005
Cadmium	ND	0.015		mg/L	5	4/26/2005
Chromium	0.034	0.015		mg/L	5	4/26/2005
Cobalt	ND	0.015		mg/L	5	4/26/2005
Copper	ND	0.025		mg/L	5	4/26/2005
Lead	ND	0.025		mg/L	5	4/26/2005
Molybdenum	ND	0.025		mg/L	5	4/26/2005
Nickel	0.040	0.025		mg/L	5	4/26/2005
Selenium	0.080	0.050		mg/L	5	4/26/2005
Silver	ND	0.015		mg/L	5	4/26/2005
Thallium	ND	0.075		mg/L	5	4/26/2005
Vanadium	0.027	0.015		mg/L	5	4/26/2005
Zinc	ND	0.050		mg/L	5	4/26/2005
MERCURY BY COLD VAPOR TECHNIQUE						
	(EPA 7470)			**EPA 7470A**		
RunID: AA1_050425C	QC Batch: 22404			PrepDate	4/21/2005	Analyst: **JT**
Mercury	0.23	0.20		µg/L	1	4/25/2005

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
DO - Surrogate Diluted Out
S - Spike/Surrogate outside of limits due to matrix interfere
H - Sample exceeded analytical holding time
E - Value above quantitation range
R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *02-May-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	GD1-W
Lab Order:	075831		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	4/13/2005
Lab ID:	075831-012E	**Matrix:**	GROUND WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS						
		EPA 8260B				
RunID: MS11_050415A	QC Batch: A05VW111			PrepDate		Analyst: **MFR**
MTBE	ND	0.50		µg/L	1	4/15/2005

Qualifiers:

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- DO - Surrogate Diluted Out
- S - Spike/Surrogate outside of limits due to matrix interfere
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories

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Advanced Technology Laboratories

Date: *02-May-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	GD1-W
Lab Order:	075831		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	4/13/2005
Lab ID:	075831-012F	**Matrix:**	GROUND WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
GASOLINE RANGE ORGANICS BY GC/FID						
		EPA 8015B(M)				
RunID: GC1_050415B	QC Batch: D05VW081			PrepDate		Analyst: **CGM**
GRO	ND	0.050		mg/L	1	4/15/2005
VOLATILE ORGANIC COMPOUNDS BY GC/PID						
		EPA 8021B				
RunID: GC1_050415B	QC Batch: D05VW081			PrepDate		Analyst: **CGM**
Benzene	ND	0.50		µg/L	1	4/15/2005
Toluene	ND	0.50		µg/L	1	4/15/2005
Ethylbenzene	ND	0.50		µg/L	1	4/15/2005
m,p-Xylene	ND	0.50		µg/L	1	4/15/2005
o-Xylene	ND	0.50		µg/L	1	4/15/2005

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- DO - Surrogate Diluted Out
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- H - Sample exceeded analytical holding time
- E - Value above quantitation range
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Results are wet unless otherwise specified

Advanced Technology Laboratories 3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *02-May-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	Composite GD11-0/GD12-0
Lab Order:	075831		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	4/11/2005
Lab ID:	075831-013A	**Matrix:**	SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS						
	(EPA 3050B)			**EPA 6010B**		
RunID: ICP6_050421F	QC Batch: 22396			PrepDate 4/21/2005		Analyst: **RQ**
Antimony	ND	1.0		mg/Kg	1	4/21/2005
Arsenic	ND	1.0		mg/Kg	1	4/21/2005
Barium	180	1.0		mg/Kg	1	4/21/2005
Beryllium	ND	1.0		mg/Kg	1	4/21/2005
Cadmium	ND	1.0		mg/Kg	1	4/21/2005
Chromium	120	1.0		mg/Kg	1	4/21/2005
Cobalt	23	1.0		mg/Kg	1	4/21/2005
Copper	29	1.0		mg/Kg	1	4/21/2005
Lead	19	1.0		mg/Kg	1	4/21/2005
Molybdenum	ND	1.0		mg/Kg	1	4/21/2005
Nickel	230	1.0		mg/Kg	1	4/21/2005
Selenium	2.0	1.0		mg/Kg	1	4/21/2005
Silver	ND	1.0		mg/Kg	1	4/22/2005
Thallium	ND	1.0		mg/Kg	1	4/21/2005
Vanadium	42	1.0		mg/Kg	1	4/21/2005
Zinc	65	1.0		mg/Kg	1	4/21/2005
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID						
	(EPA 3550B)			**EPA 8015B(M)**		
RunID: GC7_050420A	QC Batch: 22369			PrepDate 4/20/2005		Analyst: **CBR**
Diesel	1500	40		mg/Kg	10	4/21/2005
Motor Oil	4000	40		mg/Kg	10	4/21/2005
GASOLINE RANGE ORGANICS BY GC/FID						
				EPA 8015B(M)		
RunID: GC2_050415B	QC Batch: E05VS091			PrepDate		Analyst: **CGM**
GRO	ND	1.0		mg/Kg	1	4/16/2005
VOLATILE ORGANIC COMPOUNDS BY GC/PID						
				EPA 8021B		
RunID: GC2_050415B	QC Batch: E05VS091			PrepDate		Analyst: **CGM**
Benzene	ND	5.0		µg/Kg	1	4/16/2005
Ethylbenzene	ND	5.0		µg/Kg	1	4/16/2005
m,p-Xylene	ND	5.0		µg/Kg	1	4/16/2005

Qualifiers:

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J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
DO - Surrogate Diluted Out
S - Spike/Surrogate outside of limits due to matrix interfere
H - Sample exceeded analytical holding time
E - Value above quantitation range
R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *02-May-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	Composite GD11-0/GD12-0
Lab Order:	075831		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	4/11/2005
Lab ID:	075831-013A	**Matrix:**	SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/PID				**EPA 8021B**		
RunID: GC2_050415B	QC Batch: E05VS091			PrepDate		Analyst: **CGM**
o-Xylene	ND	5.0		µg/Kg	1	4/16/2005
Toluene	ND	5.0		µg/Kg	1	4/16/2005
MERCURY BY COLD VAPOR TECHNIQUE (EPA 7471)				**EPA 7471A**		
RunID: AA1_050421F	QC Batch: 22392			PrepDate	4/21/2005	Analyst: **JT**
Mercury	0.31	0.10		mg/Kg	1	4/21/2005
VOLATILE ORGANIC COMPOUNDS BY GC/MS				**EPA 8260B**		
RunID: MS1_050419A	QC Batch: P05VS043			PrepDate		Analyst: **MFR**
MTBE	ND	5.0		µg/Kg	1	4/19/2005
PH				**EPA 9045C**		
RunID: WETCHEM_050418D	QC Batch: R49078			PrepDate	4/18/2005	Analyst: **EG**
pH	8.03	0.10		pH Units	1	4/18/2005

Qualifiers:

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- S - Spike/Surrogate outside of limits due to matrix interfere
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories

3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-404(

Advanced Technology Laboratories

Date: *02-May-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	Composite GD11-4/GD12-4
Lab Order:	075831		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	4/11/2005
Lab ID:	075831-014A	**Matrix:**	SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS						
	(EPA 3050B)			**EPA 6010B**		
RunID: ICP6_050421F	QC Batch: 22396			PrepDate 4/21/2005		Analyst: **RQ**
Antimony	ND	1.0		mg/Kg	1	4/21/2005
Arsenic	3.0	1.0		mg/Kg	1	4/21/2005
Barium	180	1.0		mg/Kg	1	4/21/2005
Beryllium	ND	1.0		mg/Kg	1	4/21/2005
Cadmium	ND	1.0		mg/Kg	1	4/21/2005
Chromium	54	1.0		mg/Kg	1	4/21/2005
Cobalt	13	1.0		mg/Kg	1	4/21/2005
Copper	34	1.0		mg/Kg	1	4/21/2005
Lead	8.8	1.0		mg/Kg	1	4/21/2005
Molybdenum	ND	1.0		mg/Kg	1	4/21/2005
Nickel	80	1.0		mg/Kg	1	4/21/2005
Selenium	1.9	1.0		mg/Kg	1	4/21/2005
Silver	ND	1.0		mg/Kg	1	4/22/2005
Thallium	ND	1.0		mg/Kg	1	4/21/2005
Vanadium	41	1.0		mg/Kg	1	4/21/2005
Zinc	61	1.0		mg/Kg	1	4/21/2005
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID						
	(EPA 3550B)			**EPA 8015B(M)**		
RunID: GC7_050420A	QC Batch: 22369			PrepDate 4/20/2005		Analyst: **CBR**
Diesel	3.5	1.0		mg/Kg	1	4/20/2005
Motor Oil	6.8	1.0		mg/Kg	1	4/20/2005
GASOLINE RANGE ORGANICS BY GC/FID						
				EPA 8015B(M)		
RunID: GC2_050415B	QC Batch: E05VS091			PrepDate		Analyst: **CGM**
GRO	ND	1.0		mg/Kg	1	4/16/2005
VOLATILE ORGANIC COMPOUNDS BY GC/PID						
				EPA 8021B		
RunID: GC2_050415B	QC Batch: E05VS091			PrepDate		Analyst: **CGM**
Benzene	ND	5.0		µg/Kg	1	4/16/2005
Ethylbenzene	ND	5.0		µg/Kg	1	4/16/2005
m,p-Xylene	ND	5.0		µg/Kg	1	4/16/2005

Qualifiers:

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- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- DO - Surrogate Diluted Out
- S - Spike/Surrogate outside of limits due to matrix interfere
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories

3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *02-May-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	Composite GD11-4/GD12-4
Lab Order:	075831		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	4/11/2005
Lab ID:	075831-014A	**Matrix:**	SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/PID				**EPA 8021B**		
RunID: GC2_050415B	QC Batch: E05VS091			PrepDate		Analyst: **CGM**
o-Xylene	ND	5.0		µg/Kg	1	4/16/2005
Toluene	ND	5.0		µg/Kg	1	4/16/2005
MERCURY BY COLD VAPOR TECHNIQUE (EPA 7471)				**EPA 7471A**		
RunID: AA1_050421F	QC Batch: 22392			PrepDate	4/21/2005	Analyst: **JT**
Mercury	ND	0.10		mg/Kg	1	4/21/2005
VOLATILE ORGANIC COMPOUNDS BY GC/MS				**EPA 8260B**		
RunID: MS1_050419A	QC Batch: P05VS043			PrepDate		Analyst: **MFR**
MTBE	ND	5.0		µg/Kg	1	4/19/2005
PH				**EPA 9045C**		
RunID: WETCHEM_050418D	QC Batch: R49078			PrepDate	4/18/2005	Analyst: **EG**
pH	8.01	0.10		pH Units	1	4/18/2005

Qualifiers:

- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- DO - Surrogate Diluted Out
- S - Spike/Surrogate outside of limits due to matrix interfere
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories

3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *02-May-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	Composite GD1-0/GD2-0
Lab Order:	075831		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	4/11/2005
Lab ID:	075831-015A	**Matrix:**	SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS						
	(EPA 3050B)			**EPA 6010B**		
RunID: ICP6_050421F	QC Batch: 22396			PrepDate	4/21/2005	Analyst: **RQ**
Antimony	ND	1.0		mg/Kg	1	4/21/2005
Arsenic	17	1.0		mg/Kg	1	4/21/2005
Barium	190	1.0		mg/Kg	1	4/21/2005
Beryllium	ND	1.0		mg/Kg	1	4/21/2005
Cadmium	ND	1.0		mg/Kg	1	4/21/2005
Chromium	160	1.0		mg/Kg	1	4/21/2005
Cobalt	33	1.0		mg/Kg	1	4/21/2005
Copper	18	1.0		mg/Kg	1	4/21/2005
Lead	14	1.0		mg/Kg	1	4/21/2005
Molybdenum	ND	1.0		mg/Kg	1	4/21/2005
Nickel	560	1.0		mg/Kg	1	4/21/2005
Selenium	2.0	1.0		mg/Kg	1	4/21/2005
Silver	ND	1.0		mg/Kg	1	4/22/2005
Thallium	ND	1.0		mg/Kg	1	4/21/2005
Vanadium	35	1.0		mg/Kg	1	4/21/2005
Zinc	39	1.0		mg/Kg	1	4/21/2005
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID						
	(EPA 3550B)			**EPA 8015B(M)**		
RunID: GC7_050420A	QC Batch: 22369			PrepDate	4/20/2005	Analyst: **CBR**
Diesel	24	1.0		mg/Kg	1	4/21/2005
Motor Oil	67	1.0		mg/Kg	1	4/21/2005
GASOLINE RANGE ORGANICS BY GC/FID						
				EPA 8015B(M)		
RunID: GC2_050415B	QC Batch: E05VS091			PrepDate		Analyst: **CGM**
GRO	ND	1.0		mg/Kg	1	4/16/2005
VOLATILE ORGANIC COMPOUNDS BY GC/PID						
				EPA 8021B		
RunID: GC2_050415B	QC Batch: E05VS091			PrepDate		Analyst: **CGM**
Benzene	ND	5.0		µg/Kg	1	4/16/2005
Ethylbenzene	ND	5.0		µg/Kg	1	4/16/2005
m,p-Xylene	ND	5.0		µg/Kg	1	4/16/2005

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- S - Spike/Surrogate outside of limits due to matrix interfere
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories 3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *02-May-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	Composite GD1-0/GD2-0
Lab Order:	075831		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	4/11/2005
Lab ID:	075831-015A	**Matrix:**	SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/PID				**EPA 8021B**		
RunID: GC2_050415B	QC Batch: E05VS091			PrepDate		Analyst: **CGM**
o-Xylene	ND	5.0		µg/Kg	1	4/16/2005
Toluene	ND	5.0		µg/Kg	1	4/16/2005
MERCURY BY COLD VAPOR TECHNIQUE (EPA 7471)				**EPA 7471A**		
RunID: AA1_050421F	QC Batch: 22392			PrepDate	4/21/2005	Analyst: **JT**
Mercury	ND	0.10		mg/Kg	1	4/21/2005
VOLATILE ORGANIC COMPOUNDS BY GC/MS				**EPA 8260B**		
RunID: MS1_050419A	QC Batch: P05VS043			PrepDate		Analyst: **MFR**
MTBE	ND	5.0		µg/Kg	1	4/19/2005
PH				**EPA 9045C**		
RunID: WETCHEM_050418D	QC Batch: R49078			PrepDate	4/18/2005	Analyst: **EG**
pH	8.40	0.10		pH Units	1	4/18/2005

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Results are wet unless otherwise specified

Advanced Technology Laboratories *3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040*

Advanced Technology Laboratories

Date: *02-May-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	Composite GD1-4/GD2-4
Lab Order:	075831		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	4/11/2005
Lab ID:	075831-016A	**Matrix:**	SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS						
	(EPA 3050B)			**EPA 6010B**		
RunID: ICP6_050421F	QC Batch: 22396			PrepDate	4/21/2005	Analyst: **RQ**
Antimony	ND	1.0		mg/Kg	1	4/21/2005
Arsenic	1.1	1.0		mg/Kg	1	4/21/2005
Barium	140	1.0		mg/Kg	1	4/21/2005
Beryllium	ND	1.0		mg/Kg	1	4/21/2005
Cadmium	ND	1.0		mg/Kg	1	4/21/2005
Chromium	51	1.0		mg/Kg	1	4/21/2005
Cobalt	11	1.0		mg/Kg	1	4/21/2005
Copper	26	1.0		mg/Kg	1	4/21/2005
Lead	8.2	1.0		mg/Kg	1	4/21/2005
Molybdenum	ND	1.0		mg/Kg	1	4/21/2005
Nickel	70	1.0		mg/Kg	1	4/21/2005
Selenium	1.5	1.0		mg/Kg	1	4/21/2005
Silver	ND	1.0		mg/Kg	1	4/22/2005
Thallium	ND	1.0		mg/Kg	1	4/21/2005
Vanadium	36	1.0		mg/Kg	1	4/21/2005
Zinc	49	1.0		mg/Kg	1	4/21/2005
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID						
	(EPA 3550B)			**EPA 8015B(M)**		
RunID: GC7_050420A	QC Batch: 22369			PrepDate	4/20/2005	Analyst: **CBR**
Diesel	2.9	1.0		mg/Kg	1	4/21/2005
Motor Oil	5.5	1.0		mg/Kg	1	4/21/2005
GASOLINE RANGE ORGANICS BY GC/FID						
				EPA 8015B(M)		
RunID: GC2_050415B	QC Batch: E05VS091			PrepDate		Analyst: **CGM**
GRO	ND	1.0		mg/Kg	1	4/16/2005
VOLATILE ORGANIC COMPOUNDS BY GC/PID						
				EPA 8021B		
RunID: GC2_050415B	QC Batch: E05VS091			PrepDate		Analyst: **CGM**
Benzene	ND	5.0		µg/Kg	1	4/16/2005
Ethylbenzene	ND	5.0		µg/Kg	1	4/16/2005
m,p-Xylene	ND	5.0		µg/Kg	1	4/16/2005

Qualifiers:

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- B - Analyte detected in the associated Method Blank
- DO - Surrogate Diluted Out
- S - Spike/Surrogate outside of limits due to matrix interfere
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories *3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040*

Advanced Technology Laboratories

Date: *02-May-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	Composite GD1-4/GD2-4
Lab Order:	075831		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	4/11/2005
Lab ID:	075831-016A	**Matrix:**	SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/PID				**EPA 8021B**		
RunID: GC2_050415B	QC Batch: E05VS091			PrepDate		Analyst: **CGM**
o-Xylene	ND	5.0		µg/Kg	1	4/16/2005
Toluene	ND	5.0		µg/Kg	1	4/16/2005
MERCURY BY COLD VAPOR TECHNIQUE (EPA 7471)				**EPA 7471A**		
RunID: AA1_050421F	QC Batch: 22392			PrepDate	4/21/2005	Analyst: **JT**
Mercury	ND	0.10		mg/Kg	1	4/21/2005
VOLATILE ORGANIC COMPOUNDS BY GC/MS				**EPA 8260B**		
RunID: MS1_050419A	QC Batch: P05VS043			PrepDate		Analyst: **MFR**
MTBE	ND	5.0		µg/Kg	1	4/19/2005
PH				**EPA 9045C**		
RunID: WETCHEM_050418D	QC Batch: R49078			PrepDate	4/18/2005	Analyst: **EG**
pH	7.97	0.10		pH Units	1	4/18/2005

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Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *02-May-05*

CLIENT: Geocon Consultants, Inc.
Work Order: 075831
Project: DTEV LIGHT RAIL, E8222-06-01

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_S

Sample ID	MB-22396	SampType:	MBLK	TestCode:	6010_S	Units:	mg/Kg	Prep Date:	4/21/2005	Run ID:	ICP6_050421F
Client ID:	ZZZZZ	Batch ID:	22396	TestNo:	EPA 6010B	(EPA 3050B)		Analysis Date:	4/21/2005	SeqNo:	721607

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	2.0									
Arsenic	ND	1.0									
Barium	ND	1.0									
Beryllium	ND	1.0									
Cadmium	ND	1.0									
Chromium	ND	1.0									
Cobalt	ND	1.0									
Copper	ND	2.0									
Lead	ND	1.0									
Molybdenum	ND	1.0									
Nickel	ND	1.0									
Selenium	ND	1.0									
Thallium	ND	1.0									
Vanadium	ND	1.0									
Zinc	ND	1.0									

Sample ID	MB-22396	SampType:	MBLK	TestCode:	6010_S	Units:	mg/Kg	Prep Date:	4/21/2005	Run ID:	ICP6_050422A
Client ID:	ZZZZZ	Batch ID:	22396	TestNo:	EPA 6010B	(EPA 3050B)		Analysis Date:	4/22/2005	SeqNo:	721888

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Silver	ND	1.0									

Sample ID	LCS-22396	SampType:	LCS	TestCode:	6010_S	Units:	mg/Kg	Prep Date:	4/21/2005	Run ID:	ICP6_050421F
Client ID:	ZZZZZ	Batch ID:	22396	TestNo:	EPA 6010B	(EPA 3050B)		Analysis Date:	4/21/2005	SeqNo:	721608

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	49.23	2.0	50	0	98.5	80	120	0	0		
Arsenic	51.32	1.0	50	0	103	80	120	0	0		

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B - Analyte detected in the associated Method Blank
Calculations are based on raw values
DO- Surrogate dilute out
H - Sample exceeded holding time

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

CLIENT: Geocon Consultants, Inc.
Work Order: 075831
Project: DTEV LIGHT RAIL, E8222-06-01

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_S

Sample ID LCS-22396	SampType: LCS	TestCode: 6010_S	Units: mg/Kg	Prep Date: 4/21/2005	Run ID: ICP6_050421F
Client ID: ZZZZZ	Batch ID: 22396	TestNo: EPA 6010B	(EPA 3050B)	Analysis Date: 4/21/2005	SeqNo: 721608

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	52.81	1.0	50	0	106	80	120	0	0		
Beryllium	49.06	1.0	50	0	98.1	80	120	0	0		
Cadmium	51.34	1.0	50	0	103	80	120	0	0		
Chromium	52.17	1.0	50	0	104	80	120	0	0		
Cobalt	50.05	1.0	50	0	100	80	120	0	0		
Copper	54.35	2.0	50	0	109	80	120	0	0		
Lead	51.4	1.0	50	0	103	80	120	0	0		
Molybdenum	52.72	1.0	50	0	105	80	120	0	0		
Nickel	50.7	1.0	50	0	101	80	120	0	0		
Selenium	48.22	1.0	50	0	96.4	80	120	0	0		
Thallium	50.22	1.0	50	0	100	80	120	0	0		
Vanadium	51.82	1.0	50	0	104	80	120	0	0		
Zinc	51.67	1.0	50	0	103	80	120	0	0		

Sample ID LCS-22396	SampType: LCS	TestCode: 6010_S	Units: mg/Kg	Prep Date: 4/21/2005	Run ID: ICP6_050422A
Client ID: ZZZZZ	Batch ID: 22396	TestNo: EPA 6010B	(EPA 3050B)	Analysis Date: 4/22/2005	SeqNo: 721889

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Silver	47.37	1.0	50	0	94.7	80	120	0	0		

Sample ID 075870-017AMS	SampType: MS	TestCode: 6010_S	Units: mg/Kg	Prep Date: 4/21/2005	Run ID: ICP6_050421F
Client ID: ZZZZZ	Batch ID: 22396	TestNo: EPA 6010B	(EPA 3050B)	Analysis Date: 4/22/2005	SeqNo: 721629

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	88.43	1.0	125	0	70.7	23	118	0	0		
Arsenic	111.6	1.0	125	0	89.3	64	111	0	0		
Barium	144.1	1.0	125	23.79	96.3	36	146	0	0		
Beryllium	110.3	1.0	125	0	88.3	50	120	0	0		
Cadmium	115.2	1.0	125	0	92.1	62	107	0	0		
Chromium	122.9	1.0	125	6.456	93.2	63	119	0	0		

Qualifiers:
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Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

CLIENT: Geocon Consultants, Inc.
Work Order: 075831
Project: DTEV LIGHT RAIL, E8222-06-01

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_S

Sample ID 075870-017AMS	SampType: MS	TestCode: 6010_S	Units: mg/Kg	Prep Date: 4/21/2005	Run ID: ICP6_050421F
Client ID: ZZZZZ	Batch ID: 22396	TestNo: EPA 6010B	(EPA 3050B)	Analysis Date: 4/22/2005	SeqNo: 721629

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cobalt	117.5	1.0	125	2.237	92.2	63	111	0	0		
Copper	120	1.0	125	2.729	93.8	58	136	0	0		
Lead	116.9	1.0	125	5.307	89.2	47	125	0	0		
Molybdenum	110.2	1.0	125	0	88.2	63	116	0	0		
Nickel	118.7	1.0	125	3.868	91.9	57	116	0	0		
Selenium	105	1.0	125	0.9544	83.2	47	118	0	0		
Thallium	110.8	1.0	125	0	88.6	49	116	0	0		
Vanadium	125.5	1.0	125	9.465	92.8	65	122	0	0		
Zinc	120	1.0	125	7.424	90.1	36	140	0	0		

Sample ID 075870-017AMS	SampType: MS	TestCode: 6010_S	Units: mg/Kg	Prep Date: 4/21/2005	Run ID: ICP6_050422A
Client ID: ZZZZZ	Batch ID: 22396	TestNo: EPA 6010B	(EPA 3050B)	Analysis Date: 4/22/2005	SeqNo: 721898

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Silver	14.61	1.0	125	0	11.7	48	125	0	0		S

Sample ID 075870-017AMSD	SampType: MSD	TestCode: 6010_S	Units: mg/Kg	Prep Date: 4/21/2005	Run ID: ICP6_050421F
Client ID: ZZZZZ	Batch ID: 22396	TestNo: EPA 6010B	(EPA 3050B)	Analysis Date: 4/22/2005	SeqNo: 721630

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	87.08	1.0	125	0	69.7	23	118	88.43	1.54	20	
Arsenic	105.3	1.0	125	0	84.2	64	111	111.6	5.82	20	
Barium	161.6	1.0	125	23.79	110	36	146	144.1	11.5	20	
Beryllium	103.9	1.0	125	0	83.1	50	120	110.3	5.96	20	
Cadmium	108.2	1.0	125	0	86.5	62	107	115.2	6.26	20	
Chromium	114.6	1.0	125	6.456	86.5	63	119	122.9	7.02	20	
Cobalt	110.8	1.0	125	2.237	86.8	63	111	117.5	5.90	20	
Copper	111.6	1.0	125	2.729	87.1	58	136	120	7.19	20	
Lead	109.1	1.0	125	5.307	83.1	47	125	116.9	6.85	20	
Molybdenum	104.3	1.0	125	0	83.4	63	116	110.2	5.55	20	

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Calculations are based on raw values
DO- Surrogate dilute out
H - Sample exceeded holding time

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

CLIENT: Geocon Consultants, Inc.
Work Order: 075831
Project: DTEV LIGHT RAIL, E8222-06-01

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_S

Sample ID 075870-017AMSD	SampType: MSD	TestCode: 6010_S	Units: mg/Kg	Prep Date: 4/21/2005	Run ID: ICP6_050421F
Client ID: ZZZZZ	Batch ID: 22396	TestNo: EPA 6010B	(EPA 3050B)	Analysis Date: 4/22/2005	SeqNo: 721630

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nickel	111	1.0	125	3.868	85.7	57	116	118.7	6.76	20	
Selenium	98.6	1.0	125	0.9544	78.1	47	118	105	6.31	20	
Thallium	102.8	1.0	125	0	82.2	49	116	110.8	7.45	20	
Vanadium	117.2	1.0	125	9.465	86.2	65	122	125.5	6.84	20	
Zinc	112.1	1.0	125	7.424	83.7	36	140	120	6.85	20	

Sample ID 075870-017AMSD	SampType: MSD	TestCode: 6010_S	Units: mg/Kg	Prep Date: 4/21/2005	Run ID: ICP6_050422A
Client ID: ZZZZZ	Batch ID: 22396	TestNo: EPA 6010B	(EPA 3050B)	Analysis Date: 4/22/2005	SeqNo: 721899

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Silver	6.542	1.0	125	0	5.23	48	125	14.61	76.3	20	SR

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Advanced Technology Laboratories
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CLIENT: Geocon Consultants, Inc.
Work Order: 075831
Project: DTEV LIGHT RAIL, E8222-06-01

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_W

Sample ID MB-22354	SampType: MBLK	TestCode: 6010_W	Units: mg/L	Prep Date: 4/19/2005	Run ID: ICP5_050420A
Client ID: ZZZZZ	Batch ID: 22354	TestNo: EPA 6010B	(EPA 3010A)	Analysis Date: 4/20/2005	SeqNo: 720339

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	0.0050									
Arsenic	ND	0.010									
Barium	ND	0.0030									
Beryllium	ND	0.0030									
Cadmium	ND	0.0030									
Chromium	ND	0.0030									
Cobalt	ND	0.0030									
Copper	ND	0.0050									
Lead	ND	0.0050									
Molybdenum	ND	0.0050									
Nickel	ND	0.0050									
Silver	ND	0.0030									
Thallium	ND	0.015									
Vanadium	ND	0.0030									
Zinc	ND	0.010									

Sample ID MB-22354	SampType: MBLK	TestCode: 6010_W	Units: mg/L	Prep Date: 4/19/2005	Run ID: ICP6_050420E
Client ID: ZZZZZ	Batch ID: 22354	TestNo: EPA 6010B	(EPA 3010A)	Analysis Date: 4/20/2005	SeqNo: 720598

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Selenium	ND	0.010									

Sample ID LCS-22354	SampType: LCS	TestCode: 6010_W	Units: mg/L	Prep Date: 4/19/2005	Run ID: ICP5_050420A
Client ID: ZZZZZ	Batch ID: 22354	TestNo: EPA 6010B	(EPA 3010A)	Analysis Date: 4/20/2005	SeqNo: 720340

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.9836	0.0050	1	0	98.4	85	115	0	0		
Arsenic	1.031	0.010	1	0	103	85	115	0	0		
Barium	1.02	0.0030	1	0	102	85	115	0	0		
Beryllium	0.9879	0.0030	1	0	98.8	85	115	0	0		

Qualifiers:
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Calculations are based on raw values
DO- Surrogate dilute out
H - Sample exceeded holding time

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

CLIENT: Geocon Consultants, Inc.
Work Order: 075831
Project: DTEV LIGHT RAIL, E8222-06-01

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_W

Sample ID LCS-22354	SampType: LCS	TestCode: 6010_W	Units: mg/L	Prep Date: 4/19/2005	Run ID: ICP5_050420A
Client ID: ZZZZZ	Batch ID: 22354	TestNo: EPA 6010B	(EPA 3010A)	Analysis Date: 4/20/2005	SeqNo: 720340

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cadmium	0.9871	0.0030	1	0	98.7	85	115	0	0		
Chromium	0.9996	0.0030	1	0	100	85	115	0	0		
Cobalt	0.9576	0.0030	1	0	95.8	85	115	0	0		
Copper	1.046	0.0050	1	0	105	85	115	0	0		
Lead	0.9974	0.0050	1	0	99.7	85	115	0	0		
Molybdenum	1.003	0.0050	1	0	100	85	115	0	0		
Nickel	0.9867	0.0050	1	0	98.7	85	115	0	0		
Silver	0.9519	0.0030	1	0	95.2	85	115	0	0		
Thallium	0.9787	0.015	1	0	97.9	85	115	0	0		
Vanadium	1.004	0.0030	1	0	100	85	115	0	0		
Zinc	1.018	0.010	1	0	102	85	115	0	0		

Sample ID LCS-22354	SampType: LCS	TestCode: 6010_W	Units: mg/L	Prep Date: 4/19/2005	Run ID: ICP6_050420E
Client ID: ZZZZZ	Batch ID: 22354	TestNo: EPA 6010B	(EPA 3010A)	Analysis Date: 4/20/2005	SeqNo: 720599

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Selenium	0.9362	0.010	1	0	93.6	85	115	0	0		

Sample ID 075806-001AMS	SampType: MS	TestCode: 6010_W	Units: mg/L	Prep Date: 4/19/2005	Run ID: ICP5_050420A
Client ID: ZZZZZ	Batch ID: 22354	TestNo: EPA 6010B	(EPA 3010A)	Analysis Date: 4/20/2005	SeqNo: 720361

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	2.54	0.0050	2.5	0	102	67	129	0	0		
Arsenic	2.553	0.010	2.5	0.02557	101	73	124	0	0		
Barium	2.459	0.0030	2.5	0.004728	98.2	67	127	0	0		
Beryllium	2.507	0.0030	2.5	0	100	76	122	0	0		
Cadmium	2.454	0.0030	2.5	0	98.2	72	116	0	0		
Chromium	2.448	0.0030	2.5	0.001843	97.8	72	123	0	0		
Cobalt	2.488	0.0030	2.5	0	99.5	72	119	0	0		
Copper	2.536	0.0050	2.5	0.01216	101	76	133	0	0		

Qualifiers:
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Calculations are based on raw values
DO- Surrogate dilute out
H - Sample exceeded holding time

Advanced Technology Laboratories
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CLIENT: Geocon Consultants, Inc.
Work Order: 075831
Project: DTEV LIGHT RAIL, E8222-06-01

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_W

Sample ID 075806-001AMS	SampType: MS	TestCode: 6010_W	Units: mg/L	Prep Date: 4/19/2005	Run ID: ICP5_050420A
Client ID: ZZZZZ	Batch ID: 22354	TestNo: EPA 6010B	(EPA 3010A)	Analysis Date: 4/20/2005	SeqNo: 720361

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	2.442	0.0050	2.5	0.005493	97.5	67	120	0	0		
Molybdenum	2.537	0.0050	2.5	0.002636	101	76	124	0	0		
Nickel	2.506	0.0050	2.5	0.002564	100	66	124	0	0		
Silver	2.462	0.0030	2.5	0	98.5	78	119	0	0		
Thallium	2.437	0.015	2.5	0.01453	96.9	66	124	0	0		
Vanadium	2.5	0.0030	2.5	0.003134	99.9	75	122	0	0		
Zinc	2.528	0.010	2.5	0.06456	98.6	72	120	0	0		

Sample ID 075806-001AMS	SampType: MS	TestCode: 6010_W	Units: mg/L	Prep Date: 4/19/2005	Run ID: ICP6_050420E
Client ID: ZZZZZ	Batch ID: 22354	TestNo: EPA 6010B	(EPA 3010A)	Analysis Date: 4/20/2005	SeqNo: 720605

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Selenium	2.306	0.010	2.5	0	92.2	75	121	0	0		

Sample ID 075806-001AMSD	SampType: MSD	TestCode: 6010_W	Units: mg/L	Prep Date: 4/19/2005	Run ID: ICP5_050420A
Client ID: ZZZZZ	Batch ID: 22354	TestNo: EPA 6010B	(EPA 3010A)	Analysis Date: 4/20/2005	SeqNo: 720362

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	2.529	0.0050	2.5	0	101	67	129	2.54	0.422	20	
Arsenic	2.536	0.010	2.5	0.02557	100	73	124	2.553	0.684	20	
Barium	2.444	0.0030	2.5	0.004728	97.6	67	127	2.459	0.590	20	
Beryllium	2.484	0.0030	2.5	0	99.4	76	122	2.507	0.915	20	
Cadmium	2.431	0.0030	2.5	0	97.2	72	116	2.454	0.951	20	
Chromium	2.43	0.0030	2.5	0.001843	97.1	72	123	2.448	0.735	20	
Cobalt	2.464	0.0030	2.5	0	98.5	72	119	2.488	0.973	20	
Copper	2.524	0.0050	2.5	0.01216	100	76	133	2.536	0.480	20	
Lead	2.428	0.0050	2.5	0.005493	96.9	67	120	2.442	0.556	20	
Molybdenum	2.532	0.0050	2.5	0.002636	101	76	124	2.537	0.196	20	
Nickel	2.484	0.0050	2.5	0.002564	99.3	66	124	2.506	0.875	20	
Silver	2.455	0.0030	2.5	0	98.2	78	119	2.462	0.302	20	

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CLIENT: Geocon Consultants, Inc.
Work Order: 075831
Project: DTEV LIGHT RAIL, E8222-06-01

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_W

Sample ID 075806-001AMSD	SampType: MSD	TestCode: 6010_W	Units: mg/L	Prep Date: 4/19/2005	Run ID: ICP5_050420A
Client ID: ZZZZZ	Batch ID: 22354	TestNo: EPA 6010B	(EPA 3010A)	Analysis Date: 4/20/2005	SeqNo: 720362

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Thallium	2.437	0.015	2.5	0.01453	96.9	66	124	2.437	0.0262	20	
Vanadium	2.483	0.0030	2.5	0.003134	99.2	75	122	2.5	0.676	20	
Zinc	2.504	0.010	2.5	0.06456	97.6	72	120	2.528	0.972	20	

Sample ID 075806-001AMSD	SampType: MSD	TestCode: 6010_W	Units: mg/L	Prep Date: 4/19/2005	Run ID: ICP6_050420E
Client ID: ZZZZZ	Batch ID: 22354	TestNo: EPA 6010B	(EPA 3010A)	Analysis Date: 4/20/2005	SeqNo: 720606

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Selenium	2.342	0.010	2.5	0	93.7	75	121	2.306	1.55	20	

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Calculations are based on raw values
DO- Surrogate dilute out
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CLIENT: Geocon Consultants, Inc.
Work Order: 075831
Project: DTEV LIGHT RAIL, E8222-06-01

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WD

Sample ID MB-22394	SampType: MBLK	TestCode: 6010_WD	Units: mg/L	Prep Date: 4/25/2005	Run ID: ICP6_050426E
Client ID: ZZZZZ	Batch ID: 22394	TestNo: EPA 6010B	(EPA 3010A)	Analysis Date: 4/26/2005	SeqNo: 723830

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	0.0050									
Arsenic	ND	0.010									
Barium	ND	0.0030									
Beryllium	ND	0.0030									
Cadmium	ND	0.0030									
Chromium	ND	0.0030									
Cobalt	ND	0.0030									
Copper	ND	0.0050									
Lead	ND	0.0050									
Molybdenum	ND	0.0050									
Nickel	ND	0.0050									
Selenium	ND	0.010									
Silver	ND	0.0030									
Thallium	ND	0.015									
Vanadium	ND	0.0030									
Zinc	ND	0.010									

Sample ID LCS-22394	SampType: LCS	TestCode: 6010_WD	Units: mg/L	Prep Date: 4/25/2005	Run ID: ICP6_050426E
Client ID: ZZZZZ	Batch ID: 22394	TestNo: EPA 6010B	(EPA 3010A)	Analysis Date: 4/26/2005	SeqNo: 723831

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.9591	0.0050	1	0	95.9	85	115	0	0		
Arsenic	1.009	0.010	1	0	101	85	115	0	0		
Barium	1.016	0.0030	1	0	102	85	115	0	0		
Beryllium	1.002	0.0030	1	0	100	85	115	0	0		
Cadmium	0.9924	0.0030	1	0	99.2	85	115	0	0		
Chromium	1.011	0.0030	1	0	101	85	115	0	0		
Cobalt	0.9812	0.0030	1	0	98.1	85	115	0	0		
Copper	1.057	0.0050	1	0	106	85	115	0	0		
Lead	0.9854	0.0050	1	0	98.5	85	115	0	0		

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DO- Surrogate dilute out
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CLIENT: Geocon Consultants, Inc.
Work Order: 075831
Project: DTEV LIGHT RAIL, E8222-06-01

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WD

Sample ID LCS-22394	SampType: LCS	TestCode: 6010_WD	Units: mg/L	Prep Date: 4/25/2005	Run ID: ICP6_050426E
Client ID: ZZZZZ	Batch ID: 22394	TestNo: EPA 6010B	(EPA 3010A)	Analysis Date: 4/26/2005	SeqNo: 723831

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Molybdenum	1.008	0.0050	1	0	101	85	115	0	0		
Nickel	1	0.0050	1	0	100	85	115	0	0		
Selenium	0.9563	0.010	1	0	95.6	85	115	0	0		
Silver	0.9518	0.0030	1	0	95.2	85	115	0	0		
Thallium	0.9982	0.015	1	0	99.8	85	115	0	0		
Vanadium	0.9871	0.0030	1	0	98.7	85	115	0	0		
Zinc	0.9888	0.010	1	0	98.9	85	115	0	0		

Sample ID 075880-001DMS	SampType: MS	TestCode: 6010_WD	Units: mg/L	Prep Date: 4/25/2005	Run ID: ICP6_050426E
Client ID: ZZZZZ	Batch ID: 22394	TestNo: EPA 6010B	(EPA 3010A)	Analysis Date: 4/26/2005	SeqNo: 723837

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	2.426	0.025	2.5	0	97	67	129	0	0		
Arsenic	2.493	0.050	2.5	0	99.7	73	124	0	0		
Barium	2.474	0.015	2.5	0.0217	98.1	67	127	0	0		
Beryllium	2.506	0.015	2.5	0	100	76	122	0	0		
Cadmium	2.489	0.015	2.5	0	99.6	72	116	0	0		
Chromium	2.451	0.015	2.5	0	98	72	123	0	0		
Cobalt	2.52	0.015	2.5	0	101	72	119	0	0		
Copper	2.458	0.025	2.5	0	98.3	76	133	0	0		
Lead	2.392	0.025	2.5	0	95.7	67	120	0	0		
Molybdenum	2.445	0.025	2.5	0	97.8	76	124	0	0		
Nickel	2.543	0.025	2.5	0	102	66	124	0	0		
Selenium	2.436	0.050	2.5	0.05622	95.2	75	121	0	0		
Silver	2.369	0.015	2.5	0	94.8	78	119	0	0		
Thallium	2.466	0.075	2.5	0	98.6	66	124	0	0		
Vanadium	2.452	0.015	2.5	0.01299	97.5	75	122	0	0		
Zinc	2.408	0.050	2.5	0	96.3	72	120	0	0		

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CLIENT: Geocon Consultants, Inc.
Work Order: 075831
Project: DTEV LIGHT RAIL, E8222-06-01

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WD

Sample ID	075880-001DMSD	SampType:	MSD	TestCode:	6010_WD	Units:	mg/L	Prep Date:	4/25/2005	Run ID:	ICP6_050426E
Client ID:	ZZZZZ	Batch ID:	22394	TestNo:	EPA 6010B	(EPA 3010A)		Analysis Date:	4/26/2005	SeqNo:	723838

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	2.282	0.025	2.5	0	91.3	67	129	2.426	6.11	20	
Arsenic	2.361	0.050	2.5	0	94.4	73	124	2.493	5.43	20	
Barium	2.362	0.015	2.5	0.0217	93.6	67	127	2.474	4.63	20	
Beryllium	2.412	0.015	2.5	0	96.5	76	122	2.506	3.80	20	
Cadmium	2.333	0.015	2.5	0	93.3	72	116	2.489	6.49	20	
Chromium	2.344	0.015	2.5	0	93.8	72	123	2.451	4.46	20	
Cobalt	2.378	0.015	2.5	0	95.1	72	119	2.52	5.83	20	
Copper	2.347	0.025	2.5	0	93.9	76	133	2.458	4.61	20	
Lead	2.26	0.025	2.5	0	90.4	67	120	2.392	5.68	20	
Molybdenum	2.325	0.025	2.5	0	93	76	124	2.445	5.06	20	
Nickel	2.38	0.025	2.5	0	95.2	66	124	2.543	6.60	20	
Selenium	2.272	0.050	2.5	0.05622	88.6	75	121	2.436	6.95	20	
Silver	2.262	0.015	2.5	0	90.5	78	119	2.369	4.64	20	
Thallium	2.303	0.075	2.5	0	92.1	66	124	2.466	6.82	20	
Vanadium	2.342	0.015	2.5	0.01299	93.2	75	122	2.452	4.56	20	
Zinc	2.261	0.050	2.5	0	90.5	72	120	2.408	6.27	20	

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CLIENT: Geocon Consultants, Inc.
Work Order: 075831
Project: DTEV LIGHT RAIL, E8222-06-01

ANALYTICAL QC SUMMARY REPORT

TestCode: 7470_W

Sample ID	MB-22356	SampType:	MBLK	TestCode:	7470_W	Units:	µg/L	Prep Date:	4/21/2005	Run ID:	AA1_050425B
Client ID:	ZZZZZ	Batch ID:	22356	TestNo:	EPA 7470A	(EPA 7470)		Analysis Date:	4/25/2005	SeqNo:	722744

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.20									

Sample ID	LCS-22356	SampType:	LCS	TestCode:	7470_W	Units:	µg/L	Prep Date:	4/21/2005	Run ID:	AA1_050425B
Client ID:	ZZZZZ	Batch ID:	22356	TestNo:	EPA 7470A	(EPA 7470)		Analysis Date:	4/25/2005	SeqNo:	722743

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	26.07	0.20	25	0	104	85	115	0	0		

Sample ID	075871-004AMS	SampType:	MS	TestCode:	7470_W	Units:	µg/L	Prep Date:	4/21/2005	Run ID:	AA1_050425B
Client ID:	ZZZZZ	Batch ID:	22356	TestNo:	EPA 7470A	(EPA 7470)		Analysis Date:	4/25/2005	SeqNo:	722741

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	25.92	0.20	25	0.2693	103	70	130	0	0		

Sample ID	075871-004AMSD	SampType:	MSD	TestCode:	7470_W	Units:	µg/L	Prep Date:	4/21/2005	Run ID:	AA1_050425B
Client ID:	ZZZZZ	Batch ID:	22356	TestNo:	EPA 7470A	(EPA 7470)		Analysis Date:	4/25/2005	SeqNo:	722742

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	24.41	0.20	25	0.2693	96.6	70	130	25.92	6.00	20	

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CLIENT: Geocon Consultants, Inc.
Work Order: 075831
Project: DTEV LIGHT RAIL, E8222-06-01

ANALYTICAL QC SUMMARY REPORT

TestCode: 7470_W_DISS

Sample ID	MB-22404	SampType:	MBLK	TestCode:	7470_W_DIS	Units:	µg/L	Prep Date:	4/21/2005	Run ID:	AA1_050425C
Client ID:	ZZZZZ	Batch ID:	22404	TestNo:	EPA 7470A	(EPA 7470)		Analysis Date:	4/25/2005	SeqNo:	722752

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.20									

Sample ID	LCS-22404	SampType:	LCS	TestCode:	7470_W_DIS	Units:	µg/L	Prep Date:	4/21/2005	Run ID:	AA1_050425C
Client ID:	ZZZZZ	Batch ID:	22404	TestNo:	EPA 7470A	(EPA 7470)		Analysis Date:	4/25/2005	SeqNo:	722751

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	26.15	0.20	25	0	105	85	115	0	0		

Sample ID	075831-012DMS	SampType:	MS	TestCode:	7470_W_DIS	Units:	µg/L	Prep Date:	4/21/2005	Run ID:	AA1_050425C
Client ID:	GD1-W	Batch ID:	22404	TestNo:	EPA 7470A	(EPA 7470)		Analysis Date:	4/25/2005	SeqNo:	722749

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	25.88	0.20	25	0.2346	103	70	130	0	0		

Sample ID	075831-012DMSD	SampType:	MSD	TestCode:	7470_W_DIS	Units:	µg/L	Prep Date:	4/21/2005	Run ID:	AA1_050425C
Client ID:	GD1-W	Batch ID:	22404	TestNo:	EPA 7470A	(EPA 7470)		Analysis Date:	4/25/2005	SeqNo:	722750

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	26.55	0.20	25	0.2346	105	70	130	25.88	2.56	20	

Qualifiers:
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CLIENT: Geocon Consultants, Inc.
Work Order: 075831
Project: DTEV LIGHT RAIL, E8222-06-01

ANALYTICAL QC SUMMARY REPORT

TestCode: 7471_S

Sample ID	MB-22392	SampType:	MBLK	TestCode:	7471_S	Units:	mg/Kg	Prep Date:	4/21/2005	Run ID:	AA1_050421F
Client ID:	ZZZZZ	Batch ID:	22392	TestNo:	EPA 7471A	(EPA 7471)		Analysis Date:	4/21/2005	SeqNo:	721553

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.10									

Sample ID	LCS-22392	SampType:	LCS	TestCode:	7471_S	Units:	mg/Kg	Prep Date:	4/21/2005	Run ID:	AA1_050421F
Client ID:	ZZZZZ	Batch ID:	22392	TestNo:	EPA 7471A	(EPA 7471)		Analysis Date:	4/21/2005	SeqNo:	721552

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.971	0.10	2.08	0	94.8	80	120	0	0		

Sample ID	075870-020AMS	SampType:	MS	TestCode:	7471_S	Units:	mg/Kg	Prep Date:	4/21/2005	Run ID:	AA1_050421F
Client ID:	ZZZZZ	Batch ID:	22392	TestNo:	EPA 7471A	(EPA 7471)		Analysis Date:	4/21/2005	SeqNo:	721550

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.8197	0.10	0.83	0.0345	94.6	62	146	0	0		

Sample ID	075870-020AMSD	SampType:	MSD	TestCode:	7471_S	Units:	mg/Kg	Prep Date:	4/21/2005	Run ID:	AA1_050421F
Client ID:	ZZZZZ	Batch ID:	22392	TestNo:	EPA 7471A	(EPA 7471)		Analysis Date:	4/21/2005	SeqNo:	721551

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.8331	0.10	0.83	0.0345	96.2	62	146	0.8197	1.63	30	

Qualifiers:
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DO- Surrogate dilute out
H - Sample exceeded holding time

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CLIENT: Geocon Consultants, Inc.
Work Order: 075831
Project: DTEV LIGHT RAIL, E8222-06-01

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_S_DM LL

Sample ID	MB-22369	SampType:	MBLK	TestCode:	8015_S_DM	Units:	mg/Kg	Prep Date:	4/20/2005	Run ID:	GC7_050420A
Client ID:	ZZZZZ	Batch ID:	22369	TestNo:	EPA 8015B(M	(EPA 3550B)		Analysis Date:	4/20/2005	SeqNo:	721261

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	1.0									
Motor Oil	ND	1.0									

Sample ID	LCS-22369	SampType:	LCS	TestCode:	8015_S_DM	Units:	mg/Kg	Prep Date:	4/20/2005	Run ID:	GC7_050420A
Client ID:	ZZZZZ	Batch ID:	22369	TestNo:	EPA 8015B(M	(EPA 3550B)		Analysis Date:	4/20/2005	SeqNo:	721262

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	20.27	1.0	33	0	61.4	44	123	0	0		

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ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_S_GAS

Sample ID	E041505MB2	SampType:	MBLK	TestCode:	8015_S_GAS	Units:	mg/Kg	Prep Date:		Run ID:	GC2_050415B
Client ID:	ZZZZZ	Batch ID:	E05VS091	TestNo:	EPA 8015B(M			Analysis Date:	4/15/2005	SeqNo:	718639

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	ND	1.0									

Sample ID	E041505LC3	SampType:	LCS	TestCode:	8015_S_GAS	Units:	mg/Kg	Prep Date:		Run ID:	GC2_050415B
Client ID:	ZZZZZ	Batch ID:	E05VS091	TestNo:	EPA 8015B(M			Analysis Date:	4/16/2005	SeqNo:	718650

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	5.207	1.0	5	0	104	75	120	0	0		

Sample ID	075850-003AMS	SampType:	MS	TestCode:	8015_S_GAS	Units:	mg/Kg	Prep Date:		Run ID:	GC2_050415B
Client ID:	ZZZZZ	Batch ID:	E05VS091	TestNo:	EPA 8015B(M			Analysis Date:	4/16/2005	SeqNo:	718648

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	4.968	1.0	5	0	99.4	33	139	0	0		

Sample ID	075850-003AMSD	SampType:	MSD	TestCode:	8015_S_GAS	Units:	mg/Kg	Prep Date:		Run ID:	GC2_050415B
Client ID:	ZZZZZ	Batch ID:	E05VS091	TestNo:	EPA 8015B(M			Analysis Date:	4/16/2005	SeqNo:	718649

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	4.717	1.0	5	0	94.3	33	139	4.968	5.18	30	

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ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_W_DM_LL

Sample ID	MB-22306	SampType:	MBLK	TestCode:	8015_W_DM_	Units:	mg/L	Prep Date:	4/18/2005	Run ID:	GC7_BACK_050421E
Client ID:	ZZZZZ	Batch ID:	22306	TestNo:	EPA 8015B(M	(EPA 3510C)		Analysis Date:	4/22/2005	SeqNo:	723057

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	0.050									
Motor Oil	ND	0.050									

Sample ID	LCS-22306	SampType:	LCS	TestCode:	8015_W_DM_	Units:	mg/L	Prep Date:	4/18/2005	Run ID:	GC7_BACK_050421E
Client ID:	ZZZZZ	Batch ID:	22306	TestNo:	EPA 8015B(M	(EPA 3510C)		Analysis Date:	4/22/2005	SeqNo:	723058

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	0.7351	0.050	1	0	73.5	62	127	0	0		

Sample ID	MB-22306MS	SampType:	MS	TestCode:	8015_W_DM_	Units:	mg/L	Prep Date:	4/18/2005	Run ID:	GC7_BACK_050421E
Client ID:	ZZZZZ	Batch ID:	22306	TestNo:	EPA 8015B(M	(EPA 3510C)		Analysis Date:	4/22/2005	SeqNo:	723059

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	0.8207	0.050	1	0	82.1	50	120	0	0		

Sample ID	MB-22306MSD	SampType:	MSD	TestCode:	8015_W_DM_	Units:	mg/L	Prep Date:	4/18/2005	Run ID:	GC7_BACK_050421E
Client ID:	ZZZZZ	Batch ID:	22306	TestNo:	EPA 8015B(M	(EPA 3510C)		Analysis Date:	4/22/2005	SeqNo:	723060

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	0.8521	0.050	1	0	85.2	50	120	0	0		

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DO- Surrogate dilute out
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ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_W_GP LL

Sample ID	D041505MB4	SampType:	MBLK	TestCode:	8015_W_GP	Units:	mg/L	Prep Date:		Run ID:	GC1_050415B
Client ID:	ZZZZZ	Batch ID:	D05VW081	TestNo:	EPA 8015B(M			Analysis Date:	4/15/2005	SeqNo:	719029

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	ND	0.050									

Sample ID	D041505LC2	SampType:	LCS	TestCode:	8015_W_GP	Units:	mg/L	Prep Date:		Run ID:	GC1_050415B
Client ID:	ZZZZZ	Batch ID:	D05VW081	TestNo:	EPA 8015B(M			Analysis Date:	4/16/2005	SeqNo:	719034

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	1.118	0.050	1	0	112	70	115	0	0		

Sample ID	D041505MB4MS	SampType:	MS	TestCode:	8015_W_GP	Units:	mg/L	Prep Date:		Run ID:	GC1_050415B
Client ID:	ZZZZZ	Batch ID:	D05VW081	TestNo:	EPA 8015B(M			Analysis Date:	4/15/2005	SeqNo:	719027

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	1.064	0.050	1	0	106	64	117	0	0		

Sample ID	D041505MB4MSD	SampType:	MSD	TestCode:	8015_W_GP	Units:	mg/L	Prep Date:		Run ID:	GC1_050415B
Client ID:	ZZZZZ	Batch ID:	D05VW081	TestNo:	EPA 8015B(M			Analysis Date:	4/15/2005	SeqNo:	719028

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	1.026	0.050	1	0	103	64	117	1.064	3.64	30	

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CLIENT: Geocon Consultants, Inc.
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Project: DTEV LIGHT RAIL, E8222-06-01

ANALYTICAL QC SUMMARY REPORT

TestCode: 8021_S_BTEX

Sample ID **E041505MB2**	SampType: **MBLK**	TestCode: **8021_S_BTE**	Units: **µg/Kg**	Prep Date:	Run ID: **GC2_050415B**
Client ID: **ZZZZZ**	Batch ID: **E05VS091**	TestNo: **EPA 8021B**		Analysis Date: **4/15/2005**	SeqNo: **718629**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	5.0									
Ethylbenzene	ND	5.0									
m,p-Xylene	ND	5.0									
o-Xylene	ND	5.0									
Toluene	ND	5.0									

Sample ID **E041505LC2**	SampType: **LCS**	TestCode: **8021_S_BTE**	Units: **µg/Kg**	Prep Date:	Run ID: **GC2_050415B**
Client ID: **ZZZZZ**	Batch ID: **E05VS091**	TestNo: **EPA 8021B**		Analysis Date: **4/16/2005**	SeqNo: **718637**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	94.36	5.0	100	0	94.4	89	152	0	0		
Ethylbenzene	96.39	5.0	100	0	96.4	92	138	0	0		
m,p-Xylene	197.3	5.0	200	0	98.6	71	105	0	0		
o-Xylene	98.55	5.0	100	0	98.5	90	124	0	0		
Toluene	95.56	5.0	100	0	95.6	85	139	0	0		

Sample ID **E041505LC3**	SampType: **LCS**	TestCode: **8021_S_BTE**	Units: **µg/Kg**	Prep Date:	Run ID: **GC2_050415B**
Client ID: **ZZZZZ**	Batch ID: **E05VS091**	TestNo: **EPA 8021B**		Analysis Date: **4/16/2005**	SeqNo: **718638**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	38.67	5.0	27	0	143	89	152	0	0		
Ethylbenzene	56.6	5.0	42	0	135	92	138	0	0		
m,p-Xylene	175.7	5.0	193	0	91	71	105	0	0		
o-Xylene	71.31	5.0	65	0	110	90	124	0	0		
Toluene	151	5.0	134	0	113	85	139	0	0		

Sample ID **075850-003AMS**	SampType: **MS**	TestCode: **8021_S_BTE**	Units: **µg/Kg**	Prep Date:	Run ID: **GC2_050415B**
Client ID: **ZZZZZ**	Batch ID: **E05VS091**	TestNo: **EPA 8021B**		Analysis Date: **4/16/2005**	SeqNo: **718635**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

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ANALYTICAL QC SUMMARY REPORT

TestCode: 8021_S_BTEX

Sample ID 075850-003AMS	SampType: MS	TestCode: 8021_S_BTE	Units: µg/Kg	Prep Date:	Run ID: GC2_050415B
Client ID: ZZZZZ	Batch ID: E05VS091	TestNo: EPA 8021B		Analysis Date: 4/16/2005	SeqNo: 718635

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	37.1	5.0	27	0	137	47	174	0	0		
Ethylbenzene	45.2	5.0	42	0	108	27	143	0	0		
m,p-Xylene	165.3	5.0	193	0	85.6	30	120	0	0		
o-Xylene	66.68	5.0	65	0	103	28	155	0	0		
Toluene	143.2	5.0	134	0	107	30	161	0	0		

Sample ID 075850-003AMSD	SampType: MSD	TestCode: 8021_S_BTE	Units: µg/Kg	Prep Date:	Run ID: GC2_050415B
Client ID: ZZZZZ	Batch ID: E05VS091	TestNo: EPA 8021B		Analysis Date: 4/16/2005	SeqNo: 718636

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	35.52	5.0	27	0	132	47	174	37.1	4.36	30	
Ethylbenzene	51.75	5.0	42	0	123	27	143	45.2	13.5	30	
m,p-Xylene	160.7	5.0	193	0	83.2	30	120	165.3	2.85	30	
o-Xylene	64.79	5.0	65	0	99.7	28	155	66.68	2.88	30	
Toluene	138.3	5.0	134	0	103	30	161	143.2	3.49	30	

Qualifiers:
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ANALYTICAL QC SUMMARY REPORT

TestCode: 8021_WP_BTEX

Sample ID **D041505MB4** SampType: **MBLK** TestCode: **8021_WP_BT** Units: **µg/L** Prep Date: Run ID: **GC1_050415B**
Client ID: **ZZZZZ** Batch ID: **D05VW081** TestNo: **EPA 8021B** Analysis Date: **4/15/2005** SeqNo: **719018**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.50									
Toluene	ND	0.50									
Ethylbenzene	ND	0.50									
m,p-Xylene	ND	0.50									
o-Xylene	ND	0.50									

Sample ID **D041405LC3** SampType: **LCS** TestCode: **8021_WP_BT** Units: **µg/L** Prep Date: Run ID: **GC1_050415B**
Client ID: **ZZZZZ** Batch ID: **D05VW081** TestNo: **EPA 8021B** Analysis Date: **4/16/2005** SeqNo: **719024**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	106.1	0.50	100	0	106	79	145	0	0		
Toluene	110.1	0.50	100	0	110	78	120	0	0		
Ethylbenzene	93.38	0.50	100	0	93.4	77	126	0	0		
m,p-Xylene	212.9	0.50	200	0	106	80	113	0	0		
o-Xylene	105.5	0.50	100	0	105	83	122	0	0		

Sample ID **D041505MB4MS** SampType: **MS** TestCode: **8021_WP_BT** Units: **µg/L** Prep Date: Run ID: **GC1_050415B**
Client ID: **ZZZZZ** Batch ID: **D05VW081** TestNo: **EPA 8021B** Analysis Date: **4/15/2005** SeqNo: **719016**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	7.614	0.50	5.5	0	138	81	160	0	0		
Toluene	37.48	0.50	30	0.291	124	60	138	0	0		
Ethylbenzene	8.131	0.50	8.6	0.158	92.7	59	141	0	0		
m,p-Xylene	38.16	0.50	35	0	109	63	122	0	0		
o-Xylene	13.74	0.50	12	0.157	113	64	145	0	0		

Sample ID **D041505MB4MSD** SampType: **MSD** TestCode: **8021_WP_BT** Units: **µg/L** Prep Date: Run ID: **GC1_050415B**
Client ID: **ZZZZZ** Batch ID: **D05VW081** TestNo: **EPA 8021B** Analysis Date: **4/15/2005** SeqNo: **719017**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

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ANALYTICAL QC SUMMARY REPORT

TestCode: 8021_WP_BTEX

Sample ID **D041505MB4MSD**	SampType: **MSD**	TestCode: **8021_WP_BT**	Units: **µg/L**	Prep Date:	Run ID: **GC1_050415B**
Client ID: **ZZZZZ**	Batch ID: **D05VW081**	TestNo: **EPA 8021B**		Analysis Date: **4/15/2005**	SeqNo: **719017**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	7.42	0.50	5.5	0	135	81	160	7.614	2.58	30	
Toluene	36.88	0.50	30	0.291	122	60	138	37.48	1.62	30	
Ethylbenzene	7.529	0.50	8.6	0.158	85.7	59	141	8.131	7.69	30	
m,p-Xylene	35.76	0.50	35	0	102	63	122	38.16	6.48	30	
o-Xylene	12.74	0.50	12	0.157	105	64	145	13.74	7.59	30	

Qualifiers:
ND - Not Detected at the Reporting Limit
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DO- Surrogate dilute out
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CLIENT: Geocon Consultants, Inc.
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Project: DTEV LIGHT RAIL, E8222-06-01

ANALYTICAL QC SUMMARY REPORT

TestCode: 8082_W

Sample ID MB-22305	SampType: MBLK	TestCode: 8082_W	Units: µg/L	Prep Date: 4/18/2005	Run ID: GC4_050429A
Client ID: ZZZZZ	Batch ID: 22305	TestNo: EPA 8082	(EPA 3510C)	Analysis Date: 4/29/2005	SeqNo: 726142

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	ND	0.50									
Aroclor 1221	ND	1.0									
Aroclor 1232	ND	0.50									
Aroclor 1242	ND	0.50									
Aroclor 1248	ND	0.50									
Aroclor 1254	ND	0.50									
Aroclor 1260	ND	0.50									
Aroclor 1262	ND	0.50									
Aroclor 1268	ND	0.50									

Sample ID MB-22305	SampType: MBLK	TestCode: 8082_W	Units: µg/L	Prep Date: 4/18/2005	Run ID: GC4_050429A
Client ID: ZZZZZ	Batch ID: 22305	TestNo: EPA 8082	(EPA 3510C)	Analysis Date: 4/30/2005	SeqNo: 726160

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	ND	0.50									
Aroclor 1221	ND	1.0									
Aroclor 1232	ND	0.50									
Aroclor 1242	ND	0.50									
Aroclor 1248	ND	0.50									
Aroclor 1254	ND	0.50									
Aroclor 1260	ND	0.50									
Aroclor 1262	ND	0.50									
Aroclor 1268	ND	0.50									

Sample ID LCSA-22305	SampType: LCS	TestCode: 8082_W	Units: µg/L	Prep Date: 4/18/2005	Run ID: GC4_050429A
Client ID: ZZZZZ	Batch ID: 22305	TestNo: EPA 8082	(EPA 3510C)	Analysis Date: 4/29/2005	SeqNo: 726143

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	4.324	0.50	5	0	86.5	73	100	0	0		
Aroclor 1260	5.004	0.50	5	0	100	77	105	0	0		

Qualifiers:
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H - Sample exceeded holding time

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

CLIENT: Geocon Consultants, Inc.
Work Order: 075831
Project: DTEV LIGHT RAIL, E8222-06-01

ANALYTICAL QC SUMMARY REPORT

TestCode: 8082_W

Sample ID	LCSA-22305	SampType:	LCS	TestCode:	8082_W	Units:	µg/L	Prep Date:	4/18/2005	Run ID:	GC4_050429A
Client ID:	ZZZZZ	Batch ID:	22305	TestNo:	EPA 8082	(EPA 3510C)		Analysis Date:	4/30/2005	SeqNo:	726161

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	4.279	0.50	5	0	85.6	73	100	0	0		
Aroclor 1260	4.941	0.50	5	0	98.8	77	105	0	0		

Sample ID	MB-22305MSA	SampType:	MS	TestCode:	8082_W	Units:	µg/L	Prep Date:	4/18/2005	Run ID:	GC4_050429A
Client ID:	ZZZZZ	Batch ID:	22305	TestNo:	EPA 8082	(EPA 3510C)		Analysis Date:	4/29/2005	SeqNo:	726144

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	4.496	0.50	5	0	89.9	75	108	0	0		
Aroclor 1260	4.593	0.50	5	0	91.9	74	105	0	0		

Sample ID	MB-22305MSDA	SampType:	MSD	TestCode:	8082_W	Units:	µg/L	Prep Date:	4/18/2005	Run ID:	GC4_050429A
Client ID:	ZZZZZ	Batch ID:	22305	TestNo:	EPA 8082	(EPA 3510C)		Analysis Date:	4/29/2005	SeqNo:	726145

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	4.188	0.50	5	0	83.8	75	108	4.496	7.09	30	
Aroclor 1260	4.662	0.50	5	0	93.2	74	105	4.593	1.49	30	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
R - RPD outside accepted recovery limits
S - Spike Recovery outside accepted recovery limits
B - Analyte detected in the associated Method Blank
Calculations are based on raw values
DO- Surrogate dilute out
H - Sample exceeded holding time

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

CLIENT: Geocon Consultants, Inc.
Work Order: 075831
Project: DTEV LIGHT RAIL, E8222-06-01

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_S

Sample ID	P050419MB2	SampType:	MBLK	TestCode:	8260_S	Units:	µg/Kg	Prep Date:		Run ID:	MS1_050419A	
Client ID:	ZZZZZ	Batch ID:	P05VS043	TestNo:	EPA 8260B			Analysis Date:	4/19/2005	SeqNo:	720174	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
MTBE	ND	5.0										

Sample ID	P050419LC1	SampType:	LCS	TestCode:	8260_S	Units:	µg/Kg	Prep Date:		Run ID:	MS1_050419A	
Client ID:	ZZZZZ	Batch ID:	P05VS043	TestNo:	EPA 8260B			Analysis Date:	4/19/2005	SeqNo:	720168	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
MTBE	94	5.0	100	0	94	59	126	0	0			

Sample ID	075883-001AMS	SampType:	MS	TestCode:	8260_S	Units:	µg/Kg	Prep Date:		Run ID:	MS1_050419A	
Client ID:	ZZZZZ	Batch ID:	P05VS043	TestNo:	EPA 8260B			Analysis Date:	4/19/2005	SeqNo:	720169	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
MTBE	79.3	5.0	100	0	79.3	34	156	0	0			

Sample ID	075883-001AMSD	SampType:	MSD	TestCode:	8260_S	Units:	µg/Kg	Prep Date:		Run ID:	MS1_050419A	
Client ID:	ZZZZZ	Batch ID:	P05VS043	TestNo:	EPA 8260B			Analysis Date:	4/19/2005	SeqNo:	720170	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
MTBE	68.03	5.0	100	0	68	34	156	79.3	15.3	30		

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
R - RPD outside accepted recovery limits
S - Spike Recovery outside accepted recovery limits
B - Analyte detected in the associated Method Blank
Calculations are based on raw values
DO- Surrogate dilute out
H - Sample exceeded holding time

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

CLIENT: Geocon Consultants, Inc.
Work Order: 075831
Project: DTEV LIGHT RAIL, E8222-06-01

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_LL

Sample ID	A041505MB3	SampType:	MBLK	TestCode:	8260_WP_LL	Units:	µg/L	Prep Date:		Run ID:	MS11_050415A	
Client ID:	ZZZZZ	Batch ID:	A05VW111	TestNo:	EPA 8260B			Analysis Date:	4/15/2005	SeqNo:	718850	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
MTBE	ND	0.50										

Sample ID	A041505LC1	SampType:	LCS	TestCode:	8260_WP_LL	Units:	µg/L	Prep Date:		Run ID:	MS11_050415A	
Client ID:	ZZZZZ	Batch ID:	A05VW111	TestNo:	EPA 8260B			Analysis Date:	4/15/2005	SeqNo:	718845	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
MTBE	22.66	0.50	20	0	113	80	126	0	0			

Sample ID	A041505MB3MS	SampType:	MS	TestCode:	8260_WP_LL	Units:	µg/L	Prep Date:		Run ID:	MS11_050415A	
Client ID:	ZZZZZ	Batch ID:	A05VW111	TestNo:	EPA 8260B			Analysis Date:	4/15/2005	SeqNo:	718846	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
MTBE	22.24	0.50	20	0	111	79	128	0	0			

Sample ID	A041505MB3MSD	SampType:	MSD	TestCode:	8260_WP_LL	Units:	µg/L	Prep Date:		Run ID:	MS11_050415A	
Client ID:	ZZZZZ	Batch ID:	A05VW111	TestNo:	EPA 8260B			Analysis Date:	4/15/2005	SeqNo:	718848	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
MTBE	22.53	0.50	20	0	113	79	128	22.24	1.30	30		

Qualifiers:
ND - Not Detected at the Reporting Limit
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S - Spike Recovery outside accepted recovery limits
B - Analyte detected in the associated Method Blank
Calculations are based on raw values
DO- Surrogate dilute out
H - Sample exceeded holding time

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

CLIENT: Geocon Consultants, Inc.
Work Order: 075831
Project: DTEV LIGHT RAIL, E8222-06-01

ANALYTICAL QC SUMMARY REPORT

TestCode: 9045_S

Sample ID	075831-016ADUP	SampType:	DUP	TestCode:	9045_S	Units:	pH Units	Prep Date:	4/18/2005	Run ID:	WETCHEM_050418D
Client ID:	Composite GD1-4/G	Batch ID:	R49078	TestNo:	EPA 9045C			Analysis Date:	4/18/2005	SeqNo:	719630

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
pH	7.91	0.10	0	0	0	0	0	7.97	0.756	20	

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
R - RPD outside accepted recovery limits
S - Spike Recovery outside accepted recovery limits
B - Analyte detected in the associated Method Blank
Calculations are based on raw values
DO- Surrogate dilute out
H - Sample exceeded holding time

CHAIN OF CUSTODY RECORD

Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755
(562) 989-4045 • Fax (562) 989-4040

FOR LABORATORY USE ONLY:

P.O.#: _____

Logged By: BM Date: 04/13/05

Method of Transport: Client ☑ ATL ☐ CA OverN ☐ FEDEX ☐ Other: GSO

Sample Condition Upon Receipt
1. CHILLED 5.8 Y☑ N☐ 4. SEALED Y☐ N☑
2. HEADSPACE (VOA) Y☑ N☐ 5. # OF SPLS MATCH COC Y☑ N☐
3. CONTAINER INTACT Y☑ N☐ 6. PRESERVED Y☑ N☐

Client: GEOCON
Attn:
Address: 2356 RESEARCH DR
City LIVERMORE State CA Zip Code 94550
TEL: (925) 371-5900
FAX: ( ) 5915

Project Name: DTEV LIGHT RAIL Project #: E8222-06-01 Sampler: (Printed Name) CHRIS MERRITT (Signature) SAME

Relinquished by: (Signature and Printed Name) CHRIS MERRITT Date: 4-13-05 Time: 730 Received by: (Signature and Printed Name) MF Date: 4/14/05 Time: 8:15

Relinquished by: (Signature and Printed Name) Date: Time: Received by: (Signature and Printed Name) Date: Time:

Relinquished by: (Signature and Printed Name) Date: Time: Received by: (Signature and Printed Name) Date: Time:

I hereby authorize ATL to perform the work indicated below:
Project Mgr /Submitter:
Print Name: _____ Date: 4-11-05
Signature: CHRIS MERRITT

Send Report To:
Attn: _____
Co: A/A
Address _____
City _____ State _____ Zip _____

Bill To:
Attn: _____
Co: A/A
Address _____
City _____ State _____ Zip _____

Special Instructions/Comments:
COMPOSITES - GD11-0, GD12-0 Z-1
GD11-4, GD12-4 Z-1
GD1-0, GD2-0 Z-1
GD1-4, GD2-4 Z-1
} FOR ALL SOIL ANALYSIS.
WATERS ARE INDIVIDUAL

Sample/Records - Archival & Disposal
Unless otherwise requested by client, all samples will be disposed 45 days after receipt and records will be disposed 1 year after submittal of final report.

Storage Fees (applies when storage is requested):
- Sample : $2.00 / sample / mo (after 45 days)
- Records : $1.00 / ATL workorder / mo (after 1 year)

Circle or Add Analysis(es) Requested

ITEM	LAB USE ONLY: Batch #: / Lab No.	Sample Description: Sample I.D. / Location	Date	Time	8081A (Pesticides)	8082 (PCB)	8260B (Volatiles)	8270C (BNA)	6010B (Total Metal)	8015B (GRO) / BTEX ONLY	8015B (DRO) TPH-D/MO	(LAMP) LT pH	SPECIFY APPROPRIATE MATRIX: SOIL	WATER	GROUND WATER	WASTEWATER	TAT	Container(s): #	Container(s): Type	PRESERVATION	REMARKS
	0758831-001	GD11-0	4-11-05	0917						X	X	X	X				E	1	P T		
	-002	GD11-4	4-11-05	0922								X	X					1			
	-003	GD12-0	4-11-05	1033								X	X					1			
	-004	GD12-4	4-11-05	1039								X	X					1			
	-005	GD11-W	4-11-05	0940	X							X	X (LM)		X			10	6/1L	V/1L	
	-006	GD12-W	4-11-05	1130	X							X	X (LM)		X			10			
	-007	GD2-0	4-11-05	1230								X	X								
	-008	GD2-4		1240								X	X								
	-009	GD2-W		1310	X							X	X (LM)		X						

QA/QC: RTNE ☐ CT ☐ SWRCB ☐ Logcode ____ OTHER ____

- TAT starts 8 a.m. following day if samples received after 3 p.m.

TAT: A= Overnight ≤ 24 hr B= Emergency Next workday C= Critical 2 Workdays D= Urgent 3 Workdays E= Routine 7 Workdays

Container Types: T=Tube V=VOA L=Liter P=Pint J=Jar B=Tedlar G=Glass P=Plastic M=Metal

Preservatives: H=Hcl N=HNO_3 S=H_2SO_4 C=4°C Z=$Zn(AC)_2$ O=NaOH T=$Na_2S_2O_3$

DISTRIBUTION: **White** with report, **Yellow** to folder, **Pink** to submitter.

CHAIN OF CUSTODY RECORD

Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755
(562) 989-4045 • Fax (562) 989-4040

FOR LABORATORY USE ONLY:

P.O.#: _____

Logged By: [illegible] Date: 04/14/05

Method of Transport: Client ☐ ATL ☐ CA OverN ☐ FEDEX ☐ Other: CSO

Sample Condition Upon Receipt: 1. CHILLED 3.8 Y☐ N☐ 4. SEALED Y☐ N☑ | 2. HEADSPACE (VOA) Y☑ N☐ 5. # OF SPLS MATCH COC Y☑ N☐ | 3. CONTAINER INTACT Y☑ N☐ 6. PRESERVED Y☑ N☑

Client: GEOCON
Attn: RICK DAY \ CHRIS MERRITT
Address: 2356 RESEARCH DR
City LIVERMORE State CA Zip Code 94550
TEL: (925) 371-5900 FAX: ( ) 5915

Project Name: DTEV LIGHT RAIL Project #: E8222-06-01 Sampler: (Printed Name) (Signature) CHRIS MERRITT

Relinquished by: (Signature and Printed Name) CHRIS MERRITT Date: 4-13-05 Time: 1730 Received by: (Signature and Printed Name) MF Date: 4/14/05 Time: 8:15

Relinquished by: (Signature and Printed Name) Date: Time: Received by: (Signature and Printed Name) Date: Time:

Relinquished by: (Signature and Printed Name) Date: Time: Received by: (Signature and Printed Name) Date: Time:

I hereby authorize ATL to perform the work indicated below:
Project Mgr /Submitter:
Print Name Date
Signature

Send Report To:
Attn: A/A
Co: A/A
Address
City State Zip

Bill To:
Attn: A/A
Co: A/A
Address
City State Zip

Special Instructions/Comments:
SE P.I. COMPOSITS
ON WATER CAM 17'S RUN ONE SAMPLE FILTERED AND ONE UNFILTERED
ie. 2 CAM 17'S PER WATER

Sample/Records - Archival & Disposal
Unless otherwise requested by client, all samples will be disposed 45 days after receipt and records will be disposed 1 year after submittal of final report.

Storage Fees (applies when storage is requested):
- Sample : $2.00 / sample / mo (after 45 days)
- Records : $1.00 / ATL workorder / mo (after 1 year)

Circle or Add Analysis(es) Requested: 8081A (Pesticides), 8082 (PCB), 8260B (Volatiles), 8270C (BNA), 6010B (Total Metal), 8015B (GRO) / BTEX + MTBE, 8015B (DRO) TPH d/mo, (CAM 17) pH

SPECIFY APPROPRIATE MATRIX: SOIL, WATER, GROUND WATER, WASTEWATER

PRESERVATION

Q A / Q C: RTNE ☐ CT ☐ SWRCB ☐ Logcode ____ OTHER ____

ITEM	LAB USE ONLY: Batch #: / Lab No.	Sample Description: Sample I.D. / Location	Date	Time	TAT	Container(s): #	Type	REMARKS
	095891-010	GD1-C	4-13-05		E			
	↓ -011	GD1-4	↓		↓			
	↓ -012	GD1-W	↓		↓	10	2½ 1L 1P	

- TAT starts 8 a.m. following day if samples received after 3 p.m.

TAT: A= Overnight ≤ 24 hr B= Emergency Next workday C= Critical 2 Workdays D= Urgent 3 Workdays E= Routine 7 Workdays

Container Types: T=Tube V=VOA L=Liter P=Pint J=Jar B=Tedlar G=Glass P=Plastic M=Metal

Preservatives: H=Hcl N=HNO_3 S=H_2SO_4 C=4°C Z=$Zn(AC)_2$ O=NaOH T=$Na_2S_2O_3$

DISTRIBUTION: **White** with report, **Yellow** to folder, **Pink** to submitter.

June 08, 2005

Chris Merritt
Geocon Consultants, Inc.
2356 Research Drive
Livermore, CA 94550
TEL: (925) 371-5900
FAX: (925) 371-5915

ELAP No.: 1838
NELAP No.: 02107CA
CSDLAC No.: 10196

Workorder No.: 075831

RE: DTEV LIGHT RAIL, E8222-06-01

Attention: Chris Merritt

Enclosed are the results for sample(s) received on April 14, 2005 by Advanced Technology Laboratories . The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

This is an addendum report. Please incorporate with documentation previously submitted.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (562)989-4045 if I can be of further assistance to your company.

Sincerely,

Eddie F. Rodriguez
Laboratory Director

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *08-Jun-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	Composite GD11-0/GD12-0
Lab Order:	075831		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	4/11/2005
Lab ID:	075831-013A	**Matrix:**	SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS BY STLC						
		WET/ EPA 6010B				
RunID: ICP6_050606D	QC Batch: R50718			PrepDate:		Analyst: **RQ**
Chromium	ND	1.0		mg/L	20	6/6/2005
Nickel	2.1	1.0		mg/L	20	6/6/2005

Qualifiers:

- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- DO - Surrogate Diluted Out
- S - Spike/Surrogate outside of limits due to matrix interferen
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *08-Jun-05*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	Composite GD1-0/GD2-0
Lab Order:	075831		
Project:	DTEV LIGHT RAIL, E8222-06-01	**Collection Date:**	4/11/2005
Lab ID:	075831-015A	**Matrix:**	SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS BY STLC						
		WET/ EPA 6010B				
RunID: ICP6_050606D	QC Batch: R50718			PrepDate:		Analyst: **RQ**
Chromium	ND	1.0		mg/L	20	6/6/2005
Nickel	5.3	1.0		mg/L	20	6/6/2005

Qualifiers:

- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- DO - Surrogate Diluted Out
- S - Spike/Surrogate outside of limits due to matrix interferen
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- R - RPD outside acceptable recovery limits

Results are wet unless otherwise specified

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

CLIENT: Geocon Consultants, Inc.
Work Order: 075831
Project: DTEV LIGHT RAIL, E8222-06-01

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_ST

Sample ID: **MB-22954** SampType: **MBLK** TestCode: **6010_ST** Units: **mg/L** Prep Date: Run ID: **ICP6_050606D**
Client ID: **ZZZZZ** Batch ID: **R50718** TestNo: **WET/ EPA 60** Analysis Date: **6/6/2005** SeqNo: **744234**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	ND	0.050									
Nickel	ND	0.050									

Sample ID: **LCS-22954** SampType: **LCS** TestCode: **6010_ST** Units: **mg/L** Prep Date: Run ID: **ICP6_050606D**
Client ID: **ZZZZZ** Batch ID: **R50718** TestNo: **WET/ EPA 60** Analysis Date: **6/6/2005** SeqNo: **744235**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	0.9943	0.050	1	0	99.4	85	115	0	0		
Nickel	0.9985	0.050	1	0	99.9	85	115	0	0		

Sample ID: **075831-015AMS** SampType: **MS** TestCode: **6010_ST** Units: **mg/L** Prep Date: Run ID: **ICP6_050606D**
Client ID: **Composite GD1-0/G** Batch ID: **R50718** TestNo: **WET/ EPA 60** Analysis Date: **6/6/2005** SeqNo: **744240**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	2.819	1.0	2.5	0.4995	92.8	72	123	0	0		
Nickel	7.198	1.0	2.5	5.299	76	66	124	0	0		

Sample ID: **075831-015AMSD** SampType: **MSD** TestCode: **6010_ST** Units: **mg/L** Prep Date: Run ID: **ICP6_050606D**
Client ID: **Composite GD1-0/G** Batch ID: **R50718** TestNo: **WET/ EPA 60** Analysis Date: **6/6/2005** SeqNo: **744241**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	2.869	1.0	2.5	0.4995	94.8	72	123	2.819	1.75	20	
Nickel	7.014	1.0	2.5	5.299	68.6	66	124	7.198	2.60	20	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
R - RPD outside accepted recovery limits
S - Spike Recovery outside accepted recovery limits
B - Analyte detected in the associated Method Blank
Calculations are based on raw values
DO- Surrogate dilute out
H - Sample exceeded holding time

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Galvan, Diane

From: Rick Day [day@geoconinc.com]
Sent: Tuesday, May 31, 2005 12:07 PM
To: Galvan, Diane
Subject: WET Analysis for DTEV Light Rail

DTEV Light Rail - Geocon Project No. E8222-06-02

Diane -

Please run the following WET analyses:

Chromium and Nickel 075831-015A Comp (GD1-0, GD2-0)

Chromium and Nickel 075831-013A Comp (GD11-0, GD12-0)

Lead 075659-028A Comp (GD3-0. GD4-0)

Chromium and Nickel 075659-032A Comp (GD13-0, GD14-0, GD15-0)

Thanks,
Rick.

****
Richard Day, CEG, CHG
Geocon Consultants, Inc.
2356 Research Drive
Livermore, CA 94550
(925) 371-5900 - voice
(925) 872-5860 - cell
(925) 371-5915 – fax
day@geoconinc.com
www.geoconinc.com
****

May 05, 2005

Rick Day
Geocon Consultants, Inc.
2356 Research Drive
Livermore, CA 94550
TEL: (925) 371-5900
FAX: (925) 371-5915

ELAP No.: 1838
NELAP No.: 02107CA
CSDLAC No.: 10196

Workorder No.: 076140

RE: DTEV LIGHT RAIL, E8222-06-01

Attention: Rick Day

Enclosed are the results for sample(s) received on April 29, 2005 by Advanced Technology Laboratories . The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (562)989-4045 if I can be of further assistance to your company.

Sincerely,

Eddie F. Rodriguez
Laboratory Director

Advanced Technology Laboratories

Date: 5/5/2005

LEAD BY ICP
EPA 6010B

CLIENT:	Geocon Consultants, Inc.	**Lab Order:**	076140
Project:	DTEV LIGHT RAIL, E8222-06-01	**Date Received:**	4/29/2005 8:15:0
Project No:		**Matrix:**	Soil
PO No:		**Analyst:**	RQ

Laboratory ID	Client Sample ID	Results	Units	QC Batch	PQL	DF	Date Collected	Date Analyzed
076140-001A	GH1-0	29	mg/Kg	22547	5	1	4/28/2005	5/5/2005
076140-002A	GH1-1	600	mg/Kg	22547	5	1	4/28/2005	5/5/2005
076140-003A	GH2-0	30	mg/Kg	22547	5	1	4/28/2005	5/5/2005
076140-004A	GH2-1	28	mg/Kg	22547	5	1	4/28/2005	5/5/2005
076140-005A	GH3-0	29	mg/Kg	22547	5	1	4/28/2005	5/5/2005
076140-006A	GH3-1	7.2	mg/Kg	22547	5	1	4/28/2005	5/5/2005
076140-007A	GH4-0	47	mg/Kg	22547	5	1	4/28/2005	5/5/2005
076140-008A	GH4-1	8.6	mg/Kg	22547	5	1	4/28/2005	5/5/2005
076140-009A	GH5-0	9.5	mg/Kg	22547	5	1	4/28/2005	5/5/2005
076140-010A	GH5-1	8.8	mg/Kg	22547	5	1	4/28/2005	5/5/2005
076140-011A	GH6-0	55	mg/Kg	22547	5	1	4/28/2005	5/5/2005

Qualifiers:

- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- DO - Surrogate Diluted Out
- S - Spike/Surrogate outside of limits due to matrix interfere
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- Results are wet unless otherwise specified

Advanced Technology Laboratories *3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040*

Advanced Technology Laboratories

Date: 5/5/2005

LEAD BY ICP
EPA 6010B

CLIENT:	Geocon Consultants, Inc.	**Lab Order:**	076140
Project:	DTEV LIGHT RAIL, E8222-06-01	**Date Received:**	4/29/2005 8:15:0
Project No:		**Matrix:**	Soil
PO No:		**Analyst:**	RQ

Laboratory ID	Client Sample ID	Results	Units	QC Batch	PQL	DF	Date Collected	Date Analyzed
076140-012A	GH6-1	6.8	mg/Kg	22547	5	1	4/28/2005	5/5/2005
076140-013A	GH7-0	29	mg/Kg	22547	5	1	4/28/2005	5/5/2005
076140-014A	GH7-1	ND	mg/Kg	22547	5	1	4/28/2005	5/5/2005
076140-015A	GH8-0	36	mg/Kg	22547	5	1	4/28/2005	5/5/2005
076140-016A	GH8-1	7.0	mg/Kg	22547	5	1	4/28/2005	5/5/2005
076140-017A	GH9-0	160	mg/Kg	22547	5	1	4/28/2005	5/5/2005
076140-018A	GH9-1	160	mg/Kg	22547	5	1	4/28/2005	5/5/2005
076140-019A	GH10-0	13	mg/Kg	22547	5	1	4/28/2005	5/5/2005
076140-020A	GH10-1	9.0	mg/Kg	22547	5	1	4/28/2005	5/5/2005

Qualifiers:

- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- DO - Surrogate Diluted Out
- S - Spike/Surrogate outside of limits due to matrix interfere
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- Results are wet unless otherwise specified

Advanced Technology Laboratories *3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040*

Advanced Technology Laboratories

Date: 5/5/2005

pH
EPA 9045C

CLIENT:	Geocon Consultants, Inc.	**Lab Order:**	076140
Project:	DTEV LIGHT RAIL, E8222-06-01	**Date Received:**	4/29/2005 8:15:0
Project No:		**Matrix:**	Soil
PO No:		**Analyst:**	EG

Laboratory ID	Client Sample ID	Results	Units	QC Batch	PQL	DF	Date Collected	Date Analyzed
076140-009A	GH5-0	8.56	pH Units	R49578	0.1	1	4/28/2005	5/3/2005
076140-014A	GH7-1	8.43	pH Units	R49578	0.1	1	4/28/2005	5/3/2005

Qualifiers:

- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- DO - Surrogate Diluted Out
- S - Spike/Surrogate outside of limits due to matrix interfere
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- Results are wet unless otherwise specified

Advanced Technology Laboratories *3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040*

Advanced Technology Laboratories

3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Date: *05-May-05*

CLIENT: Geocon Consultants, Inc.
Work Order: 076140
Project: DTEV LIGHT RAIL, E8222-06-01

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_SPB

Sample ID	MB-22547A	SampType:	MBLK	TestCode:	6010_SPB	Units:	mg/Kg	Prep Date:	5/4/2005	Run ID:	ICP5_050505A
Client ID:	ZZZZZ	Batch ID:	22547	TestNo:	EPA 6010B	(EPA 3050M)		Analysis Date:	5/5/2005	SeqNo:	727756

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	ND	5.0									

Sample ID	MB-22547B	SampType:	MBLK	TestCode:	6010_SPB	Units:	mg/Kg	Prep Date:	5/4/2005	Run ID:	ICP5_050505A
Client ID:	ZZZZZ	Batch ID:	22547	TestNo:	EPA 6010B	(EPA 3050M)		Analysis Date:	5/5/2005	SeqNo:	727770

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	ND	5.0									

Sample ID	LCS-22547	SampType:	LCS	TestCode:	6010_SPB	Units:	mg/Kg	Prep Date:	5/4/2005	Run ID:	ICP5_050505A
Client ID:	ZZZZZ	Batch ID:	22547	TestNo:	EPA 6010B	(EPA 3050M)		Analysis Date:	5/5/2005	SeqNo:	727757

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	276.6	5.0	250	0	111	80	120	0	0		

Sample ID	076140-010AMS	SampType:	MS	TestCode:	6010_SPB	Units:	mg/Kg	Prep Date:	5/4/2005	Run ID:	ICP5_050505A
Client ID:	GH5-1	Batch ID:	22547	TestNo:	EPA 6010B	(EPA 3050M)		Analysis Date:	5/5/2005	SeqNo:	727769

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	194	5.0	250	8.831	74.1	47	125	0	0		

Sample ID	076140-020AMS	SampType:	MS	TestCode:	6010_SPB	Units:	mg/Kg	Prep Date:	5/4/2005	Run ID:	ICP5_050505A
Client ID:	GH10-1	Batch ID:	22547	TestNo:	EPA 6010B	(EPA 3050M)		Analysis Date:	5/5/2005	SeqNo:	727794

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	200.7	5.0	250	8.998	76.7	47	125	0	0		

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
R - RPD outside accepted recovery limits
S - Spike Recovery outside accepted recovery limits
B - Analyte detected in the associated Method Blank
Calculations are based on raw values
DO- Surrogate dilute out
H - Sample exceeded holding time

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

CLIENT: Geocon Consultants, Inc.
Work Order: 076140
Project: DTEV LIGHT RAIL, E8222-06-01

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_SPB

Sample ID	076140-010ADUP	SampType:	DUP	TestCode:	6010_SPB	Units:	mg/Kg	Prep Date:	5/4/2005	Run ID:	ICP5_050505A
Client ID:	GH5-1	Batch ID:	22547	TestNo:	EPA 6010B	(EPA 3050M)		Analysis Date:	5/5/2005	SeqNo:	727768

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	8.87	5.0	0	0	0	0	0	8.831	0.445	20	

Sample ID	076140-020ADUP	SampType:	DUP	TestCode:	6010_SPB	Units:	mg/Kg	Prep Date:	5/4/2005	Run ID:	ICP5_050505A
Client ID:	GH10-1	Batch ID:	22547	TestNo:	EPA 6010B	(EPA 3050M)		Analysis Date:	5/5/2005	SeqNo:	727793

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	9.243	5.0	0	0	0	0	0	8.998	2.68	20	

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
R - RPD outside accepted recovery limits
S - Spike Recovery outside accepted recovery limits
B - Analyte detected in the associated Method Blank
Calculations are based on raw values
DO- Surrogate dilute out
H - Sample exceeded holding time

Advanced Technology Laboratories

3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

CLIENT: Geocon Consultants, Inc.
Work Order: 076140
Project: DTEV LIGHT RAIL, E8222-06-01

ANALYTICAL QC SUMMARY REPORT

TestCode: 9045_S

Sample ID	076140-014ADUP	SampType:	DUP	TestCode:	9045_S	Units:	pH Units	Prep Date:	5/3/2005	Run ID:	WETCHEM_050503A
Client ID:	GH7-1	Batch ID:	R49578	TestNo:	EPA 9045C			Analysis Date:	5/3/2005	SeqNo:	727003

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
pH	8.31	0.10	0	0	0	0	0	8.43	1.43	20	

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
R - RPD outside accepted recovery limits
S - Spike Recovery outside accepted recovery limits
B - Analyte detected in the associated Method Blank
Calculations are based on raw values
DO- Surrogate dilute out
H - Sample exceeded holding time

CHAIN OF CUSTODY RECORD

Pg 1 of 2

Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755
(562) 989-4045 • Fax (562) 989-4040

FOR LABORATORY USE ONLY:

P.O.#: _____

Logged By: DW Date: 04/29/05

Method of Transport: Client ☐ ATL ☐ CA OverN ☐ FEDEX ☐ Other: GW

Sample Condition Upon Receipt
1. CHILLED Y☐ N☑ n/a 4. SEALED Y☐ N☑
2. HEADSPACE (VOA) Y☐ N☐ 5. # OF SPLS MATCH COC Y☑ N☐
3. CONTAINER INTACT Y☑ N☐ 6. PRESERVED Y☐ N☑

Client: GEOCON
Attn: RICK DAY / CHRIS MERRITT
Address: 2356 RESEARCH DR
City LIVERMORE State CA Zip Code 94550
TEL: (925) 371-5900
FAX: ( ) 371-5915

Project Name: DTEV LIGHT RAIL Project #: E8222-06-01 Sampler: (Printed Name) CM/DW (Signature)

Relinquished by: (Signature and Printed Name) CHRIS MERRITT	Date: 4-28-05	Time: 1730	Received by: (Signature and Printed Name)	Date: 04/29/05	Time: 0815
Relinquished by: (Signature and Printed Name)	Date:	Time:	Received by: (Signature and Printed Name)	Date:	Time:
Relinquished by: (Signature and Printed Name)	Date:	Time:	Received by: (Signature and Printed Name)	Date:	Time:

I hereby authorize ATL to perform the work indicated below:
Project Mgr / Submitter:
D. WATTS 4/28/05
Print Name Date
Signature

Send Report To:
Attn: _____
Co: SEE "CLIENT"
Address _____
City _____ State ____ Zip ____

Bill To:
Attn: _____
Co: _____
Address _____
City _____ State ____ Zip ____

Special Instructions/Comments:

Sample/Records - Archival & Disposal
Unless otherwise requested by client, all samples will be disposed 45 days after receipt and records will be disposed 1 year after submittal of final report.

Storage Fees (applies when storage is requested):
- Sample : $2.00 / sample / mo (after 45 days)
- Records : $1.00 / ATL workorder / mo (after 1 year)

Circle or Add Analysis(es) Requested

SPECIFY APPROPRIATE MATRIX

PRESERVATION

Q A / Q C
RTNE ☐
CT ☑
SWRCB ☐ Logcode ____
OTHER ____

ITEM	LAB USE ONLY: Batch #: / Lab No.	Sample Description: Sample I.D. / Location	Date	Time	8081A (Pesticides)	8082 (PCB)	8260B (Volatiles)	8270C (BNA)	6010B (Total Metal) Pb	8015B (GRO) / BTEX	8015B (DRO) pH	SOIL	WATER	GROUND WATER	WASTEWATER	TAT	Container(s) #	Container(s) Type	REMARKS
	0761140-001	GH1-0	4-28-05	1320				X				X				STD5	1	J G	
	-002	GH1-1		1320															
	-003	GH2-0		1324															
	-004	GH2-1		1324															
	-005	GH3-0		1330															
	-006	GH3-1		1331															
	-007	GH4-0		1334															
	-008	GH4-1		1335															
	-009	GH5-0		1338						X									
	-010	GH5-1		1339															

• TAT starts 8 a.m. following day if samples received after 3 p.m.

TAT: A= Overnight ≤ 24 hr B= Emergency Next workday C= Critical 2 Workdays D= Urgent 3 Workdays E= Routine 7 Workdays

Container Types: T=Tube V=VOA L=Liter P=Pint J=Jar B=Tedlar G=Glass P=Plastic M=Metal

Preservatives: H=Hcl N=HNO_3 S=H_2SO_4 C=4°C Z=$Zn(AC)_2$ O=NaOH T=$Na_2S_2O_3$

DISTRIBUTION: **White** with report, **Yellow** to folder, **Pink** to submitter.

CHAIN OF CUSTODY RECORD

Pg 2 of 2

Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755
(562) 989-4045 • Fax (562) 989-4040

FOR LABORATORY USE ONLY:

P.O.#: _____

Logged By: RM Date: 042905

Method of Transport: Client ☐ ATL ☐ CA OverN ☐ FEDEX ☐ Other: GW

Sample Condition Upon Receipt
1. CHILLED Y☐ N☑ 4. SEALED Y☐ N☑
2. HEADSPACE (VOA) Y☐ N☐ 5. # OF SPLS MATCH COC Y☑ N☐
3. CONTAINER INTACT Y☑ N☐ 6. PRESERVED Y☐ N☑

Client: GEOCON
Address: 2356 RESEARCH DR
TEL: (925) 371-5900
Attn: RICK DAY / CHRIS MERRITT
City LIVERMORE State CA Zip Code 94550
FAX: ( ) 5915

Project Name: DTEV LIGHT RAIL Project #: E8222-06-01 Sampler: (Printed Name) CMIDW (Signature) CHRIS MERRITT

Relinquished by: (Signature and Printed Name)	Date:	Time:	Received by: (Signature and Printed Name)	Date: 042905	Time: 0815
Relinquished by: (Signature and Printed Name)	Date:	Time:	Received by: (Signature and Printed Name)	Date:	Time:
Relinquished by: (Signature and Printed Name)	Date:	Time:	Received by: (Signature and Printed Name)	Date:	Time:

I hereby authorize ATL to perform the work indicated below:
Project Mgr /Submitter:
4-28-05 (Date)
CHRIS MERRITT (Print Name / Signature)

Send Report To:
Attn: _____
Co: A/A
Address _____
City _____ State _____ Zip _____

Bill To:
Attn: _____
Co: A/A
Address _____
City _____ State _____ Zip _____

Special Instructions/Comments:
HOLD THE EXTRA GH9 + GH10 SAMPLES.

Sample/Records - Archival & Disposal
Unless otherwise requested by client, all samples will be disposed 45 days after receipt and records will be disposed 1 year after submittal of final report.

Storage Fees (applies when storage is requested):
- Sample : $2.00 / sample / mo (after 45 days)
- Records : $1.00 / ATL workorder / mo (after 1 year)

Circle or Add Analysis(es) Requested: 8081A (Pesticides), 8082 (PCB), 8260B (Volatiles), 8270C (BNA), 6010B (Total Metal), 8015B (GRO) / BTEX, 8015B (DRO), TOTAL Pb, pH

SPECIFY APPROPRIATE MATRIX: SOIL, WATER, GROUND WATER, WASTEWATER

PRESERVATION

Q A / Q C: RTNE ☐ CT ☐ SWRCB ☐ Logcode ____ OTHER ____

ITEM	LAB USE ONLY: Batch #: / Lab No.	Sample Description: Sample I.D. / Location	Date	Time	TAT	Container(s) #	Container(s) Type	REMARKS
	0761140-011	GH6-0	4/28/05	1339	E STD	1		
	-012	GH6-1		1340		1		
	-013	GH7-0		1342		1		
	-014	GH7-1		1344		1		
	-015	GH8-0		1349		1		
	-016	GH8-1		1350		1		
	-017	GH9-0		1356		2		
	-018	GH9-1		1356		2		
	-019	GH10-0		1357		2		
	-020	GH10-1		1357		2		

• TAT starts 8 a.m. following day if samples received after 3 p.m.

TAT: A= Overnight ≤ 24 hr B= Emergency Next workday C= Critical 2 Workdays D= Urgent 3 Workdays E= Routine 7 Workdays

Container Types: T=Tube V=VOA L=Liter P=Pint J=Jar B=Tedlar G=Glass P=Plastic M=Metal

Preservatives: H=Hcl N=HNO_3 S=H_2SO_4 C=4°C Z=$Zn(AC)_2$ O=NaOH T=$Na_2S_2O_3$

DISTRIBUTION: **White** with report, **Yellow** to folder, **Pink** to submitter.

May 09, 2005

Rick Day
Geocon Consultants, Inc.
2356 Research Drive
Livermore, CA 94550
TEL: (925) 371-5900
FAX: (925) 371-5915

ELAP No.: 1838
NELAP No.: 02107CA
CSDLAC No.: 10196

Workorder No.: 076140

RE: DTEV LIGHT RAIL, E8222-06-01

Attention: Rick Day

Enclosed are the results for sample(s) received on April 29, 2005 by Advanced Technology Laboratories . The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

This is an addendum report. Please incorporate with documentation previously submitted.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (562)989-4045 if I can be of further assistance to your company.

Sincerely,

for Eddie F. Rodriguez
Laboratory Director

Advanced Technology Laboratories

Date: *09-May-05*

CLIENT: Geocon Consultants, Inc. **Lab Order:** 076140
Project: DTEV LIGHT RAIL, E8222-06-01

Lab ID: 076140-002 **Collection Date:** 4/28/2005
Client Sample ID: GH1-1 **Matrix:** SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
LEAD BY ICP						
	(EPA 3050M)			**EPA 6010B**		
RunID: ICP5_050506A	QC Batch: 22571			PrepDate	5/6/2005	Analyst: RQ
Lead	590	5.0		mg/Kg	1	5/6/2005
Lead	600	5.0		mg/Kg	1	5/5/2005

Lab ID: 076140-017 **Collection Date:** 4/28/2005
Client Sample ID: GH9-0 **Matrix:** SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
LEAD BY ICP						
	(EPA 3050M)			**EPA 6010B**		
RunID: ICP5_050506A	QC Batch: 22571			PrepDate	5/6/2005	Analyst: RQ
Lead	160	5.0		mg/Kg	1	5/6/2005
Lead	160	5.0		mg/Kg	1	5/5/2005

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
DO - Surrogate Diluted Out
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
H-Sample exceding holding time

Results are wet unless othewise specified

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Date: *09-May-05*

CLIENT: Geocon Consultants, Inc.
Work Order: 076140
Project: DTEV LIGHT RAIL, E8222-06-01

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_SPB

Sample ID	MB-22547A	SampType:	MBLK	TestCode:	6010_SPB	Units:	mg/Kg	Prep Date:	5/4/2005	Run ID:	ICP5_050505A
Client ID:	ZZZZZ	Batch ID:	22547	TestNo:	EPA 6010B	(EPA 3050M)		Analysis Date:	5/5/2005	SeqNo:	727756

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	ND	5.0									

Sample ID	MB-22547B	SampType:	MBLK	TestCode:	6010_SPB	Units:	mg/Kg	Prep Date:	5/4/2005	Run ID:	ICP5_050505A
Client ID:	ZZZZZ	Batch ID:	22547	TestNo:	EPA 6010B	(EPA 3050M)		Analysis Date:	5/5/2005	SeqNo:	727770

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	ND	5.0									

Sample ID	MB-22571A	SampType:	MBLK	TestCode:	6010_SPB	Units:	mg/Kg	Prep Date:	5/6/2005	Run ID:	ICP5_050506A
Client ID:	ZZZZZ	Batch ID:	22571	TestNo:	EPA 6010B	(EPA 3050M)		Analysis Date:	5/6/2005	SeqNo:	728591

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	ND	5.0									

Sample ID	LCS-22547	SampType:	LCS	TestCode:	6010_SPB	Units:	mg/Kg	Prep Date:	5/4/2005	Run ID:	ICP5_050505A
Client ID:	ZZZZZ	Batch ID:	22547	TestNo:	EPA 6010B	(EPA 3050M)		Analysis Date:	5/5/2005	SeqNo:	727757

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	276.6	5.0	250	0	111	80	120	0	0		

Sample ID	LCS-22571	SampType:	LCS	TestCode:	6010_SPB	Units:	mg/Kg	Prep Date:	5/6/2005	Run ID:	ICP5_050506A
Client ID:	ZZZZZ	Batch ID:	22571	TestNo:	EPA 6010B	(EPA 3050M)		Analysis Date:	5/6/2005	SeqNo:	728592

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	245.1	5.0	250	0	98.1	80	120	0	0		

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
R - RPD outside accepted recovery limits
S - Spike Recovery outside accepted recovery limits
B - Analyte detected in the associated Method Blank
Calculations are based on raw values
DO- Surrogate dilute out
H - Sample exceeded holding time

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

CLIENT: Geocon Consultants, Inc.
Work Order: 076140
Project: DTEV LIGHT RAIL, E8222-06-01

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_SPB

Sample ID 076140-010AMS	SampType: MS	TestCode: 6010_SPB	Units: mg/Kg	Prep Date: 5/4/2005	Run ID: ICP5_050505A
Client ID: GH5-1	Batch ID: 22547	TestNo: EPA 6010B	(EPA 3050M)	Analysis Date: 5/5/2005	SeqNo: 727769

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	194	5.0	250	8.831	74.1	47	125	0	0		

Sample ID 076140-020AMS	SampType: MS	TestCode: 6010_SPB	Units: mg/Kg	Prep Date: 5/4/2005	Run ID: ICP5_050505A
Client ID: GH10-1	Batch ID: 22547	TestNo: EPA 6010B	(EPA 3050M)	Analysis Date: 5/5/2005	SeqNo: 727794

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	200.7	5.0	250	8.998	76.7	47	125	0	0		

Sample ID 076140-017AMS	SampType: MS	TestCode: 6010_SPB	Units: mg/Kg	Prep Date: 5/6/2005	Run ID: ICP5_050506A
Client ID: GH9-0	Batch ID: 22571	TestNo: EPA 6010B	(EPA 3050M)	Analysis Date: 5/6/2005	SeqNo: 728596

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	320.8	5.0	250	156.3	65.8	47	125	0	0		

Sample ID 076140-017AMSD	SampType: MSD	TestCode: 6010_SPB	Units: mg/Kg	Prep Date: 5/6/2005	Run ID: ICP5_050506A
Client ID: GH9-0	Batch ID: 22571	TestNo: EPA 6010B	(EPA 3050M)	Analysis Date: 5/6/2005	SeqNo: 728597

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	286.8	5.0	250	156.3	52.2	47	125	320.8	11.2	20	

Sample ID 076140-010ADUP	SampType: DUP	TestCode: 6010_SPB	Units: mg/Kg	Prep Date: 5/4/2005	Run ID: ICP5_050505A
Client ID: GH5-1	Batch ID: 22547	TestNo: EPA 6010B	(EPA 3050M)	Analysis Date: 5/5/2005	SeqNo: 727768

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	8.87	5.0	0	0	0	0	0	8.831	0.445	20	

Qualifiers:
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R - RPD outside accepted recovery limits
S - Spike Recovery outside accepted recovery limits
B - Analyte detected in the associated Method Blank
Calculations are based on raw values
DO- Surrogate dilute out
H - Sample exceeded holding time

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

CLIENT: Geocon Consultants, Inc.
Work Order: 076140
Project: DTEV LIGHT RAIL, E8222-06-01

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_SPB

Sample ID	076140-020ADUP	SampType:	DUP	TestCode:	6010_SPB	Units:	mg/Kg	Prep Date:	5/4/2005	Run ID:	ICP5_050505A
Client ID:	GH10-1	Batch ID:	22547	TestNo:	EPA 6010B	(EPA 3050M)		Analysis Date:	5/5/2005	SeqNo:	727793

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	9.243	5.0	0	0	0	0	0	8.998	2.68	20	

Sample ID	076140-017ADUP	SampType:	DUP	TestCode:	6010_SPB	Units:	mg/Kg	Prep Date:	5/6/2005	Run ID:	ICP5_050506A
Client ID:	GH9-0	Batch ID:	22571	TestNo:	EPA 6010B	(EPA 3050M)		Analysis Date:	5/6/2005	SeqNo:	728595

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	123.4	5.0	0	0	0	0	0	156.3	23.5	20	R

Qualifiers:

ND - Not Detected at the Reporting Limit
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S - Spike Recovery outside accepted recovery limits
B - Analyte detected in the associated Method Blank
Calculations are based on raw values
DO- Surrogate dilute out
H - Sample exceeded holding time

Galvan, Diane

From: Chris Merritt [merritt@geoconinc.com]
Sent: Thursday, May 05, 2005 4:36 PM
To: Galvan, Diane
Subject: Re: Results - DTEV LIGHT RAIL (076140)

Hi Diane.

Could you examine GH1-1, and GH9-0 and 1 for bits of lead, rehomogenize and run again for TTLC?

Thanks

May 31, 2005

ACCREDITED IN ACCORDANCE WITH nelac

ELAP No.: 1838
NELAP No.: 02107CA
CSDLAC No.: 10196

Rick Day
Geocon Consultants, Inc.
2356 Research Drive
Livermore, CA 94550

TEL: (925) 371-5900
FAX: (925) 371-5915

Workorder No.: 076140

RE: DTEV LIGHT RAIL, E8222-06-01

Attention: Rick Day

Enclosed are the results for sample(s) received on April 29, 2005 by Advanced Technology Laboratories . The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

This is an addendum report. Please incorporate with documentation previously submitted.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (562)989-4045 if I can be of further assistance to your company.

Sincerely,

Eddie F. Rodriguez
Laboratory Director

Advanced Technology Laboratories

Date: 5/31/2005

LEAD BY ATOMIC ABSORPTION
WET/ EPA 7420

CLIENT:	Geocon Consultants, Inc.	**Lab Order:**	076140
Project:	DTEV LIGHT RAIL, E8222-06-01	**Date Received:**	4/29/2005 8:15:0
Project No:		**Matrix:**	Soil
PO No:		**Analyst:**	MJM

Laboratory ID	Client Sample ID	Results	Units	QC Batch	PQL	DF	Date Collected	Date Analyzed
076140-002A	GH1-1	38	mg/L	R50482	1.2	5	4/28/2005	5/27/2005
076140-011A	GH6-0	0.82	mg/L	R50482	0.25	1	4/28/2005	5/27/2005
076140-017A	GH9-0	8.3	mg/L	R50482	0.25	1	4/28/2005	5/27/2005
076140-018A	GH9-1	9.8	mg/L	R50482	0.25	1	4/28/2005	5/27/2005

Qualifiers:

- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- DO - Surrogate Diluted Out
- S - Spike/Surrogate outside of limits due to matrix interfere
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- Results are wet unless otherwise specified

Advanced Technology Laboratories

3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *31-May-05*

CLIENT: Geocon Consultants, Inc.
Work Order: 076140
Project: DTEV LIGHT RAIL, E8222-06-01

ANALYTICAL QC SUMMARY REPORT

TestCode: 7420_ST

Sample ID	SampType	TestCode	Units	Prep Date	Run ID
MB-22861	**MBLK**	**7420_ST**	**mg/L**		**AA2_050527D**
Client ID: **ZZZZZ**	Batch ID: **R50482**	TestNo: **WET/ EPA 74**		Analysis Date: **5/27/2005**	SeqNo: **740255**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	ND	0.25									

Sample ID	SampType	TestCode	Units	Prep Date	Run ID
MB-22861A	**MBLK**	**7420_ST**	**mg/L**		**AA2_050527D**
Client ID: **ZZZZZ**	Batch ID: **R50482**	TestNo: **WET/ EPA 74**		Analysis Date: **5/27/2005**	SeqNo: **740256**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	ND	0.25	0	0	0	0	0	0	0		

Sample ID	SampType	TestCode	Units	Prep Date	Run ID
LCS-22861	**LCS**	**7420_ST**	**mg/L**		**AA2_050527D**
Client ID: **ZZZZZ**	Batch ID: **R50482**	TestNo: **WET/ EPA 74**		Analysis Date: **5/27/2005**	SeqNo: **740257**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	5.114	0.25	5	0	102	80	120	0	0		

Sample ID	SampType	TestCode	Units	Prep Date	Run ID
076140-002AMS	**MS**	**7420_ST**	**mg/L**		**AA2_050527D**
Client ID: **GH1-1**	Batch ID: **R50482**	TestNo: **WET/ EPA 74**		Analysis Date: **5/27/2005**	SeqNo: **740266**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	41.06	1.2	5	37.72	66.7	70	130	0	0		S

Sample ID	SampType	TestCode	Units	Prep Date	Run ID
076140-002AMSD	**MSD**	**7420_ST**	**mg/L**		**AA2_050527D**
Client ID: **GH1-1**	Batch ID: **R50482**	TestNo: **WET/ EPA 74**		Analysis Date: **5/27/2005**	SeqNo: **740267**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	41.05	1.2	5	37.72	66.6	70	130	41.06	0.0169	20	S

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
R - RPD outside accepted recovery limits
S - Spike Recovery outside accepted recovery limits
B - Analyte detected in the associated Method Blank
Calculations are based on raw values
DO- Surrogate dilute out
H - Sample exceeded holding time

Advanced Technology Laboratories

3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

CLIENT: Geocon Consultants, Inc.
Work Order: 076140
Project: DTEV LIGHT RAIL, E8222-06-01

ANALYTICAL QC SUMMARY REPORT

TestCode: 7420_ST

Sample ID	076140-002ADUP	SampType:	DUP	TestCode:	7420_ST	Units:	mg/L	Prep Date:		Run ID:	AA2_050527D
Client ID:	GH1-1	Batch ID:	R50482	TestNo:	WET/ EPA 74			Analysis Date:	5/27/2005	SeqNo:	740265

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	36.65	1.2	0	0	0	0	0	37.72	2.88	20	

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
R - RPD outside accepted recovery limits
S - Spike Recovery outside accepted recovery limits
B - Analyte detected in the associated Method Blank
Calculations are based on raw values
DO- Surrogate dilute out
H - Sample exceeded holding time

Galvan, Diane

From: Chris Merritt [merritt@geoconinc.com]
Sent: Monday, May 23, 2005 4:33 PM
To: Galvan, Diane
Subject: DTEV LIGHT RAIL (076140)

Hi Diane.

Have you run those for soluble and if not, could you get them on the track for it, along with any others which exceeded 10X STLC?

Thanks

November 30, 2005

Chris Merritt
Geocon Consultants, Inc.
2356 Research Drive
Livermore, CA 94550
TEL: (925) 371-5900
FAX: (925) 371-5915

ELAP No.: 1838
NELAP No.: 02107CA
NEVADA.: CA-401
CSDLAC No.: 10196

Workorder No.: 080237

RE: DTEV LIGHT RAIL, E8222-06-01

Attention: Chris Merritt

Enclosed are the results for sample(s) received on November 22, 2005 by Advanced Technology Laboratories . The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (562)989-4045 if I can be of further assistance to your company.

Sincerely,

Eddie F. Rodriguez
Laboratory Director

Advanced Technology Laboratories

Date: 11/30/2005

LEAD BY ICP
EPA 6010B

CLIENT:	Geocon Consultants, Inc.	**Lab Order:**	080237
Project:	DTEV LIGHT RAIL, E8222-06-01	**Date Received:**	11/22/2005 8:30:
Project No:		**Matrix:**	Soil
PO No:		**Analyst:**	RQ

Laboratory ID	Client Sample ID	Results	Units	QC Batch	PQL	DF	Date Collected	Date Analyzed
080237-001A	GD3A-0	8.4	mg/Kg	25582	5	1	11/17/2005	11/29/2005
080237-002A	GD3B-0	97	mg/Kg	25582	5	1	11/17/2005	11/29/2005
080237-003A	GH1A-0	28	mg/Kg	25582	5	1	11/17/2005	11/29/2005
080237-004A	GH1A-1	12	mg/Kg	25582	5	1	11/17/2005	11/29/2005
080237-005A	GH1B-0	13	mg/Kg	25582	5	1	11/17/2005	11/29/2005
080237-006A	GH1B-1	7.7	mg/Kg	25582	5	1	11/17/2005	11/29/2005
080237-007A	GH9A-0	100	mg/Kg	25582	5	1	11/17/2005	11/29/2005
080237-008A	GH9A-1	9.3	mg/Kg	25582	5	1	11/17/2005	11/29/2005
080237-009A	GH9A-2	11	mg/Kg	25582	5	1	11/17/2005	11/29/2005
080237-010A	GH9B-0	36	mg/Kg	25582	5	1	11/17/2005	11/29/2005
080237-011A	GH9B-1	11	mg/Kg	25582	5	1	11/17/2005	11/29/2005

Qualifiers:

- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quantitation limits
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- DO - Surrogate Diluted Out
- S - Spike/Surrogate outside of limits due to matrix interferen
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- Results are wet unless otherwise specified

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: 11/30/2005

LEAD BY ICP
EPA 6010B

CLIENT:	Geocon Consultants, Inc.	**Lab Order:**	080237
Project:	DTEV LIGHT RAIL, E8222-06-01	**Date Received:**	11/22/2005 8:30:
Project No:		**Matrix:**	Soil
PO No:		**Analyst:**	RQ

Laboratory ID	Client Sample ID	Results	Units	QC Batch	PQL	DF	Date Collected	Date Analyzed
080237-012A	GH9B-2	7.1	mg/Kg	25582	5	1	11/17/2005	11/29/2005

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
DO - Surrogate Diluted Out
S - Spike/Surrogate outside of limits due to matrix interferen
H - Sample exceeded analytical holding time
E - Value above quantitation range
Results are wet unless otherwise specified

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *30-Nov-05*

CLIENT: Geocon Consultants, Inc.
Work Order: 080237
Project: DTEV LIGHT RAIL, E8222-06-01

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_SPB

Sample ID: **MB-25582A**	SampType: **MBLK**	TestCode: **6010_SPB**	Units: **mg/Kg**	Prep Date: **11/28/2005**	Run ID: **ICP5_051129A**
Client ID: **ZZZZZ**	Batch ID: **25582**	TestNo: **EPA 6010B**	**(EPA 3050M)**	Analysis Date: **11/29/2005**	SeqNo: **834418**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	ND	5.0									

Sample ID: **MB-25582B**	SampType: **MBLK**	TestCode: **6010_SPB**	Units: **mg/Kg**	Prep Date: **11/28/2005**	Run ID: **ICP5_051129A**
Client ID: **ZZZZZ**	Batch ID: **25582**	TestNo: **EPA 6010B**	**(EPA 3050M)**	Analysis Date: **11/29/2005**	SeqNo: **834432**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	ND	5.0									

Sample ID: **LCS-25582**	SampType: **LCS**	TestCode: **6010_SPB**	Units: **mg/Kg**	Prep Date: **11/28/2005**	Run ID: **ICP5_051129A**
Client ID: **ZZZZZ**	Batch ID: **25582**	TestNo: **EPA 6010B**	**(EPA 3050M)**	Analysis Date: **11/29/2005**	SeqNo: **834419**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	256.7	5.0	250	0	103	80	120	0	0		

Sample ID: **080237-010AMS**	SampType: **MS**	TestCode: **6010_SPB**	Units: **mg/Kg**	Prep Date: **11/28/2005**	Run ID: **ICP5_051129A**
Client ID: **GH9B-0**	Batch ID: **25582**	TestNo: **EPA 6010B**	**(EPA 3050M)**	Analysis Date: **11/29/2005**	SeqNo: **834431**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	202.1	5.0	250	36.37	66.3	47	125	0	0		

Sample ID: **080265-008AMS**	SampType: **MS**	TestCode: **6010_SPB**	Units: **mg/Kg**	Prep Date: **11/28/2005**	Run ID: **ICP5_051129A**
Client ID: **ZZZZZ**	Batch ID: **25582**	TestNo: **EPA 6010B**	**(EPA 3050M)**	Analysis Date: **11/29/2005**	SeqNo: **834444**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	176.5	5.0	250	2.625	69.5	47	125	0	0		

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
R - RPD outside accepted recovery limits
S - Spike Recovery outside accepted recovery limits
B - Analyte detected in the associated Method Blank
Calculations are based on raw values
DO- Surrogate dilute out
H - Sample exceeded holding time

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562-989-4045 Fax: 562-989-4040

CLIENT: Geocon Consultants, Inc.
Work Order: 080237
Project: DTEV LIGHT RAIL, E8222-06-01

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_SPB

Sample ID: 080237-010ADUP	SampType: DUP	TestCode: 6010_SPB	Units: mg/Kg	Prep Date: 11/28/2005	Run ID: ICP5_051129A
Client ID: GH9B-0	Batch ID: 25582	TestNo: EPA 6010B	(EPA 3050M)	Analysis Date: 11/29/2005	SeqNo: 834430

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	44.14	5.0	0	0	0	0	0	36.37	19.3	20	

Sample ID: 080265-008ADUP	SampType: DUP	TestCode: 6010_SPB	Units: mg/Kg	Prep Date: 11/28/2005	Run ID: ICP5_051129A
Client ID: ZZZZZ	Batch ID: 25582	TestNo: EPA 6010B	(EPA 3050M)	Analysis Date: 11/29/2005	SeqNo: 834443

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	ND	5.0	0	0	0	0	0	2.625	0	20	

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
R - RPD outside accepted recovery limits
S - Spike Recovery outside accepted recovery limits
B - Analyte detected in the associated Method Blank
Calculations are based on raw values
DO- Surrogate dilute out
H - Sample exceeded holding time

CHAIN OF CUSTODY RECORD

Pg 1 of 1

Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755
(562) 989-4045 • Fax (562) 989-4040

FOR LABORATORY USE ONLY:

P.O.#: _____
Logged By: _____ Date: 11/22/05

Method of Transport: Client ☐ ATL ☐ CA OverN ☐ FEDEX ☐ Other: Goodeo

Sample Condition Upon Receipt
1. CHILLED Y☐ N☑ 4. SEALED Y☐ N☑
2. HEADSPACE (VOA) N Y☐ N☐ 5. # OF SPLS MATCH COC Y☑ N☐
3. CONTAINER INTACT Y☑ N☐ 6. PRESERVED Y☐ N☑

Client: GEOCON
Attn:
Address: 2356 RESEARCH DR
City LIVERMORE State CA Zip Code 94550
TEL: (925) 371-5900
FAX: ( ) 5915

Project Name: DTEV LIGHT RAIL Project #: E8222-06-01 Sampler: (Printed Name) C. MERRITT (Signature) CM

Relinquished by: (Signature and Printed Name) CHRIS MERRITT Date: 11-21-05 Time: 1730 Received by: (Signature and Printed Name) Date: 11/22/05 Time: 0830
Relinquished by: (Signature and Printed Name) Date: Time: Received by: (Signature and Printed Name) Date: Time:
Relinquished by: (Signature and Printed Name) Date: Time: Received by: (Signature and Printed Name) Date: Time:

I hereby authorize ATL to perform the work indicated below:
Project Mgr /Submitter:
CM 11-21
Print Name Date
CM
Signature

Send Report To:
Attn: A/A
Co:
Address
City State Zip

Bill To:
Attn: A/A
Co:
Address
City State Zip

Special Instructions/Comments:
ALL INDIVIDUAL SAMPLES

Sample/Records - Archival & Disposal
Unless otherwise requested by client, all samples will be disposed 45 days after receipt and records will be disposed 1 year after submittal of final report.

Storage Fees (applies when storage is requested):
- Sample : $2.00 / sample / mo (after 45 days)
- Records : $1.00 / ATL workorder / mo (after 1 year)

Circle or Add Analysis(es) Requested: 8081A (Pesticides); 8082 (PCB); 8260B (Volatiles); 8270C (BNA); 6010B (Total Metal); 8015B (GRO) / 8020 (BTEX); 8015B (DRO); 8021 (BTEX); TITLE 22 / CAM 17 (6010 / 7000); TOTAL Pb

SPECIFY APPROPRIATE MATRIX: SOIL; WATER; GROUND WATER; WASTEWATER

PRESERVATION

Q A / Q C: RTNE ☐ CT ☐ SWRCB ☐ Logcode ____ OTHER ____

ITEM	LAB USE ONLY: Batch #: / Lab No.	Sample Description: Sample I.D. / Location	Date	Time	TAT	Container(s): #	Type	REMARKS
	050237-001	GD3A-0	11-19-05		ES	1	J,G	
	-002	GD3B-0				1		
	003, 004	GH1A-0, 1				1		
	005, 006	~~GH1A-0, 1~~ GH1B-0, 1				1		
		~~GH1B-0~~						
		~~GH1B-1~~						
	007, 008	GH9A-0, 1, 2				1		
	009, 010, 011	GH9B-0, 1, 2				1		

(Matrix / Analysis marks: SOIL X on all rows; TOTAL Pb X on all rows; 8081A, 8082, 8260B, 8270C, 6010B, 8015B (GRO) / 8020, 8015B (DRO), 8021, TITLE 22 / CAM 17 X on rows 001–005, 007–009)

• TAT starts 8 a.m. following day if samples received after 3 p.m.

TAT: A= Overnight ≤ 24 hr B= Emergency Next workday C= Critical 2 Workdays D= Urgent 3 Workdays E= Routine 7 Workdays

Container Types: T=Tube V=VOA L=Liter P=Pint J=Jar B=Tedlar G=Glass P=Plastic M=Metal

Preservatives: H=Hcl $N=HNO_3$ $S=H_2SO_4$ C=4°C Z=$Zn(AC)_2$ O=NaOH $T=Na_2S_2O_3$

DISTRIBUTION: **White** with report, **Yellow** to folder, **Pink** to submitter.

January 03, 2006

Chris Merritt
Geocon Consultants, Inc.
2356 Research Drive
Livermore, CA 94550
TEL: (925) 371-5900
FAX: (925) 371-5915

ELAP No.: 1838
NELAP No.: 02107CA
NEVADA.: CA-401
CSDLAC No.: 10196

Workorder No.: 080698

RE: DTEV Light Rail, E8222-06-01

Attention: Chris Merritt

Enclosed are the results for sample(s) received on December 15, 2005 by Advanced Technology Laboratories . The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (562)989-4045 if I can be of further assistance to your company.

Sincerely,

Eddie F. Rodriguez
Laboratory Director

CLIENT: Geocon Consultants, Inc.
Project: DTEV Light Rail, E8222-06-01
Lab Order: 080698

CASE NARRATIVE

Analytical Comments for Method 8015 (Diesel/Motor Oil)

Dilution was necessary for samples 080698-001A, 080698-003A, 080698-005A and 080698-011A, due to sample matrix.

Samples 080698-001A, 080698-002A, 080698-003A, 080698-004A, 080698-005A, 080698-006A, 080698-007A, 080698-008A, 080698-009A and 080698-011A contain hydrocarbons within the diesel/motor oil range that do not match the diesel/motor oil pattern. Quantitation was based on a diesel/motor oil standard.

RPD for Duplicate (DUP) is outside criteria for sample 080698-008ADUP; however, the Laboratory Control Sample (LCS) validated the analytical batch.

Advanced Technology Laboratories *3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040*

Advanced Technology Laboratories

Date: *03-Jan-06*

CLIENT: Geocon Consultants, Inc. **Lab Order:** 080698
Project: DTEV Light Rail, E8222-06-01

Lab ID: 080698-001 **Collection Date:** 12/14/2005
Client Sample ID: GD11-A-1 **Matrix:** SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID (EPA 3550B)				**EPA 8015B(M)**		
RunID: GC7_051221B	QC Batch: 25922				PrepDate: 12/21/2005	Analyst: **CBR**
Diesel	480	40		mg/Kg	10	12/23/2005
Motor Oil	1200	40		mg/Kg	10	12/23/2005

Lab ID: 080698-002 **Collection Date:** 12/14/2005
Client Sample ID: GD11-A-3 **Matrix:** SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID (EPA 3550B)				**EPA 8015B(M)**		
RunID: GC7_051221B	QC Batch: 25922				PrepDate: 12/21/2005	Analyst: **CBR**
Diesel	ND	1.0		mg/Kg	1	12/23/2005
Motor Oil	1.2	1.0		mg/Kg	1	12/23/2005

Lab ID: 080698-003 **Collection Date:** 12/14/2005
Client Sample ID: GD11-B-1 **Matrix:** SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID (EPA 3550B)				**EPA 8015B(M)**		
RunID: GC7_051221B	QC Batch: 25922				PrepDate: 12/21/2005	Analyst: **CBR**
Diesel	580	40		mg/Kg	10	12/23/2005
Motor Oil	1400	40		mg/Kg	10	12/23/2005

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
DO - Surrogate Diluted Out
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
H-Sample exceding holding time

Results are wet unless othewise specified

3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

CLIENT: Geocon Consultants, Inc. **Lab Order:** 080698
Project: DTEV Light Rail, E8222-06-01

Lab ID: 080698-004 **Collection Date:** 12/14/2005
Client Sample ID: GD11-B-3 **Matrix:** SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID (EPA 3550B) EPA 8015B(M)						
RunID: GC7_051221B QC Batch: 25922 PrepDate: 12/21/2005 Analyst: **CBR**						
Diesel	9.4	1.0		mg/Kg	1	12/23/2005
Motor Oil	22	1.0		mg/Kg	1	12/23/2005

Lab ID: 080698-005 **Collection Date:** 12/14/2005
Client Sample ID: GD11-C-1 **Matrix:** SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID (EPA 3550B) EPA 8015B(M)						
RunID: GC7_051221B QC Batch: 25922 PrepDate: 12/21/2005 Analyst: **CBR**						
Diesel	320	40		mg/Kg	10	12/23/2005
Motor Oil	770	40		mg/Kg	10	12/23/2005

Lab ID: 080698-006 **Collection Date:** 12/14/2005
Client Sample ID: GD11-C-3 **Matrix:** SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID (EPA 3550B) EPA 8015B(M)						
RunID: GC7_051221B QC Batch: 25922 PrepDate: 12/21/2005 Analyst: **CBR**						
Diesel	8.8	1.0		mg/Kg	1	12/23/2005
Motor Oil	21	1.0		mg/Kg	1	12/23/2005

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
DO - Surrogate Diluted Out
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
H-Sample exceding holding time

Results are wet unless othewise specified

CLIENT: Geocon Consultants, Inc. **Lab Order:** 080698
Project: DTEV Light Rail, E8222-06-01

Lab ID: 080698-007 **Collection Date:** 12/14/2005
Client Sample ID: GD11-D-1 **Matrix:** SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID (EPA 3550B)				**EPA 8015B(M)**		
RunID: GC7_051221B	QC Batch: 25922			PrepDate: 12/21/2005		Analyst: **CBR**
Diesel	100	4.0		mg/Kg	1	12/23/2005
Motor Oil	270	4.0		mg/Kg	1	12/23/2005

Lab ID: 080698-008 **Collection Date:** 12/14/2005
Client Sample ID: GD11-D-3 **Matrix:** SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID (EPA 3550B)				**EPA 8015B(M)**		
RunID: GC7_051221B	QC Batch: 25922			PrepDate: 12/21/2005		Analyst: **CBR**
Diesel	5.0	1.0		mg/Kg	1	12/23/2005
Motor Oil	13	1.0		mg/Kg	1	12/23/2005

Lab ID: 080698-009 **Collection Date:** 12/14/2005
Client Sample ID: GD11-E-1 **Matrix:** SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID (EPA 3550B)				**EPA 8015B(M)**		
RunID: GC7_051221B	QC Batch: 25922			PrepDate: 12/21/2005		Analyst: **CBR**
Diesel	31	1.0		mg/Kg	1	12/23/2005
Motor Oil	76	1.0		mg/Kg	1	12/23/2005

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
DO - Surrogate Diluted Out
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
H-Sample exceding holding time

Results are wet unless othewise specified

CLIENT: Geocon Consultants, Inc. **Lab Order:** 080698
Project: DTEV Light Rail, E8222-06-01

Lab ID: 080698-010 **Collection Date:** 12/14/2005
Client Sample ID: GD11-E-3 **Matrix:** SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID (EPA 3550B)				**EPA 8015B(M)**		
RunID: GC7_051221B	QC Batch: 25922			PrepDate: 12/21/2005		Analyst: **CBR**
Diesel	ND	1.0		mg/Kg	1	12/23/2005
Motor Oil	ND	1.0		mg/Kg	1	12/23/2005

Lab ID: 080698-011 **Collection Date:** 12/14/2005
Client Sample ID: GD11-F-1 **Matrix:** SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID (EPA 3550B)				**EPA 8015B(M)**		
RunID: GC7_051227A	QC Batch: 25969			PrepDate: 12/23/2005		Analyst: **CBR**
Diesel	16	2.0		mg/Kg	2	12/28/2005
Motor Oil	37	2.0		mg/Kg	2	12/28/2005

Lab ID: 080698-012 **Collection Date:** 12/14/2005
Client Sample ID: GD11-F-3 **Matrix:** SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID (EPA 3550B)				**EPA 8015B(M)**		
RunID: GC7_051227A	QC Batch: 25969			PrepDate: 12/23/2005		Analyst: **CBR**
Diesel	ND	1.0		mg/Kg	1	12/28/2005
Motor Oil	ND	1.0		mg/Kg	1	12/28/2005

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
DO - Surrogate Diluted Out
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
H-Sample exceding holding time

Results are wet unless othewise specified

Advanced Technology Laboratories

3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Date: *03-Jan-06*

CLIENT: Geocon Consultants, Inc.
Work Order: 080698
Project: DTEV Light Rail, E8222-06-01

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_S_DM LL

Sample ID: **MB-25922**	SampType: **MBLK**	TestCode: **8015_S_DM L**	Units: **mg/Kg**	Prep Date: **12/21/2005**	Run ID: **GC7_051221B**
Client ID: **ZZZZZ**	Batch ID: **25922**	TestNo: **EPA 8015B(M (EPA 3550B)**		Analysis Date: **12/21/2005**	SeqNo: **847131**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	1.0									
Motor Oil	ND	1.0									

Sample ID: **MB-25922**	SampType: **MBLK**	TestCode: **8015_S_DM L**	Units: **mg/Kg**	Prep Date: **12/21/2005**	Run ID: **GC7_051221B**
Client ID: **ZZZZZ**	Batch ID: **25922**	TestNo: **EPA 8015B(M (EPA 3550B)**		Analysis Date: **12/23/2005**	SeqNo: **849096**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	1.0									
Motor Oil	ND	1.0									

Sample ID: **MB-25969**	SampType: **MBLK**	TestCode: **8015_S_DM L**	Units: **mg/Kg**	Prep Date: **12/23/2005**	Run ID: **GC7_051227A**
Client ID: **ZZZZZ**	Batch ID: **25969**	TestNo: **EPA 8015B(M (EPA 3550B)**		Analysis Date: **12/27/2005**	SeqNo: **852255**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	1.0									
Motor Oil	ND	1.0									

Sample ID: **LCS-25922**	SampType: **LCS**	TestCode: **8015_S_DM L**	Units: **mg/Kg**	Prep Date: **12/21/2005**	Run ID: **GC7_051221B**
Client ID: **ZZZZZ**	Batch ID: **25922**	TestNo: **EPA 8015B(M (EPA 3550B)**		Analysis Date: **12/21/2005**	SeqNo: **847132**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	19.54	1.0	33	0	59.2	44	123	0	0		

Sample ID: **LCS-25922**	SampType: **LCS**	TestCode: **8015_S_DM L**	Units: **mg/Kg**	Prep Date: **12/21/2005**	Run ID: **GC7_051221B**
Client ID: **ZZZZZ**	Batch ID: **25922**	TestNo: **EPA 8015B(M (EPA 3550B)**		Analysis Date: **12/23/2005**	SeqNo: **849097**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	21.3	1.0	33	0	64.6	44	123	0	0		

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
R - RPD outside accepted recovery limits
S - Spike Recovery outside accepted recovery limits
B - Analyte detected in the associated Method Blank
Calculations are based on raw values
DO- Surrogate dilute out
H - Sample exceeded holding time

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

CLIENT: Geocon Consultants, Inc.
Work Order: 080698
Project: DTEV Light Rail, E8222-06-01

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_S_DM LL

Sample ID: LCS-25969	SampType: LCS	TestCode: 8015_S_DM L	Units: mg/Kg	Prep Date: 12/23/2005	Run ID: GC7_051227A
Client ID: ZZZZZ	Batch ID: 25969	TestNo: EPA 8015B(M (EPA 3550B)		Analysis Date: 12/27/2005	SeqNo: 852256

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	21.01	1.0	33	0	63.7	44	123	0	0		

Sample ID: 080643-002AMS	SampType: MS	TestCode: 8015_S_DM L	Units: mg/Kg	Prep Date: 12/21/2005	Run ID: GC7_051221B
Client ID: ZZZZZ	Batch ID: 25922	TestNo: EPA 8015B(M (EPA 3550B)		Analysis Date: 12/23/2005	SeqNo: 849098

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	20.18	1.0	33	0	61.2	26	106	0	0		

Sample ID: 080698-012AMS	SampType: MS	TestCode: 8015_S_DM L	Units: mg/Kg	Prep Date: 12/23/2005	Run ID: GC7_051227A
Client ID: GD11-F-3	Batch ID: 25969	TestNo: EPA 8015B(M (EPA 3550B)		Analysis Date: 12/28/2005	SeqNo: 852257

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	18.84	1.0	33	0	57.1	26	106	0	0		

Sample ID: 080643-002AMSD	SampType: MSD	TestCode: 8015_S_DM L	Units: mg/Kg	Prep Date: 12/21/2005	Run ID: GC7_051221B
Client ID: ZZZZZ	Batch ID: 25922	TestNo: EPA 8015B(M (EPA 3550B)		Analysis Date: 12/23/2005	SeqNo: 849099

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	22.49	1.0	33	0	68.1	26	106	20.18	10.8	0	

Sample ID: 080698-012AMSD	SampType: MSD	TestCode: 8015_S_DM L	Units: mg/Kg	Prep Date: 12/23/2005	Run ID: GC7_051227A
Client ID: GD11-F-3	Batch ID: 25969	TestNo: EPA 8015B(M (EPA 3550B)		Analysis Date: 12/28/2005	SeqNo: 852258

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	22.43	1.0	33	0	68	26	106	18.84	17.4	0	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
R - RPD outside accepted recovery limits
S - Spike Recovery outside accepted recovery limits
B - Analyte detected in the associated Method Blank
Calculations are based on raw values
DO- Surrogate dilute out
H - Sample exceeded holding time

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

CLIENT: Geocon Consultants, Inc.
Work Order: 080698
Project: DTEV Light Rail, E8222-06-01

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_S_DM LL

Sample ID: 080698-008ADUP	SampType: DUP	TestCode: 8015_S_DM L	Units: mg/Kg	Prep Date: 12/21/2005	Run ID: GC7_051221B
Client ID: GD11-D-3	Batch ID: 25922	TestNo: EPA 8015B(M (EPA 3550B)		Analysis Date: 12/23/2005	SeqNo: 849106

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	3.362	1.0	0	0	0	0	0	4.977	38.7	30	R
Motor Oil	8.687	1.0	0	0	0	0	0	13.27	41.7	30	R

Sample ID: 080698-012ADUP	SampType: DUP	TestCode: 8015_S_DM L	Units: mg/Kg	Prep Date: 12/23/2005	Run ID: GC7_051227A
Client ID: GD11-F-3	Batch ID: 25969	TestNo: EPA 8015B(M (EPA 3550B)		Analysis Date: 12/28/2005	SeqNo: 852259

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	1.0	0	0	0	0	0	0	0	30	
Motor Oil	ND	1.0	0	0	0	0	0	0	0	30	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
R - RPD outside accepted recovery limits
S - Spike Recovery outside accepted recovery limits
B - Analyte detected in the associated Method Blank
Calculations are based on raw values
DO- Surrogate dilute out
H - Sample exceeded holding time

CHAIN OF CUSTODY RECORD

Advanced Technology Laboratories

3275 Walnut Avenue
Signal Hill, CA 90755
Tel: (562) 989-4045 • Fax: (562) 989-4040

FOR LABORATORY USE ONLY

P.O. #: _____

Logged By: _____ Date: 12/15

Method of Transport: Client ☐ ATL ☐ CA OverN ☐ FedEx ☐ Other: GSO

Sample Condition Upon Receipt: 1. CHILLED 4.8 Y ☑ N ☐ | 2. HEADSPACE (VOA) Y ☐ N ☐ | 3. CONTAINER INTACT Y ☐ N ☐ | 4. SEALED Y ☐ N ☐ | 5. # OF SPLS MATCH COC Y ☐ N ☐ | 6. PRESERVED Y ☐ N ☐

Client: Geocon Consultants, Inc.	Address: 2356 Research Drive		Tel: 925-371-5900
Attention: Chris Merritt	City: Livermore	State: CA Zip Code: 95361	Fax: 925-371-5915

Project Name:	Project #:	Sampler: (Printed Name)	(Signature)
DTEV Light rail	E8222-06-01	CHRIS MERRITT/CHRIS GIUNTOLI	CM (FOR BOTH)

Relinquished by: (Signature and Printed Name) CHRIS MERRITT	Date: 12-14-05	Time: 1745	Received by: (Signature and Printed Name)	Date: 12/15/05	Time: 1000
Relinquished by: (Signature and Printed Name)	Date:	Time:	Received by: (Signature and Printed Name)	Date:	Time:
Relinquished by: (Signature and Printed Name)	Date:	Time:	Received by: (Signature and Printed Name)	Date:	Time:

I hereby authorize ATL to perform the work indicated below:
Project Mgr /Submitter:
Chris Merritt
Print Name Date
Chris Merritt
Signature

Send Report To:
Attn: Chris Merritt
Co: Geocon Consultants, Inc.
Addr: 2356 Research Drive
City: Livermore State: CA Zip: 94550

Bill To:
Attn: Same
Co:
Addr:
City: State: Zip:

Special Instructions/Comments:
Each individual sample to be run for TPHd\mo.

Sample/Records - Archival & Disposal
Unless otherwise requested by client, all samples will be disposed 45 days after receipt and records will be disposed 1 year after submittal of final report.

Storage Fees (applies when storage is requested):
- Sample :$2.00 / sample /mo (after 45 days)
- Records: $1 /ATL workorder /mo (after 1 year)

Circle or Add Analysis(es) Requested: 8081A (Pesticides) | 8082 (PCB) | 8260B (Volatiles) | 8270C (BNA) | 6010B (Total Metal) | 8015B (GRO) / 8020 (BTEX) | 8015B (DRO) | 8021 (BTEX) | TITLE 22 / CAM 17 (6010 / 7000) | pH - EPA 9045 | 8015B Diesel/Motor oil

SPECIFY APPROPRIATE MATRIX: SOIL | WATER | GROUND WATER | WASTEWATER

QA/QC: RTNE ☑ CT ☒ | SWRCB ☐ Logcode_____ | OTHER _____

ITEM	LAB USE ONLY: Batch #: / Lab No.	Sample Description: Sample ID / Location	Date	Time	TAT	Container(s): #	Type	PRESERVATION	REMARKS
	1/2	GD11-A-1,3	12/14/2005		E	1	T M	C	
	3/4	GD11-B-1,3	12/14/2005		E	1	T M	C	
	5/6	GD11-C-1,3	12/14/2005		E	1	T M	C	
	7/8	GD11-D-1,3	12/14/2005		E	1	T M	C	
	9/10	GD11-E-1,3	12/14/2005		E	1	T M	C	
	11/12	GD11-F-1,3	12/14/2005		E	1	T M	C	

- TAT starts 8AM the following day if samples received after 3 PM

TAT: A = Overnight ≤ 24 hrs | B = Emergency Next Workday | C = Critical 2 Workdays | D = Urgent 3 Workdays | E = Routine 7 Workdays

Container Types: T=Tube V=VOA L=Liter P=Pint J=Jar B=Tedlar G=Glass P=Plastic M=Metal

Preservatives: H=HCl $N=HNO_3$ $S=H_2SO_4$ C=4°C $Z=Zn(AC)_2$ O=NaOH $T=Na_2S_2O_3$

Advanced Technology Laboratories

Date: 1/16/2006

LEAD BY ATOMIC ABSORPTION
WET/ EPA 7420

CLIENT:	Geocon Consultants, Inc.	**Lab Order:**	080237
Project:	DTEV LIGHT RAIL, E8222-06-01	**Date Received:**	11/22/2005 8:30:
Project No:		**Matrix:**	Soil
PO No:		**Analyst:**	NS

Laboratory ID	Client Sample ID	Results	Units	QC Batch	PQL	DF	Date Collected	Date Analyzed
080237-002A	GD3B-0	3.5	mg/L	R58206	0.25	1	11/17/2005	1/16/2006
080237-007A	GH9A-0	6.3	mg/L	R58206	0.25	1	11/17/2005	1/16/2006

Qualifiers:

- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- DO - Surrogate Diluted Out
- S - Spike/Surrogate outside of limits due to matrix interferen
- H - Sample exceeded analytical holding time
- E - Value above quantitation range
- Results are wet unless otherwise specified

CLIENT: Geocon Consultants, Inc.
Work Order: 080237
Project: DTEV LIGHT RAIL, E8222-06-01

ANALYTICAL QC SUMMARY REPORT

TestCode: 7420_ST

Sample ID: **MB-26219**	SampType: **mblk**	TestCode: **7420_ST**	Units: **mg/L**	Prep Date:	Run ID: **AA2_060116A**
Client ID: **ZZZZZ**	Batch ID: **R58206**	TestNo: **WET/ EPA 74**		Analysis Date: **1/16/2006**	SeqNo: **861251**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	ND	0.25									

Sample ID: **MB-26219A**	SampType: **mblk**	TestCode: **7420_ST**	Units: **mg/L**	Prep Date:	Run ID: **AA2_060116A**
Client ID: **ZZZZZ**	Batch ID: **R58206**	TestNo: **WET/ EPA 74**		Analysis Date: **1/16/2006**	SeqNo: **861252**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	ND	0.25									

Sample ID: **LCS-26219**	SampType: **lcs**	TestCode: **7420_ST**	Units: **mg/L**	Prep Date:	Run ID: **AA2_060116A**
Client ID: **ZZZZZ**	Batch ID: **R58206**	TestNo: **WET/ EPA 74**		Analysis Date: **1/16/2006**	SeqNo: **861253**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	5.137	0.25	5	0	103	80	120	0	0		

Sample ID: **080237-002AMS**	SampType: **MS**	TestCode: **7420_ST**	Units: **mg/L**	Prep Date:	Run ID: **AA2_060116A**
Client ID: **GD3B-0**	Batch ID: **R58206**	TestNo: **WET/ EPA 74**		Analysis Date: **1/16/2006**	SeqNo: **861258**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	7.962	0.25	5	3.467	89.9	70	130	0	0		

Sample ID: **080237-002ADUP**	SampType: **DUP**	TestCode: **7420_ST**	Units: **mg/L**	Prep Date:	Run ID: **AA2_060116A**
Client ID: **GD3B-0**	Batch ID: **R58206**	TestNo: **WET/ EPA 74**		Analysis Date: **1/16/2006**	SeqNo: **861257**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	3.547	0.25	0	0	0	0	0	3.467	2.27	20	

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
R - RPD outside accepted recovery limits
S - Spike Recovery outside accepted recovery limits
B - Analyte detected in the associated Method Blank
Calculations are based on raw values
DO- Surrogate dilute out
H - Sample exceeded holding time

ADVANCED TECHNOLOGY LABORATORIES

October 26, 2018

Rick Day
Geocon Consultants, Inc.
6671 Brisa Street
Livermore, CA 94550
Tel: (925) 961-5270
Fax:(925) 371-5915

ELAP No.: 1838
CSDLAC No.: 10196
ORELAP No.: CA300003

Re: ATL Work Order Number : 1802940
Client Reference : EASTRIDGE-BART, E8222-02-02

Enclosed are the results for sample(s) received on August 14, 2018 by Advanced Technology Laboratories. The sample(s) are tested for the parameters as indicated on the enclosed chain of custody in accordance with applicable laboratory certifications. The laboratory results contained in this report specifically pertains to the sample(s) submitted.

Thank you for the opportunity to serve the needs of your company. If you have any questions, please feel free to contact me or your Project Manager.

Sincerely,

Eddie Rodriguez
Laboratory Director

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : EASTRIDGE-BART, E8222-02-02
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 10/26/2018

SUMMARY OF SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
GH11-0	1802940-01	Soil	8/09/18 0:00	8/14/18 9:56
GH11-1.5	1802940-02	Soil	8/09/18 0:00	8/14/18 9:56
GH12-0	1802940-03	Soil	8/09/18 0:00	8/14/18 9:56
GH12-1.5	1802940-04	Soil	8/09/18 0:00	8/14/18 9:56
GH13-0	1802940-05	Soil	8/09/18 0:00	8/14/18 9:56
GH13-1.5	1802940-06	Soil	8/09/18 0:00	8/14/18 9:56
GH14-0	1802940-07	Soil	8/09/18 0:00	8/14/18 9:56
GH14-1.5	1802940-08	Soil	8/09/18 0:00	8/14/18 9:56
GH15-0	1802940-09	Soil	8/09/18 0:00	8/14/18 9:56
GH15-1.5	1802940-10	Soil	8/09/18 0:00	8/14/18 9:56
GH16-0	1802940-11	Soil	8/09/18 0:00	8/14/18 9:56
GH16-1.5	1802940-12	Soil	8/09/18 0:00	8/14/18 9:56
GH17-0	1802940-13	Soil	8/09/18 0:00	8/14/18 9:56
GH17-1.5	1802940-14	Soil	8/09/18 0:00	8/14/18 9:56
GH18-0	1802940-15	Soil	8/09/18 0:00	8/14/18 9:56
GH18-1.5	1802940-16	Soil	8/09/18 0:00	8/14/18 9:56
GH19-0	1802940-17	Soil	8/09/18 0:00	8/14/18 9:56
GH19-1.5	1802940-18	Soil	8/09/18 0:00	8/14/18 9:56
GH20-0	1802940-19	Soil	8/09/18 0:00	8/14/18 9:56
GH20-1.5	1802940-20	Soil	8/09/18 0:00	8/14/18 9:56

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : EASTRIDGE-BART, E8222-02-02
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 10/26/2018

Client Sample ID GH11-0

Lab ID: 1802940-01

Title 22 Metals by ICP-AES EPA 6010B

Analyst: GO

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	1	B8H0536	08/17/2018	08/20/18 14:54	
Arsenic	**4.2**	1.0	1	B8H0536	08/17/2018	08/20/18 14:54	
Barium	**120**	1.0	1	B8H0536	08/17/2018	08/20/18 14:54	
Beryllium	ND	1.0	1	B8H0536	08/17/2018	08/20/18 14:54	
Cadmium	ND	1.0	1	B8H0536	08/17/2018	08/20/18 14:54	
Chromium	**42**	1.0	1	B8H0536	08/17/2018	08/20/18 14:54	
Cobalt	**11**	1.0	1	B8H0536	08/17/2018	08/20/18 14:54	
Copper	**29**	2.0	1	B8H0536	08/17/2018	08/20/18 14:54	
Lead	**4.8**	1.0	1	B8H0536	08/17/2018	08/20/18 14:54	
Molybdenum	ND	1.0	1	B8H0536	08/17/2018	08/20/18 14:54	
Nickel	**61**	1.0	1	B8H0536	08/17/2018	08/20/18 14:54	
Selenium	ND	1.0	1	B8H0536	08/17/2018	08/20/18 14:54	
Silver	ND	1.0	1	B8H0536	08/17/2018	08/20/18 14:54	
Thallium	ND	1.0	1	B8H0536	08/17/2018	08/20/18 14:54	
Vanadium	**35**	1.0	1	B8H0536	08/17/2018	08/20/18 14:54	
Zinc	**49**	1.0	1	B8H0536	08/17/2018	08/20/18 14:54	

Mercury by AA (Cold Vapor) EPA 7471A

Analyst: KEK

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	ND	0.10	1	B8H0539	08/17/2018	08/20/18 15:14	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: VW

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	1	B8H0433	08/15/2018	08/15/18 16:02	
Surrogate: 4-Bromofluorobenzene	*105 %*	*57 - 144*		B8H0433	08/15/2018	*08/15/18 16:02*	

Diesel Range Organics by EPA 8015B

Analyst: TKT

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	**13**	5.0	5	B8H0532	08/17/2018	08/18/18 00:10	
ORO	**28**	5.0	5	B8H0532	08/17/2018	08/18/18 00:10	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : EASTRIDGE-BART, E8222-02-02
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 10/26/2018

Client Sample ID GH11-0

Lab ID: 1802940-01

Diesel Range Organics by EPA 8015B

Analyst: TKT

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: p-Terphenyl	*46.7 %*	*34 - 158*		B8H0532	08/17/2018	*08/18/18 00:10*	

BTEX/MTBE by EPA 8021

Analyst: VW

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Benzene	ND	5.0	1	B8H0433	08/15/2018	08/15/18 16:02	
Toluene	ND	5.0	1	B8H0433	08/15/2018	08/15/18 16:02	
Ethylbenzene	ND	5.0	1	B8H0433	08/15/2018	08/15/18 16:02	
m,p-Xylene	ND	10	1	B8H0433	08/15/2018	08/15/18 16:02	
o-Xylene	ND	5.0	1	B8H0433	08/15/2018	08/15/18 16:02	
Surrogate: 4-Bromofluorobenzene	*94.0 %*	*37 - 139*		B8H0433	08/15/2018	*08/15/18 16:02*	

Organochlorine Pesticides by EPA 8081

Analyst: CO/

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
4,4´-DDD	ND	2.0	1	B8H0533	08/17/2018	08/20/18 08:13	
4,4´-DDE	ND	2.0	1	B8H0533	08/17/2018	08/20/18 08:13	
4,4´-DDT [2C]	ND	2.0	1	B8H0533	08/17/2018	08/20/18 08:13	
Aldrin	ND	1.0	1	B8H0533	08/17/2018	08/20/18 08:13	
alpha-BHC	ND	1.0	1	B8H0533	08/17/2018	08/20/18 08:13	
alpha-Chlordane	ND	1.0	1	B8H0533	08/17/2018	08/20/18 08:13	
beta-BHC	ND	1.0	1	B8H0533	08/17/2018	08/20/18 08:13	
Chlordane [2C]	ND	8.5	1	B8H0533	08/17/2018	08/20/18 08:13	
delta-BHC	ND	1.0	1	B8H0533	08/17/2018	08/20/18 08:13	
Dieldrin	ND	2.0	1	B8H0533	08/17/2018	08/20/18 08:13	
Endosulfan I	ND	1.0	1	B8H0533	08/17/2018	08/20/18 08:13	
Endosulfan II	ND	2.0	1	B8H0533	08/17/2018	08/20/18 08:13	
Endosulfan sulfate	ND	2.0	1	B8H0533	08/17/2018	08/20/18 08:13	
Endrin	ND	2.0	1	B8H0533	08/17/2018	08/20/18 08:13	
Endrin aldehyde	ND	2.0	1	B8H0533	08/17/2018	08/20/18 08:13	
Endrin ketone	ND	2.0	1	B8H0533	08/17/2018	08/20/18 08:13	
gamma-BHC	ND	1.0	1	B8H0533	08/17/2018	08/20/18 08:13	
gamma-Chlordane [2C]	ND	1.0	1	B8H0533	08/17/2018	08/20/18 08:13	
Heptachlor	ND	1.0	1	B8H0533	08/17/2018	08/20/18 08:13	
Heptachlor epoxide	ND	1.0	1	B8H0533	08/17/2018	08/20/18 08:13	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : EASTRIDGE-BART, E8222-02-02
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 10/26/2018

Client Sample ID GH11-0

Lab ID: 1802940-01

Organochlorine Pesticides by EPA 8081 **Analyst: CO/**

Analyte		Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Methoxychlor		ND	5.0	1	B8H0533	08/17/2018	08/20/18 08:13	
Toxaphene		ND	50	1	B8H0533	08/17/2018	08/20/18 08:13	
Surrogate: Decachlorobiphenyl	*51.6 %*		*15 - 100*		B8H0533	08/17/2018	*08/20/18 08:13*	
Surrogate: Tetrachloro-m-xylene	*90.5 %*		*16 - 100*		B8H0533	08/17/2018	*08/20/18 08:13*	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : EASTRIDGE-BART, E8222-02-02
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 10/26/2018

Client Sample ID GH11-1.5

Lab ID: 1802940-02

Title 22 Metals by ICP-AES EPA 6010B

Analyst: GO

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	1	B8H0536	08/17/2018	08/20/18 15:02	
Arsenic	**4.6**	1.0	1	B8H0536	08/17/2018	08/20/18 15:02	
Barium	**150**	1.0	1	B8H0536	08/17/2018	08/20/18 15:02	
Beryllium	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:02	
Cadmium	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:02	
Chromium	**39**	1.0	1	B8H0536	08/17/2018	08/20/18 15:02	
Cobalt	**10**	1.0	1	B8H0536	08/17/2018	08/20/18 15:02	
Copper	**23**	2.0	1	B8H0536	08/17/2018	08/20/18 15:02	
Lead	**18**	1.0	1	B8H0536	08/17/2018	08/20/18 15:02	
Molybdenum	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:02	
Nickel	**58**	1.0	1	B8H0536	08/17/2018	08/20/18 15:02	
Selenium	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:02	
Silver	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:02	
Thallium	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:02	
Vanadium	**31**	1.0	1	B8H0536	08/17/2018	08/20/18 15:02	
Zinc	**55**	1.0	1	B8H0536	08/17/2018	08/20/18 15:02	

Mercury by AA (Cold Vapor) EPA 7471A

Analyst: KEK

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	**0.12**	0.10	1	B8H0539	08/17/2018	08/20/18 15:25	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: VW

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	1	B8H0433	08/15/2018	08/15/18 16:21	
Surrogate: 4-Bromofluorobenzene *112 %*		*57 - 144*		B8H0433	08/15/2018	*08/15/18 16:21*	

Diesel Range Organics by EPA 8015B

Analyst: TKT

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	**8.3**	1.0	1	B8H0532	08/17/2018	08/18/18 01:33	
ORO	**19**	1.0	1	B8H0532	08/17/2018	08/18/18 01:33	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : EASTRIDGE-BART, E8222-02-02
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 10/26/2018

Client Sample ID GH11-1.5

Lab ID: 1802940-02

Diesel Range Organics by EPA 8015B

Analyst: TKT

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: p-Terphenyl	*105 %*	*34 - 158*		B8H0532	08/17/2018	*08/18/18 01:33*	

BTEX/MTBE by EPA 8021

Analyst: VW

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Benzene	ND	5.0	1	B8H0433	08/15/2018	08/15/18 16:21	
Toluene	ND	5.0	1	B8H0433	08/15/2018	08/15/18 16:21	
Ethylbenzene	ND	5.0	1	B8H0433	08/15/2018	08/15/18 16:21	
m,p-Xylene	ND	10	1	B8H0433	08/15/2018	08/15/18 16:21	
o-Xylene	ND	5.0	1	B8H0433	08/15/2018	08/15/18 16:21	
Surrogate: 4-Bromofluorobenzene	*101 %*	*37 - 139*		B8H0433	08/15/2018	*08/15/18 16:21*	

Organochlorine Pesticides by EPA 8081

Analyst: CO/

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
4,4´-DDD [2C]	ND	2.0	1	B8H0533	08/17/2018	08/20/18 08:24	
4,4´-DDE [2C]	**5.8**	2.0	1	B8H0533	08/17/2018	08/20/18 08:24	
4,4´-DDT	ND	2.0	1	B8H0533	08/17/2018	08/20/18 08:24	
Aldrin	ND	1.0	1	B8H0533	08/17/2018	08/20/18 08:24	
alpha-BHC	ND	1.0	1	B8H0533	08/17/2018	08/20/18 08:24	
alpha-Chlordane	ND	1.0	1	B8H0533	08/17/2018	08/20/18 08:24	
beta-BHC	ND	1.0	1	B8H0533	08/17/2018	08/20/18 08:24	
Chlordane [2C]	ND	8.5	1	B8H0533	08/17/2018	08/20/18 08:24	
delta-BHC	ND	1.0	1	B8H0533	08/17/2018	08/20/18 08:24	
Dieldrin [2C]	ND	2.0	1	B8H0533	08/17/2018	08/20/18 08:24	
Endosulfan I	ND	1.0	1	B8H0533	08/17/2018	08/20/18 08:24	
Endosulfan II	ND	2.0	1	B8H0533	08/17/2018	08/20/18 08:24	
Endosulfan sulfate	ND	2.0	1	B8H0533	08/17/2018	08/20/18 08:24	
Endrin	ND	2.0	1	B8H0533	08/17/2018	08/20/18 08:24	
Endrin aldehyde	ND	2.0	1	B8H0533	08/17/2018	08/20/18 08:24	
Endrin ketone	ND	2.0	1	B8H0533	08/17/2018	08/20/18 08:24	
gamma-BHC	ND	1.0	1	B8H0533	08/17/2018	08/20/18 08:24	
gamma-Chlordane [2C]	ND	1.0	1	B8H0533	08/17/2018	08/20/18 08:24	
Heptachlor	ND	1.0	1	B8H0533	08/17/2018	08/20/18 08:24	
Heptachlor epoxide	ND	1.0	1	B8H0533	08/17/2018	08/20/18 08:24	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : EASTRIDGE-BART, E8222-02-02
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 10/26/2018

Client Sample ID GH11-1.5

Lab ID: 1802940-02

Organochlorine Pesticides by EPA 8081 **Analyst: CO/**

Analyte		Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Methoxychlor		ND	5.0	1	B8H0533	08/17/2018	08/20/18 08:24	
Toxaphene		ND	50	1	B8H0533	08/17/2018	08/20/18 08:24	
Surrogate: Decachlorobiphenyl	*51.3 %*		*15 - 100*		B8H0533	08/17/2018	*08/20/18 08:24*	
Surrogate: Tetrachloro-m-xylene	*95.5 %*		*16 - 100*		B8H0533	08/17/2018	*08/20/18 08:24*	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : EASTRIDGE-BART, E8222-02-02
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 10/26/2018

Client Sample ID GH12-0

Lab ID: 1802940-03

Title 22 Metals by ICP-AES EPA 6010B

Analyst: GO

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	1	B8H0536	08/17/2018	08/20/18 15:03	
Arsenic	**4.6**	1.0	1	B8H0536	08/17/2018	08/20/18 15:03	
Barium	**130**	1.0	1	B8H0536	08/17/2018	08/20/18 15:03	
Beryllium	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:03	
Cadmium	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:03	
Chromium	**47**	1.0	1	B8H0536	08/17/2018	08/20/18 15:03	
Cobalt	**12**	1.0	1	B8H0536	08/17/2018	08/20/18 15:03	
Copper	**32**	2.0	1	B8H0536	08/17/2018	08/20/18 15:03	
Lead	**40**	1.0	1	B8H0536	08/17/2018	08/20/18 15:03	
Molybdenum	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:03	
Nickel	**94**	1.0	1	B8H0536	08/17/2018	08/20/18 15:03	
Selenium	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:03	
Silver	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:03	
Thallium	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:03	
Vanadium	**31**	1.0	1	B8H0536	08/17/2018	08/20/18 15:03	
Zinc	**63**	1.0	1	B8H0536	08/17/2018	08/20/18 15:03	

Mercury by AA (Cold Vapor) EPA 7471A

Analyst: KEK

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	ND	0.10	1	B8H0539	08/17/2018	08/20/18 15:27	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: VW

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	1	B8H0433	08/15/2018	08/15/18 16:40	
Surrogate: 4-Bromofluorobenzene	*112 %*	*57 - 144*		B8H0433	08/15/2018	*08/15/18 16:40*	

Diesel Range Organics by EPA 8015B

Analyst: TKT

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	**34**	10	10	B8H0532	08/17/2018	08/18/18 02:23	
ORO	**110**	10	10	B8H0532	08/17/2018	08/18/18 02:23	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : EASTRIDGE-BART, E8222-02-02
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 10/26/2018

Client Sample ID GH12-0

Lab ID: 1802940-03

Diesel Range Organics by EPA 8015B

Analyst: TKT

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: p-Terphenyl	*0%*	*34 - 158*		B8H0532	08/17/2018	*08/18/18 02:23*	S4

BTEX/MTBE by EPA 8021

Analyst: VW

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Benzene	ND	5.0	1	B8H0433	08/15/2018	08/15/18 16:40	
Toluene	ND	5.0	1	B8H0433	08/15/2018	08/15/18 16:40	
Ethylbenzene	ND	5.0	1	B8H0433	08/15/2018	08/15/18 16:40	
m,p-Xylene	ND	10	1	B8H0433	08/15/2018	08/15/18 16:40	
o-Xylene	ND	5.0	1	B8H0433	08/15/2018	08/15/18 16:40	
Surrogate: 4-Bromofluorobenzene	*100 %*	*37 - 139*		B8H0433	08/15/2018	*08/15/18 16:40*	

Organochlorine Pesticides by EPA 8081

Analyst: CO/

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
4,4´-DDD [2C]	ND	2.0	1	B8H0533	08/17/2018	08/20/18 08:34	
4,4´-DDE [2C]	**3.0**	2.0	1	B8H0533	08/17/2018	08/20/18 08:34	
4,4´-DDT [2C]	ND	2.0	1	B8H0533	08/17/2018	08/20/18 08:34	
Aldrin	ND	1.0	1	B8H0533	08/17/2018	08/20/18 08:34	
alpha-BHC	ND	1.0	1	B8H0533	08/17/2018	08/20/18 08:34	
alpha-Chlordane	ND	1.0	1	B8H0533	08/17/2018	08/20/18 08:34	
beta-BHC	ND	1.0	1	B8H0533	08/17/2018	08/20/18 08:34	
Chlordane [2C]	ND	8.5	1	B8H0533	08/17/2018	08/20/18 08:34	
delta-BHC	ND	1.0	1	B8H0533	08/17/2018	08/20/18 08:34	
Dieldrin [2C]	ND	2.0	1	B8H0533	08/17/2018	08/20/18 08:34	
Endosulfan I	ND	1.0	1	B8H0533	08/17/2018	08/20/18 08:34	
Endosulfan II	ND	2.0	1	B8H0533	08/17/2018	08/20/18 08:34	
Endosulfan sulfate	ND	2.0	1	B8H0533	08/17/2018	08/20/18 08:34	
Endrin	ND	2.0	1	B8H0533	08/17/2018	08/20/18 08:34	
Endrin aldehyde	ND	2.0	1	B8H0533	08/17/2018	08/20/18 08:34	
Endrin ketone	ND	2.0	1	B8H0533	08/17/2018	08/20/18 08:34	
gamma-BHC	ND	1.0	1	B8H0533	08/17/2018	08/20/18 08:34	
gamma-Chlordane [2C]	ND	1.0	1	B8H0533	08/17/2018	08/20/18 08:34	
Heptachlor	ND	1.0	1	B8H0533	08/17/2018	08/20/18 08:34	
Heptachlor epoxide	ND	1.0	1	B8H0533	08/17/2018	08/20/18 08:34	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : EASTRIDGE-BART, E8222-02-02
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 10/26/2018

Client Sample ID GH12-0

Lab ID: 1802940-03

Organochlorine Pesticides by EPA 8081 **Analyst: CO/**

Analyte		Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Methoxychlor		ND	5.0	1	B8H0533	08/17/2018	08/20/18 08:34	
Toxaphene		ND	50	1	B8H0533	08/17/2018	08/20/18 08:34	
Surrogate: Decachlorobiphenyl	*29.3 %*		*15 - 100*		B8H0533	08/17/2018	*08/20/18 08:34*	
Surrogate: Tetrachloro-m-xylene	*53.5 %*		*16 - 100*		B8H0533	08/17/2018	*08/20/18 08:34*	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : EASTRIDGE-BART, E8222-02-02
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 10/26/2018

Client Sample ID GH12-1.5

Lab ID: 1802940-04

Title 22 Metals by ICP-AES EPA 6010B

Analyst: GO

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	1	B8H0536	08/17/2018	08/20/18 15:04	
Arsenic	**3.4**	1.0	1	B8H0536	08/17/2018	08/20/18 15:04	
Barium	**110**	1.0	1	B8H0536	08/17/2018	08/20/18 15:04	
Beryllium	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:04	
Cadmium	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:04	
Chromium	**74**	1.0	1	B8H0536	08/17/2018	08/20/18 15:04	
Cobalt	**20**	1.0	1	B8H0536	08/17/2018	08/20/18 15:04	
Copper	**29**	2.0	1	B8H0536	08/17/2018	08/20/18 15:04	
Lead	**200**	1.0	1	B8H0536	08/17/2018	08/20/18 15:04	
Molybdenum	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:04	
Nickel	**240**	1.0	1	B8H0536	08/17/2018	08/20/18 15:04	
Selenium	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:04	
Silver	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:04	
Thallium	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:04	
Vanadium	**35**	1.0	1	B8H0536	08/17/2018	08/20/18 15:04	
Zinc	**59**	1.0	1	B8H0536	08/17/2018	08/20/18 15:04	

Mercury by AA (Cold Vapor) EPA 7471A

Analyst: KEK

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	ND	0.10	1	B8H0539	08/17/2018	08/20/18 15:29	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: VW

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	1	B8H0433	08/15/2018	08/15/18 16:58	
Surrogate: 4-Bromofluorobenzene	*102 %*	*57 - 144*		B8H0433	08/15/2018	*08/15/18 16:58*	

Diesel Range Organics by EPA 8015B

Analyst: TKT

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	**40**	10	10	B8H0532	08/17/2018	08/18/18 00:43	
ORO	**84**	10	10	B8H0532	08/17/2018	08/18/18 00:43	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : EASTRIDGE-BART, E8222-02-02
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 10/26/2018

Client Sample ID GH12-1.5

Lab ID: 1802940-04

Diesel Range Organics by EPA 8015B

Analyst: TKT

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: p-Terphenyl	*0%*	*34 - 158*		B8H0532	08/17/2018	*08/18/18 00:43*	S4

BTEX/MTBE by EPA 8021

Analyst: VW

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Benzene	ND	5.0	1	B8H0433	08/15/2018	08/15/18 16:58	
Toluene	ND	5.0	1	B8H0433	08/15/2018	08/15/18 16:58	
Ethylbenzene	ND	5.0	1	B8H0433	08/15/2018	08/15/18 16:58	
m,p-Xylene	ND	10	1	B8H0433	08/15/2018	08/15/18 16:58	
o-Xylene	ND	5.0	1	B8H0433	08/15/2018	08/15/18 16:58	
Surrogate: 4-Bromofluorobenzene	*88.0 %*	*37 - 139*		B8H0433	08/15/2018	*08/15/18 16:58*	

Organochlorine Pesticides by EPA 8081

Analyst: CO/

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
4,4´-DDD	ND	2.0	1	B8H0533	08/17/2018	08/20/18 08:45	
4,4´-DDE [2C]	**2.4**	2.0	1	B8H0533	08/17/2018	08/20/18 08:45	
4,4´-DDT [2C]	ND	2.0	1	B8H0533	08/17/2018	08/20/18 08:45	
Aldrin	ND	1.0	1	B8H0533	08/17/2018	08/20/18 08:45	
alpha-BHC	ND	1.0	1	B8H0533	08/17/2018	08/20/18 08:45	
alpha-Chlordane	ND	1.0	1	B8H0533	08/17/2018	08/20/18 08:45	
beta-BHC	ND	1.0	1	B8H0533	08/17/2018	08/20/18 08:45	
Chlordane [2C]	ND	8.5	1	B8H0533	08/17/2018	08/20/18 08:45	
delta-BHC	ND	1.0	1	B8H0533	08/17/2018	08/20/18 08:45	
Dieldrin	ND	2.0	1	B8H0533	08/17/2018	08/20/18 08:45	
Endosulfan I	ND	1.0	1	B8H0533	08/17/2018	08/20/18 08:45	
Endosulfan II	ND	2.0	1	B8H0533	08/17/2018	08/20/18 08:45	
Endosulfan sulfate	ND	2.0	1	B8H0533	08/17/2018	08/20/18 08:45	
Endrin	ND	2.0	1	B8H0533	08/17/2018	08/20/18 08:45	
Endrin aldehyde	ND	2.0	1	B8H0533	08/17/2018	08/20/18 08:45	
Endrin ketone	ND	2.0	1	B8H0533	08/17/2018	08/20/18 08:45	
gamma-BHC	ND	1.0	1	B8H0533	08/17/2018	08/20/18 08:45	
gamma-Chlordane [2C]	ND	1.0	1	B8H0533	08/17/2018	08/20/18 08:45	
Heptachlor	ND	1.0	1	B8H0533	08/17/2018	08/20/18 08:45	
Heptachlor epoxide	ND	1.0	1	B8H0533	08/17/2018	08/20/18 08:45	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : EASTRIDGE-BART, E8222-02-02
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 10/26/2018

Client Sample ID GH12-1.5

Lab ID: 1802940-04

Organochlorine Pesticides by EPA 8081 **Analyst: CO/**

Analyte		Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Methoxychlor		ND	5.0	1	B8H0533	08/17/2018	08/20/18 08:45	
Toxaphene		ND	50	1	B8H0533	08/17/2018	08/20/18 08:45	
Surrogate: Decachlorobiphenyl	*34.7 %*		*15 - 100*		B8H0533	08/17/2018	*08/20/18 08:45*	
Surrogate: Tetrachloro-m-xylene	*52.2 %*		*16 - 100*		B8H0533	08/17/2018	*08/20/18 08:45*	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : EASTRIDGE-BART, E8222-02-02
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 10/26/2018

Client Sample ID GH13-0

Lab ID: 1802940-05

Title 22 Metals by ICP-AES EPA 6010B

Analyst: GO

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	1	B8H0536	08/17/2018	08/20/18 15:05	
Arsenic	**4.7**	1.0	1	B8H0536	08/17/2018	08/20/18 15:05	
Barium	**140**	1.0	1	B8H0536	08/17/2018	08/20/18 15:05	
Beryllium	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:05	
Cadmium	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:05	
Chromium	**64**	1.0	1	B8H0536	08/17/2018	08/20/18 15:05	
Cobalt	**15**	1.0	1	B8H0536	08/17/2018	08/20/18 15:05	
Copper	**34**	2.0	1	B8H0536	08/17/2018	08/20/18 15:05	
Lead	**44**	1.0	1	B8H0536	08/17/2018	08/20/18 15:05	
Molybdenum	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:05	
Nickel	**130**	1.0	1	B8H0536	08/17/2018	08/20/18 15:05	
Selenium	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:05	
Silver	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:05	
Thallium	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:05	
Vanadium	**37**	1.0	1	B8H0536	08/17/2018	08/20/18 15:05	
Zinc	**61**	1.0	1	B8H0536	08/17/2018	08/20/18 15:05	

Mercury by AA (Cold Vapor) EPA 7471A

Analyst: KEK

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	ND	0.10	1	B8H0539	08/17/2018	08/20/18 15:30	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: VW

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	1	B8H0433	08/15/2018	08/15/18 17:17	
Surrogate: 4-Bromofluorobenzene	*107 %*	*57 - 144*		B8H0433	08/15/2018	*08/15/18 17:17*	

Diesel Range Organics by EPA 8015B

Analyst: TKT

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	**29**	10	10	B8H0532	08/17/2018	08/18/18 01:17	
ORO	**63**	10	10	B8H0532	08/17/2018	08/18/18 01:17	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : EASTRIDGE-BART, E8222-02-02
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 10/26/2018

Client Sample ID GH13-0

Lab ID: 1802940-05

Diesel Range Organics by EPA 8015B

Analyst: TKT

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: p-Terphenyl	*0%*	*34 - 158*		B8H0532	08/17/2018	*08/18/18 01:17*	S4

BTEX/MTBE by EPA 8021

Analyst: VW

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Benzene	ND	5.0	1	B8H0433	08/15/2018	08/15/18 17:17	
Toluene	ND	5.0	1	B8H0433	08/15/2018	08/15/18 17:17	
Ethylbenzene	ND	5.0	1	B8H0433	08/15/2018	08/15/18 17:17	
m,p-Xylene	ND	10	1	B8H0433	08/15/2018	08/15/18 17:17	
o-Xylene	ND	5.0	1	B8H0433	08/15/2018	08/15/18 17:17	
Surrogate: 4-Bromofluorobenzene	*93.1 %*	*37 - 139*		B8H0433	08/15/2018	*08/15/18 17:17*	

Organochlorine Pesticides by EPA 8081

Analyst: CO/

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
4,4´-DDD	ND	2.0	1	B8H0533	08/17/2018	08/20/18 08:55	
4,4´-DDE	**7.1**	2.0	1	B8H0533	08/17/2018	08/20/18 08:55	
4,4´-DDT [2C]	**3.3**	2.0	1	B8H0533	08/17/2018	08/20/18 08:55	
Aldrin	ND	1.0	1	B8H0533	08/17/2018	08/20/18 08:55	
alpha-BHC	ND	1.0	1	B8H0533	08/17/2018	08/20/18 08:55	
alpha-Chlordane	ND	1.0	1	B8H0533	08/17/2018	08/20/18 08:55	
beta-BHC	ND	1.0	1	B8H0533	08/17/2018	08/20/18 08:55	
Chlordane [2C]	ND	8.5	1	B8H0533	08/17/2018	08/20/18 08:55	
delta-BHC	ND	1.0	1	B8H0533	08/17/2018	08/20/18 08:55	
Dieldrin	ND	2.0	1	B8H0533	08/17/2018	08/20/18 08:55	
Endosulfan I	ND	1.0	1	B8H0533	08/17/2018	08/20/18 08:55	
Endosulfan II	ND	2.0	1	B8H0533	08/17/2018	08/20/18 08:55	
Endosulfan sulfate	ND	2.0	1	B8H0533	08/17/2018	08/20/18 08:55	
Endrin	ND	2.0	1	B8H0533	08/17/2018	08/20/18 08:55	
Endrin aldehyde	ND	2.0	1	B8H0533	08/17/2018	08/20/18 08:55	
Endrin ketone	ND	2.0	1	B8H0533	08/17/2018	08/20/18 08:55	
gamma-BHC	ND	1.0	1	B8H0533	08/17/2018	08/20/18 08:55	
gamma-Chlordane [2C]	ND	1.0	1	B8H0533	08/17/2018	08/20/18 08:55	
Heptachlor	ND	1.0	1	B8H0533	08/17/2018	08/20/18 08:55	
Heptachlor epoxide	ND	1.0	1	B8H0533	08/17/2018	08/20/18 08:55	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : EASTRIDGE-BART, E8222-02-02
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 10/26/2018

Client Sample ID GH13-0

Lab ID: 1802940-05

Organochlorine Pesticides by EPA 8081 **Analyst: CO/**

Analyte		Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Methoxychlor		ND	5.0	1	B8H0533	08/17/2018	08/20/18 08:55	
Toxaphene		ND	50	1	B8H0533	08/17/2018	08/20/18 08:55	
Surrogate: Decachlorobiphenyl	*65.0 %*		*15 - 100*		B8H0533	08/17/2018	*08/20/18 08:55*	
Surrogate: Tetrachloro-m-xylene	*89.2 %*		*16 - 100*		B8H0533	08/17/2018	*08/20/18 08:55*	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : EASTRIDGE-BART, E8222-02-02
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 10/26/2018

Client Sample ID GH13-1.5

Lab ID: 1802940-06

Title 22 Metals by ICP-AES EPA 6010B

Analyst: GO

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	1	B8H0536	08/17/2018	08/20/18 15:07	
Arsenic	**5.6**	1.0	1	B8H0536	08/17/2018	08/20/18 15:07	
Barium	**150**	1.0	1	B8H0536	08/17/2018	08/20/18 15:07	
Beryllium	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:07	
Cadmium	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:07	
Chromium	**49**	1.0	1	B8H0536	08/17/2018	08/20/18 15:07	
Cobalt	**12**	1.0	1	B8H0536	08/17/2018	08/20/18 15:07	
Copper	**33**	2.0	1	B8H0536	08/17/2018	08/20/18 15:07	
Lead	**6.2**	1.0	1	B8H0536	08/17/2018	08/20/18 15:07	
Molybdenum	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:07	
Nickel	**72**	1.0	1	B8H0536	08/17/2018	08/20/18 15:07	
Selenium	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:07	
Silver	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:07	
Thallium	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:07	
Vanadium	**37**	1.0	1	B8H0536	08/17/2018	08/20/18 15:07	
Zinc	**55**	1.0	1	B8H0536	08/17/2018	08/20/18 15:07	

Mercury by AA (Cold Vapor) EPA 7471A

Analyst: KEK

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	ND	0.10	1	B8H0539	08/17/2018	08/20/18 15:32	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: VW

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	1	B8H0433	08/15/2018	08/15/18 17:36	
Surrogate: 4-Bromofluorobenzene	*105 %*	*57 - 144*		B8H0433	08/15/2018	*08/15/18 17:36*	

Diesel Range Organics by EPA 8015B

Analyst: TKT

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	**5.0**	1.0	1	B8H0532	08/17/2018	08/17/18 23:20	
ORO	**5.5**	1.0	1	B8H0532	08/17/2018	08/17/18 23:20	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : EASTRIDGE-BART, E8222-02-02
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 10/26/2018

Client Sample ID GH13-1.5

Lab ID: 1802940-06

Diesel Range Organics by EPA 8015B

Analyst: TKT

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: p-Terphenyl	*103 %*	*34 - 158*		B8H0532	08/17/2018	*08/17/18 23:20*	

BTEX/MTBE by EPA 8021

Analyst: VW

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Benzene	ND	5.0	1	B8H0433	08/15/2018	08/15/18 17:36	
Toluene	ND	5.0	1	B8H0433	08/15/2018	08/15/18 17:36	
Ethylbenzene	ND	5.0	1	B8H0433	08/15/2018	08/15/18 17:36	
m,p-Xylene	ND	10	1	B8H0433	08/15/2018	08/15/18 17:36	
o-Xylene	ND	5.0	1	B8H0433	08/15/2018	08/15/18 17:36	
Surrogate: 4-Bromofluorobenzene	*93.7 %*	*37 - 139*		B8H0433	08/15/2018	*08/15/18 17:36*	

Organochlorine Pesticides by EPA 8081

Analyst: CO/

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
4,4´-DDD	ND	2.0	1	B8H0533	08/17/2018	08/20/18 09:06	
4,4´-DDE [2C]	ND	2.0	1	B8H0533	08/17/2018	08/20/18 09:06	
4,4´-DDT	ND	2.0	1	B8H0533	08/17/2018	08/20/18 09:06	
Aldrin	ND	1.0	1	B8H0533	08/17/2018	08/20/18 09:06	
alpha-BHC	ND	1.0	1	B8H0533	08/17/2018	08/20/18 09:06	
alpha-Chlordane	ND	1.0	1	B8H0533	08/17/2018	08/20/18 09:06	
beta-BHC	ND	1.0	1	B8H0533	08/17/2018	08/20/18 09:06	
Chlordane	ND	8.5	1	B8H0533	08/17/2018	08/20/18 09:06	
delta-BHC	ND	1.0	1	B8H0533	08/17/2018	08/20/18 09:06	
Dieldrin	ND	2.0	1	B8H0533	08/17/2018	08/20/18 09:06	
Endosulfan I	ND	1.0	1	B8H0533	08/17/2018	08/20/18 09:06	
Endosulfan II	ND	2.0	1	B8H0533	08/17/2018	08/20/18 09:06	
Endosulfan sulfate	ND	2.0	1	B8H0533	08/17/2018	08/20/18 09:06	
Endrin	ND	2.0	1	B8H0533	08/17/2018	08/20/18 09:06	
Endrin aldehyde	ND	2.0	1	B8H0533	08/17/2018	08/20/18 09:06	
Endrin ketone	ND	2.0	1	B8H0533	08/17/2018	08/20/18 09:06	
gamma-BHC	ND	1.0	1	B8H0533	08/17/2018	08/20/18 09:06	
gamma-Chlordane	ND	1.0	1	B8H0533	08/17/2018	08/20/18 09:06	
Heptachlor	ND	1.0	1	B8H0533	08/17/2018	08/20/18 09:06	
Heptachlor epoxide	ND	1.0	1	B8H0533	08/17/2018	08/20/18 09:06	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : EASTRIDGE-BART, E8222-02-02
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 10/26/2018

Client Sample ID GH13-1.5

Lab ID: 1802940-06

Organochlorine Pesticides by EPA 8081 **Analyst: CO/**

Analyte		Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Methoxychlor		ND	5.0	1	B8H0533	08/17/2018	08/20/18 09:06	
Toxaphene		ND	50	1	B8H0533	08/17/2018	08/20/18 09:06	
Surrogate: Decachlorobiphenyl	*52.1 %*		*15 - 100*		B8H0533	08/17/2018	*08/20/18 09:06*	
Surrogate: Tetrachloro-m-xylene	*86.7 %*		*16 - 100*		B8H0533	08/17/2018	*08/20/18 09:06*	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : EASTRIDGE-BART, E8222-02-02
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 10/26/2018

Client Sample ID GH14-0

Lab ID: 1802940-07

Title 22 Metals by ICP-AES EPA 6010B

Analyst: GO

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	1	B8H0536	08/17/2018	08/20/18 15:08	
Arsenic	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:08	
Barium	**83**	1.0	1	B8H0536	08/17/2018	08/20/18 15:08	
Beryllium	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:08	
Cadmium	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:08	
Chromium	**130**	1.0	1	B8H0536	08/17/2018	08/20/18 15:08	
Cobalt	**28**	1.0	1	B8H0536	08/17/2018	08/20/18 15:08	
Copper	**25**	2.0	1	B8H0536	08/17/2018	08/20/18 15:08	
Lead	**13**	1.0	1	B8H0536	08/17/2018	08/20/18 15:08	
Molybdenum	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:08	
Nickel	**400**	1.0	1	B8H0536	08/17/2018	08/20/18 15:08	
Selenium	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:08	
Silver	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:08	
Thallium	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:08	
Vanadium	**29**	1.0	1	B8H0536	08/17/2018	08/20/18 15:08	
Zinc	**40**	1.0	1	B8H0536	08/17/2018	08/20/18 15:08	

Mercury by AA (Cold Vapor) EPA 7471A

Analyst: KEK

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	ND	0.10	1	B8H0539	08/17/2018	08/20/18 15:34	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: VW

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	1	B8H0433	08/15/2018	08/15/18 17:54	
Surrogate: 4-Bromofluorobenzene	*102 %*	*57 - 144*		B8H0433	08/15/2018	*08/15/18 17:54*	

Diesel Range Organics by EPA 8015B

Analyst: TKT

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	**230**	50	50	B8H0532	08/17/2018	08/18/18 02:40	
ORO	**630**	50	50	B8H0532	08/17/2018	08/18/18 02:40	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : EASTRIDGE-BART, E8222-02-02
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 10/26/2018

Client Sample ID GH14-0

Lab ID: 1802940-07

Diesel Range Organics by EPA 8015B

Analyst: TKT

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: p-Terphenyl	*0%*	*34 - 158*		B8H0532	08/17/2018	*08/18/18 02:40*	S4

BTEX/MTBE by EPA 8021

Analyst: VW

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Benzene	ND	5.0	1	B8H0433	08/15/2018	08/15/18 17:54	
Toluene	ND	5.0	1	B8H0433	08/15/2018	08/15/18 17:54	
Ethylbenzene	ND	5.0	1	B8H0433	08/15/2018	08/15/18 17:54	
m,p-Xylene	ND	10	1	B8H0433	08/15/2018	08/15/18 17:54	
o-Xylene	ND	5.0	1	B8H0433	08/15/2018	08/15/18 17:54	
Surrogate: 4-Bromofluorobenzene	*90.0 %*	*37 - 139*		B8H0433	08/15/2018	*08/15/18 17:54*	

Organochlorine Pesticides by EPA 8081

Analyst: CO/

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
4,4´-DDD	ND	10	5	B8H0533	08/17/2018	08/20/18 09:16	D1
4,4´-DDE [2C]	ND	10	5	B8H0533	08/17/2018	08/20/18 09:16	D1
4,4´-DDT [2C]	ND	10	5	B8H0533	08/17/2018	08/20/18 09:16	D1
Aldrin	ND	5.0	5	B8H0533	08/17/2018	08/20/18 09:16	D1
alpha-BHC	ND	5.0	5	B8H0533	08/17/2018	08/20/18 09:16	D1
alpha-Chlordane	ND	5.0	5	B8H0533	08/17/2018	08/20/18 09:16	D1
beta-BHC	ND	5.0	5	B8H0533	08/17/2018	08/20/18 09:16	D1
Chlordane [2C]	ND	42	5	B8H0533	08/17/2018	08/20/18 09:16	D1
delta-BHC	ND	5.0	5	B8H0533	08/17/2018	08/20/18 09:16	D1
Dieldrin	ND	10	5	B8H0533	08/17/2018	08/20/18 09:16	D1
Endosulfan I	ND	5.0	5	B8H0533	08/17/2018	08/20/18 09:16	D1
Endosulfan II	ND	10	5	B8H0533	08/17/2018	08/20/18 09:16	D1
Endosulfan sulfate	ND	10	5	B8H0533	08/17/2018	08/20/18 09:16	D1
Endrin	ND	10	5	B8H0533	08/17/2018	08/20/18 09:16	D1
Endrin aldehyde	ND	10	5	B8H0533	08/17/2018	08/20/18 09:16	D1
Endrin ketone	ND	10	5	B8H0533	08/17/2018	08/20/18 09:16	D1
gamma-BHC	ND	5.0	5	B8H0533	08/17/2018	08/20/18 09:16	D1
gamma-Chlordane [2C]	ND	5.0	5	B8H0533	08/17/2018	08/20/18 09:16	D1
Heptachlor	ND	5.0	5	B8H0533	08/17/2018	08/20/18 09:16	D1
Heptachlor epoxide	ND	5.0	5	B8H0533	08/17/2018	08/20/18 09:16	D1

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : EASTRIDGE-BART, E8222-02-02
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 10/26/2018

Client Sample ID GH14-0

Lab ID: 1802940-07

Organochlorine Pesticides by EPA 8081 **Analyst: CO/**

Analyte		Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Methoxychlor		ND	25	5	B8H0533	08/17/2018	08/20/18 09:16	D1
Toxaphene		ND	250	5	B8H0533	08/17/2018	08/20/18 09:16	D1
Surrogate: Decachlorobiphenyl	*49.7 %*		*15 - 100*		B8H0533	08/17/2018	*08/20/18 09:16*	
Surrogate: Tetrachloro-m-xylene	*60.4 %*		*16 - 100*		B8H0533	08/17/2018	*08/20/18 09:16*	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : EASTRIDGE-BART, E8222-02-02
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 10/26/2018

Client Sample ID GH14-1.5

Lab ID: 1802940-08

Title 22 Metals by ICP-AES EPA 6010B

Analyst: GO

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	1	B8H0536	08/17/2018	08/20/18 15:09	
Arsenic	**4.0**	1.0	1	B8H0536	08/17/2018	08/20/18 15:09	
Barium	**130**	1.0	1	B8H0536	08/17/2018	08/20/18 15:09	
Beryllium	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:09	
Cadmium	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:09	
Chromium	**120**	1.0	1	B8H0536	08/17/2018	08/20/18 15:09	
Cobalt	**12**	1.0	1	B8H0536	08/17/2018	08/20/18 15:09	
Copper	**30**	2.0	1	B8H0536	08/17/2018	08/20/18 15:09	
Lead	**30**	1.0	1	B8H0536	08/17/2018	08/20/18 15:09	
Molybdenum	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:09	
Nickel	**100**	1.0	1	B8H0536	08/17/2018	08/20/18 15:09	
Selenium	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:09	
Silver	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:09	
Thallium	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:09	
Vanadium	**30**	1.0	1	B8H0536	08/17/2018	08/20/18 15:09	
Zinc	**100**	1.0	1	B8H0536	08/17/2018	08/20/18 15:09	

Mercury by AA (Cold Vapor) EPA 7471A

Analyst: KEK

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	**0.23**	0.10	1	B8H0539	08/17/2018	08/20/18 15:36	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: VW

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	1	B8H0433	08/15/2018	08/15/18 18:13	
Surrogate: 4-Bromofluorobenzene	*101 %*	*57 - 144*		B8H0433	08/15/2018	*08/15/18 18:13*	

Diesel Range Organics by EPA 8015B

Analyst: TKT

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	**500**	50	50	B8H0532	08/17/2018	08/18/18 03:29	
ORO	**1600**	50	50	B8H0532	08/17/2018	08/18/18 03:29	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : EASTRIDGE-BART, E8222-02-02
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 10/26/2018

Client Sample ID GH14-1.5

Lab ID: 1802940-08

Diesel Range Organics by EPA 8015B

Analyst: TKT

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: p-Terphenyl	*0%*	*34 - 158*		B8H0532	08/17/2018	*08/18/18 03:29*	S4

BTEX/MTBE by EPA 8021

Analyst: VW

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Benzene	ND	5.0	1	B8H0433	08/15/2018	08/15/18 18:13	
Toluene	ND	5.0	1	B8H0433	08/15/2018	08/15/18 18:13	
Ethylbenzene	ND	5.0	1	B8H0433	08/15/2018	08/15/18 18:13	
m,p-Xylene	ND	10	1	B8H0433	08/15/2018	08/15/18 18:13	
o-Xylene	ND	5.0	1	B8H0433	08/15/2018	08/15/18 18:13	
Surrogate: 4-Bromofluorobenzene	*89.2 %*	*37 - 139*		B8H0433	08/15/2018	*08/15/18 18:13*	

Organochlorine Pesticides by EPA 8081

Analyst: CO/

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
4,4´-DDD	ND	2.0	1	B8H0533	08/17/2018	08/20/18 09:27	
4,4´-DDE	**14**	2.0	1	B8H0533	08/17/2018	08/20/18 09:27	
4,4´-DDT	**7.3**	2.0	1	B8H0533	08/17/2018	08/20/18 09:27	
Aldrin [2C]	ND	1.0	1	B8H0533	08/17/2018	08/20/18 09:27	
alpha-BHC	ND	1.0	1	B8H0533	08/17/2018	08/20/18 09:27	
alpha-Chlordane	ND	1.0	1	B8H0533	08/17/2018	08/20/18 09:27	
beta-BHC	ND	1.0	1	B8H0533	08/17/2018	08/20/18 09:27	
Chlordane	ND	8.5	1	B8H0533	08/17/2018	08/20/18 09:27	
delta-BHC	ND	1.0	1	B8H0533	08/17/2018	08/20/18 09:27	
Dieldrin	ND	2.0	1	B8H0533	08/17/2018	08/20/18 09:27	
Endosulfan I	ND	1.0	1	B8H0533	08/17/2018	08/20/18 09:27	
Endosulfan II	ND	2.0	1	B8H0533	08/17/2018	08/20/18 09:27	
Endosulfan sulfate	ND	2.0	1	B8H0533	08/17/2018	08/20/18 09:27	
Endrin	ND	2.0	1	B8H0533	08/17/2018	08/20/18 09:27	
Endrin aldehyde	ND	2.0	1	B8H0533	08/17/2018	08/20/18 09:27	
Endrin ketone	ND	2.0	1	B8H0533	08/17/2018	08/20/18 09:27	
gamma-BHC	ND	1.0	1	B8H0533	08/17/2018	08/20/18 09:27	
gamma-Chlordane	ND	1.0	1	B8H0533	08/17/2018	08/20/18 09:27	
Heptachlor	ND	1.0	1	B8H0533	08/17/2018	08/20/18 09:27	
Heptachlor epoxide	ND	1.0	1	B8H0533	08/17/2018	08/20/18 09:27	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : EASTRIDGE-BART, E8222-02-02
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 10/26/2018

Client Sample ID GH14-1.5

Lab ID: 1802940-08

Organochlorine Pesticides by EPA 8081 **Analyst: CO/**

Analyte		Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Methoxychlor		ND	5.0	1	B8H0533	08/17/2018	08/20/18 09:27	
Toxaphene		ND	50	1	B8H0533	08/17/2018	08/20/18 09:27	
Surrogate: Decachlorobiphenyl	*66.2 %*		*15 - 100*		B8H0533	08/17/2018	*08/20/18 09:27*	
Surrogate: Tetrachloro-m-xylene	*88.6 %*		*16 - 100*		B8H0533	08/17/2018	*08/20/18 09:27*	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : EASTRIDGE-BART, E8222-02-02
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 10/26/2018

Client Sample ID GH15-0

Lab ID: 1802940-09

Title 22 Metals by ICP-AES EPA 6010B

Analyst: GO

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	1	B8H0536	08/17/2018	08/20/18 15:10	
Arsenic	**3.4**	1.0	1	B8H0536	08/17/2018	08/20/18 15:10	
Barium	**140**	1.0	1	B8H0536	08/17/2018	08/20/18 15:10	
Beryllium	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:10	
Cadmium	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:10	
Chromium	**71**	1.0	1	B8H0536	08/17/2018	08/20/18 15:10	
Cobalt	**20**	1.0	1	B8H0536	08/17/2018	08/20/18 15:10	
Copper	**36**	2.0	1	B8H0536	08/17/2018	08/20/18 15:10	
Lead	**18**	1.0	1	B8H0536	08/17/2018	08/20/18 15:10	
Molybdenum	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:10	
Nickel	**240**	1.0	1	B8H0536	08/17/2018	08/20/18 15:10	
Selenium	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:10	
Silver	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:10	
Thallium	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:10	
Vanadium	**31**	1.0	1	B8H0536	08/17/2018	08/20/18 15:10	
Zinc	**49**	1.0	1	B8H0536	08/17/2018	08/20/18 15:10	

Mercury by AA (Cold Vapor) EPA 7471A

Analyst: KEK

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	ND	0.10	1	B8H0539	08/17/2018	08/20/18 15:38	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: VW

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	1	B8H0433	08/15/2018	08/15/18 18:31	
Surrogate: 4-Bromofluorobenzene	*106 %*	*57 - 144*		B8H0433	08/15/2018	*08/15/18 18:31*	

Diesel Range Organics by EPA 8015B

Analyst: TKT

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	**310**	50	50	B8H0532	08/17/2018	08/18/18 03:13	
ORO	**980**	50	50	B8H0532	08/17/2018	08/18/18 03:13	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : EASTRIDGE-BART, E8222-02-02
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 10/26/2018

Client Sample ID GH15-0

Lab ID: 1802940-09

Diesel Range Organics by EPA 8015B

Analyst: TKT

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: p-Terphenyl	*0%*	*34 - 158*		B8H0532	08/17/2018	*08/18/18 03:13*	S4

BTEX/MTBE by EPA 8021

Analyst: VW

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Benzene	ND	5.0	1	B8H0433	08/15/2018	08/15/18 18:31	
Toluene	ND	5.0	1	B8H0433	08/15/2018	08/15/18 18:31	
Ethylbenzene	ND	5.0	1	B8H0433	08/15/2018	08/15/18 18:31	
m,p-Xylene	ND	10	1	B8H0433	08/15/2018	08/15/18 18:31	
o-Xylene	ND	5.0	1	B8H0433	08/15/2018	08/15/18 18:31	
Surrogate: 4-Bromofluorobenzene	*97.6 %*	*37 - 139*		B8H0433	08/15/2018	*08/15/18 18:31*	

Organochlorine Pesticides by EPA 8081

Analyst: CO/

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
4,4´-DDD	ND	4.0	2	B8H0533	08/17/2018	08/20/18 09:37	D1
4,4´-DDE	ND	4.0	2	B8H0533	08/17/2018	08/20/18 09:37	D1
4,4´-DDT [2C]	ND	4.0	2	B8H0533	08/17/2018	08/20/18 09:37	D1
Aldrin	ND	2.0	2	B8H0533	08/17/2018	08/20/18 09:37	D1
alpha-BHC	ND	2.0	2	B8H0533	08/17/2018	08/20/18 09:37	D1
alpha-Chlordane	ND	2.0	2	B8H0533	08/17/2018	08/20/18 09:37	D1
beta-BHC	ND	2.0	2	B8H0533	08/17/2018	08/20/18 09:37	D1
Chlordane [2C]	ND	17	2	B8H0533	08/17/2018	08/20/18 09:37	D1
delta-BHC	ND	2.0	2	B8H0533	08/17/2018	08/20/18 09:37	D1
Dieldrin	ND	4.0	2	B8H0533	08/17/2018	08/20/18 09:37	D1
Endosulfan I	ND	2.0	2	B8H0533	08/17/2018	08/20/18 09:37	D1
Endosulfan II	ND	4.0	2	B8H0533	08/17/2018	08/20/18 09:37	D1
Endosulfan sulfate	ND	4.0	2	B8H0533	08/17/2018	08/20/18 09:37	D1
Endrin	ND	4.0	2	B8H0533	08/17/2018	08/20/18 09:37	D1
Endrin aldehyde	ND	4.0	2	B8H0533	08/17/2018	08/20/18 09:37	D1
Endrin ketone	ND	4.0	2	B8H0533	08/17/2018	08/20/18 09:37	D1
gamma-BHC	ND	2.0	2	B8H0533	08/17/2018	08/20/18 09:37	D1
gamma-Chlordane [2C]	ND	2.0	2	B8H0533	08/17/2018	08/20/18 09:37	D1
Heptachlor	ND	2.0	2	B8H0533	08/17/2018	08/20/18 09:37	D1
Heptachlor epoxide	ND	2.0	2	B8H0533	08/17/2018	08/20/18 09:37	D1

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : EASTRIDGE-BART, E8222-02-02
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 10/26/2018

Client Sample ID GH15-0

Lab ID: 1802940-09

Organochlorine Pesticides by EPA 8081 **Analyst: CO/**

Analyte		Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Methoxychlor		ND	10	2	B8H0533	08/17/2018	08/20/18 09:37	D1
Toxaphene		ND	100	2	B8H0533	08/17/2018	08/20/18 09:37	D1
Surrogate: Decachlorobiphenyl	*29.8 %*		*15 - 100*		B8H0533	08/17/2018	*08/20/18 09:37*	
Surrogate: Tetrachloro-m-xylene	*53.9 %*		*16 - 100*		B8H0533	08/17/2018	*08/20/18 09:37*	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : EASTRIDGE-BART, E8222-02-02
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 10/26/2018

Client Sample ID GH15-1.5

Lab ID: 1802940-10

Title 22 Metals by ICP-AES EPA 6010B

Analyst: GO

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	1	B8H0536	08/17/2018	08/20/18 15:11	
Arsenic	**4.1**	1.0	1	B8H0536	08/17/2018	08/20/18 15:11	
Barium	**140**	1.0	1	B8H0536	08/17/2018	08/20/18 15:11	
Beryllium	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:11	
Cadmium	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:11	
Chromium	**42**	1.0	1	B8H0536	08/17/2018	08/20/18 15:11	
Cobalt	**10**	1.0	1	B8H0536	08/17/2018	08/20/18 15:11	
Copper	**23**	2.0	1	B8H0536	08/17/2018	08/20/18 15:11	
Lead	**6.5**	1.0	1	B8H0536	08/17/2018	08/20/18 15:11	
Molybdenum	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:11	
Nickel	**63**	1.0	1	B8H0536	08/17/2018	08/20/18 15:11	
Selenium	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:11	
Silver	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:11	
Thallium	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:11	
Vanadium	**29**	1.0	1	B8H0536	08/17/2018	08/20/18 15:11	
Zinc	**44**	1.0	1	B8H0536	08/17/2018	08/20/18 15:11	

Mercury by AA (Cold Vapor) EPA 7471A

Analyst: KEK

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	ND	0.10	1	B8H0539	08/17/2018	08/20/18 15:45	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: VW

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	1	B8H0433	08/15/2018	08/15/18 18:50	
Surrogate: 4-Bromofluorobenzene	*58.7 %*	*57 - 144*		B8H0433	08/15/2018	*08/15/18 18:50*	

Diesel Range Organics by EPA 8015B

Analyst: TKT

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	**1.3**	1.0	1	B8H0532	08/17/2018	08/17/18 22:47	
ORO	**1.9**	1.0	1	B8H0532	08/17/2018	08/17/18 22:47	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : EASTRIDGE-BART, E8222-02-02
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 10/26/2018

Client Sample ID GH15-1.5

Lab ID: 1802940-10

Diesel Range Organics by EPA 8015B

Analyst: TKT

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: p-Terphenyl	*114 %*	*34 - 158*		B8H0532	08/17/2018	*08/17/18 22:47*	

BTEX/MTBE by EPA 8021

Analyst: VW

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Benzene	ND	5.0	1	B8H0433	08/15/2018	08/15/18 18:50	
Toluene	ND	5.0	1	B8H0433	08/15/2018	08/15/18 18:50	
Ethylbenzene	ND	5.0	1	B8H0433	08/15/2018	08/15/18 18:50	
m,p-Xylene	ND	10	1	B8H0433	08/15/2018	08/15/18 18:50	
o-Xylene	ND	5.0	1	B8H0433	08/15/2018	08/15/18 18:50	
Surrogate: 4-Bromofluorobenzene	*53.2 %*	*37 - 139*		B8H0433	08/15/2018	*08/15/18 18:50*	

Organochlorine Pesticides by EPA 8081

Analyst: CO/

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
4,4´-DDD	ND	2.0	1	B8H0533	08/17/2018	08/20/18 09:48	
4,4´-DDE [2C]	ND	2.0	1	B8H0533	08/17/2018	08/20/18 09:48	
4,4´-DDT	ND	2.0	1	B8H0533	08/17/2018	08/20/18 09:48	
Aldrin	ND	1.0	1	B8H0533	08/17/2018	08/20/18 09:48	
alpha-BHC	ND	1.0	1	B8H0533	08/17/2018	08/20/18 09:48	
alpha-Chlordane	ND	1.0	1	B8H0533	08/17/2018	08/20/18 09:48	
beta-BHC	ND	1.0	1	B8H0533	08/17/2018	08/20/18 09:48	
Chlordane	ND	8.5	1	B8H0533	08/17/2018	08/20/18 09:48	
delta-BHC	ND	1.0	1	B8H0533	08/17/2018	08/20/18 09:48	
Dieldrin	ND	2.0	1	B8H0533	08/17/2018	08/20/18 09:48	
Endosulfan I	ND	1.0	1	B8H0533	08/17/2018	08/20/18 09:48	
Endosulfan II	ND	2.0	1	B8H0533	08/17/2018	08/20/18 09:48	
Endosulfan sulfate	ND	2.0	1	B8H0533	08/17/2018	08/20/18 09:48	
Endrin	ND	2.0	1	B8H0533	08/17/2018	08/20/18 09:48	
Endrin aldehyde	ND	2.0	1	B8H0533	08/17/2018	08/20/18 09:48	
Endrin ketone	ND	2.0	1	B8H0533	08/17/2018	08/20/18 09:48	
gamma-BHC	ND	1.0	1	B8H0533	08/17/2018	08/20/18 09:48	
gamma-Chlordane	ND	1.0	1	B8H0533	08/17/2018	08/20/18 09:48	
Heptachlor	ND	1.0	1	B8H0533	08/17/2018	08/20/18 09:48	
Heptachlor epoxide	ND	1.0	1	B8H0533	08/17/2018	08/20/18 09:48	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : EASTRIDGE-BART, E8222-02-02
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 10/26/2018

Client Sample ID GH15-1.5

Lab ID: 1802940-10

Organochlorine Pesticides by EPA 8081 **Analyst: CO/**

Analyte		Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Methoxychlor		ND	5.0	1	B8H0533	08/17/2018	08/20/18 09:48	
Toxaphene		ND	50	1	B8H0533	08/17/2018	08/20/18 09:48	
Surrogate: Decachlorobiphenyl	*68.0 %*		*15 - 100*		B8H0533	08/17/2018	*08/20/18 09:48*	
Surrogate: Tetrachloro-m-xylene	*97.8 %*		*16 - 100*		B8H0533	08/17/2018	*08/20/18 09:48*	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : EASTRIDGE-BART, E8222-02-02
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 10/26/2018

Client Sample ID GH16-0

Lab ID: 1802940-11

Title 22 Metals by ICP-AES EPA 6010B

Analyst: GO

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	1	B8H0536	08/17/2018	08/20/18 15:17	
Arsenic	**4.7**	1.0	1	B8H0536	08/17/2018	08/20/18 15:17	
Barium	**150**	1.0	1	B8H0536	08/17/2018	08/20/18 15:17	
Beryllium	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:17	
Cadmium	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:17	
Chromium	**42**	1.0	1	B8H0536	08/17/2018	08/20/18 15:17	
Cobalt	**10**	1.0	1	B8H0536	08/17/2018	08/20/18 15:17	
Copper	**27**	2.0	1	B8H0536	08/17/2018	08/20/18 15:17	
Lead	**11**	1.0	1	B8H0536	08/17/2018	08/20/18 15:17	
Molybdenum	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:17	
Nickel	**64**	1.0	1	B8H0536	08/17/2018	08/20/18 15:17	
Selenium	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:17	
Silver	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:17	
Thallium	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:17	
Vanadium	**32**	1.0	1	B8H0536	08/17/2018	08/20/18 15:17	
Zinc	**56**	1.0	1	B8H0536	08/17/2018	08/20/18 15:17	

Mercury by AA (Cold Vapor) EPA 7471A

Analyst: KEK

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	ND	0.10	1	B8H0539	08/17/2018	08/20/18 15:47	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: VW

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	1	B8H0433	08/15/2018	08/15/18 19:09	
Surrogate: 4-Bromofluorobenzene	*83.6 %*	*57 - 144*		B8H0433	08/15/2018	*08/15/18 19:09*	

Diesel Range Organics by EPA 8015B

Analyst: TKT

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	**9.9**	5.0	5	B8H0532	08/17/2018	08/18/18 00:27	
ORO	**35**	5.0	5	B8H0532	08/17/2018	08/18/18 00:27	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : EASTRIDGE-BART, E8222-02-02
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 10/26/2018

Client Sample ID GH16-0

Lab ID: 1802940-11

Diesel Range Organics by EPA 8015B

Analyst: TKT

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: p-Terphenyl	*58.0 %*	*34 - 158*		B8H0532	08/17/2018	*08/18/18 00:27*	

BTEX/MTBE by EPA 8021

Analyst: VW

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Benzene	ND	5.0	1	B8H0433	08/15/2018	08/15/18 19:09	
Toluene	ND	5.0	1	B8H0433	08/15/2018	08/15/18 19:09	
Ethylbenzene	ND	5.0	1	B8H0433	08/15/2018	08/15/18 19:09	
m,p-Xylene	ND	10	1	B8H0433	08/15/2018	08/15/18 19:09	
o-Xylene	ND	5.0	1	B8H0433	08/15/2018	08/15/18 19:09	
Surrogate: 4-Bromofluorobenzene	*75.8 %*	*37 - 139*		B8H0433	08/15/2018	*08/15/18 19:09*	

Organochlorine Pesticides by EPA 8081

Analyst: CO/

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
4,4´-DDD	ND	2.0	1	B8H0533	08/17/2018	08/20/18 09:58	
4,4´-DDE [2C]	**2.1**	2.0	1	B8H0533	08/17/2018	08/20/18 09:58	
4,4´-DDT	ND	2.0	1	B8H0533	08/17/2018	08/20/18 09:58	
Aldrin	ND	1.0	1	B8H0533	08/17/2018	08/20/18 09:58	
alpha-BHC	ND	1.0	1	B8H0533	08/17/2018	08/20/18 09:58	
alpha-Chlordane	ND	1.0	1	B8H0533	08/17/2018	08/20/18 09:58	
beta-BHC	ND	1.0	1	B8H0533	08/17/2018	08/20/18 09:58	
Chlordane [2C]	ND	8.5	1	B8H0533	08/17/2018	08/20/18 09:58	
delta-BHC	ND	1.0	1	B8H0533	08/17/2018	08/20/18 09:58	
Dieldrin	ND	2.0	1	B8H0533	08/17/2018	08/20/18 09:58	
Endosulfan I	ND	1.0	1	B8H0533	08/17/2018	08/20/18 09:58	
Endosulfan II	ND	2.0	1	B8H0533	08/17/2018	08/20/18 09:58	
Endosulfan sulfate	ND	2.0	1	B8H0533	08/17/2018	08/20/18 09:58	
Endrin	ND	2.0	1	B8H0533	08/17/2018	08/20/18 09:58	
Endrin aldehyde	ND	2.0	1	B8H0533	08/17/2018	08/20/18 09:58	
Endrin ketone	ND	2.0	1	B8H0533	08/17/2018	08/20/18 09:58	
gamma-BHC	ND	1.0	1	B8H0533	08/17/2018	08/20/18 09:58	
gamma-Chlordane [2C]	ND	1.0	1	B8H0533	08/17/2018	08/20/18 09:58	
Heptachlor	ND	1.0	1	B8H0533	08/17/2018	08/20/18 09:58	
Heptachlor epoxide	ND	1.0	1	B8H0533	08/17/2018	08/20/18 09:58	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : EASTRIDGE-BART, E8222-02-02
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 10/26/2018

Client Sample ID GH16-0

Lab ID: 1802940-11

Organochlorine Pesticides by EPA 8081 **Analyst: CO/**

Analyte		Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Methoxychlor		ND	5.0	1	B8H0533	08/17/2018	08/20/18 09:58	
Toxaphene		ND	50	1	B8H0533	08/17/2018	08/20/18 09:58	
Surrogate: Decachlorobiphenyl	*30.1 %*		*15 - 100*		B8H0533	08/17/2018	*08/20/18 09:58*	
Surrogate: Tetrachloro-m-xylene	*51.0 %*		*16 - 100*		B8H0533	08/17/2018	*08/20/18 09:58*	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : EASTRIDGE-BART, E8222-02-02
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 10/26/2018

Client Sample ID GH16-1.5

Lab ID: 1802940-12

Title 22 Metals by ICP-AES EPA 6010B

Analyst: GO

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	1	B8H0536	08/17/2018	08/20/18 15:18	
Arsenic	**4.0**	1.0	1	B8H0536	08/17/2018	08/20/18 15:18	
Barium	**150**	1.0	1	B8H0536	08/17/2018	08/20/18 15:18	
Beryllium	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:18	
Cadmium	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:18	
Chromium	**45**	1.0	1	B8H0536	08/17/2018	08/20/18 15:18	
Cobalt	**10**	1.0	1	B8H0536	08/17/2018	08/20/18 15:18	
Copper	**24**	2.0	1	B8H0536	08/17/2018	08/20/18 15:18	
Lead	**7.3**	1.0	1	B8H0536	08/17/2018	08/20/18 15:18	
Molybdenum	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:18	
Nickel	**68**	1.0	1	B8H0536	08/17/2018	08/20/18 15:18	
Selenium	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:18	
Silver	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:18	
Thallium	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:18	
Vanadium	**30**	1.0	1	B8H0536	08/17/2018	08/20/18 15:18	
Zinc	**47**	1.0	1	B8H0536	08/17/2018	08/20/18 15:18	

Mercury by AA (Cold Vapor) EPA 7471A

Analyst: KEK

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	**0.17**	0.10	1	B8H0539	08/17/2018	08/20/18 15:49	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: VW

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	1	B8H0433	08/15/2018	08/15/18 19:27	
Surrogate: 4-Bromofluorobenzene	*87.0 %*	*57 - 144*		B8H0433	08/15/2018	*08/15/18 19:27*	

Diesel Range Organics by EPA 8015B

Analyst: TKT

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	**5.3**	1.0	1	B8H0532	08/17/2018	08/17/18 23:04	
ORO	**7.1**	1.0	1	B8H0532	08/17/2018	08/17/18 23:04	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : EASTRIDGE-BART, E8222-02-02
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 10/26/2018

Client Sample ID GH16-1.5

Lab ID: 1802940-12

Diesel Range Organics by EPA 8015B

Analyst: TKT

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: p-Terphenyl	*94.1 %*	*34 - 158*		B8H0532	08/17/2018	*08/17/18 23:04*	

BTEX/MTBE by EPA 8021

Analyst: VW

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Benzene	ND	5.0	1	B8H0433	08/15/2018	08/15/18 19:27	
Toluene	ND	5.0	1	B8H0433	08/15/2018	08/15/18 19:27	
Ethylbenzene	ND	5.0	1	B8H0433	08/15/2018	08/15/18 19:27	
m,p-Xylene	ND	10	1	B8H0433	08/15/2018	08/15/18 19:27	
o-Xylene	ND	5.0	1	B8H0433	08/15/2018	08/15/18 19:27	
Surrogate: 4-Bromofluorobenzene	*79.0 %*	*37 - 139*		B8H0433	08/15/2018	*08/15/18 19:27*	

Organochlorine Pesticides by EPA 8081

Analyst: CO/

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
4,4´-DDD	ND	2.0	1	B8H0533	08/17/2018	08/20/18 10:08	
4,4´-DDE [2C]	ND	2.0	1	B8H0533	08/17/2018	08/20/18 10:08	
4,4´-DDT	ND	2.0	1	B8H0533	08/17/2018	08/20/18 10:08	
Aldrin	ND	1.0	1	B8H0533	08/17/2018	08/20/18 10:08	
alpha-BHC	ND	1.0	1	B8H0533	08/17/2018	08/20/18 10:08	
alpha-Chlordane	ND	1.0	1	B8H0533	08/17/2018	08/20/18 10:08	
beta-BHC	ND	1.0	1	B8H0533	08/17/2018	08/20/18 10:08	
Chlordane	ND	8.5	1	B8H0533	08/17/2018	08/20/18 10:08	
delta-BHC	ND	1.0	1	B8H0533	08/17/2018	08/20/18 10:08	
Dieldrin	ND	2.0	1	B8H0533	08/17/2018	08/20/18 10:08	
Endosulfan I	ND	1.0	1	B8H0533	08/17/2018	08/20/18 10:08	
Endosulfan II	ND	2.0	1	B8H0533	08/17/2018	08/20/18 10:08	
Endosulfan sulfate	ND	2.0	1	B8H0533	08/17/2018	08/20/18 10:08	
Endrin	ND	2.0	1	B8H0533	08/17/2018	08/20/18 10:08	
Endrin aldehyde	ND	2.0	1	B8H0533	08/17/2018	08/20/18 10:08	
Endrin ketone	ND	2.0	1	B8H0533	08/17/2018	08/20/18 10:08	
gamma-BHC	ND	1.0	1	B8H0533	08/17/2018	08/20/18 10:08	
gamma-Chlordane	ND	1.0	1	B8H0533	08/17/2018	08/20/18 10:08	
Heptachlor	ND	1.0	1	B8H0533	08/17/2018	08/20/18 10:08	
Heptachlor epoxide	ND	1.0	1	B8H0533	08/17/2018	08/20/18 10:08	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : EASTRIDGE-BART, E8222-02-02
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 10/26/2018

Client Sample ID GH16-1.5

Lab ID: 1802940-12

Organochlorine Pesticides by EPA 8081 **Analyst: CO/**

Analyte		Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Methoxychlor		ND	5.0	1	B8H0533	08/17/2018	08/20/18 10:08	
Toxaphene		ND	50	1	B8H0533	08/17/2018	08/20/18 10:08	
Surrogate: Decachlorobiphenyl	*62.5 %*		*15 - 100*		B8H0533	08/17/2018	*08/20/18 10:08*	
Surrogate: Tetrachloro-m-xylene	*98.5 %*		*16 - 100*		B8H0533	08/17/2018	*08/20/18 10:08*	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : EASTRIDGE-BART, E8222-02-02
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 10/26/2018

Client Sample ID GH17-0

Lab ID: 1802940-13

Title 22 Metals by ICP-AES EPA 6010B

Analyst: GO

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	1	B8H0536	08/17/2018	08/20/18 15:19	
Arsenic	**4.3**	1.0	1	B8H0536	08/17/2018	08/20/18 15:19	
Barium	**160**	1.0	1	B8H0536	08/17/2018	08/20/18 15:19	
Beryllium	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:19	
Cadmium	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:19	
Chromium	**55**	1.0	1	B8H0536	08/17/2018	08/20/18 15:19	
Cobalt	**13**	1.0	1	B8H0536	08/17/2018	08/20/18 15:19	
Copper	**35**	2.0	1	B8H0536	08/17/2018	08/20/18 15:19	
Lead	**27**	1.0	1	B8H0536	08/17/2018	08/20/18 15:19	
Molybdenum	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:19	
Nickel	**100**	1.0	1	B8H0536	08/17/2018	08/20/18 15:19	
Selenium	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:19	
Silver	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:19	
Thallium	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:19	
Vanadium	**35**	1.0	1	B8H0536	08/17/2018	08/20/18 15:19	
Zinc	**65**	1.0	1	B8H0536	08/17/2018	08/20/18 15:19	

Mercury by AA (Cold Vapor) EPA 7471A

Analyst: KEK

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	ND	0.10	1	B8H0539	08/17/2018	08/20/18 15:50	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: VW

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	1	B8H0433	08/15/2018	08/15/18 19:46	
Surrogate: 4-Bromofluorobenzene	*85.6 %*	*57 - 144*		B8H0433	08/15/2018	*08/15/18 19:46*	

Diesel Range Organics by EPA 8015B

Analyst: TKT

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	**40**	10	10	B8H0532	08/17/2018	08/18/18 01:50	
ORO	**99**	10	10	B8H0532	08/17/2018	08/18/18 01:50	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : EASTRIDGE-BART, E8222-02-02
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 10/26/2018

Client Sample ID GH17-0

Lab ID: 1802940-13

Diesel Range Organics by EPA 8015B

Analyst: TKT

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: p-Terphenyl	*0%*	*34 - 158*		B8H0532	08/17/2018	*08/18/18 01:50*	S4

BTEX/MTBE by EPA 8021

Analyst: VW

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Benzene	ND	5.0	1	B8H0433	08/15/2018	08/15/18 19:46	
Toluene	ND	5.0	1	B8H0433	08/15/2018	08/15/18 19:46	
Ethylbenzene	ND	5.0	1	B8H0433	08/15/2018	08/15/18 19:46	
m,p-Xylene	ND	10	1	B8H0433	08/15/2018	08/15/18 19:46	
o-Xylene	ND	5.0	1	B8H0433	08/15/2018	08/15/18 19:46	
Surrogate: 4-Bromofluorobenzene	*79.3 %*	*37 - 139*		B8H0433	08/15/2018	*08/15/18 19:46*	

Organochlorine Pesticides by EPA 8081

Analyst: CO/

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
4,4´-DDD	ND	2.0	1	B8H0533	08/17/2018	08/20/18 10:19	
4,4´-DDE	**4.6**	2.0	1	B8H0533	08/17/2018	08/20/18 10:19	
4,4´-DDT [2C]	ND	2.0	1	B8H0533	08/17/2018	08/20/18 10:19	
Aldrin	ND	1.0	1	B8H0533	08/17/2018	08/20/18 10:19	
alpha-BHC	ND	1.0	1	B8H0533	08/17/2018	08/20/18 10:19	
alpha-Chlordane	ND	1.0	1	B8H0533	08/17/2018	08/20/18 10:19	
beta-BHC	ND	1.0	1	B8H0533	08/17/2018	08/20/18 10:19	
Chlordane [2C]	ND	8.5	1	B8H0533	08/17/2018	08/20/18 10:19	
delta-BHC	ND	1.0	1	B8H0533	08/17/2018	08/20/18 10:19	
Dieldrin	ND	2.0	1	B8H0533	08/17/2018	08/20/18 10:19	
Endosulfan I	ND	1.0	1	B8H0533	08/17/2018	08/20/18 10:19	
Endosulfan II	ND	2.0	1	B8H0533	08/17/2018	08/20/18 10:19	
Endosulfan sulfate	ND	2.0	1	B8H0533	08/17/2018	08/20/18 10:19	
Endrin	ND	2.0	1	B8H0533	08/17/2018	08/20/18 10:19	
Endrin aldehyde	ND	2.0	1	B8H0533	08/17/2018	08/20/18 10:19	
Endrin ketone	ND	2.0	1	B8H0533	08/17/2018	08/20/18 10:19	
gamma-BHC	ND	1.0	1	B8H0533	08/17/2018	08/20/18 10:19	
gamma-Chlordane [2C]	ND	1.0	1	B8H0533	08/17/2018	08/20/18 10:19	
Heptachlor	ND	1.0	1	B8H0533	08/17/2018	08/20/18 10:19	
Heptachlor epoxide	ND	1.0	1	B8H0533	08/17/2018	08/20/18 10:19	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : EASTRIDGE-BART, E8222-02-02
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 10/26/2018

Client Sample ID GH17-0

Lab ID: 1802940-13

Organochlorine Pesticides by EPA 8081 **Analyst: CO/**

Analyte		Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Methoxychlor		ND	5.0	1	B8H0533	08/17/2018	08/20/18 10:19	
Toxaphene		ND	50	1	B8H0533	08/17/2018	08/20/18 10:19	
Surrogate: Decachlorobiphenyl	*30.0 %*		*15 - 100*		B8H0533	08/17/2018	*08/20/18 10:19*	
Surrogate: Tetrachloro-m-xylene	*53.9 %*		*16 - 100*		B8H0533	08/17/2018	*08/20/18 10:19*	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : EASTRIDGE-BART, E8222-02-02
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 10/26/2018

Client Sample ID GH17-1.5

Lab ID: 1802940-14

Title 22 Metals by ICP-AES EPA 6010B

Analyst: GO

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	1	B8H0536	08/17/2018	08/20/18 15:21	
Arsenic	**4.7**	1.0	1	B8H0536	08/17/2018	08/20/18 15:21	
Barium	**190**	1.0	1	B8H0536	08/17/2018	08/20/18 15:21	
Beryllium	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:21	
Cadmium	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:21	
Chromium	**49**	1.0	1	B8H0536	08/17/2018	08/20/18 15:21	
Cobalt	**13**	1.0	1	B8H0536	08/17/2018	08/20/18 15:21	
Copper	**32**	2.0	1	B8H0536	08/17/2018	08/20/18 15:21	
Lead	**7.4**	1.0	1	B8H0536	08/17/2018	08/20/18 15:21	
Molybdenum	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:21	
Nickel	**70**	1.0	1	B8H0536	08/17/2018	08/20/18 15:21	
Selenium	**1.4**	1.0	1	B8H0536	08/17/2018	08/20/18 15:21	
Silver	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:21	
Thallium	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:21	
Vanadium	**36**	1.0	1	B8H0536	08/17/2018	08/20/18 15:21	
Zinc	**51**	1.0	1	B8H0536	08/17/2018	08/20/18 15:21	

Mercury by AA (Cold Vapor) EPA 7471A

Analyst: KEK

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	ND	0.10	1	B8H0539	08/17/2018	08/20/18 15:52	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: VW

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	1	B8H0482	08/16/2018	08/16/18 10:38	
Surrogate: 4-Bromofluorobenzene	*94.0 %*	*57 - 144*		B8H0482	08/16/2018	*08/16/18 10:38*	

Diesel Range Organics by EPA 8015B

Analyst: TKT

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	ND	1.0	1	B8H0532	08/17/2018	08/17/18 21:57	
ORO	ND	1.0	1	B8H0532	08/17/2018	08/17/18 21:57	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : EASTRIDGE-BART, E8222-02-02
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 10/26/2018

Client Sample ID GH17-1.5

Lab ID: 1802940-14

Diesel Range Organics by EPA 8015B

Analyst: TKT

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: p-Terphenyl	*108 %*	*34 - 158*		B8H0532	08/17/2018	*08/17/18 21:57*	

BTEX/MTBE by EPA 8021

Analyst: VW

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Benzene	ND	5.0	1	B8H0482	08/16/2018	08/16/18 10:38	
Toluene	ND	5.0	1	B8H0482	08/16/2018	08/16/18 10:38	
Ethylbenzene	ND	5.0	1	B8H0482	08/16/2018	08/16/18 10:38	
m,p-Xylene	ND	10	1	B8H0482	08/16/2018	08/16/18 10:38	
o-Xylene	ND	5.0	1	B8H0482	08/16/2018	08/16/18 10:38	
Surrogate: 4-Bromofluorobenzene	*83.6 %*	*37 - 139*		B8H0482	08/16/2018	*08/16/18 10:38*	

Organochlorine Pesticides by EPA 8081

Analyst: CO/

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
4,4´-DDD	ND	2.0	1	B8H0533	08/17/2018	08/20/18 10:29	
4,4´-DDE [2C]	ND	2.0	1	B8H0533	08/17/2018	08/20/18 10:29	
4,4´-DDT [2C]	ND	2.0	1	B8H0533	08/17/2018	08/20/18 10:29	
Aldrin	ND	1.0	1	B8H0533	08/17/2018	08/20/18 10:29	
alpha-BHC	ND	1.0	1	B8H0533	08/17/2018	08/20/18 10:29	
alpha-Chlordane	ND	1.0	1	B8H0533	08/17/2018	08/20/18 10:29	
beta-BHC	ND	1.0	1	B8H0533	08/17/2018	08/20/18 10:29	
Chlordane	ND	8.5	1	B8H0533	08/17/2018	08/20/18 10:29	
delta-BHC	ND	1.0	1	B8H0533	08/17/2018	08/20/18 10:29	
Dieldrin	ND	2.0	1	B8H0533	08/17/2018	08/20/18 10:29	
Endosulfan I	ND	1.0	1	B8H0533	08/17/2018	08/20/18 10:29	
Endosulfan II	ND	2.0	1	B8H0533	08/17/2018	08/20/18 10:29	
Endosulfan sulfate	ND	2.0	1	B8H0533	08/17/2018	08/20/18 10:29	
Endrin	ND	2.0	1	B8H0533	08/17/2018	08/20/18 10:29	
Endrin aldehyde	ND	2.0	1	B8H0533	08/17/2018	08/20/18 10:29	
Endrin ketone	ND	2.0	1	B8H0533	08/17/2018	08/20/18 10:29	
gamma-BHC	ND	1.0	1	B8H0533	08/17/2018	08/20/18 10:29	
gamma-Chlordane	ND	1.0	1	B8H0533	08/17/2018	08/20/18 10:29	
Heptachlor	ND	1.0	1	B8H0533	08/17/2018	08/20/18 10:29	
Heptachlor epoxide	ND	1.0	1	B8H0533	08/17/2018	08/20/18 10:29	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : EASTRIDGE-BART, E8222-02-02
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 10/26/2018

Client Sample ID GH17-1.5

Lab ID: 1802940-14

Organochlorine Pesticides by EPA 8081

Analyst: CO/

Analyte		Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Methoxychlor		ND	5.0	1	B8H0533	08/17/2018	08/20/18 10:29	
Toxaphene		ND	50	1	B8H0533	08/17/2018	08/20/18 10:29	
Surrogate: Decachlorobiphenyl	*57.0 %*		*15 - 100*		B8H0533	08/17/2018	*08/20/18 10:29*	
Surrogate: Tetrachloro-m-xylene	*82.5 %*		*16 - 100*		B8H0533	08/17/2018	*08/20/18 10:29*	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : EASTRIDGE-BART, E8222-02-02
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 10/26/2018

Client Sample ID GH18-0

Lab ID: 1802940-15

Title 22 Metals by ICP-AES EPA 6010B

Analyst: GO

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	1	B8H0536	08/17/2018	08/20/18 15:22	
Arsenic	**4.2**	1.0	1	B8H0536	08/17/2018	08/20/18 15:22	
Barium	**140**	1.0	1	B8H0536	08/17/2018	08/20/18 15:22	
Beryllium	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:22	
Cadmium	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:22	
Chromium	**66**	1.0	1	B8H0536	08/17/2018	08/20/18 15:22	
Cobalt	**14**	1.0	1	B8H0536	08/17/2018	08/20/18 15:22	
Copper	**33**	2.0	1	B8H0536	08/17/2018	08/20/18 15:22	
Lead	**20**	1.0	1	B8H0536	08/17/2018	08/20/18 15:22	
Molybdenum	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:22	
Nickel	**120**	1.0	1	B8H0536	08/17/2018	08/20/18 15:22	
Selenium	**1.0**	1.0	1	B8H0536	08/17/2018	08/20/18 15:22	
Silver	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:22	
Thallium	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:22	
Vanadium	**34**	1.0	1	B8H0536	08/17/2018	08/20/18 15:22	
Zinc	**59**	1.0	1	B8H0536	08/17/2018	08/20/18 15:22	

Mercury by AA (Cold Vapor) EPA 7471A

Analyst: KEK

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	ND	0.10	1	B8H0539	08/17/2018	08/20/18 15:54	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: VW

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	1	B8H0433	08/15/2018	08/15/18 20:23	
Surrogate: 4-Bromofluorobenzene	*79.9 %*	*57 - 144*		B8H0433	08/15/2018	*08/15/18 20:23*	

Diesel Range Organics by EPA 8015B

Analyst: TKT

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	**49**	10	10	B8H0532	08/17/2018	08/18/18 02:06	
ORO	**150**	10	10	B8H0532	08/17/2018	08/18/18 02:06	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : EASTRIDGE-BART, E8222-02-02
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 10/26/2018

Client Sample ID GH18-0

Lab ID: 1802940-15

Diesel Range Organics by EPA 8015B

Analyst: TKT

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: p-Terphenyl	*0%*	*34 - 158*		B8H0532	08/17/2018	*08/18/18 02:06*	S4

BTEX/MTBE by EPA 8021

Analyst: VW

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Benzene	ND	5.0	1	B8H0433	08/15/2018	08/15/18 20:23	
Toluene	ND	5.0	1	B8H0433	08/15/2018	08/15/18 20:23	
Ethylbenzene	ND	5.0	1	B8H0433	08/15/2018	08/15/18 20:23	
m,p-Xylene	ND	10	1	B8H0433	08/15/2018	08/15/18 20:23	
o-Xylene	ND	5.0	1	B8H0433	08/15/2018	08/15/18 20:23	
Surrogate: 4-Bromofluorobenzene	*70.9 %*	*37 - 139*		B8H0433	08/15/2018	*08/15/18 20:23*	

Organochlorine Pesticides by EPA 8081

Analyst: CO/

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
4,4´-DDD	ND	2.0	1	B8H0533	08/17/2018	08/20/18 10:40	
4,4´-DDE	**10**	2.0	1	B8H0533	08/17/2018	08/20/18 10:40	
4,4´-DDT [2C]	ND	2.0	1	B8H0533	08/17/2018	08/20/18 10:40	
Aldrin	ND	1.0	1	B8H0533	08/17/2018	08/20/18 10:40	
alpha-BHC	ND	1.0	1	B8H0533	08/17/2018	08/20/18 10:40	
alpha-Chlordane	ND	1.0	1	B8H0533	08/17/2018	08/20/18 10:40	
beta-BHC	ND	1.0	1	B8H0533	08/17/2018	08/20/18 10:40	
Chlordane [2C]	ND	8.5	1	B8H0533	08/17/2018	08/20/18 10:40	
delta-BHC	ND	1.0	1	B8H0533	08/17/2018	08/20/18 10:40	
Dieldrin	ND	2.0	1	B8H0533	08/17/2018	08/20/18 10:40	
Endosulfan I	ND	1.0	1	B8H0533	08/17/2018	08/20/18 10:40	
Endosulfan II	ND	2.0	1	B8H0533	08/17/2018	08/20/18 10:40	
Endosulfan sulfate	ND	2.0	1	B8H0533	08/17/2018	08/20/18 10:40	
Endrin	ND	2.0	1	B8H0533	08/17/2018	08/20/18 10:40	
Endrin aldehyde	ND	2.0	1	B8H0533	08/17/2018	08/20/18 10:40	
Endrin ketone	ND	2.0	1	B8H0533	08/17/2018	08/20/18 10:40	
gamma-BHC	ND	1.0	1	B8H0533	08/17/2018	08/20/18 10:40	
gamma-Chlordane [2C]	ND	1.0	1	B8H0533	08/17/2018	08/20/18 10:40	
Heptachlor	ND	1.0	1	B8H0533	08/17/2018	08/20/18 10:40	
Heptachlor epoxide	ND	1.0	1	B8H0533	08/17/2018	08/20/18 10:40	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : EASTRIDGE-BART, E8222-02-02
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 10/26/2018

Client Sample ID GH18-0

Lab ID: 1802940-15

Organochlorine Pesticides by EPA 8081 **Analyst: CO/**

Analyte		Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Methoxychlor		ND	5.0	1	B8H0533	08/17/2018	08/20/18 10:40	
Toxaphene		ND	50	1	B8H0533	08/17/2018	08/20/18 10:40	
Surrogate: Decachlorobiphenyl	*30.8 %*		*15 - 100*		B8H0533	08/17/2018	*08/20/18 10:40*	
Surrogate: Tetrachloro-m-xylene	*55.2 %*		*16 - 100*		B8H0533	08/17/2018	*08/20/18 10:40*	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : EASTRIDGE-BART, E8222-02-02
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 10/26/2018

Client Sample ID GH18-1.5

Lab ID: 1802940-16

Title 22 Metals by ICP-AES EPA 6010B

Analyst: GO

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	1	B8H0536	08/17/2018	08/20/18 15:23	
Arsenic	**4.4**	1.0	1	B8H0536	08/17/2018	08/20/18 15:23	
Barium	**160**	1.0	1	B8H0536	08/17/2018	08/20/18 15:23	
Beryllium	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:23	
Cadmium	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:23	
Chromium	**46**	1.0	1	B8H0536	08/17/2018	08/20/18 15:23	
Cobalt	**11**	1.0	1	B8H0536	08/17/2018	08/20/18 15:23	
Copper	**28**	2.0	1	B8H0536	08/17/2018	08/20/18 15:23	
Lead	**96**	1.0	1	B8H0536	08/17/2018	08/20/18 15:23	
Molybdenum	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:23	
Nickel	**66**	1.0	1	B8H0536	08/17/2018	08/20/18 15:23	
Selenium	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:23	
Silver	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:23	
Thallium	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:23	
Vanadium	**33**	1.0	1	B8H0536	08/17/2018	08/20/18 15:23	
Zinc	**56**	1.0	1	B8H0536	08/17/2018	08/20/18 15:23	

Mercury by AA (Cold Vapor) EPA 7471A

Analyst: KEK

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	ND	0.10	1	B8H0539	08/17/2018	08/20/18 15:56	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: VW

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	1	B8H0433	08/15/2018	08/15/18 20:42	
Surrogate: 4-Bromofluorobenzene	*102 %*	*57 - 144*		B8H0433	08/15/2018	*08/15/18 20:42*	

Diesel Range Organics by EPA 8015B

Analyst: TKT

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	**49**	10	10	B8H0532	08/17/2018	08/18/18 02:56	
ORO	**160**	10	10	B8H0532	08/17/2018	08/18/18 02:56	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : EASTRIDGE-BART, E8222-02-02
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 10/26/2018

Client Sample ID GH18-1.5

Lab ID: 1802940-16

Diesel Range Organics by EPA 8015B

Analyst: TKT

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: p-Terphenyl	*0%*	*34 - 158*		B8H0532	08/17/2018	*08/18/18 02:56*	S4

BTEX/MTBE by EPA 8021

Analyst: VW

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Benzene	ND	5.0	1	B8H0433	08/15/2018	08/15/18 20:42	
Toluene	ND	5.0	1	B8H0433	08/15/2018	08/15/18 20:42	
Ethylbenzene	ND	5.0	1	B8H0433	08/15/2018	08/15/18 20:42	
m,p-Xylene	ND	10	1	B8H0433	08/15/2018	08/15/18 20:42	
o-Xylene	ND	5.0	1	B8H0433	08/15/2018	08/15/18 20:42	
Surrogate: 4-Bromofluorobenzene	*92.1 %*	*37 - 139*		B8H0433	08/15/2018	*08/15/18 20:42*	

Organochlorine Pesticides by EPA 8081

Analyst: CO/

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
4,4´-DDD [2C]	ND	2.0	1	B8H0533	08/17/2018	08/20/18 10:50	
4,4´-DDE [2C]	**3.6**	2.0	1	B8H0533	08/17/2018	08/20/18 10:50	
4,4´-DDT [2C]	**3.9**	2.0	1	B8H0533	08/17/2018	08/20/18 10:50	
Aldrin	ND	1.0	1	B8H0533	08/17/2018	08/20/18 10:50	
alpha-BHC	ND	1.0	1	B8H0533	08/17/2018	08/20/18 10:50	
alpha-Chlordane	ND	1.0	1	B8H0533	08/17/2018	08/20/18 10:50	
beta-BHC	ND	1.0	1	B8H0533	08/17/2018	08/20/18 10:50	
Chlordane [2C]	ND	8.5	1	B8H0533	08/17/2018	08/20/18 10:50	
delta-BHC	ND	1.0	1	B8H0533	08/17/2018	08/20/18 10:50	
Dieldrin	ND	2.0	1	B8H0533	08/17/2018	08/20/18 10:50	
Endosulfan I	ND	1.0	1	B8H0533	08/17/2018	08/20/18 10:50	
Endosulfan II	ND	2.0	1	B8H0533	08/17/2018	08/20/18 10:50	
Endosulfan sulfate	ND	2.0	1	B8H0533	08/17/2018	08/20/18 10:50	
Endrin	ND	2.0	1	B8H0533	08/17/2018	08/20/18 10:50	
Endrin aldehyde	ND	2.0	1	B8H0533	08/17/2018	08/20/18 10:50	
Endrin ketone	ND	2.0	1	B8H0533	08/17/2018	08/20/18 10:50	
gamma-BHC	ND	1.0	1	B8H0533	08/17/2018	08/20/18 10:50	
gamma-Chlordane [2C]	ND	1.0	1	B8H0533	08/17/2018	08/20/18 10:50	
Heptachlor	ND	1.0	1	B8H0533	08/17/2018	08/20/18 10:50	
Heptachlor epoxide	ND	1.0	1	B8H0533	08/17/2018	08/20/18 10:50	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : EASTRIDGE-BART, E8222-02-02
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 10/26/2018

Client Sample ID GH18-1.5

Lab ID: 1802940-16

Organochlorine Pesticides by EPA 8081 **Analyst: CO/**

Analyte		Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Methoxychlor		ND	5.0	1	B8H0533	08/17/2018	08/20/18 10:50	
Toxaphene		ND	50	1	B8H0533	08/17/2018	08/20/18 10:50	
Surrogate: Decachlorobiphenyl	*41.3 %*		*15 - 100*		B8H0533	08/17/2018	*08/20/18 10:50*	
Surrogate: Tetrachloro-m-xylene	*62.8 %*		*16 - 100*		B8H0533	08/17/2018	*08/20/18 10:50*	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : EASTRIDGE-BART, E8222-02-02
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 10/26/2018

Client Sample ID GH19-0

Lab ID: 1802940-17

Title 22 Metals by ICP-AES EPA 6010B

Analyst: GO

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	1	B8H0536	08/17/2018	08/20/18 15:24	
Arsenic	**4.5**	1.0	1	B8H0536	08/17/2018	08/20/18 15:24	
Barium	**140**	1.0	1	B8H0536	08/17/2018	08/20/18 15:24	
Beryllium	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:24	
Cadmium	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:24	
Chromium	**44**	1.0	1	B8H0536	08/17/2018	08/20/18 15:24	
Cobalt	**11**	1.0	1	B8H0536	08/17/2018	08/20/18 15:24	
Copper	**38**	2.0	1	B8H0536	08/17/2018	08/20/18 15:24	
Lead	**15**	1.0	1	B8H0536	08/17/2018	08/20/18 15:24	
Molybdenum	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:24	
Nickel	**66**	1.0	1	B8H0536	08/17/2018	08/20/18 15:24	
Selenium	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:24	
Silver	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:24	
Thallium	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:24	
Vanadium	**34**	1.0	1	B8H0536	08/17/2018	08/20/18 15:24	
Zinc	**47**	1.0	1	B8H0536	08/17/2018	08/20/18 15:24	

Mercury by AA (Cold Vapor) EPA 7471A

Analyst: KEK

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	ND	0.10	1	B8H0539	08/17/2018	08/20/18 15:58	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: VW

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	1	B8H0433	08/15/2018	08/15/18 21:00	
Surrogate: 4-Bromofluorobenzene	*101 %*	*57 - 144*		B8H0433	08/15/2018	*08/15/18 21:00*	

Diesel Range Organics by EPA 8015B

Analyst: TKT

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	**43**	10	10	B8H0532	08/17/2018	08/18/18 01:00	
ORO	**88**	10	10	B8H0532	08/17/2018	08/18/18 01:00	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : EASTRIDGE-BART, E8222-02-02
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 10/26/2018

Client Sample ID GH19-0

Lab ID: 1802940-17

Diesel Range Organics by EPA 8015B

Analyst: TKT

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: p-Terphenyl	*0%*	*34 - 158*		B8H0532	08/17/2018	*08/18/18 01:00*	S4

BTEX/MTBE by EPA 8021

Analyst: VW

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Benzene	ND	5.0	1	B8H0433	08/15/2018	08/15/18 21:00	
Toluene	ND	5.0	1	B8H0433	08/15/2018	08/15/18 21:00	
Ethylbenzene	ND	5.0	1	B8H0433	08/15/2018	08/15/18 21:00	
m,p-Xylene	ND	10	1	B8H0433	08/15/2018	08/15/18 21:00	
o-Xylene	ND	5.0	1	B8H0433	08/15/2018	08/15/18 21:00	
Surrogate: 4-Bromofluorobenzene	*88.5 %*	*37 - 139*		B8H0433	08/15/2018	*08/15/18 21:00*	

Organochlorine Pesticides by EPA 8081

Analyst: CO/

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
4,4´-DDD	ND	2.0	1	B8H0533	08/17/2018	08/20/18 11:01	
4,4´-DDE [2C]	**6.3**	2.0	1	B8H0533	08/17/2018	08/20/18 11:01	
4,4´-DDT [2C]	ND	2.0	1	B8H0533	08/17/2018	08/20/18 11:01	
Aldrin	ND	1.0	1	B8H0533	08/17/2018	08/20/18 11:01	
alpha-BHC	ND	1.0	1	B8H0533	08/17/2018	08/20/18 11:01	
alpha-Chlordane	ND	1.0	1	B8H0533	08/17/2018	08/20/18 11:01	
beta-BHC	ND	1.0	1	B8H0533	08/17/2018	08/20/18 11:01	
Chlordane	ND	8.5	1	B8H0533	08/17/2018	08/20/18 11:01	
delta-BHC	ND	1.0	1	B8H0533	08/17/2018	08/20/18 11:01	
Dieldrin	ND	2.0	1	B8H0533	08/17/2018	08/20/18 11:01	
Endosulfan I	ND	1.0	1	B8H0533	08/17/2018	08/20/18 11:01	
Endosulfan II	ND	2.0	1	B8H0533	08/17/2018	08/20/18 11:01	
Endosulfan sulfate	ND	2.0	1	B8H0533	08/17/2018	08/20/18 11:01	
Endrin	ND	2.0	1	B8H0533	08/17/2018	08/20/18 11:01	
Endrin aldehyde	ND	2.0	1	B8H0533	08/17/2018	08/20/18 11:01	
Endrin ketone	ND	2.0	1	B8H0533	08/17/2018	08/20/18 11:01	
gamma-BHC	ND	1.0	1	B8H0533	08/17/2018	08/20/18 11:01	
gamma-Chlordane	ND	1.0	1	B8H0533	08/17/2018	08/20/18 11:01	
Heptachlor	ND	1.0	1	B8H0533	08/17/2018	08/20/18 11:01	
Heptachlor epoxide	ND	1.0	1	B8H0533	08/17/2018	08/20/18 11:01	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : EASTRIDGE-BART, E8222-02-02
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 10/26/2018

Client Sample ID GH19-0

Lab ID: 1802940-17

Organochlorine Pesticides by EPA 8081 **Analyst: CO/**

Analyte		Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Methoxychlor		ND	5.0	1	B8H0533	08/17/2018	08/20/18 11:01	
Toxaphene		ND	50	1	B8H0533	08/17/2018	08/20/18 11:01	
Surrogate: Decachlorobiphenyl	*65.8 %*		*15 - 100*		B8H0533	08/17/2018	*08/20/18 11:01*	
Surrogate: Tetrachloro-m-xylene	*95.8 %*		*16 - 100*		B8H0533	08/17/2018	*08/20/18 11:01*	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : EASTRIDGE-BART, E8222-02-02
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 10/26/2018

Client Sample ID GH19-1.5

Lab ID: 1802940-18

Title 22 Metals by ICP-AES EPA 6010B

Analyst: GO

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	1	B8H0536	08/17/2018	08/20/18 15:25	
Arsenic	**4.3**	1.0	1	B8H0536	08/17/2018	08/20/18 15:25	
Barium	**160**	1.0	1	B8H0536	08/17/2018	08/20/18 15:25	
Beryllium	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:25	
Cadmium	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:25	
Chromium	**43**	1.0	1	B8H0536	08/17/2018	08/20/18 15:25	
Cobalt	**10**	1.0	1	B8H0536	08/17/2018	08/20/18 15:25	
Copper	**27**	2.0	1	B8H0536	08/17/2018	08/20/18 15:25	
Lead	**8.2**	1.0	1	B8H0536	08/17/2018	08/20/18 15:25	
Molybdenum	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:25	
Nickel	**65**	1.0	1	B8H0536	08/17/2018	08/20/18 15:25	
Selenium	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:25	
Silver	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:25	
Thallium	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:25	
Vanadium	**30**	1.0	1	B8H0536	08/17/2018	08/20/18 15:25	
Zinc	**43**	1.0	1	B8H0536	08/17/2018	08/20/18 15:25	

Mercury by AA (Cold Vapor) EPA 7471A

Analyst: KEK

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	ND	0.10	1	B8H0539	08/17/2018	08/20/18 16:00	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: VW

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	1	B8H0433	08/15/2018	08/15/18 21:19	
Surrogate: 4-Bromofluorobenzene	*96.9 %*	*57 - 144*		B8H0433	08/15/2018	*08/15/18 21:19*	

Diesel Range Organics by EPA 8015B

Analyst: TKT

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	**5.0**	1.0	1	B8H0532	08/17/2018	08/17/18 23:37	
ORO	**7.1**	1.0	1	B8H0532	08/17/2018	08/17/18 23:37	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : EASTRIDGE-BART, E8222-02-02
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 10/26/2018

Client Sample ID GH19-1.5

Lab ID: 1802940-18

Diesel Range Organics by EPA 8015B

Analyst: TKT

Analyte		Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: p-Terphenyl	*80.5 %*		*34 - 158*		B8H0532	08/17/2018	*08/17/18 23:37*	

BTEX/MTBE by EPA 8021

Analyst: VW

Analyte		Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Benzene		ND	5.0	1	B8H0433	08/15/2018	08/15/18 21:19	
Toluene		ND	5.0	1	B8H0433	08/15/2018	08/15/18 21:19	
Ethylbenzene		ND	5.0	1	B8H0433	08/15/2018	08/15/18 21:19	
m,p-Xylene		ND	10	1	B8H0433	08/15/2018	08/15/18 21:19	
o-Xylene		ND	5.0	1	B8H0433	08/15/2018	08/15/18 21:19	
Surrogate: 4-Bromofluorobenzene	*90.8 %*		*37 - 139*		B8H0433	08/15/2018	*08/15/18 21:19*	

Organochlorine Pesticides by EPA 8081

Analyst: CO/

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
4,4´-DDD	ND	2.0	1	B8H0533	08/17/2018	08/20/18 11:11	
4,4´-DDE [2C]	ND	2.0	1	B8H0533	08/17/2018	08/20/18 11:11	
4,4´-DDT	ND	2.0	1	B8H0533	08/17/2018	08/20/18 11:11	
Aldrin	ND	1.0	1	B8H0533	08/17/2018	08/20/18 11:11	
alpha-BHC	ND	1.0	1	B8H0533	08/17/2018	08/20/18 11:11	
alpha-Chlordane [2C]	ND	1.0	1	B8H0533	08/17/2018	08/20/18 11:11	
beta-BHC	ND	1.0	1	B8H0533	08/17/2018	08/20/18 11:11	
Chlordane	ND	8.5	1	B8H0533	08/17/2018	08/20/18 11:11	
delta-BHC	ND	1.0	1	B8H0533	08/17/2018	08/20/18 11:11	
Dieldrin	ND	2.0	1	B8H0533	08/17/2018	08/20/18 11:11	
Endosulfan I	ND	1.0	1	B8H0533	08/17/2018	08/20/18 11:11	
Endosulfan II	ND	2.0	1	B8H0533	08/17/2018	08/20/18 11:11	
Endosulfan sulfate	ND	2.0	1	B8H0533	08/17/2018	08/20/18 11:11	
Endrin	ND	2.0	1	B8H0533	08/17/2018	08/20/18 11:11	
Endrin aldehyde	ND	2.0	1	B8H0533	08/17/2018	08/20/18 11:11	
Endrin ketone	ND	2.0	1	B8H0533	08/17/2018	08/20/18 11:11	
gamma-BHC	ND	1.0	1	B8H0533	08/17/2018	08/20/18 11:11	
gamma-Chlordane [2C]	ND	1.0	1	B8H0533	08/17/2018	08/20/18 11:11	
Heptachlor	ND	1.0	1	B8H0533	08/17/2018	08/20/18 11:11	
Heptachlor epoxide	ND	1.0	1	B8H0533	08/17/2018	08/20/18 11:11	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : EASTRIDGE-BART, E8222-02-02
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 10/26/2018

Client Sample ID GH19-1.5

Lab ID: 1802940-18

Organochlorine Pesticides by EPA 8081 **Analyst: CO/**

Analyte		Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Methoxychlor		ND	5.0	1	B8H0533	08/17/2018	08/20/18 11:11	
Toxaphene		ND	50	1	B8H0533	08/17/2018	08/20/18 11:11	
Surrogate: Decachlorobiphenyl	*60.6 %*		*15 - 100*		B8H0533	08/17/2018	*08/20/18 11:11*	
Surrogate: Tetrachloro-m-xylene	*95.1 %*		*16 - 100*		B8H0533	08/17/2018	*08/20/18 11:11*	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : EASTRIDGE-BART, E8222-02-02
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 10/26/2018

Client Sample ID GH20-0

Lab ID: 1802940-19

Title 22 Metals by ICP-AES EPA 6010B

Analyst: GO

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	1	B8H0536	08/17/2018	08/20/18 15:26	
Arsenic	**4.4**	1.0	1	B8H0536	08/17/2018	08/20/18 15:26	
Barium	**130**	1.0	1	B8H0536	08/17/2018	08/20/18 15:26	
Beryllium	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:26	
Cadmium	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:26	
Chromium	**44**	1.0	1	B8H0536	08/17/2018	08/20/18 15:26	
Cobalt	**11**	1.0	1	B8H0536	08/17/2018	08/20/18 15:26	
Copper	**30**	2.0	1	B8H0536	08/17/2018	08/20/18 15:26	
Lead	**55**	1.0	1	B8H0536	08/17/2018	08/20/18 15:26	
Molybdenum	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:26	
Nickel	**67**	1.0	1	B8H0536	08/17/2018	08/20/18 15:26	
Selenium	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:26	
Silver	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:26	
Thallium	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:26	
Vanadium	**31**	1.0	1	B8H0536	08/17/2018	08/20/18 15:26	
Zinc	**57**	1.0	1	B8H0536	08/17/2018	08/20/18 15:26	

Mercury by AA (Cold Vapor) EPA 7471A

Analyst: KEK

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	ND	0.10	1	B8H0539	08/17/2018	08/20/18 16:02	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: VW

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	1	B8H0433	08/15/2018	08/15/18 21:38	
Surrogate: 4-Bromofluorobenzene	*106 %*	*57 - 144*		B8H0433	08/15/2018	*08/15/18 21:38*	

Diesel Range Organics by EPA 8015B

Analyst: TKT

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	**14**	10	10	B8H0532	08/17/2018	08/17/18 23:53	
ORO	**28**	10	10	B8H0532	08/17/2018	08/17/18 23:53	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : EASTRIDGE-BART, E8222-02-02
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 10/26/2018

Client Sample ID GH20-0

Lab ID: 1802940-19

Diesel Range Organics by EPA 8015B

Analyst: TKT

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: p-Terphenyl	*0%*	*34 - 158*		B8H0532	08/17/2018	*08/17/18 23:53*	S4

BTEX/MTBE by EPA 8021

Analyst: VW

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Benzene	ND	5.0	1	B8H0433	08/15/2018	08/15/18 21:38	
Toluene	ND	5.0	1	B8H0433	08/15/2018	08/15/18 21:38	
Ethylbenzene	ND	5.0	1	B8H0433	08/15/2018	08/15/18 21:38	
m,p-Xylene	ND	10	1	B8H0433	08/15/2018	08/15/18 21:38	
o-Xylene	ND	5.0	1	B8H0433	08/15/2018	08/15/18 21:38	
Surrogate: 4-Bromofluorobenzene	*95.6 %*	*37 - 139*		B8H0433	08/15/2018	*08/15/18 21:38*	

Organochlorine Pesticides by EPA 8081

Analyst: CO/

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
4,4´-DDD [2C]	ND	2.0	1	B8H0533	08/17/2018	08/20/18 11:22	
4,4´-DDE	**7.7**	2.0	1	B8H0533	08/17/2018	08/20/18 11:22	
4,4´-DDT	ND	2.0	1	B8H0533	08/17/2018	08/20/18 11:22	
Aldrin	ND	1.0	1	B8H0533	08/17/2018	08/20/18 11:22	
alpha-BHC	ND	1.0	1	B8H0533	08/17/2018	08/20/18 11:22	
alpha-Chlordane	ND	1.0	1	B8H0533	08/17/2018	08/20/18 11:22	
beta-BHC	ND	1.0	1	B8H0533	08/17/2018	08/20/18 11:22	
Chlordane [2C]	ND	8.5	1	B8H0533	08/17/2018	08/20/18 11:22	
delta-BHC	ND	1.0	1	B8H0533	08/17/2018	08/20/18 11:22	
Dieldrin	ND	2.0	1	B8H0533	08/17/2018	08/20/18 11:22	
Endosulfan I	ND	1.0	1	B8H0533	08/17/2018	08/20/18 11:22	
Endosulfan II	ND	2.0	1	B8H0533	08/17/2018	08/20/18 11:22	
Endosulfan sulfate	ND	2.0	1	B8H0533	08/17/2018	08/20/18 11:22	
Endrin	ND	2.0	1	B8H0533	08/17/2018	08/20/18 11:22	
Endrin aldehyde	ND	2.0	1	B8H0533	08/17/2018	08/20/18 11:22	
Endrin ketone	ND	2.0	1	B8H0533	08/17/2018	08/20/18 11:22	
gamma-BHC	ND	1.0	1	B8H0533	08/17/2018	08/20/18 11:22	
gamma-Chlordane [2C]	ND	1.0	1	B8H0533	08/17/2018	08/20/18 11:22	
Heptachlor	ND	1.0	1	B8H0533	08/17/2018	08/20/18 11:22	
Heptachlor epoxide	ND	1.0	1	B8H0533	08/17/2018	08/20/18 11:22	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : EASTRIDGE-BART, E8222-02-02
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 10/26/2018

Client Sample ID GH20-0

Lab ID: 1802940-19

Organochlorine Pesticides by EPA 8081 **Analyst: CO/**

Analyte		Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Methoxychlor		ND	5.0	1	B8H0533	08/17/2018	08/20/18 11:22	
Toxaphene		ND	50	1	B8H0533	08/17/2018	08/20/18 11:22	
Surrogate: Decachlorobiphenyl	*59.1 %*		*15 - 100*		B8H0533	08/17/2018	*08/20/18 11:22*	
Surrogate: Tetrachloro-m-xylene	*95.7 %*		*16 - 100*		B8H0533	08/17/2018	*08/20/18 11:22*	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : EASTRIDGE-BART, E8222-02-02
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 10/26/2018

Client Sample ID GH20-1.5

Lab ID: 1802940-20

Title 22 Metals by ICP-AES EPA 6010B

Analyst: GO

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	1	B8H0536	08/17/2018	08/20/18 15:27	
Arsenic	**4.2**	1.0	1	B8H0536	08/17/2018	08/20/18 15:27	
Barium	**130**	1.0	1	B8H0536	08/17/2018	08/20/18 15:27	
Beryllium	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:27	
Cadmium	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:27	
Chromium	**40**	1.0	1	B8H0536	08/17/2018	08/20/18 15:27	
Cobalt	**9.8**	1.0	1	B8H0536	08/17/2018	08/20/18 15:27	
Copper	**27**	2.0	1	B8H0536	08/17/2018	08/20/18 15:27	
Lead	**7.6**	1.0	1	B8H0536	08/17/2018	08/20/18 15:27	
Molybdenum	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:27	
Nickel	**61**	1.0	1	B8H0536	08/17/2018	08/20/18 15:27	
Selenium	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:27	
Silver	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:27	
Thallium	ND	1.0	1	B8H0536	08/17/2018	08/20/18 15:27	
Vanadium	**30**	1.0	1	B8H0536	08/17/2018	08/20/18 15:27	
Zinc	**44**	1.0	1	B8H0536	08/17/2018	08/20/18 15:27	

Mercury by AA (Cold Vapor) EPA 7471A

Analyst: KEK

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	ND	0.10	1	B8H0539	08/17/2018	08/20/18 16:16	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: VW

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	1	B8H0433	08/15/2018	08/15/18 21:56	
Surrogate: 4-Bromofluorobenzene	*104 %*	*57 - 144*		B8H0433	08/15/2018	*08/15/18 21:56*	

Diesel Range Organics by EPA 8015B

Analyst: TKT

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	ND	1.0	1	B8H0532	08/17/2018	08/17/18 21:41	
ORO	ND	1.0	1	B8H0532	08/17/2018	08/17/18 21:41	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : EASTRIDGE-BART, E8222-02-02
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 10/26/2018

Client Sample ID GH20-1.5

Lab ID: 1802940-20

Diesel Range Organics by EPA 8015B

Analyst: TKT

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: p-Terphenyl	*156 %*	*34 - 158*		B8H0532	08/17/2018	*08/17/18 21:41*	

BTEX/MTBE by EPA 8021

Analyst: VW

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Benzene	ND	5.0	1	B8H0433	08/15/2018	08/15/18 21:56	
Toluene	ND	5.0	1	B8H0433	08/15/2018	08/15/18 21:56	
Ethylbenzene	ND	5.0	1	B8H0433	08/15/2018	08/15/18 21:56	
m,p-Xylene	ND	10	1	B8H0433	08/15/2018	08/15/18 21:56	
o-Xylene	ND	5.0	1	B8H0433	08/15/2018	08/15/18 21:56	
Surrogate: 4-Bromofluorobenzene	*93.4 %*	*37 - 139*		B8H0433	08/15/2018	*08/15/18 21:56*	

Organochlorine Pesticides by EPA 8081

Analyst: CO/

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
4,4´-DDD	ND	2.0	1	B8H0533	08/17/2018	08/20/18 11:32	
4,4´-DDE [2C]	ND	2.0	1	B8H0533	08/17/2018	08/20/18 11:32	
4,4´-DDT [2C]	ND	2.0	1	B8H0533	08/17/2018	08/20/18 11:32	
Aldrin	ND	1.0	1	B8H0533	08/17/2018	08/20/18 11:32	
alpha-BHC	ND	1.0	1	B8H0533	08/17/2018	08/20/18 11:32	
alpha-Chlordane	ND	1.0	1	B8H0533	08/17/2018	08/20/18 11:32	
beta-BHC	ND	1.0	1	B8H0533	08/17/2018	08/20/18 11:32	
Chlordane	ND	8.5	1	B8H0533	08/17/2018	08/20/18 11:32	
delta-BHC	ND	1.0	1	B8H0533	08/17/2018	08/20/18 11:32	
Dieldrin	ND	2.0	1	B8H0533	08/17/2018	08/20/18 11:32	
Endosulfan I	ND	1.0	1	B8H0533	08/17/2018	08/20/18 11:32	
Endosulfan II	ND	2.0	1	B8H0533	08/17/2018	08/20/18 11:32	
Endosulfan sulfate	ND	2.0	1	B8H0533	08/17/2018	08/20/18 11:32	
Endrin	ND	2.0	1	B8H0533	08/17/2018	08/20/18 11:32	
Endrin aldehyde	ND	2.0	1	B8H0533	08/17/2018	08/20/18 11:32	
Endrin ketone	ND	2.0	1	B8H0533	08/17/2018	08/20/18 11:32	
gamma-BHC	ND	1.0	1	B8H0533	08/17/2018	08/20/18 11:32	
gamma-Chlordane	ND	1.0	1	B8H0533	08/17/2018	08/20/18 11:32	
Heptachlor	ND	1.0	1	B8H0533	08/17/2018	08/20/18 11:32	
Heptachlor epoxide	ND	1.0	1	B8H0533	08/17/2018	08/20/18 11:32	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : EASTRIDGE-BART, E8222-02-02
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 10/26/2018

Client Sample ID GH20-1.5

Lab ID: 1802940-20

Organochlorine Pesticides by EPA 8081 **Analyst: CO/**

Analyte		Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Methoxychlor		ND	5.0	1	B8H0533	08/17/2018	08/20/18 11:32	
Toxaphene		ND	50	1	B8H0533	08/17/2018	08/20/18 11:32	
Surrogate: Decachlorobiphenyl	*45.4 %*		*15 - 100*		B8H0533	08/17/2018	*08/20/18 11:32*	
Surrogate: Tetrachloro-m-xylene	*70.5 %*		*16 - 100*		B8H0533	08/17/2018	*08/20/18 11:32*	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : EASTRIDGE-BART, E8222-02-02
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 10/26/2018

QUALITY CONTROL SECTION

Title 22 Metals by ICP-AES EPA 6010B - Quality Control

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B8H0536 - EPA 3050B_S										
Blank (B8H0536-BLK1)						Prepared: 8/17/2018 Analyzed: 8/20/2018				
Antimony	ND	2.0	0.51							
Arsenic	ND	1.0	0.12							
Barium	ND	1.0	0.12							
Beryllium	ND	1.0	0.03							
Cadmium	ND	1.0	0.14							
Chromium	ND	1.0	0.26							
Cobalt	ND	1.0	0.07							
Copper	ND	2.0	0.19							
Lead	ND	1.0	0.18							
Molybdenum	ND	1.0	0.12							
Nickel	ND	1.0	0.18							
Selenium	ND	1.0	0.40							
Silver	ND	1.0	0.12							
Thallium	ND	1.0	0.38							
Vanadium	ND	1.0	0.06							
Zinc	ND	1.0	0.15							
LCS (B8H0536-BS1)						Prepared: 8/17/2018 Analyzed: 8/21/2018				
Antimony	43.7109	2.0	0.51	50.0000		87.4	80 - 120			
Arsenic	42.6511	1.0	0.12	50.0000		85.3	80 - 120			
Barium	44.3713	1.0	0.12	50.0000		88.7	80 - 120			
Beryllium	41.9635	1.0	0.03	50.0000		83.9	80 - 120			
Cadmium	42.0142	1.0	0.14	50.0000		84.0	80 - 120			
Chromium	44.5913	1.0	0.26	50.0000		89.2	80 - 120			
Cobalt	44.5863	1.0	0.07	50.0000		89.2	80 - 120			
Copper	45.0278	2.0	0.19	50.0000		90.1	80 - 120			
Lead	43.8008	1.0	0.18	50.0000		87.6	80 - 120			
Molybdenum	42.8873	1.0	0.12	50.0000		85.8	80 - 120			
Nickel	43.9684	1.0	0.18	50.0000		87.9	80 - 120			
Selenium	40.8387	1.0	0.40	50.0000		81.7	80 - 120			
Silver	42.5785	1.0	0.12	50.0000		85.2	80 - 120			
Thallium	43.7347	1.0	0.38	50.0000		87.5	80 - 120			
Vanadium	44.9352	1.0	0.06	50.0000		89.9	80 - 120			
Zinc	42.4216	1.0	0.15	50.0000		84.8	80 - 120			
Matrix Spike (B8H0536-MS1)			**Source: 1802940-01**			Prepared: 8/17/2018 Analyzed: 8/20/2018				
Antimony	53.7183	2.0	0.51	124.378	ND	43.2	28 - 99			
Arsenic	96.6217	1.0	0.12	124.378	4.19868	74.3	49 - 99			
Barium	211.205	1.0	0.12	124.378	124.172	70.0	19 - 135			
Beryllium	94.4794	1.0	0.03	124.378	ND	76.0	53 - 99			

Geocon Consultants, Inc.	Project Number : EASTRIDGE-BART, E8222-02-02
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 10/26/2018

Title 22 Metals by ICP-AES EPA 6010B - Quality Control (cont'd)

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B8H0536 - EPA 3050B_S (continued)										
Matrix Spike (B8H0536-MS1) - Continued			**Source: 1802940-01**		Prepared: 8/17/2018 Analyzed: 8/20/2018					
Cadmium	84.7977	1.0	0.14	124.378	0.220037	68.0	49 - 95			
Chromium	137.810	1.0	0.26	124.378	41.8070	77.2	41 - 114			
Cobalt	101.978	1.0	0.07	124.378	10.9550	73.2	44 - 106			
Copper	133.635	2.0	0.19	124.378	28.8927	84.2	42 - 120			
Lead	91.4251	1.0	0.18	124.378	4.75086	69.7	36 - 121			
Molybdenum	88.9817	1.0	0.12	124.378	ND	71.5	49 - 102			
Nickel	144.808	1.0	0.18	124.378	60.6713	67.6	45 - 101			
Selenium	88.5194	1.0	0.40	124.378	ND	71.2	50 - 94			
Silver	101.381	1.0	0.12	124.378	ND	81.5	33 - 120			
Thallium	80.0631	1.0	0.38	124.378	ND	64.4	41 - 95			
Vanadium	130.353	1.0	0.06	124.378	35.0382	76.6	45 - 113			
Zinc	125.534	1.0	0.15	124.378	49.1684	61.4	26 - 117			
Matrix Spike Dup (B8H0536-MSD1)			**Source: 1802940-01**		Prepared: 8/17/2018 Analyzed: 8/20/2018					
Antimony	42.8895	2.0	0.51	124.378	ND	34.5	28 - 99	22.4	20	R
Arsenic	80.2522	1.0	0.12	124.378	4.19868	61.1	49 - 99	18.5	20	
Barium	196.832	1.0	0.12	124.378	124.172	58.4	19 - 135	7.05	20	
Beryllium	78.9034	1.0	0.03	124.378	ND	63.4	53 - 99	18.0	20	
Cadmium	70.4798	1.0	0.14	124.378	0.220037	56.5	49 - 95	18.4	20	
Chromium	120.040	1.0	0.26	124.378	41.8070	62.9	41 - 114	13.8	20	
Cobalt	85.5867	1.0	0.07	124.378	10.9550	60.0	44 - 106	17.5	20	
Copper	117.990	2.0	0.19	124.378	28.8927	71.6	42 - 120	12.4	20	
Lead	77.2813	1.0	0.18	124.378	4.75086	58.3	36 - 121	16.8	20	
Molybdenum	72.5736	1.0	0.12	124.378	ND	58.3	49 - 102	20.3	20	R
Nickel	126.605	1.0	0.18	124.378	60.6713	53.0	45 - 101	13.4	20	
Selenium	73.9637	1.0	0.40	124.378	ND	59.5	50 - 94	17.9	20	
Silver	85.8864	1.0	0.12	124.378	ND	69.1	33 - 120	16.5	20	
Thallium	65.6190	1.0	0.38	124.378	ND	52.8	41 - 95	19.8	20	
Vanadium	114.758	1.0	0.06	124.378	35.0382	64.1	45 - 113	12.7	20	
Zinc	110.372	1.0	0.15	124.378	49.1684	49.2	26 - 117	12.9	20	

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Geocon Consultants, Inc.	Project Number : EASTRIDGE-BART, E8222-02-02
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 10/26/2018

Mercury by AA (Cold Vapor) EPA 7471A - Quality Control

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B8H0539 - EPA 7471_S										
Blank (B8H0539-BLK1)					Prepared: 8/17/2018 Analyzed: 8/20/2018					
Mercury	ND	0.10	0.006							
LCS (B8H0539-BS1)					Prepared: 8/17/2018 Analyzed: 8/20/2018					
Mercury	0.860835	0.10	0.006	0.833333		103	80 - 120			
Matrix Spike (B8H0539-MS1)			**Source: 1802940-01**		Prepared: 8/17/2018 Analyzed: 8/20/2018					
Mercury	1.05972	0.10	0.006	0.847458	0.065645	117	70 - 130			
Matrix Spike Dup (B8H0539-MSD1)			**Source: 1802940-01**		Prepared: 8/17/2018 Analyzed: 8/20/2018					
Mercury	1.05980	0.10	0.006	0.847458	0.065645	117	70 - 130	0.00718	20	

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6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 10/26/2018

Mercury by AA (Cold Vapor) EPA 7471A - Quality Control

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B8H0539 - EPA 7471_S									
Post Spike (B8H0539-PS1)			**Source: 1802940-01**	Prepared: 8/17/2018 Analyzed: 8/20/2018					
Mercury	6.8987E-3		5.00000E-3	0.000788	122	85 - 115			M1

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Gasoline Range Organics by EPA 8015B (Modified) - Quality Control

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B8H0433 - GCVOA_S										
Blank (B8H0433-BLK1)						Prepared: 8/15/2018 Analyzed: 8/15/2018				
Gasoline Range Organics	ND	1.0	0.20							
Surrogate: 4-Bromofluorobenzene	*0.1733*			*0.200000*		*86.6*	*57 - 144*			
LCS (B8H0433-BS1)						Prepared: 8/15/2018 Analyzed: 8/15/2018				
Gasoline Range Organics	4.28200	1.0	0.20	5.00000		85.6	70 - 130			
Surrogate: 4-Bromofluorobenzene	*0.1868*			*0.200000*		*93.4*	*57 - 144*			
Matrix Spike (B8H0433-MS1)			**Source: 1802940-01**			Prepared: 8/15/2018 Analyzed: 8/15/2018				
Gasoline Range Organics	4.02600	1.0	0.20	5.00000	ND	80.5	28 - 118			
Surrogate: 4-Bromofluorobenzene	*0.2117*			*0.200000*		*106*	*57 - 144*			
Matrix Spike Dup (B8H0433-MSD1)			**Source: 1802940-01**			Prepared: 8/15/2018 Analyzed: 8/15/2018				
Gasoline Range Organics	3.99800	1.0	0.20	5.00000	ND	80.0	28 - 118	0.698	20	
Surrogate: 4-Bromofluorobenzene	*0.2160*			*0.200000*		*108*	*57 - 144*			

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Gasoline Range Organics by EPA 8015B (Modified) - Quality Control

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B8H0482 - GCVOA_S										
Blank (B8H0482-BLK1)						Prepared: 8/16/2018 Analyzed: 8/16/2018				
Gasoline Range Organics	ND	1.0	0.20							
Surrogate: 4-Bromofluorobenzene	*0.1732*			*0.200000*		*86.6*	*57 - 144*			
LCS (B8H0482-BS1)						Prepared: 8/16/2018 Analyzed: 8/16/2018				
Gasoline Range Organics	4.44600	1.0	0.20	5.00000		88.9	70 - 130			
Surrogate: 4-Bromofluorobenzene	*0.2098*			*0.200000*		*105*	*57 - 144*			
Matrix Spike (B8H0482-MS1)			**Source: 1802994-01**			Prepared: 8/16/2018 Analyzed: 8/16/2018				
Gasoline Range Organics	3.51300	1.0	0.20	5.00000	ND	70.3	28 - 118			
Surrogate: 4-Bromofluorobenzene	*0.1930*			*0.200000*		*96.5*	*57 - 144*			
Matrix Spike Dup (B8H0482-MSD1)			**Source: 1802994-01**			Prepared: 8/16/2018 Analyzed: 8/16/2018				
Gasoline Range Organics	3.27600	1.0	0.20	5.00000	ND	65.5	28 - 118	6.98	20	
Surrogate: 4-Bromofluorobenzene	*0.1808*			*0.200000*		*90.4*	*57 - 144*			

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Diesel Range Organics by EPA 8015B - Quality Control

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B8H0532 - GCSEMI_DRO_S										
Blank (B8H0532-BLK1)						Prepared: 8/17/2018 Analyzed: 8/17/2018				
DRO	ND	1.0	1.0							
ORO	ND	1.0	1.0							
Surrogate: p-Terphenyl	*2.650*			*2.66667*		*99.4*	*34 - 158*			
LCS (B8H0532-BS1)						Prepared: 8/17/2018 Analyzed: 8/17/2018				
DRO	37.1657	1.0	1.0	33.3333		111	47 - 152			
Surrogate: p-Terphenyl	*2.770*			*2.66667*		*104*	*34 - 158*			
Matrix Spike (B8H0532-MS1)			**Source: 1802940-01**			Prepared: 8/17/2018 Analyzed: 8/17/2018				
DRO	28.5907	1.0	1.0	33.3333	13.1100	46.4	34 - 130			
Surrogate: p-Terphenyl	*2.438*			*2.66667*		*91.4*	*34 - 158*			
Matrix Spike Dup (B8H0532-MSD1)			**Source: 1802940-01**			Prepared: 8/17/2018 Analyzed: 8/17/2018				
DRO	27.3340	1.0	1.0	33.3333	13.1100	42.7	34 - 130	4.49	20	
Surrogate: p-Terphenyl	*2.562*			*2.66667*		*96.1*	*34 - 158*			

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BTEX/MTBE by EPA 8021 - Quality Control

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B8H0433 - GCVOA_S										
Blank (B8H0433-BLK1)					Prepared: 8/15/2018 Analyzed: 8/15/2018					
Benzene	ND	5.0	0.29							
Toluene	ND	5.0	0.44							
Ethylbenzene	ND	5.0	0.45							
m,p-Xylene	ND	10	0.50							
o-Xylene	ND	5.0	0.32							
Surrogate: 4-Bromofluorobenzene	*157.3*			*200.000*		*78.7*	*37 - 139*			
LCS (B8H0433-BS2)					Prepared: 8/15/2018 Analyzed: 8/15/2018					
Benzene	93.5610	5.0	0.29	100.000		93.6	70 - 130			
Toluene	97.9440	5.0	0.44	100.000		97.9	70 - 130			
Ethylbenzene	102.775	5.0	0.45	100.000		103	70 - 130			
m,p-Xylene	197.244	10	0.50	200.000		98.6	70 - 130			
o-Xylene	96.2790	5.0	0.32	100.000		96.3	70 - 130			
Surrogate: 4-Bromofluorobenzene	*189.1*			*200.000*		*94.5*	*37 - 139*			
Matrix Spike (B8H0433-MS1)			**Source: 1802940-01**		Prepared: 8/15/2018 Analyzed: 8/15/2018					
Benzene	31.6560	5.0	0.29	31.1750	ND	102	6 - 173			
Toluene	151.074	5.0	0.44	192.275	ND	78.6	14 - 127			
Ethylbenzene	46.6390	5.0	0.45	50.7300	ND	91.9	12 - 140			
m,p-Xylene	162.366	10	0.50	193.730	ND	83.8	12 - 138			
o-Xylene	60.5980	5.0	0.32	75.3325	ND	80.4	11 - 135			
Surrogate: 4-Bromofluorobenzene	*193.0*			*200.000*		*96.5*	*37 - 139*			
Matrix Spike Dup (B8H0433-MSD1)			**Source: 1802940-01**		Prepared: 8/15/2018 Analyzed: 8/15/2018					
Benzene	35.0850	5.0	0.29	31.1750	ND	113	6 - 173	10.3	20	
Toluene	146.511	5.0	0.44	192.275	ND	76.2	14 - 127	3.07	20	
Ethylbenzene	48.9770	5.0	0.45	50.7300	ND	96.5	12 - 140	4.89	20	
m,p-Xylene	158.306	10	0.50	193.730	ND	81.7	12 - 138	2.53	86	
o-Xylene	59.9210	5.0	0.32	75.3325	ND	79.5	11 - 135	1.12	20	
Surrogate: 4-Bromofluorobenzene	*194.5*			*200.000*		*97.2*	*37 - 139*			

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BTEX/MTBE by EPA 8021 - Quality Control

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B8H0482 - GCVOA_S										
Blank (B8H0482-BLK1)					Prepared: 8/16/2018 Analyzed: 8/16/2018					
Benzene	ND	5.0	0.29							
Toluene	ND	5.0	0.44							
Ethylbenzene	ND	5.0	0.45							
m,p-Xylene	ND	10	0.50							
o-Xylene	ND	5.0	0.32							
Surrogate: 4-Bromofluorobenzene	*152.8*			*200.000*		*76.4*	*37 - 139*			
LCS (B8H0482-BS2)					Prepared: 8/16/2018 Analyzed: 8/16/2018					
Benzene	96.6130	5.0	0.29	100.000		96.6	70 - 130			
Toluene	88.8260	5.0	0.44	100.000		88.8	70 - 130			
Ethylbenzene	96.7100	5.0	0.45	100.000		96.7	70 - 130			
m,p-Xylene	188.494	10	0.50	200.000		94.2	70 - 130			
o-Xylene	97.6820	5.0	0.32	100.000		97.7	70 - 130			
Surrogate: 4-Bromofluorobenzene	*186.3*			*200.000*		*93.2*	*37 - 139*			
Matrix Spike (B8H0482-MS1)			**Source: 1802994-01**		Prepared: 8/16/2018 Analyzed: 8/16/2018					
Benzene	30.6960	5.0	0.29	31.1750	ND	98.5	6 - 173			
Toluene	135.114	5.0	0.44	192.275	ND	70.3	14 - 127			
Ethylbenzene	45.2340	5.0	0.45	50.7300	ND	89.2	12 - 140			
m,p-Xylene	142.961	10	0.50	193.730	ND	73.8	12 - 138			
o-Xylene	60.8030	5.0	0.32	75.3325	ND	80.7	11 - 135			
Surrogate: 4-Bromofluorobenzene	*173.2*			*200.000*		*86.6*	*37 - 139*			
Matrix Spike Dup (B8H0482-MSD1)			**Source: 1802994-01**		Prepared: 8/16/2018 Analyzed: 8/16/2018					
Benzene	27.7050	5.0	0.29	31.1750	ND	88.9	6 - 173	10.2	20	
Toluene	120.515	5.0	0.44	192.275	ND	62.7	14 - 127	11.4	20	
Ethylbenzene	40.0170	5.0	0.45	50.7300	ND	78.9	12 - 140	12.2	20	
m,p-Xylene	135.461	10	0.50	193.730	ND	69.9	12 - 138	5.39	86	
o-Xylene	51.8950	5.0	0.32	75.3325	ND	68.9	11 - 135	15.8	20	
Surrogate: 4-Bromofluorobenzene	*164.9*			*200.000*		*82.5*	*37 - 139*			

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Livermore , CA 94550	Reported : 10/26/2018

Organochlorine Pesticides by EPA 8081 - Quality Control

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B8H0533 - GCSEMI_PCB/PEST_S										
Blank (B8H0533-BLK1)							Prepared: 8/17/2018 Analyzed: 8/20/2018			
4,4´-DDD	ND	2.0	0.10							
4,4´-DDD [2C]	ND	2.0	0.10							
4,4´-DDE	ND	2.0	0.07							
4,4´-DDE [2C]	ND	2.0	0.07							
4,4´-DDT	ND	2.0	0.14							
4,4´-DDT [2C]	ND	2.0	0.14							
Aldrin	ND	1.0	0.08							
Aldrin [2C]	ND	1.0	0.08							
alpha-BHC	ND	1.0	0.04							
alpha-BHC [2C]	ND	1.0	0.04							
alpha-Chlordane	ND	1.0	0.04							
alpha-Chlordane [2C]	ND	1.0	0.04							
beta-BHC	ND	1.0	0.04							
beta-BHC [2C]	ND	1.0	0.04							
Chlordane	ND	8.5	0.90							
Chlordane [2C]	ND	8.5	0.90							
delta-BHC	ND	1.0	0.04							
delta-BHC [2C]	ND	1.0	0.04							
Dieldrin	ND	2.0	0.05							
Dieldrin [2C]	ND	2.0	0.05							
Endosulfan I	ND	1.0	0.04							
Endosulfan I [2C]	ND	1.0	0.04							
Endosulfan II	ND	2.0	0.10							
Endosulfan II [2C]	ND	2.0	0.10							
Endosulfan sulfate	ND	2.0	0.06							
Endosulfan Sulfate [2C]	ND	2.0	0.06							
Endrin	ND	2.0	0.08							
Endrin [2C]	ND	2.0	0.08							
Endrin aldehyde	ND	2.0	0.09							
Endrin aldehyde [2C]	ND	2.0	0.09							
Endrin ketone	ND	2.0	0.07							
Endrin ketone [2C]	ND	2.0	0.07							
gamma-BHC	ND	1.0	0.05							
gamma-BHC [2C]	ND	1.0	0.05							
gamma-Chlordane	ND	1.0	0.04							
gamma-Chlordane [2C]	ND	1.0	0.04							
Heptachlor	ND	1.0	0.07							
Heptachlor [2C]	ND	1.0	0.07							
Heptachlor epoxide	ND	1.0	0.04							
Heptachlor epoxide [2C]	ND	1.0	0.04							
Methoxychlor	ND	5.0	0.10							

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Organochlorine Pesticides by EPA 8081 - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B8H0533 - GCSEMI_PCB/PEST_S (continued)										
Blank (B8H0533-BLK1) - Continued					Prepared: 8/17/2018 Analyzed: 8/20/2018					
Methoxychlor [2C]	ND	5.0	0.10							
Toxaphene	ND	50	8.2							
Toxaphene [2C]	ND	50	8.2							
Surrogate: Decachlorobiphenyl	*10.58*			*16.6667*		*63.5*	*15 - 100*			
Surrogate: Decachlorobiphenyl [	*11.21*			*16.6667*		*67.3*	*15 - 100*			
Surrogate: Tetrachloro-m-xylene	*15.64*			*16.6667*		*93.9*	*16 - 100*			
Surrogate: Tetrachloro-m-xylene	*14.73*			*16.6667*		*88.4*	*16 - 100*			
LCS (B8H0533-BS1)					Prepared: 8/17/2018 Analyzed: 8/20/2018					
4,4´-DDD	15.7425	2.0	0.10	16.6667		94.5	62 - 129			
4,4´-DDD [2C]	14.8873	2.0	0.10	16.6667		89.3	62 - 129			
4,4´-DDE	15.9457	2.0	0.07	16.6667		95.7	65 - 117			
4,4´-DDE [2C]	14.7673	2.0	0.07	16.6667		88.6	65 - 117			
4,4´-DDT	14.3477	2.0	0.14	16.6667		86.1	35 - 136			
4,4´-DDT [2C]	13.8210	2.0	0.14	16.6667		82.9	35 - 136			
Aldrin	15.5795	1.0	0.08	16.6667		93.5	67 - 110			
Aldrin [2C]	14.2250	1.0	0.08	16.6667		85.3	67 - 110			
alpha-BHC	15.5143	1.0	0.04	16.6667		93.1	69 - 110			
alpha-BHC [2C]	14.2818	1.0	0.04	16.6667		85.7	69 - 110			
alpha-Chlordane	15.3858	1.0	0.04	16.6667		92.3	65 - 114			
alpha-Chlordane [2C]	14.3645	1.0	0.04	16.6667		86.2	65 - 114			
beta-BHC	15.5415	1.0	0.04	16.6667		93.2	64 - 108			
beta-BHC [2C]	14.4088	1.0	0.04	16.6667		86.5	64 - 108			
delta-BHC	16.7520	1.0	0.04	16.6667		101	44 - 110			
delta-BHC [2C]	15.3967	1.0	0.04	16.6667		92.4	44 - 110			
Dieldrin	14.1233	2.0	0.05	16.6667		84.7	63 - 107			
Dieldrin [2C]	13.2982	2.0	0.05	16.6667		79.8	63 - 107			
Endosulfan I	14.3793	1.0	0.04	16.6667		86.3	63 - 103			
Endosulfan I [2C]	12.9500	1.0	0.04	16.6667		77.7	63 - 103			
Endosulfan II	14.7695	2.0	0.10	16.6667		88.6	62 - 122			
Endosulfan II [2C]	13.9078	2.0	0.10	16.6667		83.4	62 - 122			
Endosulfan sulfate	13.7442	2.0	0.06	16.6667		82.5	53 - 127			
Endosulfan Sulfate [2C]	12.2687	2.0	0.06	16.6667		73.6	53 - 127			
Endrin	16.0535	2.0	0.08	16.6667		96.3	66 - 120			
Endrin [2C]	14.6547	2.0	0.08	16.6667		87.9	66 - 120			
Endrin aldehyde	15.2672	2.0	0.09	16.6667		91.6	67 - 121			
Endrin aldehyde [2C]	14.2692	2.0	0.09	16.6667		85.6	67 - 121			
Endrin ketone	13.2862	2.0	0.07	16.6667		79.7	41 - 146			
Endrin ketone [2C]	12.4788	2.0	0.07	16.6667		74.9	41 - 146			
gamma-BHC	15.0893	1.0	0.05	16.6667		90.5	67 - 109			
gamma-BHC [2C]	13.9092	1.0	0.05	16.6667		83.5	67 - 109			

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6671 Brisa Street	Report To : Rick Day
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Organochlorine Pesticides by EPA 8081 - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B8H0533 - GCSEMI_PCB/PEST_S (continued)										
LCS (B8H0533-BS1) - Continued					Prepared: 8/17/2018 Analyzed: 8/20/2018					
gamma-Chlordane	15.1535	1.0	0.04	16.6667		90.9	63 - 110			
gamma-Chlordane [2C]	14.0653	1.0	0.04	16.6667		84.4	63 - 110			
Heptachlor	15.5683	1.0	0.07	16.6667		93.4	67 - 120			
Heptachlor [2C]	14.4908	1.0	0.07	16.6667		86.9	67 - 120			
Heptachlor epoxide	14.5328	1.0	0.04	16.6667		87.2	62 - 108			
Heptachlor epoxide [2C]	13.3133	1.0	0.04	16.6667		79.9	62 - 108			
Methoxychlor	14.1863	5.0	0.10	16.6667		85.1	47 - 152			
Methoxychlor [2C]	14.8315	5.0	0.10	16.6667		89.0	47 - 152			
Surrogate: Decachlorobiphenyl	*11.49*			*16.6667*		*68.9*	*15 - 100*			
Surrogate: Decachlorobiphenyl [	*11.19*			*16.6667*		*67.1*	*15 - 100*			
Surrogate: Tetrachloro-m-xylene	*14.94*			*16.6667*		*89.6*	*16 - 100*			
Surrogate: Tetrachloro-m-xylene	*13.52*			*16.6667*		*81.1*	*16 - 100*			
Matrix Spike (B8H0533-MS1)			**Source: 1802940-20**		Prepared: 8/17/2018 Analyzed: 8/20/2018					
4,4´-DDD	17.5418	2.0	0.10	16.6667	ND	105	0 - 127			
4,4´-DDD [2C]	16.4500	2.0	0.10	16.6667	ND	98.7	0 - 127			
4,4´-DDE	17.5932	2.0	0.07	16.6667	0.372833	103	0 - 125			
4,4´-DDE [2C]	17.3162	2.0	0.07	16.6667	0.434833	101	0 - 125			
4,4´-DDT	17.8370	2.0	0.14	16.6667	ND	107	0 - 103			M2
4,4´-DDT [2C]	17.2875	2.0	0.14	16.6667	0.175500	103	0 - 103			
Aldrin	17.1322	1.0	0.08	16.6667	ND	103	6 - 104			
Aldrin [2C]	16.8387	1.0	0.08	16.6667	ND	101	6 - 104			
alpha-BHC	17.2587	1.0	0.04	16.6667	ND	104	0 - 114			
alpha-BHC [2C]	15.5990	1.0	0.04	16.6667	ND	93.6	0 - 114			
alpha-Chlordane	17.6952	1.0	0.04	16.6667	ND	106	0 - 110			
alpha-Chlordane [2C]	15.9042	1.0	0.04	16.6667	ND	95.4	0 - 110			
beta-BHC	18.5125	1.0	0.04	16.6667	ND	111	0 - 129			
beta-BHC [2C]	17.2058	1.0	0.04	16.6667	ND	103	0 - 129			
delta-BHC	18.4653	1.0	0.04	16.6667	ND	111	18 - 99			M2
delta-BHC [2C]	18.1367	1.0	0.04	16.6667	ND	109	18 - 99			M2
Dieldrin	16.3540	2.0	0.05	16.6667	ND	98.1	0 - 124			
Dieldrin [2C]	15.0997	2.0	0.05	16.6667	ND	90.6	0 - 124			
Endosulfan I	16.1573	1.0	0.04	16.6667	ND	96.9	0 - 106			
Endosulfan I [2C]	14.3573	1.0	0.04	16.6667	ND	86.1	0 - 106			
Endosulfan II	17.5137	2.0	0.10	16.6667	ND	105	20 - 130			
Endosulfan II [2C]	15.9165	2.0	0.10	16.6667	ND	95.5	20 - 130			
Endosulfan sulfate	16.8230	2.0	0.06	16.6667	ND	101	24 - 119			
Endosulfan Sulfate [2C]	14.6015	2.0	0.06	16.6667	ND	87.6	24 - 119			
Endrin	18.0257	2.0	0.08	16.6667	ND	108	0 - 135			
Endrin [2C]	16.8053	2.0	0.08	16.6667	ND	101	0 - 135			
Endrin aldehyde	16.5568	2.0	0.09	16.6667	ND	99.3	19 - 132			

Geocon Consultants, Inc.	Project Number : EASTRIDGE-BART, E8222-02-02
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 10/26/2018

Organochlorine Pesticides by EPA 8081 - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B8H0533 - GCSEMI_PCB/PEST_S (continued)										
Matrix Spike (B8H0533-MS1) - Continued			**Source: 1802940-20**			Prepared: 8/17/2018 Analyzed: 8/20/2018				
Endrin aldehyde [2C]	11.9852	2.0	0.09	16.6667	ND	71.9	19 - 132			
Endrin ketone	16.5557	2.0	0.07	16.6667	ND	99.3	7 - 141			
Endrin ketone [2C]	14.4743	2.0	0.07	16.6667	ND	86.8	7 - 141			
gamma-BHC	17.5182	1.0	0.05	16.6667	ND	105	0 - 117			
gamma-BHC [2C]	16.2112	1.0	0.05	16.6667	ND	97.3	0 - 117			
gamma-Chlordane	17.1038	1.0	0.04	16.6667	ND	103	0 - 156			
gamma-Chlordane [2C]	13.5880	1.0	0.04	16.6667	ND	81.5	0 - 156			
Heptachlor	17.2310	1.0	0.07	16.6667	ND	103	3 - 112			
Heptachlor [2C]	16.1620	1.0	0.07	16.6667	ND	97.0	3 - 112			
Heptachlor epoxide	16.4882	1.0	0.04	16.6667	ND	98.9	0 - 118			
Heptachlor epoxide [2C]	14.8837	1.0	0.04	16.6667	ND	89.3	0 - 118			
Methoxychlor	16.7240	5.0	0.10	16.6667	ND	100	0 - 161			
Methoxychlor [2C]	17.9075	5.0	0.10	16.6667	ND	107	0 - 161			
Surrogate: Decachlorobiphenyl	*12.00*			*16.6667*		*72.0*	*15 - 100*			
Surrogate: Decachlorobiphenyl [	*11.83*			*16.6667*		*71.0*	*15 - 100*			
Surrogate: Tetrachloro-m-xylene	*16.60*			*16.6667*		*99.6*	*16 - 100*			
Surrogate: Tetrachloro-m-xylene	*14.52*			*16.6667*		*87.1*	*16 - 100*			
Matrix Spike Dup (B8H0533-MSD1)			**Source: 1802940-20**			Prepared: 8/17/2018 Analyzed: 8/20/2018				
4,4´-DDD	18.2373	2.0	0.10	16.6667	ND	109	0 - 127	3.89	20	
4,4´-DDD [2C]	16.0612	2.0	0.10	16.6667	ND	96.4	0 - 127	2.39	20	
4,4´-DDE	17.1212	2.0	0.07	16.6667	0.372833	100	0 - 125	2.72	20	
4,4´-DDE [2C]	16.8920	2.0	0.07	16.6667	0.434833	98.7	0 - 125	2.48	20	
4,4´-DDT	17.1297	2.0	0.14	16.6667	ND	103	0 - 103	4.05	20	
4,4´-DDT [2C]	17.0270	2.0	0.14	16.6667	0.175500	101	0 - 103	1.52	20	
Aldrin	16.6718	1.0	0.08	16.6667	ND	100	6 - 104	2.72	20	
Aldrin [2C]	16.7065	1.0	0.08	16.6667	ND	100	6 - 104	0.788	20	
alpha-BHC	16.9947	1.0	0.04	16.6667	ND	102	0 - 114	1.54	20	
alpha-BHC [2C]	15.6135	1.0	0.04	16.6667	ND	93.7	0 - 114	0.0929	20	
alpha-Chlordane	17.2222	1.0	0.04	16.6667	ND	103	0 - 110	2.71	20	
alpha-Chlordane [2C]	15.4945	1.0	0.04	16.6667	ND	93.0	0 - 110	2.61	20	
beta-BHC	18.0583	1.0	0.04	16.6667	ND	108	0 - 129	2.48	20	
beta-BHC [2C]	17.1188	1.0	0.04	16.6667	ND	103	0 - 129	0.507	20	
delta-BHC	17.9927	1.0	0.04	16.6667	ND	108	18 - 99	2.59	20	M2
delta-BHC [2C]	18.0067	1.0	0.04	16.6667	ND	108	18 - 99	0.719	20	M2
Dieldrin	15.9397	2.0	0.05	16.6667	ND	95.6	0 - 124	2.57	20	
Dieldrin [2C]	14.7482	2.0	0.05	16.6667	ND	88.5	0 - 124	2.36	20	
Endosulfan I	15.8033	1.0	0.04	16.6667	ND	94.8	0 - 106	2.22	20	
Endosulfan I [2C]	14.0463	1.0	0.04	16.6667	ND	84.3	0 - 106	2.19	20	
Endosulfan II	16.8060	2.0	0.10	16.6667	ND	101	20 - 130	4.12	20	
Endosulfan II [2C]	15.5822	2.0	0.10	16.6667	ND	93.5	20 - 130	2.12	20	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : EASTRIDGE-BART, E8222-02-02
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 10/26/2018

Organochlorine Pesticides by EPA 8081 - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B8H0533 - GCSEMI_PCB/PEST_S (continued)										
Matrix Spike Dup (B8H0533-MSD1) - Continued			**Source: 1802940-20**		Prepared: 8/17/2018 Analyzed: 8/20/2018					
Endosulfan sulfate	16.3217	2.0	0.06	16.6667	ND	97.9	24 - 119	3.03	20	
Endosulfan Sulfate [2C]	14.7010	2.0	0.06	16.6667	ND	88.2	24 - 119	0.679	20	
Endrin	18.6093	2.0	0.08	16.6667	ND	112	0 - 135	3.19	20	
Endrin [2C]	16.5098	2.0	0.08	16.6667	ND	99.1	0 - 135	1.77	20	
Endrin aldehyde	15.8687	2.0	0.09	16.6667	ND	95.2	19 - 132	4.24	20	
Endrin aldehyde [2C]	11.4067	2.0	0.09	16.6667	ND	68.4	19 - 132	4.95	20	
Endrin ketone	15.8612	2.0	0.07	16.6667	ND	95.2	7 - 141	4.28	20	
Endrin ketone [2C]	14.2872	2.0	0.07	16.6667	ND	85.7	7 - 141	1.30	20	
gamma-BHC	17.1960	1.0	0.05	16.6667	ND	103	0 - 117	1.86	20	
gamma-BHC [2C]	16.1667	1.0	0.05	16.6667	ND	97.0	0 - 117	0.275	20	
gamma-Chlordane	16.6868	1.0	0.04	16.6667	ND	100	0 - 156	2.47	20	
gamma-Chlordane [2C]	13.3560	1.0	0.04	16.6667	ND	80.1	0 - 156	1.72	20	
Heptachlor	17.2660	1.0	0.07	16.6667	ND	104	3 - 112	0.203	20	
Heptachlor [2C]	16.0688	1.0	0.07	16.6667	ND	96.4	3 - 112	0.578	20	
Heptachlor epoxide	15.9870	1.0	0.04	16.6667	ND	95.9	0 - 118	3.09	20	
Heptachlor epoxide [2C]	14.7033	1.0	0.04	16.6667	ND	88.2	0 - 118	1.22	20	
Methoxychlor	16.2975	5.0	0.10	16.6667	ND	97.8	0 - 161	2.58	20	
Methoxychlor [2C]	17.4283	5.0	0.10	16.6667	ND	105	0 - 161	2.71	20	
Surrogate: Decachlorobiphenyl	*9.598*			*16.6667*		*57.6*	*15 - 100*			
Surrogate: Decachlorobiphenyl [	*11.83*			*16.6667*		*71.0*	*15 - 100*			
Surrogate: Tetrachloro-m-xylene	*14.53*			*16.6667*		*87.2*	*16 - 100*			
Surrogate: Tetrachloro-m-xylene	*12.18*			*16.6667*		*73.1*	*16 - 100*			

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : EASTRIDGE-BART, E8222-02-02
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 10/26/2018

Notes and Definitions

S4	Surrogate was diluted out.
R	RPD value outside acceptance criteria. Calculation is based on raw values.
M2	Matrix spike recovery outside of acceptance limit due to possible matrix interference. The analytical batch was validated by the laboratory control sample.
M1	Matrix spike recovery outside of acceptance limit. The analytical batch was validated by the laboratory control sample.
D1	Sample required dilution due to possible matrix interference.
ND	Analyte is not detected at or above the Practical Quantitation Limit (PQL). When client requests quantitation against MDL, analyte is not detected at or above the Method Detection Limit (MDL)
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
NR	Not Reported
RPD	Relative Percent Difference
CA2	CA-ELAP (CDPH)
OR1	OR-NELAP (OSPHL)

Notes:
(1) The reported MDL and PQL are based on prep ratio variation and analytical dilution.
(2) The suffix [2C] of specific analytes signifies that the reported result is taken from the instrument's second column.
(3) Results are wet unless otherwise specified.

CHAIN OF CUSTODY RECORD

Pg 1 of 1

ADVANCED TECHNOLOGY LABORATORIES
3275 Walnut Ave., Signal Hill, CA 90755
Tel: (562) 989-4045 • Fax: (562) 989-4040

P.O.#: _____ Quote #: GEOCON PREFERRED

Logged By: _____ Date: _____

NOTE: Please include your Quote No. to ensure proper pricing of your project.

FOR LABORATORY USE ONLY:

Method of Transport: ☐ Client ☐ ATL ☐ FedEx ☐ OnTrac ☐ GSO ☐ Other: _____

Sample Condition Upon Receipt:
1. CHILLED 5.4 Y☑ N☐ 4. CUSTODY SEAL Y☐ N☑
2. HEADSPACE (VOA) Y☐ N☐ 5. # OF SPLS MATCH COC Y☑ N☐
3. CONTAINER INTACT Y☑ N☐ 6. PRESERVED Y☐ N☐

Client: Geocon Consultants, Inc. | Address: 6671 Brisa Street | TEL: (925) 371-5900
Attn: R. DAY | City Livermore | State CA | Zip Code 94550 | FAX: (925) 371-5915

Project Name: EASTRIDGE-BART Project #: E8222-02-02 Sampler: (Printed Name) D. WATTS (Signature) [signature]

Relinquished by: (Signature and Printed Name) [signature]	Date: 8/13/18	Time: 1800	Received by: (Signature and Printed Name) GSO	Date: 8/13/18	Time: 1800
Relinquished by: (Signature and Printed Name)	Date:	Time:	Received by: (Signature and Printed Name) [signature]	Date: 8/14/18	Time: 0956
Relinquished by: (Signature and Printed Name)	Date:	Time:	Received by: (Signature and Printed Name)	Date:	Time:

I hereby authorize ATL to perform the work indicated below:
Project Mgr/Submitter: D. WATTS (Print Name) 8/9/18 (Date) [signature] (Signature)

Send Report To: Attn: _____ Co: SEE "CLIENT" Addr: _____ City: _____ State: _____ Zip: _____

Bill To: Attn: _____ Co: _____ Addr: _____ City: _____ State: _____ Zip: _____

Special Instructions/Comments: DO NOT Composite Sample SETS

Sample/Records - Archival & Disposal
Unless otherwise requested by client, all samples will be disposed 45 days after receipt and records will be disposed 1 year after submittal of final report.

Storage Fees (applies when storage is requested):
- Sample : $2.00 / sample / mo (after 45 days)
- Records : $1.00 / ATL workorder / mo (after 1 year)

ITEM	LAB USE ONLY: Batch #: / Lab No.	Sample Description: Sample I.D. / Location	Date	Time
	1802940-01,02	GH9-0,1.5	8/9/18	VATR
	-03,04	10 -		
	-05,06	11 -		
	-07,08	12 -		
	-09,10	13 -		
	-11,12	14 -		
	-13,14	15 -		
	-15,16	16 -		
	-17,18	17 -		
	-19,20	18 -		

Circle or Add Analysis(es) Requested: 8081A (Pesticides); 8082 (PCB); 8260B (Volatiles); 8270C (BNA); 6010B (Total Metal); 8015B (GRO) / 8021 (BTEX) / M10; 8015B (DRO); TITLE 22 (CAM 17 6010 / 7000)

SPECIFY APPROPRIATE MATRIX: SEDIMENT; SOLID; SOIL; DRINKING WATER; GROUND WATER; WASTEWATER; STORMWATER; AQUEOUS

TAT	Container(s) #	Container(s) Type	PRESERVATION
5-Day	2	Tm	C

QA/QC: RTNE ☑ CT ☐ Legal ☐ SWRCB ☐ Logcode ____ OTHER ____

REMARKS

TAT starts 8 a.m. following day if samples received after 5 p.m.

TAT: ☐A= Overnight ≤ 24 hrs ☐B= Emergency Next workday ☐C= Critical 2 Workdays ☐D= Urgent 3 Workdays ☐E= Routine 7 Workdays

Container Types: T=Tube V=VOA L=Liter P=Pint J=Jar B=Tedlar G=Glass P=Plastic M=Metal

Preservatives: H=HCl N=HNO_3 S=H_2SO_4 C=4°C Z=$Zn(AC)_2$ O=NaOH T=$Na_2S_2O_3$

. 2010-0707

DISTRIBUTION: **White** with report, **Yellow** to folder, **Pink** to submitter.

Dominic Mata

From: Rick Day <day@geoconinc.com>
Sent: Wednesday, October 24, 2018 8:00 AM
To: Dominic Mata
Cc: customer.relations@atlglobal.com; Luann Beadle
Subject: RE: Results/Invoice - EASTRIDGE-BART, E8222-02-02 (ATL# 1802940)

Follow Up Flag: Follow up
Flag Status: Completed

Hi, Dominic.

We mis-numbered our sample IDs on this project (already had sample IDs GH9 and GH10 from previous work done about 10 years ago).

Is it possible for you to re-issue the lab reports (1802940 and 1902940add1) with new sample IDs as follows:

Old	New
GH9	GH11
GH10	GH12
GH11	GH13
GH12	GH14
GH13	GH15
GH14	GH16
GH15	GH17
GH16	GH18
GH17	GH19
GH18	GH20

Thanks,
Rick.

Please note that I will be on vacation from October 27 through November 6, 2018.

http://www.geoconinc.com/" style='position:absolute;margin-left:0;margin-top:0;width:96pt;height:67.5pt;z-index:251659776;visibility:visible;mso-wrap-style:square;mso-width-percent:0;mso-height-percent:0;mso-wrap-distance-left:0;mso-wrap-distance-top:0;mso-wrap-distance-right:0;mso-wrap-distance-bottom:0;mso-position-horizontal:left;mso-position-horizontal-relative:text;mso-position-vertical:absolute;mso-position-vertical-relative:line;mso-width-percent:0;mso-height-percent:0;mso-width-relative:page;mso-height-relative:page' o:allowoverlap="f" o:button="t">
Richard Day, CEG, CHG | *President*
GEOCON CONSULTANTS, INC.
6671 Brisa Street, Livermore, California 94550
P|925.371.5900 ext. 401 M|925.872.5860
day@geoconinc.com / www.geoconinc.com / Facebook / Linkedin

ADVANCED TECHNOLOGY LABORATORIES

October 26, 2018

Rick Day
Geocon Consultants, Inc.
6671 Brisa Street
Livermore, CA 94550
Tel: (925) 961-5270
Fax:(925) 371-5915

ELAP No.: 1838
CSDLAC No.: 10196
ORELAP No.: CA300003

Re: ATL Work Order Number : 1802940
Client Reference : EASTRIDGE-BART, E8222-02-02

Enclosed are the results for sample(s) received on August 14, 2018 by Advanced Technology Laboratories. The sample(s) are tested for the parameters as indicated on the enclosed chain of custody in accordance with applicable laboratory certifications. The laboratory results contained in this report specifically pertains to the sample(s) submitted.

Thank you for the opportunity to serve the needs of your company. If you have any questions, please feel free to contact me or your Project Manager.

Sincerely,

Eddie Rodriguez
Laboratory Director

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : EASTRIDGE-BART, E8222-02-02
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 10/26/2018

SUMMARY OF SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
GH12-1.5	1802940-04	Soil	8/09/18 0:00	8/14/18 9:56
GH13-0	1802940-05	Soil	8/09/18 0:00	8/14/18 9:56
GH14-0	1802940-07	Soil	8/09/18 0:00	8/14/18 9:56
GH14-1.5	1802940-08	Soil	8/09/18 0:00	8/14/18 9:56
GH15-0	1802940-09	Soil	8/09/18 0:00	8/14/18 9:56
GH17-0	1802940-13	Soil	8/09/18 0:00	8/14/18 9:56
GH18-0	1802940-15	Soil	8/09/18 0:00	8/14/18 9:56
GH18-1.5	1802940-16	Soil	8/09/18 0:00	8/14/18 9:56
GH20-0	1802940-19	Soil	8/09/18 0:00	8/14/18 9:56

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : EASTRIDGE-BART, E8222-02-02
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 10/26/2018

Client Sample ID GH12-1.5

Lab ID: 1802940-04

TCLP Metals by ICP-AES EPA 6010B — **Analyst: GO**

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Lead	ND	0.25	5	B8J0083	10/03/2018	10/03/18 15:29	D1

STLC Metals by ICP-AES by EPA 6010B — **Analyst: GO**

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Chromium	ND	1.0	20	B8J0126	10/04/2018	10/05/18 09:08	D1
Lead	**15**	1.0	20	B8J0126	10/04/2018	10/05/18 09:08	D1
Nickel	**1.6**	1.0	20	B8J0126	10/04/2018	10/05/18 09:08	D1

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : EASTRIDGE-BART, E8222-02-02
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 10/26/2018

Client Sample ID GH13-0

Lab ID: 1802940-05

STLC Metals by ICP-AES by EPA 6010B **Analyst: GO**

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Chromium	ND	1.0	20	B8J0126	10/04/2018	10/05/18 09:16	D1

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : EASTRIDGE-BART, E8222-02-02
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 10/26/2018

Client Sample ID GH14-0

Lab ID: 1802940-07

STLC Metals by ICP-AES by EPA 6010B **Analyst: GO**

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Chromium	ND	1.0	20	B8J0126	10/04/2018	10/05/18 09:18	D1
Nickel	**3.2**	1.0	20	B8J0126	10/04/2018	10/05/18 09:18	D1

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : EASTRIDGE-BART, E8222-02-02
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 10/26/2018

Client Sample ID GH14-1.5

Lab ID: 1802940-08

STLC Metals by ICP-AES by EPA 6010B **Analyst: GO**

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Chromium	ND	1.0	20	B8J0126	10/04/2018	10/05/18 09:19	D1

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : EASTRIDGE-BART, E8222-02-02
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 10/26/2018

Client Sample ID GH15-0

Lab ID: 1802940-09

STLC Metals by ICP-AES by EPA 6010B **Analyst: GO**

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Chromium	ND	1.0	20	B8J0126	10/04/2018	10/05/18 09:21	D1
Nickel	**1.9**	1.0	20	B8J0126	10/04/2018	10/05/18 09:21	D1

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : EASTRIDGE-BART, E8222-02-02
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 10/26/2018

Client Sample ID GH17-0

Lab ID: 1802940-13

STLC Metals by ICP-AES by EPA 6010B **Analyst: GO**

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Chromium	ND	1.0	20	B8J0126	10/04/2018	10/05/18 09:22	D1

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : EASTRIDGE-BART, E8222-02-02
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 10/26/2018

Client Sample ID GH18-0

Lab ID: 1802940-15

STLC Metals by ICP-AES by EPA 6010B **Analyst: GO**

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Chromium	ND	1.0	20	B8J0126	10/04/2018	10/05/18 09:24	D1

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : EASTRIDGE-BART, E8222-02-02
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 10/26/2018

Client Sample ID GH18-1.5

Lab ID: 1802940-16

STLC Metals by ICP-AES by EPA 6010B **Analyst: GO**

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Lead	**3.8**	1.0	20	B8J0126	10/04/2018	10/05/18 09:25	D1

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : EASTRIDGE-BART, E8222-02-02
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 10/26/2018

Client Sample ID GH20-0

Lab ID: 1802940-19

STLC Metals by ICP-AES by EPA 6010B **Analyst: GO**

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Lead	**2.3**	1.0	20	B8J0126	10/04/2018	10/05/18 09:26	D1

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : EASTRIDGE-BART, E8222-02-02
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 10/26/2018

QUALITY CONTROL SECTION

TCLP Metals by ICP-AES EPA 6010B - Quality Control

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B8J0083 - EPA 3010A_S										
Blank (B8J0083-BLK1)					Prepared: 10/3/2018 Analyzed: 10/3/2018					
Lead	ND	0.050	0.0047							
Blank (B8J0083-BLK2)					Prepared: 10/3/2018 Analyzed: 10/3/2018					
Lead	ND	0.050	0.0047							
LCS (B8J0083-BS1)					Prepared: 10/3/2018 Analyzed: 10/3/2018					
Lead	0.874866	0.050	0.0047	1.00000		87.5	80 - 120			
Duplicate (B8J0083-DUP1)			**Source: 1802940-04**		Prepared: 10/3/2018 Analyzed: 10/3/2018					
Lead	ND	0.25	0.024		ND			NR	20	
Duplicate (B8J0083-DUP2)			**Source: 1803661-04**		Prepared: 10/3/2018 Analyzed: 10/3/2018					
Lead	0.334028	1.6	0.15		0.352737			5.45	20	
Matrix Spike (B8J0083-MS1)			**Source: 1802940-04**		Prepared: 10/3/2018 Analyzed: 10/3/2018					
Lead	2.14637	0.25	0.024	2.50000	ND	85.9	59 - 123			
Matrix Spike Dup (B8J0083-MSD1)			**Source: 1802940-04**		Prepared: 10/3/2018 Analyzed: 10/3/2018					
Lead	2.26893	0.25	0.024	2.50000	ND	90.8	59 - 123	5.55	20	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : EASTRIDGE-BART, E8222-02-02
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 10/26/2018

STLC Metals by ICP-AES by EPA 6010B - Quality Control

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B8J0126 - STLC_S Extraction										
Blank (B8J0126-BLK1)							Prepared: 10/4/2018 Analyzed: 10/5/2018			
Chromium	ND	1.0	0.039							
Lead	ND	1.0	0.094							
Nickel	ND	1.0	0.092							
LCS (B8J0126-BS1)							Prepared: 10/4/2018 Analyzed: 10/5/2018			
Chromium	1.84265			2.00000		92.1	80 - 120			
Lead	1.85888			2.00000		92.9	80 - 120			
Nickel	1.97419			2.00000		98.7	80 - 120			
Duplicate (B8J0126-DUP1)			**Source: 1802940-04**				Prepared: 10/4/2018 Analyzed: 10/5/2018			
Chromium	0.179090	1.0	0.039		0.143637			22.0	20	R
Lead	8.43504	1.0	0.094		15.3296			58.0	20	R
Nickel	1.66164	1.0	0.092		1.59769			3.92	20	
Matrix Spike (B8J0126-MS1)			**Source: 1802940-04**				Prepared: 10/4/2018 Analyzed: 10/5/2018			
Chromium	2.40356			2.50000	0.143637	90.4	70 - 130			
Lead	17.2963			2.50000	15.3296	78.7	70 - 130			
Nickel	3.95245			2.50000	1.59769	94.2	70 - 130			
Matrix Spike Dup (B8J0126-MSD1)			**Source: 1802940-04**				Prepared: 10/4/2018 Analyzed: 10/5/2018			
Chromium	2.27172			2.50000	0.143637	85.1	70 - 130	5.64	20	
Lead	16.4480			2.50000	15.3296	44.7	70 - 130	5.03	20	M1
Nickel	3.78055			2.50000	1.59769	87.3	70 - 130	4.45	20	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : EASTRIDGE-BART, E8222-02-02
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 10/26/2018

Notes and Definitions

R	RPD value outside acceptance criteria. Calculation is based on raw values.
M1	Matrix spike recovery outside of acceptance limit. The analytical batch was validated by the laboratory control sample.
D1	Sample required dilution due to possible matrix interference.
ND	Analyte is not detected at or above the Practical Quantitation Limit (PQL). When client requests quantitation against MDL, analyte is not detected at or above the Method Detection Limit (MDL)
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
NR	Not Reported
RPD	Relative Percent Difference
CA2	CA-ELAP (CDPH)
OR1	OR-NELAP (OSPHL)

Notes:
(1) The reported MDL and PQL are based on prep ratio variation and analytical dilution.
(2) The suffix [2C] of specific analytes signifies that the reported result is taken from the instrument's second column.
(3) Results are wet unless otherwise specified.

Dominic Mata

From: Rick Day <day@geoconinc.com>
Sent: Monday, October 01, 2018 10:31 AM
To: Dominic Mata
Cc: customer.relations@atlglobal.com; Luann Beadle
Subject: RE: Results/Invoice - EASTRIDGE-BART, E8222-02-02 (ATL# 1802940)

Revised soluble order (added chromium and nickel).

ATL ID	Sample ID	WET Lead	WET Chromium	WET Nickel	TCLP Lead
1802940-04	GH10-1.5	X	X	X	X
1802940-05	GH11-0	---	X	---	---
1802940-07	GH12-0	---	X	X	---
1802940-08	GH12-1.5	---	X	---	---
1802940-09	GH13-0	---	X	X	---
1802940-13	GH15-0	---	X	---	---
1802940-15	GH16-0	---	X	---	---
1802940-16	GH16-1.5	X	---	---	---
1802940-19	GH18-0	X	---	---	---

Thanks,
Rick.

http://www.geoconinc.com/" style='position:absolute;margin-left:0;margin-top:0;width:96pt;height:67.5pt;z-index:251661824;visibility:visible;mso-wrap-style:square;mso-width-percent:0;mso-height-percent:0;mso-wrap-distance-left:0;mso-wrap-distance-top:0;mso-wrap-distance-right:0;mso-wrap-distance-bottom:0;mso-position-horizontal:left;mso-position-horizontal-relative:text;mso-position-vertical:absolute;mso-position-vertical-relative:line;mso-width-percent:0;mso-height-percent:0;mso-width-relative:page;mso-height-relative:page' o:allowoverlap="f" o:button="t">
Richard Day, CEG, CHG | *President*
GEOCON CONSULTANTS, INC.
6671 Brisa Street, Livermore, California 94550
P|925.371.5900 ext. 401 M|925.872.5860
day@geoconinc.com / www.geoconinc.com / Facebook / Linkedin

Bay Area ~ Sacramento ~ Fairfield ~ Los Angeles ~ Orange County ~ Riverside County ~ Coachella Valley ~ San Diego

Geotechnical Engineering Environmental Services Engineering Geology Construction Inspection
Land Development Transportation Infrastructure Institutional Brownfields/Redevelopment Natural Resources

From: Rick Day
Sent: Monday, October 01, 2018 10:14 AM

Dominic Mata

From: Rick Day <day@geoconinc.com>
Sent: Wednesday, October 24, 2018 8:00 AM
To: Dominic Mata
Cc: customer.relations@atlglobal.com; Luann Beadle
Subject: RE: Results/Invoice - EASTRIDGE-BART, E8222-02-02 (ATL# 1802940)

Follow Up Flag: Follow up
Flag Status: Completed

Hi, Dominic.

We mis-numbered our sample IDs on this project (already had sample IDs GH9 and GH10 from previous work done about 10 years ago).

Is it possible for you to re-issue the lab reports (1802940 and 1902940add1) with new sample IDs as follows:

Old	New
GH9	GH11
GH10	GH12
GH11	GH13
GH12	GH14
GH13	GH15
GH14	GH16
GH15	GH17
GH16	GH18
GH17	GH19
GH18	GH20

Thanks,
Rick.

Please note that I will be on vacation from October 27 through November 6, 2018.

http://www.geoconinc.com/" style='position:absolute;margin-left:0;margin-top:0;width:96pt;height:67.5pt;z-index:251659776;visibility:visible;mso-wrap-style:square;mso-width-percent:0;mso-height-percent:0;mso-wrap-distance-left:0;mso-wrap-distance-top:0;mso-wrap-distance-right:0;mso-wrap-distance-bottom:0;mso-position-horizontal:left;mso-position-horizontal-relative:text;mso-position-vertical:absolute;mso-position-vertical-relative:line;mso-width-percent:0;mso-height-percent:0;mso-width-relative:page;mso-height-relative:page' o:allowoverlap="f" o:button="t">
Richard Day, CEG, CHG | *President*
GEOCON CONSULTANTS, INC.
6671 Brisa Street, Livermore, California 94550
P|925.371.5900 ext. 401 M|925.872.5860
day@geoconinc.com / www.geoconinc.com / Facebook / Linkedin

ADVANCED TECHNOLOGY LABORATORIES

December 10, 2018

Rick Day
Geocon Consultants, Inc.
6671 Brisa Street
Livermore, CA 94550
Tel: (925) 961-5270
Fax:(925) 371-5915

ELAP No.: 1838
CSDLAC No.: 10196
ORELAP No.: CA300003

Re: ATL Work Order Number : 1804560
Client Reference : CAP EXPWY LIGHT RAIL, E8222-02-01

Enclosed are the results for sample(s) received on December 03, 2018 by Advanced Technology Laboratories. The sample(s) are tested for the parameters as indicated on the enclosed chain of custody in accordance with applicable laboratory certifications. The laboratory results contained in this report specifically pertains to the sample(s) submitted.

Thank you for the opportunity to serve the needs of your company. If you have any questions, please feel free to contact me or your Project Manager.

Sincerely,

Eddie Rodriguez
Laboratory Director

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : CAP EXPWY LIGHT RAIL, E8222-02-0
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 12/10/2018

SUMMARY OF SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
GH12-1.5 Dup	1804560-01	Soil	11/30/18 9:44	12/03/18 9:30
GH12-2.5	1804560-02	Soil	11/30/18 9:49	12/03/18 9:30
GH12A-1.5	1804560-03	Soil	11/30/18 10:11	12/03/18 9:30
GH12B-1.5	1804560-04	Soil	11/30/18 10:27	12/03/18 9:30

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : CAP EXPWY LIGHT RAIL, E8222-02-0
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 12/10/2018

Client Sample ID GH12-1.5 Dup

Lab ID: 1804560-01

Total Metals by ICP-AES EPA 6010B

Analyst: GO

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Lead	**38**	1.0	1	B8L0183	12/07/2018	12/07/18 16:11	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : CAP EXPWY LIGHT RAIL, E8222-02-0
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 12/10/2018

Client Sample ID GH12-2.5

Lab ID: 1804560-02

Total Metals by ICP-AES EPA 6010B **Analyst: GO**

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Lead	**9.5**	1.0	1	B8L0183	12/07/2018	12/07/18 16:15	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : CAP EXPWY LIGHT RAIL, E8222-02-0
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 12/10/2018

Client Sample ID GH12A-1.5

Lab ID: 1804560-03

Total Metals by ICP-AES EPA 6010B **Analyst: GO**

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Lead	**35**	1.0	1	B8L0183	12/07/2018	12/07/18 16:17	

Certificate of Analysis

Geocon Consultants, Inc.		Project Number :	CAP EXPWY LIGHT RAIL, E8222-02-0
6671 Brisa Street		Report To :	Rick Day
Livermore , CA 94550		Reported :	12/10/2018

Client Sample ID GH12B-1.5

Lab ID: 1804560-04

Total Metals by ICP-AES EPA 6010B **Analyst: GO**

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Lead	**30**	1.0	1	B8L0183	12/07/2018	12/07/18 16:18	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : CAP EXPWY LIGHT RAIL, E8222-02-0
6671 Brisa Street	Report To : Rick Day
Livermore , CA 94550	Reported : 12/10/2018

QUALITY CONTROL SECTION

Total Metals by ICP-AES EPA 6010B - Quality Control

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B8L0183 - EPA 3050B_S										
Blank (B8L0183-BLK1)					Prepared: 12/7/2018 Analyzed: 12/7/2018					
Lead	ND	1.0	0.18							
LCS (B8L0183-BS1)					Prepared: 12/7/2018 Analyzed: 12/7/2018					
Lead	43.7027	1.0	0.18	50.0000		87.4	80 - 120			
Matrix Spike (B8L0183-MS1)			**Source: 1804560-01**		Prepared: 12/7/2018 Analyzed: 12/7/2018					
Lead	128.739	1.0	0.18	125.628	38.4592	71.9	30 - 113			
Matrix Spike Dup (B8L0183-MSD1)			**Source: 1804560-01**		Prepared: 12/7/2018 Analyzed: 12/7/2018					
Lead	125.406	1.0	0.18	125.000	38.4592	69.6	30 - 113	2.62	20	

Certificate of Analysis

Geocon Consultants, Inc.		Project Number :	CAP EXPWY LIGHT RAIL, E8222-02-0
6671 Brisa Street		Report To :	Rick Day
Livermore , CA 94550		Reported :	12/10/2018

Notes and Definitions

ND	Analyte is not detected at or above the Practical Quantitation Limit (PQL). When client requests quantitation against MDL, analyte is not detected at or above the Method Detection Limit (MDL)
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
NR	Not Reported
RPD	Relative Percent Difference
CA2	CA-ELAP (CDPH)
OR1	OR-NELAP (OSPHL)

Notes:
(1) The reported MDL and PQL are based on prep ratio variation and analytical dilution.
(2) The suffix [2C] of specific analytes signifies that the reported result is taken from the instrument's second column.
(3) Results are wet unless otherwise specified.

CHAIN OF CUSTODY RECORD

P. 1 of 1

ADVANCED TECHNOLOGY LABORATORIES
3275 Walnut Ave., Signal Hill, CA 90755
Tel: (562) 989-4045 • Fax: (562) 989-4040

P.O.#: LIVERMORE Quote #: PREFERRED

Logged By: Date:

NOTE: Please include your Quote No. to ensure proper pricing of your project.

Method of Transport: ☐ Client ☐ ATL ☐ FedEx ☐ OnTrac ☑ GSO ☐ Other:

FOR LABORATORY USE ONLY:

Sample Condition Upon Receipt

1. CHILLED	Y☐ N☑	4. CUSTODY SEAL	Y☐ N☐
2. HEADSPACE (VOA)	Y☐ N☐	5. # OF SPLS MATCH COC	Y☐ N☐
3. CONTAINER INTACT	Y☐ N☐	6. PRESERVED	Y☐ N☐

Client: Geocon Consultants, Inc. Address: 6671 Brisa Street TEL: (925) 371-5900

Attn: R. Day City Livermore State CA Zip Code 94550 FAX: (925) 371-5915

Project Name: CAP EXPWY LIGHT RAIL Project #: E8222-02-01 Sampler: (Printed Name) D. WATTS (Signature)

Relinquished by: (Signature and Printed Name)	Date: 11/30/18	Time: 1300	Received by: (Signature and Printed Name) GSO	Date: 11/30/18	Time: 1300
Relinquished by: (Signature and Printed Name)	Date:	Time:	Received by: (Signature and Printed Name) SMP	Date: 12/03/18	Time: 0930
Relinquished by: (Signature and Printed Name)	Date:	Time:	Received by: (Signature and Printed Name)	Date:	Time:

I hereby authorize ATL to perform the work indicated below:
Project Mgr / Submitter: D. WATTS 11/30/18 (Print Name / Date)
Signature

Send Report To: Attn: R. Day Co: Addr: City: State: Zip:

Bill To: Attn: Co: Addr: City: State: Zip:

Special Instructions/Comments: ANTICIPATE SOLUBLES

Sample/Records - Archival & Disposal
Unless otherwise requested by client, all samples will be disposed 45 days after receipt and records will be disposed 1 year after submittal of final report.

Storage Fees (applies when storage is requested):
- Sample : $2.00 / sample / mo (after 45 days)
- Records : $1.00 / ATL workorder / mo (after 1 year)

Circle or Add Analysis(es) Requested: 8081A (Pesticides), 8082 (PCB), 8260B (Volatiles), 8270C (BNA), 6010B (Total Metal) - Pb, 8015B (GRO) / 8021 (BTEX), 8015B (DRO), TITLE 22 / CAM 17 (6010 / 7000)

SPECIFY APPROPRIATE MATRIX: SEDIMENT, SOLID, SOIL, DRINKING WATER, GROUND WATER, WASTEWATER, STORMWATER, AQUEOUS

PRESERVATION

Q A / Q C: RTNE ☐ CT ☑ Level ☐ SWRCB Logcode ☐ OTHER

ITEM	LAB USE ONLY: Batch #: / Lab No.	Sample Description: Sample I.D. / Location	Date	Time	TAT	Container(s) #	Container(s) Type	REMARKS
	1804560-01	GH12-1.5 DUP	11/30/18	0944	5-Day	1	Bg, P	
	-02	" -2.5		0949				
	-03	GH12A-1.5		1011				
	-04	GH12B-1.5		1027				

• TAT starts 8 a.m. following day if samples received after 5 p.m.

TAT: ☐A= Overnight ≤ 24 hrs ☐B= Emergency Next workday ☐C= Critical 2 Workdays ☐D= Urgent 3 Workdays ☐E= Routine 7 Workdays

Container Types: T=Tube V=VOA L=Liter P=Pint J=Jar B=Tedlar G=Glass P=Plastic M=Metal

Preservatives: H=HCl N=HNO_3 S=H_2SO_4 C=4°C Z=$Zn(AC)_2$ O=NaOH T=$Na_2S_2O_3$

Rev. 2010-0707

DISTRIBUTION: White with report Yellow to folder Pink to submitter

EMSL Analytical, Inc.

464 McCormick Street San Leandro, CA 94577
Phone/Fax: (510) 895-3675 / (510) 895-3680
http://www.EMSL.com / sanleandrolab@emsl.com

EMSL Order:	091817607
Customer ID:	GECN21
Customer PO:	LIV
Project ID:	

Attention:	Dave Watts Geocon Consultants, Inc. 6671 Brisa Street Livermore, CA 94550	**Phone:**	(925) 785-5340
		Fax:	(925) 371-5915
		Received:	08/10/2018 1:30 PM
		Analysis Date:	08/16/2018
		Collected:	08/09/2018
Project:	EASTRIDGE - BART / E8222-02-02		

Test Report: PLM Analysis of Bulk Samples for Asbestos via EPA 600/R-93/116 Method with CARB 435 Prep (Milling) Level A for 0.25% Target Analytical Sensitivity

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
GH9-0 *091817607-0001*	SOIL (MEDIAN)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	**<0.25% Chrysotile**
GH10-1.5 *091817607-0002*	SOIL (MEDIAN)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	**None Detected**
GH11-0 *091817607-0003*	SOIL (MEDIAN)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	**<0.25% Chrysotile**
GH12-1.5 *091817607-0004*	SOIL (MEDIAN)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	**None Detected**
GH13-0 *091817607-0005*	SOIL (MEDIAN)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	**<0.25% Chrysotile**
GH14-1.5 *091817607-0006*	SOIL (MEDIAN)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	**None Detected**
GH15-0 *091817607-0007*	SOIL (MEDIAN)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	**<0.25% Chrysotile**
GH16-1.5 *091817607-0008*	SOIL (MEDIAN)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	**None Detected**
GH17-0 *091817607-0009*	SOIL (MEDIAN)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	**<0.25% Chrysotile**
GH18-1.5 *091817607-0010*	SOIL (MEDIAN)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	**None Detected**

Samples analyzed by EMSL Analytical, Inc San Leandro, CA

Initial report from: 08/17/2018 00:24:15

EMSL Analytical, Inc.
464 McCormick Street San Leandro, CA 94577
Phone/Fax: (510) 895-3675 / (510) 895-3680
http://www.EMSL.com / sanleandrolab@emsl.com

EMSL Order:	091817607
Customer ID:	GECN21
Customer PO:	LIV
Project ID:	

Attention:	Dave Watts Geocon Consultants, Inc. 6671 Brisa Street Livermore, CA 94550	**Phone:**	(925) 785-5340
		Fax:	(925) 371-5915
		Received:	08/10/2018 1:30 PM
		Analysis Date:	08/16/2018
		Collected:	08/09/2018
Project:	EASTRIDGE - BART / E8222-02-02		

Test Report: PLM Analysis of Bulk Samples for Asbestos via EPA 600/R-93/116 Method with CARB 435 Prep (Milling) Level A for 0.25% Target Analytical Sensitivity

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**

Analyst(s)

Adam C. Fink (10)

Matthew Batongbacal
or other approved signatory

This report relates only to the samples listed above and may not be reproduced except in full, without EMSL's written approval. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. EMSL is not responsible for sample collection activities or method limitations . Some samples may contain asbestos fibers below the resolution limit of PLM. EMSL recommends that samples reported as none detected or less than the limit of detection undergo additional analysis via TEM.Samples received in good condition unless otherwise noted.

Samples analyzed by EMSL Analytical, Inc San Leandro, CA

Initial report from: 08/17/2018 00:24:15

OrderID: 091817607

EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Asbestos Chain of Custody

EMSL Order Number (Lab Use Only):

#091817607

EMSL ANALYTICAL, INC.
464 MCCORMICK STREET
SAN LEANDRO, CA 94577
PHONE: (510) 895-3675
FAX: (510) 230-3537

Company: GEOCON

Street: 6671 BRISA ST

City: LIVERMORE | State/Province: CA | Zip/Postal Code: 94550 | Country: USA

Report To (Name): D. WATTS | Telephone #: 925-371-5900

EMSL-Bill to: [X] Same [ ] Different
If Bill to is Different note instructions in Comments**
Third Party Billing requires written authorization from third party

Fax #: 925-371-5915 | Email Address: WATTS@GEOCONINC.COM

Project Name/Number: EASTRIDGE - BART / E8222-02-02

Please Provide Results: [ ] Fax [X] Email | Purchase Order: LIV | U.S. State Samples Taken: CA

Turnaround Time (TAT) Options* – Please Check

[ ] 3 Hour [ ] 6 Hour [ ] 24 Hour [ ] 48 Hour [ ] 72 Hour [ ] 96 Hour [X] 1 Week [ ] 2 Week

*For TEM Air 3 hr through 6 hr, please call ahead to schedule. *There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide.*

PCM - Air
- [ ] NIOSH 7400
- [ ] w/ OSHA 8hr. TWA

PLM - Bulk (reporting limit)
- [ ] PLM EPA 600/R-93/116 (<1%)
- [ ] PLM EPA NOB (<1%)

Point Count
- [ ] 400 (<0.25%) [ ] 1000 (<0.1%)

Point Count w/Gravimetric
- [ ] 400 (<0.25%) [ ] 1000 (<0.1%)
- [ ] NYS 198.1 (friable in NY)
- [ ] NYS 198.6 NOB (non-friable-NY)
- [ ] NIOSH 9002 (<1%)

TEM – Air [ ] 4-4.5hr TAT (AHERA only)
- [ ] AHERA 40 CFR, Part 763
- [ ] NIOSH 7402
- [ ] EPA Level II
- [ ] ISO 10312

TEM - Bulk
- [ ] TEM EPA NOB
- [ ] NYS NOB 198.4 (non-friable-NY)
- [ ] Chatfield SOP
- [ ] TEM Mass Analysis-EPA 600 sec. 2.5

TEM – Water: EPA 100.2
- Fibers >10µm [ ] Waste [ ] Drinking
- All Fiber Sizes [ ] Waste [ ] Drinking

TEM- Dust
- [ ] Microvac - ASTM D 5755
- [ ] Wipe - ASTM D6480
- [ ] Carpet Sonication (EPA 600/J-93/167)

Soil/Rock/Vermiculite
- [X] PLM CARB 435 - A (0.25% sensitivity)
- [ ] PLM CARB 435 - B (0.1% sensitivity)
- [ ] TEM CARB 435 - B (0.1% sensitivity)
- [ ] TEM CARB 435 - C (0.01% sensitivity)
- [ ] EPA Protocol (Semi-Quantitative)
- [ ] EPA Protocol (Quantitative)

Other:
- [ ]

[ ] Check For Positive Stop – Clearly Identify Homogenous Group

Samplers Name: D. WATTS | Samplers Signature: [signature]

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
GH9-0	SOIL (MEDIAN)	NA	9 AUG 2018
10-1.5			
11-0			
12-1.5			
13-0			
14-1.5			
15-0			10 AUG 2018
16-1.5			
17-0			
18-1.5			

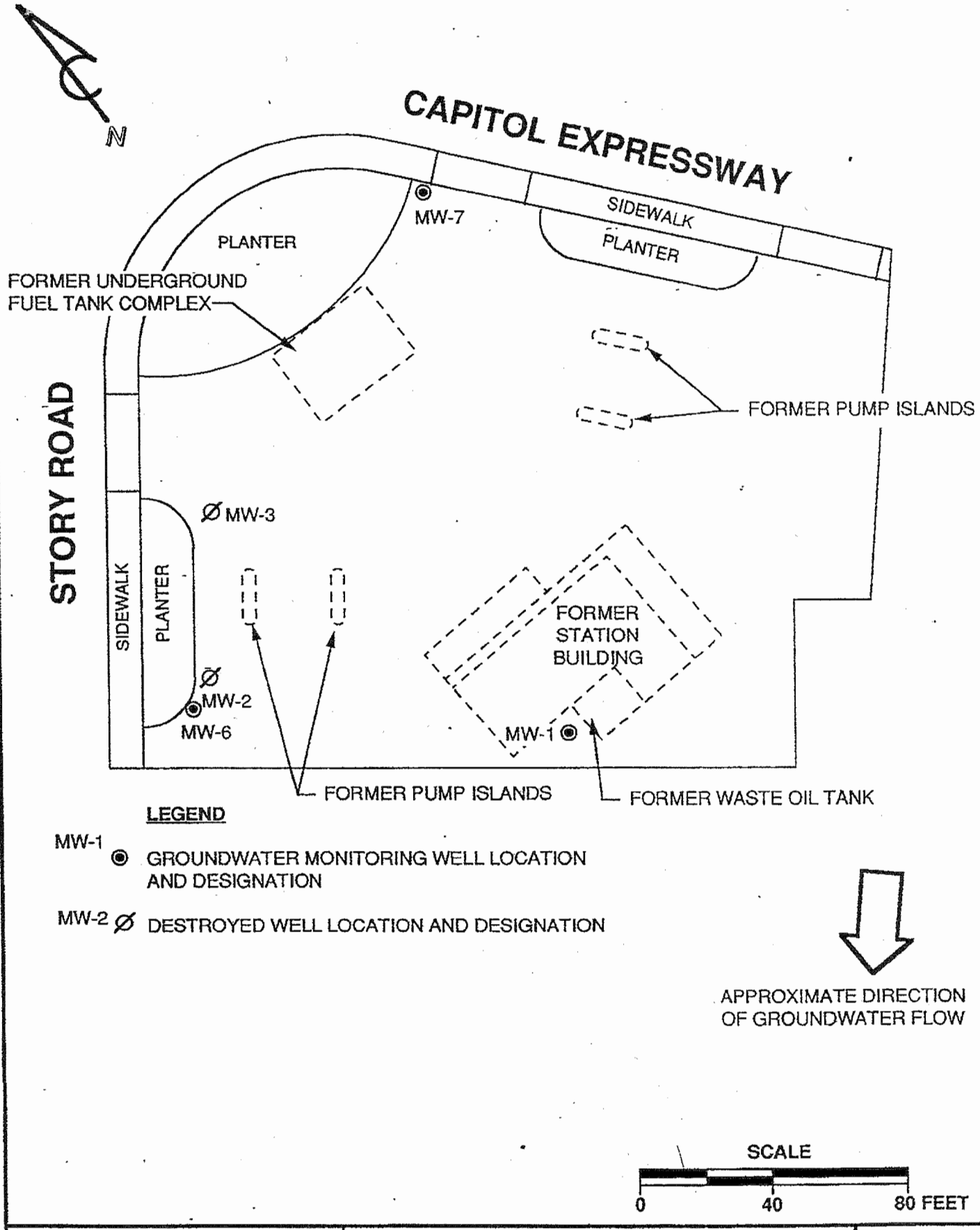
Client Sample # (s): | Total # of Samples: 10

Relinquished (Client): [signature] | Date: 8/10/2018 | Time: 1330

Received (Lab): [signature] | Date: 8/10/2018 | Time: 1330 MT

Comments/Special Instructions:

APPENDIX B



PACIFIC ENVIRONMENTAL GROUP, INC.	**FORMER SHELL SERVICE STATION** 2690 Story Road at Capitol Expressway San Jose, California **SITE MAP**	FIGURE: 2 PROJECT: 305-039.1B

FIGURE 1

POTENTIOMETRIC MAP
Former Texaco Service Station
2695 Story Road
San Jose, California (Site #211340)

DATE July 12 and 13, 2005

REVISED DATE

EXPLANATION

- Groundwater monitoring well (Former Texaco Station)
- Groundwater monitoring well (Chevron Station)
- Groundwater extraction well (Chevron Station)
- Groundwater monitoring well (Capitol Touchless Carwash)
- Abandoned/Destroyed well
- 99.99 — Groundwater elevation in feet referenced to Mean Sea Level
- -99.99- — Groundwater elevation contour, dashed where inferred
- [99.99] — Not used in contouring
- \+ — TOC not available
- * — Discontinued from monitoring/ sampling program

SINBAD AVENUE
CAPITAL AVENUE
CAPITAL EXPRESSWAY
SLEEPY HOLLOW LANE
STORY ROAD

Track 2204
Story Book Farms
Unit 4

Building
Planter
USTS
Former Texaco 211340
Dispenser Islands
Canopy
Capitol Touchless Carwash
Former USTS
Former Shell Station
Kiosk
Chevron 9-8247
Underground Storage Tanks

104.93 MW-9
105.00
105.05 MW-10
MW-13 105.27
105.43 MW-12
105.98 MW-7
106.19 MW-8
105.96 MW-1
MW-4
EA-4 106.46
EA-3
106.03 #3
#1 106.59
106.77 MW-11
MW-2
106.28 MW-2
106.90 MW-5
106.32 MW-6
MW-2 108.20
MW-1 107.22
MW-3 108.02
107.46 HLA-2
107.00
106.49 HLA-3
105.00
WCC-6
106.03
103.03
P-1
EW-1
EW-5
EW-6
HLA-1 108.60
106.98 WCC-3
WCC-4
#4
#1 106.53
#16-A
107.32 #6
WCC-5 107.38
#11 108.39
P-2
#15
105.40
#13
#9
#14
105.00
104.44
[109.05]
HLA-4
WCC-1 108.39
WCC-2 108.00

Groundwater flow direction varies at a gradient of 0.005 to 0.2 Ft./Ft.

N

0 80

Scale in Feet

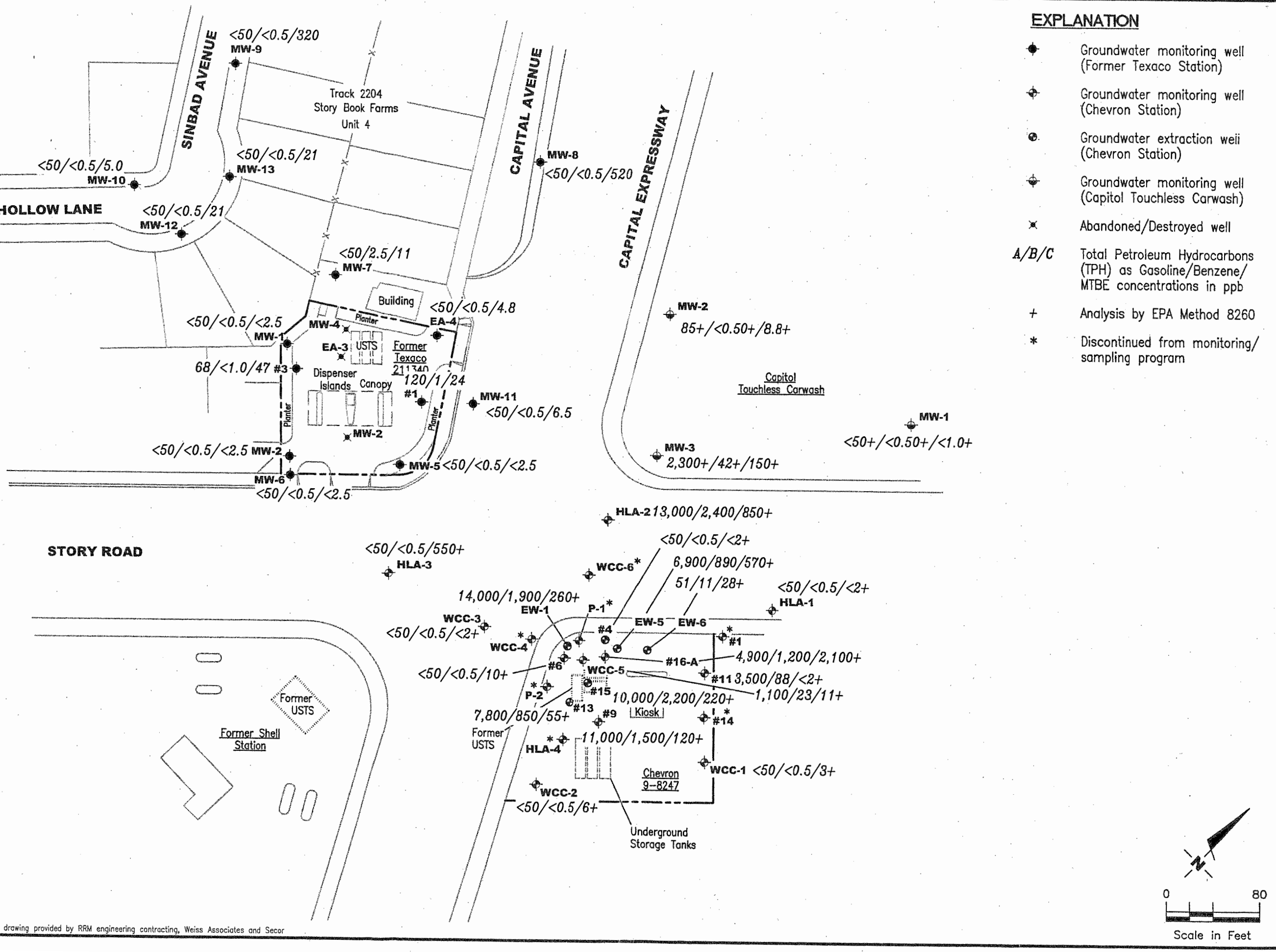
Source: Figure modified from drawing provided by RRM engineering contracting, Weiss Associates and Secor

GETTLER - RYAN INC.
6747 Sierra Court, Suite J
Dublin, CA 94568
(925) 551-7555

PROJECT NUMBER 386947

REVIEWED BY

FILE NAME: P:\Enviro\Texaco\211340\05-211340.dwg | Layout Tab: Pot3



EXPLANATION

- Groundwater monitoring well (Former Texaco Station)
- Groundwater monitoring well (Chevron Station)
- Groundwater extraction well (Chevron Station)
- Groundwater monitoring well (Capitol Touchless Carwash)
- Abandoned/Destroyed well
- A/B/C — Total Petroleum Hydrocarbons (TPH) as Gasoline/Benzene/MTBE concentrations in ppb
- \+ — Analysis by EPA Method 8260
- * — Discontinued from monitoring/sampling program

Source: Figure modified from drawing provided by RRM engineering contracting, Weiss Associates and Secor

FIGURE 2

CONCENTRATION MAP
Former Texaco Service Station
2695 Story Road
San Jose, California (Site #211340)

REVISED DATE

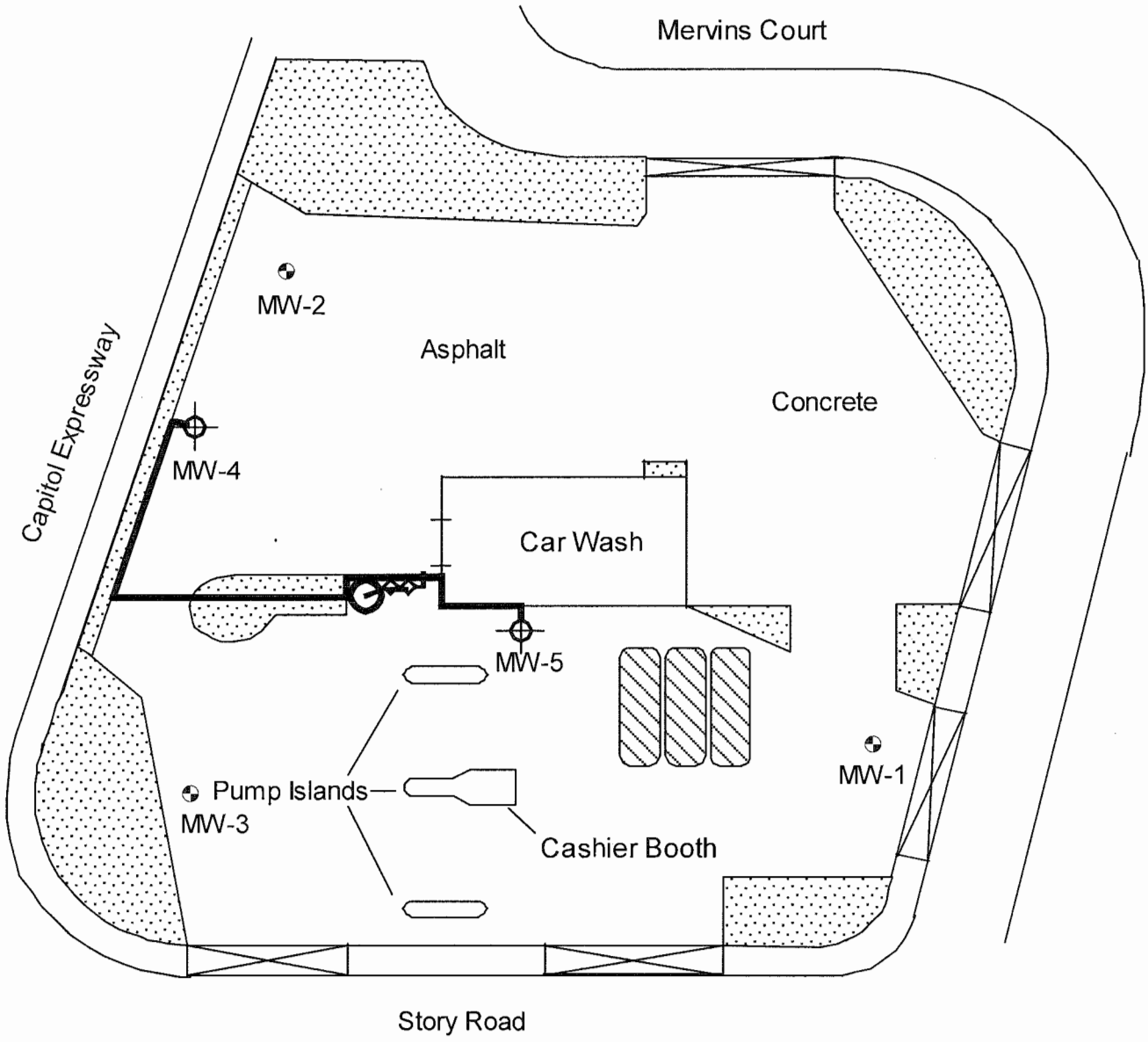
DATE July 12 and 13, 2005

REVIEWED BY

PROJECT NUMBER 386947

GETTLER - RYAN INC.
6747 Sierra Court, Suite J
Dublin, CA 94568
(925) 551-7555

FILE NAME: P:\Enviro\Texaco\211340\05-211340.dwg | Layout Tab: Con3



LEGEND

- Former UST Location
- Landscaping
- MW-2 — Monitoring Well Location
- MW-5 — Extraction Well Location
- Driveway

Title: ***Site Plan / System Location 2701 Story Road San Jose, California***	
Figure Number: 2	Scale: 1" = 40'
Project Number: 6524-001.07	Drawn By: EJG
A•C•C ENVIRONMENTAL CONSULTANTS	Date: 06/30/04

7977 Capwell Drive, Suite 100
Oakland, California 94621
(510) 638-8400 FAX (510) 638-8404

N W E S

LEGEND

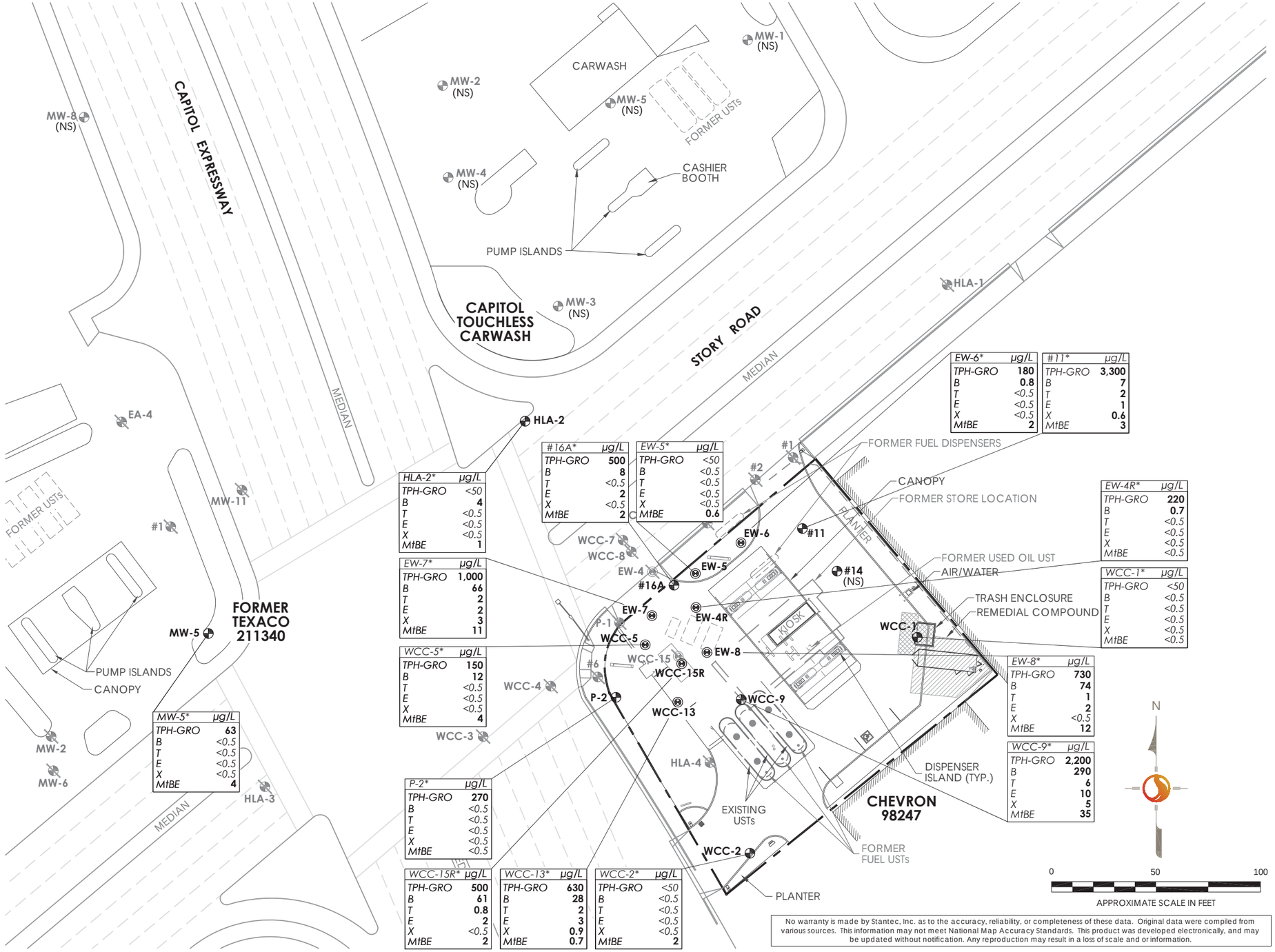
UST	UNDERGROUND STORAGE TANK
	GROUNDWATER MONITORING WELL (CHEVRON)
	GROUNDWATER EXTRACTION WELL (CHEVRON)
	GROUNDWATER MONITORING WELL (CAPITOL TOUCHLESS CARWASH)
	ABANDONED/DESTROYED MONITORING WELL
	ABANDONED/DESTROYED EXTRACTION WELL
(NS)	NOT SAMPLED

ANALYTES

TPH-GRO	TOTAL PETROLEUM HYDROCARBONS AS GASOLINE RANGE ORGANICS
B	BENZENE
T	TOLUENE
E	ETHYLBENZENE
X	TOTAL XYLENES
MtBE	METHYL TERTIARY-BUTYL ETHER

* = ADDITIONAL ANALYSES WERE RUN AND COMPLETE RESULTS ARE PRESENTED IN TABLE 3 AND ATTACHMENT B

µg/L = MICROGRAMS PER LITER



HLA-2*	µg/L
TPH-GRO	<50
B	4
T	<0.5
E	<0.5
X	<0.5
MtBE	1

#16A*	µg/L
TPH-GRO	500
B	8
T	<0.5
E	2
X	<0.5
MtBE	2

EW-5*	µg/L
TPH-GRO	<50
B	<0.5
T	<0.5
E	<0.5
X	<0.5
MtBE	0.6

EW-6*	µg/L
TPH-GRO	180
B	0.8
T	<0.5
E	<0.5
X	<0.5
MtBE	2

#11*	µg/L
TPH-GRO	3,300
B	7
T	2
E	1
X	0.6
MtBE	3

EW-4R*	µg/L
TPH-GRO	220
B	0.7
T	<0.5
E	<0.5
X	<0.5
MtBE	<0.5

WCC-1*	µg/L
TPH-GRO	<50
B	<0.5
T	<0.5
E	<0.5
X	<0.5
MtBE	<0.5

EW-7*	µg/L
TPH-GRO	1,000
B	66
T	2
E	2
X	3
MtBE	11

EW-8*	µg/L
TPH-GRO	730
B	74
T	1
E	2
X	<0.5
MtBE	12

WCC-5*	µg/L
TPH-GRO	150
B	12
T	<0.5
E	<0.5
X	<0.5
MtBE	4

WCC-9*	µg/L
TPH-GRO	2,200
B	290
T	6
E	10
X	5
MtBE	35

MW-5*	µg/L
TPH-GRO	63
B	<0.5
T	<0.5
E	<0.5
X	<0.5
MtBE	4

P-2*	µg/L
TPH-GRO	270
B	<0.5
T	<0.5
E	<0.5
X	<0.5
MtBE	<0.5

WCC-15R*	µg/L
TPH-GRO	500
B	61
T	0.8
E	2
X	<0.5
MtBE	2

WCC-13*	µg/L
TPH-GRO	630
B	28
T	2
E	3
X	0.9
MtBE	0.7

WCC-2*	µg/L
TPH-GRO	<50
B	<0.5
T	<0.5
E	<0.5
X	<0.5
MtBE	2

Stantec
15575 Los Gatos Blvd, Building C
Los Gatos, CA 95032
PHONE: (408)356-6124 FAX: (408)356-6138

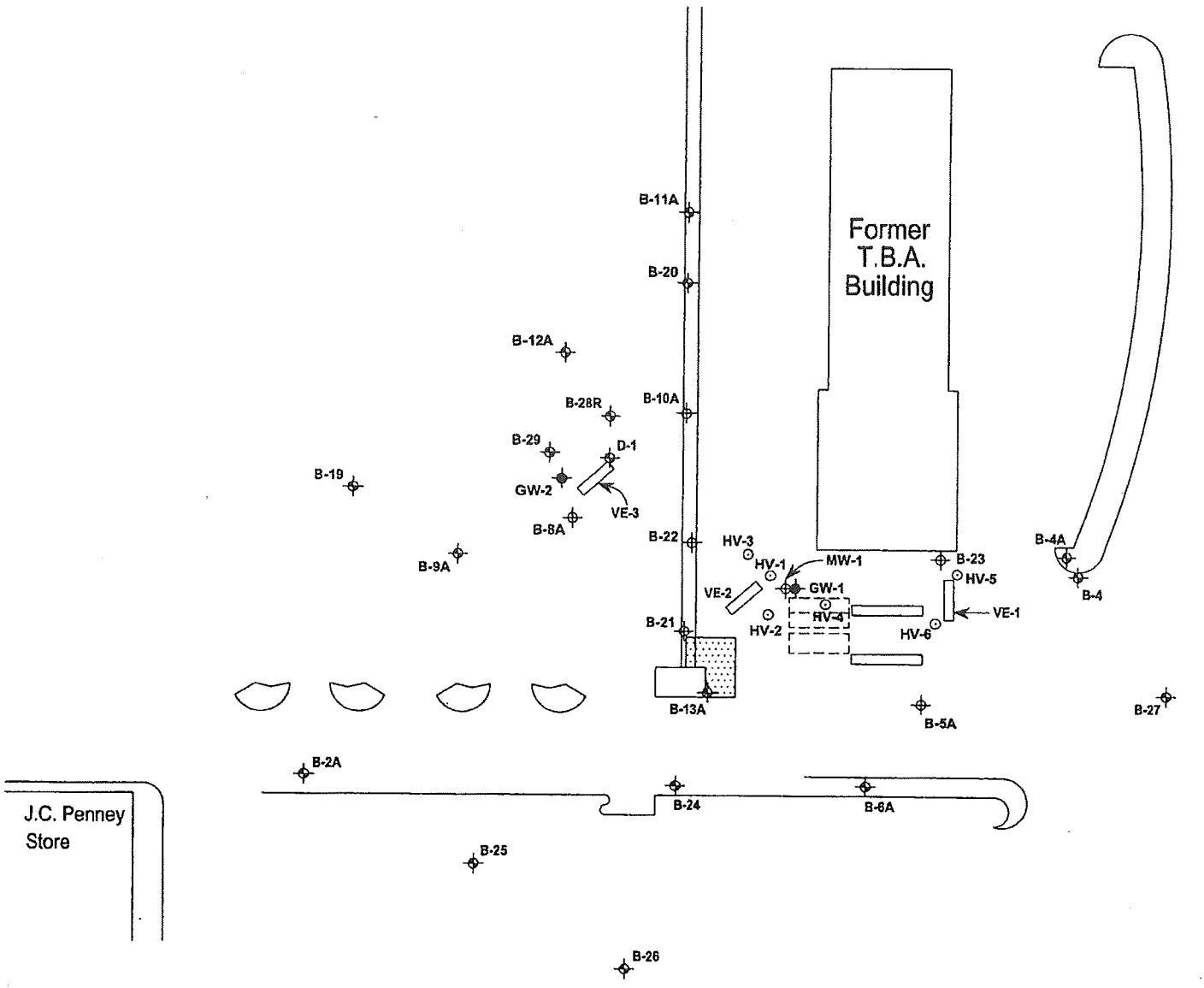
FOR: CHEVRON-BRANDED SERVICE STATION 98247
2710 STORY ROAD
SAN JOSE, CALIFORNIA

SITE PLAN SHOWING GROUNDWATER CONCENTRATIONS - FOURTH QUARTER 2015

FIGURE: 4

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
211602163	JRO	RMN/MRK	GPM/TLF	01/05/16

FILEPATH:U:\211602163\05_report_deliv\deliverables\reports\4q15_gwr\figures\cad\211602163_98247_allfigs_4q15.dwg | jopalekopsahl | Jan 13, 2016 at 13:01 | Layout: fig4_gwc



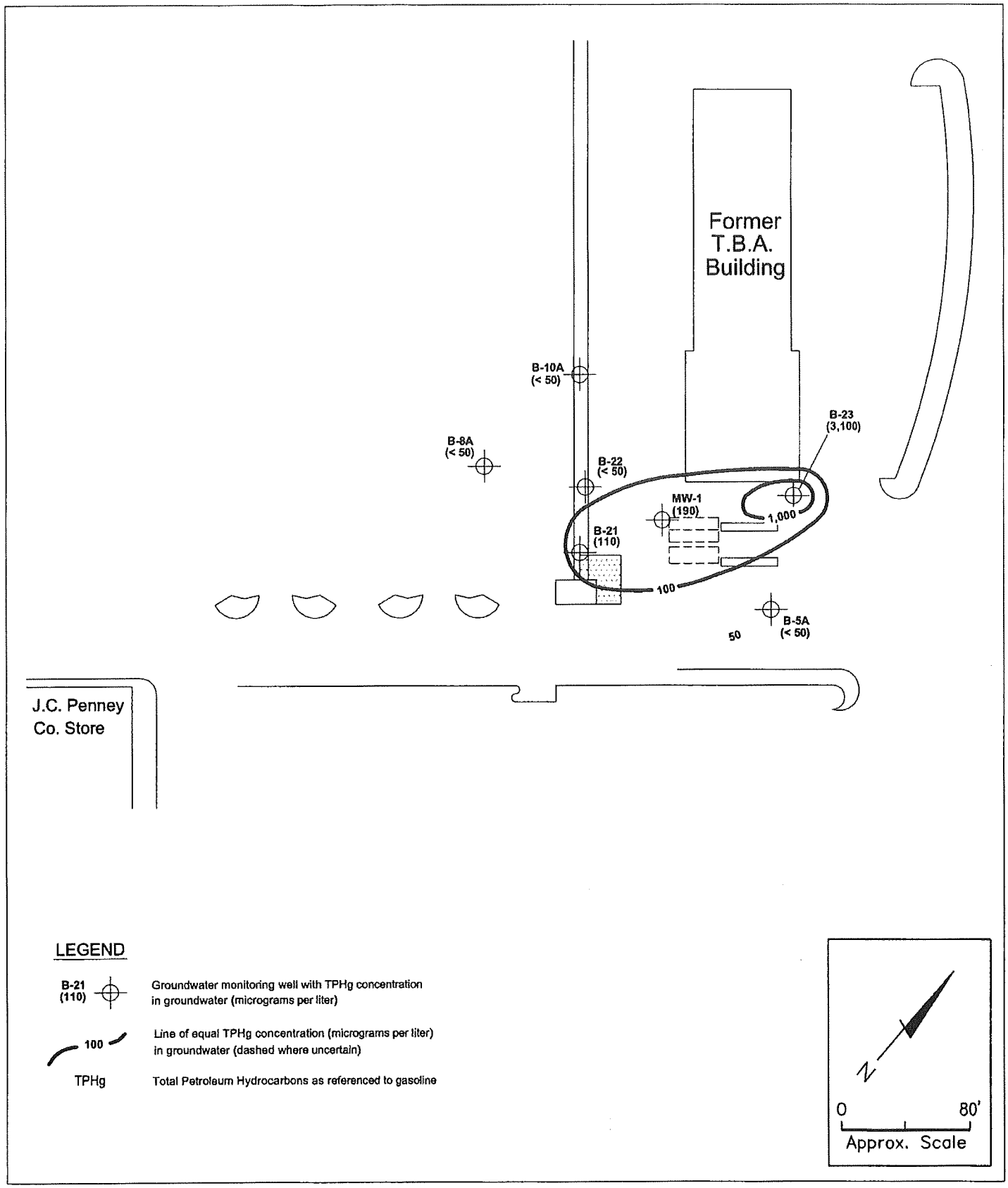
URS

SITE MAP

J.C. Penney Co., Eastridge Mall
2242 Tully Rd., San Jose, CA

FIGURE 2

Job 18714775 RTSII



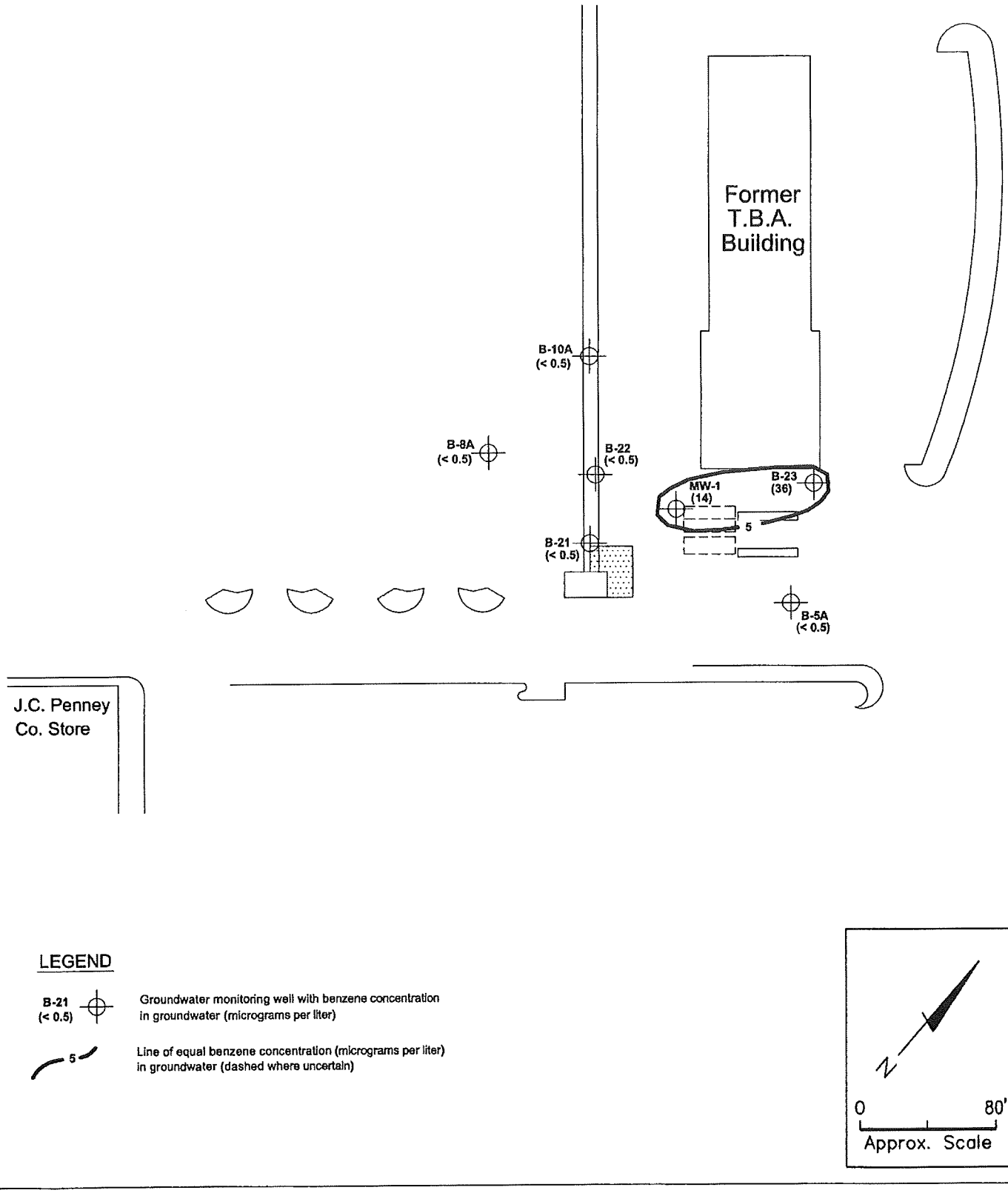
TPHg CONCENTRATIONS IN GROUNDWATER
JANUARY 13, 2012

J.C. Penney Co., Eastridge Mall
2242 Tully Rd., San Jose, CA

URS

Job 18714775 SBS Contour_1Q12.dwg

FIGURE 4



BENZENE CONCENTRATIONS IN GROUNDWATER
JANUARY 13, 2012

J.C. Penney Co., Eastridge Mall
2242 Tully Rd., San Jose, CA

URS

Job 18714775 SBS Contour_1Q12.dwg

FIGURE 5

APPENDIX C

UCL Statistics for Uncensored Full Data Sets

User Selected Options

Date/Time of Computation	ProUCL 5.112/27/2018 2:45:47 PM
From File	UCL Input New Lead added.xls
Full Precision	OFF
Confidence Coefficient	95%
Number of Bootstrap Operations	2000

Arsenic

General Statistics

Total Number of Observations	32	Number of Distinct Observations	21
		Number of Missing Observations	0
Minimum	0.5	Mean	5.069
Maximum	17	Median	4.35
SD	3.263	Std. Error of Mean	0.577
Coefficient of Variation	0.644	Skewness	2.186

Normal GOF Test

Shapiro Wilk Test Statistic	0.752	Shapiro Wilk GOF Test	
5% Shapiro Wilk Critical Value	0.93	Data Not Normal at 5% Significance Level	
Lilliefors Test Statistic	0.295	Lilliefors GOF Test	
5% Lilliefors Critical Value	0.154	Data Not Normal at 5% Significance Level	
Data Not Normal at 5% Significance Level			

Assuming Normal Distribution

95% Normal UCL		95% UCLs (Adjusted for Skewness)	
95% Student's-t UCL	6.047	95% Adjusted-CLT UCL (Chen-1995)	6.256
		95% Modified-t UCL (Johnson-1978)	6.084

Gamma GOF Test

A-D Test Statistic	2.184	Anderson-Darling Gamma GOF Test	
5% A-D Critical Value	0.755	Data Not Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.217	Kolmogorov-Smirnov Gamma GOF Test	
5% K-S Critical Value	0.157	Data Not Gamma Distributed at 5% Significance Level	
Data Not Gamma Distributed at 5% Significance Level			

Gamma Statistics

k hat (MLE)	2.651	k star (bias corrected MLE)	2.423
Theta hat (MLE)	1.912	Theta star (bias corrected MLE)	2.092
nu hat (MLE)	169.7	nu star (bias corrected)	155.1
MLE Mean (bias corrected)	5.069	MLE Sd (bias corrected)	3.256
		Approximate Chi Square Value (0.05)	127.3
Adjusted Level of Significance	0.0416	Adjusted Chi Square Value	126

Assuming Gamma Distribution

95% Approximate Gamma UCL (use when n>=50))	6.175	95% Adjusted Gamma UCL (use when n<50)	6.241

Lognormal GOF Test

Shapiro Wilk Test Statistic	0.794	Shapiro Wilk Lognormal GOF Test	
5% Shapiro Wilk Critical Value	0.93	Data Not Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.261	Lilliefors Lognormal GOF Test	
5% Lilliefors Critical Value	0.154	Data Not Lognormal at 5% Significance Level	
Data Not Lognormal at 5% Significance Level			

Lognormal Statistics

Minimum of Logged Data	-0.693	Mean of logged Data	1.423
Maximum of Logged Data	2.833	SD of logged Data	0.723

Assuming Lognormal Distribution

95% H-UCL	7.101	90% Chebyshev (MVUE) UCL	7.556
95% Chebyshev (MVUE) UCL	8.564	97.5% Chebyshev (MVUE) UCL	9.962

99% Chebyshev (MVUE) UCL	12.71

Nonparametric Distribution Free UCL Statistics
Data do not follow a Discernible Distribution (0.05)

Nonparametric Distribution Free UCLs

95% CLT UCL	6.017	95% Jackknife UCL	6.047
95% Standard Bootstrap UCL	6.03	95% Bootstrap-t UCL	6.536
95% Hall's Bootstrap UCL	8.883	95% Percentile Bootstrap UCL	6.016
95% BCA Bootstrap UCL	6.247		
90% Chebyshev(Mean, Sd) UCL	6.799	95% Chebyshev(Mean, Sd) UCL	7.583
97.5% Chebyshev(Mean, Sd) UCL	8.671	99% Chebyshev(Mean, Sd) UCL	10.81

Suggested UCL to Use
95% Chebyshev (Mean, Sd) UCL **7.58**

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
Recommendations are based upon data size, data distribution, and skewness.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Cobalt

General Statistics

Total Number of Observations	32	Number of Distinct Observations	12
		Number of Missing Observations	0
Minimum	9.1	Mean	13.5
Maximum	33	Median	11
SD	5.491	Std. Error of Mean	0.971
Coefficient of Variation	0.407	Skewness	2.362

Normal GOF Test

Shapiro Wilk Test Statistic	0.663	Shapiro Wilk GOF Test	
5% Shapiro Wilk Critical Value	0.93	Data Not Normal at 5% Significance Level	
Lilliefors Test Statistic	0.317	Lilliefors GOF Test	
5% Lilliefors Critical Value	0.154	Data Not Normal at 5% Significance Level	
Data Not Normal at 5% Significance Level			

Assuming Normal Distribution

95% Normal UCL		95% UCLs (Adjusted for Skewness)	
95% Student's-t UCL	15.14	95% Adjusted-CLT UCL (Chen-1995)	15.53
		95% Modified-t UCL (Johnson-1978)	15.21

Gamma GOF Test

A-D Test Statistic	3.359	Anderson-Darling Gamma GOF Test	
5% A-D Critical Value	0.747	Data Not Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.282	Kolmogorov-Smirnov Gamma GOF Test	
5% K-S Critical Value	0.155	Data Not Gamma Distributed at 5% Significance Level	
Data Not Gamma Distributed at 5% Significance Level			

Gamma Statistics

k hat (MLE)	9.082	k star (bias corrected MLE)	8.252
Theta hat (MLE)	1.486	Theta star (bias corrected MLE)	1.636
nu hat (MLE)	581.3	nu star (bias corrected)	528.1
MLE Mean (bias corrected)	13.5	MLE Sd (bias corrected)	4.698
		Approximate Chi Square Value (0.05)	475.8
Adjusted Level of Significance	0.0416	Adjusted Chi Square Value	473.2

Assuming Gamma Distribution

95% Approximate Gamma UCL (use when n>=50))	14.98	95% Adjusted Gamma UCL (use when n<50)	15.06

Lognormal GOF Test

Shapiro Wilk Test Statistic	0.77	Shapiro Wilk Lognormal GOF Test	
5% Shapiro Wilk Critical Value	0.93	Data Not Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.258	Lilliefors Lognormal GOF Test	
5% Lilliefors Critical Value	0.154	Data Not Lognormal at 5% Significance Level	
Data Not Lognormal at 5% Significance Level			

Lognormal Statistics			
Minimum of Logged Data	2.208	Mean of logged Data	2.546
Maximum of Logged Data	3.497	SD of logged Data	0.312

Assuming Lognormal Distribution			
95% H-UCL	14.82	90% Chebyshev (MVUE) UCL	15.63
95% Chebyshev (MVUE) UCL	16.66	97.5% Chebyshev (MVUE) UCL	18.07
99% Chebyshev (MVUE) UCL	20.86		

Nonparametric Distribution Free UCL Statistics
Data do not follow a Discernible Distribution (0.05)

Nonparametric Distribution Free UCLs			
95% CLT UCL	15.09	95% Jackknife UCL	15.14
95% Standard Bootstrap UCL	15.09	95% Bootstrap-t UCL	16
95% Hall's Bootstrap UCL	15.86	95% Percentile Bootstrap UCL	15.22
95% BCA Bootstrap UCL	15.68		
90% Chebyshev(Mean, Sd) UCL	16.41	95% Chebyshev(Mean, Sd) UCL	17.73
97.5% Chebyshev(Mean, Sd) UCL	19.56	99% Chebyshev(Mean, Sd) UCL	23.15

Suggested UCL to Use			
95% Student's-t UCL	**15.1**	or 95% Modified-t UCL	15.21

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
Recommendations are based upon data size, data distribution, and skewness.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Lead

General Statistics			
Total Number of Observations	58	Number of Distinct Observations	44
		Number of Missing Observations	0
Minimum	2.5	Mean	36.74
Maximum	600	Median	16.5
SD	81.78	Std. Error of Mean	10.74
Coefficient of Variation	2.226	Skewness	6.08

Normal GOF Test			
Shapiro Wilk Test Statistic	0.369	Shapiro Wilk GOF Test	
5% Shapiro Wilk P Value	0	Data Not Normal at 5% Significance Level	
Lilliefors Test Statistic	0.338	Lilliefors GOF Test	
5% Lilliefors Critical Value	0.116	Data Not Normal at 5% Significance Level	
Data Not Normal at 5% Significance Level			

Assuming Normal Distribution			
95% Normal UCL		95% UCLs (Adjusted for Skewness)	
95% Student's-t UCL	54.69	95% Adjusted-CLT UCL (Chen-1995)	63.56
		95% Modified-t UCL (Johnson-1978)	56.12

Gamma GOF Test			
A-D Test Statistic	3.534	Anderson-Darling Gamma GOF Test	
5% A-D Critical Value	0.787	Data Not Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.183	Kolmogorov-Smirnov Gamma GOF Test	
5% K-S Critical Value	0.121	Data Not Gamma Distributed at 5% Significance Level	
Data Not Gamma Distributed at 5% Significance Level			

Gamma Statistics

k hat (MLE)	0.849	k star (bias corrected MLE)	0.816
Theta hat (MLE)	43.28	Theta star (bias corrected MLE)	45
nu hat (MLE)	98.46	nu star (bias corrected)	94.7
MLE Mean (bias corrected)	36.74	MLE Sd (bias corrected)	40.66
		Approximate Chi Square Value (0.05)	73.25
Adjusted Level of Significance	0.0459	Adjusted Chi Square Value	72.77

Assuming Gamma Distribution

95% Approximate Gamma UCL (use when n>=50))	47.49	95% Adjusted Gamma UCL (use when n<50)	47.81

Lognormal GOF Test

Shapiro Wilk Test Statistic	0.933	Shapiro Wilk Lognormal GOF Test
5% Shapiro Wilk P Value	0.00421	Data Not Lognormal at 5% Significance Level
Lilliefors Test Statistic	0.139	Lilliefors Lognormal GOF Test
5% Lilliefors Critical Value	0.116	Data Not Lognormal at 5% Significance Level

Data Not Lognormal at 5% Significance Level

Lognormal Statistics

Minimum of Logged Data	0.916	Mean of logged Data	2.91
Maximum of Logged Data	6.397	SD of logged Data	1.012

Assuming Lognormal Distribution

95% H-UCL	42	90% Chebyshev (MVUE) UCL	44.5
95% Chebyshev (MVUE) UCL	50.97	97.5% Chebyshev (MVUE) UCL	59.95
99% Chebyshev (MVUE) UCL	77.58		

Nonparametric Distribution Free UCL Statistics

Data do not follow a Discernible Distribution (0.05)

Nonparametric Distribution Free UCLs

95% CLT UCL	54.4	95% Jackknife UCL	54.69
95% Standard Bootstrap UCL	54.23	95% Bootstrap-t UCL	90.27
95% Hall's Bootstrap UCL	123.7	95% Percentile Bootstrap UCL	56.15
95% BCA Bootstrap UCL	70.15		
90% Chebyshev(Mean, Sd) UCL	68.95	95% Chebyshev(Mean, Sd) UCL	83.55
97.5% Chebyshev(Mean, Sd) UCL	103.8	99% Chebyshev(Mean, Sd) UCL	143.6

Suggested UCL to Use

95% Chebyshev (Mean, Sd) UCL **83.6**

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
Recommendations are based upon data size, data distribution, and skewness.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Nickel

General Statistics

Total Number of Observations	32	Number of Distinct Observations	24
		Number of Missing Observations	0
Minimum	49	Mean	115.4
Maximum	560	Median	71
SD	110.2	Std. Error of Mean	19.48
Coefficient of Variation	0.955	Skewness	2.922

Normal GOF Test

Shapiro Wilk Test Statistic	0.566	Shapiro Wilk GOF Test
5% Shapiro Wilk Critical Value	0.93	Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.337	Lilliefors GOF Test
5% Lilliefors Critical Value	0.154	Data Not Normal at 5% Significance Level

Data Not Normal at 5% Significance Level

Assuming Normal Distribution

95% Normal UCL		95% UCLs (Adjusted for Skewness)	
95% Student's-t UCL	148.4	95% Adjusted-CLT UCL (Chen-1995)	158.2
		95% Modified-t UCL (Johnson-1978)	150.1

Gamma GOF Test

A-D Test Statistic	4.057	Anderson-Darling Gamma GOF Test
5% A-D Critical Value	0.757	Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.281	Kolmogorov-Smirnov Gamma GOF Test
5% K-S Critical Value	0.157	Data Not Gamma Distributed at 5% Significance Level

Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics

k hat (MLE)	2.314	k star (bias corrected MLE)	2.118
Theta hat (MLE)	49.86	Theta star (bias corrected MLE)	54.48
nu hat (MLE)	148.1	nu star (bias corrected)	135.6
MLE Mean (bias corrected)	115.4	MLE Sd (bias corrected)	79.29
		Approximate Chi Square Value (0.05)	109.7
Adjusted Level of Significance	0.0416	Adjusted Chi Square Value	108.4

Assuming Gamma Distribution

95% Approximate Gamma UCL (use when n>=50))	142.7	95% Adjusted Gamma UCL (use when n<50)	144.3

Lognormal GOF Test

Shapiro Wilk Test Statistic	0.756	Shapiro Wilk Lognormal GOF Test
5% Shapiro Wilk Critical Value	0.93	Data Not Lognormal at 5% Significance Level
Lilliefors Test Statistic	0.265	Lilliefors Lognormal GOF Test
5% Lilliefors Critical Value	0.154	Data Not Lognormal at 5% Significance Level

Data Not Lognormal at 5% Significance Level

Lognormal Statistics

Minimum of Logged Data	3.892	Mean of logged Data	4.517
Maximum of Logged Data	6.328	SD of logged Data	0.593

Assuming Lognormal Distribution

95% H-UCL	135.2	90% Chebyshev (MVUE) UCL	144.6
95% Chebyshev (MVUE) UCL	161	97.5% Chebyshev (MVUE) UCL	183.8
99% Chebyshev (MVUE) UCL	228.5		

Nonparametric Distribution Free UCL Statistics

Data do not follow a Discernible Distribution (0.05)

Nonparametric Distribution Free UCLs

95% CLT UCL	147.4	95% Jackknife UCL	148.4
95% Standard Bootstrap UCL	147.5	95% Bootstrap-t UCL	176.2
95% Hall's Bootstrap UCL	183.7	95% Percentile Bootstrap UCL	149.3
95% BCA Bootstrap UCL	162.1		
90% Chebyshev(Mean, Sd) UCL	173.8	95% Chebyshev(Mean, Sd) UCL	200.3
97.5% Chebyshev(Mean, Sd) UCL	237.1	99% Chebyshev(Mean, Sd) UCL	309.2

Suggested UCL to Use

95% Chebyshev (Mean, Sd) UCL	**200**

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
Recommendations are based upon data size, data distribution, and skewness.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Thallium

General Statistics

Total Number of Observations	32	Number of Distinct Observations	7
		Number of Missing Observations	0
Minimum	0.5	Mean	0.713
Maximum	2.1	Median	0.5
SD	0.474	Std. Error of Mean	0.0839
Coefficient of Variation	0.666	Skewness	2.045

Normal GOF Test

Shapiro Wilk Test Statistic	0.507	Shapiro Wilk GOF Test	
5% Shapiro Wilk Critical Value	0.93	Data Not Normal at 5% Significance Level	
Lilliefors Test Statistic	0.485	Lilliefors GOF Test	
5% Lilliefors Critical Value	0.154	Data Not Normal at 5% Significance Level	
Data Not Normal at 5% Significance Level			

Assuming Normal Distribution

95% Normal UCL		95% UCLs (Adjusted for Skewness)	
95% Student's-t UCL	0.855	95% Adjusted-CLT UCL (Chen-1995)	0.883
		95% Modified-t UCL (Johnson-1978)	0.86

Gamma GOF Test

A-D Test Statistic	8.095	Anderson-Darling Gamma GOF Test	
5% A-D Critical Value	0.751	Data Not Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.496	Kolmogorov-Smirnov Gamma GOF Test	
5% K-S Critical Value	0.156	Data Not Gamma Distributed at 5% Significance Level	
Data Not Gamma Distributed at 5% Significance Level			

Gamma Statistics

k hat (MLE)	3.816	k star (bias corrected MLE)	3.479
Theta hat (MLE)	0.187	Theta star (bias corrected MLE)	0.205
nu hat (MLE)	244.2	nu star (bias corrected)	222.6
MLE Mean (bias corrected)	0.713	MLE Sd (bias corrected)	0.382
		Approximate Chi Square Value (0.05)	189.1
Adjusted Level of Significance	0.0416	Adjusted Chi Square Value	187.4

Assuming Gamma Distribution

95% Approximate Gamma UCL (use when n>=50))	0.839	95% Adjusted Gamma UCL (use when n<50)	0.846

Lognormal GOF Test

Shapiro Wilk Test Statistic	0.506	Shapiro Wilk Lognormal GOF Test	
5% Shapiro Wilk Critical Value	0.93	Data Not Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.491	Lilliefors Lognormal GOF Test	
5% Lilliefors Critical Value	0.154	Data Not Lognormal at 5% Significance Level	
Data Not Lognormal at 5% Significance Level			

Lognormal Statistics

Minimum of Logged Data	-0.693	Mean of logged Data	-0.476
Maximum of Logged Data	0.742	SD of logged Data	0.47

Assuming Lognormal Distribution

95% H-UCL	0.816	90% Chebyshev (MVUE) UCL	0.871
95% Chebyshev (MVUE) UCL	0.952	97.5% Chebyshev (MVUE) UCL	1.065
99% Chebyshev (MVUE) UCL	1.286		

Nonparametric Distribution Free UCL Statistics
Data do not follow a Discernible Distribution (0.05)

Nonparametric Distribution Free UCLs

95% CLT UCL	0.85	95% Jackknife UCL	0.855
95% Standard Bootstrap UCL	0.845	95% Bootstrap-t UCL	0.895
95% Hall's Bootstrap UCL	0.844	95% Percentile Bootstrap UCL	0.859
95% BCA Bootstrap UCL	0.869		
90% Chebyshev(Mean, Sd) UCL	0.964	95% Chebyshev(Mean, Sd) UCL	1.078

97.5% Chebyshev(Mean, Sd) UCL	1.236	99% Chebyshev(Mean, Sd) UCL	1.547

Suggested UCL to Use

95% Student's-t UCL	**0.86**	or 95% Modified-t UCL	0.86

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
Recommendations are based upon data size, data distribution, and skewness.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

UCL Statistics for Uncensored Full Data Sets

User Selected Options

Date/Time of Computation	ProUCL 5.111/2/2018 8:41:04 AM
From File	UCL Input.xls
Full Precision	OFF
Confidence Coefficient	95%
Number of Bootstrap Operations	2000

TPHd

General Statistics

Total Number of Observations	44	Number of Distinct Observations	33
		Number of Missing Observations	0
Minimum	0.5	Mean	106.6
Maximum	1500	Median	13.5
SD	258	Std. Error of Mean	38.89
Coefficient of Variation	2.421	Skewness	4.139

Normal GOF Test

Shapiro Wilk Test Statistic	0.466	Shapiro Wilk GOF Test	
5% Shapiro Wilk Critical Value	0.944	Data Not Normal at 5% Significance Level	
Lilliefors Test Statistic	0.375	Lilliefors GOF Test	
5% Lilliefors Critical Value	0.132	Data Not Normal at 5% Significance Level	
Data Not Normal at 5% Significance Level			

Assuming Normal Distribution

95% Normal UCL		95% UCLs (Adjusted for Skewness)	
95% Student's-t UCL	171.9	95% Adjusted-CLT UCL (Chen-1995)	196.5
		95% Modified-t UCL (Johnson-1978)	176

Gamma GOF Test

A-D Test Statistic	1.986	Anderson-Darling Gamma GOF Test	
5% A-D Critical Value	0.851	Data Not Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.202	Kolmogorov-Smirnov Gamma GOF Test	
5% K-S Critical Value	0.144	Data Not Gamma Distributed at 5% Significance Level	
Data Not Gamma Distributed at 5% Significance Level			

Gamma Statistics

k hat (MLE)	0.342	k star (bias corrected MLE)	0.333
Theta hat (MLE)	311.9	Theta star (bias corrected MLE)	319.5
nu hat (MLE)	30.06	nu star (bias corrected)	29.35
MLE Mean (bias corrected)	106.6	MLE Sd (bias corrected)	184.5
		Approximate Chi Square Value (0.05)	17.98
Adjusted Level of Significance	0.0445	Adjusted Chi Square Value	17.68

Assuming Gamma Distribution

95% Approximate Gamma UCL (use when n>=50))	173.9	95% Adjusted Gamma UCL (use when n<50)	176.9

Lognormal GOF Test

Shapiro Wilk Test Statistic	0.948	Shapiro Wilk Lognormal GOF Test	
5% Shapiro Wilk Critical Value	0.944	Data appear Lognormal at 5% Significance Level	

Lilliefors Test Statistic	0.0996	Lilliefors Lognormal GOF Test	
5% Lilliefors Critical Value	0.132	Data appear Lognormal at 5% Significance Level	
Data appear Lognormal at 5% Significance Level			

Lognormal Statistics

Minimum of Logged Data	-0.693	Mean of logged Data	2.693
Maximum of Logged Data	7.313	SD of logged Data	2.172

Assuming Lognormal Distribution

95% H-UCL	573.4	90% Chebyshev (MVUE) UCL	325.4
95% Chebyshev (MVUE) UCL	412.3	97.5% Chebyshev (MVUE) UCL	533
99% Chebyshev (MVUE) UCL	770.1		

Nonparametric Distribution Free UCL Statistics
Data appear to follow a Discernible Distribution at 5% Significance Level

Nonparametric Distribution Free UCLs

95% CLT UCL	170.5	95% Jackknife UCL	171.9
95% Standard Bootstrap UCL	168.9	95% Bootstrap-t UCL	231.2
95% Hall's Bootstrap UCL	390.2	95% Percentile Bootstrap UCL	174.6
95% BCA Bootstrap UCL	207.3		
90% Chebyshev(Mean, Sd) UCL	223.2	95% Chebyshev(Mean, Sd) UCL	276.1
97.5% Chebyshev(Mean, Sd) UCL	349.4	99% Chebyshev(Mean, Sd) UCL	493.5

Suggested UCL to Use

97.5% Chebyshev (Mean, Sd) UCL	**349**

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
Recommendations are based upon data size, data distribution, and skewness.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

HALEY ALDRICH

www.haleyaldrich.com

LIMITED PHASE II ENVIRONMENTAL INVESTIGATION
PARCEL 1214 (TRAN & ZHONG)
1091/1093 SOUTH CAPITOL AVENUE
SAN JOSE, CALIFORNIA

by Haley & Aldrich, Inc.
San Jose, California

For Santa Clara Valley Transportation Authority
San Jose, California

File No. 129899-012
December 2019

Haley & Aldrich, Inc.
2107 N. First Street
Suite 380
San Jose, CA 95131
408.961.4805

6 December 2019
File No. 129899-014

Santa Clara Valley Transportation Authority
3331 North First Street
San Jose, California

via e-mail:
dan.pornel@vta.org

Attention: Mr. Dan Pornel

Subject: Limited Phase II Environmental Investigation
Parcel 1214 (Tran & Zhong)
1091/1093 South Capitol Avenue
San Jose, California

Dear Mr. Pornel:

Haley & Aldrich, Inc. (Haley & Aldrich) is pleased to present this report on our Limited Phase II Environmental Investigation at the 1214 (Tran & Zhong) Parcel located at 1091/1093 South Capitol Avenue in San Jose, California. This investigation was performed per the Work Plan for Phase II Environmental Site Assessment, Parcel 1214 (Tran & Zhong), 1091/1093 South Capitol Avenue, San Jose, California dated 12 June 2019 and revised 1 July 2019.

Please feel free to contact us if you have any questions.

Sincerely yours,
HALEY & ALDRICH, INC.

PROFESSIONAL GEOLOGIST
CIROOS LIAGHAT
9/30/21
No. 8646
STATE OF CALIFORNIA

Ciroos Liaghat, Ph.D., P.G. #8646 (CA)
Senior Technical Specialist

Jennifer Boyer
Senior Project Manager

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SIGNATURE PAGE FOR

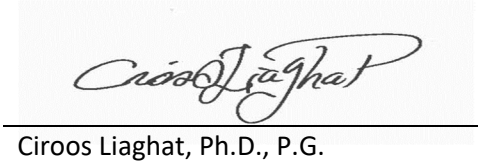
REPORT ON

LIMITED PHASE II ENVIRONMENTAL INVESTIGATION
PARCEL 1214
1091/1093 SOUTH CAPITOL AVENUE
SAN JOSE, CALIFORNIA

PREPARED FOR

SANTA CLARA VALLEY TRANSPORTATION AUTHORITY
3331 NORTH FIRST STREET
SAN JOSE, CALIFORNIA

PREPARED BY:



Ciroos Liaghat, Ph.D., P.G.
Senior Technical Specialist, CA P.G. #8646
Haley & Aldrich, Inc.

REVIEWED AND APPROVED BY:

Jennifer Boyer
Senior Project Manager
Haley & Aldrich, Inc.

Roger Cox
Engineer
Haley & Aldrich, Inc.

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1. Introduction

Haley & Aldrich, Inc. (Haley & Aldrich) has performed a Limited Phase II Environmental Investigation (Investigation) at the 1214 Parcel located at 1091/1093 South Capitol Avenue in San Jose, California (Site; Figures 1 and 2). This investigation was performed on behalf of the Santa Clara Valley Transportation Authority (SCVTA) per Work Plan for Phase II Environmental Site Assessment, Parcel 1214, 1091/1093 South Capitol Avenue, San Jose, California dated 12 June 2019 and revised 1 July 2019 (Haley & Aldrich, 2019a). The purpose of this report is to:

- Provide soil and groundwater characterization data to evaluate whether adverse environmental conditions may exist that could affect the Site's potential redevelopment plans;
- Provide soil and groundwater characterization data to protect on-Site workers and the surrounding public during excavation/construction activities conducted as part of the Site's potential redevelopment;
- Provide soil characterization data for planning the proper handling and disposal of soil encountered during potential construction activities; and,
- Provide groundwater characterization data for planning the handling and treatment/disposal of groundwater encountered during dewatering associated with potential construction activities.

1.1 SITE BACKGROUND AND GEOLOGY

The Site is currently developed with an approximately 1,340 sq. ft commercial building split into two suites and a small detached garage located in the southwestern corner of the property. The surrounding properties are mix-use residential and commercial. The Site is bounded to the north and west by residents, east by South Capitol Expressway, south-southeast by World Oil Gas Station.

Haley & Aldrich completed a Phase I Environmental Site Assessment (Phase I, Haley & Aldrich, 2019a) to assess whether recognized environmental conditions (REC) are associated with the Site. The Phase I included visual observations of Site conditions and of adjacent properties, an interview of a key site manager, review of federal, state, tribal, and local environmental database information, federal and state environmental files, previous reports (if identified and provided), and Site historical use records.

Based on the findings of the Phase I, the Site currently operates as a stereo and window tinting business at 1091 South Capitol Avenue and retail store at 1093 South Capitol Avenue. Site features include a former monitoring well (MW-7) associated with an off-site monitoring programs at the adjacent site (2695 Story Road) and a window tinting work area (Figure 2). Well MW-7 was installed in 1987 to 25 feet below ground surface (bgs) and destroyed in 2010 by WDC Exploration and subsequently inspected and approved by the Santa Clara Valley Water District (SCVWD) (Stantec, 2010).

The Site is underlain by alluvial soils consisting of sandy silts, fine to medium-grained silty sands, and lean clays with minor coarser sand and gravel layers. Depth to bedrock was not determined for this investigation.During the Investigation, groundwater was first encountered at depths 9 and 10.5 feet bgs, in boring locations SB-1 and SB-2 respectively. These water depth values meet the regional groundwater flow, which appears to flow to the west to Lower Silver Creek, based on an adjacent property groundwater contour map [Stantec, 2009].

2. Field Investigation

On 25 October 2019, Haley & Aldrich conducted soil and groundwater sampling activities to characterize the existing subsurface conditions within areas of the Site where historical activities or features may pose an environmental concern. The sampling locations are shown on Figure 2.

2.1 PRE-FIELD ACTIVITIES

Prior to conducting subsurface work, Underground Service Alert (USA) was notified and the drilling locations were cleared by Coast Wide Utility Locators (CWUL). To help ensure worker safety, a site-specific Health and Safety Plan (HASP) was prepared for the field activities.

2.2 SOIL AND GROUNDWATER INVESTIGATION

Haley & Aldrich contracted Environmental Control Associates (ECA) to complete the soil boring activities. To minimize the risk of encountering unmarked and undetected underground utilities during drilling and to ensure the health and safety of workers, each boring was advanced to a depth of five feet bgs using hand auger technique. A total of two borings were advanced for soil and groundwater sample collections. A truck-mounted GeoProbe™ drill rig equipped with direct-push technology (DPT) was used to advance the two borings (SB-1 and SB-2). Boring SB-1 was located at the entry access of 1091/1093 South Capitol Avenue on the eastern portion of the site to assess potential contributions due to an off-site source. Boring SB-1 was advanced to a total depth of 16 feet bgs, first encountered groundwater was reported to be 9.0 feet bgs. Boring SB-2 was located near the garage on the western portion of the Site to assess soil and groundwater conditions near the garage and downgradient of closed leaking underground storage tank site at 2695 Story Road site. Boring SB-2 was advanced to a total depth of 23 feet bgs and first encountered groundwater was reported to be 10.5 feet bgs.

Recovered soil was screened with a photoionization detector (PID) and logged in the field in accordance with the visual-manual procedures of American Society for Testing and Materials (ASTM) Standard D-2488-09a. Sampling locations were selected in the field to include observed visual or olfactory impacts, or PID detections.

All soil and groundwater samples were collected following standard environmental sampling and handling procedures and submitted under chain-of-custody documentation to state certified Eurofins TestAmerica of Pleasanton, California. Eurofins Test America analyzed the samples following the proposed United States Environmental Protection Agency (EPA) Methods.

Upon completion of the sampling program, the borings were backfilled with bentonite grout. All down-hole equipment was decontaminated prior to starting each new boring location by washing the equipment with laboratory grade detergent and water followed by a water rinse.

The generated investigation-derived waste (IDW) consisted of soil cuttings and purge groundwater and decontamination water placed in two 5-gallon buckets. The waste characterization will be completed with CP215 waste. The IDW drums are temporarily stored off-site at an approved SCVTA location.

Field documentation, including the Haley & Aldrich's soil boring logs, are provided in Appendix A.

3. Analytical Results

Soil and groundwater samples were analyzed for one or more of the following analytes:

- CAM 17 Metals by EPA Method 6010B/7471A;
- Hexavalent chromium by EPA Method 7199;
- TPHd and TPHmo by EPA Method 8015B with silica gel cleanup; and
- VOCs and TPHg by EPA Method 8260B.

Analytical results for soil were compared to the Commercial/Industrial: Shallow Soil Exposure and Construction Worker: Any Land Use / Any Depth Soil Exposure environmental screening levels (ESLs) published in July 2019 (Revision 1) by the San Francisco Bay Regional Water Quality Control Board (SFRWQCB). Analytical results for groundwater were compared to the SFRWQCB Groundwater Vapor Intrusion Human Health Risk Levels – Commercial / Industrial ESLs.

The commercial/industrial ESLs were selected for comparison based on the proposed redevelopment of the Site. Additionally, the Construction Worker ESLs were selected to evaluate potential exposure to construction workers who would potentially be working at the Site during its redevelopment.

3.1 SOIL

Soil analytical results are presented in Table 1 and the laboratory analytical report is included as Appendix B. Soil boring SB-1 had detections of TPHd and TPHmo within 5 feet of the ground surface and SB-2 had detections of TPHd and TPHg at both soil samples collected at 4 and 8 feet bgs. Additionally, various metals were detected in the analyzed soil samples. The following sections provide a summary of the soil data screened against ESLs.

3.1.1 Commercial/Industrial: Shallow Soil Exposure

Analytical soil results were compared to the SFRWQCB commercial/industrial shallow exposure ESLs. All detected analytes in milligrams per kilogram (mg/kg) were below their respective commercial/industrial shallow exposure ESLs with the exception of arsenic. Although the results for arsenic in soil, between 6.0 mg/kg to 9.4 mg/kg, exceed the commercial/industrial ESLs (0.31 mg/kg) for each sample collected, the concentrations are below the upper estimate for background arsenic concentration of 11 mg/kg for soil in the region [Duvergé, 2011]. Based on the soil results, mitigation measures would not be required if the Site is to remain commercial/industrial.

3.1.2 Construction Worker Exposure Screening

Analytical soil results were compared to the SFRWQCB Construction Worker ESLs for any land use and any depth soil exposure. All detected analytes were below their respective Construction Worker ESLs for with the exceptions of arsenic and nickel. As discussed in the previous section, the arsenic concentrations fall within range of background concentrations for arsenic in soils for the region and the nickel is below the cancer-risk threshold. Based on these results, special handling of soil does not appear to be warranted during construction activities.

3.1.3 Disposal Classification

Requirements of Title 22 of the California Code of Regulations, Division 4.5, Chapter 11 were used to evaluate how soil removed from the Site would be classified for disposal. Detected concentration of benzene could pose a concern with respect to the leaching of from soil to water under conditions at a theoretical disposal location for soil sample SB-2 collected at 8 feet bgs (SB-2-SS-8.0). Therefore, the soil generated during construction activities may require further leachability characterization for waste profiling (Toxicity Characteristic Leaching Procedure (TCLP) and/or Soluble Threshold Limit Concentration (STLC)).

3.2 GROUNDWATER

Analytical detections in groundwater are presented in Table 2. The laboratory analytical report is included as Appendix B. The following groundwater issues were identified as a result of the Phase II Investigation findings and may impact redevelopment construction activities at the Site:

- Shallow groundwater collected at 9.0 feet bgs from SB-1 has detected concentrations of ethylbenzene and naphthalene that exceed the SFBRWQCB commercial/industrial ESLs; and
- Shallow groundwater collected at 10.5 feet bgs from SB-2 has detected concentrations of benzene, ethylbenzene, and naphthalene that exceed the SFBRWQCB commercial/industrial ESLs.

Although both groundwater samples collected from this area exceed SFRWQCB commercial/industrial ESLs, these exceedances do not appear to present a risk to future redevelopment as this groundwater is not a drinking water resource and there are no ecological receptors. However, if groundwater is encountered in this area during the Site's redevelopment activities, such as dewatering, groundwater treatment is recommended prior to discharge into municipal storm or sewer system thru a National Pollutant Discharge Elimination System (NPDES) Permit or Short-Term Discharge Permit from the City of San Jose.

4. Conclusions and Recommendations

The following presents Haley & Aldrich's conclusions and recommendations based on the findings of the Limited Phase II Investigation conducted at the Site.

4.1 CONCLUSIONS

Site soil conditions are not anticipated to impact redevelopment of the Site; however, soil excavated from the Site may require further leachability characterization for waste profiling by TCLP and/or STLC for benzene if soil is generated a depth greater than 8 feet bgs.

Benzene, ethylbenzene, and naphthalene were detected in groundwater at concentrations that exceed the SFBRWQCB commercial/industrial ESLs and may have the potential to impact the construction activities associated with the redevelopment of the Site. The adjacent and upgradient gas stations have detected concentrations of total petroleum hydrocarbons and fuel additives prior their site closures since 2010. Therefore, based on the available information from the nearby environmental sites, it concludes the detected hydrocarbon components in groundwater samples collected from SB-1 and SB-2, are likely related to a regional plume released from the nearby sites.

4.2 RECOMMENDATIONS

Based on the above conclusions, we recommend the following be considered during planning for the Site redevelopment:

- Characterization of groundwater deeper than 10 feet bgs if encountered during excavation or dewatering activities;
- Compliance of dewatering activities including the pumping, treatment, and discharge of groundwater with applicable POTW and NPDES permit requirements;
- Preparation of a workplan for groundwater dewatering, storage, treatment, and disposal requirements, if warranted by the proposed redevelopment of the Site; and
- Preparation of a Site Management Plan and HASP to outline soil handling and disposal requirements.

5. References

1. Duvergé, 2011. “Establishing Background Arsenic in Soil of the Urbanized San Francisco Bay Region,” December.

2. Haley & Aldrich, Inc., 2019a. “Report on ASTM Phase I Environmental Site Assessment, CP214 Property (Tran) – 1091/1093 South Capitol Avenue, San Jose, California,” 16 August.

3. Haley & Aldrich, Inc., 2019b. “Work Plan for Phase II Investigation, CP214 Property (Tran) – 1091/1093 South Capitol Avenue, San Jose, California,” 1 July

4. San Francisco Bay Regional Water Quality Control Board (SFRWQCB), 2019. “User’s Guide: Derivation and Application of Environmental Screening Levels, Revision 2,” July.

5. Stantec, 2009. “Groundwater Elevation Contour Map – Second Quarter 2009, Former Texaco-Branded Service Station 21-1340 2695 Story Road San Jose, California,” 13 May.

6. Stantec, 2010. Well Destruction Report. Former Texaco-branded Service Station 21-1340, 2695 Story Road San Jose, California,” July 27.

\\haleyaldrich.com\share\CF\Projects\129899\Deliverables\2019_05_ESA_Eastridge\Phase II Investigations\2019_1206_HAI-VTA_PH_II_1091_1093_Capitol_Report_vF.docx

TABLES

TABLE 1
SUMMARY OF SOIL ANALYTICAL RESULTS
SCVTA PHASE II EASTRIDGE

Analyte				CAM 17 Metals (mg/kg) - EPA 6010B/7471A													Total Petroleum Hydrocarbons (mg/kg) - EPA 8015B with Silica Gel Cleanup		Volatile Organic Compounds (µg/kg) - EPA 8260B											
Sample ID	**Latitude**	**Longitude**	**Sample Date**	**Antimony**	**Arsenic**	**Barium**	**Beryllium**	**Cadmium**	**Trivalent Chromium (III) - Reported as Total Chromium**	**Hexavalent Chromium (VI)**	**Cobalt**	**Copper**	**Lead**	**Mercury**	**Nickel**	**Vanadium**	**Zinc**	**Total Petroleum Hydrocarbons (C10-C28) Diesel**	**Total Petroleum Hydrocarbons (C24-C36) Motor Oil**	**Total Petroleum Hydrocarbons (C4-C12) Gasoline**	**1,2,4-Trimethyl-benzene**	**2-Phenylbutane (sec-Butyl-benzene)**	**Acetone**	**Benzene**	**Ethylbenzene**	**Isopropyl-benzene (Cumene)**	**Naphthalene**	**n-Butyl-benzene**	**n-Propyl-benzene**	**tert-Butyl-benzene**	**Xylene (total)**	**Other Volatile Organic Compounds**
SB-1-SS-2.5	37.3512308600	-121.8275324200	10/25/2019	**2.5**	**7.8**	**200**	**0.62**	< 0.33	**61**	**0.53**	**14**	**35**	**15**	**0.093**	**89**	**45**	**79**	**8.5**	**65**	< 210 J	< 4.2 J	< 4.2 J	< 42 J	< 4.2 J	< 4.2 J	< 4.2 J	< 8.5 J	< 4.2 J	< 4.2 J	< 4.2 J	< 4.2 J	ND J
SB-1-SS-5.0	37.3512308600	-121.8275324200	10/25/2019	**1.4**	**8.9**	**220**	**0.52**	< 0.32	**62**	<0.40	**15**	**35**	**10**	**0.058**	**96**	**43**	**68**	< 1.9	< 48	< 220 J	< 4.3 J	< 4.3 J	< 43 J	< 4.3 J	< 4.3 J	< 4.3 J	< 8.7 J	< 4.3 J	< 4.3 J	< 4.3 J	< 4.3 J	ND J
SB-2-SS-4.0	37.3511334100	-121.8277882300	10/25/2019	< 1.4	**6.0**	**170**	**0.63**	**0.55**	**42**	NA	**8.2**	**12**	**8.9**	**0.10**	**41**	**31**	**47**	**17**	< 47	**720 J**	**14 J**	**5.1 J**	**92 J**	< 4.3 J	**5.7 J**	**10 J**	< 8.6 J	< 4.3 J	**24 J**	< 4.3 J	**15 J**	ND J
SB-2-SS-8.0	37.3511334100	-121.8277882300	10/25/2019	**1.7**	**9.4**	**200**	**0.50**	< 0.42	**64**	<0.40	**16**	**37**	**11**	**0.066**	**100**	**45**	**75**	**11**	< 48	**31,000**	< 3.5 J	**55 J**	< 35 J	**76 J**	**7.6 J**	**76 J**	**220 J**	**130 J**	**240 J**	**9.1 J**	**14 J**	ND J
Construction Worker ESL (cancer risk/non-cancer hazard)				50	0.98	3,000	27	51	530,000	2.8	28	14,000	160	44	1,700/86	470	110,000	1,100	54,000	1,800,000	--	--	270,000,000	33,000	540,000	--	400,000	--	--	--	2,400,000	Various
Commercial / Industrial ESL				160	0.31	220,000	230	1,100	1,800,000	6.2	350	47,000	320	190	11,000	5,800	350,000	1,200	180,000	2,000,000	--	--	670,000,000	1,400	26,000	--	17,000	--	--	--	2,500,000	Various
STLC Regulatory Limit (mg/L)				15	5	100	0.75	1	560	5	80	25	5	0.2	20	24	250	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Various
10x STLC (mg/L)				150	50	1,000	7.5	10	5,600	50	800	250	50	2	200	240	2,500	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Various
20x TC (mg/L)				--	100	2,000	--	20	--	100	--	--	100	4	--	--	--	--	--	--	--	--	--	10	--	--	--	--	--	--	--	Various

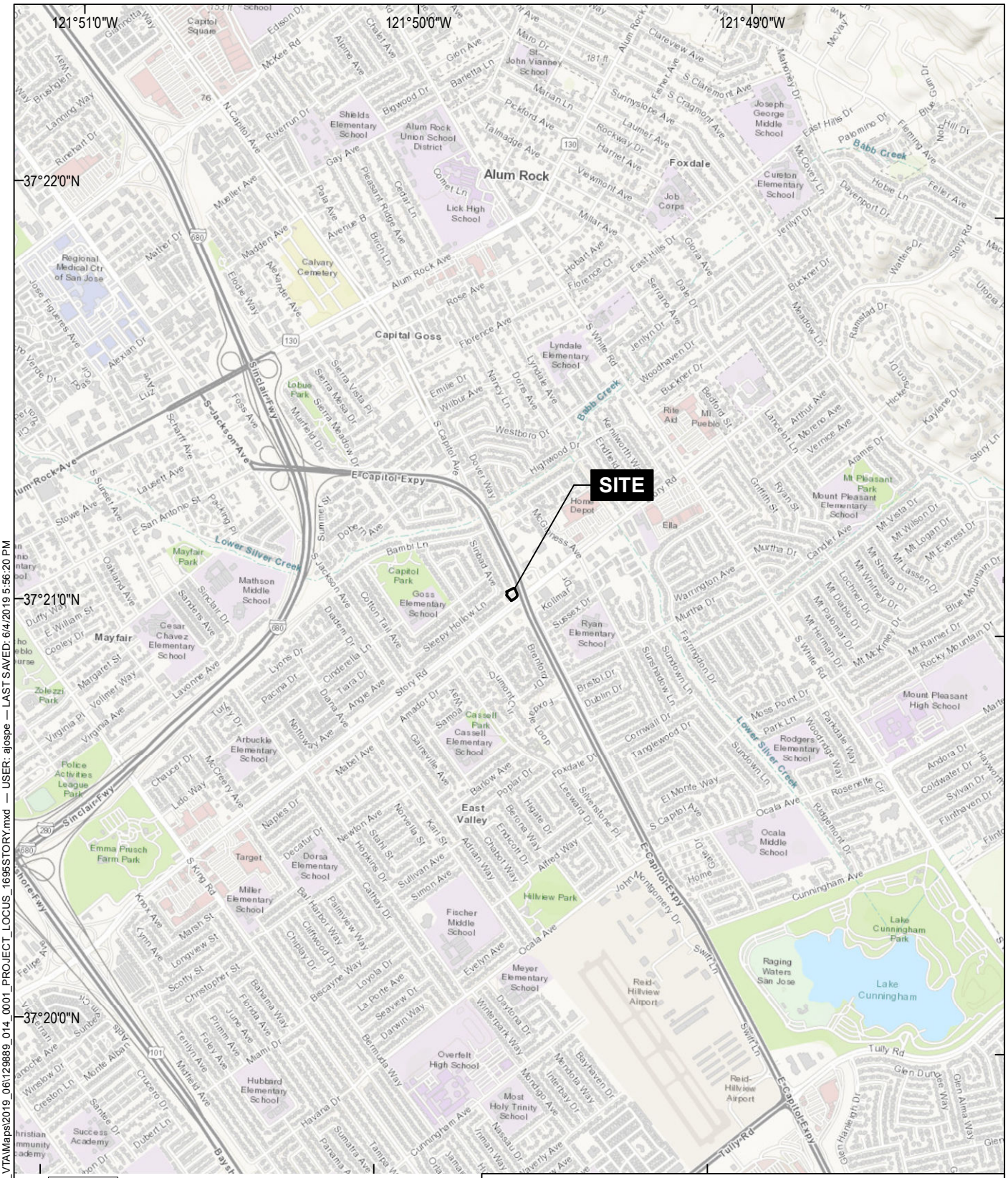
Notes:
Data are reported to the laboratory reporting limit (< RL).
Detects are **bolded.**
Only detected compounds are shown.
Data are compared to the Commercial/Industrial: Shallow Soil Exposure and Construction Worker: Any Land Use/ Any Depth Soil Exposure Environmental Screening Levels (SFRWQCB, July 2019. Rev 2).
Data exceeding Construction Worker ESLs are highlighted with orange color.
Data exceeding Commercial/Industrial ESLs are highlighted with peach color.
Data exceeding both Construction Worker and Commercial/Industrial ESLs are highlighted with purple color.
Data exceeding 10x STLC or 20x TC are highlighted with green color.
Screening levels are for chromium (III), the dominant form of chromium in the environment.
J indicates the result is estimated due to findings during validation.
-- indicates value is not available.
TC = Toxicity Characteristic
STLC = soluble threshold limit concentration
TC and STLC listed in California Code of Regulations, Title 22, Division 4.5, Chapter 11, Article 3, Section 66261.24
mg/L = milligrams per liter
µg/kg = micrograms per kilogram
mg/kg = milligrams per kilogram
NA = not analyzed

TABLE 2
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
SCVTA PHASE II EASTRIDGE

Analyte				Total Petroleum Hydrocarbons (µg/L) - EPA 8015B with Silica Gel Cleanup		Volatile Organic Compounds (µg/L) - EPA 8260B													
Sampel ID	**Sample Date**	**Latitude**	**Longitude**	**Total Petroleum Hydrocarbons (C10-C28) Diesel**	**Total Petroleum Hydrocarbons (C24-C36) Motor Oil**	**Total Petroleum Hydrocarbons (C4-C12) Gasoline**	**1,2,4-Trimethyl-benzene**	**1,3,5-Trimethyl-benzene**	**2-Phenylbutane (sec-Butylbenzene)**	**Benzene**	**Ethylbenzene**	**Isopropyl-benzene (Cumene)**	**Naphthalene**	**n-Butylbenzene**	**n-Propylbenzene**	**tert-Butylbenzene**	**Toluene**	**Xylene (total)**	**Other Volatile Organic Compounds**
SB-1-GW-9.0	10/25/2019	37.3512308600	-121.8275324200	**11,000 J**	**800 J**	**37,000 J**	< 5.0 R	< 5.0 R	**100 J**	< 5.0 R	**23 J**	**210 J**	**140 J**	**260 J**	**720 J**	**94 J**	**5.6 J**	**7.5 J**	ND R
SB-2-GW-10.5	10/25/2019	37.3511334100	-121.8277882300	**750**	< 310	**3,700 J**	**43**	**19**	**14**	**240**	**89**	**40**	**130**	**36**	**130**	< 10	< 5.0	**21**	ND
Commercial / Industrial ESLs				--	--	--	--	--	--	1.8	15	--	20	--	--	--	4,900	1,600	Various

Notes:
Data are reported to the laboratory reporting limit (< RL).
Detects are **bolded.**
Only detected compounds are shown.
Data are compared to the Groundwater Vapor Intrusion Human Health Risk Levels (Table GW-3) – Commercial / Industrial Environmental Screening Levels (SFRWQCB, July 2019).
Data exceeding Commercial/Industrial ESLs are highlighted with peach color.
J indicates the result is estimated due to findings during validation.
R indicates the value is rejected as unusable.
-- indicates value is not available.
TC = Toxicity Characteristic
STLC = soluble threshold limit concentration
TC and STLC listed in California Code of Regulations, Title 22, Division 4.5, Chapter 11, Article 3, Section 66261.24
mg/L = milligrams per liter
µg/L = micrograms per liter

FIGURES



GIS FILE PATH: C:\ajospe\Projects\129899_VTA\Maps\2019_06\129889_014_0001_PROJECT_LOCUS_1695STORY.mxd — USER: ajospe — LAST SAVED: 6/4/2019 5:56:20 PM

MAP SOURCE: ESRI
SITE COORDINATES: 121°49'39"W 37°21'4"N

HALEY ALDRICH

SANTA CLARA VALLEY TRANSPORTATION AUTHORITY
2695 STORY ROAD
SAN JOSE, CALIFORNIA

PROJECT LOCUS

APPROXIMATE SCALE: 1 IN = 2000 FT
JUNE 2019

FIGURE 1

LEGEND

SOIL BORING

SITE BOUNDARY

NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.
2. AERIAL IMAGERY SOURCE: USGS 2015

N

0 30 60

SCALE IN FEET

HALEY ALDRICH

SANTA CLARA VALLEY TRANSPORTATION AUTHORITY
1091 S CAPITOL AVENUE
SAN JOSE, CALIFORNIA

SITE PLAN

NOVEMBER 2019

FIGURE 2

GIS FILE PATH: \\haleyaldrich.com\share\phx_common\Projects\Santa Clara County VTA\GlobalGIS\Maps\2019_111729899_014_0002_SITE_PLAN.mxd — USER: lphillips — LAST SAVED: 11/18/2019 2:21:45 PM

APPENDIX A

Boring Logs

TEST BORING REPORT

Boring No. SB-1

Project	VTA Eastridge, 1091/1093 S. Capital Avenue, San Jose, California
Client	Santa Clara Valley Transportation Authority (SCVTA)
Contractor	Environmental Control Associates, Inc. (ECA)

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type		S	-	Rig Make & Model: Track, Geoprobe
Inside Diameter (in.)	-	1 3/8	-	Bit Type: Direct Push
Hammer Weight (lb)	-	140	-	Drill Mud: None
Hammer Fall (in.)	-	30	-	Casing: None
				Hoist/Hammer: -
				PID Make & Model: ppbRAE3000

File No. 129899-014
Sheet No. 1 of 1
Start 25 October 2019
Finish 25 October 2019
Driller ECA, Brent
H&A Rep. R. Cox/A. Piestrzeniewicz
Elevation ~34.5
Datum NAVD 88
Location See Plan

Depth (ft)	Recovery	Sample No.	PID Readings (ppb)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (GROUP NAME, color, moisture, Density/consistency, max. particle size*, structure, optional descriptions, odor, staining GEOLOGIC INTERPRETATION)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0	Hand Auger	SB-1-SS-2.5	55	34.3 / 0.2	ML	~2.0 in. ASPHALT at surface Sandy SILT with gravel, brown (10YR 4/3), moist, no odor, no stain		20			25	55				
			33													
			70													
			51		ML	SILT, very dark grayish-brown (10YR 3/2), moist, no odor, no stain					10	90				
		SB-1-SS-5.0	25													
5			52		ML	SILT with sand, olive-brown (2.5Y 4/3), moist, no odor, no stain					20	80				
			19		ML	SILT with sand, olive-brown (2.5Y 4/4), dry, no odor, no stain					25	75				
			22													
		SB-1-GW-9.0	20		ML	SILT with sand, olive-brown (2.5Y 4/4), moist, coarser sand, hydrocarbon-like odor, no stain				10	10	80				
			52	25.5 / 9.0	SP	Poorly-graded SAND, dark olive-gray (5Y 3/2), moist, trace fine gravel, hydrocarbon-like odor, no stain		5			90	5				
10			270													
			5200	23.5 / 11.0	CH	Fat CLAY, very dark grayish-brown (2.5Y 3/2), moist, hydrocarbon-like odor, no stain						100			H	
			2700	22.0												
			70000	12.5	SP-SM	SAND with silt and gravel, very dark gray (5Y 3/1), moist, no odor, no stain		10		30	60	10				
			4400	20.5 / 14.0	CH	Fat CLAY, dark gray (5Y 4/1), moist, hydrocarbon-like odor, no stain						100			H	
15			6500	19.0												
			668	15.5 / 18.5	CL	Lean CLAY, olive-gray (5Y 4/2), moist, hydrocarbon-like odor, no stain						100			H	
				16.0		BOTTOM OF EXPLORATION 16.0 FT BGS Note: Borehole backfilled with grout.										

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water
10/25/19		0.75		16.0	8.9

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Split Spoon Sample

Recovery
No Recovery
Recovery
Sample Collected

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft)
Rock Cored (ft)
Samples

Boring No. SB-1

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None
Toughness: L - Low M - Medium H - High
Plasticity: N - Nonplastic L - Low M - Medium H - High
Dry Strength: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

TEST BORING REPORT

Boring No. SB-2

Project	VTA Eastridge, 1091/1093 S. Capital Avenue, San Jose, California
Client	Santa Clara Valley Transportation Authority (SCVTA)
Contractor	Environmental Control Associates, Inc. (ECA)

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type		S	-	Rig Make & Model: Track, Geoprobe
Inside Diameter (in.)	-	1 3/8	-	Bit Type: Direct Push
Hammer Weight (lb)	-	140	-	Drill Mud: None
Hammer Fall (in.)	-	30	-	Casing: None
				Hoist/Hammer: -
				PID Make & Model: ppbRAE3000

File No. 129899-014
Sheet No. 1 of 2
Start 25 October 2019
Finish 25 October 2019
Driller ECA, Brent
H&A Rep. R. Cox/A. Piestrzeniewicz
Elevation ~34.5
Datum NAVD 88
Location See Plan

Depth (ft)	Recovery	Sample No.	PID Readings (ppb)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (GROUP NAME, color, moisture, Density/consistency, max. particle size*, structure, optional descriptions, odor, staining GEOLOGIC INTERPRETATION)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0	Hand Auger	SB-2-SS-4.0	7567	34.0		~5.0 in. ASPHALT at surface										
			9888	0.5	CL	Lean CLAY with sand, very dark gray (2.5Y 3/1), moist, some brick fragments, no odor, no stain					15	85			M	
				33.0												
			1743	1.5	ML	SILT with sand, very dark grayish-brown (2.5Y 3/2), moist, no odor, no stain										
			1506													
			2093													
5			4033													
			5163													
		SB-2-SS-8.0			ML	Similar to above, except olive-brown (2.5Y 4/3)										
			8421													
			4112													
			7669	25.0												
10		SB-2-GW-10.5	26.21	9.5	SM	Silty SAND, dark gray (2.5Y 4/1), wet, hydrocarbon-like odor, no stain					60	40				
			1164	23.0												
				11.5	ML	Sandy SILT, dark grayish-brown (2.5Y 4/2), wet, hydrocarbon-like odor, no stain					40	60				
			1735		ML	SILT, dark grayish-brown (2.5Y 4/2), wet, hydrocarbon-like odor, no stain										
			2157													
			1225	20.0												
15				14.5	CL	Lean CLAY, grayish-brown (2.5Y 5/2), moist, slight hydrocarbon-like odor, no stain						100			M	
			1366													
			4155													
			9470													
			4724													
			1877		CL	Lean CLAY with sand, olive-gray (5Y 4/2), moist, moderate petroleum-like odor, no stain					15	85			M	
20																

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water
10/25/19		1		23.0	9.5

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Split Spoon Sample

Recovery
No Recovery
Recovery
Sample Collected

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft)
Rock Cored (ft)
Samples

Boring No. SB-2

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None **Toughness**: L - Low M - Medium H - High **Plasticity**: N - Nonplastic L - Low M - Medium H - High **Dry Strength**: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

TEST BORING REPORT

Boring No. SB-2
File No. 129899-014
Sheet No. 2 of 2

Depth (ft)	Recovery	Sample No.	PID Readings (ppb)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Density/consistency, color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
20			3782 3742 8353		CL	Lean CLAY, olive-gray (2.5Y 4/3), moist, no odor, no stain						100			M	
				11.5 23.0		BOTTOM OF EXPLORATION 23.0 FT BGS Note: Borehole backfilled with grout.										

NOTE: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

Boring No. SB-2

APPENDIX B

Photographic Log

Photo 1: View of USA markings and front of property (facing west).

Photo 2: View of back of property (facing northwest).

Photo 3: View of potential site of monitoring well (MW-7) installed in 1987 to 25 feet below ground surface (bgs) and destroyed in 2010 by WDC Exploration and Wells and inspected and approved by the Santa Clara Valley Water District (SCVWD) (facing east).

Photo 4: View of drilling at SB-1 (facing north).

Photo 5: View of drill rig at SB-1 (facing west).

Photo 6: View of drilling at SB-2 (facing west).

Photo 7: View of soil cutting from SB-2.

Photo 8: View of soil from SB-1.

APPENDIX C

Laboratory Reports

eurofins | Environment Testing TestAmerica

ANALYTICAL REPORT

Eurofins TestAmerica, Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Tel: (925)484-1919

Laboratory Job ID: 720-95778-1
Client Project/Site: SCVTA Phase II Eastridge
Revision: 1

For:
Haley & Aldrich, Inc.
2107 N. 1st Street
Suite 380
San Jose, California 95131-2028

Attn: Roger Cox

Authorized for release by:
11/14/2019 4:33:53 PM

Micah Smith, Project Manager II
(925)484-1919
micah.smith@testamericainc.com

Table of Contents

Client: Haley & Aldrich, Inc.
Project/Site: SCVTA Phase II Eastridge

Job ID: 720-95778-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time
H3	Sample was received and analyzed past holding time.

Metals

Qualifier	Qualifier Description
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 720-95778-1

Laboratory: Eurofins TestAmerica, Pleasanton

Narrative

Job Narrative
720-95778-1

Comments
This report was revised on 11/14/19 to report sample SB-2-GW-10.5 (720-95778-6) from the initial run which was analyzed within 7 days of collection for all compounds with the exception of Gasoline Range Organics (GRO) - C4-C12 This report replaces the report generated on 11/7/19.

Receipt
The samples were received on 10/28/2019 1:40 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.5º C.

Receipt Exceptions
Terra cores received past hold time for freezing. As requested, these samples will be analyzed.

The lab did not receive enough volume of sample to do method 8015B with the full volume. The lab combined the volume submitted for the 8015B analysis and the reporting limit was elevated proportionally.

GC/MS VOA
Method 8260B: The following samples were received outside of freezing holding time: SB-1-SS-2.5 (720-95778-1), SB-1-SS-5.0 (720-95778-2), SB-2-SS-4.0 (720-95778-3) and SB-2-SS-8.0 (720-95778-4).

Method 8260B: The following sample was collected in a properly preserved vial; however, the pH was outside the required criteria when verified by the laboratory. The sample was analyzed outside the 7-day holding time specified for unpreserved samples but within the 14-day holding time specified for preserved samples: SB-1-GW-9.0 (720-95778-5).

Method 8260B: The following sample was collected in a properly preserved vial; however, the pH was outside the required criteria when verified by the laboratory. The sample was analyzed for Gasoline Range Organics (GRO) - C4-C12 outside the 7-day holding time specified for unpreserved samples but within the 14-day holding time specified for preserved samples: SB-2-GW-10.5 (720-95778-6).

Method 8260B: The following sample was collected in a properly preserved vial; however, the pH was outside the required criteria when verified by the laboratory. The sample was analyzed within the 7-day holding time specified for unpreserved samples: SB-2-GW-10.5 (720-95778-6). This is true for all compounds reported by 8260B for this sample with the exception of Gasoline Range Organics (GRO) - C4-C12.

Method 8260B: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 720-275589 recovered outside control limits for the following analytes: 1,1,2,2-Tetrachloroethane and Vinyl acetate. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA
Method 8015B: Capric acid Surrogate recovery for the following sample was outside control limits: SB-1-GW-9.0 (720-95778-5). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
Method 6010B: The following samples were diluted due to the abundance of non-target analytes: SB-1-SS-2.5 (720-95778-1), SB-1-SS-5.0 (720-95778-2), SB-2-SS-4.0 (720-95778-3) and SB-2-SS-8.0 (720-95778-4). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Job ID: 720-95778-1 (Continued)

Laboratory: Eurofins TestAmerica, Pleasanton (Continued)

Organic Prep
Method 3510C SGC: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with prep batch 720-275468 for 8015 DRO_SGC (3510).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: Haley & Aldrich, Inc.
Project/Site: SCVTA Phase II Eastridge

Job ID: 720-95778-1

Client Sample ID: SB-1-SS-2.5 — Lab Sample ID: 720-95778-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	8.5		1.9		mg/Kg	1		8015B	Silica Gel Cleanup
Motor Oil Range Organics [C24-C36]	65		48		mg/Kg	1		8015B	Silica Gel Cleanup
Antimony	2.5		1.3		mg/Kg	4		6010B	Total/NA
Arsenic	7.8		2.6		mg/Kg	4		6010B	Total/NA
Barium	200		1.3		mg/Kg	4		6010B	Total/NA
Beryllium	0.62		0.26		mg/Kg	4		6010B	Total/NA
Chromium	61		1.3		mg/Kg	4		6010B	Total/NA
Cobalt	14		0.52		mg/Kg	4		6010B	Total/NA
Copper	35		3.9		mg/Kg	4		6010B	Total/NA
Lead	15		1.3		mg/Kg	4		6010B	Total/NA
Nickel	89		1.3		mg/Kg	4		6010B	Total/NA
Vanadium	45		1.3		mg/Kg	4		6010B	Total/NA
Zinc	79		3.9		mg/Kg	4		6010B	Total/NA
Mercury	0.093		0.016		mg/Kg	1		7471A	Total/NA

Client Sample ID: SB-1-SS-5.0 — Lab Sample ID: 720-95778-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	1.4		1.3		mg/Kg	4		6010B	Total/NA
Arsenic	8.9		2.5		mg/Kg	4		6010B	Total/NA
Barium	220		1.3		mg/Kg	4		6010B	Total/NA
Beryllium	0.52		0.25		mg/Kg	4		6010B	Total/NA
Chromium	62		1.3		mg/Kg	4		6010B	Total/NA
Cobalt	15		0.51		mg/Kg	4		6010B	Total/NA
Copper	35		3.8		mg/Kg	4		6010B	Total/NA
Lead	10		1.3		mg/Kg	4		6010B	Total/NA
Nickel	96		1.3		mg/Kg	4		6010B	Total/NA
Vanadium	43		1.3		mg/Kg	4		6010B	Total/NA
Zinc	68		3.8		mg/Kg	4		6010B	Total/NA
Mercury	0.058		0.016		mg/Kg	1		7471A	Total/NA

Client Sample ID: SB-2-SS-4.0 — Lab Sample ID: 720-95778-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	92	H H3	43		ug/Kg	1		8260B/CA_LUFT MS	Total/NA
sec-Butylbenzene	5.1	H H3	4.3		ug/Kg	1		8260B/CA_LUFT MS	Total/NA
Ethylbenzene	5.7	H H3	4.3		ug/Kg	1		8260B/CA_LUFT MS	Total/NA
Isopropylbenzene	10	H H3	4.3		ug/Kg	1		8260B/CA_LUFT MS	Total/NA
N-Propylbenzene	24	H H3	4.3		ug/Kg	1		8260B/CA_LUFT MS	Total/NA
1,2,4-Trimethylbenzene	14	H H3	4.3		ug/Kg	1		8260B/CA_LUFT MS	Total/NA
Xylenes, Total	15	H H3	4.3		ug/Kg	1		8260B/CA_LUFT MS	Total/NA
Gasoline Range Organics (GRO) -C4-C12	720	H H3	220		ug/Kg	1		8260B/CA_LUFT MS	Total/NA
Diesel Range Organics [C10-C28]	17		1.9		mg/Kg	1		8015B	Silica Gel Cleanup
Arsenic	6.0		2.9		mg/Kg	4		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Pleasanton

Client Sample ID: SB-2-SS-4.0 (Continued) — Lab Sample ID: 720-95778-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	170		1.4		mg/Kg	4		6010B	Total/NA
Beryllium	0.63		0.29		mg/Kg	4		6010B	Total/NA
Cadmium	0.55		0.36		mg/Kg	4		6010B	Total/NA
Chromium	42		1.4		mg/Kg	4		6010B	Total/NA
Cobalt	8.2		0.58		mg/Kg	4		6010B	Total/NA
Copper	12		4.3		mg/Kg	4		6010B	Total/NA
Lead	8.9		1.4		mg/Kg	4		6010B	Total/NA
Nickel	41		1.4		mg/Kg	4		6010B	Total/NA
Vanadium	31		1.4		mg/Kg	4		6010B	Total/NA
Zinc	47		4.3		mg/Kg	4		6010B	Total/NA
Mercury	0.10		0.015		mg/Kg	1		7471A	Total/NA

Client Sample ID: SB-2-SS-8.0 — Lab Sample ID: 720-95778-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	76	H H3	3.5		ug/Kg	1		8260B/CA_LUFT MS	Total/NA
n-Butylbenzene	130	H H3	3.5		ug/Kg	1		8260B/CA_LUFT MS	Total/NA
sec-Butylbenzene	55	H H3	3.5		ug/Kg	1		8260B/CA_LUFT MS	Total/NA
tert-Butylbenzene	9.1	H H3	3.5		ug/Kg	1		8260B/CA_LUFT MS	Total/NA
Ethylbenzene	7.6	H H3	3.5		ug/Kg	1		8260B/CA_LUFT MS	Total/NA
Isopropylbenzene	76	H H3	3.5		ug/Kg	1		8260B/CA_LUFT MS	Total/NA
Naphthalene	220	H H3	7.0		ug/Kg	1		8260B/CA_LUFT MS	Total/NA
N-Propylbenzene	240	H H3	3.5		ug/Kg	1		8260B/CA_LUFT MS	Total/NA
Xylenes, Total	14	H H3	3.5		ug/Kg	1		8260B/CA_LUFT MS	Total/NA
Gasoline Range Organics (GRO) -C4-C12	31000		20000		ug/Kg	1		8260B/CA_LUFT MS	Total/NA
Diesel Range Organics [C10-C28]	11		1.9		mg/Kg	1		8015B	Silica Gel Cleanup
Antimony	1.7		1.7		mg/Kg	4		6010B	Total/NA
Arsenic	9.4		3.4		mg/Kg	4		6010B	Total/NA
Barium	200		1.7		mg/Kg	4		6010B	Total/NA
Beryllium	0.50		0.34		mg/Kg	4		6010B	Total/NA
Chromium	64		1.7		mg/Kg	4		6010B	Total/NA
Cobalt	16		0.68		mg/Kg	4		6010B	Total/NA
Copper	37		5.1		mg/Kg	4		6010B	Total/NA
Lead	11		1.7		mg/Kg	4		6010B	Total/NA
Nickel	100		1.7		mg/Kg	4		6010B	Total/NA
Vanadium	45		1.7		mg/Kg	4		6010B	Total/NA
Zinc	75		5.1		mg/Kg	4		6010B	Total/NA
Mercury	0.066		0.016		mg/Kg	1		7471A	Total/NA

Client Sample ID: SB-1-GW-9.0 — Lab Sample ID: 720-95778-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
n-Butylbenzene	260		10		ug/L	10		8260B/CA_LUFT MS	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SB-1-GW-9.0 (Continued)

Lab Sample ID: 720-95778-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
sec-Butylbenzene	100		10		ug/L	10		8260B/CA_LUFT MS	Total/NA
tert-Butylbenzene	94		10		ug/L	10		8260B/CA_LUFT MS	Total/NA
Ethylbenzene	23		5.0		ug/L	10		8260B/CA_LUFT MS	Total/NA
Isopropylbenzene	210		5.0		ug/L	10		8260B/CA_LUFT MS	Total/NA
Naphthalene	140		10		ug/L	10		8260B/CA_LUFT MS	Total/NA
N-Propylbenzene	720		10		ug/L	10		8260B/CA_LUFT MS	Total/NA
Toluene	5.6		5.0		ug/L	10		8260B/CA_LUFT MS	Total/NA
Xylenes, Total	7.5		5.0		ug/L	10		8260B/CA_LUFT MS	Total/NA
Gasoline Range Organics (GRO) -C4-C12	37000		500		ug/L	10		8260B/CA_LUFT MS	Total/NA
Diesel Range Organics [C10-C28]	11000		160		ug/L	1		8015B	Silica Gel Cleanup
Motor Oil Range Organics [C24-C36]	800		310		ug/L	1		8015B	Silica Gel Cleanup

Client Sample ID: SB-2-GW-10.5

Lab Sample ID: 720-95778-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	240		5.0		ug/L	10		8260B/CA_LUFT MS	Total/NA
n-Butylbenzene	36		10		ug/L	10		8260B/CA_LUFT MS	Total/NA
sec-Butylbenzene	14		10		ug/L	10		8260B/CA_LUFT MS	Total/NA
Ethylbenzene	89		5.0		ug/L	10		8260B/CA_LUFT MS	Total/NA
Isopropylbenzene	40		5.0		ug/L	10		8260B/CA_LUFT MS	Total/NA
Naphthalene	130		10		ug/L	10		8260B/CA_LUFT MS	Total/NA
N-Propylbenzene	130		10		ug/L	10		8260B/CA_LUFT MS	Total/NA
1,2,4-Trimethylbenzene	43		5.0		ug/L	10		8260B/CA_LUFT MS	Total/NA
1,3,5-Trimethylbenzene	19		5.0		ug/L	10		8260B/CA_LUFT MS	Total/NA
Xylenes, Total	21		5.0		ug/L	10		8260B/CA_LUFT MS	Total/NA
Gasoline Range Organics (GRO) -C4-C12	3700		500		ug/L	10		8260B/CA_LUFT MS	Total/NA
Diesel Range Organics [C10-C28]	750		160		ug/L	1		8015B	Silica Gel Cleanup

This Detection Summary does not include radiochemical test results.

Client Sample ID: SB-1-SS-2.5
Date Collected: 10/25/19 09:30
Date Received: 10/28/19 13:40

Lab Sample ID: 720-95778-1
Matrix: Solid

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND	H H3	4.2		ug/Kg		10/28/19 15:00	10/31/19 21:57	1
Acetone	ND	H H3	42		ug/Kg		10/28/19 15:00	10/31/19 21:57	1
Benzene	ND	H H3	4.2		ug/Kg		10/28/19 15:00	10/31/19 21:57	1
Dichlorobromomethane	ND	H H3	4.2		ug/Kg		10/28/19 15:00	10/31/19 21:57	1
Bromobenzene	ND	H H3	4.2		ug/Kg		10/28/19 15:00	10/31/19 21:57	1
Chlorobromomethane	ND	H H3	17		ug/Kg		10/28/19 15:00	10/31/19 21:57	1
Bromoform	ND	H H3	4.2		ug/Kg		10/28/19 15:00	10/31/19 21:57	1
Bromomethane	ND	H H3	8.5		ug/Kg		10/28/19 15:00	10/31/19 21:57	1
2-Butanone (MEK)	ND	H H3	42		ug/Kg		10/28/19 15:00	10/31/19 21:57	1
n-Butylbenzene	ND	H H3	4.2		ug/Kg		10/28/19 15:00	10/31/19 21:57	1
sec-Butylbenzene	ND	H H3	4.2		ug/Kg		10/28/19 15:00	10/31/19 21:57	1
tert-Butylbenzene	ND	H H3	4.2		ug/Kg		10/28/19 15:00	10/31/19 21:57	1
Carbon disulfide	ND	H H3	4.2		ug/Kg		10/28/19 15:00	10/31/19 21:57	1
Carbon tetrachloride	ND	H H3	4.2		ug/Kg		10/28/19 15:00	10/31/19 21:57	1
Chlorobenzene	ND	H H3	4.2		ug/Kg		10/28/19 15:00	10/31/19 21:57	1
Chloroethane	ND	H H3	8.5		ug/Kg		10/28/19 15:00	10/31/19 21:57	1
Chloroform	ND	H H3	4.2		ug/Kg		10/28/19 15:00	10/31/19 21:57	1
Chloromethane	ND	H H3	8.5		ug/Kg		10/28/19 15:00	10/31/19 21:57	1
2-Chlorotoluene	ND	H H3	4.2		ug/Kg		10/28/19 15:00	10/31/19 21:57	1
4-Chlorotoluene	ND	H H3	4.2		ug/Kg		10/28/19 15:00	10/31/19 21:57	1
Chlorodibromomethane	ND	H H3	4.2		ug/Kg		10/28/19 15:00	10/31/19 21:57	1
1,2-Dichlorobenzene	ND	H H3	4.2		ug/Kg		10/28/19 15:00	10/31/19 21:57	1
1,3-Dichlorobenzene	ND	H H3	4.2		ug/Kg		10/28/19 15:00	10/31/19 21:57	1
1,4-Dichlorobenzene	ND	H H3	4.2		ug/Kg		10/28/19 15:00	10/31/19 21:57	1
1,3-Dichloropropane	ND	H H3	4.2		ug/Kg		10/28/19 15:00	10/31/19 21:57	1
1,1-Dichloropropene	ND	H H3	4.2		ug/Kg		10/28/19 15:00	10/31/19 21:57	1
1,2-Dibromo-3-Chloropropane	ND	H H3	8.5		ug/Kg		10/28/19 15:00	10/31/19 21:57	1
Ethylene Dibromide	ND	H H3	4.2		ug/Kg		10/28/19 15:00	10/31/19 21:57	1
Dibromomethane	ND	H H3	8.5		ug/Kg		10/28/19 15:00	10/31/19 21:57	1
Dichlorodifluoromethane	ND	H H3	8.5		ug/Kg		10/28/19 15:00	10/31/19 21:57	1
1,1-Dichloroethane	ND	H H3	4.2		ug/Kg		10/28/19 15:00	10/31/19 21:57	1
1,2-Dichloroethane	ND	H H3	4.2		ug/Kg		10/28/19 15:00	10/31/19 21:57	1
1,1-Dichloroethene	ND	H H3	4.2		ug/Kg		10/28/19 15:00	10/31/19 21:57	1
cis-1,2-Dichloroethene	ND	H H3	4.2		ug/Kg		10/28/19 15:00	10/31/19 21:57	1
trans-1,2-Dichloroethene	ND	H H3	4.2		ug/Kg		10/28/19 15:00	10/31/19 21:57	1
1,2-Dichloropropane	ND	H H3	4.2		ug/Kg		10/28/19 15:00	10/31/19 21:57	1
cis-1,3-Dichloropropene	ND	H H3	4.2		ug/Kg		10/28/19 15:00	10/31/19 21:57	1
trans-1,3-Dichloropropene	ND	H H3	4.2		ug/Kg		10/28/19 15:00	10/31/19 21:57	1
Ethylbenzene	ND	H H3	4.2		ug/Kg		10/28/19 15:00	10/31/19 21:57	1
Hexachlorobutadiene	ND	H H3	4.2		ug/Kg		10/28/19 15:00	10/31/19 21:57	1
2-Hexanone	ND	H H3	42		ug/Kg		10/28/19 15:00	10/31/19 21:57	1
Isopropylbenzene	ND	H H3	4.2		ug/Kg		10/28/19 15:00	10/31/19 21:57	1
4-Isopropyltoluene	ND	H H3	4.2		ug/Kg		10/28/19 15:00	10/31/19 21:57	1
Methylene Chloride	ND	H H3	8.5		ug/Kg		10/28/19 15:00	10/31/19 21:57	1
4-Methyl-2-pentanone (MIBK)	ND	H H3	42		ug/Kg		10/28/19 15:00	10/31/19 21:57	1
Naphthalene	ND	H H3	8.5		ug/Kg		10/28/19 15:00	10/31/19 21:57	1
N-Propylbenzene	ND	H H3	4.2		ug/Kg		10/28/19 15:00	10/31/19 21:57	1
Styrene	ND	H H3	4.2		ug/Kg		10/28/19 15:00	10/31/19 21:57	1
1,1,1,2-Tetrachloroethane	ND	H H3	4.2		ug/Kg		10/28/19 15:00	10/31/19 21:57	1

Client Sample ID: SB-1-SS-2.5
Date Collected: 10/25/19 09:30
Date Received: 10/28/19 13:40

Lab Sample ID: 720-95778-1
Matrix: Solid

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND	H H3	4.2		ug/Kg		10/28/19 15:00	10/31/19 21:57	1
Tetrachloroethene	ND	H H3	4.2		ug/Kg		10/28/19 15:00	10/31/19 21:57	1
Toluene	ND	H H3	4.2		ug/Kg		10/28/19 15:00	10/31/19 21:57	1
1,2,3-Trichlorobenzene	ND	H H3	4.2		ug/Kg		10/28/19 15:00	10/31/19 21:57	1
1,2,4-Trichlorobenzene	ND	H H3	4.2		ug/Kg		10/28/19 15:00	10/31/19 21:57	1
1,1,1-Trichloroethane	ND	H H3	4.2		ug/Kg		10/28/19 15:00	10/31/19 21:57	1
1,1,2-Trichloroethane	ND	H H3	4.2		ug/Kg		10/28/19 15:00	10/31/19 21:57	1
Trichloroethene	ND	H H3	4.2		ug/Kg		10/28/19 15:00	10/31/19 21:57	1
Trichlorofluoromethane	ND	H H3	4.2		ug/Kg		10/28/19 15:00	10/31/19 21:57	1
1,2,3-Trichloropropane	ND	H H3	4.2		ug/Kg		10/28/19 15:00	10/31/19 21:57	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	H H3	4.2		ug/Kg		10/28/19 15:00	10/31/19 21:57	1
1,2,4-Trimethylbenzene	ND	H H3	4.2		ug/Kg		10/28/19 15:00	10/31/19 21:57	1
1,3,5-Trimethylbenzene	ND	H H3	4.2		ug/Kg		10/28/19 15:00	10/31/19 21:57	1
Vinyl acetate	ND	H H3	17		ug/Kg		10/28/19 15:00	10/31/19 21:57	1
Vinyl chloride	ND	H H3	4.2		ug/Kg		10/28/19 15:00	10/31/19 21:57	1
Xylenes, Total	ND	H H3	4.2		ug/Kg		10/28/19 15:00	10/31/19 21:57	1
2,2-Dichloropropane	ND	H H3	4.2		ug/Kg		10/28/19 15:00	10/31/19 21:57	1
Gasoline Range Organics (GRO) -C4-C12	ND	H H3	210		ug/Kg		10/28/19 15:00	10/31/19 21:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*45 - 131*	*10/28/19 15:00*	*10/31/19 21:57*	*1*
1,2-Dichloroethane-d4 (Surr)	*121*		*60 - 140*	*10/28/19 15:00*	*10/31/19 21:57*	*1*
Toluene-d8 (Surr)	*99*		*58 - 140*	*10/28/19 15:00*	*10/31/19 21:57*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC) - Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**8.5**		1.9		mg/Kg		10/31/19 10:38	11/02/19 22:50	1
Motor Oil Range Organics [C24-C36]	**65**		48		mg/Kg		10/31/19 10:38	11/02/19 22:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*103*		*38 - 148*	*10/31/19 10:38*	*11/02/19 22:50*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**2.5**		1.3		mg/Kg		10/30/19 09:42	11/01/19 09:56	4
Arsenic	**7.8**		2.6		mg/Kg		10/30/19 09:42	11/01/19 09:56	4
Barium	**200**		1.3		mg/Kg		10/30/19 09:42	11/01/19 09:56	4
Beryllium	**0.62**		0.26		mg/Kg		10/30/19 09:42	11/01/19 09:56	4
Cadmium	ND		0.33		mg/Kg		10/30/19 09:42	11/01/19 09:56	4
Chromium	**61**		1.3		mg/Kg		10/30/19 09:42	11/01/19 09:56	4
Cobalt	**14**		0.52		mg/Kg		10/30/19 09:42	11/01/19 09:56	4
Copper	**35**		3.9		mg/Kg		10/30/19 09:42	11/01/19 09:56	4
Lead	**15**		1.3		mg/Kg		10/30/19 09:42	11/01/19 09:56	4
Molybdenum	ND		1.3		mg/Kg		10/30/19 09:42	11/01/19 09:56	4
Nickel	**89**		1.3		mg/Kg		10/30/19 09:42	11/01/19 09:56	4
Selenium	ND		2.6		mg/Kg		10/30/19 09:42	11/01/19 09:56	4
Silver	ND		0.65		mg/Kg		10/30/19 09:42	11/01/19 09:56	4
Thallium	ND		1.3		mg/Kg		10/30/19 09:42	11/01/19 09:56	4
Vanadium	**45**		1.3		mg/Kg		10/30/19 09:42	11/01/19 09:56	4

Client: Haley & Aldrich, Inc.
Project/Site: SCVTA Phase II Eastridge

Job ID: 720-95778-1

Client Sample ID: SB-1-SS-2.5
Date Collected: 10/25/19 09:30
Date Received: 10/28/19 13:40

Lab Sample ID: 720-95778-1
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	79		3.9		mg/Kg		10/30/19 09:42	11/01/19 09:56	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.093		0.016		mg/Kg		10/31/19 14:38	11/06/19 17:29	1

Client Sample ID: SB-1-SS-5.0
Date Collected: 10/25/19 09:45
Date Received: 10/28/19 13:40

Lab Sample ID: 720-95778-2
Matrix: Solid

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:26	1
Acetone	ND	H H3	43		ug/Kg		10/28/19 15:00	10/31/19 22:26	1
Benzene	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:26	1
Dichlorobromomethane	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:26	1
Bromobenzene	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:26	1
Chlorobromomethane	ND	H H3	17		ug/Kg		10/28/19 15:00	10/31/19 22:26	1
Bromoform	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:26	1
Bromomethane	ND	H H3	8.7		ug/Kg		10/28/19 15:00	10/31/19 22:26	1
2-Butanone (MEK)	ND	H H3	43		ug/Kg		10/28/19 15:00	10/31/19 22:26	1
n-Butylbenzene	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:26	1
sec-Butylbenzene	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:26	1
tert-Butylbenzene	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:26	1
Carbon disulfide	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:26	1
Carbon tetrachloride	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:26	1
Chlorobenzene	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:26	1
Chloroethane	ND	H H3	8.7		ug/Kg		10/28/19 15:00	10/31/19 22:26	1
Chloroform	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:26	1
Chloromethane	ND	H H3	8.7		ug/Kg		10/28/19 15:00	10/31/19 22:26	1
2-Chlorotoluene	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:26	1
4-Chlorotoluene	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:26	1
Chlorodibromomethane	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:26	1
1,2-Dichlorobenzene	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:26	1
1,3-Dichlorobenzene	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:26	1
1,4-Dichlorobenzene	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:26	1
1,3-Dichloropropane	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:26	1
1,1-Dichloropropene	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:26	1
1,2-Dibromo-3-Chloropropane	ND	H H3	8.7		ug/Kg		10/28/19 15:00	10/31/19 22:26	1
Ethylene Dibromide	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:26	1
Dibromomethane	ND	H H3	8.7		ug/Kg		10/28/19 15:00	10/31/19 22:26	1
Dichlorodifluoromethane	ND	H H3	8.7		ug/Kg		10/28/19 15:00	10/31/19 22:26	1
1,1-Dichloroethane	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:26	1
1,2-Dichloroethane	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:26	1
1,1-Dichloroethene	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:26	1
cis-1,2-Dichloroethene	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:26	1
trans-1,2-Dichloroethene	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:26	1
1,2-Dichloropropane	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:26	1
cis-1,3-Dichloropropene	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:26	1
trans-1,3-Dichloropropene	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:26	1
Ethylbenzene	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:26	1
Hexachlorobutadiene	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:26	1
2-Hexanone	ND	H H3	43		ug/Kg		10/28/19 15:00	10/31/19 22:26	1
Isopropylbenzene	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:26	1
4-Isopropyltoluene	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:26	1
Methylene Chloride	ND	H H3	8.7		ug/Kg		10/28/19 15:00	10/31/19 22:26	1
4-Methyl-2-pentanone (MIBK)	ND	H H3	43		ug/Kg		10/28/19 15:00	10/31/19 22:26	1
Naphthalene	ND	H H3	8.7		ug/Kg		10/28/19 15:00	10/31/19 22:26	1
N-Propylbenzene	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:26	1
Styrene	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:26	1
1,1,1,2-Tetrachloroethane	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:26	1

Client Sample ID: SB-1-SS-5.0
Date Collected: 10/25/19 09:45
Date Received: 10/28/19 13:40

Lab Sample ID: 720-95778-2
Matrix: Solid

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:26	1
Tetrachloroethene	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:26	1
Toluene	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:26	1
1,2,3-Trichlorobenzene	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:26	1
1,2,4-Trichlorobenzene	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:26	1
1,1,1-Trichloroethane	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:26	1
1,1,2-Trichloroethane	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:26	1
Trichloroethene	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:26	1
Trichlorofluoromethane	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:26	1
1,2,3-Trichloropropane	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:26	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:26	1
1,2,4-Trimethylbenzene	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:26	1
1,3,5-Trimethylbenzene	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:26	1
Vinyl acetate	ND	H H3	17		ug/Kg		10/28/19 15:00	10/31/19 22:26	1
Vinyl chloride	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:26	1
Xylenes, Total	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:26	1
2,2-Dichloropropane	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:26	1
Gasoline Range Organics (GRO) -C4-C12	ND	H H3	220		ug/Kg		10/28/19 15:00	10/31/19 22:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*45 - 131*	*10/28/19 15:00*	*10/31/19 22:26*	*1*
1,2-Dichloroethane-d4 (Surr)	*115*		*60 - 140*	*10/28/19 15:00*	*10/31/19 22:26*	*1*
Toluene-d8 (Surr)	*96*		*58 - 140*	*10/28/19 15:00*	*10/31/19 22:26*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC) - Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		1.9		mg/Kg		10/31/19 10:38	11/02/19 23:19	1
Motor Oil Range Organics [C24-C36]	ND		48		mg/Kg		10/31/19 10:38	11/02/19 23:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*114*		*38 - 148*	*10/31/19 10:38*	*11/02/19 23:19*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**1.4**		1.3		mg/Kg		10/30/19 09:42	11/01/19 10:00	4
Arsenic	**8.9**		2.5		mg/Kg		10/30/19 09:42	11/01/19 10:00	4
Barium	**220**		1.3		mg/Kg		10/30/19 09:42	11/01/19 10:00	4
Beryllium	**0.52**		0.25		mg/Kg		10/30/19 09:42	11/01/19 10:00	4
Cadmium	ND		0.32		mg/Kg		10/30/19 09:42	11/01/19 10:00	4
Chromium	**62**		1.3		mg/Kg		10/30/19 09:42	11/01/19 10:00	4
Cobalt	**15**		0.51		mg/Kg		10/30/19 09:42	11/01/19 10:00	4
Copper	**35**		3.8		mg/Kg		10/30/19 09:42	11/01/19 10:00	4
Lead	**10**		1.3		mg/Kg		10/30/19 09:42	11/01/19 10:00	4
Molybdenum	ND		1.3		mg/Kg		10/30/19 09:42	11/01/19 10:00	4
Nickel	**96**		1.3		mg/Kg		10/30/19 09:42	11/01/19 10:00	4
Selenium	ND		2.5		mg/Kg		10/30/19 09:42	11/01/19 10:00	4
Silver	ND		0.63		mg/Kg		10/30/19 09:42	11/01/19 10:00	4
Thallium	ND		1.3		mg/Kg		10/30/19 09:42	11/01/19 10:00	4
Vanadium	**43**		1.3		mg/Kg		10/30/19 09:42	11/01/19 10:00	4
Zinc	**68**		3.8		mg/Kg		10/30/19 09:42	11/01/19 10:00	4

Client: Haley & Aldrich, Inc.
Project/Site: SCVTA Phase II Eastridge

Job ID: 720-95778-1

Client Sample ID: SB-1-SS-5.0
Date Collected: 10/25/19 09:45
Date Received: 10/28/19 13:40

Lab Sample ID: 720-95778-2
Matrix: Solid

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.058		0.016		mg/Kg		10/31/19 14:38	11/06/19 16:17	1

Client Sample ID: SB-2-SS-4.0
Date Collected: 10/25/19 12:20
Date Received: 10/28/19 13:40

Lab Sample ID: 720-95778-3
Matrix: Solid

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:55	1
Acetone	**92**	**H H3**	43		ug/Kg		10/28/19 15:00	10/31/19 22:55	1
Benzene	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:55	1
Dichlorobromomethane	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:55	1
Bromobenzene	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:55	1
Chlorobromomethane	ND	H H3	17		ug/Kg		10/28/19 15:00	10/31/19 22:55	1
Bromoform	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:55	1
Bromomethane	ND	H H3	8.6		ug/Kg		10/28/19 15:00	10/31/19 22:55	1
2-Butanone (MEK)	ND	H H3	43		ug/Kg		10/28/19 15:00	10/31/19 22:55	1
n-Butylbenzene	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:55	1
sec-Butylbenzene	**5.1**	**H H3**	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:55	1
tert-Butylbenzene	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:55	1
Carbon disulfide	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:55	1
Carbon tetrachloride	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:55	1
Chlorobenzene	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:55	1
Chloroethane	ND	H H3	8.6		ug/Kg		10/28/19 15:00	10/31/19 22:55	1
Chloroform	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:55	1
Chloromethane	ND	H H3	8.6		ug/Kg		10/28/19 15:00	10/31/19 22:55	1
2-Chlorotoluene	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:55	1
4-Chlorotoluene	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:55	1
Chlorodibromomethane	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:55	1
1,2-Dichlorobenzene	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:55	1
1,3-Dichlorobenzene	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:55	1
1,4-Dichlorobenzene	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:55	1
1,3-Dichloropropane	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:55	1
1,1-Dichloropropene	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:55	1
1,2-Dibromo-3-Chloropropane	ND	H H3	8.6		ug/Kg		10/28/19 15:00	10/31/19 22:55	1
Ethylene Dibromide	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:55	1
Dibromomethane	ND	H H3	8.6		ug/Kg		10/28/19 15:00	10/31/19 22:55	1
Dichlorodifluoromethane	ND	H H3	8.6		ug/Kg		10/28/19 15:00	10/31/19 22:55	1
1,1-Dichloroethane	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:55	1
1,2-Dichloroethane	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:55	1
1,1-Dichloroethene	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:55	1
cis-1,2-Dichloroethene	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:55	1
trans-1,2-Dichloroethene	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:55	1
1,2-Dichloropropane	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:55	1
cis-1,3-Dichloropropene	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:55	1
trans-1,3-Dichloropropene	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:55	1
Ethylbenzene	**5.7**	**H H3**	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:55	1
Hexachlorobutadiene	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:55	1
2-Hexanone	ND	H H3	43		ug/Kg		10/28/19 15:00	10/31/19 22:55	1
Isopropylbenzene	**10**	**H H3**	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:55	1
4-Isopropyltoluene	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:55	1
Methylene Chloride	ND	H H3	8.6		ug/Kg		10/28/19 15:00	10/31/19 22:55	1
4-Methyl-2-pentanone (MIBK)	ND	H H3	43		ug/Kg		10/28/19 15:00	10/31/19 22:55	1
Naphthalene	ND	H H3	8.6		ug/Kg		10/28/19 15:00	10/31/19 22:55	1
N-Propylbenzene	**24**	**H H3**	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:55	1
Styrene	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:55	1
1,1,1,2-Tetrachloroethane	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:55	1

Client Sample ID: SB-2-SS-4.0

Date Collected: 10/25/19 12:20
Date Received: 10/28/19 13:40

Lab Sample ID: 720-95778-3

Matrix: Solid

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:55	1
Tetrachloroethene	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:55	1
Toluene	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:55	1
1,2,3-Trichlorobenzene	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:55	1
1,2,4-Trichlorobenzene	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:55	1
1,1,1-Trichloroethane	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:55	1
1,1,2-Trichloroethane	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:55	1
Trichloroethene	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:55	1
Trichlorofluoromethane	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:55	1
1,2,3-Trichloropropane	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:55	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:55	1
1,2,4-Trimethylbenzene	**14**	**H H3**	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:55	1
1,3,5-Trimethylbenzene	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:55	1
Vinyl acetate	ND	H H3	17		ug/Kg		10/28/19 15:00	10/31/19 22:55	1
Vinyl chloride	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:55	1
Xylenes, Total	**15**	**H H3**	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:55	1
2,2-Dichloropropane	ND	H H3	4.3		ug/Kg		10/28/19 15:00	10/31/19 22:55	1
Gasoline Range Organics (GRO) -C4-C12	**720**	**H H3**	220		ug/Kg		10/28/19 15:00	10/31/19 22:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*45 - 131*	*10/28/19 15:00*	*10/31/19 22:55*	*1*
1,2-Dichloroethane-d4 (Surr)	*118*		*60 - 140*	*10/28/19 15:00*	*10/31/19 22:55*	*1*
Toluene-d8 (Surr)	*100*		*58 - 140*	*10/28/19 15:00*	*10/31/19 22:55*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC) - Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**17**		1.9		mg/Kg		10/31/19 10:38	11/02/19 23:48	1
Motor Oil Range Organics [C24-C36]	ND		47		mg/Kg		10/31/19 10:38	11/02/19 23:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*99*		*38 - 148*	*10/31/19 10:38*	*11/02/19 23:48*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.4		mg/Kg		10/30/19 09:42	11/01/19 10:05	4
Arsenic	**6.0**		2.9		mg/Kg		10/30/19 09:42	11/01/19 10:05	4
Barium	**170**		1.4		mg/Kg		10/30/19 09:42	11/01/19 10:05	4
Beryllium	**0.63**		0.29		mg/Kg		10/30/19 09:42	11/01/19 10:05	4
Cadmium	**0.55**		0.36		mg/Kg		10/30/19 09:42	11/01/19 10:05	4
Chromium	**42**		1.4		mg/Kg		10/30/19 09:42	11/01/19 10:05	4
Cobalt	**8.2**		0.58		mg/Kg		10/30/19 09:42	11/01/19 10:05	4
Copper	**12**		4.3		mg/Kg		10/30/19 09:42	11/01/19 10:05	4
Lead	**8.9**		1.4		mg/Kg		10/30/19 09:42	11/01/19 10:05	4
Molybdenum	ND		1.4		mg/Kg		10/30/19 09:42	11/01/19 10:05	4
Nickel	**41**		1.4		mg/Kg		10/30/19 09:42	11/01/19 10:05	4
Selenium	ND		2.9		mg/Kg		10/30/19 09:42	11/01/19 10:05	4
Silver	ND		0.72		mg/Kg		10/30/19 09:42	11/01/19 10:05	4
Thallium	ND		1.4		mg/Kg		10/30/19 09:42	11/01/19 10:05	4
Vanadium	**31**		1.4		mg/Kg		10/30/19 09:42	11/01/19 10:05	4
Zinc	**47**		4.3		mg/Kg		10/30/19 09:42	11/01/19 10:05	4

Client Sample Results

Client: Haley & Aldrich, Inc.
Project/Site: SCVTA Phase II Eastridge

Job ID: 720-95778-1

Client Sample ID: SB-2-SS-4.0
Date Collected: 10/25/19 12:20
Date Received: 10/28/19 13:40

Lab Sample ID: 720-95778-3
Matrix: Solid

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.10		0.015		mg/Kg		10/31/19 14:38	11/06/19 16:18	1

Client Sample ID: SB-2-SS-8.0
Date Collected: 10/25/19 12:25
Date Received: 10/28/19 13:40

Lab Sample ID: 720-95778-4
Matrix: Solid

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND	H H3	3.5		ug/Kg		10/28/19 15:00	10/31/19 23:23	1
Acetone	ND	H H3	35		ug/Kg		10/28/19 15:00	10/31/19 23:23	1
Benzene	**76**	**H H3**	3.5		ug/Kg		10/28/19 15:00	10/31/19 23:23	1
Dichlorobromomethane	ND	H H3	3.5		ug/Kg		10/28/19 15:00	10/31/19 23:23	1
Bromobenzene	ND	H H3	3.5		ug/Kg		10/28/19 15:00	10/31/19 23:23	1
Chlorobromomethane	ND	H H3	14		ug/Kg		10/28/19 15:00	10/31/19 23:23	1
Bromoform	ND	H H3	3.5		ug/Kg		10/28/19 15:00	10/31/19 23:23	1
Bromomethane	ND	H H3	7.0		ug/Kg		10/28/19 15:00	10/31/19 23:23	1
2-Butanone (MEK)	ND	H H3	35		ug/Kg		10/28/19 15:00	10/31/19 23:23	1
n-Butylbenzene	**130**	**H H3**	3.5		ug/Kg		10/28/19 15:00	10/31/19 23:23	1
sec-Butylbenzene	**55**	**H H3**	3.5		ug/Kg		10/28/19 15:00	10/31/19 23:23	1
tert-Butylbenzene	**9.1**	**H H3**	3.5		ug/Kg		10/28/19 15:00	10/31/19 23:23	1
Carbon disulfide	ND	H H3	3.5		ug/Kg		10/28/19 15:00	10/31/19 23:23	1
Carbon tetrachloride	ND	H H3	3.5		ug/Kg		10/28/19 15:00	10/31/19 23:23	1
Chlorobenzene	ND	H H3	3.5		ug/Kg		10/28/19 15:00	10/31/19 23:23	1
Chloroethane	ND	H H3	7.0		ug/Kg		10/28/19 15:00	10/31/19 23:23	1
Chloroform	ND	H H3	3.5		ug/Kg		10/28/19 15:00	10/31/19 23:23	1
Chloromethane	ND	H H3	7.0		ug/Kg		10/28/19 15:00	10/31/19 23:23	1
2-Chlorotoluene	ND	H H3	3.5		ug/Kg		10/28/19 15:00	10/31/19 23:23	1
4-Chlorotoluene	ND	H H3	3.5		ug/Kg		10/28/19 15:00	10/31/19 23:23	1
Chlorodibromomethane	ND	H H3	3.5		ug/Kg		10/28/19 15:00	10/31/19 23:23	1
1,2-Dichlorobenzene	ND	H H3	3.5		ug/Kg		10/28/19 15:00	10/31/19 23:23	1
1,3-Dichlorobenzene	ND	H H3	3.5		ug/Kg		10/28/19 15:00	10/31/19 23:23	1
1,4-Dichlorobenzene	ND	H H3	3.5		ug/Kg		10/28/19 15:00	10/31/19 23:23	1
1,3-Dichloropropane	ND	H H3	3.5		ug/Kg		10/28/19 15:00	10/31/19 23:23	1
1,1-Dichloropropene	ND	H H3	3.5		ug/Kg		10/28/19 15:00	10/31/19 23:23	1
1,2-Dibromo-3-Chloropropane	ND	H H3	7.0		ug/Kg		10/28/19 15:00	10/31/19 23:23	1
Ethylene Dibromide	ND	H H3	3.5		ug/Kg		10/28/19 15:00	10/31/19 23:23	1
Dibromomethane	ND	H H3	7.0		ug/Kg		10/28/19 15:00	10/31/19 23:23	1
Dichlorodifluoromethane	ND	H H3	7.0		ug/Kg		10/28/19 15:00	10/31/19 23:23	1
1,1-Dichloroethane	ND	H H3	3.5		ug/Kg		10/28/19 15:00	10/31/19 23:23	1
1,2-Dichloroethane	ND	H H3	3.5		ug/Kg		10/28/19 15:00	10/31/19 23:23	1
1,1-Dichloroethene	ND	H H3	3.5		ug/Kg		10/28/19 15:00	10/31/19 23:23	1
cis-1,2-Dichloroethene	ND	H H3	3.5		ug/Kg		10/28/19 15:00	10/31/19 23:23	1
trans-1,2-Dichloroethene	ND	H H3	3.5		ug/Kg		10/28/19 15:00	10/31/19 23:23	1
1,2-Dichloropropane	ND	H H3	3.5		ug/Kg		10/28/19 15:00	10/31/19 23:23	1
cis-1,3-Dichloropropene	ND	H H3	3.5		ug/Kg		10/28/19 15:00	10/31/19 23:23	1
trans-1,3-Dichloropropene	ND	H H3	3.5		ug/Kg		10/28/19 15:00	10/31/19 23:23	1
Ethylbenzene	**7.6**	**H H3**	3.5		ug/Kg		10/28/19 15:00	10/31/19 23:23	1
Hexachlorobutadiene	ND	H H3	3.5		ug/Kg		10/28/19 15:00	10/31/19 23:23	1
2-Hexanone	ND	H H3	35		ug/Kg		10/28/19 15:00	10/31/19 23:23	1
Isopropylbenzene	**76**	**H H3**	3.5		ug/Kg		10/28/19 15:00	10/31/19 23:23	1
4-Isopropyltoluene	ND	H H3	3.5		ug/Kg		10/28/19 15:00	10/31/19 23:23	1
Methylene Chloride	ND	H H3	7.0		ug/Kg		10/28/19 15:00	10/31/19 23:23	1
4-Methyl-2-pentanone (MIBK)	ND	H H3	35		ug/Kg		10/28/19 15:00	10/31/19 23:23	1
Naphthalene	**220**	**H H3**	7.0		ug/Kg		10/28/19 15:00	10/31/19 23:23	1
N-Propylbenzene	**240**	**H H3**	3.5		ug/Kg		10/28/19 15:00	10/31/19 23:23	1
Styrene	ND	H H3	3.5		ug/Kg		10/28/19 15:00	10/31/19 23:23	1
1,1,1,2-Tetrachloroethane	ND	H H3	3.5		ug/Kg		10/28/19 15:00	10/31/19 23:23	1

Client Sample ID: SB-2-SS-8.0
Date Collected: 10/25/19 12:25
Date Received: 10/28/19 13:40

Lab Sample ID: 720-95778-4
Matrix: Solid

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND	H H3	3.5		ug/Kg		10/28/19 15:00	10/31/19 23:23	1
Tetrachloroethene	ND	H H3	3.5		ug/Kg		10/28/19 15:00	10/31/19 23:23	1
Toluene	ND	H H3	3.5		ug/Kg		10/28/19 15:00	10/31/19 23:23	1
1,2,3-Trichlorobenzene	ND	H H3	3.5		ug/Kg		10/28/19 15:00	10/31/19 23:23	1
1,2,4-Trichlorobenzene	ND	H H3	3.5		ug/Kg		10/28/19 15:00	10/31/19 23:23	1
1,1,1-Trichloroethane	ND	H H3	3.5		ug/Kg		10/28/19 15:00	10/31/19 23:23	1
1,1,2-Trichloroethane	ND	H H3	3.5		ug/Kg		10/28/19 15:00	10/31/19 23:23	1
Trichloroethene	ND	H H3	3.5		ug/Kg		10/28/19 15:00	10/31/19 23:23	1
Trichlorofluoromethane	ND	H H3	3.5		ug/Kg		10/28/19 15:00	10/31/19 23:23	1
1,2,3-Trichloropropane	ND	H H3	3.5		ug/Kg		10/28/19 15:00	10/31/19 23:23	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	H H3	3.5		ug/Kg		10/28/19 15:00	10/31/19 23:23	1
1,2,4-Trimethylbenzene	ND	H H3	3.5		ug/Kg		10/28/19 15:00	10/31/19 23:23	1
1,3,5-Trimethylbenzene	ND	H H3	3.5		ug/Kg		10/28/19 15:00	10/31/19 23:23	1
Vinyl acetate	ND	H H3	14		ug/Kg		10/28/19 15:00	10/31/19 23:23	1
Vinyl chloride	ND	H H3	3.5		ug/Kg		10/28/19 15:00	10/31/19 23:23	1
Xylenes, Total	**14**	**H H3**	3.5		ug/Kg		10/28/19 15:00	10/31/19 23:23	1
2,2-Dichloropropane	ND	H H3	3.5		ug/Kg		10/28/19 15:00	10/31/19 23:23	1
Gasoline Range Organics (GRO) -C4-C12	**31000**		20000		ug/Kg		10/28/19 15:00	11/01/19 15:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*125*		*45 - 131*	*10/28/19 15:00*	*10/31/19 23:23*	*1*
4-Bromofluorobenzene	*108*		*66 - 148*	*10/28/19 15:00*	*11/01/19 15:45*	*1*
1,2-Dichloroethane-d4 (Surr)	*114*		*60 - 140*	*10/28/19 15:00*	*10/31/19 23:23*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*62 - 137*	*10/28/19 15:00*	*11/01/19 15:45*	*1*
Toluene-d8 (Surr)	*101*		*58 - 140*	*10/28/19 15:00*	*10/31/19 23:23*	*1*
Toluene-d8 (Surr)	*101*		*65 - 141*	*10/28/19 15:00*	*11/01/19 15:45*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC) - Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**11**		1.9		mg/Kg		10/31/19 10:38	11/03/19 00:17	1
Motor Oil Range Organics [C24-C36]	ND		48		mg/Kg		10/31/19 10:38	11/03/19 00:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*113*		*38 - 148*	*10/31/19 10:38*	*11/03/19 00:17*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**1.7**		1.7		mg/Kg		10/30/19 09:42	11/01/19 10:10	4
Arsenic	**9.4**		3.4		mg/Kg		10/30/19 09:42	11/01/19 10:10	4
Barium	**200**		1.7		mg/Kg		10/30/19 09:42	11/01/19 10:10	4
Beryllium	**0.50**		0.34		mg/Kg		10/30/19 09:42	11/01/19 10:10	4
Cadmium	ND		0.42		mg/Kg		10/30/19 09:42	11/01/19 10:10	4
Chromium	**64**		1.7		mg/Kg		10/30/19 09:42	11/01/19 10:10	4
Cobalt	**16**		0.68		mg/Kg		10/30/19 09:42	11/01/19 10:10	4
Copper	**37**		5.1		mg/Kg		10/30/19 09:42	11/01/19 10:10	4
Lead	**11**		1.7		mg/Kg		10/30/19 09:42	11/01/19 10:10	4
Molybdenum	ND		1.7		mg/Kg		10/30/19 09:42	11/01/19 10:10	4
Nickel	**100**		1.7		mg/Kg		10/30/19 09:42	11/01/19 10:10	4
Selenium	ND		3.4		mg/Kg		10/30/19 09:42	11/01/19 10:10	4
Silver	ND		0.85		mg/Kg		10/30/19 09:42	11/01/19 10:10	4

Client Sample ID: SB-2-SS-8.0
Date Collected: 10/25/19 12:25
Date Received: 10/28/19 13:40

Lab Sample ID: 720-95778-4
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	ND		1.7		mg/Kg		10/30/19 09:42	11/01/19 10:10	4
Vanadium	**45**		1.7		mg/Kg		10/30/19 09:42	11/01/19 10:10	4
Zinc	**75**		5.1		mg/Kg		10/30/19 09:42	11/01/19 10:10	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.066**		0.016		mg/Kg		10/31/19 14:38	11/06/19 16:20	1

Client Sample ID: SB-1-GW-9.0
Date Collected: 10/25/19 09:26
Date Received: 10/28/19 13:40

Lab Sample ID: 720-95778-5
Matrix: Water

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.0		ug/L			11/04/19 13:19	10
Acetone	ND		500		ug/L			11/04/19 13:19	10
Benzene	ND		5.0		ug/L			11/04/19 13:19	10
Dichlorobromomethane	ND		5.0		ug/L			11/04/19 13:19	10
Bromobenzene	ND		10		ug/L			11/04/19 13:19	10
Chlorobromomethane	ND		10		ug/L			11/04/19 13:19	10
Bromoform	ND		10		ug/L			11/04/19 13:19	10
Bromomethane	ND		10		ug/L			11/04/19 13:19	10
2-Butanone (MEK)	ND		500		ug/L			11/04/19 13:19	10
n-Butylbenzene	**260**		10		ug/L			11/04/19 13:19	10
sec-Butylbenzene	**100**		10		ug/L			11/04/19 13:19	10
tert-Butylbenzene	**94**		10		ug/L			11/04/19 13:19	10
Carbon disulfide	ND		50		ug/L			11/04/19 13:19	10
Carbon tetrachloride	ND		5.0		ug/L			11/04/19 13:19	10
Chlorobenzene	ND		5.0		ug/L			11/04/19 13:19	10
Chloroethane	ND		10		ug/L			11/04/19 13:19	10
Chloroform	ND		10		ug/L			11/04/19 13:19	10
Chloromethane	ND		10		ug/L			11/04/19 13:19	10
2-Chlorotoluene	ND		5.0		ug/L			11/04/19 13:19	10
4-Chlorotoluene	ND		5.0		ug/L			11/04/19 13:19	10
Chlorodibromomethane	ND		5.0		ug/L			11/04/19 13:19	10
1,2-Dichlorobenzene	ND		5.0		ug/L			11/04/19 13:19	10
1,3-Dichlorobenzene	ND		5.0		ug/L			11/04/19 13:19	10
1,4-Dichlorobenzene	ND		5.0		ug/L			11/04/19 13:19	10
1,3-Dichloropropane	ND		10		ug/L			11/04/19 13:19	10
1,1-Dichloropropene	ND		5.0		ug/L			11/04/19 13:19	10
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			11/04/19 13:19	10
Ethylene Dibromide	ND		5.0		ug/L			11/04/19 13:19	10
Dibromomethane	ND		5.0		ug/L			11/04/19 13:19	10
Dichlorodifluoromethane	ND		5.0		ug/L			11/04/19 13:19	10
1,1-Dichloroethane	ND		5.0		ug/L			11/04/19 13:19	10
1,2-Dichloroethane	ND		5.0		ug/L			11/04/19 13:19	10
1,1-Dichloroethene	ND		5.0		ug/L			11/04/19 13:19	10
cis-1,2-Dichloroethene	ND		5.0		ug/L			11/04/19 13:19	10
trans-1,2-Dichloroethene	ND		5.0		ug/L			11/04/19 13:19	10
1,2-Dichloropropane	ND		5.0		ug/L			11/04/19 13:19	10
cis-1,3-Dichloropropene	ND		5.0		ug/L			11/04/19 13:19	10
trans-1,3-Dichloropropene	ND		5.0		ug/L			11/04/19 13:19	10
Ethylbenzene	**23**		5.0		ug/L			11/04/19 13:19	10
Hexachlorobutadiene	ND		10		ug/L			11/04/19 13:19	10
2-Hexanone	ND		500		ug/L			11/04/19 13:19	10
Isopropylbenzene	**210**		5.0		ug/L			11/04/19 13:19	10
4-Isopropyltoluene	ND		10		ug/L			11/04/19 13:19	10
Methylene Chloride	ND		50		ug/L			11/04/19 13:19	10
4-Methyl-2-pentanone (MIBK)	ND		500		ug/L			11/04/19 13:19	10
Naphthalene	**140**		10		ug/L			11/04/19 13:19	10
N-Propylbenzene	**720**		10		ug/L			11/04/19 13:19	10
Styrene	ND		5.0		ug/L			11/04/19 13:19	10
1,1,1,2-Tetrachloroethane	ND		5.0		ug/L			11/04/19 13:19	10

Client Sample ID: SB-1-GW-9.0
Date Collected: 10/25/19 09:26
Date Received: 10/28/19 13:40

Lab Sample ID: 720-95778-5
Matrix: Water

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		5.0		ug/L			11/04/19 13:19	10
Tetrachloroethene	ND		5.0		ug/L			11/04/19 13:19	10
Toluene	**5.6**		5.0		ug/L			11/04/19 13:19	10
1,2,3-Trichlorobenzene	ND		10		ug/L			11/04/19 13:19	10
1,2,4-Trichlorobenzene	ND		10		ug/L			11/04/19 13:19	10
1,1,1-Trichloroethane	ND		5.0		ug/L			11/04/19 13:19	10
1,1,2-Trichloroethane	ND		5.0		ug/L			11/04/19 13:19	10
Trichloroethene	ND		5.0		ug/L			11/04/19 13:19	10
Trichlorofluoromethane	ND		10		ug/L			11/04/19 13:19	10
1,2,3-Trichloropropane	ND		10		ug/L			11/04/19 13:19	10
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0		ug/L			11/04/19 13:19	10
1,2,4-Trimethylbenzene	ND		5.0		ug/L			11/04/19 13:19	10
1,3,5-Trimethylbenzene	ND		5.0		ug/L			11/04/19 13:19	10
Vinyl acetate	ND		100		ug/L			11/04/19 13:19	10
Vinyl chloride	ND		5.0		ug/L			11/04/19 13:19	10
Xylenes, Total	**7.5**		5.0		ug/L			11/04/19 13:19	10
2,2-Dichloropropane	ND		5.0		ug/L			11/04/19 13:19	10
Gasoline Range Organics (GRO) -C4-C12	**37000**		500		ug/L			11/04/19 13:19	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*67 - 130*		*11/04/19 13:19*	*10*
1,2-Dichloroethane-d4 (Surr)	*103*		*72 - 130*		*11/04/19 13:19*	*10*
Toluene-d8 (Surr)	*105*		*70 - 130*		*11/04/19 13:19*	*10*

Method: 8015B - Diesel Range Organics (DRO) (GC) - Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**11000**		160		ug/L		10/31/19 14:14	11/02/19 15:31	1
Motor Oil Range Organics [C24-C36]	**800**		310		ug/L		10/31/19 14:14	11/02/19 15:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*94*		*31 - 150*	*10/31/19 14:14*	*11/02/19 15:31*	*1*

Client Sample ID: SB-2-GW-10.5
Date Collected: 10/25/19 10:30
Date Received: 10/28/19 13:40

Lab Sample ID: 720-95778-6
Matrix: Water

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.0		ug/L			11/02/19 04:34	10
Acetone	ND		500		ug/L			11/02/19 04:34	10
Benzene	**240**		5.0		ug/L			11/02/19 04:34	10
Dichlorobromomethane	ND		5.0		ug/L			11/02/19 04:34	10
Bromobenzene	ND		10		ug/L			11/02/19 04:34	10
Chlorobromomethane	ND		10		ug/L			11/02/19 04:34	10
Bromoform	ND		10		ug/L			11/02/19 04:34	10
Bromomethane	ND		10		ug/L			11/02/19 04:34	10
2-Butanone (MEK)	ND		500		ug/L			11/02/19 04:34	10
n-Butylbenzene	**36**		10		ug/L			11/02/19 04:34	10
sec-Butylbenzene	**14**		10		ug/L			11/02/19 04:34	10
tert-Butylbenzene	ND		10		ug/L			11/02/19 04:34	10
Carbon disulfide	ND		50		ug/L			11/02/19 04:34	10
Carbon tetrachloride	ND		5.0		ug/L			11/02/19 04:34	10
Chlorobenzene	ND		5.0		ug/L			11/02/19 04:34	10
Chloroethane	ND		10		ug/L			11/02/19 04:34	10
Chloroform	ND		10		ug/L			11/02/19 04:34	10
Chloromethane	ND		10		ug/L			11/02/19 04:34	10
2-Chlorotoluene	ND		5.0		ug/L			11/02/19 04:34	10
4-Chlorotoluene	ND		5.0		ug/L			11/02/19 04:34	10
Chlorodibromomethane	ND		5.0		ug/L			11/02/19 04:34	10
1,2-Dichlorobenzene	ND		5.0		ug/L			11/02/19 04:34	10
1,3-Dichlorobenzene	ND		5.0		ug/L			11/02/19 04:34	10
1,4-Dichlorobenzene	ND		5.0		ug/L			11/02/19 04:34	10
1,3-Dichloropropane	ND		10		ug/L			11/02/19 04:34	10
1,1-Dichloropropene	ND		5.0		ug/L			11/02/19 04:34	10
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			11/02/19 04:34	10
Ethylene Dibromide	ND		5.0		ug/L			11/02/19 04:34	10
Dibromomethane	ND		5.0		ug/L			11/02/19 04:34	10
Dichlorodifluoromethane	ND		5.0		ug/L			11/02/19 04:34	10
1,1-Dichloroethane	ND		5.0		ug/L			11/02/19 04:34	10
1,2-Dichloroethane	ND		5.0		ug/L			11/02/19 04:34	10
1,1-Dichloroethene	ND		5.0		ug/L			11/02/19 04:34	10
cis-1,2-Dichloroethene	ND		5.0		ug/L			11/02/19 04:34	10
trans-1,2-Dichloroethene	ND		5.0		ug/L			11/02/19 04:34	10
1,2-Dichloropropane	ND		5.0		ug/L			11/02/19 04:34	10
cis-1,3-Dichloropropene	ND		5.0		ug/L			11/02/19 04:34	10
trans-1,3-Dichloropropene	ND		5.0		ug/L			11/02/19 04:34	10
Ethylbenzene	**89**		5.0		ug/L			11/02/19 04:34	10
Hexachlorobutadiene	ND		10		ug/L			11/02/19 04:34	10
2-Hexanone	ND		500		ug/L			11/02/19 04:34	10
Isopropylbenzene	**40**		5.0		ug/L			11/02/19 04:34	10
4-Isopropyltoluene	ND		10		ug/L			11/02/19 04:34	10
Methylene Chloride	ND		50		ug/L			11/02/19 04:34	10
4-Methyl-2-pentanone (MIBK)	ND		500		ug/L			11/02/19 04:34	10
Naphthalene	**130**		10		ug/L			11/02/19 04:34	10
N-Propylbenzene	**130**		10		ug/L			11/02/19 04:34	10
Styrene	ND		5.0		ug/L			11/02/19 04:34	10
1,1,1,2-Tetrachloroethane	ND		5.0		ug/L			11/02/19 04:34	10

Client Sample ID: SB-2-GW-10.5
Date Collected: 10/25/19 10:30
Date Received: 10/28/19 13:40

Lab Sample ID: 720-95778-6
Matrix: Water

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		5.0		ug/L			11/02/19 04:34	10
Tetrachloroethene	ND		5.0		ug/L			11/02/19 04:34	10
Toluene	ND		5.0		ug/L			11/02/19 04:34	10
1,2,3-Trichlorobenzene	ND		10		ug/L			11/02/19 04:34	10
1,2,4-Trichlorobenzene	ND		10		ug/L			11/02/19 04:34	10
1,1,1-Trichloroethane	ND		5.0		ug/L			11/02/19 04:34	10
1,1,2-Trichloroethane	ND		5.0		ug/L			11/02/19 04:34	10
Trichloroethene	ND		5.0		ug/L			11/02/19 04:34	10
Trichlorofluoromethane	ND		10		ug/L			11/02/19 04:34	10
1,2,3-Trichloropropane	ND		10		ug/L			11/02/19 04:34	10
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0		ug/L			11/02/19 04:34	10
1,2,4-Trimethylbenzene	**43**		5.0		ug/L			11/02/19 04:34	10
1,3,5-Trimethylbenzene	**19**		5.0		ug/L			11/02/19 04:34	10
Vinyl acetate	ND		100		ug/L			11/02/19 04:34	10
Vinyl chloride	ND		5.0		ug/L			11/02/19 04:34	10
Xylenes, Total	**21**		5.0		ug/L			11/02/19 04:34	10
2,2-Dichloropropane	ND		5.0		ug/L			11/02/19 04:34	10
Gasoline Range Organics (GRO) -C4-C12	**3700**		500		ug/L			11/04/19 15:47	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*105*		*67 - 130*		*11/02/19 04:34*	*10*
4-Bromofluorobenzene	*100*		*67 - 130*		*11/04/19 15:47*	*10*
1,2-Dichloroethane-d4 (Surr)	*110*		*72 - 130*		*11/02/19 04:34*	*10*
1,2-Dichloroethane-d4 (Surr)	*95*		*72 - 130*		*11/04/19 15:47*	*10*
Toluene-d8 (Surr)	*100*		*70 - 130*		*11/02/19 04:34*	*10*
Toluene-d8 (Surr)	*96*		*70 - 130*		*11/04/19 15:47*	*10*

Method: 8015B - Diesel Range Organics (DRO) (GC) - Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**750**		160		ug/L		10/31/19 14:14	11/02/19 16:00	1
Motor Oil Range Organics [C24-C36]	ND		310		ug/L		10/31/19 14:14	11/02/19 16:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*105*		*31 - 150*	*10/31/19 14:14*	*11/02/19 16:00*	*1*

Surrogate Summary

Client: Haley & Aldrich, Inc.
Project/Site: SCVTA Phase II Eastridge

Job ID: 720-95778-1

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DCA	TOL
Lab Sample ID	Client Sample ID	(45-131)	(60-140)	(58-140)
720-95778-1	SB-1-SS-2.5	99	121	99
720-95778-2	SB-1-SS-5.0	92	115	96
720-95778-3	SB-2-SS-4.0	106	118	100
720-95778-4	SB-2-SS-8.0	125	114	101
LCS 720-275487/4	Lab Control Sample	99	98	100
LCS 720-275487/6	Lab Control Sample	102	106	100
LCSD 720-275487/5	Lab Control Sample Dup	100	101	100
LCSD 720-275487/7	Lab Control Sample Dup	104	104	101
MB 720-275487/8	Method Blank	100	106	99

Surrogate Legend

BFB = 4-Bromofluorobenzene
DCA = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DCA	TOL
Lab Sample ID	Client Sample ID	(66-148)	(62-137)	(65-141)
720-95778-4	SB-2-SS-8.0	108	100	101
LCS 720-275425/4-A	Lab Control Sample	102	102	102
LCSD 720-275425/5-A	Lab Control Sample Dup	101	103	101
MB 720-275425/1-A	Method Blank	100	106	100

Surrogate Legend

BFB = 4-Bromofluorobenzene
DCA = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DCA	TOL
Lab Sample ID	Client Sample ID	(67-130)	(72-130)	(70-130)
720-95778-5	SB-1-GW-9.0	97	103	105
720-95778-6	SB-2-GW-10.5	105	110	100
720-95778-6	SB-2-GW-10.5	100	95	96
LCS 720-275559/4	Lab Control Sample	98	99	99
LCS 720-275559/6	Lab Control Sample	103	104	99
LCS 720-275589/7	Lab Control Sample	100	98	96
LCS 720-275590/5	Lab Control Sample	99	97	100
LCS 720-275590/7	Lab Control Sample	98	103	100
LCSD 720-275559/5	Lab Control Sample Dup	100	102	100
LCSD 720-275559/7	Lab Control Sample Dup	101	107	100
LCSD 720-275589/8	Lab Control Sample Dup	99	96	95
LCSD 720-275590/6	Lab Control Sample Dup	96	95	100
LCSD 720-275590/8	Lab Control Sample Dup	99	100	101
MB 720-275559/9	Method Blank	96	105	100

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DCA	TOL
Lab Sample ID	Client Sample ID	(67-130)	(72-130)	(70-130)
MB 720-275589/4	Method Blank	99	96	94
MB 720-275590/4	Method Blank	96	102	99

Surrogate Legend

BFB = 4-Bromofluorobenzene
DCA = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)

Method: 8015B - Diesel Range Organics (DRO) (GC)

Matrix: Solid **Prep Type: Silica Gel Cleanup**

		Percent Surrogate Recovery (Acceptance Limits)
		TPH1
Lab Sample ID	Client Sample ID	(38-148)
720-95778-1	SB-1-SS-2.5	103
720-95778-2	SB-1-SS-5.0	114
720-95778-3	SB-2-SS-4.0	99
720-95778-4	SB-2-SS-8.0	113
LCS 720-275446/2-A	Lab Control Sample	102
MB 720-275446/1-A	Method Blank	104

Surrogate Legend

TPH = p-Terphenyl

Method: 8015B - Diesel Range Organics (DRO) (GC)

Matrix: Water **Prep Type: Silica Gel Cleanup**

		Percent Surrogate Recovery (Acceptance Limits)
		TPH1
Lab Sample ID	Client Sample ID	(31-150)
720-95778-5	SB-1-GW-9.0	94
720-95778-6	SB-2-GW-10.5	105
LCS 720-275468/2-A	Lab Control Sample	93
LCSD 720-275468/3-A	Lab Control Sample Dup	97
MB 720-275468/1-A	Method Blank	79

Surrogate Legend

TPH = p-Terphenyl

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Lab Sample ID: MB 720-275425/1-A
Matrix: Solid
Analysis Batch: 275501

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 275425

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C4-C12	ND		25000		ug/Kg		10/31/19 05:46	11/01/19 09:34	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*66 - 148*	*10/31/19 05:46*	*11/01/19 09:34*	*1*
1,2-Dichloroethane-d4 (Surr)	*106*		*62 - 137*	*10/31/19 05:46*	*11/01/19 09:34*	*1*
Toluene-d8 (Surr)	*100*		*65 - 141*	*10/31/19 05:46*	*11/01/19 09:34*	*1*

Lab Sample ID: LCS 720-275425/4-A
Matrix: Solid
Analysis Batch: 275501

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 275425

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C4-C12	100000	108000		ug/Kg		108	62 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*102*		*66 - 148*
1,2-Dichloroethane-d4 (Surr)	*102*		*62 - 137*
Toluene-d8 (Surr)	*102*		*65 - 141*

Lab Sample ID: LCSD 720-275425/5-A
Matrix: Solid
Analysis Batch: 275501

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 275425

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C4-C12	100000	110000		ug/Kg		110	62 - 120	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*101*		*66 - 148*
1,2-Dichloroethane-d4 (Surr)	*103*		*62 - 137*
Toluene-d8 (Surr)	*101*		*65 - 141*

Lab Sample ID: MB 720-275487/8
Matrix: Solid
Analysis Batch: 275487

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.0		ug/Kg			10/31/19 21:29	1
Acetone	ND		50		ug/Kg			10/31/19 21:29	1
Benzene	ND		5.0		ug/Kg			10/31/19 21:29	1
Dichlorobromomethane	ND		5.0		ug/Kg			10/31/19 21:29	1
Bromobenzene	ND		5.0		ug/Kg			10/31/19 21:29	1
Chlorobromomethane	ND		20		ug/Kg			10/31/19 21:29	1
Bromoform	ND		5.0		ug/Kg			10/31/19 21:29	1
Bromomethane	ND		10		ug/Kg			10/31/19 21:29	1
2-Butanone (MEK)	ND		50		ug/Kg			10/31/19 21:29	1

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: MB 720-275487/8
Matrix: Solid
Analysis Batch: 275487

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Butylbenzene	ND		5.0		ug/Kg			10/31/19 21:29	1
sec-Butylbenzene	ND		5.0		ug/Kg			10/31/19 21:29	1
tert-Butylbenzene	ND		5.0		ug/Kg			10/31/19 21:29	1
Carbon disulfide	ND		5.0		ug/Kg			10/31/19 21:29	1
Carbon tetrachloride	ND		5.0		ug/Kg			10/31/19 21:29	1
Chlorobenzene	ND		5.0		ug/Kg			10/31/19 21:29	1
Chloroethane	ND		10		ug/Kg			10/31/19 21:29	1
Chloroform	ND		5.0		ug/Kg			10/31/19 21:29	1
Chloromethane	ND		10		ug/Kg			10/31/19 21:29	1
2-Chlorotoluene	ND		5.0		ug/Kg			10/31/19 21:29	1
4-Chlorotoluene	ND		5.0		ug/Kg			10/31/19 21:29	1
Chlorodibromomethane	ND		5.0		ug/Kg			10/31/19 21:29	1
1,2-Dichlorobenzene	ND		5.0		ug/Kg			10/31/19 21:29	1
1,3-Dichlorobenzene	ND		5.0		ug/Kg			10/31/19 21:29	1
1,4-Dichlorobenzene	ND		5.0		ug/Kg			10/31/19 21:29	1
1,3-Dichloropropane	ND		5.0		ug/Kg			10/31/19 21:29	1
1,1-Dichloropropene	ND		5.0		ug/Kg			10/31/19 21:29	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/Kg			10/31/19 21:29	1
Ethylene Dibromide	ND		5.0		ug/Kg			10/31/19 21:29	1
Dibromomethane	ND		10		ug/Kg			10/31/19 21:29	1
Dichlorodifluoromethane	ND		10		ug/Kg			10/31/19 21:29	1
1,1-Dichloroethane	ND		5.0		ug/Kg			10/31/19 21:29	1
1,2-Dichloroethane	ND		5.0		ug/Kg			10/31/19 21:29	1
1,1-Dichloroethene	ND		5.0		ug/Kg			10/31/19 21:29	1
cis-1,2-Dichloroethene	ND		5.0		ug/Kg			10/31/19 21:29	1
trans-1,2-Dichloroethene	ND		5.0		ug/Kg			10/31/19 21:29	1
1,2-Dichloropropane	ND		5.0		ug/Kg			10/31/19 21:29	1
cis-1,3-Dichloropropene	ND		5.0		ug/Kg			10/31/19 21:29	1
trans-1,3-Dichloropropene	ND		5.0		ug/Kg			10/31/19 21:29	1
Ethylbenzene	ND		5.0		ug/Kg			10/31/19 21:29	1
Hexachlorobutadiene	ND		5.0		ug/Kg			10/31/19 21:29	1
2-Hexanone	ND		50		ug/Kg			10/31/19 21:29	1
Isopropylbenzene	ND		5.0		ug/Kg			10/31/19 21:29	1
4-Isopropyltoluene	ND		5.0		ug/Kg			10/31/19 21:29	1
Methylene Chloride	ND		10		ug/Kg			10/31/19 21:29	1
4-Methyl-2-pentanone (MIBK)	ND		50		ug/Kg			10/31/19 21:29	1
Naphthalene	ND		10		ug/Kg			10/31/19 21:29	1
N-Propylbenzene	ND		5.0		ug/Kg			10/31/19 21:29	1
Styrene	ND		5.0		ug/Kg			10/31/19 21:29	1
1,1,1,2-Tetrachloroethane	ND		5.0		ug/Kg			10/31/19 21:29	1
1,1,2,2-Tetrachloroethane	ND		5.0		ug/Kg			10/31/19 21:29	1
Tetrachloroethene	ND		5.0		ug/Kg			10/31/19 21:29	1
Toluene	ND		5.0		ug/Kg			10/31/19 21:29	1
1,2,3-Trichlorobenzene	ND		5.0		ug/Kg			10/31/19 21:29	1
1,2,4-Trichlorobenzene	ND		5.0		ug/Kg			10/31/19 21:29	1
1,1,1-Trichloroethane	ND		5.0		ug/Kg			10/31/19 21:29	1
1,1,2-Trichloroethane	ND		5.0		ug/Kg			10/31/19 21:29	1
Trichloroethene	ND		5.0		ug/Kg			10/31/19 21:29	1
Trichlorofluoromethane	ND		5.0		ug/Kg			10/31/19 21:29	1

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: MB 720-275487/8
Matrix: Solid
Analysis Batch: 275487

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		5.0		ug/Kg			10/31/19 21:29	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0		ug/Kg			10/31/19 21:29	1
1,2,4-Trimethylbenzene	ND		5.0		ug/Kg			10/31/19 21:29	1
1,3,5-Trimethylbenzene	ND		5.0		ug/Kg			10/31/19 21:29	1
Vinyl acetate	ND		20		ug/Kg			10/31/19 21:29	1
Vinyl chloride	ND		5.0		ug/Kg			10/31/19 21:29	1
Xylenes, Total	ND		5.0		ug/Kg			10/31/19 21:29	1
2,2-Dichloropropane	ND		5.0		ug/Kg			10/31/19 21:29	1
Gasoline Range Organics (GRO) -C4-C12	ND		250		ug/Kg			10/31/19 21:29	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*45 - 131*		*10/31/19 21:29*	*1*
1,2-Dichloroethane-d4 (Surr)	*106*		*60 - 140*		*10/31/19 21:29*	*1*
Toluene-d8 (Surr)	*99*		*58 - 140*		*10/31/19 21:29*	*1*

Lab Sample ID: LCS 720-275487/4
Matrix: Solid
Analysis Batch: 275487

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	50.0	50.2		ug/Kg		100	70 - 144
Acetone	250	260		ug/Kg		104	30 - 162
Benzene	50.0	47.9		ug/Kg		96	70 - 130
Dichlorobromomethane	50.0	49.3		ug/Kg		99	70 - 140
Bromobenzene	50.0	49.3		ug/Kg		99	70 - 130
Chlorobromomethane	50.0	50.3		ug/Kg		101	70 - 130
Bromoform	50.0	50.0		ug/Kg		100	59 - 158
Bromomethane	50.0	48.1		ug/Kg		96	59 - 132
2-Butanone (MEK)	250	251		ug/Kg		101	59 - 159
n-Butylbenzene	50.0	49.8		ug/Kg		100	70 - 142
sec-Butylbenzene	50.0	49.8		ug/Kg		100	70 - 136
tert-Butylbenzene	50.0	49.0		ug/Kg		98	70 - 130
Carbon disulfide	50.0	47.7		ug/Kg		95	60 - 140
Carbon tetrachloride	50.0	50.3		ug/Kg		101	70 - 142
Chlorobenzene	50.0	48.6		ug/Kg		97	70 - 130
Chloroethane	50.0	46.8		ug/Kg		94	65 - 130
Chloroform	50.0	48.9		ug/Kg		98	77 - 127
Chloromethane	50.0	45.6		ug/Kg		91	55 - 140
2-Chlorotoluene	50.0	48.9		ug/Kg		98	70 - 138
4-Chlorotoluene	50.0	49.3		ug/Kg		99	70 - 136
Chlorodibromomethane	50.0	51.0		ug/Kg		102	70 - 146
1,2-Dichlorobenzene	50.0	48.3		ug/Kg		97	70 - 130
1,3-Dichlorobenzene	50.0	48.4		ug/Kg		97	70 - 131
1,4-Dichlorobenzene	50.0	48.8		ug/Kg		98	70 - 130
1,3-Dichloropropane	50.0	48.9		ug/Kg		98	70 - 140
1,1-Dichloropropene	50.0	49.1		ug/Kg		98	70 - 130
1,2-Dibromo-3-Chloropropane	50.0	49.0		ug/Kg		98	60 - 145
Ethylene Dibromide	50.0	50.2		ug/Kg		100	70 - 140

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: LCS 720-275487/4
Matrix: Solid
Analysis Batch: 275487

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dibromomethane	50.0	51.1		ug/Kg		102	70 - 139
Dichlorodifluoromethane	50.0	47.6		ug/Kg		95	37 - 158
1,1-Dichloroethane	50.0	48.2		ug/Kg		96	70 - 130
1,2-Dichloroethane	50.0	48.7		ug/Kg		97	70 - 130
1,1-Dichloroethene	50.0	48.9		ug/Kg		98	74 - 122
cis-1,2-Dichloroethene	50.0	47.6		ug/Kg		95	70 - 138
trans-1,2-Dichloroethene	50.0	48.7		ug/Kg		97	67 - 130
1,2-Dichloropropane	50.0	48.6		ug/Kg		97	73 - 127
cis-1,3-Dichloropropene	50.0	50.8		ug/Kg		102	68 - 147
trans-1,3-Dichloropropene	50.0	52.1		ug/Kg		104	70 - 155
Ethylbenzene	50.0	48.9		ug/Kg		98	80 - 137
Hexachlorobutadiene	50.0	46.7		ug/Kg		93	70 - 132
2-Hexanone	250	245		ug/Kg		98	62 - 158
Isopropylbenzene	50.0	49.9		ug/Kg		100	70 - 130
4-Isopropyltoluene	50.0	49.6		ug/Kg		99	70 - 133
Methylene Chloride	50.0	45.5		ug/Kg		91	70 - 134
4-Methyl-2-pentanone (MIBK)	250	254		ug/Kg		102	60 - 160
Naphthalene	50.0	49.4		ug/Kg		99	60 - 147
N-Propylbenzene	50.0	49.6		ug/Kg		99	70 - 130
Styrene	50.0	54.4		ug/Kg		109	70 - 130
1,1,1,2-Tetrachloroethane	50.0	50.3		ug/Kg		101	70 - 130
1,1,2,2-Tetrachloroethane	50.0	47.0		ug/Kg		94	70 - 146
Tetrachloroethene	50.0	49.6		ug/Kg		99	70 - 132
Toluene	50.0	48.6		ug/Kg		97	75 - 120
1,2,3-Trichlorobenzene	50.0	47.8		ug/Kg		96	60 - 140
1,2,4-Trichlorobenzene	50.0	49.1		ug/Kg		98	60 - 140
1,1,1-Trichloroethane	50.0	50.1		ug/Kg		100	70 - 130
1,1,2-Trichloroethane	50.0	49.6		ug/Kg		99	70 - 130
Trichloroethene	50.0	50.3		ug/Kg		101	70 - 133
Trichlorofluoromethane	50.0	49.4		ug/Kg		99	60 - 140
1,2,3-Trichloropropane	50.0	51.3		ug/Kg		103	70 - 146
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	50.3		ug/Kg		101	60 - 140
1,2,4-Trimethylbenzene	50.0	49.7		ug/Kg		99	70 - 130
1,3,5-Trimethylbenzene	50.0	50.1		ug/Kg		100	70 - 131
Vinyl acetate	50.0	48.1		ug/Kg		96	38 - 176
Vinyl chloride	50.0	46.7		ug/Kg		93	58 - 125
m-Xylene & p-Xylene	50.0	49.3		ug/Kg		99	70 - 146
o-Xylene	50.0	49.0		ug/Kg		98	70 - 140
2,2-Dichloropropane	50.0	54.6		ug/Kg		109	70 - 162

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*98*		*60 - 140*
Toluene-d8 (Surr)	*100*		*58 - 140*

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: LCS 720-275487/6
Matrix: Solid
Analysis Batch: 275487

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO) -C4-C12			1000	1080		ug/Kg		108	70 - 122		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*102*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*106*		*60 - 140*
Toluene-d8 (Surr)	*100*		*58 - 140*

Lab Sample ID: LCSD 720-275487/5
Matrix: Solid
Analysis Batch: 275487

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether			50.0	53.8		ug/Kg		108	70 - 144	7	20
Acetone			250	302		ug/Kg		121	30 - 162	15	30
Benzene			50.0	48.8		ug/Kg		98	70 - 130	2	20
Dichlorobromomethane			50.0	51.3		ug/Kg		103	70 - 140	4	20
Bromobenzene			50.0	49.7		ug/Kg		99	70 - 130	1	20
Chlorobromomethane			50.0	52.1		ug/Kg		104	70 - 130	4	20
Bromoform			50.0	52.0		ug/Kg		104	59 - 158	4	20
Bromomethane			50.0	48.9		ug/Kg		98	59 - 132	2	20
2-Butanone (MEK)			250	272		ug/Kg		109	59 - 159	8	20
n-Butylbenzene			50.0	49.9		ug/Kg		100	70 - 142	0	20
sec-Butylbenzene			50.0	49.1		ug/Kg		98	70 - 136	1	20
tert-Butylbenzene			50.0	48.4		ug/Kg		97	70 - 130	1	20
Carbon disulfide			50.0	47.6		ug/Kg		95	60 - 140	0	20
Carbon tetrachloride			50.0	50.3		ug/Kg		101	70 - 142	0	20
Chlorobenzene			50.0	49.0		ug/Kg		98	70 - 130	1	20
Chloroethane			50.0	47.3		ug/Kg		95	65 - 130	1	20
Chloroform			50.0	50.1		ug/Kg		100	77 - 127	2	20
Chloromethane			50.0	45.5		ug/Kg		91	55 - 140	0	20
2-Chlorotoluene			50.0	48.3		ug/Kg		97	70 - 138	1	20
4-Chlorotoluene			50.0	49.3		ug/Kg		99	70 - 136	0	20
Chlorodibromomethane			50.0	54.5		ug/Kg		109	70 - 146	7	20
1,2-Dichlorobenzene			50.0	49.5		ug/Kg		99	70 - 130	2	20
1,3-Dichlorobenzene			50.0	48.8		ug/Kg		98	70 - 131	1	20
1,4-Dichlorobenzene			50.0	48.8		ug/Kg		98	70 - 130	0	20
1,3-Dichloropropane			50.0	51.8		ug/Kg		104	70 - 140	6	20
1,1-Dichloropropene			50.0	49.8		ug/Kg		100	70 - 130	1	20
1,2-Dibromo-3-Chloropropane			50.0	53.0		ug/Kg		106	60 - 145	8	20
Ethylene Dibromide			50.0	53.5		ug/Kg		107	70 - 140	6	20
Dibromomethane			50.0	54.3		ug/Kg		109	70 - 139	6	20
Dichlorodifluoromethane			50.0	47.5		ug/Kg		95	37 - 158	0	20
1,1-Dichloroethane			50.0	49.0		ug/Kg		98	70 - 130	2	20
1,2-Dichloroethane			50.0	51.4		ug/Kg		103	70 - 130	6	20
1,1-Dichloroethene			50.0	49.3		ug/Kg		99	74 - 122	1	20
cis-1,2-Dichloroethene			50.0	49.0		ug/Kg		98	70 - 138	3	20
trans-1,2-Dichloroethene			50.0	49.4		ug/Kg		99	67 - 130	1	20

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: LCSD 720-275487/5
Matrix: Solid
Analysis Batch: 275487

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dichloropropane			50.0	50.7		ug/Kg		101	73 - 127	4	20
cis-1,3-Dichloropropene			50.0	53.1		ug/Kg		106	68 - 147	4	20
trans-1,3-Dichloropropene			50.0	55.8		ug/Kg		112	70 - 155	7	20
Ethylbenzene			50.0	48.5		ug/Kg		97	80 - 137	1	20
Hexachlorobutadiene			50.0	48.3		ug/Kg		97	70 - 132	4	20
2-Hexanone			250	263		ug/Kg		105	62 - 158	7	20
Isopropylbenzene			50.0	49.4		ug/Kg		99	70 - 130	1	20
4-Isopropyltoluene			50.0	49.3		ug/Kg		99	70 - 133	1	20
Methylene Chloride			50.0	47.1		ug/Kg		94	70 - 134	4	20
4-Methyl-2-pentanone (MIBK)			250	275		ug/Kg		110	60 - 160	8	20
Naphthalene			50.0	53.8		ug/Kg		108	60 - 147	9	20
N-Propylbenzene			50.0	48.8		ug/Kg		98	70 - 130	2	20
Styrene			50.0	55.2		ug/Kg		110	70 - 130	1	20
1,1,1,2-Tetrachloroethane			50.0	51.1		ug/Kg		102	70 - 130	2	20
1,1,2,2-Tetrachloroethane			50.0	49.4		ug/Kg		99	70 - 146	5	20
Tetrachloroethene			50.0	49.7		ug/Kg		99	70 - 132	0	20
Toluene			50.0	48.6		ug/Kg		97	75 - 120	0	20
1,2,3-Trichlorobenzene			50.0	52.3		ug/Kg		105	60 - 140	9	20
1,2,4-Trichlorobenzene			50.0	52.2		ug/Kg		104	60 - 140	6	20
1,1,1-Trichloroethane			50.0	49.8		ug/Kg		100	70 - 130	1	20
1,1,2-Trichloroethane			50.0	52.1		ug/Kg		104	70 - 130	5	20
Trichloroethene			50.0	50.6		ug/Kg		101	70 - 133	1	20
Trichlorofluoromethane			50.0	49.5		ug/Kg		99	60 - 140	0	20
1,2,3-Trichloropropane			50.0	52.5		ug/Kg		105	70 - 146	2	20
1,1,2-Trichloro-1,2,2-trifluoroethane			50.0	50.6		ug/Kg		101	60 - 140	1	20
1,2,4-Trimethylbenzene			50.0	49.6		ug/Kg		99	70 - 130	0	20
1,3,5-Trimethylbenzene			50.0	49.5		ug/Kg		99	70 - 131	1	20
Vinyl acetate			50.0	51.7		ug/Kg		103	38 - 176	7	20
Vinyl chloride			50.0	46.0		ug/Kg		92	58 - 125	1	20
m-Xylene & p-Xylene			50.0	48.9		ug/Kg		98	70 - 146	1	20
o-Xylene			50.0	49.3		ug/Kg		99	70 - 140	1	20
2,2-Dichloropropane			50.0	51.8		ug/Kg		104	70 - 162	5	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*100*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*101*		*60 - 140*
Toluene-d8 (Surr)	*100*		*58 - 140*

Lab Sample ID: LCSD 720-275487/7
Matrix: Solid
Analysis Batch: 275487

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C4-C12			1000	1060		ug/Kg		106	70 - 122	2	20

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: LCSD 720-275487/7
Matrix: Solid
Analysis Batch: 275487

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	*104*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*104*		*60 - 140*
Toluene-d8 (Surr)	*101*		*58 - 140*

Lab Sample ID: MB 720-275559/9
Matrix: Water
Analysis Batch: 275559

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			11/01/19 21:54	1
Acetone	ND		50		ug/L			11/01/19 21:54	1
Benzene	ND		0.50		ug/L			11/01/19 21:54	1
Dichlorobromomethane	ND		0.50		ug/L			11/01/19 21:54	1
Bromobenzene	ND		1.0		ug/L			11/01/19 21:54	1
Chlorobromomethane	ND		1.0		ug/L			11/01/19 21:54	1
Bromoform	ND		1.0		ug/L			11/01/19 21:54	1
Bromomethane	ND		1.0		ug/L			11/01/19 21:54	1
2-Butanone (MEK)	ND		50		ug/L			11/01/19 21:54	1
n-Butylbenzene	ND		1.0		ug/L			11/01/19 21:54	1
sec-Butylbenzene	ND		1.0		ug/L			11/01/19 21:54	1
tert-Butylbenzene	ND		1.0		ug/L			11/01/19 21:54	1
Carbon disulfide	ND		5.0		ug/L			11/01/19 21:54	1
Carbon tetrachloride	ND		0.50		ug/L			11/01/19 21:54	1
Chlorobenzene	ND		0.50		ug/L			11/01/19 21:54	1
Chloroethane	ND		1.0		ug/L			11/01/19 21:54	1
Chloroform	ND		1.0		ug/L			11/01/19 21:54	1
Chloromethane	ND		1.0		ug/L			11/01/19 21:54	1
2-Chlorotoluene	ND		0.50		ug/L			11/01/19 21:54	1
4-Chlorotoluene	ND		0.50		ug/L			11/01/19 21:54	1
Chlorodibromomethane	ND		0.50		ug/L			11/01/19 21:54	1
1,2-Dichlorobenzene	ND		0.50		ug/L			11/01/19 21:54	1
1,3-Dichlorobenzene	ND		0.50		ug/L			11/01/19 21:54	1
1,4-Dichlorobenzene	ND		0.50		ug/L			11/01/19 21:54	1
1,3-Dichloropropane	ND		1.0		ug/L			11/01/19 21:54	1
1,1-Dichloropropene	ND		0.50		ug/L			11/01/19 21:54	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			11/01/19 21:54	1
Ethylene Dibromide	ND		0.50		ug/L			11/01/19 21:54	1
Dibromomethane	ND		0.50		ug/L			11/01/19 21:54	1
Dichlorodifluoromethane	ND		0.50		ug/L			11/01/19 21:54	1
1,1-Dichloroethane	ND		0.50		ug/L			11/01/19 21:54	1
1,2-Dichloroethane	ND		0.50		ug/L			11/01/19 21:54	1
1,1-Dichloroethene	ND		0.50		ug/L			11/01/19 21:54	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			11/01/19 21:54	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			11/01/19 21:54	1
1,2-Dichloropropane	ND		0.50		ug/L			11/01/19 21:54	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			11/01/19 21:54	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			11/01/19 21:54	1
Ethylbenzene	ND		0.50		ug/L			11/01/19 21:54	1

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: MB 720-275559/9
Matrix: Water
Analysis Batch: 275559

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobutadiene	ND		1.0		ug/L			11/01/19 21:54	1
2-Hexanone	ND		50		ug/L			11/01/19 21:54	1
Isopropylbenzene	ND		0.50		ug/L			11/01/19 21:54	1
4-Isopropyltoluene	ND		1.0		ug/L			11/01/19 21:54	1
Methylene Chloride	ND		5.0		ug/L			11/01/19 21:54	1
4-Methyl-2-pentanone (MIBK)	ND		50		ug/L			11/01/19 21:54	1
Naphthalene	ND		1.0		ug/L			11/01/19 21:54	1
N-Propylbenzene	ND		1.0		ug/L			11/01/19 21:54	1
Styrene	ND		0.50		ug/L			11/01/19 21:54	1
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L			11/01/19 21:54	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			11/01/19 21:54	1
Tetrachloroethene	ND		0.50		ug/L			11/01/19 21:54	1
Toluene	ND		0.50		ug/L			11/01/19 21:54	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			11/01/19 21:54	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/01/19 21:54	1
1,1,1-Trichloroethane	ND		0.50		ug/L			11/01/19 21:54	1
1,1,2-Trichloroethane	ND		0.50		ug/L			11/01/19 21:54	1
Trichloroethene	ND		0.50		ug/L			11/01/19 21:54	1
Trichlorofluoromethane	ND		1.0		ug/L			11/01/19 21:54	1
1,2,3-Trichloropropane	ND		1.0		ug/L			11/01/19 21:54	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50		ug/L			11/01/19 21:54	1
1,2,4-Trimethylbenzene	ND		0.50		ug/L			11/01/19 21:54	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			11/01/19 21:54	1
Vinyl acetate	ND		10		ug/L			11/01/19 21:54	1
Vinyl chloride	ND		0.50		ug/L			11/01/19 21:54	1
Xylenes, Total	ND		0.50		ug/L			11/01/19 21:54	1
2,2-Dichloropropane	ND		0.50		ug/L			11/01/19 21:54	1
Gasoline Range Organics (GRO) -C4-C12	ND		50		ug/L			11/01/19 21:54	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*67 - 130*		*11/01/19 21:54*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*72 - 130*		*11/01/19 21:54*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*11/01/19 21:54*	*1*

Lab Sample ID: LCS 720-275559/4
Matrix: Water
Analysis Batch: 275559

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	25.0	24.6		ug/L		99	70 - 130
Acetone	125	131		ug/L		104	61 - 147
Benzene	25.0	23.9		ug/L		96	79 - 119
Dichlorobromomethane	25.0	24.7		ug/L		99	81 - 130
Bromobenzene	25.0	24.8		ug/L		99	77 - 117
Chlorobromomethane	25.0	24.7		ug/L		99	81 - 122
Bromoform	25.0	24.0		ug/L		96	75 - 127
Bromomethane	25.0	23.3		ug/L		93	70 - 132
2-Butanone (MEK)	125	118		ug/L		94	66 - 133

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: LCS 720-275559/4
Matrix: Water
Analysis Batch: 275559

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
n-Butylbenzene	25.0	24.8		ug/L		99	78 - 119
sec-Butylbenzene	25.0	24.9		ug/L		100	78 - 118
tert-Butylbenzene	25.0	24.6		ug/L		98	78 - 118
Carbon disulfide	25.0	23.1		ug/L		92	64 - 127
Carbon tetrachloride	25.0	24.8		ug/L		99	72 - 142
Chlorobenzene	25.0	24.2		ug/L		97	76 - 116
Chloroethane	25.0	22.8		ug/L		91	70 - 131
Chloroform	25.0	24.5		ug/L		98	82 - 119
Chloromethane	25.0	22.8		ug/L		91	49 - 134
2-Chlorotoluene	25.0	24.5		ug/L		98	75 - 115
4-Chlorotoluene	25.0	24.7		ug/L		99	73 - 119
Chlorodibromomethane	25.0	25.5		ug/L		102	77 - 133
1,2-Dichlorobenzene	25.0	24.1		ug/L		96	77 - 117
1,3-Dichlorobenzene	25.0	24.2		ug/L		97	76 - 116
1,4-Dichlorobenzene	25.0	24.1		ug/L		97	76 - 116
1,3-Dichloropropane	25.0	24.1		ug/L		96	77 - 117
1,1-Dichloropropene	25.0	24.7		ug/L		99	83 - 130
1,2-Dibromo-3-Chloropropane	25.0	23.3		ug/L		93	74 - 126
Ethylene Dibromide	25.0	24.1		ug/L		97	80 - 121
Dibromomethane	25.0	25.2		ug/L		101	79 - 117
Dichlorodifluoromethane	25.0	20.6		ug/L		82	21 - 150
1,1-Dichloroethane	25.0	24.1		ug/L		97	77 - 119
1,2-Dichloroethane	25.0	24.3		ug/L		97	73 - 122
1,1-Dichloroethene	25.0	23.6		ug/L		94	69 - 119
cis-1,2-Dichloroethene	25.0	24.1		ug/L		96	77 - 117
trans-1,2-Dichloroethene	25.0	24.0		ug/L		96	79 - 117
1,2-Dichloropropane	25.0	24.4		ug/L		98	79 - 119
cis-1,3-Dichloropropene	25.0	25.2		ug/L		101	82 - 119
trans-1,3-Dichloropropene	25.0	25.8		ug/L		103	76 - 122
Ethylbenzene	25.0	24.2		ug/L		97	77 - 117
Hexachlorobutadiene	25.0	24.2		ug/L		97	78 - 140
2-Hexanone	125	119		ug/L		96	63 - 140
Isopropylbenzene	25.0	24.6		ug/L		98	77 - 130
4-Isopropyltoluene	25.0	24.9		ug/L		100	80 - 120
Methylene Chloride	25.0	23.5		ug/L		94	75 - 117
4-Methyl-2-pentanone (MIBK)	125	123		ug/L		98	66 - 140
Naphthalene	25.0	24.2		ug/L		97	81 - 121
N-Propylbenzene	25.0	24.9		ug/L		100	77 - 117
Styrene	25.0	27.2		ug/L		109	76 - 116
1,1,1,2-Tetrachloroethane	25.0	24.8		ug/L		99	81 - 121
1,1,2,2-Tetrachloroethane	25.0	22.8		ug/L		91	70 - 115
Tetrachloroethene	25.0	24.2		ug/L		97	81 - 130
Toluene	25.0	24.1		ug/L		96	75 - 120
1,2,3-Trichlorobenzene	25.0	24.4		ug/L		97	87 - 123
1,2,4-Trichlorobenzene	25.0	24.9		ug/L		100	78 - 120
1,1,1-Trichloroethane	25.0	24.7		ug/L		99	74 - 130
1,1,2-Trichloroethane	25.0	24.3		ug/L		97	80 - 117
Trichloroethene	25.0	24.9		ug/L		99	80 - 123
Trichlorofluoromethane	25.0	24.0		ug/L		96	75 - 141

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: LCS 720-275559/4
Matrix: Water
Analysis Batch: 275559

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	25.0	24.8		ug/L		99	77 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	24.3		ug/L		97	70 - 133
1,2,4-Trimethylbenzene	25.0	25.1		ug/L		100	75 - 115
1,3,5-Trimethylbenzene	25.0	25.0		ug/L		100	77 - 117
Vinyl acetate	25.0	23.4		ug/L		94	50 - 126
Vinyl chloride	25.0	21.5		ug/L		86	58 - 138
m-Xylene & p-Xylene	25.0	24.3		ug/L		97	74 - 119
o-Xylene	25.0	24.4		ug/L		98	77 - 118
2,2-Dichloropropane	25.0	26.3		ug/L		105	74 - 156

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*67 - 130*
1,2-Dichloroethane-d4 (Surr)	*99*		*72 - 130*
Toluene-d8 (Surr)	*99*		*70 - 130*

Lab Sample ID: LCS 720-275559/6
Matrix: Water
Analysis Batch: 275559

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C4-C12	500	529		ug/L		106	77 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*103*		*67 - 130*
1,2-Dichloroethane-d4 (Surr)	*104*		*72 - 130*
Toluene-d8 (Surr)	*99*		*70 - 130*

Lab Sample ID: LCSD 720-275559/5
Matrix: Water
Analysis Batch: 275559

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	25.0	26.1		ug/L		104	70 - 130	6	20
Acetone	125	135		ug/L		108	61 - 147	3	30
Benzene	25.0	23.9		ug/L		96	79 - 119	0	20
Dichlorobromomethane	25.0	25.2		ug/L		101	81 - 130	2	20
Bromobenzene	25.0	24.2		ug/L		97	77 - 117	2	20
Chlorobromomethane	25.0	25.4		ug/L		102	81 - 122	3	20
Bromoform	25.0	25.4		ug/L		102	75 - 127	6	20
Bromomethane	25.0	23.4		ug/L		94	70 - 132	1	20
2-Butanone (MEK)	125	134		ug/L		107	66 - 133	12	22
n-Butylbenzene	25.0	24.9		ug/L		99	78 - 119	0	20
sec-Butylbenzene	25.0	24.2		ug/L		97	78 - 118	3	20
tert-Butylbenzene	25.0	23.8		ug/L		95	78 - 118	3	20
Carbon disulfide	25.0	23.2		ug/L		93	64 - 127	1	20
Carbon tetrachloride	25.0	24.6		ug/L		98	72 - 142	1	20
Chlorobenzene	25.0	24.1		ug/L		96	76 - 116	0	20

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: LCSD 720-275559/5
Matrix: Water
Analysis Batch: 275559

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloroethane	25.0	23.2		ug/L		93	70 - 131	2	20
Chloroform	25.0	24.7		ug/L		99	82 - 119	1	20
Chloromethane	25.0	22.7		ug/L		91	49 - 134	1	20
2-Chlorotoluene	25.0	23.9		ug/L		96	75 - 115	3	20
4-Chlorotoluene	25.0	24.2		ug/L		97	73 - 119	2	20
Chlorodibromomethane	25.0	26.3		ug/L		105	77 - 133	3	20
1,2-Dichlorobenzene	25.0	24.2		ug/L		97	77 - 117	0	20
1,3-Dichlorobenzene	25.0	24.0		ug/L		96	76 - 116	1	20
1,4-Dichlorobenzene	25.0	24.0		ug/L		96	76 - 116	0	20
1,3-Dichloropropane	25.0	25.2		ug/L		101	77 - 117	5	20
1,1-Dichloropropene	25.0	24.6		ug/L		98	83 - 130	0	20
1,2-Dibromo-3-Chloropropane	25.0	25.4		ug/L		101	74 - 126	8	20
Ethylene Dibromide	25.0	25.5		ug/L		102	80 - 121	6	20
Dibromomethane	25.0	26.0		ug/L		104	79 - 117	3	20
Dichlorodifluoromethane	25.0	21.3		ug/L		85	21 - 150	3	20
1,1-Dichloroethane	25.0	24.1		ug/L		96	77 - 119	0	20
1,2-Dichloroethane	25.0	25.2		ug/L		101	73 - 122	4	20
1,1-Dichloroethene	25.0	23.9		ug/L		95	69 - 119	1	20
cis-1,2-Dichloroethene	25.0	24.1		ug/L		96	77 - 117	0	20
trans-1,2-Dichloroethene	25.0	24.1		ug/L		96	79 - 117	0	20
1,2-Dichloropropane	25.0	24.7		ug/L		99	79 - 119	1	20
cis-1,3-Dichloropropene	25.0	26.0		ug/L		104	82 - 119	3	20
trans-1,3-Dichloropropene	25.0	26.9		ug/L		108	76 - 122	4	20
Ethylbenzene	25.0	23.7		ug/L		95	77 - 117	2	20
Hexachlorobutadiene	25.0	24.0		ug/L		96	78 - 140	1	20
2-Hexanone	125	133		ug/L		106	63 - 140	10	24
Isopropylbenzene	25.0	24.3		ug/L		97	77 - 130	1	20
4-Isopropyltoluene	25.0	24.2		ug/L		97	80 - 120	3	20
Methylene Chloride	25.0	22.9		ug/L		92	75 - 117	2	20
4-Methyl-2-pentanone (MIBK)	125	135		ug/L		108	66 - 140	10	21
Naphthalene	25.0	25.8		ug/L		103	81 - 121	7	20
N-Propylbenzene	25.0	24.1		ug/L		96	77 - 117	3	20
Styrene	25.0	27.1		ug/L		108	76 - 116	0	20
1,1,1,2-Tetrachloroethane	25.0	24.9		ug/L		99	81 - 121	0	20
1,1,2,2-Tetrachloroethane	25.0	23.5		ug/L		94	70 - 115	3	20
Tetrachloroethene	25.0	24.5		ug/L		98	81 - 130	1	20
Toluene	25.0	23.8		ug/L		95	75 - 120	1	20
1,2,3-Trichlorobenzene	25.0	25.4		ug/L		102	87 - 123	4	20
1,2,4-Trichlorobenzene	25.0	25.7		ug/L		103	78 - 120	3	20
1,1,1-Trichloroethane	25.0	24.6		ug/L		99	74 - 130	0	20
1,1,2-Trichloroethane	25.0	25.4		ug/L		102	80 - 117	4	20
Trichloroethene	25.0	24.8		ug/L		99	80 - 123	0	20
Trichlorofluoromethane	25.0	24.1		ug/L		96	75 - 141	0	20
1,2,3-Trichloropropane	25.0	25.9		ug/L		103	77 - 120	4	20
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	24.4		ug/L		98	70 - 133	1	20
1,2,4-Trimethylbenzene	25.0	24.6		ug/L		98	75 - 115	2	20
1,3,5-Trimethylbenzene	25.0	24.4		ug/L		97	77 - 117	3	20
Vinyl acetate	25.0	24.9		ug/L		100	50 - 126	6	20

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: LCSD 720-275559/5
Matrix: Water
Analysis Batch: 275559

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Vinyl chloride			25.0	21.9		ug/L		88	58 - 138	2	20
m-Xylene & p-Xylene			25.0	24.1		ug/L		96	74 - 119	1	20
o-Xylene			25.0	24.2		ug/L		97	77 - 118	1	20
2,2-Dichloropropane			25.0	26.8		ug/L		107	74 - 156	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*100*		*67 - 130*
1,2-Dichloroethane-d4 (Surr)	*102*		*72 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

Lab Sample ID: LCSD 720-275559/7
Matrix: Water
Analysis Batch: 275559

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C4-C12			500	534		ug/L		107	77 - 130	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*101*		*67 - 130*
1,2-Dichloroethane-d4 (Surr)	*107*		*72 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

Lab Sample ID: MB 720-275589/4
Matrix: Water
Analysis Batch: 275589

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C4-C12	ND		50		ug/L			11/04/19 10:29	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*67 - 130*		*11/04/19 10:29*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*72 - 130*		*11/04/19 10:29*	*1*
Toluene-d8 (Surr)	*94*		*70 - 130*		*11/04/19 10:29*	*1*

Lab Sample ID: LCS 720-275589/7
Matrix: Water
Analysis Batch: 275589

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C4-C12			500	525		ug/L		105	77 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*100*		*67 - 130*
1,2-Dichloroethane-d4 (Surr)	*98*		*72 - 130*
Toluene-d8 (Surr)	*96*		*70 - 130*

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: LCSD 720-275589/8
Matrix: Water
Analysis Batch: 275589

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C4-C12			500	522		ug/L		104	77 - 130	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*67 - 130*
1,2-Dichloroethane-d4 (Surr)	*96*		*72 - 130*
Toluene-d8 (Surr)	*95*		*70 - 130*

Lab Sample ID: MB 720-275590/4
Matrix: Water
Analysis Batch: 275590

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			11/04/19 12:50	1
Acetone	ND		50		ug/L			11/04/19 12:50	1
Benzene	ND		0.50		ug/L			11/04/19 12:50	1
Dichlorobromomethane	ND		0.50		ug/L			11/04/19 12:50	1
Bromobenzene	ND		1.0		ug/L			11/04/19 12:50	1
Chlorobromomethane	ND		1.0		ug/L			11/04/19 12:50	1
Bromoform	ND		1.0		ug/L			11/04/19 12:50	1
Bromomethane	ND		1.0		ug/L			11/04/19 12:50	1
2-Butanone (MEK)	ND		50		ug/L			11/04/19 12:50	1
n-Butylbenzene	ND		1.0		ug/L			11/04/19 12:50	1
sec-Butylbenzene	ND		1.0		ug/L			11/04/19 12:50	1
tert-Butylbenzene	ND		1.0		ug/L			11/04/19 12:50	1
Carbon disulfide	ND		5.0		ug/L			11/04/19 12:50	1
Carbon tetrachloride	ND		0.50		ug/L			11/04/19 12:50	1
Chlorobenzene	ND		0.50		ug/L			11/04/19 12:50	1
Chloroethane	ND		1.0		ug/L			11/04/19 12:50	1
Chloroform	ND		1.0		ug/L			11/04/19 12:50	1
Chloromethane	ND		1.0		ug/L			11/04/19 12:50	1
2-Chlorotoluene	ND		0.50		ug/L			11/04/19 12:50	1
4-Chlorotoluene	ND		0.50		ug/L			11/04/19 12:50	1
Chlorodibromomethane	ND		0.50		ug/L			11/04/19 12:50	1
1,2-Dichlorobenzene	ND		0.50		ug/L			11/04/19 12:50	1
1,3-Dichlorobenzene	ND		0.50		ug/L			11/04/19 12:50	1
1,4-Dichlorobenzene	ND		0.50		ug/L			11/04/19 12:50	1
1,3-Dichloropropane	ND		1.0		ug/L			11/04/19 12:50	1
1,1-Dichloropropene	ND		0.50		ug/L			11/04/19 12:50	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			11/04/19 12:50	1
Ethylene Dibromide	ND		0.50		ug/L			11/04/19 12:50	1
Dibromomethane	ND		0.50		ug/L			11/04/19 12:50	1
Dichlorodifluoromethane	ND		0.50		ug/L			11/04/19 12:50	1
1,1-Dichloroethane	ND		0.50		ug/L			11/04/19 12:50	1
1,2-Dichloroethane	ND		0.50		ug/L			11/04/19 12:50	1
1,1-Dichloroethene	ND		0.50		ug/L			11/04/19 12:50	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			11/04/19 12:50	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			11/04/19 12:50	1

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: MB 720-275590/4
Matrix: Water
Analysis Batch: 275590

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloropropane	ND		0.50		ug/L			11/04/19 12:50	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			11/04/19 12:50	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			11/04/19 12:50	1
Ethylbenzene	ND		0.50		ug/L			11/04/19 12:50	1
Hexachlorobutadiene	ND		1.0		ug/L			11/04/19 12:50	1
2-Hexanone	ND		50		ug/L			11/04/19 12:50	1
Isopropylbenzene	ND		0.50		ug/L			11/04/19 12:50	1
4-Isopropyltoluene	ND		1.0		ug/L			11/04/19 12:50	1
Methylene Chloride	ND		5.0		ug/L			11/04/19 12:50	1
4-Methyl-2-pentanone (MIBK)	ND		50		ug/L			11/04/19 12:50	1
Naphthalene	ND		1.0		ug/L			11/04/19 12:50	1
N-Propylbenzene	ND		1.0		ug/L			11/04/19 12:50	1
Styrene	ND		0.50		ug/L			11/04/19 12:50	1
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L			11/04/19 12:50	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			11/04/19 12:50	1
Tetrachloroethene	ND		0.50		ug/L			11/04/19 12:50	1
Toluene	ND		0.50		ug/L			11/04/19 12:50	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			11/04/19 12:50	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/04/19 12:50	1
1,1,1-Trichloroethane	ND		0.50		ug/L			11/04/19 12:50	1
1,1,2-Trichloroethane	ND		0.50		ug/L			11/04/19 12:50	1
Trichloroethene	ND		0.50		ug/L			11/04/19 12:50	1
Trichlorofluoromethane	ND		1.0		ug/L			11/04/19 12:50	1
1,2,3-Trichloropropane	ND		1.0		ug/L			11/04/19 12:50	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50		ug/L			11/04/19 12:50	1
1,2,4-Trimethylbenzene	ND		0.50		ug/L			11/04/19 12:50	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			11/04/19 12:50	1
Vinyl acetate	ND		10		ug/L			11/04/19 12:50	1
Vinyl chloride	ND		0.50		ug/L			11/04/19 12:50	1
Xylenes, Total	ND		0.50		ug/L			11/04/19 12:50	1
2,2-Dichloropropane	ND		0.50		ug/L			11/04/19 12:50	1
Gasoline Range Organics (GRO) -C4-C12	ND		50		ug/L			11/04/19 12:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*67 - 130*		*11/04/19 12:50*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*72 - 130*		*11/04/19 12:50*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*11/04/19 12:50*	*1*

Lab Sample ID: LCS 720-275590/5
Matrix: Water
Analysis Batch: 275590

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	25.0	24.5		ug/L		98	70 - 130
Acetone	125	131		ug/L		105	61 - 147
Benzene	25.0	23.9		ug/L		96	79 - 119
Dichlorobromomethane	25.0	24.3		ug/L		97	81 - 130
Bromobenzene	25.0	24.6		ug/L		98	77 - 117

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: LCS 720-275590/5
Matrix: Water
Analysis Batch: 275590

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chlorobromomethane	25.0	24.9		ug/L		100	81 - 122
Bromoform	25.0	25.0		ug/L		100	75 - 127
Bromomethane	25.0	24.2		ug/L		97	70 - 132
2-Butanone (MEK)	125	133		ug/L		107	66 - 133
n-Butylbenzene	25.0	25.7		ug/L		103	78 - 119
sec-Butylbenzene	25.0	26.3		ug/L		105	78 - 118
tert-Butylbenzene	25.0	25.5		ug/L		102	78 - 118
Carbon disulfide	25.0	24.2		ug/L		97	64 - 127
Carbon tetrachloride	25.0	26.2		ug/L		105	72 - 142
Chlorobenzene	25.0	24.5		ug/L		98	76 - 116
Chloroethane	25.0	24.0		ug/L		96	70 - 131
Chloroform	25.0	24.3		ug/L		97	82 - 119
Chloromethane	25.0	23.8		ug/L		95	49 - 134
2-Chlorotoluene	25.0	24.3		ug/L		97	75 - 115
4-Chlorotoluene	25.0	24.5		ug/L		98	73 - 119
Chlorodibromomethane	25.0	25.3		ug/L		101	77 - 133
1,2-Dichlorobenzene	25.0	24.1		ug/L		97	77 - 117
1,3-Dichlorobenzene	25.0	24.2		ug/L		97	76 - 116
1,4-Dichlorobenzene	25.0	24.3		ug/L		97	76 - 116
1,3-Dichloropropane	25.0	24.5		ug/L		98	77 - 117
1,1-Dichloropropene	25.0	25.7		ug/L		103	83 - 130
1,2-Dibromo-3-Chloropropane	25.0	28.9		ug/L		116	74 - 126
Ethylene Dibromide	25.0	25.0		ug/L		100	80 - 121
Dibromomethane	25.0	25.6		ug/L		103	79 - 117
Dichlorodifluoromethane	25.0	20.8		ug/L		83	21 - 150
1,1-Dichloroethane	25.0	24.4		ug/L		98	77 - 119
1,2-Dichloroethane	25.0	24.2		ug/L		97	73 - 122
1,1-Dichloroethene	25.0	25.3		ug/L		101	69 - 119
cis-1,2-Dichloroethene	25.0	24.1		ug/L		96	77 - 117
trans-1,2-Dichloroethene	25.0	24.3		ug/L		97	79 - 117
1,2-Dichloropropane	25.0	23.8		ug/L		95	79 - 119
cis-1,3-Dichloropropene	25.0	24.4		ug/L		98	82 - 119
trans-1,3-Dichloropropene	25.0	25.2		ug/L		101	76 - 122
Ethylbenzene	25.0	24.8		ug/L		99	77 - 117
Hexachlorobutadiene	25.0	25.8		ug/L		103	78 - 140
2-Hexanone	125	132		ug/L		106	63 - 140
Isopropylbenzene	25.0	25.8		ug/L		103	77 - 130
4-Isopropyltoluene	25.0	25.6		ug/L		102	80 - 120
Methylene Chloride	25.0	21.8		ug/L		87	75 - 117
4-Methyl-2-pentanone (MIBK)	125	135		ug/L		108	66 - 140
Naphthalene	25.0	26.1		ug/L		104	81 - 121
N-Propylbenzene	25.0	25.5		ug/L		102	77 - 117
Styrene	25.0	25.0		ug/L		100	76 - 116
1,1,1,2-Tetrachloroethane	25.0	24.8		ug/L		99	81 - 121
1,1,2,2-Tetrachloroethane	25.0	25.1		ug/L		100	70 - 115
Tetrachloroethene	25.0	25.5		ug/L		102	81 - 130
Toluene	25.0	24.7		ug/L		99	75 - 120
1,2,3-Trichlorobenzene	25.0	24.8		ug/L		99	87 - 123
1,2,4-Trichlorobenzene	25.0	24.5		ug/L		98	78 - 120

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: LCS 720-275590/5
Matrix: Water
Analysis Batch: 275590

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	25.0	25.6		ug/L		103	74 - 130
1,1,2-Trichloroethane	25.0	24.2		ug/L		97	80 - 117
Trichloroethene	25.0	25.4		ug/L		101	80 - 123
Trichlorofluoromethane	25.0	25.5		ug/L		102	75 - 141
1,2,3-Trichloropropane	25.0	27.0		ug/L		108	77 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	26.0		ug/L		104	70 - 133
1,2,4-Trimethylbenzene	25.0	25.1		ug/L		100	75 - 115
1,3,5-Trimethylbenzene	25.0	25.2		ug/L		101	77 - 117
Vinyl acetate	25.0	25.3		ug/L		101	50 - 126
Vinyl chloride	25.0	24.5		ug/L		98	58 - 138
m-Xylene & p-Xylene	25.0	24.8		ug/L		99	74 - 119
o-Xylene	25.0	24.7		ug/L		99	77 - 118
2,2-Dichloropropane	25.0	28.3		ug/L		113	74 - 156

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*67 - 130*
1,2-Dichloroethane-d4 (Surr)	*97*		*72 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

Lab Sample ID: LCS 720-275590/7
Matrix: Water
Analysis Batch: 275590

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C4-C12	500	530		ug/L		106	77 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*67 - 130*
1,2-Dichloroethane-d4 (Surr)	*103*		*72 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

Lab Sample ID: LCSD 720-275590/6
Matrix: Water
Analysis Batch: 275590

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	25.0	23.9		ug/L		96	70 - 130	2	20
Acetone	125	125		ug/L		100	61 - 147	5	30
Benzene	25.0	23.5		ug/L		94	79 - 119	2	20
Dichlorobromomethane	25.0	24.0		ug/L		96	81 - 130	1	20
Bromobenzene	25.0	24.4		ug/L		98	77 - 117	1	20
Chlorobromomethane	25.0	24.7		ug/L		99	81 - 122	1	20
Bromoform	25.0	23.7		ug/L		95	75 - 127	5	20
Bromomethane	25.0	22.8		ug/L		91	70 - 132	6	20
2-Butanone (MEK)	125	126		ug/L		101	66 - 133	5	22
n-Butylbenzene	25.0	24.9		ug/L		99	78 - 119	3	20
sec-Butylbenzene	25.0	25.4		ug/L		102	78 - 118	4	20

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: LCSD 720-275590/6
Matrix: Water
Analysis Batch: 275590

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
tert-Butylbenzene	25.0	25.0		ug/L		100	78 - 118	2	20
Carbon disulfide	25.0	23.1		ug/L		92	64 - 127	5	20
Carbon tetrachloride	25.0	25.2		ug/L		101	72 - 142	4	20
Chlorobenzene	25.0	23.6		ug/L		94	76 - 116	4	20
Chloroethane	25.0	22.6		ug/L		90	70 - 131	6	20
Chloroform	25.0	23.9		ug/L		95	82 - 119	2	20
Chloromethane	25.0	21.9		ug/L		88	49 - 134	8	20
2-Chlorotoluene	25.0	24.1		ug/L		97	75 - 115	1	20
4-Chlorotoluene	25.0	24.3		ug/L		97	73 - 119	1	20
Chlorodibromomethane	25.0	24.9		ug/L		99	77 - 133	2	20
1,2-Dichlorobenzene	25.0	23.9		ug/L		96	77 - 117	1	20
1,3-Dichlorobenzene	25.0	24.1		ug/L		96	76 - 116	0	20
1,4-Dichlorobenzene	25.0	24.0		ug/L		96	76 - 116	1	20
1,3-Dichloropropane	25.0	23.7		ug/L		95	77 - 117	3	20
1,1-Dichloropropene	25.0	24.7		ug/L		99	83 - 130	4	20
1,2-Dibromo-3-Chloropropane	25.0	26.1		ug/L		105	74 - 126	10	20
Ethylene Dibromide	25.0	24.4		ug/L		98	80 - 121	2	20
Dibromomethane	25.0	25.0		ug/L		100	79 - 117	2	20
Dichlorodifluoromethane	25.0	18.8		ug/L		75	21 - 150	10	20
1,1-Dichloroethane	25.0	23.8		ug/L		95	77 - 119	2	20
1,2-Dichloroethane	25.0	24.0		ug/L		96	73 - 122	1	20
1,1-Dichloroethene	25.0	24.0		ug/L		96	69 - 119	5	20
cis-1,2-Dichloroethene	25.0	23.5		ug/L		94	77 - 117	3	20
trans-1,2-Dichloroethene	25.0	24.0		ug/L		96	79 - 117	1	20
1,2-Dichloropropane	25.0	24.0		ug/L		96	79 - 119	1	20
cis-1,3-Dichloropropene	25.0	24.2		ug/L		97	82 - 119	1	20
trans-1,3-Dichloropropene	25.0	24.8		ug/L		99	76 - 122	2	20
Ethylbenzene	25.0	23.9		ug/L		96	77 - 117	4	20
Hexachlorobutadiene	25.0	24.5		ug/L		98	78 - 140	5	20
2-Hexanone	125	126		ug/L		101	63 - 140	4	24
Isopropylbenzene	25.0	24.7		ug/L		99	77 - 130	5	20
4-Isopropyltoluene	25.0	25.1		ug/L		100	80 - 120	2	20
Methylene Chloride	25.0	21.2		ug/L		85	75 - 117	3	20
4-Methyl-2-pentanone (MIBK)	125	128		ug/L		103	66 - 140	5	21
Naphthalene	25.0	25.0		ug/L		100	81 - 121	4	20
N-Propylbenzene	25.0	25.0		ug/L		100	77 - 117	2	20
Styrene	25.0	24.6		ug/L		99	76 - 116	1	20
1,1,1,2-Tetrachloroethane	25.0	24.2		ug/L		97	81 - 121	3	20
1,1,2,2-Tetrachloroethane	25.0	24.6		ug/L		98	70 - 115	2	20
Tetrachloroethene	25.0	24.8		ug/L		99	81 - 130	3	20
Toluene	25.0	23.8		ug/L		95	75 - 120	3	20
1,2,3-Trichlorobenzene	25.0	24.6		ug/L		98	87 - 123	1	20
1,2,4-Trichlorobenzene	25.0	24.4		ug/L		98	78 - 120	0	20
1,1,1-Trichloroethane	25.0	25.1		ug/L		100	74 - 130	2	20
1,1,2-Trichloroethane	25.0	24.0		ug/L		96	80 - 117	1	20
Trichloroethene	25.0	24.8		ug/L		99	80 - 123	2	20
Trichlorofluoromethane	25.0	24.1		ug/L		96	75 - 141	6	20
1,2,3-Trichloropropane	25.0	26.1		ug/L		104	77 - 120	3	20

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: LCSD 720-275590/6
Matrix: Water
Analysis Batch: 275590

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,2-Trichloro-1,2,2-trifluoroethane			25.0	24.4		ug/L		98	70 - 133	6	20
1,2,4-Trimethylbenzene			25.0	24.8		ug/L		99	75 - 115	1	20
1,3,5-Trimethylbenzene			25.0	25.2		ug/L		101	77 - 117	0	20
Vinyl acetate			25.0	24.4		ug/L		98	50 - 126	4	20
Vinyl chloride			25.0	22.8		ug/L		91	58 - 138	7	20
m-Xylene & p-Xylene			25.0	23.8		ug/L		95	74 - 119	4	20
o-Xylene			25.0	23.8		ug/L		95	77 - 118	4	20
2,2-Dichloropropane			25.0	26.8		ug/L		107	74 - 156	5	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*96*		*67 - 130*
1,2-Dichloroethane-d4 (Surr)	*95*		*72 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

Lab Sample ID: LCSD 720-275590/8
Matrix: Water
Analysis Batch: 275590

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C4-C12			500	547		ug/L		109	77 - 130	3	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*67 - 130*
1,2-Dichloroethane-d4 (Surr)	*100*		*72 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 720-275446/1-A
Matrix: Solid
Analysis Batch: 275577

Client Sample ID: Method Blank
Prep Type: Silica Gel Cleanup
Prep Batch: 275446

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		2.0		mg/Kg		10/31/19 10:04	11/02/19 23:19	1
Motor Oil Range Organics [C24-C36]	ND		50		mg/Kg		10/31/19 10:04	11/02/19 23:19	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*104*		*38 - 148*	*10/31/19 10:04*	*11/02/19 23:19*	*1*

Lab Sample ID: LCS 720-275446/2-A
Matrix: Solid
Analysis Batch: 275577

Client Sample ID: Lab Control Sample
Prep Type: Silica Gel Cleanup
Prep Batch: 275446

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]			167	119		mg/Kg		71	36 - 112

Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCS 720-275446/2-A
Matrix: Solid
Analysis Batch: 275577

Client Sample ID: Lab Control Sample
Prep Type: Silica Gel Cleanup
Prep Batch: 275446

Surrogate	LCS %Recovery	LCS Qualifier	Limits
p-Terphenyl	102		38 - 148

Lab Sample ID: MB 720-275468/1-A
Matrix: Water
Analysis Batch: 275577

Client Sample ID: Method Blank
Prep Type: Silica Gel Cleanup
Prep Batch: 275468

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		50		ug/L		10/31/19 14:14	11/02/19 14:03	1
Motor Oil Range Organics [C24-C36]	ND		100		ug/L		10/31/19 14:14	11/02/19 14:03	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl	79		31 - 150	10/31/19 14:14	11/02/19 14:03	1

Lab Sample ID: LCS 720-275468/2-A
Matrix: Water
Analysis Batch: 275577

Client Sample ID: Lab Control Sample
Prep Type: Silica Gel Cleanup
Prep Batch: 275468

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics [C10-C28]			2500	1860		ug/L		74	32 - 119		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
p-Terphenyl	93		31 - 150

Lab Sample ID: LCSD 720-275468/3-A
Matrix: Water
Analysis Batch: 275577

Client Sample ID: Lab Control Sample Dup
Prep Type: Silica Gel Cleanup
Prep Batch: 275468

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]			2500	1770		ug/L		71	32 - 119	5	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
p-Terphenyl	97		31 - 150

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 720-275345/1-A
Matrix: Solid
Analysis Batch: 275549

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 275345

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.50		mg/Kg		10/30/19 09:42	10/31/19 10:53	1
Arsenic	ND		1.0		mg/Kg		10/30/19 09:42	10/31/19 10:53	1
Barium	ND		0.50		mg/Kg		10/30/19 09:42	10/31/19 10:53	1
Beryllium	ND		0.10		mg/Kg		10/30/19 09:42	10/31/19 10:53	1
Cadmium	ND		0.13		mg/Kg		10/30/19 09:42	10/31/19 10:53	1
Chromium	ND		0.50		mg/Kg		10/30/19 09:42	10/31/19 10:53	1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: MB 720-275345/1-A
Matrix: Solid
Analysis Batch: 275549

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 275345

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	ND		0.20		mg/Kg		10/30/19 09:42	10/31/19 10:53	1
Copper	ND		1.5		mg/Kg		10/30/19 09:42	10/31/19 10:53	1
Lead	ND		0.50		mg/Kg		10/30/19 09:42	10/31/19 10:53	1
Molybdenum	ND		0.50		mg/Kg		10/30/19 09:42	10/31/19 10:53	1
Nickel	ND		0.50		mg/Kg		10/30/19 09:42	10/31/19 10:53	1
Selenium	ND		1.0		mg/Kg		10/30/19 09:42	10/31/19 10:53	1
Silver	ND		0.25		mg/Kg		10/30/19 09:42	10/31/19 10:53	1
Thallium	ND		0.50		mg/Kg		10/30/19 09:42	10/31/19 10:53	1
Vanadium	ND		0.50		mg/Kg		10/30/19 09:42	10/31/19 10:53	1
Zinc	ND	^	1.5		mg/Kg		10/30/19 09:42	10/31/19 10:53	1

Lab Sample ID: LCS 720-275345/2-A
Matrix: Solid
Analysis Batch: 275549

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 275345

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	50.1		mg/Kg		100	80 - 120
Arsenic	50.0	48.8		mg/Kg		98	80 - 120
Barium	50.0	52.3		mg/Kg		105	80 - 120
Beryllium	50.0	53.0		mg/Kg		106	80 - 120
Cadmium	50.0	50.2		mg/Kg		100	80 - 120
Chromium	50.0	49.5		mg/Kg		99	80 - 120
Cobalt	50.0	51.5		mg/Kg		103	80 - 120
Copper	50.0	50.6		mg/Kg		101	80 - 120
Lead	50.0	49.4		mg/Kg		99	80 - 120
Molybdenum	50.0	50.5		mg/Kg		101	80 - 120
Nickel	50.0	49.1		mg/Kg		98	80 - 120
Selenium	50.0	49.7		mg/Kg		99	80 - 120
Silver	25.0	22.9		mg/Kg		91	80 - 120
Thallium	50.0	51.0		mg/Kg		102	80 - 120
Vanadium	50.0	52.9		mg/Kg		106	80 - 120
Zinc	50.0	52.6	^	mg/Kg		105	80 - 120

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 720-275470/1-A
Matrix: Solid
Analysis Batch: 275841

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 275470

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.017		mg/Kg		10/31/19 14:38	11/06/19 17:48	1

Lab Sample ID: LCS 720-275470/2-A
Matrix: Solid
Analysis Batch: 275841

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 275470

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.833	0.827		mg/Kg		99	80 - 120

GC/MS VOA

Prep Batch: 275425

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-275425/1-A	Method Blank	Total/NA	Solid	5030B	
LCS 720-275425/4-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 720-275425/5-A	Lab Control Sample Dup	Total/NA	Solid	5030B	

Prep Batch: 275467

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-95778-1	SB-1-SS-2.5	Total/NA	Solid	5035	
720-95778-2	SB-1-SS-5.0	Total/NA	Solid	5035	
720-95778-3	SB-2-SS-4.0	Total/NA	Solid	5035	
720-95778-4	SB-2-SS-8.0	Total/NA	Solid	5035	

Analysis Batch: 275487

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-95778-1	SB-1-SS-2.5	Total/NA	Solid	8260B/CA_LUFT MS	275467
720-95778-2	SB-1-SS-5.0	Total/NA	Solid	8260B/CA_LUFT MS	275467
720-95778-3	SB-2-SS-4.0	Total/NA	Solid	8260B/CA_LUFT MS	275467
720-95778-4	SB-2-SS-8.0	Total/NA	Solid	8260B/CA_LUFT MS	275467
MB 720-275487/8	Method Blank	Total/NA	Solid	8260B/CA_LUFT MS	
LCS 720-275487/4	Lab Control Sample	Total/NA	Solid	8260B/CA_LUFT MS	
LCS 720-275487/6	Lab Control Sample	Total/NA	Solid	8260B/CA_LUFT MS	
LCSD 720-275487/5	Lab Control Sample Dup	Total/NA	Solid	8260B/CA_LUFT MS	
LCSD 720-275487/7	Lab Control Sample Dup	Total/NA	Solid	8260B/CA_LUFT MS	

Analysis Batch: 275501

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-95778-4	SB-2-SS-8.0	Total/NA	Solid	8260B/CA_LUFT MS	275535
MB 720-275425/1-A	Method Blank	Total/NA	Solid	8260B/CA_LUFT MS	275425
LCS 720-275425/4-A	Lab Control Sample	Total/NA	Solid	8260B/CA_LUFT MS	275425
LCSD 720-275425/5-A	Lab Control Sample Dup	Total/NA	Solid	8260B/CA_LUFT MS	275425

Prep Batch: 275535

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-95778-4	SB-2-SS-8.0	Total/NA	Solid	5035	

Analysis Batch: 275559

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-95778-6	SB-2-GW-10.5	Total/NA	Water	8260B/CA_LUFT MS	
MB 720-275559/9	Method Blank	Total/NA	Water	8260B/CA_LUFT MS	
LCS 720-275559/4	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	

GC/MS VOA (Continued)

Analysis Batch: 275559 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 720-275559/6	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
LCSD 720-275559/5	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	
LCSD 720-275559/7	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	

Analysis Batch: 275589

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-95778-6	SB-2-GW-10.5	Total/NA	Water	8260B/CA_LUFT MS	
MB 720-275589/4	Method Blank	Total/NA	Water	8260B/CA_LUFT MS	
LCS 720-275589/7	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
LCSD 720-275589/8	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	

Analysis Batch: 275590

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-95778-5	SB-1-GW-9.0	Total/NA	Water	8260B/CA_LUFT MS	
MB 720-275590/4	Method Blank	Total/NA	Water	8260B/CA_LUFT MS	
LCS 720-275590/5	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
LCS 720-275590/7	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
LCSD 720-275590/6	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	
LCSD 720-275590/8	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	

GC Semi VOA

Prep Batch: 275446

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-95778-1	SB-1-SS-2.5	Silica Gel Cleanup	Solid	3546	
720-95778-2	SB-1-SS-5.0	Silica Gel Cleanup	Solid	3546	
720-95778-3	SB-2-SS-4.0	Silica Gel Cleanup	Solid	3546	
720-95778-4	SB-2-SS-8.0	Silica Gel Cleanup	Solid	3546	
MB 720-275446/1-A	Method Blank	Silica Gel Cleanup	Solid	3546	
LCS 720-275446/2-A	Lab Control Sample	Silica Gel Cleanup	Solid	3546	

Prep Batch: 275468

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-95778-5	SB-1-GW-9.0	Silica Gel Cleanup	Water	3510C SGC	
720-95778-6	SB-2-GW-10.5	Silica Gel Cleanup	Water	3510C SGC	
MB 720-275468/1-A	Method Blank	Silica Gel Cleanup	Water	3510C SGC	
LCS 720-275468/2-A	Lab Control Sample	Silica Gel Cleanup	Water	3510C SGC	
LCSD 720-275468/3-A	Lab Control Sample Dup	Silica Gel Cleanup	Water	3510C SGC	

Analysis Batch: 275577

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-95778-5	SB-1-GW-9.0	Silica Gel Cleanup	Water	8015B	275468

GC Semi VOA (Continued)

Analysis Batch: 275577 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-95778-6	SB-2-GW-10.5	Silica Gel Cleanup	Water	8015B	275468
MB 720-275446/1-A	Method Blank	Silica Gel Cleanup	Solid	8015B	275446
MB 720-275468/1-A	Method Blank	Silica Gel Cleanup	Water	8015B	275468
LCS 720-275446/2-A	Lab Control Sample	Silica Gel Cleanup	Solid	8015B	275446
LCS 720-275468/2-A	Lab Control Sample	Silica Gel Cleanup	Water	8015B	275468
LCSD 720-275468/3-A	Lab Control Sample Dup	Silica Gel Cleanup	Water	8015B	275468

Analysis Batch: 275578

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-95778-1	SB-1-SS-2.5	Silica Gel Cleanup	Solid	8015B	275446
720-95778-2	SB-1-SS-5.0	Silica Gel Cleanup	Solid	8015B	275446
720-95778-3	SB-2-SS-4.0	Silica Gel Cleanup	Solid	8015B	275446
720-95778-4	SB-2-SS-8.0	Silica Gel Cleanup	Solid	8015B	275446

Metals

Prep Batch: 275345

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-95778-1	SB-1-SS-2.5	Total/NA	Solid	3050B	
720-95778-2	SB-1-SS-5.0	Total/NA	Solid	3050B	
720-95778-3	SB-2-SS-4.0	Total/NA	Solid	3050B	
720-95778-4	SB-2-SS-8.0	Total/NA	Solid	3050B	
MB 720-275345/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 720-275345/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Prep Batch: 275470

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-95778-1	SB-1-SS-2.5	Total/NA	Solid	7471A	
720-95778-2	SB-1-SS-5.0	Total/NA	Solid	7471A	
720-95778-3	SB-2-SS-4.0	Total/NA	Solid	7471A	
720-95778-4	SB-2-SS-8.0	Total/NA	Solid	7471A	
MB 720-275470/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 720-275470/2-A	Lab Control Sample	Total/NA	Solid	7471A	

Analysis Batch: 275530

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-95778-1	SB-1-SS-2.5	Total/NA	Solid	6010B	275345
720-95778-2	SB-1-SS-5.0	Total/NA	Solid	6010B	275345
720-95778-3	SB-2-SS-4.0	Total/NA	Solid	6010B	275345
720-95778-4	SB-2-SS-8.0	Total/NA	Solid	6010B	275345

Analysis Batch: 275549

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-275345/1-A	Method Blank	Total/NA	Solid	6010B	275345
LCS 720-275345/2-A	Lab Control Sample	Total/NA	Solid	6010B	275345

Analysis Batch: 275841

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-95778-1	SB-1-SS-2.5	Total/NA	Solid	7471A	275470
720-95778-2	SB-1-SS-5.0	Total/NA	Solid	7471A	275470
720-95778-3	SB-2-SS-4.0	Total/NA	Solid	7471A	275470

Metals (Continued)

Analysis Batch: 275841 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-95778-4	SB-2-SS-8.0	Total/NA	Solid	7471A	275470
MB 720-275470/1-A	Method Blank	Total/NA	Solid	7471A	275470
LCS 720-275470/2-A	Lab Control Sample	Total/NA	Solid	7471A	275470

Lab Chronicle

Client: Haley & Aldrich, Inc.
Project/Site: SCVTA Phase II Eastridge

Job ID: 720-95778-1

Client Sample ID: SB-1-SS-2.5

Lab Sample ID: 720-95778-1

Date Collected: 10/25/19 09:30
Matrix: Solid
Date Received: 10/28/19 13:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			275467	10/28/19 15:00	AJS	TAL PLS
Total/NA	Analysis	8260B/CA_LUFTMS		1	275487	10/31/19 21:57	JRM	TAL PLS
Silica Gel Cleanup	Prep	3546			275446	10/31/19 10:38	BMA	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	275578	11/02/19 22:50	JXL	TAL PLS
Total/NA	Prep	3050B			275345	10/30/19 09:42	JAM	TAL PLS
Total/NA	Analysis	6010B		4	275530	11/01/19 09:56	BKR	TAL PLS
Total/NA	Prep	7471A			275470	10/31/19 14:38	MAG	TAL PLS
Total/NA	Analysis	7471A		1	275841	11/06/19 17:29	MAG	TAL PLS

Client Sample ID: SB-1-SS-5.0

Lab Sample ID: 720-95778-2

Date Collected: 10/25/19 09:45
Matrix: Solid
Date Received: 10/28/19 13:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			275467	10/28/19 15:00	AJS	TAL PLS
Total/NA	Analysis	8260B/CA_LUFTMS		1	275487	10/31/19 22:26	JRM	TAL PLS
Silica Gel Cleanup	Prep	3546			275446	10/31/19 10:38	BMA	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	275578	11/02/19 23:19	JXL	TAL PLS
Total/NA	Prep	3050B			275345	10/30/19 09:42	JAM	TAL PLS
Total/NA	Analysis	6010B		4	275530	11/01/19 10:00	BKR	TAL PLS
Total/NA	Prep	7471A			275470	10/31/19 14:38	MAG	TAL PLS
Total/NA	Analysis	7471A		1	275841	11/06/19 16:17	MAG	TAL PLS

Client Sample ID: SB-2-SS-4.0

Lab Sample ID: 720-95778-3

Date Collected: 10/25/19 12:20
Matrix: Solid
Date Received: 10/28/19 13:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			275467	10/28/19 15:00	AJS	TAL PLS
Total/NA	Analysis	8260B/CA_LUFTMS		1	275487	10/31/19 22:55	JRM	TAL PLS
Silica Gel Cleanup	Prep	3546			275446	10/31/19 10:38	BMA	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	275578	11/02/19 23:48	JXL	TAL PLS
Total/NA	Prep	3050B			275345	10/30/19 09:42	JAM	TAL PLS
Total/NA	Analysis	6010B		4	275530	11/01/19 10:05	BKR	TAL PLS
Total/NA	Prep	7471A			275470	10/31/19 14:38	MAG	TAL PLS
Total/NA	Analysis	7471A		1	275841	11/06/19 16:18	MAG	TAL PLS

Client Sample ID: SB-2-SS-8.0

Lab Sample ID: 720-95778-4

Date Collected: 10/25/19 12:25
Matrix: Solid
Date Received: 10/28/19 13:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			275467	10/28/19 15:00	AJS	TAL PLS
Total/NA	Analysis	8260B/CA_LUFTMS		1	275487	10/31/19 23:23	JRM	TAL PLS

Lab Chronicle

Client: Haley & Aldrich, Inc.
Project/Site: SCVTA Phase II Eastridge

Job ID: 720-95778-1

Client Sample ID: SB-2-SS-8.0

Lab Sample ID: 720-95778-4

Date Collected: 10/25/19 12:25
Matrix: Solid
Date Received: 10/28/19 13:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			275535	10/28/19 15:00	AJS	TAL PLS
Total/NA	Analysis	8260B/CA_LUFTMS		1	275501	11/01/19 15:45	JRM	TAL PLS
Silica Gel Cleanup	Prep	3546			275446	10/31/19 10:38	BMA	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	275578	11/03/19 00:17	JXL	TAL PLS
Total/NA	Prep	3050B			275345	10/30/19 09:42	JAM	TAL PLS
Total/NA	Analysis	6010B		4	275530	11/01/19 10:10	BKR	TAL PLS
Total/NA	Prep	7471A			275470	10/31/19 14:38	MAG	TAL PLS
Total/NA	Analysis	7471A		1	275841	11/06/19 16:20	MAG	TAL PLS

Client Sample ID: SB-1-GW-9.0

Lab Sample ID: 720-95778-5

Date Collected: 10/25/19 09:26
Matrix: Water
Date Received: 10/28/19 13:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		10	275590	11/04/19 13:19	AJS	TAL PLS
Silica Gel Cleanup	Prep	3510C SGC			275468	10/31/19 14:14	BRR	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	275577	11/02/19 15:31	JXL	TAL PLS

Client Sample ID: SB-2-GW-10.5

Lab Sample ID: 720-95778-6

Date Collected: 10/25/19 10:30
Matrix: Water
Date Received: 10/28/19 13:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		10	275589	11/04/19 15:47	AJS	TAL PLS
Total/NA	Analysis	8260B/CA_LUFTMS		10	275559	11/02/19 04:34	A1C	TAL PLS
Silica Gel Cleanup	Prep	3510C SGC			275468	10/31/19 14:14	BRR	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	275577	11/02/19 16:00	JXL	TAL PLS

Laboratory References:

TAL PLS = Eurofins TestAmerica, Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Accreditation/Certification Summary

Client: Haley & Aldrich, Inc. Job ID: 720-95778-1
Project/Site: SCVTA Phase II Eastridge

Laboratory: Eurofins TestAmerica, Pleasanton

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
California	State Program	2496	01-31-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte

Method Summary

Client: Haley & Aldrich, Inc.
Project/Site: SCVTA Phase II Eastridge

Job ID: 720-95778-1

Method	Method Description	Protocol	Laboratory
8260B/CA_LUFTMS	8260B / CA LUFT MS	SW846	TAL PLS
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL PLS
6010B	Metals (ICP)	SW846	TAL PLS
7471A	Mercury (CVAA)	SW846	TAL PLS
3050B	Preparation, Metals	SW846	TAL PLS
3510C SGC	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL PLS
3546	Microwave Extraction	SW846	TAL PLS
5030B	Purge and Trap	SW846	TAL PLS
5035	Closed System Purge and Trap	SW846	TAL PLS
7471A	Preparation, Mercury	SW846	TAL PLS

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PLS = Eurofins TestAmerica, Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Sample Summary

Client: Haley & Aldrich, Inc.
Project/Site: SCVTA Phase II Eastridge

Job ID: 720-95778-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
720-95778-1	SB-1-SS-2.5	Solid	10/25/19 09:30	10/28/19 13:40	
720-95778-2	SB-1-SS-5.0	Solid	10/25/19 09:45	10/28/19 13:40	
720-95778-3	SB-2-SS-4.0	Solid	10/25/19 12:20	10/28/19 13:40	
720-95778-4	SB-2-SS-8.0	Solid	10/25/19 12:25	10/28/19 13:40	
720-95778-5	SB-1-GW-9.0	Water	10/25/19 09:26	10/28/19 13:40	
720-95778-6	SB-2-GW-10.5	Water	10/25/19 10:30	10/28/19 13:40	

TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566-4756
phone 925.484.1919 fax 925.600.3002

Chain of Custody Record for
Haley & Aldrich, Inc. Blanket Service Agreement #2019-22-TestAmerica

720-95778

#193100

eurofins | Environment Testing

TestAmerica Laboratories, Inc.

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☑ Other:

TestAmerica's services under this CoC shall be performed in accordance with the T&Cs within Blanket Service Agreement# 2019-22-TestAmerica by and between Haley & Aldrich, Inc., its subsidiaries and affiliates, and TestAmerica Laboratories Inc..

Client Contact	H&A Project Manager: J. Boyer	H&A Site Contact: R. Cox	Date: 10/25/2019	COC No:
Haley & Aldrich, Inc.	Tel/Fax: (408) 961-4808	Lab Contact: M. Smith	Carrier:	___1___ of ___1___ COCs
2107 N. 1st. St., Suite 380	**Analysis Turnaround Time**			Sampler: R. Cox
San Jose/CA/95131	☐ CALENDAR DAYS ☑ WORKING DAYS			**For Lab Use Only:**
(408) 961-4808 Phone	TAT if different from Below _____			Walk-in Client:
(408) 453-8708 FAX	☐ 2 weeks			Lab Sampling:
H&A Project Number : 129899-014	☑ 1 week			
Site: SCVTA Phase II Eastridge	☐ 2 days			Job / SDG No.:
H&A P O # 129899-014 SID 3	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	VOCs & TPH-g 8260B	TPH-d/mo 3510/8015M silica gel cleanu	CAM 17 Metals 6010B and 7470/7471	Sample Specific Notes:
SB-1-SS-2.5	10/25/2019	9:30	G	S	4			X	X	X	
SB-1-SS-5.0	10/25/2019	09:45	G	S	4			X	X	X	
SB-2-SS-4.0	10/25/2019	12:20	G	S	4			X	X	X	
SB-2-SS-8.0	10/25/2019	12:25	G	S	4			X	X	X	
SB-1-GW-9.0	10/25/2019	9:26	G	W	6			X	X		
SB-2-GW-10.5	10/25/2019	10:30	G	W	6			X	X		

720-95778 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return to Client ☑ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:
CC RESULTS TO: RCOX@HALEYALDRICH.COM & JGODARD@HALEYALDRICH.COM

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:		Cooler Temp. (°C): Obs'd: _____ Corr'd: _____		Therm ID No.: _____
Relinquished by: Roger Cox Ryan Cox	Company: H&A	Date/Time: 10-28-19 11:06	Received by:	Company: EMPCS	Date/Time: 10/28/19 1106
Relinquished by:	Company: EMPCS	Date/Time: 10/28/19 1340	Received by: Joseph Hurley	Company: EMPCS	Date/Time: 10-28-19 1340
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

2.5C

Login Sample Receipt Checklist

Client: Haley & Aldrich, Inc.

Job Number: 720-95778-1

Login Number: 95778
List Number: 1
Creator: Mullen, Joan

List Source: Eurofins TestAmerica, Pleasanton

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	False	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	False	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

eurofins | Environment Testing TestAmerica

ANALYTICAL REPORT

Eurofins TestAmerica, Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Tel: (925)484-1919

Laboratory Job ID: 720-95778-2
Client Project/Site: SCVTA Phase II Eastridge

For:
Haley & Aldrich, Inc.
2107 N. 1st Street
Suite 380
San Jose, California 95131-2028

Attn: Roger Cox

Authorized for release by:
11/27/2019 11:30:05 AM

Micah Smith, Project Manager II
(925)484-1919
micah.smith@testamericainc.com

Table of Contents

Definitions/Glossary

Client: Haley & Aldrich, Inc.
Project/Site: SCVTA Phase II Eastridge

Job ID: 720-95778-2

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: Haley & Aldrich, Inc.
Project/Site: SCVTA Phase II Eastridge

Job ID: 720-95778-2

Job ID: 720-95778-2

Laboratory: Eurofins TestAmerica, Pleasanton

Narrative

Job Narrative
720-95778-2

Comments
No additional comments.

Receipt
The samples were received on 10/28/2019 1:40 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.5º C.

HPLC/IC
Method 7199: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 570-34997 and analytical batch 570-34950 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: Haley & Aldrich, Inc.
Project/Site: SCVTA Phase II Eastridge

Job ID: 720-95778-2

Client Sample ID: SB-1-SS-2.5 — Lab Sample ID: 720-95778-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium, hexavalent	530	F1	400		ug/Kg	10		7199	Total/NA

Client Sample ID: SB-1-SS-5.0 — Lab Sample ID: 720-95778-2

No Detections.

Client Sample ID: SB-2-SS-8.0 — Lab Sample ID: 720-95778-4

No Detections.

This Detection Summary does not include radiochemical test results.

Client: Haley & Aldrich, Inc.
Project/Site: SCVTA Phase II Eastridge

Job ID: 720-95778-2

Client Sample ID: SB-1-SS-2.5
Date Collected: 10/25/19 09:30
Date Received: 10/28/19 13:40

Lab Sample ID: 720-95778-1
Matrix: Solid

Method: 7199 - Chromium, Hexavalent (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	530	F1	400		ug/Kg		11/23/19 15:44	11/23/19 18:17	10

Client Sample Results

Client: Haley & Aldrich, Inc.
Project/Site: SCVTA Phase II Eastridge

Job ID: 720-95778-2

Client Sample ID: SB-1-SS-5.0
Date Collected: 10/25/19 09:45
Date Received: 10/28/19 13:40

Lab Sample ID: 720-95778-2
Matrix: Solid

Method: 7199 - Chromium, Hexavalent (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		400		ug/Kg		11/23/19 15:44	11/23/19 18:26	10

Client: Haley & Aldrich, Inc.
Project/Site: SCVTA Phase II Eastridge

Job ID: 720-95778-2

Client Sample ID: SB-2-SS-8.0
Date Collected: 10/25/19 12:25
Date Received: 10/28/19 13:40

Lab Sample ID: 720-95778-4
Matrix: Solid

Method: 7199 - Chromium, Hexavalent (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		400		ug/Kg		11/23/19 15:44	11/23/19 18:35	10

Method: 7199 - Chromium, Hexavalent (IC)

Lab Sample ID: MB 570-34997/1-A
Matrix: Solid
Analysis Batch: 34950

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 34997

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		400		ug/Kg		11/23/19 15:44	11/23/19 17:14	10

Lab Sample ID: LCS 570-34997/2-A
Matrix: Solid
Analysis Batch: 34950

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 34997

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium, hexavalent	20000	18900		ug/Kg		95	80 - 120

Lab Sample ID: LCSD 570-34997/3-A
Matrix: Solid
Analysis Batch: 34950

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 34997

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chromium, hexavalent	20000	19600		ug/Kg		98	80 - 120	4	20

Lab Sample ID: 720-95778-1 MS
Matrix: Solid
Analysis Batch: 34950

Client Sample ID: SB-1-SS-2.5
Prep Type: Total/NA
Prep Batch: 34997

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium, hexavalent	530	F1	20000	14600	F1	ug/Kg		71	75 - 125

Lab Sample ID: 720-95778-1 MSD
Matrix: Solid
Analysis Batch: 34950

Client Sample ID: SB-1-SS-2.5
Prep Type: Total/NA
Prep Batch: 34997

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chromium, hexavalent	530	F1	20000	12700	F1	ug/Kg		61	75 - 125	15	25

Lab Sample ID: 720-95778-1 MSI
Matrix: Solid
Analysis Batch: 34950

Client Sample ID: SB-1-SS-2.5
Prep Type: Total/NA
Prep Batch: 34997

Analyte	Sample Result	Sample Qualifier	Spike Added	MSI Result	MSI Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium, hexavalent	530	F1	980000	975000		ug/Kg		99	75 - 125

Lab Sample ID: 720-95778-1 MSID
Matrix: Solid
Analysis Batch: 34950

Client Sample ID: SB-1-SS-2.5
Prep Type: Total/NA
Prep Batch: 34997

Analyte	Sample Result	Sample Qualifier	Spike Added	MSID Result	MSID Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chromium, hexavalent	530	F1	986000	1030000		ug/Kg		104	75 - 125	5	25

QC Association Summary

Client: Haley & Aldrich, Inc.
Project/Site: SCVTA Phase II Eastridge

Job ID: 720-95778-2

HPLC/IC

Analysis Batch: 34950

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-95778-1	SB-1-SS-2.5	Total/NA	Solid	7199	34997
720-95778-2	SB-1-SS-5.0	Total/NA	Solid	7199	34997
720-95778-4	SB-2-SS-8.0	Total/NA	Solid	7199	34997
MB 570-34997/1-A	Method Blank	Total/NA	Solid	7199	34997
LCS 570-34997/2-A	Lab Control Sample	Total/NA	Solid	7199	34997
LCSD 570-34997/3-A	Lab Control Sample Dup	Total/NA	Solid	7199	34997
720-95778-1 MS	SB-1-SS-2.5	Total/NA	Solid	7199	34997
720-95778-1 MSD	SB-1-SS-2.5	Total/NA	Solid	7199	34997
720-95778-1 MSI	SB-1-SS-2.5	Total/NA	Solid	7199	34997
720-95778-1 MSID	SB-1-SS-2.5	Total/NA	Solid	7199	34997

Prep Batch: 34997

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-95778-1	SB-1-SS-2.5	Total/NA	Solid	3060A	
720-95778-2	SB-1-SS-5.0	Total/NA	Solid	3060A	
720-95778-4	SB-2-SS-8.0	Total/NA	Solid	3060A	
MB 570-34997/1-A	Method Blank	Total/NA	Solid	3060A	
LCS 570-34997/2-A	Lab Control Sample	Total/NA	Solid	3060A	
LCSD 570-34997/3-A	Lab Control Sample Dup	Total/NA	Solid	3060A	
720-95778-1 MS	SB-1-SS-2.5	Total/NA	Solid	3060A	
720-95778-1 MSD	SB-1-SS-2.5	Total/NA	Solid	3060A	
720-95778-1 MSI	SB-1-SS-2.5	Total/NA	Solid	3060A	
720-95778-1 MSID	SB-1-SS-2.5	Total/NA	Solid	3060A	

Lab Chronicle

Client: Haley & Aldrich, Inc.
Project/Site: SCVTA Phase II Eastridge

Job ID: 720-95778-2

Client Sample ID: SB-1-SS-2.5

Lab Sample ID: 720-95778-1

Date Collected: 10/25/19 09:30
Matrix: Solid
Date Received: 10/28/19 13:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3060A			34997	11/23/19 15:44	J7WE	ECL 1
Total/NA	Analysis	7199		10	34950	11/23/19 18:17	J7WE	ECL 1

Client Sample ID: SB-1-SS-5.0

Lab Sample ID: 720-95778-2

Date Collected: 10/25/19 09:45
Matrix: Solid
Date Received: 10/28/19 13:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3060A			34997	11/23/19 15:44	J7WE	ECL 1
Total/NA	Analysis	7199		10	34950	11/23/19 18:26	J7WE	ECL 1

Client Sample ID: SB-2-SS-8.0

Lab Sample ID: 720-95778-4

Date Collected: 10/25/19 12:25
Matrix: Solid
Date Received: 10/28/19 13:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3060A			34997	11/23/19 15:44	J7WE	ECL 1
Total/NA	Analysis	7199		10	34950	11/23/19 18:35	J7WE	ECL 1

Laboratory References:

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

Accreditation/Certification Summary

Client: Haley & Aldrich, Inc.
Job ID: 720-95778-2
Project/Site: SCVTA Phase II Eastridge

Laboratory: Eurofins TestAmerica, Pleasanton

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State Program	2496	01-31-20

Laboratory: Eurofins Calscience LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arizona	State	AZ0781	03-13-20
California	SCAQMD LAP	17LA0919	11-30-19
California	State	2944	09-29-20
Hawaii	State	<cert No.>	07-02-20
Nevada	State	CA00111	07-31-20
Oregon	NELAP	CA300001	01-29-20

Method Summary

Client: Haley & Aldrich, Inc.
Project/Site: SCVTA Phase II Eastridge

Job ID: 720-95778-2

Method	Method Description	Protocol	Laboratory
7199	Chromium, Hexavalent (IC)	SW846	ECL 1
3060A	Alkaline Digestion (Chromium, Hexavalent)	SW846	ECL 1

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

Sample Summary

Client: Haley & Aldrich, Inc.
Project/Site: SCVTA Phase II Eastridge

Job ID: 720-95778-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
720-95778-1	SB-1-SS-2.5	Solid	10/25/19 09:30	10/28/19 13:40	
720-95778-2	SB-1-SS-5.0	Solid	10/25/19 09:45	10/28/19 13:40	
720-95778-4	SB-2-SS-8.0	Solid	10/25/19 12:25	10/28/19 13:40	

Eurofins TestAmerica, Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Phone: 925-484-1919 Fax: 925-600-3002

Chain of Custody Record

eurofins Environment Testing TestAmerica

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Smith, Micah	Carrier Tracking No(s):	COC No: 720-44259.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: micah.smith@testamericainc.com	State of Origin: California	Page: Page 1 of 1
Company: Eurofins Calscience LLC		Accreditations Required (See note): State Program - California		Job #: 720-95778-2
Address: 7440 Lincoln Way, ,	Due Date Requested: 11/27/2019			
City: Garden Grove	TAT Requested (days):			
State, Zip: CA, 92841				
Phone: 714-895-5494(Tel) 714-894-7501(Fax)	PO #:			
Email:	WO #:			
Project Name: SCVTA Phase II Eastridge	Project #: 72014814			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	7199_ORGFM/3060A_IC Hexavalent Chromium	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
SB-1-SS-2.5 (720-95778-1)	10/25/19	09:30 Pacific		Solid			X	1	
SB-1-SS-5.0 (720-95778-2)	10/25/19	09:45 Pacific		Solid			X	1	
SB-2-SS-8.0 (720-95778-4)	10/25/19	12:25 Pacific		Solid			X	1	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	Tom Muller	11-22-19 1600	PCS			
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
					11/23/19 1216	TC
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

1.9/2.4 5.6

Ver: 01/16/2019

11/27/2019

Login Sample Receipt Checklist

Client: Haley & Aldrich, Inc.

Job Number: 720-95778-2

Login Number: 95778
List Number: 1
Creator: Mullen, Joan

List Source: Eurofins TestAmerica, Pleasanton

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	False	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	False	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Haley & Aldrich, Inc.

Job Number: 720-95778-2

Login Number: 95778
List Number: 2
Creator: Liao, Gineyau

List Source: Eurofins Calscience
List Creation: 11/23/19 02:53 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

HALEY ALDRICH

LIMITED PHASE II ENVIRONMENTAL INVESTIGATION
PARCEL 1215 (WORLD OIL)
2695 STORY ROAD
SAN JOSE, CALIFORNIA

by Haley & Aldrich, Inc.
San Jose, California

For Santa Clara Valley Transportation Authority
San Jose, California

File No. 129899-014
January 2020

Haley & Aldrich, Inc.
2107 N. First Street
Suite 380
San Jose, CA 95131
408.961.4805

28 January 2020
File No. 129899-014

Santa Clara Valley Transportation Authority
3331 North First Street
San Jose, California

via e-mail:
dan.pornel@vta.org

Attention: Mr. Dan Pornel

Subject: Limited Phase II Environmental Investigation
Parcel 1215 (World Oil)
2695 Story Road
San Jose, California

Dear Mr. Pornel:

Haley & Aldrich, Inc. (Haley & Aldrich) is pleased to present this report on our Limited Phase II Environmental Investigation at the 1215 (World Oil) Parcel located at 2695 Story Road in San Jose, California. This investigation was performed per the Work Plan for Phase II Environmental Site Assessment, Parcel 1215 (World Oil), 2695 Story Road, San Jose, California dated 12 June 2019 and revised 1 July 2019.

Please feel free to contact us if you have any questions.

Sincerely yours,
HALEY & ALDRICH, INC.

Jennifer Boyer
Senior Project Manager

\\haleyaldrich.com\share\CF\Projects\129899\Deliverables\2020_0128_HAI-VTA_PH_II_2695_Story_Report_vF.docx

SIGNATURE PAGE FOR

REPORT ON

LIMITED PHASE II ENVIRONMENTAL INVESTIGATION
PARCEL 1215
2695 STORY ROAD
SAN JOSE, CALIFORNIA

PREPARED FOR

SANTA CLARA VALLEY TRANSPORTATION AUTHORITY
3331 NORTH FIRST STREET
SAN JOSE, CALIFORNIA

PREPARED BY:

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1. Introduction

Haley & Aldrich, Inc. (Haley & Aldrich) has performed a Limited Phase II Environmental Investigation (Investigation) at the 1215 Parcel located at 2695 Story Road in San Jose, California (Site; Figures 1 and 2). This investigation was performed on behalf of the Santa Clara Valley Transportation Authority (SCVTA) per Work Plan for Phase II Environmental Site Assessment, Parcel 1215, 2695 Story Road, San Jose, California dated 12 June 2019 and revised 1 July 2019 (Haley & Aldrich, 2019a). The purpose of this report is to:

- Provide soil and groundwater characterization data to evaluate whether adverse environmental conditions may exist that could affect the Site's potential redevelopment plans;
- Provide soil and groundwater characterization data to protect on-Site workers and the surrounding public during excavation/construction activities conducted as part of the Site's potential redevelopment;
- Provide soil characterization data for planning the proper handling and disposal of soil encountered during potential construction activities; and,
- Provide groundwater characterization data for planning the handling and treatment/disposal of groundwater encountered during dewatering associated with potential construction activities.

1.1 SITE BACKGROUND AND GEOLOGY

The Site is currently developed with a gas station containing two buildings including a storage room and attendant office that total 330 square feet of the 17,200 sq. ft. of the total site. The surrounding properties are mix-use residential and commercial. The Site is bounded to the north by VT Spa and Premium Car Stereo & Window Tint, west by a single-family residence, east by South Capitol Expressway, south by Story Road.

Haley & Aldrich completed a Phase I Environmental Site Assessment (Phase I, Haley & Aldrich, 2019a) to assess whether recognized environmental conditions (REC) are associated with the Site. The Phase I included visual observations of Site conditions and of adjacent properties, an interview of a key site manager, review of federal, state, tribal, and local environmental database information, federal and state environmental files, previous reports (if identified and provided), and Site historical use records.

Based on the findings of the Phase I, the Site currently operates as a gas station located at 2695 Story Road. The site previously had three 10,000-gallon gasoline underground storage tanks and associated piping removed. Site management requirements have been established for the subject site as it continues to be an active gas station. Residual contamination in subject site soil and groundwater remain at the site.

The Site is underlain by alluvial soils consisting of sandy silts, fine to medium-grained silty sands, and lean clays with minor coarser sand and gravel layers. Depth to bedrock was not determined for this investigation. During the Investigation, groundwater was first encountered at depths 8.5 and 7.3 feet below ground surface (bgs), in boring locations SB-3 and SB-4 respectively. These water depth values meet the regional groundwater flow, which appears to flow to the west to Lower Silver Creek, based on an adjacent property groundwater contour map [Stantec, 2009].

2. Field Investigation

On 8 January 2020, Haley & Aldrich conducted soil and groundwater sampling activities to characterize the existing subsurface conditions within areas of the Site where historical activities or features may pose an environmental concern during VTA construction activities. VTA secured a Permit to Enter (PTE) agreement on 6 December 2019 prior to Site access. The sampling locations are shown on Figure 2.

2.1 PRE-FIELD ACTIVITIES

Prior to conducting subsurface work, Underground Service Alert (USA) was notified and the drilling locations were cleared by Coast Wide Utility Locators (CWUL). To help ensure worker safety, a site-specific Health and Safety Plan (HASP) was prepared for the field activities.

2.2 SOIL AND GROUNDWATER INVESTIGATION

Haley & Aldrich contracted Environmental Control Associates (ECA) to complete the soil boring activities. As part of the PTE Agreement, World Oil management obtained services from an APEX representative to observe the sampling activities by Haley & Aldrich. No split samples were requested or collected by the Apex representative. To minimize the risk of encountering unmarked and undetected underground utilities during drilling and to ensure the health and safety of workers, each boring was advanced to a depth of five feet bgs using hand auger technique.

A total of two borings were advanced for soil and groundwater sample collections. A truck-mounted GeoProbe™ drill rig equipped with direct-push technology (DPT) was used to advance the two borings (SB-3 and SB-4). Boring SB-3 was located at the northern portion of landscaping on the eastern side of the gas station property, south of the gas station entrance along Capitol Expressway. Boring SB-3 was advanced to a total depth of 12 feet bgs, first encountered groundwater was reported to be 8.5 feet bgs. Boring SB-4 was located 50 feet south of SB-3 on the landscaped area. Boring SB-4 was advanced to a total depth of 12 feet bgs and first encountered groundwater was reported to be 7.3 feet bgs.

Recovered soil was screened with a photoionization detector (PID) and logged in the field in accordance with the visual-manual procedures of American Society for Testing and Materials (ASTM) Standard D-2488-09a. Sampling locations were selected in the field to include observed visual or olfactory impacts, or PID detections.

All soil and groundwater samples were collected following standard environmental sampling and handling procedures and submitted under chain-of-custody documentation to state certified Eurofins TestAmerica of Pleasanton, California. Eurofins Test America analyzed the samples following the proposed United States Environmental Protection Agency (EPA) Methods.

Upon completion of the sampling program, the borings were backfilled with bentonite grout and covered with the landscaped area removed at the start of drilling. All down-hole equipment was decontaminated prior to starting each new boring location by washing the equipment with laboratory grade detergent and water followed by a water rinse.

The generated investigation-derived waste (IDW) consisted of soil cuttings and purge groundwater and decontamination water placed in one 30-gallon drum. The waste characterization was analyzed with the

waste from Parcel 1214 and is presented in the Appendix. The IDW drums are temporarily stored off-site at an approved SCVTA location.

Field documentation, including the Haley & Aldrich's soil boring logs, are provided in Appendix A. Additionally, photographs logs documenting the field activities are included in Appendix B.

3. Analytical Results

Soil and groundwater samples were analyzed for one or more of the following analytes:

- CAM 17 Metals by EPA Method 6010B/7471A;
- Hexavalent chromium by EPA Method 7199;
- TPHd and TPHmo by EPA Method 8015B with silica gel cleanup; and
- VOCs and TPHg by EPA Method 8260B.

Analytical results for soil were compared to the Commercial/Industrial: Shallow Soil Exposure and Construction Worker: Any Land Use / Any Depth Soil Exposure environmental screening levels (ESLs) published in July 2019 (Revision 1) by the San Francisco Bay Regional Water Quality Control Board (SFRWQCB). Analytical results for groundwater were compared to the SFRWQCB Groundwater Vapor Intrusion Human Health Risk Levels – Commercial / Industrial ESLs.

The commercial/industrial ESLs were selected for comparison based on the proposed redevelopment of the Site. Additionally, the Construction Worker ESLs were selected to evaluate potential exposure to construction workers who would potentially be working at the Site during its redevelopment.

3.1 SOIL

Soil analytical results are presented in Table 1 and the laboratory analytical report is included as Appendix C. Soil borings SB-3 and SB-4 had detected concentrations of TPHd (C10-C24) in all four soil samples collected, ranging from 1.1 mg/kg to 19 mg/kg. TPHmo was detected in two soil samples at 28 mg/kg to 82 mg/kg. Various metals were also detected in the analyzed soil samples. The following sections provide a summary of the soil data screened against ESLs.

3.1.1 Commercial/Industrial: Shallow Soil Exposure

Analytical soil results were compared to the SFRWQCB commercial/industrial shallow exposure ESLs. All detected analytes in milligrams per kilogram (mg/kg) were below their respective commercial/industrial shallow exposure ESLs with the exception of arsenic. Although the results for arsenic in soil, between 6.0 mg/kg to 7.2 mg/kg, exceed the commercial/industrial ESLs (0.31 mg/kg) for each sample collected, the concentrations are below the upper estimate for background arsenic concentration of 11 mg/kg for soil in the region [Duvergé, 2011]. Nickel was detected in one soil sample (SB-4 at 1.5 feet bgs, 330 mg/kg) at concentrations greater than 10 times Soluble Threshold Limit Concentration (STLC) of 200 mg/kg. Compared to the other collected samples, this value appears to be anomalous.

Based on the soil results, mitigation measures would not be required if the Site is to remain commercial/industrial.

3.1.2 Construction Worker Exposure Screening

Analytical soil results were compared to the SFRWQCB Construction Worker ESLs for any land use and any depth soil exposure. All detected analytes were below their respective Construction Worker ESLs for with the exceptions of arsenic and nickel. As discussed in the previous section, the arsenic concentrations fall within range of background concentrations for arsenic in soils for the region and the nickel is below the cancer-risk threshold. Based on these results, special handling of soil does not appear to be warranted during construction activities.

3.1.3 Disposal Classification

Requirements of Title 22 of the California Code of Regulations, Division 4.5, Chapter 11 were used to evaluate how soil removed from the Site would be classified for disposal. Nickel was detected at concentrations 10 times STLC however the result appears to be anomalous. Therefore, the soil generated during construction activities may require further leachability characterization for waste profiling (Toxicity Characteristic Leaching Procedure (TCLP) and/or STLC).

3.2 GROUNDWATER

Analytical detections in groundwater are presented in Table 2. The laboratory analytical report is included as Appendix C. The following groundwater issues were identified as a result of the Phase II Investigation findings and may impact redevelopment construction activities at the Site:

- No compounds in SB-3 and SB-4 were detected at levels that exceed the SFBRWQCB commercial/industrial ESLs using Groundwater Vapor Intrusion Human Health Risk Levels (Table GW-3, SFRWQCB, July 2019).
- Total Petroleum Hydrocarbons-Gasoline (TPH-g) was detected in SB-4 at 310 µg/L and 1,900 µg/L in SB-3.
- 2-Phenylbutane, 4-Methyl-2-pentanone, benzene, Isopropyl-benzene, n-Butylbenzene, n-Propylbenzene, tert-Butylbenzene, toluene, and xylene were detected in groundwater collected from SB-3 and SB-4 at concentrations greater than 0.50 µg/L, however all detected compounds were below their respective ESL.

The groundwater does not appear to present a risk to future redevelopment as this groundwater is not a drinking water resource and there are no ecological receptors. However, if groundwater is encountered in this area during the Site's redevelopment activities, such as dewatering, groundwater treatment is recommended prior to discharge into municipal storm or sewer system thru a National Pollutant Discharge Elimination System (NPDES) Permit or Short-Term Discharge Permit from the City of San Jose.

4. Conclusions and Recommendations

The following presents Haley & Aldrich's conclusions and recommendations based on the findings of the Limited Phase II Investigation conducted at the Site.

4.1 CONCLUSIONS

Site soil conditions are not anticipated to impact redevelopment of the Site; however, soil excavated from the Site may require further leachability characterization for waste profiling by TCLP and/or STLC for nickel.

No VOCs were detected in groundwater at concentrations that exceed the SFBRWQCB commercial/industrial ESLs, therefore there will be no potential to impact the construction activities associated with the redevelopment of the Site. The adjacent and upgradient gas stations have detected concentrations of total petroleum hydrocarbons and fuel additives prior their site closures since 2010. Therefore, based on the available information from the nearby environmental sites, it concludes the detected hydrocarbon components in groundwater samples collected from SB-3 and SB-4, are likely related to a regional plume released from the nearby sites.

4.2 RECOMMENDATIONS

Based on the above conclusions, we recommend the following be considered during planning for the Site redevelopment:

- Characterization of groundwater deeper than 8 feet bgs if encountered during excavation or dewatering activities;
- Compliance of dewatering activities including the pumping, treatment, and discharge of groundwater with applicable POTW and NPDES permit requirements;
- Preparation of a workplan for groundwater dewatering, storage, treatment, and disposal requirements, if warranted by the proposed redevelopment of the Site; and

5. References

1. Duvergé, 2011. “Establishing Background Arsenic in Soil of the Urbanized San Francisco Bay Region,” December.

2. Haley & Aldrich, Inc., 2019a. “Report on ASTM Phase I Environmental Site Assessment, CP214 Property (Tran) – 1091/1093 South Capitol Avenue, San Jose, California,” 16 August.

3. Haley & Aldrich, Inc., 2019b. “Work Plan for Phase II Investigation, CP214 Property (Tran) – 1091/1093 South Capitol Avenue, San Jose, California,” 1 July

4. San Francisco Bay Regional Water Quality Control Board (SFRWQCB), 2019. “User’s Guide: Derivation and Application of Environmental Screening Levels, Revision 2,” July.

5. Stantec, 2009. “Groundwater Elevation Contour Map – Second Quarter 2009, Former Texaco-Branded Service Station 21-1340 2695 Story Road San Jose, California,” 13 May.

6. Stantec, 2010. Well Destruction Report. Former Texaco-branded Service Station 21-1340, 2695 Story Road San Jose, California,” July 27.

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TABLES

TABLE 1
SUMMARY OF SOIL ANALYTICAL RESULTS
SCVTA PHASE II EASTRIDGE

Analyte				CAM 17 Metals (mg/kg) - EPA 6010B/7471A													Total Petroleum Hydrocarbons (mg/kg) - EPA 8015B with Silica Gel Cleanup		Volatile Organic Compounds (µg/kg) - EPA 8260B	
Sample ID	**Latitude**	**Longitude**	**Sample Date**	**Antimony**	**Arsenic**	**Barium**	**Beryllium**	**Cadmium**	**Trivalent Chromium (III) - Reported as Total Chromium**	**Hexavalent Chromium (VI)**	**Cobalt**	**Copper**	**Lead**	**Mercury**	**Nickel**	**Vanadium**	**Zinc**	**Total Petroleum Hydrocarbons (C10-C28) Diesel**	**Total Petroleum Hydrocarbons (C24-C36) Motor Oil**	**Total Petroleum Hydrocarbons (C4-C12) Gasoline**	**Other Volatile Organic Compounds**
SB-3-SS-3.5	37.3510802	-121.8273477	1/8/2020	< 2.1	6.7	**190**	**0.47**	**0.072 J**	**54**	<0.30	**11**	**30 B**	**8.5**	**0.054**	**78**	**38**	**60**	**1.1 J**	< 48	< 230	ND
SB-3-SS-8.0	37.3510802	-121.8273477	1/8/2020	< 2.1	6.5	**140**	**0.33**	**0.069 J**	**46**	--	**11**	**24 B**	**6.5**	**0.079**	**73**	**31**	**46**	**5.0**	**28 J**	< 230	ND
SB-4-SS-1.5	37.3509380	-121.8273040	1/8/2020	**1.1 J**	6.0	**77**	**0.27**	**0.17 J**	**170**	**0.17 J**	**20**	**22 B**	**24**	**0.088**	**330**	**36**	**69**	**19**	**82**	< 230	ND
SB-4-SS-6.0	37.3509380	-121.8273040	1/8/2020	< 2.1	7.2	**160**	**0.42**	**0.061 J**	**53**	--	**11**	**30 B**	**7.5**	**0.055**	**72**	**38**	**56**	**1.1 J**	< 48	< 230	ND
Construction Worker ESL (cancer risk/non-cancer hazard)				50	0.98	3,000	27	51	530,000	2.8	28	14,000	160	44	1,700/86	470	110,000	1,100	54,000	1,800,000	Various
Commercial / Industrial ESL				160	0.31	220,000	230	1,100	1,800,000	6.2	350	47,000	320	190	11,000	5,800	350,000	1,200	180,000	2,000,000	Various
STLC Regulatory Limit (mg/L)				15	5	100	0.75	1	560	5	80	25	5	0.2	20	24	250	--	--	--	Various
10x STLC (mg/L)				150	50	1,000	7.5	10	5,600	50	800	250	50	2	200	240	2,500	--	--	--	Various
20x TC (mg/L)				--	100	2,000	--	20	--	100	--	--	100	4	--	--	--	--	--	--	Various

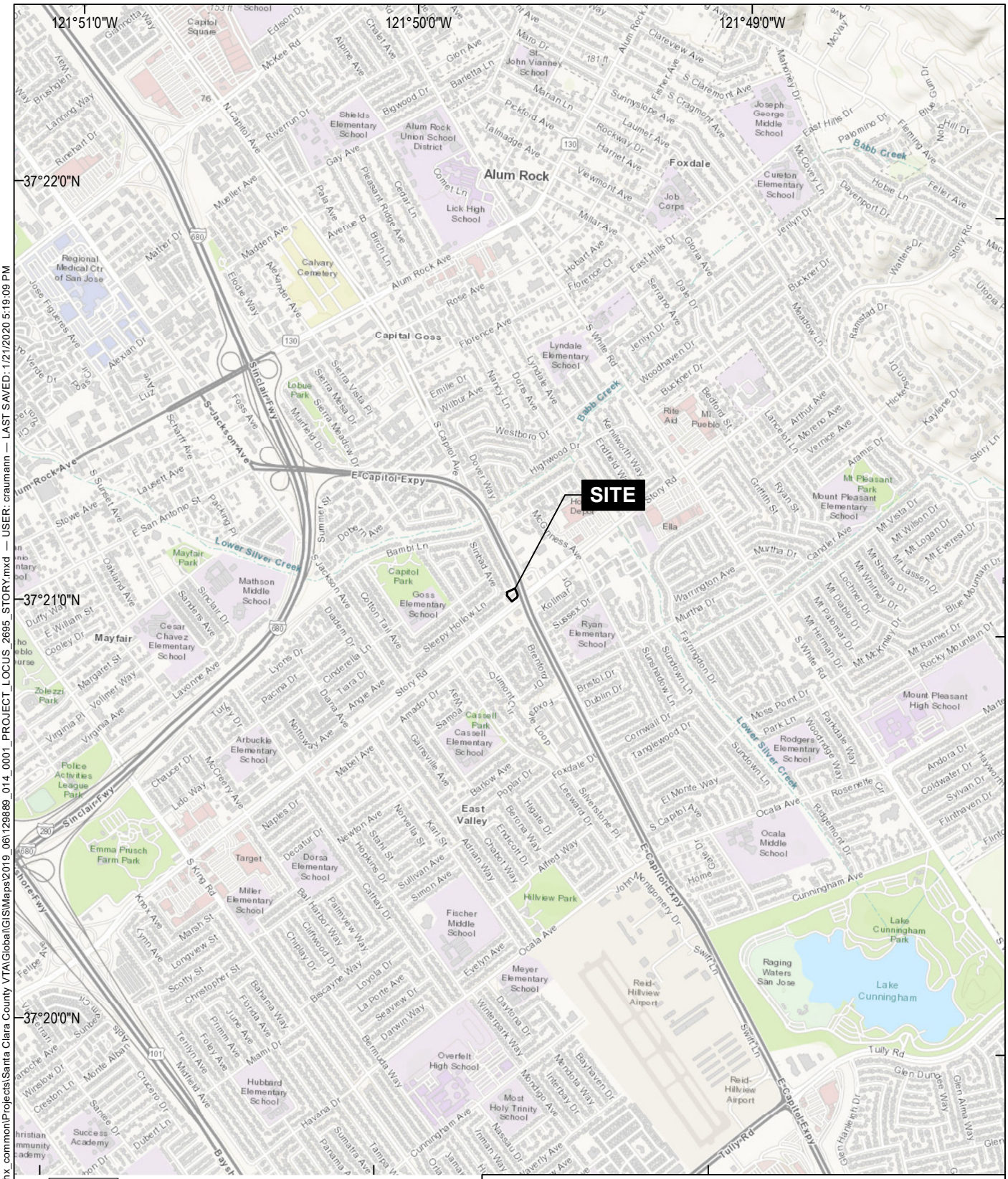
Notes:
Data are reported to the laboratory reporting limit (< RL).
Detects are **bolded.**
Only detected compounds are shown.
Data are compared to the Commercial/Industrial: Shallow Soil Exposure and Construction Worker: Any Land Use/ Any Depth Soil Exposure Environmental Screening Levels (SFRWQCB, July 2019. Rev 2).
Data exceeding Construction Worker ESLs are highlighted with orange color.
Data exceeding Commercial/Industrial ESLs are highlighted with peach color.
Data exceeding both Construction Worker and Commercial/Industrial ESLs are highlighted with purple color.
Data exceeding 10x STLC or 20x TC are highlighted with green color.
Screening levels are for chromium (III), the dominant form of chromium in the environment.
J indicates the result is estimated due to findings during validation.
B indicates compound was found in sample and blank.
-- indicates value is not available.
TC = Toxicity Characteristic
STLC = soluble threshold limit concentration
TC and STLC listed in California Code of Regulations, Title 22, Division 4.5, Chapter 11, Article 3, Section 66261.24
mg/L = milligrams per liter
µg/kg = micrograms per kilogram
mg/kg = milligrams per kilogram
NA = not analyzed

TABLE 2
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
SCVTA PHASE II EASTRIDGE

Analyte				Total Petroleum Hydrocarbons (µg/L) - EPA 8015B with Silica Gel Cleanup		Volatile Organic Compounds (µg/L) - EPA 8260B													
Sampel ID	**Sample Date**	**Latitude**	**Longitude**	**Total Petroleum Hydrocarbons (C10-C28) Diesel**	**Total Petroleum Hydrocarbons (C24-C36) Motor Oil**	**Total Petroleum Hydrocarbons (C4-C12) Gasoline**	**1,2,4-Trimethyl-benzene**	**1,3,5-Trimethyl-benzene**	**2-Phenylbutane (sec-Butylbenzene)**	**4-Methyl-2-pentanone**	**Benzene**	**Ethylbenzene**	**Isopropyl-benzene (Cumene)**	**n-Butylbenzene**	**n-Propylbenzene**	**tert-Butylbenzene**	**Toluene**	**Xylene (total)**	**Other Volatile Organic Compounds**
SB-3-GW-8.5	1/8/2019	37.3510802	-121.8273477	**130**	< 100	**1900**	**0.24 J**	< 0.50	**2.5**	**13 J**	**0.95**	**0.18 J**	**3.1**	**2.4**	**7.8**	**7.7**	**0.52**	**0.77**	ND
SB-4-GW-7.3	1/8/2019	37.3509380	-121.8273040	< 52	< 100	**310**	< 0.50	< 0.50	**0.39 J**	< 50	< 0.50	< 0.50	< 0.50	**0.50 J**	< 1.0	**4.0**	**0.20 J**	< 0.50	ND
Commercial / Industrial ESLs				--	--	--	--	--	--	--	1.8	15	--	--	--	--	4,900	1,600	Various

Notes:
Data are reported to the laboratory reporting limit (< RL).
Detects are **bolded.**
Only detected compounds are shown.
Data are compared to the Groundwater Vapor Intrusion Human Health Risk Levels (Table GW-3) – Commercial / Industrial Environmental Screening Levels (SFRWQCB, July 2019).
Data exceeding Commercial/Industrial ESLs are highlighted with peach color.
J indicates the result is estimated due to findings during validation.
R indicates the value is rejected as unusable.
-- indicates value is not available.
TC = Toxicity Characteristic
STLC = soluble threshold limit concentration
TC and STLC listed in California Code of Regulations, Title 22, Division 4.5, Chapter 11, Article 3, Section 66261.24
mg/L = milligrams per liter
µg/L = micrograms per liter

FIGURES



MAP SOURCE: ESRI
SITE COORDINATES: 121°49'39"W 37°21'4"N

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SANTA CLARA VALLEY TRANSPORTATION AUTHORITY
2695 STORY ROAD
SAN JOSE, CALIFORNIA

PROJECT LOCUS

APPROXIMATE SCALE: 1 IN = 2000 FT
JANUARY 2020

FIGURE 1

GIS FILE PATH: \\haleyaldrich.com\share\phx_common\Projects\Santa Clara County VTA\Global\GIS\Maps\2019_06\129889_014_0001_PROJECT_LOCUS_2695_STORY.mxd — USER: craumann — LAST SAVED: 1/21/2020 5:19:09 PM

LEGEND

- PHASE II SOIL BORING
- PHASE II INVESTIGATION AREA
- SITE BOUNDARY
- SITE FEATURE

NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.
2. FORMER GROUNDWATER MONITORING WELLS ARE SHOWN IN HISTORICAL FIGURES PRESENTED IN APPENDIX C.
3. AERIAL IMAGERY SOURCE: USGS 2015

N

0 30 60

SCALE IN FEET

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SANTA CLARA VALLEY TRANSPORTATION AUTHORITY
2695 STORY ROAD
SAN JOSE, CALIFORNIA

SITE PLAN

JANUARY 2020

FIGURE 2

APPENDIX A

Boring Logs

TEST BORING REPORT

Boring No. SB-3

Project	2695 Story Road - World Oil
Client	Santa Clara Valley Transit Authority
Contractor	Environmental Control Associates, Inc. (ECA)

File No. 129899-014
Sheet No. 1 of 1
Start 8 January 2020
Finish 8 January 2020
Driller --
H&A Rep. R.Cox/ D.Rattanasith
Elevation ~
Datum NAVD 88
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type		4.0	--	Rig Make & Model: Geoprobe 594
Inside Diameter (in.)	--	2.25 in.	--	Bit Type: Direct Push
Hammer Weight (lb)	--	--	-	Drill Mud: None
Hammer Fall (in.)	--	--	-	Casing: None
				Hoist/Hammer: --
				PID Make & Model: ppbRAE3000

Depth (ft)	Recovery	Sample No.	PID Readings (ppb)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Density/consistency, color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0	Hand Auger		68		SC	Clayey SAND, very dark grayish-brown (2.5Y 3/2), moist, no odor, no stain			15	50	5	30				
			149			Hand auger refusal at 3.0 ft Similar to above, except trace gravel, wet, wire debris at 3.0 ft										
			123	4.5												
					CL	Lean CLAY, olive-brown (2.5Y 4/3), moist, low plasticity, no odor, no stain						100				
5			102													
			105			Similar to above, except wet										
			116	9.0	SP	Poorly-graded SAND with gravel, dark grayish-brown (2.5YR 4/2), wet, gravel mps 1 in., no odor, no stain	15			80		5				
10						Similar to above, except staining at 10 ft										
			196	11.0	SW	Well-graded SAND with gravel, greenish-black (GLEY 2.5/10Y), wet, gravel mps 0.5 in., hydrocarbon-like odor	15		25	30	25	5				
				12.0		BOTTOM OF EXPLORATION 12.0 FT										

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water
1/8/2020	10:42	--	--	12.0	8.5

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Split Spoon Sample

Recovery
No Recovery
Recovery
Sample Collected

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft)
Rock Cored (ft)
Samples

Boring No. SB-3

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None
Toughness: L - Low M - Medium H - High
Plasticity: N - Nonplastic L - Low M - Medium H - High
Dry Strength: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

TEST BORING REPORT

Boring No. SB-4

Project	2695 Story Road - World Oil
Client	Santa Clara Valley Transit Authority
Contractor	Environmental Control Associates, Inc. (ECA)

File No. 129899-014
Sheet No. 1 of 1
Start 8 January 2020
Finish 8 January 2020
Driller --
H&A Rep. R.Cox/ D.Rattanasith
Elevation ~
Datum NAVD 88
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type		4.0	--	Rig Make & Model: Geoprobe 594
Inside Diameter (in.)	--	2.25 in.	--	Bit Type: Direct Push
Hammer Weight (lb)	--	--	-	Drill Mud: None
Hammer Fall (in.)	--	--	-	Casing: None
				Hoist/Hammer: --
				PID Make & Model: ppbRAE3000

Depth (ft)	Recovery	Sample No.	PID Readings (ppb)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Density/consistency, color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0	Hand Auger		112		SW-SM	Well-graded SAND with silt and gravel, very dusky red (2.5Y 2.5/2), moist, gravel mps 2.0 in., no odor, no stain		25	10	40	15	10				
			227													
			137			Similar to above, except dark brown (2.5Y 3/3), gravel mps 1 in., no odor										
			130													
5						Similar to above, except very dark grayish-brown (2.5Y 3/2)										
				6.5	CL	Lean CLAY, very dark grayish-brown (2.5Y 3/2), moist, firm, low plasticity, no odor, no stain					5	95				
			161			Similar to above, except wet										
				8.0	SC	Clayey SAND, olive-brown (2.5Y 4/3), wet, no odor, no stain			5	60	5	30				
10			138	10.0	SP	Poorly-graded SAND, greenish-gray (GLEY 6/10Y), wet, no odor, no stain	10				85	5				
			242			Similar to above, except hydrocarbon-like odor at 11.0 ft										
				12.0		BOTTOM OF EXPLORATION 12.0 FT										

Water Level Data					
Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water
1/8/2020	-	--	--	12.0	7.3

Sample ID: O - Open End Rod; T - Thin Wall Tube; U - Undisturbed Sample; S - Split Spoon Sample

Recovery: No Recovery; Recovery; Sample Collected

Well Diagram: Riser Pipe; Screen; Filter Sand; Cuttings; Grout; Concrete; Bentonite Seal

Summary
Overburden (ft)
Rock Cored (ft)
Samples

Boring No. SB-4

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None; **Toughness**: L - Low M - Medium H - High; **Plasticity**: N - Nonplastic L - Low M - Medium H - High; **Dry Strength**: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

APPENDIX B

Photographic Log

Photo 1: View of drilling operation and safety zone (facing south).

Photo 2: View of utility markings near SB-3 (facing east).

Photo 3: View of utility markings near SB-4 (facing east).

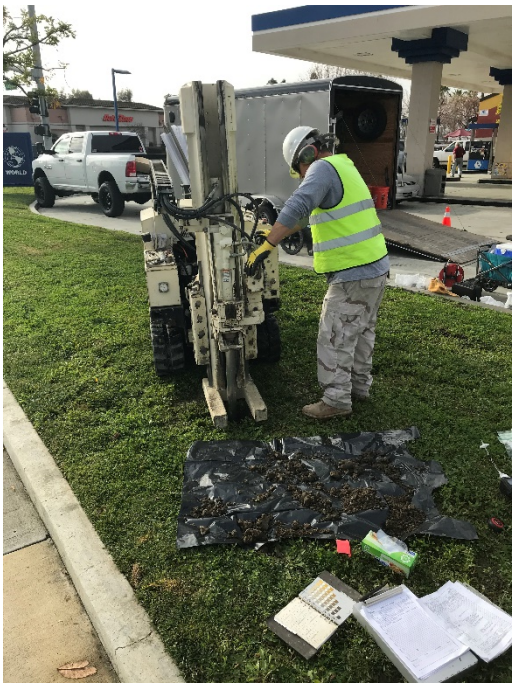


Photo 4: View of drilling at SB-3 (facing south).

Photo 5: View of flag marking SB-3 location (facing west).

Photo 6: View of flag marking SB-4 location (facing west).

Photo 7: View of waste drum from Parcels 1214 and 1215 (facing north).

Photo 8: View of soil from SB-3.

APPENDIX C

Laboratory Reports

eurofins | Environment Testing TestAmerica

ANALYTICAL REPORT

Eurofins TestAmerica, Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Tel: (925)484-1919

Laboratory Job ID: 720-96843-1
Client Project/Site: World Oil

For:
Haley & Aldrich, Inc.
2107 N. 1st Street
Suite 380
San Jose, California 95131-2028

Attn: Roger Cox

Authorized for release by:
1/16/2020 12:23:10 PM

Micah Smith, Project Manager II
(925)484-1919
micah.smith@testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 720-96843-1

Laboratory: Eurofins TestAmerica, Pleasanton

Narrative

Job Narrative
720-96843-1

Comments
No additional comments.

Receipt
The samples were received on 1/9/2020 12:34 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.6º C.

GC/MS VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

HPLC/IC
Method 7199: The matrix spike duplicate (MSD) recoveries for the following sample associated with preparation batch 440-590539 and analytical batch 440-590632 were outside control limits: (720-96843-F-1-C MSD). The associated laboratory control sample (LCS) recovery met acceptance criteria.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals
Method 7471A: Due to a instrument program malfunction, a temperature data log was unable to be saved. Analyst observed temperature at 121 +/- 3 degrees Celsius at 15 psi for 15 minutes. There was no averse affect on data. The following samples were affected: SB-3-SS-3.5 (720-96843-1), SB-3-SS-8.0 (720-96843-2), SB-4-SS-1.5 (720-96843-3), SB-4-SS-6.0 (720-96843-4), (LCS 320-350339/12-A) and (ME 320-350339/11-A).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep
Method 3510C SGC: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with prep batch 720-278174 for 8015 DRO_SGC (3510).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: Haley & Aldrich, Inc.
Project/Site: World Oil

Job ID: 720-96843-1

Client Sample ID: SB-3-SS-3.5 — Lab Sample ID: 720-96843-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	1.1	J	1.9	0.72	mg/Kg	1		8015B	Silica Gel Cleanup
Arsenic	6.7		2.1	1.4	mg/Kg	1		6010B	Total/NA
Barium	190		1.0	0.13	mg/Kg	1		6010B	Total/NA
Beryllium	0.47		0.21	0.031	mg/Kg	1		6010B	Total/NA
Cadmium	0.072	J	0.21	0.031	mg/Kg	1		6010B	Total/NA
Cobalt	13		0.52	0.26	mg/Kg	1		6010B	Total/NA
Chromium	54		0.52	0.15	mg/Kg	1		6010B	Total/NA
Copper	35	B	1.6	0.23	mg/Kg	1		6010B	Total/NA
Nickel	78		1.0	0.25	mg/Kg	1		6010B	Total/NA
Lead	8.5		1.0	0.27	mg/Kg	1		6010B	Total/NA
Vanadium	38		0.52	0.20	mg/Kg	1		6010B	Total/NA
Zinc	60		2.1	0.20	mg/Kg	1		6010B	Total/NA
Mercury	0.054		0.039	0.0083	mg/Kg	1		7471A	Total/NA

Client Sample ID: SB-3-SS-8.0 — Lab Sample ID: 720-96843-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	5.0		2.0	0.74	mg/Kg	1		8015B	Silica Gel Cleanup
Motor Oil Range Organics [C24-C36]	28	J	49	9.8	mg/Kg	1		8015B	Silica Gel Cleanup
Arsenic	6.5		1.9	1.2	mg/Kg	1		6010B	Total/NA
Barium	140		0.93	0.11	mg/Kg	1		6010B	Total/NA
Beryllium	0.33		0.19	0.028	mg/Kg	1		6010B	Total/NA
Cadmium	0.069	J	0.19	0.028	mg/Kg	1		6010B	Total/NA
Cobalt	11		0.47	0.23	mg/Kg	1		6010B	Total/NA
Chromium	46		0.47	0.13	mg/Kg	1		6010B	Total/NA
Copper	24	B	1.4	0.21	mg/Kg	1		6010B	Total/NA
Nickel	73		0.93	0.22	mg/Kg	1		6010B	Total/NA
Lead	6.5		0.93	0.24	mg/Kg	1		6010B	Total/NA
Vanadium	31		0.47	0.18	mg/Kg	1		6010B	Total/NA
Zinc	46		1.9	0.18	mg/Kg	1		6010B	Total/NA
Mercury	0.079		0.040	0.0086	mg/Kg	1		7471A	Total/NA

Client Sample ID: SB-4-SS-1.5 — Lab Sample ID: 720-96843-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	19		2.0	0.74	mg/Kg	1		8015B	Silica Gel Cleanup
Motor Oil Range Organics [C24-C36]	82		49	9.9	mg/Kg	1		8015B	Silica Gel Cleanup
Cr (VI)	0.17	J	0.30	0.15	mg/Kg	3		7199	Total/NA
Arsenic	6.0		1.8	1.1	mg/Kg	1		6010B	Total/NA
Barium	77		0.88	0.11	mg/Kg	1		6010B	Total/NA
Beryllium	0.27		0.18	0.026	mg/Kg	1		6010B	Total/NA
Cadmium	0.17	J	0.18	0.026	mg/Kg	1		6010B	Total/NA
Cobalt	20		0.44	0.22	mg/Kg	1		6010B	Total/NA
Chromium	170		0.44	0.12	mg/Kg	1		6010B	Total/NA
Copper	22	B	1.3	0.19	mg/Kg	1		6010B	Total/NA
Nickel	330		0.88	0.21	mg/Kg	1		6010B	Total/NA
Lead	24		0.88	0.23	mg/Kg	1		6010B	Total/NA
Antimony	1.1	J	1.8	0.82	mg/Kg	1		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SB-4-SS-1.5 (Continued) — Lab Sample ID: 720-96843-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vanadium	36		0.44	0.17	mg/Kg	1		6010B	Total/NA
Zinc	69		1.8	0.17	mg/Kg	1		6010B	Total/NA
Mercury	0.088		0.041	0.0089	mg/Kg	1		7471A	Total/NA

Client Sample ID: SB-4-SS-6.0 — Lab Sample ID: 720-96843-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	1.1	J	2.0	0.73	mg/Kg	1		8015B	Silica Gel Cleanup
Arsenic	7.2		1.9	1.2	mg/Kg	1		6010B	Total/NA
Barium	160		0.93	0.11	mg/Kg	1		6010B	Total/NA
Beryllium	0.42		0.19	0.028	mg/Kg	1		6010B	Total/NA
Cadmium	0.061	J	0.19	0.028	mg/Kg	1		6010B	Total/NA
Cobalt	11		0.46	0.23	mg/Kg	1		6010B	Total/NA
Chromium	53		0.46	0.13	mg/Kg	1		6010B	Total/NA
Copper	30	B	1.4	0.20	mg/Kg	1		6010B	Total/NA
Nickel	72		0.93	0.22	mg/Kg	1		6010B	Total/NA
Lead	7.5		0.93	0.24	mg/Kg	1		6010B	Total/NA
Vanadium	38		0.46	0.18	mg/Kg	1		6010B	Total/NA
Zinc	56		1.9	0.18	mg/Kg	1		6010B	Total/NA
Mercury	0.055		0.043	0.0092	mg/Kg	1		7471A	Total/NA

Client Sample ID: SB-3-GW-8.5 — Lab Sample ID: 720-96843-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.95		0.50	0.25	ug/L	1		8260B	Total/NA
n-Butylbenzene	2.4		1.0	0.30	ug/L	1		8260B	Total/NA
sec-Butylbenzene	2.5		1.0	0.17	ug/L	1		8260B	Total/NA
tert-Butylbenzene	7.7		1.0	0.20	ug/L	1		8260B	Total/NA
Ethylbenzene	0.18	J	0.50	0.13	ug/L	1		8260B	Total/NA
Isopropylbenzene	3.1		0.50	0.20	ug/L	1		8260B	Total/NA
4-Methyl-2-pentanone (MIBK)	13	J	50	10	ug/L	1		8260B	Total/NA
N-Propylbenzene	7.8		1.0	0.20	ug/L	1		8260B	Total/NA
Toluene	0.52		0.50	0.17	ug/L	1		8260B	Total/NA
1,2,4-Trimethylbenzene	0.24	J	0.50	0.20	ug/L	1		8260B	Total/NA
Xylenes, Total	0.77		0.50	0.40	ug/L	1		8260B	Total/NA
Gasoline Range Organics (GRO) -C4-C12	1900		50	21	ug/L	1		8260B	Total/NA
Diesel Range Organics [C10-C28]	130		52	31	ug/L	1		8015B	Silica Gel Cleanup

Client Sample ID: SB-4-GW-7.3 — Lab Sample ID: 720-96843-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
n-Butylbenzene	0.50	J	1.0	0.30	ug/L	1		8260B	Total/NA
sec-Butylbenzene	0.39	J	1.0	0.17	ug/L	1		8260B	Total/NA
tert-Butylbenzene	4.0		1.0	0.20	ug/L	1		8260B	Total/NA
Toluene	0.20	J	0.50	0.17	ug/L	1		8260B	Total/NA
Gasoline Range Organics (GRO) -C4-C12	310		50	21	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SB-3-SS-3.5
Date Collected: 01/08/20 10:30
Date Received: 01/09/20 12:34

Lab Sample ID: 720-96843-1
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.7	1.1	ug/Kg		01/09/20 18:10	01/13/20 23:15	1
Acetone	ND		47	35	ug/Kg		01/09/20 18:10	01/13/20 23:15	1
Benzene	ND		4.7	0.61	ug/Kg		01/09/20 18:10	01/13/20 23:15	1
Dichlorobromomethane	ND		4.7	0.67	ug/Kg		01/09/20 18:10	01/13/20 23:15	1
Bromobenzene	ND		4.7	0.74	ug/Kg		01/09/20 18:10	01/13/20 23:15	1
Chlorobromomethane	ND		19	1.7	ug/Kg		01/09/20 18:10	01/13/20 23:15	1
Bromoform	ND		4.7	1.9	ug/Kg		01/09/20 18:10	01/13/20 23:15	1
Bromomethane	ND		9.3	0.74	ug/Kg		01/09/20 18:10	01/13/20 23:15	1
2-Butanone (MEK)	ND		47	20	ug/Kg		01/09/20 18:10	01/13/20 23:15	1
n-Butylbenzene	ND		4.7	0.93	ug/Kg		01/09/20 18:10	01/13/20 23:15	1
sec-Butylbenzene	ND		4.7	0.67	ug/Kg		01/09/20 18:10	01/13/20 23:15	1
tert-Butylbenzene	ND		4.7	0.68	ug/Kg		01/09/20 18:10	01/13/20 23:15	1
Carbon disulfide	ND		4.7	1.9	ug/Kg		01/09/20 18:10	01/13/20 23:15	1
Carbon tetrachloride	ND		4.7	0.58	ug/Kg		01/09/20 18:10	01/13/20 23:15	1
Chlorobenzene	ND		4.7	0.64	ug/Kg		01/09/20 18:10	01/13/20 23:15	1
Chloroethane	ND		9.3	1.3	ug/Kg		01/09/20 18:10	01/13/20 23:15	1
Chloroform	ND		4.7	0.62	ug/Kg		01/09/20 18:10	01/13/20 23:15	1
Chloromethane	ND		9.3	2.1	ug/Kg		01/09/20 18:10	01/13/20 23:15	1
2-Chlorotoluene	ND		4.7	0.61	ug/Kg		01/09/20 18:10	01/13/20 23:15	1
4-Chlorotoluene	ND		4.7	0.63	ug/Kg		01/09/20 18:10	01/13/20 23:15	1
Chlorodibromomethane	ND		4.7	0.66	ug/Kg		01/09/20 18:10	01/13/20 23:15	1
1,2-Dichlorobenzene	ND		4.7	0.63	ug/Kg		01/09/20 18:10	01/13/20 23:15	1
1,3-Dichlorobenzene	ND		4.7	0.67	ug/Kg		01/09/20 18:10	01/13/20 23:15	1
1,4-Dichlorobenzene	ND		4.7	0.66	ug/Kg		01/09/20 18:10	01/13/20 23:15	1
1,3-Dichloropropane	ND		4.7	0.68	ug/Kg		01/09/20 18:10	01/13/20 23:15	1
1,1-Dichloropropene	ND		4.7	0.64	ug/Kg		01/09/20 18:10	01/13/20 23:15	1
1,2-Dibromo-3-Chloropropane	ND		9.3	1.6	ug/Kg		01/09/20 18:10	01/13/20 23:15	1
Ethylene Dibromide	ND		4.7	1.3	ug/Kg		01/09/20 18:10	01/13/20 23:15	1
Dibromomethane	ND		9.3	1.9	ug/Kg		01/09/20 18:10	01/13/20 23:15	1
Dichlorodifluoromethane	ND		9.3	3.7	ug/Kg		01/09/20 18:10	01/13/20 23:15	1
1,1-Dichloroethane	ND		4.7	0.63	ug/Kg		01/09/20 18:10	01/13/20 23:15	1
1,2-Dichloroethane	ND		4.7	0.71	ug/Kg		01/09/20 18:10	01/13/20 23:15	1
1,1-Dichloroethene	ND		4.7	0.58	ug/Kg		01/09/20 18:10	01/13/20 23:15	1
cis-1,2-Dichloroethene	ND		4.7	0.63	ug/Kg		01/09/20 18:10	01/13/20 23:15	1
trans-1,2-Dichloroethene	ND		4.7	0.70	ug/Kg		01/09/20 18:10	01/13/20 23:15	1
1,2-Dichloropropane	ND		4.7	0.59	ug/Kg		01/09/20 18:10	01/13/20 23:15	1
cis-1,3-Dichloropropene	ND		4.7	0.64	ug/Kg		01/09/20 18:10	01/13/20 23:15	1
trans-1,3-Dichloropropene	ND		4.7	0.63	ug/Kg		01/09/20 18:10	01/13/20 23:15	1
Ethylbenzene	ND		4.7	0.70	ug/Kg		01/09/20 18:10	01/13/20 23:15	1
Hexachlorobutadiene	ND		4.7	0.84	ug/Kg		01/09/20 18:10	01/13/20 23:15	1
2-Hexanone	ND		47	9.3	ug/Kg		01/09/20 18:10	01/13/20 23:15	1
Isopropylbenzene	ND		4.7	0.63	ug/Kg		01/09/20 18:10	01/13/20 23:15	1
4-Isopropyltoluene	ND		4.7	2.3	ug/Kg		01/09/20 18:10	01/13/20 23:15	1
Methylene Chloride	ND		9.3	5.2	ug/Kg		01/09/20 18:10	01/13/20 23:15	1
4-Methyl-2-pentanone (MIBK)	ND		47	9.3	ug/Kg		01/09/20 18:10	01/13/20 23:15	1
Naphthalene	ND		9.3	1.4	ug/Kg		01/09/20 18:10	01/13/20 23:15	1
N-Propylbenzene	ND		4.7	0.62	ug/Kg		01/09/20 18:10	01/13/20 23:15	1
Styrene	ND		4.7	0.59	ug/Kg		01/09/20 18:10	01/13/20 23:15	1
1,1,1,2-Tetrachloroethane	ND		4.7	0.71	ug/Kg		01/09/20 18:10	01/13/20 23:15	1

Client Sample ID: SB-3-SS-3.5

Date Collected: 01/08/20 10:30
Date Received: 01/09/20 12:34

Lab Sample ID: 720-96843-1

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		4.7	0.70	ug/Kg		01/09/20 18:10	01/13/20 23:15	1
Tetrachloroethene	ND		4.7	0.63	ug/Kg		01/09/20 18:10	01/13/20 23:15	1
Toluene	ND		4.7	0.66	ug/Kg		01/09/20 18:10	01/13/20 23:15	1
1,2,3-Trichlorobenzene	ND		4.7	0.69	ug/Kg		01/09/20 18:10	01/13/20 23:15	1
1,2,4-Trichlorobenzene	ND		4.7	0.66	ug/Kg		01/09/20 18:10	01/13/20 23:15	1
1,1,1-Trichloroethane	ND		4.7	0.57	ug/Kg		01/09/20 18:10	01/13/20 23:15	1
1,1,2-Trichloroethane	ND		4.7	0.65	ug/Kg		01/09/20 18:10	01/13/20 23:15	1
Trichloroethene	ND		4.7	0.59	ug/Kg		01/09/20 18:10	01/13/20 23:15	1
Trichlorofluoromethane	ND		4.7	1.0	ug/Kg		01/09/20 18:10	01/13/20 23:15	1
1,2,3-Trichloropropane	ND		4.7	0.72	ug/Kg		01/09/20 18:10	01/13/20 23:15	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.7	2.0	ug/Kg		01/09/20 18:10	01/13/20 23:15	1
1,2,4-Trimethylbenzene	ND		4.7	1.5	ug/Kg		01/09/20 18:10	01/13/20 23:15	1
1,3,5-Trimethylbenzene	ND		4.7	0.61	ug/Kg		01/09/20 18:10	01/13/20 23:15	1
Vinyl acetate	ND		19	4.7	ug/Kg		01/09/20 18:10	01/13/20 23:15	1
Vinyl chloride	ND		4.7	0.68	ug/Kg		01/09/20 18:10	01/13/20 23:15	1
Xylenes, Total	ND		4.7	1.1	ug/Kg		01/09/20 18:10	01/13/20 23:15	1
2,2-Dichloropropane	ND		4.7	1.9	ug/Kg		01/09/20 18:10	01/13/20 23:15	1
Gasoline Range Organics (GRO) -C4-C12	ND		230	93	ug/Kg		01/09/20 18:10	01/13/20 23:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*45 - 131*	*01/09/20 18:10*	*01/13/20 23:15*	*1*
1,2-Dichloroethane-d4 (Surr)	*108*		*60 - 140*	*01/09/20 18:10*	*01/13/20 23:15*	*1*
Toluene-d8 (Surr)	*93*		*58 - 140*	*01/09/20 18:10*	*01/13/20 23:15*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC) - Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**1.1**	**J**	1.9	0.72	mg/Kg		01/10/20 09:17	01/14/20 16:39	1
Motor Oil Range Organics [C24-C36]	ND		48	9.6	mg/Kg		01/10/20 09:17	01/14/20 16:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*80*		*38 - 148*	*01/10/20 09:17*	*01/14/20 16:39*	*1*
Capric Acid (Surr)	*0.01*		*0 - 1*	*01/10/20 09:17*	*01/14/20 16:39*	*1*

Method: 7199 - Chromium, Hexavalent (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND	F1	0.30	0.15	mg/Kg		01/14/20 20:59	01/15/20 12:11	3

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.52	0.094	mg/Kg		01/13/20 07:15	01/14/20 16:59	1
Arsenic	**6.7**		2.1	1.4	mg/Kg		01/13/20 07:15	01/14/20 16:59	1
Barium	**190**		1.0	0.13	mg/Kg		01/13/20 07:15	01/14/20 16:59	1
Beryllium	**0.47**		0.21	0.031	mg/Kg		01/13/20 07:15	01/14/20 16:59	1
Cadmium	**0.072**	**J**	0.21	0.031	mg/Kg		01/13/20 07:15	01/14/20 16:59	1
Cobalt	**13**		0.52	0.26	mg/Kg		01/13/20 07:15	01/14/20 16:59	1
Chromium	**54**		0.52	0.15	mg/Kg		01/13/20 07:15	01/14/20 16:59	1
Copper	**35**	**B**	1.6	0.23	mg/Kg		01/13/20 07:15	01/14/20 16:59	1
Molybdenum	ND		2.1	0.78	mg/Kg		01/13/20 07:15	01/14/20 16:59	1
Nickel	**78**		1.0	0.25	mg/Kg		01/13/20 07:15	01/14/20 16:59	1
Lead	**8.5**		1.0	0.27	mg/Kg		01/13/20 07:15	01/14/20 16:59	1

Client: Haley & Aldrich, Inc.
Project/Site: World Oil

Job ID: 720-96843-1

Client Sample ID: SB-3-SS-3.5
Date Collected: 01/08/20 10:30
Date Received: 01/09/20 12:34

Lab Sample ID: 720-96843-1
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	ND		2.1	1.5	mg/Kg		01/13/20 07:15	01/14/20 16:59	1
Antimony	ND		2.1	0.98	mg/Kg		01/13/20 07:15	01/14/20 16:59	1
Thallium	ND		2.1	0.88	mg/Kg		01/13/20 07:15	01/14/20 16:59	1
Vanadium	**38**		0.52	0.20	mg/Kg		01/13/20 07:15	01/14/20 16:59	1
Zinc	**60**		2.1	0.20	mg/Kg		01/13/20 07:15	01/14/20 16:59	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.054**		0.039	0.0083	mg/Kg		01/12/20 14:00	01/13/20 12:26	1

Client Sample ID: SB-3-SS-8.0
Date Collected: 01/08/20 10:35
Date Received: 01/09/20 12:34

Lab Sample ID: 720-96843-2
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		3.4	0.83	ug/Kg		01/09/20 18:10	01/10/20 10:33	1
Acetone	ND		34	26	ug/Kg		01/09/20 18:10	01/10/20 10:33	1
Benzene	ND		3.4	0.45	ug/Kg		01/09/20 18:10	01/10/20 10:33	1
Dichlorobromomethane	ND		3.4	0.50	ug/Kg		01/09/20 18:10	01/10/20 10:33	1
Bromobenzene	ND		3.4	0.54	ug/Kg		01/09/20 18:10	01/10/20 10:33	1
Chlorobromomethane	ND		14	1.2	ug/Kg		01/09/20 18:10	01/10/20 10:33	1
Bromoform	ND		3.4	1.4	ug/Kg		01/09/20 18:10	01/10/20 10:33	1
Bromomethane	ND		6.9	0.54	ug/Kg		01/09/20 18:10	01/10/20 10:33	1
2-Butanone (MEK)	ND		34	14	ug/Kg		01/09/20 18:10	01/10/20 10:33	1
n-Butylbenzene	ND		3.4	0.69	ug/Kg		01/09/20 18:10	01/10/20 10:33	1
sec-Butylbenzene	ND		3.4	0.50	ug/Kg		01/09/20 18:10	01/10/20 10:33	1
tert-Butylbenzene	ND		3.4	0.50	ug/Kg		01/09/20 18:10	01/10/20 10:33	1
Carbon disulfide	ND		3.4	1.4	ug/Kg		01/09/20 18:10	01/10/20 10:33	1
Carbon tetrachloride	ND		3.4	0.43	ug/Kg		01/09/20 18:10	01/10/20 10:33	1
Chlorobenzene	ND		3.4	0.48	ug/Kg		01/09/20 18:10	01/10/20 10:33	1
Chloroethane	ND		6.9	0.96	ug/Kg		01/09/20 18:10	01/10/20 10:33	1
Chloroform	ND		3.4	0.45	ug/Kg		01/09/20 18:10	01/10/20 10:33	1
Chloromethane	ND		6.9	1.5	ug/Kg		01/09/20 18:10	01/10/20 10:33	1
2-Chlorotoluene	ND		3.4	0.45	ug/Kg		01/09/20 18:10	01/10/20 10:33	1
4-Chlorotoluene	ND		3.4	0.47	ug/Kg		01/09/20 18:10	01/10/20 10:33	1
Chlorodibromomethane	ND		3.4	0.49	ug/Kg		01/09/20 18:10	01/10/20 10:33	1
1,2-Dichlorobenzene	ND		3.4	0.47	ug/Kg		01/09/20 18:10	01/10/20 10:33	1
1,3-Dichlorobenzene	ND		3.4	0.50	ug/Kg		01/09/20 18:10	01/10/20 10:33	1
1,4-Dichlorobenzene	ND		3.4	0.49	ug/Kg		01/09/20 18:10	01/10/20 10:33	1
1,3-Dichloropropane	ND		3.4	0.50	ug/Kg		01/09/20 18:10	01/10/20 10:33	1
1,1-Dichloropropene	ND		3.4	0.48	ug/Kg		01/09/20 18:10	01/10/20 10:33	1
1,2-Dibromo-3-Chloropropane	ND		6.9	1.2	ug/Kg		01/09/20 18:10	01/10/20 10:33	1
Ethylene Dibromide	ND		3.4	0.98	ug/Kg		01/09/20 18:10	01/10/20 10:33	1
Dibromomethane	ND		6.9	1.4	ug/Kg		01/09/20 18:10	01/10/20 10:33	1
Dichlorodifluoromethane	ND		6.9	2.8	ug/Kg		01/09/20 18:10	01/10/20 10:33	1
1,1-Dichloroethane	ND		3.4	0.47	ug/Kg		01/09/20 18:10	01/10/20 10:33	1
1,2-Dichloroethane	ND		3.4	0.52	ug/Kg		01/09/20 18:10	01/10/20 10:33	1
1,1-Dichloroethene	ND		3.4	0.43	ug/Kg		01/09/20 18:10	01/10/20 10:33	1
cis-1,2-Dichloroethene	ND		3.4	0.47	ug/Kg		01/09/20 18:10	01/10/20 10:33	1
trans-1,2-Dichloroethene	ND		3.4	0.52	ug/Kg		01/09/20 18:10	01/10/20 10:33	1
1,2-Dichloropropane	ND		3.4	0.43	ug/Kg		01/09/20 18:10	01/10/20 10:33	1
cis-1,3-Dichloropropene	ND		3.4	0.48	ug/Kg		01/09/20 18:10	01/10/20 10:33	1
trans-1,3-Dichloropropene	ND		3.4	0.46	ug/Kg		01/09/20 18:10	01/10/20 10:33	1
Ethylbenzene	ND		3.4	0.52	ug/Kg		01/09/20 18:10	01/10/20 10:33	1
Hexachlorobutadiene	ND		3.4	0.62	ug/Kg		01/09/20 18:10	01/10/20 10:33	1
2-Hexanone	ND		34	6.9	ug/Kg		01/09/20 18:10	01/10/20 10:33	1
Isopropylbenzene	ND		3.4	0.47	ug/Kg		01/09/20 18:10	01/10/20 10:33	1
4-Isopropyltoluene	ND		3.4	1.7	ug/Kg		01/09/20 18:10	01/10/20 10:33	1
Methylene Chloride	ND		6.9	3.9	ug/Kg		01/09/20 18:10	01/10/20 10:33	1
4-Methyl-2-pentanone (MIBK)	ND		34	6.9	ug/Kg		01/09/20 18:10	01/10/20 10:33	1
Naphthalene	ND		6.9	1.0	ug/Kg		01/09/20 18:10	01/10/20 10:33	1
N-Propylbenzene	ND		3.4	0.45	ug/Kg		01/09/20 18:10	01/10/20 10:33	1
Styrene	ND		3.4	0.43	ug/Kg		01/09/20 18:10	01/10/20 10:33	1
1,1,1,2-Tetrachloroethane	ND		3.4	0.52	ug/Kg		01/09/20 18:10	01/10/20 10:33	1

Client Sample ID: SB-3-SS-8.0

Date Collected: 01/08/20 10:35
Date Received: 01/09/20 12:34

Lab Sample ID: 720-96843-2

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		3.4	0.52	ug/Kg		01/09/20 18:10	01/10/20 10:33	1
Tetrachloroethene	ND		3.4	0.46	ug/Kg		01/09/20 18:10	01/10/20 10:33	1
Toluene	ND		3.4	0.49	ug/Kg		01/09/20 18:10	01/10/20 10:33	1
1,2,3-Trichlorobenzene	ND		3.4	0.51	ug/Kg		01/09/20 18:10	01/10/20 10:33	1
1,2,4-Trichlorobenzene	ND		3.4	0.49	ug/Kg		01/09/20 18:10	01/10/20 10:33	1
1,1,1-Trichloroethane	ND		3.4	0.42	ug/Kg		01/09/20 18:10	01/10/20 10:33	1
1,1,2-Trichloroethane	ND		3.4	0.48	ug/Kg		01/09/20 18:10	01/10/20 10:33	1
Trichloroethene	ND		3.4	0.43	ug/Kg		01/09/20 18:10	01/10/20 10:33	1
Trichlorofluoromethane	ND		3.4	0.76	ug/Kg		01/09/20 18:10	01/10/20 10:33	1
1,2,3-Trichloropropane	ND		3.4	0.53	ug/Kg		01/09/20 18:10	01/10/20 10:33	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.4	1.4	ug/Kg		01/09/20 18:10	01/10/20 10:33	1
1,2,4-Trimethylbenzene	ND		3.4	1.1	ug/Kg		01/09/20 18:10	01/10/20 10:33	1
1,3,5-Trimethylbenzene	ND		3.4	0.45	ug/Kg		01/09/20 18:10	01/10/20 10:33	1
Vinyl acetate	ND		14	3.4	ug/Kg		01/09/20 18:10	01/10/20 10:33	1
Vinyl chloride	ND		3.4	0.50	ug/Kg		01/09/20 18:10	01/10/20 10:33	1
Xylenes, Total	ND		3.4	0.84	ug/Kg		01/09/20 18:10	01/10/20 10:33	1
2,2-Dichloropropane	ND		3.4	1.4	ug/Kg		01/09/20 18:10	01/10/20 10:33	1
Gasoline Range Organics (GRO) -C4-C12	ND		170	69	ug/Kg		01/09/20 18:10	01/10/20 10:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*45 - 131*	*01/09/20 18:10*	*01/10/20 10:33*	*1*
1,2-Dichloroethane-d4 (Surr)	*110*		*60 - 140*	*01/09/20 18:10*	*01/10/20 10:33*	*1*
Toluene-d8 (Surr)	*95*		*58 - 140*	*01/09/20 18:10*	*01/10/20 10:33*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC) - Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**5.0**		2.0	0.74	mg/Kg		01/10/20 09:17	01/14/20 17:08	1
Motor Oil Range Organics [C24-C36]	**28**	**J**	49	9.8	mg/Kg		01/10/20 09:17	01/14/20 17:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*75*		*38 - 148*	*01/10/20 09:17*	*01/14/20 17:08*	*1*
Capric Acid (Surr)	*0.005*		*0 - 1*	*01/10/20 09:17*	*01/14/20 17:08*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.47	0.084	mg/Kg		01/13/20 07:15	01/14/20 17:03	1
Arsenic	**6.5**		1.9	1.2	mg/Kg		01/13/20 07:15	01/14/20 17:03	1
Barium	**140**		0.93	0.11	mg/Kg		01/13/20 07:15	01/14/20 17:03	1
Beryllium	**0.33**		0.19	0.028	mg/Kg		01/13/20 07:15	01/14/20 17:03	1
Cadmium	**0.069**	**J**	0.19	0.028	mg/Kg		01/13/20 07:15	01/14/20 17:03	1
Cobalt	**11**		0.47	0.23	mg/Kg		01/13/20 07:15	01/14/20 17:03	1
Chromium	**46**		0.47	0.13	mg/Kg		01/13/20 07:15	01/14/20 17:03	1
Copper	**24**	**B**	1.4	0.21	mg/Kg		01/13/20 07:15	01/14/20 17:03	1
Molybdenum	ND		1.9	0.70	mg/Kg		01/13/20 07:15	01/14/20 17:03	1
Nickel	**73**		0.93	0.22	mg/Kg		01/13/20 07:15	01/14/20 17:03	1
Lead	**6.5**		0.93	0.24	mg/Kg		01/13/20 07:15	01/14/20 17:03	1
Selenium	ND		1.9	1.3	mg/Kg		01/13/20 07:15	01/14/20 17:03	1
Antimony	ND		1.9	0.88	mg/Kg		01/13/20 07:15	01/14/20 17:03	1
Thallium	ND		1.9	0.79	mg/Kg		01/13/20 07:15	01/14/20 17:03	1

Client: Haley & Aldrich, Inc.
Project/Site: World Oil

Job ID: 720-96843-1

Client Sample ID: SB-3-SS-8.0
Date Collected: 01/08/20 10:35
Date Received: 01/09/20 12:34

Lab Sample ID: 720-96843-2
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vanadium	31		0.47	0.18	mg/Kg		01/13/20 07:15	01/14/20 17:03	1
Zinc	46		1.9	0.18	mg/Kg		01/13/20 07:15	01/14/20 17:03	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.079		0.040	0.0086	mg/Kg		01/12/20 14:00	01/13/20 12:28	1

Client: Haley & Aldrich, Inc.
Project/Site: World Oil

Job ID: 720-96843-1

Client Sample ID: SB-4-SS-1.5
Date Collected: 01/08/20 11:55
Date Received: 01/09/20 12:34

Lab Sample ID: 720-96843-3
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.6	1.1	ug/Kg		01/09/20 18:10	01/10/20 12:40	1
Acetone	ND		46	35	ug/Kg		01/09/20 18:10	01/10/20 12:40	1
Benzene	ND		4.6	0.59	ug/Kg		01/09/20 18:10	01/10/20 12:40	1
Dichlorobromomethane	ND		4.6	0.66	ug/Kg		01/09/20 18:10	01/10/20 12:40	1
Bromobenzene	ND		4.6	0.72	ug/Kg		01/09/20 18:10	01/10/20 12:40	1
Chlorobromomethane	ND		18	1.6	ug/Kg		01/09/20 18:10	01/10/20 12:40	1
Bromoform	ND		4.6	1.8	ug/Kg		01/09/20 18:10	01/10/20 12:40	1
Bromomethane	ND		9.1	0.72	ug/Kg		01/09/20 18:10	01/10/20 12:40	1
2-Butanone (MEK)	ND		46	19	ug/Kg		01/09/20 18:10	01/10/20 12:40	1
n-Butylbenzene	ND		4.6	0.91	ug/Kg		01/09/20 18:10	01/10/20 12:40	1
sec-Butylbenzene	ND		4.6	0.66	ug/Kg		01/09/20 18:10	01/10/20 12:40	1
tert-Butylbenzene	ND		4.6	0.67	ug/Kg		01/09/20 18:10	01/10/20 12:40	1
Carbon disulfide	ND		4.6	1.8	ug/Kg		01/09/20 18:10	01/10/20 12:40	1
Carbon tetrachloride	ND		4.6	0.57	ug/Kg		01/09/20 18:10	01/10/20 12:40	1
Chlorobenzene	ND		4.6	0.63	ug/Kg		01/09/20 18:10	01/10/20 12:40	1
Chloroethane	ND		9.1	1.3	ug/Kg		01/09/20 18:10	01/10/20 12:40	1
Chloroform	ND		4.6	0.60	ug/Kg		01/09/20 18:10	01/10/20 12:40	1
Chloromethane	ND		9.1	2.0	ug/Kg		01/09/20 18:10	01/10/20 12:40	1
2-Chlorotoluene	ND		4.6	0.59	ug/Kg		01/09/20 18:10	01/10/20 12:40	1
4-Chlorotoluene	ND		4.6	0.62	ug/Kg		01/09/20 18:10	01/10/20 12:40	1
Chlorodibromomethane	ND		4.6	0.65	ug/Kg		01/09/20 18:10	01/10/20 12:40	1
1,2-Dichlorobenzene	ND		4.6	0.62	ug/Kg		01/09/20 18:10	01/10/20 12:40	1
1,3-Dichlorobenzene	ND		4.6	0.66	ug/Kg		01/09/20 18:10	01/10/20 12:40	1
1,4-Dichlorobenzene	ND		4.6	0.65	ug/Kg		01/09/20 18:10	01/10/20 12:40	1
1,3-Dichloropropane	ND		4.6	0.67	ug/Kg		01/09/20 18:10	01/10/20 12:40	1
1,1-Dichloropropene	ND		4.6	0.63	ug/Kg		01/09/20 18:10	01/10/20 12:40	1
1,2-Dibromo-3-Chloropropane	ND		9.1	1.6	ug/Kg		01/09/20 18:10	01/10/20 12:40	1
Ethylene Dibromide	ND		4.6	1.3	ug/Kg		01/09/20 18:10	01/10/20 12:40	1
Dibromomethane	ND		9.1	1.8	ug/Kg		01/09/20 18:10	01/10/20 12:40	1
Dichlorodifluoromethane	ND		9.1	3.6	ug/Kg		01/09/20 18:10	01/10/20 12:40	1
1,1-Dichloroethane	ND		4.6	0.62	ug/Kg		01/09/20 18:10	01/10/20 12:40	1
1,2-Dichloroethane	ND		4.6	0.69	ug/Kg		01/09/20 18:10	01/10/20 12:40	1
1,1-Dichloroethene	ND		4.6	0.57	ug/Kg		01/09/20 18:10	01/10/20 12:40	1
cis-1,2-Dichloroethene	ND		4.6	0.62	ug/Kg		01/09/20 18:10	01/10/20 12:40	1
trans-1,2-Dichloroethene	ND		4.6	0.68	ug/Kg		01/09/20 18:10	01/10/20 12:40	1
1,2-Dichloropropane	ND		4.6	0.57	ug/Kg		01/09/20 18:10	01/10/20 12:40	1
cis-1,3-Dichloropropene	ND		4.6	0.63	ug/Kg		01/09/20 18:10	01/10/20 12:40	1
trans-1,3-Dichloropropene	ND		4.6	0.61	ug/Kg		01/09/20 18:10	01/10/20 12:40	1
Ethylbenzene	ND		4.6	0.68	ug/Kg		01/09/20 18:10	01/10/20 12:40	1
Hexachlorobutadiene	ND		4.6	0.82	ug/Kg		01/09/20 18:10	01/10/20 12:40	1
2-Hexanone	ND		46	9.1	ug/Kg		01/09/20 18:10	01/10/20 12:40	1
Isopropylbenzene	ND		4.6	0.62	ug/Kg		01/09/20 18:10	01/10/20 12:40	1
4-Isopropyltoluene	ND		4.6	2.3	ug/Kg		01/09/20 18:10	01/10/20 12:40	1
Methylene Chloride	ND		9.1	5.1	ug/Kg		01/09/20 18:10	01/10/20 12:40	1
4-Methyl-2-pentanone (MIBK)	ND		46	9.1	ug/Kg		01/09/20 18:10	01/10/20 12:40	1
Naphthalene	ND		9.1	1.4	ug/Kg		01/09/20 18:10	01/10/20 12:40	1
N-Propylbenzene	ND		4.6	0.60	ug/Kg		01/09/20 18:10	01/10/20 12:40	1
Styrene	ND		4.6	0.57	ug/Kg		01/09/20 18:10	01/10/20 12:40	1
1,1,1,2-Tetrachloroethane	ND		4.6	0.69	ug/Kg		01/09/20 18:10	01/10/20 12:40	1

Client Sample ID: SB-4-SS-1.5

Date Collected: 01/08/20 11:55
Date Received: 01/09/20 12:34

Lab Sample ID: 720-96843-3

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		4.6	0.68	ug/Kg		01/09/20 18:10	01/10/20 12:40	1
Tetrachloroethene	ND		4.6	0.61	ug/Kg		01/09/20 18:10	01/10/20 12:40	1
Toluene	ND		4.6	0.65	ug/Kg		01/09/20 18:10	01/10/20 12:40	1
1,2,3-Trichlorobenzene	ND		4.6	0.68	ug/Kg		01/09/20 18:10	01/10/20 12:40	1
1,2,4-Trichlorobenzene	ND		4.6	0.65	ug/Kg		01/09/20 18:10	01/10/20 12:40	1
1,1,1-Trichloroethane	ND		4.6	0.56	ug/Kg		01/09/20 18:10	01/10/20 12:40	1
1,1,2-Trichloroethane	ND		4.6	0.64	ug/Kg		01/09/20 18:10	01/10/20 12:40	1
Trichloroethene	ND		4.6	0.57	ug/Kg		01/09/20 18:10	01/10/20 12:40	1
Trichlorofluoromethane	ND		4.6	1.0	ug/Kg		01/09/20 18:10	01/10/20 12:40	1
1,2,3-Trichloropropane	ND		4.6	0.70	ug/Kg		01/09/20 18:10	01/10/20 12:40	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.6	1.9	ug/Kg		01/09/20 18:10	01/10/20 12:40	1
1,2,4-Trimethylbenzene	ND		4.6	1.5	ug/Kg		01/09/20 18:10	01/10/20 12:40	1
1,3,5-Trimethylbenzene	ND		4.6	0.59	ug/Kg		01/09/20 18:10	01/10/20 12:40	1
Vinyl acetate	ND		18	4.6	ug/Kg		01/09/20 18:10	01/10/20 12:40	1
Vinyl chloride	ND		4.6	0.67	ug/Kg		01/09/20 18:10	01/10/20 12:40	1
Xylenes, Total	ND		4.6	1.1	ug/Kg		01/09/20 18:10	01/10/20 12:40	1
2,2-Dichloropropane	ND		4.6	1.8	ug/Kg		01/09/20 18:10	01/10/20 12:40	1
Gasoline Range Organics (GRO) -C4-C12	ND		230	91	ug/Kg		01/09/20 18:10	01/10/20 12:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*45 - 131*	*01/09/20 18:10*	*01/10/20 12:40*	*1*
1,2-Dichloroethane-d4 (Surr)	*124*		*60 - 140*	*01/09/20 18:10*	*01/10/20 12:40*	*1*
Toluene-d8 (Surr)	*90*		*58 - 140*	*01/09/20 18:10*	*01/10/20 12:40*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC) - Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**19**		2.0	0.74	mg/Kg		01/10/20 09:17	01/14/20 16:10	1
Motor Oil Range Organics [C24-C36]	**82**		49	9.9	mg/Kg		01/10/20 09:17	01/14/20 16:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*70*		*38 - 148*	*01/10/20 09:17*	*01/14/20 16:10*	*1*
Capric Acid (Surr)	*0.02*		*0 - 1*	*01/10/20 09:17*	*01/14/20 16:10*	*1*

Method: 7199 - Chromium, Hexavalent (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	**0.17**	**J**	0.30	0.15	mg/Kg		01/14/20 20:59	01/15/20 13:52	3

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.44	0.079	mg/Kg		01/13/20 07:15	01/14/20 17:14	1
Arsenic	**6.0**		1.8	1.1	mg/Kg		01/13/20 07:15	01/14/20 17:14	1
Barium	**77**		0.88	0.11	mg/Kg		01/13/20 07:15	01/14/20 17:14	1
Beryllium	**0.27**		0.18	0.026	mg/Kg		01/13/20 07:15	01/14/20 17:14	1
Cadmium	**0.17**	**J**	0.18	0.026	mg/Kg		01/13/20 07:15	01/14/20 17:14	1
Cobalt	**20**		0.44	0.22	mg/Kg		01/13/20 07:15	01/14/20 17:14	1
Chromium	**170**		0.44	0.12	mg/Kg		01/13/20 07:15	01/14/20 17:14	1
Copper	**22**	**B**	1.3	0.19	mg/Kg		01/13/20 07:15	01/14/20 17:14	1
Molybdenum	ND		1.8	0.66	mg/Kg		01/13/20 07:15	01/14/20 17:14	1
Nickel	**330**		0.88	0.21	mg/Kg		01/13/20 07:15	01/14/20 17:14	1

Client: Haley & Aldrich, Inc.
Project/Site: World Oil

Job ID: 720-96843-1

Client Sample ID: SB-4-SS-1.5
Date Collected: 01/08/20 11:55
Date Received: 01/09/20 12:34

Lab Sample ID: 720-96843-3
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	24		0.88	0.23	mg/Kg		01/13/20 07:15	01/14/20 17:14	1
Selenium	ND		1.8	1.2	mg/Kg		01/13/20 07:15	01/14/20 17:14	1
Antimony	1.1	J	1.8	0.82	mg/Kg		01/13/20 07:15	01/14/20 17:14	1
Thallium	ND		1.8	0.74	mg/Kg		01/13/20 07:15	01/14/20 17:14	1
Vanadium	36		0.44	0.17	mg/Kg		01/13/20 07:15	01/14/20 17:14	1
Zinc	69		1.8	0.17	mg/Kg		01/13/20 07:15	01/14/20 17:14	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.088		0.041	0.0089	mg/Kg		01/12/20 14:00	01/13/20 12:31	1

Client Sample ID: SB-4-SS-6.0
Date Collected: 01/08/20 11:32
Date Received: 01/09/20 12:34

Lab Sample ID: 720-96843-4
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.2	1.0	ug/Kg		01/09/20 18:10	01/10/20 13:08	1
Acetone	ND		42	32	ug/Kg		01/09/20 18:10	01/10/20 13:08	1
Benzene	ND		4.2	0.54	ug/Kg		01/09/20 18:10	01/10/20 13:08	1
Dichlorobromomethane	ND		4.2	0.60	ug/Kg		01/09/20 18:10	01/10/20 13:08	1
Bromobenzene	ND		4.2	0.66	ug/Kg		01/09/20 18:10	01/10/20 13:08	1
Chlorobromomethane	ND		17	1.5	ug/Kg		01/09/20 18:10	01/10/20 13:08	1
Bromoform	ND		4.2	1.7	ug/Kg		01/09/20 18:10	01/10/20 13:08	1
Bromomethane	ND		8.4	0.66	ug/Kg		01/09/20 18:10	01/10/20 13:08	1
2-Butanone (MEK)	ND		42	18	ug/Kg		01/09/20 18:10	01/10/20 13:08	1
n-Butylbenzene	ND		4.2	0.84	ug/Kg		01/09/20 18:10	01/10/20 13:08	1
sec-Butylbenzene	ND		4.2	0.60	ug/Kg		01/09/20 18:10	01/10/20 13:08	1
tert-Butylbenzene	ND		4.2	0.61	ug/Kg		01/09/20 18:10	01/10/20 13:08	1
Carbon disulfide	ND		4.2	1.7	ug/Kg		01/09/20 18:10	01/10/20 13:08	1
Carbon tetrachloride	ND		4.2	0.52	ug/Kg		01/09/20 18:10	01/10/20 13:08	1
Chlorobenzene	ND		4.2	0.58	ug/Kg		01/09/20 18:10	01/10/20 13:08	1
Chloroethane	ND		8.4	1.2	ug/Kg		01/09/20 18:10	01/10/20 13:08	1
Chloroform	ND		4.2	0.55	ug/Kg		01/09/20 18:10	01/10/20 13:08	1
Chloromethane	ND		8.4	1.8	ug/Kg		01/09/20 18:10	01/10/20 13:08	1
2-Chlorotoluene	ND		4.2	0.54	ug/Kg		01/09/20 18:10	01/10/20 13:08	1
4-Chlorotoluene	ND		4.2	0.57	ug/Kg		01/09/20 18:10	01/10/20 13:08	1
Chlorodibromomethane	ND		4.2	0.59	ug/Kg		01/09/20 18:10	01/10/20 13:08	1
1,2-Dichlorobenzene	ND		4.2	0.57	ug/Kg		01/09/20 18:10	01/10/20 13:08	1
1,3-Dichlorobenzene	ND		4.2	0.60	ug/Kg		01/09/20 18:10	01/10/20 13:08	1
1,4-Dichlorobenzene	ND		4.2	0.59	ug/Kg		01/09/20 18:10	01/10/20 13:08	1
1,3-Dichloropropane	ND		4.2	0.61	ug/Kg		01/09/20 18:10	01/10/20 13:08	1
1,1-Dichloropropene	ND		4.2	0.58	ug/Kg		01/09/20 18:10	01/10/20 13:08	1
1,2-Dibromo-3-Chloropropane	ND		8.4	1.4	ug/Kg		01/09/20 18:10	01/10/20 13:08	1
Ethylene Dibromide	ND		4.2	1.2	ug/Kg		01/09/20 18:10	01/10/20 13:08	1
Dibromomethane	ND		8.4	1.7	ug/Kg		01/09/20 18:10	01/10/20 13:08	1
Dichlorodifluoromethane	ND		8.4	3.3	ug/Kg		01/09/20 18:10	01/10/20 13:08	1
1,1-Dichloroethane	ND		4.2	0.57	ug/Kg		01/09/20 18:10	01/10/20 13:08	1
1,2-Dichloroethane	ND		4.2	0.63	ug/Kg		01/09/20 18:10	01/10/20 13:08	1
1,1-Dichloroethene	ND		4.2	0.52	ug/Kg		01/09/20 18:10	01/10/20 13:08	1
cis-1,2-Dichloroethene	ND		4.2	0.57	ug/Kg		01/09/20 18:10	01/10/20 13:08	1
trans-1,2-Dichloroethene	ND		4.2	0.63	ug/Kg		01/09/20 18:10	01/10/20 13:08	1
1,2-Dichloropropane	ND		4.2	0.53	ug/Kg		01/09/20 18:10	01/10/20 13:08	1
cis-1,3-Dichloropropene	ND		4.2	0.58	ug/Kg		01/09/20 18:10	01/10/20 13:08	1
trans-1,3-Dichloropropene	ND		4.2	0.56	ug/Kg		01/09/20 18:10	01/10/20 13:08	1
Ethylbenzene	ND		4.2	0.63	ug/Kg		01/09/20 18:10	01/10/20 13:08	1
Hexachlorobutadiene	ND		4.2	0.75	ug/Kg		01/09/20 18:10	01/10/20 13:08	1
2-Hexanone	ND		42	8.4	ug/Kg		01/09/20 18:10	01/10/20 13:08	1
Isopropylbenzene	ND		4.2	0.57	ug/Kg		01/09/20 18:10	01/10/20 13:08	1
4-Isopropyltoluene	ND		4.2	2.1	ug/Kg		01/09/20 18:10	01/10/20 13:08	1
Methylene Chloride	ND		8.4	4.7	ug/Kg		01/09/20 18:10	01/10/20 13:08	1
4-Methyl-2-pentanone (MIBK)	ND		42	8.4	ug/Kg		01/09/20 18:10	01/10/20 13:08	1
Naphthalene	ND		8.4	1.3	ug/Kg		01/09/20 18:10	01/10/20 13:08	1
N-Propylbenzene	ND		4.2	0.55	ug/Kg		01/09/20 18:10	01/10/20 13:08	1
Styrene	ND		4.2	0.53	ug/Kg		01/09/20 18:10	01/10/20 13:08	1
1,1,1,2-Tetrachloroethane	ND		4.2	0.63	ug/Kg		01/09/20 18:10	01/10/20 13:08	1

Client Sample ID: SB-4-SS-6.0

Date Collected: 01/08/20 11:32
Date Received: 01/09/20 12:34

Lab Sample ID: 720-96843-4

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		4.2	0.63	ug/Kg		01/09/20 18:10	01/10/20 13:08	1
Tetrachloroethene	ND		4.2	0.56	ug/Kg		01/09/20 18:10	01/10/20 13:08	1
Toluene	ND		4.2	0.59	ug/Kg		01/09/20 18:10	01/10/20 13:08	1
1,2,3-Trichlorobenzene	ND		4.2	0.62	ug/Kg		01/09/20 18:10	01/10/20 13:08	1
1,2,4-Trichlorobenzene	ND		4.2	0.59	ug/Kg		01/09/20 18:10	01/10/20 13:08	1
1,1,1-Trichloroethane	ND		4.2	0.51	ug/Kg		01/09/20 18:10	01/10/20 13:08	1
1,1,2-Trichloroethane	ND		4.2	0.58	ug/Kg		01/09/20 18:10	01/10/20 13:08	1
Trichloroethene	ND		4.2	0.53	ug/Kg		01/09/20 18:10	01/10/20 13:08	1
Trichlorofluoromethane	ND		4.2	0.92	ug/Kg		01/09/20 18:10	01/10/20 13:08	1
1,2,3-Trichloropropane	ND		4.2	0.64	ug/Kg		01/09/20 18:10	01/10/20 13:08	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.2	1.8	ug/Kg		01/09/20 18:10	01/10/20 13:08	1
1,2,4-Trimethylbenzene	ND		4.2	1.4	ug/Kg		01/09/20 18:10	01/10/20 13:08	1
1,3,5-Trimethylbenzene	ND		4.2	0.54	ug/Kg		01/09/20 18:10	01/10/20 13:08	1
Vinyl acetate	ND		17	4.2	ug/Kg		01/09/20 18:10	01/10/20 13:08	1
Vinyl chloride	ND		4.2	0.61	ug/Kg		01/09/20 18:10	01/10/20 13:08	1
Xylenes, Total	ND		4.2	1.0	ug/Kg		01/09/20 18:10	01/10/20 13:08	1
2,2-Dichloropropane	ND		4.2	1.7	ug/Kg		01/09/20 18:10	01/10/20 13:08	1
Gasoline Range Organics (GRO) -C4-C12	ND		210	84	ug/Kg		01/09/20 18:10	01/10/20 13:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*91*		*45 - 131*	*01/09/20 18:10*	*01/10/20 13:08*	*1*
1,2-Dichloroethane-d4 (Surr)	*126*		*60 - 140*	*01/09/20 18:10*	*01/10/20 13:08*	*1*
Toluene-d8 (Surr)	*92*		*58 - 140*	*01/09/20 18:10*	*01/10/20 13:08*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC) - Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**1.1**	**J**	2.0	0.73	mg/Kg		01/10/20 09:17	01/14/20 17:37	1
Motor Oil Range Organics [C24-C36]	ND		49	9.8	mg/Kg		01/10/20 09:17	01/14/20 17:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*81*		*38 - 148*	*01/10/20 09:17*	*01/14/20 17:37*	*1*
Capric Acid (Surr)	*0.009*		*0 - 1*	*01/10/20 09:17*	*01/14/20 17:37*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.46	0.083	mg/Kg		01/13/20 07:15	01/14/20 17:18	1
Arsenic	**7.2**		1.9	1.2	mg/Kg		01/13/20 07:15	01/14/20 17:18	1
Barium	**160**		0.93	0.11	mg/Kg		01/13/20 07:15	01/14/20 17:18	1
Beryllium	**0.42**		0.19	0.028	mg/Kg		01/13/20 07:15	01/14/20 17:18	1
Cadmium	**0.061**	**J**	0.19	0.028	mg/Kg		01/13/20 07:15	01/14/20 17:18	1
Cobalt	**11**		0.46	0.23	mg/Kg		01/13/20 07:15	01/14/20 17:18	1
Chromium	**53**		0.46	0.13	mg/Kg		01/13/20 07:15	01/14/20 17:18	1
Copper	**30**	**B**	1.4	0.20	mg/Kg		01/13/20 07:15	01/14/20 17:18	1
Molybdenum	ND		1.9	0.69	mg/Kg		01/13/20 07:15	01/14/20 17:18	1
Nickel	**72**		0.93	0.22	mg/Kg		01/13/20 07:15	01/14/20 17:18	1
Lead	**7.5**		0.93	0.24	mg/Kg		01/13/20 07:15	01/14/20 17:18	1
Selenium	ND		1.9	1.3	mg/Kg		01/13/20 07:15	01/14/20 17:18	1
Antimony	ND		1.9	0.87	mg/Kg		01/13/20 07:15	01/14/20 17:18	1
Thallium	ND		1.9	0.78	mg/Kg		01/13/20 07:15	01/14/20 17:18	1
Vanadium	**38**		0.46	0.18	mg/Kg		01/13/20 07:15	01/14/20 17:18	1

Client: Haley & Aldrich, Inc.
Project/Site: World Oil

Job ID: 720-96843-1

Client Sample ID: SB-4-SS-6.0
Date Collected: 01/08/20 11:32
Date Received: 01/09/20 12:34

Lab Sample ID: 720-96843-4
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	56		1.9	0.18	mg/Kg		01/13/20 07:15	01/14/20 17:18	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.055		0.043	0.0092	mg/Kg		01/12/20 14:00	01/13/20 12:33	1

Client: Haley & Aldrich, Inc.
Project/Site: World Oil

Job ID: 720-96843-1

Client Sample ID: SB-3-GW-8.5
Date Collected: 01/08/20 10:51
Date Received: 01/09/20 12:34

Lab Sample ID: 720-96843-5
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50	0.11	ug/L			01/13/20 11:11	1
Acetone	ND		50	20	ug/L			01/13/20 11:11	1
Benzene	**0.95**		0.50	0.25	ug/L			01/13/20 11:11	1
Dichlorobromomethane	ND		0.50	0.20	ug/L			01/13/20 11:11	1
Bromobenzene	ND		1.0	0.20	ug/L			01/13/20 11:11	1
Chlorobromomethane	ND		1.0	0.25	ug/L			01/13/20 11:11	1
Bromoform	ND		1.0	0.20	ug/L			01/13/20 11:11	1
Bromomethane	ND		1.0	0.49	ug/L			01/13/20 11:11	1
2-Butanone (MEK)	ND		50	8.4	ug/L			01/13/20 11:11	1
n-Butylbenzene	**2.4**		1.0	0.30	ug/L			01/13/20 11:11	1
sec-Butylbenzene	**2.5**		1.0	0.17	ug/L			01/13/20 11:11	1
tert-Butylbenzene	**7.7**		1.0	0.20	ug/L			01/13/20 11:11	1
Carbon disulfide	ND		5.0	0.78	ug/L			01/13/20 11:11	1
Carbon tetrachloride	ND		0.50	0.11	ug/L			01/13/20 11:11	1
Chlorobenzene	ND		0.50	0.13	ug/L			01/13/20 11:11	1
Chloroethane	ND		1.0	0.17	ug/L			01/13/20 11:11	1
Chloroform	ND		1.0	0.40	ug/L			01/13/20 11:11	1
Chloromethane	ND		1.0	0.19	ug/L			01/13/20 11:11	1
2-Chlorotoluene	ND		0.50	0.20	ug/L			01/13/20 11:11	1
4-Chlorotoluene	ND		0.50	0.20	ug/L			01/13/20 11:11	1
Chlorodibromomethane	ND		0.50	0.10	ug/L			01/13/20 11:11	1
1,2-Dichlorobenzene	ND		0.50	0.21	ug/L			01/13/20 11:11	1
1,3-Dichlorobenzene	ND		0.50	0.20	ug/L			01/13/20 11:11	1
1,4-Dichlorobenzene	ND		0.50	0.16	ug/L			01/13/20 11:11	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			01/13/20 11:11	1
1,1-Dichloropropene	ND		0.50	0.20	ug/L			01/13/20 11:11	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.30	ug/L			01/13/20 11:11	1
Ethylene Dibromide	ND		0.50	0.075	ug/L			01/13/20 11:11	1
Dibromomethane	ND		0.50	0.12	ug/L			01/13/20 11:11	1
Dichlorodifluoromethane	ND		0.50	0.25	ug/L			01/13/20 11:11	1
1,1-Dichloroethane	ND		0.50	0.11	ug/L			01/13/20 11:11	1
1,2-Dichloroethane	ND		0.50	0.077	ug/L			01/13/20 11:11	1
1,1-Dichloroethene	ND		0.50	0.20	ug/L			01/13/20 11:11	1
cis-1,2-Dichloroethene	ND		0.50	0.16	ug/L			01/13/20 11:11	1
trans-1,2-Dichloroethene	ND		0.50	0.13	ug/L			01/13/20 11:11	1
1,2-Dichloropropane	ND		0.50	0.20	ug/L			01/13/20 11:11	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			01/13/20 11:11	1
trans-1,3-Dichloropropene	ND		0.50	0.17	ug/L			01/13/20 11:11	1
Ethylbenzene	**0.18**	**J**	0.50	0.13	ug/L			01/13/20 11:11	1
Hexachlorobutadiene	ND		1.0	0.27	ug/L			01/13/20 11:11	1
2-Hexanone	ND		50	11	ug/L			01/13/20 11:11	1
Isopropylbenzene	**3.1**		0.50	0.20	ug/L			01/13/20 11:11	1
4-Isopropyltoluene	ND		1.0	0.20	ug/L			01/13/20 11:11	1
Methylene Chloride	ND		5.0	1.5	ug/L			01/13/20 11:11	1
4-Methyl-2-pentanone (MIBK)	**13**	**J**	50	10	ug/L			01/13/20 11:11	1
Naphthalene	ND		1.0	0.50	ug/L			01/13/20 11:11	1
N-Propylbenzene	**7.8**		1.0	0.20	ug/L			01/13/20 11:11	1
Styrene	ND		0.50	0.22	ug/L			01/13/20 11:11	1
1,1,1,2-Tetrachloroethane	ND		0.50	0.14	ug/L			01/13/20 11:11	1

Client Sample ID: SB-3-GW-8.5

Date Collected: 01/08/20 10:51
Date Received: 01/09/20 12:34

Lab Sample ID: 720-96843-5

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		0.50	0.17	ug/L			01/13/20 11:11	1
Tetrachloroethene	ND		0.50	0.20	ug/L			01/13/20 11:11	1
Toluene	**0.52**		0.50	0.17	ug/L			01/13/20 11:11	1
1,2,3-Trichlorobenzene	ND		1.0	0.50	ug/L			01/13/20 11:11	1
1,2,4-Trichlorobenzene	ND		1.0	0.47	ug/L			01/13/20 11:11	1
1,1,1-Trichloroethane	ND		0.50	0.20	ug/L			01/13/20 11:11	1
1,1,2-Trichloroethane	ND		0.50	0.11	ug/L			01/13/20 11:11	1
Trichloroethene	ND		0.50	0.20	ug/L			01/13/20 11:11	1
Trichlorofluoromethane	ND		1.0	0.30	ug/L			01/13/20 11:11	1
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			01/13/20 11:11	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.20	ug/L			01/13/20 11:11	1
1,2,4-Trimethylbenzene	**0.24**	**J**	0.50	0.20	ug/L			01/13/20 11:11	1
1,3,5-Trimethylbenzene	ND		0.50	0.17	ug/L			01/13/20 11:11	1
Vinyl acetate	ND		10	1.8	ug/L			01/13/20 11:11	1
Vinyl chloride	ND		0.50	0.20	ug/L			01/13/20 11:11	1
Xylenes, Total	**0.77**		0.50	0.40	ug/L			01/13/20 11:11	1
2,2-Dichloropropane	ND		0.50	0.17	ug/L			01/13/20 11:11	1
Gasoline Range Organics (GRO) -C4-C12	**1900**		50	21	ug/L			01/13/20 11:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*67 - 130*		*01/13/20 11:11*	*1*
1,2-Dichloroethane-d4 (Surr)	*91*		*72 - 130*		*01/13/20 11:11*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*		*01/13/20 11:11*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC) - Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**130**		52	31	ug/L		01/09/20 18:05	01/14/20 22:59	1
Motor Oil Range Organics [C24-C36]	ND		100	74	ug/L		01/09/20 18:05	01/14/20 22:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*88*		*31 - 150*	*01/09/20 18:05*	*01/14/20 22:59*	*1*
Capric Acid (Surr)	*0.2*		*0 - 5*	*01/09/20 18:05*	*01/14/20 22:59*	*1*

Client: Haley & Aldrich, Inc.
Project/Site: World Oil

Job ID: 720-96843-1

Client Sample ID: SB-4-GW-7.3
Date Collected: 01/08/20 11:37
Date Received: 01/09/20 12:34

Lab Sample ID: 720-96843-6
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50	0.11	ug/L			01/13/20 11:40	1
Acetone	ND		50	20	ug/L			01/13/20 11:40	1
Benzene	ND		0.50	0.25	ug/L			01/13/20 11:40	1
Dichlorobromomethane	ND		0.50	0.20	ug/L			01/13/20 11:40	1
Bromobenzene	ND		1.0	0.20	ug/L			01/13/20 11:40	1
Chlorobromomethane	ND		1.0	0.25	ug/L			01/13/20 11:40	1
Bromoform	ND		1.0	0.20	ug/L			01/13/20 11:40	1
Bromomethane	ND		1.0	0.49	ug/L			01/13/20 11:40	1
2-Butanone (MEK)	ND		50	8.4	ug/L			01/13/20 11:40	1
n-Butylbenzene	**0.50**	**J**	1.0	0.30	ug/L			01/13/20 11:40	1
sec-Butylbenzene	**0.39**	**J**	1.0	0.17	ug/L			01/13/20 11:40	1
tert-Butylbenzene	**4.0**		1.0	0.20	ug/L			01/13/20 11:40	1
Carbon disulfide	ND		5.0	0.78	ug/L			01/13/20 11:40	1
Carbon tetrachloride	ND		0.50	0.11	ug/L			01/13/20 11:40	1
Chlorobenzene	ND		0.50	0.13	ug/L			01/13/20 11:40	1
Chloroethane	ND		1.0	0.17	ug/L			01/13/20 11:40	1
Chloroform	ND		1.0	0.40	ug/L			01/13/20 11:40	1
Chloromethane	ND		1.0	0.19	ug/L			01/13/20 11:40	1
2-Chlorotoluene	ND		0.50	0.20	ug/L			01/13/20 11:40	1
4-Chlorotoluene	ND		0.50	0.20	ug/L			01/13/20 11:40	1
Chlorodibromomethane	ND		0.50	0.10	ug/L			01/13/20 11:40	1
1,2-Dichlorobenzene	ND		0.50	0.21	ug/L			01/13/20 11:40	1
1,3-Dichlorobenzene	ND		0.50	0.20	ug/L			01/13/20 11:40	1
1,4-Dichlorobenzene	ND		0.50	0.16	ug/L			01/13/20 11:40	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			01/13/20 11:40	1
1,1-Dichloropropene	ND		0.50	0.20	ug/L			01/13/20 11:40	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.30	ug/L			01/13/20 11:40	1
Ethylene Dibromide	ND		0.50	0.075	ug/L			01/13/20 11:40	1
Dibromomethane	ND		0.50	0.12	ug/L			01/13/20 11:40	1
Dichlorodifluoromethane	ND		0.50	0.25	ug/L			01/13/20 11:40	1
1,1-Dichloroethane	ND		0.50	0.11	ug/L			01/13/20 11:40	1
1,2-Dichloroethane	ND		0.50	0.077	ug/L			01/13/20 11:40	1
1,1-Dichloroethene	ND		0.50	0.20	ug/L			01/13/20 11:40	1
cis-1,2-Dichloroethene	ND		0.50	0.16	ug/L			01/13/20 11:40	1
trans-1,2-Dichloroethene	ND		0.50	0.13	ug/L			01/13/20 11:40	1
1,2-Dichloropropane	ND		0.50	0.20	ug/L			01/13/20 11:40	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			01/13/20 11:40	1
trans-1,3-Dichloropropene	ND		0.50	0.17	ug/L			01/13/20 11:40	1
Ethylbenzene	ND		0.50	0.13	ug/L			01/13/20 11:40	1
Hexachlorobutadiene	ND		1.0	0.27	ug/L			01/13/20 11:40	1
2-Hexanone	ND		50	11	ug/L			01/13/20 11:40	1
Isopropylbenzene	ND		0.50	0.20	ug/L			01/13/20 11:40	1
4-Isopropyltoluene	ND		1.0	0.20	ug/L			01/13/20 11:40	1
Methylene Chloride	ND		5.0	1.5	ug/L			01/13/20 11:40	1
4-Methyl-2-pentanone (MIBK)	ND		50	10	ug/L			01/13/20 11:40	1
Naphthalene	ND		1.0	0.50	ug/L			01/13/20 11:40	1
N-Propylbenzene	ND		1.0	0.20	ug/L			01/13/20 11:40	1
Styrene	ND		0.50	0.22	ug/L			01/13/20 11:40	1
1,1,1,2-Tetrachloroethane	ND		0.50	0.14	ug/L			01/13/20 11:40	1

Client: Haley & Aldrich, Inc.
Project/Site: World Oil

Job ID: 720-96843-1

Client Sample ID: SB-4-GW-7.3

Date Collected: 01/08/20 11:37
Date Received: 01/09/20 12:34

Lab Sample ID: 720-96843-6

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		0.50	0.17	ug/L			01/13/20 11:40	1
Tetrachloroethene	ND		0.50	0.20	ug/L			01/13/20 11:40	1
Toluene	**0.20**	**J**	0.50	0.17	ug/L			01/13/20 11:40	1
1,2,3-Trichlorobenzene	ND		1.0	0.50	ug/L			01/13/20 11:40	1
1,2,4-Trichlorobenzene	ND		1.0	0.47	ug/L			01/13/20 11:40	1
1,1,1-Trichloroethane	ND		0.50	0.20	ug/L			01/13/20 11:40	1
1,1,2-Trichloroethane	ND		0.50	0.11	ug/L			01/13/20 11:40	1
Trichloroethene	ND		0.50	0.20	ug/L			01/13/20 11:40	1
Trichlorofluoromethane	ND		1.0	0.30	ug/L			01/13/20 11:40	1
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			01/13/20 11:40	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.20	ug/L			01/13/20 11:40	1
1,2,4-Trimethylbenzene	ND		0.50	0.20	ug/L			01/13/20 11:40	1
1,3,5-Trimethylbenzene	ND		0.50	0.17	ug/L			01/13/20 11:40	1
Vinyl acetate	ND		10	1.8	ug/L			01/13/20 11:40	1
Vinyl chloride	ND		0.50	0.20	ug/L			01/13/20 11:40	1
Xylenes, Total	ND		0.50	0.40	ug/L			01/13/20 11:40	1
2,2-Dichloropropane	ND		0.50	0.17	ug/L			01/13/20 11:40	1
Gasoline Range Organics (GRO) -C4-C12	**310**		50	21	ug/L			01/13/20 11:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*67 - 130*		*01/13/20 11:40*	*1*
1,2-Dichloroethane-d4 (Surr)	*87*		*72 - 130*		*01/13/20 11:40*	*1*
Toluene-d8 (Surr)	*94*		*70 - 130*		*01/13/20 11:40*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC) - Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		52	31	ug/L		01/09/20 18:05	01/14/20 23:28	1
Motor Oil Range Organics [C24-C36]	ND		100	74	ug/L		01/09/20 18:05	01/14/20 23:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*82*		*31 - 150*	*01/09/20 18:05*	*01/14/20 23:28*	*1*
Capric Acid (Surr)	*0.002*		*0 - 5*	*01/09/20 18:05*	*01/14/20 23:28*	*1*

Surrogate Summary

Client: Haley & Aldrich, Inc.
Project/Site: World Oil

Job ID: 720-96843-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DCA	TOL
Lab Sample ID	Client Sample ID	(45-131)	(60-140)	(58-140)
720-96843-1	SB-3-SS-3.5	94	108	93
720-96843-2	SB-3-SS-8.0	98	110	95
720-96843-3	SB-4-SS-1.5	93	124	90
720-96843-4	SB-4-SS-6.0	91	126	92
LCS 720-278181/5	Lab Control Sample	101	101	99
LCS 720-278181/7	Lab Control Sample	103	105	100
LCS 720-278182/5	Lab Control Sample	98	95	101
LCS 720-278182/7	Lab Control Sample	100	100	101
LCS 720-278278/4	Lab Control Sample	105	105	102
LCS 720-278278/6	Lab Control Sample	107	104	99
LCSD 720-278181/6	Lab Control Sample Dup	100	98	97
LCSD 720-278181/8	Lab Control Sample Dup	99	103	98
LCSD 720-278182/6	Lab Control Sample Dup	100	92	101
LCSD 720-278182/8	Lab Control Sample Dup	102	99	100
LCSD 720-278278/5	Lab Control Sample Dup	103	103	103
LCSD 720-278278/7	Lab Control Sample Dup	106	103	99
MB 720-278181/4	Method Blank	100	106	97
MB 720-278182/4	Method Blank	102	95	98
MB 720-278278/9	Method Blank	105	101	99

Surrogate Legend

BFB = 4-Bromofluorobenzene
DCA = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DCA	TOL
Lab Sample ID	Client Sample ID	(67-130)	(72-130)	(70-130)
720-96843-5	SB-3-GW-8.5	96	91	95
720-96843-6	SB-4-GW-7.3	94	87	94
LCS 720-278249/5	Lab Control Sample	93	88	95
LCS 720-278249/7	Lab Control Sample	93	87	96
LCSD 720-278249/6	Lab Control Sample Dup	94	89	96
LCSD 720-278249/8	Lab Control Sample Dup	93	90	95
MB 720-278249/4	Method Blank	87	89	93

Surrogate Legend

BFB = 4-Bromofluorobenzene
DCA = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)

Method: 8015B - Diesel Range Organics (DRO) (GC)

Matrix: Solid — **Prep Type: Silica Gel Cleanup**

		Percent Surrogate Recovery (Acceptance Limits)	
		TPH1	NDA1
Lab Sample ID	Client Sample ID	(38-148)	(0-1)
720-96843-1	SB-3-SS-3.5	80	0.01

Surrogate Summary

Client: Haley & Aldrich, Inc.
Project/Site: World Oil

Job ID: 720-96843-1

Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

Matrix: Solid **Prep Type: Silica Gel Cleanup**

		Percent Surrogate Recovery (Acceptance Limits)	
		TPH1	NDA1
Lab Sample ID	Client Sample ID	(38-148)	(0-1)
720-96843-2	SB-3-SS-8.0	75	0.005
720-96843-3	SB-4-SS-1.5	70	0.02
720-96843-4	SB-4-SS-6.0	81	0.009
LCS 720-278193/2-A	Lab Control Sample	87	
MB 720-278193/1-A	Method Blank	75	0.07

Surrogate Legend

TPH = p-Terphenyl
NDA = Capric Acid (Surr)

Method: 8015B - Diesel Range Organics (DRO) (GC)

Matrix: Water **Prep Type: Silica Gel Cleanup**

		Percent Surrogate Recovery (Acceptance Limits)	
		TPH1	NDA1
Lab Sample ID	Client Sample ID	(31-150)	(0-5)
720-96843-5	SB-3-GW-8.5	88	0.2
720-96843-6	SB-4-GW-7.3	82	0.002
LCS 720-278174/2-A	Lab Control Sample	79	
LCSD 720-278174/3-A	Lab Control Sample Dup	75	
MB 720-278174/1-A	Method Blank	81	0.02

Surrogate Legend

TPH = p-Terphenyl
NDA = Capric Acid (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 720-278181/4
Matrix: Solid
Analysis Batch: 278181

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.0	1.2	ug/Kg			01/10/20 07:27	1
Acetone	ND		50	38	ug/Kg			01/10/20 07:27	1
Benzene	ND		5.0	0.65	ug/Kg			01/10/20 07:27	1
Dichlorobromomethane	ND		5.0	0.72	ug/Kg			01/10/20 07:27	1
Bromobenzene	ND		5.0	0.79	ug/Kg			01/10/20 07:27	1
Chlorobromomethane	ND		20	1.8	ug/Kg			01/10/20 07:27	1
Bromoform	ND		5.0	2.0	ug/Kg			01/10/20 07:27	1
Bromomethane	ND		10	0.79	ug/Kg			01/10/20 07:27	1
2-Butanone (MEK)	ND		50	21	ug/Kg			01/10/20 07:27	1
n-Butylbenzene	ND		5.0	1.0	ug/Kg			01/10/20 07:27	1
sec-Butylbenzene	ND		5.0	0.72	ug/Kg			01/10/20 07:27	1
tert-Butylbenzene	ND		5.0	0.73	ug/Kg			01/10/20 07:27	1
Carbon disulfide	ND		5.0	2.0	ug/Kg			01/10/20 07:27	1
Carbon tetrachloride	ND		5.0	0.62	ug/Kg			01/10/20 07:27	1
Chlorobenzene	ND		5.0	0.69	ug/Kg			01/10/20 07:27	1
Chloroethane	ND		10	1.4	ug/Kg			01/10/20 07:27	1
Chloroform	ND		5.0	0.66	ug/Kg			01/10/20 07:27	1
Chloromethane	ND		10	2.2	ug/Kg			01/10/20 07:27	1
2-Chlorotoluene	ND		5.0	0.65	ug/Kg			01/10/20 07:27	1
4-Chlorotoluene	ND		5.0	0.68	ug/Kg			01/10/20 07:27	1
Chlorodibromomethane	ND		5.0	0.71	ug/Kg			01/10/20 07:27	1
1,2-Dichlorobenzene	ND		5.0	0.68	ug/Kg			01/10/20 07:27	1
1,3-Dichlorobenzene	ND		5.0	0.72	ug/Kg			01/10/20 07:27	1
1,4-Dichlorobenzene	ND		5.0	0.71	ug/Kg			01/10/20 07:27	1
1,3-Dichloropropane	ND		5.0	0.73	ug/Kg			01/10/20 07:27	1
1,1-Dichloropropene	ND		5.0	0.69	ug/Kg			01/10/20 07:27	1
1,2-Dibromo-3-Chloropropane	ND		10	1.7	ug/Kg			01/10/20 07:27	1
Ethylene Dibromide	ND		5.0	1.4	ug/Kg			01/10/20 07:27	1
Dibromomethane	ND		10	2.0	ug/Kg			01/10/20 07:27	1
Dichlorodifluoromethane	ND		10	4.0	ug/Kg			01/10/20 07:27	1
1,1-Dichloroethane	ND		5.0	0.68	ug/Kg			01/10/20 07:27	1
1,2-Dichloroethane	ND		5.0	0.76	ug/Kg			01/10/20 07:27	1
1,1-Dichloroethene	ND		5.0	0.62	ug/Kg			01/10/20 07:27	1
cis-1,2-Dichloroethene	ND		5.0	0.68	ug/Kg			01/10/20 07:27	1
trans-1,2-Dichloroethene	ND		5.0	0.75	ug/Kg			01/10/20 07:27	1
1,2-Dichloropropane	ND		5.0	0.63	ug/Kg			01/10/20 07:27	1
cis-1,3-Dichloropropene	ND		5.0	0.69	ug/Kg			01/10/20 07:27	1
trans-1,3-Dichloropropene	ND		5.0	0.67	ug/Kg			01/10/20 07:27	1
Ethylbenzene	ND		5.0	0.75	ug/Kg			01/10/20 07:27	1
Hexachlorobutadiene	ND		5.0	0.90	ug/Kg			01/10/20 07:27	1
2-Hexanone	ND		50	10	ug/Kg			01/10/20 07:27	1
Isopropylbenzene	ND		5.0	0.68	ug/Kg			01/10/20 07:27	1
4-Isopropyltoluene	ND		5.0	2.5	ug/Kg			01/10/20 07:27	1
Methylene Chloride	ND		10	5.6	ug/Kg			01/10/20 07:27	1
4-Methyl-2-pentanone (MIBK)	ND		50	10	ug/Kg			01/10/20 07:27	1
Naphthalene	ND		10	1.5	ug/Kg			01/10/20 07:27	1
N-Propylbenzene	ND		5.0	0.66	ug/Kg			01/10/20 07:27	1
Styrene	ND		5.0	0.63	ug/Kg			01/10/20 07:27	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-278181/4
Matrix: Solid
Analysis Batch: 278181

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.0	0.76	ug/Kg			01/10/20 07:27	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.75	ug/Kg			01/10/20 07:27	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			01/10/20 07:27	1
Toluene	ND		5.0	0.71	ug/Kg			01/10/20 07:27	1
1,2,3-Trichlorobenzene	ND		5.0	0.74	ug/Kg			01/10/20 07:27	1
1,2,4-Trichlorobenzene	ND		5.0	0.71	ug/Kg			01/10/20 07:27	1
1,1,1-Trichloroethane	ND		5.0	0.61	ug/Kg			01/10/20 07:27	1
1,1,2-Trichloroethane	ND		5.0	0.70	ug/Kg			01/10/20 07:27	1
Trichloroethene	ND		5.0	0.63	ug/Kg			01/10/20 07:27	1
Trichlorofluoromethane	ND		5.0	1.1	ug/Kg			01/10/20 07:27	1
1,2,3-Trichloropropane	ND		5.0	0.77	ug/Kg			01/10/20 07:27	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	2.1	ug/Kg			01/10/20 07:27	1
1,2,4-Trimethylbenzene	ND		5.0	1.6	ug/Kg			01/10/20 07:27	1
1,3,5-Trimethylbenzene	ND		5.0	0.65	ug/Kg			01/10/20 07:27	1
Vinyl acetate	ND		20	5.0	ug/Kg			01/10/20 07:27	1
Vinyl chloride	ND		5.0	0.73	ug/Kg			01/10/20 07:27	1
Xylenes, Total	ND		5.0	1.2	ug/Kg			01/10/20 07:27	1
2,2-Dichloropropane	ND		5.0	2.0	ug/Kg			01/10/20 07:27	1
Gasoline Range Organics (GRO) -C4-C12	ND		250	100	ug/Kg			01/10/20 07:27	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*45 - 131*		*01/10/20 07:27*	*1*
1,2-Dichloroethane-d4 (Surr)	*106*		*60 - 140*		*01/10/20 07:27*	*1*
Toluene-d8 (Surr)	*97*		*58 - 140*		*01/10/20 07:27*	*1*

Lab Sample ID: LCS 720-278181/5
Matrix: Solid
Analysis Batch: 278181

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	50.0	48.6		ug/Kg		97	70 - 144
Acetone	250	197		ug/Kg		79	30 - 162
Benzene	50.0	49.3		ug/Kg		99	70 - 130
Dichlorobromomethane	50.0	56.3		ug/Kg		113	70 - 140
Bromobenzene	50.0	51.2		ug/Kg		102	70 - 130
Chlorobromomethane	50.0	52.6		ug/Kg		105	70 - 130
Bromoform	50.0	53.0		ug/Kg		106	59 - 158
Bromomethane	50.0	48.0		ug/Kg		96	59 - 132
2-Butanone (MEK)	250	203		ug/Kg		81	59 - 159
n-Butylbenzene	50.0	50.2		ug/Kg		100	70 - 142
sec-Butylbenzene	50.0	49.2		ug/Kg		98	70 - 136
tert-Butylbenzene	50.0	49.4		ug/Kg		99	70 - 130
Carbon disulfide	50.0	44.3		ug/Kg		89	60 - 140
Carbon tetrachloride	50.0	58.1		ug/Kg		116	70 - 142
Chlorobenzene	50.0	49.2		ug/Kg		98	70 - 130
Chloroethane	50.0	46.2		ug/Kg		92	65 - 130
Chloroform	50.0	53.3		ug/Kg		107	77 - 127
Chloromethane	50.0	35.3		ug/Kg		71	55 - 140

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-278181/5
Matrix: Solid
Analysis Batch: 278181

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Chlorotoluene	50.0	50.9		ug/Kg		102	70 - 138
4-Chlorotoluene	50.0	51.6		ug/Kg		103	70 - 136
Chlorodibromomethane	50.0	56.7		ug/Kg		113	70 - 146
1,2-Dichlorobenzene	50.0	51.0		ug/Kg		102	70 - 130
1,3-Dichlorobenzene	50.0	51.2		ug/Kg		102	70 - 131
1,4-Dichlorobenzene	50.0	50.6		ug/Kg		101	70 - 130
1,3-Dichloropropane	50.0	52.2		ug/Kg		104	70 - 140
1,1-Dichloropropene	50.0	48.4		ug/Kg		97	70 - 130
1,2-Dibromo-3-Chloropropane	50.0	40.2		ug/Kg		80	60 - 145
Ethylene Dibromide	50.0	53.4		ug/Kg		107	70 - 140
Dibromomethane	50.0	54.5		ug/Kg		109	70 - 139
Dichlorodifluoromethane	50.0	36.3		ug/Kg		73	37 - 158
1,1-Dichloroethane	50.0	48.5		ug/Kg		97	70 - 130
1,2-Dichloroethane	50.0	54.0		ug/Kg		108	70 - 130
1,1-Dichloroethene	50.0	47.5		ug/Kg		95	74 - 122
cis-1,2-Dichloroethene	50.0	49.0		ug/Kg		98	70 - 138
trans-1,2-Dichloroethene	50.0	49.7		ug/Kg		99	67 - 130
1,2-Dichloropropane	50.0	50.0		ug/Kg		100	73 - 127
cis-1,3-Dichloropropene	50.0	53.6		ug/Kg		107	68 - 147
trans-1,3-Dichloropropene	50.0	57.1		ug/Kg		114	70 - 155
Ethylbenzene	50.0	48.7		ug/Kg		97	80 - 137
Hexachlorobutadiene	50.0	53.6		ug/Kg		107	70 - 132
2-Hexanone	250	192		ug/Kg		77	62 - 158
Isopropylbenzene	50.0	50.6		ug/Kg		101	70 - 130
4-Isopropyltoluene	50.0	49.9		ug/Kg		100	70 - 133
Methylene Chloride	50.0	47.7		ug/Kg		95	70 - 134
4-Methyl-2-pentanone (MIBK)	250	201		ug/Kg		80	60 - 160
Naphthalene	50.0	44.6		ug/Kg		89	60 - 147
N-Propylbenzene	50.0	49.2		ug/Kg		98	70 - 130
Styrene	50.0	51.7		ug/Kg		103	70 - 130
1,1,1,2-Tetrachloroethane	50.0	54.3		ug/Kg		109	70 - 130
1,1,2,2-Tetrachloroethane	50.0	46.4		ug/Kg		93	70 - 146
Tetrachloroethene	50.0	49.9		ug/Kg		100	70 - 132
Toluene	50.0	47.7		ug/Kg		95	75 - 120
1,2,3-Trichlorobenzene	50.0	51.9		ug/Kg		104	60 - 140
1,2,4-Trichlorobenzene	50.0	52.0		ug/Kg		104	60 - 140
1,1,1-Trichloroethane	50.0	54.1		ug/Kg		108	70 - 130
1,1,2-Trichloroethane	50.0	52.9		ug/Kg		106	70 - 130
Trichloroethene	50.0	49.7		ug/Kg		99	70 - 133
Trichlorofluoromethane	50.0	48.9		ug/Kg		98	60 - 140
1,2,3-Trichloropropane	50.0	49.7		ug/Kg		99	70 - 146
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	49.3		ug/Kg		99	60 - 140
1,2,4-Trimethylbenzene	50.0	52.8		ug/Kg		106	70 - 130
1,3,5-Trimethylbenzene	50.0	51.3		ug/Kg		103	70 - 131
Vinyl acetate	50.0	41.0		ug/Kg		82	38 - 176
Vinyl chloride	50.0	42.5		ug/Kg		85	58 - 125
m-Xylene & p-Xylene	50.0	49.8		ug/Kg		100	70 - 146
o-Xylene	50.0	51.7		ug/Kg		103	70 - 140

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-278181/5
Matrix: Solid
Analysis Batch: 278181

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
2,2-Dichloropropane			50.0	58.8		ug/Kg		118	70 - 162		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*101*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*101*		*60 - 140*
Toluene-d8 (Surr)	*99*		*58 - 140*

Lab Sample ID: LCS 720-278181/7
Matrix: Solid
Analysis Batch: 278181

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO) -C4-C12			1000	927		ug/Kg		93	70 - 122		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*103*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*105*		*60 - 140*
Toluene-d8 (Surr)	*100*		*58 - 140*

Lab Sample ID: LCSD 720-278181/6
Matrix: Solid
Analysis Batch: 278181

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether			50.0	47.9		ug/Kg		96	70 - 144	1	20
Acetone			250	199		ug/Kg		80	30 - 162	1	30
Benzene			50.0	50.3		ug/Kg		101	70 - 130	2	20
Dichlorobromomethane			50.0	57.9		ug/Kg		116	70 - 140	3	20
Bromobenzene			50.0	50.7		ug/Kg		101	70 - 130	1	20
Chlorobromomethane			50.0	54.4		ug/Kg		109	70 - 130	3	20
Bromoform			50.0	53.0		ug/Kg		106	59 - 158	0	20
Bromomethane			50.0	48.3		ug/Kg		97	59 - 132	1	20
2-Butanone (MEK)			250	209		ug/Kg		83	59 - 159	3	20
n-Butylbenzene			50.0	52.8		ug/Kg		106	70 - 142	5	20
sec-Butylbenzene			50.0	50.7		ug/Kg		101	70 - 136	3	20
tert-Butylbenzene			50.0	50.5		ug/Kg		101	70 - 130	2	20
Carbon disulfide			50.0	44.5		ug/Kg		89	60 - 140	0	20
Carbon tetrachloride			50.0	58.7		ug/Kg		117	70 - 142	1	20
Chlorobenzene			50.0	50.3		ug/Kg		101	70 - 130	2	20
Chloroethane			50.0	44.3		ug/Kg		89	65 - 130	4	20
Chloroform			50.0	54.2		ug/Kg		108	77 - 127	2	20
Chloromethane			50.0	34.7		ug/Kg		69	55 - 140	2	20
2-Chlorotoluene			50.0	51.4		ug/Kg		103	70 - 138	1	20
4-Chlorotoluene			50.0	51.6		ug/Kg		103	70 - 136	0	20
Chlorodibromomethane			50.0	56.1		ug/Kg		112	70 - 146	1	20
1,2-Dichlorobenzene			50.0	52.1		ug/Kg		104	70 - 130	2	20
1,3-Dichlorobenzene			50.0	52.0		ug/Kg		104	70 - 131	2	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-278181/6
Matrix: Solid
Analysis Batch: 278181

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dichlorobenzene			50.0	52.0		ug/Kg		104	70 - 130	3	20
1,3-Dichloropropane			50.0	52.6		ug/Kg		105	70 - 140	1	20
1,1-Dichloropropene			50.0	49.3		ug/Kg		99	70 - 130	2	20
1,2-Dibromo-3-Chloropropane			50.0	40.7		ug/Kg		81	60 - 145	1	20
Ethylene Dibromide			50.0	53.5		ug/Kg		107	70 - 140	0	20
Dibromomethane			50.0	54.9		ug/Kg		110	70 - 139	1	20
Dichlorodifluoromethane			50.0	35.9		ug/Kg		72	37 - 158	1	20
1,1-Dichloroethane			50.0	49.6		ug/Kg		99	70 - 130	2	20
1,2-Dichloroethane			50.0	54.3		ug/Kg		109	70 - 130	1	20
1,1-Dichloroethene			50.0	46.4		ug/Kg		93	74 - 122	2	20
cis-1,2-Dichloroethene			50.0	50.4		ug/Kg		101	70 - 138	3	20
trans-1,2-Dichloroethene			50.0	51.3		ug/Kg		103	67 - 130	3	20
1,2-Dichloropropane			50.0	50.6		ug/Kg		101	73 - 127	1	20
cis-1,3-Dichloropropene			50.0	54.7		ug/Kg		109	68 - 147	2	20
trans-1,3-Dichloropropene			50.0	57.6		ug/Kg		115	70 - 155	1	20
Ethylbenzene			50.0	50.3		ug/Kg		101	80 - 137	3	20
Hexachlorobutadiene			50.0	57.0		ug/Kg		114	70 - 132	6	20
2-Hexanone			250	190		ug/Kg		76	62 - 158	1	20
Isopropylbenzene			50.0	51.5		ug/Kg		103	70 - 130	2	20
4-Isopropyltoluene			50.0	51.9		ug/Kg		104	70 - 133	4	20
Methylene Chloride			50.0	47.4		ug/Kg		95	70 - 134	1	20
4-Methyl-2-pentanone (MIBK)			250	197		ug/Kg		79	60 - 160	2	20
Naphthalene			50.0	46.6		ug/Kg		93	60 - 147	4	20
N-Propylbenzene			50.0	49.8		ug/Kg		100	70 - 130	1	20
Styrene			50.0	52.2		ug/Kg		104	70 - 130	1	20
1,1,1,2-Tetrachloroethane			50.0	55.6		ug/Kg		111	70 - 130	2	20
1,1,2,2-Tetrachloroethane			50.0	46.8		ug/Kg		94	70 - 146	1	20
Tetrachloroethene			50.0	50.6		ug/Kg		101	70 - 132	1	20
Toluene			50.0	50.1		ug/Kg		100	75 - 120	5	20
1,2,3-Trichlorobenzene			50.0	53.1		ug/Kg		106	60 - 140	2	20
1,2,4-Trichlorobenzene			50.0	54.2		ug/Kg		108	60 - 140	4	20
1,1,1-Trichloroethane			50.0	54.2		ug/Kg		108	70 - 130	0	20
1,1,2-Trichloroethane			50.0	53.0		ug/Kg		106	70 - 130	0	20
Trichloroethene			50.0	51.7		ug/Kg		103	70 - 133	4	20
Trichlorofluoromethane			50.0	48.9		ug/Kg		98	60 - 140	0	20
1,2,3-Trichloropropane			50.0	48.3		ug/Kg		97	70 - 146	3	20
1,1,2-Trichloro-1,2,2-trifluoroethane			50.0	48.7		ug/Kg		97	60 - 140	1	20
1,2,4-Trimethylbenzene			50.0	53.9		ug/Kg		108	70 - 130	2	20
1,3,5-Trimethylbenzene			50.0	51.8		ug/Kg		104	70 - 131	1	20
Vinyl acetate			50.0	41.0		ug/Kg		82	38 - 176	0	20
Vinyl chloride			50.0	43.0		ug/Kg		86	58 - 125	1	20
m-Xylene & p-Xylene			50.0	50.5		ug/Kg		101	70 - 146	2	20
o-Xylene			50.0	52.4		ug/Kg		105	70 - 140	1	20
2,2-Dichloropropane			50.0	59.7		ug/Kg		119	70 - 162	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*100*		*45 - 131*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-278181/6
Matrix: Solid
Analysis Batch: 278181

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*98*		*60 - 140*
Toluene-d8 (Surr)	*97*		*58 - 140*

Lab Sample ID: LCSD 720-278181/8
Matrix: Solid
Analysis Batch: 278181

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C4-C12			1000	933		ug/Kg		93	70 - 122	1	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	*99*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*103*		*60 - 140*
Toluene-d8 (Surr)	*98*		*58 - 140*

Lab Sample ID: MB 720-278182/4
Matrix: Solid
Analysis Batch: 278182

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.0	1.2	ug/Kg			01/10/20 10:04	1
Acetone	ND		50	38	ug/Kg			01/10/20 10:04	1
Benzene	ND		5.0	0.65	ug/Kg			01/10/20 10:04	1
Dichlorobromomethane	ND		5.0	0.72	ug/Kg			01/10/20 10:04	1
Bromobenzene	ND		5.0	0.79	ug/Kg			01/10/20 10:04	1
Chlorobromomethane	ND		20	1.8	ug/Kg			01/10/20 10:04	1
Bromoform	ND		5.0	2.0	ug/Kg			01/10/20 10:04	1
Bromomethane	ND		10	0.79	ug/Kg			01/10/20 10:04	1
2-Butanone (MEK)	ND		50	21	ug/Kg			01/10/20 10:04	1
n-Butylbenzene	ND		5.0	1.0	ug/Kg			01/10/20 10:04	1
sec-Butylbenzene	ND		5.0	0.72	ug/Kg			01/10/20 10:04	1
tert-Butylbenzene	ND		5.0	0.73	ug/Kg			01/10/20 10:04	1
Carbon disulfide	ND		5.0	2.0	ug/Kg			01/10/20 10:04	1
Carbon tetrachloride	ND		5.0	0.62	ug/Kg			01/10/20 10:04	1
Chlorobenzene	ND		5.0	0.69	ug/Kg			01/10/20 10:04	1
Chloroethane	ND		10	1.4	ug/Kg			01/10/20 10:04	1
Chloroform	ND		5.0	0.66	ug/Kg			01/10/20 10:04	1
Chloromethane	ND		10	2.2	ug/Kg			01/10/20 10:04	1
2-Chlorotoluene	ND		5.0	0.65	ug/Kg			01/10/20 10:04	1
4-Chlorotoluene	ND		5.0	0.68	ug/Kg			01/10/20 10:04	1
Chlorodibromomethane	ND		5.0	0.71	ug/Kg			01/10/20 10:04	1
1,2-Dichlorobenzene	ND		5.0	0.68	ug/Kg			01/10/20 10:04	1
1,3-Dichlorobenzene	ND		5.0	0.72	ug/Kg			01/10/20 10:04	1
1,4-Dichlorobenzene	ND		5.0	0.71	ug/Kg			01/10/20 10:04	1
1,3-Dichloropropane	ND		5.0	0.73	ug/Kg			01/10/20 10:04	1
1,1-Dichloropropene	ND		5.0	0.69	ug/Kg			01/10/20 10:04	1
1,2-Dibromo-3-Chloropropane	ND		10	1.7	ug/Kg			01/10/20 10:04	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-278182/4
Matrix: Solid
Analysis Batch: 278182

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	ND		5.0	1.4	ug/Kg			01/10/20 10:04	1
Dibromomethane	ND		10	2.0	ug/Kg			01/10/20 10:04	1
Dichlorodifluoromethane	ND		10	4.0	ug/Kg			01/10/20 10:04	1
1,1-Dichloroethane	ND		5.0	0.68	ug/Kg			01/10/20 10:04	1
1,2-Dichloroethane	ND		5.0	0.76	ug/Kg			01/10/20 10:04	1
1,1-Dichloroethene	ND		5.0	0.62	ug/Kg			01/10/20 10:04	1
cis-1,2-Dichloroethene	ND		5.0	0.68	ug/Kg			01/10/20 10:04	1
trans-1,2-Dichloroethene	ND		5.0	0.75	ug/Kg			01/10/20 10:04	1
1,2-Dichloropropane	ND		5.0	0.63	ug/Kg			01/10/20 10:04	1
cis-1,3-Dichloropropene	ND		5.0	0.69	ug/Kg			01/10/20 10:04	1
trans-1,3-Dichloropropene	ND		5.0	0.67	ug/Kg			01/10/20 10:04	1
Ethylbenzene	ND		5.0	0.75	ug/Kg			01/10/20 10:04	1
Hexachlorobutadiene	ND		5.0	0.90	ug/Kg			01/10/20 10:04	1
2-Hexanone	ND		50	10	ug/Kg			01/10/20 10:04	1
Isopropylbenzene	ND		5.0	0.68	ug/Kg			01/10/20 10:04	1
4-Isopropyltoluene	ND		5.0	2.5	ug/Kg			01/10/20 10:04	1
Methylene Chloride	ND		10	5.6	ug/Kg			01/10/20 10:04	1
4-Methyl-2-pentanone (MIBK)	ND		50	10	ug/Kg			01/10/20 10:04	1
Naphthalene	ND		10	1.5	ug/Kg			01/10/20 10:04	1
N-Propylbenzene	ND		5.0	0.66	ug/Kg			01/10/20 10:04	1
Styrene	ND		5.0	0.63	ug/Kg			01/10/20 10:04	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.76	ug/Kg			01/10/20 10:04	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.75	ug/Kg			01/10/20 10:04	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			01/10/20 10:04	1
Toluene	ND		5.0	0.71	ug/Kg			01/10/20 10:04	1
1,2,3-Trichlorobenzene	ND		5.0	0.74	ug/Kg			01/10/20 10:04	1
1,2,4-Trichlorobenzene	ND		5.0	0.71	ug/Kg			01/10/20 10:04	1
1,1,1-Trichloroethane	ND		5.0	0.61	ug/Kg			01/10/20 10:04	1
1,1,2-Trichloroethane	ND		5.0	0.70	ug/Kg			01/10/20 10:04	1
Trichloroethene	ND		5.0	0.63	ug/Kg			01/10/20 10:04	1
Trichlorofluoromethane	ND		5.0	1.1	ug/Kg			01/10/20 10:04	1
1,2,3-Trichloropropane	ND		5.0	0.77	ug/Kg			01/10/20 10:04	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	2.1	ug/Kg			01/10/20 10:04	1
1,2,4-Trimethylbenzene	ND		5.0	1.6	ug/Kg			01/10/20 10:04	1
1,3,5-Trimethylbenzene	ND		5.0	0.65	ug/Kg			01/10/20 10:04	1
Vinyl acetate	ND		20	5.0	ug/Kg			01/10/20 10:04	1
Vinyl chloride	ND		5.0	0.73	ug/Kg			01/10/20 10:04	1
Xylenes, Total	ND		5.0	1.2	ug/Kg			01/10/20 10:04	1
2,2-Dichloropropane	ND		5.0	2.0	ug/Kg			01/10/20 10:04	1
Gasoline Range Organics (GRO) -C4-C12	ND		250	100	ug/Kg			01/10/20 10:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*45 - 131*		*01/10/20 10:04*	*1*
1,2-Dichloroethane-d4 (Surr)	*95*		*60 - 140*		*01/10/20 10:04*	*1*
Toluene-d8 (Surr)	*98*		*58 - 140*		*01/10/20 10:04*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-278182/5
Matrix: Solid
Analysis Batch: 278182

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	50.0	48.7		ug/Kg		97	70 - 144
Acetone	250	219		ug/Kg		87	30 - 162
Benzene	50.0	49.9		ug/Kg		100	70 - 130
Dichlorobromomethane	50.0	53.4		ug/Kg		107	70 - 140
Bromobenzene	50.0	51.2		ug/Kg		102	70 - 130
Chlorobromomethane	50.0	52.5		ug/Kg		105	70 - 130
Bromoform	50.0	53.7		ug/Kg		107	59 - 158
Bromomethane	50.0	43.8		ug/Kg		88	59 - 132
2-Butanone (MEK)	250	211		ug/Kg		84	59 - 159
n-Butylbenzene	50.0	51.1		ug/Kg		102	70 - 142
sec-Butylbenzene	50.0	50.5		ug/Kg		101	70 - 136
tert-Butylbenzene	50.0	50.3		ug/Kg		101	70 - 130
Carbon disulfide	50.0	46.7		ug/Kg		93	60 - 140
Carbon tetrachloride	50.0	53.9		ug/Kg		108	70 - 142
Chlorobenzene	50.0	49.4		ug/Kg		99	70 - 130
Chloroethane	50.0	43.2		ug/Kg		86	65 - 130
Chloroform	50.0	51.3		ug/Kg		103	77 - 127
Chloromethane	50.0	37.4		ug/Kg		75	55 - 140
2-Chlorotoluene	50.0	50.0		ug/Kg		100	70 - 138
4-Chlorotoluene	50.0	49.8		ug/Kg		100	70 - 136
Chlorodibromomethane	50.0	54.3		ug/Kg		109	70 - 146
1,2-Dichlorobenzene	50.0	50.2		ug/Kg		100	70 - 130
1,3-Dichlorobenzene	50.0	50.4		ug/Kg		101	70 - 131
1,4-Dichlorobenzene	50.0	49.5		ug/Kg		99	70 - 130
1,3-Dichloropropane	50.0	49.5		ug/Kg		99	70 - 140
1,1-Dichloropropene	50.0	49.8		ug/Kg		100	70 - 130
1,2-Dibromo-3-Chloropropane	50.0	48.2		ug/Kg		96	60 - 145
Ethylene Dibromide	50.0	49.9		ug/Kg		100	70 - 140
Dibromomethane	50.0	50.3		ug/Kg		101	70 - 139
Dichlorodifluoromethane	50.0	34.1		ug/Kg		68	37 - 158
1,1-Dichloroethane	50.0	49.3		ug/Kg		99	70 - 130
1,2-Dichloroethane	50.0	50.2		ug/Kg		100	70 - 130
1,1-Dichloroethene	50.0	45.7		ug/Kg		91	74 - 122
cis-1,2-Dichloroethene	50.0	49.6		ug/Kg		99	70 - 138
trans-1,2-Dichloroethene	50.0	49.2		ug/Kg		98	67 - 130
1,2-Dichloropropane	50.0	50.2		ug/Kg		100	73 - 127
cis-1,3-Dichloropropene	50.0	52.6		ug/Kg		105	68 - 147
trans-1,3-Dichloropropene	50.0	52.1		ug/Kg		104	70 - 155
Ethylbenzene	50.0	50.3		ug/Kg		101	80 - 137
Hexachlorobutadiene	50.0	52.8		ug/Kg		106	70 - 132
2-Hexanone	250	212		ug/Kg		85	62 - 158
Isopropylbenzene	50.0	50.7		ug/Kg		101	70 - 130
4-Isopropyltoluene	50.0	51.0		ug/Kg		102	70 - 133
Methylene Chloride	50.0	47.6		ug/Kg		95	70 - 134
4-Methyl-2-pentanone (MIBK)	250	216		ug/Kg		86	60 - 160
Naphthalene	50.0	47.2		ug/Kg		94	60 - 147
N-Propylbenzene	50.0	51.0		ug/Kg		102	70 - 130
Styrene	50.0	50.4		ug/Kg		101	70 - 130

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-278182/5
Matrix: Solid
Analysis Batch: 278182

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,1,1,2-Tetrachloroethane			50.0	52.1		ug/Kg		104	70 - 130		
1,1,2,2-Tetrachloroethane			50.0	44.8		ug/Kg		90	70 - 146		
Tetrachloroethene			50.0	53.4		ug/Kg		107	70 - 132		
Toluene			50.0	49.6		ug/Kg		99	75 - 120		
1,2,3-Trichlorobenzene			50.0	51.8		ug/Kg		104	60 - 140		
1,2,4-Trichlorobenzene			50.0	53.6		ug/Kg		107	60 - 140		
1,1,1-Trichloroethane			50.0	52.7		ug/Kg		105	70 - 130		
1,1,2-Trichloroethane			50.0	49.0		ug/Kg		98	70 - 130		
Trichloroethene			50.0	52.5		ug/Kg		105	70 - 133		
Trichlorofluoromethane			50.0	45.3		ug/Kg		91	60 - 140		
1,2,3-Trichloropropane			50.0	46.0		ug/Kg		92	70 - 146		
1,1,2-Trichloro-1,2,2-trifluoroethane			50.0	48.5		ug/Kg		97	60 - 140		
1,2,4-Trimethylbenzene			50.0	51.1		ug/Kg		102	70 - 130		
1,3,5-Trimethylbenzene			50.0	51.1		ug/Kg		102	70 - 131		
Vinyl acetate			50.0	43.2		ug/Kg		86	38 - 176		
Vinyl chloride			50.0	42.4		ug/Kg		85	58 - 125		
m-Xylene & p-Xylene			50.0	50.3		ug/Kg		101	70 - 146		
o-Xylene			50.0	49.8		ug/Kg		100	70 - 140		
2,2-Dichloropropane			50.0	51.8		ug/Kg		104	70 - 162		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*95*		*60 - 140*
Toluene-d8 (Surr)	*101*		*58 - 140*

Lab Sample ID: LCS 720-278182/7
Matrix: Solid
Analysis Batch: 278182

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO) -C4-C12			1000	979		ug/Kg		98	70 - 122		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*100*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*100*		*60 - 140*
Toluene-d8 (Surr)	*101*		*58 - 140*

Lab Sample ID: LCSD 720-278182/6
Matrix: Solid
Analysis Batch: 278182

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether			50.0	47.6		ug/Kg		95	70 - 144	2	20
Acetone			250	199		ug/Kg		80	30 - 162	9	30
Benzene			50.0	49.7		ug/Kg		99	70 - 130	0	20
Dichlorobromomethane			50.0	52.1		ug/Kg		104	70 - 140	3	20
Bromobenzene			50.0	50.5		ug/Kg		101	70 - 130	1	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-278182/6
Matrix: Solid
Analysis Batch: 278182

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chlorobromomethane	50.0	50.9		ug/Kg		102	70 - 130	3	20
Bromoform	50.0	53.1		ug/Kg		106	59 - 158	1	20
Bromomethane	50.0	45.3		ug/Kg		91	59 - 132	3	20
2-Butanone (MEK)	250	207		ug/Kg		83	59 - 159	2	20
n-Butylbenzene	50.0	51.3		ug/Kg		103	70 - 142	0	20
sec-Butylbenzene	50.0	50.4		ug/Kg		101	70 - 136	0	20
tert-Butylbenzene	50.0	49.9		ug/Kg		100	70 - 130	1	20
Carbon disulfide	50.0	47.2		ug/Kg		94	60 - 140	1	20
Carbon tetrachloride	50.0	53.9		ug/Kg		108	70 - 142	0	20
Chlorobenzene	50.0	48.9		ug/Kg		98	70 - 130	1	20
Chloroethane	50.0	44.0		ug/Kg		88	65 - 130	2	20
Chloroform	50.0	50.1		ug/Kg		100	77 - 127	2	20
Chloromethane	50.0	37.7		ug/Kg		75	55 - 140	1	20
2-Chlorotoluene	50.0	49.2		ug/Kg		98	70 - 138	2	20
4-Chlorotoluene	50.0	49.4		ug/Kg		99	70 - 136	1	20
Chlorodibromomethane	50.0	53.6		ug/Kg		107	70 - 146	1	20
1,2-Dichlorobenzene	50.0	49.7		ug/Kg		99	70 - 130	1	20
1,3-Dichlorobenzene	50.0	49.8		ug/Kg		100	70 - 131	1	20
1,4-Dichlorobenzene	50.0	49.0		ug/Kg		98	70 - 130	1	20
1,3-Dichloropropane	50.0	49.0		ug/Kg		98	70 - 140	1	20
1,1-Dichloropropene	50.0	49.4		ug/Kg		99	70 - 130	1	20
1,2-Dibromo-3-Chloropropane	50.0	47.3		ug/Kg		95	60 - 145	2	20
Ethylene Dibromide	50.0	49.8		ug/Kg		100	70 - 140	0	20
Dibromomethane	50.0	49.4		ug/Kg		99	70 - 139	2	20
Dichlorodifluoromethane	50.0	33.7		ug/Kg		67	37 - 158	1	20
1,1-Dichloroethane	50.0	48.8		ug/Kg		98	70 - 130	1	20
1,2-Dichloroethane	50.0	47.9		ug/Kg		96	70 - 130	5	20
1,1-Dichloroethene	50.0	46.3		ug/Kg		93	74 - 122	1	20
cis-1,2-Dichloroethene	50.0	48.8		ug/Kg		98	70 - 138	2	20
trans-1,2-Dichloroethene	50.0	49.1		ug/Kg		98	67 - 130	0	20
1,2-Dichloropropane	50.0	49.7		ug/Kg		99	73 - 127	1	20
cis-1,3-Dichloropropene	50.0	51.7		ug/Kg		103	68 - 147	2	20
trans-1,3-Dichloropropene	50.0	51.6		ug/Kg		103	70 - 155	1	20
Ethylbenzene	50.0	49.6		ug/Kg		99	80 - 137	1	20
Hexachlorobutadiene	50.0	52.8		ug/Kg		106	70 - 132	0	20
2-Hexanone	250	211		ug/Kg		85	62 - 158	0	20
Isopropylbenzene	50.0	50.7		ug/Kg		101	70 - 130	0	20
4-Isopropyltoluene	50.0	50.7		ug/Kg		101	70 - 133	1	20
Methylene Chloride	50.0	47.3		ug/Kg		95	70 - 134	1	20
4-Methyl-2-pentanone (MIBK)	250	211		ug/Kg		85	60 - 160	2	20
Naphthalene	50.0	47.8		ug/Kg		96	60 - 147	1	20
N-Propylbenzene	50.0	50.8		ug/Kg		102	70 - 130	0	20
Styrene	50.0	50.6		ug/Kg		101	70 - 130	0	20
1,1,1,2-Tetrachloroethane	50.0	50.7		ug/Kg		101	70 - 130	3	20
1,1,2,2-Tetrachloroethane	50.0	43.5		ug/Kg		87	70 - 146	3	20
Tetrachloroethene	50.0	53.0		ug/Kg		106	70 - 132	1	20
Toluene	50.0	49.1		ug/Kg		98	75 - 120	1	20
1,2,3-Trichlorobenzene	50.0	51.3		ug/Kg		103	60 - 140	1	20
1,2,4-Trichlorobenzene	50.0	52.9		ug/Kg		106	60 - 140	1	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-278182/6
Matrix: Solid
Analysis Batch: 278182

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane			50.0	52.6		ug/Kg		105	70 - 130	0	20
1,1,2-Trichloroethane			50.0	48.4		ug/Kg		97	70 - 130	1	20
Trichloroethene			50.0	52.2		ug/Kg		104	70 - 133	1	20
Trichlorofluoromethane			50.0	45.6		ug/Kg		91	60 - 140	1	20
1,2,3-Trichloropropane			50.0	44.9		ug/Kg		90	70 - 146	3	20
1,1,2-Trichloro-1,2,2-trifluoroethane			50.0	49.1		ug/Kg		98	60 - 140	1	20
1,2,4-Trimethylbenzene			50.0	50.6		ug/Kg		101	70 - 130	1	20
1,3,5-Trimethylbenzene			50.0	50.7		ug/Kg		101	70 - 131	1	20
Vinyl acetate			50.0	42.6		ug/Kg		85	38 - 176	1	20
Vinyl chloride			50.0	43.0		ug/Kg		86	58 - 125	1	20
m-Xylene & p-Xylene			50.0	49.9		ug/Kg		100	70 - 146	1	20
o-Xylene			50.0	49.3		ug/Kg		99	70 - 140	1	20
2,2-Dichloropropane			50.0	51.8		ug/Kg		104	70 - 162	0	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*100*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*92*		*60 - 140*
Toluene-d8 (Surr)	*101*		*58 - 140*

Lab Sample ID: LCSD 720-278182/8
Matrix: Solid
Analysis Batch: 278182

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C4-C12			1000	1030		ug/Kg		103	70 - 122	5	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*102*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*99*		*60 - 140*
Toluene-d8 (Surr)	*100*		*58 - 140*

Lab Sample ID: MB 720-278249/4
Matrix: Water
Analysis Batch: 278249

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50	0.11	ug/L			01/13/20 06:50	1
Acetone	ND		50	20	ug/L			01/13/20 06:50	1
Benzene	ND		0.50	0.25	ug/L			01/13/20 06:50	1
Dichlorobromomethane	ND		0.50	0.20	ug/L			01/13/20 06:50	1
Bromobenzene	ND		1.0	0.20	ug/L			01/13/20 06:50	1
Chlorobromomethane	ND		1.0	0.25	ug/L			01/13/20 06:50	1
Bromoform	ND		1.0	0.20	ug/L			01/13/20 06:50	1
Bromomethane	ND		1.0	0.49	ug/L			01/13/20 06:50	1
2-Butanone (MEK)	ND		50	8.4	ug/L			01/13/20 06:50	1
n-Butylbenzene	ND		1.0	0.30	ug/L			01/13/20 06:50	1
sec-Butylbenzene	ND		1.0	0.17	ug/L			01/13/20 06:50	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-278249/4
Matrix: Water
Analysis Batch: 278249

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	ND		1.0	0.20	ug/L			01/13/20 06:50	1
Carbon disulfide	ND		5.0	0.78	ug/L			01/13/20 06:50	1
Carbon tetrachloride	ND		0.50	0.11	ug/L			01/13/20 06:50	1
Chlorobenzene	ND		0.50	0.13	ug/L			01/13/20 06:50	1
Chloroethane	ND		1.0	0.17	ug/L			01/13/20 06:50	1
Chloroform	ND		1.0	0.40	ug/L			01/13/20 06:50	1
Chloromethane	ND		1.0	0.19	ug/L			01/13/20 06:50	1
2-Chlorotoluene	ND		0.50	0.20	ug/L			01/13/20 06:50	1
4-Chlorotoluene	ND		0.50	0.20	ug/L			01/13/20 06:50	1
Chlorodibromomethane	ND		0.50	0.10	ug/L			01/13/20 06:50	1
1,2-Dichlorobenzene	ND		0.50	0.21	ug/L			01/13/20 06:50	1
1,3-Dichlorobenzene	ND		0.50	0.20	ug/L			01/13/20 06:50	1
1,4-Dichlorobenzene	ND		0.50	0.16	ug/L			01/13/20 06:50	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			01/13/20 06:50	1
1,1-Dichloropropene	ND		0.50	0.20	ug/L			01/13/20 06:50	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.30	ug/L			01/13/20 06:50	1
Ethylene Dibromide	ND		0.50	0.075	ug/L			01/13/20 06:50	1
Dibromomethane	ND		0.50	0.12	ug/L			01/13/20 06:50	1
Dichlorodifluoromethane	ND		0.50	0.25	ug/L			01/13/20 06:50	1
1,1-Dichloroethane	ND		0.50	0.11	ug/L			01/13/20 06:50	1
1,2-Dichloroethane	ND		0.50	0.077	ug/L			01/13/20 06:50	1
1,1-Dichloroethene	ND		0.50	0.20	ug/L			01/13/20 06:50	1
cis-1,2-Dichloroethene	ND		0.50	0.16	ug/L			01/13/20 06:50	1
trans-1,2-Dichloroethene	ND		0.50	0.13	ug/L			01/13/20 06:50	1
1,2-Dichloropropane	ND		0.50	0.20	ug/L			01/13/20 06:50	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			01/13/20 06:50	1
trans-1,3-Dichloropropene	ND		0.50	0.17	ug/L			01/13/20 06:50	1
Ethylbenzene	ND		0.50	0.13	ug/L			01/13/20 06:50	1
Hexachlorobutadiene	ND		1.0	0.27	ug/L			01/13/20 06:50	1
2-Hexanone	ND		50	11	ug/L			01/13/20 06:50	1
Isopropylbenzene	ND		0.50	0.20	ug/L			01/13/20 06:50	1
4-Isopropyltoluene	ND		1.0	0.20	ug/L			01/13/20 06:50	1
Methylene Chloride	ND		5.0	1.5	ug/L			01/13/20 06:50	1
4-Methyl-2-pentanone (MIBK)	ND		50	10	ug/L			01/13/20 06:50	1
Naphthalene	ND		1.0	0.50	ug/L			01/13/20 06:50	1
N-Propylbenzene	ND		1.0	0.20	ug/L			01/13/20 06:50	1
Styrene	ND		0.50	0.22	ug/L			01/13/20 06:50	1
1,1,1,2-Tetrachloroethane	ND		0.50	0.14	ug/L			01/13/20 06:50	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.17	ug/L			01/13/20 06:50	1
Tetrachloroethene	ND		0.50	0.20	ug/L			01/13/20 06:50	1
Toluene	ND		0.50	0.17	ug/L			01/13/20 06:50	1
1,2,3-Trichlorobenzene	ND		1.0	0.50	ug/L			01/13/20 06:50	1
1,2,4-Trichlorobenzene	ND		1.0	0.47	ug/L			01/13/20 06:50	1
1,1,1-Trichloroethane	ND		0.50	0.20	ug/L			01/13/20 06:50	1
1,1,2-Trichloroethane	ND		0.50	0.11	ug/L			01/13/20 06:50	1
Trichloroethene	ND		0.50	0.20	ug/L			01/13/20 06:50	1
Trichlorofluoromethane	ND		1.0	0.30	ug/L			01/13/20 06:50	1
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			01/13/20 06:50	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.20	ug/L			01/13/20 06:50	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-278249/4
Matrix: Water
Analysis Batch: 278249

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.50	0.20	ug/L			01/13/20 06:50	1
1,3,5-Trimethylbenzene	ND		0.50	0.17	ug/L			01/13/20 06:50	1
Vinyl acetate	ND		10	1.8	ug/L			01/13/20 06:50	1
Vinyl chloride	ND		0.50	0.20	ug/L			01/13/20 06:50	1
Xylenes, Total	ND		0.50	0.40	ug/L			01/13/20 06:50	1
2,2-Dichloropropane	ND		0.50	0.17	ug/L			01/13/20 06:50	1
Gasoline Range Organics (GRO) -C4-C12	ND		50	21	ug/L			01/13/20 06:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*87*		*67 - 130*		*01/13/20 06:50*	*1*
1,2-Dichloroethane-d4 (Surr)	*89*		*72 - 130*		*01/13/20 06:50*	*1*
Toluene-d8 (Surr)	*93*		*70 - 130*		*01/13/20 06:50*	*1*

Lab Sample ID: LCS 720-278249/5
Matrix: Water
Analysis Batch: 278249

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	25.0	23.0		ug/L		92	70 - 130
Acetone	125	109		ug/L		87	61 - 147
Benzene	25.0	24.2		ug/L		97	79 - 119
Dichlorobromomethane	25.0	24.3		ug/L		97	81 - 130
Bromobenzene	25.0	24.2		ug/L		97	77 - 117
Chlorobromomethane	25.0	24.6		ug/L		98	81 - 122
Bromoform	25.0	20.6		ug/L		82	75 - 127
Bromomethane	25.0	23.5		ug/L		94	70 - 132
2-Butanone (MEK)	125	116		ug/L		93	66 - 133
n-Butylbenzene	25.0	28.0		ug/L		112	78 - 119
sec-Butylbenzene	25.0	26.7		ug/L		107	78 - 118
tert-Butylbenzene	25.0	25.6		ug/L		102	78 - 118
Carbon disulfide	25.0	24.4		ug/L		98	64 - 127
Carbon tetrachloride	25.0	22.7		ug/L		91	72 - 142
Chlorobenzene	25.0	23.9		ug/L		96	76 - 116
Chloroethane	25.0	23.8		ug/L		95	70 - 131
Chloroform	25.0	24.0		ug/L		96	82 - 119
Chloromethane	25.0	21.2		ug/L		85	49 - 134
2-Chlorotoluene	25.0	25.3		ug/L		101	75 - 115
4-Chlorotoluene	25.0	25.7		ug/L		103	73 - 119
Chlorodibromomethane	25.0	24.1		ug/L		97	77 - 133
1,2-Dichlorobenzene	25.0	25.1		ug/L		100	77 - 117
1,3-Dichlorobenzene	25.0	25.2		ug/L		101	76 - 116
1,4-Dichlorobenzene	25.0	25.3		ug/L		101	76 - 116
1,3-Dichloropropane	25.0	23.8		ug/L		95	77 - 117
1,1-Dichloropropene	25.0	24.0		ug/L		96	83 - 130
1,2-Dibromo-3-Chloropropane	25.0	21.4		ug/L		85	74 - 126
Ethylene Dibromide	25.0	23.9		ug/L		96	80 - 121
Dibromomethane	25.0	23.7		ug/L		95	79 - 117
Dichlorodifluoromethane	25.0	15.4		ug/L		62	21 - 150

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-278249/5
Matrix: Water
Analysis Batch: 278249

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	25.0	23.7		ug/L		95	77 - 119
1,2-Dichloroethane	25.0	21.8		ug/L		87	73 - 122
1,1-Dichloroethene	25.0	24.1		ug/L		97	69 - 119
cis-1,2-Dichloroethene	25.0	23.5		ug/L		94	77 - 117
trans-1,2-Dichloroethene	25.0	24.0		ug/L		96	79 - 117
1,2-Dichloropropane	25.0	24.2		ug/L		97	79 - 119
cis-1,3-Dichloropropene	25.0	24.6		ug/L		99	82 - 119
trans-1,3-Dichloropropene	25.0	24.3		ug/L		97	76 - 122
Ethylbenzene	25.0	23.9		ug/L		95	77 - 117
Hexachlorobutadiene	25.0	22.1		ug/L		89	78 - 140
2-Hexanone	125	116		ug/L		93	63 - 140
Isopropylbenzene	25.0	24.2		ug/L		97	77 - 130
4-Isopropyltoluene	25.0	26.4		ug/L		106	80 - 120
Methylene Chloride	25.0	24.6		ug/L		98	75 - 117
4-Methyl-2-pentanone (MIBK)	125	118		ug/L		94	66 - 140
Naphthalene	25.0	24.7		ug/L		99	81 - 121
N-Propylbenzene	25.0	27.1		ug/L		108	77 - 117
Styrene	25.0	24.7		ug/L		99	76 - 116
1,1,1,2-Tetrachloroethane	25.0	23.8		ug/L		95	81 - 121
1,1,2,2-Tetrachloroethane	25.0	25.7		ug/L		103	70 - 115
Tetrachloroethene	25.0	22.4		ug/L		90	81 - 130
Toluene	25.0	23.6		ug/L		95	75 - 120
1,2,3-Trichlorobenzene	25.0	23.0		ug/L		92	87 - 123
1,2,4-Trichlorobenzene	25.0	23.6		ug/L		95	78 - 120
1,1,1-Trichloroethane	25.0	22.6		ug/L		90	74 - 130
1,1,2-Trichloroethane	25.0	24.2		ug/L		97	80 - 117
Trichloroethene	25.0	24.3		ug/L		97	80 - 123
Trichlorofluoromethane	25.0	20.7		ug/L		83	75 - 141
1,2,3-Trichloropropane	25.0	24.0		ug/L		96	77 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	21.9		ug/L		88	70 - 133
1,2,4-Trimethylbenzene	25.0	26.0		ug/L		104	75 - 115
1,3,5-Trimethylbenzene	25.0	25.7		ug/L		103	77 - 117
Vinyl acetate	25.0	23.1		ug/L		92	50 - 126
Vinyl chloride	25.0	22.5		ug/L		90	58 - 138
m-Xylene & p-Xylene	25.0	23.3		ug/L		93	74 - 119
o-Xylene	25.0	23.7		ug/L		95	77 - 118
2,2-Dichloropropane	25.0	23.3		ug/L		93	74 - 156

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*93*		*67 - 130*
1,2-Dichloroethane-d4 (Surr)	*88*		*72 - 130*
Toluene-d8 (Surr)	*95*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-278249/7
Matrix: Water
Analysis Batch: 278249

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO) -C4-C12			500	465		ug/L		93	77 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*93*		*67 - 130*
1,2-Dichloroethane-d4 (Surr)	*87*		*72 - 130*
Toluene-d8 (Surr)	*96*		*70 - 130*

Lab Sample ID: LCSD 720-278249/6
Matrix: Water
Analysis Batch: 278249

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether			25.0	23.4		ug/L		94	70 - 130	2	20
Acetone			125	105		ug/L		84	61 - 147	4	30
Benzene			25.0	24.2		ug/L		97	79 - 119	0	20
Dichlorobromomethane			25.0	24.2		ug/L		97	81 - 130	1	20
Bromobenzene			25.0	24.5		ug/L		98	77 - 117	1	20
Chlorobromomethane			25.0	24.4		ug/L		98	81 - 122	1	20
Bromoform			25.0	20.7		ug/L		83	75 - 127	1	20
Bromomethane			25.0	24.1		ug/L		96	70 - 132	2	20
2-Butanone (MEK)			125	112		ug/L		89	66 - 133	4	22
n-Butylbenzene			25.0	27.3		ug/L		109	78 - 119	3	20
sec-Butylbenzene			25.0	26.6		ug/L		107	78 - 118	0	20
tert-Butylbenzene			25.0	25.5		ug/L		102	78 - 118	0	20
Carbon disulfide			25.0	24.4		ug/L		98	64 - 127	0	20
Carbon tetrachloride			25.0	22.7		ug/L		91	72 - 142	0	20
Chlorobenzene			25.0	24.0		ug/L		96	76 - 116	0	20
Chloroethane			25.0	24.7		ug/L		99	70 - 131	3	20
Chloroform			25.0	24.0		ug/L		96	82 - 119	0	20
Chloromethane			25.0	22.5		ug/L		90	49 - 134	6	20
2-Chlorotoluene			25.0	25.3		ug/L		101	75 - 115	0	20
4-Chlorotoluene			25.0	25.6		ug/L		102	73 - 119	0	20
Chlorodibromomethane			25.0	24.5		ug/L		98	77 - 133	2	20
1,2-Dichlorobenzene			25.0	25.0		ug/L		100	77 - 117	0	20
1,3-Dichlorobenzene			25.0	25.4		ug/L		102	76 - 116	1	20
1,4-Dichlorobenzene			25.0	25.1		ug/L		101	76 - 116	1	20
1,3-Dichloropropane			25.0	23.8		ug/L		95	77 - 117	0	20
1,1-Dichloropropene			25.0	23.7		ug/L		95	83 - 130	1	20
1,2-Dibromo-3-Chloropropane			25.0	21.7		ug/L		87	74 - 126	2	20
Ethylene Dibromide			25.0	24.4		ug/L		98	80 - 121	2	20
Dibromomethane			25.0	24.0		ug/L		96	79 - 117	1	20
Dichlorodifluoromethane			25.0	16.1		ug/L		64	21 - 150	4	20
1,1-Dichloroethane			25.0	23.9		ug/L		95	77 - 119	1	20
1,2-Dichloroethane			25.0	22.2		ug/L		89	73 - 122	2	20
1,1-Dichloroethene			25.0	24.0		ug/L		96	69 - 119	1	20
cis-1,2-Dichloroethene			25.0	23.6		ug/L		95	77 - 117	1	20
trans-1,2-Dichloroethene			25.0	24.2		ug/L		97	79 - 117	1	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-278249/6
Matrix: Water
Analysis Batch: 278249

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dichloropropane			25.0	24.5		ug/L		98	79 - 119	1	20
cis-1,3-Dichloropropene			25.0	24.9		ug/L		100	82 - 119	1	20
trans-1,3-Dichloropropene			25.0	24.5		ug/L		98	76 - 122	1	20
Ethylbenzene			25.0	23.8		ug/L		95	77 - 117	0	20
Hexachlorobutadiene			25.0	21.7		ug/L		87	78 - 140	2	20
2-Hexanone			125	115		ug/L		92	63 - 140	0	24
Isopropylbenzene			25.0	24.2		ug/L		97	77 - 130	0	20
4-Isopropyltoluene			25.0	26.1		ug/L		104	80 - 120	1	20
Methylene Chloride			25.0	24.7		ug/L		99	75 - 117	1	20
4-Methyl-2-pentanone (MIBK)			125	117		ug/L		94	66 - 140	1	21
Naphthalene			25.0	24.7		ug/L		99	81 - 121	0	20
N-Propylbenzene			25.0	26.8		ug/L		107	77 - 117	1	20
Styrene			25.0	24.8		ug/L		99	76 - 116	1	20
1,1,1,2-Tetrachloroethane			25.0	24.3		ug/L		97	81 - 121	2	20
1,1,2,2-Tetrachloroethane			25.0	26.1		ug/L		105	70 - 115	2	20
Tetrachloroethene			25.0	22.3		ug/L		89	81 - 130	1	20
Toluene			25.0	23.6		ug/L		95	75 - 120	0	20
1,2,3-Trichlorobenzene			25.0	23.0		ug/L		92	87 - 123	0	20
1,2,4-Trichlorobenzene			25.0	23.5		ug/L		94	78 - 120	1	20
1,1,1-Trichloroethane			25.0	22.6		ug/L		90	74 - 130	0	20
1,1,2-Trichloroethane			25.0	24.6		ug/L		98	80 - 117	2	20
Trichloroethene			25.0	24.0		ug/L		96	80 - 123	1	20
Trichlorofluoromethane			25.0	21.5		ug/L		86	75 - 141	4	20
1,2,3-Trichloropropane			25.0	23.8		ug/L		95	77 - 120	1	20
1,1,2-Trichloro-1,2,2-trifluoroethane			25.0	21.9		ug/L		87	70 - 133	0	20
1,2,4-Trimethylbenzene			25.0	26.2		ug/L		105	75 - 115	1	20
1,3,5-Trimethylbenzene			25.0	25.9		ug/L		103	77 - 117	0	20
Vinyl acetate			25.0	24.1		ug/L		97	50 - 126	4	20
Vinyl chloride			25.0	23.8		ug/L		95	58 - 138	5	20
m-Xylene & p-Xylene			25.0	23.1		ug/L		92	74 - 119	1	20
o-Xylene			25.0	23.7		ug/L		95	77 - 118	0	20
2,2-Dichloropropane			25.0	23.1		ug/L		92	74 - 156	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*94*		*67 - 130*
1,2-Dichloroethane-d4 (Surr)	*89*		*72 - 130*
Toluene-d8 (Surr)	*96*		*70 - 130*

Lab Sample ID: LCSD 720-278249/8
Matrix: Water
Analysis Batch: 278249

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C4-C12			500	435		ug/L		87	77 - 130	7	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-278249/8
Matrix: Water
Analysis Batch: 278249

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	*93*		*67 - 130*
1,2-Dichloroethane-d4 (Surr)	*90*		*72 - 130*
Toluene-d8 (Surr)	*95*		*70 - 130*

Lab Sample ID: MB 720-278278/9
Matrix: Solid
Analysis Batch: 278278

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.0	1.2	ug/Kg			01/13/20 21:03	1
Acetone	ND		50	38	ug/Kg			01/13/20 21:03	1
Benzene	ND		5.0	0.65	ug/Kg			01/13/20 21:03	1
Dichlorobromomethane	ND		5.0	0.72	ug/Kg			01/13/20 21:03	1
Bromobenzene	ND		5.0	0.79	ug/Kg			01/13/20 21:03	1
Chlorobromomethane	ND		20	1.8	ug/Kg			01/13/20 21:03	1
Bromoform	ND		5.0	2.0	ug/Kg			01/13/20 21:03	1
Bromomethane	ND		10	0.79	ug/Kg			01/13/20 21:03	1
2-Butanone (MEK)	ND		50	21	ug/Kg			01/13/20 21:03	1
n-Butylbenzene	ND		5.0	1.0	ug/Kg			01/13/20 21:03	1
sec-Butylbenzene	ND		5.0	0.72	ug/Kg			01/13/20 21:03	1
tert-Butylbenzene	ND		5.0	0.73	ug/Kg			01/13/20 21:03	1
Carbon disulfide	ND		5.0	2.0	ug/Kg			01/13/20 21:03	1
Carbon tetrachloride	ND		5.0	0.62	ug/Kg			01/13/20 21:03	1
Chlorobenzene	ND		5.0	0.69	ug/Kg			01/13/20 21:03	1
Chloroethane	ND		10	1.4	ug/Kg			01/13/20 21:03	1
Chloroform	ND		5.0	0.66	ug/Kg			01/13/20 21:03	1
Chloromethane	ND		10	2.2	ug/Kg			01/13/20 21:03	1
2-Chlorotoluene	ND		5.0	0.65	ug/Kg			01/13/20 21:03	1
4-Chlorotoluene	ND		5.0	0.68	ug/Kg			01/13/20 21:03	1
Chlorodibromomethane	ND		5.0	0.71	ug/Kg			01/13/20 21:03	1
1,2-Dichlorobenzene	ND		5.0	0.68	ug/Kg			01/13/20 21:03	1
1,3-Dichlorobenzene	ND		5.0	0.72	ug/Kg			01/13/20 21:03	1
1,4-Dichlorobenzene	ND		5.0	0.71	ug/Kg			01/13/20 21:03	1
1,3-Dichloropropane	ND		5.0	0.73	ug/Kg			01/13/20 21:03	1
1,1-Dichloropropene	ND		5.0	0.69	ug/Kg			01/13/20 21:03	1
1,2-Dibromo-3-Chloropropane	ND		10	1.7	ug/Kg			01/13/20 21:03	1
Ethylene Dibromide	ND		5.0	1.4	ug/Kg			01/13/20 21:03	1
Dibromomethane	ND		10	2.0	ug/Kg			01/13/20 21:03	1
Dichlorodifluoromethane	ND		10	4.0	ug/Kg			01/13/20 21:03	1
1,1-Dichloroethane	ND		5.0	0.68	ug/Kg			01/13/20 21:03	1
1,2-Dichloroethane	ND		5.0	0.76	ug/Kg			01/13/20 21:03	1
1,1-Dichloroethene	ND		5.0	0.62	ug/Kg			01/13/20 21:03	1
cis-1,2-Dichloroethene	ND		5.0	0.68	ug/Kg			01/13/20 21:03	1
trans-1,2-Dichloroethene	ND		5.0	0.75	ug/Kg			01/13/20 21:03	1
1,2-Dichloropropane	ND		5.0	0.63	ug/Kg			01/13/20 21:03	1
cis-1,3-Dichloropropene	ND		5.0	0.69	ug/Kg			01/13/20 21:03	1
trans-1,3-Dichloropropene	ND		5.0	0.67	ug/Kg			01/13/20 21:03	1
Ethylbenzene	ND		5.0	0.75	ug/Kg			01/13/20 21:03	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-278278/9
Matrix: Solid
Analysis Batch: 278278

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobutadiene	ND		5.0	0.90	ug/Kg			01/13/20 21:03	1
2-Hexanone	ND		50	10	ug/Kg			01/13/20 21:03	1
Isopropylbenzene	ND		5.0	0.68	ug/Kg			01/13/20 21:03	1
4-Isopropyltoluene	ND		5.0	2.5	ug/Kg			01/13/20 21:03	1
Methylene Chloride	ND		10	5.6	ug/Kg			01/13/20 21:03	1
4-Methyl-2-pentanone (MIBK)	ND		50	10	ug/Kg			01/13/20 21:03	1
Naphthalene	ND		10	1.5	ug/Kg			01/13/20 21:03	1
N-Propylbenzene	ND		5.0	0.66	ug/Kg			01/13/20 21:03	1
Styrene	ND		5.0	0.63	ug/Kg			01/13/20 21:03	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.76	ug/Kg			01/13/20 21:03	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.75	ug/Kg			01/13/20 21:03	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			01/13/20 21:03	1
Toluene	ND		5.0	0.71	ug/Kg			01/13/20 21:03	1
1,2,3-Trichlorobenzene	ND		5.0	0.74	ug/Kg			01/13/20 21:03	1
1,2,4-Trichlorobenzene	ND		5.0	0.71	ug/Kg			01/13/20 21:03	1
1,1,1-Trichloroethane	ND		5.0	0.61	ug/Kg			01/13/20 21:03	1
1,1,2-Trichloroethane	ND		5.0	0.70	ug/Kg			01/13/20 21:03	1
Trichloroethene	ND		5.0	0.63	ug/Kg			01/13/20 21:03	1
Trichlorofluoromethane	ND		5.0	1.1	ug/Kg			01/13/20 21:03	1
1,2,3-Trichloropropane	ND		5.0	0.77	ug/Kg			01/13/20 21:03	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	2.1	ug/Kg			01/13/20 21:03	1
1,2,4-Trimethylbenzene	ND		5.0	1.6	ug/Kg			01/13/20 21:03	1
1,3,5-Trimethylbenzene	ND		5.0	0.65	ug/Kg			01/13/20 21:03	1
Vinyl acetate	ND		20	5.0	ug/Kg			01/13/20 21:03	1
Vinyl chloride	ND		5.0	0.73	ug/Kg			01/13/20 21:03	1
Xylenes, Total	ND		5.0	1.2	ug/Kg			01/13/20 21:03	1
2,2-Dichloropropane	ND		5.0	2.0	ug/Kg			01/13/20 21:03	1
Gasoline Range Organics (GRO) -C4-C12	ND		250	100	ug/Kg			01/13/20 21:03	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*105*		*45 - 131*		*01/13/20 21:03*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*60 - 140*		*01/13/20 21:03*	*1*
Toluene-d8 (Surr)	*99*		*58 - 140*		*01/13/20 21:03*	*1*

Lab Sample ID: LCS 720-278278/4
Matrix: Solid
Analysis Batch: 278278

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	50.0	54.3		ug/Kg		109	70 - 144
Acetone	250	283		ug/Kg		113	30 - 162
Benzene	50.0	49.0		ug/Kg		98	70 - 130
Dichlorobromomethane	50.0	55.4		ug/Kg		111	70 - 140
Bromobenzene	50.0	50.3		ug/Kg		101	70 - 130
Chlorobromomethane	50.0	51.2		ug/Kg		102	70 - 130
Bromoform	50.0	58.2		ug/Kg		116	59 - 158
Bromomethane	50.0	52.4		ug/Kg		105	59 - 132
2-Butanone (MEK)	250	277		ug/Kg		111	59 - 159

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-278278/4
Matrix: Solid
Analysis Batch: 278278

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
n-Butylbenzene	50.0	52.7		ug/Kg		105	70 - 142
sec-Butylbenzene	50.0	50.1		ug/Kg		100	70 - 136
tert-Butylbenzene	50.0	48.9		ug/Kg		98	70 - 130
Carbon disulfide	50.0	45.4		ug/Kg		91	60 - 140
Carbon tetrachloride	50.0	53.4		ug/Kg		107	70 - 142
Chlorobenzene	50.0	49.8		ug/Kg		100	70 - 130
Chloroethane	50.0	51.7		ug/Kg		103	65 - 130
Chloroform	50.0	50.2		ug/Kg		100	77 - 127
Chloromethane	50.0	48.7		ug/Kg		97	55 - 140
2-Chlorotoluene	50.0	48.6		ug/Kg		97	70 - 138
4-Chlorotoluene	50.0	49.9		ug/Kg		100	70 - 136
Chlorodibromomethane	50.0	58.5		ug/Kg		117	70 - 146
1,2-Dichlorobenzene	50.0	49.7		ug/Kg		99	70 - 130
1,3-Dichlorobenzene	50.0	49.6		ug/Kg		99	70 - 131
1,4-Dichlorobenzene	50.0	50.4		ug/Kg		101	70 - 130
1,3-Dichloropropane	50.0	54.5		ug/Kg		109	70 - 140
1,1-Dichloropropene	50.0	48.7		ug/Kg		97	70 - 130
1,2-Dibromo-3-Chloropropane	50.0	57.1		ug/Kg		114	60 - 145
Ethylene Dibromide	50.0	55.4		ug/Kg		111	70 - 140
Dibromomethane	50.0	53.8		ug/Kg		108	70 - 139
Dichlorodifluoromethane	50.0	49.7		ug/Kg		99	37 - 158
1,1-Dichloroethane	50.0	48.7		ug/Kg		97	70 - 130
1,2-Dichloroethane	50.0	52.9		ug/Kg		106	70 - 130
1,1-Dichloroethene	50.0	48.1		ug/Kg		96	74 - 122
cis-1,2-Dichloroethene	50.0	51.0		ug/Kg		102	70 - 138
trans-1,2-Dichloroethene	50.0	49.0		ug/Kg		98	67 - 130
1,2-Dichloropropane	50.0	52.1		ug/Kg		104	73 - 127
cis-1,3-Dichloropropene	50.0	55.5		ug/Kg		111	68 - 147
trans-1,3-Dichloropropene	50.0	54.7		ug/Kg		109	70 - 155
Ethylbenzene	50.0	50.2		ug/Kg		100	80 - 137
Hexachlorobutadiene	50.0	56.5		ug/Kg		113	70 - 132
2-Hexanone	250	293		ug/Kg		117	62 - 158
Isopropylbenzene	50.0	52.1		ug/Kg		104	70 - 130
4-Isopropyltoluene	50.0	50.7		ug/Kg		101	70 - 133
Methylene Chloride	50.0	47.3		ug/Kg		95	70 - 134
4-Methyl-2-pentanone (MIBK)	250	286		ug/Kg		114	60 - 160
Naphthalene	50.0	54.3		ug/Kg		109	60 - 147
N-Propylbenzene	50.0	49.7		ug/Kg		99	70 - 130
Styrene	50.0	55.4		ug/Kg		111	70 - 130
1,1,1,2-Tetrachloroethane	50.0	53.2		ug/Kg		106	70 - 130
1,1,2,2-Tetrachloroethane	50.0	52.0		ug/Kg		104	70 - 146
Tetrachloroethene	50.0	53.0		ug/Kg		106	70 - 132
Toluene	50.0	48.6		ug/Kg		97	75 - 120
1,2,3-Trichlorobenzene	50.0	54.7		ug/Kg		109	60 - 140
1,2,4-Trichlorobenzene	50.0	56.0		ug/Kg		112	60 - 140
1,1,1-Trichloroethane	50.0	52.0		ug/Kg		104	70 - 130
1,1,2-Trichloroethane	50.0	55.0		ug/Kg		110	70 - 130
Trichloroethene	50.0	50.9		ug/Kg		102	70 - 133
Trichlorofluoromethane	50.0	51.9		ug/Kg		104	60 - 140

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-278278/4
Matrix: Solid
Analysis Batch: 278278

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	50.0	52.2		ug/Kg		104	70 - 146
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	49.5		ug/Kg		99	60 - 140
1,2,4-Trimethylbenzene	50.0	51.2		ug/Kg		102	70 - 130
1,3,5-Trimethylbenzene	50.0	50.7		ug/Kg		101	70 - 131
Vinyl acetate	50.0	52.3		ug/Kg		105	38 - 176
Vinyl chloride	50.0	52.9		ug/Kg		106	58 - 125
m-Xylene & p-Xylene	50.0	50.6		ug/Kg		101	70 - 146
o-Xylene	50.0	50.7		ug/Kg		101	70 - 140
2,2-Dichloropropane	50.0	55.9		ug/Kg		112	70 - 162

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*105*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*105*		*60 - 140*
Toluene-d8 (Surr)	*102*		*58 - 140*

Lab Sample ID: LCS 720-278278/6
Matrix: Solid
Analysis Batch: 278278

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C4-C12	1000	1060		ug/Kg		106	70 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*107*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*104*		*60 - 140*
Toluene-d8 (Surr)	*99*		*58 - 140*

Lab Sample ID: LCSD 720-278278/5
Matrix: Solid
Analysis Batch: 278278

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	50.0	55.4		ug/Kg		111	70 - 144	2	20
Acetone	250	274		ug/Kg		110	30 - 162	3	30
Benzene	50.0	49.7		ug/Kg		99	70 - 130	1	20
Dichlorobromomethane	50.0	54.9		ug/Kg		110	70 - 140	1	20
Bromobenzene	50.0	51.8		ug/Kg		104	70 - 130	3	20
Chlorobromomethane	50.0	51.6		ug/Kg		103	70 - 130	1	20
Bromoform	50.0	58.5		ug/Kg		117	59 - 158	1	20
Bromomethane	50.0	52.1		ug/Kg		104	59 - 132	1	20
2-Butanone (MEK)	250	271		ug/Kg		108	59 - 159	2	20
n-Butylbenzene	50.0	55.0		ug/Kg		110	70 - 142	4	20
sec-Butylbenzene	50.0	51.5		ug/Kg		103	70 - 136	3	20
tert-Butylbenzene	50.0	50.8		ug/Kg		102	70 - 130	4	20
Carbon disulfide	50.0	46.0		ug/Kg		92	60 - 140	1	20
Carbon tetrachloride	50.0	54.6		ug/Kg		109	70 - 142	2	20
Chlorobenzene	50.0	50.5		ug/Kg		101	70 - 130	1	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-278278/5
Matrix: Solid
Analysis Batch: 278278

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloroethane	50.0	51.2		ug/Kg		102	65 - 130	1	20
Chloroform	50.0	50.4		ug/Kg		101	77 - 127	0	20
Chloromethane	50.0	48.0		ug/Kg		96	55 - 140	1	20
2-Chlorotoluene	50.0	50.5		ug/Kg		101	70 - 138	4	20
4-Chlorotoluene	50.0	51.8		ug/Kg		104	70 - 136	4	20
Chlorodibromomethane	50.0	58.6		ug/Kg		117	70 - 146	0	20
1,2-Dichlorobenzene	50.0	51.1		ug/Kg		102	70 - 130	3	20
1,3-Dichlorobenzene	50.0	51.3		ug/Kg		103	70 - 131	3	20
1,4-Dichlorobenzene	50.0	51.4		ug/Kg		103	70 - 130	2	20
1,3-Dichloropropane	50.0	54.7		ug/Kg		109	70 - 140	0	20
1,1-Dichloropropene	50.0	50.1		ug/Kg		100	70 - 130	3	20
1,2-Dibromo-3-Chloropropane	50.0	57.5		ug/Kg		115	60 - 145	1	20
Ethylene Dibromide	50.0	55.5		ug/Kg		111	70 - 140	0	20
Dibromomethane	50.0	54.1		ug/Kg		108	70 - 139	1	20
Dichlorodifluoromethane	50.0	49.3		ug/Kg		99	37 - 158	1	20
1,1-Dichloroethane	50.0	49.5		ug/Kg		99	70 - 130	2	20
1,2-Dichloroethane	50.0	53.4		ug/Kg		107	70 - 130	1	20
1,1-Dichloroethene	50.0	49.1		ug/Kg		98	74 - 122	2	20
cis-1,2-Dichloroethene	50.0	51.9		ug/Kg		104	70 - 138	2	20
trans-1,2-Dichloroethene	50.0	50.1		ug/Kg		100	67 - 130	2	20
1,2-Dichloropropane	50.0	53.3		ug/Kg		107	73 - 127	2	20
cis-1,3-Dichloropropene	50.0	56.6		ug/Kg		113	68 - 147	2	20
trans-1,3-Dichloropropene	50.0	55.1		ug/Kg		110	70 - 155	1	20
Ethylbenzene	50.0	50.9		ug/Kg		102	80 - 137	1	20
Hexachlorobutadiene	50.0	59.7		ug/Kg		119	70 - 132	6	20
2-Hexanone	250	284		ug/Kg		114	62 - 158	3	20
Isopropylbenzene	50.0	52.8		ug/Kg		106	70 - 130	1	20
4-Isopropyltoluene	50.0	53.0		ug/Kg		106	70 - 133	4	20
Methylene Chloride	50.0	48.0		ug/Kg		96	70 - 134	2	20
4-Methyl-2-pentanone (MIBK)	250	278		ug/Kg		111	60 - 160	3	20
Naphthalene	50.0	56.0		ug/Kg		112	60 - 147	3	20
N-Propylbenzene	50.0	51.4		ug/Kg		103	70 - 130	3	20
Styrene	50.0	56.1		ug/Kg		112	70 - 130	1	20
1,1,1,2-Tetrachloroethane	50.0	53.5		ug/Kg		107	70 - 130	1	20
1,1,2,2-Tetrachloroethane	50.0	52.9		ug/Kg		106	70 - 146	2	20
Tetrachloroethene	50.0	53.7		ug/Kg		107	70 - 132	1	20
Toluene	50.0	49.1		ug/Kg		98	75 - 120	1	20
1,2,3-Trichlorobenzene	50.0	57.3		ug/Kg		115	60 - 140	5	20
1,2,4-Trichlorobenzene	50.0	58.1		ug/Kg		116	60 - 140	4	20
1,1,1-Trichloroethane	50.0	52.6		ug/Kg		105	70 - 130	1	20
1,1,2-Trichloroethane	50.0	55.1		ug/Kg		110	70 - 130	0	20
Trichloroethene	50.0	51.5		ug/Kg		103	70 - 133	1	20
Trichlorofluoromethane	50.0	51.4		ug/Kg		103	60 - 140	1	20
1,2,3-Trichloropropane	50.0	53.6		ug/Kg		107	70 - 146	3	20
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	49.9		ug/Kg		100	60 - 140	1	20
1,2,4-Trimethylbenzene	50.0	53.0		ug/Kg		106	70 - 130	4	20
1,3,5-Trimethylbenzene	50.0	52.4		ug/Kg		105	70 - 131	3	20
Vinyl acetate	50.0	51.7		ug/Kg		103	38 - 176	1	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-278278/5
Matrix: Solid
Analysis Batch: 278278

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Vinyl chloride			50.0	52.9		ug/Kg		106	58 - 125	0	20
m-Xylene & p-Xylene			50.0	51.2		ug/Kg		102	70 - 146	1	20
o-Xylene			50.0	51.4		ug/Kg		103	70 - 140	1	20
2,2-Dichloropropane			50.0	57.1		ug/Kg		114	70 - 162	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*103*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*103*		*60 - 140*
Toluene-d8 (Surr)	*103*		*58 - 140*

Lab Sample ID: LCSD 720-278278/7
Matrix: Solid
Analysis Batch: 278278

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C4-C12			1000	1070		ug/Kg		107	70 - 122	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*106*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*103*		*60 - 140*
Toluene-d8 (Surr)	*99*		*58 - 140*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 720-278174/1-A
Matrix: Water
Analysis Batch: 278288

Client Sample ID: Method Blank
Prep Type: Silica Gel Cleanup
Prep Batch: 278174

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		50	30	ug/L		01/09/20 18:05	01/14/20 22:30	1
Motor Oil Range Organics [C24-C36]	ND		100	72	ug/L		01/09/20 18:05	01/14/20 22:30	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*81*		*31 - 150*	*01/09/20 18:05*	*01/14/20 22:30*	*1*
Capric Acid (Surr)	*0.02*		*0 - 5*	*01/09/20 18:05*	*01/14/20 22:30*	*1*

Lab Sample ID: LCS 720-278174/2-A
Matrix: Water
Analysis Batch: 278288

Client Sample ID: Lab Control Sample
Prep Type: Silica Gel Cleanup
Prep Batch: 278174

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]			2500	1610		ug/L		64	32 - 119

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
p-Terphenyl	*79*		*31 - 150*

Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCSD 720-278174/3-A
Matrix: Water
Analysis Batch: 278288

Client Sample ID: Lab Control Sample Dup
Prep Type: Silica Gel Cleanup
Prep Batch: 278174

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]			2500	1680		ug/L		67	32 - 119	4	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
p-Terphenyl	*75*		*31 - 150*

Lab Sample ID: MB 720-278193/1-A
Matrix: Solid
Analysis Batch: 278253

Client Sample ID: Method Blank
Prep Type: Silica Gel Cleanup
Prep Batch: 278193

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		2.0	0.75	mg/Kg		01/10/20 09:17	01/13/20 12:40	1
Motor Oil Range Organics [C24-C36]	ND		50	10	mg/Kg		01/10/20 09:17	01/13/20 12:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*75*		*38 - 148*	*01/10/20 09:17*	*01/13/20 12:40*	*1*
Capric Acid (Surr)	*0.07*		*0 - 1*	*01/10/20 09:17*	*01/13/20 12:40*	*1*

Lab Sample ID: LCS 720-278193/2-A
Matrix: Solid
Analysis Batch: 278287

Client Sample ID: Lab Control Sample
Prep Type: Silica Gel Cleanup
Prep Batch: 278193

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]			167	116		mg/Kg		70	36 - 112

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
p-Terphenyl	*87*		*38 - 148*

Method: 7199 - Chromium, Hexavalent (IC)

Lab Sample ID: MB 440-590539/1-A
Matrix: Solid
Analysis Batch: 590632

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 590539

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.30	0.15	mg/Kg		01/14/20 20:59	01/15/20 11:45	3

Lab Sample ID: LCS 440-590539/2-A
Matrix: Solid
Analysis Batch: 590632

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 590539

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cr (VI)			40.0	33.3		mg/Kg		83	80 - 120

Method: 7199 - Chromium, Hexavalent (IC) (Continued)

Lab Sample ID: 720-96843-1 MS
Matrix: Solid
Analysis Batch: 590632

Client Sample ID: SB-3-SS-3.5
Prep Type: Total/NA
Prep Batch: 590539

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cr (VI)	ND	F1	40.0	47.7		mg/Kg		119	75 - 125

Lab Sample ID: 720-96843-1 MSD
Matrix: Solid
Analysis Batch: 590632

Client Sample ID: SB-3-SS-3.5
Prep Type: Total/NA
Prep Batch: 590539

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cr (VI)	ND	F1	40.2	53.5	F1	mg/Kg		133	75 - 125	11	20

Lab Sample ID: 720-96843-1 MSI
Matrix: Solid
Analysis Batch: 590632

Client Sample ID: SB-3-SS-3.5
Prep Type: Total/NA
Prep Batch: 590539

Analyte	Sample Result	Sample Qualifier	Spike Added	MSI Result	MSI Qualifier	Unit	D	%Rec	%Rec. Limits
Cr (VI)	ND	F1	1000	997		mg/Kg		99	75 - 125

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 320-350349/1-A
Matrix: Solid
Analysis Batch: 350981

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 350349

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.50	0.090	mg/Kg		01/13/20 07:15	01/14/20 14:20	1
Arsenic	ND		2.0	1.3	mg/Kg		01/13/20 07:15	01/14/20 14:20	1
Barium	ND		1.0	0.12	mg/Kg		01/13/20 07:15	01/14/20 14:20	1
Beryllium	ND		0.20	0.030	mg/Kg		01/13/20 07:15	01/14/20 14:20	1
Cadmium	ND		0.20	0.030	mg/Kg		01/13/20 07:15	01/14/20 14:20	1
Cobalt	ND		0.50	0.25	mg/Kg		01/13/20 07:15	01/14/20 14:20	1
Chromium	ND		0.50	0.14	mg/Kg		01/13/20 07:15	01/14/20 14:20	1
Copper	0.244	J	1.5	0.22	mg/Kg		01/13/20 07:15	01/14/20 14:20	1
Molybdenum	ND		2.0	0.75	mg/Kg		01/13/20 07:15	01/14/20 14:20	1
Nickel	ND		1.0	0.24	mg/Kg		01/13/20 07:15	01/14/20 14:20	1
Lead	ND		1.0	0.26	mg/Kg		01/13/20 07:15	01/14/20 14:20	1
Selenium	ND		2.0	1.4	mg/Kg		01/13/20 07:15	01/14/20 14:20	1
Antimony	ND		2.0	0.94	mg/Kg		01/13/20 07:15	01/14/20 14:20	1
Thallium	ND		2.0	0.84	mg/Kg		01/13/20 07:15	01/14/20 14:20	1
Vanadium	ND		0.50	0.19	mg/Kg		01/13/20 07:15	01/14/20 14:20	1
Zinc	ND		2.0	0.19	mg/Kg		01/13/20 07:15	01/14/20 14:20	1

Lab Sample ID: LCS 320-350349/2-A
Matrix: Solid
Analysis Batch: 350981

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 350349

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	4.98	5.06		mg/Kg		102	80 - 120
Arsenic	50.0	46.6		mg/Kg		93	80 - 120
Barium	50.0	48.3		mg/Kg		97	80 - 120
Beryllium	25.0	24.5		mg/Kg		98	80 - 120
Cadmium	25.0	24.4		mg/Kg		98	80 - 120

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 320-350349/2-A
Matrix: Solid
Analysis Batch: 350981

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 350349

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cobalt	25.0	24.1		mg/Kg		96	80 - 120
Chromium	25.0	25.1		mg/Kg		100	80 - 120
Copper	25.0	24.8		mg/Kg		99	80 - 120
Molybdenum	25.0	24.4		mg/Kg		98	80 - 120
Nickel	25.0	24.3		mg/Kg		97	80 - 120
Lead	25.0	24.6		mg/Kg		98	80 - 120
Selenium	50.0	49.3		mg/Kg		99	80 - 120
Antimony	50.0	43.2		mg/Kg		86	80 - 120
Thallium	50.0	48.7		mg/Kg		97	80 - 120
Vanadium	25.0	24.8		mg/Kg		99	80 - 120
Zinc	50.3	49.7		mg/Kg		99	80 - 120

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 320-350339/11-A
Matrix: Solid
Analysis Batch: 350850

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 350339

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.040	0.0086	mg/Kg		01/12/20 14:00	01/13/20 10:33	1

Lab Sample ID: LCS 320-350339/12-A
Matrix: Solid
Analysis Batch: 350850

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 350339

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.167	0.165		mg/Kg		99	86 - 114

GC/MS VOA

Analysis Batch: 278181

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-96843-3	SB-4-SS-1.5	Total/NA	Solid	8260B	278185
720-96843-4	SB-4-SS-6.0	Total/NA	Solid	8260B	278185
MB 720-278181/4	Method Blank	Total/NA	Solid	8260B	
LCS 720-278181/5	Lab Control Sample	Total/NA	Solid	8260B	
LCS 720-278181/7	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 720-278181/6	Lab Control Sample Dup	Total/NA	Solid	8260B	
LCSD 720-278181/8	Lab Control Sample Dup	Total/NA	Solid	8260B	

Analysis Batch: 278182

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-96843-2	SB-3-SS-8.0	Total/NA	Solid	8260B	278185
MB 720-278182/4	Method Blank	Total/NA	Solid	8260B	
LCS 720-278182/5	Lab Control Sample	Total/NA	Solid	8260B	
LCS 720-278182/7	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 720-278182/6	Lab Control Sample Dup	Total/NA	Solid	8260B	
LCSD 720-278182/8	Lab Control Sample Dup	Total/NA	Solid	8260B	

Prep Batch: 278185

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-96843-2	SB-3-SS-8.0	Total/NA	Solid	5035	
720-96843-3	SB-4-SS-1.5	Total/NA	Solid	5035	
720-96843-4	SB-4-SS-6.0	Total/NA	Solid	5035	

Analysis Batch: 278249

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-96843-5	SB-3-GW-8.5	Total/NA	Water	8260B	
720-96843-6	SB-4-GW-7.3	Total/NA	Water	8260B	
MB 720-278249/4	Method Blank	Total/NA	Water	8260B	
LCS 720-278249/5	Lab Control Sample	Total/NA	Water	8260B	
LCS 720-278249/7	Lab Control Sample	Total/NA	Water	8260B	
LCSD 720-278249/6	Lab Control Sample Dup	Total/NA	Water	8260B	
LCSD 720-278249/8	Lab Control Sample Dup	Total/NA	Water	8260B	

Analysis Batch: 278278

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-96843-1	SB-3-SS-3.5	Total/NA	Solid	8260B	278281
MB 720-278278/9	Method Blank	Total/NA	Solid	8260B	
LCS 720-278278/4	Lab Control Sample	Total/NA	Solid	8260B	
LCS 720-278278/6	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 720-278278/5	Lab Control Sample Dup	Total/NA	Solid	8260B	
LCSD 720-278278/7	Lab Control Sample Dup	Total/NA	Solid	8260B	

Prep Batch: 278281

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-96843-1	SB-3-SS-3.5	Total/NA	Solid	5035	

GC Semi VOA

Prep Batch: 278174

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-96843-5	SB-3-GW-8.5	Silica Gel Cleanup	Water	3510C SGC	

GC Semi VOA (Continued)

Prep Batch: 278174 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-96843-6	SB-4-GW-7.3	Silica Gel Cleanup	Water	3510C SGC	
MB 720-278174/1-A	Method Blank	Silica Gel Cleanup	Water	3510C SGC	
LCS 720-278174/2-A	Lab Control Sample	Silica Gel Cleanup	Water	3510C SGC	
LCSD 720-278174/3-A	Lab Control Sample Dup	Silica Gel Cleanup	Water	3510C SGC	

Prep Batch: 278193

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-96843-1	SB-3-SS-3.5	Silica Gel Cleanup	Solid	3546	
720-96843-2	SB-3-SS-8.0	Silica Gel Cleanup	Solid	3546	
720-96843-3	SB-4-SS-1.5	Silica Gel Cleanup	Solid	3546	
720-96843-4	SB-4-SS-6.0	Silica Gel Cleanup	Solid	3546	
MB 720-278193/1-A	Method Blank	Silica Gel Cleanup	Solid	3546	
LCS 720-278193/2-A	Lab Control Sample	Silica Gel Cleanup	Solid	3546	

Analysis Batch: 278253

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-278193/1-A	Method Blank	Silica Gel Cleanup	Solid	8015B	278193

Analysis Batch: 278287

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-96843-3	SB-4-SS-1.5	Silica Gel Cleanup	Solid	8015B	278193
LCS 720-278193/2-A	Lab Control Sample	Silica Gel Cleanup	Solid	8015B	278193

Analysis Batch: 278288

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-96843-1	SB-3-SS-3.5	Silica Gel Cleanup	Solid	8015B	278193
720-96843-2	SB-3-SS-8.0	Silica Gel Cleanup	Solid	8015B	278193
720-96843-4	SB-4-SS-6.0	Silica Gel Cleanup	Solid	8015B	278193
720-96843-5	SB-3-GW-8.5	Silica Gel Cleanup	Water	8015B	278174
720-96843-6	SB-4-GW-7.3	Silica Gel Cleanup	Water	8015B	278174
MB 720-278174/1-A	Method Blank	Silica Gel Cleanup	Water	8015B	278174
LCS 720-278174/2-A	Lab Control Sample	Silica Gel Cleanup	Water	8015B	278174
LCSD 720-278174/3-A	Lab Control Sample Dup	Silica Gel Cleanup	Water	8015B	278174

HPLC/IC

Prep Batch: 590539

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-96843-1	SB-3-SS-3.5	Total/NA	Solid	3060A	
720-96843-3	SB-4-SS-1.5	Total/NA	Solid	3060A	
MB 440-590539/1-A	Method Blank	Total/NA	Solid	3060A	
LCS 440-590539/2-A	Lab Control Sample	Total/NA	Solid	3060A	
720-96843-1 MS	SB-3-SS-3.5	Total/NA	Solid	3060A	
720-96843-1 MSD	SB-3-SS-3.5	Total/NA	Solid	3060A	
720-96843-1 MSI	SB-3-SS-3.5	Total/NA	Solid	3060A	

Analysis Batch: 590632

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-96843-1	SB-3-SS-3.5	Total/NA	Solid	7199	590539
720-96843-3	SB-4-SS-1.5	Total/NA	Solid	7199	590539
MB 440-590539/1-A	Method Blank	Total/NA	Solid	7199	590539

HPLC/IC (Continued)

Analysis Batch: 590632 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 440-590539/2-A	Lab Control Sample	Total/NA	Solid	7199	590539
720-96843-1 MS	SB-3-SS-3.5	Total/NA	Solid	7199	590539
720-96843-1 MSD	SB-3-SS-3.5	Total/NA	Solid	7199	590539
720-96843-1 MSI	SB-3-SS-3.5	Total/NA	Solid	7199	590539

Metals

Prep Batch: 350339

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-96843-1	SB-3-SS-3.5	Total/NA	Solid	7471A	
720-96843-2	SB-3-SS-8.0	Total/NA	Solid	7471A	
720-96843-3	SB-4-SS-1.5	Total/NA	Solid	7471A	
720-96843-4	SB-4-SS-6.0	Total/NA	Solid	7471A	
MB 320-350339/11-A	Method Blank	Total/NA	Solid	7471A	
LCS 320-350339/12-A	Lab Control Sample	Total/NA	Solid	7471A	

Prep Batch: 350349

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-96843-1	SB-3-SS-3.5	Total/NA	Solid	3050B	
720-96843-2	SB-3-SS-8.0	Total/NA	Solid	3050B	
720-96843-3	SB-4-SS-1.5	Total/NA	Solid	3050B	
720-96843-4	SB-4-SS-6.0	Total/NA	Solid	3050B	
MB 320-350349/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 320-350349/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Analysis Batch: 350850

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-96843-1	SB-3-SS-3.5	Total/NA	Solid	7471A	350339
720-96843-2	SB-3-SS-8.0	Total/NA	Solid	7471A	350339
720-96843-3	SB-4-SS-1.5	Total/NA	Solid	7471A	350339
720-96843-4	SB-4-SS-6.0	Total/NA	Solid	7471A	350339
MB 320-350339/11-A	Method Blank	Total/NA	Solid	7471A	350339
LCS 320-350339/12-A	Lab Control Sample	Total/NA	Solid	7471A	350339

Analysis Batch: 350981

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-96843-1	SB-3-SS-3.5	Total/NA	Solid	6010B	350349
720-96843-2	SB-3-SS-8.0	Total/NA	Solid	6010B	350349
720-96843-3	SB-4-SS-1.5	Total/NA	Solid	6010B	350349
720-96843-4	SB-4-SS-6.0	Total/NA	Solid	6010B	350349
MB 320-350349/1-A	Method Blank	Total/NA	Solid	6010B	350349
LCS 320-350349/2-A	Lab Control Sample	Total/NA	Solid	6010B	350349

Lab Chronicle

Client: Haley & Aldrich, Inc.
Project/Site: World Oil

Job ID: 720-96843-1

Client Sample ID: SB-3-SS-3.5

Lab Sample ID: 720-96843-1

Date Collected: 01/08/20 10:30

Matrix: Solid

Date Received: 01/09/20 12:34

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			278281	01/09/20 18:10	MJK	TAL PLS
Total/NA	Analysis	8260B		1	278278	01/13/20 23:15	AJS	TAL PLS
Silica Gel Cleanup	Prep	3546			278193	01/10/20 09:17	RAR	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	278288	01/14/20 16:39	JXL	TAL PLS
Total/NA	Prep	3060A			590539	01/14/20 20:59	RW	TAL IRV
Total/NA	Analysis	7199		3	590632	01/15/20 12:11	MN	TAL IRV
Total/NA	Prep	3050B			350349	01/13/20 07:15	NIM	TAL SAC
Total/NA	Analysis	6010B		1	350981	01/14/20 16:59	GSH	TAL SAC
Total/NA	Prep	7471A			350339	01/12/20 14:00	DPM	TAL SAC
Total/NA	Analysis	7471A		1	350850	01/13/20 12:26	DPM	TAL SAC

Client Sample ID: SB-3-SS-8.0

Lab Sample ID: 720-96843-2

Date Collected: 01/08/20 10:35

Matrix: Solid

Date Received: 01/09/20 12:34

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			278185	01/09/20 18:10	AJS	TAL PLS
Total/NA	Analysis	8260B		1	278182	01/10/20 10:33	A1C	TAL PLS
Silica Gel Cleanup	Prep	3546			278193	01/10/20 09:17	RAR	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	278288	01/14/20 17:08	JXL	TAL PLS
Total/NA	Prep	3050B			350349	01/13/20 07:15	NIM	TAL SAC
Total/NA	Analysis	6010B		1	350981	01/14/20 17:03	GSH	TAL SAC
Total/NA	Prep	7471A			350339	01/12/20 14:00	DPM	TAL SAC
Total/NA	Analysis	7471A		1	350850	01/13/20 12:28	DPM	TAL SAC

Client Sample ID: SB-4-SS-1.5

Lab Sample ID: 720-96843-3

Date Collected: 01/08/20 11:55

Matrix: Solid

Date Received: 01/09/20 12:34

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			278185	01/09/20 18:10	AJS	TAL PLS
Total/NA	Analysis	8260B		1	278181	01/10/20 12:40	A1C	TAL PLS
Silica Gel Cleanup	Prep	3546			278193	01/10/20 09:17	RAR	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	278287	01/14/20 16:10	JXL	TAL PLS
Total/NA	Prep	3060A			590539	01/14/20 20:59	RW	TAL IRV
Total/NA	Analysis	7199		3	590632	01/15/20 13:52	MN	TAL IRV
Total/NA	Prep	3050B			350349	01/13/20 07:15	NIM	TAL SAC
Total/NA	Analysis	6010B		1	350981	01/14/20 17:14	GSH	TAL SAC
Total/NA	Prep	7471A			350339	01/12/20 14:00	DPM	TAL SAC
Total/NA	Analysis	7471A		1	350850	01/13/20 12:31	DPM	TAL SAC

Lab Chronicle

Client: Haley & Aldrich, Inc.
Project/Site: World Oil

Job ID: 720-96843-1

Client Sample ID: SB-4-SS-6.0

Lab Sample ID: 720-96843-4

Date Collected: 01/08/20 11:32

Matrix: Solid

Date Received: 01/09/20 12:34

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			278185	01/09/20 18:10	AJS	TAL PLS
Total/NA	Analysis	8260B		1	278181	01/10/20 13:08	A1C	TAL PLS
Silica Gel Cleanup	Prep	3546			278193	01/10/20 09:17	RAR	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	278288	01/14/20 17:37	JXL	TAL PLS
Total/NA	Prep	3050B			350349	01/13/20 07:15	NIM	TAL SAC
Total/NA	Analysis	6010B		1	350981	01/14/20 17:18	GSH	TAL SAC
Total/NA	Prep	7471A			350339	01/12/20 14:00	DPM	TAL SAC
Total/NA	Analysis	7471A		1	350850	01/13/20 12:33	DPM	TAL SAC

Client Sample ID: SB-3-GW-8.5

Lab Sample ID: 720-96843-5

Date Collected: 01/08/20 10:51

Matrix: Water

Date Received: 01/09/20 12:34

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	278249	01/13/20 11:11	A1C	TAL PLS
Silica Gel Cleanup	Prep	3510C SGC			278174	01/09/20 18:05	BRR	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	278288	01/14/20 22:59	JXL	TAL PLS

Client Sample ID: SB-4-GW-7.3

Lab Sample ID: 720-96843-6

Date Collected: 01/08/20 11:37

Matrix: Water

Date Received: 01/09/20 12:34

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	278249	01/13/20 11:40	A1C	TAL PLS
Silica Gel Cleanup	Prep	3510C SGC			278174	01/09/20 18:05	BRR	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	278288	01/14/20 23:28	JXL	TAL PLS

Laboratory References:

TAL IRV = Eurofins Calscience Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

TAL PLS = Eurofins TestAmerica, Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Accreditation/Certification Summary

Client: Haley & Aldrich, Inc.
Project/Site: World Oil

Job ID: 720-96843-1

Laboratory: Eurofins TestAmerica, Pleasanton

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
California	State	2496	01-31-20 *

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015B	3510C SGC	Water	Diesel Range Organics [C10-C28]
8015B	3510C SGC	Water	Motor Oil Range Organics [C24-C36]
8015B	3546	Solid	Diesel Range Organics [C10-C28]
8015B	3546	Solid	Motor Oil Range Organics [C24-C36]
8260B		Water	1,1,1,2-Tetrachloroethane
8260B		Water	1,1,1-Trichloroethane
8260B		Water	1,1,2,2-Tetrachloroethane
8260B		Water	1,1,2-Trichloro-1,2,2-trifluoroethane
8260B		Water	1,1,2-Trichloroethane
8260B		Water	1,1-Dichloroethane
8260B		Water	1,1-Dichloroethene
8260B		Water	1,1-Dichloropropene
8260B		Water	1,2,3-Trichlorobenzene
8260B		Water	1,2,3-Trichloropropane
8260B		Water	1,2,4-Trichlorobenzene
8260B		Water	1,2,4-Trimethylbenzene
8260B		Water	1,2-Dibromo-3-Chloropropane
8260B		Water	1,2-Dichlorobenzene
8260B		Water	1,2-Dichloroethane
8260B		Water	1,2-Dichloropropane
8260B		Water	1,3,5-Trimethylbenzene
8260B		Water	1,3-Dichlorobenzene
8260B		Water	1,3-Dichloropropane
8260B		Water	1,4-Dichlorobenzene
8260B		Water	2,2-Dichloropropane
8260B		Water	2-Butanone (MEK)
8260B		Water	2-Chlorotoluene
8260B		Water	2-Hexanone
8260B		Water	4-Chlorotoluene
8260B		Water	4-Isopropyltoluene
8260B		Water	4-Methyl-2-pentanone (MIBK)
8260B		Water	Acetone
8260B		Water	Benzene
8260B		Water	Bromobenzene
8260B		Water	Bromoform
8260B		Water	Bromomethane
8260B		Water	Carbon disulfide
8260B		Water	Carbon tetrachloride
8260B		Water	Chlorobenzene
8260B		Water	Chlorobromomethane
8260B		Water	Chlorodibromomethane
8260B		Water	Chloroethane
8260B		Water	Chloroform
8260B		Water	Chloromethane
8260B		Water	cis-1,2-Dichloroethene

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Laboratory: Eurofins TestAmerica, Pleasanton (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
California	State	2496	01-31-20 *

8260B		Water	cis-1,3-Dichloropropene
8260B		Water	Dibromomethane
8260B		Water	Dichlorobromomethane
8260B		Water	Dichlorodifluoromethane
8260B		Water	Ethylbenzene
8260B		Water	Ethylene Dibromide
8260B		Water	Gasoline Range Organics (GRO)-C4-C12
8260B		Water	Hexachlorobutadiene
8260B		Water	Isopropylbenzene
8260B		Water	Methyl tert-butyl ether
8260B		Water	Methylene Chloride
8260B		Water	Naphthalene
8260B		Water	n-Butylbenzene
8260B		Water	N-Propylbenzene
8260B		Water	sec-Butylbenzene
8260B		Water	Styrene
8260B		Water	tert-Butylbenzene
8260B		Water	Tetrachloroethene
8260B		Water	Toluene
8260B		Water	trans-1,2-Dichloroethene
8260B		Water	trans-1,3-Dichloropropene
8260B		Water	Trichloroethene
8260B		Water	Trichlorofluoromethane
8260B		Water	Vinyl acetate
8260B		Water	Vinyl chloride
8260B		Water	Xylenes, Total
8260B	5035	Solid	1,1,1,2-Tetrachloroethane
8260B	5035	Solid	1,1,1-Trichloroethane
8260B	5035	Solid	1,1,2,2-Tetrachloroethane
8260B	5035	Solid	1,1,2-Trichloro-1,2,2-trifluoroethane
8260B	5035	Solid	1,1,2-Trichloroethane
8260B	5035	Solid	1,1-Dichloroethane
8260B	5035	Solid	1,1-Dichloroethene
8260B	5035	Solid	1,1-Dichloropropene
8260B	5035	Solid	1,2,3-Trichlorobenzene
8260B	5035	Solid	1,2,3-Trichloropropane
8260B	5035	Solid	1,2,4-Trichlorobenzene
8260B	5035	Solid	1,2,4-Trimethylbenzene
8260B	5035	Solid	1,2-Dibromo-3-Chloropropane
8260B	5035	Solid	1,2-Dichlorobenzene
8260B	5035	Solid	1,2-Dichloroethane
8260B	5035	Solid	1,2-Dichloropropane
8260B	5035	Solid	1,3,5-Trimethylbenzene
8260B	5035	Solid	1,3-Dichlorobenzene
8260B	5035	Solid	1,3-Dichloropropane
8260B	5035	Solid	1,4-Dichlorobenzene
8260B	5035	Solid	2,2-Dichloropropane
8260B	5035	Solid	2-Butanone (MEK)
8260B	5035	Solid	2-Chlorotoluene

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Haley & Aldrich, Inc.
Project/Site: World Oil

Job ID: 720-96843-1

Laboratory: Eurofins TestAmerica, Pleasanton (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
California	State	2496	01-31-20 *
8260B	5035	Solid	2-Hexanone
8260B	5035	Solid	4-Chlorotoluene
8260B	5035	Solid	4-Isopropyltoluene
8260B	5035	Solid	4-Methyl-2-pentanone (MIBK)
8260B	5035	Solid	Acetone
8260B	5035	Solid	Benzene
8260B	5035	Solid	Bromobenzene
8260B	5035	Solid	Bromoform
8260B	5035	Solid	Bromomethane
8260B	5035	Solid	Carbon disulfide
8260B	5035	Solid	Carbon tetrachloride
8260B	5035	Solid	Chlorobenzene
8260B	5035	Solid	Chlorobromomethane
8260B	5035	Solid	Chlorodibromomethane
8260B	5035	Solid	Chloroethane
8260B	5035	Solid	Chloroform
8260B	5035	Solid	Chloromethane
8260B	5035	Solid	cis-1,2-Dichloroethene
8260B	5035	Solid	cis-1,3-Dichloropropene
8260B	5035	Solid	Dibromomethane
8260B	5035	Solid	Dichlorobromomethane
8260B	5035	Solid	Dichlorodifluoromethane
8260B	5035	Solid	Ethylbenzene
8260B	5035	Solid	Ethylene Dibromide
8260B	5035	Solid	Gasoline Range Organics (GRO)-C4-C12
8260B	5035	Solid	Hexachlorobutadiene
8260B	5035	Solid	Isopropylbenzene
8260B	5035	Solid	Methyl tert-butyl ether
8260B	5035	Solid	Methylene Chloride
8260B	5035	Solid	Naphthalene
8260B	5035	Solid	n-Butylbenzene
8260B	5035	Solid	N-Propylbenzene
8260B	5035	Solid	sec-Butylbenzene
8260B	5035	Solid	Styrene
8260B	5035	Solid	tert-Butylbenzene
8260B	5035	Solid	Tetrachloroethene
8260B	5035	Solid	Toluene
8260B	5035	Solid	trans-1,2-Dichloroethene
8260B	5035	Solid	trans-1,3-Dichloropropene
8260B	5035	Solid	Trichloroethene
8260B	5035	Solid	Trichlorofluoromethane
8260B	5035	Solid	Vinyl acetate
8260B	5035	Solid	Vinyl chloride
8260B	5035	Solid	Xylenes, Total

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Haley & Aldrich, Inc.
Project/Site: World Oil

Job ID: 720-96843-1

Laboratory: Eurofins Calscience Irvine

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
California	State	2706	06-30-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
7199	3060A	Solid	Cr (VI)

Laboratory: Eurofins TestAmerica, Sacramento

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
California	State	2897	01-31-20 *

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
6010B	3050B	Solid	Antimony
6010B	3050B	Solid	Arsenic
6010B	3050B	Solid	Barium
6010B	3050B	Solid	Beryllium
6010B	3050B	Solid	Cadmium
6010B	3050B	Solid	Chromium
6010B	3050B	Solid	Cobalt
6010B	3050B	Solid	Copper
6010B	3050B	Solid	Lead
6010B	3050B	Solid	Molybdenum
6010B	3050B	Solid	Nickel
6010B	3050B	Solid	Selenium
6010B	3050B	Solid	Silver
6010B	3050B	Solid	Thallium
6010B	3050B	Solid	Vanadium
6010B	3050B	Solid	Zinc
7471A	7471A	Solid	Mercury

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: Haley & Aldrich, Inc.
Project/Site: World Oil

Job ID: 720-96843-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL PLS
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL PLS
7199	Chromium, Hexavalent (IC)	SW846	TAL IRV
6010B	Metals (ICP)	SW846	TAL SAC
7471A	Mercury (CVAA)	SW846	TAL SAC
3050B	Preparation, Metals	SW846	TAL SAC
3060A	Alkaline Digestion (Chromium, Hexavalent)	SW846	TAL IRV
3510C SGC	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL PLS
3546	Microwave Extraction	SW846	TAL PLS
5030B	Purge and Trap	SW846	TAL PLS
5035	Closed System Purge and Trap	SW846	TAL PLS
7471A	Preparation, Mercury	SW846	TAL SAC

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL IRV = Eurofins Calscience Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

TAL PLS = Eurofins TestAmerica, Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Sample Summary

Client: Haley & Aldrich, Inc.
Project/Site: World Oil

Job ID: 720-96843-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
720-96843-1	SB-3-SS-3.5	Solid	01/08/20 10:30	01/09/20 12:34	
720-96843-2	SB-3-SS-8.0	Solid	01/08/20 10:35	01/09/20 12:34	
720-96843-3	SB-4-SS-1.5	Solid	01/08/20 11:55	01/09/20 12:34	
720-96843-4	SB-4-SS-6.0	Solid	01/08/20 11:32	01/09/20 12:34	
720-96843-5	SB-3-GW-8.5	Water	01/08/20 10:51	01/09/20 12:34	
720-96843-6	SB-4-GW-7.3	Water	01/08/20 11:37	01/09/20 12:34	

TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566-4756
phone 925.484.1919 fax 925.600.3002

Chain of Custody Record for
Haley & Aldrich, Inc. Blanket Service Agreement #2019-22-TestAmerica

720-96843

#194189

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

TestAmerica Laboratories, Inc.

TestAmerica's services under this CoC shall be performed in accordance with the T&Cs within Blanket Service Agreement# 2019-22-TestAmerica by and between Haley & Aldrich, Inc., its subsidiaries and affiliates, and TestAmerica Laboratories Inc..

Client Contact	H&A Project Manager: J. Boyer	H&A Site Contact: R. Cox	Date: 01/08/2020	COC No: 1
Haley & Aldrich Inc.	Tel/Fax: (408) 961-4808	Lab Contact: M. Smith	Carrier: COURIER	1 of 1 COCs
2107 N. 1st St., Suite 380	Analysis Turnaround Time			Sampler: R. Cox
San Jose/CA/95131	☐ CALENDAR DAYS ☑ WORKING DAYS			For Lab Use Only:
(408) 961-4808 Phone	TAT if different from Below _____			Walk-in Client:
(408) 453-8708 FAX	☐ 2 weeks			Lab Sampling:
H&A Project Number : 129899-014	☑ 1 week			
Site: WORLD OIL - 2695 STORY RD.	☐ 2 days			Job / SDG No.:
H&A P O # 129899-014 SID 6	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	VOCs & TPH-g 8260B	TPH-d/mo 3510/8015M using silica gel cleanup	CAM 17 Metals 6010B and 7470/7471	Hexavalent Chromium 7199	HOLD	Sample Specific Notes:
SB-3-SS- 3.5	1/8/2020	1030	G	S	6	N	N	X	X	X	X		
SB-3-SS- 8.0	1/8/2020	1035	G	S	6	N	N	X	X	X			
SB-4-SS- 1.5	1/8/2020	1155	G	S	6	N	N	X	X	X	X		
SB-4-SS- 6.0	1/8/2020	1132	G	S	6	N	N	X	X	X			
SB-3-GW- 8.5	1/8/2020	1051	G	W	5	N	N	X	X				
SB-4-GW- 7.3	1/8/2020	1137	G	W	5	N	N	X	X				
SB-3-SS- 11.0	1/8/2020	1045	G	S	6	N	N	~~X~~	~~X~~ RC	~~X~~		X	PLACE ON HOLD
								6	1	1	1		

720-96343 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other Methanol & UPBW

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:
****CC results to : rcox@haleyaldrich.com, vgodard@haleyaldrich.com, drattanasith@haleyaldrich.com, jboyer@haleyaldrich.com**

1-6 C°

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:		Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ Therm ID No.:_____		
Relinquished by: Roger Cox	Company: H&A	Date/Time: 1-8-20/1710	Received by:	Company: ETA/LCS	Date/Time: 1/9/2020 11:31
Relinquished by: A-FISHER	Company: ETA LCS	Date/Time: 1/9/20 1234	Received by:	Company: ETA-LCS	Date/Time: 1/9/20 1234
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

Form No. CA-C-WI-045, Rev. 1.2, dated 1/8/2016

1/16/2020

Eurofins TestAmerica, Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Phone: 925-484-1919 Fax: 925-600-3002

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Smith, Micah	Carrier Tracking No(s):	COC No: 720-44928.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: micah.smith@testamericainc.com	State of Origin: California	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State - California		Job #: 720-96843-1
Address: 880 Riverside Parkway,	Due Date Requested: 1/15/2020			
City: West Sacramento	TAT Requested (days):			
State, Zip: CA, 95605				
Phone: 916-373-5600(Tel) 916-372-1059(Fax)	PO #:			
Email:	WO #:			
Project Name: World Oil	Project #: 72014990			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B/3050B CAM 17 List, minus Mercury	7471A/7471A_Prep Mercury	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
SB-3-SS-3.5 (720-96843-1)	1/8/20	10:30 Pacific		Solid			X	X	1	
SB-3-SS-8.0 (720-96843-2)	1/8/20	10:35 Pacific		Solid			X	X	1	
SB-4-SS-1.5 (720-96843-3)	1/8/20	11:55 Pacific		Solid			X	X	1	
SB-4-SS-6.0 (720-96843-4)	1/8/20	11:32 Pacific		Solid			X	X	1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature]	1-10-2020 1600	PTS	[signature]	1/11/20 - 9:46	GTA-SAC
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ∆ Yes ∆ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: OBS 5.1 Corr 5.5

Ver: 01/16/2019

1/16/2020

Eurofins TestAmerica, Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Phone. 925-484-1919 Fax: 925-600-3002

Chain of Custody Record

eurofins Environment Testing TestAmerica

Client Information (Sub Contract Lab)	Sampler	Lab PM: Smith, Micah	Carrier Tracking No(s):	COC No: 720-44927.1
Client Contact: Shipping/Receiving	Phone	E-Mail: micah.smith@testamericainc.com	State of Origin: California	Page: Page 1 of 1
Company: Eurofins Calscience LLC		Accreditations Required (See note): State - California		Job #: 720-96843-1
Address: 17461 Derian Ave, Suite 100,	Due Date Requested: 1/15/2020			
City: Irvine	TAT Requested (days):			
State, Zip: CA, 92614-5817				
Phone: 949-261-1022(Tel) 949-260-3297(Fax)	PO #:			
Email:	WO #:			
Project Name: World Oil	Project #: 72014990			
Site	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid
I - Ice
J - DI Water
K - EDTA
L - EDA
M - Hexane
N - None
O - AsNaO2
P - Na2O4S
Q - Na2SO3
R - Na2S2O3
S - H2SO4
T - TSP Dodecahydrate
U - Acetone
V - MCAA
W - pH 4-5
Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	7199_ORGFM/3060A	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
SB-3-SS-3.5 (720-96843-1)	1/8/20	10:30 Pacific		Solid			X	1	
SB-4-SS-1.5 (720-96843-3)	1/8/20	11 55 Pacific		Solid			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins TestAmerica

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by	Date/Time:	Company	Received by:	Date/Time:	Company
John Mueller	1-10-2020 1600	RA			
Relinquished by	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by	Date/Time	Company	Received by	Date/Time:	Company
				1/11/20 1120	EC-IRV

Custody Seals Intact: ☒ Yes ☐ No	Custody Seal No.: 1302 3164 6178	Cooler Temperature(s) °C and Other Remarks: 1.9/1.8 IR93

Ver: 01/16/2019

1/16/2020

eurofins | Environment Testing TestAmerica

Sacramento Sample Receiving Notes

720-96843 Field Sheet

Tracking # : 1302-3164-6145

SO / RO / FO / SAT / 2-Day / Ground / UPS / CDO / Courier

GSO / OnTrac / Goldstreak / USPS / Other _____

Job: _____

Use this form to record Sample Custody Seal, Cooler Custody Seal, Temperature & corrected Temperature & other observations.
File in the job folder with the COC.

Notes: _____

Therm. ID: Ak-11 Corr. Factor: (+ / -) 0.4 °C

Ice ✓ Wet ~ Gel _____ Other _____

Cooler Custody Seal: —

Cooler ID: —

Temp Observed: 5.1 °C Corrected: 5.5 °C

From: Temp Blank ☐ Sample ☑

During Initial Triage	Yes	No	NA
Cooler compromised/tampered with?	☐	☑	☐
Cooler Temperature is acceptable?	☑	☐	☐
CoC is complete w/o discrepancies?	☑	☐	☐
Samples received within holding time?	☑	☐	☐

Initials: JV Date: 1/11/20

During Labeling	Yes	No	NA
Samples compromised/tampered with?	☐	☐	☐
Sample containers have legible labels?	☐	☐	☐
Sample custody seal?	☐	☐	☐
Containers are not broken or leaking?	☐	☐	☐
Sample date/times are provided?	☐	☐	☐
Appropriate containers are used?	☐	☐	☐
Sample bottles are completely filled?	☐	☐	☐
Sample preservatives verified?	☐	☐	☐
Samples w/o discrepancies?	☐	☐	☐
Zero headspace?*	☐	☐	☐
Alkalinity has no headspace?	☐	☐	☐
Perchlorate has headspace? (Methods 314, 331, 6850)	☐	☐	☐
Multiphasic samples are not present?	☐	☐	☐
NCM Filed	☐	☐	☐

Initials: _____ Date: _____

*Containers requiring zero headspace have no headspace, or bubble < 6 mm (1/4")

Login Sample Receipt Checklist

Client: Haley & Aldrich, Inc.

Job Number: 720-96843-1

Login Number: 96843
List Number: 1
Creator: Arauz, Dennis

List Source: Eurofins TestAmerica, Pleasanton

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Haley & Aldrich, Inc.

Job Number: 720-96843-1

Login Number: 96843
List Number: 2
Creator: Dolidze, Lado

List Source: Eurofins Irvine
List Creation: 01/11/20 12:36 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	Not Present
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Haley & Aldrich, Inc.

Job Number: 720-96843-1

Login Number: 96843
List Number: 3
Creator: Guzman, Juan

List Source: Eurofins TestAmerica, Sacramento
List Creation: 01/11/20 02:19 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	obs 5.1 corr 5.5
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

EC202001-0393
Rcv'd 01/24/2020

BURNS McDONNELL

01-22-2020

Dan Pornel
Planning & Engineering Division
Santa Clara Valley Transportation Authority
3331 North First Street
San Jose, California 95134

Re: Phase II: AutoZone - Parcel 1216

Dear Dan:

Please find enclosed one copy of the Phase II Report for the AutoZone Property (Parcel 1216) located at 2690 Story Rd, San Jose, CA 95122.

Enclosures:

- 1 Hardcopy (bound) Final Phase II report
- 1 Thumb Drive with the Phase II report in .pdf format

Sincerely,

Simon Barber P.G. QSP/D QISP ENV SP
Project Geologist

SB/sb

Enclosure Attachment
cc: Chris Valle - SCVTA
Chris D'Sa - Burns & McDonnell

400 Oyster Point Blvd. \ Suite 533 \ South San Francisco, CA 94080
O 650-871-2926 \ **F** 650-871-2653 \ burnsmcd.com
CA Contractor License 755238

Phase II Site Characterization Report: Parcel 1216 AutoZone

Santa Clara Valley Transportation Authority

VTA Project No. 1216
Burns & McDonnell Project No. 87119
Revision Final
1/22/2020

Phase II Site Characterization Report: Parcel 1216 AutoZone

prepared for

Santa Clara Valley Transportation Authority
VTA Project No. 1216
San Jose, CA

Project No. 87119

Revision Final
1/22/2020

prepared by

Burns & McDonnell Engineering Company, Inc.
South San Francisco, California

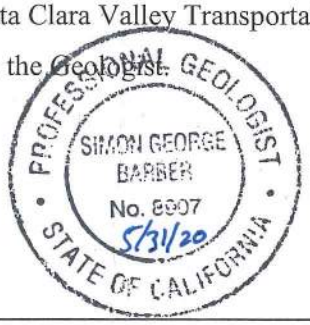
INDEX AND CERTIFICATION

Santa Clara Valley Transportation Authority
Phase II Site Characterization Report:
Parcel 1216 AutoZone
Project No. 87119

Report Index

Certification

I hereby certify, as a Professional Geologist in the state of California, that the information in this document was assembled under my direct personal charge. This report is not intended or represented to be suitable for reuse by the Santa Clara Valley Transportation Authority or others without specific verification or adaptation by the Geologist.



Simon Barber P.G. (CA 8907)
BMcD Geologist QSP/D QISP ENV SP
Date: 01-22-2020

Carly Beck
Assistant Environmental Scientist
Date 01-22-2020

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LIST OF ABBREVIATIONS

Abbreviation	Term/Phrase/Name
µg/kg	Microgram per kilogram
µg/L	Microgram per liter
BART	Bay Area Rapid Transit
Burns & McDonnell	Burns & McDonnell Engineering Company, Inc.
Cascade	Cascade Drilling, LP.
CIH	Certified Industrial Hygienist
EBRC	Eastridge to BART Regional Connector Project
ELAP	Environmental Laboratory Accreditation Program
EPA	United Stated Environmental Protection Agency
ESA	Environmental Site Assessment
ESL	Environmental Screening Level (San Francisco Bay-Regional Board)
Fee Take	VTA Fee Take Area of Activity
ft bgs	feet below ground surface
IDW	investigation-derived waste
MDL	method detection limit
mg/kg	Milligrams per kilogram
NPDES	National Pollution Discharge Elimination System
OCP	organochlorine pesticide
OSHA	Occupational Safety & Health Administration
PCB	polychlorinated biphenyl
PID	photoionization detector
PQL	practicable quantitation limit
Regional Board	San Francisco-Bay Regional Water Quality Control Board
Site	1216 Property Parcel
SVOC	semi-volatile organic compound
TPH	total petroleum hydrocarbons
TPHd	diesel-range total petroleum hydrocarbons
TPHg	gasoline-range total petroleum hydrocarbons
TPHmo	motor oil-range total petroleum hydrocarbons
TTLC	Total Threshold Limit Concentration
UST	Underground storage tank
VOC	volatile organic compound
VTA	Valley Transportation Authority

1.0 INTRODUCTION

On behalf of the Santa Clara Valley Transportation Authority (VTA), Burns & McDonnell Engineering Company, Inc. (Burns & McDonnell), has prepared this *Phase II Site Characterization Report: Parcel 1216 AutoZone.* The 1216 Property is part of the Eastridge to the Bay Area Rapid Transit (BART) Regional Connector Project (EBRC) and will extend 2.4 miles of Light Rail from the existing Alum Rock Station to the Eastridge Transit Center. Light Rail will operate primarily in the center of Capitol Expressway and new rail stations will be built at Story Road and the Eastridge Transit Center (Figure 1).

The VTA retained Burns & McDonnell to assess existing subsurface conditions in soil and groundwater encountered within the VTA Fee Take project footprint (Fee Take) at the property identified by the Santa Clara County Assessor PIN prefix 1216; located at 2690 Story Road, San Jose, CA (Site). The VTA Fee Take area is depicted in Figure 2.

On December 27, 2019, Burns & McDonnell advanced two (2) direct push borings, each to a depth of 24 feet (ft) below ground surface (bgs). A total of four (4) soil samples were collected. The soil samples were collected from the boring as defined in the Phase II Site Characterization Workplan: CP216 Parcel[1]. In addition, one (1) groundwater sample was collected from the boring. The direct push borings were advanced by Cascade Drilling L.P. (Cascade) a California C-57 licensed drilling company under contract to Burns & McDonnell.

Four (4) soil and one (1) groundwater samples were analyzed by Advanced Laboratory Technologies (ATL) an Environmental Laboratory Accreditation Program (ELAP) laboratory (ELAP#: 1838) for following constituents of concern:

- Total Petroleum Hydrocarbons (TPH) as Diesel (TPHd) by Environmental Protection Agency (EPA) Method 8015B with EPA Method 3630C silica gel cleanup preparation,
- TPH as motor oil (TPHmo) by EPA method 8015B,
- TPH as gasoline (TPHg) and Volatile Organic Compounds (VOCs) be EPA Method 8260B,
- Cam17/Title 22 Metals (metals) by EPA Method 6010B/7470A.
  One soil sample was additionally analyzed for the presence of: Hexavalent Chromium by EPA Method 7199.
- Semi-volatile Organic Compounds (SVOCs) by EPA Method 8270C SIM,

[1] Phase II Site Characterization Workplan: CP216 Parcel. Burns & McDonnell Engineering Company, Inc. July 11, 2019.

- Organochlorine Pesticides (OCPs) by EPA Method 8081A,
- Polychlorinated Biphenyl's (PCBs) by EPA Method 8082.

2.0 SOIL & GROUNDWATER INVESTIGATION

Prior to all Phase II activities commencing, access to the Parcel 1216 was secured by the VTA through a Permit-to-Enter Agreement between the VTA and the property owner.

On December 27, 2019, Phase II Environmental Site Assessment (ESA) activities were performed by a Burns & McDonnell Professional Geologist. Phase II ESA activities consisted of advancement of two (2) direct-push borings performed by Cascade, under the supervision of Burns & McDonnell geologist Simon Barber. Prior to direct-push advancement, an Underground Service Alert of Northern California Dig Alert ticket was obtained, and a private utility location contractor conducted a subsurface utility survey within the planned areas of investigation. The investigation included locating subsurface utilities within the planned areas of investigation.

The soil borings were advanced within the VTA Fee Take area in the landscaping on the northeastern edge of the property (Figure 2). Boring B-1 was advanced to a depth of 24 ft bgs in the landscaping east of the Sites former Underground Storage Tanks (UST) area (east side of the property). Boring B-2 was advanced in the landscaping east of the former UST area (northeastern portion of property). Boring locations are depicted on Figure 2.

This Phase II ESA sampling locations were selected to be representative of the Site conditions within the VTA Fee Take area as observed during a Phase I ESA[2] site visit and further based upon historical Site environmental investigations. Figure 2 depicts the soil boring location for this investigation.

2.1 Direct Push Drilling

Borings B-1 and B-2 were hand cleared to a depth of 5 ft bgs prior to direct push drilling. The borings were advanced to a total depth of 24 ft bgs using a Geoprobe® 6620DT Track Mounted Probe Rig operated by Cascade. The soil boring was continuously sampled using a 3-inch sample barrel equipped with an acetate sleeve and logged according to the Unified Soil Classification System (USCS) by a Burns & McDonnell geologist. Upon retrieval, the acetate sleeve was opened, and soil materials were field screened for presence of organic vapors using a photoionization detector (PID). Headspace PID readings were recorded on the boring logs; copies of the boring logs are provided as Attachment 1.

[2] Phase I Environmental Site Assessment of the AutoZone Property (1216), 2690 Story Road, San Jose, CA, 95122. Burns & McDonnell Engineering Company, Inc. January 9, 2020.

Each soil sample was collected by transferring a portion of the material from the acetate sleeve into the appropriate laboratory-provided sample containers. Each sample was labeled and immediately placed into a cooler containing ice. All samples were delivered to ATL, under chain-of-custody manifestation and protocols.

A grab groundwater sample was retrieved from boring B-1. The groundwater sample was submitted to ATL for constituents-of-concern as described in section 2.3 below.

Upon completion of sampling activities, the boring was abandoned by back-filling with a high solids cement-bentonite grout. The grout was placed using a side discharge tremie pipe. The tremie pipe was raised slowly while keeping the discharge point of the tremie pipe just below the surface of the slurry. The grout was placed from the bottom of the hole to within 12 inches of the ground surface. After the grout set, the remaining portion of the open hole was backfilled with sand and the landscape (grass) patch which was removed prior to drilling. As the boring did not advance past 45 ft bgs, a Santa Clara Valley Water District drill permit and grout inspection was not required.

2.2 Soil Sampling

Two soil samples were collected from each boring at depths of 7 ft bgs (B-1), 10 ft bgs (B-2), and 24 ft bgs (B-1 & B-2); correlating to either the highest PID reading or at the soil/groundwater interface, and at total depth of the boring. Soil samples were collected in laboratory supplied sample vessels, uniquely labeled, and placed in an insulated cooler on crushed ice pending transfer to the analytical laboratory under standard chain-of-custody procedures and documentation.

2.3 Groundwater Sampling

Groundwater was encountered prior to the maximum boring depth of 24 ft bgs in each boring, and one (1) groundwater sample, B-1, was collected from boring B-1. The groundwater sample was analyzed for constituents of concern TPHd, TPHmo, VOCs, and metals only as the temporary well pumped dry after approximately 1 liter of groundwater was collected; a period of approximately 3 hours was allowed for recharge, subsequent recharge was very minimal and pumped dry. As a result of the lack of groundwater, and minimal groundwater recharge, the full constituents-of-concern analytical suite was unable to be analyzed.

Groundwater sample B-1 was collected with a peristaltic pump and new polyethylene tubing placed within ¾ inch poly-vinyl chloride casing and machine slotted screen. The groundwater sample was

collected in laboratory supplied sample vessels, uniquely labeled, and placed in an insulated cooler on crushed ice pending transfer to the analytical laboratory under standard chain-of-custody documentation.

All soil and groundwater samples were submitted to ATL, a California ELAP laboratory. ATL is a CA department of General Services-Small Business Enterprise, CA Unified Certification Program and Caltrans-Disadvantaged Business Enterprise, and Caltrans, Public Utilities Commission-Minority Business Enterprise.

2.4 Safety & Health

Fieldwork was performed under a Site Safety & Health Plan prepared by a Burns & McDonnell certified industrial hygienist, in accordance with Occupational Safety and Health Administration (OSHA) guidelines. Prior to beginning daily activities, a safety & health tailgate meeting was held on-Site, and a Pre-Task Analysis and Activity Hazard Analysis was performed.

3.0 SOIL & GROUNDWATER INVESTIGATION RESULTS

3.1 Constituents of Concern in Soil

Four (4) soil samples were collected and submitted for analysis of TPHg, TPHd, TPHmo, VOCs, and Metals, one (1) soil sample was submitted for analysis of SVOCs, OCPs, and PCB; the following sections summarize the analytical findings. All soil analytical results are compared to the San Francisco Bay-Regional Water Quality Control Board (Reginal Board) Environmental Screening Level (ESL): Table S-1 for "any land use, construction worker shallow and deep soil exposure scenario[3]".

3.1.1 TPH in Soil

- TPHmo was not detected in any soil sample.
- TPHg was detected in B-2d24 at a concentration of 1.100 mg/kg.
- TPHd was detected in samples B-1d7, B-2d10, and B-2d24 at concentrations of 1.5 mg/kg, 1.7 mg/kg, and 1.5 mg/kg, respectively.

It is noted that none of the THP concentrations exceed their corresponding ESLs. TPH analytical results are summarized in Table 1. Copies of the Certified-Analytical Report are provided as Attachment 2.

3.1.2 Volatile Organic Compounds in Soil

- VOCs were not detected in any soil sample at or above the method detection limit (MDL) or the practicable quantitation limit (PQL).

VOC analytical results are summarized in Table 2.

3.1.3 Semi-Volatile Organic Compounds in Soil

- SVOCs were not detected at or above the MDL or PQL in sample B-1d7.

SVOC analytical results are summarized in Table 3.

3.1.4 CAM17/Title 22 Metals in Soil

- CAM17/Title 22 Metals were detected in B-1d17, B-1d24, B-2d10, and B-2d24. Of the metals detected, Arsenic (As) and Chromium (Cr) exceeded their corresponding ESLs of 0.98 mg/kg, and 2.80 mg/kg, respectively.

[3] San Francisco Bay-Regional Water Quality Control Board, Environmental Screening Levels: Table S-1. January 2019 (Rev.1). https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/esl.html

- As was detected in B-1d7, B-1d24, B-2d10, and B-2d24 at concentrations of 5.4 mg/kg, 6.0 mg/kg, 4.3 mg/kg and 1.1 mg/kg, respectively.
- Cr (total) was detected in B-1d7, B-1d24, B-2d10, and B-2d24 at concentrations of 45 mg/kg, 50 mg/kg, 42 mg/kg, and 37 mg/kg, respectively.

Multiple metals were detected above the MDL or PQL. However, none of the concentrations in metals, except Cr, exceeded their California Code of Regulations Title 22 Total Threshold Limit Concentration (TTLC) values, respectively.

Sample B-1d24 was additionally run for Hexavalent Chrome in response to the initial result of 50 mg/kg.

- Hexavalent Chrome was detected at a concentration of 0.21mg/kg. It is noted that the result was flagged by the laboratory with a 'J' indicating that the constituent was detected below the reporting limit and is therefore reported as an estimate concentration.

CAM17/Title22 Metals analytical results are summarized in Table 4.

3.1.5 Organochlorine Pesticides in Soil

- OCPs were not detected in soil at or above the MDL or PQL.

OCP analytical results are summarized in Table 5.

3.1.6 Polychlorinated Biphenyl's in Soil

- PCBs were not detected at or above the MDL or PQL in soil sample B-1d7.

PCB analytical results are summarized in Table 6.

3.1.7 Asbestos in Soil

Asbestos in soil was analyzed in sample B-1d7 by AmeriSci Los Angeles laboratory by Method CARB 435.

- Asbestos in soil was determined not present.

3.2 Constituents of Concern in Groundwater

One groundwater sample (B-1) was collected and submitted for analysis of TPHg, TPHd, TPHmo, VOCs, and, Metals; the following sections summarize the analytical findings. All groundwater analytical results

are compared to the Regional Board Regional Board ESL: Table GW-1 for "Direct Exposure Human Health Risk Levels[4]".

3.2.1 TPH in Groundwater

- TPHg was not detected at or above the MDL or PQL.
- TPHd was not detected at or above the MDL or PQL
- TPHmo was not detected at or above the MDL or PQL.

TPH analytical results are summarized in Table 7.

3.2.2 VOCs in Groundwater

Multiple VOCs were detected in groundwater sample B-1: m,p-xylene at 1.3 µg/l, o-xylene at 0.56 µg/l, and toluene at 1.9 µg/l. These VOCs were detected above the MDL, however, none of the concentrations exceeded their corresponding ESLs.

Groundwater at the Site will not be used as a drinking water source. VOC analytical results are summarized in Table 8.

3.2.3 Cam17/Title 22 Metals in Groundwater

- Metals were detected at or above the MDL in groundwater sample B-1. These metals included: As, Barium (Ba), Beryllium (Be), Cr (total), Cobalt (Co), Copper (Cu), Lead (Pb), Mercury (Hg), Molybdenum (Mo), Nickel (Ni), Vanadium (V), and Zinc (Zn). Of the metals detected, As, Ba, Be, Cr (total), Co, Pb, Ni, and Va exceeded their corresponding ESLs at concentrations of 48 µg/L, 3,900 µg/L, 16 µg/L, 1,100 µg/L, 320 µg/L, 180 µg/L, 1,800 µg/L, and 740 µg/L, respectively.

CAM17/Title 22 metals analytical results are summarized in Table 9. Copies of the Certified-Analytical Reports is provided as Attachment 2.

[4] San Francisco Bay-Regional Water Quality Control Board, Environmental Screening Levels: Table GW-1. January 2019 (Rev.1). https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/esl.html

4.0 CONCLUSIONS

Two direct push borings were advanced in the footprint of VTA Fee Take area at the Site. Four (4) soil samples, and one (1) groundwater sample were submitted for laboratory analysis of potential constituents of concern. Based on the evaluation of the sample analytical results, the following is concluded:

- TPHg, TPHd, and TPHmo, when detected, concentrations did not exceed their respective ESLs in soil for construction workers. TPHg and TPHd were detected in the soil samples above their MDLs, but none exceed their ESLs, respectively.
- TPHg, TPHd, and TPHmo concentrations did not exceed their respective ESLs in soil for construction workers.
- No VOC compounds were detected above the MDL in soil. VOC compounds m,p-xylene, o-xylene, and toluene were detected above the MDL groundwater but not in excess of the ESL for direct exposure.
- No SVOC compounds were detected in the soil samples.
- Multiple CAM17/Title 22 metals were detected in soil above the MDL in all samples collected (as expected for the region); As and Cr (total) were detected above the ESL for construction workers but did not exceed the TTLC trigger for hazardous waste.
- Multiple CAM17/Title 22 metals were detected in groundwater above the MDL (as expected for the region); As, Ba, Be, Cr (total), Co, Pb, Ni, and Va were detected above their respective ESL Priority screening level. It is noted that no CAM17/Title 22 metal exceeded the TTLC trigger for hazardous waste.
- OCPs were not detected at or above the MDL in the soil samples.
- PCBs were not detected at or above the MDL in the soil samples.
- Asbestos was not detected in soil.

Given the soil and groundwater quality results obtained during this Phase II ESA investigation specific to the VTA Fee Take area at the 1216 property; VTA and any future commercial contractors should take into account that multiple metals present in soil and groundwater exceed their corresponding ESLs and are constituents of concern.

Due to the presence of elevated concentrations of VOCs and metals in groundwater, it is recommended that groundwater generated during dewatering activities undergoes treatment prior to discharge into any

storm drain system under a National Pollution Discharge Elimination System (NPDES) permit or into any sewer system under a Short Term Discharge permit with the City of San Jose.

Residual hydrocarbons exist in subsurface soil and groundwater within the VTA Fee Take Area related to historical site uses (i.e. leaking underground storage tanks). Although the residual constituents of concern are not considered hazardous, further waste characterization will be required by potential contractors who generate materials that require transportation and disposal/recycling. It is anticipated that no special handling requirements will be required during soil disturbance activities and standard personal protection equipment (PPE) is sufficient; PPE requirements shall be adjusted if unforeseen conditions are encountered.

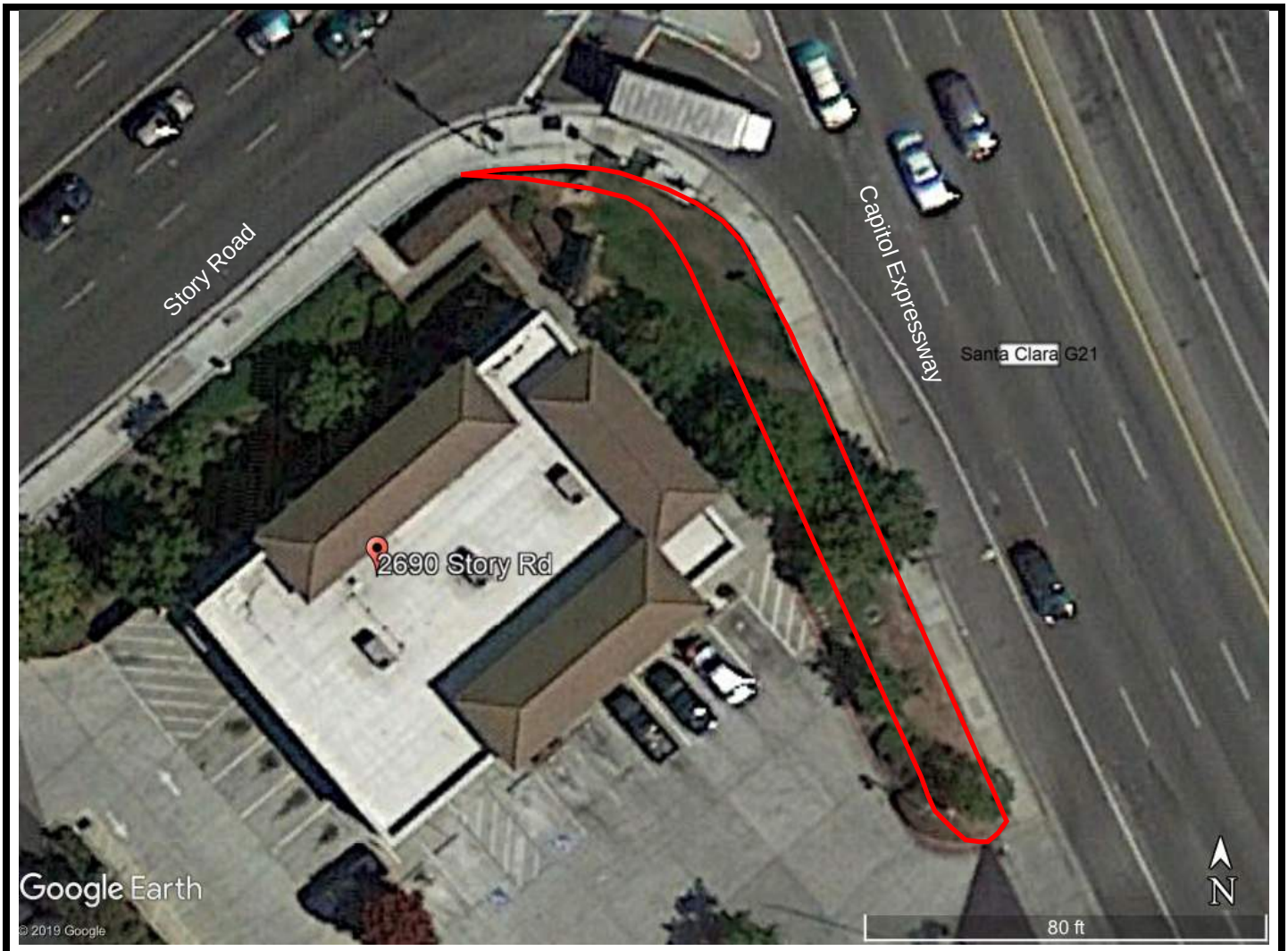
*****

5.0 INVESTIGATION DERIVED WASTE

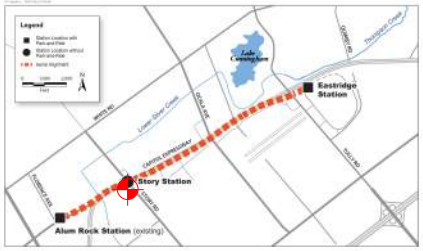
Investigation-derived waste (IDW) include soil cuttings, decontamination fluid, and groundwater displaced during the investigation. IDW generated during investigation activities were contained in a Department of Transportation approved 55-gallon drum and staged on-site pending results of waste characterization analyses. Following waste profiling, the IDW will be removed from the Site and transported to an appropriate waste facility for disposal or recycling.

Other IDW generated, including personal protective equipment, rope, bailers, paper towels, etc. was placed in trash bags and into appropriate receptacles.

FIGURES



SCVTA FEE TAKE AREA (APPROXIMATE)

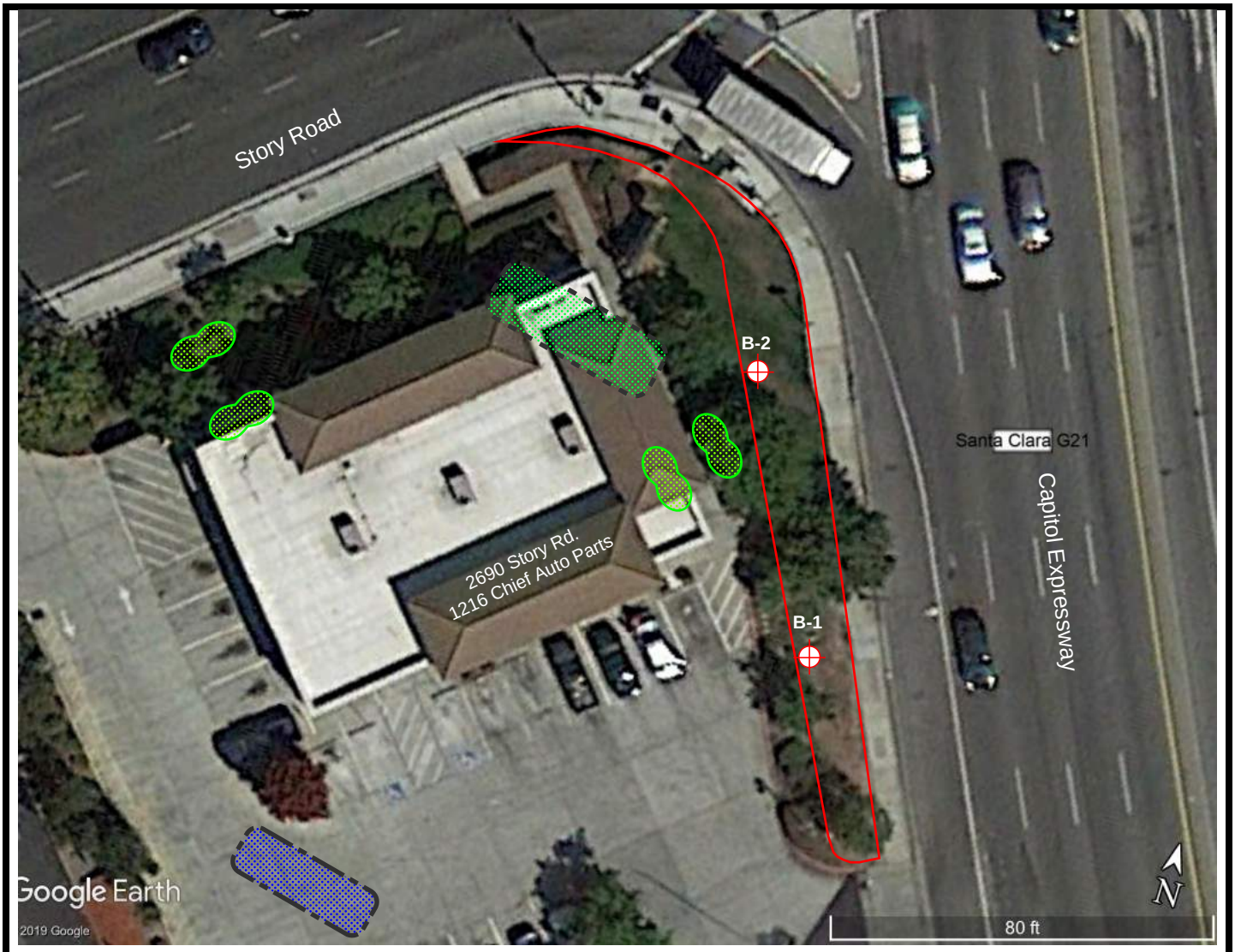


VTA SANTA CLARA Valley Transportation Authority

BURNS McDONNELL

FIGURE 1

SITE LOCATION
1216 CHIEF AUTO PARTS PARCEL
SANTA CLARA VALLEY
TRANSPORTATION AUTHORITY



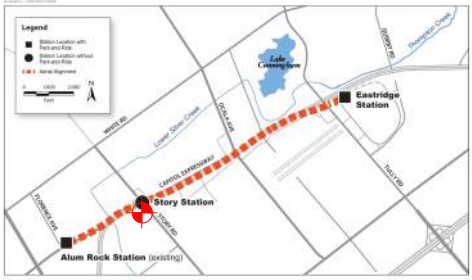
SCVTA FEE TAKE AREA (APPROXIMATE)

FORMER UNDERGROUND STORAGE TANK LOCATION (APPROXIMATE)

FORMER WASTE OIL TANK LOCATION (APPROXIMATE)

FORMER FUEL ISLAND LOCATIONS (APPROXIMATE)

BORING LOCATION
B-1: 37° 21.011' N 121° 49.618'W
B-2: 37° 21.021'N 121° 49.625'W



VTA SANTA CLARA Valley Transportation Authority

BURNS McDONNELL

FIGURE 2

BORING LOCATIONS
1216 CHIEF AUTO PARTS
2690 STORY RD. SAN JOSE , CA
SANTA CLARA VALLEY
TRANSPORTATION AUTHORITY

TABLES

TABLE 1

SITE CHARACTERIZATION
TOTAL PETROLEUM HYDROCARBONS IN SOIL
SCVTA 1216 CHIEF AUTO PARTS PARCEL
SAN JOSE, CALIFORNIA

Sample ID	Sample Date	Sample Depth (ft bgs)	TPH - GRO (mg/kg)	TPH - Diesel (mg/kg)	TPH - Motor Oil (mg/kg)
B-1d7	12/27/2019	7	<0.790	1.5	<1.0
B1-d24	12/27/2019	24	<0.830	<1.0	<1.0
B-2d10	12/27/2019	10	<0.950	1.7	<1.0
B-2d24	12/27/2019	24	1.100	1.5	<1.0
Environmental Screening Level (ESL)			**---**	**1,100**	**54,000**

Notes:

ESL: Table S-1: Soil Direct Exposure Human Health Risk Screening Level (mg/kg).
Construction Worker: Any Land Use/Any Depth Soil Exposure.
SF Bay- Regional Water Quality Control Board January 2019 (rev.1).
https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/esl.html

TPH as diesel by EPA Method 8015M
TPH as motor oil by EPA Method 8015M
TPH as gasoline by EPA Method 8260B
ft bgs - Feet below ground surface
Concentrations are in units of milligrams per kilogram (mg/kg)
Samples were analyzed using EPA Method 8015B

Laboratory Qualifiers

< # - Compound was not detected above the indicated laboratory Method Detection Limit MDL or Practical Quantitation Limit (PQL)

TABLE 2

SITE CHARACTERIZATION
VOLATILE ORGANIC COMPOUNDS IN SOIL
SCVTA 1216 CHIEF AUTO PARTS PARCEL
SAN JOSE, CALIFORNIA

Sample ID	**B-1d7**	**B-1d24**	**B-2d10**	**B-2d24**	**ESL**
Sample Depth ft bgs	7	24	10	24	
Sample Date	12/27/2019	12/27/2019	12/27/2019	12/27/2019	
1,1,1,2-Tetrachloroethane	<4.0	<4.2	<4.8	<3.9	**190,000**
1,1,1-Trichloroethane	<4.0	<4.2	<4.8	<3.9	**7,200,000**
1,1,2,2-Tetrachloroethane	<4.0	<4.2	<4.8	<3.9	**49,000**
1,1,2-Trichloroethane	<4.0	<4.2	<4.8	<3.9	**6,300**
1,1-Dichloroethane	<4.0	<4.2	<4.8	<3.9	**370,000**
1,1-Dichloroethene	<4.0	<4.2	<4.8	<3.9	**350,000**
1,1-Dichloropropene	<4.0	<4.2	<4.8	<3.9	**---**
1,2,3-Trichloropropane	<4.0	<4.2	<4.8	<3.9	**830**
1,2,3-Trichlorobenzene	<4.0	<4.2	<4.8	<3.9	**---**
1,2,4-Trichlorobenzene	<4.0	<4.2	<4.8	<3.9	**240,000**
1,2,4-Trimethylbenzene	<4.0	<4.2	<4.8	<3.9	**---**
1,2-Dibromo-3-chloropropane	<7.9	<8.3	<9.5	<7.8	**1,100**
1,2-Dibromoethane	<4.0	<4.2	<4.8	<3.9	**3,300**
1,2-Dichlorobenzene	<4.0	<4.2	<4.8	<3.9	**7,800,000**
1,2-Dichloroethane	<4.0	<4.2	<4.8	<3.9	**45,000**
1,2-Dichloropropane	<4.0	<4.2	<4.8	<3.9	**66,000**
1,3,5-Trimethylbenzene	<4.0	<4.2	<4.8	<3.9	**---**
1,3-Dichlorobenzene	<4.0	<4.2	<4.8	<3.9	**---**
1,3-Dichloropropane	<4.0	<4.2	<4.8	<3.9	**---**
1,4-Dichlorobenzene	<4.0	<4.2	<4.8	<3.9	**280,000**
2,2-Dichloropropane	<4.0	<4.2	<4.8	<3.9	**---**
2-Chlorotoluene	<4.0	<4.2	<4.8	<3.9	**---**
4-Chlorotoluene	<4.0	<4.2	<4.8	<3.9	**---**
4-Isopropyltoluene	<4.0	<4.2	<4.8	<3.9	**---**
Benzene	<4.0	<4.2	<4.8	<3.9	**33,000**
Bromobenzene	<4.0	<4.2	<4.8	<3.9	**---**
Bromochloromethane	<4.0	<4.2	<4.8	<3.9	**---**
Bromodichloromethane	<4.0	<4.2	<4.8	<3.9	**28,000**
Bromoform	<4.0	<4.2	<4.8	<3.9	**1,200,000**
Bromomethane	<4.0	<4.2	<4.8	<3.9	**29,000**
Carbon disulfide	<4.0	<4.2	<4.8	<3.9	**---**
Carbon tetrachloride	<4.0	<4.2	<4.8	<3.9	**---**
Chlorobenzene	<4.0	<4.2	<4.8	<3.9	**1,200,000**
Chloroethane	<4.0	<4.2	<4.8	<3.9	**59,000,000**
Chloroform	<4.0	<4.2	<4.8	<3.9	**34,000**
Chloromethane	<4.0	<4.2	<4.8	<3.9	**470,000**
cis-1,2-Dichloroethene	<4.0	<4.2	<4.8	<3.9	**78,000**
cis-1,3-Dichloropropene	<4.0	<4.2	<4.8	<3.9	**53,000**
Di-isopropyl ether	<4.0	<4.2	<4.8	<3.9	**---**
Dibromochloromethane	<4.0	<4.2	<4.8	<3.9	**300,000**
Dibromomethane	<4.0	<4.2	<4.8	<3.9	**---**
Dichlorodifluoromethane	<4.0	<4.2	<4.8	<3.9	**---**
Ethyl Acetate	<40	<42	<48	<39	**---**
Ethyl Ether	<40	<42	<48	<39	**---**
Ethyl tert-butyl ether	<4	<4.2	<4.8	<3.9	**---**
Ethylbenzene	<4.0	<4.2	<4.8	<3.9	**540,000**
Freon-113	<4.0	<4.2	<4.8	<3.9	**---**
Hexachlorobutadiene	<4.0	<4.2	<4.8	<3.9	**100,000**
Isopropylbenzene	<4.0	<4.2	<4.8	<3.9	**---**
m,p-Xylene	<7.9	<8.3	<9.5	<7.8	**2,400,000**
Methylene chloride	<4.0	<4.2	<4.8	<3.9	**490,000**
MTBE	<4.0	<4.2	<4.8	<3.9	**4,100,000**
n-Butylbenzene	<4.0	<4.2	<4.8	<3.9	**---**
n-Propylbenzene	<4.0	<4.2	<4.8	<3.9	**---**
Naphthalene	<4.0	<4.2	<4.8	<3.9	**400,000**
o-Xylene	<4.0	<4.2	<4.8	<3.9	**---**
sec-Butylbenzene	<4.0	<4.2	<4.8	<3.9	**---**
Styrene	<4.0	<4.2	<4.8	<3.9	**25,000,000**
tert-Amyl methyl ether	<4.0	<4.2	<4.8	<3.9	**---**
tert-Butanol	<79	<83	<95	<78	**---**
tert-Butylbenzene	<4.0	<4.2	<4.8	<3.9	**---**
Tetrachloroethene	<4.0	<4.2	<4.8	<3.9	**33,000**
Toluene	<4.0	<4.2	<4.8	<3.9	**4,700,000**
trans-1,2-Dichloroethene	<4.0	<4.2	<4.8	<3.9	**570,000**
trans-1,3-Dichloropropene	<4.0	<4.2	<4.8	<3.9	**---**
Trichloroethene	<4.0	<4.2	<4.8	<3.9	**18,000**
Trichlorofluoromethane	<4.0	<4.2	<4.8	<3.9	**---**
Vinyl acetate	<40	<42	<48	<39	**---**
Vinyl chloride	<4.0	<4.2	<4.8	<3.9	**3,400**

Notes:
ESL: Table S-1: Soil Direct Exposure Human Health Risk Screening Level (mg/kg).
Construction Worker: Any Land Use/Any Depth Soil Exposure.
SF Bay- Regional Water Quality Control Board January 2019 (rev.1).
https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/esl.html
Volatile Organic Compounds by EPA Method 8260B.
ft bgs - Feet below ground surface.
Concentrations are in units of micrograms per kilogram (µg/kg).
Exceedance in bold font.
-- No ESL listed.
Laboratory Qualifiers
< # - Compound was not detected above the indicated laboratory Method Detection Limit (MDL) or Practical Quantitation Limit (PQL)

TABLE 3

SITE CHARACTERIZATION
SEMI VOLATILE ORGANIC COMPOUNDS IN SOIL
SCVTA 1216 CHIEF AUTO PARTS PARCEL
SAN JOSE, CALIFORNIA

Sample ID	**B-1d7**	**ESL**
Sample Depth (ft bgs)	7	
Sample Date	12/27/2019	
2-Methylnaphthalene	<330	670,000
Acenaphthene	<330	10,000,000
Acenaphthylene	<330	---
Anthracene	<330	50,000,000
Benzo(a)anthracene	<330	110,000
Benzo(a)pyrene	<330	10,000
Benzo(b)fluoranthene	<330	110,000
Benzo(g,h,i)perylene	<330	---
Benzo(k)fluoranthene	<330	910,000
Chrysene	<330	9,100,000
Dibenz(a,h)anthracene	<330	11,000
Fluoranthene	<330	6,700,000
Fluorene	<330	6,700,000
Indeno(1,2,3-cd)pyrene	<330	110,000
Naphthalene	<330	400,000
Phenanthrene	<330	---
Pyrene	<330	5,000,000

Notes:
ESL: Table S-1: Soil Direct Exposure Human Health Risk Screening Level (mg/kg).
Construction Worker: Any Land Use/Any Depth Soil Exposure.
SF Bay- Regional Water Quality Control Board January 2019 (rev.1).
https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/esl.html
Semi-Volatile Organic Compounds by EPA Method 8270SIM.
ft bgs - Feet below ground surface
Concentrations are in units of micrograms per kilogram (µg/kg).
##: Exceedance in bold
--- no ESL listed.
Laboratory Qualifiers
< # - Compound was not detected above the indicated laboratory Method Detection Limit (MDL or Practical Quantitation Limit (PQL).

TABLE 4

SITE CHARACTERIZATION
CAM17/TITLE 22 METALS IN SOIL
SCVTA 1216 CHIEF AUTO PARTS PARCEL
SAN JOSE, CALIFORNIA

Sample ID	Sample Date	Sample Depth (ft. bgs)	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
B-1d7	12/27/2019	7	<2.0	**5.4**	90	<1.0	<1.0	**45**	8.5	20	5.9	<0.01	<1.0	76	<1.0	<1.0	<1.0	29	37
B-1d24	12/27/2019	24	<2.0	**6.0**	170	<1.0	<1.0	**50**	11	26	8.1	<0.01	<1.0	78	<1.0	<1.0	<1.0	39	48
B-2d10	12/27/2019	10	<2.0	**4.3**	110	<1.0	<1.0	**42**	8.2	17	4.8	<0.01	<1.0	68	<1.0	<1.0	<1.0	25	35
B-2d24	12/27/2019	24	<2.0	**1.1**	150	<1.0	<1.0	**37**	5.9	12	3.8	<0.01	<1.0	46	<1.0	<1.0	<1.0	21	27
ESL			**50**	**0.98**	**3,000**	**27**	**51**	**2.80**	**28**	**14,000**	**160**	**44**	**1,800**	**86**	**1,700**	**1,800**	**3.5**	**470**	**110,000**
B-1d24 Hexavalent Chrome (mg/kg)	12/27/2019	7	NA	NA	NA	NA	NA	0.21 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

ESL: Table S-1: Soil Direct Exposure Human Health Risk Screening Level (mg/kg).

Construction Worker: Any Land Use/Any Depth Soil Exposure.

SF Bay- Regional Water Quality Control Board January 2019 (rev.1).

https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/esl.html

CAM17/Title 22 Metals analyzed using EPA Method 6010B; Mercury was analyzed using EPA Method 7471A

ft bgs - Feet below ground surface

Concentrations are in units of milligrams per kilogram (mg/kg).
Exceedance in bold font.

mg/L- Miligrams per Liter

--- NO ESL listed.

NA - Not Applicable

STLC- Soluable Threshold Limit Concentration

Laboratory Qualifiers

< # - Compound was not detected above the indicated laboratory Method Detection Limit (MDL) or Practical Quantitation Limit (PQL).

J - Detected below the Reporting Limit, reported as as estimated concetration.

TABLE 5

SITE CHARACTERIZATION
ORGANOCHLORINE PESTICIDES IN SOIL
SCVTA 1216 CHIEF AUTO PARTS PARCEL
SAN JOSE, CALIFORNIA

Sample ID	B-1d7	ESL
Sample Date	12/27/2019	
4,4´-DDD	<2.0	**81,000**
4,4´-DDE	<2.0	**57,000**
4,4´-DDT	<2.0	**57,000**
Aldrin	<1.0	**1,000**
alpha-BHC	<1.0	**---**
alpha-Chlordane	<1.0	**---**
beta-BHC	<1.0	**---**
Chlordane	<8.5	**14,000**
delta-BHC	<1.0	**---**
Dieldrin	<2.0	**11,000**
Endosulfan I	<1.0	**1,500,000**
Endosulfan II	<2.0	**---**
Endosulfan sulfate	<2.0	**---**
Endrin	<2.0	**74,000**
Endrin aldehyde	<2.0	**---**
Endrin ketone	<2.0	**---**
gamma-BHC	<1.0	**16,000**
gamma-Chlordane	<1.0	**---**
Heptachlor	<1.0	**3,700**
Heptachlor epoxide	<1.0	**1,900**
Methoxychlor	<5.0	**1,200,000**
Toxaphene	<50	**14,000**

Notes:

ESL: Table S-1: Soil Direct Exposure Human Health Risk Screening Level (mg/kg).
Construction Worker: Any Land Use/Any Depth Soil Exposure.
SF Bay- Regional Water Quality Control Board January 2019 (rev.1).
https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/esl.html

Concentrations are in units of micrograms per kilogram (µg/kg).
Samples were analyzed using EPA Method 8081A.
ft bgs - Feet below ground surface.
Exceedance in bold font.

Laboratory Qualifiers:

< # - Compound was not detected above the indicated laboratory Method Detection Limit (MDL).

TABLE 6

SITE CHARACTERIZATION
POLYCHLORINATED BIPHENYLS IN SOIL
SCVTA 1216 CHIEF AUTO PARTS PARCEL
SAN JOSE, CALIFORNIA

Sample ID	Sample Date	Sample Depth (ft bgs)	Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Aroclor 1262	Aroclor 1268
B-1d7	12/27/2019	7	<16	<16	<16	<16	<16	<16	<16	<16	<16
ESL			---	---	---	---	---	---	---	---	---

Notes:
ESL: Table S-1: Soil Direct Exposure Human Health Risk Screening Level (mg/kg).
Construction Worker: Any Land Use/Any Depth Soil Exposure.
SF Bay- Regional Water Quality Control Board January 2019 (rev.1).
https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/esl.html
Polychlorinated biphenyls (PCBs) by EPA Method 8082.
ft bgs - Feet below ground surface
Concentrations are in units of milligrams per kilogram (µg/kg)
Exceedance in bold font.
--- No ESL listed.

Laboratory Qualifiers
< # - Compound was not detected above the indicated laboratory Method Detection Limit (MDL) or Practical Quantation Limit (PQL).

TABLE 7

SITE CHARACTERIZATION
TOTAL PETROLEUM HYDROCARBON IN GROUNDWATER
SCVTA 1216 CHIEF AUTO PARTS PARCEL
SAN JOSE, CALIFORNIA

Sample ID	Sample Date	TPHg (µg/L)	TPH - Diesel (µg/L)	TPH - Motor Oil (µg/L)
B-1	12/27/2019	<0.20	<0.05	<0.05
ESL		**760**	**200**	**---**

Notes:
ESL: Table GW-1: Direct Exposure Human Health Risk Levels (µg/L). MCL Priority/Human Health Risk. SF Bay- Regional Water Quality Control Board January 2019 (rev.1).
https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/esl.html
MCL Priority lists all available MCL values. If no MCl value, the lower of the cancer/non cancer tapwater direct exposure levels is listed.

TABLE 8

SITE CHARACTERIZATION
VOLATILE ORGANIC COMPOUND IN GRAB GROUNDWATER
SCVTA 1216 CHIEF AUTO PARTS PARCEL
SAN JOSE, CALIFORNIA

Sample ID	**B-1**	**ESL**
Sample Date	12/27/2019	
1,1,1,2-Tetrachloroethane	<0.50	**0.57**
1,1,1-Trichloroethane	<0.50	**200**
1,1,2,2-Tetrachloroethane	<0.50	**1**
1,1,2-Trichloroethane	<0.50	**5**
1,1-Dichloroethane	<0.50	**5**
1,1-Dichloroethene	<0.50	**6**
1,1-Dichloropropene	<0.50	**---**
1,2,3-Trichloropropane	<0.50	**0.005**
1,2,3-Trichlorobenzene	<0.50	**---**
1,2,4-Trichlorobenzene	<0.50	**5**
1,2,4-Trimethylbenzene	<0.50	**---**
1,2-Dibromo-3-chloropropane	<0.50	**---**
1,2-Dibromoethane	<0.24	**0.05**
1,2-Dichlorobenzene	<0.50	**100**
1,2-Dichloroethane	<0.50	**0.5**
1,2-Dichloropropane	<0.50	**5**
1,3,5-Trimethylbenzene	<0.50	**---**
1,3-Dichlorobenzene	<0.50	**600**
1,3-Dichloropropane	<0.50	**---**
1,4-Dichlorobenzene	<0.50	**5**
2,2-Dichloropropane	<0.50	**---**
2-Chlorotoluene	<0.50	**---**
4-Chlorotoluene	<0.50	**---**
4-Isopropyltoluene	<0.50	**---**
Benzene	<0.50	**1**
Bromobenzene	<0.50	**---**
Bromochloromethane	<0.50	**---**
Bromodichloromethane	<0.50	**80**
Bromoform	<0.50	**80**
Bromomethane	<0.50	**7.5**
Carbon disulfide	<1.0	**---**
Carbon tetrachloride	<0.50	**0.5**
Chlorobenzene	<0.50	**70**
Chloroethane	<0.50	**21,000**
Chloroform	<0.50	**80**
Chloromethane	<0.50	**190**
cis-1,2-Dichloroethene	<0.50	**6**
cis-1,3-Dichloropropene	<0.50	**---**
Di-isopropyl ether	<0.50	**---**
Dibromochloromethane	<0.50	**80**
Dibromomethane	<0.50	**---**
Dichlorodifluoromethane	<0.50	**---**
Ethyl Acetate	<10	**---**
Ethyl Ether	<10	**---**
Ethyl tert-butyl ether	<0.50	**---**
Ethylbenzene	<0.50	**30**
Freon-113	<0.50	**---**
Hexachlorobutadiene	<0.50	**0.14**
Isopropylbenzene	<0.50	**---**
m,p-Xylene	1.3	**20**
Methylene chloride	<1.0	**5**
MTBE	<0.50	**5**
n-Butylbenzene	<0.50	**---**
n-Propylbenzene	<0.50	**0.14**
Naphthalene	<0.50	**0.17**
o-Xylene	0.56	**20**
sec-Butylbenzene	<0.50	**---**
Styrene	<0.50	**10**
tert-Amyl methyl ether	<0.50	**---**
tert-Butanol	<10	**---**
tert-Butylbenzene	<0.50	**---**
Tetrachloroethene	<0.50	**5**
Toluene	1.9	**40**
trans-1,2-Dichloroethene	<0.50	**10**
trans-1,3-Dichloropropene	<0.50	**---**
Trichloroethene	<0.50	**5**
Trichlorofluoromethane	<0.50	**---**
Vinyl acetate	<10	**---**
Vinyl chloride	<0.50	**0.5**

Notes:
ESL: Table GW-1: Direct Exposure Human Health Risk Levels (µg/L). MCL Priority/Human Health Risk.
SF Bay- Regional Water Quality Control Board January 2019 (rev.1).
https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/esl.html
MCL Priority lists all available MCL values. If no MCl value, the lower of the cancer/non cancer tapwater direct exposure levels is listed.
Concentrations are in units of micrograms per liter (µg/L).
Volatile Organic Compounds analyzed by EPA Method 8260B
Laboratory Qualifiers
<# -Compound was not detected above the indicated laboratory Method Detection Limit (MDL) or Pratcical Quantitation Limit (PQL).
--- No ESL listed.
**Exceedance in bold font**

TABLE 9

SITE CHARACTERIZATION
CAM17/TITLE 22 METALS IN GROUNDWATER
SCVTA 1216 CHIEF AUTO PARTS PARCEL
SAN JOSE, CALIFORNIA

Sample ID	B-1	ESL
Sample Date	12/27/2019	
Antimony	<10	**6**
Arsenic	**48**	**10**
Barium	**3,900**	**1,000**
Beryllium	**16**	**4**
Cadmium	<2.4	**5**
Chromium	**1,100**	**50**
Cobalt	**320**	**6**
Copper	780	**1,000**
Lead	**180**	**15**
Mercury	1.1	**2**
Molybdenum	15	**100**
Nickel	**1,800**	**100**
Selenium	<9.3	**50**
Silver	<2.4	**100**
Thallium	<8.5	**2**
Vanadium	**740**	**50**
Zinc	1,400	**5,000**

Notes:

ESL: Table GW-1: Direct Exposure Human Health Risk Levels (µg/L). MCL Priority/Human Health Risk. SF Bay- Regional Water Quality Control Board January 2019 (rev.1).

https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/esl.html

MCL Priority lists all available MCL values. If no MCl value, the lower of the cancer/non cancer tapwater direct exposure levels is listed.

Concentrations are in units of micrograms per liter (µg/L).

Samples were analyzed using EPA Method 6010B; mercury was analyzed using EPA Method 7470A

Laboratory Qualifiers

<# -Compound was not detected above the indicated laboratory Method Detection Limit (MDL) or Practical Quanitation Limit (PQL).

--- No ESL listed

**Exceedance in bold font**

ATTACHMENT 1 - SOIL BORINGS

Drilling Log Continuation

Project Name	SCVTA - 1216 AUTO ZONE
Project Number	87119
Boring Number	B-1
Page	1 of 2
Date	12/27/2019

Depth (feet)	Description	Class	Blow Count	Recov.	Run/ Time	Sample Desig.	PID (ppm) BZ	PID (ppm) BH	PID (ppm) S	Remarks/ Water Levels
15	as above						0/0/0			
16				0754	70					
17	Clay: 2.5Y 3/4 Stiff plastic.	CL								
18	Dark brown & black staining									
19										
20				0800	100		0/0/0			
21	4" moist									
22										
23										
24				0810	90	B-1d24 0812	0/0/0			
	Total Depth 24' bgs. Terminated per Workplan									
25										
26										
27										
28										
29										
30										

BZ=Breathing Zone BH=Bore Hole S=Sample

BURNS McDONNELL

Drilling Log

Project Name	Santa Clara Valley Transportation Authority: Eastridge	Boring Number	B-2
Project No.	87119	Page	1 of -
Ground Elevation	Location 2690 Story Rd, San Jose, CA North end of eastern landscaping near auto zone sign.	Total Footage	24

Drilling Type	Hole Size	Overburden Footage	Bedrock Footage	No. Of Samples	No. Core Boxes	Depth to Water	Date Measured
D.Push	3"			2			

Drilling Co.	Cascade Drilling L.P.	Driller (s)	Jose & Salvador
Drilling Rig.	6620 DT	Type of Penetration Test	
Date	12-27-2019 To 12-27-2019	Field Observer (s)	S. Barber

Depth	Description	Class.	Blow Count	Field Strength	Recov.	Sample or Box No.	Remarks
0	Grass	Fill		0742			Hand clear to 5' bgs.
1	Fill (Top soil): Silty Clayey Sand, very dark brown to black.						
2	Soft soil, landscape watering. Strong organic odor roots 2mm						0/0/0
3							
4							
5				0803	100		
5	Silty Sand: 10YR 2/3 fine to medium sand. Dense, dry.	SM		0825			
6							
7							0/0/0
8	Sandy Silty Clay: 2.5Y 3/2 . Tan to reddish brown staining.	SC-SM		0826	80		
9							
10	Sand; 2.5Y 3/3 Fine to medium sand. Saturated.	SW				B-2d10 0840	Wet-Saturated 0/0/0
11	Clay: 2.5Y 4/3. Very fine sand, soft, plastic. Gray and tan to beige staining.						
12				0835	90		
13							
14							

Breathing Zone/Borehole/Sample #/#/#

BURNS McDONNELL

Form WCI-OP3-1

Drilling Log Continuation

Project Name	SCVTA - 1216 AUTO ZONE
Project Number	87119
Boring Number	B-1
Page	1 of 2
Date	12/27/2019

Depth (feet)	Description	Class	Blow Count	Recov.	Run/ Time	Sample Desig.	PID (ppm) BZ	PID (ppm) BH	PID (ppm) S	Remarks/ Water Levels
15	as above Black staining			0838	70		0/0/0			
16	Clay: 2.5Y 3/3 Stiff, dry.	CL								
17	Brown to black staining									
18										
19	Silty Clay: with very fine sand. Light gray staining, soft.	SC								Bioturbation?
20				0840	100		0/0/0			
21	Clay: 2.5Y 3/3 Stiff, dry.	CL								
22										
23	Gray specks and rare coarse sand. Stiff, hard.									
24				0843	100	B-2d24 0850	0/0/0			
	Total Depth 24' bgs. Terminated per Workplan									
25										
26										
27										
28										
29										
30										

BZ=Breathing Zone BH=Bore Hole S=Sample

BURNS McDONNELL

ATTACHMENT 2 – CERTIFIED ANALYICAL REPORTS

ADVANCED TECHNOLOGY LABORATORIES

January 08, 2020

Christopher D'Sa
Burns and McDonnell
400 Oyster Point Blvd, Suite 533
South San Francisco, CA 94080
Tel: (626) 817-7900
Fax:

ELAP No.: 1838
CSDLAC No.: 10196
ORELAP No.: CA300003

Re: ATL Work Order Number : 1904742
Client Reference : SCVTA, 87119-1216 Auto Zone

Enclosed are the results for sample(s) received on December 31, 2019 by Advanced Technology Laboratories. The sample(s) are tested for the parameters as indicated on the enclosed chain of custody in accordance with applicable laboratory certifications. The laboratory results contained in this report specifically pertains to the sample(s) submitted.

Thank you for the opportunity to serve the needs of your company. If you have any questions, please feel free to contact me or your Project Manager.

Sincerely,

Edgar Caballero
President & Laboratory Director

Certificate of Analysis

Burns and McDonnell	Project Number : SCVTA, 87119-1216 Auto Zone
400 Oyster Point Blvd, Suite 533	Report To : Christopher D'Sa
South San Francisco , CA 94080	Reported : 01/08/2020

SUMMARY OF SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
B-1d7	1904742-01	Soil	12/27/19 7:53	12/31/19 7:20
B-1d24	1904742-02	Soil	12/27/19 8:12	12/31/19 7:20
B-2d10	1904742-03	Soil	12/27/19 8:40	12/31/19 7:20
B-2d24	1904742-04	Soil	12/27/19 8:50	12/31/19 7:20
B-1	1904742-05	Water	12/27/19 9:15	12/31/19 7:20

Certificate of Analysis

Burns and McDonnell	Project Number : SCVTA, 87119-1216 Auto Zone
400 Oyster Point Blvd, Suite 533	Report To : Christopher D'Sa
South San Francisco , CA 94080	Reported : 01/08/2020

Client Sample ID: B-1d7

Lab ID: 1904742-01

Title 22 Metals by ICP-AES EPA 6010B

Analyst: KEK

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	1	B0A0091	01/06/2020	01/06/20 17:07	
Arsenic	**5.4**	1.0	1	B0A0091	01/06/2020	01/06/20 17:07	
Barium	**90**	1.0	1	B0A0091	01/06/2020	01/06/20 17:07	
Beryllium	ND	1.0	1	B0A0091	01/06/2020	01/06/20 17:07	
Cadmium	ND	1.0	1	B0A0091	01/06/2020	01/06/20 17:07	
Chromium	**45**	1.0	1	B0A0091	01/06/2020	01/06/20 17:07	
Cobalt	**8.5**	1.0	1	B0A0091	01/06/2020	01/06/20 17:07	
Copper	**20**	2.0	1	B0A0091	01/06/2020	01/06/20 17:07	
Lead	**5.9**	1.0	1	B0A0091	01/06/2020	01/06/20 17:07	
Molybdenum	ND	1.0	1	B0A0091	01/06/2020	01/06/20 17:07	
Nickel	**76**	1.0	1	B0A0091	01/06/2020	01/06/20 17:07	
Selenium	ND	1.0	1	B0A0091	01/06/2020	01/06/20 17:07	
Silver	ND	1.0	1	B0A0091	01/06/2020	01/06/20 17:07	
Thallium	ND	1.0	1	B0A0091	01/06/2020	01/06/20 17:07	
Vanadium	**29**	1.0	1	B0A0091	01/06/2020	01/06/20 17:07	
Zinc	**37**	1.0	1	B0A0091	01/06/2020	01/06/20 17:07	

Mercury by AA (Cold Vapor) EPA 7471A

Analyst: VV

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	ND	0.10	1	B0A0092	01/06/2020	01/06/20 14:33	

Diesel Range Organics by EPA 8015B (SGT)

Analyst: VL

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	**1.5**	1.0	1	B0A0056	01/02/2020	01/02/20 21:11	
ORO	ND	1.0	1	B0A0056	01/02/2020	01/02/20 21:11	
Surrogate: p-Terphenyl	*63.1 %*	*34 - 158*		B0A0056	01/02/2020	*01/02/20 21:11*	

Certificate of Analysis

Burns and McDonnell	Project Number : SCVTA, 87119-1216 Auto Zone
400 Oyster Point Blvd, Suite 533	Report To : Christopher D'Sa
South San Francisco , CA 94080	Reported : 01/08/2020

Client Sample ID: B-1d7

Lab ID: 1904742-01

Organochlorine Pesticides by EPA 8081A **Analyst: KD**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
4,4′-DDD	ND	2.0	1	B0A0069	01/03/2020	01/03/20 13:57	
4,4′-DDE	ND	2.0	1	B0A0069	01/03/2020	01/03/20 13:57	
4,4′-DDT	ND	2.0	1	B0A0069	01/03/2020	01/03/20 13:57	
Aldrin	ND	1.0	1	B0A0069	01/03/2020	01/03/20 13:57	
alpha-BHC	ND	1.0	1	B0A0069	01/03/2020	01/03/20 13:57	
alpha-Chlordane	ND	1.0	1	B0A0069	01/03/2020	01/03/20 13:57	
beta-BHC	ND	1.0	1	B0A0069	01/03/2020	01/03/20 13:57	
Chlordane	ND	8.5	1	B0A0069	01/03/2020	01/03/20 13:57	
delta-BHC	ND	1.0	1	B0A0069	01/03/2020	01/03/20 13:57	
Dieldrin	ND	2.0	1	B0A0069	01/03/2020	01/03/20 13:57	
Endosulfan I	ND	1.0	1	B0A0069	01/03/2020	01/03/20 13:57	
Endosulfan II	ND	2.0	1	B0A0069	01/03/2020	01/03/20 13:57	
Endosulfan sulfate	ND	2.0	1	B0A0069	01/03/2020	01/03/20 13:57	
Endrin	ND	2.0	1	B0A0069	01/03/2020	01/03/20 13:57	
Endrin aldehyde	ND	2.0	1	B0A0069	01/03/2020	01/03/20 13:57	
Endrin ketone	ND	2.0	1	B0A0069	01/03/2020	01/03/20 13:57	
gamma-BHC	ND	1.0	1	B0A0069	01/03/2020	01/03/20 13:57	
gamma-Chlordane	ND	1.0	1	B0A0069	01/03/2020	01/03/20 13:57	
Heptachlor	ND	1.0	1	B0A0069	01/03/2020	01/03/20 13:57	
Heptachlor epoxide	ND	1.0	1	B0A0069	01/03/2020	01/03/20 13:57	
Methoxychlor	ND	5.0	1	B0A0069	01/03/2020	01/03/20 13:57	
Toxaphene	ND	50	1	B0A0069	01/03/2020	01/03/20 13:57	
Surrogate: Decachlorobiphenyl	*77.2 %*	*32 - 91*		B0A0069	01/03/2020	*01/03/20 13:57*	
Surrogate: Tetrachloro-m-xylene	*60.8 %*	*38 - 93*		B0A0069	01/03/2020	*01/03/20 13:57*	

Certificate of Analysis

Burns and McDonnell	Project Number : SCVTA, 87119-1216 Auto Zone
400 Oyster Point Blvd, Suite 533	Report To : Christopher D'Sa
South San Francisco , CA 94080	Reported : 01/08/2020

Client Sample ID: B-1d7

Lab ID: 1904742-01

Polychlorinated Biphenyls by EPA 8082

Analyst: KD

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Aroclor 1016	ND	16	1	B0A0069	01/03/2020	01/03/20 15:03	
Aroclor 1221	ND	16	1	B0A0069	01/03/2020	01/03/20 15:03	
Aroclor 1232	ND	16	1	B0A0069	01/03/2020	01/03/20 15:03	
Aroclor 1242	ND	16	1	B0A0069	01/03/2020	01/03/20 15:03	
Aroclor 1248	ND	16	1	B0A0069	01/03/2020	01/03/20 15:03	
Aroclor 1254	ND	16	1	B0A0069	01/03/2020	01/03/20 15:03	
Aroclor 1260	ND	16	1	B0A0069	01/03/2020	01/03/20 15:03	
Aroclor 1262	ND	16	1	B0A0069	01/03/2020	01/03/20 15:03	
Aroclor 1268	ND	16	1	B0A0069	01/03/2020	01/03/20 15:03	
Surrogate: Decachlorobiphenyl	*77.7 %*	*30 - 132*		B0A0069	01/03/2020	*01/03/20 15:03*	
Surrogate: Tetrachloro-m-xylene	*62.9 %*	*44 - 113*		B0A0069	01/03/2020	*01/03/20 15:03*	

Volatile Organic Compounds by EPA 5035 / EPA 8260B

Analyst: KL

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	4.0	1	B0A0015	01/02/2020	01/03/20 13:20	
1,1,1-Trichloroethane	ND	4.0	1	B0A0015	01/02/2020	01/03/20 13:20	
1,1,2,2-Tetrachloroethane	ND	4.0	1	B0A0015	01/02/2020	01/03/20 13:20	
1,1,2-Trichloroethane	ND	4.0	1	B0A0015	01/02/2020	01/03/20 13:20	
1,1-Dichloroethane	ND	4.0	1	B0A0015	01/02/2020	01/03/20 13:20	
1,1-Dichloroethene	ND	4.0	1	B0A0015	01/02/2020	01/03/20 13:20	
1,1-Dichloropropene	ND	4.0	1	B0A0015	01/02/2020	01/03/20 13:20	
1,2,3-Trichloropropane	ND	4.0	1	B0A0015	01/02/2020	01/03/20 13:20	
1,2,3-Trichlorobenzene	ND	4.0	1	B0A0015	01/02/2020	01/03/20 13:20	
1,2,4-Trichlorobenzene	ND	4.0	1	B0A0015	01/02/2020	01/03/20 13:20	
1,2,4-Trimethylbenzene	ND	4.0	1	B0A0015	01/02/2020	01/03/20 13:20	
1,2-Dibromo-3-chloropropane	ND	7.9	1	B0A0015	01/02/2020	01/03/20 13:20	
1,2-Dibromoethane	ND	4.0	1	B0A0015	01/02/2020	01/03/20 13:20	
1,2-Dichlorobenzene	ND	4.0	1	B0A0015	01/02/2020	01/03/20 13:20	
1,2-Dichloroethane	ND	4.0	1	B0A0015	01/02/2020	01/03/20 13:20	
1,2-Dichloropropane	ND	4.0	1	B0A0015	01/02/2020	01/03/20 13:20	
1,3,5-Trimethylbenzene	ND	4.0	1	B0A0015	01/02/2020	01/03/20 13:20	
1,3-Dichlorobenzene	ND	4.0	1	B0A0015	01/02/2020	01/03/20 13:20	
1,3-Dichloropropane	ND	4.0	1	B0A0015	01/02/2020	01/03/20 13:20	
1,4-Dichlorobenzene	ND	4.0	1	B0A0015	01/02/2020	01/03/20 13:20	

Certificate of Analysis

Burns and McDonnell	Project Number : SCVTA, 87119-1216 Auto Zone
400 Oyster Point Blvd, Suite 533	Report To : Christopher D'Sa
South San Francisco , CA 94080	Reported : 01/08/2020

Client Sample ID: B-1d7

Lab ID: 1904742-01

Volatile Organic Compounds by EPA 5035 / EPA 8260B **Analyst: KL**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
2,2-Dichloropropane	ND	4.0	1	B0A0015	01/02/2020	01/03/20 13:20	
2-Chlorotoluene	ND	4.0	1	B0A0015	01/02/2020	01/03/20 13:20	
4-Chlorotoluene	ND	4.0	1	B0A0015	01/02/2020	01/03/20 13:20	
4-Isopropyltoluene	ND	4.0	1	B0A0015	01/02/2020	01/03/20 13:20	
Benzene	ND	4.0	1	B0A0015	01/02/2020	01/03/20 13:20	
Bromobenzene	ND	4.0	1	B0A0015	01/02/2020	01/03/20 13:20	
Bromochloromethane	ND	4.0	1	B0A0015	01/02/2020	01/03/20 13:20	
Bromodichloromethane	ND	4.0	1	B0A0015	01/02/2020	01/03/20 13:20	
Bromoform	ND	4.0	1	B0A0015	01/02/2020	01/03/20 13:20	
Bromomethane	ND	4.0	1	B0A0015	01/02/2020	01/03/20 13:20	
Carbon disulfide	ND	4.0	1	B0A0015	01/02/2020	01/03/20 13:20	
Carbon tetrachloride	ND	4.0	1	B0A0015	01/02/2020	01/03/20 13:20	
Chlorobenzene	ND	4.0	1	B0A0015	01/02/2020	01/03/20 13:20	
Chloroethane	ND	4.0	1	B0A0015	01/02/2020	01/03/20 13:20	
Chloroform	ND	4.0	1	B0A0015	01/02/2020	01/03/20 13:20	
Chloromethane	ND	4.0	1	B0A0015	01/02/2020	01/03/20 13:20	
cis-1,2-Dichloroethene	ND	4.0	1	B0A0015	01/02/2020	01/03/20 13:20	
cis-1,3-Dichloropropene	ND	4.0	1	B0A0015	01/02/2020	01/03/20 13:20	
Di-isopropyl ether	ND	4.0	1	B0A0015	01/02/2020	01/03/20 13:20	
Dibromochloromethane	ND	4.0	1	B0A0015	01/02/2020	01/03/20 13:20	
Dibromomethane	ND	4.0	1	B0A0015	01/02/2020	01/03/20 13:20	
Dichlorodifluoromethane	ND	4.0	1	B0A0015	01/02/2020	01/03/20 13:20	
Ethyl Acetate	ND	40	1	B0A0015	01/02/2020	01/03/20 13:20	
Ethyl Ether	ND	40	1	B0A0015	01/02/2020	01/03/20 13:20	
Ethyl tert-butyl ether	ND	4.0	1	B0A0015	01/02/2020	01/03/20 13:20	
Ethylbenzene	ND	4.0	1	B0A0015	01/02/2020	01/03/20 13:20	
Freon-113	ND	4.0	1	B0A0015	01/02/2020	01/03/20 13:20	
Hexachlorobutadiene	ND	4.0	1	B0A0015	01/02/2020	01/03/20 13:20	
Isopropylbenzene	ND	4.0	1	B0A0015	01/02/2020	01/03/20 13:20	
m,p-Xylene	ND	7.9	1	B0A0015	01/02/2020	01/03/20 13:20	
Methylene chloride	ND	4.0	1	B0A0015	01/02/2020	01/03/20 13:20	
MTBE	ND	4.0	1	B0A0015	01/02/2020	01/03/20 13:20	
n-Butylbenzene	ND	4.0	1	B0A0015	01/02/2020	01/03/20 13:20	
n-Propylbenzene	ND	4.0	1	B0A0015	01/02/2020	01/03/20 13:20	
Naphthalene	ND	4.0	1	B0A0015	01/02/2020	01/03/20 13:20	
o-Xylene	ND	4.0	1	B0A0015	01/02/2020	01/03/20 13:20	

Certificate of Analysis

Burns and McDonnell	Project Number : SCVTA, 87119-1216 Auto Zone
400 Oyster Point Blvd, Suite 533	Report To : Christopher D'Sa
South San Francisco , CA 94080	Reported : 01/08/2020

Client Sample ID: B-1d7

Lab ID: 1904742-01

Volatile Organic Compounds by EPA 5035 / EPA 8260B

Analyst: KL

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
sec-Butylbenzene	ND	4.0	1	B0A0015	01/02/2020	01/03/20 13:20	
Styrene	ND	4.0	1	B0A0015	01/02/2020	01/03/20 13:20	
tert-Amyl methyl ether	ND	4.0	1	B0A0015	01/02/2020	01/03/20 13:20	
tert-Butanol	ND	79	1	B0A0015	01/02/2020	01/03/20 13:20	
tert-Butylbenzene	ND	4.0	1	B0A0015	01/02/2020	01/03/20 13:20	
Tetrachloroethene	ND	4.0	1	B0A0015	01/02/2020	01/03/20 13:20	
Toluene	ND	4.0	1	B0A0015	01/02/2020	01/03/20 13:20	
trans-1,2-Dichloroethene	ND	4.0	1	B0A0015	01/02/2020	01/03/20 13:20	
trans-1,3-Dichloropropene	ND	4.0	1	B0A0015	01/02/2020	01/03/20 13:20	
Trichloroethene	ND	4.0	1	B0A0015	01/02/2020	01/03/20 13:20	
Trichlorofluoromethane	ND	4.0	1	B0A0015	01/02/2020	01/03/20 13:20	
Vinyl acetate	ND	40	1	B0A0015	01/02/2020	01/03/20 13:20	
Vinyl chloride	ND	4.0	1	B0A0015	01/02/2020	01/03/20 13:20	
GRO (C4 - C12)	ND	790	1	B0A0059	01/02/2020	01/03/20 13:20	
Surrogate: 1,2-Dichloroethane-d4	*109 %*	*58 - 160*		B0A0015	01/02/2020	*01/03/20 13:20*	
Surrogate: 1,2-Dichloroethane-d4	*111 %*	*58 - 160*		B0A0059	01/02/2020	*01/03/20 13:20*	
Surrogate: 4-Bromofluorobenzene	*95.3 %*	*72 - 121*		B0A0015	01/02/2020	*01/03/20 13:20*	
Surrogate: 4-Bromofluorobenzene	*99.2 %*	*72 - 121*		B0A0059	01/02/2020	*01/03/20 13:20*	
Surrogate: Dibromofluoromethane	*104 %*	*75 - 139*		B0A0015	01/02/2020	*01/03/20 13:20*	
Surrogate: Dibromofluoromethane	*113 %*	*75 - 139*		B0A0059	01/02/2020	*01/03/20 13:20*	
Surrogate: Toluene-d8	*98.9 %*	*84 - 115*		B0A0015	01/02/2020	*01/03/20 13:20*	
Surrogate: Toluene-d8	*103 %*	*84 - 115*		B0A0059	01/02/2020	*01/03/20 13:20*	

Semivolatile Organic Compounds by EPA 8270C

Analyst: SP

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,2,4-Trichlorobenzene	ND	330	1	B0A0093	01/03/2020	01/03/20 17:49	
1,2-Dichlorobenzene	ND	330	1	B0A0093	01/03/2020	01/03/20 17:49	
1,3-Dichlorobenzene	ND	330	1	B0A0093	01/03/2020	01/03/20 17:49	
1,4-Dichlorobenzene	ND	330	1	B0A0093	01/03/2020	01/03/20 17:49	
2,4,5-Trichlorophenol	ND	330	1	B0A0093	01/03/2020	01/03/20 17:49	
2,4,6-Trichlorophenol	ND	330	1	B0A0093	01/03/2020	01/03/20 17:49	
2,4-Dichlorophenol	ND	1600	1	B0A0093	01/03/2020	01/03/20 17:49	
2,4-Dimethylphenol	ND	330	1	B0A0093	01/03/2020	01/03/20 17:49	
2,4-Dinitrophenol	ND	1600	1	B0A0093	01/03/2020	01/03/20 17:49	

Certificate of Analysis

Burns and McDonnell	Project Number : SCVTA, 87119-1216 Auto Zone
400 Oyster Point Blvd, Suite 533	Report To : Christopher D'Sa
South San Francisco , CA 94080	Reported : 01/08/2020

Client Sample ID: B-1d7

Lab ID: 1904742-01

Semivolatile Organic Compounds by EPA 8270C **Analyst: SP**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
2,4-Dinitrotoluene	ND	330	1	B0A0093	01/03/2020	01/03/20 17:49	
2,6-Dinitrotoluene	ND	330	1	B0A0093	01/03/2020	01/03/20 17:49	
2-Chloronaphthalene	ND	330	1	B0A0093	01/03/2020	01/03/20 17:49	
2-Chlorophenol	ND	330	1	B0A0093	01/03/2020	01/03/20 17:49	
2-Methylnaphthalene	ND	330	1	B0A0093	01/03/2020	01/03/20 17:49	
2-Methylphenol	ND	330	1	B0A0093	01/03/2020	01/03/20 17:49	
2-Nitroaniline	ND	1600	1	B0A0093	01/03/2020	01/03/20 17:49	
2-Nitrophenol	ND	330	1	B0A0093	01/03/2020	01/03/20 17:49	
3,3´-Dichlorobenzidine	ND	660	1	B0A0093	01/03/2020	01/03/20 17:49	
3-Nitroaniline	ND	1600	1	B0A0093	01/03/2020	01/03/20 17:49	
4,6-Dinitro-2-methyphenol	ND	1600	1	B0A0093	01/03/2020	01/03/20 17:49	
4-Bromophenyl-phenylether	ND	330	1	B0A0093	01/03/2020	01/03/20 17:49	
4-Chloro-3-methylphenol	ND	660	1	B0A0093	01/03/2020	01/03/20 17:49	
4-Chloroaniline	ND	660	1	B0A0093	01/03/2020	01/03/20 17:49	
4-Chlorophenyl-phenylether	ND	330	1	B0A0093	01/03/2020	01/03/20 17:49	
4-Methylphenol	ND	330	1	B0A0093	01/03/2020	01/03/20 17:49	
4-Nitroaniline	ND	1600	1	B0A0093	01/03/2020	01/03/20 17:49	
4-Nitrophenol	ND	330	1	B0A0093	01/03/2020	01/03/20 17:49	
Acenaphthene	ND	330	1	B0A0093	01/03/2020	01/03/20 17:49	
Acenaphthylene	ND	330	1	B0A0093	01/03/2020	01/03/20 17:49	
Anthracene	ND	330	1	B0A0093	01/03/2020	01/03/20 17:49	
Benzidine (M)	ND	1600	1	B0A0093	01/03/2020	01/03/20 17:49	
Benzo(a)anthracene	ND	330	1	B0A0093	01/03/2020	01/03/20 17:49	
Benzo(a)pyrene	ND	330	1	B0A0093	01/03/2020	01/03/20 17:49	
Benzo(b)fluoranthene	ND	330	1	B0A0093	01/03/2020	01/03/20 17:49	
Benzo(g,h,i)perylene	ND	330	1	B0A0093	01/03/2020	01/03/20 17:49	
Benzo(k)fluoranthene	ND	330	1	B0A0093	01/03/2020	01/03/20 17:49	
Benzoic acid	ND	1600	1	B0A0093	01/03/2020	01/03/20 17:49	
Benzyl alcohol	ND	660	1	B0A0093	01/03/2020	01/03/20 17:49	
bis(2-chloroethoxy)methane	ND	330	1	B0A0093	01/03/2020	01/03/20 17:49	
bis(2-Chloroethyl)ether	ND	330	1	B0A0093	01/03/2020	01/03/20 17:49	
bis(2-chloroisopropyl)ether	ND	330	1	B0A0093	01/03/2020	01/03/20 17:49	
bis(2-ethylhexyl)phthalate	ND	330	1	B0A0093	01/03/2020	01/03/20 17:49	
Butylbenzylphthalate	ND	330	1	B0A0093	01/03/2020	01/03/20 17:49	
Chrysene	ND	330	1	B0A0093	01/03/2020	01/03/20 17:49	
Di-n-butylphthalate	ND	330	1	B0A0093	01/03/2020	01/03/20 17:49	

Certificate of Analysis

Burns and McDonnell	Project Number : SCVTA, 87119-1216 Auto Zone
400 Oyster Point Blvd, Suite 533	Report To : Christopher D'Sa
South San Francisco , CA 94080	Reported : 01/08/2020

Client Sample ID: B-1d7

Lab ID: 1904742-01

Semivolatile Organic Compounds by EPA 8270C **Analyst: SP**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Di-n-octylphthalate	ND	330	1	B0A0093	01/03/2020	01/03/20 17:49	
Dibenz(a,h)anthracene	ND	330	1	B0A0093	01/03/2020	01/03/20 17:49	
Dibenzofuran	ND	330	1	B0A0093	01/03/2020	01/03/20 17:49	
Diethyl phthalate	ND	330	1	B0A0093	01/03/2020	01/03/20 17:49	
Dimethyl phthalate	ND	330	1	B0A0093	01/03/2020	01/03/20 17:49	
Fluoranthene	ND	330	1	B0A0093	01/03/2020	01/03/20 17:49	
Fluorene	ND	330	1	B0A0093	01/03/2020	01/03/20 17:49	
Hexachlorobenzene	ND	330	1	B0A0093	01/03/2020	01/03/20 17:49	
Hexachlorobutadiene	ND	660	1	B0A0093	01/03/2020	01/03/20 17:49	
Hexachlorocyclopentadiene	ND	660	1	B0A0093	01/03/2020	01/03/20 17:49	
Hexachloroethane	ND	330	1	B0A0093	01/03/2020	01/03/20 17:49	
Indeno(1,2,3-cd)pyrene	ND	330	1	B0A0093	01/03/2020	01/03/20 17:49	
Isophorone	ND	330	1	B0A0093	01/03/2020	01/03/20 17:49	
N-Nitroso-di-n propylamine	ND	330	1	B0A0093	01/03/2020	01/03/20 17:49	
N-Nitrosodiphenylamine	ND	330	1	B0A0093	01/03/2020	01/03/20 17:49	
Naphthalene	ND	330	1	B0A0093	01/03/2020	01/03/20 17:49	
Nitrobenzene	ND	330	1	B0A0093	01/03/2020	01/03/20 17:49	
Pentachlorophenol	ND	1600	1	B0A0093	01/03/2020	01/03/20 17:49	
Phenanthrene	ND	330	1	B0A0093	01/03/2020	01/03/20 17:49	
Phenol	ND	330	1	B0A0093	01/03/2020	01/03/20 17:49	
Pyrene	ND	330	1	B0A0093	01/03/2020	01/03/20 17:49	
Pyridine	ND	1600	1	B0A0093	01/03/2020	01/03/20 17:49	
Surrogate: 1,2-Dichlorobenzene-d4	*72.0 %*	*28 - 77*		B0A0093	01/03/2020	*01/03/20 17:49*	
Surrogate: 2,4,6-Tribromophenol	*125 %*	*17 - 157*		B0A0093	01/03/2020	*01/03/20 17:49*	
Surrogate: 2-Chlorophenol-d4	*76.4 %*	*35 - 98*		B0A0093	01/03/2020	*01/03/20 17:49*	
Surrogate: 2-Fluorobiphenyl	*80.8 %*	*35 - 88*		B0A0093	01/03/2020	*01/03/20 17:49*	
Surrogate: 2-Fluorophenol	*71.4 %*	*32 - 88*		B0A0093	01/03/2020	*01/03/20 17:49*	
Surrogate: 4-Terphenyl-d14	*94.3 %*	*35 - 114*		B0A0093	01/03/2020	*01/03/20 17:49*	
Surrogate: Nitrobenzene-d5	*73.5 %*	*27 - 80*		B0A0093	01/03/2020	*01/03/20 17:49*	
Surrogate: Phenol-d6	*72.1 %*	*35 - 98*		B0A0093	01/03/2020	*01/03/20 17:49*	

Certificate of Analysis

Burns and McDonnell	Project Number : SCVTA, 87119-1216 Auto Zone
400 Oyster Point Blvd, Suite 533	Report To : Christopher D'Sa
South San Francisco , CA 94080	Reported : 01/08/2020

Client Sample ID: B-1d24

Lab ID: 1904742-02

Title 22 Metals by ICP-AES EPA 6010B

Analyst: KEK

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	1	B0A0091	01/06/2020	01/06/20 17:08	
Arsenic	**6.0**	1.0	1	B0A0091	01/06/2020	01/06/20 17:08	
Barium	**170**	1.0	1	B0A0091	01/06/2020	01/06/20 17:08	
Beryllium	ND	1.0	1	B0A0091	01/06/2020	01/06/20 17:08	
Cadmium	ND	1.0	1	B0A0091	01/06/2020	01/06/20 17:08	
Chromium	**50**	1.0	1	B0A0091	01/06/2020	01/06/20 17:08	
Cobalt	**11**	1.0	1	B0A0091	01/06/2020	01/06/20 17:08	
Copper	**26**	2.0	1	B0A0091	01/06/2020	01/06/20 17:08	
Lead	**8.1**	1.0	1	B0A0091	01/06/2020	01/06/20 17:08	
Molybdenum	ND	1.0	1	B0A0091	01/06/2020	01/06/20 17:08	
Nickel	**78**	1.0	1	B0A0091	01/06/2020	01/06/20 17:08	
Selenium	ND	1.0	1	B0A0091	01/06/2020	01/06/20 17:08	
Silver	ND	1.0	1	B0A0091	01/06/2020	01/06/20 17:08	
Thallium	ND	1.0	1	B0A0091	01/06/2020	01/06/20 17:08	
Vanadium	**39**	1.0	1	B0A0091	01/06/2020	01/06/20 17:08	
Zinc	**48**	1.0	1	B0A0091	01/06/2020	01/06/20 17:08	

Mercury by AA (Cold Vapor) EPA 7471A

Analyst: VV

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	ND	0.10	1	B0A0092	01/06/2020	01/06/20 14:40	

Diesel Range Organics by EPA 8015B (SGT)

Analyst: VL

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	ND	1.0	1	B0A0056	01/02/2020	01/02/20 21:28	
ORO	ND	1.0	1	B0A0056	01/02/2020	01/02/20 21:28	
Surrogate: p-Terphenyl	*68.5 %*	*34 - 158*		B0A0056	01/02/2020	*01/02/20 21:28*	

Certificate of Analysis

Burns and McDonnell	Project Number : SCVTA, 87119-1216 Auto Zone
400 Oyster Point Blvd, Suite 533	Report To : Christopher D'Sa
South San Francisco , CA 94080	Reported : 01/08/2020

Client Sample ID: B-1d24

Lab ID: 1904742-02

Volatile Organic Compounds by EPA 5035 / EPA 8260B **Analyst: KL**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	4.2	1	B0A0015	01/02/2020	01/03/20 16:26	
1,1,1-Trichloroethane	ND	4.2	1	B0A0015	01/02/2020	01/03/20 16:26	
1,1,2,2-Tetrachloroethane	ND	4.2	1	B0A0015	01/02/2020	01/03/20 16:26	
1,1,2-Trichloroethane	ND	4.2	1	B0A0015	01/02/2020	01/03/20 16:26	
1,1-Dichloroethane	ND	4.2	1	B0A0015	01/02/2020	01/03/20 16:26	
1,1-Dichloroethene	ND	4.2	1	B0A0015	01/02/2020	01/03/20 16:26	
1,1-Dichloropropene	ND	4.2	1	B0A0015	01/02/2020	01/03/20 16:26	
1,2,3-Trichloropropane	ND	4.2	1	B0A0015	01/02/2020	01/03/20 16:26	
1,2,3-Trichlorobenzene	ND	4.2	1	B0A0015	01/02/2020	01/03/20 16:26	
1,2,4-Trichlorobenzene	ND	4.2	1	B0A0015	01/02/2020	01/03/20 16:26	
1,2,4-Trimethylbenzene	ND	4.2	1	B0A0015	01/02/2020	01/03/20 16:26	
1,2-Dibromo-3-chloropropane	ND	8.3	1	B0A0015	01/02/2020	01/03/20 16:26	
1,2-Dibromoethane	ND	4.2	1	B0A0015	01/02/2020	01/03/20 16:26	
1,2-Dichlorobenzene	ND	4.2	1	B0A0015	01/02/2020	01/03/20 16:26	
1,2-Dichloroethane	ND	4.2	1	B0A0015	01/02/2020	01/03/20 16:26	
1,2-Dichloropropane	ND	4.2	1	B0A0015	01/02/2020	01/03/20 16:26	
1,3,5-Trimethylbenzene	ND	4.2	1	B0A0015	01/02/2020	01/03/20 16:26	
1,3-Dichlorobenzene	ND	4.2	1	B0A0015	01/02/2020	01/03/20 16:26	
1,3-Dichloropropane	ND	4.2	1	B0A0015	01/02/2020	01/03/20 16:26	
1,4-Dichlorobenzene	ND	4.2	1	B0A0015	01/02/2020	01/03/20 16:26	
2,2-Dichloropropane	ND	4.2	1	B0A0015	01/02/2020	01/03/20 16:26	
2-Chlorotoluene	ND	4.2	1	B0A0015	01/02/2020	01/03/20 16:26	
4-Chlorotoluene	ND	4.2	1	B0A0015	01/02/2020	01/03/20 16:26	
4-Isopropyltoluene	ND	4.2	1	B0A0015	01/02/2020	01/03/20 16:26	
Benzene	ND	4.2	1	B0A0015	01/02/2020	01/03/20 16:26	
Bromobenzene	ND	4.2	1	B0A0015	01/02/2020	01/03/20 16:26	
Bromochloromethane	ND	4.2	1	B0A0015	01/02/2020	01/03/20 16:26	
Bromodichloromethane	ND	4.2	1	B0A0015	01/02/2020	01/03/20 16:26	
Bromoform	ND	4.2	1	B0A0015	01/02/2020	01/03/20 16:26	
Bromomethane	ND	4.2	1	B0A0015	01/02/2020	01/03/20 16:26	
Carbon disulfide	ND	4.2	1	B0A0015	01/02/2020	01/03/20 16:26	
Carbon tetrachloride	ND	4.2	1	B0A0015	01/02/2020	01/03/20 16:26	
Chlorobenzene	ND	4.2	1	B0A0015	01/02/2020	01/03/20 16:26	
Chloroethane	ND	4.2	1	B0A0015	01/02/2020	01/03/20 16:26	
Chloroform	ND	4.2	1	B0A0015	01/02/2020	01/03/20 16:26	
Chloromethane	ND	4.2	1	B0A0015	01/02/2020	01/03/20 16:26	

Certificate of Analysis

Burns and McDonnell	Project Number : SCVTA, 87119-1216 Auto Zone
400 Oyster Point Blvd, Suite 533	Report To : Christopher D'Sa
South San Francisco , CA 94080	Reported : 01/08/2020

Client Sample ID: B-1d24

Lab ID: 1904742-02

Volatile Organic Compounds by EPA 5035 / EPA 8260B **Analyst: KL**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
cis-1,2-Dichloroethene	ND	4.2	1	B0A0015	01/02/2020	01/03/20 16:26	
cis-1,3-Dichloropropene	ND	4.2	1	B0A0015	01/02/2020	01/03/20 16:26	
Di-isopropyl ether	ND	4.2	1	B0A0015	01/02/2020	01/03/20 16:26	
Dibromochloromethane	ND	4.2	1	B0A0015	01/02/2020	01/03/20 16:26	
Dibromomethane	ND	4.2	1	B0A0015	01/02/2020	01/03/20 16:26	
Dichlorodifluoromethane	ND	4.2	1	B0A0015	01/02/2020	01/03/20 16:26	
Ethyl Acetate	ND	42	1	B0A0015	01/02/2020	01/03/20 16:26	
Ethyl Ether	ND	42	1	B0A0015	01/02/2020	01/03/20 16:26	
Ethyl tert-butyl ether	ND	4.2	1	B0A0015	01/02/2020	01/03/20 16:26	
Ethylbenzene	ND	4.2	1	B0A0015	01/02/2020	01/03/20 16:26	
Freon-113	ND	4.2	1	B0A0015	01/02/2020	01/03/20 16:26	
Hexachlorobutadiene	ND	4.2	1	B0A0015	01/02/2020	01/03/20 16:26	
Isopropylbenzene	ND	4.2	1	B0A0015	01/02/2020	01/03/20 16:26	
m,p-Xylene	ND	8.3	1	B0A0015	01/02/2020	01/03/20 16:26	
Methylene chloride	ND	4.2	1	B0A0015	01/02/2020	01/03/20 16:26	
MTBE	ND	4.2	1	B0A0015	01/02/2020	01/03/20 16:26	
n-Butylbenzene	ND	4.2	1	B0A0015	01/02/2020	01/03/20 16:26	
n-Propylbenzene	ND	4.2	1	B0A0015	01/02/2020	01/03/20 16:26	
Naphthalene	ND	4.2	1	B0A0015	01/02/2020	01/03/20 16:26	
o-Xylene	ND	4.2	1	B0A0015	01/02/2020	01/03/20 16:26	
sec-Butylbenzene	ND	4.2	1	B0A0015	01/02/2020	01/03/20 16:26	
Styrene	ND	4.2	1	B0A0015	01/02/2020	01/03/20 16:26	
tert-Amyl methyl ether	ND	4.2	1	B0A0015	01/02/2020	01/03/20 16:26	
tert-Butanol	ND	83	1	B0A0015	01/02/2020	01/03/20 16:26	
tert-Butylbenzene	ND	4.2	1	B0A0015	01/02/2020	01/03/20 16:26	
Tetrachloroethene	ND	4.2	1	B0A0015	01/02/2020	01/03/20 16:26	
Toluene	ND	4.2	1	B0A0015	01/02/2020	01/03/20 16:26	
trans-1,2-Dichloroethene	ND	4.2	1	B0A0015	01/02/2020	01/03/20 16:26	
trans-1,3-Dichloropropene	ND	4.2	1	B0A0015	01/02/2020	01/03/20 16:26	
Trichloroethene	ND	4.2	1	B0A0015	01/02/2020	01/03/20 16:26	
Trichlorofluoromethane	ND	4.2	1	B0A0015	01/02/2020	01/03/20 16:26	
Vinyl acetate	ND	42	1	B0A0015	01/02/2020	01/03/20 16:26	
Vinyl chloride	ND	4.2	1	B0A0015	01/02/2020	01/03/20 16:26	
GRO (C4 - C12)	ND	830	1	B0A0059	01/02/2020	01/03/20 16:26	
Surrogate: 1,2-Dichloroethane-d4	*103 %*	*58 - 160*		B0A0015	01/02/2020	*01/03/20 16:26*	
Surrogate: 1,2-Dichloroethane-d4	*105 %*	*58 - 160*		B0A0059	01/02/2020	*01/03/20 16:26*	

Certificate of Analysis

Burns and McDonnell	Project Number : SCVTA, 87119-1216 Auto Zone
400 Oyster Point Blvd, Suite 533	Report To : Christopher D'Sa
South San Francisco , CA 94080	Reported : 01/08/2020

Client Sample ID: B-1d24

Lab ID: 1904742-02

Volatile Organic Compounds by EPA 5035 / EPA 8260B **Analyst: KL**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: 4-Bromofluorobenzene	*97.2 %*	*72 - 121*		B0A0015	01/02/2020	*01/03/20 16:26*	
Surrogate: 4-Bromofluorobenzene	*101 %*	*72 - 121*		B0A0059	01/02/2020	*01/03/20 16:26*	
Surrogate: Dibromofluoromethane	*98.5 %*	*75 - 139*		B0A0015	01/02/2020	*01/03/20 16:26*	
Surrogate: Dibromofluoromethane	*106 %*	*75 - 139*		B0A0059	01/02/2020	*01/03/20 16:26*	
Surrogate: Toluene-d8	*97.7 %*	*84 - 115*		B0A0015	01/02/2020	*01/03/20 16:26*	
Surrogate: Toluene-d8	*102 %*	*84 - 115*		B0A0059	01/02/2020	*01/03/20 16:26*	

Certificate of Analysis

Burns and McDonnell	Project Number : SCVTA, 87119-1216 Auto Zone
400 Oyster Point Blvd, Suite 533	Report To : Christopher D'Sa
South San Francisco , CA 94080	Reported : 01/08/2020

Client Sample ID: B-2d10

Lab ID: 1904742-03

Title 22 Metals by ICP-AES EPA 6010B

Analyst: KEK

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	1	B0A0091	01/06/2020	01/06/20 17:10	
Arsenic	**4.3**	1.0	1	B0A0091	01/06/2020	01/06/20 17:10	
Barium	**110**	1.0	1	B0A0091	01/06/2020	01/06/20 17:10	
Beryllium	ND	1.0	1	B0A0091	01/06/2020	01/06/20 17:10	
Cadmium	ND	1.0	1	B0A0091	01/06/2020	01/06/20 17:10	
Chromium	**42**	1.0	1	B0A0091	01/06/2020	01/06/20 17:10	
Cobalt	**8.2**	1.0	1	B0A0091	01/06/2020	01/06/20 17:10	
Copper	**17**	2.0	1	B0A0091	01/06/2020	01/06/20 17:10	
Lead	**4.8**	1.0	1	B0A0091	01/06/2020	01/06/20 17:10	
Molybdenum	ND	1.0	1	B0A0091	01/06/2020	01/06/20 17:10	
Nickel	**68**	1.0	1	B0A0091	01/06/2020	01/06/20 17:10	
Selenium	ND	1.0	1	B0A0091	01/06/2020	01/06/20 17:10	
Silver	ND	1.0	1	B0A0091	01/06/2020	01/06/20 17:10	
Thallium	ND	1.0	1	B0A0091	01/06/2020	01/06/20 17:10	
Vanadium	**25**	1.0	1	B0A0091	01/06/2020	01/06/20 17:10	
Zinc	**35**	1.0	1	B0A0091	01/06/2020	01/06/20 17:10	

Mercury by AA (Cold Vapor) EPA 7471A

Analyst: VV

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	ND	0.10	1	B0A0092	01/06/2020	01/06/20 14:42	

Diesel Range Organics by EPA 8015B (SGT)

Analyst: VL

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	**1.7**	1.0	1	B0A0056	01/02/2020	01/02/20 21:45	
ORO	ND	1.0	1	B0A0056	01/02/2020	01/02/20 21:45	
Surrogate: p-Terphenyl	*79.3 %*	*34 - 158*		B0A0056	01/02/2020	*01/02/20 21:45*	

Certificate of Analysis

Burns and McDonnell	Project Number : SCVTA, 87119-1216 Auto Zone
400 Oyster Point Blvd, Suite 533	Report To : Christopher D'Sa
South San Francisco , CA 94080	Reported : 01/08/2020

Client Sample ID: B-2d10

Lab ID: 1904742-03

Volatile Organic Compounds by EPA 5035 / EPA 8260B **Analyst: KL**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	4.8	1	B0A0015	01/02/2020	01/03/20 16:44	
1,1,1-Trichloroethane	ND	4.8	1	B0A0015	01/02/2020	01/03/20 16:44	
1,1,2,2-Tetrachloroethane	ND	4.8	1	B0A0015	01/02/2020	01/03/20 16:44	
1,1,2-Trichloroethane	ND	4.8	1	B0A0015	01/02/2020	01/03/20 16:44	
1,1-Dichloroethane	ND	4.8	1	B0A0015	01/02/2020	01/03/20 16:44	
1,1-Dichloroethene	ND	4.8	1	B0A0015	01/02/2020	01/03/20 16:44	
1,1-Dichloropropene	ND	4.8	1	B0A0015	01/02/2020	01/03/20 16:44	
1,2,3-Trichloropropane	ND	4.8	1	B0A0015	01/02/2020	01/03/20 16:44	
1,2,3-Trichlorobenzene	ND	4.8	1	B0A0015	01/02/2020	01/03/20 16:44	
1,2,4-Trichlorobenzene	ND	4.8	1	B0A0015	01/02/2020	01/03/20 16:44	
1,2,4-Trimethylbenzene	ND	4.8	1	B0A0015	01/02/2020	01/03/20 16:44	
1,2-Dibromo-3-chloropropane	ND	9.5	1	B0A0015	01/02/2020	01/03/20 16:44	
1,2-Dibromoethane	ND	4.8	1	B0A0015	01/02/2020	01/03/20 16:44	
1,2-Dichlorobenzene	ND	4.8	1	B0A0015	01/02/2020	01/03/20 16:44	
1,2-Dichloroethane	ND	4.8	1	B0A0015	01/02/2020	01/03/20 16:44	
1,2-Dichloropropane	ND	4.8	1	B0A0015	01/02/2020	01/03/20 16:44	
1,3,5-Trimethylbenzene	ND	4.8	1	B0A0015	01/02/2020	01/03/20 16:44	
1,3-Dichlorobenzene	ND	4.8	1	B0A0015	01/02/2020	01/03/20 16:44	
1,3-Dichloropropane	ND	4.8	1	B0A0015	01/02/2020	01/03/20 16:44	
1,4-Dichlorobenzene	ND	4.8	1	B0A0015	01/02/2020	01/03/20 16:44	
2,2-Dichloropropane	ND	4.8	1	B0A0015	01/02/2020	01/03/20 16:44	
2-Chlorotoluene	ND	4.8	1	B0A0015	01/02/2020	01/03/20 16:44	
4-Chlorotoluene	ND	4.8	1	B0A0015	01/02/2020	01/03/20 16:44	
4-Isopropyltoluene	ND	4.8	1	B0A0015	01/02/2020	01/03/20 16:44	
Benzene	ND	4.8	1	B0A0015	01/02/2020	01/03/20 16:44	
Bromobenzene	ND	4.8	1	B0A0015	01/02/2020	01/03/20 16:44	
Bromochloromethane	ND	4.8	1	B0A0015	01/02/2020	01/03/20 16:44	
Bromodichloromethane	ND	4.8	1	B0A0015	01/02/2020	01/03/20 16:44	
Bromoform	ND	4.8	1	B0A0015	01/02/2020	01/03/20 16:44	
Bromomethane	ND	4.8	1	B0A0015	01/02/2020	01/03/20 16:44	
Carbon disulfide	ND	4.8	1	B0A0015	01/02/2020	01/03/20 16:44	
Carbon tetrachloride	ND	4.8	1	B0A0015	01/02/2020	01/03/20 16:44	
Chlorobenzene	ND	4.8	1	B0A0015	01/02/2020	01/03/20 16:44	
Chloroethane	ND	4.8	1	B0A0015	01/02/2020	01/03/20 16:44	
Chloroform	ND	4.8	1	B0A0015	01/02/2020	01/03/20 16:44	
Chloromethane	ND	4.8	1	B0A0015	01/02/2020	01/03/20 16:44	

Certificate of Analysis

Burns and McDonnell	Project Number : SCVTA, 87119-1216 Auto Zone
400 Oyster Point Blvd, Suite 533	Report To : Christopher D'Sa
South San Francisco , CA 94080	Reported : 01/08/2020

Client Sample ID: B-2d10

Lab ID: 1904742-03

Volatile Organic Compounds by EPA 5035 / EPA 8260B **Analyst: KL**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
cis-1,2-Dichloroethene	ND	4.8	1	B0A0015	01/02/2020	01/03/20 16:44	
cis-1,3-Dichloropropene	ND	4.8	1	B0A0015	01/02/2020	01/03/20 16:44	
Di-isopropyl ether	ND	4.8	1	B0A0015	01/02/2020	01/03/20 16:44	
Dibromochloromethane	ND	4.8	1	B0A0015	01/02/2020	01/03/20 16:44	
Dibromomethane	ND	4.8	1	B0A0015	01/02/2020	01/03/20 16:44	
Dichlorodifluoromethane	ND	4.8	1	B0A0015	01/02/2020	01/03/20 16:44	
Ethyl Acetate	ND	48	1	B0A0015	01/02/2020	01/03/20 16:44	
Ethyl Ether	ND	48	1	B0A0015	01/02/2020	01/03/20 16:44	
Ethyl tert-butyl ether	ND	4.8	1	B0A0015	01/02/2020	01/03/20 16:44	
Ethylbenzene	ND	4.8	1	B0A0015	01/02/2020	01/03/20 16:44	
Freon-113	ND	4.8	1	B0A0015	01/02/2020	01/03/20 16:44	
Hexachlorobutadiene	ND	4.8	1	B0A0015	01/02/2020	01/03/20 16:44	
Isopropylbenzene	ND	4.8	1	B0A0015	01/02/2020	01/03/20 16:44	
m,p-Xylene	ND	9.5	1	B0A0015	01/02/2020	01/03/20 16:44	
Methylene chloride	ND	4.8	1	B0A0015	01/02/2020	01/03/20 16:44	
MTBE	ND	4.8	1	B0A0015	01/02/2020	01/03/20 16:44	
n-Butylbenzene	ND	4.8	1	B0A0015	01/02/2020	01/03/20 16:44	
n-Propylbenzene	ND	4.8	1	B0A0015	01/02/2020	01/03/20 16:44	
Naphthalene	ND	4.8	1	B0A0015	01/02/2020	01/03/20 16:44	
o-Xylene	ND	4.8	1	B0A0015	01/02/2020	01/03/20 16:44	
sec-Butylbenzene	ND	4.8	1	B0A0015	01/02/2020	01/03/20 16:44	
Styrene	ND	4.8	1	B0A0015	01/02/2020	01/03/20 16:44	
tert-Amyl methyl ether	ND	4.8	1	B0A0015	01/02/2020	01/03/20 16:44	
tert-Butanol	ND	95	1	B0A0015	01/02/2020	01/03/20 16:44	
tert-Butylbenzene	ND	4.8	1	B0A0015	01/02/2020	01/03/20 16:44	
Tetrachloroethene	ND	4.8	1	B0A0015	01/02/2020	01/03/20 16:44	
Toluene	ND	4.8	1	B0A0015	01/02/2020	01/03/20 16:44	
trans-1,2-Dichloroethene	ND	4.8	1	B0A0015	01/02/2020	01/03/20 16:44	
trans-1,3-Dichloropropene	ND	4.8	1	B0A0015	01/02/2020	01/03/20 16:44	
Trichloroethene	ND	4.8	1	B0A0015	01/02/2020	01/03/20 16:44	
Trichlorofluoromethane	ND	4.8	1	B0A0015	01/02/2020	01/03/20 16:44	
Vinyl acetate	ND	48	1	B0A0015	01/02/2020	01/03/20 16:44	
Vinyl chloride	ND	4.8	1	B0A0015	01/02/2020	01/03/20 16:44	
GRO (C4 - C12)	ND	950	1	B0A0059	01/02/2020	01/03/20 16:44	
Surrogate: 1,2-Dichloroethane-d4	*106 %*	*58 - 160*		B0A0015	01/02/2020	*01/03/20 16:44*	
Surrogate: 1,2-Dichloroethane-d4	*107 %*	*58 - 160*		B0A0059	01/02/2020	*01/03/20 16:44*	

Certificate of Analysis

Burns and McDonnell	Project Number : SCVTA, 87119-1216 Auto Zone
400 Oyster Point Blvd, Suite 533	Report To : Christopher D'Sa
South San Francisco , CA 94080	Reported : 01/08/2020

Client Sample ID: B-2d10

Lab ID: 1904742-03

Volatile Organic Compounds by EPA 5035 / EPA 8260B **Analyst: KL**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: 4-Bromofluorobenzene	*95.1 %*	*72 - 121*		B0A0015	01/02/2020	*01/03/20 16:44*	
Surrogate: 4-Bromofluorobenzene	*98.9 %*	*72 - 121*		B0A0059	01/02/2020	*01/03/20 16:44*	
Surrogate: Dibromofluoromethane	*100 %*	*75 - 139*		B0A0015	01/02/2020	*01/03/20 16:44*	
Surrogate: Dibromofluoromethane	*108 %*	*75 - 139*		B0A0059	01/02/2020	*01/03/20 16:44*	
Surrogate: Toluene-d8	*97.9 %*	*84 - 115*		B0A0015	01/02/2020	*01/03/20 16:44*	
Surrogate: Toluene-d8	*102 %*	*84 - 115*		B0A0059	01/02/2020	*01/03/20 16:44*	

Certificate of Analysis

Burns and McDonnell	Project Number : SCVTA, 87119-1216 Auto Zone
400 Oyster Point Blvd, Suite 533	Report To : Christopher D'Sa
South San Francisco , CA 94080	Reported : 01/08/2020

Client Sample ID: B-2d24

Lab ID: 1904742-04

Title 22 Metals by ICP-AES EPA 6010B

Analyst: KEK

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	1	B0A0091	01/06/2020	01/06/20 17:11	
Arsenic	**1.1**	1.0	1	B0A0091	01/06/2020	01/06/20 17:11	
Barium	**150**	1.0	1	B0A0091	01/06/2020	01/06/20 17:11	
Beryllium	ND	1.0	1	B0A0091	01/06/2020	01/06/20 17:11	
Cadmium	ND	1.0	1	B0A0091	01/06/2020	01/06/20 17:11	
Chromium	**37**	1.0	1	B0A0091	01/06/2020	01/06/20 17:11	
Cobalt	**5.9**	1.0	1	B0A0091	01/06/2020	01/06/20 17:11	
Copper	**12**	2.0	1	B0A0091	01/06/2020	01/06/20 17:11	
Lead	**3.8**	1.0	1	B0A0091	01/06/2020	01/06/20 17:11	
Molybdenum	ND	1.0	1	B0A0091	01/06/2020	01/06/20 17:11	
Nickel	**46**	1.0	1	B0A0091	01/06/2020	01/06/20 17:11	
Selenium	ND	1.0	1	B0A0091	01/06/2020	01/06/20 17:11	
Silver	ND	1.0	1	B0A0091	01/06/2020	01/06/20 17:11	
Thallium	ND	1.0	1	B0A0091	01/06/2020	01/06/20 17:11	
Vanadium	**21**	1.0	1	B0A0091	01/06/2020	01/06/20 17:11	
Zinc	**27**	1.0	1	B0A0091	01/06/2020	01/06/20 17:11	

Mercury by AA (Cold Vapor) EPA 7471A

Analyst: VV

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	ND	0.10	1	B0A0092	01/06/2020	01/06/20 14:44	

Diesel Range Organics by EPA 8015B (SGT)

Analyst: VL

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	**1.5**	1.0	1	B0A0056	01/02/2020	01/02/20 22:02	
ORO	ND	1.0	1	B0A0056	01/02/2020	01/02/20 22:02	
Surrogate: p-Terphenyl	*73.9 %*	*34 - 158*		B0A0056	01/02/2020	*01/02/20 22:02*	

Certificate of Analysis

Burns and McDonnell	Project Number : SCVTA, 87119-1216 Auto Zone
400 Oyster Point Blvd, Suite 533	Report To : Christopher D'Sa
South San Francisco , CA 94080	Reported : 01/08/2020

Client Sample ID: B-2d24

Lab ID: 1904742-04

Volatile Organic Compounds by EPA 5035 / EPA 8260B **Analyst: KL**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	3.9	1	B0A0015	01/02/2020	01/03/20 17:03	
1,1,1-Trichloroethane	ND	3.9	1	B0A0015	01/02/2020	01/03/20 17:03	
1,1,2,2-Tetrachloroethane	ND	3.9	1	B0A0015	01/02/2020	01/03/20 17:03	
1,1,2-Trichloroethane	ND	3.9	1	B0A0015	01/02/2020	01/03/20 17:03	
1,1-Dichloroethane	ND	3.9	1	B0A0015	01/02/2020	01/03/20 17:03	
1,1-Dichloroethene	ND	3.9	1	B0A0015	01/02/2020	01/03/20 17:03	
1,1-Dichloropropene	ND	3.9	1	B0A0015	01/02/2020	01/03/20 17:03	
1,2,3-Trichloropropane	ND	3.9	1	B0A0015	01/02/2020	01/03/20 17:03	
1,2,3-Trichlorobenzene	ND	3.9	1	B0A0015	01/02/2020	01/03/20 17:03	
1,2,4-Trichlorobenzene	ND	3.9	1	B0A0015	01/02/2020	01/03/20 17:03	
1,2,4-Trimethylbenzene	ND	3.9	1	B0A0015	01/02/2020	01/03/20 17:03	
1,2-Dibromo-3-chloropropane	ND	7.8	1	B0A0015	01/02/2020	01/03/20 17:03	
1,2-Dibromoethane	ND	3.9	1	B0A0015	01/02/2020	01/03/20 17:03	
1,2-Dichlorobenzene	ND	3.9	1	B0A0015	01/02/2020	01/03/20 17:03	
1,2-Dichloroethane	ND	3.9	1	B0A0015	01/02/2020	01/03/20 17:03	
1,2-Dichloropropane	ND	3.9	1	B0A0015	01/02/2020	01/03/20 17:03	
1,3,5-Trimethylbenzene	ND	3.9	1	B0A0015	01/02/2020	01/03/20 17:03	
1,3-Dichlorobenzene	ND	3.9	1	B0A0015	01/02/2020	01/03/20 17:03	
1,3-Dichloropropane	ND	3.9	1	B0A0015	01/02/2020	01/03/20 17:03	
1,4-Dichlorobenzene	ND	3.9	1	B0A0015	01/02/2020	01/03/20 17:03	
2,2-Dichloropropane	ND	3.9	1	B0A0015	01/02/2020	01/03/20 17:03	
2-Chlorotoluene	ND	3.9	1	B0A0015	01/02/2020	01/03/20 17:03	
4-Chlorotoluene	ND	3.9	1	B0A0015	01/02/2020	01/03/20 17:03	
4-Isopropyltoluene	ND	3.9	1	B0A0015	01/02/2020	01/03/20 17:03	
Benzene	ND	3.9	1	B0A0015	01/02/2020	01/03/20 17:03	
Bromobenzene	ND	3.9	1	B0A0015	01/02/2020	01/03/20 17:03	
Bromochloromethane	ND	3.9	1	B0A0015	01/02/2020	01/03/20 17:03	
Bromodichloromethane	ND	3.9	1	B0A0015	01/02/2020	01/03/20 17:03	
Bromoform	ND	3.9	1	B0A0015	01/02/2020	01/03/20 17:03	
Bromomethane	ND	3.9	1	B0A0015	01/02/2020	01/03/20 17:03	
Carbon disulfide	ND	3.9	1	B0A0015	01/02/2020	01/03/20 17:03	
Carbon tetrachloride	ND	3.9	1	B0A0015	01/02/2020	01/03/20 17:03	
Chlorobenzene	ND	3.9	1	B0A0015	01/02/2020	01/03/20 17:03	
Chloroethane	ND	3.9	1	B0A0015	01/02/2020	01/03/20 17:03	
Chloroform	ND	3.9	1	B0A0015	01/02/2020	01/03/20 17:03	
Chloromethane	ND	3.9	1	B0A0015	01/02/2020	01/03/20 17:03	

Certificate of Analysis

Burns and McDonnell	Project Number : SCVTA, 87119-1216 Auto Zone
400 Oyster Point Blvd, Suite 533	Report To : Christopher D'Sa
South San Francisco , CA 94080	Reported : 01/08/2020

Client Sample ID: B-2d24

Lab ID: 1904742-04

Volatile Organic Compounds by EPA 5035 / EPA 8260B **Analyst: KL**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
cis-1,2-Dichloroethene	ND	3.9	1	B0A0015	01/02/2020	01/03/20 17:03	
cis-1,3-Dichloropropene	ND	3.9	1	B0A0015	01/02/2020	01/03/20 17:03	
Di-isopropyl ether	ND	3.9	1	B0A0015	01/02/2020	01/03/20 17:03	
Dibromochloromethane	ND	3.9	1	B0A0015	01/02/2020	01/03/20 17:03	
Dibromomethane	ND	3.9	1	B0A0015	01/02/2020	01/03/20 17:03	
Dichlorodifluoromethane	ND	3.9	1	B0A0015	01/02/2020	01/03/20 17:03	
Ethyl Acetate	ND	39	1	B0A0015	01/02/2020	01/03/20 17:03	
Ethyl Ether	ND	39	1	B0A0015	01/02/2020	01/03/20 17:03	
Ethyl tert-butyl ether	ND	3.9	1	B0A0015	01/02/2020	01/03/20 17:03	
Ethylbenzene	ND	3.9	1	B0A0015	01/02/2020	01/03/20 17:03	
Freon-113	ND	3.9	1	B0A0015	01/02/2020	01/03/20 17:03	
Hexachlorobutadiene	ND	3.9	1	B0A0015	01/02/2020	01/03/20 17:03	
Isopropylbenzene	ND	3.9	1	B0A0015	01/02/2020	01/03/20 17:03	
m,p-Xylene	ND	7.8	1	B0A0015	01/02/2020	01/03/20 17:03	
Methylene chloride	ND	3.9	1	B0A0015	01/02/2020	01/03/20 17:03	
MTBE	ND	3.9	1	B0A0015	01/02/2020	01/03/20 17:03	
n-Butylbenzene	ND	3.9	1	B0A0015	01/02/2020	01/03/20 17:03	
n-Propylbenzene	ND	3.9	1	B0A0015	01/02/2020	01/03/20 17:03	
Naphthalene	ND	3.9	1	B0A0015	01/02/2020	01/03/20 17:03	
o-Xylene	ND	3.9	1	B0A0015	01/02/2020	01/03/20 17:03	
sec-Butylbenzene	ND	3.9	1	B0A0015	01/02/2020	01/03/20 17:03	
Styrene	ND	3.9	1	B0A0015	01/02/2020	01/03/20 17:03	
tert-Amyl methyl ether	ND	3.9	1	B0A0015	01/02/2020	01/03/20 17:03	
tert-Butanol	ND	78	1	B0A0015	01/02/2020	01/03/20 17:03	
tert-Butylbenzene	ND	3.9	1	B0A0015	01/02/2020	01/03/20 17:03	
Tetrachloroethene	ND	3.9	1	B0A0015	01/02/2020	01/03/20 17:03	
Toluene	ND	3.9	1	B0A0015	01/02/2020	01/03/20 17:03	
trans-1,2-Dichloroethene	ND	3.9	1	B0A0015	01/02/2020	01/03/20 17:03	
trans-1,3-Dichloropropene	ND	3.9	1	B0A0015	01/02/2020	01/03/20 17:03	
Trichloroethene	ND	3.9	1	B0A0015	01/02/2020	01/03/20 17:03	
Trichlorofluoromethane	ND	3.9	1	B0A0015	01/02/2020	01/03/20 17:03	
Vinyl acetate	ND	39	1	B0A0015	01/02/2020	01/03/20 17:03	
Vinyl chloride	ND	3.9	1	B0A0015	01/02/2020	01/03/20 17:03	
GRO (C4 - C12)	**1100**	780	1	B0A0059	01/02/2020	01/03/20 17:03	
Surrogate: 1,2-Dichloroethane-d4	*110 %*	*58 - 160*		B0A0015	01/02/2020	*01/03/20 17:03*	
Surrogate: 1,2-Dichloroethane-d4	*112 %*	*58 - 160*		B0A0059	01/02/2020	*01/03/20 17:03*	

Certificate of Analysis

Burns and McDonnell	Project Number : SCVTA, 87119-1216 Auto Zone
400 Oyster Point Blvd, Suite 533	Report To : Christopher D'Sa
South San Francisco , CA 94080	Reported : 01/08/2020

Client Sample ID: B-2d24

Lab ID: 1904742-04

Volatile Organic Compounds by EPA 5035 / EPA 8260B **Analyst: KL**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: 4-Bromofluorobenzene	*97.0 %*	*72 - 121*		B0A0015	01/02/2020	*01/03/20 17:03*	
Surrogate: 4-Bromofluorobenzene	*101 %*	*72 - 121*		B0A0059	01/02/2020	*01/03/20 17:03*	
Surrogate: Dibromofluoromethane	*105 %*	*75 - 139*		B0A0015	01/02/2020	*01/03/20 17:03*	
Surrogate: Dibromofluoromethane	*113 %*	*75 - 139*		B0A0059	01/02/2020	*01/03/20 17:03*	
Surrogate: Toluene-d8	*99.6 %*	*84 - 115*		B0A0015	01/02/2020	*01/03/20 17:03*	
Surrogate: Toluene-d8	*104 %*	*84 - 115*		B0A0059	01/02/2020	*01/03/20 17:03*	

Certificate of Analysis

Burns and McDonnell	Project Number : SCVTA, 87119-1216 Auto Zone
400 Oyster Point Blvd, Suite 533	Report To : Christopher D'Sa
South San Francisco , CA 94080	Reported : 01/08/2020

Client Sample ID: B-1

Lab ID: 1904742-05

Title 22 Metals by ICP-AES EPA 6010B

Analyst: KEK

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	0.010	1	B0A0137	01/07/2020	01/08/20 12:47	
Arsenic	**0.048**	0.010	1	B0A0137	01/07/2020	01/08/20 12:47	
Barium	**3.9**	0.0030	1	B0A0137	01/07/2020	01/08/20 12:47	
Beryllium	**0.016**	0.0030	1	B0A0137	01/07/2020	01/08/20 12:47	
Cadmium	ND	0.0030	1	B0A0137	01/07/2020	01/08/20 12:47	
Chromium	**1.1**	0.0030	1	B0A0137	01/07/2020	01/08/20 12:47	
Cobalt	**0.32**	0.0030	1	B0A0137	01/07/2020	01/08/20 12:47	
Copper	**0.78**	0.0090	1	B0A0137	01/07/2020	01/08/20 12:47	
Lead	**0.18**	0.0050	1	B0A0137	01/07/2020	01/08/20 12:47	
Molybdenum	**0.015**	0.0050	1	B0A0137	01/07/2020	01/08/20 12:47	
Nickel	**1.8**	0.0050	1	B0A0137	01/07/2020	01/08/20 12:47	
Selenium	ND	0.010	1	B0A0137	01/07/2020	01/08/20 12:47	
Silver	ND	0.0030	1	B0A0137	01/07/2020	01/08/20 12:47	
Thallium	ND	0.015	1	B0A0137	01/07/2020	01/08/20 12:47	
Vanadium	**0.74**	0.0030	1	B0A0137	01/07/2020	01/08/20 12:47	
Zinc	**1.4**	0.025	1	B0A0137	01/07/2020	01/08/20 12:47	

Mercury by AA (Cold Vapor) EPA 7470A

Analyst: VV

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	**1.1**	0.20	1	B0A0139	01/07/2020	01/08/20 13:06	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: Kur

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	0.20	1	B0A0058	01/03/2020	01/03/20 13:22	
Surrogate: 4-Bromofluorobenzene *87.9 %*		*70 - 130*		B0A0058	01/03/2020	*01/03/20 13:22*	

Diesel Range Organics by EPA 8015B (SGT)

Analyst: VL

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	ND	0.05	1	B0A0014	01/02/2020	01/02/20 13:16	
ORO	ND	0.05	1	B0A0014	01/02/2020	01/02/20 13:16	

Certificate of Analysis

Burns and McDonnell	Project Number : SCVTA, 87119-1216 Auto Zone
400 Oyster Point Blvd, Suite 533	Report To : Christopher D'Sa
South San Francisco , CA 94080	Reported : 01/08/2020

Client Sample ID: B-1

Lab ID: 1904742-05

Diesel Range Organics by EPA 8015B (SGT)

Analyst: VL

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: p-Terphenyl	*80.4 %*	*32 - 169*		B0A0014	01/02/2020	*01/02/20 13:16*	

Volatile Organic Compounds by EPA 8260B

Analyst: VW

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:57	
1,1,1-Trichloroethane	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:57	
1,1,2,2-Tetrachloroethane	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:57	
1,1,2-Trichloroethane	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:57	
1,1-Dichloroethane	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:57	
1,1-Dichloroethene	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:57	
1,1-Dichloropropene	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:57	
1,2,3-Trichloropropane	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:57	
1,2,3-Trichlorobenzene	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:57	
1,2,4-Trichlorobenzene	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:57	
1,2,4-Trimethylbenzene	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:57	
1,2-Dibromo-3-chloropropane	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:57	
1,2-Dibromoethane	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:57	
1,2-Dichlorobenzene	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:57	
1,2-Dichloroethane	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:57	
1,2-Dichloropropane	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:57	
1,3,5-Trimethylbenzene	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:57	
1,3-Dichlorobenzene	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:57	
1,3-Dichloropropane	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:57	
1,4-Dichlorobenzene	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:57	
2,2-Dichloropropane	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:57	
2-Chlorotoluene	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:57	
4-Chlorotoluene	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:57	
4-Isopropyltoluene	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:57	
Benzene	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:57	
Bromobenzene	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:57	
Bromochloromethane	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:57	
Bromodichloromethane	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:57	
Bromoform	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:57	
Bromomethane	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:57	

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400 Oyster Point Blvd, Suite 533	Report To : Christopher D'Sa
South San Francisco , CA 94080	Reported : 01/08/2020

Client Sample ID: B-1

Lab ID: 1904742-05

Volatile Organic Compounds by EPA 8260B **Analyst: VW**

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Carbon disulfide	ND	1.0	1	B0A0003	01/02/2020	01/02/20 11:57	
Carbon tetrachloride	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:57	
Chlorobenzene	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:57	
Chloroethane	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:57	
Chloroform	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:57	
Chloromethane	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:57	
cis-1,2-Dichloroethene	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:57	
cis-1,3-Dichloropropene	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:57	
Di-isopropyl ether	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:57	
Dibromochloromethane	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:57	
Dibromomethane	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:57	
Dichlorodifluoromethane	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:57	
Ethyl Acetate	ND	10	1	B0A0003	01/02/2020	01/02/20 11:57	
Ethyl Ether	ND	10	1	B0A0003	01/02/2020	01/02/20 11:57	
Ethyl tert-butyl ether	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:57	
Ethylbenzene	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:57	
Freon-113	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:57	
Hexachlorobutadiene	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:57	
Isopropylbenzene	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:57	
m,p-Xylene	**1.3**	1.0	1	B0A0003	01/02/2020	01/02/20 11:57	
Methylene chloride	ND	1.0	1	B0A0003	01/02/2020	01/02/20 11:57	
MTBE	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:57	
n-Butylbenzene	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:57	
n-Propylbenzene	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:57	
Naphthalene	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:57	
o-Xylene	**0.56**	0.50	1	B0A0003	01/02/2020	01/02/20 11:57	
sec-Butylbenzene	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:57	
Styrene	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:57	
tert-Amyl methyl ether	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:57	
tert-Butanol	ND	10	1	B0A0003	01/02/2020	01/02/20 11:57	
tert-Butylbenzene	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:57	
Tetrachloroethene	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:57	
Toluene	**1.9**	0.50	1	B0A0003	01/02/2020	01/02/20 11:57	
trans-1,2-Dichloroethene	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:57	
trans-1,3-Dichloropropene	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:57	
Trichloroethene	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:57	

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400 Oyster Point Blvd, Suite 533	Report To : Christopher D'Sa
South San Francisco , CA 94080	Reported : 01/08/2020

Client Sample ID: B-1

Lab ID: 1904742-05

Volatile Organic Compounds by EPA 8260B **Analyst: VW**

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Trichlorofluoromethane	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:57	
Vinyl acetate	ND	10	1	B0A0003	01/02/2020	01/02/20 11:57	
Vinyl chloride	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:57	
Surrogate: 1,2-Dichloroethane-d4	*105 %*	*59 - 158*		B0A0003	01/02/2020	*01/02/20 11:57*	
Surrogate: 4-Bromofluorobenzene	*99.8 %*	*71 - 127*		B0A0003	01/02/2020	*01/02/20 11:57*	
Surrogate: Dibromofluoromethane	*102 %*	*66 - 147*		B0A0003	01/02/2020	*01/02/20 11:57*	
Surrogate: Toluene-d8	*101 %*	*77 - 138*		B0A0003	01/02/2020	*01/02/20 11:57*	

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South San Francisco , CA 94080	Reported : 01/08/2020

QUALITY CONTROL SECTION

Title 22 Metals by ICP-AES EPA 6010B - Quality Control

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B0A0091 - EPA 3050B_S										
Blank (B0A0091-BLK1)					Prepared: 1/6/2020 Analyzed: 1/6/2020					
Antimony	ND	2.0	0.51							
Arsenic	ND	1.0	0.12							
Barium	ND	1.0	0.12							
Beryllium	ND	1.0	0.03							
Cadmium	ND	1.0	0.14							
Chromium	ND	1.0	0.26							
Cobalt	ND	1.0	0.07							
Copper	ND	2.0	0.19							
Lead	ND	1.0	0.18							
Molybdenum	ND	1.0	0.12							
Nickel	ND	1.0	0.18							
Selenium	ND	1.0	0.40							
Silver	ND	1.0	0.12							
Thallium	ND	1.0	0.38							
Vanadium	ND	1.0	0.06							
Zinc	ND	1.0	0.15							
LCS (B0A0091-BS1)					Prepared: 1/6/2020 Analyzed: 1/6/2020					
Antimony	21.1763	2.0	0.51	25.0000		84.7	80 - 120			
Arsenic	20.9210	1.0	0.12	25.0000		83.7	80 - 120			
Barium	22.1566	1.0	0.12	25.0000		88.6	80 - 120			
Beryllium	22.0517	1.0	0.03	25.0000		88.2	80 - 120			
Cadmium	21.0803	1.0	0.14	25.0000		84.3	80 - 120			
Chromium	24.1591	1.0	0.26	25.0000		96.6	80 - 120			
Cobalt	21.7155	1.0	0.07	25.0000		86.9	80 - 120			
Copper	21.6100	2.0	0.19	25.0000		86.4	80 - 120			
Lead	21.7064	1.0	0.18	25.0000		86.8	80 - 120			
Molybdenum	21.8665	1.0	0.12	25.0000		87.5	80 - 120			
Nickel	23.2806	1.0	0.18	25.0000		93.1	80 - 120			
Selenium	20.3748	1.0	0.40	25.0000		81.5	80 - 120			
Silver	10.4278	1.0	0.12	12.5000		83.4	80 - 120			
Thallium	20.5717	1.0	0.38	25.0000		82.3	80 - 120			
Vanadium	23.2441	1.0	0.06	25.0000		93.0	80 - 120			
Zinc	22.0614	1.0	0.15	25.0000		88.2	80 - 120			
Matrix Spike (B0A0091-MS1)			**Source: 1904739-01**		Prepared: 1/6/2020 Analyzed: 1/6/2020					
Antimony	4.96524	2.0	0.51	25.0000	ND	19.9	21 - 95			M1
Arsenic	25.0182	1.0	0.12	25.0000	4.56679	81.8	46 - 97			

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Title 22 Metals by ICP-AES EPA 6010B - Quality Control (cont'd)

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B0A0091 - EPA 3050B_S (continued)										
Matrix Spike (B0A0091-MS1) - Continued			**Source: 1904739-01**		Prepared: 1/6/2020 Analyzed: 1/6/2020					
Barium	107.918	1.0	0.12	25.0000	88.8690	76.2	24 - 123			
Beryllium	22.2729	1.0	0.03	25.0000	0.400074	87.5	47 - 99			
Cadmium	22.0952	1.0	0.14	25.0000	0.241449	87.4	43 - 95			
Chromium	63.0950	1.0	0.26	25.0000	37.2508	103	39 - 109			
Cobalt	29.3024	1.0	0.07	25.0000	7.33445	87.9	45 - 101			
Copper	38.7660	2.0	0.19	25.0000	16.5429	88.9	44 - 118			
Lead	25.3306	1.0	0.18	25.0000	5.46776	79.5	33 - 121			
Molybdenum	20.3211	1.0	0.12	25.0000	0.666052	78.6	45 - 101			
Nickel	82.9560	1.0	0.18	25.0000	59.7934	92.7	37 - 104			
Selenium	12.5202	1.0	0.40	25.0000	ND	50.1	43 - 96			
Silver	10.4288	1.0	0.12	12.5000	ND	83.4	49 - 104			
Thallium	15.8648	1.0	0.38	25.0000	ND	63.5	23 - 103			
Vanadium	49.0760	1.0	0.06	25.0000	24.7232	97.4	42 - 109			
Zinc	53.7289	1.0	0.15	25.0000	35.1451	74.3	22 - 114			
Matrix Spike Dup (B0A0091-MSD1)			**Source: 1904739-01**		Prepared: 1/6/2020 Analyzed: 1/6/2020					
Antimony	4.76382	2.0	0.51	25.0000	ND	19.1	21 - 95	4.14	20	M1
Arsenic	25.7013	1.0	0.12	25.0000	4.56679	84.5	46 - 97	2.69	20	
Barium	112.277	1.0	0.12	25.0000	88.8690	93.6	24 - 123	3.96	20	
Beryllium	22.5273	1.0	0.03	25.0000	0.400074	88.5	47 - 99	1.14	20	
Cadmium	22.3894	1.0	0.14	25.0000	0.241449	88.6	43 - 95	1.32	20	
Chromium	64.9706	1.0	0.26	25.0000	37.2508	111	39 - 109	2.93	20	M1
Cobalt	30.0454	1.0	0.07	25.0000	7.33445	90.8	45 - 101	2.50	20	
Copper	40.8330	2.0	0.19	25.0000	16.5429	97.2	44 - 118	5.19	20	
Lead	26.1953	1.0	0.18	25.0000	5.46776	82.9	33 - 121	3.36	20	
Molybdenum	20.2860	1.0	0.12	25.0000	0.666052	78.5	45 - 101	0.173	20	
Nickel	86.2242	1.0	0.18	25.0000	59.7934	106	37 - 104	3.86	20	M1
Selenium	11.7133	1.0	0.40	25.0000	ND	46.9	43 - 96	6.66	20	
Silver	11.0100	1.0	0.12	12.5000	ND	88.1	49 - 104	5.42	20	
Thallium	16.6090	1.0	0.38	25.0000	ND	66.4	23 - 103	4.58	20	
Vanadium	50.7147	1.0	0.06	25.0000	24.7232	104	42 - 109	3.28	20	
Zinc	56.3804	1.0	0.15	25.0000	35.1451	84.9	22 - 114	4.82	20	

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Title 22 Metals by ICP-AES EPA 6010B - Quality Control

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B0A0137 - EPA 3010A_W										
Blank (B0A0137-BLK1)					Prepared: 1/7/2020 Analyzed: 1/8/2020					
Antimony	ND	0.010	0.0088							
Arsenic	ND	0.010	0.0078							
Barium	ND	0.0030	0.0026							
Beryllium	ND	0.0030	0.0016							
Cadmium	ND	0.0030	0.0024							
Chromium	ND	0.0030	0.0020							
Cobalt	ND	0.0030	0.0016							
Copper	ND	0.0090	0.0038							
Lead	ND	0.0050	0.0047							
Molybdenum	ND	0.0050	0.0030							
Nickel	ND	0.0050	0.0046							
Selenium	ND	0.010	0.0093							
Silver	ND	0.0030	0.0024							
Thallium	ND	0.015	0.0085							
Vanadium	ND	0.0030	0.0022							
Zinc	ND	0.025	0.0057							
LCS (B0A0137-BS1)					Prepared: 1/7/2020 Analyzed: 1/8/2020					
Antimony	0.471552	0.010	0.0088	0.500000		94.3	80 - 120			
Arsenic	0.475137	0.010	0.0078	0.500000		95.0	80 - 120			
Barium	0.489436	0.0030	0.0026	0.500000		97.9	80 - 120			
Beryllium	0.457377	0.0030	0.0016	0.500000		91.5	80 - 120			
Cadmium	0.492922	0.0030	0.0024	0.500000		98.6	80 - 120			
Chromium	0.504562	0.0030	0.0020	0.500000		101	80 - 120			
Cobalt	0.489195	0.0030	0.0016	0.500000		97.8	80 - 120			
Copper	0.482510	0.0090	0.0038	0.500000		96.5	80 - 120			
Lead	0.484696	0.0050	0.0047	0.500000		96.9	80 - 120			
Molybdenum	0.484177	0.0050	0.0030	0.500000		96.8	80 - 120			
Nickel	0.461684	0.0050	0.0046	0.500000		92.3	80 - 120			
Selenium	0.480963	0.010	0.0093	0.500000		96.2	80 - 120			
Silver	0.248438	0.0030	0.0024	0.250000		99.4	80 - 120			
Thallium	0.492382	0.015	0.0085	0.500000		98.5	80 - 120			
Vanadium	0.491722	0.0030	0.0022	0.500000		98.3	80 - 120			
Zinc	0.451533	0.025	0.0057	0.500000		90.3	80 - 120			
Matrix Spike (B0A0137-MS1)			**Source: 1904739-05**		Prepared: 1/7/2020 Analyzed: 1/8/2020					
Antimony	0.045378	0.010	0.0088	0.500000	ND	9.08	56 - 141			M1
Arsenic	0.634037	0.010	0.0078	0.500000	0.140584	98.7	60 - 137			
Barium	4.75662	0.0030	0.0026	0.500000	4.27663	96.0	61 - 141			
Beryllium	0.552112	0.0030	0.0016	0.500000	0.019239	107	62 - 134			
Cadmium	0.559110	0.0030	0.0024	0.500000	ND	112	61 - 131			

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South San Francisco , CA 94080	Reported : 01/08/2020

Title 22 Metals by ICP-AES EPA 6010B - Quality Control (cont'd)

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B0A0137 - EPA 3010A_W (continued)										
Matrix Spike (B0A0137-MS1) - Continued			**Source: 1904739-05**		Prepared: 1/7/2020 Analyzed: 1/8/2020					
Chromium	1.47165	0.0030	0.0020	0.500000	0.902159	114	62 - 136			
Cobalt	0.968131	0.0030	0.0016	0.500000	0.419364	110	62 - 134			
Copper	1.66284	0.0090	0.0038	0.500000	1.09871	113	63 - 140			
Lead	0.670729	0.0050	0.0047	0.500000	0.175943	99.0	60 - 130			
Molybdenum	0.431127	0.0050	0.0030	0.500000	0.010077	84.2	56 - 140			
Nickel	2.40366	0.0050	0.0046	0.500000	1.91927	96.9	55 - 140			
Selenium	0.159972	0.010	0.0093	0.500000	ND	32.0	59 - 135			M1
Silver	0.144715	0.0030	0.0024	0.250000	ND	57.9	59 - 144			M1
Thallium	0.395104	0.015	0.0085	0.500000	ND	79.0	47 - 137			
Vanadium	1.36714	0.0030	0.0022	0.500000	0.823102	109	59 - 143			
Zinc	1.91373	0.025	0.0057	0.500000	1.40798	101	57 - 132			
Matrix Spike Dup (B0A0137-MSD1)			**Source: 1904739-05**		Prepared: 1/7/2020 Analyzed: 1/8/2020					
Antimony	0.057674	0.010	0.0088	0.500000	ND	11.5	56 - 141	23.9	20	M1, R
Arsenic	0.589363	0.010	0.0078	0.500000	0.140584	89.8	60 - 137	7.30	20	
Barium	4.88375	0.0030	0.0026	0.500000	4.27663	121	61 - 141	2.64	20	
Beryllium	0.539310	0.0030	0.0016	0.500000	0.019239	104	62 - 134	2.35	20	
Cadmium	0.538929	0.0030	0.0024	0.500000	ND	108	61 - 131	3.68	20	
Chromium	1.43131	0.0030	0.0020	0.500000	0.902159	106	62 - 136	2.78	20	
Cobalt	0.958915	0.0030	0.0016	0.500000	0.419364	108	62 - 134	0.957	20	
Copper	1.66372	0.0090	0.0038	0.500000	1.09871	113	63 - 140	0.0531	20	
Lead	0.653714	0.0050	0.0047	0.500000	0.175943	95.6	60 - 130	2.57	20	
Molybdenum	0.408279	0.0050	0.0030	0.500000	0.010077	79.6	56 - 140	5.44	20	
Nickel	2.40674	0.0050	0.0046	0.500000	1.91927	97.5	55 - 140	0.128	20	
Selenium	0.114447	0.010	0.0093	0.500000	ND	22.9	59 - 135	33.2	20	M1, R
Silver	0.115622	0.0030	0.0024	0.250000	ND	46.2	59 - 144	22.3	20	M1, R
Thallium	0.377288	0.015	0.0085	0.500000	ND	75.5	47 - 137	4.61	20	
Vanadium	1.35653	0.0030	0.0022	0.500000	0.823102	107	59 - 143	0.779	20	
Zinc	1.89434	0.025	0.0057	0.500000	1.40798	97.3	57 - 132	1.02	20	

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South San Francisco , CA 94080	Reported : 01/08/2020

Mercury by AA (Cold Vapor) EPA 7470A - Quality Control

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B0A0139 - EPA 245.1/7470_W										
Blank (B0A0139-BLK1)					Prepared: 1/7/2020 Analyzed: 1/8/2020					
Mercury	ND	0.20	0.05							
LCS (B0A0139-BS1)					Prepared: 1/7/2020 Analyzed: 1/8/2020					
Mercury	9.96841	0.20	0.05	10.0000		99.7	80 - 120			
Matrix Spike (B0A0139-MS1)			**Source: 1904739-05**		Prepared: 1/7/2020 Analyzed: 1/8/2020					
Mercury	5.11423	0.20	0.05	10.0000	0.637676	44.8	70 - 130			M2
Matrix Spike Dup (B0A0139-MSD1)			**Source: 1904739-05**		Prepared: 1/7/2020 Analyzed: 1/8/2020					
Mercury	5.22463	0.20	0.05	10.0000	0.637676	45.9	70 - 130	2.14	20	M2
Post Spike (B0A0139-PS1)			**Source: 1904742-05**		Prepared: 1/7/2020 Analyzed: 1/8/2020					
Mercury	3.57852			5.00000	1.13150	48.9	85 - 115			M2

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Mercury by AA (Cold Vapor) EPA 7471A - Quality Control

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B0A0092 - EPA 7471_S										
Blank (B0A0092-BLK1)					Prepared: 1/6/2020 Analyzed: 1/6/2020					
Mercury	ND	0.10	0.01							
LCS (B0A0092-BS1)					Prepared: 1/6/2020 Analyzed: 1/6/2020					
Mercury	0.428962	0.10	0.01	0.416667		103	80 - 120			
Matrix Spike (B0A0092-MS1)			**Source: 1904739-01**		Prepared: 1/6/2020 Analyzed: 1/6/2020					
Mercury	0.473667	0.10	0.01	0.416667	0.040582	104	70 - 130			
Matrix Spike Dup (B0A0092-MSD1)			**Source: 1904739-01**		Prepared: 1/6/2020 Analyzed: 1/6/2020					
Mercury	0.457586	0.10	0.01	0.416667	0.040582	100	70 - 130	3.45	20	

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Mercury by AA (Cold Vapor) EPA 7471A - Quality Control

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B0A0092 - EPA 7471_S									
Post Spike (B0A0092-PS1)			**Source: 1904739-01**		Prepared: 1/6/2020 Analyzed: 1/6/2020				
Mercury	0.002623		2.00000E-3	0.000487	107	85 - 115			

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Gasoline Range Organics by EPA 8015B (Modified) - Quality Control

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B0A0058 - GCVOA_W										
Blank (B0A0058-BLK1)					Prepared: 1/3/2020 Analyzed: 1/3/2020					
Gasoline Range Organics	ND	0.20	0.05							
Surrogate: 4-Bromofluorobenzene	*0.08778*			*0.100000*		*87.8*	*70 - 130*			
LCS (B0A0058-BS1)					Prepared: 1/3/2020 Analyzed: 1/3/2020					
Gasoline Range Organics	0.891000	0.20	0.05	1.00000		89.1	70 - 130			
Surrogate: 4-Bromofluorobenzene	*0.09800*			*0.100000*		*98.0*	*70 - 130*			
LCS Dup (B0A0058-BSD1)					Prepared: 1/3/2020 Analyzed: 1/3/2020					
Gasoline Range Organics	0.909000	0.20	0.05	1.00000		90.9	70 - 130	2.00	20	
Surrogate: 4-Bromofluorobenzene	*0.09849*			*0.100000*		*98.5*	*70 - 130*			

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Diesel Range Organics by EPA 8015B (SGT) - Quality Control

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B0A0014 - GCSEMI_DRO_W										
Blank (B0A0014-BLK1)						Prepared: 1/2/2020 Analyzed: 1/2/2020				
DRO	ND	0.05	0.05							
ORO	ND	0.05	0.05							
Surrogate: p-Terphenyl	*0.05749*			*8.00000E-2*		*71.9*	*32 - 169*			
LCS (B0A0014-BS1)						Prepared: 1/2/2020 Analyzed: 1/2/2020				
DRO	0.543340	0.05	0.05	1.00000		54.3	45 - 161			
Surrogate: p-Terphenyl	*0.05857*			*8.00000E-2*		*73.2*	*32 - 169*			
LCS Dup (B0A0014-BSD1)						Prepared: 1/2/2020 Analyzed: 1/2/2020				
DRO	0.494520	0.05	0.05	1.00000		49.5	45 - 161	9.41	20	
Surrogate: p-Terphenyl	*0.04998*			*8.00000E-2*		*62.5*	*32 - 169*			

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Diesel Range Organics by EPA 8015B (SGT) - Quality Control

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B0A0056 - GCSEMI_DRO_LL_S										
Blank (B0A0056-BLK1)					Prepared: 1/2/2020 Analyzed: 1/2/2020					
DRO	ND	1.0	1.0							
ORO	ND	1.0	1.0							
Surrogate: p-Terphenyl	*1.698*			*2.66667*		*63.7*	*34 - 158*			
LCS (B0A0056-BS1)					Prepared: 1/2/2020 Analyzed: 1/2/2020					
DRO	18.7387	1.0	1.0	33.3333		56.2	47 - 152			
Surrogate: p-Terphenyl	*1.461*			*2.66667*		*54.8*	*34 - 158*			
Matrix Spike (B0A0056-MS1)			**Source: 1904739-01**		Prepared: 1/2/2020 Analyzed: 1/2/2020					
DRO	21.5530	1.0	1.0	33.3333	ND	64.7	34 - 130			
Surrogate: p-Terphenyl	*1.582*			*2.66667*		*59.3*	*34 - 158*			
Matrix Spike Dup (B0A0056-MSD1)			**Source: 1904739-01**		Prepared: 1/2/2020 Analyzed: 1/2/2020					
DRO	18.1380	1.0	1.0	33.3333	ND	54.4	34 - 130	17.2	20	
Surrogate: p-Terphenyl	*1.642*			*2.66667*		*61.6*	*34 - 158*			

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South San Francisco , CA 94080	Reported : 01/08/2020

Organochlorine Pesticides by EPA 8081A - Quality Control

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B0A0069 - GCSEMI_PCB/PEST_S										
Blank (B0A0069-BLK1)							Prepared: 1/3/2020 Analyzed: 1/3/2020			
4,4′-DDD	ND	2.0	0.14							
4,4′-DDD [2C]	ND	2.0	0.14							
4,4′-DDE	ND	2.0	0.20							
4,4′-DDE [2C]	ND	2.0	0.20							
4,4′-DDT	ND	2.0	0.04							
4,4′-DDT [2C]	ND	2.0	0.04							
Aldrin	ND	1.0	0.05							
Aldrin [2C]	ND	1.0	0.05							
alpha-BHC	ND	1.0	0.12							
alpha-BHC [2C]	ND	1.0	0.12							
alpha-Chlordane	ND	1.0	0.06							
alpha-Chlordane [2C]	ND	1.0	0.06							
beta-BHC	ND	1.0	0.08							
beta-BHC [2C]	ND	1.0	0.08							
Chlordane	ND	8.5	0.78							
Chlordane [2C]	ND	8.5	0.78							
delta-BHC	ND	1.0	0.07							
delta-BHC [2C]	ND	1.0	0.07							
Dieldrin	ND	2.0	0.04							
Dieldrin [2C]	ND	2.0	0.04							
Endosulfan I	ND	1.0	0.05							
Endosulfan I [2C]	ND	1.0	0.05							
Endosulfan II	ND	2.0	0.06							
Endosulfan II [2C]	ND	2.0	0.06							
Endosulfan sulfate	ND	2.0	0.15							
Endosulfan Sulfate [2C]	ND	2.0	0.15							
Endrin	ND	2.0	0.08							
Endrin [2C]	ND	2.0	0.08							
Endrin aldehyde	ND	2.0	0.09							
Endrin aldehyde [2C]	ND	2.0	0.09							
Endrin ketone	ND	2.0	0.09							
Endrin ketone [2C]	ND	2.0	0.09							
gamma-BHC	ND	1.0	0.12							
gamma-BHC [2C]	ND	1.0	0.12							
gamma-Chlordane	ND	1.0	0.28							
gamma-Chlordane [2C]	ND	1.0	0.28							
Heptachlor	ND	1.0	0.06							
Heptachlor [2C]	ND	1.0	0.06							
Heptachlor epoxide	ND	1.0	0.06							
Heptachlor epoxide [2C]	ND	1.0	0.06							

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Organochlorine Pesticides by EPA 8081A - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B0A0069 - GCSEMI_PCB/PEST_S (continued)										
Blank (B0A0069-BLK1) - Continued						Prepared: 1/3/2020 Analyzed: 1/3/2020				
Methoxychlor	ND	5.0	0.16							
Methoxychlor [2C]	ND	5.0	0.16							
Toxaphene	ND	50	4.7							
Toxaphene [2C]	ND	50	4.7							
Surrogate: Decachlorobiphenyl	*12.39*			*16.6667*		*74.4*	*32 - 91*			
Surrogate: Decachlorobiphenyl [	*11.48*			*16.6667*		*68.9*	*32 - 91*			
Surrogate: Tetrachloro-m-xylene	*12.74*			*16.6667*		*76.4*	*38 - 93*			
Surrogate: Tetrachloro-m-xylene	*12.83*			*16.6667*		*77.0*	*38 - 93*			
LCS (B0A0069-BS1)						Prepared: 1/3/2020 Analyzed: 1/3/2020				
4,4′-DDD	13.8432	2.0	0.14	16.6667		83.1	66 - 112			
4,4′-DDD [2C]	13.5260	2.0	0.14	16.6667		81.2	66 - 112			
4,4′-DDE	14.3317	2.0	0.20	16.6667		86.0	62 - 112			
4,4′-DDE [2C]	13.9142	2.0	0.20	16.6667		83.5	62 - 112			
4,4′-DDT	13.6745	2.0	0.04	16.6667		82.0	48 - 90			
4,4′-DDT [2C]	12.9632	2.0	0.04	16.6667		77.8	48 - 90			
Aldrin	13.6100	1.0	0.05	16.6667		81.7	58 - 104			
Aldrin [2C]	14.3535	1.0	0.05	16.6667		86.1	58 - 104			
alpha-BHC	13.0595	1.0	0.12	16.6667		78.4	57 - 105			
alpha-BHC [2C]	13.7920	1.0	0.12	16.6667		82.8	57 - 105			
alpha-Chlordane	13.8632	1.0	0.06	16.6667		83.2	62 - 108			
alpha-Chlordane [2C]	14.3493	1.0	0.06	16.6667		86.1	62 - 108			
beta-BHC	14.0173	1.0	0.08	16.6667		84.1	59 - 106			
beta-BHC [2C]	14.1485	1.0	0.08	16.6667		84.9	59 - 106			
delta-BHC	12.2812	1.0	0.07	16.6667		73.7	63 - 115			
delta-BHC [2C]	12.6433	1.0	0.07	16.6667		75.9	63 - 115			
Dieldrin	13.5922	2.0	0.04	16.6667		81.6	59 - 102			
Dieldrin [2C]	13.4090	2.0	0.04	16.6667		80.5	59 - 102			
Endosulfan I	12.7663	1.0	0.05	16.6667		76.6	61 - 99			
Endosulfan I [2C]	13.1452	1.0	0.05	16.6667		78.9	61 - 99			
Endosulfan II	14.0960	2.0	0.06	16.6667		84.6	65 - 105			
Endosulfan II [2C]	13.8040	2.0	0.06	16.6667		82.8	65 - 105			
Endosulfan sulfate	13.2815	2.0	0.15	16.6667		79.7	59 - 107			
Endosulfan Sulfate [2C]	12.4523	2.0	0.15	16.6667		74.7	59 - 107			
Endrin	14.5808	2.0	0.08	16.6667		87.5	65 - 113			
Endrin [2C]	14.5280	2.0	0.08	16.6667		87.2	65 - 113			
Endrin aldehyde	14.2155	2.0	0.09	16.6667		85.3	61 - 109			
Endrin aldehyde [2C]	13.7368	2.0	0.09	16.6667		82.4	61 - 109			
Endrin ketone	13.0922	2.0	0.09	16.6667		78.6	56 - 97			
Endrin ketone [2C]	12.8188	2.0	0.09	16.6667		76.9	56 - 97			

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Organochlorine Pesticides by EPA 8081A - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B0A0069 - GCSEMI_PCB/PEST_S (continued)										
LCS (B0A0069-BS1) - Continued						Prepared: 1/3/2020 Analyzed: 1/3/2020				
gamma-BHC	13.5262	1.0	0.12	16.6667		81.2	57 - 101			
gamma-BHC [2C]	14.0795	1.0	0.12	16.6667		84.5	57 - 101			
gamma-Chlordane	13.6003	1.0	0.28	16.6667		81.6	56 - 125			
gamma-Chlordane [2C]	14.2027	1.0	0.28	16.6667		85.2	56 - 125			
Heptachlor	13.7452	1.0	0.06	16.6667		82.5	61 - 105			
Heptachlor [2C]	13.7812	1.0	0.06	16.6667		82.7	61 - 105			
Heptachlor epoxide	12.9083	1.0	0.06	16.6667		77.4	59 - 97			
Heptachlor epoxide [2C]	13.3090	1.0	0.06	16.6667		79.9	59 - 97			
Methoxychlor	14.4952	5.0	0.16	16.6667		87.0	68 - 118			
Methoxychlor [2C]	12.8012	5.0	0.16	16.6667		76.8	68 - 118			
Surrogate: Decachlorobiphenyl	*13.93*			*16.6667*		*83.6*	*32 - 91*			
Surrogate: Decachlorobiphenyl [	*12.54*			*16.6667*		*75.3*	*32 - 91*			
Surrogate: Tetrachloro-m-xylene	*14.72*			*16.6667*		*88.3*	*38 - 93*			
Surrogate: Tetrachloro-m-xylene	*13.69*			*16.6667*		*82.2*	*38 - 93*			
Matrix Spike (B0A0069-MS1)			**Source: 1904739-01**			Prepared: 1/3/2020 Analyzed: 1/3/2020				
4,4′-DDD	11.7258	2.0	0.14	16.6667	ND	70.4	33 - 116			
4,4′-DDD [2C]	11.5550	2.0	0.14	16.6667	ND	69.3	33 - 116			
4,4′-DDE	10.8033	2.0	0.20	16.6667	ND	64.8	29 - 128			
4,4′-DDE [2C]	11.6393	2.0	0.20	16.6667	ND	69.8	29 - 128			
4,4′-DDT	9.92200	2.0	0.04	16.6667	ND	59.5	27 - 109			
4,4′-DDT [2C]	11.3487	2.0	0.04	16.6667	ND	68.1	27 - 109			
Aldrin	11.0088	1.0	0.05	16.6667	ND	66.1	34 - 110			
Aldrin [2C]	11.9227	1.0	0.05	16.6667	ND	71.5	34 - 110			
alpha-BHC	14.1835	1.0	0.12	16.6667	ND	85.1	39 - 107			
alpha-BHC [2C]	14.8972	1.0	0.12	16.6667	ND	89.4	39 - 107			
alpha-Chlordane	11.8525	1.0	0.06	16.6667	ND	71.1	37 - 111			
alpha-Chlordane [2C]	12.3178	1.0	0.06	16.6667	ND	73.9	37 - 111			
beta-BHC	14.0198	1.0	0.08	16.6667	ND	84.1	33 - 111			
beta-BHC [2C]	15.6408	1.0	0.08	16.6667	ND	93.8	33 - 111			
delta-BHC	12.3495	1.0	0.07	16.6667	ND	74.1	25 - 122			
delta-BHC [2C]	13.3648	1.0	0.07	16.6667	ND	80.2	25 - 122			
Dieldrin	12.1722	2.0	0.04	16.6667	ND	73.0	28 - 114			
Dieldrin [2C]	12.2455	2.0	0.04	16.6667	ND	73.5	28 - 114			
Endosulfan I	11.5632	1.0	0.05	16.6667	ND	69.4	35 - 107			
Endosulfan I [2C]	12.0743	1.0	0.05	16.6667	ND	72.4	35 - 107			
Endosulfan II	13.2777	2.0	0.06	16.6667	ND	79.7	13 - 122			
Endosulfan II [2C]	13.1285	2.0	0.06	16.6667	ND	78.8	13 - 122			
Endosulfan sulfate	12.5922	2.0	0.15	16.6667	ND	75.6	13 - 120			
Endosulfan Sulfate [2C]	12.2010	2.0	0.15	16.6667	ND	73.2	13 - 120			

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South San Francisco , CA 94080	Reported : 01/08/2020

Organochlorine Pesticides by EPA 8081A - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B0A0069 - GCSEMI_PCB/PEST_S (continued)										
Matrix Spike (B0A0069-MS1) - Continued			**Source: 1904739-01**		Prepared: 1/3/2020 Analyzed: 1/3/2020					
Endrin	13.3208	2.0	0.08	16.6667	ND	79.9	31 - 121			
Endrin [2C]	13.6295	2.0	0.08	16.6667	ND	81.8	31 - 121			
Endrin aldehyde	13.7708	2.0	0.09	16.6667	ND	82.6	18 - 129			
Endrin aldehyde [2C]	13.5425	2.0	0.09	16.6667	ND	81.3	18 - 129			
Endrin ketone	12.3213	2.0	0.09	16.6667	ND	73.9	14 - 113			
Endrin ketone [2C]	12.8537	2.0	0.09	16.6667	ND	77.1	14 - 113			
gamma-BHC	13.5547	1.0	0.12	16.6667	ND	81.3	34 - 104			
gamma-BHC [2C]	15.0390	1.0	0.12	16.6667	ND	90.2	34 - 104			
gamma-Chlordane	11.5543	1.0	0.28	16.6667	ND	69.3	35 - 121			
gamma-Chlordane [2C]	12.3915	1.0	0.28	16.6667	ND	74.3	35 - 121			
Heptachlor	11.8455	1.0	0.06	16.6667	ND	71.1	35 - 110			
Heptachlor [2C]	12.0775	1.0	0.06	16.6667	ND	72.5	35 - 110			
Heptachlor epoxide	11.4935	1.0	0.06	16.6667	ND	69.0	31 - 106			
Heptachlor epoxide [2C]	12.3967	1.0	0.06	16.6667	ND	74.4	31 - 106			
Methoxychlor	13.0007	5.0	0.16	16.6667	ND	78.0	21 - 128			
Methoxychlor [2C]	11.2242	5.0	0.16	16.6667	ND	67.3	21 - 128			
Surrogate: Decachlorobiphenyl	*10.36*			*16.6667*		*62.1*	*32 - 91*			
Surrogate: Decachlorobiphenyl [	*8.718*			*16.6667*		*52.3*	*32 - 91*			
Surrogate: Tetrachloro-m-xylene	*8.792*			*16.6667*		*52.8*	*38 - 93*			
Surrogate: Tetrachloro-m-xylene	*9.152*			*16.6667*		*54.9*	*38 - 93*			
Matrix Spike Dup (B0A0069-MSD1)			**Source: 1904739-01**		Prepared: 1/3/2020 Analyzed: 1/3/2020					
4,4′-DDD	11.5118	2.0	0.14	16.6667	ND	69.1	33 - 116	1.84	20	
4,4′-DDD [2C]	10.7543	2.0	0.14	16.6667	ND	64.5	33 - 116	7.18	20	
4,4′-DDE	10.5635	2.0	0.20	16.6667	ND	63.4	29 - 128	2.24	20	
4,4′-DDE [2C]	10.7920	2.0	0.20	16.6667	ND	64.8	29 - 128	7.55	20	
4,4′-DDT	9.52017	2.0	0.04	16.6667	ND	57.1	27 - 109	4.13	20	
4,4′-DDT [2C]	10.6545	2.0	0.04	16.6667	ND	63.9	27 - 109	6.31	20	
Aldrin	10.7422	1.0	0.05	16.6667	ND	64.5	34 - 110	2.45	20	
Aldrin [2C]	11.0277	1.0	0.05	16.6667	ND	66.2	34 - 110	7.80	20	
alpha-BHC	13.1487	1.0	0.12	16.6667	ND	78.9	39 - 107	7.57	20	
alpha-BHC [2C]	13.8932	1.0	0.12	16.6667	ND	83.4	39 - 107	6.97	20	
alpha-Chlordane	11.6337	1.0	0.06	16.6667	ND	69.8	37 - 111	1.86	20	
alpha-Chlordane [2C]	11.4257	1.0	0.06	16.6667	ND	68.6	37 - 111	7.51	20	
beta-BHC	13.2548	1.0	0.08	16.6667	ND	79.5	33 - 111	5.61	20	
beta-BHC [2C]	13.9315	1.0	0.08	16.6667	ND	83.6	33 - 111	11.6	20	
delta-BHC	11.7958	1.0	0.07	16.6667	ND	70.8	25 - 122	4.59	20	
delta-BHC [2C]	12.4862	1.0	0.07	16.6667	ND	74.9	25 - 122	6.80	20	
Dieldrin	11.9310	2.0	0.04	16.6667	ND	71.6	28 - 114	2.00	20	
Dieldrin [2C]	11.3988	2.0	0.04	16.6667	ND	68.4	28 - 114	7.16	20	

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Organochlorine Pesticides by EPA 8081A - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B0A0069 - GCSEMI_PCB/PEST_S (continued)										
Matrix Spike Dup (B0A0069-MSD1) - Continued			**Source: 1904739-01**		Prepared: 1/3/2020 Analyzed: 1/3/2020					
Endosulfan I	11.3317	1.0	0.05	16.6667	ND	68.0	35 - 107	2.02	20	
Endosulfan I [2C]	11.2185	1.0	0.05	16.6667	ND	67.3	35 - 107	7.35	20	
Endosulfan II	13.0297	2.0	0.06	16.6667	ND	78.2	13 - 122	1.89	20	
Endosulfan II [2C]	12.1815	2.0	0.06	16.6667	ND	73.1	13 - 122	7.48	20	
Endosulfan sulfate	12.3208	2.0	0.15	16.6667	ND	73.9	13 - 120	2.18	20	
Endosulfan Sulfate [2C]	11.2958	2.0	0.15	16.6667	ND	67.8	13 - 120	7.70	20	
Endrin	13.1015	2.0	0.08	16.6667	ND	78.6	31 - 121	1.66	20	
Endrin [2C]	12.6392	2.0	0.08	16.6667	ND	75.8	31 - 121	7.54	20	
Endrin aldehyde	13.4945	2.0	0.09	16.6667	ND	81.0	18 - 129	2.03	20	
Endrin aldehyde [2C]	12.5758	2.0	0.09	16.6667	ND	75.5	18 - 129	7.40	20	
Endrin ketone	12.1572	2.0	0.09	16.6667	ND	72.9	14 - 113	1.34	20	
Endrin ketone [2C]	12.0363	2.0	0.09	16.6667	ND	72.2	14 - 113	6.57	20	
gamma-BHC	12.9872	1.0	0.12	16.6667	ND	77.9	34 - 104	4.28	20	
gamma-BHC [2C]	13.7440	1.0	0.12	16.6667	ND	82.5	34 - 104	9.00	20	
gamma-Chlordane	11.3360	1.0	0.28	16.6667	ND	68.0	35 - 121	1.91	20	
gamma-Chlordane [2C]	11.5225	1.0	0.28	16.6667	ND	69.1	35 - 121	7.27	20	
Heptachlor	11.3495	1.0	0.06	16.6667	ND	68.1	35 - 110	4.28	20	
Heptachlor [2C]	11.3223	1.0	0.06	16.6667	ND	67.9	35 - 110	6.45	20	
Heptachlor epoxide	11.2195	1.0	0.06	16.6667	ND	67.3	31 - 106	2.41	20	
Heptachlor epoxide [2C]	11.5662	1.0	0.06	16.6667	ND	69.4	31 - 106	6.93	20	
Methoxychlor	12.9447	5.0	0.16	16.6667	ND	77.7	21 - 128	0.432	20	
Methoxychlor [2C]	10.6818	5.0	0.16	16.6667	ND	64.1	21 - 128	4.95	20	
Surrogate: Decachlorobiphenyl	*10.13*			*16.6667*		*60.8*	*32 - 91*			
Surrogate: Decachlorobiphenyl [	*8.075*			*16.6667*		*48.5*	*32 - 91*			
Surrogate: Tetrachloro-m-xylene	*8.759*			*16.6667*		*52.6*	*38 - 93*			
Surrogate: Tetrachloro-m-xylene	*8.308*			*16.6667*		*49.8*	*38 - 93*			

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South San Francisco , CA 94080	Reported : 01/08/2020

Polychlorinated Biphenyls by EPA 8082 - Quality Control

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B0A0069 - GCSEMI_PCB/PEST_S										
Blank (B0A0069-BLK2)					Prepared: 1/3/2020 Analyzed: 1/3/2020					
Aroclor 1016	ND	16	0.82							
Aroclor 1221	ND	16	0.82							
Aroclor 1232	ND	16	0.82							
Aroclor 1242	ND	16	0.82							
Aroclor 1248	ND	16	0.82							
Aroclor 1254	ND	16	0.82							
Aroclor 1260	ND	16	0.82							
Aroclor 1262	ND	16	0.82							
Aroclor 1268	ND	16	0.82							
Surrogate: Decachlorobiphenyl	*11.97*			*16.6667*		*71.8*	*30 - 132*			
Surrogate: Tetrachloro-m-xylene	*12.90*			*16.6667*		*77.4*	*44 - 113*			
LCS (B0A0069-BS2)					Prepared: 1/3/2020 Analyzed: 1/3/2020					
Aroclor 1016	136.234	16	0.82	166.667		81.7	52 - 104			
Aroclor 1260	160.959	16	0.82	166.667		96.6	45 - 121			
Surrogate: Decachlorobiphenyl	*13.30*			*16.6667*		*79.8*	*30 - 132*			
Surrogate: Tetrachloro-m-xylene	*14.20*			*16.6667*		*85.2*	*44 - 113*			
Matrix Spike (B0A0069-MS2)			**Source: 1904742-01**		Prepared: 1/3/2020 Analyzed: 1/3/2020					
Aroclor 1016	129.605	16	0.82	166.667	ND	77.8	33 - 112			
Aroclor 1260	147.521	16	0.82	166.667	ND	88.5	30 - 120			
Surrogate: Decachlorobiphenyl	*11.88*			*16.6667*		*71.3*	*30 - 132*			
Surrogate: Tetrachloro-m-xylene	*9.170*			*16.6667*		*55.0*	*44 - 113*			
Matrix Spike Dup (B0A0069-MSD2)			**Source: 1904742-01**		Prepared: 1/3/2020 Analyzed: 1/3/2020					
Aroclor 1016	129.550	16	0.82	166.667	ND	77.7	33 - 112	0.0424	20	
Aroclor 1260	147.657	16	0.82	166.667	ND	88.6	30 - 120	0.0919	20	
Surrogate: Decachlorobiphenyl	*11.98*			*16.6667*		*71.9*	*30 - 132*			
Surrogate: Tetrachloro-m-xylene	*9.193*			*16.6667*		*55.2*	*44 - 113*			

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South San Francisco , CA 94080	Reported : 01/08/2020

Volatile Organic Compounds by EPA 8260B - Quality Control

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B0A0003 - MSVOA_LL_W										
Blank (B0A0003-BLK1)							Prepared: 1/2/2020 Analyzed: 1/2/2020			
1,1,1,2-Tetrachloroethane	ND	0.50	0.11							
1,1,1-Trichloroethane	ND	0.50	0.21							
1,1,2,2-Tetrachloroethane	ND	0.50	0.36							
1,1,2-Trichloroethane	ND	0.50	0.25							
1,1-Dichloroethane	ND	0.50	0.09							
1,1-Dichloroethene	ND	0.50	0.13							
1,1-Dichloropropene	ND	0.50	0.13							
1,2,3-Trichloropropane	ND	0.50	0.39							
1,2,3-Trichlorobenzene	ND	0.50	0.18							
1,2,4-Trichlorobenzene	ND	0.50	0.16							
1,2,4-Trimethylbenzene	ND	0.50	0.14							
1,2-Dibromo-3-chloropropane	ND	0.50	0.41							
1,2-Dibromoethane	ND	0.50	0.24							
1,2-Dichlorobenzene	ND	0.50	0.20							
1,2-Dichloroethane	ND	0.50	0.20							
1,2-Dichloropropane	ND	0.50	0.15							
1,3,5-Trimethylbenzene	ND	0.50	0.13							
1,3-Dichlorobenzene	ND	0.50	0.16							
1,3-Dichloropropane	ND	0.50	0.21							
1,4-Dichlorobenzene	ND	0.50	0.17							
2,2-Dichloropropane	ND	0.50	0.38							
2-Chlorotoluene	ND	0.50	0.11							
4-Chlorotoluene	ND	0.50	0.12							
4-Isopropyltoluene	ND	0.50	0.11							
Benzene	ND	0.50	0.13							
Bromobenzene	ND	0.50	0.21							
Bromochloromethane	ND	0.50	0.16							
Bromodichloromethane	ND	0.50	0.14							
Bromoform	ND	0.50	0.20							
Bromomethane	ND	0.50	0.40							
Carbon disulfide	ND	1.0	0.07							
Carbon tetrachloride	ND	0.50	0.09							
Chlorobenzene	ND	0.50	0.13							
Chloroethane	ND	0.50	0.15							
Chloroform	ND	0.50	0.11							
Chloromethane	ND	0.50	0.12							
cis-1,2-Dichloroethene	ND	0.50	0.14							
cis-1,3-Dichloropropene	ND	0.50	0.13							
Di-isopropyl ether	ND	0.50	0.15							
Dibromochloromethane	ND	0.50	0.16							

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Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B0A0003 - MSVOA_LL_W (continued)										
Blank (B0A0003-BLK1) - Continued					Prepared: 1/2/2020 Analyzed: 1/2/2020					
Dibromomethane	ND	0.50	0.19							
Dichlorodifluoromethane	ND	0.50	0.18							
Ethyl Acetate	ND	10	8.7							
Ethyl Ether	ND	10	2.0							
Ethyl tert-butyl ether	ND	0.50	0.21							
Ethylbenzene	ND	0.50	0.13							
Freon-113	ND	0.50	0.13							
Hexachlorobutadiene	ND	0.50	0.15							
Isopropylbenzene	ND	0.50	0.10							
m,p-Xylene	ND	1.0	0.19							
Methylene chloride	ND	1.0	0.71							
MTBE	ND	0.50	0.26							
n-Butylbenzene	ND	0.50	0.11							
n-Propylbenzene	ND	0.50	0.10							
Naphthalene	ND	0.50	0.41							
o-Xylene	ND	0.50	0.13							
sec-Butylbenzene	ND	0.50	0.09							
Styrene	ND	0.50	0.13							
tert-Amyl methyl ether	ND	0.50	0.41							
tert-Butanol	ND	10	2.4							
tert-Butylbenzene	ND	0.50	0.09							
Tetrachloroethene	ND	0.50	0.10							
Toluene	ND	0.50	0.12							
trans-1,2-Dichloroethene	ND	0.50	0.09							
trans-1,3-Dichloropropene	ND	0.50	0.23							
Trichloroethene	ND	0.50	0.10							
Trichlorofluoromethane	ND	0.50	0.23							
Vinyl acetate	ND	10	1.7							
Vinyl chloride	ND	0.50	0.13							
Surrogate: 1,2-Dichloroethane-d4	*25.23*			*25.0000*		*101*	*59 - 158*			
Surrogate: 4-Bromofluorobenzene	*24.64*			*25.0000*		*98.6*	*71 - 127*			
Surrogate: Dibromofluoromethan	*24.51*			*25.0000*		*98.0*	*66 - 147*			
Surrogate: Toluene-d8	*24.66*			*25.0000*		*98.6*	*77 - 138*			
LCS (B0A0003-BS1)					Prepared: 1/2/2020 Analyzed: 1/2/2020					
1,1,1,2-Tetrachloroethane	19.2400	0.50	0.11	20.0000		96.2	71 - 133			
1,1,1-Trichloroethane	18.1200	0.50	0.21	20.0000		90.6	62 - 124			
1,1,2,2-Tetrachloroethane	19.9200	0.50	0.36	20.0000		99.6	50 - 131			
1,1,2-Trichloroethane	18.5100	0.50	0.25	20.0000		92.6	77 - 121			
1,1-Dichloroethane	18.6400	0.50	0.09	20.0000		93.2	52 - 130			

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Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B0A0003 - MSVOA_LL_W (continued)										
LCS (B0A0003-BS1) - Continued					Prepared: 1/2/2020 Analyzed: 1/2/2020					
1,1-Dichloroethene	17.8500	0.50	0.13	20.0000		89.2	61 - 136			
1,1-Dichloropropene	19.0200	0.50	0.13	20.0000		95.1	80 - 128			
1,2,3-Trichloropropane	19.1600	0.50	0.39	20.0000		95.8	59 - 126			
1,2,3-Trichlorobenzene	19.8300	0.50	0.18	20.0000		99.2	69 - 138			
1,2,4-Trichlorobenzene	20.1600	0.50	0.16	20.0000		101	78 - 125			
1,2,4-Trimethylbenzene	19.3600	0.50	0.14	20.0000		96.8	70 - 126			
1,2-Dibromo-3-chloropropane	19.5300	0.50	0.41	20.0000		97.6	58 - 127			
1,2-Dibromoethane	20.2300	0.50	0.24	20.0000		101	76 - 120			
1,2-Dichlorobenzene	18.9200	0.50	0.20	20.0000		94.6	82 - 117			
1,2-Dichloroethane	19.1100	0.50	0.20	20.0000		95.6	66 - 126			
1,2-Dichloropropane	18.6900	0.50	0.15	20.0000		93.4	70 - 117			
1,3,5-Trimethylbenzene	19.4400	0.50	0.13	20.0000		97.2	71 - 125			
1,3-Dichlorobenzene	19.2700	0.50	0.16	20.0000		96.4	81 - 116			
1,3-Dichloropropane	19.1200	0.50	0.21	20.0000		95.6	69 - 124			
1,4-Dichlorobenzene	18.8700	0.50	0.17	20.0000		94.4	80 - 114			
2,2-Dichloropropane	19.2200	0.50	0.38	20.0000		96.1	58 - 132			
2-Chlorotoluene	18.8800	0.50	0.11	20.0000		94.4	71 - 119			
4-Chlorotoluene	19.4600	0.50	0.12	20.0000		97.3	72 - 122			
4-Isopropyltoluene	19.7000	0.50	0.11	20.0000		98.5	69 - 126			
Benzene	37.6300	0.50	0.13	40.0000		94.1	80 - 116			
Bromobenzene	18.8800	0.50	0.21	20.0000		94.4	77 - 118			
Bromochloromethane	19.5200	0.50	0.16	20.0000		97.6	68 - 121			
Bromodichloromethane	19.5000	0.50	0.14	20.0000		97.5	73 - 118			
Bromoform	17.8500	0.50	0.20	20.0000		89.2	65 - 133			
Bromomethane	17.8700	0.50	0.40	20.0000		89.4	7 - 205			
Carbon disulfide	15.6800	1.0	0.07	20.0000		78.4	55 - 131			
Carbon tetrachloride	18.8600	0.50	0.09	20.0000		94.3	63 - 133			
Chlorobenzene	18.7100	0.50	0.13	20.0000		93.6	86 - 113			
Chloroethane	39.8600	0.50	0.15	20.0000		199	66 - 141			L5
Chloroform	18.5600	0.50	0.11	20.0000		92.8	63 - 127			
Chloromethane	19.2600	0.50	0.12	20.0000		96.3	0 - 207			
cis-1,2-Dichloroethene	18.5700	0.50	0.14	20.0000		92.8	64 - 126			
cis-1,3-Dichloropropene	19.7100	0.50	0.13	20.0000		98.6	70 - 141			
Di-isopropyl ether	18.3500	0.50	0.15	20.0000		91.8	56 - 131			
Dibromochloromethane	18.6900	0.50	0.16	20.0000		93.4	67 - 135			
Dibromomethane	19.1800	0.50	0.19	20.0000		95.9	74 - 118			
Dichlorodifluoromethane	19.5500	0.50	0.18	20.0000		97.8	14 - 181			
Ethyl Acetate	162.470	10	8.7	200.000		81.2	49 - 128			
Ethyl Ether	189.720	10	2.0	200.000		94.9	53 - 143			
Ethyl tert-butyl ether	17.9000	0.50	0.21	20.0000		89.5	54 - 132			

Certificate of Analysis

Burns and McDonnell	Project Number : SCVTA, 87119-1216 Auto Zone
400 Oyster Point Blvd, Suite 533	Report To : Christopher D'Sa
South San Francisco , CA 94080	Reported : 01/08/2020

Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B0A0003 - MSVOA_LL_W (continued)										
LCS (B0A0003-BS1) - Continued					Prepared: 1/2/2020 Analyzed: 1/2/2020					
Ethylbenzene	37.7000	0.50	0.13	40.0000		94.2	77 - 118			
Freon-113	18.9800	0.50	0.13	20.0000		94.9	68 - 145			
Hexachlorobutadiene	19.3600	0.50	0.15	20.0000		96.8	66 - 125			
Isopropylbenzene	19.0100	0.50	0.10	20.0000		95.0	68 - 137			
m,p-Xylene	37.0600	1.0	0.19	40.0000		92.6	78 - 126			
Methylene chloride	19.1600	1.0	0.71	20.0000		95.8	51 - 149			
MTBE	17.8400	0.50	0.26	20.0000		89.2	63 - 128			
n-Butylbenzene	19.5900	0.50	0.11	20.0000		98.0	63 - 127			
n-Propylbenzene	19.1000	0.50	0.10	20.0000		95.5	69 - 124			
Naphthalene	20.1200	0.50	0.41	20.0000		101	60 - 126			
o-Xylene	37.9900	0.50	0.13	40.0000		95.0	79 - 126			
sec-Butylbenzene	19.1000	0.50	0.09	20.0000		95.5	69 - 124			
Styrene	19.4300	0.50	0.13	20.0000		97.2	80 - 127			
tert-Amyl methyl ether	18.7300	0.50	0.41	20.0000		93.6	49 - 130			
tert-Butanol	46.6500	10	2.4	100.000		46.6	29 - 163			
tert-Butylbenzene	18.9200	0.50	0.09	20.0000		94.6	71 - 124			
Tetrachloroethene	18.3600	0.50	0.10	20.0000		91.8	73 - 129			
Toluene	38.4000	0.50	0.12	40.0000		96.0	78 - 121			
trans-1,2-Dichloroethene	17.9300	0.50	0.09	20.0000		89.6	58 - 141			
trans-1,3-Dichloropropene	19.8500	0.50	0.23	20.0000		99.2	68 - 128			
Trichloroethene	18.4500	0.50	0.10	20.0000		92.2	73 - 126			
Trichlorofluoromethane	19.3200	0.50	0.23	20.0000		96.6	62 - 146			
Vinyl acetate	204.730	10	1.7	200.000		102	53 - 153			
Vinyl chloride	17.6400	0.50	0.13	20.0000		88.2	61 - 137			
Surrogate: 1,2-Dichloroethane-d4	*23.72*			*25.0000*		*94.9*	*59 - 158*			
Surrogate: 4-Bromofluorobenzene	*24.23*			*25.0000*		*96.9*	*71 - 127*			
Surrogate: Dibromofluoromethan	*25.22*			*25.0000*		*101*	*66 - 147*			
Surrogate: Toluene-d8	*25.17*			*25.0000*		*101*	*77 - 138*			
LCS Dup (B0A0003-BSD1)					Prepared: 1/2/2020 Analyzed: 1/2/2020					
1,1,1,2-Tetrachloroethane	19.1300	0.50	0.11	20.0000		95.6	71 - 133	0.573	20	
1,1,1-Trichloroethane	18.5500	0.50	0.21	20.0000		92.8	62 - 124	2.35	20	
1,1,2,2-Tetrachloroethane	19.7500	0.50	0.36	20.0000		98.8	50 - 131	0.857	20	
1,1,2-Trichloroethane	19.1400	0.50	0.25	20.0000		95.7	77 - 121	3.35	20	
1,1-Dichloroethane	18.5700	0.50	0.09	20.0000		92.8	52 - 130	0.376	20	
1,1-Dichloroethene	18.4500	0.50	0.13	20.0000		92.2	61 - 136	3.31	20	
1,1-Dichloropropene	19.5900	0.50	0.13	20.0000		98.0	80 - 128	2.95	20	
1,2,3-Trichloropropane	19.5500	0.50	0.39	20.0000		97.8	59 - 126	2.01	20	
1,2,3-Trichlorobenzene	19.1600	0.50	0.18	20.0000		95.8	69 - 138	3.44	20	
1,2,4-Trichlorobenzene	19.2800	0.50	0.16	20.0000		96.4	78 - 125	4.46	20	

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Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B0A0003 - MSVOA_LL_W (continued)										
LCS Dup (B0A0003-BSD1) - Continued					Prepared: 1/2/2020 Analyzed: 1/2/2020					
1,2,4-Trimethylbenzene	19.1300	0.50	0.14	20.0000		95.6	70 - 126	1.20	20	
1,2-Dibromo-3-chloropropane	19.2500	0.50	0.41	20.0000		96.2	58 - 127	1.44	20	
1,2-Dibromoethane	19.5300	0.50	0.24	20.0000		97.6	76 - 120	3.52	20	
1,2-Dichlorobenzene	19.0200	0.50	0.20	20.0000		95.1	82 - 117	0.527	20	
1,2-Dichloroethane	18.9500	0.50	0.20	20.0000		94.8	66 - 126	0.841	20	
1,2-Dichloropropane	19.2100	0.50	0.15	20.0000		96.0	70 - 117	2.74	20	
1,3,5-Trimethylbenzene	19.2200	0.50	0.13	20.0000		96.1	71 - 125	1.14	20	
1,3-Dichlorobenzene	19.1100	0.50	0.16	20.0000		95.6	81 - 116	0.834	20	
1,3-Dichloropropane	18.9600	0.50	0.21	20.0000		94.8	69 - 124	0.840	20	
1,4-Dichlorobenzene	19.0200	0.50	0.17	20.0000		95.1	80 - 114	0.792	20	
2,2-Dichloropropane	19.0400	0.50	0.38	20.0000		95.2	58 - 132	0.941	20	
2-Chlorotoluene	18.5000	0.50	0.11	20.0000		92.5	71 - 119	2.03	20	
4-Chlorotoluene	18.9400	0.50	0.12	20.0000		94.7	72 - 122	2.71	20	
4-Isopropyltoluene	19.5000	0.50	0.11	20.0000		97.5	69 - 126	1.02	20	
Benzene	37.3700	0.50	0.13	40.0000		93.4	80 - 116	0.693	20	
Bromobenzene	18.8500	0.50	0.21	20.0000		94.2	77 - 118	0.159	20	
Bromochloromethane	19.8900	0.50	0.16	20.0000		99.4	68 - 121	1.88	20	
Bromodichloromethane	19.3800	0.50	0.14	20.0000		96.9	73 - 118	0.617	20	
Bromoform	18.4600	0.50	0.20	20.0000		92.3	65 - 133	3.36	20	
Bromomethane	14.0400	0.50	0.40	20.0000		70.2	7 - 205	24.0	20	R
Carbon disulfide	16.6600	1.0	0.07	20.0000		83.3	55 - 131	6.06	20	
Carbon tetrachloride	19.6300	0.50	0.09	20.0000		98.2	63 - 133	4.00	20	
Chlorobenzene	18.6400	0.50	0.13	20.0000		93.2	86 - 113	0.375	20	
Chloroethane	37.3300	0.50	0.15	20.0000		187	66 - 141	6.56	20	L5
Chloroform	18.6500	0.50	0.11	20.0000		93.2	63 - 127	0.484	20	
Chloromethane	20.7300	0.50	0.12	20.0000		104	0 - 207	7.35	20	
cis-1,2-Dichloroethene	18.5800	0.50	0.14	20.0000		92.9	64 - 126	0.0538	20	
cis-1,3-Dichloropropene	19.7600	0.50	0.13	20.0000		98.8	70 - 141	0.253	20	
Di-isopropyl ether	18.2100	0.50	0.15	20.0000		91.0	56 - 131	0.766	20	
Dibromochloromethane	19.2400	0.50	0.16	20.0000		96.2	67 - 135	2.90	20	
Dibromomethane	19.9500	0.50	0.19	20.0000		99.8	74 - 118	3.94	20	
Dichlorodifluoromethane	19.6600	0.50	0.18	20.0000		98.3	14 - 181	0.561	20	
Ethyl Acetate	179.400	10	8.7	200.000		89.7	49 - 128	9.90	20	
Ethyl Ether	192.660	10	2.0	200.000		96.3	53 - 143	1.54	20	
Ethyl tert-butyl ether	17.8300	0.50	0.21	20.0000		89.2	54 - 132	0.392	20	
Ethylbenzene	37.4700	0.50	0.13	40.0000		93.7	77 - 118	0.612	20	
Freon-113	20.1800	0.50	0.13	20.0000		101	68 - 145	6.13	20	
Hexachlorobutadiene	18.5700	0.50	0.15	20.0000		92.8	66 - 125	4.17	20	
Isopropylbenzene	19.0400	0.50	0.10	20.0000		95.2	68 - 137	0.158	20	
m,p-Xylene	37.0600	1.0	0.19	40.0000		92.6	78 - 126	0.00	20	

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Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B0A0003 - MSVOA_LL_W (continued)										
LCS Dup (B0A0003-BSD1) - Continued					Prepared: 1/2/2020 Analyzed: 1/2/2020					
Methylene chloride	19.3000	1.0	0.71	20.0000		96.5	51 - 149	0.728	20	
MTBE	18.3000	0.50	0.26	20.0000		91.5	63 - 128	2.55	20	
n-Butylbenzene	19.2400	0.50	0.11	20.0000		96.2	63 - 127	1.80	20	
n-Propylbenzene	18.8800	0.50	0.10	20.0000		94.4	69 - 124	1.16	20	
Naphthalene	19.6300	0.50	0.41	20.0000		98.2	60 - 126	2.47	20	
o-Xylene	37.8300	0.50	0.13	40.0000		94.6	79 - 126	0.422	20	
sec-Butylbenzene	19.1600	0.50	0.09	20.0000		95.8	69 - 124	0.314	20	
Styrene	19.3200	0.50	0.13	20.0000		96.6	80 - 127	0.568	20	
tert-Amyl methyl ether	19.1800	0.50	0.41	20.0000		95.9	49 - 130	2.37	20	
tert-Butanol	78.8200	10	2.4	100.000		78.8	29 - 163	51.3	20	R
tert-Butylbenzene	18.6500	0.50	0.09	20.0000		93.2	71 - 124	1.44	20	
Tetrachloroethene	18.6600	0.50	0.10	20.0000		93.3	73 - 129	1.62	20	
Toluene	38.3200	0.50	0.12	40.0000		95.8	78 - 121	0.209	20	
trans-1,2-Dichloroethene	18.0000	0.50	0.09	20.0000		90.0	58 - 141	0.390	20	
trans-1,3-Dichloropropene	19.5200	0.50	0.23	20.0000		97.6	68 - 128	1.68	20	
Trichloroethene	18.9200	0.50	0.10	20.0000		94.6	73 - 126	2.52	20	
Trichlorofluoromethane	19.9500	0.50	0.23	20.0000		99.8	62 - 146	3.21	20	
Vinyl acetate	204.440	10	1.7	200.000		102	53 - 153	0.142	20	
Vinyl chloride	17.9800	0.50	0.13	20.0000		89.9	61 - 137	1.91	20	
Surrogate: 1,2-Dichloroethane-d4	*24.13*			*25.0000*		*96.5*	*59 - 158*			
Surrogate: 4-Bromofluorobenzene	*24.20*			*25.0000*		*96.8*	*71 - 127*			
Surrogate: Dibromofluoromethan	*24.65*			*25.0000*		*98.6*	*66 - 147*			
Surrogate: Toluene-d8	*24.79*			*25.0000*		*99.2*	*77 - 138*			

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400 Oyster Point Blvd, Suite 533	Report To : Christopher D'Sa
South San Francisco , CA 94080	Reported : 01/08/2020

Volatile Organic Compounds by EPA 5035 / EPA 8260B - Quality Control

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B0A0015 - MSVOA_S										
Blank (B0A0015-BLK1)					Prepared: 1/3/2020 Analyzed: 1/3/2020					
1,1,1,2-Tetrachloroethane	ND	5.0	0.40							
1,1,1-Trichloroethane	ND	5.0	0.79							
1,1,2,2-Tetrachloroethane	ND	5.0	0.70							
1,1,2-Trichloroethane	ND	5.0	0.57							
1,1-Dichloroethane	ND	5.0	0.63							
1,1-Dichloroethene	ND	5.0	2.9							
1,1-Dichloropropene	ND	5.0	0.26							
1,2,3-Trichloropropane	ND	5.0	0.72							
1,2,3-Trichlorobenzene	ND	5.0	0.57							
1,2,4-Trichlorobenzene	ND	5.0	0.61							
1,2,4-Trimethylbenzene	ND	5.0	1.0							
1,2-Dibromo-3-chloropropane	ND	10	1.2							
1,2-Dibromoethane	ND	5.0	0.28							
1,2-Dichlorobenzene	ND	5.0	0.45							
1,2-Dichloroethane	ND	5.0	0.88							
1,2-Dichloropropane	ND	5.0	0.67							
1,3,5-Trimethylbenzene	ND	5.0	0.35							
1,3-Dichlorobenzene	ND	5.0	0.41							
1,3-Dichloropropane	ND	5.0	0.49							
1,4-Dichlorobenzene	ND	5.0	0.39							
2,2-Dichloropropane	ND	5.0	0.61							
2-Chlorotoluene	ND	5.0	0.26							
4-Chlorotoluene	ND	5.0	0.20							
4-Isopropyltoluene	ND	5.0	0.28							
Benzene	ND	5.0	0.37							
Bromobenzene	ND	5.0	0.44							
Bromochloromethane	ND	5.0	0.99							
Bromodichloromethane	ND	5.0	0.58							
Bromoform	ND	5.0	0.37							
Bromomethane	ND	5.0	4.7							
Carbon disulfide	ND	5.0	3.2							
Carbon tetrachloride	ND	5.0	0.65							
Chlorobenzene	ND	5.0	0.29							
Chloroethane	ND	5.0	4.0							
Chloroform	ND	5.0	0.75							
Chloromethane	ND	5.0	0.98							
cis-1,2-Dichloroethene	ND	5.0	0.82							
cis-1,3-Dichloropropene	ND	5.0	0.22							
Di-isopropyl ether	ND	5.0	0.55							
Dibromochloromethane	ND	5.0	0.20							

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Volatile Organic Compounds by EPA 5035 / EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B0A0015 - MSVOA_S (continued)										
Blank (B0A0015-BLK1) - Continued					Prepared: 1/3/2020 Analyzed: 1/3/2020					
Dibromomethane	ND	5.0	0.56							
Dichlorodifluoromethane	ND	5.0	2.6							
Ethyl Acetate	ND	50	10							
Ethyl Ether	ND	50	20							
Ethyl tert-butyl ether	ND	5.0	0.32							
Ethylbenzene	ND	5.0	0.26							
Freon-113	ND	5.0	3.7							
Hexachlorobutadiene	ND	5.0	0.40							
Isopropylbenzene	ND	5.0	0.32							
m,p-Xylene	ND	10	0.86							
Methylene chloride	ND	5.0	3.4							
MTBE	ND	5.0	1.3							
n-Butylbenzene	ND	5.0	0.42							
n-Propylbenzene	ND	5.0	0.25							
Naphthalene	ND	5.0	0.50							
o-Xylene	ND	5.0	0.46							
sec-Butylbenzene	ND	5.0	0.36							
Styrene	ND	5.0	0.38							
tert-Amyl methyl ether	ND	5.0	0.43							
tert-Butanol	ND	100	7.4							
tert-Butylbenzene	ND	5.0	0.33							
Tetrachloroethene	ND	5.0	0.31							
Toluene	ND	5.0	0.47							
trans-1,2-Dichloroethene	ND	5.0	1.4							
trans-1,3-Dichloropropene	ND	5.0	0.48							
Trichloroethene	ND	5.0	0.64							
Trichlorofluoromethane	ND	5.0	0.79							
Vinyl acetate	ND	50	9.0							
Vinyl chloride	ND	5.0	0.74							
Surrogate: 1,2-Dichloroethane-d4	*44.50*			*50.0000*		*89.0*	*58 - 160*			
Surrogate: 4-Bromofluorobenzene	*48.19*			*50.0000*		*96.4*	*72 - 121*			
Surrogate: Dibromofluoromethan	*47.54*			*50.0000*		*95.1*	*75 - 139*			
Surrogate: Toluene-d8	*48.93*			*50.0000*		*97.9*	*84 - 115*			
LCS (B0A0015-BS1)					Prepared: 1/3/2020 Analyzed: 1/3/2020					
1,1,1,2-Tetrachloroethane	51.0100	5.0	0.40	50.0000		102	80 - 114			
1,1,1-Trichloroethane	48.7700	5.0	0.79	50.0000		97.5	71 - 127			
1,1,2,2-Tetrachloroethane	49.0200	5.0	0.70	50.0000		98.0	73 - 113			
1,1,2-Trichloroethane	49.3300	5.0	0.57	50.0000		98.7	78 - 112			
1,1-Dichloroethane	47.0300	5.0	0.63	50.0000		94.1	73 - 123			

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Volatile Organic Compounds by EPA 5035 / EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B0A0015 - MSVOA_S (continued)										
LCS (B0A0015-BS1) - Continued					Prepared: 1/3/2020 Analyzed: 1/3/2020					
1,1-Dichloroethene	59.4200	5.0	2.9	50.0000		119	59 - 139			
1,1-Dichloropropene	53.4600	5.0	0.26	50.0000		107	78 - 131			
1,2,3-Trichloropropane	49.1000	5.0	0.72	50.0000		98.2	71 - 117			
1,2,3-Trichlorobenzene	56.3600	5.0	0.57	50.0000		113	68 - 134			
1,2,4-Trichlorobenzene	58.5300	5.0	0.61	50.0000		117	72 - 141			
1,2,4-Trimethylbenzene	53.1600	5.0	1.0	50.0000		106	81 - 122			
1,2-Dibromo-3-chloropropane	51.0400	10	1.2	50.0000		102	64 - 134			
1,2-Dibromoethane	50.6200	5.0	0.28	50.0000		101	78 - 113			
1,2-Dichlorobenzene	50.2500	5.0	0.45	50.0000		100	79 - 119			
1,2-Dichloroethane	46.2500	5.0	0.88	50.0000		92.5	62 - 126			
1,2-Dichloropropane	49.6600	5.0	0.67	50.0000		99.3	77 - 120			
1,3,5-Trimethylbenzene	54.4600	5.0	0.35	50.0000		109	80 - 123			
1,3-Dichlorobenzene	51.0100	5.0	0.41	50.0000		102	80 - 118			
1,3-Dichloropropane	49.8800	5.0	0.49	50.0000		99.8	80 - 114			
1,4-Dichlorobenzene	51.4200	5.0	0.39	50.0000		103	80 - 117			
2,2-Dichloropropane	50.9600	5.0	0.61	50.0000		102	66 - 133			
2-Chlorotoluene	51.5400	5.0	0.26	50.0000		103	79 - 117			
4-Chlorotoluene	51.9700	5.0	0.20	50.0000		104	80 - 117			
4-Isopropyltoluene	54.4700	5.0	0.28	50.0000		109	81 - 130			
Benzene	94.1900	5.0	0.37	100.000		94.2	79 - 116			
Bromobenzene	50.7200	5.0	0.44	50.0000		101	76 - 113			
Bromochloromethane	47.9300	5.0	0.99	50.0000		95.9	74 - 113			
Bromodichloromethane	48.6500	5.0	0.58	50.0000		97.3	74 - 115			
Bromoform	51.8400	5.0	0.37	50.0000		104	70 - 118			
Bromomethane	61.7200	5.0	4.7	50.0000		123	41 - 170			
Carbon disulfide	46.2400	5.0	3.2	50.0000		92.5	53 - 139			
Carbon tetrachloride	50.8000	5.0	0.65	50.0000		102	71 - 131			
Chlorobenzene	50.7400	5.0	0.29	50.0000		101	83 - 114			
Chloroethane	49.4600	5.0	4.0	50.0000		98.9	61 - 165			
Chloroform	46.6400	5.0	0.75	50.0000		93.3	73 - 117			
Chloromethane	53.6400	5.0	0.98	50.0000		107	51 - 147			
cis-1,2-Dichloroethene	48.2000	5.0	0.82	50.0000		96.4	73 - 121			
cis-1,3-Dichloropropene	52.7200	5.0	0.22	50.0000		105	81 - 136			
Di-isopropyl ether	41.7700	5.0	0.55	50.0000		83.5	66 - 126			
Dibromochloromethane	50.1700	5.0	0.20	50.0000		100	77 - 114			
Dibromomethane	48.6900	5.0	0.56	50.0000		97.4	78 - 110			
Dichlorodifluoromethane	56.1500	5.0	2.6	50.0000		112	22 - 172			
Ethyl Acetate	442.570	50	10	500.000		88.5	48 - 147			
Ethyl Ether	497.130	50	20	500.000		99.4	40 - 155			
Ethyl tert-butyl ether	51.9700	5.0	0.32	50.0000		104	50 - 150			

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Volatile Organic Compounds by EPA 5035 / EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B0A0015 - MSVOA_S (continued)										
LCS (B0A0015-BS1) - Continued					Prepared: 1/3/2020 Analyzed: 1/3/2020					
Ethylbenzene	95.1400	5.0	0.26	100.000		95.1	73 - 128			
Freon-113	54.7700	5.0	3.7	50.0000		110	60 - 144			
Hexachlorobutadiene	51.3000	5.0	0.40	50.0000		103	72 - 147			
Isopropylbenzene	52.8200	5.0	0.32	50.0000		106	79 - 134			
m,p-Xylene	99.6600	10	0.86	100.000		99.7	79 - 128			
Methylene chloride	46.7000	5.0	3.4	50.0000		93.4	60 - 131			
MTBE	47.9700	5.0	1.3	50.0000		95.9	57 - 131			
n-Butylbenzene	54.0100	5.0	0.42	50.0000		108	82 - 134			
n-Propylbenzene	53.0500	5.0	0.25	50.0000		106	78 - 127			
Naphthalene	43.1300	5.0	0.50	50.0000		86.3	67 - 131			
o-Xylene	98.3900	5.0	0.46	100.000		98.4	79 - 126			
sec-Butylbenzene	53.5400	5.0	0.36	50.0000		107	79 - 130			
Styrene	51.3600	5.0	0.38	50.0000		103	81 - 125			
tert-Amyl methyl ether	55.1800	5.0	0.43	50.0000		110	50 - 142			
tert-Butanol	222.290	100	7.4	250.000		88.9	0 - 168			
tert-Butylbenzene	54.4100	5.0	0.33	50.0000		109	80 - 126			
Tetrachloroethene	53.2500	5.0	0.31	50.0000		106	76 - 127			
Toluene	93.9400	5.0	0.47	100.000		93.9	79 - 119			
trans-1,2-Dichloroethene	49.5600	5.0	1.4	50.0000		99.1	66 - 128			
trans-1,3-Dichloropropene	50.6900	5.0	0.48	50.0000		101	76 - 117			
Trichloroethene	52.3200	5.0	0.64	50.0000		105	81 - 120			
Trichlorofluoromethane	45.5100	5.0	0.79	50.0000		91.0	63 - 138			
Vinyl acetate	413.330	50	9.0	500.000		82.7	60 - 149			
Vinyl chloride	54.6000	5.0	0.74	50.0000		109	58 - 142			
Surrogate: 1,2-Dichloroethane-d4	*43.01*			*50.0000*		*86.0*	*58 - 160*			
Surrogate: 4-Bromofluorobenzene	*48.13*			*50.0000*		*96.3*	*72 - 121*			
Surrogate: Dibromofluoromethan	*44.26*			*50.0000*		*88.5*	*75 - 139*			
Surrogate: Toluene-d8	*49.35*			*50.0000*		*98.7*	*84 - 115*			
LCS Dup (B0A0015-BSD1)					Prepared: 1/3/2020 Analyzed: 1/3/2020					
1,1,1,2-Tetrachloroethane	51.4500	5.0	0.40	50.0000		103	80 - 114	0.859	20	
1,1,1-Trichloroethane	47.7200	5.0	0.79	50.0000		95.4	71 - 127	2.18	20	
1,1,2,2-Tetrachloroethane	50.1900	5.0	0.70	50.0000		100	73 - 113	2.36	20	
1,1,2-Trichloroethane	50.9500	5.0	0.57	50.0000		102	78 - 112	3.23	20	
1,1-Dichloroethane	46.8300	5.0	0.63	50.0000		93.7	73 - 123	0.426	20	
1,1-Dichloroethene	51.8800	5.0	2.9	50.0000		104	59 - 139	13.5	20	
1,1-Dichloropropene	52.4600	5.0	0.26	50.0000		105	78 - 131	1.89	20	
1,2,3-Trichloropropane	49.6300	5.0	0.72	50.0000		99.3	71 - 117	1.07	20	
1,2,3-Trichlorobenzene	53.6800	5.0	0.57	50.0000		107	68 - 134	4.87	20	
1,2,4-Trichlorobenzene	56.3500	5.0	0.61	50.0000		113	72 - 141	3.80	20	

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Volatile Organic Compounds by EPA 5035 / EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B0A0015 - MSVOA_S (continued)										
LCS Dup (B0A0015-BSD1) - Continued					Prepared: 1/3/2020 Analyzed: 1/3/2020					
1,2,4-Trimethylbenzene	51.8500	5.0	1.0	50.0000		104	81 - 122	2.50	20	
1,2-Dibromo-3-chloropropane	52.7300	10	1.2	50.0000		105	64 - 134	3.26	20	
1,2-Dibromoethane	52.6700	5.0	0.28	50.0000		105	78 - 113	3.97	20	
1,2-Dichlorobenzene	51.6700	5.0	0.45	50.0000		103	79 - 119	2.79	20	
1,2-Dichloroethane	47.4800	5.0	0.88	50.0000		95.0	62 - 126	2.62	20	
1,2-Dichloropropane	50.7500	5.0	0.67	50.0000		102	77 - 120	2.17	20	
1,3,5-Trimethylbenzene	52.4600	5.0	0.35	50.0000		105	80 - 123	3.74	20	
1,3-Dichlorobenzene	51.5300	5.0	0.41	50.0000		103	80 - 118	1.01	20	
1,3-Dichloropropane	51.3900	5.0	0.49	50.0000		103	80 - 114	2.98	20	
1,4-Dichlorobenzene	52.0600	5.0	0.39	50.0000		104	80 - 117	1.24	20	
2,2-Dichloropropane	50.0600	5.0	0.61	50.0000		100	66 - 133	1.78	20	
2-Chlorotoluene	50.7700	5.0	0.26	50.0000		102	79 - 117	1.51	20	
4-Chlorotoluene	51.0600	5.0	0.20	50.0000		102	80 - 117	1.77	20	
4-Isopropyltoluene	52.7400	5.0	0.28	50.0000		105	81 - 130	3.23	20	
Benzene	95.8000	5.0	0.37	100.000		95.8	79 - 116	1.69	20	
Bromobenzene	50.3200	5.0	0.44	50.0000		101	76 - 113	0.792	20	
Bromochloromethane	48.7400	5.0	0.99	50.0000		97.5	74 - 113	1.68	20	
Bromodichloromethane	49.9100	5.0	0.58	50.0000		99.8	74 - 115	2.56	20	
Bromoform	52.7200	5.0	0.37	50.0000		105	70 - 118	1.68	20	
Bromomethane	55.3300	5.0	4.7	50.0000		111	41 - 170	10.9	20	
Carbon disulfide	41.7600	5.0	3.2	50.0000		83.5	53 - 139	10.2	20	
Carbon tetrachloride	48.5200	5.0	0.65	50.0000		97.0	71 - 131	4.59	20	
Chlorobenzene	51.8600	5.0	0.29	50.0000		104	83 - 114	2.18	20	
Chloroethane	45.6600	5.0	4.0	50.0000		91.3	61 - 165	7.99	20	
Chloroform	46.7600	5.0	0.75	50.0000		93.5	73 - 117	0.257	20	
Chloromethane	48.8200	5.0	0.98	50.0000		97.6	51 - 147	9.41	20	
cis-1,2-Dichloroethene	48.6700	5.0	0.82	50.0000		97.3	73 - 121	0.970	20	
cis-1,3-Dichloropropene	53.9800	5.0	0.22	50.0000		108	81 - 136	2.36	20	
Di-isopropyl ether	57.0400	5.0	0.55	50.0000		114	66 - 126	30.9	20	R
Dibromochloromethane	51.0000	5.0	0.20	50.0000		102	77 - 114	1.64	20	
Dibromomethane	49.9800	5.0	0.56	50.0000		100	78 - 110	2.61	20	
Dichlorodifluoromethane	53.0200	5.0	2.6	50.0000		106	22 - 172	5.73	20	
Ethyl Acetate	451.260	50	10	500.000		90.3	48 - 147	1.94	20	
Ethyl Ether	477.310	50	20	500.000		95.5	40 - 155	4.07	20	
Ethyl tert-butyl ether	52.2400	5.0	0.32	50.0000		104	50 - 150	0.518	20	
Ethylbenzene	95.9000	5.0	0.26	100.000		95.9	73 - 128	0.796	20	
Freon-113	49.5200	5.0	3.7	50.0000		99.0	60 - 144	10.1	20	
Hexachlorobutadiene	48.9800	5.0	0.40	50.0000		98.0	72 - 147	4.63	20	
Isopropylbenzene	50.3700	5.0	0.32	50.0000		101	79 - 134	4.75	20	
m,p-Xylene	100.620	10	0.86	100.000		101	79 - 128	0.959	20	

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Volatile Organic Compounds by EPA 5035 / EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B0A0015 - MSVOA_S (continued)										
LCS Dup (B0A0015-BSD1) - Continued					Prepared: 1/3/2020 Analyzed: 1/3/2020					
Methylene chloride	45.0200	5.0	3.4	50.0000		90.0	60 - 131	3.66	20	
MTBE	47.9000	5.0	1.3	50.0000		95.8	57 - 131	0.146	20	
n-Butylbenzene	52.2700	5.0	0.42	50.0000		105	82 - 134	3.27	20	
n-Propylbenzene	50.4000	5.0	0.25	50.0000		101	78 - 127	5.12	20	
Naphthalene	42.5600	5.0	0.50	50.0000		85.1	67 - 131	1.33	20	
o-Xylene	99.4100	5.0	0.46	100.000		99.4	79 - 126	1.03	20	
sec-Butylbenzene	51.4400	5.0	0.36	50.0000		103	79 - 130	4.00	20	
Styrene	51.5200	5.0	0.38	50.0000		103	81 - 125	0.311	20	
tert-Amyl methyl ether	56.1800	5.0	0.43	50.0000		112	50 - 142	1.80	20	
tert-Butanol	225.780	100	7.4	250.000		90.3	0 - 168	1.56	20	
tert-Butylbenzene	52.0500	5.0	0.33	50.0000		104	80 - 126	4.43	20	
Tetrachloroethene	52.1300	5.0	0.31	50.0000		104	76 - 127	2.13	20	
Toluene	95.6000	5.0	0.47	100.000		95.6	79 - 119	1.75	20	
trans-1,2-Dichloroethene	45.6900	5.0	1.4	50.0000		91.4	66 - 128	8.13	20	
trans-1,3-Dichloropropene	52.4400	5.0	0.48	50.0000		105	76 - 117	3.39	20	
Trichloroethene	51.6100	5.0	0.64	50.0000		103	81 - 120	1.37	20	
Trichlorofluoromethane	45.0600	5.0	0.79	50.0000		90.1	63 - 138	0.994	20	
Vinyl acetate	428.310	50	9.0	500.000		85.7	60 - 149	3.56	20	
Vinyl chloride	48.1100	5.0	0.74	50.0000		96.2	58 - 142	12.6	20	
Surrogate: 1,2-Dichloroethane-d4	*43.70*			*50.0000*		*87.4*	*58 - 160*			
Surrogate: 4-Bromofluorobenzene	*49.79*			*50.0000*		*99.6*	*72 - 121*			
Surrogate: Dibromofluoromethan	*44.71*			*50.0000*		*89.4*	*75 - 139*			
Surrogate: Toluene-d8	*49.87*			*50.0000*		*99.7*	*84 - 115*			

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Volatile Organic Compounds by EPA 5035 / EPA 8260B - Quality Control

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B0A0059 - MSVOA_S										
Blank (B0A0059-BLK1)					Prepared: 1/3/2020 Analyzed: 1/3/2020					
GRO (C4 - C12)	ND	1000	80							
Surrogate: 1,2-Dichloroethane-d4	*44.59*			*50.0000*		*89.2*	*58 - 160*			
Surrogate: 4-Bromofluorobenzene	*50.34*			*50.0000*		*101*	*72 - 121*			
Surrogate: Dibromofluoromethan	*49.39*			*50.0000*		*98.8*	*75 - 139*			
Surrogate: Toluene-d8	*50.97*			*50.0000*		*102*	*84 - 115*			
LCS (B0A0059-BS1)					Prepared: 1/3/2020 Analyzed: 1/3/2020					
Gasoline Range Organics	4680.00	1000	80	5000.00		93.6	70 - 130			
Surrogate: 1,2-Dichloroethane-d4	*48.99*			*50.0000*		*98.0*	*58 - 160*			
Surrogate: 4-Bromofluorobenzene	*50.56*			*50.0000*		*101*	*72 - 121*			
Surrogate: Dibromofluoromethan	*49.03*			*50.0000*		*98.1*	*75 - 139*			
Surrogate: Toluene-d8	*49.92*			*50.0000*		*99.8*	*84 - 115*			
LCS Dup (B0A0059-BSD1)					Prepared: 1/3/2020 Analyzed: 1/3/2020					
Gasoline Range Organics	4990.00	1000	80	5000.00		99.8	70 - 130	6.41	20	
Surrogate: 1,2-Dichloroethane-d4	*48.31*			*50.0000*		*96.6*	*58 - 160*			
Surrogate: 4-Bromofluorobenzene	*50.46*			*50.0000*		*101*	*72 - 121*			
Surrogate: Dibromofluoromethan	*47.66*			*50.0000*		*95.3*	*75 - 139*			
Surrogate: Toluene-d8	*50.48*			*50.0000*		*101*	*84 - 115*			

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Semivolatile Organic Compounds by EPA 8270C - Quality Control

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B0A0093 - MSSEMI_S										
Blank (B0A0093-BLK1)					Prepared: 1/3/2020 Analyzed: 1/3/2020					
1,2,4-Trichlorobenzene	ND	330	50							
1,2-Dichlorobenzene	ND	330	26							
1,3-Dichlorobenzene	ND	330	27							
1,4-Dichlorobenzene	ND	330	27							
2,4,5-Trichlorophenol	ND	330	30							
2,4,6-Trichlorophenol	ND	330	35							
2,4-Dichlorophenol	ND	1600	34							
2,4-Dimethylphenol	ND	330	26							
2,4-Dinitrophenol	ND	1600	86							
2,4-Dinitrotoluene	ND	330	33							
2,6-Dinitrotoluene	ND	330	49							
2-Chloronaphthalene	ND	330	28							
2-Chlorophenol	ND	330	31							
2-Methylnaphthalene	ND	330	27							
2-Methylphenol	ND	330	36							
2-Nitroaniline	ND	1600	43							
2-Nitrophenol	ND	330	45							
3,3´-Dichlorobenzidine	ND	660	280							
3-Nitroaniline	ND	1600	49							
4,6-Dinitro-2-methyphenol	ND	1600	41							
4-Bromophenyl-phenylether	ND	330	64							
4-Chloro-3-methylphenol	ND	660	71							
4-Chloroaniline	ND	660	53							
4-Chlorophenyl-phenylether	ND	330	33							
4-Methylphenol	ND	330	57							
4-Nitroaniline	ND	1600	37							
4-Nitrophenol	ND	330	64							
Acenaphthene	ND	330	43							
Acenaphthylene	ND	330	62							
Anthracene	ND	330	51							
Benzidine (M)	ND	1600	1400							
Benzo(a)anthracene	ND	330	44							
Benzo(a)pyrene	ND	330	64							
Benzo(b)fluoranthene	ND	330	65							
Benzo(g,h,i)perylene	ND	330	81							
Benzo(k)fluoranthene	ND	330	33							
Benzoic acid	ND	1600	890							
Benzyl alcohol	ND	660	32							
bis(2-chloroethoxy)methane	ND	330	64							
bis(2-Chloroethyl)ether	ND	330	66							

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Semivolatile Organic Compounds by EPA 8270C - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B0A0093 - MSSEMI_S (continued)										
Blank (B0A0093-BLK1) - Continued					Prepared: 1/3/2020 Analyzed: 1/3/2020					
bis(2-chloroisopropyl)ether	ND	330	76							
bis(2-ethylhexyl)phthalate	ND	330	63							
Butylbenzylphthalate	ND	330	41							
Chrysene	ND	330	84							
Di-n-butylphthalate	ND	330	51							
Di-n-octylphthalate	ND	330	63							
Dibenz(a,h)anthracene	ND	330	45							
Dibenzofuran	ND	330	58							
Diethyl phthalate	ND	330	58							
Dimethyl phthalate	ND	330	40							
Fluoranthene	ND	330	60							
Fluorene	ND	330	110							
Hexachlorobenzene	ND	330	55							
Hexachlorobutadiene	ND	660	53							
Hexachlorocyclopentadiene	ND	660	70							
Hexachloroethane	ND	330	94							
Indeno(1,2,3-cd)pyrene	ND	330	75							
Isophorone	ND	330	85							
N-Nitroso-di-n propylamine	ND	330	60							
N-Nitrosodiphenylamine	ND	330	32							
Naphthalene	ND	330	56							
Nitrobenzene	ND	330	57							
Pentachlorophenol	ND	1600	50							
Phenanthrene	ND	330	67							
Phenol	ND	330	34							
Pyrene	ND	330	72							
Pyridine	ND	1600	270							
Surrogate: 1,2-Dichlorobenzene-d	*2136*			*3333.33*		*64.1*	*28 - 77*			
Surrogate: 2,4,6-Tribromophenol	*3787*			*3325.00*		*114*	*17 - 157*			
Surrogate: 2-Chlorophenol-d4	*2212*			*3325.00*		*66.5*	*35 - 98*			
Surrogate: 2-Fluorobiphenyl	*2360*			*3333.33*		*70.8*	*35 - 88*			
Surrogate: 2-Fluorophenol	*2104*			*3325.00*		*63.3*	*32 - 88*			
Surrogate: 4-Terphenyl-d14	*2776*			*3333.33*		*83.3*	*35 - 114*			
Surrogate: Nitrobenzene-d5	*2089*			*3333.33*		*62.7*	*27 - 80*			
Surrogate: Phenol-d6	*2193*			*3325.00*		*66.0*	*35 - 98*			
LCS (B0A0093-BS1)					Prepared: 1/3/2020 Analyzed: 1/3/2020					
1,2,4-Trichlorobenzene	2487.00	330	50	3333.33		74.6	52 - 94			
1,2-Dichlorobenzene	2433.67	330	26	3333.33		73.0	47 - 95			
1,3-Dichlorobenzene	2442.67	330	27	3333.33		73.3	50 - 88			

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Semivolatile Organic Compounds by EPA 8270C - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B0A0093 - MSSEMI_S (continued)										
LCS (B0A0093-BS1) - Continued					Prepared: 1/3/2020 Analyzed: 1/3/2020					
1,4-Dichlorobenzene	2373.33	330	27	3333.33		71.2	47 - 89			
2,4,5-Trichlorophenol	3068.33	330	30	3333.33		92.0	66 - 113			
2,4,6-Trichlorophenol	3232.33	330	35	3333.33		97.0	59 - 113			
2,4-Dichlorophenol	2829.67	1600	34	3333.33		84.9	61 - 98			
2,4-Dimethylphenol	3211.00	330	26	3333.33		96.3	54 - 108			
2,4-Dinitrophenol	3562.33	1600	86	3333.33		107	58 - 135			
2,4-Dinitrotoluene	3563.67	330	33	3333.33		107	63 - 115			
2,6-Dinitrotoluene	3572.00	330	49	3333.33		107	67 - 111			
2-Chloronaphthalene	2997.00	330	28	3333.33		89.9	59 - 104			
2-Chlorophenol	2619.00	330	31	3333.33		78.6	50 - 97			
2-Methylnaphthalene	2480.67	330	27	3333.33		74.4	56 - 112			
2-Methylphenol	2520.00	330	36	3333.33		75.6	57 - 102			
2-Nitroaniline	3300.67	1600	43	3333.33		99.0	55 - 118			
2-Nitrophenol	3284.33	330	45	3333.33		98.5	61 - 100			
3,3´-Dichlorobenzidine	2500.67	660	280	3333.33		75.0	47 - 113			
3-Nitroaniline	3468.67	1600	49	3333.33		104	66 - 117			
4,6-Dinitro-2-methyphenol	3587.33	1600	41	3333.33		108	62 - 125			
4-Bromophenyl-phenylether	2784.67	330	64	3333.33		83.5	45 - 137			
4-Chloro-3-methylphenol	2981.33	660	71	3333.33		89.4	64 - 101			
4-Chloroaniline	2884.00	660	53	3333.33		86.5	59 - 110			
4-Chlorophenyl-phenylether	2928.33	330	33	3333.33		87.8	58 - 109			
4-Methylphenol	2444.67	330	57	3333.33		73.3	57 - 106			
4-Nitroaniline	3468.67	1600	37	3333.33		104	70 - 117			
4-Nitrophenol	3556.33	330	64	3333.33		107	62 - 114			
Acenaphthene	2899.33	330	43	3333.33		87.0	59 - 107			
Acenaphthylene	2843.00	330	62	3333.33		85.3	61 - 108			
Anthracene	2916.00	330	51	3333.33		87.5	63 - 106			
Benzidine (M)	2411.33	1600	1400	3333.33		72.3	25 - 109			
Benzo(a)anthracene	3077.67	330	44	3333.33		92.3	60 - 103			
Benzo(a)pyrene	2899.00	330	64	3333.33		87.0	63 - 110			
Benzo(b)fluoranthene	2668.67	330	65	3333.33		80.1	55 - 115			
Benzo(g,h,i)perylene	2824.33	330	81	3333.33		84.7	66 - 107			
Benzo(k)fluoranthene	3012.00	330	33	3333.33		90.4	60 - 115			
Benzoic acid	2772.33	1600	890	3333.33		83.2	16 - 110			
Benzyl alcohol	2497.00	660	32	3333.33		74.9	57 - 107			
bis(2-chloroethoxy)methane	2664.00	330	64	3333.33		79.9	51 - 97			
bis(2-Chloroethyl)ether	2543.67	330	66	3333.33		76.3	45 - 97			
bis(2-chloroisopropyl)ether	2915.33	330	76	3333.33		87.5	2 - 127			
bis(2-ethylhexyl)phthalate	3777.00	330	63	3333.33		113	62 - 115			
Butylbenzylphthalate	3737.67	330	41	3333.33		112	60 - 117			

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Semivolatile Organic Compounds by EPA 8270C - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B0A0093 - MSSEMI_S (continued)										
LCS (B0A0093-BS1) - Continued					Prepared: 1/3/2020 Analyzed: 1/3/2020					
Chrysene	2987.00	330	84	3333.33		89.6	52 - 120			
Di-n-butylphthalate	3289.33	330	51	3333.33		98.7	65 - 114			
Di-n-octylphthalate	3379.67	330	63	3333.33		101	52 - 128			
Dibenz(a,h)anthracene	2753.67	330	45	3333.33		82.6	62 - 113			
Dibenzofuran	2825.00	330	58	3333.33		84.8	66 - 110			
Diethyl phthalate	3132.00	330	58	3333.33		94.0	61 - 113			
Dimethyl phthalate	3170.67	330	40	3333.33		95.1	64 - 105			
Fluoranthene	2866.67	330	60	3333.33		86.0	62 - 106			
Fluorene	2952.00	330	110	3333.33		88.6	58 - 113			
Hexachlorobenzene	2682.67	330	55	3333.33		80.5	65 - 110			
Hexachlorobutadiene	2226.33	660	53	3333.33		66.8	48 - 96			
Hexachlorocyclopentadiene	2744.00	660	70	3333.33		82.3	46 - 110			
Hexachloroethane	2252.33	330	94	3333.33		67.6	48 - 91			
Indeno(1,2,3-cd)pyrene	2763.33	330	75	3333.33		82.9	60 - 112			
Isophorone	2735.33	330	85	3333.33		82.1	52 - 100			
N-Nitroso-di-n propylamine	2663.33	330	60	3333.33		79.9	51 - 99			
N-Nitrosodiphenylamine	3144.33	330	32	3333.33		94.3	65 - 107			
Naphthalene	2471.00	330	56	3333.33		74.1	53 - 95			
Nitrobenzene	2613.67	330	57	3333.33		78.4	51 - 97			
Pentachlorophenol	3107.67	1600	50	3333.33		93.2	58 - 118			
Phenanthrene	2857.33	330	67	3333.33		85.7	63 - 107			
Phenol	2793.00	330	34	3333.33		83.8	49 - 98			
Pyrene	2840.33	330	72	3333.33		85.2	62 - 106			
Pyridine	1041.00	1600	270	3333.33		31.2	0 - 54			
Surrogate: 1,2-Dichlorobenzene-d	*2155*			*3333.33*		*64.6*	*28 - 77*			
Surrogate: 2,4,6-Tribromophenol	*4328*			*3325.00*		*130*	*17 - 157*			
Surrogate: 2-Chlorophenol-d4	*2363*			*3325.00*		*71.1*	*35 - 98*			
Surrogate: 2-Fluorobiphenyl	*2585*			*3333.33*		*77.5*	*35 - 88*			
Surrogate: 2-Fluorophenol	*2279*			*3325.00*		*68.6*	*32 - 88*			
Surrogate: 4-Terphenyl-d14	*2885*			*3333.33*		*86.6*	*35 - 114*			
Surrogate: Nitrobenzene-d5	*2342*			*3333.33*		*70.3*	*27 - 80*			
Surrogate: Phenol-d6	*2386*			*3325.00*		*71.7*	*35 - 98*			
Matrix Spike (B0A0093-MS1)			**Source: 1904739-01**		Prepared: 1/3/2020 Analyzed: 1/3/2020					
1,2,4-Trichlorobenzene	2482.67	330	50	3333.33	ND	74.5	44 - 98			
1,2-Dichlorobenzene	2455.33	330	26	3333.33	ND	73.7	38 - 101			
1,3-Dichlorobenzene	2385.67	330	27	3333.33	ND	71.6	39 - 95			
1,4-Dichlorobenzene	2371.33	330	27	3333.33	ND	71.1	39 - 94			
2,4,5-Trichlorophenol	3129.67	330	30	3333.33	ND	93.9	53 - 122			
2,4,6-Trichlorophenol	3391.00	330	35	3333.33	ND	102	44 - 126			

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Semivolatile Organic Compounds by EPA 8270C - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B0A0093 - MSSEMI_S (continued)										
Matrix Spike (B0A0093-MS1) - Continued			**Source: 1904739-01**		Prepared: 1/3/2020 Analyzed: 1/3/2020					
2,4-Dichlorophenol	2948.00	1600	34	3333.33	ND	88.4	51 - 105			
2,4-Dimethylphenol	3268.00	330	26	3333.33	ND	98.0	50 - 114			
2,4-Dinitrophenol	2955.00	1600	86	3333.33	ND	88.7	5 - 171			
2,4-Dinitrotoluene	3701.33	330	33	3333.33	ND	111	39 - 139			
2,6-Dinitrotoluene	3726.67	330	49	3333.33	ND	112	36 - 146			
2-Chloronaphthalene	3111.00	330	28	3333.33	ND	93.3	50 - 111			
2-Chlorophenol	2726.33	330	31	3333.33	ND	81.8	40 - 104			
2-Methylnaphthalene	2591.33	330	27	3333.33	ND	77.7	46 - 115			
2-Methylphenol	2641.00	330	36	3333.33	ND	79.2	47 - 109			
2-Nitroaniline	3357.00	1600	43	3333.33	ND	101	49 - 120			
2-Nitrophenol	3259.67	330	45	3333.33	ND	97.8	25 - 139			
3,3´-Dichlorobenzidine	2635.00	660	280	3333.33	ND	79.1	35 - 122			
3-Nitroaniline	3556.67	1600	49	3333.33	ND	107	46 - 131			
4,6-Dinitro-2-methyphenol	3735.67	1600	41	3333.33	ND	112	32 - 158			
4-Bromophenyl-phenylether	2924.67	330	64	3333.33	ND	87.7	35 - 142			
4-Chloro-3-methylphenol	3115.67	660	71	3333.33	ND	93.5	52 - 110			
4-Chloroaniline	2992.33	660	53	3333.33	ND	89.8	48 - 118			
4-Chlorophenyl-phenylether	3083.33	330	33	3333.33	ND	92.5	49 - 114			
4-Methylphenol	2562.67	330	57	3333.33	ND	76.9	48 - 112			
4-Nitroaniline	3556.67	1600	37	3333.33	ND	107	40 - 153			
4-Nitrophenol	3426.33	330	64	3333.33	ND	103	45 - 122			
Acenaphthene	3017.33	330	43	3333.33	ND	90.5	47 - 117			
Acenaphthylene	2941.67	330	62	3333.33	ND	88.3	47 - 120			
Anthracene	3045.33	330	51	3333.33	ND	91.4	50 - 115			
Benzidine (M)	2046.00	1600	1400	3333.33	ND	61.4	25 - 131			
Benzo(a)anthracene	3182.00	330	44	3333.33	ND	95.5	51 - 108			
Benzo(a)pyrene	2924.00	330	64	3333.33	ND	87.7	46 - 120			
Benzo(b)fluoranthene	2754.00	330	65	3333.33	ND	82.6	41 - 120			
Benzo(g,h,i)perylene	2888.33	330	81	3333.33	ND	86.6	50 - 117			
Benzo(k)fluoranthene	3107.67	330	33	3333.33	ND	93.2	33 - 135			
Benzoic acid	ND	1600	890	3333.33	ND	NR	0 - 104			
Benzyl alcohol	2584.67	660	32	3333.33	ND	77.5	41 - 116			
bis(2-chloroethoxy)methane	2666.33	330	64	3333.33	ND	80.0	41 - 101			
bis(2-Chloroethyl)ether	2572.67	330	66	3333.33	ND	77.2	33 - 106			
bis(2-chloroisopropyl)ether	3005.33	330	76	3333.33	ND	90.2	0 - 128			
bis(2-ethylhexyl)phthalate	3906.33	330	63	3333.33	ND	117	45 - 126			
Butylbenzylphthalate	3912.67	330	41	3333.33	ND	117	51 - 125			
Chrysene	3168.33	330	84	3333.33	ND	95.0	38 - 131			
Di-n-butylphthalate	3370.00	330	51	3333.33	ND	101	53 - 124			
Di-n-octylphthalate	3390.33	330	63	3333.33	ND	102	29 - 150			

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Semivolatile Organic Compounds by EPA 8270C - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B0A0093 - MSSEMI_S (continued)										
Matrix Spike (B0A0093-MS1) - Continued			**Source: 1904739-01**			Prepared: 1/3/2020 Analyzed: 1/3/2020				
Dibenz(a,h)anthracene	2765.33	330	45	3333.33	ND	83.0	42 - 123			
Dibenzofuran	2935.33	330	58	3333.33	ND	88.1	55 - 121			
Diethyl phthalate	3263.33	330	58	3333.33	ND	97.9	44 - 127			
Dimethyl phthalate	3229.33	330	40	3333.33	ND	96.9	51 - 114			
Fluoranthene	3018.00	330	60	3333.33	ND	90.5	49 - 114			
Fluorene	3009.33	330	110	3333.33	ND	90.3	45 - 123			
Hexachlorobenzene	2768.33	330	55	3333.33	ND	83.0	51 - 119			
Hexachlorobutadiene	2284.67	660	53	3333.33	ND	68.5	42 - 97			
Hexachlorocyclopentadiene	2823.00	660	70	3333.33	ND	84.7	36 - 115			
Hexachloroethane	2299.33	330	94	3333.33	ND	69.0	35 - 101			
Indeno(1,2,3-cd)pyrene	2832.33	330	75	3333.33	ND	85.0	44 - 118			
Isophorone	2817.67	330	85	3333.33	ND	84.5	42 - 103			
N-Nitroso-di-n propylamine	2848.00	330	60	3333.33	ND	85.4	42 - 103			
N-Nitrosodiphenylamine	3271.33	330	32	3333.33	ND	98.1	52 - 116			
Naphthalene	2534.33	330	56	3333.33	ND	76.0	44 - 101			
Nitrobenzene	2577.33	330	57	3333.33	ND	77.3	44 - 99			
Pentachlorophenol	3272.00	1600	50	3333.33	ND	98.2	39 - 126			
Phenanthrene	2993.33	330	67	3333.33	ND	89.8	51 - 115			
Phenol	2909.00	330	34	3333.33	ND	87.3	39 - 103			
Pyrene	2992.67	330	72	3333.33	ND	89.8	48 - 114			
Pyridine	2283.33	1600	270	3333.33	ND	68.5	20 - 91			
Surrogate: 1,2-Dichlorobenzene-d	*2102*			*3333.33*		*63.1*	*28 - 77*			
Surrogate: 2,4,6-Tribromophenol	*4314*			*3325.00*		*130*	*17 - 157*			
Surrogate: 2-Chlorophenol-d4	*2416*			*3325.00*		*72.7*	*35 - 98*			
Surrogate: 2-Fluorobiphenyl	*2547*			*3333.33*		*76.4*	*35 - 88*			
Surrogate: 2-Fluorophenol	*2244*			*3325.00*		*67.5*	*32 - 88*			
Surrogate: 4-Terphenyl-d14	*3032*			*3333.33*		*91.0*	*35 - 114*			
Surrogate: Nitrobenzene-d5	*2297*			*3333.33*		*68.9*	*27 - 80*			
Surrogate: Phenol-d6	*2399*			*3325.00*		*72.1*	*35 - 98*			
Matrix Spike Dup (B0A0093-MSD1)			**Source: 1904739-01**			Prepared: 1/3/2020 Analyzed: 1/3/2020				
1,2,4-Trichlorobenzene	2569.67	330	50	3333.33	ND	77.1	44 - 98	3.44	20	
1,2-Dichlorobenzene	2370.67	330	26	3333.33	ND	71.1	38 - 101	3.51	20	
1,3-Dichlorobenzene	2363.00	330	27	3333.33	ND	70.9	39 - 95	0.955	20	
1,4-Dichlorobenzene	2335.00	330	27	3333.33	ND	70.1	39 - 94	1.54	20	
2,4,5-Trichlorophenol	3088.00	330	30	3333.33	ND	92.6	53 - 122	1.34	20	
2,4,6-Trichlorophenol	3294.67	330	35	3333.33	ND	98.8	44 - 126	2.88	20	
2,4-Dichlorophenol	2955.33	1600	34	3333.33	ND	88.7	51 - 105	0.248	20	
2,4-Dimethylphenol	3270.67	330	26	3333.33	ND	98.1	50 - 114	0.0816	20	
2,4-Dinitrophenol	2799.33	1600	86	3333.33	ND	84.0	5 - 171	5.41	20	

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Semivolatile Organic Compounds by EPA 8270C - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B0A0093 - MSSEMI_S (continued)										
Matrix Spike Dup (B0A0093-MSD1) - Continued			**Source: 1904739-01**		Prepared: 1/3/2020 Analyzed: 1/3/2020					
2,4-Dinitrotoluene	3617.00	330	33	3333.33	ND	109	39 - 139	2.30	20	
2,6-Dinitrotoluene	3583.00	330	49	3333.33	ND	107	36 - 146	3.93	20	
2-Chloronaphthalene	3084.00	330	28	3333.33	ND	92.5	50 - 111	0.872	20	
2-Chlorophenol	2652.33	330	31	3333.33	ND	79.6	40 - 104	2.75	20	
2-Methylnaphthalene	2597.67	330	27	3333.33	ND	77.9	46 - 115	0.244	20	
2-Methylphenol	2609.33	330	36	3333.33	ND	78.3	47 - 109	1.21	20	
2-Nitroaniline	3247.67	1600	43	3333.33	ND	97.4	49 - 120	3.31	20	
2-Nitrophenol	3262.00	330	45	3333.33	ND	97.9	25 - 139	0.0715	20	
3,3´-Dichlorobenzidine	2606.00	660	280	3333.33	ND	78.2	35 - 122	1.11	20	
3-Nitroaniline	3471.33	1600	49	3333.33	ND	104	46 - 131	2.43	20	
4,6-Dinitro-2-methyphenol	3701.33	1600	41	3333.33	ND	111	32 - 158	0.923	20	
4-Bromophenyl-phenylether	3003.00	330	64	3333.33	ND	90.1	35 - 142	2.64	20	
4-Chloro-3-methylphenol	3094.00	660	71	3333.33	ND	92.8	52 - 110	0.698	20	
4-Chloroaniline	2947.33	660	53	3333.33	ND	88.4	48 - 118	1.52	20	
4-Chlorophenyl-phenylether	3125.00	330	33	3333.33	ND	93.8	49 - 114	1.34	20	
4-Methylphenol	2495.33	330	57	3333.33	ND	74.9	48 - 112	2.66	20	
4-Nitroaniline	3471.33	1600	37	3333.33	ND	104	40 - 153	2.43	20	
4-Nitrophenol	3235.67	330	64	3333.33	ND	97.1	45 - 122	5.72	20	
Acenaphthene	2996.67	330	43	3333.33	ND	89.9	47 - 117	0.687	20	
Acenaphthylene	2930.33	330	62	3333.33	ND	87.9	47 - 120	0.386	20	
Anthracene	2993.33	330	51	3333.33	ND	89.8	50 - 115	1.72	20	
Benzidine (M)	1947.33	1600	1400	3333.33	ND	58.4	25 - 131	4.94	20	
Benzo(a)anthracene	3148.00	330	44	3333.33	ND	94.4	51 - 108	1.07	20	
Benzo(a)pyrene	2963.00	330	64	3333.33	ND	88.9	46 - 120	1.32	20	
Benzo(b)fluoranthene	2787.00	330	65	3333.33	ND	83.6	41 - 120	1.19	20	
Benzo(g,h,i)perylene	2929.67	330	81	3333.33	ND	87.9	50 - 117	1.42	20	
Benzo(k)fluoranthene	3146.00	330	33	3333.33	ND	94.4	33 - 135	1.23	20	
Benzoic acid	ND	1600	890	3333.33	ND	NR	0 - 104	NR	20	
Benzyl alcohol	2516.00	660	32	3333.33	ND	75.5	41 - 116	2.69	20	
bis(2-chloroethoxy)methane	2664.00	330	64	3333.33	ND	79.9	41 - 101	0.0875	20	
bis(2-Chloroethyl)ether	2490.67	330	66	3333.33	ND	74.7	33 - 106	3.24	20	
bis(2-chloroisopropyl)ether	2886.00	330	76	3333.33	ND	86.6	0 - 128	4.05	20	
bis(2-ethylhexyl)phthalate	3804.67	330	63	3333.33	ND	114	45 - 126	2.64	20	
Butylbenzylphthalate	3835.33	330	41	3333.33	ND	115	51 - 125	2.00	20	
Chrysene	3108.00	330	84	3333.33	ND	93.2	38 - 131	1.92	20	
Di-n-butylphthalate	3308.33	330	51	3333.33	ND	99.2	53 - 124	1.85	20	
Di-n-octylphthalate	3310.67	330	63	3333.33	ND	99.3	29 - 150	2.38	20	
Dibenz(a,h)anthracene	2795.67	330	45	3333.33	ND	83.9	42 - 123	1.09	20	
Dibenzofuran	2892.00	330	58	3333.33	ND	86.8	55 - 121	1.49	20	
Diethyl phthalate	3182.00	330	58	3333.33	ND	95.5	44 - 127	2.52	20	

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Semivolatile Organic Compounds by EPA 8270C - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B0A0093 - MSSEMI_S (continued)										
Matrix Spike Dup (B0A0093-MSD1) - Continued			**Source: 1904739-01**		Prepared: 1/3/2020 Analyzed: 1/3/2020					
Dimethyl phthalate	3176.00	330	40	3333.33	ND	95.3	51 - 114	1.67	20	
Fluoranthene	2911.00	330	60	3333.33	ND	87.3	49 - 114	3.61	20	
Fluorene	2962.00	330	110	3333.33	ND	88.9	45 - 123	1.59	20	
Hexachlorobenzene	2914.00	330	55	3333.33	ND	87.4	51 - 119	5.13	20	
Hexachlorobutadiene	2327.00	660	53	3333.33	ND	69.8	42 - 97	1.84	20	
Hexachlorocyclopentadiene	2821.00	660	70	3333.33	ND	84.6	36 - 115	0.0709	20	
Hexachloroethane	2208.33	330	94	3333.33	ND	66.2	35 - 101	4.04	20	
Indeno(1,2,3-cd)pyrene	2895.00	330	75	3333.33	ND	86.9	44 - 118	2.19	20	
Isophorone	2813.33	330	85	3333.33	ND	84.4	42 - 103	0.154	20	
N-Nitroso-di-n propylamine	2710.00	330	60	3333.33	ND	81.3	42 - 103	4.97	20	
N-Nitrosodiphenylamine	3273.00	330	32	3333.33	ND	98.2	52 - 116	0.0509	20	
Naphthalene	2534.00	330	56	3333.33	ND	76.0	44 - 101	0.0131	20	
Nitrobenzene	2603.00	330	57	3333.33	ND	78.1	44 - 99	0.991	20	
Pentachlorophenol	3318.33	1600	50	3333.33	ND	99.6	39 - 126	1.41	20	
Phenanthrene	2999.00	330	67	3333.33	ND	90.0	51 - 115	0.189	20	
Phenol	2803.00	330	34	3333.33	ND	84.1	39 - 103	3.71	20	
Pyrene	2968.33	330	72	3333.33	ND	89.0	48 - 114	0.816	20	
Pyridine	2392.00	1600	270	3333.33	ND	71.8	20 - 91	4.65	20	
Surrogate: 1,2-Dichlorobenzene-d	*2011*			*3333.33*		*60.3*	*28 - 77*			
Surrogate: 2,4,6-Tribromophenol	*4180*			*3325.00*		*126*	*17 - 157*			
Surrogate: 2-Chlorophenol-d4	*2369*			*3325.00*		*71.2*	*35 - 98*			
Surrogate: 2-Fluorobiphenyl	*2555*			*3333.33*		*76.7*	*35 - 88*			
Surrogate: 2-Fluorophenol	*2190*			*3325.00*		*65.9*	*32 - 88*			
Surrogate: 4-Terphenyl-d14	*3126*			*3333.33*		*93.8*	*35 - 114*			
Surrogate: Nitrobenzene-d5	*2262*			*3333.33*		*67.9*	*27 - 80*			
Surrogate: Phenol-d6	*2301*			*3325.00*		*69.2*	*35 - 98*			

Certificate of Analysis

Burns and McDonnell	Project Number : SCVTA, 87119-1216 Auto Zone
400 Oyster Point Blvd, Suite 533	Report To : Christopher D'Sa
South San Francisco , CA 94080	Reported : 01/08/2020

Notes and Definitions

R	RPD value outside acceptance criteria. Calculation is based on raw values.
M2	Matrix spike recovery outside of acceptance limit due to possible matrix interference. The analytical batch was validated by the laboratory control sample.
M1	Matrix spike recovery outside of acceptance limit. The analytical batch was validated by the laboratory control sample.
L5	Laboratory Control Sample high biased. Sample result/s was non-detect (ND) for the target analyte; therefore reanalysis was not necessary.
ND	Analyte is not detected at or above the Practical Quantitation Limit (PQL). When client requests quantitation against MDL, analyte is not detected at or above the Method Detection Limit (MDL)
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
NR	Not Reported
RPD	Relative Percent Difference
CA2	CA-ELAP (CDPH)
OR1	OR-NELAP (OSPHL)

Notes:
(1) The reported MDL and PQL are based on prep ratio variation and analytical dilution.
(2) The suffix [2C] of specific analytes signifies that the reported result is taken from the instrument's second column.
(3) Results are wet unless otherwise specified.

Erick Ovalle

From: Barber, Simon <sbarber@burnsmcd.com>
Sent: Tuesday, December 31, 2019 8:16 AM
To: Erick Ovalle; D'Sa, Christopher P (Chris); Molky Brar
Subject: RE: Sample Received 12/31/19 - 1218 Abdulkariem, 1216 Auto Zone

Erick,

Please prioritize TPHD/M. then SVOCs, OCP/PCB.

From: Erick Ovalle <Erick.Ovalle@atlglobal.com>
Sent: Tuesday, December 31, 2019 8:13 AM
To: D'Sa, Christopher P (Chris) <cdsa@burnsmcd.com>; Barber, Simon <sbarber@burnsmcd.com>; Molky Brar <molky.brar@atlglobal.com>
Subject: RE: Sample Received 12/31/19 - 1218 Abdulkariem, 1216 Auto Zone

Good morning Chris,

We received one 1L amber for sample B-1 on project 87119-1216 Auto Zone but we need four 1L ambers in order to perform TPH D/M, SVOC, OCP/PCB and Asbestos. Please advise which method you would like us to prioritize?

Best regards,

Erick Ovalle | Project Manager
ADVANCED TECHNOLOGY LABORATORIES
3275 Walnut Avenue, Signal Hill CA 90755 | www.atlglobal.com
Email: Erick.Ovalle@atlglobal.com
Tel: 562.989.4045 ext. 237 | Fax: 562.989.6348
Laboratory Excellence Defined

From: D'Sa, Christopher P (Chris) <cdsa@burnsmcd.com>
Sent: Tuesday, December 31, 2019 7:39 AM
To: Advanced Technology Laboratories - customer.relations@atlglobal.com <customer.relations@atlglobal.com>; Barber, Simon <sbarber@burnsmcd.com>; Molky Brar <molky.brar@atlglobal.com>; Erick Ovalle <Erick.Ovalle@atlglobal.com>
Subject: RE: Sample Received 12/31/19 - 1218 Abdulkariem, 1216 Auto Zone

Thanks for the prompt notification, Can you get this invoiced in advance asap with 12/31/19 date so we can process with Dec 2019 invoice to client..

From: ATL Sample Control <SampleControl@atlglobal.com>
Sent: Tuesday, December 31, 2019 7:35 AM
To: D'Sa, Christopher P (Chris) <cdsa@burnsmcd.com>; Barber, Simon <sbarber@burnsmcd.com>
Cc: Erick Ovalle <Erick.Ovalle@atlglobal.com>
Subject: Sample Received 12/31/19 - 1218 Abdulkariem, 1216 Auto Zone

Good morning Simon,

ATL received 2 coolers for your project today and will start processing the samples shortly. We will contact you if there are any issues.

Attached is the chain of custody for your reference.

If you have questions or concerns, please contact your ATL Project Manager.

Please do not reply to this message. Replies to this message are routed to an unmonitored mailbox. If you have any questions, please contact your ATL Project Manager.

Thank you for your business,

ATL Sample Control
ADVANCED TECHNOLOGY LABORATORIES
3275 Walnut Avenue, Signal Hill CA 90755
O: 562.989.4045
http://www.atlglobal.com

Laboratory Excellence Defined

ADVANCED TECHNOLOGY LABORATORIES
3275 Walnut Ave., Signal Hill, CA 90755
Tel: (562) 989-4045 • Fax: (562) 989-4040

CHAIN OF CUSTODY RECORD

Page 1 of 1

Instruction: Complete all shaded areas.

For Laboratory Use Only — ATLCOC Ver:20191022

Method of Transport	Sample Conditions Upon Receipt					
	Condition	Y	N	Condition	Y	N
☐ Client ☐ ATL	1. CHILLED	☐	☐	5. # OF SAMPLES MATCH COC	☐	☐
☑ FedEx ☐ OnTrac	2. HEADSPACE (VOA)	☐	☐	6. PRESERVED	☐	☐
☐ GSO	3. CONTAINER INTACT	☑	☐	7. COOLER TEMP, deg C:	2.8	3.1
☐ Other:	4. SEALED	☐	☐		ICE	

CUSTOMER

Company: Burns & McDonnell Enginnering Company, Inc.		Address: 400 Oyster Point Blvd. Suite 533	Tel: 650-871-2661
		City: South San Francisco State: CA Zip: 94080	Fax: 650-871-2653

SEND REPORT TO:	SEND INVOICE TO: ☐ same as SEND REPORT TO
Attn: sbarber@burnsmcd.com; cdsa@burnsmcd.com Email:	Attn: CDSA@burnsmcd.com Email: supplierinvoices@burnsmcd.com
Company: Burns & McDonnell Engineerign Compnay, Inc.	Company: Burns & McDonnell Engineering Company, Inc.
Address: 400 Oyster Point Blvd. Suite 533	Address: 400 Oyster Point Blvd. Suite 533
City: South San Francisco State: CA Zip: 94080	City: South San Francisco State: CA Zip: 98040

EDD: ☐ Excel ☐ EDF ☐ Equis ☐ _____

QA/QC: ☐ Routine ☐ Caltrans ☐ Legal ☑ RWQCB ☐ Level IV ☐ _____

PROJECT SAMPLES

Project Name: SCVTA
Project No.: 87119-1216 Auto Zone
Sampler: Simon Barber
Quote #:
PO #:
Special Instructions/Comments: Run Silica Gel Cleanup

ITEM	Laboratory ID (For Lab Use Only)	Sample Description: Sample ID / Location	Date	Time	TPHd 8015	TPHmo 8015	TPHg & VOCs 8260	CAM17Mtls 22 MEtals 200.7/6010	SVOCs 8270C SIM	OCP/PCBs 8081A/8082	Asbestos PLM-CARB435A	Sample Matrix: Soil	Solid	Water	Wastewater	Non-aqueous	Custom	Turnaround Time (TAT)	Container: Quantity	Type	Material	Preservative	Remarks
1	1904742-01	B-1d7	12.27.19	0753	X	X	X	X	X	X	X	S						5	5	2 5	1	4	5035
2	-02	B-1d24	12.27.19	0812	X	X	X	X				S						5	4	2 5	1	4	5035
3	-03	B-2d10	12.27.19	0840	X	X	X	X				S						5	4	2 5	1	4	5035
4	-04	B-2d24	12.27.19	0850	X	X	X	X				S						5	4	2 5	1	4	5035
5	-05	B-1	12.27.19	0915	X	X	X	X	X	X	X			GW				5	8	2 3	1 2	1 2	
6																							
7																							
8																							
9																							
10																							

TERMS

1. Sample receiving hours: 7:30 AM to 7:30 PM Monday - Friday; Saturday 8:00 AM to 12:00 PM.
2. Samples submitted AFTER 5:00 PM are considered received the following business day at 8:00 AM.
3. The following turnaround time conditions apply:
   - TAT = 0 : Same Business Day if received by 9:00 AM
   - TAT = 1 : 1 Business Day (COB)
   - TAT = 2 : 2 Business Days (COB)
   - TAT = 3 : 3 Business Days (COB)
   - TAT = 4 : 4 Business Days (COB)
   - TAT = 5 : 5 Business Days (COB)
   - TAT = 6 : 5 to 7 Business Days (COB)
4. Weekend, holiday, after-hours work --- ask for quote.
5. Subcontract TAT is 10 - 15 business days. Projects requiring shorter TATs will incur a surcharge respective to the subcontract lab --- ask for quote.
6. Liquid and solid samples will be disposed of after 45 calendar days from receipt of samples; air samples will be disposed of after 14 calendar days after receipt of samples.
7. Electronic records maintained for five (5) years from report date.
8. Hard copy reports will be disposed of after 45 calendar days from report date.
9. Storage and Report Fees:
   - Liquid & solid samples: Complimentary storage for forty-five (45) calendar days from receipt of samples; $2/sample/month if extended storage or hold is requested.
   - Air samples: Complimentary storage for ten (10) calendar days from receipt of samples; $20 sample/week if extended storage is requested.
   - Hard copy and regenerated reports/EDDs: $17.50 per hard copy report requested; $50.00 per regenerated/reformatted report; $35 per reprocessed EDD.
10. Rush TCLP/STLC samples: add 2 days to analysis TAT for extraction procedure.
11. Unanalyzed samples will incur a disposal fee of $7 per sample.
12. The laboratory will randomly select from all QC samples received the sample to spike for Matrix Spike/ Matrix Spike Duplicate (MS/MSD) at no cost. However, if you want the laboratory to additionally perform MS/MSD on your sample, a charge will be assessed for the specific sample used.

CUSTODY

Relinquished by: (Signature and Printed Name)	Date:	Time:	Received by: (Signature and Printed Name)	Date:	Time:
Simon Barber	12.27.19	1100		12/31/19	720
Relinquished by: (Signature and Printed Name)	Date:	Time:	Received by: (Signature and Printed Name)	Date:	Time:
Relinquished by: (Signature and Printed Name)	Date:	Time:	Received by: (Signature and Printed Name)	Date:	Time:

As the authorized agent of the company above, I hereby purchase laboratory services from ATL as shown above and hereby guarantee payment as quoted.

Printed Name _____ Signature _____

Please Reply To:

AmeriSci Los Angeles
24416 S. Main Street, Ste 308
Carson, California 90745
TEL: (310) 834-4868 • FAX: (310) 834-4772

FACSIMILE TELECOPY TRANSMISSION

To: Rachelle Arada
Advanced Technology Laboratories
Fax #:

From: Arturo A. Aldana
AmeriSci Job #: 919121777
Subject: PLM-CARB 435 - 1000 pt ct 5 day
Client Project: 1904742

Email: Erick.Ovalle@atlglobal.com,Tina.Nguyen@atlglobal.com,Rahul.Nair@atlglobal.com

Date: Tuesday, January 7, 2020
Time: 09:46:00
Comments:

Number of Pages: 3 (including cover sheet)

AmeriSci Los Angeles
24416 S. Main Street, Ste 308
Carson, California 90745
TEL: (310) 834-4868 • FAX: (310) 834-4772

PLM Bulk Asbestos Report

Advanced Technology Laboratories
Attn: Rachelle Arada
3275 Walnut Street

Signal Hill , CA 90755

Date Received 12/31/19
Date Examined 01/07/20

RE: 1904742

AmeriSci Job # 919121777
P.O. # SC14443
Page 1 **of** 1

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
1904742-01	919121777-01	*No*	NAD [1]
Location: B-1d7			(by 1000 pt ct) by Arturo A. Aldana on 01/07/20

Analyst Description: Brown, Heterogeneous, Non-Fibrous, Soil
Asbestos Types:
Other Material: Non-Asbestos/Inert 100 %

Reporting Notes:

(1) Sample analyzed by California Air Resources Board - Method 435 for serpentine aggregate using 1000 Point Count analysis.

Analyzed By: Arturo A. Aldana aa; Date Analyzed: 1/7/2020 1/7/20

*NAD = no asbestos detected; Detection Limit <1%; Reporting Limits: CVES = 1%, 400 Pt Ct = 0.25%, 1000 Pt Ct = 0.1%; NA = not analyzed; NA/PS = not analyzed / positive stop; NVA = No Visible Asbestos; PLM (polarized light microscopy) Bulk Asbestos Analysis by EPA 600/R-93/116, including requirements for EPA 600/M4-82-020 per 40 CFR 763 (NVLAP Lab #200346-0); Note: PLM is not consistently reliable in detecting asbestos in floor coverings and similar NOB materials. TEM is currently the only method that can be used to determine if this material can be considered or treated as non-asbestos-containing in New York State (also see EPA Advisory for floor tile, FR 59, 146, 38970, 8/1/94). NIST Accreditation requirements mandate that this report must not be reproduced ~~except in~~ full with the approval of the laboratory. This PLM report relates ONLY to the items tested.

Reviewed By: _____

ADVANCED TECHNOLOGY LABORATORIES

SUBCONTRACT ORDER

Work Order: 1904742

9191217777

SENDING LABORATORY:

Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755
Phone: 562.989.4045
Fax: 562.989.6348
Project Manager: Erick Ovalle

RECEIVING LABORATORY:

AmeriSci Los Angeles
24416 South Main Street, Suite 308
Carson, CA 90745
Phone :(310) 834-4868
Fax: (310) 834-4772
PO#: SC14443- STANDARD TAT

Sampler: Simon Barber

60

IMPORTANT : Please include Work Order # and PO # in your invoice.

Analysis	Due	Expires	Sampled	Comments
ATL Lab#: 1904742-01 / B-1d7		**Soil**	**12/27/19 07:53**	
Asbestos_CARB_435_1000_SUB [Asbestos CARB 435 (1000 pt ct)] 1-Glass Jar - 2 oz	**01/07/20 17:00**	01/03/20 07:53		

Released By	Date	Received By	Date
	13:07 12-31-19		12/31/19 13:10
Released By	Date	Received By	Date

ADVANCED TECHNOLOGY LABORATORIES

January 20, 2020

Christopher D'Sa
Burns and McDonnell
400 Oyster Point Blvd, Suite 533
South San Francisco, CA 94080
Tel: (626) 817-7900
Fax:

ELAP No.: 1838
CSDLAC No.: 10196
ORELAP No.: CA300003

Re: ATL Work Order Number : 1904742
Client Reference : SCVTA, 87119-1216 Auto Zone

Enclosed are the results for sample(s) received on December 31, 2019 by Advanced Technology Laboratories. The sample(s) are tested for the parameters as indicated on the enclosed chain of custody in accordance with applicable laboratory certifications. The laboratory results contained in this report specifically pertains to the sample(s) submitted.

Thank you for the opportunity to serve the needs of your company. If you have any questions, please feel free to contact me or your Project Manager.

Sincerely,

Dr. Reza Karimi
Laboratory Director

Burns and McDonnell	Project Number : SCVTA, 87119-1216 Auto Zone
400 Oyster Point Blvd, Suite 533	Report To : Christopher D'Sa
South San Francisco , CA 94080	Reported : 01/20/2020

SUMMARY OF SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
B-1d24	1904742-02	Soil	12/27/19 8:12	12/31/19 7:20

Erick Ovalle

From: Barber, Simon <sbarber@burnsmcd.com>
Sent: Thursday, January 9, 2020 10:39 AM
To: Erick Ovalle
Cc: Advanced Technology Laboratories - customer.relations@atlglobal.com; D'Sa, Christopher P (Chris)
Subject: RE: Results / SCVTA, 87119-1216 Auto Zone / ATL 1904742

Standard turn is fine.

From: Erick Ovalle <Erick.Ovalle@atlglobal.com>
Sent: Thursday, January 09, 2020 10:39 AM
To: Barber, Simon <sbarber@burnsmcd.com>
Cc: Advanced Technology Laboratories - customer.relations@atlglobal.com <customer.relations@atlglobal.com>; D'Sa, Christopher P (Chris) <cdsa@burnsmcd.com>
Subject: RE: Results / SCVTA, 87119-1216 Auto Zone / ATL 1904742

Good morning Simon,

We can analyze for Hex Chrome EPA 7199. How soon would you need the results?

Best regards,

Erick Ovalle | Project Manager
ADVANCED TECHNOLOGY LABORATORIES
3275 Walnut Avenue, Signal Hill CA 90755 | www.atlglobal.com
Email: Erick.Ovalle@atlglobal.com
Tel: 562.989.4045 ext. 237 | Fax: 562.989.6348
Laboratory Excellence Defined

From: Barber, Simon <sbarber@burnsmcd.com>
Sent: Thursday, January 9, 2020 10:28 AM
To: Erick Ovalle <Erick.Ovalle@atlglobal.com>
Cc: Advanced Technology Laboratories - customer.relations@atlglobal.com <customer.relations@atlglobal.com>; D'Sa, Christopher P (Chris) <cdsa@burnsmcd.com>
Subject: FW: Results / SCVTA, 87119-1216 Auto Zone / ATL 1904742

Good morning Erick,

May we request that Hex Chrome be run on sample B-1d24.

Thanks,
Simon

From: Erick Ovalle <Erick.Ovalle@atlglobal.com>
Sent: Wednesday, January 08, 2020 5:21 PM
To: D'Sa, Christopher P (Chris) <cdsa@burnsmcd.com>; Barber, Simon <sbarber@burnsmcd.com>

Cc: Molky Brar <molky.brar@atlglobal.com>
Subject: Results / SCVTA, 87119-1216 Auto Zone / ATL 1904742

Good afternoon Chris,

Please find your results and invoice for the above project attached.

If I can further assist you, please let me know.

PLEASE NOTE: Our legal name is Environmental Treatment & Technology Inc., dba Advanced Technology Laboratories.

Best regards,

Erick Ovalle | Project Manager
ADVANCED TECHNOLOGY LABORATORIES
3275 Walnut Avenue, Signal Hill CA 90755 | www.atlglobal.com
Email: Erick.Ovalle@atlglobal.com
Tel: 562.989.4045 ext. 237 | Fax: 562.989.6348
Laboratory Excellence Defined

Erick Ovalle

From: D'Sa, Christopher P (Chris) <cdsa@burnsmcd.com>
Sent: Thursday, January 2, 2020 1:21 PM
To: Molky Brar
Cc: Erick Ovalle; Barber, Simon
Subject: Re: SCVTA / 87119 / ATL 1904739 / 1904742

Ok. Thanks Molky. Erick lets go with this direction

Sent from my iPhone

> On Jan 2, 2020, at 15:19, Molky Brar <molky.brar@atlglobal.com> wrote:
>
> Hi Chris,
>
> 8015B GROs is equivalent to 8260B GROs. The results will be comparable. I would recommend to proceed with analyzing by 8015B GROs.
>
> Thanks!
>
> Molky
>
> ---
>
> **From:** D'Sa, Christopher P (Chris) <cdsa@burnsmcd.com>
> **Sent:** Thursday, January 2, 2020 12:46 PM
> **To:** Erick Ovalle <Erick.Ovalle@atlglobal.com>; Molky Brar <molky.brar@atlglobal.com>
> **Cc:** Barber, Simon <sbarber@burnsmcd.com>
> **Subject:** Re: SCVTA / 87119 / ATL 1904739 / 1904742
>
> I'm ok. As long as Molky concurs thatvthis is our best option
> Sent from my iPhone
>
> > On Jan 2, 2020, at 14:32, Erick Ovalle <Erick.Ovalle@atlglobal.com> wrote:
> >
> > Good afternoon Chris,
> >
> > We are having difficulties calibrating our instrument for GRO by EPA 8260 to analyze the two aqueous samples for work orders 1904739 and 1904742. Can we change the method to run it by EPA 8015 GRO?
> >
> > Best regards,

Erick Ovalle | Project Manager
ADVANCED TECHNOLOGY LABORATORIES
3275 Walnut Avenue, Signal Hill CA 90755 | www.atlglobal.com
Email: Erick.Ovalle@atlglobal.com
Tel: 562.989.4045 ext. 237 | Fax: 562.989.6348
<image002.png>

<1904739_SRC.pdf>
<1904742_SRC.pdf>

ADVANCED TECHNOLOGY LABORATORIES
3275 Walnut Ave., Signal Hill, CA 90755
Tel: (562) 989-4045 • Fax: (562) 989-4040

CHAIN OF CUSTODY RECORD

Page 1 of 1

Instruction: Complete all shaded areas.

For Laboratory Use Only — ATLCOC Ver:20191022

Method of Transport: ☐ Client ☐ ATL ☑ FedEx ☐ OnTrac ☐ GSO ☐ Other: _____

Sample Conditions Upon Receipt

Condition	Y	N	Condition	Y	N
1. CHILLED	☑	☐	5. # OF SAMPLES MATCH COC	☐	☐
2. HEADSPACE (VOA)	☐	☑	6. PRESERVED	☐	☐
3. CONTAINER INTACT	☑	☐	7. COOLER TEMP, deg C:	2.8, 3.1	
4. SEALED	☐	☐		ICE	

CUSTOMER

Company: Burns & McDonnell Enginnering Company, Inc.
Address: 400 Oyster Point Blvd. Suite 533
City: South San Francisco | State: CA | Zip: 94080
Tel: 650-871-2661 | Fax: 650-871-2653

SEND REPORT TO:
Attn: sbarber@burnsmcd.com; cdsa@burnsmcd.com Email:
Company: Burns & McDonnell Engineerign Compnay, Inc.
Address: 400 Oyster Point Blvd. Suite 533
City: South San Francisco | State: CA | Zip: 94080

SEND INVOICE TO: ☐ same as SEND REPORT TO
Attn: CDSA@burnsmcd.com Email: supplierinvoices@burnsmcd.com
Company: Burns & McDonnell Engineering Company, Inc.
Address: 400 Oyster Point Blvd. Suite 533
City: South San Francisco | State: CA | Zip: 98040

EDD: ☐ Excel ☐ EDF ☐ Equis ☐ _____
QA/QC: ☐ Routine ☐ Caltrans ☐ Legal ☑ RWQCB ☐ Level IV ☐ _____

PROJECT SAMPLES

Project Name: SCVTA
Project No.: 87119-1216 Auto Zone
Sampler: Simon Barber
Quote #:
PO #:
Special Instructions/Comments: Run Silica Gel Cleanup

ITEM	Laboratory ID (For Lab Use Only)	Sample ID / Location	Date	Time	TPHd 8015	TPHmo 8015	TPHg & VOCs 8260	SVOCs 8270C SIM	OCP/PCBs 8081A/8082	Asbestos PLM-CARB435A	Sample Matrix	Turnaround Time (TAT)	Container: Quantity	Container: Type	Container: Material	Container: Preservative	Remarks
1	1904742-01	B-1d7	12.27.19	0753	X	X	X	X	X	X	S	5	5	2 5	1	4	5035
2	-02	B-1d24	12.27.19	0812	X	X	X	X			S	5	4	2 5	1	4	5035
3	-03	B-2d10	12.27.19	0840	X	X	X	X			S	5	4	2 5	1	4	5035
4	-04	B-2d24	12.27.19	0850	X	X	X	X			S	5	4	2 5	1	4	5035
5	-05	B-1	12.27.19	0915	X	X	X	X	X	X	GW	5	8	2 3	1 2	1 2	
6																	
7																	
8																	
9																	
10																	

TERMS

1. Sample receiving hours: 7:30 AM to 7:30 PM Monday - Friday; Saturday 8:00 AM to 12:00 PM.
2. Samples submitted AFTER 5:00 PM are considered received the following business day at 8:00 AM.
3. The following turnaround time conditions apply:
   - TAT = 0 : Same Business Day if received by 9:00 AM
   - TAT = 1 : 1 Business Day (COB)
   - TAT = 2 : 2 Business Days (COB)
   - TAT = 3 : 3 Business Days (COB)
   - TAT = 4 : 4 Business Days (COB)
   - TAT = 5 : 5 Business Days (COB)
   - TAT = 6 : 5 to 7 Business Days (COB)
4. Weekend, holiday, after-hours work --- ask for quote.
5. Subcontract TAT is 10 - 15 business days. Projects requiring shorter TATs will incur a surcharge respective to the subcontract lab --- ask for quote.
6. Liquid and solid samples will be disposed of after 45 calendar days from receipt of samples; air samples will be disposed of after 14 calendar days after receipt of samples.
7. Electronic records maintained for five (5) years from report date.
8. Hard copy reports will be disposed of after 45 calendar days from report date.
9. Storage and Report Fees:
   - Liquid & solid samples: Complimentary storage for forty-five (45) calendar days from receipt of samples; $2/sample/month if extended storage or hold is requested.
   - Air samples: Complimentary storage for ten (10) calendar days from receipt of samples; $20 sample/week if extended storage is requested.
   - Hard copy and regenerated reports/EDDs: $17.50 per hard copy report requested; $50.00 per regenerated/reformatted report; $35 per reprocessed EDD.
10. Rush TCLP/STLC samples: add 2 days to analysis TAT for extraction procedure.
11. Unanalyzed samples will incur a disposal fee of $7 per sample.
12. The laboratory will randomly select from all QC samples received the sample to spike for Matrix Spike/ Matrix Spike Duplicate (MS/MSD) at no cost. However, if you want the laboratory to additionally perform MS/MSD on your sample, a charge will be assessed for the specific sample used.

CUSTODY

Relinquished by: (Signature and Printed Name)	Date:	Time:	Received by: (Signature and Printed Name)	Date:	Time:
Simon Barber	12.27.19	1100		12/31/19	720
Relinquished by: (Signature and Printed Name)	Date:	Time:	Received by: (Signature and Printed Name)	Date:	Time:
Relinquished by: (Signature and Printed Name)	Date:	Time:	Received by: (Signature and Printed Name)	Date:	Time:

As the authorized agent of the company above, I hereby purchase laboratory services from ATL as shown above and hereby guarantee payment as quoted.

Printed Name _____ Signature _____

AMERICAN SCIENTIFIC LABORATORIES, LLC
Environmental Testing Services
2520 N. San Fernando Road, LA CA 90065 Tel: (323) 223-9700 • Fax: (323) 223-9500

17 January 2020

Erick Ovalle

Advanced Technology Laboratories

3275 Walnut Ave.

Signal Hill, CA 90755

Work Order #: 2001111

Project Name: Soil Sample

Project ID: 1904742

Site Address:

Enclosed are the results of analyses for samples received by the laboratory on January 17, 2020. If you have any questions concerning this report, please feel free to contact us.

Rojert G. Araghi

Laboratory Director

ADVANCED TECHNOLOGY LABORATORIES

SUBCONTRACT ORDER

Work Order: 1904742

9200111284

ASL JOB # 2001111

SENDING LABORATORY:

Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755
Phone: 562.989.4045
Fax: 562.989.6348
Project Manager: Erick Ovalle

Sampler: Simon Barber

RECEIVING LABORATORY:

American Scientific Laboratories
2520 N. San Fernando Rd.
Los Angeles, CA 90065
Phone :(323) 223-9700
Fax: (323) 223-9500
PO#: Sc14462 ~~Standard~~ TAT

EO Rush

IMPORTANT : Please include Work Order # and PO # in your invoice.

Analysis	Due	Expires	Sampled	Comments	Lab I.D.
ATL Lab#: 1904742-02 / B-1d24		**Soil**	**12/27/19 08:12**	**1-Glass Jar - 4 oz**	
7199_3060A_SUB	**01/16/20 17:00**	01/24/20 08:12			2001111 - 01
[Hexavalent Chromium by Ion Chromatography]					

Released By	Date	Received By	Date
	01/09/20 11:48		1/9/20 11:50
P. Jones	1/17/20 10.40		01/17/20 10:40
	01/17/20 1127	Janet Chen	1-17-20 11:27

Job# 2001111

ASL Sample Receipt Form

Client: Advanced Technology Laboratories

Date: 1-17-2020

Sample Information:

Temperature: 4.5°C ☐ Blank ☒ Sample

Custody Seal: ☐ Yes ☒ No ☐ Not Available

Received Within Holding Time: ☒ Yes ☐ No

Container:

Proper Containers and Sufficient Volume: ☒ Yes ☐ No

Soil: ☒ 4oz ☐ 8oz ☐ Sleeve ☐ VOA

Water: ☐ 500AG ☐ 1AG ☐ 125PB ☐ 250PB ☐ 500PB ☐ VOA ☐ Other _____

Air: ☐ Tedlar®

Sample Containers Intact: ☒ Yes ☐ No

Trip Blank ☐ Yes ☒ No

Chain-of-Custody (COC):

Received: ☒ Yes ☐ No

Samplers Name: ☒ Yes ☐ No

Container Labels match COC: ☒ Yes ☐ No

COC documents received complete: ☒ Yes ☐ No

Proper Preservation Noted: ☒ Yes ☐ No

Completed By: Janet Chin

AMERICAN SCIENTIFIC LABORATORIES, LLC
Environmental Testing Services
2520 N. San Fernando Road, LA CA 90065 Tel: (323) 223-9700 • Fax: (323) 223-9500

Advanced Technology Laboratories	Project: Soil Sample	Work Order No: 2001111
3275 Walnut Ave.	Project Number: 1904742	**Reported:**
Signal Hill CA, 90755	Project Manager: Erick Ovalle	01/17/2020 15:51

ANALYTICAL SUMMARY REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
1904742-02 / B-Id24	2001111-01	Solid	12/27/2019 08:12	01/17/2020 11:27

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Rojert G. Araghi, President/Lab Director

AMERICAN SCIENTIFIC LABORATORIES, LLC
Environmental Testing Services
2520 N. San Fernando Road, LA CA 90065 Tel: (323) 223-9700 • Fax: (323) 223-9500

Advanced Technology Laboratories	Project: Soil Sample	Work Order No: 2001111
3275 Walnut Ave.	Project Number: 1904742	**Reported:**
Signal Hill CA, 90755	Project Manager: Erick Ovalle	01/17/2020 15:51

Analytical Results

Client Sample ID: 1904742-02 / B-Id24

Laboratory Sample ID: 2001111-01 (Solid)

Analyte	Result	Notes	MDL	PQL	Units	Dilution	Prep Method	Analyzed	Analyst	Method
Chromium, Hexavalent By Ion Chromatography					Batch ID: BA00464		Prepared: 01/17/2020 13:18			
Chromium, Hexavalent	**0.21**	J	0.10	0.50	mg/kg	1	3060A	01/17/2020 15:25	CBP	7199

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Rojert G. Araghi, President/Lab Director

American Scientific Laboratories, LLC
Environmental Testing Services
2520 N. San Fernando Road, LA CA 90065 Tel: (323) 223-9700 • Fax: (323) 223-9500

Advanced Technology Laboratories	Project: Soil Sample	Work Order No: 2001111
3275 Walnut Ave.	Project Number: 1904742	**Reported:**
Signal Hill CA, 90755	Project Manager: Erick Ovalle	01/17/2020 15:51

Chromium, Hexavalent By Ion Chromatography - Quality Control Report

Analyte	Result	MDL	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BA00464 - 3060A - 7199											
Blank (BA00464-BLK1)					Prepared & Analyzed: 01/17/202						
Chromium, Hexavalent	ND	0.10	0.50	mg/kg							
LCS (BA00464-BS1)					Prepared & Analyzed: 01/17/202						
Chromium, Hexavalent	4.92	0.10	0.50	mg/kg	5.00		98.4	80-120			
LCS Dup (BA00464-BSD1)					Prepared & Analyzed: 01/17/202						
Chromium, Hexavalent	5.26	0.10	0.50	mg/kg	5.00		105	80-120	6.68	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Rojert G. Araghi, President/Lab Director

American Scientific Laboratories, LLC
Environmental Testing Services
2520 N. San Fernando Road, LA CA 90065 Tel: (323) 223-9700 • Fax: (323) 223-9500

Advanced Technology Laboratories	Project: Soil Sample	Work Order No: 2001111
3275 Walnut Ave.	Project Number: 1904742	**Reported:**
Signal Hill CA, 90755	Project Manager: Erick Ovalle	01/17/2020 15:51

Notes and Definitions

J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the practical quantitation limit (PQL)
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

ATTACHMENT 3 – PHASE II ESA PHOTOGRAPHS

Photograph Log Sheets
Santa Clara Valley Transportation Authority
Parcel 1216 AutoZone
Phase II Environmental Site Assessment 2019-12-27

Photo 1: Boring location B-1.

Photo 2: Boring Location B-2.

Photo 3: Hand clearance B-1.

Photo 4: Direct Push Drilling (B-1).

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CREATE AMAZING.

Burns & McDonnell World Headquarters
9400 Ward Parkway
Kansas City, MO 64114
O 816-333-9400
F 816-333-3690
www.burnsmcd.com

BURNS McDONNELL

12-13-2019

Dan Pornel
Planning & Engineering Division
Santa Clara Valley Transportation Authority
3331 North First Street
San Jose, California 95134

Re: Phase II ESA: Bohannon - Property 1217

Dear Dan:

Please find enclosed one copy of the Phase II Report for the Bohannon Property (1217) located at 2710 Story Road, San Jose, CA 95127.

Enclosures:

- 1 Hardcopy (bound) Final Phase II report
- 1 Thumb Drive with the Phase II report in .pdf format

Sincerely,

Simon Barber P.G. QSP/D QISP ENV SP
Project Geologist

SB/sb

Enclosure Attachment
cc: Chris Valle - SCVTA
Chris D'Sa - Burns & McDonnell

400 Oyster Point Blvd. \ Suite 533 \ South San Francisco, CA 94080
O 650-871-2926 \ F 650-871-2653 \ burnsmcd.com
CA Contractor License 755238

Phase II Site Characterization Report: Bohannon 1217 Parcel

Santa Clara Valley Transportation Authority

VTA Project No. 1217
Burns & McDonnell Project No. 87119
Revision Draft
12/13/2019

Phase II Site Characterization Report: Bohannon 1217 Parcel

prepared for

Santa Clara Valley Transportation Authority
VTA Project No. 1217
San Jose, CA

Project No. 87119

Revision Draft
12/13/2019

prepared by

Burns & McDonnell Engineering Company, Inc.
South San Francisco, California

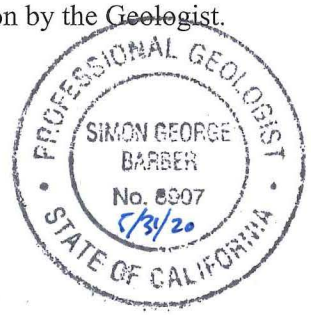
INDEX AND CERTIFICATION

Santa Clara Valley Transportation Authority
Phase II Site Characterization Report:
Bohannon
1217 Parcel
Project No. 87119

Report Index

Certification

I hereby certify, as a Professional Geologist in the state of California, that the information in this document was assembled under my direct personal charge. This report is not intended or represented to be suitable for reuse by the Santa Clara Valley Transportation Authority or others without specific verification or adaptation by the Geologist.



Simon Barber P.G. (CA 8907)

BMcD Geologist QSP/D QISP ENV SP

Date: 12-13-2019

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LIST OF FIGURES

LIST OF ABBREVIATIONS

Abbreviation	Term/Phrase/Name
µg/kg	Microgram per kilogram
µg/L	Microgram per liter
ACM	asbestos containing materials
BART	Bay Area Rapid Transit
Burns & McDonnell	Burns & McDonnell Engineering Company, Inc.
Cascade	Cascade Drilling, LP.
CIH	Certified Industrial Hygienist
DBE	disadvantaged business enterprise
EBRC	Eastridge to BART Regional Connector Project
ELAP	Environmental Laboratory Accreditation Program
EPA	United Stated Environmental Protection Agency
ESA	Environmental Site Assessment
ESL	Environmental Screening Level (SF Bay-Regional Board)
Fee Take	VTA Fee Take Area of Activity
ft bgs	feet below ground surface
IDW	investigation-derived waste
mg/kg	Milligrams per kilogram
mg/L	Milligram per liter
NPDES	National Pollution Discharge Elimination System
NVLAP	National Voluntary Laboratory Accredited Program
OCP	organochlorine pesticide
OSHA	Occupational Safety & Health Administration
PAH	polycyclic aromatic hydrocarbon
PCB	polychlorinated biphenyl
PID	photoionization detector
PQL	practicable quantitation limit
RCRA	Resource Conservation & Recovery Act
Regional Board	SF-Bay Regional Water Quality Control Board
S&HP	Site Safety & Health Plan
SBE	small business enterprise
Site	1217B3109 Property Parcels
STLC	Soluble Threshold Limit Concentration
SVOC	semi-volatile organic compound
TPH	total petroleum hydrocarbons
TPHd	diesel-range total petroleum hydrocarbons
TPHg	gasoline-range total petroleum hydrocarbons
TPHmo	motor oil-range total petroleum hydrocarbons
TTLC	Total Threshold Limit Concentration
USA	Underground Service Alert of Northern California
USCS	Unified Soil Classification System
UST	underground storage tank

Abbreviation	Term/Phrase/Name
VOC	volatile organic compound
VTA	Valley Transportation Authority
WBE	woman owned business enterprise

1.0 INTRODUCTION

On behalf of the Santa Clara Valley Transportation Authority (VTA), Burns & McDonnell Engineering Company, Inc. (Burns & McDonnell), has prepared this *Phase II Site Characterization Report: Bohannon 1217 Parcel.* The Eastridge to the Bay Area Rapid Transit (BART) BART Regional Connector Project (EBRC) will extend 2.4 miles of Light Rail from the existing Alum Rock Station to the Eastridge Transit Center. Light Rail will operate primarily in the center of Capitol Expressway and new rail stations will be built at Story Road and the Eastridge Transit Center (Figure 1).

The VTA retained Burns & McDonnell to assess existing subsurface conditions in soil and groundwater encountered within the VTA Fee Take project footprint (Fee Take) at the property identified by the Santa Clara County Assessor PIN prefix 1217; located at 2710 Story Road, San Jose, CA (Site). The VTA Fee Take area is depicted in Figure 2.

On November 4, 2019, Burns & McDonnell advanced one (1) direct push borings, to a depth of 15 feet (ft) below ground surface (bgs). A total of two (2) soil samples were collected. The soil samples were collected from the boring as defined in the Phase II Site Characterization Workplan: 1217 Parcel (Workplan)[1]. In addition, one (1) groundwater sample was collected from the boring. The direct push boring was advanced by Cascade Drilling L.P. (Cascade) a California C-57 licensed drilling company under contract to Burns & McDonnell.

Two (2) soil and one (1) groundwater samples were analyzed by Advanced Laboratory Technologies (ATL) for following constituents of concern:

- Total Petroleum Hydrocarbons (TPH) as Diesel (TPHd) by Environmental Protection Agency (EPA) Method 8015B with EPA Method 3630C silica gel cleanup preparation,
- TPH as motor oil (TPHmo) by EPA method 8015B,
- TPH as gasoline (TPHg) and Volatile Organic Compounds (VOCs) be EPA Method 8260B,
- Cam17/Title 22 Metals (metals) by EPA Method 6010B/7470A.

One soil and one groundwater sample were additionally analyzed for the presence of:

- Semi-volatile Organic Compounds (SVOCs) by EPA Method 8270C SIM,
- Organochlorine Pesticides (OCPs) by EPA Method 8081A,
- Polycyclic Aromatic Biphenyl's (PCBs) by EPA Method 8082,

[1] Phase II Site Characterization Workplan: 1217 Parcel. Burns & McDonnell Engineering Company, Inc. April 12, 2019.

One soil sample was analyzed for:

- Asbestos by PLM CARB435A.

2.0 SOIL & GROUNDWATER INVESTIGATION

On November 4, 2019, Phase II ESA activities were performed by a Burns & McDonnell Professional Geologist. Phase II ESA activities consisted of advancement of one (1) direct-push borings performed by Cascade, under the supervision of Burns & McDonnell geologist Simon Barber. Prior to direct-push advancement, a USA Dig Alert ticket was obtained, and a private utility location contractor conducted a subsurface utility survey within the planned areas of investigation. The investigation included locating subsurface utilities within the planned areas of investigation.

The soil boring was advanced within the VTA Fee Take area in the landscaping on the western edge of the property (Figure 2). Boring B-1 was advanced to a depth of 15 ft bgs in the landscaping west of the Sites former and current Underground Storage Tanks (UST) area (central western region of the property).

This Phase II ESA sampling location was selected to be representative of the Site conditions within the VTA Fee Take area as observed during a Phase I Environmental Site Assessment (ESA)[2] site visit and further based upon historical Site environmental investigations. Figure 2 depicts the soil boring location for this investigation.

2.1 Direct Push Drilling

Boring B-1 was hand cleared to a depth of 5 ft bgs prior to direct push drilling. Boring B-1 was advanced to a total depth of 15 ft bgs using a Geoprobe® 6620 track mounted drill rig operated by Cascade. The soil boring was continuously sampled using a 3-inch sample barrel equipped with an acetate sleeve and logged according to the Unified Soil Classification System (USCS) by a Burns & McDonnell geologist. Upon retrieval, the acetate sleeve was opened, and soil materials were field screened for presence of organic vapors using a photoionization detector (PID). Headspace PID readings were recorded on a boring log; boring log B-1 is provided as Attachment 1.

Each soil sample was collected by transferring a portion of the material from the acetate sleeve into the appropriate laboratory-provided sample containers. Each sample was labeled and immediately placed into a cooler containing ice. All samples were delivered to ATL, under chain-of-custody manifestation and protocols.

[2] Phase I Environmental Site Assessment of the Bohannon Property (1217), 2710 Story Road, San Jose, CA, 95115. Burns & McDonnell Engineering Company, Inc. May 13, 2019.

A grab groundwater sample was retrieved from boring B-1 at approximately 15 ft bgs. The groundwater sample was submitted to ATL for all constituents-of-concern except for asbestos (a sample bottle was broken during transport to the laboratory and therefore there was insufficient sample volume to analyze asbestos).

Upon completion of sampling activities, the boring was abandoned by back-filling with a high solids cement-bentonite grout. The grout was placed using a side discharge tremie pipe. The tremie pipe was raised slowly while keeping the discharge point of the tremie pipe just below the surface of the slurry. The grout was placed from the bottom of the hole to within 12 inches of the ground surface. After the grout set, the remaining portion of the open hole was backfilled with sand and the landscape (grass) patch which was removed prior to drilling. As the boring did not advance past 45 ft bgs, a Santa Clara Valley Water District drill permit and grout inspection was not required.

2.2 Soil Sampling

Two shallow soil samples were collected from the boring at depths of 10.5 ft bgs and 15 ft bgs; correlating to the highest PID reading (at the soil/groundwater interface) and at total depth of the boring. Soil samples were collected in laboratory supplied sample vessels, uniquely labeled, and placed in an insulated cooler on crushed ice pending transfer to the analytical laboratory under standard chain-of-custody procedures and documentation.

2.3 Groundwater Sampling

Groundwater was encountered prior to the maximum boring depth of 15 ft bgs in boring B-1, and one (1) groundwater sample, B-1, was collected for all constituents of concern (except asbestos). The groundwater sample was collected with a peristaltic pump and new polyethylene tubing placed within ¾ inch poly-vinyl chloride casing and machine slotted screen. The groundwater sample was collected in laboratory supplied sample vessels, uniquely labeled, and placed in an insulated cooler on crushed ice pending transfer to the analytical laboratory under standard chain-of-custody documentation.

All soil and groundwater samples were submitted to ATL, a California Environmental Laboratory Accredited Program (ELAP) laboratory (ELAP #: 1838). ATL is a CA department of General Services-Small Business Enterprise (SBE), CA Unified Certification Program and Caltrans-Disadvantaged Business Enterprise (DBE), and Caltrans, Public Utilities Commission-Minority Business Enterprise (MBE). Asbestos in soil was analyzed by AmeriSci Los Angeles. AmeriSci Los Angeles is an ELAP (ELAP #2322) and National Voluntary Accredited laboratory (NVLAP: Lab Code: 200346-0).

2.4 Safety & Health

Fieldwork was performed under a Site Safety & Health Plan (S&HP) prepared by a Burns & McDonnell certified industrial hygienist (CIH), in accordance with Occupational Safety and Health Administration (OSHA) guidelines. Prior to beginning daily activities, a safety & health tailgate meeting was held on-Site, and a Pre-Task Analysis and Activity Hazard Analysis was performed.

3.0 SOIL & GROUNDWATER INVESTIGATION RESULTS

3.1 Constituents of Concern in Soil

Two (2) soil samples were collected and submitted for analysis of TPHg, TPHd, TPHmo, VOCs, and Metals, one (1) soil sample was submitted for analysis of SVOCs, OCPs, PCB, and Asbestos; the following sections summarize the analytical findings. All soil analytical results are compared to the San Francisco Bay-Regional Water Quality Control Board (Reginal Board) Environmental Screening Level: Table S-1 for "any land use, construction worker shallow and deep soil exposure scenario[3]".

3.1.1 TPH in Soil

- TPHg was detected in samples B-1d10.5 and B-1d15 at concentrations of 190 mg/kg and 3.200 mg/kg, respectively.
- TPHd was detected in samples B-1d10.5 at a concentration of 9.4 mg/kg.
- TPHmo was detected in sample B-1d10.5 at a concentration of 4.1 mg/kg.

TPH analytical results are summarized in Table 1.

3.1.2 Volatile Organic Compounds in Soil

- VOCs were not detected at or above the PQL except for Hexachlorobutadiene in sample B-1d10.5 at a concentration of 0.870 mg/kg and Tert-butlybenzene in sample B-1d15 at a concentration of 0.025 mg/kg.

VOC analytical results are summarized in Table 2. Copies of the Certified-Analytical Report are provided as Attachment 2.

3.1.3 Semi-Volatile Organic Compounds in Soil

- SVOCs were not detected at or above the MDL or PQL in sample B-1d10.5.

SVOC analytical results are summarized in Table 3.

[3] San Francisco Bay-Regional Water Quality Control Board, Environmental Screening Levels: Table S-1. January 2019 (Rev.1). https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/esl.html

3.1.4 CAM17/Title 22 Metals in Soil

- CAM17/Title 22 Metals were detected in B-1d10.5 and B-1d15. Of the metals detected, Arsenic (As), Chromium (Cr) exceeded their corresponding ESLs of 0.98 mg/kg, and 2.80 mg/kg, respectively.

- Arsenic was detected in B-1d10.5 and B-1d15 at concentrations of 5.8 mg/kg and 8.3 mg/kg, respectively.
- Chromium was detected in B-1d10.5 and B-1d15 at concentrations 42 mg/kg and 53 mg/kg, respectively.
- Chromium STLC was detected in B-1d15 at a concentration of 0.091 mg/L.

Multiple metals were detected above the MDL. However, none of the concentrations in metals exceeded their California Code of Regulations (CCR) Title 22 Total Threshold Limit Concentration (TTLC) values, respectively. The CCR Title 22 Soluble Threshold Limit Concentration (STLC) is a level that, if exceeded in a solid waste material, providing the compound present is completely in its soluble form, defines the material as a hazardous waste. An industry-accepted screening level for dry waste is 10 times the STLC value, to indicate whether a separate assessment of the soluble compound is warranted.

Chromium was detected at a concentration of 53 mg/kg in sample B-1d15, therefore, STLC wet extraction analysis was performed. Post STLC analysis, chromium was present in sample B-1d15 at a concentration of 0.091 mg/l.

CAM17/Title22 Metals analytical results are summarized in Table 4.

3.1.5 Organochlorine Pesticides in Soil

- OCPs were not detected in soil at or above the MDL or Practicable Quantitation Limit (PQL).

OCP analytical results are summarized in Table 5.

3.1.6 Polycyclic Biphenyl's in Soil

- PCBs were not detected in any soil sample at or above the MDL or PQL.

PCB analytical results are summarized in Table 6.

3.1.7 Asbestos in Soil

- Asbestos was reported by the subcontracted laboratory (AmerSci) as Positive, <0.1 %.

Copies of the Certified-Analytical Reports are provided as Attachment 2.

3.2 Constituents of Concern in Groundwater

One groundwater sample was collected and submitted for analysis of TPHg, TPHd, TPHmo, VOC, SVOC, Metals, OCPs, and PCB; the following sections summarize the analytical findings. All groundwater analytical results are compared to the San Francisco Bay-Regional Water Quality Control Board (Regional Board) Environmental Screening Level: Table GW-1 for "Direct Exposure Human Health Risk Levels[4]".

3.2.1 TPH in Groundwater

- TPHg was detected at a concentration of 4,600 µg/L in sample B-1.
- TPHd was detected at a concentration of 3,600 µg/L in sample B-1.
- TPHmo was detected at a concentration of 1,600 µg/L in sample B-1.

The TPHg and TPHd concentrations exceed their ESLs of 760 µg/L and 200 µg/L, respectively.

TPH analytical results are summarized in Table 7.

3.2.2 VOCs in Groundwater

Multiple VOCs were detected in groundwater: 1,2,4-Trimethylbenzene, ethylbenzene, isopropylbenzene, n-Butylbenzene, n-Propylbenzene, naphthalene, sec-butylbenzene, tert-Butylbenzene, and toluene. No other VOCs were detected at or above the MDL. The following is a summary of the VOCs that exceeded their corresponding ESLs:

- n-Propylbenzene was detected at a concentration of 58 µg/L,
- Naphthalene was detected at a concentration of 65 µg/L.

Groundwater at the Site will not be used as a drinking water source. VOC analytical results are summarized in Table 8.

3.2.3 Semi-Volatile Organic Compounds in Groundwater

- SVOC were not detected at or above the MDL in groundwater.

SVOC analytical results are summarized in Table 9.

[4] San Francisco Bay-Regional Water Quality Control Board, Environmental Screening Levels: Table GW-1. January 2019 (Rev.1). https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/esl.html

3.2.4 Cam17/Title 22 Metals in Groundwater

- Metals were detected at or above the MDL in groundwater sample B-1. These metals included: Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Copper (Cu), Lead (Pb), Mercury (Hg), Molybdenum (Mo), Nickel (Ni), Vanadium (V), and Zinc (Zn). Of the metals detected, Sb, As, Ba, Cd, Cr (total),Co, Pb, Hg, Ni, and Va exceeded their corresponding ESLs at concentrations of 110 µg/L, 200 µg/L, 9,200 µg/L, 22 µg/L, 19 µg/L, 1,400 µg/L, 350 µg/L, 1,000 µg/L, 270 µg/L, 4.3 µg/L, 2,300 µg/L, and 1,200 µg/L, respectively.

CAM17/Title 22 metals analytical results are summarized in Table 10. Copies of the Certified-Analytical Reports is provided as Attachment 2.

3.2.5 Organochlorine Pesticides in Groundwater

- OCP compounds were not detected at or above their corresponding MDL or PQL in groundwater.

OCP analytical results are summarized in Table 11.

3.2.6 Polycyclic Aromatic Biphenyl's in Groundwater

- PCBs compounds were not detected at or above their corresponding MDL or PQL in groundwater.

OCP analytical results are summarized in Table 12.

Certified-Analytical Reports for all samples collected are provided as Attachment 2.

4.0 CONCLUSIONS

One direct push boring was advanced in the footprint of VTA Fee Take area at the 1217 Site. Two (2) soil samples, and one (1) groundwater sample were submitted for laboratory analysis of various potential constituents of concern. Based on the evaluation of the sample analytical results, the following is concluded:

- TPHg, TPHd, and TPHmo concentrations did not exceed their respective ESLs in soil for construction workers. TPHg, TPHd, TPHmo were detected at concentrations exceeding their respective ESLs in groundwater, although TPHmo has no corresponding ESL.
- No VOC compounds were detected above the MDL in soil. VOC compounds n-Propylbenzene and Naphthalene were detected above the MDL groundwater in excess of the MCL for direct exposure.
- No SVOC compounds were detected in soil or groundwater at or above the MDL.
- Multiple CAM17/Title 22 metals were detected in soil at or above the MDL in all samples collected (as expected for the region); As and Cr (total) were detected above the ESL for construction workers. It is noted that As and Cr (total) did not exceed the TTLC trigger for hazardous waste.
- Multiple CAM17/Title 22 metals were detected in groundwater at or above the MDL in sample B-1 (as expected for the region); Sb, As, Ba, Be, Cd, Cr (total), Co, Cu, Pb, Hg, Ni, and Va were detected above their respective MCL Priority screening level. It is noted that no CAM17/Title 22 metal exceeded the TTLC trigger for hazardous waste.
- OCPs were not detected at or above the MDL in soil or groundwater.
- PCBs were not detected at or above the MDL in soil or groundwater.
- Asbestos containing materials were detected in soil at less than 0.1 %.

Given the soil and groundwater quality results obtained during this Phase II ESA investigation specific to the VTA Fee Take area at the 1217 property; VTA and any future commercial contractors should take into account that constituents of concern TPHg, TPHd, VOCs, and multiple metals are present in groundwater above their corresponding MCL and or ESLs. Constituents of concern as metals are likewise present in soil above their corresponding MCL or ESL.

Due to the presence of elevated concentrations of hydrocarbons, VOCs, and metals in groundwater, it is recommended that groundwater generated during dewatering activities undergoes treatment prior to discharge into any storm drain system under a National Pollution Discharge Elimination System (NPDES) permit or into any sewer system under a Short Term Discharge permit with the City of San Jose.

Residual hydrocarbons exist in subsurface soil and groundwater within the VTA Fee Take Area related to historical site uses (i.e. leaking underground storage tanks). Although the residual constituents-of-concern (hydrocarbons, VOCs, metals) are not considered hazardous, further waste characterization will be required by potential contractors who generate materials that require transportation and disposal/recycling.

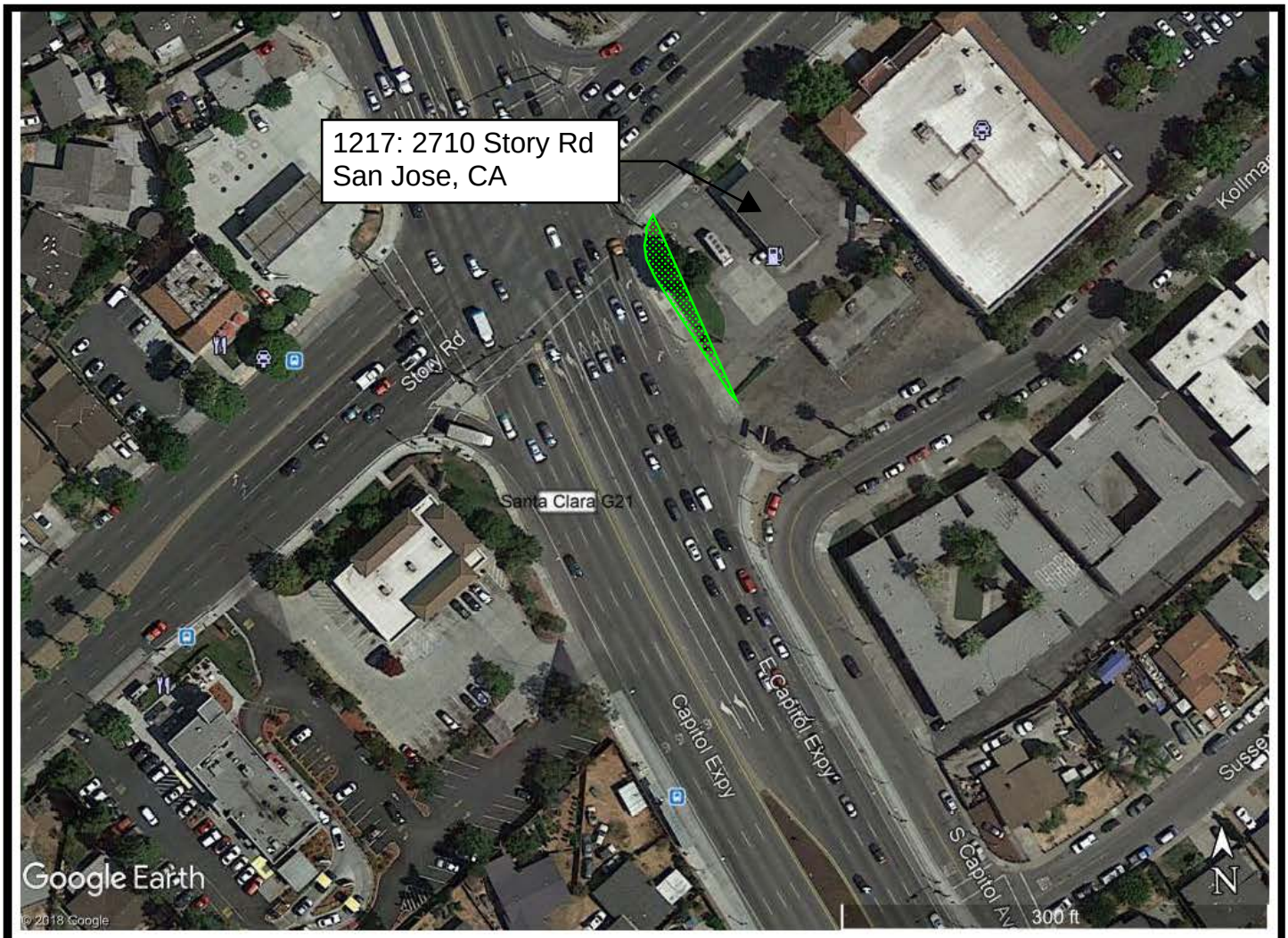
*****

5.0 INVESTIGATION DERIVED WASTE

Investigation-derived waste (IDW) include soil cuttings, decontamination fluid, and groundwater displaced during the investigation. IDW generated during investigation activities were contained in a Department of Transportation (DOT) approved 55-gallon drum and staged on-site pending results of waste characterization analyses. Following waste profiling, the IDW will be removed from the Site and transported to an appropriate waste facility for disposal or recycling.

Other IDW generated, including personal protective equipment, rope, bailers, paper towels, etc. was placed in trash bags and into appropriate receptacles.

FIGURES



VTA FEE TAKE AREA OF TEH 1217 PROPERTY

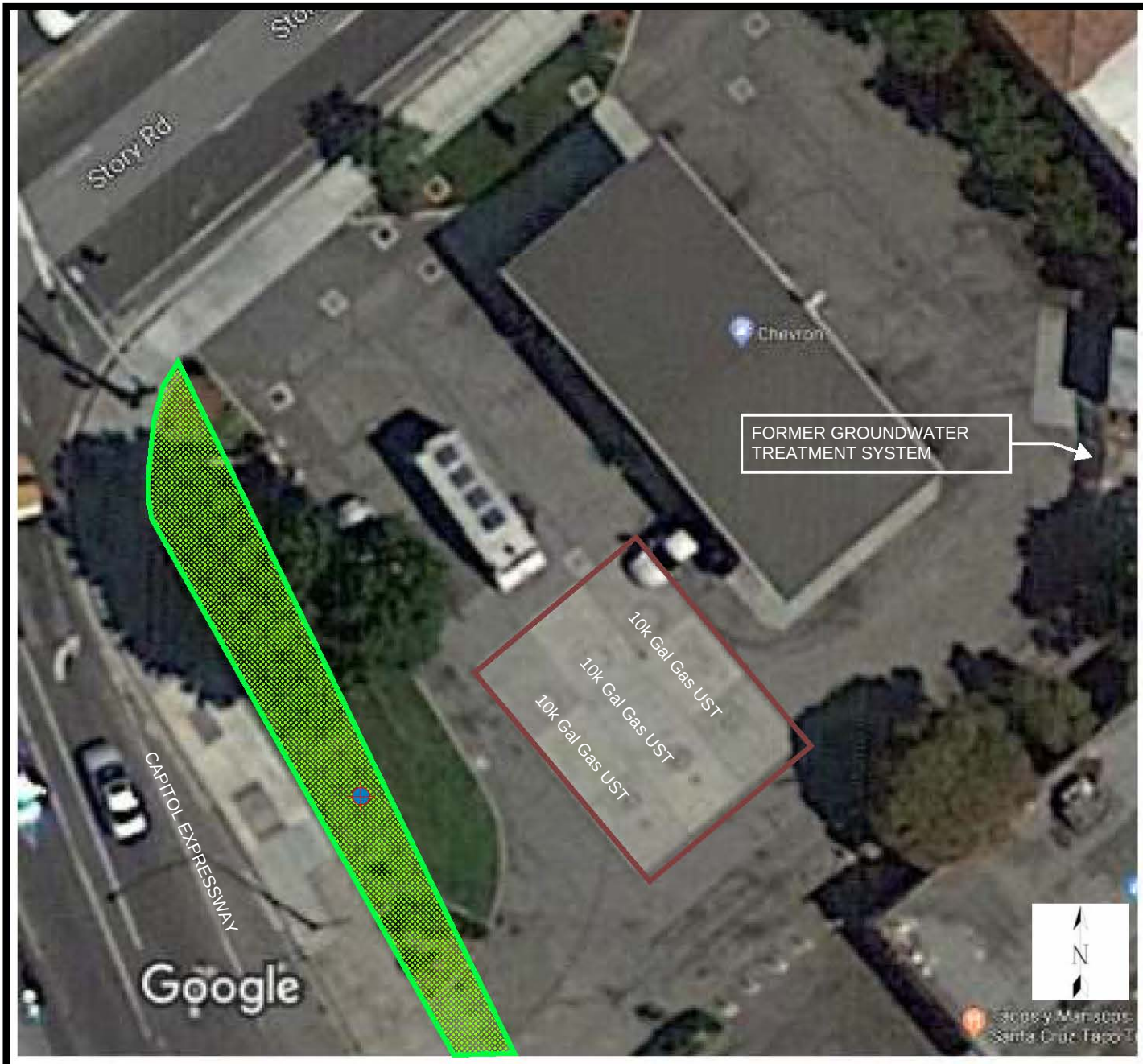
Santa Clara Valley Transportation Authority

Solutions that move you

BURNS McDONNELL

FIGURE 1

SITE LOCATION
1217 BOHANNON PARCEL
SANTA CLARA VALLEY
TRANSPORTATION AUTHORITY



DIRECT PUSH BORING LOCATION
37° 21.042 N 121° 49.592 W

VTA FEE TAKE AREA (LOCATOIN APPROXIMATE)

FORMER AND CURRENT GASOLINE UNDERGROUND STORAGE TANK LOCATION

Santa Clara Valley Transportation Authority
Solutions that move you

BURNS McDONNELL

FIGURE 2
SITE INVESTIGATION PLAN
1217 BOHANNON
2710 STORY ROAD
SAN JOSE, CA

TABLES

TABLE 1

SITE CHARACTERIZATION
TOTAL PETROLEUM HYDROCARBONS IN SOIL
SCVTA 1217 BOHANNON PARCEL
SAN JOSE, CALIFORNIA

Sample ID	Sample Date	Sample Depth (ft bgs)	TPH - GRO (mg/kg)	TPH - Diesel (mg/kg)	TPH - Motor Oil (mg/kg)
B-1d10.5	11/4/19	10.5	190	9.4	4.1
B-1d15	11/4/19	15	3.200	<1.0	<1.0
Environmental Screening Level (ESL)			**---**	**1,100**	**54,000**

Notes:
ESL: Table S-1: Soil Direct Exposure Human Health Risk Screening Level (mg/kg).
Construction Worker: Any Land Use/Any Depth Soil Exposure.
SF Bay- Regional Water Quality Control Board January 2019 (rev.1).
https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/esl.html
TPH as diesel by EPA Method 8015M
TPH as motor oil by EPA Method 8015M
TPH as gasoline by EPA Method 8260B
ft bgs - Feet below ground surface
Concentrations are in units of milligrams per kilogram (mg/kg)
Samples were analyzed using EPA Method 8015B
Laboratory Qualifiers
< # - Compound was not detected above the indicated laboratory Method Detection Limit MDL or Practical Quantitation Limit (PQL)

TABLE 2

SITE CHARACTERIZATION
VOLATILE ORGANIC COMPOUNDS IN SOIL
SCVTA 1217 BOHANNON PARCEL
SAN JOSE, CALIFORNIA

Sample ID	**B-1d10.5**	**B-1d15**	**ESL**
Sample Depth ft bgs	10.5	15	
Sample Date	11/4/2019	11/4/2019	
1,1,1,2-Tetrachloroethane	<410	<3.9	**190,000**
1,1,1-Trichloroethane	<410	<3.9	**7,200,000**
1,1,2,2-Tetrachloroethane	<410	<3.9	**49,000**
1,1,2-Trichloroethane	<410	3.9	**6,300**
1,1-Dichloroethane	<410	<3.9	**370,000**
1,1-Dichloroethene	<410	<3.9	**350,000**
1,1-Dichloropropene	<410	<3.9	**---**
1,2,3-Trichloropropane	<410	<3.9	**830**
1,2,3-Trichlorobenzene	<410	<3.9	**---**
1,2,4-Trichlorobenzene	<410	<3.9	**240,000**
1,2,4-Trimethylbenzene	<410	<3.9	**---**
1,2-Dibromo-3-chloropropane	<810	<7.9	**1,100**
1,2-Dibromoethane	<410	<3.9	**3,300**
1,2-Dichlorobenzene	<410	<3.9	**7,800,000**
1,2-Dichloroethane	<410	<3.9	**45,000**
1,2-Dichloropropane	<410	<3.9	**66,000**
1,3,5-Trimethylbenzene	<410	<3.9	**---**
1,3-Dichlorobenzene	<410	<3.9	**---**
1,3-Dichloropropane	<410	<3.9	**---**
1,4-Dichlorobenzene	<410	<3.9	**280,000**
2,2-Dichloropropane	<410	<3.9	**---**
2-Chlorotoluene	<410	<3.9	**---**
4-Chlorotoluene	<410	<3.9	**---**
4-Isopropyltoluene	<410	<3.9	**---**
Benzene	<410	<3.9	**33,000**
Bromobenzene	<410	<3.9	**---**
Bromochloromethane	<410	<3.9	**---**
Bromodichloromethane	<410	<3.9	**28,000**
Bromoform	<410	<3.9	**1,200,000**
Bromomethane	<410	<3.9	**29,000**
Carbon disulfide	<410	<3.9	**---**
Carbon tetrachloride	<410	<3.9	**---**
Chlorobenzene	<410	<3.9	**1,200,000**
Chloroethane	<410	<3.9	**59,000,000**
Chloroform	<410	<3.9	**34,000**
Chloromethane	<410	<3.9	**470,000**
cis-1,2-Dichloroethene	<410	<3.9	**78,000**
cis-1,3-Dichloropropene	<410	<3.9	**53,000**
Di-isopropyl ether	<410	<3.9	**---**
Dibromochloromethane	<410	<3.9	**300,000**
Dibromomethane	<410	<3.9	**---**
Dichlorodifluoromethane	<410	<3.9	**---**
Ethyl Acetate	<4,100	<39	**---**
Ethyl Ether	<4,100	<39	**---**
Ethyl tert-butyl ether	<410	<3.9	**---**
Ethylbenzene	<410	<3.9	**540,000**
Freon-113	<410	<3.9	**---**
Hexachlorobutadiene	870	<3.9	**100,000**
Isopropylbenzene	<410	<3.9	**---**
m,p-Xylene	<810	<7.9	**2,400,000**
Methylene chloride	<410	<3.9	**490,000**
MTBE	<410	<3.9	**4,100,000**
n-Butylbenzene	<410	<3.9	**---**
n-Propylbenzene	<410	<3.9	**---**
Naphthalene	<410	<3.9	**400,000**
o-Xylene	<410	<3.9	**---**
sec-Butylbenzene	<410	<3.9	**---**
Styrene	<410	<3.9	**25,000,000**
tert-Amyl methyl ether	<410	<3.9	**---**
tert-Butanol	<8,100	<79	**---**
tert-Butylbenzene	<410	25	**---**
Tetrachloroethene	<410	<3.9	**33,000**
Toluene	<410	<3.9	**4,700,000**
trans-1,2-Dichloroethene	<410	<3.9	**570,000**
trans-1,3-Dichloropropene	<410	<3.9	**---**
Trichloroethene	<410	<3.9	**18,000**
Trichlorofluoromethane	<410	<3.9	**---**
Vinyl acetate	<4,100	<39	**---**
Vinyl chloride	<410	<3.9	**3,400**

Notes:
ESL: Table S-1: Soil Direct Exposure Human Health Risk Screening Level (mg/kg).
Construction Worker: Any Land Use/Any Depth Soil Exposure.
SF Bay- Regional Water Quality Control Board January 2019 (rev.1).
https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/esl.html
Volatile Organic Compounds by EPA Method 8260B.
ft bgs - Feet below ground surface.
Concentrations are in units of micrograms per kilogram (µg/kg).
Exceedance in bold font.
-- No ESL listed.
Laboratory Qualifiers
< # - Compound was not detected above the indicated laboratory Method Detection Limit (MDL) or Practical Quantitation Limit (PQL)

TABLE 3

SITE CHARACTERIZATION
SEMI VOLATILE ORGANIC COMPOUNDS IN SOIL
SCVTA 1217 BOHANNON PARCEL
SAN JOSE, CALIFORNIA

Sample ID	**B-1d10.5**	**ESL**
Sample Depth (ft bgs)	10.5	
Sample Date	11/4/2019	
2-Methylnaphthalene	<330	670,000
Acenaphthene	<330	10,000,000
Acenaphthylene	<330	---
Anthracene	<330	50,000,000
Benzo(a)anthracene	<330	110,000
Benzo(a)pyrene	<330	10,000
Benzo(b)fluoranthene	<330	110,000
Benzo(g,h,i)perylene	<330	---
Benzo(k)fluoranthene	<330	910,000
Chrysene	<330	9,100,000
Dibenz(a,h)anthracene	<330	11,000
Fluoranthene	<330	6,700,000
Fluorene	<330	6,700,000
Indeno(1,2,3-cd)pyrene	<330	110,000
Naphthalene	<330	400,000
Phenanthrene	<330	---
Pyrene	<330	5,000,000

Notes:
ESL: Table S-1: Soil Direct Exposure Human Health Risk Screening Level (mg/kg).
Construction Worker: Any Land Use/Any Depth Soil Exposure.
SF Bay- Regional Water Quality Control Board January 2019 (rev.1).
https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/esl.html
Semi-Volatile Organic Compounds by EPA Method 8270SIM.
ft bgs - Feet below ground surface
Concentrations are in units of micrograms per kilogram (µg/kg).
##: Exceedance in bold
--- no ESL listed.
Laboratory Qualifiers
< # - Compound was not detected above the indicated laboratory Method Detection Limit (MDL or Practical Quantitation Limit (PQL).

TABLE 4

SITE CHARACTERIZATION
CAM17/TITLE 22 METALS IN SOIL
SCVTA 1217 BPHANNON PARCEL
SAN JOSE, CALIFORNIA

Sample ID	Sample Date	Sample Depth (ft. bgs)	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
B-1d10.5	11/4/2019	10.5	<2.0	**5.8**	140	<1.0	<1.0	**42**	9.9	24	5.8	<0.10	<1.0	76	<1.0	<1.0	<1.0	31	47
B-1d15	11/4/2019	15	<2.0	**8.3**	210	<1.0	<1.0	**53**	12	36	9.2	<0.10	1.1	78	<1.0	<1.0	<1.0	41	69
ESL			**50**	**0.98**	**3,000**	**27**	**51**	**2.80**	**28**	**14,000**	**160**	**44**	**1,800**	**86**	**1,700**	**1,800**	**3.5**	**470**	**110,000**
B-1d15 STCL (mg/L)	43,774	15	NA	NA	NA	NA	NA	0.091	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

ESL: Table S-1: Soil Direct Exposure Human Health Risk Screening Level (mg/kg).

Construction Worker: Any Land Use/Any Depth Soil Exposure.

SF Bay- Regional Water Quality Control Board January 2019 (rev.1).

https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/esl.html

CAM17/Title 22 Metals analyzed using EPA Method 6010B; Mercury was analyzed using EPA Method 7471A

ft bgs - Feet below ground surface

Concentrations are in units of milligrams per kilogram (mg/kg).

Exceedance in bold font.

mg/L- Miligrams per Liter

--- NO ESL listed.

NA - Not Applicable

STLC- Soluable Threshold Limit Concentration

Laboratory Qualifiers

< # - Compound was not detected above the indicated laboratory Method Detection Limit (MDL) or Practical Quantitation Limit (PQL).

TABLE 5

SITE CHARACTERIZATION
ORGANOCHLORINE PESTICIDES IN SOIL
SCVTA 1217 BOHANNON PARCEL
SAN JOSE, CALIFORNIA

Sample ID	BM-1d10.5	ESL
Sample Date	11/4/2019	
4,4´-DDD	<10	**81,000**
4,4´-DDE	<10	**57,000**
4,4´-DDT	<10	**57,000**
Aldrin	<5.0	**1,000**
alpha-BHC	<5.0	**---**
alpha-Chlordane	<5.0	**---**
beta-BHC	<5.0	**---**
Chlordane	<42	**14,000**
delta-BHC	<5.0	**---**
Dieldrin	<10	**11,000**
Endosulfan I	<5.0	**1,500,000**
Endosulfan II	<10	**---**
Endosulfan sulfate	<10	**---**
Endrin	<10	**74,000**
Endrin aldehyde	<10	**---**
Endrin ketone	<10	**---**
gamma-BHC	<5.0	**16,000**
gamma-Chlordane	<5.0	**---**
Heptachlor	<5.0	**3,700**
Heptachlor epoxide	<5.0	**1,900**
Methoxychlor	<25	**1,200,000**
Toxaphene	<250	**14,000**

Notes:

ESL: Table S-1: Soil Direct Exposure Human Health Risk Screening Level (mg/kg).
Construction Worker: Any Land Use/Any Depth Soil Exposure.
SF Bay- Regional Water Quality Control Board January 2019 (rev.1).
https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/esl.html

Concentrations are in units of micrograms per kilogram (µg/kg).
Samples were analyzed using EPA Method 8081A.
ft bgs - Feet below ground surface.
Exceedance in bold font.

Laboratory Qualifiers:

< # - Compound was not detected above the indicated laboratory Method Detection Limit (MDL).

TABLE 6

SITE CHARACTERIZATION
POLYCHLORINATED BIPHENYLS IN SOIL
SCVTA 1217 BOHANNON PARCEL
SAN JOSE, CALIFORNIA

Sample ID	Sample Date	Sample Depth (ft bgs)	Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Aroclor 1262	Aroclor 1268
BM-1d10.5	11/4/2019	10.5	<16	<16	<16	<16	<16	<16	<16	<16	<16
ESL			---	---	---	---	---	---	---	---	---

Notes:
ESL: Table S-1: Soil Direct Exposure Human Health Risk Screening Level (mg/kg).
Construction Worker: Any Land Use/Any Depth Soil Exposure.
SF Bay- Regional Water Quality Control Board January 2019 (rev.1).
https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/esl.html
Polychlorinated biphenyls (PCBs) by EPA Method 8082.
ft bgs - Feet below ground surface
Concentrations are in units of milligrams per kilogram (µg/kg)
Exceedance in bold font.
--- No ESL listed.

Laboratory Qualifiers
< # - Compound was not detected above the indicated laboratory Method Detection Limit (MDL) or Practical Quantation Limit (PQL).

TABLE 7

SITE CHARACTERIZATION
TOTAL PETROLEUM HYDROCARBON IN GROUNDWATER
SCVTA 1217 PARCEL
SAN JOSE, CALIFORNIA

Sample ID	Sample Date	TPHg (µg/L)	TPH - Diesel (µg/L)	TPH - Motor Oil (µg/L)
B-1	11/5/2019	**4,600**	**3,600**	1,600
ESL		**760**	**200**	**---**

Notes:
ESL: Table GW-1: Direct Exposure Human Health Risk Levels (µg/L). MCL Priority/Human Health Risk. SF Bay- Regional Water Quality Control Board January 2019 (rev.1).
https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/esl.html
MCL Priority lists all available MCL values. If no MCl value, the lower of the cancer/non cancer tapwater direct exposure levels is listed.

TABLE 8

SITE CHARACTERIZATION
VOLATILE ORGANIC COMPOUND IN GRAB GROUNDWATER
SCVTA 1217 BOHANNON PARCEL
SAN JOSE, CALIFORNIA

Sample ID	**B-1**	**ESL**
Sample Date	11/5/2019	
1,1,1,2-Tetrachloroethane	<0.50	**0.57**
1,1,1-Trichloroethane	<0.50	**200**
1,1,2,2-Tetrachloroethane	<0.50	**1**
1,1,2-Trichloroethane	<0.50	**5**
1,1-Dichloroethane	<0.50	**5**
1,1-Dichloroethene	<0.50	**6**
1,1-Dichloropropene	<0.50	**---**
1,2,3-Trichloropropane	<0.50	**0.005**
1,2,3-Trichlorobenzene	<0.50	**---**
1,2,4-Trichlorobenzene	<0.50	**5**
1,2,4-Trimethylbenzene	0.51	**---**
1,2-Dibromo-3-chloropropane	<0.50	**---**
1,2-Dibromoethane	<0.50	**0.05**
1,2-Dichlorobenzene	<0.50	**100**
1,2-Dichloroethane	<0.50	**0.5**
1,2-Dichloropropane	<0.50	**5**
1,3,5-Trimethylbenzene	<0.50	**---**
1,3-Dichlorobenzene	<0.50	**600**
1,3-Dichloropropane	<0.50	**---**
1,4-Dichlorobenzene	<0.50	**5**
2,2-Dichloropropane	<0.50	**---**
2-Chlorotoluene	<0.50	**---**
4-Chlorotoluene	<0.50	**---**
4-Isopropyltoluene	<0.50	**---**
Benzene	<0.50	**1**
Bromobenzene	<0.50	**---**
Bromochloromethane	<0.50	**---**
Bromodichloromethane	<0.50	**80**
Bromoform	<0.50	**80**
Bromomethane	<0.50	**7.5**
Carbon disulfide	<1.0	**---**
Carbon tetrachloride	<0.50	**0.5**
Chlorobenzene	<0.50	**70**
Chloroethane	<0.50	**21,000**
Chloroform	<0.50	**80**
Chloromethane	<0.50	**190**
cis-1,2-Dichloroethene	<0.50	**6**
cis-1,3-Dichloropropene	<0.50	**---**
Di-isopropyl ether	<0.50	**---**
Dibromochloromethane	<0.50	**80**
Dibromomethane	<0.50	**---**
Dichlorodifluoromethane	<0.50	**---**
Ethyl Acetate	<10	**---**
Ethyl Ether	<10	**---**
Ethyl tert-butyl ether	<0.50	**---**
Ethylbenzene	3.6	**30**
Freon-113	<0.50	**---**
Hexachlorobutadiene	<0.50	**0.14**
Isopropylbenzene	23	**---**
m,p-Xylene	<1.0	**20**
Methylene chloride	<1.0	**5**
MTBE	<0.50	**5**
n-Butylbenzene	4.9	**---**
n-Propylbenzene	**58**	**0.14**
Naphthalene	**65**	**0.17**
o-Xylene	<0.50	**20**
sec-Butylbenzene	6.6	**---**
Styrene	<0.50	**10**
tert-Amyl methyl ether	<0.50	**---**
tert-Butanol	<10	**---**
tert-Butylbenzene	12	**---**
Tetrachloroethene	<0.50	**5**
Toluene	0.54	**40**
trans-1,2-Dichloroethene	<0.50	**10**
trans-1,3-Dichloropropene	<0.50	**---**
Trichloroethene	<0.50	**5**
Trichlorofluoromethane	<0.50	**---**
Vinyl acetate	<10	**---**
Vinyl chloride	<50	**0.5**

Notes:
ESL: Table GW-1: Direct Exposure Human Health Risk Levels (µg/L). MCL Priority/Human Health Risk.
SF Bay- Regional Water Quality Control Board January 2019 (rev.1).
https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/esl.html
MCL Priority lists all available MCL values. If no MCl value, the lower of the cancer/non cancer tapwater direct exposure levels is listed.
Concentrations are in units of micrograms per liter (µg/L).
Volatile Organic Compounds analyzed by EPA Method 8260B
Laboratory Qualifiers
<# -Compound was not detected above the indicated laboratory Method Detection Limit (MDL) or Pratcical Quantitation Limit (PQL).
--- No ESL listed.
**Exceedance in bold font**

TABLE 9

SITE CHARACTERIZATION
SEMI VOLATILE ORGANIC COMPOUNDS IN GROUNDWATER
SCVTA 1217 BOHANNON PARCEL
SAN JOSE, CALIFORNIA

Sample ID	B-1	ESL
Sample Date	11/4/2019	
2-Methylnaphthalene	<50	**36**
Acenaphthene	<50	**530**
Acenaphthylene	<50	**---**
Anthracene	<50	**1,800**
Benzo(a)anthracene	<50	**0.017**
Benzo(a)pyrene	<50	**0.2**
Benzo(b)fluoranthene	<50	**0.25**
Benzo(g,h,i)perylene	<50	**---**
Benzo(k)fluoranthene	<50	**2.5**
Chrysene	<50	**25**
Dibenz(a,h)anthracene	<50	**0.025**
Fluoranthene	<50	**800**
Fluorene	<50	**290**
Indeno(1,2,3-c,d)pyrene	<50	**0.25**
Naphthalene	<50	**0.17**
Phenanthrene	<50	**---**
Pyrene	<50	**120**

Notes:

ESL: Table GW-1: Direct Exposure Human Health Risk Levels (µg/L). MCL Priority/Human Health Risk. SF Bay- Regional Water Quality Control Board January 2019 (rev.1).
https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/esl.html

MCL Priority lists all available MCL values. If no MCl value, the lower of the cancer/non cancer tapwater direct exposure levels is listed.

Concentrations are in units of micrograms per liter (µg/L).

Semi-volatile Organic Compounds analyzed using EPA Method 8270C SIM

Laboratory Qualifiers

<# -Compound was not detected above the indicated laboratory Method Detection Limit (MDL) or Practical Quantitation Limit (PQL).

--- No ESL listed

6.1 **Exceedance in bold font**

TABLE 10

SITE CHARACTERIZATION
CAM17/TITLE 22 METALS IN GROUNDWATER
SCVTA 1217 PARCEL
SAN JOSE, CALIFORNIA

Sample ID	B-1	ESL
Sample Date	11/4/2019	
Antimony	**110**	**6**
Arsenic	**200**	**10**
Barium	**9,200**	**1,000**
Beryllium	**22**	**4**
Cadmium	**19**	**5**
Chromium	**1,400**	**50**
Cobalt	**350**	**6**
Copper	**1,000**	**1,000**
Lead	**270**	**15**
Mercury	**4.3**	**2**
Molybdenum	71	**100**
Nickel	**2,300**	**100**
Selenium	<10	**50**
Silver	<3.0	**100**
Thallium	<15	**2**
Vanadium	**1,200**	**50**
Zinc	1,700	**5,000**

Notes:

ESL: Table GW-1: Direct Exposure Human Health Risk Levels (µg/L). MCL Priority/Human Health Risk. SF Bay- Regional Water Quality Control Board January 2019 (rev.1).

https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/esl.html

MCL Priority lists all available MCL values. If no MCl value, the lower of the cancer/non cancer tapwater direct exposure levels is listed.

Concentrations are in units of micrograms per liter (µg/L).

Samples were analyzed using EPA Method 6010B; mercury was analyzed using EPA Method 7470A

Laboratory Qualifiers

<# -Compound was not detected above the indicated laboratory Method Detection Limit (MDL) or Practical Quanitation Limit (PQL).

--- No ESL listed

**Exceedance in bold font**

TABLE 11

SITE CHARACTERIZATION
ORGANOCHLORINE PESTICIDES IN GROUNDWATER
SCVTA 1217 BOHANNON PARCEL
SAN JOSE, CALIFORNIA

Sample ID	Sample Date	4,4´-DDD	4,4´-DDE	4,4´-DDT	Aldrin	alpha-BHC	alpha-Chlordane	beta-BHC	Chlordane	delta-BHC	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan sulfate	Endrin	Endrin aldehyde	Endrin ketone	gamma-BHC	gamma-Chlordane	Heptachlor	Heptachlor epoxide	Methoxychlor	Toxaphene
B-1	11/4/2019	<0.50	<0.50	<0.50	<0.25	<0.25	<0.25	<0.25	<2.5	<0.25	<0.50	<0.25	<0.50	<0.50	<0.50	<0.50	<0.50	<0.25	<0.25	<0.25	<0.25	<2.5	<25
ESL		**0.031**	**0.046**	**0.23**	**0.00092**	**---**	**---**	**---**	**0.1**	**---**	**0.00071**	**100**	**---**	**---**	**2**	**---**	**---**	**---**	**---**	**0.01**	**0.01**	**30**	**3**

Notes:
ESL: Table GW-1: Direct Exposure Human Health Risk Levels (µg/L). MCL Priority/Human Health Risk.
SF Bay- Regional Water Quality Control Board January 2019 (rev.1).
https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/esl.html
MCL Priority lists all available MCL values. If no MCl value, the lower of the cancer/non cancer tapwater direct exposure levels is listed.
Concentrations are in units of micrograms per liter (µg/L).
Organochlorine Pesticides samples analyzed using EPA Method 8081A
Laboratory Qualifiers
<# -Compound was not detected above the indicated laboratory Method Detection Limit (MDL) or the Practical Quantitation Limit (PQL).
--- No ESL Listed.
**Exceedance in bold font**

TABLE 12

SITE CHARACTERIZATION
POLYCHLORINATED BIPHENYLS IN GROUNDWATER
SCVTA 1217 BOHANNON PARCEL
SAN JOSE, CALIFORNIA

Sample ID	Sample Date	Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Aroclor 1262	Aroclor 1268
B-1	11/4/2019	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ESL		---	---	---	---	---	---	---	---	---

Notes:
ESL: Table GW-1: Direct Exposure Human Health Risk Levels (µg/L). MCL Priority/Human Health Risk.
SF Bay- Regional Water Quality Control Board January 2019 (rev.1).
https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/esl.html
MCL Priority lists all available MCL values. If no MCl value, the lower of the cancer/non cancer tapwater direct exposure levels is listed.
Polychlorinated biphenyls (PCBs) samples analyzed using EPA Method 8082 for PCBs

Laboratory Qualifiers
<# -Compound was not detected above the indicated laboratory Method Detection Limit (MDL) or Practical Quanitation Limit (PQL).
--- No ESL Listed.
6.1 Exceedance in bold font

ATTACHMENT 1 - SOIL BORINGS

Drilling Log

Project Name: SCVTA 1217 Bohannon Property			Boring Number: B-1
Project No.: 87119			Page: 1 of 2
Ground Elevation	Location: 2710 Story Rd., San Jose, CA Landscaping- western edge of site.		Total Footage: 15

Drilling Type	Hole Size	Overburden Footage	Bedrock Footage	No. Of Samples	No. Core Boxes	Depth to Water	Date Measured
Direct Push	3"			2		8	

Drilling Co.: Cascade Drilling L.P.	Driller (s): Jessie C. & Miguel U.
Drilling Rig.: GeoProbe 6620 DT	Type of Penetration Test
Date: 11-04-2019 To 11-04-2019	Field Observer (s): S. Barber

Depth	Description	Class.	Blow Count	Field Strength	Recov.		Sample or Box No.	Remarks
	Grass.			0830				Hand clear to 5' bgs
1	Sandy Clay/Topsoil- 5YR 2.5/2 Very fine sand and fines (wet: sprinkler system/irrigation) with organics.	SC						
2	Sand- 10YR 4/3 Fine to coarse sand with 5% gravel to 1 cm. Angular coarse sand with organics.	SP						0/0/0
3	Silt Sand- 2.5Y 3/2 Fine to medium sand with silt, trace clay. Organic odor.	SM						
4								
5				0847	100			
6	Silt Sand- 2.5Y 3/2 Fine to coarse sand, dense. Gray and black staining. Organic odor. Dry.	SM		0904				0/0/0
7								
8	Moist ▽			0905	100			
9	Sand- 2.5 Y 2.5/1 Fine sand with trace clay. Black with fuel odor, moist.	SW						
10							B-1d10.5 0911	0/0/22.6
11	Clay- 2.5 Y 3/1 soft, moist,. No odor.	CL						Set casing for water sampling
12				0908	100			
				0922				
13								
14								

Drilling Log Continuation

	Boring Number B-1
Project Name SCVTA 1217 Bohannon	**Page** 2 of 2
Project Number 87119	**Date** 11-04-2019

Depth (feet)	Description	Class	Blow Count	Recov.	Run/ Time	Sample Desig.	PID (ppm) BZ	PID (ppm) BH	PID (ppm) S	Remarks/ Water Levels
15	Clay as above			100	0923	B-1d15 0925	0/0/0			
	Terminate boring at 15' bgs per work-plan									
16										
17										
18										
19										
20										
21										
22										
23										
24										
25										
26										
27										
28										
29										
30										

BZ=Breathing Zone BH=Bore Hole S=Sample

ATTACHMENT 2 – CERTIFIED ANALYICAL REPORTS

November 21, 2019

Christopher D'Sa
Burns and McDonnell
400 Oyster Point Blvd, Suite 533
South San Francisco, CA 94080
Tel: (626) 817-7900
Fax:

ELAP No.: 1838
CSDLAC No.: 10196
ORELAP No.: CA300003

Re: ATL Work Order Number : 1904037
Client Reference : SCVTA-1217

Enclosed are the results for sample(s) received on November 05, 2019 by Advanced Technology Laboratories. The sample(s) are tested for the parameters as indicated on the enclosed chain of custody in accordance with applicable laboratory certifications. The laboratory results contained in this report specifically pertains to the sample(s) submitted.

Thank you for the opportunity to serve the needs of your company. If you have any questions, please feel free to contact me or your Project Manager.

Sincerely,

Edgar Caballero
President & Laboratory Director

Certificate of Analysis

Burns and McDonnell	Project Number : SCVTA-1217
400 Oyster Point Blvd, Suite 533	Report To : Christopher D'Sa
South San Francisco , CA 94080	Reported : 11/21/2019

SUMMARY OF SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
B-1d10.5	1904037-01	Soil	11/04/19 9:11	11/05/19 9:09
B-1d15	1904037-02	Soil	11/04/19 9:25	11/05/19 9:09
B-1	1904037-03	Water	11/04/19 9:45	11/05/19 9:09

CASE NARRATIVE

Due tio shortiage of sample volume, and per clienti autihorization, sample volume was adjustied from tihe metihod recommended 1L, down tio 500ml. By also reducing tihe concentiration volume down from tihe metihod recommended 1ml, down tio 0.5ml, an adjustimenti of tihe RL was noti necessary. Clienti was advised of tihe possibilitiy tihati variabilitiy in resultis may occur, due tio altieration of tihe metihod process

Certificate of Analysis

Burns and McDonnell	Project Number : SCVTA-1217
400 Oyster Point Blvd, Suite 533	Report To : Christopher D'Sa
South San Francisco , CA 94080	Reported : 11/21/2019

Client Sample ID: B-1d10.5

Lab ID: 1904037-01

Title 22 Metals by ICP-AES EPA 6010B

Analyst: KEK

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	1	B9K0202	11/11/2019	11/11/19 17:36	
Arsenic	**5.8**	1.0	1	B9K0202	11/11/2019	11/11/19 17:36	
Barium	**140**	1.0	1	B9K0202	11/11/2019	11/11/19 17:36	
Beryllium	ND	1.0	1	B9K0202	11/11/2019	11/11/19 17:36	
Cadmium	ND	1.0	1	B9K0202	11/11/2019	11/11/19 17:36	
Chromium	**42**	1.0	1	B9K0202	11/11/2019	11/11/19 17:36	
Cobalt	**9.9**	1.0	1	B9K0202	11/11/2019	11/11/19 17:36	
Copper	**24**	2.0	1	B9K0202	11/11/2019	11/11/19 17:36	
Lead	**5.8**	1.0	1	B9K0202	11/11/2019	11/11/19 17:36	
Molybdenum	ND	1.0	1	B9K0202	11/11/2019	11/11/19 17:36	
Nickel	**76**	1.0	1	B9K0202	11/11/2019	11/11/19 17:36	
Selenium	ND	1.0	1	B9K0202	11/11/2019	11/11/19 17:36	
Silver	ND	1.0	1	B9K0202	11/11/2019	11/11/19 17:36	
Thallium	ND	1.0	1	B9K0202	11/11/2019	11/11/19 17:36	
Vanadium	**31**	1.0	1	B9K0202	11/11/2019	11/11/19 17:36	
Zinc	**47**	1.0	1	B9K0202	11/11/2019	11/11/19 17:36	

Mercury by AA (Cold Vapor) EPA 7471A

Analyst: KEK

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	ND	0.10	1	B9K0201	11/11/2019	11/11/19 18:43	

Diesel Range Organics by EPA 8015B (SGT)

Analyst: VL

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	**9.4**	1.0	1	B9K0181	11/08/2019	11/08/19 15:34	
ORO	**4.1**	1.0	1	B9K0181	11/08/2019	11/08/19 15:34	
Surrogate: p-Terphenyl	*57.2 %*	*34 - 158*		B9K0181	11/08/2019	*11/08/19 15:34*	

Certificate of Analysis

Burns and McDonnell	Project Number : SCVTA-1217
400 Oyster Point Blvd, Suite 533	Report To : Christopher D'Sa
South San Francisco , CA 94080	Reported : 11/21/2019

Client Sample ID: B-1d10.5

Lab ID: 1904037-01

Organochlorine Pesticides by EPA 8081A **Analyst: KD**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
4,4′-DDD	ND	10	5	B9K0175	11/07/2019	11/08/19 11:11	D1
4,4′-DDE	ND	10	5	B9K0175	11/07/2019	11/08/19 11:11	D1
4,4′-DDT	ND	10	5	B9K0175	11/07/2019	11/08/19 11:11	D1
Aldrin	ND	5.0	5	B9K0175	11/07/2019	11/08/19 11:11	D1
alpha-BHC	ND	5.0	5	B9K0175	11/07/2019	11/08/19 11:11	D1
alpha-Chlordane	ND	5.0	5	B9K0175	11/07/2019	11/08/19 11:11	D1
beta-BHC	ND	5.0	5	B9K0175	11/07/2019	11/08/19 11:11	D1
Chlordane	ND	42	5	B9K0175	11/07/2019	11/08/19 11:11	D1
delta-BHC	ND	5.0	5	B9K0175	11/07/2019	11/08/19 11:11	D1
Dieldrin	ND	10	5	B9K0175	11/07/2019	11/08/19 11:11	D1
Endosulfan I	ND	5.0	5	B9K0175	11/07/2019	11/08/19 11:11	D1
Endosulfan II	ND	10	5	B9K0175	11/07/2019	11/08/19 11:11	D1
Endosulfan sulfate	ND	10	5	B9K0175	11/07/2019	11/08/19 11:11	D1
Endrin	ND	10	5	B9K0175	11/07/2019	11/08/19 11:11	D1
Endrin aldehyde	ND	10	5	B9K0175	11/07/2019	11/08/19 11:11	D1
Endrin ketone	ND	10	5	B9K0175	11/07/2019	11/08/19 11:11	D1
gamma-BHC	ND	5.0	5	B9K0175	11/07/2019	11/08/19 11:11	D1
gamma-Chlordane	ND	5.0	5	B9K0175	11/07/2019	11/08/19 11:11	D1
Heptachlor	ND	5.0	5	B9K0175	11/07/2019	11/08/19 11:11	D1
Heptachlor epoxide	ND	5.0	5	B9K0175	11/07/2019	11/08/19 11:11	D1
Methoxychlor	ND	25	5	B9K0175	11/07/2019	11/08/19 11:11	D1
Toxaphene	ND	250	5	B9K0175	11/07/2019	11/08/19 11:11	D1
Surrogate: Decachlorobiphenyl	*47.3 %*	*32 - 91*		B9K0175	11/07/2019	*11/08/19 11:11*	
Surrogate: Tetrachloro-m-xylene	*56.9 %*	*38 - 93*		B9K0175	11/07/2019	*11/08/19 11:11*	

Certificate of Analysis

Burns and McDonnell	Project Number : SCVTA-1217
400 Oyster Point Blvd, Suite 533	Report To : Christopher D'Sa
South San Francisco , CA 94080	Reported : 11/21/2019

Client Sample ID: B-1d10.5

Lab ID: 1904037-01

Polychlorinated Biphenyls by EPA 8082

Analyst: KD

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Aroclor 1016	ND	16	1	B9K0175	11/07/2019	11/08/19 14:58	
Aroclor 1221	ND	16	1	B9K0175	11/07/2019	11/08/19 14:58	
Aroclor 1232	ND	16	1	B9K0175	11/07/2019	11/08/19 14:58	
Aroclor 1242	ND	16	1	B9K0175	11/07/2019	11/08/19 14:58	
Aroclor 1248	ND	16	1	B9K0175	11/07/2019	11/08/19 14:58	
Aroclor 1254	ND	16	1	B9K0175	11/07/2019	11/08/19 14:58	
Aroclor 1260	ND	16	1	B9K0175	11/07/2019	11/08/19 14:58	
Aroclor 1262	ND	16	1	B9K0175	11/07/2019	11/08/19 14:58	
Aroclor 1268	ND	16	1	B9K0175	11/07/2019	11/08/19 14:58	
Surrogate: Decachlorobiphenyl	*30.1 %*	*30 - 132*		B9K0175	11/07/2019	*11/08/19 14:58*	
Surrogate: Tetrachloro-m-xylene	*30.4 %*	*44 - 113*		B9K0175	11/07/2019	*11/08/19 14:58*	S10

Volatile Organic Compounds by EPA 5035 / EPA 8260B

Analyst: JBL

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	410	100	B9K0259	11/13/2019	11/13/19 13:07	D6
1,1,1-Trichloroethane	ND	410	100	B9K0259	11/13/2019	11/13/19 13:07	D6
1,1,2,2-Tetrachloroethane	ND	410	100	B9K0259	11/13/2019	11/13/19 13:07	D6
1,1,2-Trichloroethane	ND	410	100	B9K0259	11/13/2019	11/13/19 13:07	D6
1,1-Dichloroethane	ND	410	100	B9K0259	11/13/2019	11/13/19 13:07	D6
1,1-Dichloroethene	ND	410	100	B9K0259	11/13/2019	11/13/19 13:07	D6
1,1-Dichloropropene	ND	410	100	B9K0259	11/13/2019	11/13/19 13:07	D6
1,2,3-Trichloropropane	ND	410	100	B9K0259	11/13/2019	11/13/19 13:07	D6
1,2,3-Trichlorobenzene	ND	410	100	B9K0259	11/13/2019	11/13/19 13:07	D6
1,2,4-Trichlorobenzene	ND	410	100	B9K0259	11/13/2019	11/13/19 13:07	D6
1,2,4-Trimethylbenzene	ND	410	100	B9K0259	11/13/2019	11/13/19 13:07	D6
1,2-Dibromo-3-chloropropane	ND	810	100	B9K0259	11/13/2019	11/13/19 13:07	D6
1,2-Dibromoethane	ND	410	100	B9K0259	11/13/2019	11/13/19 13:07	D6
1,2-Dichlorobenzene	ND	410	100	B9K0259	11/13/2019	11/13/19 13:07	D6
1,2-Dichloroethane	ND	410	100	B9K0259	11/13/2019	11/13/19 13:07	D6
1,2-Dichloropropane	ND	410	100	B9K0259	11/13/2019	11/13/19 13:07	D6
1,3,5-Trimethylbenzene	ND	410	100	B9K0259	11/13/2019	11/13/19 13:07	D6
1,3-Dichlorobenzene	ND	410	100	B9K0259	11/13/2019	11/13/19 13:07	D6
1,3-Dichloropropane	ND	410	100	B9K0259	11/13/2019	11/13/19 13:07	D6
1,4-Dichlorobenzene	ND	410	100	B9K0259	11/13/2019	11/13/19 13:07	D6

Certificate of Analysis

Burns and McDonnell	Project Number : SCVTA-1217
400 Oyster Point Blvd, Suite 533	Report To : Christopher D'Sa
South San Francisco , CA 94080	Reported : 11/21/2019

Client Sample ID: B-1d10.5

Lab ID: 1904037-01

Volatile Organic Compounds by EPA 5035 / EPA 8260B **Analyst: JBL**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
2,2-Dichloropropane	ND	410	100	B9K0259	11/13/2019	11/13/19 13:07	D6
2-Chlorotoluene	ND	410	100	B9K0259	11/13/2019	11/13/19 13:07	D6
4-Chlorotoluene	ND	410	100	B9K0259	11/13/2019	11/13/19 13:07	D6
4-Isopropyltoluene	ND	410	100	B9K0259	11/13/2019	11/13/19 13:07	D6
Benzene	ND	410	100	B9K0259	11/13/2019	11/13/19 13:07	D6
Bromobenzene	ND	410	100	B9K0259	11/13/2019	11/13/19 13:07	D6
Bromochloromethane	ND	410	100	B9K0259	11/13/2019	11/13/19 13:07	D6
Bromodichloromethane	ND	410	100	B9K0259	11/13/2019	11/13/19 13:07	D6
Bromoform	ND	410	100	B9K0259	11/13/2019	11/13/19 13:07	D6
Bromomethane	ND	410	100	B9K0259	11/13/2019	11/13/19 13:07	D6
Carbon disulfide	ND	410	100	B9K0259	11/13/2019	11/13/19 13:07	D6
Carbon tetrachloride	ND	410	100	B9K0259	11/13/2019	11/13/19 13:07	D6
Chlorobenzene	ND	410	100	B9K0259	11/13/2019	11/13/19 13:07	D6
Chloroethane	ND	410	100	B9K0259	11/13/2019	11/13/19 13:07	D6
Chloroform	ND	410	100	B9K0259	11/13/2019	11/13/19 13:07	D6
Chloromethane	ND	410	100	B9K0259	11/13/2019	11/13/19 13:07	D6
cis-1,2-Dichloroethene	ND	410	100	B9K0259	11/13/2019	11/13/19 13:07	D6
cis-1,3-Dichloropropene	ND	410	100	B9K0259	11/13/2019	11/13/19 13:07	D6
Di-isopropyl ether	ND	410	100	B9K0259	11/13/2019	11/13/19 13:07	D6
Dibromochloromethane	ND	410	100	B9K0259	11/13/2019	11/13/19 13:07	D6
Dibromomethane	ND	410	100	B9K0259	11/13/2019	11/13/19 13:07	D6
Dichlorodifluoromethane	ND	410	100	B9K0259	11/13/2019	11/13/19 13:07	D6
Ethyl Acetate	ND	4100	100	B9K0259	11/13/2019	11/13/19 13:07	D6
Ethyl Ether	ND	4100	100	B9K0259	11/13/2019	11/13/19 13:07	D6
Ethyl tert-butyl ether	ND	410	100	B9K0259	11/13/2019	11/13/19 13:07	D6
Ethylbenzene	ND	410	100	B9K0259	11/13/2019	11/13/19 13:07	D6
Freon-113	ND	410	100	B9K0259	11/13/2019	11/13/19 13:07	D6
Hexachlorobutadiene	**870**	410	100	B9K0259	11/13/2019	11/13/19 13:07	D6
Isopropylbenzene	ND	410	100	B9K0259	11/13/2019	11/13/19 13:07	D6
m,p-Xylene	ND	810	100	B9K0259	11/13/2019	11/13/19 13:07	D6
Methylene chloride	ND	410	100	B9K0259	11/13/2019	11/13/19 13:07	D6
MTBE	ND	410	100	B9K0259	11/13/2019	11/13/19 13:07	D6
n-Butylbenzene	ND	410	100	B9K0259	11/13/2019	11/13/19 13:07	D6
n-Propylbenzene	ND	410	100	B9K0259	11/13/2019	11/13/19 13:07	D6
Naphthalene	ND	410	100	B9K0259	11/13/2019	11/13/19 13:07	D6
o-Xylene	ND	410	100	B9K0259	11/13/2019	11/13/19 13:07	D6

Certificate of Analysis

Burns and McDonnell	Project Number : SCVTA-1217
400 Oyster Point Blvd, Suite 533	Report To : Christopher D'Sa
South San Francisco , CA 94080	Reported : 11/21/2019

Client Sample ID: B-1d10.5

Lab ID: 1904037-01

Volatile Organic Compounds by EPA 5035 / EPA 8260B

Analyst: JBL

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
sec-Butylbenzene	ND	410	100	B9K0259	11/13/2019	11/13/19 13:07	D6
Styrene	ND	410	100	B9K0259	11/13/2019	11/13/19 13:07	D6
tert-Amyl methyl ether	ND	410	100	B9K0259	11/13/2019	11/13/19 13:07	D6
tert-Butanol	ND	8100	100	B9K0259	11/13/2019	11/13/19 13:07	D6
tert-Butylbenzene	ND	410	100	B9K0259	11/13/2019	11/13/19 13:07	D6
Tetrachloroethene	ND	410	100	B9K0259	11/13/2019	11/13/19 13:07	D6
Toluene	ND	410	100	B9K0259	11/13/2019	11/13/19 13:07	D6
trans-1,2-Dichloroethene	ND	410	100	B9K0259	11/13/2019	11/13/19 13:07	D6
trans-1,3-Dichloropropene	ND	410	100	B9K0259	11/13/2019	11/13/19 13:07	D6
Trichloroethene	ND	410	100	B9K0259	11/13/2019	11/13/19 13:07	D6
Trichlorofluoromethane	ND	410	100	B9K0259	11/13/2019	11/13/19 13:07	D6
Vinyl acetate	ND	4100	100	B9K0259	11/13/2019	11/13/19 13:07	D6
Vinyl chloride	ND	410	100	B9K0259	11/13/2019	11/13/19 13:07	D6
GRO (C4 - C12)	**190000**	81000	100	B9K0260	11/13/2019	11/13/19 13:07	D6
Surrogate: 1,2-Dichloroethane-d4	*78.6 %*	*60 - 145*		B9K0260	11/13/2019	*11/13/19 13:07*	
Surrogate: 1,2-Dichloroethane-d4	*103 %*	*60 - 145*		B9K0259	11/13/2019	*11/13/19 13:07*	
Surrogate: 4-Bromofluorobenzene	*82.2 %*	*68 - 121*		B9K0260	11/13/2019	*11/13/19 13:07*	
Surrogate: 4-Bromofluorobenzene	*101 %*	*68 - 121*		B9K0259	11/13/2019	*11/13/19 13:07*	
Surrogate: Dibromofluoromethane	*95.3 %*	*65 - 137*		B9K0259	11/13/2019	*11/13/19 13:07*	
Surrogate: Dibromofluoromethane	*93.6 %*	*65 - 137*		B9K0260	11/13/2019	*11/13/19 13:07*	
Surrogate: Toluene-d8	*87.9 %*	*82 - 119*		B9K0260	11/13/2019	*11/13/19 13:07*	
Surrogate: Toluene-d8	*90.9 %*	*82 - 119*		B9K0259	11/13/2019	*11/13/19 13:07*	

Semivolatile Organic Compounds by EPA 8270C

Analyst: SP

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,2,4-Trichlorobenzene	ND	330	1	B9K0190	11/08/2019	11/12/19 23:49	
1,2-Dichlorobenzene	ND	330	1	B9K0190	11/08/2019	11/12/19 23:49	
1,3-Dichlorobenzene	ND	330	1	B9K0190	11/08/2019	11/12/19 23:49	
1,4-Dichlorobenzene	ND	330	1	B9K0190	11/08/2019	11/12/19 23:49	
2,4,5-Trichlorophenol	ND	330	1	B9K0190	11/08/2019	11/12/19 23:49	
2,4,6-Trichlorophenol	ND	330	1	B9K0190	11/08/2019	11/12/19 23:49	
2,4-Dichlorophenol	ND	1600	1	B9K0190	11/08/2019	11/12/19 23:49	
2,4-Dimethylphenol	ND	330	1	B9K0190	11/08/2019	11/12/19 23:49	
2,4-Dinitrophenol	ND	1600	1	B9K0190	11/08/2019	11/12/19 23:49	

Certificate of Analysis

Burns and McDonnell	Project Number : SCVTA-1217
400 Oyster Point Blvd, Suite 533	Report To : Christopher D'Sa
South San Francisco , CA 94080	Reported : 11/21/2019

Client Sample ID: B-1d10.5

Lab ID: 1904037-01

Semivolatile Organic Compounds by EPA 8270C **Analyst: SP**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
2,4-Dinitrotoluene	ND	330	1	B9K0190	11/08/2019	11/12/19 23:49	
2,6-Dinitrotoluene	ND	330	1	B9K0190	11/08/2019	11/12/19 23:49	
2-Chloronaphthalene	ND	330	1	B9K0190	11/08/2019	11/12/19 23:49	
2-Chlorophenol	ND	330	1	B9K0190	11/08/2019	11/12/19 23:49	
2-Methylnaphthalene	ND	330	1	B9K0190	11/08/2019	11/12/19 23:49	
2-Methylphenol	ND	330	1	B9K0190	11/08/2019	11/12/19 23:49	
2-Nitroaniline	ND	1600	1	B9K0190	11/08/2019	11/12/19 23:49	
2-Nitrophenol	ND	330	1	B9K0190	11/08/2019	11/12/19 23:49	
3,3´-Dichlorobenzidine	ND	660	1	B9K0190	11/08/2019	11/12/19 23:49	
3-Nitroaniline	ND	1600	1	B9K0190	11/08/2019	11/12/19 23:49	
4,6-Dinitro-2-methyphenol	ND	1600	1	B9K0190	11/08/2019	11/12/19 23:49	
4-Bromophenyl-phenylether	ND	330	1	B9K0190	11/08/2019	11/12/19 23:49	
4-Chloro-3-methylphenol	ND	660	1	B9K0190	11/08/2019	11/12/19 23:49	
4-Chloroaniline	ND	660	1	B9K0190	11/08/2019	11/12/19 23:49	
4-Chlorophenyl-phenylether	ND	330	1	B9K0190	11/08/2019	11/12/19 23:49	
4-Methylphenol	ND	330	1	B9K0190	11/08/2019	11/12/19 23:49	
4-Nitroaniline	ND	1600	1	B9K0190	11/08/2019	11/12/19 23:49	
4-Nitrophenol	ND	330	1	B9K0190	11/08/2019	11/12/19 23:49	
Acenaphthene	ND	330	1	B9K0190	11/08/2019	11/12/19 23:49	
Acenaphthylene	ND	330	1	B9K0190	11/08/2019	11/12/19 23:49	
Anthracene	ND	330	1	B9K0190	11/08/2019	11/12/19 23:49	
Benzidine (M)	ND	1600	1	B9K0190	11/08/2019	11/12/19 23:49	
Benzo(a)anthracene	ND	330	1	B9K0190	11/08/2019	11/12/19 23:49	
Benzo(a)pyrene	ND	330	1	B9K0190	11/08/2019	11/12/19 23:49	
Benzo(b)fluoranthene	ND	330	1	B9K0190	11/08/2019	11/12/19 23:49	
Benzo(g,h,i)perylene	ND	330	1	B9K0190	11/08/2019	11/12/19 23:49	
Benzo(k)fluoranthene	ND	330	1	B9K0190	11/08/2019	11/12/19 23:49	
Benzoic acid	ND	1600	1	B9K0190	11/08/2019	11/12/19 23:49	
Benzyl alcohol	ND	660	1	B9K0190	11/08/2019	11/12/19 23:49	
bis(2-chloroethoxy)methane	ND	330	1	B9K0190	11/08/2019	11/12/19 23:49	
bis(2-Chloroethyl)ether	ND	330	1	B9K0190	11/08/2019	11/12/19 23:49	
bis(2-chloroisopropyl)ether	ND	330	1	B9K0190	11/08/2019	11/12/19 23:49	
bis(2-ethylhexyl)phthalate	ND	330	1	B9K0190	11/08/2019	11/12/19 23:49	
Butylbenzylphthalate	ND	330	1	B9K0190	11/08/2019	11/12/19 23:49	
Chrysene	ND	330	1	B9K0190	11/08/2019	11/12/19 23:49	
Di-n-butylphthalate	ND	330	1	B9K0190	11/08/2019	11/12/19 23:49	

Certificate of Analysis

Burns and McDonnell	Project Number : SCVTA-1217
400 Oyster Point Blvd, Suite 533	Report To : Christopher D'Sa
South San Francisco , CA 94080	Reported : 11/21/2019

Client Sample ID: B-1d10.5

Lab ID: 1904037-01

Semivolatile Organic Compounds by EPA 8270C **Analyst: SP**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Di-n-octylphthalate	ND	330	1	B9K0190	11/08/2019	11/12/19 23:49	
Dibenz(a,h)anthracene	ND	330	1	B9K0190	11/08/2019	11/12/19 23:49	
Dibenzofuran	ND	330	1	B9K0190	11/08/2019	11/12/19 23:49	
Diethyl phthalate	ND	330	1	B9K0190	11/08/2019	11/12/19 23:49	
Dimethyl phthalate	ND	330	1	B9K0190	11/08/2019	11/12/19 23:49	
Fluoranthene	ND	330	1	B9K0190	11/08/2019	11/12/19 23:49	
Fluorene	ND	330	1	B9K0190	11/08/2019	11/12/19 23:49	
Hexachlorobenzene	ND	330	1	B9K0190	11/08/2019	11/12/19 23:49	
Hexachlorobutadiene	ND	660	1	B9K0190	11/08/2019	11/12/19 23:49	
Hexachlorocyclopentadiene	ND	660	1	B9K0190	11/08/2019	11/12/19 23:49	
Hexachloroethane	ND	330	1	B9K0190	11/08/2019	11/12/19 23:49	
Indeno(1,2,3-cd)pyrene	ND	330	1	B9K0190	11/08/2019	11/12/19 23:49	
Isophorone	ND	330	1	B9K0190	11/08/2019	11/12/19 23:49	
N-Nitroso-di-n propylamine	ND	330	1	B9K0190	11/08/2019	11/12/19 23:49	
N-Nitrosodiphenylamine	ND	330	1	B9K0190	11/08/2019	11/12/19 23:49	
Naphthalene	ND	330	1	B9K0190	11/08/2019	11/12/19 23:49	
Nitrobenzene	ND	330	1	B9K0190	11/08/2019	11/12/19 23:49	
Pentachlorophenol	ND	1600	1	B9K0190	11/08/2019	11/12/19 23:49	
Phenanthrene	ND	330	1	B9K0190	11/08/2019	11/12/19 23:49	
Phenol	ND	330	1	B9K0190	11/08/2019	11/12/19 23:49	
Pyrene	ND	330	1	B9K0190	11/08/2019	11/12/19 23:49	
Pyridine	ND	1600	1	B9K0190	11/08/2019	11/12/19 23:49	
Surrogate: 1,2-Dichlorobenzene-d4	*94.1 %*	*28 - 77*		B9K0190	11/08/2019	*11/12/19 23:49*	S1
Surrogate: 2,4,6-Tribromophenol	*91.8 %*	*17 - 157*		B9K0190	11/08/2019	*11/12/19 23:49*	
Surrogate: 2-Chlorophenol-d4	*70.5 %*	*35 - 98*		B9K0190	11/08/2019	*11/12/19 23:49*	
Surrogate: 2-Fluorobiphenyl	*71.6 %*	*35 - 88*		B9K0190	11/08/2019	*11/12/19 23:49*	
Surrogate: 2-Fluorophenol	*67.3 %*	*32 - 88*		B9K0190	11/08/2019	*11/12/19 23:49*	
Surrogate: 4-Terphenyl-d14	*72.6 %*	*35 - 114*		B9K0190	11/08/2019	*11/12/19 23:49*	
Surrogate: Nitrobenzene-d5	*73.0 %*	*27 - 80*		B9K0190	11/08/2019	*11/12/19 23:49*	
Surrogate: Phenol-d6	*73.1 %*	*35 - 98*		B9K0190	11/08/2019	*11/12/19 23:49*	

Certificate of Analysis

Burns and McDonnell	Project Number : SCVTA-1217
400 Oyster Point Blvd, Suite 533	Report To : Christopher D'Sa
South San Francisco , CA 94080	Reported : 11/21/2019

Client Sample ID: B-1d15

Lab ID: 1904037-02

Title 22 Metals by ICP-AES EPA 6010B

Analyst: KEK

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	1	B9K0202	11/11/2019	11/11/19 17:41	
Arsenic	**8.3**	1.0	1	B9K0202	11/11/2019	11/11/19 17:41	
Barium	**210**	1.0	1	B9K0202	11/11/2019	11/11/19 17:41	
Beryllium	ND	1.0	1	B9K0202	11/11/2019	11/11/19 17:41	
Cadmium	ND	1.0	1	B9K0202	11/11/2019	11/11/19 17:41	
Chromium	**53**	1.0	1	B9K0202	11/11/2019	11/11/19 17:41	
Cobalt	**12**	1.0	1	B9K0202	11/11/2019	11/11/19 17:41	
Copper	**36**	2.0	1	B9K0202	11/11/2019	11/11/19 17:41	
Lead	**9.2**	1.0	1	B9K0202	11/11/2019	11/11/19 17:41	
Molybdenum	**1.1**	1.0	1	B9K0202	11/11/2019	11/11/19 17:41	
Nickel	**78**	1.0	1	B9K0202	11/11/2019	11/11/19 17:41	
Selenium	ND	1.0	1	B9K0202	11/11/2019	11/11/19 17:41	
Silver	ND	1.0	1	B9K0202	11/11/2019	11/11/19 17:41	
Thallium	ND	1.0	1	B9K0202	11/11/2019	11/11/19 17:41	
Vanadium	**41**	1.0	1	B9K0202	11/11/2019	11/11/19 17:41	
Zinc	**69**	1.0	1	B9K0202	11/11/2019	11/11/19 17:41	

STLC Metals by ICP-AES by EPA 6010B

Analyst: KEK

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Chromium	**0.091**	1.0	0.039	20	B9K0410	11/16/2019	11/18/19 13:56	J, D1

Mercury by AA (Cold Vapor) EPA 7471A

Analyst: KEK

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	ND	0.10	1	B9K0201	11/11/2019	11/11/19 18:45	

Diesel Range Organics by EPA 8015B (SGT)

Analyst: VL

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	ND	1.0	1	B9K0181	11/08/2019	11/08/19 15:52	
ORO	ND	1.0	1	B9K0181	11/08/2019	11/08/19 15:52	
Surrogate: p-Terphenyl	*65.0 %*	*34 - 158*		B9K0181	11/08/2019	*11/08/19 15:52*	

Certificate of Analysis

Burns and McDonnell	Project Number : SCVTA-1217
400 Oyster Point Blvd, Suite 533	Report To : Christopher D'Sa
South San Francisco , CA 94080	Reported : 11/21/2019

Client Sample ID: B-1d15

Lab ID: 1904037-02

Volatile Organic Compounds by EPA 5035 / EPA 8260B **Analyst: JBL**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	3.9	1	B9K0259	11/13/2019	11/13/19 16:32	
1,1,1-Trichloroethane	ND	3.9	1	B9K0259	11/13/2019	11/13/19 16:32	
1,1,2,2-Tetrachloroethane	ND	3.9	1	B9K0259	11/13/2019	11/13/19 16:32	
1,1,2-Trichloroethane	ND	3.9	1	B9K0259	11/13/2019	11/13/19 16:32	
1,1-Dichloroethane	ND	3.9	1	B9K0259	11/13/2019	11/13/19 16:32	
1,1-Dichloroethene	ND	3.9	1	B9K0259	11/13/2019	11/13/19 16:32	
1,1-Dichloropropene	ND	3.9	1	B9K0259	11/13/2019	11/13/19 16:32	
1,2,3-Trichloropropane	ND	3.9	1	B9K0259	11/13/2019	11/13/19 16:32	
1,2,3-Trichlorobenzene	ND	3.9	1	B9K0259	11/13/2019	11/13/19 16:32	
1,2,4-Trichlorobenzene	ND	3.9	1	B9K0259	11/13/2019	11/13/19 16:32	
1,2,4-Trimethylbenzene	ND	3.9	1	B9K0259	11/13/2019	11/13/19 16:32	
1,2-Dibromo-3-chloropropane	ND	7.9	1	B9K0259	11/13/2019	11/13/19 16:32	
1,2-Dibromoethane	ND	3.9	1	B9K0259	11/13/2019	11/13/19 16:32	
1,2-Dichlorobenzene	ND	3.9	1	B9K0259	11/13/2019	11/13/19 16:32	
1,2-Dichloroethane	ND	3.9	1	B9K0259	11/13/2019	11/13/19 16:32	
1,2-Dichloropropane	ND	3.9	1	B9K0259	11/13/2019	11/13/19 16:32	
1,3,5-Trimethylbenzene	ND	3.9	1	B9K0259	11/13/2019	11/13/19 16:32	
1,3-Dichlorobenzene	ND	3.9	1	B9K0259	11/13/2019	11/13/19 16:32	
1,3-Dichloropropane	ND	3.9	1	B9K0259	11/13/2019	11/13/19 16:32	
1,4-Dichlorobenzene	ND	3.9	1	B9K0259	11/13/2019	11/13/19 16:32	
2,2-Dichloropropane	ND	3.9	1	B9K0259	11/13/2019	11/13/19 16:32	
2-Chlorotoluene	ND	3.9	1	B9K0259	11/13/2019	11/13/19 16:32	
4-Chlorotoluene	ND	3.9	1	B9K0259	11/13/2019	11/13/19 16:32	
4-Isopropyltoluene	ND	3.9	1	B9K0259	11/13/2019	11/13/19 16:32	
Benzene	ND	3.9	1	B9K0259	11/13/2019	11/13/19 16:32	
Bromobenzene	ND	3.9	1	B9K0259	11/13/2019	11/13/19 16:32	
Bromochloromethane	ND	3.9	1	B9K0259	11/13/2019	11/13/19 16:32	
Bromodichloromethane	ND	3.9	1	B9K0259	11/13/2019	11/13/19 16:32	
Bromoform	ND	3.9	1	B9K0259	11/13/2019	11/13/19 16:32	
Bromomethane	ND	3.9	1	B9K0259	11/13/2019	11/13/19 16:32	
Carbon disulfide	ND	3.9	1	B9K0259	11/13/2019	11/13/19 16:32	
Carbon tetrachloride	ND	3.9	1	B9K0259	11/13/2019	11/13/19 16:32	
Chlorobenzene	ND	3.9	1	B9K0259	11/13/2019	11/13/19 16:32	
Chloroethane	ND	3.9	1	B9K0259	11/13/2019	11/13/19 16:32	
Chloroform	ND	3.9	1	B9K0259	11/13/2019	11/13/19 16:32	
Chloromethane	ND	3.9	1	B9K0259	11/13/2019	11/13/19 16:32	

Certificate of Analysis

Burns and McDonnell	Project Number : SCVTA-1217
400 Oyster Point Blvd, Suite 533	Report To : Christopher D'Sa
South San Francisco , CA 94080	Reported : 11/21/2019

Client Sample ID: B-1d15

Lab ID: 1904037-02

Volatile Organic Compounds by EPA 5035 / EPA 8260B **Analyst: JBL**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
cis-1,2-Dichloroethene	ND	3.9	1	B9K0259	11/13/2019	11/13/19 16:32	
cis-1,3-Dichloropropene	ND	3.9	1	B9K0259	11/13/2019	11/13/19 16:32	
Di-isopropyl ether	ND	3.9	1	B9K0259	11/13/2019	11/13/19 16:32	
Dibromochloromethane	ND	3.9	1	B9K0259	11/13/2019	11/13/19 16:32	
Dibromomethane	ND	3.9	1	B9K0259	11/13/2019	11/13/19 16:32	
Dichlorodifluoromethane	ND	3.9	1	B9K0259	11/13/2019	11/13/19 16:32	
Ethyl Acetate	ND	39	1	B9K0259	11/13/2019	11/13/19 16:32	
Ethyl Ether	ND	39	1	B9K0259	11/13/2019	11/13/19 16:32	
Ethyl tert-butyl ether	ND	3.9	1	B9K0259	11/13/2019	11/13/19 16:32	
Ethylbenzene	ND	3.9	1	B9K0259	11/13/2019	11/13/19 16:32	
Freon-113	ND	3.9	1	B9K0259	11/13/2019	11/13/19 16:32	
Hexachlorobutadiene	ND	3.9	1	B9K0259	11/13/2019	11/13/19 16:32	
Isopropylbenzene	ND	3.9	1	B9K0259	11/13/2019	11/13/19 16:32	
m,p-Xylene	ND	7.9	1	B9K0259	11/13/2019	11/13/19 16:32	
Methylene chloride	ND	3.9	1	B9K0259	11/13/2019	11/13/19 16:32	
MTBE	ND	3.9	1	B9K0259	11/13/2019	11/13/19 16:32	
n-Butylbenzene	ND	3.9	1	B9K0259	11/13/2019	11/13/19 16:32	
n-Propylbenzene	ND	3.9	1	B9K0259	11/13/2019	11/13/19 16:32	
Naphthalene	ND	3.9	1	B9K0259	11/13/2019	11/13/19 16:32	
o-Xylene	ND	3.9	1	B9K0259	11/13/2019	11/13/19 16:32	
sec-Butylbenzene	ND	3.9	1	B9K0259	11/13/2019	11/13/19 16:32	
Styrene	ND	3.9	1	B9K0259	11/13/2019	11/13/19 16:32	
tert-Amyl methyl ether	ND	3.9	1	B9K0259	11/13/2019	11/13/19 16:32	
tert-Butanol	ND	79	1	B9K0259	11/13/2019	11/13/19 16:32	
tert-Butylbenzene	**25**	3.9	1	B9K0259	11/13/2019	11/13/19 16:32	
Tetrachloroethene	ND	3.9	1	B9K0259	11/13/2019	11/13/19 16:32	
Toluene	ND	3.9	1	B9K0259	11/13/2019	11/13/19 16:32	
trans-1,2-Dichloroethene	ND	3.9	1	B9K0259	11/13/2019	11/13/19 16:32	
trans-1,3-Dichloropropene	ND	3.9	1	B9K0259	11/13/2019	11/13/19 16:32	
Trichloroethene	ND	3.9	1	B9K0259	11/13/2019	11/13/19 16:32	
Trichlorofluoromethane	ND	3.9	1	B9K0259	11/13/2019	11/13/19 16:32	
Vinyl acetate	ND	39	1	B9K0259	11/13/2019	11/13/19 16:32	
Vinyl chloride	ND	3.9	1	B9K0259	11/13/2019	11/13/19 16:32	
GRO (C4 - C12)	**3200**	790	1	B9K0260	11/13/2019	11/13/19 16:32	
Surrogate: 1,2-Dichloroethane-d4	*125 %*	*60 - 145*		B9K0259	11/13/2019	*11/13/19 16:32*	
Surrogate: 1,2-Dichloroethane-d4	*93.1 %*	*60 - 145*		B9K0260	11/13/2019	*11/13/19 16:32*	

Certificate of Analysis

Burns and McDonnell	Project Number : SCVTA-1217
400 Oyster Point Blvd, Suite 533	Report To : Christopher D'Sa
South San Francisco , CA 94080	Reported : 11/21/2019

Client Sample ID: B-1d15

Lab ID: 1904037-02

Volatile Organic Compounds by EPA 5035 / EPA 8260B **Analyst: JBL**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: 4-Bromofluorobenzene	*96.0 %*	*68 - 121*		B9K0259	11/13/2019	*11/13/19 16:32*	
Surrogate: 4-Bromofluorobenzene	*78.5 %*	*68 - 121*		B9K0260	11/13/2019	*11/13/19 16:32*	
Surrogate: Dibromofluoromethane	*99.1 %*	*65 - 137*		B9K0260	11/13/2019	*11/13/19 16:32*	
Surrogate: Dibromofluoromethane	*101 %*	*65 - 137*		B9K0259	11/13/2019	*11/13/19 16:32*	
Surrogate: Toluene-d8	*95.3 %*	*82 - 119*		B9K0259	11/13/2019	*11/13/19 16:32*	
Surrogate: Toluene-d8	*92.4 %*	*82 - 119*		B9K0260	11/13/2019	*11/13/19 16:32*	

Certificate of Analysis

Burns and McDonnell	Project Number : SCVTA-1217
400 Oyster Point Blvd, Suite 533	Report To : Christopher D'Sa
South San Francisco , CA 94080	Reported : 11/21/2019

Client Sample ID: B-1

Lab ID: 1904037-03

Title 22 Metals by ICP-AES EPA 6010B

Analyst: KEK

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	**0.11**	0.010	1	B9K0203	11/11/2019	11/12/19 11:46	
Arsenic	**0.20**	0.010	1	B9K0203	11/11/2019	11/12/19 11:46	
Barium	**9.2**	0.0030	1	B9K0203	11/11/2019	11/12/19 11:46	
Beryllium	**0.022**	0.0030	1	B9K0203	11/11/2019	11/12/19 11:46	
Cadmium	**0.019**	0.0030	1	B9K0203	11/11/2019	11/12/19 11:46	
Chromium	**1.4**	0.0030	1	B9K0203	11/11/2019	11/12/19 11:46	
Cobalt	**0.35**	0.0030	1	B9K0203	11/11/2019	11/12/19 11:46	
Copper	**1.0**	0.0090	1	B9K0203	11/11/2019	11/12/19 11:46	
Lead	**0.27**	0.0050	1	B9K0203	11/11/2019	11/12/19 11:46	
Molybdenum	**0.071**	0.0050	1	B9K0203	11/11/2019	11/12/19 11:46	
Nickel	**2.3**	0.0050	1	B9K0203	11/11/2019	11/12/19 11:46	
Selenium	ND	0.010	1	B9K0203	11/11/2019	11/12/19 11:46	
Silver	ND	0.0030	1	B9K0203	11/11/2019	11/12/19 11:46	
Thallium	ND	0.015	1	B9K0203	11/11/2019	11/12/19 11:46	
Vanadium	**1.2**	0.0030	1	B9K0203	11/11/2019	11/12/19 11:46	
Zinc	**1.7**	0.025	1	B9K0203	11/11/2019	11/12/19 11:46	

Mercury by AA (Cold Vapor) EPA 7470A

Analyst: KEK

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	**4.3**	0.20	1	B9K0204	11/11/2019	11/12/19 12:23	

Diesel Range Organics by EPA 8015B (SGT)

Analyst: VL

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	**3.6**	0.05	1	B9K0189	11/08/2019	11/08/19 19:03	
ORO	**1.6**	0.05	1	B9K0189	11/08/2019	11/08/19 19:03	
Surrogate: p-Terphenyl	*87.6 %*	*32 - 169*		B9K0189	11/08/2019	*11/08/19 19:03*	

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Organochlorine Pesticides by EPA 8081A **Analyst: KD**

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
4,4′-DDD	ND	0.50	5	B9K0188	11/08/2019	11/11/19 11:18	D1
4,4′-DDE	ND	0.50	5	B9K0188	11/08/2019	11/11/19 11:18	D1
4,4′-DDT	ND	0.50	5	B9K0188	11/08/2019	11/11/19 11:18	D1
Aldrin	ND	0.25	5	B9K0188	11/08/2019	11/11/19 11:18	D1
alpha-BHC	ND	0.25	5	B9K0188	11/08/2019	11/11/19 11:18	D1
alpha-Chlordane	ND	0.25	5	B9K0188	11/08/2019	11/11/19 11:18	D1
beta-BHC	ND	0.25	5	B9K0188	11/08/2019	11/11/19 11:18	D1
Chlordane	ND	2.5	5	B9K0188	11/08/2019	11/11/19 11:18	D1
delta-BHC	ND	0.25	5	B9K0188	11/08/2019	11/11/19 11:18	D1
Dieldrin	ND	0.50	5	B9K0188	11/08/2019	11/11/19 11:18	D1
Endosulfan I	ND	0.25	5	B9K0188	11/08/2019	11/11/19 11:18	D1
Endosulfan II	ND	0.50	5	B9K0188	11/08/2019	11/11/19 11:18	D1
Endosulfan sulfate	ND	0.50	5	B9K0188	11/08/2019	11/11/19 11:18	D1
Endrin	ND	0.50	5	B9K0188	11/08/2019	11/11/19 11:18	D1
Endrin aldehyde	ND	0.50	5	B9K0188	11/08/2019	11/11/19 11:18	D1
Endrin ketone	ND	0.50	5	B9K0188	11/08/2019	11/11/19 11:18	D1
gamma-BHC	ND	0.25	5	B9K0188	11/08/2019	11/11/19 11:18	D1
gamma-Chlordane	ND	0.25	5	B9K0188	11/08/2019	11/11/19 11:18	D1
Heptachlor	ND	0.25	5	B9K0188	11/08/2019	11/11/19 11:18	D1
Heptachlor epoxide	ND	0.25	5	B9K0188	11/08/2019	11/11/19 11:18	D1
Methoxychlor	ND	2.5	5	B9K0188	11/08/2019	11/11/19 11:18	D1
Toxaphene	ND	25	5	B9K0188	11/08/2019	11/11/19 11:18	D1
Surrogate: Decachlorobiphenyl	*53.0 %*	*20 - 111*		B9K0188	11/08/2019	*11/11/19 11:18*	
Surrogate: Tetrachloro-m-xylene	*47.8 %*	*31 - 126*		B9K0188	11/08/2019	*11/11/19 11:18*	

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Polychlorinated Biphenyls by EPA 8082 **Analyst: KD**

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Aroclor 1016	ND	1.0	1	B9K0188	11/08/2019	11/11/19 11:36	
Aroclor 1221	ND	2.0	1	B9K0188	11/08/2019	11/11/19 11:36	
Aroclor 1232	ND	1.0	1	B9K0188	11/08/2019	11/11/19 11:36	
Aroclor 1242	ND	1.0	1	B9K0188	11/08/2019	11/11/19 11:36	
Aroclor 1248	ND	1.0	1	B9K0188	11/08/2019	11/11/19 11:36	
Aroclor 1254	ND	1.0	1	B9K0188	11/08/2019	11/11/19 11:36	
Aroclor 1260	ND	1.0	1	B9K0188	11/08/2019	11/11/19 11:36	
Aroclor 1262	ND	1.0	1	B9K0188	11/08/2019	11/11/19 11:36	
Aroclor 1268	ND	1.0	1	B9K0188	11/08/2019	11/11/19 11:36	
Surrogate: Decachlorobiphenyl	*47.9 %*	*20 - 111*		B9K0188	11/08/2019	*11/11/19 11:36*	
Surrogate: Tetrachloro-m-xylene	*39.2 %*	*31 - 126*		B9K0188	11/08/2019	*11/11/19 11:36*	

Volatile Organic Compounds by EPA 8260B **Analyst: KL/**

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	1	B9K0170	11/11/2019	11/11/19 11:26	
1,1,1-Trichloroethane	ND	0.50	1	B9K0170	11/11/2019	11/11/19 11:26	
1,1,2,2-Tetrachloroethane	ND	0.50	1	B9K0170	11/11/2019	11/11/19 11:26	
1,1,2-Trichloroethane	ND	0.50	1	B9K0170	11/11/2019	11/11/19 11:26	
1,1-Dichloroethane	ND	0.50	1	B9K0170	11/11/2019	11/11/19 11:26	
1,1-Dichloroethene	ND	0.50	1	B9K0170	11/11/2019	11/11/19 11:26	
1,1-Dichloropropene	ND	0.50	1	B9K0170	11/11/2019	11/11/19 11:26	
1,2,3-Trichloropropane	ND	0.50	1	B9K0170	11/11/2019	11/11/19 11:26	
1,2,3-Trichlorobenzene	ND	0.50	1	B9K0170	11/11/2019	11/11/19 11:26	
1,2,4-Trichlorobenzene	ND	0.50	1	B9K0170	11/11/2019	11/11/19 11:26	
1,2,4-Trimethylbenzene	**0.51**	0.50	1	B9K0170	11/11/2019	11/11/19 11:26	
1,2-Dibromo-3-chloropropane	ND	0.50	1	B9K0170	11/11/2019	11/11/19 11:26	
1,2-Dibromoethane	ND	0.50	1	B9K0170	11/11/2019	11/11/19 11:26	
1,2-Dichlorobenzene	ND	0.50	1	B9K0170	11/11/2019	11/11/19 11:26	
1,2-Dichloroethane	ND	0.50	1	B9K0170	11/11/2019	11/11/19 11:26	
1,2-Dichloropropane	ND	0.50	1	B9K0170	11/11/2019	11/11/19 11:26	
1,3,5-Trimethylbenzene	ND	0.50	1	B9K0170	11/11/2019	11/11/19 11:26	
1,3-Dichlorobenzene	ND	0.50	1	B9K0170	11/11/2019	11/11/19 11:26	
1,3-Dichloropropane	ND	0.50	1	B9K0170	11/11/2019	11/11/19 11:26	
1,4-Dichlorobenzene	ND	0.50	1	B9K0170	11/11/2019	11/11/19 11:26	

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Volatile Organic Compounds by EPA 8260B **Analyst: KL/**

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
2,2-Dichloropropane	ND	0.50	1	B9K0170	11/11/2019	11/11/19 11:26	
2-Chlorotoluene	ND	0.50	1	B9K0170	11/11/2019	11/11/19 11:26	
4-Chlorotoluene	ND	0.50	1	B9K0170	11/11/2019	11/11/19 11:26	
4-Isopropyltoluene	ND	0.50	1	B9K0170	11/11/2019	11/11/19 11:26	
Benzene	ND	0.50	1	B9K0170	11/11/2019	11/11/19 11:26	
Bromobenzene	ND	0.50	1	B9K0170	11/11/2019	11/11/19 11:26	
Bromochloromethane	ND	0.50	1	B9K0170	11/11/2019	11/11/19 11:26	
Bromodichloromethane	ND	0.50	1	B9K0170	11/11/2019	11/11/19 11:26	
Bromoform	ND	0.50	1	B9K0170	11/11/2019	11/11/19 11:26	
Bromomethane	ND	0.50	1	B9K0170	11/11/2019	11/11/19 11:26	
Carbon disulfide	ND	1.0	1	B9K0170	11/11/2019	11/11/19 11:26	
Carbon tetrachloride	ND	0.50	1	B9K0170	11/11/2019	11/11/19 11:26	
Chlorobenzene	ND	0.50	1	B9K0170	11/11/2019	11/11/19 11:26	
Chloroethane	ND	0.50	1	B9K0170	11/11/2019	11/11/19 11:26	
Chloroform	ND	0.50	1	B9K0170	11/11/2019	11/11/19 11:26	
Chloromethane	ND	0.50	1	B9K0170	11/11/2019	11/11/19 11:26	
cis-1,2-Dichloroethene	ND	0.50	1	B9K0170	11/11/2019	11/11/19 11:26	
cis-1,3-Dichloropropene	ND	0.50	1	B9K0170	11/11/2019	11/11/19 11:26	
Di-isopropyl ether	ND	0.50	1	B9K0170	11/11/2019	11/11/19 11:26	
Dibromochloromethane	ND	0.50	1	B9K0170	11/11/2019	11/11/19 11:26	
Dibromomethane	ND	0.50	1	B9K0170	11/11/2019	11/11/19 11:26	
Dichlorodifluoromethane	ND	0.50	1	B9K0170	11/11/2019	11/11/19 11:26	
Ethyl Acetate	ND	10	1	B9K0170	11/11/2019	11/11/19 11:26	
Ethyl Ether	ND	10	1	B9K0170	11/11/2019	11/11/19 11:26	
Ethyl tert-butyl ether	ND	0.50	1	B9K0170	11/11/2019	11/11/19 11:26	
Ethylbenzene	**3.6**	0.50	1	B9K0170	11/11/2019	11/11/19 11:26	
Freon-113	ND	0.50	1	B9K0170	11/11/2019	11/11/19 11:26	
Hexachlorobutadiene	ND	0.50	1	B9K0170	11/11/2019	11/11/19 11:26	
Isopropylbenzene	**23**	0.50	1	B9K0170	11/11/2019	11/11/19 11:26	
m,p-Xylene	ND	1.0	1	B9K0170	11/11/2019	11/11/19 11:26	
Methylene chloride	ND	1.0	1	B9K0170	11/11/2019	11/11/19 11:26	
MTBE	ND	0.50	1	B9K0170	11/11/2019	11/11/19 11:26	
n-Butylbenzene	**4.9**	0.50	1	B9K0170	11/11/2019	11/11/19 11:26	
n-Propylbenzene	**58**	0.50	1	B9K0170	11/11/2019	11/11/19 11:26	
Naphthalene	**65**	0.50	1	B9K0170	11/11/2019	11/11/19 11:26	
o-Xylene	ND	0.50	1	B9K0170	11/11/2019	11/11/19 11:26	

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Volatile Organic Compounds by EPA 8260B

Analyst: KL/

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
sec-Butylbenzene	**6.6**	0.50	1	B9K0170	11/11/2019	11/11/19 11:26	
Styrene	ND	0.50	1	B9K0170	11/11/2019	11/11/19 11:26	
tert-Amyl methyl ether	ND	0.50	1	B9K0170	11/11/2019	11/11/19 11:26	
tert-Butanol	ND	10	1	B9K0170	11/11/2019	11/11/19 11:26	
tert-Butylbenzene	**12**	0.50	1	B9K0170	11/11/2019	11/11/19 11:26	
Tetrachloroethene	ND	0.50	1	B9K0170	11/11/2019	11/11/19 11:26	
Toluene	**0.54**	0.50	1	B9K0170	11/11/2019	11/11/19 11:26	
trans-1,2-Dichloroethene	ND	0.50	1	B9K0170	11/11/2019	11/11/19 11:26	
trans-1,3-Dichloropropene	ND	0.50	1	B9K0170	11/11/2019	11/11/19 11:26	
Trichloroethene	ND	0.50	1	B9K0170	11/11/2019	11/11/19 11:26	
Trichlorofluoromethane	ND	0.50	1	B9K0170	11/11/2019	11/11/19 11:26	
Vinyl acetate	ND	10	1	B9K0170	11/11/2019	11/11/19 11:26	
Vinyl chloride	ND	0.50	1	B9K0170	11/11/2019	11/11/19 11:26	
Gasoline Range Organics	**4600**	100	2	B9K0161	11/08/2019	11/08/19 11:24	
Surrogate: 1,2-Dichloroethane-d4	*84.5 %*	*59 - 158*		B9K0170	11/11/2019	*11/11/19 11:26*	
Surrogate: 1,2-Dichloroethane-d4	*94.0 %*	*59 - 158*		B9K0161	11/08/2019	*11/08/19 11:24*	
Surrogate: 4-Bromofluorobenzene	*101 %*	*71 - 127*		B9K0170	11/11/2019	*11/11/19 11:26*	
Surrogate: 4-Bromofluorobenzene	*99.0 %*	*71 - 127*		B9K0161	11/08/2019	*11/08/19 11:24*	
Surrogate: Dibromofluoromethane	*105 %*	*66 - 147*		B9K0161	11/08/2019	*11/08/19 11:24*	
Surrogate: Dibromofluoromethane	*88.4 %*	*66 - 147*		B9K0170	11/11/2019	*11/11/19 11:26*	
Surrogate: Toluene-d8	*105 %*	*77 - 138*		B9K0170	11/11/2019	*11/11/19 11:26*	
Surrogate: Toluene-d8	*101 %*	*77 - 138*		B9K0161	11/08/2019	*11/08/19 11:24*	

Semivolatile Organic Compounds by EPA 8270C

Analyst: SP

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,2,4-Trichlorobenzene	ND	50	5	B9K0222	11/11/2019	11/13/19 02:51	D1
1,2-Dichlorobenzene	ND	50	5	B9K0222	11/11/2019	11/13/19 02:51	D1
1,3-Dichlorobenzene	ND	50	5	B9K0222	11/11/2019	11/13/19 02:51	D1
1,4-Dichlorobenzene	ND	50	5	B9K0222	11/11/2019	11/13/19 02:51	D1
2,4,5-Trichlorophenol	ND	50	5	B9K0222	11/11/2019	11/13/19 02:51	D1
2,4,6-Trichlorophenol	ND	50	5	B9K0222	11/11/2019	11/13/19 02:51	D1
2,4-Dichlorophenol	ND	50	5	B9K0222	11/11/2019	11/13/19 02:51	D1
2,4-Dimethylphenol	ND	50	5	B9K0222	11/11/2019	11/13/19 02:51	D1
2,4-Dinitrophenol	ND	250	5	B9K0222	11/11/2019	11/13/19 02:51	D1

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Semivolatile Organic Compounds by EPA 8270C **Analyst: SP**

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
2,4-Dinitrotoluene	ND	50	5	B9K0222	11/11/2019	11/13/19 02:51	D1
2,6-Dinitrotoluene	ND	50	5	B9K0222	11/11/2019	11/13/19 02:51	D1
2-Chloronaphthalene	ND	50	5	B9K0222	11/11/2019	11/13/19 02:51	D1
2-Chlorophenol	ND	50	5	B9K0222	11/11/2019	11/13/19 02:51	D1
2-Methylnaphthalene	ND	50	5	B9K0222	11/11/2019	11/13/19 02:51	D1
2-Methylphenol	ND	50	5	B9K0222	11/11/2019	11/13/19 02:51	D1
2-Nitroaniline	ND	250	5	B9K0222	11/11/2019	11/13/19 02:51	D1
2-Nitrophenol	ND	50	5	B9K0222	11/11/2019	11/13/19 02:51	D1
3,3´-Dichlorobenzidine	ND	100	5	B9K0222	11/11/2019	11/13/19 02:51	D1
3-Nitroaniline	ND	250	5	B9K0222	11/11/2019	11/13/19 02:51	D1
4,6-Dinitro-2-methyphenol	ND	250	5	B9K0222	11/11/2019	11/13/19 02:51	D1
4-Bromophenyl-phenylether	ND	50	5	B9K0222	11/11/2019	11/13/19 02:51	D1
4-Chloro-3-methylphenol	ND	250	5	B9K0222	11/11/2019	11/13/19 02:51	D1
4-Chloroaniline	ND	100	5	B9K0222	11/11/2019	11/13/19 02:51	D1
4-Chlorophenyl-phenylether	ND	50	5	B9K0222	11/11/2019	11/13/19 02:51	D1
4-Methylphenol	ND	50	5	B9K0222	11/11/2019	11/13/19 02:51	D1
4-Nitroaniline	ND	100	5	B9K0222	11/11/2019	11/13/19 02:51	D1
4-Nitrophenol	ND	250	5	B9K0222	11/11/2019	11/13/19 02:51	D1
Acenaphthene	ND	50	5	B9K0222	11/11/2019	11/13/19 02:51	D1
Acenaphthylene	ND	50	5	B9K0222	11/11/2019	11/13/19 02:51	D1
Anthracene	ND	50	5	B9K0222	11/11/2019	11/13/19 02:51	D1
Benzidine (M)	ND	250	5	B9K0222	11/11/2019	11/13/19 02:51	D1
Benzo(a)anthracene	ND	50	5	B9K0222	11/11/2019	11/13/19 02:51	D1
Benzo(a)pyrene	ND	50	5	B9K0222	11/11/2019	11/13/19 02:51	D1
Benzo(b)fluoranthene	ND	50	5	B9K0222	11/11/2019	11/13/19 02:51	D1
Benzo(g,h,i)perylene	ND	50	5	B9K0222	11/11/2019	11/13/19 02:51	D1
Benzo(k)fluoranthene	ND	50	5	B9K0222	11/11/2019	11/13/19 02:51	D1
Benzoic acid	ND	250	5	B9K0222	11/11/2019	11/13/19 02:51	D1
Benzyl alcohol	ND	100	5	B9K0222	11/11/2019	11/13/19 02:51	D1
bis(2-chloroethoxy)methane	ND	50	5	B9K0222	11/11/2019	11/13/19 02:51	D1
bis(2-Chloroethyl)ether	ND	50	5	B9K0222	11/11/2019	11/13/19 02:51	D1
bis(2-chloroisopropyl)ether	ND	50	5	B9K0222	11/11/2019	11/13/19 02:51	D1
bis(2-ethylhexyl)phthalate	ND	50	5	B9K0222	11/11/2019	11/13/19 02:51	D1
Butylbenzylphthalate	ND	50	5	B9K0222	11/11/2019	11/13/19 02:51	D1
Chrysene	ND	50	5	B9K0222	11/11/2019	11/13/19 02:51	D1
Di-n-butylphthalate	ND	50	5	B9K0222	11/11/2019	11/13/19 02:51	D1

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Semivolatile Organic Compounds by EPA 8270C **Analyst: SP**

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Di-n-octylphthalate	ND	50	5	B9K0222	11/11/2019	11/13/19 02:51	D1
Dibenz(a,h)anthracene	ND	50	5	B9K0222	11/11/2019	11/13/19 02:51	D1
Dibenzofuran	ND	50	5	B9K0222	11/11/2019	11/13/19 02:51	D1
Diethyl phthalate	ND	50	5	B9K0222	11/11/2019	11/13/19 02:51	D1
Dimethyl phthalate	ND	50	5	B9K0222	11/11/2019	11/13/19 02:51	D1
Fluoranthene	ND	50	5	B9K0222	11/11/2019	11/13/19 02:51	D1
Fluorene	ND	50	5	B9K0222	11/11/2019	11/13/19 02:51	D1
Hexachlorobenzene	ND	50	5	B9K0222	11/11/2019	11/13/19 02:51	D1
Hexachlorobutadiene	ND	100	5	B9K0222	11/11/2019	11/13/19 02:51	D1
Hexachlorocyclopentadiene	ND	50	5	B9K0222	11/11/2019	11/13/19 02:51	D1
Hexachloroethane	ND	50	5	B9K0222	11/11/2019	11/13/19 02:51	D1
Indeno(1,2,3-cd)pyrene	ND	50	5	B9K0222	11/11/2019	11/13/19 02:51	D1
Isophorone	ND	50	5	B9K0222	11/11/2019	11/13/19 02:51	D1
N-Nitroso-di-n propylamine	ND	50	5	B9K0222	11/11/2019	11/13/19 02:51	D1
N-Nitrosodiphenylamine	ND	50	5	B9K0222	11/11/2019	11/13/19 02:51	D1
Naphthalene	ND	50	5	B9K0222	11/11/2019	11/13/19 02:51	D1
Nitrobenzene	ND	50	5	B9K0222	11/11/2019	11/13/19 02:51	D1
Pentachlorophenol	ND	250	5	B9K0222	11/11/2019	11/13/19 02:51	D1
Phenanthrene	ND	50	5	B9K0222	11/11/2019	11/13/19 02:51	D1
Phenol	ND	50	5	B9K0222	11/11/2019	11/13/19 02:51	D1
Pyrene	ND	50	5	B9K0222	11/11/2019	11/13/19 02:51	D1
Pyridine	ND	250	5	B9K0222	11/11/2019	11/13/19 02:51	D1
Surrogate: 1,2-Dichlorobenzene-d4	*87.7 %*	*30 - 78*		B9K0222	11/11/2019	*11/13/19 02:51*	S1
Surrogate: 2,4,6-Tribromophenol	*116 %*	*47 - 158*		B9K0222	11/11/2019	*11/13/19 02:51*	
Surrogate: 2-Chlorophenol-d4	*87.8 %*	*28 - 84*		B9K0222	11/11/2019	*11/13/19 02:51*	S1
Surrogate: 2-Fluorobiphenyl	*111 %*	*32 - 90*		B9K0222	11/11/2019	*11/13/19 02:51*	S1
Surrogate: 2-Fluorophenol	*42.4 %*	*13 - 41*		B9K0222	11/11/2019	*11/13/19 02:51*	S1
Surrogate: 4-Terphenyl-d14	*104 %*	*36 - 112*		B9K0222	11/11/2019	*11/13/19 02:51*	
Surrogate: Nitrobenzene-d5	*87.4 %*	*30 - 82*		B9K0222	11/11/2019	*11/13/19 02:51*	S1
Surrogate: Phenol-d6	*27.7 %*	*8 - 26*		B9K0222	11/11/2019	*11/13/19 02:51*	S1

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QUALITY CONTROL SECTION

STLC Extraction - Quality Control

Analyte	Result (N/A)	PQL (N/A)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B9K0367 - STLC_S Extraction									
Blank (B9K0367-BLK1)				Prepared: 11/16/2019 Analyzed: 11/18/2019					
EXTTime	0.00000								
Blank (B9K0367-BLK2)				Prepared: 11/16/2019 Analyzed: 11/18/2019					
EXTTime	0.00000								
Duplicate (B9K0367-DUP1)			**Source: 1903821-07RE1**	Prepared: 11/16/2019 Analyzed: 11/18/2019					
EXTTime	0.00000			0.00000				200	
Duplicate (B9K0367-DUP2)			**Source: 1904037-02**	Prepared: 11/16/2019 Analyzed: 11/18/2019					
EXTTime	0.00000			0.00000				200	

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Title 22 Metals by ICP-AES EPA 6010B - Quality Control

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B9K0202 - EPA 3050B_S										
Blank (B9K0202-BLK1)						Prepared: 11/11/2019 Analyzed: 11/11/2019				
Antimony	ND	2.0	0.51							
Arsenic	ND	1.0	0.12							
Barium	ND	1.0	0.12							
Beryllium	ND	1.0	0.03							
Cadmium	ND	1.0	0.14							
Chromium	ND	1.0	0.26							
Cobalt	ND	1.0	0.07							
Copper	ND	2.0	0.19							
Lead	ND	1.0	0.18							
Molybdenum	ND	1.0	0.12							
Nickel	ND	1.0	0.18							
Selenium	ND	1.0	0.40							
Silver	ND	1.0	0.12							
Thallium	ND	1.0	0.38							
Vanadium	ND	1.0	0.06							
Zinc	ND	1.0	0.15							
LCS (B9K0202-BS1)						Prepared: 11/11/2019 Analyzed: 11/11/2019				
Antimony	48.5811	2.0	0.51	50.0000		97.2	80 - 120			
Arsenic	46.6790	1.0	0.12	50.0000		93.4	80 - 120			
Barium	49.1504	1.0	0.12	50.0000		98.3	80 - 120			
Beryllium	44.9764	1.0	0.03	50.0000		90.0	80 - 120			
Cadmium	46.7840	1.0	0.14	50.0000		93.6	80 - 120			
Chromium	47.7966	1.0	0.26	50.0000		95.6	80 - 120			
Cobalt	47.5534	1.0	0.07	50.0000		95.1	80 - 120			
Copper	49.6894	2.0	0.19	50.0000		99.4	80 - 120			
Lead	47.7243	1.0	0.18	50.0000		95.4	80 - 120			
Molybdenum	43.6296	1.0	0.12	50.0000		87.3	80 - 120			
Nickel	46.6577	1.0	0.18	50.0000		93.3	80 - 120			
Selenium	46.7872	1.0	0.40	50.0000		93.6	80 - 120			
Silver	51.4973	1.0	0.12	50.0000		103	80 - 120			
Thallium	47.1980	1.0	0.38	50.0000		94.4	80 - 120			
Vanadium	48.9179	1.0	0.06	50.0000		97.8	80 - 120			
Zinc	45.5928	1.0	0.15	50.0000		91.2	80 - 120			
Matrix Spike (B9K0202-MS1)			**Source: 1904023-01**			Prepared: 11/11/2019 Analyzed: 11/11/2019				
Antimony	97.9728	2.0	0.51	125.000	0.696404	77.8	21 - 95			
Arsenic	102.983	1.0	0.12	125.000	1.72780	81.0	46 - 97			
Barium	157.215	1.0	0.12	125.000	47.2616	88.0	24 - 123			
Beryllium	99.4717	1.0	0.03	125.000	0.243653	79.4	47 - 99			
Cadmium	99.9703	1.0	0.14	125.000	0.170518	79.8	43 - 95			

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Title 22 Metals by ICP-AES EPA 6010B - Quality Control (cont'd)

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B9K0202 - EPA 3050B_S (continued)										
Matrix Spike (B9K0202-MS1) - Continued			**Source: 1904023-01**		Prepared: 11/11/2019 Analyzed: 11/11/2019					
Chromium	127.138	1.0	0.26	125.000	3.46421	98.9	39 - 109			
Cobalt	102.627	1.0	0.07	125.000	1.69505	80.7	45 - 101			
Copper	113.400	2.0	0.19	125.000	4.37460	87.2	44 - 118			
Lead	100.080	1.0	0.18	125.000	2.14966	78.3	33 - 121			
Molybdenum	102.928	1.0	0.12	125.000	0.405923	82.0	45 - 101			
Nickel	102.508	1.0	0.18	125.000	2.57023	80.0	37 - 104			
Selenium	101.418	1.0	0.40	125.000	ND	81.1	43 - 96			
Silver	108.571	1.0	0.12	125.000	2.41775	84.9	49 - 104			
Thallium	97.4314	1.0	0.38	125.000	ND	77.9	23 - 103			
Vanadium	118.290	1.0	0.06	125.000	12.6278	84.5	42 - 109			
Zinc	115.871	1.0	0.15	125.000	17.3651	78.8	22 - 114			
Matrix Spike Dup (B9K0202-MSD1)			**Source: 1904023-01**		Prepared: 11/11/2019 Analyzed: 11/11/2019					
Antimony	101.937	2.0	0.51	125.628	0.696404	80.6	21 - 95	3.97	20	
Arsenic	106.102	1.0	0.12	125.628	1.72780	83.1	46 - 97	2.98	20	
Barium	161.263	1.0	0.12	125.628	47.2616	90.7	24 - 123	2.54	20	
Beryllium	102.628	1.0	0.03	125.628	0.243653	81.5	47 - 99	3.12	20	
Cadmium	103.655	1.0	0.14	125.628	0.170518	82.4	43 - 95	3.62	20	
Chromium	134.125	1.0	0.26	125.628	3.46421	104	39 - 109	5.35	20	
Cobalt	106.044	1.0	0.07	125.628	1.69505	83.1	45 - 101	3.27	20	
Copper	115.810	2.0	0.19	125.628	4.37460	88.7	44 - 118	2.10	20	
Lead	102.654	1.0	0.18	125.628	2.14966	80.0	33 - 121	2.54	20	
Molybdenum	106.088	1.0	0.12	125.628	0.405923	84.1	45 - 101	3.02	20	
Nickel	105.692	1.0	0.18	125.628	2.57023	82.1	37 - 104	3.06	20	
Selenium	104.043	1.0	0.40	125.628	ND	82.8	43 - 96	2.56	20	
Silver	110.965	1.0	0.12	125.628	2.41775	86.4	49 - 104	2.18	20	
Thallium	100.224	1.0	0.38	125.628	ND	79.8	23 - 103	2.83	20	
Vanadium	122.539	1.0	0.06	125.628	12.6278	87.5	42 - 109	3.53	20	
Zinc	120.221	1.0	0.15	125.628	17.3651	81.9	22 - 114	3.69	20	

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Title 22 Metals by ICP-AES EPA 6010B - Quality Control

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B9K0203 - EPA 3010A_W										
Blank (B9K0203-BLK1)						Prepared: 11/11/2019 Analyzed: 11/12/2019				
Antimony	ND	0.010	0.0088							
Arsenic	ND	0.010	0.0078							
Barium	ND	0.0030	0.0026							
Beryllium	ND	0.0030	0.0016							
Cadmium	ND	0.0030	0.0024							
Chromium	ND	0.0030	0.0020							
Cobalt	ND	0.0030	0.0016							
Copper	ND	0.0090	0.0038							
Lead	ND	0.0050	0.0047							
Molybdenum	ND	0.0050	0.0030							
Nickel	ND	0.0050	0.0046							
Selenium	ND	0.010	0.0093							
Silver	ND	0.0030	0.0024							
Thallium	ND	0.015	0.0085							
Vanadium	ND	0.0030	0.0022							
Zinc	ND	0.025	0.0057							
LCS (B9K0203-BS1)						Prepared: 11/11/2019 Analyzed: 11/12/2019				
Antimony	1.00370	0.010	0.0088	1.00000		100	80 - 120			
Arsenic	0.962273	0.010	0.0078	1.00000		96.2	80 - 120			
Barium	1.00128	0.0030	0.0026	1.00000		100	80 - 120			
Beryllium	0.978900	0.0030	0.0016	1.00000		97.9	80 - 120			
Cadmium	0.957934	0.0030	0.0024	1.00000		95.8	80 - 120			
Chromium	0.992057	0.0030	0.0020	1.00000		99.2	80 - 120			
Cobalt	0.991743	0.0030	0.0016	1.00000		99.2	80 - 120			
Copper	1.01152	0.0090	0.0038	1.00000		101	80 - 120			
Lead	0.965234	0.0050	0.0047	1.00000		96.5	80 - 120			
Molybdenum	0.979425	0.0050	0.0030	1.00000		97.9	80 - 120			
Nickel	0.978849	0.0050	0.0046	1.00000		97.9	80 - 120			
Selenium	0.988861	0.010	0.0093	1.00000		98.9	80 - 120			
Silver	1.14309	0.0030	0.0024	1.00000		114	80 - 120			
Thallium	0.978112	0.015	0.0085	1.00000		97.8	80 - 120			
Vanadium	1.00056	0.0030	0.0022	1.00000		100	80 - 120			
Zinc	0.951840	0.025	0.0057	1.00000		95.2	80 - 120			
Matrix Spike (B9K0203-MS1)			**Source: 1903996-01**			Prepared: 11/11/2019 Analyzed: 11/12/2019				
Antimony	2.28715	0.010	0.0088	2.50000	ND	91.5	56 - 141			
Arsenic	2.33575	0.010	0.0078	2.50000	ND	93.4	60 - 137			
Barium	2.66508	0.0030	0.0026	2.50000	0.294451	94.8	61 - 141			
Beryllium	2.37918	0.0030	0.0016	2.50000	0.006467	94.9	62 - 134			
Cadmium	2.22418	0.0030	0.0024	2.50000	ND	89.0	61 - 131			

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Title 22 Metals by ICP-AES EPA 6010B - Quality Control (cont'd)

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B9K0203 - EPA 3010A_W (continued)										
Matrix Spike (B9K0203-MS1) - Continued			**Source: 1903996-01**		Prepared: 11/11/2019 Analyzed: 11/12/2019					
Chromium	2.49920	0.0030	0.0020	2.50000	0.175723	92.9	62 - 136			
Cobalt	2.29805	0.0030	0.0016	2.50000	0.020123	91.1	62 - 134			
Copper	2.50418	0.0090	0.0038	2.50000	0.055175	98.0	63 - 140			
Lead	2.20204	0.0050	0.0047	2.50000	ND	88.1	60 - 130			
Molybdenum	2.48441	0.0050	0.0030	2.50000	0.022809	98.5	56 - 140			
Nickel	2.32402	0.0050	0.0046	2.50000	0.091837	89.3	55 - 140			
Selenium	2.36287	0.010	0.0093	2.50000	ND	94.5	59 - 135			
Silver	0.036130	0.0030	0.0024	2.50000	0.011089	1.00	59 - 144			M1
Thallium	2.20071	0.015	0.0085	2.50000	ND	88.0	47 - 137			
Vanadium	2.56043	0.0030	0.0022	2.50000	0.173431	95.5	59 - 143			
Zinc	2.36233	0.025	0.0057	2.50000	0.158796	88.1	57 - 132			
Matrix Spike Dup (B9K0203-MSD1)			**Source: 1903996-01**		Prepared: 11/11/2019 Analyzed: 11/12/2019					
Antimony	2.24074	0.010	0.0088	2.50000	ND	89.6	56 - 141	2.05	20	
Arsenic	2.29074	0.010	0.0078	2.50000	ND	91.6	60 - 137	1.95	20	
Barium	2.61026	0.0030	0.0026	2.50000	0.294451	92.6	61 - 141	2.08	20	
Beryllium	2.33906	0.0030	0.0016	2.50000	0.006467	93.3	62 - 134	1.70	20	
Cadmium	2.19443	0.0030	0.0024	2.50000	ND	87.8	61 - 131	1.35	20	
Chromium	2.45562	0.0030	0.0020	2.50000	0.175723	91.2	62 - 136	1.76	20	
Cobalt	2.26558	0.0030	0.0016	2.50000	0.020123	89.8	62 - 134	1.42	20	
Copper	2.45919	0.0090	0.0038	2.50000	0.055175	96.2	63 - 140	1.81	20	
Lead	2.15706	0.0050	0.0047	2.50000	ND	86.3	60 - 130	2.06	20	
Molybdenum	2.42986	0.0050	0.0030	2.50000	0.022809	96.3	56 - 140	2.22	20	
Nickel	2.29372	0.0050	0.0046	2.50000	0.091837	88.1	55 - 140	1.31	20	
Selenium	2.31163	0.010	0.0093	2.50000	ND	92.5	59 - 135	2.19	20	
Silver	0.035083	0.0030	0.0024	2.50000	0.011089	0.960	59 - 144	2.94	20	M1
Thallium	2.16259	0.015	0.0085	2.50000	ND	86.5	47 - 137	1.75	20	
Vanadium	2.51277	0.0030	0.0022	2.50000	0.173431	93.6	59 - 143	1.88	20	
Zinc	2.33176	0.025	0.0057	2.50000	0.158796	86.9	57 - 132	1.30	20	

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STLC Metals by ICP-AES by EPA 6010B - Quality Control

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B9K0410 - STLC_S Extraction										
Blank (B9K0410-BLK1)					Prepared: 11/16/2019 Analyzed: 11/18/2019					
Chromium	ND	1.0	0.039							
Blank (B9K0410-BLK2)					Prepared: 11/16/2019 Analyzed: 11/18/2019					
Chromium	ND	1.0	0.039							
LCS (B9K0410-BS1)					Prepared: 11/16/2019 Analyzed: 11/18/2019					
Chromium	0.470843			0.500000		94.2	80 - 120			
Duplicate (B9K0410-DUP1)			**Source: 1903821-07RE1**		Prepared: 11/16/2019 Analyzed: 11/18/2019					
Chromium	ND	1.0	0.039		0.042794			NR	20	
Duplicate (B9K0410-DUP2)			**Source: 1904037-02**		Prepared: 11/16/2019 Analyzed: 11/18/2019					
Chromium	0.099890	1.0	0.039		0.090639			9.71	20	J
Matrix Spike (B9K0410-MS1)			**Source: 1903821-07RE1**		Prepared: 11/16/2019 Analyzed: 11/18/2019					
Chromium	0.550909			0.500000	0.042794	102	70 - 130			
Matrix Spike (B9K0410-MS2)			**Source: 1904037-02**		Prepared: 11/16/2019 Analyzed: 11/18/2019					
Chromium	0.587200			0.500000	0.090639	99.3	70 - 130			
Matrix Spike Dup (B9K0410-MSD1)			**Source: 1903821-07RE1**		Prepared: 11/16/2019 Analyzed: 11/18/2019					
Chromium	0.524709			0.500000	0.042794	96.4	70 - 130	4.87	20	

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Mercury by AA (Cold Vapor) EPA 7470A - Quality Control

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B9K0204 - EPA 245.1/7470_W										
Blank (B9K0204-BLK1)						Prepared: 11/11/2019 Analyzed: 11/12/2019				
Mercury	ND	0.20	0.05							
LCS (B9K0204-BS1)						Prepared: 11/11/2019 Analyzed: 11/12/2019				
Mercury	10.1359	0.20	0.05	10.0000		101	80 - 120			
Matrix Spike (B9K0204-MS1)			**Source: 1903996-01**			Prepared: 11/11/2019 Analyzed: 11/12/2019				
Mercury	8.59993	0.20	0.05	10.0000	ND	86.0	70 - 130			
Matrix Spike Dup (B9K0204-MSD1)			**Source: 1903996-01**			Prepared: 11/11/2019 Analyzed: 11/12/2019				
Mercury	8.77842	0.20	0.05	10.0000	ND	87.8	70 - 130	2.05	20	
Post Spike (B9K0204-PS1)			**Source: 1903996-01**			Prepared: 11/11/2019 Analyzed: 11/12/2019				
Mercury	4.34441			5.00000	0.017523	86.5	85 - 115			

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Mercury by AA (Cold Vapor) EPA 7471A - Quality Control

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B9K0201 - EPA 7471_S										
Blank (B9K0201-BLK1)					Prepared: 11/11/2019 Analyzed: 11/11/2019					
Mercury	ND	0.10	0.01							
LCS (B9K0201-BS1)					Prepared: 11/11/2019 Analyzed: 11/11/2019					
Mercury	0.401675	0.10	0.01	0.416667		96.4	80 - 120			
Matrix Spike (B9K0201-MS1)			**Source: 1904023-01**		Prepared: 11/11/2019 Analyzed: 11/11/2019					
Mercury	0.421335	0.10	0.01	0.409836	ND	103	70 - 130			
Matrix Spike Dup (B9K0201-MSD1)			**Source: 1904023-01**		Prepared: 11/11/2019 Analyzed: 11/11/2019					
Mercury	0.417828	0.10	0.01	0.416667	ND	100	70 - 130	0.836	20	

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Mercury by AA (Cold Vapor) EPA 7471A - Quality Control

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B9K0201 - EPA 7471_S									
Post Spike (B9K0201-PS1)			**Source: 1904023-01**		Prepared: 11/11/2019 Analyzed: 11/11/2019				
Mercury	0.002042		2.50000E-3	0.000081	78.5	85 - 115			M1

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Burns and McDonnell	Project Number : SCVTA-1217
400 Oyster Point Blvd, Suite 533	Report To : Christopher D'Sa
South San Francisco , CA 94080	Reported : 11/21/2019

Diesel Range Organics by EPA 8015B (SGT) - Quality Control

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B9K0181 - GCSEMI_DRO_LL_S										
Blank (B9K0181-BLK1)					Prepared: 11/8/2019 Analyzed: 11/11/2019					
DRO	ND	1.0	1.0							
ORO	ND	1.0	1.0							
Surrogate: p-Terphenyl	*3.373*			*2.66667*		*126*	*34 - 158*			
LCS (B9K0181-BS1)					Prepared: 11/8/2019 Analyzed: 11/8/2019					
DRO	22.5557	1.0	1.0	33.3333		67.7	47 - 152			
Surrogate: p-Terphenyl	*1.770*			*2.66667*		*66.4*	*34 - 158*			
Matrix Spike (B9K0181-MS1)			**Source: 1904037-02**		Prepared: 11/8/2019 Analyzed: 11/8/2019					
DRO	33.2483	1.0	1.0	33.3333	ND	99.7	34 - 130			
Surrogate: p-Terphenyl	*1.569*			*2.66667*		*58.8*	*34 - 158*			
Matrix Spike Dup (B9K0181-MSD1)			**Source: 1904037-02**		Prepared: 11/8/2019 Analyzed: 11/11/2019					
DRO	31.9877	1.0	1.0	33.3333	ND	96.0	34 - 130	3.86	20	
Surrogate: p-Terphenyl	*1.619*			*2.66667*		*60.7*	*34 - 158*			

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South San Francisco , CA 94080	Reported : 11/21/2019

Diesel Range Organics by EPA 8015B (SGT) - Quality Control

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B9K0189 - GCSEMI_DRO_W										
Blank (B9K0189-BLK1)						Prepared: 11/8/2019 Analyzed: 11/8/2019				
DRO	ND	0.05	0.05							
ORO	ND	0.05	0.05							
Surrogate: p-Terphenyl	*0.2229*			*0.160000*		*139*	*32 - 169*			
LCS (B9K0189-BS1)						Prepared: 11/8/2019 Analyzed: 11/11/2019				
DRO	1.17392	0.05	0.05	1.00000		117	45 - 161			
Surrogate: p-Terphenyl	*0.1656*			*0.160000*		*104*	*32 - 169*			
LCS Dup (B9K0189-BSD1)						Prepared: 11/8/2019 Analyzed: 11/8/2019				
DRO	0.960960	0.05	0.05	1.00000		96.1	45 - 161	20.0	20	
Surrogate: p-Terphenyl	*0.1436*			*0.160000*		*89.7*	*32 - 169*			

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South San Francisco , CA 94080	Reported : 11/21/2019

Organochlorine Pesticides by EPA 8081A - Quality Control

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B9K0175 - GCSEMI_PCB/PEST_S										
Blank (B9K0175-BLK1)							Prepared: 11/7/2019 Analyzed: 11/8/2019			
4,4′-DDD	ND	2.0	0.14							
4,4′-DDD [2C]	ND	2.0	0.14							
4,4′-DDE	ND	2.0	0.20							
4,4′-DDE [2C]	ND	2.0	0.20							
4,4′-DDT	ND	2.0	0.04							
4,4′-DDT [2C]	ND	2.0	0.04							
Aldrin	ND	1.0	0.05							
Aldrin [2C]	ND	1.0	0.05							
alpha-BHC	ND	1.0	0.12							
alpha-BHC [2C]	ND	1.0	0.12							
alpha-Chlordane	ND	1.0	0.06							
alpha-Chlordane [2C]	ND	1.0	0.06							
beta-BHC	ND	1.0	0.08							
beta-BHC [2C]	ND	1.0	0.08							
Chlordane	ND	8.5	0.78							
Chlordane [2C]	ND	8.5	0.78							
delta-BHC	ND	1.0	0.07							
delta-BHC [2C]	ND	1.0	0.07							
Dieldrin	ND	2.0	0.04							
Dieldrin [2C]	ND	2.0	0.04							
Endosulfan I	ND	1.0	0.05							
Endosulfan I [2C]	ND	1.0	0.05							
Endosulfan II	ND	2.0	0.06							
Endosulfan II [2C]	ND	2.0	0.06							
Endosulfan sulfate	ND	2.0	0.15							
Endosulfan Sulfate [2C]	ND	2.0	0.15							
Endrin	ND	2.0	0.08							
Endrin [2C]	ND	2.0	0.08							
Endrin aldehyde	ND	2.0	0.09							
Endrin aldehyde [2C]	ND	2.0	0.09							
Endrin ketone	ND	2.0	0.09							
Endrin ketone [2C]	ND	2.0	0.09							
gamma-BHC	ND	1.0	0.12							
gamma-BHC [2C]	ND	1.0	0.12							
gamma-Chlordane	ND	1.0	0.28							
gamma-Chlordane [2C]	ND	1.0	0.28							
Heptachlor	ND	1.0	0.06							
Heptachlor [2C]	ND	1.0	0.06							
Heptachlor epoxide	ND	1.0	0.06							
Heptachlor epoxide [2C]	ND	1.0	0.06							

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South San Francisco , CA 94080	Reported : 11/21/2019

Organochlorine Pesticides by EPA 8081A - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B9K0175 - GCSEMI_PCB/PEST_S (continued)										
Blank (B9K0175-BLK1) - Continued						Prepared: 11/7/2019 Analyzed: 11/8/2019				
Methoxychlor	ND	5.0	0.16							
Methoxychlor [2C]	ND	5.0	0.16							
Toxaphene	ND	50	4.7							
Toxaphene [2C]	ND	50	4.7							
Surrogate: Decachlorobiphenyl	*10.69*			*16.6667*		*64.1*	*32 - 91*			
Surrogate: Decachlorobiphenyl [	*9.393*			*16.6667*		*56.4*	*32 - 91*			
Surrogate: Tetrachloro-m-xylene	*11.61*			*16.6667*		*69.7*	*38 - 93*			
Surrogate: Tetrachloro-m-xylene	*10.85*			*16.6667*		*65.1*	*38 - 93*			
LCS (B9K0175-BS1)						Prepared: 11/7/2019 Analyzed: 11/8/2019				
4,4′-DDD	12.6690	2.0	0.14	16.6667		76.0	66 - 112			
4,4′-DDD [2C]	13.7797	2.0	0.14	16.6667		82.7	66 - 112			
4,4′-DDE	12.9222	2.0	0.20	16.6667		77.5	62 - 112			
4,4′-DDE [2C]	12.8497	2.0	0.20	16.6667		77.1	62 - 112			
4,4′-DDT	13.0165	2.0	0.04	16.6667		78.1	48 - 90			
4,4′-DDT [2C]	12.3657	2.0	0.04	16.6667		74.2	48 - 90			
Aldrin	12.5505	1.0	0.05	16.6667		75.3	58 - 104			
Aldrin [2C]	13.6700	1.0	0.05	16.6667		82.0	58 - 104			
alpha-BHC	12.4272	1.0	0.12	16.6667		74.6	57 - 105			
alpha-BHC [2C]	13.5962	1.0	0.12	16.6667		81.6	57 - 105			
alpha-Chlordane	12.7075	1.0	0.06	16.6667		76.2	62 - 108			
alpha-Chlordane [2C]	14.5970	1.0	0.06	16.6667		87.6	62 - 108			
beta-BHC	12.7240	1.0	0.08	16.6667		76.3	59 - 106			
beta-BHC [2C]	13.3277	1.0	0.08	16.6667		80.0	59 - 106			
delta-BHC	12.2145	1.0	0.07	16.6667		73.3	63 - 115			
delta-BHC [2C]	13.4483	1.0	0.07	16.6667		80.7	63 - 115			
Dieldrin	12.4722	2.0	0.04	16.6667		74.8	59 - 102			
Dieldrin [2C]	12.2165	2.0	0.04	16.6667		73.3	59 - 102			
Endosulfan I	11.8183	1.0	0.05	16.6667		70.9	61 - 99			
Endosulfan I [2C]	12.2715	1.0	0.05	16.6667		73.6	61 - 99			
Endosulfan II	12.7947	2.0	0.06	16.6667		76.8	65 - 105			
Endosulfan II [2C]	13.5265	2.0	0.06	16.6667		81.2	65 - 105			
Endosulfan sulfate	12.3377	2.0	0.15	16.6667		74.0	59 - 107			
Endosulfan Sulfate [2C]	11.7213	2.0	0.15	16.6667		70.3	59 - 107			
Endrin	13.5175	2.0	0.08	16.6667		81.1	65 - 113			
Endrin [2C]	13.5705	2.0	0.08	16.6667		81.4	65 - 113			
Endrin aldehyde	12.9043	2.0	0.09	16.6667		77.4	61 - 109			
Endrin aldehyde [2C]	12.5723	2.0	0.09	16.6667		75.4	61 - 109			
Endrin ketone	11.9373	2.0	0.09	16.6667		71.6	56 - 97			
Endrin ketone [2C]	11.0935	2.0	0.09	16.6667		66.6	56 - 97			

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Organochlorine Pesticides by EPA 8081A - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B9K0175 - GCSEMI_PCB/PEST_S (continued)										
LCS (B9K0175-BS1) - Continued						Prepared: 11/7/2019 Analyzed: 11/8/2019				
gamma-BHC	12.7193	1.0	0.12	16.6667		76.3	57 - 101			
gamma-BHC [2C]	14.0097	1.0	0.12	16.6667		84.1	57 - 101			
gamma-Chlordane	12.6247	1.0	0.28	16.6667		75.7	56 - 125			
gamma-Chlordane [2C]	13.7323	1.0	0.28	16.6667		82.4	56 - 125			
Heptachlor	12.6592	1.0	0.06	16.6667		76.0	61 - 105			
Heptachlor [2C]	11.9183	1.0	0.06	16.6667		71.5	61 - 105			
Heptachlor epoxide	12.0958	1.0	0.06	16.6667		72.6	59 - 97			
Heptachlor epoxide [2C]	12.8368	1.0	0.06	16.6667		77.0	59 - 97			
Methoxychlor	13.5047	5.0	0.16	16.6667		81.0	68 - 118			
Methoxychlor [2C]	11.3785	5.0	0.16	16.6667		68.3	68 - 118			
Surrogate: Decachlorobiphenyl	*12.79*			*16.6667*		*76.8*	*32 - 91*			
Surrogate: Decachlorobiphenyl [	*11.99*			*16.6667*		*71.9*	*32 - 91*			
Surrogate: Tetrachloro-m-xylene	*13.87*			*16.6667*		*83.2*	*38 - 93*			
Surrogate: Tetrachloro-m-xylene	*13.91*			*16.6667*		*83.5*	*38 - 93*			
Matrix Spike (B9K0175-MS1)			**Source: 1904037-01**			Prepared: 11/7/2019 Analyzed: 11/8/2019				
4,4′-DDD	12.2408	10	0.70	16.6667	ND	73.4	33 - 116			
4,4′-DDD [2C]	10.7033	10	0.70	16.6667	ND	64.2	33 - 116			
4,4′-DDE	11.7575	10	0.98	16.6667	ND	70.5	29 - 128			
4,4′-DDE [2C]	9.92417	10	0.98	16.6667	ND	59.5	29 - 128			
4,4′-DDT	12.0775	10	0.18	16.6667	ND	72.5	27 - 109			
4,4′-DDT [2C]	10.3817	10	0.18	16.6667	ND	62.3	27 - 109			
Aldrin	11.4675	5.0	0.27	16.6667	ND	68.8	34 - 110			
Aldrin [2C]	10.4158	5.0	0.27	16.6667	ND	62.5	34 - 110			
alpha-BHC	13.4817	5.0	0.58	16.6667	ND	80.9	39 - 107			
alpha-BHC [2C]	12.0567	5.0	0.58	16.6667	ND	72.3	39 - 107			
alpha-Chlordane	12.1250	5.0	0.32	16.6667	ND	72.7	37 - 111			
alpha-Chlordane [2C]	10.8967	5.0	0.32	16.6667	ND	65.4	37 - 111			
beta-BHC	15.0808	5.0	0.39	16.6667	ND	90.5	33 - 111			
beta-BHC [2C]	15.6692	5.0	0.39	16.6667	ND	94.0	33 - 111			
delta-BHC	10.8367	5.0	0.36	16.6667	ND	65.0	25 - 122			
delta-BHC [2C]	9.71417	5.0	0.36	16.6667	ND	58.3	25 - 122			
Dieldrin	12.5108	10	0.20	16.6667	ND	75.1	28 - 114			
Dieldrin [2C]	10.3917	10	0.20	16.6667	ND	62.4	28 - 114			
Endosulfan I	11.9508	5.0	0.27	16.6667	ND	71.7	35 - 107			
Endosulfan I [2C]	10.6225	5.0	0.27	16.6667	ND	63.7	35 - 107			
Endosulfan II	13.6367	10	0.28	16.6667	ND	81.8	13 - 122			
Endosulfan II [2C]	11.6767	10	0.28	16.6667	ND	70.1	13 - 122			
Endosulfan sulfate	12.7975	10	0.77	16.6667	ND	76.8	13 - 120			
Endosulfan Sulfate [2C]	10.7067	10	0.77	16.6667	ND	64.2	13 - 120			

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Organochlorine Pesticides by EPA 8081A - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B9K0175 - GCSEMI_PCB/PEST_S (continued)										
Matrix Spike (B9K0175-MS1) - Continued			**Source: 1904037-01**		Prepared: 11/7/2019 Analyzed: 11/8/2019					
Endrin	13.7733	10	0.38	16.6667	ND	82.6	31 - 121			
Endrin [2C]	11.7308	10	0.38	16.6667	ND	70.4	31 - 121			
Endrin aldehyde	15.1242	10	0.43	16.6667	ND	90.7	18 - 129			
Endrin aldehyde [2C]	13.1042	10	0.43	16.6667	ND	78.6	18 - 129			
Endrin ketone	13.5717	10	0.46	16.6667	ND	81.4	14 - 113			
Endrin ketone [2C]	11.9542	10	0.46	16.6667	ND	71.7	14 - 113			
gamma-BHC	14.3383	5.0	0.59	16.6667	ND	86.0	34 - 104			
gamma-BHC [2C]	13.4925	5.0	0.59	16.6667	ND	81.0	34 - 104			
gamma-Chlordane	1275.24	5.0	1.4	16.6667	ND	7650	35 - 121			M2
gamma-Chlordane [2C]	10.9025	5.0	1.4	16.6667	ND	65.4	35 - 121			
Heptachlor	12.4917	5.0	0.30	16.6667	ND	75.0	35 - 110			
Heptachlor [2C]	9.74500	5.0	0.30	16.6667	ND	58.5	35 - 110			
Heptachlor epoxide	14.7650	5.0	0.31	16.6667	ND	88.6	31 - 106			
Heptachlor epoxide [2C]	10.7583	5.0	0.31	16.6667	ND	64.5	31 - 106			
Methoxychlor	14.4450	25	0.80	16.6667	ND	86.7	21 - 128			
Methoxychlor [2C]	10.8850	25	0.80	16.6667	ND	65.3	21 - 128			
Surrogate: Decachlorobiphenyl	*8.356*			*16.6667*		*50.1*	*32 - 91*			
Surrogate: Decachlorobiphenyl [	*6.235*			*16.6667*		*37.4*	*32 - 91*			
Surrogate: Tetrachloro-m-xylene	*9.553*			*16.6667*		*57.3*	*38 - 93*			
Surrogate: Tetrachloro-m-xylene	*7.773*			*16.6667*		*46.6*	*38 - 93*			
Matrix Spike Dup (B9K0175-MSD1)			**Source: 1904037-01**		Prepared: 11/7/2019 Analyzed: 11/8/2019					
4,4′-DDD	12.0792	10	0.70	16.6667	ND	72.5	33 - 116	1.33	20	
4,4′-DDD [2C]	10.6250	10	0.70	16.6667	ND	63.7	33 - 116	0.735	20	
4,4′-DDE	11.7442	10	0.98	16.6667	ND	70.5	29 - 128	0.113	20	
4,4′-DDE [2C]	9.91583	10	0.98	16.6667	ND	59.5	29 - 128	0.0840	20	
4,4′-DDT	12.0383	10	0.18	16.6667	ND	72.2	27 - 109	0.325	20	
4,4′-DDT [2C]	10.3517	10	0.18	16.6667	ND	62.1	27 - 109	0.289	20	
Aldrin	10.6208	5.0	0.27	16.6667	ND	63.7	34 - 110	7.67	20	
Aldrin [2C]	10.5425	5.0	0.27	16.6667	ND	63.3	34 - 110	1.21	20	
alpha-BHC	13.4283	5.0	0.58	16.6667	ND	80.6	39 - 107	0.396	20	
alpha-BHC [2C]	11.9558	5.0	0.58	16.6667	ND	71.7	39 - 107	0.840	20	
alpha-Chlordane	12.0608	5.0	0.32	16.6667	ND	72.4	37 - 111	0.531	20	
alpha-Chlordane [2C]	10.9033	5.0	0.32	16.6667	ND	65.4	37 - 111	0.0611	20	
beta-BHC	15.1833	5.0	0.39	16.6667	ND	91.1	33 - 111	0.677	20	
beta-BHC [2C]	15.8833	5.0	0.39	16.6667	ND	95.3	33 - 111	1.36	20	
delta-BHC	10.8692	5.0	0.36	16.6667	ND	65.2	25 - 122	0.299	20	
delta-BHC [2C]	9.70250	5.0	0.36	16.6667	ND	58.2	25 - 122	0.120	20	
Dieldrin	12.4333	10	0.20	16.6667	ND	74.6	28 - 114	0.621	20	
Dieldrin [2C]	10.3342	10	0.20	16.6667	ND	62.0	28 - 114	0.555	20	

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Organochlorine Pesticides by EPA 8081A - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B9K0175 - GCSEMI_PCB/PEST_S (continued)										
Matrix Spike Dup (B9K0175-MSD1) - Continued			**Source: 1904037-01**		Prepared: 11/7/2019 Analyzed: 11/8/2019					
Endosulfan I	11.8917	5.0	0.27	16.6667	ND	71.4	35 - 107	0.496	20	
Endosulfan I [2C]	10.5417	5.0	0.27	16.6667	ND	63.3	35 - 107	0.764	20	
Endosulfan II	13.5142	10	0.28	16.6667	ND	81.1	13 - 122	0.902	20	
Endosulfan II [2C]	11.6067	10	0.28	16.6667	ND	69.6	13 - 122	0.601	20	
Endosulfan sulfate	12.6867	10	0.77	16.6667	ND	76.1	13 - 120	0.870	20	
Endosulfan Sulfate [2C]	10.5275	10	0.77	16.6667	ND	63.2	13 - 120	1.69	20	
Endrin	13.6850	10	0.38	16.6667	ND	82.1	31 - 121	0.643	20	
Endrin [2C]	11.6633	10	0.38	16.6667	ND	70.0	31 - 121	0.577	20	
Endrin aldehyde	15.0317	10	0.43	16.6667	ND	90.2	18 - 129	0.613	20	
Endrin aldehyde [2C]	12.8758	10	0.43	16.6667	ND	77.3	18 - 129	1.76	20	
Endrin ketone	13.4842	10	0.46	16.6667	ND	80.9	14 - 113	0.647	20	
Endrin ketone [2C]	11.7458	10	0.46	16.6667	ND	70.5	14 - 113	1.76	20	
gamma-BHC	14.0500	5.0	0.59	16.6667	ND	84.3	34 - 104	2.03	20	
gamma-BHC [2C]	13.2983	5.0	0.59	16.6667	ND	79.8	34 - 104	1.45	20	
gamma-Chlordane	1123.11	5.0	1.4	16.6667	ND	6740	35 - 121	12.7	20	M2
gamma-Chlordane [2C]	10.8742	5.0	1.4	16.6667	ND	65.2	35 - 121	0.260	20	
Heptachlor	12.3600	5.0	0.30	16.6667	ND	74.2	35 - 110	1.06	20	
Heptachlor [2C]	10.0008	5.0	0.30	16.6667	ND	60.0	35 - 110	2.59	20	
Heptachlor epoxide	15.0575	5.0	0.31	16.6667	ND	90.3	31 - 106	1.96	20	
Heptachlor epoxide [2C]	10.7100	5.0	0.31	16.6667	ND	64.3	31 - 106	0.450	20	
Methoxychlor	14.3308	25	0.80	16.6667	ND	86.0	21 - 128	0.794	20	
Methoxychlor [2C]	10.6175	25	0.80	16.6667	ND	63.7	21 - 128	2.49	20	
Surrogate: Decachlorobiphenyl	*8.320*			*16.6667*		*49.9*	*32 - 91*			
Surrogate: Decachlorobiphenyl [	*6.147*			*16.6667*		*36.9*	*32 - 91*			
Surrogate: Tetrachloro-m-xylene	*9.475*			*16.6667*		*56.8*	*38 - 93*			
Surrogate: Tetrachloro-m-xylene	*7.689*			*16.6667*		*46.1*	*38 - 93*			

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South San Francisco , CA 94080	Reported : 11/21/2019

Organochlorine Pesticides by EPA 8081A - Quality Control

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B9K0188 - GCSEMI_PCB/PEST_W										
Blank (B9K0188-BLK1)							Prepared: 11/8/2019 Analyzed: 11/11/2019			
4,4′-DDD	ND	0.05	0.006							
4,4′-DDD [2C]	ND	0.05	0.006							
4,4′-DDE	ND	0.05	0.006							
4,4′-DDE [2C]	ND	0.05	0.006							
4,4′-DDT	ND	0.05	0.005							
4,4′-DDT [2C]	ND	0.05	0.005							
Aldrin	ND	0.02	0.006							
Aldrin [2C]	ND	0.02	0.006							
alpha-BHC	ND	0.02	0.004							
alpha-BHC [2C]	ND	0.02	0.004							
alpha-Chlordane	ND	0.02	0.006							
alpha-Chlordane [2C]	ND	0.02	0.006							
beta-BHC	ND	0.02	0.002							
beta-BHC [2C]	ND	0.02	0.002							
Chlordane	ND	0.25	0.03							
Chlordane [2C]	ND	0.25	0.03							
delta-BHC	ND	0.02	0.007							
delta-BHC [2C]	ND	0.02	0.007							
Dieldrin	ND	0.05	0.005							
Dieldrin [2C]	ND	0.05	0.005							
Endosulfan I	ND	0.02	0.005							
Endosulfan I [2C]	ND	0.02	0.005							
Endosulfan II	ND	0.05	0.007							
Endosulfan II [2C]	ND	0.05	0.007							
Endosulfan sulfate	ND	0.05	0.005							
Endosulfan Sulfate [2C]	ND	0.05	0.005							
Endrin	ND	0.05	0.005							
Endrin [2C]	ND	0.05	0.005							
Endrin aldehyde	ND	0.05	0.006							
Endrin aldehyde [2C]	ND	0.05	0.006							
Endrin ketone	ND	0.05	0.004							
Endrin ketone [2C]	ND	0.05	0.004							
gamma-BHC	ND	0.02	0.005							
gamma-BHC [2C]	ND	0.02	0.005							
gamma-Chlordane	ND	0.02	0.008							
gamma-Chlordane [2C]	ND	0.02	0.008							
Heptachlor	ND	0.02	0.006							
Heptachlor [2C]	ND	0.02	0.006							
Heptachlor epoxide	ND	0.02	0.008							
Heptachlor epoxide [2C]	ND	0.02	0.008							

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South San Francisco , CA 94080	Reported : 11/21/2019

Organochlorine Pesticides by EPA 8081A - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B9K0188 - GCSEMI_PCB/PEST_W (continued)										
Blank (B9K0188-BLK1) - Continued					Prepared: 11/8/2019 Analyzed: 11/11/2019					
Methoxychlor	ND	0.25	0.004							
Methoxychlor [2C]	ND	0.25	0.004							
Toxaphene	ND	2.5	0.28							
Toxaphene [2C]	ND	2.5	0.28							
Surrogate: Decachlorobiphenyl	*0.3313*			*0.500000*		*66.3*	*20 - 111*			
Surrogate: Decachlorobiphenyl [	*0.3018*			*0.500000*		*60.4*	*20 - 111*			
Surrogate: Tetrachloro-m-xylene	*0.3635*			*0.500000*		*72.7*	*31 - 126*			
Surrogate: Tetrachloro-m-xylene	*0.3403*			*0.500000*		*68.1*	*31 - 126*			
LCS (B9K0188-BS1)					Prepared: 11/8/2019 Analyzed: 11/11/2019					
4,4′-DDD	0.410890	0.05	0.006	0.500000		82.2	61 - 124			
4,4′-DDD [2C]	0.421950	0.05	0.006	0.500000		84.4	61 - 124			
4,4′-DDE	0.416990	0.05	0.006	0.500000		83.4	63 - 119			
4,4′-DDE [2C]	0.415040	0.05	0.006	0.500000		83.0	63 - 119			
4,4′-DDT	0.396690	0.05	0.005	0.500000		79.3	18 - 135			
4,4′-DDT [2C]	0.380515	0.05	0.005	0.500000		76.1	18 - 135			
Aldrin	0.405375	0.02	0.006	0.500000		81.1	56 - 117			
Aldrin [2C]	0.431160	0.02	0.006	0.500000		86.2	56 - 117			
alpha-BHC	0.381085	0.02	0.004	0.500000		76.2	62 - 115			
alpha-BHC [2C]	0.411680	0.02	0.004	0.500000		82.3	62 - 115			
alpha-Chlordane	0.406880	0.02	0.006	0.500000		81.4	65 - 113			
alpha-Chlordane [2C]	0.424400	0.02	0.006	0.500000		84.9	65 - 113			
beta-BHC	0.401265	0.02	0.002	0.500000		80.3	59 - 113			
beta-BHC [2C]	0.413520	0.02	0.002	0.500000		82.7	59 - 113			
delta-BHC	0.292490	0.02	0.007	0.500000		58.5	62 - 122			L4
delta-BHC [2C]	0.310585	0.02	0.007	0.500000		62.1	62 - 122			
Dieldrin	0.402425	0.05	0.005	0.500000		80.5	62 - 105			
Dieldrin [2C]	0.404860	0.05	0.005	0.500000		81.0	62 - 105			
Endosulfan I	0.377635	0.02	0.005	0.500000		75.5	63 - 106			
Endosulfan I [2C]	0.395815	0.02	0.005	0.500000		79.2	63 - 106			
Endosulfan II	0.414075	0.05	0.007	0.500000		82.8	64 - 113			
Endosulfan II [2C]	0.416440	0.05	0.007	0.500000		83.3	64 - 113			
Endosulfan sulfate	0.384115	0.05	0.005	0.500000		76.8	59 - 111			
Endosulfan Sulfate [2C]	0.361590	0.05	0.005	0.500000		72.3	59 - 111			
Endrin	0.437410	0.05	0.005	0.500000		87.5	64 - 119			
Endrin [2C]	0.437770	0.05	0.005	0.500000		87.6	64 - 119			
Endrin aldehyde	0.422555	0.05	0.006	0.500000		84.5	60 - 121			
Endrin aldehyde [2C]	0.414655	0.05	0.006	0.500000		82.9	60 - 121			
Endrin ketone	0.388835	0.05	0.004	0.500000		77.8	47 - 113			
Endrin ketone [2C]	0.385295	0.05	0.004	0.500000		77.1	47 - 113			

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Organochlorine Pesticides by EPA 8081A - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B9K0188 - GCSEMI_PCB/PEST_W (continued)										
LCS (B9K0188-BS1) - Continued					Prepared: 11/8/2019 Analyzed: 11/11/2019					
gamma-BHC	0.394295	0.02	0.005	0.500000		78.9	61 - 109			
gamma-BHC [2C]	0.424790	0.02	0.005	0.500000		85.0	61 - 109			
gamma-Chlordane	0.401715	0.02	0.008	0.500000		80.3	63 - 111			
gamma-Chlordane [2C]	0.420675	0.02	0.008	0.500000		84.1	63 - 111			
Heptachlor	0.421660	0.02	0.006	0.500000		84.3	55 - 118			
Heptachlor [2C]	0.409890	0.02	0.006	0.500000		82.0	55 - 118			
Heptachlor epoxide	0.380315	0.02	0.008	0.500000		76.1	61 - 106			
Heptachlor epoxide [2C]	0.398820	0.02	0.008	0.500000		79.8	61 - 106			
Methoxychlor	0.425730	0.25	0.004	0.500000		85.1	38 - 140			
Methoxychlor [2C]	0.376405	0.25	0.004	0.500000		75.3	38 - 140			
Surrogate: Decachlorobiphenyl	*0.3547*			*0.500000*		*70.9*	*20 - 111*			
Surrogate: Decachlorobiphenyl [	*0.3078*			*0.500000*		*61.6*	*20 - 111*			
Surrogate: Tetrachloro-m-xylene	*0.3814*			*0.500000*		*76.3*	*31 - 126*			
Surrogate: Tetrachloro-m-xylene	*0.3646*			*0.500000*		*72.9*	*31 - 126*			
LCS Dup (B9K0188-BSD1)					Prepared: 11/8/2019 Analyzed: 11/11/2019					
4,4′-DDD	0.409965	0.05	0.006	0.500000		82.0	61 - 124	0.225	20	
4,4′-DDD [2C]	0.411780	0.05	0.006	0.500000		82.4	61 - 124	2.44	20	
4,4′-DDE	0.416120	0.05	0.006	0.500000		83.2	63 - 119	0.209	20	
4,4′-DDE [2C]	0.405535	0.05	0.006	0.500000		81.1	63 - 119	2.32	20	
4,4′-DDT	0.397585	0.05	0.005	0.500000		79.5	18 - 135	0.225	20	
4,4′-DDT [2C]	0.373135	0.05	0.005	0.500000		74.6	18 - 135	1.96	20	
Aldrin	0.404305	0.02	0.006	0.500000		80.9	56 - 117	0.264	20	
Aldrin [2C]	0.423050	0.02	0.006	0.500000		84.6	56 - 117	1.90	20	
alpha-BHC	0.381470	0.02	0.004	0.500000		76.3	62 - 115	0.101	20	
alpha-BHC [2C]	0.405130	0.02	0.004	0.500000		81.0	62 - 115	1.60	20	
alpha-Chlordane	0.406440	0.02	0.006	0.500000		81.3	65 - 113	0.108	20	
alpha-Chlordane [2C]	0.417275	0.02	0.006	0.500000		83.5	65 - 113	1.69	20	
beta-BHC	0.401480	0.02	0.002	0.500000		80.3	59 - 113	0.0536	20	
beta-BHC [2C]	0.407625	0.02	0.002	0.500000		81.5	59 - 113	1.44	20	
delta-BHC	0.294550	0.02	0.007	0.500000		58.9	62 - 122	0.702	20	L4
delta-BHC [2C]	0.310210	0.02	0.007	0.500000		62.0	62 - 122	0.121	20	
Dieldrin	0.402160	0.05	0.005	0.500000		80.4	62 - 105	0.0659	20	
Dieldrin [2C]	0.396365	0.05	0.005	0.500000		79.3	62 - 105	2.12	20	
Endosulfan I	0.378055	0.02	0.005	0.500000		75.6	63 - 106	0.111	20	
Endosulfan I [2C]	0.386020	0.02	0.005	0.500000		77.2	63 - 106	2.51	20	
Endosulfan II	0.414110	0.05	0.007	0.500000		82.8	64 - 113	0.00846	20	
Endosulfan II [2C]	0.407645	0.05	0.007	0.500000		81.5	64 - 113	2.13	20	
Endosulfan sulfate	0.385660	0.05	0.005	0.500000		77.1	59 - 111	0.401	20	
Endosulfan Sulfate [2C]	0.353750	0.05	0.005	0.500000		70.8	59 - 111	2.19	20	

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Organochlorine Pesticides by EPA 8081A - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B9K0188 - GCSEMI_PCB/PEST_W (continued)										
LCS Dup (B9K0188-BSD1) - Continued					Prepared: 11/8/2019 Analyzed: 11/11/2019					
Endrin	0.438255	0.05	0.005	0.500000		87.7	64 - 119	0.193	20	
Endrin [2C]	0.430520	0.05	0.005	0.500000		86.1	64 - 119	1.67	20	
Endrin aldehyde	0.423535	0.05	0.006	0.500000		84.7	60 - 121	0.232	20	
Endrin aldehyde [2C]	0.405265	0.05	0.006	0.500000		81.1	60 - 121	2.29	20	
Endrin ketone	0.390090	0.05	0.004	0.500000		78.0	47 - 113	0.322	20	
Endrin ketone [2C]	0.377100	0.05	0.004	0.500000		75.4	47 - 113	2.15	20	
gamma-BHC	0.393980	0.02	0.005	0.500000		78.8	61 - 109	0.0799	20	
gamma-BHC [2C]	0.417875	0.02	0.005	0.500000		83.6	61 - 109	1.64	20	
gamma-Chlordane	0.401200	0.02	0.008	0.500000		80.2	63 - 111	0.128	20	
gamma-Chlordane [2C]	0.413210	0.02	0.008	0.500000		82.6	63 - 111	1.79	20	
Heptachlor	0.421660	0.02	0.006	0.500000		84.3	55 - 118	0.00	20	
Heptachlor [2C]	0.404175	0.02	0.006	0.500000		80.8	55 - 118	1.40	20	
Heptachlor epoxide	0.382160	0.02	0.008	0.500000		76.4	61 - 106	0.484	20	
Heptachlor epoxide [2C]	0.392115	0.02	0.008	0.500000		78.4	61 - 106	1.70	20	
Methoxychlor	0.426005	0.25	0.004	0.500000		85.2	38 - 140	0.0646	20	
Methoxychlor [2C]	0.376300	0.25	0.004	0.500000		75.3	38 - 140	0.0279	20	
Surrogate: Decachlorobiphenyl	*0.3612*			*0.500000*		*72.2*	*20 - 111*			
Surrogate: Decachlorobiphenyl [	*0.3146*			*0.500000*		*62.9*	*20 - 111*			
Surrogate: Tetrachloro-m-xylene	*0.3781*			*0.500000*		*75.6*	*31 - 126*			
Surrogate: Tetrachloro-m-xylene	*0.3577*			*0.500000*		*71.5*	*31 - 126*			

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Polychlorinated Biphenyls by EPA 8082 - Quality Control

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B9K0175 - GCSEMI_PCB/PEST_S										
Blank (B9K0175-BLK2)					Prepared: 11/7/2019 Analyzed: 11/8/2019					
Aroclor 1016	ND	16	0.82							
Aroclor 1221	ND	16	0.82							
Aroclor 1232	ND	16	0.82							
Aroclor 1242	ND	16	0.82							
Aroclor 1248	ND	16	0.82							
Aroclor 1254	ND	16	0.82							
Aroclor 1260	ND	16	0.82							
Aroclor 1262	ND	16	0.82							
Aroclor 1268	ND	16	0.82							
Surrogate: Decachlorobiphenyl	*7.244*			*16.6667*		*43.5*	*30 - 132*			
Surrogate: Tetrachloro-m-xylene	*8.490*			*16.6667*		*50.9*	*44 - 113*			
LCS (B9K0175-BS2)					Prepared: 11/7/2019 Analyzed: 11/8/2019					
Aroclor 1016	108.489	16	0.82	166.667		65.1	52 - 104			
Aroclor 1260	97.3152	16	0.82	166.667		58.4	45 - 121			
Surrogate: Decachlorobiphenyl	*7.246*			*16.6667*		*43.5*	*30 - 132*			
Surrogate: Tetrachloro-m-xylene	*7.890*			*16.6667*		*47.3*	*44 - 113*			
Matrix Spike (B9K0175-MS2)			**Source: 1904037-01**		Prepared: 11/7/2019 Analyzed: 11/8/2019					
Aroclor 1016	101.764	16	0.82	166.667	ND	61.1	33 - 112			
Aroclor 1260	97.2002	16	0.82	166.667	ND	58.3	30 - 120			
Surrogate: Decachlorobiphenyl	*6.434*			*16.6667*		*38.6*	*30 - 132*			
Surrogate: Tetrachloro-m-xylene	*6.151*			*16.6667*		*36.9*	*44 - 113*			S10
Matrix Spike Dup (B9K0175-MSD2)			**Source: 1904037-01**		Prepared: 11/7/2019 Analyzed: 11/8/2019					
Aroclor 1016	104.593	16	0.82	166.667	ND	62.8	33 - 112	2.74	20	
Aroclor 1260	101.834	16	0.82	166.667	ND	61.1	30 - 120	4.66	20	
Surrogate: Decachlorobiphenyl	*6.689*			*16.6667*		*40.1*	*30 - 132*			
Surrogate: Tetrachloro-m-xylene	*6.310*			*16.6667*		*37.9*	*44 - 113*			S10

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Polychlorinated Biphenyls by EPA 8082 - Quality Control

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B9K0188 - GCSEMI_PCB/PEST_W										
Blank (B9K0188-BLK2)					Prepared: 11/8/2019 Analyzed: 11/11/2019					
Aroclor 1016	ND	0.50	0.03							
Aroclor 1221	ND	1.0	0.03							
Aroclor 1232	ND	0.50	0.03							
Aroclor 1242	ND	0.50	0.03							
Aroclor 1248	ND	0.50	0.03							
Aroclor 1254	ND	0.50	0.03							
Aroclor 1260	ND	0.50	0.03							
Aroclor 1262	ND	0.50	0.03							
Aroclor 1268	ND	0.50	0.03							
Surrogate: Decachlorobiphenyl	*0.2210*			*0.500000*		*44.2*	*20 - 111*			
Surrogate: Tetrachloro-m-xylene	*0.2510*			*0.500000*		*50.2*	*31 - 126*			
LCS (B9K0188-BS2)					Prepared: 11/8/2019 Analyzed: 11/11/2019					
Aroclor 1016	3.54402	0.50	0.03	5.00000		70.9	70 - 102			
Aroclor 1260	3.21229	0.50	0.03	5.00000		64.2	75 - 115			L2
Surrogate: Decachlorobiphenyl	*0.2045*			*0.500000*		*40.9*	*20 - 111*			
Surrogate: Tetrachloro-m-xylene	*0.2351*			*0.500000*		*47.0*	*31 - 126*			
LCS Dup (B9K0188-BSD2)					Prepared: 11/8/2019 Analyzed: 11/11/2019					
Aroclor 1016	3.57721	0.50	0.03	5.00000		71.5	70 - 102	0.932	20	
Aroclor 1260	3.25948	0.50	0.03	5.00000		65.2	75 - 115	1.46	20	L2
Surrogate: Decachlorobiphenyl	*0.2059*			*0.500000*		*41.2*	*20 - 111*			
Surrogate: Tetrachloro-m-xylene	*0.2388*			*0.500000*		*47.8*	*31 - 126*			

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Volatile Organic Compounds by EPA 8260B - Quality Control

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B9K0161 - MSVOA_LL_W										
Blank (B9K0161-BLK1)					Prepared: 11/8/2019 Analyzed: 11/8/2019					
Gasoline Range Organics	ND	50	15							
Surrogate: 1,2-Dichloroethane-d4	*22.77*			*25.0000*		*91.1*	*59 - 158*			
Surrogate: 4-Bromofluorobenzene	*24.22*			*25.0000*		*96.9*	*71 - 127*			
Surrogate: Dibromofluoromethan	*25.17*			*25.0000*		*101*	*66 - 147*			
Surrogate: Toluene-d8	*24.69*			*25.0000*		*98.8*	*77 - 138*			
LCS (B9K0161-BS1)					Prepared: 11/8/2019 Analyzed: 11/8/2019					
Gasoline Range Organics	910.000	50	15	1000.00		91.0	70 - 130			
Surrogate: 1,2-Dichloroethane-d4	*22.43*			*25.0000*		*89.7*	*59 - 158*			
Surrogate: 4-Bromofluorobenzene	*24.83*			*25.0000*		*99.3*	*71 - 127*			
Surrogate: Dibromofluoromethan	*23.22*			*25.0000*		*92.9*	*66 - 147*			
Surrogate: Toluene-d8	*25.05*			*25.0000*		*100*	*77 - 138*			
LCS Dup (B9K0161-BSD1)					Prepared: 11/8/2019 Analyzed: 11/8/2019					
Gasoline Range Organics	850.000	50	15	1000.00		85.0	70 - 130	6.82	20	
Surrogate: 1,2-Dichloroethane-d4	*22.99*			*25.0000*		*92.0*	*59 - 158*			
Surrogate: 4-Bromofluorobenzene	*25.01*			*25.0000*		*100*	*71 - 127*			
Surrogate: Dibromofluoromethan	*23.78*			*25.0000*		*95.1*	*66 - 147*			
Surrogate: Toluene-d8	*25.16*			*25.0000*		*101*	*77 - 138*			

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Burns and McDonnell	Project Number : SCVTA-1217
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South San Francisco , CA 94080	Reported : 11/21/2019

Volatile Organic Compounds by EPA 8260B - Quality Control

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B9K0170 - MSVOA_LL_W										
Blank (B9K0170-BLK1)							Prepared: 11/11/2019 Analyzed: 11/11/2019			
1,1,1,2-Tetrachloroethane	ND	0.50	0.11							
1,1,1-Trichloroethane	ND	0.50	0.21							
1,1,2,2-Tetrachloroethane	ND	0.50	0.36							
1,1,2-Trichloroethane	ND	0.50	0.25							
1,1-Dichloroethane	ND	0.50	0.09							
1,1-Dichloroethene	ND	0.50	0.13							
1,1-Dichloropropene	ND	0.50	0.13							
1,2,3-Trichloropropane	ND	0.50	0.39							
1,2,3-Trichlorobenzene	ND	0.50	0.18							
1,2,4-Trichlorobenzene	ND	0.50	0.16							
1,2,4-Trimethylbenzene	ND	0.50	0.14							
1,2-Dibromo-3-chloropropane	ND	0.50	0.41							
1,2-Dibromoethane	ND	0.50	0.24							
1,2-Dichlorobenzene	ND	0.50	0.20							
1,2-Dichloroethane	ND	0.50	0.20							
1,2-Dichloropropane	ND	0.50	0.15							
1,3,5-Trimethylbenzene	ND	0.50	0.13							
1,3-Dichlorobenzene	ND	0.50	0.16							
1,3-Dichloropropane	ND	0.50	0.21							
1,4-Dichlorobenzene	ND	0.50	0.17							
2,2-Dichloropropane	ND	0.50	0.38							
2-Chlorotoluene	ND	0.50	0.11							
4-Chlorotoluene	ND	0.50	0.12							
4-Isopropyltoluene	ND	0.50	0.11							
Benzene	ND	0.50	0.13							
Bromobenzene	ND	0.50	0.21							
Bromochloromethane	ND	0.50	0.16							
Bromodichloromethane	ND	0.50	0.14							
Bromoform	ND	0.50	0.20							
Bromomethane	ND	0.50	0.40							
Carbon disulfide	ND	1.0	0.07							
Carbon tetrachloride	ND	0.50	0.09							
Chlorobenzene	ND	0.50	0.13							
Chloroethane	ND	0.50	0.15							
Chloroform	ND	0.50	0.11							
Chloromethane	ND	0.50	0.12							
cis-1,2-Dichloroethene	ND	0.50	0.14							
cis-1,3-Dichloropropene	ND	0.50	0.13							
Di-isopropyl ether	ND	0.50	0.15							
Dibromochloromethane	ND	0.50	0.16							

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Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B9K0170 - MSVOA_LL_W (continued)										
Blank (B9K0170-BLK1) - Continued					Prepared: 11/11/2019 Analyzed: 11/11/2019					
Dibromomethane	ND	0.50	0.19							
Dichlorodifluoromethane	ND	0.50	0.18							
Ethyl Acetate	ND	10	8.7							
Ethyl Ether	ND	10	2.0							
Ethyl tert-butyl ether	ND	0.50	0.21							
Ethylbenzene	ND	0.50	0.13							
Freon-113	ND	0.50	0.13							
Hexachlorobutadiene	ND	0.50	0.15							
Isopropylbenzene	ND	0.50	0.10							
m,p-Xylene	ND	1.0	0.19							
Methylene chloride	ND	1.0	0.71							
MTBE	ND	0.50	0.26							
n-Butylbenzene	ND	0.50	0.11							
n-Propylbenzene	ND	0.50	0.10							
Naphthalene	ND	0.50	0.41							
o-Xylene	ND	0.50	0.13							
sec-Butylbenzene	ND	0.50	0.09							
Styrene	ND	0.50	0.13							
tert-Amyl methyl ether	ND	0.50	0.41							
tert-Butanol	ND	10	2.4							
tert-Butylbenzene	ND	0.50	0.09							
Tetrachloroethene	ND	0.50	0.10							
Toluene	ND	0.50	0.12							
trans-1,2-Dichloroethene	ND	0.50	0.09							
trans-1,3-Dichloropropene	ND	0.50	0.23							
Trichloroethene	ND	0.50	0.10							
Trichlorofluoromethane	ND	0.50	0.23							
Vinyl acetate	ND	10	1.7							
Vinyl chloride	ND	0.50	0.13							
Gasoline Range Organics	ND	50	15							
Surrogate: 1,2-Dichloroethane-d4	*20.42*			*25.0000*		*81.7*	*59 - 158*			
Surrogate: 4-Bromofluorobenzene	*24.56*			*25.0000*		*98.2*	*71 - 127*			
Surrogate: Dibromofluoromethan	*22.35*			*25.0000*		*89.4*	*66 - 147*			
Surrogate: Toluene-d8	*25.46*			*25.0000*		*102*	*77 - 138*			
LCS (B9K0170-BS1)					Prepared: 11/11/2019 Analyzed: 11/11/2019					
1,1,1,2-Tetrachloroethane	17.6200	0.50	0.11	20.0000		88.1	71 - 133			
1,1,1-Trichloroethane	14.9600	0.50	0.21	20.0000		74.8	62 - 124			
1,1,2,2-Tetrachloroethane	13.2500	0.50	0.36	20.0000		66.2	50 - 131			
1,1,2-Trichloroethane	16.1000	0.50	0.25	20.0000		80.5	77 - 121			

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Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B9K0170 - MSVOA_LL_W (continued)										
LCS (B9K0170-BS1) - Continued					Prepared: 11/11/2019 Analyzed: 11/11/2019					
1,1-Dichloroethane	13.7900	0.50	0.09	20.0000		69.0	52 - 130			
1,1-Dichloroethene	15.8600	0.50	0.13	20.0000		79.3	61 - 136			
1,1-Dichloropropene	18.0700	0.50	0.13	20.0000		90.4	80 - 128			
1,2,3-Trichloropropane	12.7900	0.50	0.39	20.0000		64.0	59 - 126			
1,2,3-Trichlorobenzene	17.5700	0.50	0.18	20.0000		87.8	69 - 138			
1,2,4-Trichlorobenzene	17.6600	0.50	0.16	20.0000		88.3	78 - 125			
1,2,4-Trimethylbenzene	15.6400	0.50	0.14	20.0000		78.2	70 - 126			
1,2-Dibromo-3-chloropropane	11.5400	0.50	0.41	20.0000		57.7	58 - 127			L4
1,2-Dibromoethane	16.8800	0.50	0.24	20.0000		84.4	76 - 120			
1,2-Dichlorobenzene	16.5000	0.50	0.20	20.0000		82.5	82 - 117			
1,2-Dichloroethane	15.1800	0.50	0.20	20.0000		75.9	66 - 126			
1,2-Dichloropropane	15.4100	0.50	0.15	20.0000		77.0	70 - 117			
1,3,5-Trimethylbenzene	15.8000	0.50	0.13	20.0000		79.0	71 - 125			
1,3-Dichlorobenzene	16.7200	0.50	0.16	20.0000		83.6	81 - 116			
1,3-Dichloropropane	14.9600	0.50	0.21	20.0000		74.8	69 - 124			
1,4-Dichlorobenzene	16.7200	0.50	0.17	20.0000		83.6	80 - 114			
2,2-Dichloropropane	15.0100	0.50	0.38	20.0000		75.0	58 - 132			
2-Chlorotoluene	15.1700	0.50	0.11	20.0000		75.8	71 - 119			
4-Chlorotoluene	15.2500	0.50	0.12	20.0000		76.2	72 - 122			
4-Isopropyltoluene	16.3100	0.50	0.11	20.0000		81.6	69 - 126			
Benzene	31.7900	0.50	0.13	40.0000		79.5	80 - 116			L4
Bromobenzene	16.6300	0.50	0.21	20.0000		83.2	77 - 118			
Bromochloromethane	16.6800	0.50	0.16	20.0000		83.4	68 - 121			
Bromodichloromethane	16.2500	0.50	0.14	20.0000		81.2	73 - 118			
Bromoform	17.4300	0.50	0.20	20.0000		87.2	65 - 133			
Bromomethane	19.7300	0.50	0.40	20.0000		98.6	7 - 205			
Carbon disulfide	12.7300	1.0	0.07	20.0000		63.6	55 - 131			
Carbon tetrachloride	17.7500	0.50	0.09	20.0000		88.8	63 - 133			
Chlorobenzene	17.2200	0.50	0.13	20.0000		86.1	86 - 113			
Chloroethane	13.8400	0.50	0.15	20.0000		69.2	66 - 141			
Chloroform	14.3800	0.50	0.11	20.0000		71.9	63 - 127			
Chloromethane	14.2500	0.50	0.12	20.0000		71.2	0 - 207			
cis-1,2-Dichloroethene	14.5200	0.50	0.14	20.0000		72.6	64 - 126			
cis-1,3-Dichloropropene	18.3200	0.50	0.13	20.0000		91.6	70 - 141			
Di-isopropyl ether	12.2600	0.50	0.15	20.0000		61.3	56 - 131			
Dibromochloromethane	17.0400	0.50	0.16	20.0000		85.2	67 - 135			
Dibromomethane	16.0700	0.50	0.19	20.0000		80.4	74 - 118			
Dichlorodifluoromethane	16.3000	0.50	0.18	20.0000		81.5	14 - 181			
Ethyl Acetate	110.180	10	8.7	200.000		55.1	49 - 128			
Ethyl Ether	133.360	10	2.0	200.000		66.7	53 - 143			

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Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B9K0170 - MSVOA_LL_W (continued)										
LCS (B9K0170-BS1) - Continued					Prepared: 11/11/2019 Analyzed: 11/11/2019					
Ethyl tert-butyl ether	11.9800	0.50	0.21	20.0000		59.9	54 - 132			
Ethylbenzene	32.5100	0.50	0.13	40.0000		81.3	77 - 118			
Freon-113	15.6200	0.50	0.13	20.0000		78.1	68 - 145			
Hexachlorobutadiene	19.7100	0.50	0.15	20.0000		98.6	66 - 125			
Isopropylbenzene	16.3700	0.50	0.10	20.0000		81.8	68 - 137			
m,p-Xylene	33.4800	1.0	0.19	40.0000		83.7	78 - 126			
Methylene chloride	16.0100	1.0	0.71	20.0000		80.0	51 - 149			
MTBE	12.4300	0.50	0.26	20.0000		62.2	63 - 128			L4
n-Butylbenzene	15.6000	0.50	0.11	20.0000		78.0	63 - 127			
n-Propylbenzene	15.0100	0.50	0.10	20.0000		75.0	69 - 124			
Naphthalene	14.2200	0.50	0.41	20.0000		71.1	60 - 126			
o-Xylene	33.7700	0.50	0.13	40.0000		84.4	79 - 126			
sec-Butylbenzene	15.8000	0.50	0.09	20.0000		79.0	69 - 124			
Styrene	17.1200	0.50	0.13	20.0000		85.6	80 - 127			
tert-Amyl methyl ether	12.2900	0.50	0.41	20.0000		61.4	49 - 130			
tert-Butanol	52.2500	10	2.4	100.000		52.2	29 - 163			
tert-Butylbenzene	16.2900	0.50	0.09	20.0000		81.4	71 - 124			
Tetrachloroethene	19.0500	0.50	0.10	20.0000		95.2	73 - 129			
Toluene	34.8500	0.50	0.12	40.0000		87.1	78 - 121			
trans-1,2-Dichloroethene	14.0500	0.50	0.09	20.0000		70.2	58 - 141			
trans-1,3-Dichloropropene	15.8600	0.50	0.23	20.0000		79.3	68 - 128			
Trichloroethene	18.1900	0.50	0.10	20.0000		91.0	73 - 126			
Trichlorofluoromethane	15.9100	0.50	0.23	20.0000		79.6	62 - 146			
Vinyl acetate	130.600	10	1.7	200.000		65.3	53 - 153			
Vinyl chloride	15.0900	0.50	0.13	20.0000		75.4	61 - 137			
Gasoline Range Organics	ND	50	15			NR	70 - 130			
Surrogate: 1,2-Dichloroethane-d4	*19.84*			*25.0000*		*79.4*	*59 - 158*			
Surrogate: 4-Bromofluorobenzene	*25.25*			*25.0000*		*101*	*71 - 127*			
Surrogate: Dibromofluoromethan	*21.61*			*25.0000*		*86.4*	*66 - 147*			
Surrogate: Toluene-d8	*26.31*			*25.0000*		*105*	*77 - 138*			
LCS Dup (B9K0170-BSD1)					Prepared: 11/11/2019 Analyzed: 11/11/2019					
1,1,1,2-Tetrachloroethane	19.2300	0.50	0.11	20.0000		96.2	71 - 133	8.74	20	
1,1,1-Trichloroethane	16.9200	0.50	0.21	20.0000		84.6	62 - 124	12.3	20	
1,1,2,2-Tetrachloroethane	15.7600	0.50	0.36	20.0000		78.8	50 - 131	17.3	20	
1,1,2-Trichloroethane	19.2200	0.50	0.25	20.0000		96.1	77 - 121	17.7	20	
1,1-Dichloroethane	15.0900	0.50	0.09	20.0000		75.4	52 - 130	9.00	20	
1,1-Dichloroethene	17.8000	0.50	0.13	20.0000		89.0	61 - 136	11.5	20	
1,1-Dichloropropene	20.7100	0.50	0.13	20.0000		104	80 - 128	13.6	20	
1,2,3-Trichloropropane	15.5200	0.50	0.39	20.0000		77.6	59 - 126	19.3	20	

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Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B9K0170 - MSVOA_LL_W (continued)										
LCS Dup (B9K0170-BSD1) - Continued					Prepared: 11/11/2019 Analyzed: 11/11/2019					
1,2,3-Trichlorobenzene	19.8400	0.50	0.18	20.0000		99.2	69 - 138	12.1	20	
1,2,4-Trichlorobenzene	19.8200	0.50	0.16	20.0000		99.1	78 - 125	11.5	20	
1,2,4-Trimethylbenzene	17.2800	0.50	0.14	20.0000		86.4	70 - 126	9.96	20	
1,2-Dibromo-3-chloropropane	14.2300	0.50	0.41	20.0000		71.2	58 - 127	20.9	20	R
1,2-Dibromoethane	19.8600	0.50	0.24	20.0000		99.3	76 - 120	16.2	20	
1,2-Dichlorobenzene	18.5500	0.50	0.20	20.0000		92.8	82 - 117	11.7	20	
1,2-Dichloroethane	17.5200	0.50	0.20	20.0000		87.6	66 - 126	14.3	20	
1,2-Dichloropropane	17.5500	0.50	0.15	20.0000		87.8	70 - 117	13.0	20	
1,3,5-Trimethylbenzene	17.2700	0.50	0.13	20.0000		86.4	71 - 125	8.89	20	
1,3-Dichlorobenzene	18.8500	0.50	0.16	20.0000		94.2	81 - 116	12.0	20	
1,3-Dichloropropane	17.3000	0.50	0.21	20.0000		86.5	69 - 124	14.5	20	
1,4-Dichlorobenzene	18.2700	0.50	0.17	20.0000		91.4	80 - 114	8.86	20	
2,2-Dichloropropane	16.2400	0.50	0.38	20.0000		81.2	58 - 132	7.87	20	
2-Chlorotoluene	16.8800	0.50	0.11	20.0000		84.4	71 - 119	10.7	20	
4-Chlorotoluene	16.8100	0.50	0.12	20.0000		84.0	72 - 122	9.73	20	
4-Isopropyltoluene	17.9000	0.50	0.11	20.0000		89.5	69 - 126	9.30	20	
Benzene	36.3800	0.50	0.13	40.0000		91.0	80 - 116	13.5	20	
Bromobenzene	18.5800	0.50	0.21	20.0000		92.9	77 - 118	11.1	20	
Bromochloromethane	18.1500	0.50	0.16	20.0000		90.8	68 - 121	8.44	20	
Bromodichloromethane	18.6000	0.50	0.14	20.0000		93.0	73 - 118	13.5	20	
Bromoform	20.2900	0.50	0.20	20.0000		101	65 - 133	15.2	20	
Bromomethane	21.6300	0.50	0.40	20.0000		108	7 - 205	9.19	20	
Carbon disulfide	13.9000	1.0	0.07	20.0000		69.5	55 - 131	8.79	20	
Carbon tetrachloride	19.5500	0.50	0.09	20.0000		97.8	63 - 133	9.65	20	
Chlorobenzene	18.6800	0.50	0.13	20.0000		93.4	86 - 113	8.13	20	
Chloroethane	15.3900	0.50	0.15	20.0000		77.0	66 - 141	10.6	20	
Chloroform	15.7000	0.50	0.11	20.0000		78.5	63 - 127	8.78	20	
Chloromethane	15.0800	0.50	0.12	20.0000		75.4	0 - 207	5.66	20	
cis-1,2-Dichloroethene	16.1900	0.50	0.14	20.0000		81.0	64 - 126	10.9	20	
cis-1,3-Dichloropropene	20.6500	0.50	0.13	20.0000		103	70 - 141	12.0	20	
Di-isopropyl ether	13.5700	0.50	0.15	20.0000		67.8	56 - 131	10.1	20	
Dibromochloromethane	19.7200	0.50	0.16	20.0000		98.6	67 - 135	14.6	20	
Dibromomethane	18.9300	0.50	0.19	20.0000		94.6	74 - 118	16.3	20	
Dichlorodifluoromethane	17.8000	0.50	0.18	20.0000		89.0	14 - 181	8.80	20	
Ethyl Acetate	134.930	10	8.7	200.000		67.5	49 - 128	20.2	20	R
Ethyl Ether	155.220	10	2.0	200.000		77.6	53 - 143	15.2	20	
Ethyl tert-butyl ether	13.9100	0.50	0.21	20.0000		69.6	54 - 132	14.9	20	
Ethylbenzene	36.3800	0.50	0.13	40.0000		91.0	77 - 118	11.2	20	
Freon-113	16.6800	0.50	0.13	20.0000		83.4	68 - 145	6.56	20	
Hexachlorobutadiene	21.8100	0.50	0.15	20.0000		109	66 - 125	10.1	20	

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Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B9K0170 - MSVOA_LL_W (continued)										
LCS Dup (B9K0170-BSD1) - Continued					Prepared: 11/11/2019 Analyzed: 11/11/2019					
Isopropylbenzene	18.3000	0.50	0.10	20.0000		91.5	68 - 137	11.1	20	
m,p-Xylene	36.9000	1.0	0.19	40.0000		92.2	78 - 126	9.72	20	
Methylene chloride	17.5200	1.0	0.71	20.0000		87.6	51 - 149	9.01	20	
MTBE	14.5900	0.50	0.26	20.0000		73.0	63 - 128	16.0	20	
n-Butylbenzene	17.0600	0.50	0.11	20.0000		85.3	63 - 127	8.94	20	
n-Propylbenzene	16.6500	0.50	0.10	20.0000		83.2	69 - 124	10.4	20	
Naphthalene	17.1300	0.50	0.41	20.0000		85.6	60 - 126	18.6	20	
o-Xylene	37.5700	0.50	0.13	40.0000		93.9	79 - 126	10.7	20	
sec-Butylbenzene	17.4200	0.50	0.09	20.0000		87.1	69 - 124	9.75	20	
Styrene	19.0100	0.50	0.13	20.0000		95.0	80 - 127	10.5	20	
tert-Amyl methyl ether	14.2500	0.50	0.41	20.0000		71.2	49 - 130	14.8	20	
tert-Butanol	66.4500	10	2.4	100.000		66.4	29 - 163	23.9	20	R
tert-Butylbenzene	18.1300	0.50	0.09	20.0000		90.6	71 - 124	10.7	20	
Tetrachloroethene	20.7400	0.50	0.10	20.0000		104	73 - 129	8.49	20	
Toluene	39.8300	0.50	0.12	40.0000		99.6	78 - 121	13.3	20	
trans-1,2-Dichloroethene	15.7400	0.50	0.09	20.0000		78.7	58 - 141	11.3	20	
trans-1,3-Dichloropropene	18.2900	0.50	0.23	20.0000		91.4	68 - 128	14.2	20	
Trichloroethene	20.4500	0.50	0.10	20.0000		102	73 - 126	11.7	20	
Trichlorofluoromethane	17.4600	0.50	0.23	20.0000		87.3	62 - 146	9.29	20	
Vinyl acetate	151.960	10	1.7	200.000		76.0	53 - 153	15.1	20	
Vinyl chloride	16.8400	0.50	0.13	20.0000		84.2	61 - 137	11.0	20	
Gasoline Range Organics	ND	50	15			NR	70 - 130		20	
Surrogate: 1,2-Dichloroethane-d4	*19.80*			*25.0000*		*79.2*	*59 - 158*			
Surrogate: 4-Bromofluorobenzene	*25.12*			*25.0000*		*100*	*71 - 127*			
Surrogate: Dibromofluoromethan	*21.73*			*25.0000*		*86.9*	*66 - 147*			
Surrogate: Toluene-d8	*26.05*			*25.0000*		*104*	*77 - 138*			

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South San Francisco , CA 94080	Reported : 11/21/2019

Volatile Organic Compounds by EPA 5035 / EPA 8260B - Quality Control

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B9K0259 - MSVOA_S										
Blank (B9K0259-BLK1)							Prepared: 11/13/2019 Analyzed: 11/13/2019			
1,1,1,2-Tetrachloroethane	ND	5.0	0.40							
1,1,1-Trichloroethane	ND	5.0	0.79							
1,1,2,2-Tetrachloroethane	ND	5.0	0.70							
1,1,2-Trichloroethane	ND	5.0	0.57							
1,1-Dichloroethane	ND	5.0	0.63							
1,1-Dichloroethene	ND	5.0	2.9							
1,1-Dichloropropene	ND	5.0	0.26							
1,2,3-Trichloropropane	ND	5.0	0.72							
1,2,3-Trichlorobenzene	ND	5.0	0.57							
1,2,4-Trichlorobenzene	ND	5.0	0.61							
1,2,4-Trimethylbenzene	ND	5.0	1.0							
1,2-Dibromo-3-chloropropane	ND	10	1.2							
1,2-Dibromoethane	ND	5.0	0.28							
1,2-Dichlorobenzene	ND	5.0	0.45							
1,2-Dichloroethane	ND	5.0	0.88							
1,2-Dichloropropane	ND	5.0	0.67							
1,3,5-Trimethylbenzene	ND	5.0	0.35							
1,3-Dichlorobenzene	ND	5.0	0.41							
1,3-Dichloropropane	ND	5.0	0.49							
1,4-Dichlorobenzene	ND	5.0	0.39							
2,2-Dichloropropane	ND	5.0	0.61							
2-Chlorotoluene	ND	5.0	0.26							
4-Chlorotoluene	ND	5.0	0.20							
4-Isopropyltoluene	ND	5.0	0.28							
Benzene	ND	5.0	0.37							
Bromobenzene	ND	5.0	0.44							
Bromochloromethane	ND	5.0	0.99							
Bromodichloromethane	ND	5.0	0.58							
Bromoform	ND	5.0	0.37							
Bromomethane	ND	5.0	4.7							
Carbon disulfide	ND	5.0	3.2							
Carbon tetrachloride	ND	5.0	0.65							
Chlorobenzene	ND	5.0	0.29							
Chloroethane	ND	5.0	4.0							
Chloroform	ND	5.0	0.75							
Chloromethane	ND	5.0	0.98							
cis-1,2-Dichloroethene	ND	5.0	0.82							
cis-1,3-Dichloropropene	ND	5.0	0.22							
Di-isopropyl ether	ND	5.0	0.55							
Dibromochloromethane	ND	5.0	0.20							

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South San Francisco , CA 94080	Reported : 11/21/2019

Volatile Organic Compounds by EPA 5035 / EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B9K0259 - MSVOA_S (continued)										
Blank (B9K0259-BLK1) - Continued						Prepared: 11/13/2019 Analyzed: 11/13/2019				
Dibromomethane	ND	5.0	0.56							
Dichlorodifluoromethane	ND	5.0	2.6							
Ethyl Acetate	ND	50	10							
Ethyl Ether	ND	50	20							
Ethyl tert-butyl ether	ND	5.0	0.32							
Ethylbenzene	ND	5.0	0.26							
Freon-113	ND	5.0	3.7							
Hexachlorobutadiene	ND	5.0	0.40							
Isopropylbenzene	ND	5.0	0.32							
m,p-Xylene	ND	10	0.86							
Methylene chloride	ND	5.0	3.4							
MTBE	ND	5.0	1.3							
n-Butylbenzene	ND	5.0	0.42							
n-Propylbenzene	ND	5.0	0.25							
Naphthalene	ND	5.0	0.50							
o-Xylene	ND	5.0	0.46							
sec-Butylbenzene	ND	5.0	0.36							
Styrene	ND	5.0	0.38							
tert-Amyl methyl ether	ND	5.0	0.43							
tert-Butanol	ND	100	7.4							
tert-Butylbenzene	ND	5.0	0.33							
Tetrachloroethene	ND	5.0	0.31							
Toluene	ND	5.0	0.47							
trans-1,2-Dichloroethene	ND	5.0	1.4							
trans-1,3-Dichloropropene	ND	5.0	0.48							
Trichloroethene	ND	5.0	0.64							
Trichlorofluoromethane	ND	5.0	0.79							
Vinyl acetate	ND	50	9.0							
Vinyl chloride	ND	5.0	0.74							
Surrogate: 1,2-Dichloroethane-d4	*48.93*			*50.0000*		*97.9*	*60 - 145*			
Surrogate: 4-Bromofluorobenzene	*47.61*			*50.0000*		*95.2*	*68 - 121*			
Surrogate: Dibromofluoromethan	*46.49*			*50.0000*		*93.0*	*65 - 137*			
Surrogate: Toluene-d8	*49.20*			*50.0000*		*98.4*	*82 - 119*			
LCS (B9K0259-BS1)						Prepared: 11/13/2019 Analyzed: 11/13/2019				
1,1,1,2-Tetrachloroethane	50.5500	5.0	0.40	50.0000		101	82 - 114			
1,1,1-Trichloroethane	50.4000	5.0	0.79	50.0000		101	70 - 121			
1,1,2,2-Tetrachloroethane	46.5300	5.0	0.70	50.0000		93.1	65 - 116			
1,1,2-Trichloroethane	48.2300	5.0	0.57	50.0000		96.5	73 - 114			
1,1-Dichloroethane	48.7600	5.0	0.63	50.0000		97.5	69 - 117			

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Volatile Organic Compounds by EPA 5035 / EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B9K0259 - MSVOA_S (continued)										
LCS (B9K0259-BS1) - Continued					Prepared: 11/13/2019 Analyzed: 11/13/2019					
1,1-Dichloroethene	48.9300	5.0	2.9	50.0000		97.9	57 - 128			
1,1-Dichloropropene	53.8100	5.0	0.26	50.0000		108	76 - 122			
1,2,3-Trichloropropane	46.6300	5.0	0.72	50.0000		93.3	65 - 116			
1,2,3-Trichlorobenzene	50.8800	5.0	0.57	50.0000		102	72 - 130			
1,2,4-Trichlorobenzene	53.9700	5.0	0.61	50.0000		108	74 - 141			
1,2,4-Trimethylbenzene	52.4400	5.0	1.0	50.0000		105	81 - 126			
1,2-Dibromo-3-chloropropane	49.0300	10	1.2	50.0000		98.1	63 - 126			
1,2-Dibromoethane	48.2400	5.0	0.28	50.0000		96.5	75 - 113			
1,2-Dichlorobenzene	51.5900	5.0	0.45	50.0000		103	83 - 114			
1,2-Dichloroethane	47.3500	5.0	0.88	50.0000		94.7	73 - 115			
1,2-Dichloropropane	50.6700	5.0	0.67	50.0000		101	75 - 117			
1,3,5-Trimethylbenzene	52.2800	5.0	0.35	50.0000		105	80 - 126			
1,3-Dichlorobenzene	52.5100	5.0	0.41	50.0000		105	83 - 113			
1,3-Dichloropropane	50.7800	5.0	0.49	50.0000		102	79 - 108			
1,4-Dichlorobenzene	51.7300	5.0	0.39	50.0000		103	82 - 114			
2,2-Dichloropropane	51.5400	5.0	0.61	50.0000		103	66 - 135			
2-Chlorotoluene	51.1200	5.0	0.26	50.0000		102	79 - 117			
4-Chlorotoluene	51.8200	5.0	0.20	50.0000		104	77 - 118			
4-Isopropyltoluene	54.1600	5.0	0.28	50.0000		108	81 - 129			
Benzene	98.0700	5.0	0.37	100.000		98.1	78 - 112			
Bromobenzene	49.6400	5.0	0.44	50.0000		99.3	79 - 111			
Bromochloromethane	47.9400	5.0	0.99	50.0000		95.9	69 - 116			
Bromodichloromethane	48.9200	5.0	0.58	50.0000		97.8	79 - 111			
Bromoform	47.3400	5.0	0.37	50.0000		94.7	75 - 119			
Bromomethane	61.3100	5.0	4.7	50.0000		123	31 - 168			
Carbon disulfide	43.8900	5.0	3.2	50.0000		87.8	54 - 141			
Carbon tetrachloride	52.8600	5.0	0.65	50.0000		106	74 - 125			
Chlorobenzene	51.2500	5.0	0.29	50.0000		102	83 - 112			
Chloroethane	64.4400	5.0	4.0	50.0000		129	53 - 144			
Chloroform	48.7100	5.0	0.75	50.0000		97.4	69 - 118			
Chloromethane	52.4800	5.0	0.98	50.0000		105	46 - 137			
cis-1,2-Dichloroethene	49.0400	5.0	0.82	50.0000		98.1	68 - 118			
cis-1,3-Dichloropropene	51.9300	5.0	0.22	50.0000		104	77 - 121			
Di-isopropyl ether	41.1900	5.0	0.55	50.0000		82.4	60 - 129			
Dibromochloromethane	49.9600	5.0	0.20	50.0000		99.9	80 - 111			
Dibromomethane	48.2100	5.0	0.56	50.0000		96.4	78 - 108			
Dichlorodifluoromethane	45.2300	5.0	2.6	50.0000		90.5	41 - 146			
Ethyl Acetate	488.620	50	10	500.000		97.7	52 - 130			
Ethyl Ether	559.590	50	20	500.000		112	54 - 138			
Ethyl tert-butyl ether	46.9500	5.0	0.32	50.0000		93.9	52 - 141			

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Volatile Organic Compounds by EPA 5035 / EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B9K0259 - MSVOA_S (continued)										
LCS (B9K0259-BS1) - Continued					Prepared: 11/13/2019 Analyzed: 11/13/2019					
Ethylbenzene	100.220	5.0	0.26	100.000		100	82 - 121			
Freon-113	52.1300	5.0	3.7	50.0000		104	59 - 139			
Hexachlorobutadiene	56.0700	5.0	0.40	50.0000		112	69 - 143			
Isopropylbenzene	49.6400	5.0	0.32	50.0000		99.3	78 - 124			
m,p-Xylene	104.280	10	0.86	100.000		104	85 - 118			
Methylene chloride	54.0600	5.0	3.4	50.0000		108	44 - 146			
MTBE	45.7600	5.0	1.3	50.0000		91.5	61 - 122			
n-Butylbenzene	55.6600	5.0	0.42	50.0000		111	78 - 135			
n-Propylbenzene	60.4800	5.0	0.25	50.0000		121	78 - 127			
Naphthalene	48.9100	5.0	0.50	50.0000		97.8	68 - 129			
o-Xylene	100.720	5.0	0.46	100.000		101	86 - 118			
sec-Butylbenzene	53.3100	5.0	0.36	50.0000		107	80 - 127			
Styrene	51.5600	5.0	0.38	50.0000		103	85 - 117			
tert-Amyl methyl ether	46.9300	5.0	0.43	50.0000		93.9	48 - 135			
tert-Butanol	223.690	100	7.4	250.000		89.5	0 - 175			
tert-Butylbenzene	52.6100	5.0	0.33	50.0000		105	81 - 122			
Tetrachloroethene	54.9800	5.0	0.31	50.0000		110	77 - 122			
Toluene	95.4600	5.0	0.47	100.000		95.5	79 - 114			
trans-1,2-Dichloroethene	50.8300	5.0	1.4	50.0000		102	66 - 125			
trans-1,3-Dichloropropene	51.2500	5.0	0.48	50.0000		102	76 - 120			
Trichloroethene	52.0000	5.0	0.64	50.0000		104	79 - 117			
Trichlorofluoromethane	49.4900	5.0	0.79	50.0000		99.0	55 - 133			
Vinyl acetate	431.040	50	9.0	500.000		86.2	52 - 141			
Vinyl chloride	50.1000	5.0	0.74	50.0000		100	58 - 132			
Surrogate: 1,2-Dichloroethane-d4	*51.62*			*50.0000*		*103*	*60 - 145*			
Surrogate: 4-Bromofluorobenzene	*48.86*			*50.0000*		*97.7*	*68 - 121*			
Surrogate: Dibromofluoromethan	*48.36*			*50.0000*		*96.7*	*65 - 137*			
Surrogate: Toluene-d8	*48.59*			*50.0000*		*97.2*	*82 - 119*			
LCS Dup (B9K0259-BSD1)					Prepared: 11/13/2019 Analyzed: 11/13/2019					
1,1,1,2-Tetrachloroethane	49.6200	5.0	0.40	50.0000		99.2	82 - 114	1.86	20	
1,1,1-Trichloroethane	47.1700	5.0	0.79	50.0000		94.3	70 - 121	6.62	20	
1,1,2,2-Tetrachloroethane	47.9600	5.0	0.70	50.0000		95.9	65 - 116	3.03	20	
1,1,2-Trichloroethane	50.5600	5.0	0.57	50.0000		101	73 - 114	4.72	20	
1,1-Dichloroethane	46.5500	5.0	0.63	50.0000		93.1	69 - 117	4.64	20	
1,1-Dichloroethene	41.2600	5.0	2.9	50.0000		82.5	57 - 128	17.0	20	
1,1-Dichloropropene	49.8700	5.0	0.26	50.0000		99.7	76 - 122	7.60	20	
1,2,3-Trichloropropane	49.0800	5.0	0.72	50.0000		98.2	65 - 116	5.12	20	
1,2,3-Trichlorobenzene	51.0200	5.0	0.57	50.0000		102	72 - 130	0.275	20	
1,2,4-Trichlorobenzene	52.3100	5.0	0.61	50.0000		105	74 - 141	3.12	20	

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Volatile Organic Compounds by EPA 5035 / EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B9K0259 - MSVOA_S (continued)										
LCS Dup (B9K0259-BSD1) - Continued					Prepared: 11/13/2019 Analyzed: 11/13/2019					
1,2,4-Trimethylbenzene	50.1500	5.0	1.0	50.0000		100	81 - 126	4.46	20	
1,2-Dibromo-3-chloropropane	49.0400	10	1.2	50.0000		98.1	63 - 126	0.0204	20	
1,2-Dibromoethane	51.9200	5.0	0.28	50.0000		104	75 - 113	7.35	20	
1,2-Dichlorobenzene	49.2300	5.0	0.45	50.0000		98.5	83 - 114	4.68	20	
1,2-Dichloroethane	47.2500	5.0	0.88	50.0000		94.5	73 - 115	0.211	20	
1,2-Dichloropropane	49.1200	5.0	0.67	50.0000		98.2	75 - 117	3.11	20	
1,3,5-Trimethylbenzene	50.0500	5.0	0.35	50.0000		100	80 - 126	4.36	20	
1,3-Dichlorobenzene	50.1800	5.0	0.41	50.0000		100	83 - 113	4.54	20	
1,3-Dichloropropane	49.0400	5.0	0.49	50.0000		98.1	79 - 108	3.49	20	
1,4-Dichlorobenzene	49.8200	5.0	0.39	50.0000		99.6	82 - 114	3.76	20	
2,2-Dichloropropane	48.8300	5.0	0.61	50.0000		97.7	66 - 135	5.40	20	
2-Chlorotoluene	49.6900	5.0	0.26	50.0000		99.4	79 - 117	2.84	20	
4-Chlorotoluene	49.9700	5.0	0.20	50.0000		99.9	77 - 118	3.63	20	
4-Isopropyltoluene	50.9900	5.0	0.28	50.0000		102	81 - 129	6.03	20	
Benzene	92.8900	5.0	0.37	100.000		92.9	78 - 112	5.43	20	
Bromobenzene	50.0000	5.0	0.44	50.0000		100	79 - 111	0.723	20	
Bromochloromethane	47.2700	5.0	0.99	50.0000		94.5	69 - 116	1.41	20	
Bromodichloromethane	48.4800	5.0	0.58	50.0000		97.0	79 - 111	0.903	20	
Bromoform	48.9200	5.0	0.37	50.0000		97.8	75 - 119	3.28	20	
Bromomethane	52.8400	5.0	4.7	50.0000		106	31 - 168	14.8	20	
Carbon disulfide	37.0700	5.0	3.2	50.0000		74.1	54 - 141	16.8	20	
Carbon tetrachloride	49.4500	5.0	0.65	50.0000		98.9	74 - 125	6.67	20	
Chlorobenzene	49.0200	5.0	0.29	50.0000		98.0	83 - 112	4.45	20	
Chloroform	46.6700	5.0	0.75	50.0000		93.3	69 - 118	4.28	20	
Chloromethane	46.4100	5.0	0.98	50.0000		92.8	46 - 137	12.3	20	
cis-1,2-Dichloroethene	46.8200	5.0	0.82	50.0000		93.6	68 - 118	4.63	20	
cis-1,3-Dichloropropene	52.0400	5.0	0.22	50.0000		104	77 - 121	0.212	20	
Di-isopropyl ether	48.5700	5.0	0.55	50.0000		97.1	60 - 129	16.4	20	
Dibromochloromethane	50.1200	5.0	0.20	50.0000		100	80 - 111	0.320	20	
Dibromomethane	47.9600	5.0	0.56	50.0000		95.9	78 - 108	0.520	20	
Dichlorodifluoromethane	42.9900	5.0	2.6	50.0000		86.0	41 - 146	5.08	20	
Ethyl Acetate	487.300	50	10	500.000		97.5	52 - 130	0.271	20	
Ethyl Ether	474.620	50	20	500.000		94.9	54 - 138	16.4	20	
Ethyl tert-butyl ether	45.5400	5.0	0.32	50.0000		91.1	52 - 141	3.05	20	
Ethylbenzene	93.0100	5.0	0.26	100.000		93.0	82 - 121	7.46	20	
Freon-113	45.2200	5.0	3.7	50.0000		90.4	59 - 139	14.2	20	
Hexachlorobutadiene	51.6000	5.0	0.40	50.0000		103	69 - 143	8.30	20	
Isopropylbenzene	48.4900	5.0	0.32	50.0000		97.0	78 - 124	2.34	20	
m,p-Xylene	97.0600	10	0.86	100.000		97.1	85 - 118	7.17	20	
Methylene chloride	46.4300	5.0	3.4	50.0000		92.9	44 - 146	15.2	20	

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Volatile Organic Compounds by EPA 5035 / EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B9K0259 - MSVOA_S (continued)										
LCS Dup (B9K0259-BSD1) - Continued					Prepared: 11/13/2019 Analyzed: 11/13/2019					
MTBE	51.0000	5.0	1.3	50.0000		102	61 - 122	10.8	20	
n-Butylbenzene	51.8200	5.0	0.42	50.0000		104	78 - 135	7.15	20	
n-Propylbenzene	58.6100	5.0	0.25	50.0000		117	78 - 127	3.14	20	
Naphthalene	49.5200	5.0	0.50	50.0000		99.0	68 - 129	1.24	20	
o-Xylene	95.0100	5.0	0.46	100.000		95.0	86 - 118	5.83	20	
sec-Butylbenzene	50.4300	5.0	0.36	50.0000		101	80 - 127	5.55	20	
Styrene	49.3300	5.0	0.38	50.0000		98.7	85 - 117	4.42	20	
tert-Amyl methyl ether	46.2400	5.0	0.43	50.0000		92.5	48 - 135	1.48	20	
tert-Butanol	239.680	100	7.4	250.000		95.9	0 - 175	6.90	20	
tert-Butylbenzene	50.3300	5.0	0.33	50.0000		101	81 - 122	4.43	20	
Tetrachloroethene	49.3700	5.0	0.31	50.0000		98.7	77 - 122	10.8	20	
Toluene	92.2300	5.0	0.47	100.000		92.2	79 - 114	3.44	20	
trans-1,2-Dichloroethene	54.1500	5.0	1.4	50.0000		108	66 - 125	6.33	20	
trans-1,3-Dichloropropene	53.7900	5.0	0.48	50.0000		108	76 - 120	4.84	20	
Trichloroethene	50.0000	5.0	0.64	50.0000		100	79 - 117	3.92	20	
Trichlorofluoromethane	44.1700	5.0	0.79	50.0000		88.3	55 - 133	11.4	20	
Vinyl acetate	421.390	50	9.0	500.000		84.3	52 - 141	2.26	20	
Vinyl chloride	43.0100	5.0	0.74	50.0000		86.0	58 - 132	15.2	20	
Surrogate: 1,2-Dichloroethane-d4	*48.69*			*50.0000*		*97.4*	*60 - 145*			
Surrogate: 4-Bromofluorobenzene	*47.12*			*50.0000*		*94.2*	*68 - 121*			
Surrogate: Dibromofluoromethan	*46.94*			*50.0000*		*93.9*	*65 - 137*			
Surrogate: Toluene-d8	*47.93*			*50.0000*		*95.9*	*82 - 119*			

Certificate of Analysis

Burns and McDonnell	Project Number : SCVTA-1217
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South San Francisco , CA 94080	Reported : 11/21/2019

Volatile Organic Compounds by EPA 5035 / EPA 8260B - Quality Control

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B9K0260 - MSVOA_S										
Blank (B9K0260-BLK1)						Prepared: 11/13/2019 Analyzed: 11/13/2019				
GRO (C4 - C12)	ND	1000	80							
Surrogate: 1,2-Dichloroethane-d4	*37.05*			*50.0000*		*74.1*	*60 - 145*			
Surrogate: 4-Bromofluorobenzene	*38.37*			*50.0000*		*76.7*	*68 - 121*			
Surrogate: Dibromofluoromethan	*44.81*			*50.0000*		*89.6*	*65 - 137*			
Surrogate: Toluene-d8	*48.64*			*50.0000*		*97.3*	*82 - 119*			
LCS (B9K0260-BS1)						Prepared: 11/13/2019 Analyzed: 11/13/2019				
Gasoline Range Organics	5220.00	1000	80	5000.00		104	70 - 130			
Surrogate: 1,2-Dichloroethane-d4	*43.03*			*50.0000*		*86.1*	*60 - 145*			
Surrogate: 4-Bromofluorobenzene	*39.67*			*50.0000*		*79.3*	*68 - 121*			
Surrogate: Dibromofluoromethan	*46.77*			*50.0000*		*93.5*	*65 - 137*			
Surrogate: Toluene-d8	*46.53*			*50.0000*		*93.1*	*82 - 119*			
LCS Dup (B9K0260-BSD1)						Prepared: 11/13/2019 Analyzed: 11/13/2019				
Gasoline Range Organics	5040.00	1000	80	5000.00		101	70 - 130	3.51	20	
Surrogate: 1,2-Dichloroethane-d4	*43.83*			*50.0000*		*87.7*	*60 - 145*			
Surrogate: 4-Bromofluorobenzene	*40.69*			*50.0000*		*81.4*	*68 - 121*			
Surrogate: Dibromofluoromethan	*47.56*			*50.0000*		*95.1*	*65 - 137*			
Surrogate: Toluene-d8	*45.93*			*50.0000*		*91.9*	*82 - 119*			

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Burns and McDonnell	Project Number : SCVTA-1217
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Semivolatile Organic Compounds by EPA 8270C - Quality Control

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B9K0190 - MSSEMI_S										
Blank (B9K0190-BLK1)					Prepared: 11/8/2019 Analyzed: 11/12/2019					
1,2,4-Trichlorobenzene	ND	330	50							
1,2-Dichlorobenzene	ND	330	26							
1,3-Dichlorobenzene	ND	330	27							
1,4-Dichlorobenzene	ND	330	27							
2,4,5-Trichlorophenol	ND	330	30							
2,4,6-Trichlorophenol	ND	330	35							
2,4-Dichlorophenol	ND	1600	34							
2,4-Dimethylphenol	ND	330	26							
2,4-Dinitrophenol	ND	1600	86							
2,4-Dinitrotoluene	ND	330	33							
2,6-Dinitrotoluene	ND	330	49							
2-Chloronaphthalene	ND	330	28							
2-Chlorophenol	ND	330	31							
2-Methylnaphthalene	ND	330	27							
2-Methylphenol	ND	330	36							
2-Nitroaniline	ND	1600	43							
2-Nitrophenol	ND	330	45							
3,3´-Dichlorobenzidine	ND	660	280							
3-Nitroaniline	ND	1600	49							
4,6-Dinitro-2-methyphenol	ND	1600	41							
4-Bromophenyl-phenylether	ND	330	64							
4-Chloro-3-methylphenol	ND	660	71							
4-Chloroaniline	ND	660	53							
4-Chlorophenyl-phenylether	ND	330	33							
4-Methylphenol	ND	330	57							
4-Nitroaniline	ND	1600	37							
4-Nitrophenol	ND	330	64							
Acenaphthene	ND	330	43							
Acenaphthylene	ND	330	62							
Anthracene	ND	330	51							
Benzidine (M)	ND	1600	1400							
Benzo(a)anthracene	ND	330	44							
Benzo(a)pyrene	ND	330	64							
Benzo(b)fluoranthene	ND	330	65							
Benzo(g,h,i)perylene	ND	330	81							
Benzo(k)fluoranthene	ND	330	33							
Benzoic acid	ND	1600	890							
Benzyl alcohol	ND	660	32							
bis(2-chloroethoxy)methane	ND	330	64							
bis(2-Chloroethyl)ether	ND	330	66							

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Semivolatile Organic Compounds by EPA 8270C - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B9K0190 - MSSEMI_S (continued)										
Blank (B9K0190-BLK1) - Continued					Prepared: 11/8/2019 Analyzed: 11/12/2019					
bis(2-chloroisopropyl)ether	ND	330	76							
bis(2-ethylhexyl)phthalate	ND	330	63							
Butylbenzylphthalate	ND	330	41							
Chrysene	ND	330	84							
Di-n-butylphthalate	ND	330	51							
Di-n-octylphthalate	ND	330	63							
Dibenz(a,h)anthracene	ND	330	45							
Dibenzofuran	ND	330	58							
Diethyl phthalate	ND	330	58							
Dimethyl phthalate	ND	330	40							
Fluoranthene	ND	330	60							
Fluorene	ND	330	110							
Hexachlorobenzene	ND	330	55							
Hexachlorobutadiene	ND	660	53							
Hexachlorocyclopentadiene	ND	660	70							
Hexachloroethane	ND	330	94							
Indeno(1,2,3-cd)pyrene	ND	330	75							
Isophorone	ND	330	85							
N-Nitroso-di-n propylamine	ND	330	60							
N-Nitrosodiphenylamine	ND	330	32							
Naphthalene	ND	330	56							
Nitrobenzene	ND	330	57							
Pentachlorophenol	ND	1600	50							
Phenanthrene	ND	330	67							
Phenol	ND	330	34							
Pyrene	ND	330	72							
Pyridine	ND	1600	270							
Surrogate: 1,2-Dichlorobenzene-d	*2253*			*3333.33*		*67.6*	*28 - 77*			
Surrogate: 2,4,6-Tribromophenol	*2574*			*3325.00*		*77.4*	*17 - 157*			
Surrogate: 2-Chlorophenol-d4	*1887*			*3325.00*		*56.8*	*35 - 98*			
Surrogate: 2-Fluorobiphenyl	*2009*			*3333.33*		*60.3*	*35 - 88*			
Surrogate: 2-Fluorophenol	*1773*			*3325.00*		*53.3*	*32 - 88*			
Surrogate: 4-Terphenyl-d14	*2154*			*3333.33*		*64.6*	*35 - 114*			
Surrogate: Nitrobenzene-d5	*1913*			*3333.33*		*57.4*	*27 - 80*			
Surrogate: Phenol-d6	*1994*			*3325.00*		*60.0*	*35 - 98*			
LCS (B9K0190-BS1)					Prepared: 11/8/2019 Analyzed: 11/12/2019					
1,2,4-Trichlorobenzene	2441.33	330	50	3333.33		73.2	52 - 94			
1,2-Dichlorobenzene	2403.00	330	26	3333.33		72.1	47 - 95			
1,3-Dichlorobenzene	2330.67	330	27	3333.33		69.9	50 - 88			

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Semivolatile Organic Compounds by EPA 8270C - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B9K0190 - MSSEMI_S (continued)										
LCS (B9K0190-BS1) - Continued					Prepared: 11/8/2019 Analyzed: 11/12/2019					
1,4-Dichlorobenzene	2266.00	330	27	3333.33		68.0	47 - 89			
2,4,5-Trichlorophenol	2644.67	330	30	3333.33		79.3	66 - 113			
2,4,6-Trichlorophenol	2921.33	330	35	3333.33		87.6	59 - 113			
2,4-Dichlorophenol	2674.67	1600	34	3333.33		80.2	61 - 98			
2,4-Dimethylphenol	2671.67	330	26	3333.33		80.2	54 - 108			
2,4-Dinitrophenol	3481.00	1600	86	3333.33		104	58 - 135			
2,4-Dinitrotoluene	3070.33	330	33	3333.33		92.1	63 - 115			
2,6-Dinitrotoluene	3173.67	330	49	3333.33		95.2	67 - 111			
2-Chloronaphthalene	2536.00	330	28	3333.33		76.1	59 - 104			
2-Chlorophenol	2524.33	330	31	3333.33		75.7	50 - 97			
2-Methylnaphthalene	2274.67	330	27	3333.33		68.2	56 - 112			
2-Methylphenol	2642.33	330	36	3333.33		79.3	57 - 102			
2-Nitroaniline	3054.00	1600	43	3333.33		91.6	55 - 118			
2-Nitrophenol	2868.67	330	45	3333.33		86.1	61 - 100			
3,3´-Dichlorobenzidine	2659.33	660	280	3333.33		79.8	47 - 113			
3-Nitroaniline	2980.67	1600	49	3333.33		89.4	66 - 117			
4,6-Dinitro-2-methyphenol	3206.33	1600	41	3333.33		96.2	62 - 125			
4-Bromophenyl-phenylether	2892.00	330	64	3333.33		86.8	45 - 137			
4-Chloro-3-methylphenol	2881.33	660	71	3333.33		86.4	64 - 101			
4-Chloroaniline	2664.00	660	53	3333.33		79.9	59 - 110			
4-Chlorophenyl-phenylether	2722.67	330	33	3333.33		81.7	58 - 109			
4-Methylphenol	2100.33	330	57	3333.33		63.0	57 - 106			
4-Nitroaniline	2980.67	1600	37	3333.33		89.4	70 - 117			
4-Nitrophenol	3313.67	330	64	3333.33		99.4	62 - 114			
Acenaphthene	2325.67	330	43	3333.33		69.8	59 - 107			
Acenaphthylene	2484.67	330	62	3333.33		74.5	61 - 108			
Anthracene	2383.67	330	51	3333.33		71.5	63 - 106			
Benzidine (M)	1845.33	1600	1400	3333.33		55.4	25 - 109			
Benzo(a)anthracene	2852.33	330	44	3333.33		85.6	60 - 103			
Benzo(a)pyrene	2808.67	330	64	3333.33		84.3	63 - 110			
Benzo(b)fluoranthene	2656.67	330	65	3333.33		79.7	55 - 115			
Benzo(g,h,i)perylene	2830.33	330	81	3333.33		84.9	66 - 107			
Benzo(k)fluoranthene	2551.67	330	33	3333.33		76.6	60 - 115			
Benzoic acid	2671.67	1600	890	3333.33		80.2	16 - 110			
Benzyl alcohol	2275.67	660	32	3333.33		68.3	57 - 107			
bis(2-chloroethoxy)methane	2779.00	330	64	3333.33		83.4	51 - 97			
bis(2-Chloroethyl)ether	2660.67	330	66	3333.33		79.8	45 - 97			
bis(2-chloroisopropyl)ether	2765.33	330	76	3333.33		83.0	2 - 127			
bis(2-ethylhexyl)phthalate	3075.33	330	63	3333.33		92.3	62 - 115			
Butylbenzylphthalate	3048.67	330	41	3333.33		91.5	60 - 117			

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Semivolatile Organic Compounds by EPA 8270C - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B9K0190 - MSSEMI_S (continued)										
LCS (B9K0190-BS1) - Continued					Prepared: 11/8/2019 Analyzed: 11/12/2019					
Chrysene	2885.00	330	84	3333.33		86.6	52 - 120			
Di-n-butylphthalate	2964.67	330	51	3333.33		88.9	65 - 114			
Di-n-octylphthalate	3463.33	330	63	3333.33		104	52 - 128			
Dibenz(a,h)anthracene	2934.00	330	45	3333.33		88.0	62 - 113			
Dibenzofuran	2541.00	330	58	3333.33		76.2	66 - 110			
Diethyl phthalate	3007.00	330	58	3333.33		90.2	61 - 113			
Dimethyl phthalate	2932.67	330	40	3333.33		88.0	64 - 105			
Fluoranthene	2464.67	330	60	3333.33		73.9	62 - 106			
Fluorene	2730.33	330	110	3333.33		81.9	58 - 113			
Hexachlorobenzene	2863.67	330	55	3333.33		85.9	65 - 110			
Hexachlorobutadiene	2480.67	660	53	3333.33		74.4	48 - 96			
Hexachlorocyclopentadiene	2647.33	660	70	3333.33		79.4	46 - 110			
Hexachloroethane	2427.00	330	94	3333.33		72.8	48 - 91			
Indeno(1,2,3-cd)pyrene	2655.00	330	75	3333.33		79.7	60 - 112			
Isophorone	3021.67	330	85	3333.33		90.7	52 - 100			
N-Nitroso-di-n propylamine	2661.33	330	60	3333.33		79.8	51 - 99			
N-Nitrosodiphenylamine	2803.67	330	32	3333.33		84.1	65 - 107			
Naphthalene	2200.67	330	56	3333.33		66.0	53 - 95			
Nitrobenzene	2750.33	330	57	3333.33		82.5	51 - 97			
Pentachlorophenol	3158.67	1600	50	3333.33		94.8	58 - 118			
Phenanthrene	2672.33	330	67	3333.33		80.2	63 - 107			
Phenol	2270.00	330	34	3333.33		68.1	49 - 98			
Pyrene	2350.33	330	72	3333.33		70.5	62 - 106			
Pyridine	1131.67	1600	270	3333.33		34.0	0 - 54			
Surrogate: 1,2-Dichlorobenzene-d	*2082*			*3333.33*		*62.5*	*28 - 77*			
Surrogate: 2,4,6-Tribromophenol	*2999*			*3325.00*		*90.2*	*17 - 157*			
Surrogate: 2-Chlorophenol-d4	*2411*			*3325.00*		*72.5*	*35 - 98*			
Surrogate: 2-Fluorobiphenyl	*2427*			*3333.33*		*72.8*	*35 - 88*			
Surrogate: 2-Fluorophenol	*2295*			*3325.00*		*69.0*	*32 - 88*			
Surrogate: 4-Terphenyl-d14	*3751*			*3333.33*		*113*	*35 - 114*			
Surrogate: Nitrobenzene-d5	*2478*			*3333.33*		*74.4*	*27 - 80*			
Surrogate: Phenol-d6	*2512*			*3325.00*		*75.5*	*35 - 98*			
Matrix Spike (B9K0190-MS1)			**Source: 1904037-01**		Prepared: 11/8/2019 Analyzed: 11/12/2019					
1,2,4-Trichlorobenzene	2443.67	330	50	3333.33	ND	73.3	44 - 98			
1,2-Dichlorobenzene	2493.00	330	26	3333.33	ND	74.8	38 - 101			
1,3-Dichlorobenzene	2434.00	330	27	3333.33	ND	73.0	39 - 95			
1,4-Dichlorobenzene	2322.33	330	27	3333.33	ND	69.7	39 - 94			
2,4,5-Trichlorophenol	2654.67	330	30	3333.33	ND	79.6	53 - 122			
2,4,6-Trichlorophenol	2957.00	330	35	3333.33	ND	88.7	44 - 126			

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Semivolatile Organic Compounds by EPA 8270C - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B9K0190 - MSSEMI_S (continued)										
Matrix Spike (B9K0190-MS1) - Continued			**Source: 1904037-01**		Prepared: 11/8/2019 Analyzed: 11/12/2019					
2,4-Dichlorophenol	2722.00	1600	34	3333.33	ND	81.7	51 - 105			
2,4-Dimethylphenol	2753.33	330	26	3333.33	ND	82.6	50 - 114			
2,4-Dinitrophenol	2147.00	1600	86	3333.33	ND	64.4	5 - 171			
2,4-Dinitrotoluene	3154.67	330	33	3333.33	ND	94.6	39 - 139			
2,6-Dinitrotoluene	3231.33	330	49	3333.33	ND	96.9	36 - 146			
2-Chloronaphthalene	2576.67	330	28	3333.33	ND	77.3	50 - 111			
2-Chlorophenol	2549.33	330	31	3333.33	ND	76.5	40 - 104			
2-Methylnaphthalene	2363.67	330	27	3333.33	94.6667	68.1	46 - 115			
2-Methylphenol	2719.33	330	36	3333.33	ND	81.6	47 - 109			
2-Nitroaniline	3183.00	1600	43	3333.33	ND	95.5	49 - 120			
2-Nitrophenol	2968.00	330	45	3333.33	ND	89.0	25 - 139			
3,3´-Dichlorobenzidine	2817.00	660	280	3333.33	ND	84.5	35 - 122			
3-Nitroaniline	3052.00	1600	49	3333.33	ND	91.6	46 - 131			
4,6-Dinitro-2-methyphenol	3126.00	1600	41	3333.33	ND	93.8	32 - 158			
4-Bromophenyl-phenylether	2915.67	330	64	3333.33	ND	87.5	35 - 142			
4-Chloro-3-methylphenol	2910.67	660	71	3333.33	ND	87.3	52 - 110			
4-Chloroaniline	2749.67	660	53	3333.33	ND	82.5	48 - 118			
4-Chlorophenyl-phenylether	2774.33	330	33	3333.33	ND	83.2	49 - 114			
4-Methylphenol	2266.33	330	57	3333.33	ND	68.0	48 - 112			
4-Nitroaniline	3052.00	1600	37	3333.33	ND	91.6	40 - 153			
4-Nitrophenol	3210.67	330	64	3333.33	ND	96.3	45 - 122			
Acenaphthene	2328.00	330	43	3333.33	ND	69.8	47 - 117			
Acenaphthylene	2494.33	330	62	3333.33	ND	74.8	47 - 120			
Anthracene	2431.33	330	51	3333.33	ND	72.9	50 - 115			
Benzidine (M)	2435.00	1600	1400	3333.33	ND	73.1	25 - 131			
Benzo(a)anthracene	2998.00	330	44	3333.33	ND	89.9	51 - 108			
Benzo(a)pyrene	2813.33	330	64	3333.33	ND	84.4	46 - 120			
Benzo(b)fluoranthene	2978.67	330	65	3333.33	ND	89.4	41 - 120			
Benzo(g,h,i)perylene	2849.67	330	81	3333.33	ND	85.5	50 - 117			
Benzo(k)fluoranthene	2609.67	330	33	3333.33	ND	78.3	33 - 135			
Benzoic acid	2753.33	1600	890	3333.33	ND	82.6	0 - 104			
Benzyl alcohol	2331.33	660	32	3333.33	ND	69.9	41 - 116			
bis(2-chloroethoxy)methane	2965.00	330	64	3333.33	ND	89.0	41 - 101			
bis(2-Chloroethyl)ether	2751.33	330	66	3333.33	ND	82.5	33 - 106			
bis(2-chloroisopropyl)ether	2893.00	330	76	3333.33	ND	86.8	0 - 128			
bis(2-ethylhexyl)phthalate	3244.00	330	63	3333.33	ND	97.3	45 - 126			
Butylbenzylphthalate	3208.67	330	41	3333.33	ND	96.3	51 - 125			
Chrysene	3019.33	330	84	3333.33	ND	90.6	38 - 131			
Di-n-butylphthalate	3060.67	330	51	3333.33	ND	91.8	53 - 124			
Di-n-octylphthalate	3418.67	330	63	3333.33	ND	103	29 - 150			

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Semivolatile Organic Compounds by EPA 8270C - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B9K0190 - MSSEMI_S (continued)										
Matrix Spike (B9K0190-MS1) - Continued			**Source: 1904037-01**		Prepared: 11/8/2019 Analyzed: 11/12/2019					
Dibenz(a,h)anthracene	2934.67	330	45	3333.33	ND	88.0	42 - 123			
Dibenzofuran	2565.33	330	58	3333.33	ND	77.0	55 - 121			
Diethyl phthalate	3055.67	330	58	3333.33	ND	91.7	44 - 127			
Dimethyl phthalate	3001.67	330	40	3333.33	ND	90.1	51 - 114			
Fluoranthene	2523.00	330	60	3333.33	ND	75.7	49 - 114			
Fluorene	2742.67	330	110	3333.33	ND	82.3	45 - 123			
Hexachlorobenzene	2942.00	330	55	3333.33	ND	88.3	51 - 119			
Hexachlorobutadiene	2634.00	660	53	3333.33	ND	79.0	42 - 97			
Hexachlorocyclopentadiene	2693.00	660	70	3333.33	ND	80.8	36 - 115			
Hexachloroethane	2492.67	330	94	3333.33	ND	74.8	35 - 101			
Indeno(1,2,3-cd)pyrene	2696.67	330	75	3333.33	ND	80.9	44 - 118			
Isophorone	3085.00	330	85	3333.33	ND	92.6	42 - 103			
N-Nitroso-di-n propylamine	2835.67	330	60	3333.33	ND	85.1	42 - 103			
N-Nitrosodiphenylamine	2845.33	330	32	3333.33	ND	85.4	52 - 116			
Naphthalene	2297.33	330	56	3333.33	96.0000	66.0	44 - 101			
Nitrobenzene	2848.00	330	57	3333.33	ND	85.4	44 - 99			
Pentachlorophenol	3227.67	1600	50	3333.33	ND	96.8	39 - 126			
Phenanthrene	2748.00	330	67	3333.33	ND	82.4	51 - 115			
Phenol	2351.00	330	34	3333.33	ND	70.5	39 - 103			
Pyrene	2414.00	330	72	3333.33	ND	72.4	48 - 114			
Pyridine	2421.67	1600	270	3333.33	ND	72.7	20 - 91			
Surrogate: 1,2-Dichlorobenzene-d	*2154*			*3333.33*		*64.6*	*28 - 77*			
Surrogate: 2,4,6-Tribromophenol	*3071*			*3325.00*		*92.4*	*17 - 157*			
Surrogate: 2-Chlorophenol-d4	*2476*			*3325.00*		*74.5*	*35 - 98*			
Surrogate: 2-Fluorobiphenyl	*2458*			*3333.33*		*73.8*	*35 - 88*			
Surrogate: 2-Fluorophenol	*2366*			*3325.00*		*71.2*	*32 - 88*			
Surrogate: 4-Terphenyl-d14	*3868*			*3333.33*		*116*	*35 - 114*			S3
Surrogate: Nitrobenzene-d5	*2544*			*3333.33*		*76.3*	*27 - 80*			
Surrogate: Phenol-d6	*2514*			*3325.00*		*75.6*	*35 - 98*			
Matrix Spike Dup (B9K0190-MSD1)			**Source: 1904037-01**		Prepared: 11/8/2019 Analyzed: 11/12/2019					
1,2,4-Trichlorobenzene	2501.00	330	50	3333.33	ND	75.0	44 - 98	2.32	20	
1,2-Dichlorobenzene	2544.67	330	26	3333.33	ND	76.3	38 - 101	2.05	20	
1,3-Dichlorobenzene	2424.67	330	27	3333.33	ND	72.7	39 - 95	0.384	20	
1,4-Dichlorobenzene	2336.33	330	27	3333.33	ND	70.1	39 - 94	0.601	20	
2,4,5-Trichlorophenol	2759.33	330	30	3333.33	ND	82.8	53 - 122	3.87	20	
2,4,6-Trichlorophenol	3068.33	330	35	3333.33	ND	92.0	44 - 126	3.70	20	
2,4-Dichlorophenol	2805.67	1600	34	3333.33	ND	84.2	51 - 105	3.03	20	
2,4-Dimethylphenol	2773.00	330	26	3333.33	ND	83.2	50 - 114	0.712	20	
2,4-Dinitrophenol	2204.33	1600	86	3333.33	ND	66.1	5 - 171	2.64	20	

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Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B9K0190 - MSSEMI_S (continued)										
Matrix Spike Dup (B9K0190-MSD1) - Continued			**Source: 1904037-01**		Prepared: 11/8/2019 Analyzed: 11/12/2019					
2,4-Dinitrotoluene	3263.33	330	33	3333.33	ND	97.9	39 - 139	3.39	20	
2,6-Dinitrotoluene	3362.67	330	49	3333.33	ND	101	36 - 146	3.98	20	
2-Chloronaphthalene	2690.33	330	28	3333.33	ND	80.7	50 - 111	4.32	20	
2-Chlorophenol	2622.00	330	31	3333.33	ND	78.7	40 - 104	2.81	20	
2-Methylnaphthalene	2420.33	330	27	3333.33	94.6667	69.8	46 - 115	2.37	20	
2-Methylphenol	2768.67	330	36	3333.33	ND	83.1	47 - 109	1.80	20	
2-Nitroaniline	3250.67	1600	43	3333.33	ND	97.5	49 - 120	2.10	20	
2-Nitrophenol	2974.00	330	45	3333.33	ND	89.2	25 - 139	0.202	20	
3,3´-Dichlorobenzidine	2961.00	660	280	3333.33	ND	88.8	35 - 122	4.98	20	
3-Nitroaniline	3124.67	1600	49	3333.33	ND	93.7	46 - 131	2.35	20	
4,6-Dinitro-2-methyphenol	3255.00	1600	41	3333.33	ND	97.7	32 - 158	4.04	20	
4-Bromophenyl-phenylether	2980.67	330	64	3333.33	ND	89.4	35 - 142	2.20	20	
4-Chloro-3-methylphenol	3025.00	660	71	3333.33	ND	90.8	52 - 110	3.85	20	
4-Chloroaniline	2716.67	660	53	3333.33	ND	81.5	48 - 118	1.21	20	
4-Chlorophenyl-phenylether	2870.67	330	33	3333.33	ND	86.1	49 - 114	3.41	20	
4-Methylphenol	2275.00	330	57	3333.33	ND	68.3	48 - 112	0.382	20	
4-Nitroaniline	3124.67	1600	37	3333.33	ND	93.7	40 - 153	2.35	20	
4-Nitrophenol	3270.67	330	64	3333.33	ND	98.1	45 - 122	1.85	20	
Acenaphthene	2453.67	330	43	3333.33	ND	73.6	47 - 117	5.26	20	
Acenaphthylene	2603.00	330	62	3333.33	ND	78.1	47 - 120	4.26	20	
Anthracene	2503.00	330	51	3333.33	ND	75.1	50 - 115	2.90	20	
Benzidine (M)	2527.33	1600	1400	3333.33	ND	75.8	25 - 131	3.72	20	
Benzo(a)anthracene	3104.00	330	44	3333.33	ND	93.1	51 - 108	3.47	20	
Benzo(a)pyrene	2834.33	330	64	3333.33	ND	85.0	46 - 120	0.744	20	
Benzo(b)fluoranthene	3071.33	330	65	3333.33	ND	92.1	41 - 120	3.06	20	
Benzo(g,h,i)perylene	2866.00	330	81	3333.33	ND	86.0	50 - 117	0.572	20	
Benzo(k)fluoranthene	2761.00	330	33	3333.33	ND	82.8	33 - 135	5.64	20	
Benzoic acid	2773.00	1600	890	3333.33	ND	83.2	0 - 104	0.712	20	
Benzyl alcohol	2401.67	660	32	3333.33	ND	72.1	41 - 116	2.97	20	
bis(2-chloroethoxy)methane	3052.33	330	64	3333.33	ND	91.6	41 - 101	2.90	20	
bis(2-Chloroethyl)ether	2782.67	330	66	3333.33	ND	83.5	33 - 106	1.13	20	
bis(2-chloroisopropyl)ether	2903.67	330	76	3333.33	ND	87.1	0 - 128	0.368	20	
bis(2-ethylhexyl)phthalate	3234.33	330	63	3333.33	ND	97.0	45 - 126	0.298	20	
Butylbenzylphthalate	3212.00	330	41	3333.33	ND	96.4	51 - 125	0.104	20	
Chrysene	3070.33	330	84	3333.33	ND	92.1	38 - 131	1.67	20	
Di-n-butylphthalate	3109.67	330	51	3333.33	ND	93.3	53 - 124	1.59	20	
Di-n-octylphthalate	3495.67	330	63	3333.33	ND	105	29 - 150	2.23	20	
Dibenz(a,h)anthracene	2995.67	330	45	3333.33	ND	89.9	42 - 123	2.06	20	
Dibenzofuran	2786.67	330	58	3333.33	ND	83.6	55 - 121	8.27	20	
Diethyl phthalate	3133.00	330	58	3333.33	ND	94.0	44 - 127	2.50	20	

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Semivolatile Organic Compounds by EPA 8270C - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B9K0190 - MSSEMI_S (continued)										
Matrix Spike Dup (B9K0190-MSD1) - Continued			**Source: 1904037-01**		Prepared: 11/8/2019 Analyzed: 11/12/2019					
Dimethyl phthalate	3065.67	330	40	3333.33	ND	92.0	51 - 114	2.11	20	
Fluoranthene	2648.33	330	60	3333.33	ND	79.4	49 - 114	4.85	20	
Fluorene	2949.67	330	110	3333.33	ND	88.5	45 - 123	7.27	20	
Hexachlorobenzene	2967.33	330	55	3333.33	ND	89.0	51 - 119	0.857	20	
Hexachlorobutadiene	2643.67	660	53	3333.33	ND	79.3	42 - 97	0.366	20	
Hexachlorocyclopentadiene	2803.00	660	70	3333.33	ND	84.1	36 - 115	4.00	20	
Hexachloroethane	2551.67	330	94	3333.33	ND	76.6	35 - 101	2.34	20	
Indeno(1,2,3-cd)pyrene	2747.00	330	75	3333.33	ND	82.4	44 - 118	1.85	20	
Isophorone	3115.33	330	85	3333.33	ND	93.5	42 - 103	0.978	20	
N-Nitroso-di-n propylamine	2854.67	330	60	3333.33	ND	85.6	42 - 103	0.668	20	
N-Nitrosodiphenylamine	2953.00	330	32	3333.33	ND	88.6	52 - 116	3.71	20	
Naphthalene	2367.00	330	56	3333.33	96.0000	68.1	44 - 101	2.99	20	
Nitrobenzene	2949.67	330	57	3333.33	ND	88.5	44 - 99	3.51	20	
Pentachlorophenol	3330.67	1600	50	3333.33	ND	99.9	39 - 126	3.14	20	
Phenanthrene	2838.67	330	67	3333.33	ND	85.2	51 - 115	3.25	20	
Phenol	2412.33	330	34	3333.33	ND	72.4	39 - 103	2.58	20	
Pyrene	2538.00	330	72	3333.33	ND	76.1	48 - 114	5.01	20	
Pyridine	2467.33	1600	270	3333.33	ND	74.0	20 - 91	1.87	20	
Surrogate: 1,2-Dichlorobenzene-d	*2214*			*3333.33*		*66.4*	*28 - 77*			
Surrogate: 2,4,6-Tribromophenol	*3093*			*3325.00*		*93.0*	*17 - 157*			
Surrogate: 2-Chlorophenol-d4	*2508*			*3325.00*		*75.4*	*35 - 98*			
Surrogate: 2-Fluorobiphenyl	*2614*			*3333.33*		*78.4*	*35 - 88*			
Surrogate: 2-Fluorophenol	*2395*			*3325.00*		*72.0*	*32 - 88*			
Surrogate: 4-Terphenyl-d14	*3905*			*3333.33*		*117*	*35 - 114*			S3
Surrogate: Nitrobenzene-d5	*2633*			*3333.33*		*79.0*	*27 - 80*			
Surrogate: Phenol-d6	*2549*			*3325.00*		*76.7*	*35 - 98*			

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Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B9K0222 - MSSEMI_W										
Blank (B9K0222-BLK1)					Prepared: 11/11/2019 Analyzed: 11/13/2019					
1,2,4-Trichlorobenzene	ND	10	2.3							
1,2-Dichlorobenzene	ND	10	2.0							
1,3-Dichlorobenzene	ND	10	2.0							
1,4-Dichlorobenzene	ND	10	1.9							
2,4,5-Trichlorophenol	ND	10	2.0							
2,4,6-Trichlorophenol	ND	10	1.9							
2,4-Dichlorophenol	ND	10	1.4							
2,4-Dimethylphenol	ND	10	0.83							
2,4-Dinitrophenol	ND	50	3.8							
2,4-Dinitrotoluene	ND	10	2.4							
2,6-Dinitrotoluene	ND	10	1.8							
2-Chloronaphthalene	ND	10	2.2							
2-Chlorophenol	ND	10	1.7							
2-Methylnaphthalene	ND	10	2.8							
2-Methylphenol	ND	10	0.92							
2-Nitroaniline	ND	50	1.2							
2-Nitrophenol	ND	10	1.9							
3,3´-Dichlorobenzidine	ND	20	1.6							
3-Nitroaniline	ND	50	1.1							
4,6-Dinitro-2-methyphenol	ND	50	2.0							
4-Bromophenyl-phenylether	ND	10	2.6							
4-Chloro-3-methylphenol	ND	50	1.0							
4-Chloroaniline	ND	20	0.70							
4-Chlorophenyl-phenylether	ND	10	2.9							
4-Methylphenol	ND	10	0.88							
4-Nitroaniline	ND	20	1.2							
4-Nitrophenol	ND	50	0.51							
Acenaphthene	ND	10	2.1							
Acenaphthylene	ND	10	2.1							
Anthracene	ND	10	2.1							
Benzidine (M)	ND	50	3.4							
Benzo(a)anthracene	ND	10	2.1							
Benzo(a)pyrene	ND	10	1.8							
Benzo(b)fluoranthene	ND	10	2.5							
Benzo(g,h,i)perylene	ND	10	1.8							
Benzo(k)fluoranthene	ND	10	2.8							
Benzoic acid	ND	50	17							
Benzyl alcohol	ND	20	0.60							
bis(2-chloroethoxy)methane	ND	10	1.4							
bis(2-Chloroethyl)ether	ND	10	1.7							

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Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B9K0222 - MSSEMI_W (continued)										
Blank (B9K0222-BLK1) - Continued					Prepared: 11/11/2019 Analyzed: 11/13/2019					
bis(2-chloroisopropyl)ether	ND	10	1.8							
bis(2-ethylhexyl)phthalate	ND	10	1.7							
Butylbenzylphthalate	ND	10	2.6							
Chrysene	ND	10	1.9							
Di-n-butylphthalate	ND	10	1.5							
Di-n-octylphthalate	ND	10	1.8							
Dibenz(a,h)anthracene	ND	10	2.7							
Dibenzofuran	ND	10	2.5							
Diethyl phthalate	ND	10	1.3							
Dimethyl phthalate	ND	10	1.3							
Fluoranthene	ND	10	2.2							
Fluorene	ND	10	2.6							
Hexachlorobenzene	ND	10	3.3							
Hexachlorobutadiene	ND	20	2.7							
Hexachlorocyclopentadiene	ND	10	3.4							
Hexachloroethane	ND	10	1.8							
Indeno(1,2,3-cd)pyrene	ND	10	2.2							
Isophorone	ND	10	1.1							
N-Nitroso-di-n propylamine	ND	10	1.3							
N-Nitrosodiphenylamine	ND	10	1.6							
Naphthalene	ND	10	2.3							
Nitrobenzene	ND	10	1.5							
Pentachlorophenol	ND	50	1.5							
Phenanthrene	ND	10	2.3							
Phenol	ND	10	0.35							
Pyrene	ND	10	2.2							
Pyridine	ND	50	0.55							
Surrogate: 1,2-Dichlorobenzene-d	*108.5*			*100.000*		*109*	*30 - 78*			S1
Surrogate: 2,4,6-Tribromophenol	*88.13*			*99.7500*		*88.4*	*47 - 158*			
Surrogate: 2-Chlorophenol-d4	*66.87*			*99.7500*		*67.0*	*28 - 84*			
Surrogate: 2-Fluorobiphenyl	*72.01*			*100.000*		*72.0*	*32 - 90*			
Surrogate: 2-Fluorophenol	*36.99*			*99.7500*		*37.1*	*13 - 41*			
Surrogate: 4-Terphenyl-d14	*69.25*			*100.000*		*69.2*	*36 - 112*			
Surrogate: Nitrobenzene-d5	*73.66*			*100.000*		*73.7*	*30 - 82*			
Surrogate: Phenol-d6	*23.47*			*99.7500*		*23.5*	*8 - 26*			
LCS (B9K0222-BS1)					Prepared: 11/11/2019 Analyzed: 11/13/2019					
1,2,4-Trichlorobenzene	74.4200	10	2.3	100.000		74.4	55 - 95			
1,2-Dichlorobenzene	71.8900	10	2.0	100.000		71.9	36 - 90			
1,3-Dichlorobenzene	71.2600	10	2.0	100.000		71.3	53 - 85			

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Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B9K0222 - MSSEMI_W (continued)										
LCS (B9K0222-BS1) - Continued					Prepared: 11/11/2019 Analyzed: 11/13/2019					
1,4-Dichlorobenzene	68.9600	10	1.9	100.000		69.0	53 - 86			
2,4,5-Trichlorophenol	79.6800	10	2.0	100.000		79.7	68 - 113			
2,4,6-Trichlorophenol	81.1600	10	1.9	100.000		81.2	63 - 113			
2,4-Dichlorophenol	74.1100	10	1.4	100.000		74.1	59 - 94			
2,4-Dimethylphenol	74.9000	10	0.83	100.000		74.9	50 - 98			
2,4-Dinitrophenol	100.990	50	3.8	100.000		101	60 - 136			
2,4-Dinitrotoluene	87.5700	10	2.4	100.000		87.6	60 - 126			
2,6-Dinitrotoluene	94.2500	10	1.8	100.000		94.2	65 - 119			
2-Chloronaphthalene	76.1800	10	2.2	100.000		76.2	63 - 103			
2-Chlorophenol	64.0400	10	1.7	100.000		64.0	37 - 86			
2-Methylnaphthalene	67.0100	10	2.8	100.000		67.0	61 - 110			
2-Methylphenol	57.2900	10	0.92	100.000		57.3	33 - 78			
2-Nitroaniline	87.5000	50	1.2	100.000		87.5	61 - 122			
2-Nitrophenol	84.3000	10	1.9	100.000		84.3	56 - 106			
3,3´-Dichlorobenzidine	77.1000	20	1.6	100.000		77.1	52 - 108			
3-Nitroaniline	86.2300	50	1.1	100.000		86.2	66 - 119			
4,6-Dinitro-2-methyphenol	95.1100	50	2.0	100.000		95.1	62 - 132			
4-Bromophenyl-phenylether	86.6600	10	2.6	100.000		86.7	34 - 153			
4-Chloro-3-methylphenol	72.8300	50	1.0	100.000		72.8	48 - 98			
4-Chloroaniline	71.9600	20	0.70	100.000		72.0	40 - 121			
4-Chlorophenyl-phenylether	81.1200	10	2.9	100.000		81.1	63 - 111			
4-Methylphenol	34.8100	10	0.88	100.000		34.8	30 - 69			
4-Nitroaniline	86.2300	20	1.2	100.000		86.2	53 - 127			
4-Nitrophenol	27.7600	50	0.51	100.000		27.8	14 - 42			
Acenaphthene	69.2800	10	2.1	100.000		69.3	63 - 107			
Acenaphthylene	74.3100	10	2.1	100.000		74.3	66 - 107			
Anthracene	70.7100	10	2.1	100.000		70.7	60 - 112			
Benzidine (M)	39.2300	50	3.4	100.000		39.2	0 - 111			
Benzo(a)anthracene	87.2300	10	2.1	100.000		87.2	57 - 105			
Benzo(a)pyrene	79.4200	10	1.8	100.000		79.4	59 - 114			
Benzo(b)fluoranthene	78.1700	10	2.5	100.000		78.2	55 - 112			
Benzo(g,h,i)perylene	80.5700	10	1.8	100.000		80.6	66 - 106			
Benzo(k)fluoranthene	87.7700	10	2.8	100.000		87.8	54 - 120			
Benzoic acid	74.9000	50	17	100.000		74.9	0 - 57			L2
Benzyl alcohol	49.7200	20	0.60	100.000		49.7	37 - 77			
bis(2-chloroethoxy)methane	84.6700	10	1.4	100.000		84.7	57 - 95			
bis(2-Chloroethyl)ether	79.3300	10	1.7	100.000		79.3	50 - 92			
bis(2-chloroisopropyl)ether	83.0600	10	1.8	100.000		83.1	22 - 122			
bis(2-ethylhexyl)phthalate	86.7300	10	1.7	100.000		86.7	55 - 117			
Butylbenzylphthalate	89.3500	10	2.6	100.000		89.4	55 - 117			

Certificate of Analysis

Burns and McDonnell	Project Number : SCVTA-1217
400 Oyster Point Blvd, Suite 533	Report To : Christopher D'Sa
South San Francisco , CA 94080	Reported : 11/21/2019

Semivolatile Organic Compounds by EPA 8270C - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B9K0222 - MSSEMI_W (continued)										
LCS (B9K0222-BS1) - Continued					Prepared: 11/11/2019 Analyzed: 11/13/2019					
Chrysene	85.1700	10	1.9	100.000		85.2	50 - 109			
Di-n-butylphthalate	86.8800	10	1.5	100.000		86.9	66 - 115			
Di-n-octylphthalate	93.2200	10	1.8	100.000		93.2	53 - 120			
Dibenz(a,h)anthracene	83.6700	10	2.7	100.000		83.7	55 - 121			
Dibenzofuran	74.5200	10	2.5	100.000		74.5	69 - 112			
Diethyl phthalate	87.6100	10	1.3	100.000		87.6	61 - 114			
Dimethyl phthalate	87.4100	10	1.3	100.000		87.4	67 - 106			
Fluoranthene	74.7800	10	2.2	100.000		74.8	59 - 114			
Fluorene	79.6700	10	2.6	100.000		79.7	59 - 117			
Hexachlorobenzene	84.1500	10	3.3	100.000		84.2	63 - 117			
Hexachlorobutadiene	78.9900	20	2.7	100.000		79.0	50 - 98			
Hexachlorocyclopentadiene	76.4400	10	3.4	100.000		76.4	52 - 108			
Hexachloroethane	73.5300	10	1.8	100.000		73.5	52 - 87			
Indeno(1,2,3-cd)pyrene	76.1200	10	2.2	100.000		76.1	54 - 122			
Isophorone	85.2100	10	1.1	100.000		85.2	59 - 88			
N-Nitroso-di-n propylamine	81.7500	10	1.3	100.000		81.8	55 - 101			
N-Nitrosodiphenylamine	82.9400	10	1.6	100.000		82.9	61 - 112			
Naphthalene	67.0100	10	2.3	100.000		67.0	57 - 95			
Nitrobenzene	81.7000	10	1.5	100.000		81.7	60 - 96			
Pentachlorophenol	91.5300	50	1.5	100.000		91.5	62 - 119			
Phenanthrene	79.8600	10	2.3	100.000		79.9	60 - 111			
Phenol	29.4200	10	0.35	100.000		29.4	11 - 32			
Pyrene	70.7500	10	2.2	100.000		70.8	58 - 114			
Pyridine	28.1900	50	0.55	100.000		28.2	0 - 53			
Surrogate: 1,2-Dichlorobenzene-d	*78.09*			*100.000*		*78.1*	*30 - 78*			S3
Surrogate: 2,4,6-Tribromophenol	*87.31*			*99.7500*		*87.5*	*47 - 158*			
Surrogate: 2-Chlorophenol-d4	*63.22*			*99.7500*		*63.4*	*28 - 84*			
Surrogate: 2-Fluorobiphenyl	*78.10*			*100.000*		*78.1*	*32 - 90*			
Surrogate: 2-Fluorophenol	*35.24*			*99.7500*		*35.3*	*13 - 41*			
Surrogate: 4-Terphenyl-d14	*112.5*			*100.000*		*112*	*36 - 112*			
Surrogate: Nitrobenzene-d5	*77.99*			*100.000*		*78.0*	*30 - 82*			
Surrogate: Phenol-d6	*24.47*			*99.7500*		*24.5*	*8 - 26*			
LCS Dup (B9K0222-BSD1)					Prepared: 11/11/2019 Analyzed: 11/13/2019					
1,2,4-Trichlorobenzene	73.9900	10	2.3	100.000		74.0	55 - 95	0.579	20	
1,2-Dichlorobenzene	76.9900	10	2.0	100.000		77.0	36 - 90	6.85	20	
1,3-Dichlorobenzene	73.5500	10	2.0	100.000		73.6	53 - 85	3.16	20	
1,4-Dichlorobenzene	70.6000	10	1.9	100.000		70.6	53 - 86	2.35	20	
2,4,5-Trichlorophenol	79.6600	10	2.0	100.000		79.7	68 - 113	0.0251	20	
2,4,6-Trichlorophenol	83.7000	10	1.9	100.000		83.7	63 - 113	3.08	20	

Certificate of Analysis

Burns and McDonnell	Project Number : SCVTA-1217
400 Oyster Point Blvd, Suite 533	Report To : Christopher D'Sa
South San Francisco , CA 94080	Reported : 11/21/2019

Semivolatile Organic Compounds by EPA 8270C - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B9K0222 - MSSEMI_W (continued)										
LCS Dup (B9K0222-BSD1) - Continued					Prepared: 11/11/2019 Analyzed: 11/13/2019					
2,4-Dichlorophenol	75.7000	10	1.4	100.000		75.7	59 - 94	2.12	20	
2,4-Dimethylphenol	76.5600	10	0.83	100.000		76.6	50 - 98	2.19	20	
2,4-Dinitrophenol	106.220	50	3.8	100.000		106	60 - 136	5.05	20	
2,4-Dinitrotoluene	92.0200	10	2.4	100.000		92.0	60 - 126	4.96	20	
2,6-Dinitrotoluene	96.9500	10	1.8	100.000		97.0	65 - 119	2.82	20	
2-Chloronaphthalene	78.8700	10	2.2	100.000		78.9	63 - 103	3.47	20	
2-Chlorophenol	66.9900	10	1.7	100.000		67.0	37 - 86	4.50	20	
2-Methylnaphthalene	69.5400	10	2.8	100.000		69.5	61 - 110	3.71	20	
2-Methylphenol	60.3600	10	0.92	100.000		60.4	33 - 78	5.22	20	
2-Nitroaniline	91.5100	50	1.2	100.000		91.5	61 - 122	4.48	20	
2-Nitrophenol	87.0700	10	1.9	100.000		87.1	56 - 106	3.23	20	
3,3´-Dichlorobenzidine	77.6400	20	1.6	100.000		77.6	52 - 108	0.698	20	
3-Nitroaniline	89.5700	50	1.1	100.000		89.6	66 - 119	3.80	20	
4,6-Dinitro-2-methyphenol	101.240	50	2.0	100.000		101	62 - 132	6.24	20	
4-Bromophenyl-phenylether	87.1400	10	2.6	100.000		87.1	34 - 153	0.552	20	
4-Chloro-3-methylphenol	75.8200	50	1.0	100.000		75.8	48 - 98	4.02	20	
4-Chloroaniline	73.7300	20	0.70	100.000		73.7	40 - 121	2.43	20	
4-Chlorophenyl-phenylether	84.0200	10	2.9	100.000		84.0	63 - 111	3.51	20	
4-Methylphenol	37.5500	10	0.88	100.000		37.6	30 - 69	7.57	20	
4-Nitroaniline	89.5700	20	1.2	100.000		89.6	53 - 127	3.80	20	
4-Nitrophenol	28.8400	50	0.51	100.000		28.8	14 - 42	3.82	20	
Acenaphthene	71.0600	10	2.1	100.000		71.1	63 - 107	2.54	20	
Acenaphthylene	76.4700	10	2.1	100.000		76.5	66 - 107	2.87	20	
Anthracene	73.0700	10	2.1	100.000		73.1	60 - 112	3.28	20	
Benzidine (M)	41.0400	50	3.4	100.000		41.0	0 - 111	4.51	20	
Benzo(a)anthracene	88.6500	10	2.1	100.000		88.6	57 - 105	1.61	20	
Benzo(a)pyrene	82.9600	10	1.8	100.000		83.0	59 - 114	4.36	20	
Benzo(b)fluoranthene	81.3200	10	2.5	100.000		81.3	55 - 112	3.95	20	
Benzo(g,h,i)perylene	82.6500	10	1.8	100.000		82.6	66 - 106	2.55	20	
Benzo(k)fluoranthene	92.3900	10	2.8	100.000		92.4	54 - 120	5.13	20	
Benzoic acid	76.5600	50	17	100.000		76.6	0 - 57	2.19	20	L2
Benzyl alcohol	51.3300	20	0.60	100.000		51.3	37 - 77	3.19	20	
bis(2-chloroethoxy)methane	87.9800	10	1.4	100.000		88.0	57 - 95	3.83	20	
bis(2-Chloroethyl)ether	83.6100	10	1.7	100.000		83.6	50 - 92	5.25	20	
bis(2-chloroisopropyl)ether	86.9900	10	1.8	100.000		87.0	22 - 122	4.62	20	
bis(2-ethylhexyl)phthalate	87.6900	10	1.7	100.000		87.7	55 - 117	1.10	20	
Butylbenzylphthalate	90.4300	10	2.6	100.000		90.4	55 - 117	1.20	20	
Chrysene	86.2300	10	1.9	100.000		86.2	50 - 109	1.24	20	
Di-n-butylphthalate	87.8900	10	1.5	100.000		87.9	66 - 115	1.16	20	
Di-n-octylphthalate	97.9800	10	1.8	100.000		98.0	53 - 120	4.98	20	

Certificate of Analysis

Burns and McDonnell	Project Number : SCVTA-1217
400 Oyster Point Blvd, Suite 533	Report To : Christopher D'Sa
South San Francisco , CA 94080	Reported : 11/21/2019

Semivolatile Organic Compounds by EPA 8270C - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B9K0222 - MSSEMI_W (continued)										
LCS Dup (B9K0222-BSD1) - Continued					Prepared: 11/11/2019 Analyzed: 11/13/2019					
Dibenz(a,h)anthracene	87.3300	10	2.7	100.000		87.3	55 - 121	4.28	20	
Dibenzofuran	76.5400	10	2.5	100.000		76.5	69 - 112	2.67	20	
Diethyl phthalate	92.3200	10	1.3	100.000		92.3	61 - 114	5.24	20	
Dimethyl phthalate	89.5000	10	1.3	100.000		89.5	67 - 106	2.36	20	
Fluoranthene	75.6600	10	2.2	100.000		75.7	59 - 114	1.17	20	
Fluorene	83.1400	10	2.6	100.000		83.1	59 - 117	4.26	20	
Hexachlorobenzene	85.6000	10	3.3	100.000		85.6	63 - 117	1.71	20	
Hexachlorobutadiene	79.0300	20	2.7	100.000		79.0	50 - 98	0.0506	20	
Hexachlorocyclopentadiene	76.5800	10	3.4	100.000		76.6	52 - 108	0.183	20	
Hexachloroethane	77.1600	10	1.8	100.000		77.2	52 - 87	4.82	20	
Indeno(1,2,3-cd)pyrene	78.8700	10	2.2	100.000		78.9	54 - 122	3.55	20	
Isophorone	89.4500	10	1.1	100.000		89.4	59 - 88	4.86	20	L2
N-Nitroso-di-n propylamine	88.8600	10	1.3	100.000		88.9	55 - 101	8.33	20	
N-Nitrosodiphenylamine	85.4300	10	1.6	100.000		85.4	61 - 112	2.96	20	
Naphthalene	67.3900	10	2.3	100.000		67.4	57 - 95	0.565	20	
Nitrobenzene	84.3400	10	1.5	100.000		84.3	60 - 96	3.18	20	
Pentachlorophenol	94.2200	50	1.5	100.000		94.2	62 - 119	2.90	20	
Phenanthrene	82.3100	10	2.3	100.000		82.3	60 - 111	3.02	20	
Phenol	30.6000	10	0.35	100.000		30.6	11 - 32	3.93	20	
Pyrene	71.9100	10	2.2	100.000		71.9	58 - 114	1.63	20	
Pyridine	30.7900	50	0.55	100.000		30.8	0 - 53	8.82	20	
Surrogate: 1,2-Dichlorobenzene-d	*82.87*			*100.000*		*82.9*	*30 - 78*			S3
Surrogate: 2,4,6-Tribromophenol	*90.70*			*99.7500*		*90.9*	*47 - 158*			
Surrogate: 2-Chlorophenol-d4	*65.12*			*99.7500*		*65.3*	*28 - 84*			
Surrogate: 2-Fluorobiphenyl	*79.15*			*100.000*		*79.2*	*32 - 90*			
Surrogate: 2-Fluorophenol	*36.77*			*99.7500*		*36.9*	*13 - 41*			
Surrogate: 4-Terphenyl-d14	*115.6*			*100.000*		*116*	*36 - 112*			S3
Surrogate: Nitrobenzene-d5	*82.39*			*100.000*		*82.4*	*30 - 82*			S3
Surrogate: Phenol-d6	*25.36*			*99.7500*		*25.4*	*8 - 26*			

Certificate of Analysis

Burns and McDonnell	Project Number : SCVTA-1217
400 Oyster Point Blvd, Suite 533	Report To : Christopher D'Sa
South San Francisco , CA 94080	Reported : 11/21/2019

Notes and Definitions

S3	Surrogate recovery outside of laboratory acceptance limit. Unable to confirm matrix effects.
S10	Surrogate recovery was outside of laboratory acceptance limit due to possible matrix interference.
S1	Surrogate recovery was above laboratory acceptance limit. No associated target analyte was detected in the sample.
R	RPD value outside acceptance criteria. Calculation is based on raw values.
M2	Matrix spike recovery outside of acceptance limit due to possible matrix interference. The analytical batch was validated by the laboratory control sample.
M1	Matrix spike recovery outside of acceptance limit. The analytical batch was validated by the laboratory control sample.
L4	Laboratory Control Sample outside of control limit but within Marginal Exceedance (ME) limit.
L2	Laboratory control sample outside of acceptance limits. Reextraction and/or reanalysis is not possible due to limited amount of sample.
J	Analyte detected below the Practical Quantitation Limit but above or equal to the Method Detection Limit. Result is an estimated concentration.
D6	Sample required dilution due to high concentration of target analyte.
D1	Sample required dilution due to possible matrix interference.
ND	Analyte is not detected at or above the Practical Quantitation Limit (PQL). When client requests quantitation against MDL, analyte is not detected at or above the Method Detection Limit (MDL)
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
NR	Not Reported
RPD	Relative Percent Difference
CA2	CA-ELAP (CDPH)
OR1	OR-NELAP (OSPHL)

Notes:
(1) The reported MDL and PQL are based on prep ratio variation and analytical dilution.
(2) The suffix [2C] of specific analytes signifies that the reported result is taken from the instrument's second column.
(3) Results are wet unless otherwise specified.

ADVANCED TECHNOLOGY LABORATORIES
3275 Walnut Ave., Signal Hill, CA 90755
Tel: (562) 989-4045 • Fax: (562) 989-4040

CHAIN OF CUSTODY RECORD

Page 1 of 1

Instruction: Complete all shaded areas.

For Laboratory Use Only ATLCOC Ver:20190413

Method of Transport: ☐ Client ☐ ATL ☒ FedEx ☐ OnTrac ☐ GSO ☐ Other:

Sample Conditions Upon Receipt					
Condition	Y	N	Condition	Y	N
1. CHILLED	☒	☐	5. # OF SAMPLES MATCH COC	☐	☐
2. HEADSPACE (VOA)	☐	☐	6. PRESERVED	☐	☐
3. CONTAINER INTACT	☒	☐	7. COOLER TEMP, deg C:	2.8	
4. SEALED	☐	☐		ICE	

CUSTOMER

Company: Burns + McDonnell
Address: 400 Oyster Point Blvd suite 523 Tel: 650.808.7503
City: State: Zip: Fax: 650 821 2653

SEND REPORT TO:	SEND INVOICE TO: ☐ same as SEND REPORT TO
Attn: Chris D'sa	Attn: Chris D'sa
Email: cdsa@burnsmcd.com	Email: supplierinvoices@bomsmcd.com
Company: Burns + McDonnell	Company: Burns + McDonnell
Address: 400 Oyster Point Blvd. suite 523	Address: 400 oyster Point Blvd. suite 523
City: S. San francisco State: Ca Zip: 94080	City: S. San francisco State: Ca Zip: 94080

EDD: ☒ Excel ☐ EDF ☐ Equis ☐ _____
QA/QC: ☐ Routine ☐ Caltrans ☐ Legal ☒ RWQCB ☐ Level IV ☐ _____

PROJECT SAMPLES

Project Name: VTA
Project No.: 87119
Sampler: Simon Barber
Quote #:
PO #:
Special Instructions/Comments: Run Silica Gel.

ITEM	Laboratory ID (For Lab Use Only)	Sample Description: Sample ID / Location	Date	Time	8260 / 624 (Volatiles) - GRO	8015 (GRO) - MO	8015 (DRO)	8081 (Organochlorine Pesticides)	8082 (PCBs)	8270 (Semi-volatiles)	6010 / 7000 (Title 22 Metals)	TO-15	Sample Matrix: SOIL	SOLID	GROUNDWATER	WASTEWATER	OIL	Turnaround Time (TAT)	Container: Quantity	Container: Type	Container: Material	Container: Preservative	Remarks
1	1904037-01	B-1 @ 10.5	11.4.19	0911	X	X	X	X	X	X	X		X					5	4	2.5	1	1	
2	-02	B-1 @ 15	11.4.19	0925	X	X	X				X		X					5	4	2.5	1	1	
3	-03	B-1	11.4.19	0945	X	X	X	X	X	X	X				X			5	10	2.5	12	123	
4																							
5																							
6																							
7																							
8																							
9																							
10																							

TERMS

1. Sample receiving hours: 7:30 AM to 7:30 PM Monday - Friday; Saturday 8:00 AM to 12:00 PM.
2. Samples submitted AFTER 5:00 PM are considered received the following business day at 8:00 AM.
3. The following turnaround time conditions apply:
   - TAT = 0 : 300% Surcharge SAME BUSINESS DAY if received by 9:00 AM
   - TAT = 1 : 100% Surcharge NEXT BUSINESS DAY (COB 5:00 PM)
   - TAT = 2 : 50% Surcharge 2ND BUSINESS DAY (COB 5:00 PM)
   - TAT = 3 : 30% Surcharge 3RD BUSINESS DAY (COB 5:00 PM)
   - TAT = 4 : 20% Surcharge 4TH BUSINESS DAY (COB 5:00 PM)
   - TAT = 5 : NO SURCHARGE 5th BUSINESS DAY (COB 5:00 PM)
4. Weekend, holiday, after-hours work --- ask for quote.
5. Subcontract TAT is 10 - 15 business days. Projects requiring shorter TATs will incur a surcharge respective to the subcontract lab --- ask for quote.
6. Liquid and solid samples will be disposed of after 45 calendar days from receipt of samples; air samples will be disposed of after 14 calendar days after receipt of samples.
7. Electronic records maintained for five (5) years from report date.
8. Hard copy reports will be disposed of after 45 calendar days from report date.
9. Storage and Report Fees:
   - Liquid & solid samples: Complimentary storage for forty-five (45) calendar days from receipt of samples; $2/sample/month if extended storage or hold is requested.
   - Air samples: Complimentary storage for ten (10) calendar days from receipt of samples; $20 sample/week if extended storage is requested.
   - Hard copy and regenerated reports/EDDs: $17.50 per hard copy report requested; $50.00 per regenerated/reformatted report; $35 per reprocessed EDD.
10. Rush TCLP/STLC samples: add 2 days to analysis TAT for extraction procedure.
11. Unanalyzed samples will incur a disposal fee of $7 per sample.
12. The laboratory will randomly select from all QC samples received the sample to spike for Matrix Spike/Matrix Spike Duplicate (MS/MSD) at no cost. However, if you want the laboratory to additionally perform MS/MSD on your sample, a charge will be assessed for the specific sample used.

Relinquished by: (Signature and Printed Name)	Date:	Time:	Received by: (Signature and Printed Name)	Date:	Time:
Simon Barber	11.4.19	1700		11-5-19	909
Relinquished by: (Signature and Printed Name)	Date:	Time:	Received by: (Signature and Printed Name)	Date:	Time:
Relinquished by: (Signature and Printed Name)	Date:	Time:	Received by: (Signature and Printed Name)	Date:	Time:

As the authorized agent of the company above, I hereby purchase laboratory services from ATL as shown above and hereby guarantee payment as quoted.

Printed Name _____ Signature _____

Erick Ovalle

From: D'Sa, Christopher P (Chris) <cdsa@burnsmcd.com>
Sent: Tuesday, November 12, 2019 6:43 PM
To: Erick Ovalle; Barber, Simon
Cc: Molky Brar
Subject: RE: Partials / SCVTA,B3109 / ATL 1904037

Thanks Erick.. Looks like some metals are exceeding 10x STLC. Can you run STLC on all those metals that are exceeding this parameter.

Thanks..

From: Erick Ovalle <Erick.Ovalle@atlglobal.com>
Sent: Tuesday, November 12, 2019 6:30 PM
To: D'Sa, Christopher P (Chris) <cdsa@burnsmcd.com>; Barber, Simon <sbarber@burnsmcd.com>
Cc: Molky Brar <molky.brar@atlglobal.com>
Subject: Partials / SCVTA,B3109 / ATL 1904037

Good evening Chris,

Please find your partial results for the above project attached.

I will follow up with a final report to include EPA 8260 and 8270 results.

If I can further assist you, please let me know.

PLEASE NOTE: Our legal name is Environmental Treatment & Technology Inc., dba Advanced Technology Laboratories.

Best regards,

Erick Ovalle | Project Manager
ADVANCED TECHNOLOGY LABORATORIES
3275 Walnut Avenue, Signal Hill CA 90755 | www.atlglobal.com
Email: Erick.Ovalle@atlglobal.com
Tel: 562.989.4045 ext. 237 | Fax: 562.989.6348
Laboratory Excellence Defined

Erick Ovalle

From: Barber, Simon <sbarber@burnsmcd.com>
Sent: Thursday, November 21, 2019 7:50 AM
To: Erick Ovalle; D'Sa, Christopher P (Chris)
Cc: Molky Brar
Subject: RE: Results / SCVTA,B3109 / ATL 1904037

Thank you Erick,

May I request the Client Reference be changed to SCVTA-1217

Much appreciated,
Simon

From: Erick Ovalle <Erick.Ovalle@atlglobal.com>
Sent: Wednesday, November 20, 2019 3:25 PM
To: D'Sa, Christopher P (Chris) <cdsa@burnsmcd.com>; Barber, Simon <sbarber@burnsmcd.com>
Cc: Molky Brar <molky.brar@atlglobal.com>
Subject: Results / SCVTA,B3109 / ATL 1904037

Good afternoon Chris,

Please find your results and Invoice for the above project attached.

If I can further assist you, please let me know.

PLEASE NOTE: Our legal name is Environmental Treatment & Technology Inc., dba Advanced Technology Laboratories.

Best regards,

Erick Ovalle | Project Manager
ADVANCED TECHNOLOGY LABORATORIES
3275 Walnut Avenue, Signal Hill CA 90755 | www.atlglobal.com
Email: Erick.Ovalle@atlglobal.com
Tel: 562.989.4045 ext. 237 | Fax: 562.989.6348
Laboratory Excellence Defined

ADVANCED TECHNOLOGY LABORATORIES

December 05, 2019

Christopher D'Sa
Burns and McDonnell
400 Oyster Point Blvd, Suite 533
South San Francisco, CA 94080
Tel: (626) 817-7900
Fax:

ELAP No.: 1838
CSDLAC No.: 10196
ORELAP No.: CA300003

Re: ATL Work Order Number : 1904037
Client Reference : SCVTA-1217

Enclosed are the results for sample(s) received on November 05, 2019 by Advanced Technology Laboratories. The sample(s) are tested for the parameters as indicated on the enclosed chain of custody in accordance with applicable laboratory certifications. The laboratory results contained in this report specifically pertains to the sample(s) submitted.

Thank you for the opportunity to serve the needs of your company. If you have any questions, please feel free to contact me or your Project Manager.

Sincerely,

Edgar Caballero
President & Laboratory Director

Burns and McDonnell	Project Number : SCVTA-1217
400 Oyster Point Blvd, Suite 533	Report To : Christopher D'Sa
South San Francisco , CA 94080	Reported : 12/05/2019

SUMMARY OF SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
B-1d10.5	1904037-01	Soil	11/04/19 9:11	11/05/19 9:09

CASE NARRATIVE

Due tio shortiage of sample volume, and per clienti autihorization, sample volume was adjustied from tihe metihod recommended 1L, down tio500ml. By also reducing tihe concentiration volume down from tihe metihod recommended 1ml, down tio0.5ml, an adjustimenti of tihe RL was noti necessary. Clienti was advised of tihe possibilitiy tihati variabilitiy in resultis may occur, due tio altieration of tihe metihod process

Sample/s for Asbestos Carb 435 analysis was/were subcontracted to Amerisci Los Angeles with NVLAP Lab Code 200346-0.

Erick Ovalle

From: Barber, Simon <sbarber@burnsmcd.com>
Sent: Thursday, November 21, 2019 1:53 PM
To: Erick Ovalle
Cc: D'Sa, Christopher P (Chris); Molky Brar
Subject: Re: Results / SCVTA,B3109 / ATL 1904037

Thank you Erick,

Please proceed with the asbestos analysis from sample B-1d10.5 Lab is: 1904037-01

Sent from my iPhone

On Nov 21, 2019, at 13:50, Erick Ovalle <Erick.Ovalle@atlglobal.com> wrote:

Good afternoon Simon,

Please find attached report with an updated project name. We have enough soil to analyze Asbestos Carb 435 – please let me know if you would like us to proceed with analysis.

Best regards,

Erick Ovalle | Project Manager
ADVANCED TECHNOLOGY LABORATORIES
3275 Walnut Avenue, Signal Hill CA 90755 | www.atlglobal.com
Email: Erick.Ovalle@atlglobal.com
Tel: 562.989.4045 ext. 237 | Fax: 562.989.6348

From: Barber, Simon <sbarber@burnsmcd.com>
Sent: Thursday, November 21, 2019 8:01 AM
To: Erick Ovalle <Erick.Ovalle@atlglobal.com>
Subject: RE: Results / SCVTA,B3109 / ATL 1904037

Morning Erick,

Is there any soil left over to run Asbestos, CARB 435A?

From: Erick Ovalle <Erick.Ovalle@atlglobal.com>
Sent: Wednesday, November 20, 2019 3:25 PM
To: D'Sa, Christopher P (Chris) <cdsa@burnsmcd.com>; Barber, Simon <sbarber@burnsmcd.com>
Cc: Molky Brar <molky.brar@atlglobal.com>
Subject: Results / SCVTA,B3109 / ATL 1904037

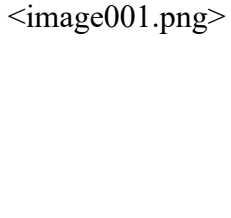
Good afternoon Chris,

Please find your results and Invoice for the above project attached.

If I can further assist you, please let me know.

PLEASE NOTE: Our legal name is Environmental Treatment & Technology Inc., dba Advanced Technology Laboratories.

Best regards,



Erick Ovalle | Project Manager
ADVANCED TECHNOLOGY LABORATORIES
3275 Walnut Avenue, Signal Hill CA 90755 | www.atlglobal.com
Email: Erick.Ovalle@atlglobal.com
Tel: 562.989.4045 ext. 237 | Fax: 562.989.6348

<1904037rev.pdf>

Erick Ovalle

From: Barber, Simon <sbarber@burnsmcd.com>
Sent: Thursday, November 21, 2019 7:50 AM
To: Erick Ovalle; D'Sa, Christopher P (Chris)
Cc: Molky Brar
Subject: RE: Results / SCVTA,B3109 / ATL 1904037

Thank you Erick,

May I request the Client Reference be changed to SCVTA-1217

Much appreciated,
Simon

From: Erick Ovalle <Erick.Ovalle@atlglobal.com>
Sent: Wednesday, November 20, 2019 3:25 PM
To: D'Sa, Christopher P (Chris) <cdsa@burnsmcd.com>; Barber, Simon <sbarber@burnsmcd.com>
Cc: Molky Brar <molky.brar@atlglobal.com>
Subject: Results / SCVTA,B3109 / ATL 1904037

Good afternoon Chris,

Please find your results and Invoice for the above project attached.

If I can further assist you, please let me know.

PLEASE NOTE: Our legal name is Environmental Treatment & Technology Inc., dba Advanced Technology Laboratories.

Best regards,

Erick Ovalle | Project Manager
ADVANCED TECHNOLOGY LABORATORIES
3275 Walnut Avenue, Signal Hill CA 90755 | www.atlglobal.com
Email: Erick.Ovalle@atlglobal.com
Tel: 562.989.4045 ext. 237 | Fax: 562.989.6348
Laboratory Excellence Defined

Erick Ovalle

From: D'Sa, Christopher P (Chris) <cdsa@burnsmcd.com>
Sent: Tuesday, November 12, 2019 6:43 PM
To: Erick Ovalle; Barber, Simon
Cc: Molky Brar
Subject: RE: Partials / SCVTA,B3109 / ATL 1904037

Thanks Erick.. Looks like some metals are exceeding 10x STLC. Can you run STLC on all those metals that are exceeding this parameter.

Thanks..

From: Erick Ovalle <Erick.Ovalle@atlglobal.com>
Sent: Tuesday, November 12, 2019 6:30 PM
To: D'Sa, Christopher P (Chris) <cdsa@burnsmcd.com>; Barber, Simon <sbarber@burnsmcd.com>
Cc: Molky Brar <molky.brar@atlglobal.com>
Subject: Partials / SCVTA,B3109 / ATL 1904037

Good evening Chris,

Please find your partial results for the above project attached.

I will follow up with a final report to include EPA 8260 and 8270 results.

If I can further assist you, please let me know.

PLEASE NOTE: Our legal name is Environmental Treatment & Technology Inc., dba Advanced Technology Laboratories.

Best regards,

Erick Ovalle | Project Manager
ADVANCED TECHNOLOGY LABORATORIES
3275 Walnut Avenue, Signal Hill CA 90755 | www.atlglobal.com
Email: Erick.Ovalle@atlglobal.com
Tel: 562.989.4045 ext. 237 | Fax: 562.989.6348
Laboratory Excellence Defined

ADVANCED TECHNOLOGY LABORATORIES
3275 Walnut Ave., Signal Hill, CA 90755
Tel: (562) 989-4045 • Fax: (562) 989-4040

CHAIN OF CUSTODY RECORD

Page 1 of 1

Instruction: Complete all shaded areas.

For Laboratory Use Only ATLCOC Ver:20190413

Method of Transport	Sample Conditions Upon Receipt					
	Condition	Y	N	Condition	Y	N
☐ Client ☐ ATL	1. CHILLED	☑	☐	5. # OF SAMPLES MATCH COC	☐	☐
☐ FedEx ☐ OnTrac	2. HEADSPACE (VOA)	☐	☐	6. PRESERVED	☐	☐
☐ GSO	3. CONTAINER INTACT	☑	☐	7. COOLER TEMP, deg C:	2.8	
☐ Other:	4. SEALED	☐	☐		ICE	

CUSTOMER

Company: Burns + McDonnell
Address: 400 Oyster Point Blvd suite 523 Tel: 650.808.7503
City: State: Zip: Fax: 650 821 2653

SEND REPORT TO:	SEND INVOICE TO: ☐ same as SEND REPORT TO
Attn: Chris D'sa	Attn: Chris D'sa
Email: cdsa@burnsmcd.com	Email: supplierinvoices@bomsmcd.com
Company: Burns + McDonnell	Company: Burns + McDonnell
Address: 400 Oyster Point Blvd. suite 523	Address: 400 oyster Point Blvd. suite 523
City: S. San francisco State: Ca Zip: 94080	City: S. San francisco State: Ca Zip: 94080

EDD: ☒ Excel ☐ EDF ☐ Equis ☐ _____
QA/QC: ☐ Routine ☐ Caltrans ☐ Legal ☒ RWQCB ☐ Level IV ☐ _____

PROJECT SAMPLES

Project Name: VTA
Project No.: 87119
Sampler: Simon Barber
Quote #:
PO #:
Special Instructions/Comments: Run Silica Gel.

ITEM	Laboratory ID (For Lab Use Only)	Sample Description: Sample ID / Location	Date	Time	Requested Analysis: 8260 / 624 (Volatiles) - GRO	8015 (GRO) - MO	8015 (DRO)	8081 (Organochlorine Pesticides)	8082 (PCBs)	8270 (Semi-volatiles)	6010 / 7000 (Title 22 Metals)	TO-15	Sample Matrix: SOIL	SOLID	GROUNDWATER	WASTEWATER	OIL	Turnaround Time (TAT)	Container: Quantity	Type	Material	Preservative	Remarks
1	1904037-01	B-1 @ 10.5	11.4.19	0911	X	X	X	X	X	X	X		X					5	4	2.5	1	1	
2	-02	B-1 @ 15	11.4.19	0925	X	X	X				X		X					5	4	2.5	1	1	
3	-03	B-1	11.4.19	0945	X	X	X	X	X	X	X				X			5	10	2.5	12	123	
4																							
5																							
6																							
7																							
8																							
9																							
10																							

TERMS

1. Sample receiving hours: 7:30 AM to 7:30 PM Monday - Friday; Saturday 8:00 AM to 12:00 PM.
2. Samples submitted AFTER 5:00 PM are considered received the following business day at 8:00 AM.
3. The following turnaround time conditions apply:
   - TAT = 0 : 300% Surcharge SAME BUSINESS DAY if received by 9:00 AM
   - TAT = 1 : 100% Surcharge NEXT BUSINESS DAY (COB 5:00 PM)
   - TAT = 2 : 50% Surcharge 2ND BUSINESS DAY (COB 5:00 PM)
   - TAT = 3 : 30% Surcharge 3RD BUSINESS DAY (COB 5:00 PM)
   - TAT = 4 : 20% Surcharge 4TH BUSINESS DAY (COB 5:00 PM)
   - TAT = 5 : NO SURCHARGE 5th BUSINESS DAY (COB 5:00 PM)
4. Weekend, holiday, after-hours work --- ask for quote.
5. Subcontract TAT is 10 - 15 business days. Projects requiring shorter TATs will incur a surcharge respective to the subcontract lab --- ask for quote.
6. Liquid and solid samples will be disposed of after 45 calendar days from receipt of samples; air samples will be disposed of after 14 calendar days after receipt of samples.
7. Electronic records maintained for five (5) years from report date.
8. Hard copy reports will be disposed of after 45 calendar days from report date.
9. Storage and Report Fees:
   - Liquid & solid samples: Complimentary storage for forty-five (45) calendar days from receipt of samples; $2/sample/month if extended storage or hold is requested.
   - Air samples: Complimentary storage for ten (10) calendar days from receipt of samples; $20 sample/week if extended storage is requested.
   - Hard copy and regenerated reports/EDDs: $17.50 per hard copy report requested; $50.00 per regenerated/reformatted report; $35 per reprocessed EDD.
10. Rush TCLP/STLC samples: add 2 days to analysis TAT for extraction procedure.
11. Unanalyzed samples will incur a disposal fee of $7 per sample.
12. The laboratory will randomly select from all QC samples received the sample to spike for Matrix Spike/Matrix Spike Duplicate (MS/MSD) at no cost. However, if you want the laboratory to additionally perform MS/MSD on your sample, a charge will be assessed for the specific sample used.

Relinquished by: (Signature and Printed Name)	Date:	Time:	Received by: (Signature and Printed Name)	Date:	Time:
Simon Barber	11.4.19	1700		11-5-19	909
Relinquished by: (Signature and Printed Name)	Date:	Time:	Received by: (Signature and Printed Name)	Date:	Time:
Relinquished by: (Signature and Printed Name)	Date:	Time:	Received by: (Signature and Printed Name)	Date:	Time:

As the authorized agent of the company above, I hereby purchase laboratory services from ATL as shown above and hereby guarantee payment as quoted.

Printed Name _____ Signature _____

Please Reply To:

AmeriSci Los Angeles
24416 S. Main Street, Ste 308
Carson, California 90745
TEL: (310) 834-4868 • FAX: (310) 834-4772

FACSIMILE TELECOPY TRANSMISSION

To:	Rachelle Arada	**From:**	Arturo A. Aldana
	Advanced Technology Laboratories	**AmeriSci Job #:**	919111714
Fax #:		**Subject:**	PLM-CARB 435 - 1000 pt ct 5 day
		Client Project:	1904037

Email: Erick.Ovalle@atlglobal.com,Tina.Nguyen@atlglobal.com,Rahul.Nair@atlglobal.com

Date: Thursday, December 5, 2019
Time: 08:36:48
Comments:

Number of Pages: 3 (including cover sheet)

AmeriSci Los Angeles
24416 S. Main Street, Ste 308
Carson, California 90745
TEL: (310) 834-4868 • FAX: (310) 834-4772

PLM Bulk Asbestos Report

Advanced Technology Laboratories
Attn: Rachelle Arada
3275 Walnut Street

Signal Hill , CA 90755

Date Received 11/25/19
Date Examined 12/05/19

RE: 1904037

AmeriSci Job # 919111714
P.O. # SC14247
Page 1 **of** 1

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
1904037-01	919111714-01	*Yes*	Trace (<0.1 % pc) (by 1000 pt ct) by Arturo A. Aldana on 12/05/19

Location: B-1d10.5

Analyst Description: Brown, Heterogeneous, Non-Fibrous, Soil
Asbestos Types: Chrysotile <0.1 % pc
Other Material: Non-Asbestos/Inert 100 %

Reporting Notes:
Analyzed By: Arturo A. Aldana ; Date Analyzed: 12/5/2019 12/5/19
*NAD = no asbestos detected; Detection Limit <1%; Reporting Limits: CVES = 1%, 400 Pt Ct = 0.25%, 1000 Pt Ct = 0.1%; NA = not analyzed; NA/PS = not analyzed / positive stop; NVA = No Visible Asbestos; PLM (polarized light microscopy) Bulk Asbestos Analysis by EPA 600/R-93/116, including requirements for EPA 600/M4-82-020 per 40 CFR 763 (NVLAP Lab #200346-0); Note: PLM is not consistently reliable in detecting asbestos in floor coverings and similar NOB materials. TEM is currently the only method that can be used to determine if this material can be considered or treated as non-asbestos-containing in New York State (also see EPA Advisory for floor tile, FR 59, 146, 38970, 8/1/94). NIST Accreditation requirements mandate that this report must not be reproduced except in full with the approval of the laboratory. This PLM report relates ONLY to the items tested.

Reviewed By:

ADVANCED TECHNOLOGY LABORATORIES

SUBCONTRACT ORDER

Work Order: 1904037

91911714

SENDING LABORATORY:

Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755
Phone: 562.989.4045
Fax: 562.989.6348
Project Manager: Erick Ovalle

RECEIVING LABORATORY:

AmeriSci Los Angeles
24416 South Main Street, Suite 308
Carson, CA 90745
Phone :(310) 834-4868
Fax: (310) 834-4772
PO#: SC14247- STANDARD TAT

Sampler: Simon Barber

IMPORTANT : Please include Work Order # and PO # in your invoice.

Analysis	Due	Expires	Sampled	Comments
ATL Lab#: 1904037-01 / B-1d10.5		**Soil**	**11/04/19 09:11**	
Asbestos_CARB_435_1000_SUB	**12/02/19 17:00**	11/11/19 09:11		
[Asbestos CARB 435 (1000 pt ct)]				
1-Glass Jar - 2 oz				

Released By	Date	Received By	Date
	11/29/19 15:55	Pissamai Bones	11/5/19 15:55
Released By	Date	Received By	Date

ATTACHMENT 3 – PHASE II ESA PHOTOGRAPHS

Photograph Log Sheets
SCVTA- 1217 Bohannan
Phase II ESA 2019-11-04

Photo 1: Boring Location with VTA Fee Take Area

Photo 2: Pressure grouted groundwater extraction well.

Photo 3: Former Groundwater extraction well.; Pressure Grouted.

Photo 4: Boring Location.

Photo 5: Hand Clearance of boring.

Photo 6: Direct Push Drilling.

Photo 7: Boring backfilling.

BURNS McDONNELL

CREATE AMAZING.

Burns & McDonnell World Headquarters
9400 Ward Parkway
Kansas City, MO 64114
O 816-333-9400
F 816-333-3690
www.burnsmcd.com

EC202001-0388
Rcv'd 01/24/2020

BURNS McDONNELL

01-22-2020

Dan Pornel
Planning & Engineering Division
Santa Clara Valley Transportation Authority
3331 North First Street
San Jose, California 95134

Re: Phase II: Abdulkariem – Property Parcel 1218

Dear Dan:

Please find enclosed one copy of the Phase II Report for the Abdulkariem Property (Parcel 1218) located at 1148 South Capitol Ave, San Jose, CA 95127.

Enclosures:

- 1 Hardcopy (bound) Final Phase II report
- 1 Thumb Drive with the Phase II report in .pdf format

Sincerely,

Simon Barber P.G. QSP/D QISP ENV SP
Project Geologist

SB/sb

Enclosure Attachment
cc: Jose Mares- SCVTA
Chris D'Sa- Burns & McDonnell

400 Oyster Point Blvd. \ Suite 533 \ South San Francisco, CA 94080
O 650-871-2926 \ **F** 650-871-2653 \ burnsmcd.com
CA Contractor License 755238

Phase II Site Characterization Report: Parcel 1218 Abdulkariem

Santa Clara Valley Transportation Authority

VTA Project No. 1218
Burns & McDonnell Project No. 87119
Revision Draft
1/20/2020

Phase II Site Characterization Report: Parcel 1218 Abdulkariem

prepared for

Santa Clara Valley Transportation Authority
VTA Project No. 1218
San Jose, CA

Project No. 87119

Revision Draft
1/20/2020

prepared by

Burns & McDonnell Engineering Company, Inc.
South San Francisco, California

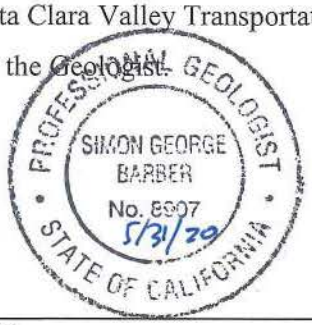
INDEX AND CERTIFICATION

Santa Clara Valley Transportation Authority
Phase II Site Characterization Report:
Parcel 1218 Abdulkariem
Project No. 87119

Report Index

Certification

I hereby certify, as a Professional Geologist in the state of California, that the information in this document was assembled under my direct personal charge. This report is not intended or represented to be suitable for reuse by the Santa Clara Valley Transportation Authority or others without specific verification or adaptation by the Geologist.



Simon Barber P.G. (CA 8907)
BMcD Geologist QSP/D QISP ENV SP
Date: 01-22-2020

Carly Beck
Assistant Environmental Scientist
Date 01-22-2020

TABLE OF CONTENTS

Page No.

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS

Abbreviation	Term/Phrase/Name
µg/kg	Microgram per kilogram
µg/L	Microgram per liter
BART	Bay Area Rapid Transit
Burns & McDonnell	Burns & McDonnell Engineering Company, Inc.
Cascade	Cascade Drilling, LP.
EBRC	Eastridge to BART Regional Connector Project
ELAP	Environmental Laboratory Accreditation Program
EPA	United Stated Environmental Protection Agency
ESA	Environmental Site Assessment
ESL	Environmental Screening Level (San Francisco Bay-Regional Board)
Fee Take	VTA Fee Take Area of Activity
ft bgs	feet below ground surface
IDW	investigation-derived waste
MDL	method detection limit
mg/kg	Milligrams per kilogram
MTBE	Methyl tert-butyl ether
NPDES	National Pollution Discharge Elimination System
NVLAP	National Voluntary Laboratory Accredited Program
OCP	organochlorine pesticide
OSHA	Occupational Safety & Health Administration
PCB	polychlorinated biphenyl
PID	photoionization detector
PQL	practicable quantitation limit
Regional Board	San Francisco-Bay Regional Water Quality Control Board
S&HP	Site Safety & Health Plan
Site	1218 Property Parcel
SVOC	semi-volatile organic compound
TPH	total petroleum hydrocarbons
TPHd	diesel-range total petroleum hydrocarbons
TPHg	gasoline-range total petroleum hydrocarbons
TPHmo	motor oil-range total petroleum hydrocarbons
TTLC	Total Threshold Limit Concentration
VOC	volatile organic compound
VTA	Valley Transportation Authority

1.0 INTRODUCTION

On behalf of the Santa Clara Valley Transportation Authority (VTA), Burns & McDonnell Engineering Company, Inc. (Burns & McDonnell), has prepared this *Phase II Site Characterization Report: Parcel 1218 Abdulkariem.* The Parcel 1218 Abdulkariem property is part of the Eastridge to the Bay Area Rapid Transit (BART) Regional Connector Project (EBRC) and will extend 2.4 miles of Light Rail from the existing Alum Rock Station to the Eastridge Transit Center. Light Rail will operate primarily in the center of Capitol Expressway and new rail stations will be built at Story Road and the Eastridge Transit Center (Figure 1).

The VTA retained Burns & McDonnell to assess existing subsurface conditions in soil and groundwater encountered within the VTA Fee Take project footprint (Fee Take) at the property identified by the Santa Clara County Assessor PIN prefix 1218; located at 1148 South Capitol Avenue, San Jose, CA (Site). The site is occupied by S&S Market. The VTA Fee Take area is depicted in Figure 2.

On December 27, 2019, Burns & McDonnell advanced two (2) direct push borings, to a depth of 24 feet (ft) below ground surface (bgs). A total of four (4) soil samples were collected. The soil samples were collected from the boring as defined in the Phase II Site Characterization Workplan: CP218 Parcel[1]. In addition, one (1) groundwater sample was collected from one boring. The direct push borings were advanced by Cascade Drilling L.P. (Cascade) a California C-57 licensed drilling company under contract to Burns & McDonnell.

Four (4) soil and one (1) groundwater samples were analyzed by Advanced Laboratory Technologies (ATL) for following constituents of concern:

- Total Petroleum Hydrocarbons (TPH) as Diesel (TPHd) by Environmental Protection Agency (EPA) Method 8015B with EPA Method 3630C silica gel cleanup preparation,
- TPH as motor oil (TPHmo) by EPA method 8015B,
- TPH as gasoline (TPHg) and Volatile Organic Compounds (VOCs) by EPA Method 8260B,
- Cam17/Title 22 Metals (metals) by EPA Method 6010B/7470A.

One soil and one groundwater sample were additionally analyzed for the presence of:

- Semi-volatile Organic Compounds (SVOCs) by EPA Method 8270C SIM,
- Organochlorine Pesticides (OCPs) by EPA Method 8081A,
- Polychlorinated Biphenyl's (PCBs) by EPA Method 8082.

[1] Phase II Site Characterization Workplan: CP218 Parcel. Burns & McDonnell Engineering Company, Inc. July 11, 2019.

- Asbestos by CARB435

2.0 SOIL & GROUNDWATER INVESTIGATION

Prior to all Phase II activities commencing, access to the Parcel 1218 was secured by the VTA through a Permit-to-Enter Agreement between the VTA and the property owner.

On December 27, 2019, Phase II Environmental Site Assessment (ESA) activities were performed by a Burns & McDonnell Professional Geologist. Phase II ESA activities consisted of advancement of two (2) direct-push borings performed by Cascade, under the supervision of Burns & McDonnell geologist Simon Barber. Prior to direct-push advancement, an Underground Service Alert of Northern California Dig Alert ticket was obtained, and a private utility location contractor conducted a subsurface utility survey within the planned areas of investigation. The investigation included locating subsurface utilities within the planned areas of investigation.

These Phase II ESA sampling locations were selected to be representative of the Site conditions within the VTA Fee Take area as observed during a Phase I ESA[2] site visit. Figure 2 depicts the soil boring locations for this investigation.

2.1 Direct Push Drilling

Borings B-1 and B-2 were hand cleared to a depth of 5 ft bgs prior to direct push drilling. Both borings were advanced to a total depth of 24 ft bgs using a Geoprobe® 6620DT Track Mounted Probe Rig operated by Cascade. The soil borings were continuously sampled using a 3-inch sample barrel equipped with an acetate sleeve and logged according to the Unified Soil Classification System by a Burns & McDonnell geologist. Upon retrieval, the acetate sleeve was opened, and soil materials were field screened for presence of organic vapors using a photoionization detector (PID). Headspace PID readings were recorded on a boring log; copies of boring logs are provided as Attachment 1.

Each soil sample was collected by transferring a portion of the material from the acetate sleeve into the appropriate laboratory-provided sample containers. Each sample was labeled and immediately placed into a cooler containing ice. A grab groundwater sample was retrieved from boring B-1. All samples were delivered to ATL, under chain-of-custody manifestation and protocols.

Upon completion of sampling activities, the borings were abandoned by back-filling with a high solids cement-bentonite grout. The grout was placed using a side discharge tremie pipe. The tremie pipe was

[2] Phase I Environmental Site Assessment of the S&S Market Property (1218), 1148 S Capitol Ave, San Jose, CA, 95127. Burns & McDonnell Engineering Company, Inc. November 19, 2019.

raised slowly while keeping the discharge point of the tremie pipe just below the surface of the slurry. The grout was placed from the bottom of the hole to within 12 inches of the ground surface. After the grout set, the remaining portion of the open hole was backfilled with grout and restored to match surrounding surface conditions. As the boring did not advance past 45 ft bgs, a Santa Clara Valley Water District drill permit and grout inspection was not required.

2.2 Soil Sampling

Two soil samples were collected from each borings at depths of 7 ft bgs (B-2), 8 ft bgs (B-1), and 24 ft bgs (B-1 & B-2); correlating to the highest PID reading (and or at the soil/groundwater interface) and at total depth of the boring. Soil samples were collected in laboratory supplied sample vessels, uniquely labeled, and placed in an insulated cooler on crushed ice pending transfer to the analytical laboratory under standard chain-of-custody procedures and documentation.

2.3 Groundwater Sampling

Groundwater was encountered prior to the maximum boring depth of 24 ft bgs in each boring, and one (1) groundwater sample, B-1, was collected for all constituents of concern from boring B-1. The groundwater sample was collected with a peristaltic pump and new polyethylene tubing placed within ¾ inch poly-vinyl chloride casing and machine slotted screen. The groundwater sample was collected in laboratory supplied sample vessels, uniquely labeled, and placed in an insulated cooler on crushed ice pending transfer to the analytical laboratory under standard chain-of-custody documentation.

All soil and groundwater samples were submitted to ATL, a California Environmental Laboratory Accredited Program (ELAP) laboratory (ELAP #: 1838). ATL is a CA department of General Services-Small Business Enterprise, CA Unified Certification Program and Caltrans-Disadvantaged Business Enterprise, and Caltrans, Public Utilities Commission-Minority Business Enterprise.

2.4 Safety & Health

Fieldwork was performed under a Site Safety & Health Plan (S&HP) prepared by a Burns & McDonnell certified industrial hygienist, in accordance with Occupational Safety and Health Administration (OSHA) guidelines. Prior to beginning daily activities, a safety & health tailgate meeting was held on-Site, and a Soil & Groundwater Investigation Results

2.5 Constituents of Concern in Soil

Four (4) soil samples were collected and submitted for analysis of TPHg, TPHd, TPHmo, VOCs, and Metals, one (1) soil sample was submitted for analysis of SVOCs, OCPs, PCB and asbestos; the following

sections summarize the analytical findings. All soil analytical results are compared to the San Francisco Bay-Regional Water Quality Control Board (Regional Board) Environmental Screening Level (ESL): Table S-1 for "any land use, construction worker shallow and deep soil exposure scenario[3]".

2.5.1 TPH in Soil

- TPHg was not detected in any soil sample at or above the method detection limit (MDL) or the practicable quantitation limit (PQL).
- TPHd was detected in sample B-2d24 at a concentration of 1.5 mg/kg; below its corresponding ESL.
- TPHmo was not detected in any soil sample at or above the MDL or PQL.

TPH analytical results are summarized in Table 1. Copies of the Certified-Analytical Report are provided as Attachment 2.

2.5.2 Volatile Organic Compounds in Soil

- VOCs were not detected in any soil sample at or above the MDL or PQL

VOC analytical results are summarized in Table 2.

2.5.3 Semi-Volatile Organic Compounds in Soil

- SVOCs were not detected at or above the MDL or PQL in sample B-1d8.

SVOC analytical results are summarized in Table 3.

2.5.4 CAM17/Title 22 Metals in Soil

- CAM17/Title 22 Metals were detected in all the soil samples. Of the metals detected, Arsenic (As) and Chromium (Cr) total exceeded their corresponding ESLs of 0.98 mg/kg, and 2.80 mg/kg, respectively.
- As was detected in B-1d8, B-1d24, B-2d7, and B-2d24 at concentrations of 4.6 mg/kg, 1.8 mg/kg, 6.7 mg/kg and 1.9 mg/kg, respectively.
- Cr (total) was detected in B-1d8, B-1d24, B-2d7, and B-2d24 at concentrations of 37 mg/kg, 24 mg/kg, 42 mg/kg, and 36 mg/kg, respectively.

[3] San Francisco Bay-Regional Water Quality Control Board, Environmental Screening Levels: Table S-1. January 2019 (Rev.1). https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/esl.html

Multiple metals were detected above the MDL. However, none of the concentrations in metals (besides As and Cr) exceeded their California Code of Regulations Title 22 Total Threshold Limit Concentration (TTLC) values. No metals exceeded the TTLC trigger for hazardous waste.

CAM17/Title22 Metals analytical results are summarized in Table 4.

2.5.5 Organochlorine Pesticides in Soil

- OCPs were not detected at or above the MDL or PQL in soil sample B-1d8.

OCP analytical results are summarized in Table 5.

2.5.6 Polychlorinated Biphenyl's in Soil

- PCBs were not detected at or above the MDL or PQL in soil sample B-1d8.

PCB analytical results are summarized in Table 6.

2.5.7 Asbestos in Soil

- Asbestos was determined not present in soil.

2.6 Constituents of Concern in Groundwater

One groundwater sample was collected form boring B-1 and submitted for analysis of TPHg, TPHd, TPHmo, VOC, SVOC, Metals, OCPs, PCBs, and Asbestos; the following sections summarize the analytical findings. All groundwater analytical results are compared to the Regional Board ESL: Table GW-1 for "Direct Exposure Human Health Risk Levels[4]".

2.6.1 TPH in Groundwater

- TPHg was not detected at or above the MDL or PQL.
- TPHd was not detected at or above the MDL or PQL.
- TPHmo was not detected at or above the MDL or PQL.

TPH analytical results are summarized in Table 7.

[4] San Francisco Bay-Regional Water Quality Control Board, Environmental Screening Levels: Table GW-1. January 2019 (Rev.1). https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/esl.html

2.6.2 VOCs in Groundwater

Two VOCs compounds were detected in groundwater sample B-1: Methyl tert-butyl ether (MTBE) and toluene at concentrations of 0.96 µg/l and 1.1 µg/l, respectively. Although TMBE and toluene were detected above the MDL, the concentrations did not exceed their corresponding ESLs.

Groundwater at the Site will not be used as a drinking water source. VOC analytical results are summarized in Table 8.

2.6.3 Semi-Volatile Organic Compounds in Groundwater

- SVOC were not detected at or above the MDL in groundwater.

SVOC analytical results are summarized in Table 9.

2.6.4 Cam17/Title 22 Metals in Groundwater

- Metals were detected at or above the MDL in groundwater sample B-1. These metals included: As, Barium (Ba), Beryllium (Be), Cr (total), Cobalt (Co), Copper (Cu), Lead (Pb), Mercury (Hg), Molybdenum (Mo), Nickel (Ni), Vanadium (V), and Zinc (Zn). Of the metals detected, As, Ba, Be, Cr (total), Co, Cu, Pb, Ni, and Va exceeded their corresponding ESLs at concentrations of 140 µg/L, 4,300 µg/L, 19 µg/L, 900 µg/L, 420 µg/L, 1,100 µg/L, 180 µg/L, 1,900 µg/L, and 820 µg/L, respectively. No metals exceeded the TTLC trigger for hazardous waste.

CAM17/Title 22 metals analytical results are summarized in Table 10.

Copies of the Certified-Analytical Reports is provided as Attachment 2.

2.6.5 Organochlorine Pesticides in Groundwater

- OCP compounds were not detected at or above their corresponding MDL or PQL in groundwater.

OCP analytical results are summarized in Table 11.

2.6.6 Polychlorinated Biphenyl's in Groundwater

- PCBs compounds were not detected at or above their corresponding MDL or PQL in groundwater.

OCP analytical results are summarized in Table 12.

2.6.7 Asbestos in Groundwater

Soil sample B-1d8 and groundwater sample B-1 were analyzed for the presence of asbestos by Method CARB 435 by AmeriSci Los Angeles laboratory.

- Asbestos was not detected in groundwater.

Certified-Analytical Reports for all samples collected are provided as Attachment 2.

3.0 CONCLUSIONS

Two direct push borings were advanced in the footprint of VTA Fee Take area at the Site. Four (4) soil samples, and one (1) groundwater sample were submitted for laboratory analysis of potential constituents of concern. Based on the evaluation of the sample analytical results, the following is concluded:

- TPHg, TPHd, and TPHmo concentrations (when detected) did not exceed their respective ESLs in soil or groundwater for construction workers.
- VOC compounds were detected above the MDL in soil. VOC compounds MTBE and toluene were detected above the MDL, but not in in excess of the ESL for direct exposure.
- No SVOC compounds were detected in soil or groundwater at or above the MDL.
- Multiple CAM17/Title 22 metals were detected in soil at or above the MDL in all samples collected (as expected for the region); As and Cr (total) were detected above the ESL for construction workers but did not exceed the TTLC trigger for hazardous waste.
- Multiple CAM17/Title 22 metals were detected in groundwater at or above the MDL in sample B-1 (as expected for the region); As, Ba, Be, Cr (total), Co, Cu, Pb, Ni, and Va were detected above their respective ESL but did not exceeded the TTLC trigger for hazardous waste.
- OCPs were not detected at or above the MDL in soil or groundwater.
- PCBs were not detected at or above the MDL in soil or groundwater.
- Asbestos was not detected in soil or groundwater.

Given the soil and groundwater quality results in this Phase II ESA investigation specific to the VTA Fee Take area at the Site; VTA and future commercial contractors should take into account that multiple metals present in soil and groundwater exceed their corresponding ESLs and are constituents-of-concern.

Due to the presence of elevated concentrations of metals in groundwater, it is recommended that groundwater generated during dewatering activities is treatment prior to discharge into any storm drain system under a National Pollution Discharge Elimination System (NPDES) permit or into any sewer system under a Short Term Discharge permit with the City of San Jose.

Residual hydrocarbons as diesel is present in subsurface soil within the VTA Fee Take Area at a very low concentration. Although the constituents-of-concern (metals) are not considered hazardous, further waste characterization will be required by potential contractors who generate materials that require transportation and disposal/recycling.

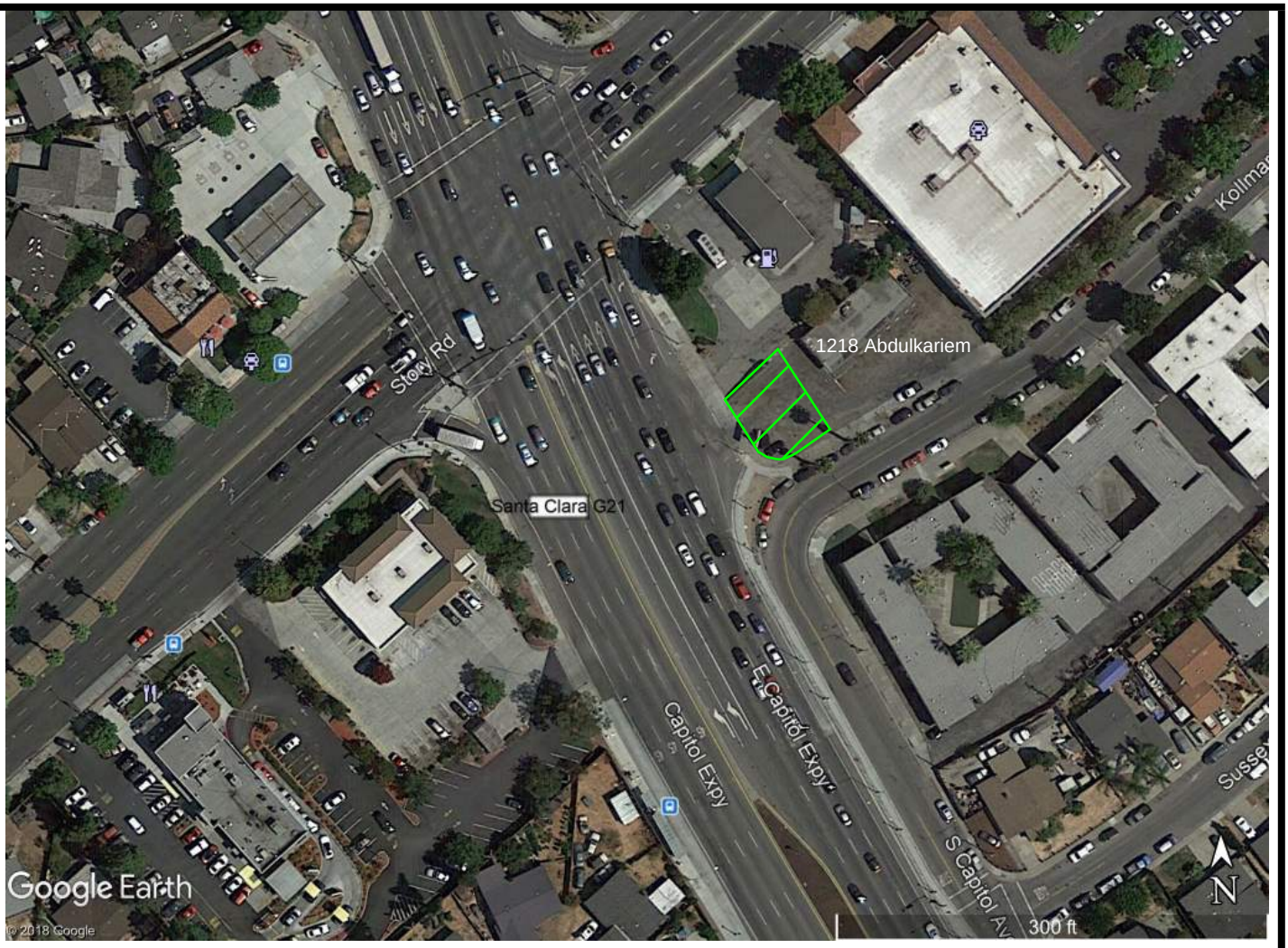
It is anticipated that no special handling requirements will be required during soil disturbance activities and standard personal protection equipment (PPE) is sufficient; PPE requirements shall be adjusted if unforeseen conditions are encountered.

4.0 INVESTIGATION DERIVED WASTE

Investigation-derived waste (IDW) include soil cuttings, decontamination fluid, and groundwater displaced during the investigation. IDW generated during investigation activities were contained in a Department of Transportation approved 55-gallon drum and staged at the VTA Eastridge station pending results of waste characterization analyses. Following waste profiling, the IDW will be removed from the Site and transported to an appropriate waste facility for disposal or recycling.

Other IDW generated, including personal protective equipment, rope, bailers, paper towels, etc. was placed in trash bags and into appropriate receptacles.

FIGURES



SCVTA FEE TAKE AREA: 1218 (APPROXIMATE)

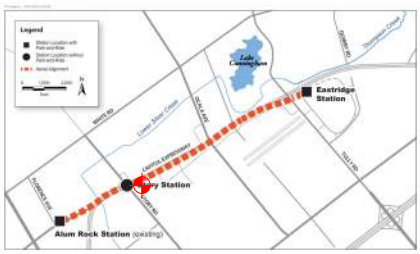
Santa Clara Valley Transportation Authority
Solutions that move you

BURNS McDONNELL

FIGURE 1
SITE LOCATION
1218
SANTA CLARA VALLEY
TRANSPORATATION
AUTHORITY

SCVTA FEE TAKE AREA (APPROXIMATE)

BORING LOCATIONS
B-1: 37° 21.027'N 121° 49.578'W
B-2: 37° 21.034'N 121° 49.580'W



BURNS McDONNELL

FIGURE 2
SITE INVESTIGATION PLAN
1218 ABDULKARIEM
1148 S CAPITOL AVE
SAN JOSE, CA

TABLES

TABLE 1

SITE CHARACTERIZATION
TOTAL PETROLEUM HYDROCARBONS IN SOIL
SCVTA 1218 ABDULKARIEM PARCEL
SAN JOSE, CALIFORNIA

Sample ID	Sample Date	Sample Depth (ft bgs)	TPH - GRO (mg/kg)	TPH - Diesel (mg/kg)	TPH - Motor Oil (mg/kg)
B-1d8	12/27/2019	8	<800	<1.0	<1.0
B-1d24	12/27/2019	24	<750	<1.0	<1.0
B-2d7	12/27/2019	7	<840	<1.0	<1.0
B-2d24	12/27/2019	24	<820	1.5	<1.0
Environmental Screening Level (ESL)			**---**	**1,100**	**54,000**

Notes:
ESL: Table S-1: Soil Direct Exposure Human Health Risk Screening Level (mg/kg).
Construction Worker: Any Land Use/Any Depth Soil Exposure.
SF Bay- Regional Water Quality Control Board January 2019 (rev.1).
https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/esl.html
TPH as diesel by EPA Method 8015M
TPH as motor oil by EPA Method 8015M
TPH as gasoline by EPA Method 8260B
ft bgs - Feet below ground surface
Concentrations are in units of milligrams per kilogram (mg/kg)
Samples were analyzed using EPA Method 8015B
Laboratory Qualifiers
< # - Compound was not detected above the indicated laboratory Method Detection Limit MDL or Practical Quantitation Limit (PQL)

TABLE 2

SITE CHARACTERIZATION
VOLATILE ORGANIC COMPOUNDS IN SOIL
SCVTA 1218 ABDULKARIEM PARCEL
SAN JOSE, CALIFORNIA

Sample ID	**B-1d8**	**B-1d24**	**B-2d7**	**B-2d24**	**ESL**
Sample Depth ft bgs	8	24	7	24	
Sample Date	12/27/2019	12/27/2019	12/27/2019	12/27/2019	
1,1,1,2-Tetrachloroethane	<4.0	<3.7	<4.2	<4.1	**190,000**
1,1,1-Trichloroethane	<4.0	<3.7	<4.2	<4.1	**7,200,000**
1,1,2,2-Tetrachloroethane	<4.0	<3.7	<4.2	<4.1	**49,000**
1,1,2-Trichloroethane	<4.0	<3.7	<4.2	<4.1	**6,300**
1,1-Dichloroethane	<4.0	<3.7	<4.2	<4.1	**370,000**
1,1-Dichloroethene	<4.0	<3.7	<4.2	<4.1	**350,000**
1,1-Dichloropropene	<4.0	<3.7	<4.2	<4.1	**---**
1,2,3-Trichloropropane	<4.0	<3.7	<4.2	<4.1	**830**
1,2,3-Trichlorobenzene	<4.0	<3.7	<4.2	<4.1	**---**
1,2,4-Trichlorobenzene	<4.0	<3.7	<4.2	<4.1	**240,000**
1,2,4-Trimethylbenzene	<4.0	<3.7	<4.2	<4.1	**---**
1,2-Dibromo-3-chloropropane	<8.0	<7.5	<8.4	<8.2	**1,100**
1,2-Dibromoethane	<4.0	<3.7	<4.2	<4.1	**3,300**
1,2-Dichlorobenzene	<4.0	<3.7	<4.2	<4.1	**7,800,000**
1,2-Dichloroethane	<4.0	<3.7	<4.2	<4.1	**45,000**
1,2-Dichloropropane	<4.0	<3.7	<4.2	<4.1	**66,000**
1,3,5-Trimethylbenzene	<4.0	<3.7	<4.2	<4.1	**---**
1,3-Dichlorobenzene	<4.0	<3.7	<4.2	<4.1	**---**
1,3-Dichloropropane	<4.0	<3.7	<4.2	<4.1	**---**
1,4-Dichlorobenzene	<4.0	<3.7	<4.2	<4.1	**280,000**
2,2-Dichloropropane	<4.0	<3.7	<4.2	<4.1	**---**
2-Chlorotoluene	<4.0	<3.7	<4.2	<4.1	**---**
4-Chlorotoluene	<4.0	<3.7	<4.2	<4.1	**---**
4-Isopropyltoluene	<4.0	<3.7	<4.2	<4.1	**---**
Benzene	<4.0	<3.7	<4.2	<4.1	**33,000**
Bromobenzene	<4.0	<3.7	<4.2	<4.1	**---**
Bromochloromethane	<4.0	<3.7	<4.2	<4.1	**---**
Bromodichloromethane	<4.0	<3.7	<4.2	<4.1	**28,000**
Bromoform	<4.0	<3.7	<4.2	<4.1	**1,200,000**
Bromomethane	<4.0	<3.7	<4.2	<4.1	**29,000**
Carbon disulfide	<4.0	<3.7	<4.2	<4.1	**---**
Carbon tetrachloride	<4.0	<3.7	<4.2	<4.1	**---**
Chlorobenzene	<4.0	<3.7	<4.2	<4.1	**1,200,000**
Chloroethane	<4.0	<3.7	<4.2	<4.1	**59,000,000**
Chloroform	<4.0	<3.7	<4.2	<4.1	**34,000**
Chloromethane	<4.0	<3.7	<4.2	<4.1	**470,000**
cis-1,2-Dichloroethene	<4.0	<3.7	<4.2	<4.1	**78,000**
cis-1,3-Dichloropropene	<4.0	<3.7	<4.2	<4.1	**53,000**
Di-isopropyl ether	<4.0	<3.7	<4.2	<4.1	**---**
Dibromochloromethane	<4.0	<3.7	<4.2	<4.1	**300,000**
Dibromomethane	<4.0	<3.7	<4.2	<4.1	**---**
Dichlorodifluoromethane	<4.0	<3.7	<4.2	<4.1	**---**
Ethyl Acetate	<40	<37	<42	<41	**---**
Ethyl Ether	<40	<37	<42	<41	**---**
Ethyl tert-butyl ether	<4.0	<3.7	<4.2	<4.1	**---**
Ethylbenzene	<4.0	<3.7	<4.2	<4.1	**540,000**
Freon-113	<4.0	<3.7	<4.2	<4.1	**---**
Hexachlorobutadiene	<4.0	<3.7	<4.2	<4.1	**100,000**
Isopropylbenzene	<4.0	<3.7	<4.2	<4.1	**---**
m,p-Xylene	<8.0	<7.5	<8.4	<8.2	**2,400,000**
Methylene chloride	<4.0	<3.7	<4.2	<4.1	**490,000**
MTBE	<4.0	<3.7	<4.2	<4.1	**4,100,000**
n-Butylbenzene	<4.0	<3.7	<4.2	<4.1	**---**
n-Propylbenzene	<4.0	<3.7	<4.2	<4.1	**---**
Naphthalene	<4.0	<3.7	<4.2	<4.1	**400,000**
o-Xylene	<4.0	<3.7	<4.2	<4.1	**---**
sec-Butylbenzene	<4.0	<3.7	<4.2	<4.1	**---**
Styrene	<4.0	<3.7	<4.2	<4.1	**25,000,000**
tert-Amyl methyl ether	<4.0	<3.7	<4.2	<4.1	**---**
tert-Butanol	<80	<75	<84	<82	**---**
tert-Butylbenzene	<4.0	<3.7	<4.2	<4.1	**---**
Tetrachloroethene	<4.0	<3.7	<4.2	<4.1	**33,000**
Toluene	<4.0	<3.7	<4.2	<4.1	**4,700,000**
trans-1,2-Dichloroethene	<4.0	<3.7	<4.2	<4.1	**570,000**
trans-1,3-Dichloropropene	<4.0	<3.7	<4.2	<4.1	**---**
Trichloroethene	<4.0	<3.7	<4.2	<4.1	**18,000**
Trichlorofluoromethane	<4.0	<3.7	<4.2	<4.1	**---**
Vinyl acetate	<40	<37	<42	<41	**---**
Vinyl chloride	<4.0	<3.7	<4.2	<4.1	**3,400**

Notes:
ESL: Table S-1: Soil Direct Exposure Human Health Risk Screening Level (mg/kg).
Construction Worker: Any Land Use/Any Depth Soil Exposure.
SF Bay- Regional Water Quality Control Board January 2019 (rev.1).
https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/esl.html
Volatile Organic Compounds by EPA Method 8260B.
ft bgs - Feet below ground surface.
Concentrations are in units of micrograms per kilogram (µg/kg).
Exceedance in bold font.
-- No ESL listed.
Laboratory Qualifiers
< # - Compound was not detected above the indicated laboratory Method Detection Limit (MDL) or Practical Quantitation Limit (PQL)

TABLE 3

SITE CHARACTERIZATION
SEMI VOLATILE ORGANIC COMPOUNDS IN SOIL
SCVTA 1218 ABDULKARIEM PARCEL
SAN JOSE, CALIFORNIA

Sample ID	**B-1d8**	**ESL**
Sample Depth (ft bgs)	8	
Sample Date	12/27/2019	
2-Methylnaphthalene	<330	670,000
Acenaphthene	<330	10,000,000
Acenaphthylene	<330	---
Anthracene	<330	50,000,000
Benzo(a)anthracene	<330	110,000
Benzo(a)pyrene	<330	10,000
Benzo(b)fluoranthene	<330	110,000
Benzo(g,h,i)perylene	<330	---
Benzo(k)fluoranthene	<330	910,000
Chrysene	<330	9,100,000
Dibenz(a,h)anthracene	<330	11,000
Fluoranthene	<330	6,700,000
Fluorene	<330	6,700,000
Indeno(1,2,3-cd)pyrene	<330	110,000
Naphthalene	<330	400,000
Phenanthrene	<330	---
Pyrene	<330	5,000,000

Notes:
ESL: Table S-1: Soil Direct Exposure Human Health Risk Screening Level (mg/kg).
Construction Worker: Any Land Use/Any Depth Soil Exposure.
SF Bay- Regional Water Quality Control Board January 2019 (rev.1).
https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/esl.html
Semi-Volatile Organic Compounds by EPA Method 8270SIM.
ft bgs - Feet below ground surface
Concentrations are in units of micrograms per kilogram (µg/kg).
##: Exceedance in bold
--- no ESL listed.
Laboratory Qualifiers
< # - Compound was not detected above the indicated laboratory Method Detection Limit (MDL or Practical Quantitation Limit (PQL).

TABLE 4

SITE CHARACTERIZATION
CAM17/TITLE 22 METALS IN SOIL
SCVTA 1218 ABDULKARIEM PARCEL
SAN JOSE, CALIFORNIA

Sample ID	Sample Date	Sample Depth (ft. bgs)	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
B-1d8	12/27/2019	8	<2.0	**4.6**	89	<1.0	<1.0	**37**	7.3	17	5.5	<0.10	<1.0	60	<1.0	<1.0	<1.0	25	35
B-1d24	12/27/2019	24	<2.0	**1.8**	100	<1.0	<1.0	**24**	5.0	9.0	3.6	<0.10	<1.0	32	<1.0	<1.0	<1.0	16	19
B-2d7	12/27/2019	7	<2.0	**6.7**	150	<1.0	<1.0	**42**	9.3	21	5.9	<0.10	<1.0	75	<1.0	<1.0	<1.0	28	37
B-2d24	12/27/2019	24	<2.0	**1.9**	120	<1.0	<1.0	**36**	7.0	14	4.8	0.17	<0.10	46	<1.0	<1.0	<1.0	24	31
ESL			**50**	**0.98**	**3,000**	**27**	**51**	**2.80**	**28**	**14,000**	**160**	**44**	**1,800**	**86**	**1,700**	**1,800**	**3.5**	**470**	**110,000**

Notes:

ESL: Table S-1: Soil Direct Exposure Human Health Risk Screening Level (mg/kg).

Construction Worker: Any Land Use/Any Depth Soil Exposure.

SF Bay- Regional Water Quality Control Board January 2019 (rev.1).

https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/esl.html

CAM17/Title 22 Metals analyzed using EPA Method 6010B; Mercury was analyzed using EPA Method 7471A

ft bgs - Feet below ground surface

Concentrations are in units of milligrams per kilogram (mg/kg).
Exceedance in bold font.
mg/L- Miligrams per Liter

--- NO ESL listed.

NA - Not Applicable

STLC- Soluable Threshold Limit Concentration

Laboratory Qualifiers

< # - Compound was not detected above the indicated laboratory Method Detection Limit (MDL) or Practical Quantitation Limit (PQL).

TABLE 5

SITE CHARACTERIZATION
ORGANOCHLORINE PESTICIDES IN SOIL
SCVTA 1218 ABDULKARIEM PARCEL
SAN JOSE, CALIFORNIA

Sample ID	BM-1d8	ESL
Sample Date	12/27/2019	
4,4´-DDD	<2.0	**81,000**
4,4´-DDE	<2.0	**57,000**
4,4´-DDT	<2.0	**57,000**
Aldrin	<1.0	**1,000**
alpha-BHC	<1.0	**---**
alpha-Chlordane	<1.0	**---**
beta-BHC	<1.0	**---**
Chlordane	<8.5	**14,000**
delta-BHC	<1.0	**---**
Dieldrin	<2.0	**11,000**
Endosulfan I	<1.0	**1,500,000**
Endosulfan II	<2.0	**---**
Endosulfan sulfate	<2.0	**---**
Endrin	<2.0	**74,000**
Endrin aldehyde	<2.0	**---**
Endrin ketone	<2.0	**---**
gamma-BHC	<1.0	**16,000**
gamma-Chlordane	<1.0	**---**
Heptachlor	<1.0	**3,700**
Heptachlor epoxide	<1.0	**1,900**
Methoxychlor	<5.0	**1,200,000**
Toxaphene	<50	**14,000**

Notes:

ESL: Table S-1: Soil Direct Exposure Human Health Risk Screening Level (mg/kg).
Construction Worker: Any Land Use/Any Depth Soil Exposure.
SF Bay- Regional Water Quality Control Board January 2019 (rev.1).
https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/esl.html

Concentrations are in units of micrograms per kilogram (µg/kg).
Samples were analyzed using EPA Method 8081A.
ft bgs - Feet below ground surface.
Exceedance in bold font.

Laboratory Qualifiers:

< # - Compound was not detected above the indicated laboratory Method Detection Limit (MDL).

TABLE 6

SITE CHARACTERIZATION
POLYCHLORINATED BIPHENYLS IN SOIL
SCVTA 1218 ABDULKARIEM PARCEL
SAN JOSE, CALIFORNIA

Sample ID	Sample Date	Sample Depth (ft bgs)	Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Aroclor 1262	Aroclor 1268
BM-1d8	12/27/2019	8	<16	<16	<16	<16	<16	<16	<16	<16	<16
ESL			---	---	---	---	---	---	---	---	---

Notes:
ESL: Table S-1: Soil Direct Exposure Human Health Risk Screening Level (mg/kg).
Construction Worker: Any Land Use/Any Depth Soil Exposure.
SF Bay- Regional Water Quality Control Board January 2019 (rev.1).
https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/esl.html
Polychlorinated biphenyls (PCBs) by EPA Method 8082.
ft bgs - Feet below ground surface
Concentrations are in units of milligrams per kilogram (µg/kg)
Exceedance in bold font.
--- No ESL listed.

Laboratory Qualifiers
< # - Compound was not detected above the indicated laboratory Method Detection Limit (MDL) or Practical Quantation Limit (PQL).

TABLE 7

SITE CHARACTERIZATION
TOTAL PETROLEUM HYDROCARBONS IN GROUNDWATER
SCVTA 1218 ABDULKARIEM PARCEL
SAN JOSE, CALIFORNIA

Sample ID	Sample Date	TPHg (µg/L)	TPH - Diesel (µg/L)	TPH - Motor Oil (µg/L)
B-1	12/27/2019	<0.20	<0.05	<0.05
ESL		**760**	**200**	**---**

Notes:
ESL: Table GW-1: Direct Exposure Human Health Risk Levels (µg/L). MCL Priority/Human Health Risk. SF Bay- Regional Water Quality Control Board January 2019 (rev.1).
https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/esl.html
MCL Priority lists all available MCL values. If no MCl value, the lower of the cancer/non cancer tapwater direct exposure levels is listed.

TABLE 8

SITE CHARACTERIZATION
VOLATILE ORGANIC COMPOUND IN GRAB GROUNDWATER
SCVTA 1218 ABDULKARIM PARCEL
SAN JOSE, CALIFORNIA

Sample ID	**B-1**	**ESL**
Sample Date	12/27/2019	
1,1,1,2-Tetrachloroethane	<0.50	**0.57**
1,1,1-Trichloroethane	<0.50	**200**
1,1,2,2-Tetrachloroethane	<0.50	**1**
1,1,2-Trichloroethane	<0.50	**5**
1,1-Dichloroethane	<0.50	**5**
1,1-Dichloroethene	<0.50	**6**
1,1-Dichloropropene	<0.50	**---**
1,2,3-Trichloropropane	<0.50	**0.005**
1,2,3-Trichlorobenzene	<0.50	**---**
1,2,4-Trichlorobenzene	<0.50	**5**
1,2,4-Trimethylbenzene	<0.50	**---**
1,2-Dibromo-3-chloropropane	<0.50	**---**
1,2-Dibromoethane	<0.50	**0.05**
1,2-Dichlorobenzene	<0.50	**100**
1,2-Dichloroethane	<0.50	**0.5**
1,2-Dichloropropane	<0.50	**5**
1,3,5-Trimethylbenzene	<0.50	**---**
1,3-Dichlorobenzene	<0.50	**600**
1,3-Dichloropropane	<0.50	**---**
1,4-Dichlorobenzene	<0.50	**5**
2,2-Dichloropropane	<0.50	**---**
2-Chlorotoluene	<0.50	**---**
4-Chlorotoluene	<0.50	**---**
4-Isopropyltoluene	<0.50	**---**
Benzene	<0.50	**1**
Bromobenzene	<0.50	**---**
Bromochloromethane	<0.50	**---**
Bromodichloromethane	<0.50	**80**
Bromoform	<0.50	**80**
Bromomethane	<0.50	**7.5**
Carbon disulfide	<1.0	**---**
Carbon tetrachloride	<0.50	**0.5**
Chlorobenzene	<0.50	**70**
Chloroethane	<0.50	**21,000**
Chloroform	<0.50	**80**
Chloromethane	<0.50	**190**
cis-1,2-Dichloroethene	<0.50	**6**
cis-1,3-Dichloropropene	<0.50	**---**
Di-isopropyl ether	<0.50	**---**
Dibromochloromethane	<0.50	**80**
Dibromomethane	<0.50	**---**
Dichlorodifluoromethane	<0.50	**---**
Ethyl Acetate	<10	**---**
Ethyl Ether	<10	**---**
Ethyl tert-butyl ether	<0.50	**---**
Ethylbenzene	<0.50	**30**
Freon-113	<0.50	**---**
Hexachlorobutadiene	<0.50	**0.14**
Isopropylbenzene	<0.50	**---**
m,p-Xylene	<1.0	**20**
Methylene chloride	<1.0	**5**
MTBE	0.96	**5**
n-Butylbenzene	<0.50	**---**
n-Propylbenzene	<0.50	**0.14**
Naphthalene	<0.50	**0.17**
o-Xylene	<0.50	**20**
sec-Butylbenzene	<0.50	**---**
Styrene	<0.50	**10**
tert-Amyl methyl ether	<0.50	**---**
tert-Butanol	<10	**---**
tert-Butylbenzene	<0.50	**---**
Tetrachloroethene	<0.50	**5**
Toluene	1.1	**40**
trans-1,2-Dichloroethene	<0.50	**10**
trans-1,3-Dichloropropene	<0.50	**---**
Trichloroethene	<0.50	**5**
Trichlorofluoromethane	<0.50	**---**
Vinyl acetate	<10	**---**
Vinyl chloride	<0.50	**0.5**

Notes:
ESL: Table GW-1: Direct Exposure Human Health Risk Levels (µg/L). MCL Priority/Human Health Risk.
SF Bay- Regional Water Quality Control Board January 2019 (rev.1).
https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/esl.html
MCL Priority lists all available MCL values. If no MCl value, the lower of the cancer/non cancer tapwater direct exposure levels is listed.
Concentrations are in units of micrograms per liter (µg/L).
Volatile Organic Compounds analyzed by EPA Method 8260B
Laboratory Qualifiers
<# -Compound was not detected above the indicated laboratory Method Detection Limit (MDL) or Pratcical Quantitation Limit (PQL).
--- No ESL listed.
**Exceedance in bold font**

TABLE 9

SITE CHARACTERIZATION
SEMI VOLATILE ORGANIC COMPOUNDS IN GROUNDWATER
SCVTA 1218 ABDULKARIEM PARCEL
SAN JOSE, CALIFORNIA

Sample ID	B-1	ESL
Sample Date	12/27/2019	
2-Methylnaphthalene	<10	**36**
Acenaphthene	<10	**530**
Acenaphthylene	<10	**---**
Anthracene	<10	**1,800**
Benzo(a)anthracene	<10	**0.017**
Benzo(a)pyrene	<10	**0.2**
Benzo(b)fluoranthene	<10	**0.25**
Benzo(g,h,i)perylene	<10	**---**
Benzo(k)fluoranthene	<10	**2.5**
Chrysene	<10	**25**
Dibenz(a,h)anthracene	<10	**0.025**
Fluoranthene	<10	**800**
Fluorene	<10	**290**
Indeno(1,2,3-c,d)pyrene	<10	**0.25**
Naphthalene	<10	**0.17**
Phenanthrene	<10	**---**
Pyrene	<10	**120**

Notes:

ESL: Table GW-1: Direct Exposure Human Health Risk Levels (µg/L). MCL Priority/Human Health Risk. SF Bay- Regional Water Quality Control Board January 2019 (rev.1).
https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/esl.html

MCL Priority lists all available MCL values. If no MCl value, the lower of the cancer/non cancer tapwater direct exposure levels is listed.

Concentrations are in units of micrograms per liter (µg/L).

Semi-volatile Organic Compounds analyzed using EPA Method 8270C SIM

Laboratory Qualifiers

<# -Compound was not detected above the indicated laboratory Method Detection Limit (MDL) or Practical Quantitation Limit (PQL).

--- No ESL listed

6.1 **Exceedance in bold font**

TABLE 10

SITE CHARACTERIZATION
CAM17/TITLE 22 METALS IN GROUNDWATER
SCVTA 1218 ABDULKARIEM PARCEL
SAN JOSE, CALIFORNIA

Sample ID	B-1	ESL
Sample Date	12/27/2019	
Antimony	<10	**6**
Arsenic	**140**	**10**
Barium	**4,300**	**1,000**
Beryllium	**19**	**4**
Cadmium	<3.0	**5**
Chromium	**900**	**50**
Cobalt	**420**	**6**
Copper	**1,100**	**1,000**
Lead	**180**	**15**
Mercury	0.64	**2**
Molybdenum	10	**100**
Nickel	**1,900**	**100**
Selenium	<10	**50**
Silver	<3.0	**100**
Thallium	<15	**2**
Vanadium	**820**	**50**
Zinc	1,400	**5,000**

Notes:

ESL: Table GW-1: Direct Exposure Human Health Risk Levels (µg/L). MCL Priority/Human Health Risk. SF Bay- Regional Water Quality Control Board January 2019 (rev.1).

https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/esl.html

MCL Priority lists all available MCL values. If no MCl value, the lower of the cancer/non cancer tapwater direct exposure levels is listed.

Concentrations are in units of micrograms per liter (µg/L).

Samples were analyzed using EPA Method 6010B; mercury was analyzed using EPA Method 7470A

Laboratory Qualifiers

<# -Compound was not detected above the indicated laboratory Method Detection Limit (MDL) or Practical Quanitation Limit (PQL).

--- No ESL listed

**Exceedance in bold font**

TABLE 11

SITE CHARACTERIZATION
ORGANOCHLORINE PESTICIDES IN GROUNDWATER
SCVTA 1218 ABDULKARIEM PARCEL
SAN JOSE, CALIFORNIA

Sample ID	Sample Date	4,4´-DDD	4,4´-DDE	4,4´-DDT	Aldrin	alpha-BHC	alpha-Chlordane	beta-BHC	Chlordane	delta-BHC	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan sulfate	Endrin	Endrin aldehyde	Endrin ketone	gamma-BHC	gamma-Chlordane	Heptachlor	Heptachlor epoxide	Methoxychlor	Toxaphene
B-1	12/27/2019	<0.05	<0.05	<0.05	<0.02	<0.02	<0.02	<0.02	<0.25	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.02	<0.02	<0.02	<0.02	<0.25	<2.5
ESL		**0.031**	**0.046**	**0.23**	**0.00092**	**---**	**---**	**---**	**0.1**	**---**	**0.00071**	**100**	**---**	**---**	**2**	**---**	**---**	**---**	**---**	**0.01**	**0.01**	**30**	**3**

Notes:
ESL: Table GW-1: Direct Exposure Human Health Risk Levels (µg/L). MCL Priority/Human Health Risk.
SF Bay- Regional Water Quality Control Board January 2019 (rev.1).
https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/esl.html
MCL Priority lists all available MCL values. If no MCl value, the lower of the cancer/non cancer tapwater direct exposure levels is listed.
Concentrations are in units of micrograms per liter (µg/L).
Organochlorine Pesticides samples analyzed using EPA Method 8081A
Laboratory Qualifiers
<# -Compound was not detected above the indicated laboratory Method Detection Limit (MDL) or the Practical Quantitation Limit (PQL).
--- No ESL Listed.
**Exceedance in bold font**

TABLE 12

SITE CHARACTERIZATION
POLYCHLORINATED BIPHENYLS IN GROUNDWATER
SCVTA 1218 ABDULKARIEM PARCEL
SAN JOSE, CALIFORNIA

Sample ID	Sample Date	Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Aroclor 1262	Aroclor 1268
B-1	12/27/2019	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
ESL		---	---	---	---	---	---	---	---	---

Notes:
ESL: Table GW-1: Direct Exposure Human Health Risk Levels (µg/L). MCL Priority/Human Health Risk.
SF Bay- Regional Water Quality Control Board January 2019 (rev.1).
https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/esl.html
MCL Priority lists all available MCL values. If no MCl value, the lower of the cancer/non cancer tapwater direct exposure levels is listed.
Polychlorinated biphenyls (PCBs) samples analyzed using EPA Method 8082 for PCBs

Laboratory Qualifiers
<# -Compound was not detected above the indicated laboratory Method Detection Limit (MDL) or Practical Quanitation Limit (PQL).
--- No ESL Listed.
6.1 Exceedance in bold font

ATTACHMENT 1 - SOIL BORINGS

Drilling Log

Project Name	Santa Clara Valley Transportation Authority: Eastridge	Boring Number	B- 1
Project No.	87119	Page	1 of 1
Ground Elevation	Location 1148 S Capitol Ave., San Jose, CA Southwest corner near catch basin.	Total Footage	24

Drilling Type	Hole Size	Overburden Footage	Bedrock Footage	No. Of Samples	No. Core Boxes	Depth to Water	Date Measured
D.Push	3"			2		8	

Drilling Co.	Cascade Drilling L.P.	Driller (s)	Jose & Salvador
Drilling Rig.	6620 DT	Type of Penetration Test	
Date	12-27-2019 To 12-27-2019	Field Observer (s)	S. Barber

Depth	Description	Class.	Blow Count	Field Strength	Recov.		Sample or Box No.	Remarks
0	Asphalt	Asphalt		0939				Hand clear to 5' bgs.
1	Silty sandy gravel (fill). Gray to black, tan to brown. Dense, gravel up to 2 in. Roots (2.5 mm).	Fill						
2								0/0/0
3	Trace clay							
4	Sandy Clay.	SC						
	Silty Sandy Clay: 10RY 3/2. Dense, dry. Roots.	SC-SM		0952	100			
5	Silty Sand: 10YR 3/2 fine to medium sand medium dense sand with silt. Reddish brown and black staining.	SM		0959				
6								
7	Trace water							
8				1000	100			
	Sand: 2.5 Y 3/2 Fine to medium sand. Wet.	SW					B-1d8 1005	Wet-Saturated 0/0/0
9								
10	Sandy Clay: 2.5Y 3/2 very fine to medium sand in clay. Reddish brown staining. Soft, plastic, moist.	SC						
11								
12				1002	90			Set 10' screen
	Clay: 5Y 3/2 with gray and reddish brown staining. Soft, plastic, moist.	CL						0/0/0
13								
14								

Breathing Zone/Borehole/Sample #/#/#

BURNS McDONNELL

Form WCI-OP3-1

Drilling Log Continuation

Project Name	SCVTA - 1218 ABDULKARIEM
Project Number	87119
Boring Number	B-1
Page	1 of 2
Date	12/27/2019

Depth (feet)	Description	Class	Blow Count	Recov.	Run/ Time	Sample Desig.	PID (ppm) BZ	PID (ppm) BH	PID (ppm) S	Remarks/ Water Levels
15	Clay as above, moist.									
				1006	100		0/0/0			
16										
17										
18	Dark brown & black staining Sand: 10YR 3/6 medium subangular to subrounded sand. Wet.	SW								
19										
20	Grain size increasing.			1012	90		0/0/0			
	Clay: 10 YR 3/1 Stiff.	CL								
21										
22										
23										
				1015	100	B-1d24 1024	0/0/0			
24	Total Depth 24' bgs. Terminated per Workplan									
25										
26										
27										
28										
29										
30										

BZ=Breathing Zone BH=Bore Hole S=Sample

Drilling Log

Project Name	Santa Clara Valley Transportation Authority: Eastridge	Boring Number	B- 2
Project No.	87119	Page	1 of 1
Ground Elevation	Location 1148 S Capitol Ave., San Jose, CA Southwest of market in parking lot.	Total Footage	24

Drilling Type	Hole Size	Overburden Footage	Bedrock Footage	No. Of Samples	No. Core Boxes	Depth to Water	Date Measured
D.Push	3"			2		7	

Drilling Co.	Cascade Drilling L.P.	Driller (s)	Jose & Salvador
Drilling Rig.	6620 DT	Type of Penetration Test	
Date	12-27-2019 To 12-27-2019	Field Observer (s)	S. Barber

Depth	Description	Class.	Blow Count	Field Strength	Recov.		Sample or Box No.	Remarks
0	Asphalt	Asphalt		1025				Hand clear to 5' bgs.
1	Silty Sand with gravel (fill): tan to brown to black angular sands and gravel. Gravel 15-20% up to 2 cm.	Fill						
2								0/0/0
3	Silty Sand: 10YR 3/3 fine to coarse angular to subrounded loose sand. Dry.	SM						
4								
5				1036	100			
6	Silty Clayey Sand: 10YR 3/3 Dense, stiff, plastic. Tan to Reddish brown staining.	SC-SM		1037				
7	Sand: 2.5 Y 3/3 Fine to medium sand. Tan to gray staining. Wet.	SW					B-2d7 1045	Wet-Saturated 0/0/0
8				1038	100			
9								
10	Some clay.							
11	Clay: 2.5Y 4/4 some mottled gray and brown staining. Soft, plastic.	CL						
12				1040	100			Set 10' screen 0/0/0
13								
14								

Breathing Zone/Borehole/Sample #/#/#

BURNS McDONNELL

Form WCI-OP3-1

Drilling Log Continuation

	Boring Number B-2
Project Name SCVTA - 1218 ABDULKARIEM	**Page** 1 of 2
Project Number 87119	**Date** 12/27/2019

Depth (feet)	Description	Class	Blow Count	Recov.	Run/ Time	Sample Desig.	PID (ppm) BZ	PID (ppm) BH	PID (ppm) S	Remarks/ Water Levels
15	Clay as above.						0/0/0			
				1043	75					
16										
17	Sand: 10YR 3/3 fine to medium subangular to subrounded sand. Wet.	SW								
18										
19										
20				1045	90		0/0/0			
21										
22	Clay: 5Y 2.5/1 Very Stiff, dense.	CL								
23										
24				1048	75	B-2d24 1105	0/0/0			
	Total Depth 24' bgs. Terminated per Workplan									
25										
26										
27										
28										
29										
30										

BZ=Breathing Zone BH=Bore Hole S=Sample

ATTACHMENT 2 – CERTIFIED ANALYICAL REPORTS

ADVANCED TECHNOLOGY LABORATORIES

January 08, 2020

Christopher D'Sa
Burns and McDonnell
400 Oyster Point Blvd, Suite 533
South San Francisco, CA 94080
Tel: (626) 817-7900
Fax:

ELAP No.: 1838
CSDLAC No.: 10196
ORELAP No.: CA300003

Re: ATL Work Order Number : 1904739
Client Reference : SCVTA, 87119-1218 Abdulkariem

Enclosed are the results for sample(s) received on December 31, 2019 by Advanced Technology Laboratories. The sample(s) are tested for the parameters as indicated on the enclosed chain of custody in accordance with applicable laboratory certifications. The laboratory results contained in this report specifically pertains to the sample(s) submitted.

Thank you for the opportunity to serve the needs of your company. If you have any questions, please feel free to contact me or your Project Manager.

Sincerely,

Edgar Caballero
President & Laboratory Director

Certificate of Analysis

Burns and McDonnell	Project Number : SCVTA, 87119-1218 Abdulkariem
400 Oyster Point Blvd, Suite 533	Report To : Christopher D'Sa
South San Francisco , CA 94080	Reported : 01/08/2020

SUMMARY OF SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
B-1d8	1904739-01	Soil	12/27/19 10:05	12/31/19 7:20
B-1d24	1904739-02	Soil	12/27/19 10:25	12/31/19 7:20
B-2d7	1904739-03	Soil	12/27/19 10:45	12/31/19 7:20
B-2d24	1904739-04	Soil	12/27/19 11:05	12/31/19 7:20
B-1	1904739-05	Water	12/27/19 11:30	12/31/19 7:20

Certificate of Analysis

Burns and McDonnell	Project Number : SCVTA, 87119-1218 Abdulkariem
400 Oyster Point Blvd, Suite 533	Report To : Christopher D'Sa
South San Francisco , CA 94080	Reported : 01/08/2020

Client Sample ID: B-1d8

Lab ID: 1904739-01

Title 22 Metals by ICP-AES EPA 6010B

Analyst: KEK

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	1	B0A0091	01/06/2020	01/06/20 16:54	
Arsenic	**4.6**	1.0	1	B0A0091	01/06/2020	01/06/20 16:54	
Barium	**89**	1.0	1	B0A0091	01/06/2020	01/06/20 16:54	
Beryllium	ND	1.0	1	B0A0091	01/06/2020	01/06/20 16:54	
Cadmium	ND	1.0	1	B0A0091	01/06/2020	01/06/20 16:54	
Chromium	**37**	1.0	1	B0A0091	01/06/2020	01/06/20 16:54	
Cobalt	**7.3**	1.0	1	B0A0091	01/06/2020	01/06/20 16:54	
Copper	**17**	2.0	1	B0A0091	01/06/2020	01/06/20 16:54	
Lead	**5.5**	1.0	1	B0A0091	01/06/2020	01/06/20 16:54	
Molybdenum	ND	1.0	1	B0A0091	01/06/2020	01/06/20 16:54	
Nickel	**60**	1.0	1	B0A0091	01/06/2020	01/06/20 16:54	
Selenium	ND	1.0	1	B0A0091	01/06/2020	01/06/20 16:54	
Silver	ND	1.0	1	B0A0091	01/06/2020	01/06/20 16:54	
Thallium	ND	1.0	1	B0A0091	01/06/2020	01/06/20 16:54	
Vanadium	**25**	1.0	1	B0A0091	01/06/2020	01/06/20 16:54	
Zinc	**35**	1.0	1	B0A0091	01/06/2020	01/06/20 16:54	

Mercury by AA (Cold Vapor) EPA 7471A

Analyst: VV

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	ND	0.10	1	B0A0092	01/06/2020	01/06/20 14:19	

Diesel Range Organics by EPA 8015B (SGT)

Analyst: VL

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	ND	1.0	1	B0A0056	01/02/2020	01/02/20 20:03	
ORO	ND	1.0	1	B0A0056	01/02/2020	01/02/20 20:03	
Surrogate: p-Terphenyl	*49.9 %*	*34 - 158*		B0A0056	01/02/2020	*01/02/20 20:03*	

Certificate of Analysis

Burns and McDonnell	Project Number : SCVTA, 87119-1218 Abdulkariem
400 Oyster Point Blvd, Suite 533	Report To : Christopher D'Sa
South San Francisco , CA 94080	Reported : 01/08/2020

Client Sample ID: B-1d8

Lab ID: 1904739-01

Organochlorine Pesticides by EPA 8081A **Analyst: KD**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
4,4′-DDD	ND	2.0	1	B0A0069	01/03/2020	01/03/20 13:47	
4,4′-DDE	ND	2.0	1	B0A0069	01/03/2020	01/03/20 13:47	
4,4′-DDT	ND	2.0	1	B0A0069	01/03/2020	01/03/20 13:47	
Aldrin	ND	1.0	1	B0A0069	01/03/2020	01/03/20 13:47	
alpha-BHC	ND	1.0	1	B0A0069	01/03/2020	01/03/20 13:47	
alpha-Chlordane	ND	1.0	1	B0A0069	01/03/2020	01/03/20 13:47	
beta-BHC	ND	1.0	1	B0A0069	01/03/2020	01/03/20 13:47	
Chlordane	ND	8.5	1	B0A0069	01/03/2020	01/03/20 13:47	
delta-BHC	ND	1.0	1	B0A0069	01/03/2020	01/03/20 13:47	
Dieldrin	ND	2.0	1	B0A0069	01/03/2020	01/03/20 13:47	
Endosulfan I	ND	1.0	1	B0A0069	01/03/2020	01/03/20 13:47	
Endosulfan II	ND	2.0	1	B0A0069	01/03/2020	01/03/20 13:47	
Endosulfan sulfate	ND	2.0	1	B0A0069	01/03/2020	01/03/20 13:47	
Endrin	ND	2.0	1	B0A0069	01/03/2020	01/03/20 13:47	
Endrin aldehyde	ND	2.0	1	B0A0069	01/03/2020	01/03/20 13:47	
Endrin ketone	ND	2.0	1	B0A0069	01/03/2020	01/03/20 13:47	
gamma-BHC	ND	1.0	1	B0A0069	01/03/2020	01/03/20 13:47	
gamma-Chlordane	ND	1.0	1	B0A0069	01/03/2020	01/03/20 13:47	
Heptachlor	ND	1.0	1	B0A0069	01/03/2020	01/03/20 13:47	
Heptachlor epoxide	ND	1.0	1	B0A0069	01/03/2020	01/03/20 13:47	
Methoxychlor	ND	5.0	1	B0A0069	01/03/2020	01/03/20 13:47	
Toxaphene	ND	50	1	B0A0069	01/03/2020	01/03/20 13:47	
Surrogate: Decachlorobiphenyl	*55.7 %*	*32 - 91*		B0A0069	01/03/2020	*01/03/20 13:47*	
Surrogate: Tetrachloro-m-xylene	*43.1 %*	*38 - 93*		B0A0069	01/03/2020	*01/03/20 13:47*	

Certificate of Analysis

Burns and McDonnell	Project Number : SCVTA, 87119-1218 Abdulkariem
400 Oyster Point Blvd, Suite 533	Report To : Christopher D'Sa
South San Francisco , CA 94080	Reported : 01/08/2020

Client Sample ID: B-1d8

Lab ID: 1904739-01

Polychlorinated Biphenyls by EPA 8082

Analyst: KD

Analyte		Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Aroclor 1016		ND	16	1	B0A0069	01/03/2020	01/03/20 15:21	
Aroclor 1221		ND	16	1	B0A0069	01/03/2020	01/03/20 15:21	
Aroclor 1232		ND	16	1	B0A0069	01/03/2020	01/03/20 15:21	
Aroclor 1242		ND	16	1	B0A0069	01/03/2020	01/03/20 15:21	
Aroclor 1248		ND	16	1	B0A0069	01/03/2020	01/03/20 15:21	
Aroclor 1254		ND	16	1	B0A0069	01/03/2020	01/03/20 15:21	
Aroclor 1260		ND	16	1	B0A0069	01/03/2020	01/03/20 15:21	
Aroclor 1262		ND	16	1	B0A0069	01/03/2020	01/03/20 15:21	
Aroclor 1268		ND	16	1	B0A0069	01/03/2020	01/03/20 15:21	
Surrogate: Decachlorobiphenyl	*57.7 %*		*30 - 132*		B0A0069	01/03/2020	*01/03/20 15:21*	
Surrogate: Tetrachloro-m-xylene	*40.5 %*		*44 - 113*		B0A0069	01/03/2020	*01/03/20 15:21*	S13

Volatile Organic Compounds by EPA 5035 / EPA 8260B

Analyst: KL

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	4.0	1	B0A0015	01/02/2020	01/03/20 12:06	
1,1,1-Trichloroethane	ND	4.0	1	B0A0015	01/02/2020	01/03/20 12:06	
1,1,2,2-Tetrachloroethane	ND	4.0	1	B0A0015	01/02/2020	01/03/20 12:06	
1,1,2-Trichloroethane	ND	4.0	1	B0A0015	01/02/2020	01/03/20 12:06	
1,1-Dichloroethane	ND	4.0	1	B0A0015	01/02/2020	01/03/20 12:06	
1,1-Dichloroethene	ND	4.0	1	B0A0015	01/02/2020	01/03/20 12:06	
1,1-Dichloropropene	ND	4.0	1	B0A0015	01/02/2020	01/03/20 12:06	
1,2,3-Trichloropropane	ND	4.0	1	B0A0015	01/02/2020	01/03/20 12:06	
1,2,3-Trichlorobenzene	ND	4.0	1	B0A0015	01/02/2020	01/03/20 12:06	
1,2,4-Trichlorobenzene	ND	4.0	1	B0A0015	01/02/2020	01/03/20 12:06	
1,2,4-Trimethylbenzene	ND	4.0	1	B0A0015	01/02/2020	01/03/20 12:06	
1,2-Dibromo-3-chloropropane	ND	8.0	1	B0A0015	01/02/2020	01/03/20 12:06	
1,2-Dibromoethane	ND	4.0	1	B0A0015	01/02/2020	01/03/20 12:06	
1,2-Dichlorobenzene	ND	4.0	1	B0A0015	01/02/2020	01/03/20 12:06	
1,2-Dichloroethane	ND	4.0	1	B0A0015	01/02/2020	01/03/20 12:06	
1,2-Dichloropropane	ND	4.0	1	B0A0015	01/02/2020	01/03/20 12:06	
1,3,5-Trimethylbenzene	ND	4.0	1	B0A0015	01/02/2020	01/03/20 12:06	
1,3-Dichlorobenzene	ND	4.0	1	B0A0015	01/02/2020	01/03/20 12:06	
1,3-Dichloropropane	ND	4.0	1	B0A0015	01/02/2020	01/03/20 12:06	
1,4-Dichlorobenzene	ND	4.0	1	B0A0015	01/02/2020	01/03/20 12:06	
2,2-Dichloropropane	ND	4.0	1	B0A0015	01/02/2020	01/03/20 12:06	

Certificate of Analysis

Burns and McDonnell	Project Number : SCVTA, 87119-1218 Abdulkariem
400 Oyster Point Blvd, Suite 533	Report To : Christopher D'Sa
South San Francisco , CA 94080	Reported : 01/08/2020

Client Sample ID: B-1d8

Lab ID: 1904739-01

Volatile Organic Compounds by EPA 5035 / EPA 8260B **Analyst: KL**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
2-Chlorotoluene	ND	4.0	1	B0A0015	01/02/2020	01/03/20 12:06	
4-Chlorotoluene	ND	4.0	1	B0A0015	01/02/2020	01/03/20 12:06	
4-Isopropyltoluene	ND	4.0	1	B0A0015	01/02/2020	01/03/20 12:06	
Benzene	ND	4.0	1	B0A0015	01/02/2020	01/03/20 12:06	
Bromobenzene	ND	4.0	1	B0A0015	01/02/2020	01/03/20 12:06	
Bromochloromethane	ND	4.0	1	B0A0015	01/02/2020	01/03/20 12:06	
Bromodichloromethane	ND	4.0	1	B0A0015	01/02/2020	01/03/20 12:06	
Bromoform	ND	4.0	1	B0A0015	01/02/2020	01/03/20 12:06	
Bromomethane	ND	4.0	1	B0A0015	01/02/2020	01/03/20 12:06	
Carbon disulfide	ND	4.0	1	B0A0015	01/02/2020	01/03/20 12:06	
Carbon tetrachloride	ND	4.0	1	B0A0015	01/02/2020	01/03/20 12:06	
Chlorobenzene	ND	4.0	1	B0A0015	01/02/2020	01/03/20 12:06	
Chloroethane	ND	4.0	1	B0A0015	01/02/2020	01/03/20 12:06	
Chloroform	ND	4.0	1	B0A0015	01/02/2020	01/03/20 12:06	
Chloromethane	ND	4.0	1	B0A0015	01/02/2020	01/03/20 12:06	
cis-1,2-Dichloroethene	ND	4.0	1	B0A0015	01/02/2020	01/03/20 12:06	
cis-1,3-Dichloropropene	ND	4.0	1	B0A0015	01/02/2020	01/03/20 12:06	
Di-isopropyl ether	ND	4.0	1	B0A0015	01/02/2020	01/03/20 12:06	
Dibromochloromethane	ND	4.0	1	B0A0015	01/02/2020	01/03/20 12:06	
Dibromomethane	ND	4.0	1	B0A0015	01/02/2020	01/03/20 12:06	
Dichlorodifluoromethane	ND	4.0	1	B0A0015	01/02/2020	01/03/20 12:06	
Ethyl Acetate	ND	40	1	B0A0015	01/02/2020	01/03/20 12:06	
Ethyl Ether	ND	40	1	B0A0015	01/02/2020	01/03/20 12:06	
Ethyl tert-butyl ether	ND	4.0	1	B0A0015	01/02/2020	01/03/20 12:06	
Ethylbenzene	ND	4.0	1	B0A0015	01/02/2020	01/03/20 12:06	
Freon-113	ND	4.0	1	B0A0015	01/02/2020	01/03/20 12:06	
Hexachlorobutadiene	ND	4.0	1	B0A0015	01/02/2020	01/03/20 12:06	
Isopropylbenzene	ND	4.0	1	B0A0015	01/02/2020	01/03/20 12:06	
m,p-Xylene	ND	8.0	1	B0A0015	01/02/2020	01/03/20 12:06	
Methylene chloride	ND	4.0	1	B0A0015	01/02/2020	01/03/20 12:06	
MTBE	ND	4.0	1	B0A0015	01/02/2020	01/03/20 12:06	
n-Butylbenzene	ND	4.0	1	B0A0015	01/02/2020	01/03/20 12:06	
n-Propylbenzene	ND	4.0	1	B0A0015	01/02/2020	01/03/20 12:06	
Naphthalene	ND	4.0	1	B0A0015	01/02/2020	01/03/20 12:06	
o-Xylene	ND	4.0	1	B0A0015	01/02/2020	01/03/20 12:06	
sec-Butylbenzene	ND	4.0	1	B0A0015	01/02/2020	01/03/20 12:06	
Styrene	ND	4.0	1	B0A0015	01/02/2020	01/03/20 12:06	

Certificate of Analysis

Burns and McDonnell	Project Number : SCVTA, 87119-1218 Abdulkariem
400 Oyster Point Blvd, Suite 533	Report To : Christopher D'Sa
South San Francisco , CA 94080	Reported : 01/08/2020

Client Sample ID: B-1d8

Lab ID: 1904739-01

Volatile Organic Compounds by EPA 5035 / EPA 8260B

Analyst: KL

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
tert-Amyl methyl ether	ND	4.0	1	B0A0015	01/02/2020	01/03/20 12:06	
tert-Butanol	ND	80	1	B0A0015	01/02/2020	01/03/20 12:06	
tert-Butylbenzene	ND	4.0	1	B0A0015	01/02/2020	01/03/20 12:06	
Tetrachloroethene	ND	4.0	1	B0A0015	01/02/2020	01/03/20 12:06	
Toluene	ND	4.0	1	B0A0015	01/02/2020	01/03/20 12:06	
trans-1,2-Dichloroethene	ND	4.0	1	B0A0015	01/02/2020	01/03/20 12:06	
trans-1,3-Dichloropropene	ND	4.0	1	B0A0015	01/02/2020	01/03/20 12:06	
Trichloroethene	ND	4.0	1	B0A0015	01/02/2020	01/03/20 12:06	
Trichlorofluoromethane	ND	4.0	1	B0A0015	01/02/2020	01/03/20 12:06	
Vinyl acetate	ND	40	1	B0A0015	01/02/2020	01/03/20 12:06	
Vinyl chloride	ND	4.0	1	B0A0015	01/02/2020	01/03/20 12:06	
GRO (C4 - C12)	ND	800	1	B0A0059	01/02/2020	01/03/20 12:06	
Surrogate: 1,2-Dichloroethane-d4	*100 %*	*58 - 160*		B0A0015	01/02/2020	*01/03/20 12:06*	
Surrogate: 1,2-Dichloroethane-d4	*101 %*	*58 - 160*		B0A0059	01/02/2020	*01/03/20 12:06*	
Surrogate: 4-Bromofluorobenzene	*96.0 %*	*72 - 121*		B0A0015	01/02/2020	*01/03/20 12:06*	
Surrogate: 4-Bromofluorobenzene	*99.8 %*	*72 - 121*		B0A0059	01/02/2020	*01/03/20 12:06*	
Surrogate: Dibromofluoromethane	*98.1 %*	*75 - 139*		B0A0015	01/02/2020	*01/03/20 12:06*	
Surrogate: Dibromofluoromethane	*106 %*	*75 - 139*		B0A0059	01/02/2020	*01/03/20 12:06*	
Surrogate: Toluene-d8	*96.7 %*	*84 - 115*		B0A0015	01/02/2020	*01/03/20 12:06*	
Surrogate: Toluene-d8	*101 %*	*84 - 115*		B0A0059	01/02/2020	*01/03/20 12:06*	

Semivolatile Organic Compounds by EPA 8270C

Analyst: SP

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,2,4-Trichlorobenzene	ND	330	1	B0A0093	01/03/2020	01/03/20 16:58	
1,2-Dichlorobenzene	ND	330	1	B0A0093	01/03/2020	01/03/20 16:58	
1,3-Dichlorobenzene	ND	330	1	B0A0093	01/03/2020	01/03/20 16:58	
1,4-Dichlorobenzene	ND	330	1	B0A0093	01/03/2020	01/03/20 16:58	
2,4,5-Trichlorophenol	ND	330	1	B0A0093	01/03/2020	01/03/20 16:58	
2,4,6-Trichlorophenol	ND	330	1	B0A0093	01/03/2020	01/03/20 16:58	
2,4-Dichlorophenol	ND	1600	1	B0A0093	01/03/2020	01/03/20 16:58	
2,4-Dimethylphenol	ND	330	1	B0A0093	01/03/2020	01/03/20 16:58	
2,4-Dinitrophenol	ND	1600	1	B0A0093	01/03/2020	01/03/20 16:58	
2,4-Dinitrotoluene	ND	330	1	B0A0093	01/03/2020	01/03/20 16:58	
2,6-Dinitrotoluene	ND	330	1	B0A0093	01/03/2020	01/03/20 16:58	
2-Chloronaphthalene	ND	330	1	B0A0093	01/03/2020	01/03/20 16:58	

Certificate of Analysis

Burns and McDonnell	Project Number : SCVTA, 87119-1218 Abdulkariem
400 Oyster Point Blvd, Suite 533	Report To : Christopher D'Sa
South San Francisco , CA 94080	Reported : 01/08/2020

Client Sample ID: B-1d8

Lab ID: 1904739-01

Semivolatile Organic Compounds by EPA 8270C **Analyst: SP**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
2-Chlorophenol	ND	330	1	B0A0093	01/03/2020	01/03/20 16:58	
2-Methylnaphthalene	ND	330	1	B0A0093	01/03/2020	01/03/20 16:58	
2-Methylphenol	ND	330	1	B0A0093	01/03/2020	01/03/20 16:58	
2-Nitroaniline	ND	1600	1	B0A0093	01/03/2020	01/03/20 16:58	
2-Nitrophenol	ND	330	1	B0A0093	01/03/2020	01/03/20 16:58	
3,3´-Dichlorobenzidine	ND	660	1	B0A0093	01/03/2020	01/03/20 16:58	
3-Nitroaniline	ND	1600	1	B0A0093	01/03/2020	01/03/20 16:58	
4,6-Dinitro-2-methyphenol	ND	1600	1	B0A0093	01/03/2020	01/03/20 16:58	
4-Bromophenyl-phenylether	ND	330	1	B0A0093	01/03/2020	01/03/20 16:58	
4-Chloro-3-methylphenol	ND	660	1	B0A0093	01/03/2020	01/03/20 16:58	
4-Chloroaniline	ND	660	1	B0A0093	01/03/2020	01/03/20 16:58	
4-Chlorophenyl-phenylether	ND	330	1	B0A0093	01/03/2020	01/03/20 16:58	
4-Methylphenol	ND	330	1	B0A0093	01/03/2020	01/03/20 16:58	
4-Nitroaniline	ND	1600	1	B0A0093	01/03/2020	01/03/20 16:58	
4-Nitrophenol	ND	330	1	B0A0093	01/03/2020	01/03/20 16:58	
Acenaphthene	ND	330	1	B0A0093	01/03/2020	01/03/20 16:58	
Acenaphthylene	ND	330	1	B0A0093	01/03/2020	01/03/20 16:58	
Anthracene	ND	330	1	B0A0093	01/03/2020	01/03/20 16:58	
Benzidine (M)	ND	1600	1	B0A0093	01/03/2020	01/03/20 16:58	
Benzo(a)anthracene	ND	330	1	B0A0093	01/03/2020	01/03/20 16:58	
Benzo(a)pyrene	ND	330	1	B0A0093	01/03/2020	01/03/20 16:58	
Benzo(b)fluoranthene	ND	330	1	B0A0093	01/03/2020	01/03/20 16:58	
Benzo(g,h,i)perylene	ND	330	1	B0A0093	01/03/2020	01/03/20 16:58	
Benzo(k)fluoranthene	ND	330	1	B0A0093	01/03/2020	01/03/20 16:58	
Benzoic acid	ND	1600	1	B0A0093	01/03/2020	01/03/20 16:58	
Benzyl alcohol	ND	660	1	B0A0093	01/03/2020	01/03/20 16:58	
bis(2-chloroethoxy)methane	ND	330	1	B0A0093	01/03/2020	01/03/20 16:58	
bis(2-Chloroethyl)ether	ND	330	1	B0A0093	01/03/2020	01/03/20 16:58	
bis(2-chloroisopropyl)ether	ND	330	1	B0A0093	01/03/2020	01/03/20 16:58	
bis(2-ethylhexyl)phthalate	ND	330	1	B0A0093	01/03/2020	01/03/20 16:58	
Butylbenzylphthalate	ND	330	1	B0A0093	01/03/2020	01/03/20 16:58	
Chrysene	ND	330	1	B0A0093	01/03/2020	01/03/20 16:58	
Di-n-butylphthalate	ND	330	1	B0A0093	01/03/2020	01/03/20 16:58	
Di-n-octylphthalate	ND	330	1	B0A0093	01/03/2020	01/03/20 16:58	
Dibenz(a,h)anthracene	ND	330	1	B0A0093	01/03/2020	01/03/20 16:58	
Dibenzofuran	ND	330	1	B0A0093	01/03/2020	01/03/20 16:58	
Diethyl phthalate	ND	330	1	B0A0093	01/03/2020	01/03/20 16:58	

Certificate of Analysis

Burns and McDonnell	Project Number : SCVTA, 87119-1218 Abdulkariem
400 Oyster Point Blvd, Suite 533	Report To : Christopher D'Sa
South San Francisco , CA 94080	Reported : 01/08/2020

Client Sample ID: B-1d8

Lab ID: 1904739-01

Semivolatile Organic Compounds by EPA 8270C **Analyst: SP**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Dimethyl phthalate	ND	330	1	B0A0093	01/03/2020	01/03/20 16:58	
Fluoranthene	ND	330	1	B0A0093	01/03/2020	01/03/20 16:58	
Fluorene	ND	330	1	B0A0093	01/03/2020	01/03/20 16:58	
Hexachlorobenzene	ND	330	1	B0A0093	01/03/2020	01/03/20 16:58	
Hexachlorobutadiene	ND	660	1	B0A0093	01/03/2020	01/03/20 16:58	
Hexachlorocyclopentadiene	ND	660	1	B0A0093	01/03/2020	01/03/20 16:58	
Hexachloroethane	ND	330	1	B0A0093	01/03/2020	01/03/20 16:58	
Indeno(1,2,3-cd)pyrene	ND	330	1	B0A0093	01/03/2020	01/03/20 16:58	
Isophorone	ND	330	1	B0A0093	01/03/2020	01/03/20 16:58	
N-Nitroso-di-n propylamine	ND	330	1	B0A0093	01/03/2020	01/03/20 16:58	
N-Nitrosodiphenylamine	ND	330	1	B0A0093	01/03/2020	01/03/20 16:58	
Naphthalene	ND	330	1	B0A0093	01/03/2020	01/03/20 16:58	
Nitrobenzene	ND	330	1	B0A0093	01/03/2020	01/03/20 16:58	
Pentachlorophenol	ND	1600	1	B0A0093	01/03/2020	01/03/20 16:58	
Phenanthrene	ND	330	1	B0A0093	01/03/2020	01/03/20 16:58	
Phenol	ND	330	1	B0A0093	01/03/2020	01/03/20 16:58	
Pyrene	ND	330	1	B0A0093	01/03/2020	01/03/20 16:58	
Pyridine	ND	1600	1	B0A0093	01/03/2020	01/03/20 16:58	
Surrogate: 1,2-Dichlorobenzene-d4	*73.3 %*	*28 - 77*		B0A0093	01/03/2020	*01/03/20 16:58*	
Surrogate: 2,4,6-Tribromophenol	*128 %*	*17 - 157*		B0A0093	01/03/2020	*01/03/20 16:58*	
Surrogate: 2-Chlorophenol-d4	*78.4 %*	*35 - 98*		B0A0093	01/03/2020	*01/03/20 16:58*	
Surrogate: 2-Fluorobiphenyl	*80.8 %*	*35 - 88*		B0A0093	01/03/2020	*01/03/20 16:58*	
Surrogate: 2-Fluorophenol	*71.9 %*	*32 - 88*		B0A0093	01/03/2020	*01/03/20 16:58*	
Surrogate: 4-Terphenyl-d14	*97.6 %*	*35 - 114*		B0A0093	01/03/2020	*01/03/20 16:58*	
Surrogate: Nitrobenzene-d5	*72.8 %*	*27 - 80*		B0A0093	01/03/2020	*01/03/20 16:58*	
Surrogate: Phenol-d6	*73.8 %*	*35 - 98*		B0A0093	01/03/2020	*01/03/20 16:58*	

Certificate of Analysis

Burns and McDonnell	Project Number : SCVTA, 87119-1218 Abdulkariem
400 Oyster Point Blvd, Suite 533	Report To : Christopher D'Sa
South San Francisco , CA 94080	Reported : 01/08/2020

Client Sample ID: B-1d24

Lab ID: 1904739-02

Title 22 Metals by ICP-AES EPA 6010B

Analyst: KEK

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	1	B0A0091	01/06/2020	01/06/20 16:58	
Arsenic	**1.8**	1.0	1	B0A0091	01/06/2020	01/06/20 16:58	
Barium	**100**	1.0	1	B0A0091	01/06/2020	01/06/20 16:58	
Beryllium	ND	1.0	1	B0A0091	01/06/2020	01/06/20 16:58	
Cadmium	ND	1.0	1	B0A0091	01/06/2020	01/06/20 16:58	
Chromium	**24**	1.0	1	B0A0091	01/06/2020	01/06/20 16:58	
Cobalt	**5.0**	1.0	1	B0A0091	01/06/2020	01/06/20 16:58	
Copper	**9.0**	2.0	1	B0A0091	01/06/2020	01/06/20 16:58	
Lead	**3.6**	1.0	1	B0A0091	01/06/2020	01/06/20 16:58	
Molybdenum	ND	1.0	1	B0A0091	01/06/2020	01/06/20 16:58	
Nickel	**32**	1.0	1	B0A0091	01/06/2020	01/06/20 16:58	
Selenium	ND	1.0	1	B0A0091	01/06/2020	01/06/20 16:58	
Silver	ND	1.0	1	B0A0091	01/06/2020	01/06/20 16:58	
Thallium	ND	1.0	1	B0A0091	01/06/2020	01/06/20 16:58	
Vanadium	**16**	1.0	1	B0A0091	01/06/2020	01/06/20 16:58	
Zinc	**19**	1.0	1	B0A0091	01/06/2020	01/06/20 16:58	

Mercury by AA (Cold Vapor) EPA 7471A

Analyst: VV

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	ND	0.10	1	B0A0092	01/06/2020	01/06/20 14:27	

Diesel Range Organics by EPA 8015B (SGT)

Analyst: VL

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	ND	1.0	1	B0A0056	01/02/2020	01/02/20 20:20	
ORO	ND	1.0	1	B0A0056	01/02/2020	01/02/20 20:20	
Surrogate: p-Terphenyl	*77.5 %*	*34 - 158*		B0A0056	01/02/2020	*01/02/20 20:20*	

Certificate of Analysis

Burns and McDonnell	Project Number : SCVTA, 87119-1218 Abdulkariem
400 Oyster Point Blvd, Suite 533	Report To : Christopher D'Sa
South San Francisco , CA 94080	Reported : 01/08/2020

Client Sample ID: B-1d24

Lab ID: 1904739-02

Volatile Organic Compounds by EPA 5035 / EPA 8260B **Analyst: KL**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	3.7	1	B0A0015	01/02/2020	01/03/20 12:24	
1,1,1-Trichloroethane	ND	3.7	1	B0A0015	01/02/2020	01/03/20 12:24	
1,1,2,2-Tetrachloroethane	ND	3.7	1	B0A0015	01/02/2020	01/03/20 12:24	
1,1,2-Trichloroethane	ND	3.7	1	B0A0015	01/02/2020	01/03/20 12:24	
1,1-Dichloroethane	ND	3.7	1	B0A0015	01/02/2020	01/03/20 12:24	
1,1-Dichloroethene	ND	3.7	1	B0A0015	01/02/2020	01/03/20 12:24	
1,1-Dichloropropene	ND	3.7	1	B0A0015	01/02/2020	01/03/20 12:24	
1,2,3-Trichloropropane	ND	3.7	1	B0A0015	01/02/2020	01/03/20 12:24	
1,2,3-Trichlorobenzene	ND	3.7	1	B0A0015	01/02/2020	01/03/20 12:24	
1,2,4-Trichlorobenzene	ND	3.7	1	B0A0015	01/02/2020	01/03/20 12:24	
1,2,4-Trimethylbenzene	ND	3.7	1	B0A0015	01/02/2020	01/03/20 12:24	
1,2-Dibromo-3-chloropropane	ND	7.5	1	B0A0015	01/02/2020	01/03/20 12:24	
1,2-Dibromoethane	ND	3.7	1	B0A0015	01/02/2020	01/03/20 12:24	
1,2-Dichlorobenzene	ND	3.7	1	B0A0015	01/02/2020	01/03/20 12:24	
1,2-Dichloroethane	ND	3.7	1	B0A0015	01/02/2020	01/03/20 12:24	
1,2-Dichloropropane	ND	3.7	1	B0A0015	01/02/2020	01/03/20 12:24	
1,3,5-Trimethylbenzene	ND	3.7	1	B0A0015	01/02/2020	01/03/20 12:24	
1,3-Dichlorobenzene	ND	3.7	1	B0A0015	01/02/2020	01/03/20 12:24	
1,3-Dichloropropane	ND	3.7	1	B0A0015	01/02/2020	01/03/20 12:24	
1,4-Dichlorobenzene	ND	3.7	1	B0A0015	01/02/2020	01/03/20 12:24	
2,2-Dichloropropane	ND	3.7	1	B0A0015	01/02/2020	01/03/20 12:24	
2-Chlorotoluene	ND	3.7	1	B0A0015	01/02/2020	01/03/20 12:24	
4-Chlorotoluene	ND	3.7	1	B0A0015	01/02/2020	01/03/20 12:24	
4-Isopropyltoluene	ND	3.7	1	B0A0015	01/02/2020	01/03/20 12:24	
Benzene	ND	3.7	1	B0A0015	01/02/2020	01/03/20 12:24	
Bromobenzene	ND	3.7	1	B0A0015	01/02/2020	01/03/20 12:24	
Bromochloromethane	ND	3.7	1	B0A0015	01/02/2020	01/03/20 12:24	
Bromodichloromethane	ND	3.7	1	B0A0015	01/02/2020	01/03/20 12:24	
Bromoform	ND	3.7	1	B0A0015	01/02/2020	01/03/20 12:24	
Bromomethane	ND	3.7	1	B0A0015	01/02/2020	01/03/20 12:24	
Carbon disulfide	ND	3.7	1	B0A0015	01/02/2020	01/03/20 12:24	
Carbon tetrachloride	ND	3.7	1	B0A0015	01/02/2020	01/03/20 12:24	
Chlorobenzene	ND	3.7	1	B0A0015	01/02/2020	01/03/20 12:24	
Chloroethane	ND	3.7	1	B0A0015	01/02/2020	01/03/20 12:24	
Chloroform	ND	3.7	1	B0A0015	01/02/2020	01/03/20 12:24	
Chloromethane	ND	3.7	1	B0A0015	01/02/2020	01/03/20 12:24	
cis-1,2-Dichloroethene	ND	3.7	1	B0A0015	01/02/2020	01/03/20 12:24	

Certificate of Analysis

Burns and McDonnell	Project Number : SCVTA, 87119-1218 Abdulkariem
400 Oyster Point Blvd, Suite 533	Report To : Christopher D'Sa
South San Francisco , CA 94080	Reported : 01/08/2020

Client Sample ID: B-1d24

Lab ID: 1904739-02

Volatile Organic Compounds by EPA 5035 / EPA 8260B **Analyst: KL**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
cis-1,3-Dichloropropene	ND	3.7	1	B0A0015	01/02/2020	01/03/20 12:24	
Di-isopropyl ether	ND	3.7	1	B0A0015	01/02/2020	01/03/20 12:24	
Dibromochloromethane	ND	3.7	1	B0A0015	01/02/2020	01/03/20 12:24	
Dibromomethane	ND	3.7	1	B0A0015	01/02/2020	01/03/20 12:24	
Dichlorodifluoromethane	ND	3.7	1	B0A0015	01/02/2020	01/03/20 12:24	
Ethyl Acetate	ND	37	1	B0A0015	01/02/2020	01/03/20 12:24	
Ethyl Ether	ND	37	1	B0A0015	01/02/2020	01/03/20 12:24	
Ethyl tert-butyl ether	ND	3.7	1	B0A0015	01/02/2020	01/03/20 12:24	
Ethylbenzene	ND	3.7	1	B0A0015	01/02/2020	01/03/20 12:24	
Freon-113	ND	3.7	1	B0A0015	01/02/2020	01/03/20 12:24	
Hexachlorobutadiene	ND	3.7	1	B0A0015	01/02/2020	01/03/20 12:24	
Isopropylbenzene	ND	3.7	1	B0A0015	01/02/2020	01/03/20 12:24	
m,p-Xylene	ND	7.5	1	B0A0015	01/02/2020	01/03/20 12:24	
Methylene chloride	ND	3.7	1	B0A0015	01/02/2020	01/03/20 12:24	
MTBE	ND	3.7	1	B0A0015	01/02/2020	01/03/20 12:24	
n-Butylbenzene	ND	3.7	1	B0A0015	01/02/2020	01/03/20 12:24	
n-Propylbenzene	ND	3.7	1	B0A0015	01/02/2020	01/03/20 12:24	
Naphthalene	ND	3.7	1	B0A0015	01/02/2020	01/03/20 12:24	
o-Xylene	ND	3.7	1	B0A0015	01/02/2020	01/03/20 12:24	
sec-Butylbenzene	ND	3.7	1	B0A0015	01/02/2020	01/03/20 12:24	
Styrene	ND	3.7	1	B0A0015	01/02/2020	01/03/20 12:24	
tert-Amyl methyl ether	ND	3.7	1	B0A0015	01/02/2020	01/03/20 12:24	
tert-Butanol	ND	75	1	B0A0015	01/02/2020	01/03/20 12:24	
tert-Butylbenzene	ND	3.7	1	B0A0015	01/02/2020	01/03/20 12:24	
Tetrachloroethene	ND	3.7	1	B0A0015	01/02/2020	01/03/20 12:24	
Toluene	ND	3.7	1	B0A0015	01/02/2020	01/03/20 12:24	
trans-1,2-Dichloroethene	ND	3.7	1	B0A0015	01/02/2020	01/03/20 12:24	
trans-1,3-Dichloropropene	ND	3.7	1	B0A0015	01/02/2020	01/03/20 12:24	
Trichloroethene	ND	3.7	1	B0A0015	01/02/2020	01/03/20 12:24	
Trichlorofluoromethane	ND	3.7	1	B0A0015	01/02/2020	01/03/20 12:24	
Vinyl acetate	ND	37	1	B0A0015	01/02/2020	01/03/20 12:24	
Vinyl chloride	ND	3.7	1	B0A0015	01/02/2020	01/03/20 12:24	
GRO (C4 - C12)	ND	750	1	B0A0059	01/02/2020	01/03/20 12:24	
Surrogate: 1,2-Dichloroethane-d4	*106 %*	*58 - 160*		B0A0015	01/02/2020	*01/03/20 12:24*	
Surrogate: 1,2-Dichloroethane-d4	*108 %*	*58 - 160*		B0A0059	01/02/2020	*01/03/20 12:24*	
Surrogate: 4-Bromofluorobenzene	*98.2 %*	*72 - 121*		B0A0015	01/02/2020	*01/03/20 12:24*	
Surrogate: 4-Bromofluorobenzene	*102 %*	*72 - 121*		B0A0059	01/02/2020	*01/03/20 12:24*	

Certificate of Analysis

Burns and McDonnell	Project Number : SCVTA, 87119-1218 Abdulkariem
400 Oyster Point Blvd, Suite 533	Report To : Christopher D'Sa
South San Francisco , CA 94080	Reported : 01/08/2020

Client Sample ID: B-1d24

Lab ID: 1904739-02

Volatile Organic Compounds by EPA 5035 / EPA 8260B **Analyst: KL**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: Dibromofluoromethane	*103 %*	*75 - 139*		B0A0015	01/02/2020	*01/03/20 12:24*	
Surrogate: Dibromofluoromethane	*111 %*	*75 - 139*		B0A0059	01/02/2020	*01/03/20 12:24*	
Surrogate: Toluene-d8	*100 %*	*84 - 115*		B0A0015	01/02/2020	*01/03/20 12:24*	
Surrogate: Toluene-d8	*104 %*	*84 - 115*		B0A0059	01/02/2020	*01/03/20 12:24*	

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Burns and McDonnell	Project Number : SCVTA, 87119-1218 Abdulkariem
400 Oyster Point Blvd, Suite 533	Report To : Christopher D'Sa
South San Francisco , CA 94080	Reported : 01/08/2020

Client Sample ID: B-2d7

Lab ID: 1904739-03

Title 22 Metals by ICP-AES EPA 6010B

Analyst: KEK

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	1	B0A0091	01/06/2020	01/06/20 17:03	
Arsenic	**6.7**	1.0	1	B0A0091	01/06/2020	01/06/20 17:03	
Barium	**150**	1.0	1	B0A0091	01/06/2020	01/06/20 17:03	
Beryllium	ND	1.0	1	B0A0091	01/06/2020	01/06/20 17:03	
Cadmium	ND	1.0	1	B0A0091	01/06/2020	01/06/20 17:03	
Chromium	**42**	1.0	1	B0A0091	01/06/2020	01/06/20 17:03	
Cobalt	**9.3**	1.0	1	B0A0091	01/06/2020	01/06/20 17:03	
Copper	**21**	2.0	1	B0A0091	01/06/2020	01/06/20 17:03	
Lead	**5.9**	1.0	1	B0A0091	01/06/2020	01/06/20 17:03	
Molybdenum	ND	1.0	1	B0A0091	01/06/2020	01/06/20 17:03	
Nickel	**75**	1.0	1	B0A0091	01/06/2020	01/06/20 17:03	
Selenium	ND	1.0	1	B0A0091	01/06/2020	01/06/20 17:03	
Silver	ND	1.0	1	B0A0091	01/06/2020	01/06/20 17:03	
Thallium	ND	1.0	1	B0A0091	01/06/2020	01/06/20 17:03	
Vanadium	**28**	1.0	1	B0A0091	01/06/2020	01/06/20 17:03	
Zinc	**37**	1.0	1	B0A0091	01/06/2020	01/06/20 17:03	

Mercury by AA (Cold Vapor) EPA 7471A

Analyst: VV

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	ND	0.10	1	B0A0092	01/06/2020	01/06/20 14:29	

Diesel Range Organics by EPA 8015B (SGT)

Analyst: VL

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	ND	1.0	1	B0A0056	01/02/2020	01/02/20 20:37	
ORO	ND	1.0	1	B0A0056	01/02/2020	01/02/20 20:37	
Surrogate: p-Terphenyl	*49.8 %*	*34 - 158*		B0A0056	01/02/2020	*01/02/20 20:37*	

Certificate of Analysis

Burns and McDonnell	Project Number : SCVTA, 87119-1218 Abdulkariem
400 Oyster Point Blvd, Suite 533	Report To : Christopher D'Sa
South San Francisco , CA 94080	Reported : 01/08/2020

Client Sample ID: B-2d7

Lab ID: 1904739-03

Volatile Organic Compounds by EPA 5035 / EPA 8260B **Analyst: KL**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	4.2	1	B0A0015	01/02/2020	01/03/20 12:43	
1,1,1-Trichloroethane	ND	4.2	1	B0A0015	01/02/2020	01/03/20 12:43	
1,1,2,2-Tetrachloroethane	ND	4.2	1	B0A0015	01/02/2020	01/03/20 12:43	
1,1,2-Trichloroethane	ND	4.2	1	B0A0015	01/02/2020	01/03/20 12:43	
1,1-Dichloroethane	ND	4.2	1	B0A0015	01/02/2020	01/03/20 12:43	
1,1-Dichloroethene	ND	4.2	1	B0A0015	01/02/2020	01/03/20 12:43	
1,1-Dichloropropene	ND	4.2	1	B0A0015	01/02/2020	01/03/20 12:43	
1,2,3-Trichloropropane	ND	4.2	1	B0A0015	01/02/2020	01/03/20 12:43	
1,2,3-Trichlorobenzene	ND	4.2	1	B0A0015	01/02/2020	01/03/20 12:43	
1,2,4-Trichlorobenzene	ND	4.2	1	B0A0015	01/02/2020	01/03/20 12:43	
1,2,4-Trimethylbenzene	ND	4.2	1	B0A0015	01/02/2020	01/03/20 12:43	
1,2-Dibromo-3-chloropropane	ND	8.4	1	B0A0015	01/02/2020	01/03/20 12:43	
1,2-Dibromoethane	ND	4.2	1	B0A0015	01/02/2020	01/03/20 12:43	
1,2-Dichlorobenzene	ND	4.2	1	B0A0015	01/02/2020	01/03/20 12:43	
1,2-Dichloroethane	ND	4.2	1	B0A0015	01/02/2020	01/03/20 12:43	
1,2-Dichloropropane	ND	4.2	1	B0A0015	01/02/2020	01/03/20 12:43	
1,3,5-Trimethylbenzene	ND	4.2	1	B0A0015	01/02/2020	01/03/20 12:43	
1,3-Dichlorobenzene	ND	4.2	1	B0A0015	01/02/2020	01/03/20 12:43	
1,3-Dichloropropane	ND	4.2	1	B0A0015	01/02/2020	01/03/20 12:43	
1,4-Dichlorobenzene	ND	4.2	1	B0A0015	01/02/2020	01/03/20 12:43	
2,2-Dichloropropane	ND	4.2	1	B0A0015	01/02/2020	01/03/20 12:43	
2-Chlorotoluene	ND	4.2	1	B0A0015	01/02/2020	01/03/20 12:43	
4-Chlorotoluene	ND	4.2	1	B0A0015	01/02/2020	01/03/20 12:43	
4-Isopropyltoluene	ND	4.2	1	B0A0015	01/02/2020	01/03/20 12:43	
Benzene	ND	4.2	1	B0A0015	01/02/2020	01/03/20 12:43	
Bromobenzene	ND	4.2	1	B0A0015	01/02/2020	01/03/20 12:43	
Bromochloromethane	ND	4.2	1	B0A0015	01/02/2020	01/03/20 12:43	
Bromodichloromethane	ND	4.2	1	B0A0015	01/02/2020	01/03/20 12:43	
Bromoform	ND	4.2	1	B0A0015	01/02/2020	01/03/20 12:43	
Bromomethane	ND	4.2	1	B0A0015	01/02/2020	01/03/20 12:43	
Carbon disulfide	ND	4.2	1	B0A0015	01/02/2020	01/03/20 12:43	
Carbon tetrachloride	ND	4.2	1	B0A0015	01/02/2020	01/03/20 12:43	
Chlorobenzene	ND	4.2	1	B0A0015	01/02/2020	01/03/20 12:43	
Chloroethane	ND	4.2	1	B0A0015	01/02/2020	01/03/20 12:43	
Chloroform	ND	4.2	1	B0A0015	01/02/2020	01/03/20 12:43	
Chloromethane	ND	4.2	1	B0A0015	01/02/2020	01/03/20 12:43	
cis-1,2-Dichloroethene	ND	4.2	1	B0A0015	01/02/2020	01/03/20 12:43	

Certificate of Analysis

Burns and McDonnell	Project Number : SCVTA, 87119-1218 Abdulkariem
400 Oyster Point Blvd, Suite 533	Report To : Christopher D'Sa
South San Francisco , CA 94080	Reported : 01/08/2020

Client Sample ID: B-2d7

Lab ID: 1904739-03

Volatile Organic Compounds by EPA 5035 / EPA 8260B **Analyst: KL**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
cis-1,3-Dichloropropene	ND	4.2	1	B0A0015	01/02/2020	01/03/20 12:43	
Di-isopropyl ether	ND	4.2	1	B0A0015	01/02/2020	01/03/20 12:43	
Dibromochloromethane	ND	4.2	1	B0A0015	01/02/2020	01/03/20 12:43	
Dibromomethane	ND	4.2	1	B0A0015	01/02/2020	01/03/20 12:43	
Dichlorodifluoromethane	ND	4.2	1	B0A0015	01/02/2020	01/03/20 12:43	
Ethyl Acetate	ND	42	1	B0A0015	01/02/2020	01/03/20 12:43	
Ethyl Ether	ND	42	1	B0A0015	01/02/2020	01/03/20 12:43	
Ethyl tert-butyl ether	ND	4.2	1	B0A0015	01/02/2020	01/03/20 12:43	
Ethylbenzene	ND	4.2	1	B0A0015	01/02/2020	01/03/20 12:43	
Freon-113	ND	4.2	1	B0A0015	01/02/2020	01/03/20 12:43	
Hexachlorobutadiene	ND	4.2	1	B0A0015	01/02/2020	01/03/20 12:43	
Isopropylbenzene	ND	4.2	1	B0A0015	01/02/2020	01/03/20 12:43	
m,p-Xylene	ND	8.4	1	B0A0015	01/02/2020	01/03/20 12:43	
Methylene chloride	ND	4.2	1	B0A0015	01/02/2020	01/03/20 12:43	
MTBE	ND	4.2	1	B0A0015	01/02/2020	01/03/20 12:43	
n-Butylbenzene	ND	4.2	1	B0A0015	01/02/2020	01/03/20 12:43	
n-Propylbenzene	ND	4.2	1	B0A0015	01/02/2020	01/03/20 12:43	
Naphthalene	ND	4.2	1	B0A0015	01/02/2020	01/03/20 12:43	
o-Xylene	ND	4.2	1	B0A0015	01/02/2020	01/03/20 12:43	
sec-Butylbenzene	ND	4.2	1	B0A0015	01/02/2020	01/03/20 12:43	
Styrene	ND	4.2	1	B0A0015	01/02/2020	01/03/20 12:43	
tert-Amyl methyl ether	ND	4.2	1	B0A0015	01/02/2020	01/03/20 12:43	
tert-Butanol	ND	84	1	B0A0015	01/02/2020	01/03/20 12:43	
tert-Butylbenzene	ND	4.2	1	B0A0015	01/02/2020	01/03/20 12:43	
Tetrachloroethene	ND	4.2	1	B0A0015	01/02/2020	01/03/20 12:43	
Toluene	ND	4.2	1	B0A0015	01/02/2020	01/03/20 12:43	
trans-1,2-Dichloroethene	ND	4.2	1	B0A0015	01/02/2020	01/03/20 12:43	
trans-1,3-Dichloropropene	ND	4.2	1	B0A0015	01/02/2020	01/03/20 12:43	
Trichloroethene	ND	4.2	1	B0A0015	01/02/2020	01/03/20 12:43	
Trichlorofluoromethane	ND	4.2	1	B0A0015	01/02/2020	01/03/20 12:43	
Vinyl acetate	ND	42	1	B0A0015	01/02/2020	01/03/20 12:43	
Vinyl chloride	ND	4.2	1	B0A0015	01/02/2020	01/03/20 12:43	
GRO (C4 - C12)	ND	840	1	B0A0059	01/02/2020	01/03/20 12:43	
Surrogate: 1,2-Dichloroethane-d4	*104 %*	*58 - 160*		B0A0015	01/02/2020	*01/03/20 12:43*	
Surrogate: 1,2-Dichloroethane-d4	*105 %*	*58 - 160*		B0A0059	01/02/2020	*01/03/20 12:43*	
Surrogate: 4-Bromofluorobenzene	*96.9 %*	*72 - 121*		B0A0015	01/02/2020	*01/03/20 12:43*	
Surrogate: 4-Bromofluorobenzene	*100 %*	*72 - 121*		B0A0059	01/02/2020	*01/03/20 12:43*	

Certificate of Analysis

Burns and McDonnell	Project Number : SCVTA, 87119-1218 Abdulkariem
400 Oyster Point Blvd, Suite 533	Report To : Christopher D'Sa
South San Francisco , CA 94080	Reported : 01/08/2020

Client Sample ID: B-2d7

Lab ID: 1904739-03

Volatile Organic Compounds by EPA 5035 / EPA 8260B **Analyst: KL**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: Dibromofluoromethane	*101 %*	*75 - 139*		B0A0015	01/02/2020	*01/03/20 12:43*	
Surrogate: Dibromofluoromethane	*109 %*	*75 - 139*		B0A0059	01/02/2020	*01/03/20 12:43*	
Surrogate: Toluene-d8	*99.6 %*	*84 - 115*		B0A0015	01/02/2020	*01/03/20 12:43*	
Surrogate: Toluene-d8	*104 %*	*84 - 115*		B0A0059	01/02/2020	*01/03/20 12:43*	

Certificate of Analysis

Burns and McDonnell	Project Number : SCVTA, 87119-1218 Abdulkariem
400 Oyster Point Blvd, Suite 533	Report To : Christopher D'Sa
South San Francisco , CA 94080	Reported : 01/08/2020

Client Sample ID: B-2d24

Lab ID: 1904739-04

Title 22 Metals by ICP-AES EPA 6010B

Analyst: KEK

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	1	B0A0091	01/06/2020	01/06/20 17:05	
Arsenic	**1.9**	1.0	1	B0A0091	01/06/2020	01/06/20 17:05	
Barium	**120**	1.0	1	B0A0091	01/06/2020	01/06/20 17:05	
Beryllium	ND	1.0	1	B0A0091	01/06/2020	01/06/20 17:05	
Cadmium	ND	1.0	1	B0A0091	01/06/2020	01/06/20 17:05	
Chromium	**36**	1.0	1	B0A0091	01/06/2020	01/06/20 17:05	
Cobalt	**7.0**	1.0	1	B0A0091	01/06/2020	01/06/20 17:05	
Copper	**14**	2.0	1	B0A0091	01/06/2020	01/06/20 17:05	
Lead	**4.8**	1.0	1	B0A0091	01/06/2020	01/06/20 17:05	
Molybdenum	ND	1.0	1	B0A0091	01/06/2020	01/06/20 17:05	
Nickel	**46**	1.0	1	B0A0091	01/06/2020	01/06/20 17:05	
Selenium	ND	1.0	1	B0A0091	01/06/2020	01/06/20 17:05	
Silver	ND	1.0	1	B0A0091	01/06/2020	01/06/20 17:05	
Thallium	ND	1.0	1	B0A0091	01/06/2020	01/06/20 17:05	
Vanadium	**24**	1.0	1	B0A0091	01/06/2020	01/06/20 17:05	
Zinc	**31**	1.0	1	B0A0091	01/06/2020	01/06/20 17:05	

Mercury by AA (Cold Vapor) EPA 7471A

Analyst: VV

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	**0.17**	0.10	1	B0A0092	01/06/2020	01/06/20 14:31	

Diesel Range Organics by EPA 8015B (SGT)

Analyst: VL

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	**1.5**	1.0	1	B0A0056	01/02/2020	01/02/20 20:54	
ORO	ND	1.0	1	B0A0056	01/02/2020	01/02/20 20:54	
Surrogate: p-Terphenyl	*53.5 %*	*34 - 158*		B0A0056	01/02/2020	*01/02/20 20:54*	

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400 Oyster Point Blvd, Suite 533	Report To : Christopher D'Sa
South San Francisco , CA 94080	Reported : 01/08/2020

Client Sample ID: B-2d24

Lab ID: 1904739-04

Volatile Organic Compounds by EPA 5035 / EPA 8260B **Analyst: KL**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	4.1	1	B0A0015	01/02/2020	01/03/20 13:01	
1,1,1-Trichloroethane	ND	4.1	1	B0A0015	01/02/2020	01/03/20 13:01	
1,1,2,2-Tetrachloroethane	ND	4.1	1	B0A0015	01/02/2020	01/03/20 13:01	
1,1,2-Trichloroethane	ND	4.1	1	B0A0015	01/02/2020	01/03/20 13:01	
1,1-Dichloroethane	ND	4.1	1	B0A0015	01/02/2020	01/03/20 13:01	
1,1-Dichloroethene	ND	4.1	1	B0A0015	01/02/2020	01/03/20 13:01	
1,1-Dichloropropene	ND	4.1	1	B0A0015	01/02/2020	01/03/20 13:01	
1,2,3-Trichloropropane	ND	4.1	1	B0A0015	01/02/2020	01/03/20 13:01	
1,2,3-Trichlorobenzene	ND	4.1	1	B0A0015	01/02/2020	01/03/20 13:01	
1,2,4-Trichlorobenzene	ND	4.1	1	B0A0015	01/02/2020	01/03/20 13:01	
1,2,4-Trimethylbenzene	ND	4.1	1	B0A0015	01/02/2020	01/03/20 13:01	
1,2-Dibromo-3-chloropropane	ND	8.2	1	B0A0015	01/02/2020	01/03/20 13:01	
1,2-Dibromoethane	ND	4.1	1	B0A0015	01/02/2020	01/03/20 13:01	
1,2-Dichlorobenzene	ND	4.1	1	B0A0015	01/02/2020	01/03/20 13:01	
1,2-Dichloroethane	ND	4.1	1	B0A0015	01/02/2020	01/03/20 13:01	
1,2-Dichloropropane	ND	4.1	1	B0A0015	01/02/2020	01/03/20 13:01	
1,3,5-Trimethylbenzene	ND	4.1	1	B0A0015	01/02/2020	01/03/20 13:01	
1,3-Dichlorobenzene	ND	4.1	1	B0A0015	01/02/2020	01/03/20 13:01	
1,3-Dichloropropane	ND	4.1	1	B0A0015	01/02/2020	01/03/20 13:01	
1,4-Dichlorobenzene	ND	4.1	1	B0A0015	01/02/2020	01/03/20 13:01	
2,2-Dichloropropane	ND	4.1	1	B0A0015	01/02/2020	01/03/20 13:01	
2-Chlorotoluene	ND	4.1	1	B0A0015	01/02/2020	01/03/20 13:01	
4-Chlorotoluene	ND	4.1	1	B0A0015	01/02/2020	01/03/20 13:01	
4-Isopropyltoluene	ND	4.1	1	B0A0015	01/02/2020	01/03/20 13:01	
Benzene	ND	4.1	1	B0A0015	01/02/2020	01/03/20 13:01	
Bromobenzene	ND	4.1	1	B0A0015	01/02/2020	01/03/20 13:01	
Bromochloromethane	ND	4.1	1	B0A0015	01/02/2020	01/03/20 13:01	
Bromodichloromethane	ND	4.1	1	B0A0015	01/02/2020	01/03/20 13:01	
Bromoform	ND	4.1	1	B0A0015	01/02/2020	01/03/20 13:01	
Bromomethane	ND	4.1	1	B0A0015	01/02/2020	01/03/20 13:01	
Carbon disulfide	ND	4.1	1	B0A0015	01/02/2020	01/03/20 13:01	
Carbon tetrachloride	ND	4.1	1	B0A0015	01/02/2020	01/03/20 13:01	
Chlorobenzene	ND	4.1	1	B0A0015	01/02/2020	01/03/20 13:01	
Chloroethane	ND	4.1	1	B0A0015	01/02/2020	01/03/20 13:01	
Chloroform	ND	4.1	1	B0A0015	01/02/2020	01/03/20 13:01	
Chloromethane	ND	4.1	1	B0A0015	01/02/2020	01/03/20 13:01	
cis-1,2-Dichloroethene	ND	4.1	1	B0A0015	01/02/2020	01/03/20 13:01	

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Client Sample ID: B-2d24

Lab ID: 1904739-04

Volatile Organic Compounds by EPA 5035 / EPA 8260B **Analyst: KL**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
cis-1,3-Dichloropropene	ND	4.1	1	B0A0015	01/02/2020	01/03/20 13:01	
Di-isopropyl ether	ND	4.1	1	B0A0015	01/02/2020	01/03/20 13:01	
Dibromochloromethane	ND	4.1	1	B0A0015	01/02/2020	01/03/20 13:01	
Dibromomethane	ND	4.1	1	B0A0015	01/02/2020	01/03/20 13:01	
Dichlorodifluoromethane	ND	4.1	1	B0A0015	01/02/2020	01/03/20 13:01	
Ethyl Acetate	ND	41	1	B0A0015	01/02/2020	01/03/20 13:01	
Ethyl Ether	ND	41	1	B0A0015	01/02/2020	01/03/20 13:01	
Ethyl tert-butyl ether	ND	4.1	1	B0A0015	01/02/2020	01/03/20 13:01	
Ethylbenzene	ND	4.1	1	B0A0015	01/02/2020	01/03/20 13:01	
Freon-113	ND	4.1	1	B0A0015	01/02/2020	01/03/20 13:01	
Hexachlorobutadiene	ND	4.1	1	B0A0015	01/02/2020	01/03/20 13:01	
Isopropylbenzene	ND	4.1	1	B0A0015	01/02/2020	01/03/20 13:01	
m,p-Xylene	ND	8.2	1	B0A0015	01/02/2020	01/03/20 13:01	
Methylene chloride	ND	4.1	1	B0A0015	01/02/2020	01/03/20 13:01	
MTBE	ND	4.1	1	B0A0015	01/02/2020	01/03/20 13:01	
n-Butylbenzene	ND	4.1	1	B0A0015	01/02/2020	01/03/20 13:01	
n-Propylbenzene	ND	4.1	1	B0A0015	01/02/2020	01/03/20 13:01	
Naphthalene	ND	4.1	1	B0A0015	01/02/2020	01/03/20 13:01	
o-Xylene	ND	4.1	1	B0A0015	01/02/2020	01/03/20 13:01	
sec-Butylbenzene	ND	4.1	1	B0A0015	01/02/2020	01/03/20 13:01	
Styrene	ND	4.1	1	B0A0015	01/02/2020	01/03/20 13:01	
tert-Amyl methyl ether	ND	4.1	1	B0A0015	01/02/2020	01/03/20 13:01	
tert-Butanol	ND	82	1	B0A0015	01/02/2020	01/03/20 13:01	
tert-Butylbenzene	ND	4.1	1	B0A0015	01/02/2020	01/03/20 13:01	
Tetrachloroethene	ND	4.1	1	B0A0015	01/02/2020	01/03/20 13:01	
Toluene	ND	4.1	1	B0A0015	01/02/2020	01/03/20 13:01	
trans-1,2-Dichloroethene	ND	4.1	1	B0A0015	01/02/2020	01/03/20 13:01	
trans-1,3-Dichloropropene	ND	4.1	1	B0A0015	01/02/2020	01/03/20 13:01	
Trichloroethene	ND	4.1	1	B0A0015	01/02/2020	01/03/20 13:01	
Trichlorofluoromethane	ND	4.1	1	B0A0015	01/02/2020	01/03/20 13:01	
Vinyl acetate	ND	41	1	B0A0015	01/02/2020	01/03/20 13:01	
Vinyl chloride	ND	4.1	1	B0A0015	01/02/2020	01/03/20 13:01	
GRO (C4 - C12)	ND	820	1	B0A0059	01/02/2020	01/03/20 13:01	
Surrogate: 1,2-Dichloroethane-d4	*102 %*	*58 - 160*		B0A0015	01/02/2020	*01/03/20 13:01*	
Surrogate: 1,2-Dichloroethane-d4	*104 %*	*58 - 160*		B0A0059	01/02/2020	*01/03/20 13:01*	
Surrogate: 4-Bromofluorobenzene	*96.0 %*	*72 - 121*		B0A0015	01/02/2020	*01/03/20 13:01*	
Surrogate: 4-Bromofluorobenzene	*99.3 %*	*72 - 121*		B0A0059	01/02/2020	*01/03/20 13:01*	

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Client Sample ID: B-2d24

Lab ID: 1904739-04

Volatile Organic Compounds by EPA 5035 / EPA 8260B **Analyst: KL**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: Dibromofluoromethane	*102 %*	*75 - 139*		B0A0015	01/02/2020	*01/03/20 13:01*	
Surrogate: Dibromofluoromethane	*110 %*	*75 - 139*		B0A0059	01/02/2020	*01/03/20 13:01*	
Surrogate: Toluene-d8	*98.8 %*	*84 - 115*		B0A0015	01/02/2020	*01/03/20 13:01*	
Surrogate: Toluene-d8	*103 %*	*84 - 115*		B0A0059	01/02/2020	*01/03/20 13:01*	

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Client Sample ID: B-1

Lab ID: 1904739-05

Title 22 Metals by ICP-AES EPA 6010B

Analyst: KEK

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	0.010	1	B0A0137	01/07/2020	01/08/20 12:42	
Arsenic	**0.14**	0.010	1	B0A0137	01/07/2020	01/08/20 12:42	
Barium	**4.3**	0.0030	1	B0A0137	01/07/2020	01/08/20 12:42	
Beryllium	**0.019**	0.0030	1	B0A0137	01/07/2020	01/08/20 12:42	
Cadmium	ND	0.0030	1	B0A0137	01/07/2020	01/08/20 12:42	
Chromium	**0.90**	0.0030	1	B0A0137	01/07/2020	01/08/20 12:42	
Cobalt	**0.42**	0.0030	1	B0A0137	01/07/2020	01/08/20 12:42	
Copper	**1.1**	0.0090	1	B0A0137	01/07/2020	01/08/20 12:42	
Lead	**0.18**	0.0050	1	B0A0137	01/07/2020	01/08/20 12:42	
Molybdenum	**0.010**	0.0050	1	B0A0137	01/07/2020	01/08/20 12:42	
Nickel	**1.9**	0.0050	1	B0A0137	01/07/2020	01/08/20 12:42	
Selenium	ND	0.010	1	B0A0137	01/07/2020	01/08/20 12:42	
Silver	ND	0.0030	1	B0A0137	01/07/2020	01/08/20 12:42	
Thallium	ND	0.015	1	B0A0137	01/07/2020	01/08/20 12:42	
Vanadium	**0.82**	0.0030	1	B0A0137	01/07/2020	01/08/20 12:42	
Zinc	**1.4**	0.025	1	B0A0137	01/07/2020	01/08/20 12:42	

Mercury by AA (Cold Vapor) EPA 7470A

Analyst: VV

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	**0.64**	0.20	1	B0A0139	01/07/2020	01/08/20 12:37	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: Kur

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	0.20	1	B0A0058	01/03/2020	01/03/20 12:57	
Surrogate: 4-Bromofluorobenzene	*90.9 %*	*70 - 130*		B0A0058	01/03/2020	*01/03/20 12:57*	

Diesel Range Organics by EPA 8015B (SGT)

Analyst: VL

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	ND	0.05	1	B0A0014	01/02/2020	01/02/20 13:33	
ORO	ND	0.05	1	B0A0014	01/02/2020	01/02/20 13:33	

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Diesel Range Organics by EPA 8015B (SGT)

Analyst: VL

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: p-Terphenyl	*78.1 %*	*32 - 169*		B0A0014	01/02/2020	*01/02/20 13:33*	

Organochlorine Pesticides by EPA 8081A

Analyst: KD

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
4,4′-DDD	ND	0.05	1	B0A0016	01/02/2020	01/02/20 19:43	
4,4′-DDE	ND	0.05	1	B0A0016	01/02/2020	01/02/20 19:43	
4,4′-DDT	ND	0.05	1	B0A0016	01/02/2020	01/02/20 19:43	
Aldrin	ND	0.02	1	B0A0016	01/02/2020	01/02/20 19:43	
alpha-BHC	ND	0.02	1	B0A0016	01/02/2020	01/02/20 19:43	
alpha-Chlordane	ND	0.02	1	B0A0016	01/02/2020	01/02/20 19:43	
beta-BHC	ND	0.02	1	B0A0016	01/02/2020	01/02/20 19:43	
Chlordane	ND	0.25	1	B0A0016	01/02/2020	01/02/20 19:43	
delta-BHC	ND	0.02	1	B0A0016	01/02/2020	01/02/20 19:43	
Dieldrin	ND	0.05	1	B0A0016	01/02/2020	01/02/20 19:43	
Endosulfan I	ND	0.02	1	B0A0016	01/02/2020	01/02/20 19:43	
Endosulfan II	ND	0.05	1	B0A0016	01/02/2020	01/02/20 19:43	
Endosulfan sulfate	ND	0.05	1	B0A0016	01/02/2020	01/02/20 19:43	
Endrin	ND	0.05	1	B0A0016	01/02/2020	01/02/20 19:43	
Endrin aldehyde	ND	0.05	1	B0A0016	01/02/2020	01/02/20 19:43	
Endrin ketone	ND	0.05	1	B0A0016	01/02/2020	01/02/20 19:43	
gamma-BHC	ND	0.02	1	B0A0016	01/02/2020	01/02/20 19:43	
gamma-Chlordane	ND	0.02	1	B0A0016	01/02/2020	01/02/20 19:43	
Heptachlor	ND	0.02	1	B0A0016	01/02/2020	01/02/20 19:43	
Heptachlor epoxide	ND	0.02	1	B0A0016	01/02/2020	01/02/20 19:43	
Methoxychlor	ND	0.25	1	B0A0016	01/02/2020	01/02/20 19:43	
Toxaphene	ND	2.5	1	B0A0016	01/02/2020	01/02/20 19:43	
Surrogate: Decachlorobiphenyl	*54.1 %*	*25 - 103*		B0A0016	01/02/2020	*01/02/20 19:43*	
Surrogate: Tetrachloro-m-xylene	*40.7 %*	*21 - 105*		B0A0016	01/02/2020	*01/02/20 19:43*	

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Lab ID: 1904739-05

Polychlorinated Biphenyls by EPA 8082

Analyst: KD

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Aroclor 1016	ND	0.50	1	B0A0016	01/02/2020	01/02/20 13:04	
Aroclor 1221	ND	1.0	1	B0A0016	01/02/2020	01/02/20 13:04	
Aroclor 1232	ND	0.50	1	B0A0016	01/02/2020	01/02/20 13:04	
Aroclor 1242	ND	0.50	1	B0A0016	01/02/2020	01/02/20 13:04	
Aroclor 1248	ND	0.50	1	B0A0016	01/02/2020	01/02/20 13:04	
Aroclor 1254	ND	0.50	1	B0A0016	01/02/2020	01/02/20 13:04	
Aroclor 1260	ND	0.50	1	B0A0016	01/02/2020	01/02/20 13:04	
Aroclor 1262	ND	0.50	1	B0A0016	01/02/2020	01/02/20 13:04	
Aroclor 1268	ND	0.50	1	B0A0016	01/02/2020	01/02/20 13:04	
Surrogate: Decachlorobiphenyl	*48.2 %*	*25 - 103*		B0A0016	01/02/2020	*01/02/20 13:04*	
Surrogate: Tetrachloro-m-xylene	*39.6 %*	*21 - 105*		B0A0016	01/02/2020	*01/02/20 13:04*	

Volatile Organic Compounds by EPA 8260B

Analyst: VW

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:32	
1,1,1-Trichloroethane	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:32	
1,1,2,2-Tetrachloroethane	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:32	
1,1,2-Trichloroethane	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:32	
1,1-Dichloroethane	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:32	
1,1-Dichloroethene	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:32	
1,1-Dichloropropene	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:32	
1,2,3-Trichloropropane	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:32	
1,2,3-Trichlorobenzene	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:32	
1,2,4-Trichlorobenzene	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:32	
1,2,4-Trimethylbenzene	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:32	
1,2-Dibromo-3-chloropropane	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:32	
1,2-Dibromoethane	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:32	
1,2-Dichlorobenzene	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:32	
1,2-Dichloroethane	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:32	
1,2-Dichloropropane	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:32	
1,3,5-Trimethylbenzene	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:32	
1,3-Dichlorobenzene	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:32	
1,3-Dichloropropane	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:32	
1,4-Dichlorobenzene	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:32	
2,2-Dichloropropane	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:32	

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Client Sample ID: B-1

Lab ID: 1904739-05

Volatile Organic Compounds by EPA 8260B **Analyst: VW**

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
2-Chlorotoluene	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:32	
4-Chlorotoluene	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:32	
4-Isopropyltoluene	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:32	
Benzene	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:32	
Bromobenzene	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:32	
Bromochloromethane	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:32	
Bromodichloromethane	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:32	
Bromoform	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:32	
Bromomethane	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:32	
Carbon disulfide	ND	1.0	1	B0A0003	01/02/2020	01/02/20 11:32	
Carbon tetrachloride	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:32	
Chlorobenzene	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:32	
Chloroethane	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:32	
Chloroform	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:32	
Chloromethane	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:32	
cis-1,2-Dichloroethene	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:32	
cis-1,3-Dichloropropene	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:32	
Di-isopropyl ether	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:32	
Dibromochloromethane	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:32	
Dibromomethane	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:32	
Dichlorodifluoromethane	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:32	
Ethyl Acetate	ND	10	1	B0A0003	01/02/2020	01/02/20 11:32	
Ethyl Ether	ND	10	1	B0A0003	01/02/2020	01/02/20 11:32	
Ethyl tert-butyl ether	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:32	
Ethylbenzene	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:32	
Freon-113	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:32	
Hexachlorobutadiene	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:32	
Isopropylbenzene	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:32	
m,p-Xylene	ND	1.0	1	B0A0003	01/02/2020	01/02/20 11:32	
Methylene chloride	ND	1.0	1	B0A0003	01/02/2020	01/02/20 11:32	
MTBE	**0.96**	0.50	1	B0A0003	01/02/2020	01/02/20 11:32	
n-Butylbenzene	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:32	
n-Propylbenzene	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:32	
Naphthalene	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:32	
o-Xylene	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:32	
sec-Butylbenzene	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:32	
Styrene	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:32	

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South San Francisco , CA 94080	Reported : 01/08/2020

Client Sample ID: B-1

Lab ID: 1904739-05

Volatile Organic Compounds by EPA 8260B

Analyst: VW

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
tert-Amyl methyl ether	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:32	
tert-Butanol	ND	10	1	B0A0003	01/02/2020	01/02/20 11:32	
tert-Butylbenzene	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:32	
Tetrachloroethene	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:32	
Toluene	**1.1**	0.50	1	B0A0003	01/02/2020	01/02/20 11:32	
trans-1,2-Dichloroethene	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:32	
trans-1,3-Dichloropropene	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:32	
Trichloroethene	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:32	
Trichlorofluoromethane	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:32	
Vinyl acetate	ND	10	1	B0A0003	01/02/2020	01/02/20 11:32	
Vinyl chloride	ND	0.50	1	B0A0003	01/02/2020	01/02/20 11:32	
Surrogate: 1,2-Dichloroethane-d4	*104 %*	*59 - 158*		B0A0003	01/02/2020	*01/02/20 11:32*	
Surrogate: 4-Bromofluorobenzene	*99.2 %*	*71 - 127*		B0A0003	01/02/2020	*01/02/20 11:32*	
Surrogate: Dibromofluoromethane	*95.5 %*	*66 - 147*		B0A0003	01/02/2020	*01/02/20 11:32*	
Surrogate: Toluene-d8	*99.6 %*	*77 - 138*		B0A0003	01/02/2020	*01/02/20 11:32*	

Semivolatile Organic Compounds by EPA 8270C

Analyst: SP

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,2,4-Trichlorobenzene	ND	10	1	B9L0812	12/31/2019	12/31/19 14:50	
1,2-Dichlorobenzene	ND	10	1	B9L0812	12/31/2019	12/31/19 14:50	
1,3-Dichlorobenzene	ND	10	1	B9L0812	12/31/2019	12/31/19 14:50	
1,4-Dichlorobenzene	ND	10	1	B9L0812	12/31/2019	12/31/19 14:50	
2,4,5-Trichlorophenol	ND	10	1	B9L0812	12/31/2019	12/31/19 14:50	
2,4,6-Trichlorophenol	ND	10	1	B9L0812	12/31/2019	12/31/19 14:50	
2,4-Dichlorophenol	ND	10	1	B9L0812	12/31/2019	12/31/19 14:50	
2,4-Dimethylphenol	ND	10	1	B9L0812	12/31/2019	12/31/19 14:50	
2,4-Dinitrophenol	ND	50	1	B9L0812	12/31/2019	12/31/19 14:50	
2,4-Dinitrotoluene	ND	10	1	B9L0812	12/31/2019	12/31/19 14:50	
2,6-Dinitrotoluene	ND	10	1	B9L0812	12/31/2019	12/31/19 14:50	
2-Chloronaphthalene	ND	10	1	B9L0812	12/31/2019	12/31/19 14:50	
2-Chlorophenol	ND	10	1	B9L0812	12/31/2019	12/31/19 14:50	
2-Methylnaphthalene	ND	10	1	B9L0812	12/31/2019	12/31/19 14:50	
2-Methylphenol	ND	10	1	B9L0812	12/31/2019	12/31/19 14:50	
2-Nitroaniline	ND	50	1	B9L0812	12/31/2019	12/31/19 14:50	
2-Nitrophenol	ND	10	1	B9L0812	12/31/2019	12/31/19 14:50	

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Client Sample ID: B-1

Lab ID: 1904739-05

Semivolatile Organic Compounds by EPA 8270C **Analyst: SP**

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
3,3′-Dichlorobenzidine	ND	20	1	B9L0812	12/31/2019	12/31/19 14:50	
3-Nitroaniline	ND	50	1	B9L0812	12/31/2019	12/31/19 14:50	
4,6-Dinitro-2-methyphenol	ND	50	1	B9L0812	12/31/2019	12/31/19 14:50	
4-Bromophenyl-phenylether	ND	10	1	B9L0812	12/31/2019	12/31/19 14:50	
4-Chloro-3-methylphenol	ND	50	1	B9L0812	12/31/2019	12/31/19 14:50	
4-Chloroaniline	ND	20	1	B9L0812	12/31/2019	12/31/19 14:50	
4-Chlorophenyl-phenylether	ND	10	1	B9L0812	12/31/2019	12/31/19 14:50	
4-Methylphenol	ND	10	1	B9L0812	12/31/2019	12/31/19 14:50	
4-Nitroaniline	ND	20	1	B9L0812	12/31/2019	12/31/19 14:50	
4-Nitrophenol	ND	50	1	B9L0812	12/31/2019	12/31/19 14:50	
Acenaphthene	ND	10	1	B9L0812	12/31/2019	12/31/19 14:50	
Acenaphthylene	ND	10	1	B9L0812	12/31/2019	12/31/19 14:50	
Anthracene	ND	10	1	B9L0812	12/31/2019	12/31/19 14:50	
Benzidine (M)	ND	50	1	B9L0812	12/31/2019	12/31/19 14:50	
Benzo(a)anthracene	ND	10	1	B9L0812	12/31/2019	12/31/19 14:50	
Benzo(a)pyrene	ND	10	1	B9L0812	12/31/2019	12/31/19 14:50	
Benzo(b)fluoranthene	ND	10	1	B9L0812	12/31/2019	12/31/19 14:50	
Benzo(g,h,i)perylene	ND	10	1	B9L0812	12/31/2019	12/31/19 14:50	
Benzo(k)fluoranthene	ND	10	1	B9L0812	12/31/2019	12/31/19 14:50	
Benzoic acid	ND	50	1	B9L0812	12/31/2019	12/31/19 14:50	
Benzyl alcohol	ND	20	1	B9L0812	12/31/2019	12/31/19 14:50	
bis(2-chloroethoxy)methane	ND	10	1	B9L0812	12/31/2019	12/31/19 14:50	
bis(2-Chloroethyl)ether	ND	10	1	B9L0812	12/31/2019	12/31/19 14:50	
bis(2-chloroisopropyl)ether	ND	10	1	B9L0812	12/31/2019	12/31/19 14:50	
bis(2-ethylhexyl)phthalate	ND	10	1	B9L0812	12/31/2019	12/31/19 14:50	
Butylbenzylphthalate	ND	10	1	B9L0812	12/31/2019	12/31/19 14:50	
Chrysene	ND	10	1	B9L0812	12/31/2019	12/31/19 14:50	
Di-n-butylphthalate	ND	10	1	B9L0812	12/31/2019	12/31/19 14:50	
Di-n-octylphthalate	ND	10	1	B9L0812	12/31/2019	12/31/19 14:50	
Dibenz(a,h)anthracene	ND	10	1	B9L0812	12/31/2019	12/31/19 14:50	
Dibenzofuran	ND	10	1	B9L0812	12/31/2019	12/31/19 14:50	
Diethyl phthalate	ND	10	1	B9L0812	12/31/2019	12/31/19 14:50	
Dimethyl phthalate	ND	10	1	B9L0812	12/31/2019	12/31/19 14:50	
Fluoranthene	ND	10	1	B9L0812	12/31/2019	12/31/19 14:50	
Fluorene	ND	10	1	B9L0812	12/31/2019	12/31/19 14:50	
Hexachlorobenzene	ND	10	1	B9L0812	12/31/2019	12/31/19 14:50	
Hexachlorobutadiene	ND	20	1	B9L0812	12/31/2019	12/31/19 14:50	

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Client Sample ID: B-1

Lab ID: 1904739-05

Semivolatile Organic Compounds by EPA 8270C **Analyst: SP**

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Hexachlorocyclopentadiene	ND	10	1	B9L0812	12/31/2019	12/31/19 14:50	
Hexachloroethane	ND	10	1	B9L0812	12/31/2019	12/31/19 14:50	
Indeno(1,2,3-cd)pyrene	ND	10	1	B9L0812	12/31/2019	12/31/19 14:50	
Isophorone	ND	10	1	B9L0812	12/31/2019	12/31/19 14:50	
N-Nitroso-di-n propylamine	ND	10	1	B9L0812	12/31/2019	12/31/19 14:50	
N-Nitrosodiphenylamine	ND	10	1	B9L0812	12/31/2019	12/31/19 14:50	
Naphthalene	ND	10	1	B9L0812	12/31/2019	12/31/19 14:50	
Nitrobenzene	ND	10	1	B9L0812	12/31/2019	12/31/19 14:50	
Pentachlorophenol	ND	50	1	B9L0812	12/31/2019	12/31/19 14:50	
Phenanthrene	ND	10	1	B9L0812	12/31/2019	12/31/19 14:50	
Phenol	ND	10	1	B9L0812	12/31/2019	12/31/19 14:50	
Pyrene	ND	10	1	B9L0812	12/31/2019	12/31/19 14:50	
Pyridine	ND	50	1	B9L0812	12/31/2019	12/31/19 14:50	
Surrogate: 1,2-Dichlorobenzene-d4	*72.3 %*	*30 - 78*		B9L0812	12/31/2019	*12/31/19 14:50*	
Surrogate: 2,4,6-Tribromophenol	*123 %*	*47 - 158*		B9L0812	12/31/2019	*12/31/19 14:50*	
Surrogate: 2-Chlorophenol-d4	*59.1 %*	*28 - 84*		B9L0812	12/31/2019	*12/31/19 14:50*	
Surrogate: 2-Fluorobiphenyl	*80.2 %*	*32 - 90*		B9L0812	12/31/2019	*12/31/19 14:50*	
Surrogate: 2-Fluorophenol	*29.0 %*	*13 - 41*		B9L0812	12/31/2019	*12/31/19 14:50*	
Surrogate: 4-Terphenyl-d14	*88.8 %*	*36 - 112*		B9L0812	12/31/2019	*12/31/19 14:50*	
Surrogate: Nitrobenzene-d5	*79.7 %*	*30 - 82*		B9L0812	12/31/2019	*12/31/19 14:50*	
Surrogate: Phenol-d6	*17.8 %*	*8 - 26*		B9L0812	12/31/2019	*12/31/19 14:50*	

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QUALITY CONTROL SECTION

Title 22 Metals by ICP-AES EPA 6010B - Quality Control

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B0A0091 - EPA 3050B_S										
Blank (B0A0091-BLK1)					Prepared: 1/6/2020 Analyzed: 1/6/2020					
Antimony	ND	2.0	0.51							
Arsenic	ND	1.0	0.12							
Barium	ND	1.0	0.12							
Beryllium	ND	1.0	0.03							
Cadmium	ND	1.0	0.14							
Chromium	ND	1.0	0.26							
Cobalt	ND	1.0	0.07							
Copper	ND	2.0	0.19							
Lead	ND	1.0	0.18							
Molybdenum	ND	1.0	0.12							
Nickel	ND	1.0	0.18							
Selenium	ND	1.0	0.40							
Silver	ND	1.0	0.12							
Thallium	ND	1.0	0.38							
Vanadium	ND	1.0	0.06							
Zinc	ND	1.0	0.15							
LCS (B0A0091-BS1)					Prepared: 1/6/2020 Analyzed: 1/6/2020					
Antimony	21.1763	2.0	0.51	25.0000		84.7	80 - 120			
Arsenic	20.9210	1.0	0.12	25.0000		83.7	80 - 120			
Barium	22.1566	1.0	0.12	25.0000		88.6	80 - 120			
Beryllium	22.0517	1.0	0.03	25.0000		88.2	80 - 120			
Cadmium	21.0803	1.0	0.14	25.0000		84.3	80 - 120			
Chromium	24.1591	1.0	0.26	25.0000		96.6	80 - 120			
Cobalt	21.7155	1.0	0.07	25.0000		86.9	80 - 120			
Copper	21.6100	2.0	0.19	25.0000		86.4	80 - 120			
Lead	21.7064	1.0	0.18	25.0000		86.8	80 - 120			
Molybdenum	21.8665	1.0	0.12	25.0000		87.5	80 - 120			
Nickel	23.2806	1.0	0.18	25.0000		93.1	80 - 120			
Selenium	20.3748	1.0	0.40	25.0000		81.5	80 - 120			
Silver	10.4278	1.0	0.12	12.5000		83.4	80 - 120			
Thallium	20.5717	1.0	0.38	25.0000		82.3	80 - 120			
Vanadium	23.2441	1.0	0.06	25.0000		93.0	80 - 120			
Zinc	22.0614	1.0	0.15	25.0000		88.2	80 - 120			
Matrix Spike (B0A0091-MS1)			**Source: 1904739-01**		Prepared: 1/6/2020 Analyzed: 1/6/2020					
Antimony	4.96524	2.0	0.51	25.0000	ND	19.9	21 - 95			M1
Arsenic	25.0182	1.0	0.12	25.0000	4.56679	81.8	46 - 97			
Barium	107.918	1.0	0.12	25.0000	88.8690	76.2	24 - 123			
Beryllium	22.2729	1.0	0.03	25.0000	0.400074	87.5	47 - 99			

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Title 22 Metals by ICP-AES EPA 6010B - Quality Control (cont'd)

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B0A0091 - EPA 3050B_S (continued)										
Matrix Spike (B0A0091-MS1) - Continued			**Source: 1904739-01**		Prepared: 1/6/2020 Analyzed: 1/6/2020					
Cadmium	22.0952	1.0	0.14	25.0000	0.241449	87.4	43 - 95			
Chromium	63.0950	1.0	0.26	25.0000	37.2508	103	39 - 109			
Cobalt	29.3024	1.0	0.07	25.0000	7.33445	87.9	45 - 101			
Copper	38.7660	2.0	0.19	25.0000	16.5429	88.9	44 - 118			
Lead	25.3306	1.0	0.18	25.0000	5.46776	79.5	33 - 121			
Molybdenum	20.3211	1.0	0.12	25.0000	0.666052	78.6	45 - 101			
Nickel	82.9560	1.0	0.18	25.0000	59.7934	92.7	37 - 104			
Selenium	12.5202	1.0	0.40	25.0000	ND	50.1	43 - 96			
Silver	10.4288	1.0	0.12	12.5000	ND	83.4	49 - 104			
Thallium	15.8648	1.0	0.38	25.0000	ND	63.5	23 - 103			
Vanadium	49.0760	1.0	0.06	25.0000	24.7232	97.4	42 - 109			
Zinc	53.7289	1.0	0.15	25.0000	35.1451	74.3	22 - 114			
Matrix Spike Dup (B0A0091-MSD1)			**Source: 1904739-01**		Prepared: 1/6/2020 Analyzed: 1/6/2020					
Antimony	4.76382	2.0	0.51	25.0000	ND	19.1	21 - 95	4.14	20	M1
Arsenic	25.7013	1.0	0.12	25.0000	4.56679	84.5	46 - 97	2.69	20	
Barium	112.277	1.0	0.12	25.0000	88.8690	93.6	24 - 123	3.96	20	
Beryllium	22.5273	1.0	0.03	25.0000	0.400074	88.5	47 - 99	1.14	20	
Cadmium	22.3894	1.0	0.14	25.0000	0.241449	88.6	43 - 95	1.32	20	
Chromium	64.9706	1.0	0.26	25.0000	37.2508	111	39 - 109	2.93	20	M1
Cobalt	30.0454	1.0	0.07	25.0000	7.33445	90.8	45 - 101	2.50	20	
Copper	40.8330	2.0	0.19	25.0000	16.5429	97.2	44 - 118	5.19	20	
Lead	26.1953	1.0	0.18	25.0000	5.46776	82.9	33 - 121	3.36	20	
Molybdenum	20.2860	1.0	0.12	25.0000	0.666052	78.5	45 - 101	0.173	20	
Nickel	86.2242	1.0	0.18	25.0000	59.7934	106	37 - 104	3.86	20	M1
Selenium	11.7133	1.0	0.40	25.0000	ND	46.9	43 - 96	6.66	20	
Silver	11.0100	1.0	0.12	12.5000	ND	88.1	49 - 104	5.42	20	
Thallium	16.6090	1.0	0.38	25.0000	ND	66.4	23 - 103	4.58	20	
Vanadium	50.7147	1.0	0.06	25.0000	24.7232	104	42 - 109	3.28	20	
Zinc	56.3804	1.0	0.15	25.0000	35.1451	84.9	22 - 114	4.82	20	

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Title 22 Metals by ICP-AES EPA 6010B - Quality Control

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B0A0137 - EPA 3010A_W										
Blank (B0A0137-BLK1)					Prepared: 1/7/2020 Analyzed: 1/8/2020					
Antimony	ND	0.010	0.0088							
Arsenic	ND	0.010	0.0078							
Barium	ND	0.0030	0.0026							
Beryllium	ND	0.0030	0.0016							
Cadmium	ND	0.0030	0.0024							
Chromium	ND	0.0030	0.0020							
Cobalt	ND	0.0030	0.0016							
Copper	ND	0.0090	0.0038							
Lead	ND	0.0050	0.0047							
Molybdenum	ND	0.0050	0.0030							
Nickel	ND	0.0050	0.0046							
Selenium	ND	0.010	0.0093							
Silver	ND	0.0030	0.0024							
Thallium	ND	0.015	0.0085							
Vanadium	ND	0.0030	0.0022							
Zinc	ND	0.025	0.0057							
LCS (B0A0137-BS1)					Prepared: 1/7/2020 Analyzed: 1/8/2020					
Antimony	0.471552	0.010	0.0088	0.500000		94.3	80 - 120			
Arsenic	0.475137	0.010	0.0078	0.500000		95.0	80 - 120			
Barium	0.489436	0.0030	0.0026	0.500000		97.9	80 - 120			
Beryllium	0.457377	0.0030	0.0016	0.500000		91.5	80 - 120			
Cadmium	0.492922	0.0030	0.0024	0.500000		98.6	80 - 120			
Chromium	0.504562	0.0030	0.0020	0.500000		101	80 - 120			
Cobalt	0.489195	0.0030	0.0016	0.500000		97.8	80 - 120			
Copper	0.482510	0.0090	0.0038	0.500000		96.5	80 - 120			
Lead	0.484696	0.0050	0.0047	0.500000		96.9	80 - 120			
Molybdenum	0.484177	0.0050	0.0030	0.500000		96.8	80 - 120			
Nickel	0.461684	0.0050	0.0046	0.500000		92.3	80 - 120			
Selenium	0.480963	0.010	0.0093	0.500000		96.2	80 - 120			
Silver	0.248438	0.0030	0.0024	0.250000		99.4	80 - 120			
Thallium	0.492382	0.015	0.0085	0.500000		98.5	80 - 120			
Vanadium	0.491722	0.0030	0.0022	0.500000		98.3	80 - 120			
Zinc	0.451533	0.025	0.0057	0.500000		90.3	80 - 120			
Matrix Spike (B0A0137-MS1)					**Source: 1904739-05** Prepared: 1/7/2020 Analyzed: 1/8/2020					
Antimony	0.045378	0.010	0.0088	0.500000	ND	9.08	56 - 141			M1
Arsenic	0.634037	0.010	0.0078	0.500000	0.140584	98.7	60 - 137			
Barium	4.75662	0.0030	0.0026	0.500000	4.27663	96.0	61 - 141			
Beryllium	0.552112	0.0030	0.0016	0.500000	0.019239	107	62 - 134			
Cadmium	0.559110	0.0030	0.0024	0.500000	ND	112	61 - 131			
Chromium	1.47165	0.0030	0.0020	0.500000	0.902159	114	62 - 136			

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Title 22 Metals by ICP-AES EPA 6010B - Quality Control (cont'd)

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B0A0137 - EPA 3010A_W (continued)										
Matrix Spike (B0A0137-MS1) - Continued			**Source: 1904739-05**		Prepared: 1/7/2020 Analyzed: 1/8/2020					
Cobalt	0.968131	0.0030	0.0016	0.500000	0.419364	110	62 - 134			
Copper	1.66284	0.0090	0.0038	0.500000	1.09871	113	63 - 140			
Lead	0.670729	0.0050	0.0047	0.500000	0.175943	99.0	60 - 130			
Molybdenum	0.431127	0.0050	0.0030	0.500000	0.010077	84.2	56 - 140			
Nickel	2.40366	0.0050	0.0046	0.500000	1.91927	96.9	55 - 140			
Selenium	0.159972	0.010	0.0093	0.500000	ND	32.0	59 - 135			M1
Silver	0.144715	0.0030	0.0024	0.250000	ND	57.9	59 - 144			M1
Thallium	0.395104	0.015	0.0085	0.500000	ND	79.0	47 - 137			
Vanadium	1.36714	0.0030	0.0022	0.500000	0.823102	109	59 - 143			
Zinc	1.91373	0.025	0.0057	0.500000	1.40798	101	57 - 132			
Matrix Spike Dup (B0A0137-MSD1)			**Source: 1904739-05**		Prepared: 1/7/2020 Analyzed: 1/8/2020					
Antimony	0.057674	0.010	0.0088	0.500000	ND	11.5	56 - 141	23.9	20	M1, R
Arsenic	0.589363	0.010	0.0078	0.500000	0.140584	89.8	60 - 137	7.30	20	
Barium	4.88375	0.0030	0.0026	0.500000	4.27663	121	61 - 141	2.64	20	
Beryllium	0.539310	0.0030	0.0016	0.500000	0.019239	104	62 - 134	2.35	20	
Cadmium	0.538929	0.0030	0.0024	0.500000	ND	108	61 - 131	3.68	20	
Chromium	1.43131	0.0030	0.0020	0.500000	0.902159	106	62 - 136	2.78	20	
Cobalt	0.958915	0.0030	0.0016	0.500000	0.419364	108	62 - 134	0.957	20	
Copper	1.66372	0.0090	0.0038	0.500000	1.09871	113	63 - 140	0.0531	20	
Lead	0.653714	0.0050	0.0047	0.500000	0.175943	95.6	60 - 130	2.57	20	
Molybdenum	0.408279	0.0050	0.0030	0.500000	0.010077	79.6	56 - 140	5.44	20	
Nickel	2.40674	0.0050	0.0046	0.500000	1.91927	97.5	55 - 140	0.128	20	
Selenium	0.114447	0.010	0.0093	0.500000	ND	22.9	59 - 135	33.2	20	M1, R
Silver	0.115622	0.0030	0.0024	0.250000	ND	46.2	59 - 144	22.3	20	M1, R
Thallium	0.377288	0.015	0.0085	0.500000	ND	75.5	47 - 137	4.61	20	
Vanadium	1.35653	0.0030	0.0022	0.500000	0.823102	107	59 - 143	0.779	20	
Zinc	1.89434	0.025	0.0057	0.500000	1.40798	97.3	57 - 132	1.02	20	

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Mercury by AA (Cold Vapor) EPA 7470A - Quality Control

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B0A0139 - EPA 245.1/7470_W										
Blank (B0A0139-BLK1)					Prepared: 1/7/2020 Analyzed: 1/8/2020					
Mercury	ND	0.20	0.05							
LCS (B0A0139-BS1)					Prepared: 1/7/2020 Analyzed: 1/8/2020					
Mercury	9.96841	0.20	0.05	10.0000		99.7	80 - 120			
Matrix Spike (B0A0139-MS1)			**Source: 1904739-05**		Prepared: 1/7/2020 Analyzed: 1/8/2020					
Mercury	5.11423	0.20	0.05	10.0000	0.637676	44.8	70 - 130			M2
Matrix Spike Dup (B0A0139-MSD1)			**Source: 1904739-05**		Prepared: 1/7/2020 Analyzed: 1/8/2020					
Mercury	5.22463	0.20	0.05	10.0000	0.637676	45.9	70 - 130	2.14	20	M2
Post Spike (B0A0139-PS1)			**Source: 1904742-05**		Prepared: 1/7/2020 Analyzed: 1/8/2020					
Mercury	3.57852			5.00000	1.13150	48.9	85 - 115			M2

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Mercury by AA (Cold Vapor) EPA 7471A - Quality Control

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B0A0092 - EPA 7471_S										
Blank (B0A0092-BLK1)					Prepared: 1/6/2020 Analyzed: 1/6/2020					
Mercury	ND	0.10	0.01							
LCS (B0A0092-BS1)					Prepared: 1/6/2020 Analyzed: 1/6/2020					
Mercury	0.428962	0.10	0.01	0.416667		103	80 - 120			
Matrix Spike (B0A0092-MS1)			**Source: 1904739-01**		Prepared: 1/6/2020 Analyzed: 1/6/2020					
Mercury	0.473667	0.10	0.01	0.416667	0.040582	104	70 - 130			
Matrix Spike Dup (B0A0092-MSD1)			**Source: 1904739-01**		Prepared: 1/6/2020 Analyzed: 1/6/2020					
Mercury	0.457586	0.10	0.01	0.416667	0.040582	100	70 - 130	3.45	20	

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Mercury by AA (Cold Vapor) EPA 7471A - Quality Control

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B0A0092 - EPA 7471_S									
Post Spike (B0A0092-PS1)			**Source: 1904739-01**		Prepared: 1/6/2020 Analyzed: 1/6/2020				
Mercury	0.002623		2.00000E-3	0.000487	107	85 - 115			

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Gasoline Range Organics by EPA 8015B (Modified) - Quality Control

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B0A0058 - GCVOA_W										
Blank (B0A0058-BLK1)					Prepared: 1/3/2020 Analyzed: 1/3/2020					
Gasoline Range Organics	ND	0.20	0.05							
Surrogate: 4-Bromofluorobenzene	*0.08778*			*0.100000*		*87.8*	*70 - 130*			
LCS (B0A0058-BS1)					Prepared: 1/3/2020 Analyzed: 1/3/2020					
Gasoline Range Organics	0.891000	0.20	0.05	1.00000		89.1	70 - 130			
Surrogate: 4-Bromofluorobenzene	*0.09800*			*0.100000*		*98.0*	*70 - 130*			
LCS Dup (B0A0058-BSD1)					Prepared: 1/3/2020 Analyzed: 1/3/2020					
Gasoline Range Organics	0.909000	0.20	0.05	1.00000		90.9	70 - 130	2.00	20	
Surrogate: 4-Bromofluorobenzene	*0.09849*			*0.100000*		*98.5*	*70 - 130*			

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Diesel Range Organics by EPA 8015B (SGT) - Quality Control

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B0A0014 - GCSEMI_DRO_W										
Blank (B0A0014-BLK1)					Prepared: 1/2/2020 Analyzed: 1/2/2020					
DRO	ND	0.05	0.05							
ORO	ND	0.05	0.05							
Surrogate: p-Terphenyl	*0.05749*			*8.00000E-2*		*71.9*	*32 - 169*			
LCS (B0A0014-BS1)					Prepared: 1/2/2020 Analyzed: 1/2/2020					
DRO	0.543340	0.05	0.05	1.00000		54.3	45 - 161			
Surrogate: p-Terphenyl	*0.05857*			*8.00000E-2*		*73.2*	*32 - 169*			
LCS Dup (B0A0014-BSD1)					Prepared: 1/2/2020 Analyzed: 1/2/2020					
DRO	0.494520	0.05	0.05	1.00000		49.5	45 - 161	9.41	20	
Surrogate: p-Terphenyl	*0.04998*			*8.00000E-2*		*62.5*	*32 - 169*			

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Diesel Range Organics by EPA 8015B (SGT) - Quality Control

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B0A0056 - GCSEMI_DRO_LL_S										
Blank (B0A0056-BLK1)						Prepared: 1/2/2020 Analyzed: 1/2/2020				
DRO	ND	1.0	1.0							
ORO	ND	1.0	1.0							
Surrogate: p-Terphenyl	*1.698*			*2.66667*		*63.7*	*34 - 158*			
LCS (B0A0056-BS1)						Prepared: 1/2/2020 Analyzed: 1/2/2020				
DRO	18.7387	1.0	1.0	33.3333		56.2	47 - 152			
Surrogate: p-Terphenyl	*1.461*			*2.66667*		*54.8*	*34 - 158*			
Matrix Spike (B0A0056-MS1)			**Source: 1904739-01**			Prepared: 1/2/2020 Analyzed: 1/2/2020				
DRO	21.5530	1.0	1.0	33.3333	ND	64.7	34 - 130			
Surrogate: p-Terphenyl	*1.582*			*2.66667*		*59.3*	*34 - 158*			
Matrix Spike Dup (B0A0056-MSD1)			**Source: 1904739-01**			Prepared: 1/2/2020 Analyzed: 1/2/2020				
DRO	18.1380	1.0	1.0	33.3333	ND	54.4	34 - 130	17.2	20	
Surrogate: p-Terphenyl	*1.642*			*2.66667*		*61.6*	*34 - 158*			

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Organochlorine Pesticides by EPA 8081A - Quality Control

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B0A0016 - GCSEMI_PCB/PEST_W										
Blank (B0A0016-BLK1)					Prepared: 1/2/2020 Analyzed: 1/2/2020					
4,4′-DDD	ND	0.05	0.006							
4,4′-DDD [2C]	ND	0.05	0.006							
4,4′-DDE	ND	0.05	0.006							
4,4′-DDE [2C]	ND	0.05	0.006							
4,4′-DDT	ND	0.05	0.005							
4,4′-DDT [2C]	ND	0.05	0.005							
Aldrin	ND	0.02	0.006							
Aldrin [2C]	ND	0.02	0.006							
alpha-BHC	ND	0.02	0.004							
alpha-BHC [2C]	ND	0.02	0.004							
alpha-Chlordane	ND	0.02	0.006							
alpha-Chlordane [2C]	ND	0.02	0.006							
beta-BHC	ND	0.02	0.002							
beta-BHC [2C]	ND	0.02	0.002							
Chlordane	ND	0.25	0.03							
Chlordane [2C]	ND	0.25	0.03							
delta-BHC	ND	0.02	0.007							
delta-BHC [2C]	ND	0.02	0.007							
Dieldrin	ND	0.05	0.005							
Dieldrin [2C]	ND	0.05	0.005							
Endosulfan I	ND	0.02	0.005							
Endosulfan I [2C]	ND	0.02	0.005							
Endosulfan II	ND	0.05	0.007							
Endosulfan II [2C]	ND	0.05	0.007							
Endosulfan sulfate	ND	0.05	0.005							
Endosulfan Sulfate [2C]	ND	0.05	0.005							
Endrin	ND	0.05	0.005							
Endrin [2C]	ND	0.05	0.005							
Endrin aldehyde	ND	0.05	0.006							
Endrin aldehyde [2C]	ND	0.05	0.006							
Endrin ketone	ND	0.05	0.004							
Endrin ketone [2C]	ND	0.05	0.004							
gamma-BHC	ND	0.02	0.005							
gamma-BHC [2C]	ND	0.02	0.005							
gamma-Chlordane	ND	0.02	0.008							
gamma-Chlordane [2C]	ND	0.02	0.008							
Heptachlor	ND	0.02	0.006							
Heptachlor [2C]	ND	0.02	0.006							
Heptachlor epoxide	ND	0.02	0.008							
Heptachlor epoxide [2C]	ND	0.02	0.008							
Methoxychlor	ND	0.25	0.004							

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Organochlorine Pesticides by EPA 8081A - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B0A0016 - GCSEMI_PCB/PEST_W (continued)										
Blank (B0A0016-BLK1) - Continued					Prepared: 1/2/2020 Analyzed: 1/2/2020					
Methoxychlor [2C]	ND	0.25	0.004							
Toxaphene	ND	2.5	0.28							
Toxaphene [2C]	ND	2.5	0.28							
Surrogate: Decachlorobiphenyl	*0.4218*			*0.500000*		*84.4*	*25 - 103*			
Surrogate: Decachlorobiphenyl [	*0.3451*			*0.500000*		*69.0*	*25 - 103*			
Surrogate: Tetrachloro-m-xylene	*0.4550*			*0.500000*		*91.0*	*21 - 105*			
Surrogate: Tetrachloro-m-xylene	*0.3734*			*0.500000*		*74.7*	*21 - 105*			
LCS (B0A0016-BS1)					Prepared: 1/2/2020 Analyzed: 1/2/2020					
4,4′-DDD	0.430795	0.05	0.006	0.500000		86.2	45 - 133			
4,4′-DDD [2C]	0.423505	0.05	0.006	0.500000		84.7	45 - 133			
4,4′-DDE	0.450590	0.05	0.006	0.500000		90.1	42 - 129			
4,4′-DDE [2C]	0.412245	0.05	0.006	0.500000		82.4	42 - 129			
4,4′-DDT	0.420920	0.05	0.005	0.500000		84.2	14 - 142			
4,4′-DDT [2C]	0.411555	0.05	0.005	0.500000		82.3	14 - 142			
Aldrin	0.427865	0.02	0.006	0.500000		85.6	48 - 121			
Aldrin [2C]	0.431815	0.02	0.006	0.500000		86.4	48 - 121			
alpha-BHC	0.405085	0.02	0.004	0.500000		81.0	50 - 111			
alpha-BHC [2C]	0.414480	0.02	0.004	0.500000		82.9	50 - 111			
alpha-Chlordane	0.434325	0.02	0.006	0.500000		86.9	46 - 122			
alpha-Chlordane [2C]	0.426460	0.02	0.006	0.500000		85.3	46 - 122			
beta-BHC	0.433990	0.02	0.002	0.500000		86.8	49 - 121			
beta-BHC [2C]	0.434495	0.02	0.002	0.500000		86.9	49 - 121			
delta-BHC	0.298915	0.02	0.007	0.500000		59.8	48 - 97			
delta-BHC [2C]	0.303185	0.02	0.007	0.500000		60.6	48 - 97			
Dieldrin	0.425885	0.05	0.005	0.500000		85.2	47 - 118			
Dieldrin [2C]	0.410030	0.05	0.005	0.500000		82.0	47 - 118			
Endosulfan I	0.401875	0.02	0.005	0.500000		80.4	47 - 108			
Endosulfan I [2C]	0.400315	0.02	0.005	0.500000		80.1	47 - 108			
Endosulfan II	0.438020	0.05	0.007	0.500000		87.6	48 - 122			
Endosulfan II [2C]	0.414895	0.05	0.007	0.500000		83.0	48 - 122			
Endosulfan sulfate	0.393705	0.05	0.005	0.500000		78.7	47 - 110			
Endosulfan Sulfate [2C]	0.356975	0.05	0.005	0.500000		71.4	47 - 110			
Endrin	0.456415	0.05	0.005	0.500000		91.3	61 - 126			
Endrin [2C]	0.444225	0.05	0.005	0.500000		88.8	61 - 126			
Endrin aldehyde	0.436355	0.05	0.006	0.500000		87.3	45 - 121			
Endrin aldehyde [2C]	0.412455	0.05	0.006	0.500000		82.5	45 - 121			
Endrin ketone	0.390075	0.05	0.004	0.500000		78.0	37 - 122			
Endrin ketone [2C]	0.394585	0.05	0.004	0.500000		78.9	37 - 122			
gamma-BHC	0.415110	0.02	0.005	0.500000		83.0	46 - 120			
gamma-BHC [2C]	0.437445	0.02	0.005	0.500000		87.5	46 - 120			

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Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B0A0016 - GCSEMI_PCB/PEST_W (continued)										
LCS (B0A0016-BS1) - Continued						Prepared: 1/2/2020 Analyzed: 1/2/2020				
gamma-Chlordane	0.428060	0.02	0.008	0.500000		85.6	38 - 135			
gamma-Chlordane [2C]	0.430250	0.02	0.008	0.500000		86.0	38 - 135			
Heptachlor	0.433080	0.02	0.006	0.500000		86.6	47 - 123			
Heptachlor [2C]	0.443165	0.02	0.006	0.500000		88.6	47 - 123			
Heptachlor epoxide	0.408825	0.02	0.008	0.500000		81.8	45 - 114			
Heptachlor epoxide [2C]	0.412225	0.02	0.008	0.500000		82.4	45 - 114			
Methoxychlor	0.446410	0.25	0.004	0.500000		89.3	4 - 178			
Methoxychlor [2C]	0.409990	0.25	0.004	0.500000		82.0	4 - 178			
Surrogate: Decachlorobiphenyl	*0.3477*			*0.500000*		*69.5*	*25 - 103*			
Surrogate: Decachlorobiphenyl [	*0.2856*			*0.500000*		*57.1*	*25 - 103*			
Surrogate: Tetrachloro-m-xylene	*0.3784*			*0.500000*		*75.7*	*21 - 105*			
Surrogate: Tetrachloro-m-xylene	*0.3390*			*0.500000*		*67.8*	*21 - 105*			
LCS Dup (B0A0016-BSD1)						Prepared: 1/2/2020 Analyzed: 1/2/2020				
4,4′-DDD	0.405855	0.05	0.006	0.500000		81.2	45 - 133	5.96	20	
4,4′-DDD [2C]	0.373615	0.05	0.006	0.500000		74.7	45 - 133	12.5	20	
4,4′-DDE	0.422630	0.05	0.006	0.500000		84.5	42 - 129	6.40	20	
4,4′-DDE [2C]	0.362770	0.05	0.006	0.500000		72.6	42 - 129	12.8	20	
4,4′-DDT	0.395575	0.05	0.005	0.500000		79.1	14 - 142	6.21	20	
4,4′-DDT [2C]	0.358115	0.05	0.005	0.500000		71.6	14 - 142	13.9	20	
Aldrin	0.401410	0.02	0.006	0.500000		80.3	48 - 121	6.38	20	
Aldrin [2C]	0.381595	0.02	0.006	0.500000		76.3	48 - 121	12.3	20	
alpha-BHC	0.383635	0.02	0.004	0.500000		76.7	50 - 111	5.44	20	
alpha-BHC [2C]	0.370100	0.02	0.004	0.500000		74.0	50 - 111	11.3	20	
alpha-Chlordane	0.408135	0.02	0.006	0.500000		81.6	46 - 122	6.22	20	
alpha-Chlordane [2C]	0.377145	0.02	0.006	0.500000		75.4	46 - 122	12.3	20	
beta-BHC	0.404070	0.02	0.002	0.500000		80.8	49 - 121	7.14	20	
beta-BHC [2C]	0.378735	0.02	0.002	0.500000		75.7	49 - 121	13.7	20	
delta-BHC	0.353500	0.02	0.007	0.500000		70.7	48 - 97	16.7	20	
delta-BHC [2C]	0.341470	0.02	0.007	0.500000		68.3	48 - 97	11.9	20	
Dieldrin	0.399090	0.05	0.005	0.500000		79.8	47 - 118	6.50	20	
Dieldrin [2C]	0.361300	0.05	0.005	0.500000		72.3	47 - 118	12.6	20	
Endosulfan I	0.377670	0.02	0.005	0.500000		75.5	47 - 108	6.21	20	
Endosulfan I [2C]	0.354155	0.02	0.005	0.500000		70.8	47 - 108	12.2	20	
Endosulfan II	0.410680	0.05	0.007	0.500000		82.1	48 - 122	6.44	20	
Endosulfan II [2C]	0.365710	0.05	0.007	0.500000		73.1	48 - 122	12.6	20	
Endosulfan sulfate	0.383745	0.05	0.005	0.500000		76.7	47 - 110	2.56	20	
Endosulfan Sulfate [2C]	0.326595	0.05	0.005	0.500000		65.3	47 - 110	8.89	20	
Endrin	0.428820	0.05	0.005	0.500000		85.8	61 - 126	6.23	20	
Endrin [2C]	0.395545	0.05	0.005	0.500000		79.1	61 - 126	11.6	20	
Endrin aldehyde	0.415130	0.05	0.006	0.500000		83.0	45 - 121	4.99	20	

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Organochlorine Pesticides by EPA 8081A - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B0A0016 - GCSEMI_PCB/PEST_W (continued)										
LCS Dup (B0A0016-BSD1) - Continued					Prepared: 1/2/2020 Analyzed: 1/2/2020					
Endrin aldehyde [2C]	0.365745	0.05	0.006	0.500000		73.1	45 - 121	12.0	20	
Endrin ketone	0.369075	0.05	0.004	0.500000		73.8	37 - 122	5.53	20	
Endrin ketone [2C]	0.345640	0.05	0.004	0.500000		69.1	37 - 122	13.2	20	
gamma-BHC	0.390805	0.02	0.005	0.500000		78.2	46 - 120	6.03	20	
gamma-BHC [2C]	0.387625	0.02	0.005	0.500000		77.5	46 - 120	12.1	20	
gamma-Chlordane	0.400760	0.02	0.008	0.500000		80.2	38 - 135	6.59	20	
gamma-Chlordane [2C]	0.378895	0.02	0.008	0.500000		75.8	38 - 135	12.7	20	
Heptachlor	0.404920	0.02	0.006	0.500000		81.0	47 - 123	6.72	20	
Heptachlor [2C]	0.389970	0.02	0.006	0.500000		78.0	47 - 123	12.8	20	
Heptachlor epoxide	0.383985	0.02	0.008	0.500000		76.8	45 - 114	6.27	20	
Heptachlor epoxide [2C]	0.362890	0.02	0.008	0.500000		72.6	45 - 114	12.7	20	
Methoxychlor	0.407990	0.25	0.004	0.500000		81.6	4 - 178	8.99	20	
Methoxychlor [2C]	0.355015	0.25	0.004	0.500000		71.0	4 - 178	14.4	20	
Surrogate: Decachlorobiphenyl	*0.3780*			*0.500000*		*75.6*	*25 - 103*			
Surrogate: Decachlorobiphenyl [	*0.3063*			*0.500000*		*61.3*	*25 - 103*			
Surrogate: Tetrachloro-m-xylene	*0.4163*			*0.500000*		*83.3*	*21 - 105*			
Surrogate: Tetrachloro-m-xylene	*0.3478*			*0.500000*		*69.6*	*21 - 105*			

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Organochlorine Pesticides by EPA 8081A - Quality Control

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B0A0069 - GCSEMI_PCB/PEST_S										
Blank (B0A0069-BLK1)							Prepared: 1/3/2020 Analyzed: 1/3/2020			
4,4′-DDD	ND	2.0	0.14							
4,4′-DDD [2C]	ND	2.0	0.14							
4,4′-DDE	ND	2.0	0.20							
4,4′-DDE [2C]	ND	2.0	0.20							
4,4′-DDT	ND	2.0	0.04							
4,4′-DDT [2C]	ND	2.0	0.04							
Aldrin	ND	1.0	0.05							
Aldrin [2C]	ND	1.0	0.05							
alpha-BHC	ND	1.0	0.12							
alpha-BHC [2C]	ND	1.0	0.12							
alpha-Chlordane	ND	1.0	0.06							
alpha-Chlordane [2C]	ND	1.0	0.06							
beta-BHC	ND	1.0	0.08							
beta-BHC [2C]	ND	1.0	0.08							
Chlordane	ND	8.5	0.78							
Chlordane [2C]	ND	8.5	0.78							
delta-BHC	ND	1.0	0.07							
delta-BHC [2C]	ND	1.0	0.07							
Dieldrin	ND	2.0	0.04							
Dieldrin [2C]	ND	2.0	0.04							
Endosulfan I	ND	1.0	0.05							
Endosulfan I [2C]	ND	1.0	0.05							
Endosulfan II	ND	2.0	0.06							
Endosulfan II [2C]	ND	2.0	0.06							
Endosulfan sulfate	ND	2.0	0.15							
Endosulfan Sulfate [2C]	ND	2.0	0.15							
Endrin	ND	2.0	0.08							
Endrin [2C]	ND	2.0	0.08							
Endrin aldehyde	ND	2.0	0.09							
Endrin aldehyde [2C]	ND	2.0	0.09							
Endrin ketone	ND	2.0	0.09							
Endrin ketone [2C]	ND	2.0	0.09							
gamma-BHC	ND	1.0	0.12							
gamma-BHC [2C]	ND	1.0	0.12							
gamma-Chlordane	ND	1.0	0.28							
gamma-Chlordane [2C]	ND	1.0	0.28							
Heptachlor	ND	1.0	0.06							
Heptachlor [2C]	ND	1.0	0.06							
Heptachlor epoxide	ND	1.0	0.06							
Heptachlor epoxide [2C]	ND	1.0	0.06							
Methoxychlor	ND	5.0	0.16							

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Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B0A0069 - GCSEMI_PCB/PEST_S (continued)										
Blank (B0A0069-BLK1) - Continued					Prepared: 1/3/2020 Analyzed: 1/3/2020					
Methoxychlor [2C]	ND	5.0	0.16							
Toxaphene	ND	50	4.7							
Toxaphene [2C]	ND	50	4.7							
Surrogate: Decachlorobiphenyl	*12.39*			*16.6667*		*74.4*	*32 - 91*			
Surrogate: Decachlorobiphenyl [	*11.48*			*16.6667*		*68.9*	*32 - 91*			
Surrogate: Tetrachloro-m-xylene	*12.74*			*16.6667*		*76.4*	*38 - 93*			
Surrogate: Tetrachloro-m-xylene	*12.83*			*16.6667*		*77.0*	*38 - 93*			
LCS (B0A0069-BS1)					Prepared: 1/3/2020 Analyzed: 1/3/2020					
4,4′-DDD	13.8432	2.0	0.14	16.6667		83.1	66 - 112			
4,4′-DDD [2C]	13.5260	2.0	0.14	16.6667		81.2	66 - 112			
4,4′-DDE	14.3317	2.0	0.20	16.6667		86.0	62 - 112			
4,4′-DDE [2C]	13.9142	2.0	0.20	16.6667		83.5	62 - 112			
4,4′-DDT	13.6745	2.0	0.04	16.6667		82.0	48 - 90			
4,4′-DDT [2C]	12.9632	2.0	0.04	16.6667		77.8	48 - 90			
Aldrin	13.6100	1.0	0.05	16.6667		81.7	58 - 104			
Aldrin [2C]	14.3535	1.0	0.05	16.6667		86.1	58 - 104			
alpha-BHC	13.0595	1.0	0.12	16.6667		78.4	57 - 105			
alpha-BHC [2C]	13.7920	1.0	0.12	16.6667		82.8	57 - 105			
alpha-Chlordane	13.8632	1.0	0.06	16.6667		83.2	62 - 108			
alpha-Chlordane [2C]	14.3493	1.0	0.06	16.6667		86.1	62 - 108			
beta-BHC	14.0173	1.0	0.08	16.6667		84.1	59 - 106			
beta-BHC [2C]	14.1485	1.0	0.08	16.6667		84.9	59 - 106			
delta-BHC	12.2812	1.0	0.07	16.6667		73.7	63 - 115			
delta-BHC [2C]	12.6433	1.0	0.07	16.6667		75.9	63 - 115			
Dieldrin	13.5922	2.0	0.04	16.6667		81.6	59 - 102			
Dieldrin [2C]	13.4090	2.0	0.04	16.6667		80.5	59 - 102			
Endosulfan I	12.7663	1.0	0.05	16.6667		76.6	61 - 99			
Endosulfan I [2C]	13.1452	1.0	0.05	16.6667		78.9	61 - 99			
Endosulfan II	14.0960	2.0	0.06	16.6667		84.6	65 - 105			
Endosulfan II [2C]	13.8040	2.0	0.06	16.6667		82.8	65 - 105			
Endosulfan sulfate	13.2815	2.0	0.15	16.6667		79.7	59 - 107			
Endosulfan Sulfate [2C]	12.4523	2.0	0.15	16.6667		74.7	59 - 107			
Endrin	14.5808	2.0	0.08	16.6667		87.5	65 - 113			
Endrin [2C]	14.5280	2.0	0.08	16.6667		87.2	65 - 113			
Endrin aldehyde	14.2155	2.0	0.09	16.6667		85.3	61 - 109			
Endrin aldehyde [2C]	13.7368	2.0	0.09	16.6667		82.4	61 - 109			
Endrin ketone	13.0922	2.0	0.09	16.6667		78.6	56 - 97			
Endrin ketone [2C]	12.8188	2.0	0.09	16.6667		76.9	56 - 97			
gamma-BHC	13.5262	1.0	0.12	16.6667		81.2	57 - 101			
gamma-BHC [2C]	14.0795	1.0	0.12	16.6667		84.5	57 - 101			

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Organochlorine Pesticides by EPA 8081A - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B0A0069 - GCSEMI_PCB/PEST_S (continued)										
LCS (B0A0069-BS1) - Continued						Prepared: 1/3/2020 Analyzed: 1/3/2020				
gamma-Chlordane	13.6003	1.0	0.28	16.6667		81.6	56 - 125			
gamma-Chlordane [2C]	14.2027	1.0	0.28	16.6667		85.2	56 - 125			
Heptachlor	13.7452	1.0	0.06	16.6667		82.5	61 - 105			
Heptachlor [2C]	13.7812	1.0	0.06	16.6667		82.7	61 - 105			
Heptachlor epoxide	12.9083	1.0	0.06	16.6667		77.4	59 - 97			
Heptachlor epoxide [2C]	13.3090	1.0	0.06	16.6667		79.9	59 - 97			
Methoxychlor	14.4952	5.0	0.16	16.6667		87.0	68 - 118			
Methoxychlor [2C]	12.8012	5.0	0.16	16.6667		76.8	68 - 118			
Surrogate: Decachlorobiphenyl	*13.93*			*16.6667*		*83.6*	*32 - 91*			
Surrogate: Decachlorobiphenyl [	*12.54*			*16.6667*		*75.3*	*32 - 91*			
Surrogate: Tetrachloro-m-xylene	*14.72*			*16.6667*		*88.3*	*38 - 93*			
Surrogate: Tetrachloro-m-xylene	*13.69*			*16.6667*		*82.2*	*38 - 93*			
Matrix Spike (B0A0069-MS1)			**Source: 1904739-01**			Prepared: 1/3/2020 Analyzed: 1/3/2020				
4,4′-DDD	11.7258	2.0	0.14	16.6667	ND	70.4	33 - 116			
4,4′-DDD [2C]	11.5550	2.0	0.14	16.6667	ND	69.3	33 - 116			
4,4′-DDE	10.8033	2.0	0.20	16.6667	ND	64.8	29 - 128			
4,4′-DDE [2C]	11.6393	2.0	0.20	16.6667	ND	69.8	29 - 128			
4,4′-DDT	9.92200	2.0	0.04	16.6667	ND	59.5	27 - 109			
4,4′-DDT [2C]	11.3487	2.0	0.04	16.6667	ND	68.1	27 - 109			
Aldrin	11.0088	1.0	0.05	16.6667	ND	66.1	34 - 110			
Aldrin [2C]	11.9227	1.0	0.05	16.6667	ND	71.5	34 - 110			
alpha-BHC	14.1835	1.0	0.12	16.6667	ND	85.1	39 - 107			
alpha-BHC [2C]	14.8972	1.0	0.12	16.6667	ND	89.4	39 - 107			
alpha-Chlordane	11.8525	1.0	0.06	16.6667	ND	71.1	37 - 111			
alpha-Chlordane [2C]	12.3178	1.0	0.06	16.6667	ND	73.9	37 - 111			
beta-BHC	14.0198	1.0	0.08	16.6667	ND	84.1	33 - 111			
beta-BHC [2C]	15.6408	1.0	0.08	16.6667	ND	93.8	33 - 111			
delta-BHC	12.3495	1.0	0.07	16.6667	ND	74.1	25 - 122			
delta-BHC [2C]	13.3648	1.0	0.07	16.6667	ND	80.2	25 - 122			
Dieldrin	12.1722	2.0	0.04	16.6667	ND	73.0	28 - 114			
Dieldrin [2C]	12.2455	2.0	0.04	16.6667	ND	73.5	28 - 114			
Endosulfan I	11.5632	1.0	0.05	16.6667	ND	69.4	35 - 107			
Endosulfan I [2C]	12.0743	1.0	0.05	16.6667	ND	72.4	35 - 107			
Endosulfan II	13.2777	2.0	0.06	16.6667	ND	79.7	13 - 122			
Endosulfan II [2C]	13.1285	2.0	0.06	16.6667	ND	78.8	13 - 122			
Endosulfan sulfate	12.5922	2.0	0.15	16.6667	ND	75.6	13 - 120			
Endosulfan Sulfate [2C]	12.2010	2.0	0.15	16.6667	ND	73.2	13 - 120			
Endrin	13.3208	2.0	0.08	16.6667	ND	79.9	31 - 121			
Endrin [2C]	13.6295	2.0	0.08	16.6667	ND	81.8	31 - 121			
Endrin aldehyde	13.7708	2.0	0.09	16.6667	ND	82.6	18 - 129			

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Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B0A0069 - GCSEMI_PCB/PEST_S (continued)										
Matrix Spike (B0A0069-MS1) - Continued			**Source: 1904739-01**		Prepared: 1/3/2020 Analyzed: 1/3/2020					
Endrin aldehyde [2C]	13.5425	2.0	0.09	16.6667	ND	81.3	18 - 129			
Endrin ketone	12.3213	2.0	0.09	16.6667	ND	73.9	14 - 113			
Endrin ketone [2C]	12.8537	2.0	0.09	16.6667	ND	77.1	14 - 113			
gamma-BHC	13.5547	1.0	0.12	16.6667	ND	81.3	34 - 104			
gamma-BHC [2C]	15.0390	1.0	0.12	16.6667	ND	90.2	34 - 104			
gamma-Chlordane	11.5543	1.0	0.28	16.6667	ND	69.3	35 - 121			
gamma-Chlordane [2C]	12.3915	1.0	0.28	16.6667	ND	74.3	35 - 121			
Heptachlor	11.8455	1.0	0.06	16.6667	ND	71.1	35 - 110			
Heptachlor [2C]	12.0775	1.0	0.06	16.6667	ND	72.5	35 - 110			
Heptachlor epoxide	11.4935	1.0	0.06	16.6667	ND	69.0	31 - 106			
Heptachlor epoxide [2C]	12.3967	1.0	0.06	16.6667	ND	74.4	31 - 106			
Methoxychlor	13.0007	5.0	0.16	16.6667	ND	78.0	21 - 128			
Methoxychlor [2C]	11.2242	5.0	0.16	16.6667	ND	67.3	21 - 128			
Surrogate: Decachlorobiphenyl	*10.36*			*16.6667*		*62.1*	*32 - 91*			
Surrogate: Decachlorobiphenyl [	*8.718*			*16.6667*		*52.3*	*32 - 91*			
Surrogate: Tetrachloro-m-xylene	*8.792*			*16.6667*		*52.8*	*38 - 93*			
Surrogate: Tetrachloro-m-xylene	*9.152*			*16.6667*		*54.9*	*38 - 93*			
Matrix Spike Dup (B0A0069-MSD1)			**Source: 1904739-01**		Prepared: 1/3/2020 Analyzed: 1/3/2020					
4,4′-DDD	11.5118	2.0	0.14	16.6667	ND	69.1	33 - 116	1.84	20	
4,4′-DDD [2C]	10.7543	2.0	0.14	16.6667	ND	64.5	33 - 116	7.18	20	
4,4′-DDE	10.5635	2.0	0.20	16.6667	ND	63.4	29 - 128	2.24	20	
4,4′-DDE [2C]	10.7920	2.0	0.20	16.6667	ND	64.8	29 - 128	7.55	20	
4,4′-DDT	9.52017	2.0	0.04	16.6667	ND	57.1	27 - 109	4.13	20	
4,4′-DDT [2C]	10.6545	2.0	0.04	16.6667	ND	63.9	27 - 109	6.31	20	
Aldrin	10.7422	1.0	0.05	16.6667	ND	64.5	34 - 110	2.45	20	
Aldrin [2C]	11.0277	1.0	0.05	16.6667	ND	66.2	34 - 110	7.80	20	
alpha-BHC	13.1487	1.0	0.12	16.6667	ND	78.9	39 - 107	7.57	20	
alpha-BHC [2C]	13.8932	1.0	0.12	16.6667	ND	83.4	39 - 107	6.97	20	
alpha-Chlordane	11.6337	1.0	0.06	16.6667	ND	69.8	37 - 111	1.86	20	
alpha-Chlordane [2C]	11.4257	1.0	0.06	16.6667	ND	68.6	37 - 111	7.51	20	
beta-BHC	13.2548	1.0	0.08	16.6667	ND	79.5	33 - 111	5.61	20	
beta-BHC [2C]	13.9315	1.0	0.08	16.6667	ND	83.6	33 - 111	11.6	20	
delta-BHC	11.7958	1.0	0.07	16.6667	ND	70.8	25 - 122	4.59	20	
delta-BHC [2C]	12.4862	1.0	0.07	16.6667	ND	74.9	25 - 122	6.80	20	
Dieldrin	11.9310	2.0	0.04	16.6667	ND	71.6	28 - 114	2.00	20	
Dieldrin [2C]	11.3988	2.0	0.04	16.6667	ND	68.4	28 - 114	7.16	20	
Endosulfan I	11.3317	1.0	0.05	16.6667	ND	68.0	35 - 107	2.02	20	
Endosulfan I [2C]	11.2185	1.0	0.05	16.6667	ND	67.3	35 - 107	7.35	20	
Endosulfan II	13.0297	2.0	0.06	16.6667	ND	78.2	13 - 122	1.89	20	
Endosulfan II [2C]	12.1815	2.0	0.06	16.6667	ND	73.1	13 - 122	7.48	20	

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Organochlorine Pesticides by EPA 8081A - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B0A0069 - GCSEMI_PCB/PEST_S (continued)										
Matrix Spike Dup (B0A0069-MSD1) - Continued			**Source: 1904739-01**		Prepared: 1/3/2020 Analyzed: 1/3/2020					
Endosulfan sulfate	12.3208	2.0	0.15	16.6667	ND	73.9	13 - 120	2.18	20	
Endosulfan Sulfate [2C]	11.2958	2.0	0.15	16.6667	ND	67.8	13 - 120	7.70	20	
Endrin	13.1015	2.0	0.08	16.6667	ND	78.6	31 - 121	1.66	20	
Endrin [2C]	12.6392	2.0	0.08	16.6667	ND	75.8	31 - 121	7.54	20	
Endrin aldehyde	13.4945	2.0	0.09	16.6667	ND	81.0	18 - 129	2.03	20	
Endrin aldehyde [2C]	12.5758	2.0	0.09	16.6667	ND	75.5	18 - 129	7.40	20	
Endrin ketone	12.1572	2.0	0.09	16.6667	ND	72.9	14 - 113	1.34	20	
Endrin ketone [2C]	12.0363	2.0	0.09	16.6667	ND	72.2	14 - 113	6.57	20	
gamma-BHC	12.9872	1.0	0.12	16.6667	ND	77.9	34 - 104	4.28	20	
gamma-BHC [2C]	13.7440	1.0	0.12	16.6667	ND	82.5	34 - 104	9.00	20	
gamma-Chlordane	11.3360	1.0	0.28	16.6667	ND	68.0	35 - 121	1.91	20	
gamma-Chlordane [2C]	11.5225	1.0	0.28	16.6667	ND	69.1	35 - 121	7.27	20	
Heptachlor	11.3495	1.0	0.06	16.6667	ND	68.1	35 - 110	4.28	20	
Heptachlor [2C]	11.3223	1.0	0.06	16.6667	ND	67.9	35 - 110	6.45	20	
Heptachlor epoxide	11.2195	1.0	0.06	16.6667	ND	67.3	31 - 106	2.41	20	
Heptachlor epoxide [2C]	11.5662	1.0	0.06	16.6667	ND	69.4	31 - 106	6.93	20	
Methoxychlor	12.9447	5.0	0.16	16.6667	ND	77.7	21 - 128	0.432	20	
Methoxychlor [2C]	10.6818	5.0	0.16	16.6667	ND	64.1	21 - 128	4.95	20	
Surrogate: Decachlorobiphenyl	*10.13*			*16.6667*		*60.8*	*32 - 91*			
Surrogate: Decachlorobiphenyl [	*8.075*			*16.6667*		*48.5*	*32 - 91*			
Surrogate: Tetrachloro-m-xylene	*8.759*			*16.6667*		*52.6*	*38 - 93*			
Surrogate: Tetrachloro-m-xylene	*8.308*			*16.6667*		*49.8*	*38 - 93*			

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Polychlorinated Biphenyls by EPA 8082 - Quality Control

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B0A0016 - GCSEMI_PCB/PEST_W										
Blank (B0A0016-BLK2)					Prepared: 1/2/2020 Analyzed: 1/2/2020					
Aroclor 1016	ND	0.50	0.03							
Aroclor 1221	ND	1.0	0.03							
Aroclor 1232	ND	0.50	0.03							
Aroclor 1242	ND	0.50	0.03							
Aroclor 1248	ND	0.50	0.03							
Aroclor 1254	ND	0.50	0.03							
Aroclor 1260	ND	0.50	0.03							
Aroclor 1262	ND	0.50	0.03							
Aroclor 1268	ND	0.50	0.03							
Surrogate: Decachlorobiphenyl	*0.3520*			*0.500000*		*70.4*	*25 - 103*			
Surrogate: Tetrachloro-m-xylene	*0.3525*			*0.500000*		*70.5*	*21 - 105*			
LCS (B0A0016-BS2)					Prepared: 1/2/2020 Analyzed: 1/2/2020					
Aroclor 1016	4.04607	0.50	0.03	5.00000		80.9	60 - 101			
Aroclor 1260	4.73640	0.50	0.03	5.00000		94.7	58 - 113			
Surrogate: Decachlorobiphenyl	*0.3885*			*0.500000*		*77.7*	*25 - 103*			
Surrogate: Tetrachloro-m-xylene	*0.4267*			*0.500000*		*85.3*	*21 - 105*			
LCS Dup (B0A0016-BSD2)					Prepared: 1/2/2020 Analyzed: 1/2/2020					
Aroclor 1016	4.07634	0.50	0.03	5.00000		81.5	60 - 101	0.745	20	
Aroclor 1260	4.78272	0.50	0.03	5.00000		95.7	58 - 113	0.973	20	
Surrogate: Decachlorobiphenyl	*0.3907*			*0.500000*		*78.1*	*25 - 103*			
Surrogate: Tetrachloro-m-xylene	*0.4321*			*0.500000*		*86.4*	*21 - 105*			

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Polychlorinated Biphenyls by EPA 8082 - Quality Control

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B0A0069 - GCSEMI_PCB/PEST_S										
Blank (B0A0069-BLK2)						Prepared: 1/3/2020 Analyzed: 1/3/2020				
Aroclor 1016	ND	16	0.82							
Aroclor 1221	ND	16	0.82							
Aroclor 1232	ND	16	0.82							
Aroclor 1242	ND	16	0.82							
Aroclor 1248	ND	16	0.82							
Aroclor 1254	ND	16	0.82							
Aroclor 1260	ND	16	0.82							
Aroclor 1262	ND	16	0.82							
Aroclor 1268	ND	16	0.82							
Surrogate: Decachlorobiphenyl	*11.97*			*16.6667*		*71.8*	*30 - 132*			
Surrogate: Tetrachloro-m-xylene	*12.90*			*16.6667*		*77.4*	*44 - 113*			
LCS (B0A0069-BS2)						Prepared: 1/3/2020 Analyzed: 1/3/2020				
Aroclor 1016	136.234	16	0.82	166.667		81.7	52 - 104			
Aroclor 1260	160.959	16	0.82	166.667		96.6	45 - 121			
Surrogate: Decachlorobiphenyl	*13.30*			*16.6667*		*79.8*	*30 - 132*			
Surrogate: Tetrachloro-m-xylene	*14.20*			*16.6667*		*85.2*	*44 - 113*			
Matrix Spike (B0A0069-MS2)			**Source: 1904742-01**			Prepared: 1/3/2020 Analyzed: 1/3/2020				
Aroclor 1016	129.605	16	0.82	166.667	ND	77.8	33 - 112			
Aroclor 1260	147.521	16	0.82	166.667	ND	88.5	30 - 120			
Surrogate: Decachlorobiphenyl	*11.88*			*16.6667*		*71.3*	*30 - 132*			
Surrogate: Tetrachloro-m-xylene	*9.170*			*16.6667*		*55.0*	*44 - 113*			
Matrix Spike Dup (B0A0069-MSD2)			**Source: 1904742-01**			Prepared: 1/3/2020 Analyzed: 1/3/2020				
Aroclor 1016	129.550	16	0.82	166.667	ND	77.7	33 - 112	0.0424	20	
Aroclor 1260	147.657	16	0.82	166.667	ND	88.6	30 - 120	0.0919	20	
Surrogate: Decachlorobiphenyl	*11.98*			*16.6667*		*71.9*	*30 - 132*			
Surrogate: Tetrachloro-m-xylene	*9.193*			*16.6667*		*55.2*	*44 - 113*			

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Volatile Organic Compounds by EPA 8260B - Quality Control

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B0A0003 - MSVOA_LL_W										
Blank (B0A0003-BLK1)					Prepared: 1/2/2020 Analyzed: 1/2/2020					
1,1,1,2-Tetrachloroethane	ND	0.50	0.11							
1,1,1-Trichloroethane	ND	0.50	0.21							
1,1,2,2-Tetrachloroethane	ND	0.50	0.36							
1,1,2-Trichloroethane	ND	0.50	0.25							
1,1-Dichloroethane	ND	0.50	0.09							
1,1-Dichloroethene	ND	0.50	0.13							
1,1-Dichloropropene	ND	0.50	0.13							
1,2,3-Trichloropropane	ND	0.50	0.39							
1,2,3-Trichlorobenzene	ND	0.50	0.18							
1,2,4-Trichlorobenzene	ND	0.50	0.16							
1,2,4-Trimethylbenzene	ND	0.50	0.14							
1,2-Dibromo-3-chloropropane	ND	0.50	0.41							
1,2-Dibromoethane	ND	0.50	0.24							
1,2-Dichlorobenzene	ND	0.50	0.20							
1,2-Dichloroethane	ND	0.50	0.20							
1,2-Dichloropropane	ND	0.50	0.15							
1,3,5-Trimethylbenzene	ND	0.50	0.13							
1,3-Dichlorobenzene	ND	0.50	0.16							
1,3-Dichloropropane	ND	0.50	0.21							
1,4-Dichlorobenzene	ND	0.50	0.17							
2,2-Dichloropropane	ND	0.50	0.38							
2-Chlorotoluene	ND	0.50	0.11							
4-Chlorotoluene	ND	0.50	0.12							
4-Isopropyltoluene	ND	0.50	0.11							
Benzene	ND	0.50	0.13							
Bromobenzene	ND	0.50	0.21							
Bromochloromethane	ND	0.50	0.16							
Bromodichloromethane	ND	0.50	0.14							
Bromoform	ND	0.50	0.20							
Bromomethane	ND	0.50	0.40							
Carbon disulfide	ND	1.0	0.07							
Carbon tetrachloride	ND	0.50	0.09							
Chlorobenzene	ND	0.50	0.13							
Chloroethane	ND	0.50	0.15							
Chloroform	ND	0.50	0.11							
Chloromethane	ND	0.50	0.12							
cis-1,2-Dichloroethene	ND	0.50	0.14							
cis-1,3-Dichloropropene	ND	0.50	0.13							
Di-isopropyl ether	ND	0.50	0.15							
Dibromochloromethane	ND	0.50	0.16							
Dibromomethane	ND	0.50	0.19							

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Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B0A0003 - MSVOA_LL_W (continued)										
Blank (B0A0003-BLK1) - Continued					Prepared: 1/2/2020 Analyzed: 1/2/2020					
Dichlorodifluoromethane	ND	0.50	0.18							
Ethyl Acetate	ND	10	8.7							
Ethyl Ether	ND	10	2.0							
Ethyl tert-butyl ether	ND	0.50	0.21							
Ethylbenzene	ND	0.50	0.13							
Freon-113	ND	0.50	0.13							
Hexachlorobutadiene	ND	0.50	0.15							
Isopropylbenzene	ND	0.50	0.10							
m,p-Xylene	ND	1.0	0.19							
Methylene chloride	ND	1.0	0.71							
MTBE	ND	0.50	0.26							
n-Butylbenzene	ND	0.50	0.11							
n-Propylbenzene	ND	0.50	0.10							
Naphthalene	ND	0.50	0.41							
o-Xylene	ND	0.50	0.13							
sec-Butylbenzene	ND	0.50	0.09							
Styrene	ND	0.50	0.13							
tert-Amyl methyl ether	ND	0.50	0.41							
tert-Butanol	ND	10	2.4							
tert-Butylbenzene	ND	0.50	0.09							
Tetrachloroethene	ND	0.50	0.10							
Toluene	ND	0.50	0.12							
trans-1,2-Dichloroethene	ND	0.50	0.09							
trans-1,3-Dichloropropene	ND	0.50	0.23							
Trichloroethene	ND	0.50	0.10							
Trichlorofluoromethane	ND	0.50	0.23							
Vinyl acetate	ND	10	1.7							
Vinyl chloride	ND	0.50	0.13							
Surrogate: 1,2-Dichloroethane-d4	*25.23*			*25.0000*		*101*	*59 - 158*			
Surrogate: 4-Bromofluorobenzene	*24.64*			*25.0000*		*98.6*	*71 - 127*			
Surrogate: Dibromofluoromethan	*24.51*			*25.0000*		*98.0*	*66 - 147*			
Surrogate: Toluene-d8	*24.66*			*25.0000*		*98.6*	*77 - 138*			
LCS (B0A0003-BS1)					Prepared: 1/2/2020 Analyzed: 1/2/2020					
1,1,1,2-Tetrachloroethane	19.2400	0.50	0.11	20.0000		96.2	71 - 133			
1,1,1-Trichloroethane	18.1200	0.50	0.21	20.0000		90.6	62 - 124			
1,1,2,2-Tetrachloroethane	19.9200	0.50	0.36	20.0000		99.6	50 - 131			
1,1,2-Trichloroethane	18.5100	0.50	0.25	20.0000		92.6	77 - 121			
1,1-Dichloroethane	18.6400	0.50	0.09	20.0000		93.2	52 - 130			
1,1-Dichloroethene	17.8500	0.50	0.13	20.0000		89.2	61 - 136			
1,1-Dichloropropene	19.0200	0.50	0.13	20.0000		95.1	80 - 128			

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Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B0A0003 - MSVOA_LL_W (continued)										
LCS (B0A0003-BS1) - Continued					Prepared: 1/2/2020 Analyzed: 1/2/2020					
1,2,3-Trichloropropane	19.1600	0.50	0.39	20.0000		95.8	59 - 126			
1,2,3-Trichlorobenzene	19.8300	0.50	0.18	20.0000		99.2	69 - 138			
1,2,4-Trichlorobenzene	20.1600	0.50	0.16	20.0000		101	78 - 125			
1,2,4-Trimethylbenzene	19.3600	0.50	0.14	20.0000		96.8	70 - 126			
1,2-Dibromo-3-chloropropane	19.5300	0.50	0.41	20.0000		97.6	58 - 127			
1,2-Dibromoethane	20.2300	0.50	0.24	20.0000		101	76 - 120			
1,2-Dichlorobenzene	18.9200	0.50	0.20	20.0000		94.6	82 - 117			
1,2-Dichloroethane	19.1100	0.50	0.20	20.0000		95.6	66 - 126			
1,2-Dichloropropane	18.6900	0.50	0.15	20.0000		93.4	70 - 117			
1,3,5-Trimethylbenzene	19.4400	0.50	0.13	20.0000		97.2	71 - 125			
1,3-Dichlorobenzene	19.2700	0.50	0.16	20.0000		96.4	81 - 116			
1,3-Dichloropropane	19.1200	0.50	0.21	20.0000		95.6	69 - 124			
1,4-Dichlorobenzene	18.8700	0.50	0.17	20.0000		94.4	80 - 114			
2,2-Dichloropropane	19.2200	0.50	0.38	20.0000		96.1	58 - 132			
2-Chlorotoluene	18.8800	0.50	0.11	20.0000		94.4	71 - 119			
4-Chlorotoluene	19.4600	0.50	0.12	20.0000		97.3	72 - 122			
4-Isopropyltoluene	19.7000	0.50	0.11	20.0000		98.5	69 - 126			
Benzene	37.6300	0.50	0.13	40.0000		94.1	80 - 116			
Bromobenzene	18.8800	0.50	0.21	20.0000		94.4	77 - 118			
Bromochloromethane	19.5200	0.50	0.16	20.0000		97.6	68 - 121			
Bromodichloromethane	19.5000	0.50	0.14	20.0000		97.5	73 - 118			
Bromoform	17.8500	0.50	0.20	20.0000		89.2	65 - 133			
Bromomethane	17.8700	0.50	0.40	20.0000		89.4	7 - 205			
Carbon disulfide	15.6800	1.0	0.07	20.0000		78.4	55 - 131			
Carbon tetrachloride	18.8600	0.50	0.09	20.0000		94.3	63 - 133			
Chlorobenzene	18.7100	0.50	0.13	20.0000		93.6	86 - 113			
Chloroethane	39.8600	0.50	0.15	20.0000		199	66 - 141			L5
Chloroform	18.5600	0.50	0.11	20.0000		92.8	63 - 127			
Chloromethane	19.2600	0.50	0.12	20.0000		96.3	0 - 207			
cis-1,2-Dichloroethene	18.5700	0.50	0.14	20.0000		92.8	64 - 126			
cis-1,3-Dichloropropene	19.7100	0.50	0.13	20.0000		98.6	70 - 141			
Di-isopropyl ether	18.3500	0.50	0.15	20.0000		91.8	56 - 131			
Dibromochloromethane	18.6900	0.50	0.16	20.0000		93.4	67 - 135			
Dibromomethane	19.1800	0.50	0.19	20.0000		95.9	74 - 118			
Dichlorodifluoromethane	19.5500	0.50	0.18	20.0000		97.8	14 - 181			
Ethyl Acetate	162.470	10	8.7	200.000		81.2	49 - 128			
Ethyl Ether	189.720	10	2.0	200.000		94.9	53 - 143			
Ethyl tert-butyl ether	17.9000	0.50	0.21	20.0000		89.5	54 - 132			
Ethylbenzene	37.7000	0.50	0.13	40.0000		94.2	77 - 118			
Freon-113	18.9800	0.50	0.13	20.0000		94.9	68 - 145			
Hexachlorobutadiene	19.3600	0.50	0.15	20.0000		96.8	66 - 125			
Isopropylbenzene	19.0100	0.50	0.10	20.0000		95.0	68 - 137			

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Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B0A0003 - MSVOA_LL_W (continued)										
LCS (B0A0003-BS1) - Continued					Prepared: 1/2/2020 Analyzed: 1/2/2020					
m,p-Xylene	37.0600	1.0	0.19	40.0000		92.6	78 - 126			
Methylene chloride	19.1600	1.0	0.71	20.0000		95.8	51 - 149			
MTBE	17.8400	0.50	0.26	20.0000		89.2	63 - 128			
n-Butylbenzene	19.5900	0.50	0.11	20.0000		98.0	63 - 127			
n-Propylbenzene	19.1000	0.50	0.10	20.0000		95.5	69 - 124			
Naphthalene	20.1200	0.50	0.41	20.0000		101	60 - 126			
o-Xylene	37.9900	0.50	0.13	40.0000		95.0	79 - 126			
sec-Butylbenzene	19.1000	0.50	0.09	20.0000		95.5	69 - 124			
Styrene	19.4300	0.50	0.13	20.0000		97.2	80 - 127			
tert-Amyl methyl ether	18.7300	0.50	0.41	20.0000		93.6	49 - 130			
tert-Butanol	46.6500	10	2.4	100.000		46.6	29 - 163			
tert-Butylbenzene	18.9200	0.50	0.09	20.0000		94.6	71 - 124			
Tetrachloroethene	18.3600	0.50	0.10	20.0000		91.8	73 - 129			
Toluene	38.4000	0.50	0.12	40.0000		96.0	78 - 121			
trans-1,2-Dichloroethene	17.9300	0.50	0.09	20.0000		89.6	58 - 141			
trans-1,3-Dichloropropene	19.8500	0.50	0.23	20.0000		99.2	68 - 128			
Trichloroethene	18.4500	0.50	0.10	20.0000		92.2	73 - 126			
Trichlorofluoromethane	19.3200	0.50	0.23	20.0000		96.6	62 - 146			
Vinyl acetate	204.730	10	1.7	200.000		102	53 - 153			
Vinyl chloride	17.6400	0.50	0.13	20.0000		88.2	61 - 137			
Surrogate: 1,2-Dichloroethane-d4	*23.72*			*25.0000*		*94.9*	*59 - 158*			
Surrogate: 4-Bromofluorobenzene	*24.23*			*25.0000*		*96.9*	*71 - 127*			
Surrogate: Dibromofluoromethan	*25.22*			*25.0000*		*101*	*66 - 147*			
Surrogate: Toluene-d8	*25.17*			*25.0000*		*101*	*77 - 138*			
LCS Dup (B0A0003-BSD1)					Prepared: 1/2/2020 Analyzed: 1/2/2020					
1,1,1,2-Tetrachloroethane	19.1300	0.50	0.11	20.0000		95.6	71 - 133	0.573	20	
1,1,1-Trichloroethane	18.5500	0.50	0.21	20.0000		92.8	62 - 124	2.35	20	
1,1,2,2-Tetrachloroethane	19.7500	0.50	0.36	20.0000		98.8	50 - 131	0.857	20	
1,1,2-Trichloroethane	19.1400	0.50	0.25	20.0000		95.7	77 - 121	3.35	20	
1,1-Dichloroethane	18.5700	0.50	0.09	20.0000		92.8	52 - 130	0.376	20	
1,1-Dichloroethene	18.4500	0.50	0.13	20.0000		92.2	61 - 136	3.31	20	
1,1-Dichloropropene	19.5900	0.50	0.13	20.0000		98.0	80 - 128	2.95	20	
1,2,3-Trichloropropane	19.5500	0.50	0.39	20.0000		97.8	59 - 126	2.01	20	
1,2,3-Trichlorobenzene	19.1600	0.50	0.18	20.0000		95.8	69 - 138	3.44	20	
1,2,4-Trichlorobenzene	19.2800	0.50	0.16	20.0000		96.4	78 - 125	4.46	20	
1,2,4-Trimethylbenzene	19.1300	0.50	0.14	20.0000		95.6	70 - 126	1.20	20	
1,2-Dibromo-3-chloropropane	19.2500	0.50	0.41	20.0000		96.2	58 - 127	1.44	20	
1,2-Dibromoethane	19.5300	0.50	0.24	20.0000		97.6	76 - 120	3.52	20	
1,2-Dichlorobenzene	19.0200	0.50	0.20	20.0000		95.1	82 - 117	0.527	20	
1,2-Dichloroethane	18.9500	0.50	0.20	20.0000		94.8	66 - 126	0.841	20	

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Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B0A0003 - MSVOA_LL_W (continued)										
LCS Dup (B0A0003-BSD1) - Continued					Prepared: 1/2/2020 Analyzed: 1/2/2020					
1,2-Dichloropropane	19.2100	0.50	0.15	20.0000		96.0	70 - 117	2.74	20	
1,3,5-Trimethylbenzene	19.2200	0.50	0.13	20.0000		96.1	71 - 125	1.14	20	
1,3-Dichlorobenzene	19.1100	0.50	0.16	20.0000		95.6	81 - 116	0.834	20	
1,3-Dichloropropane	18.9600	0.50	0.21	20.0000		94.8	69 - 124	0.840	20	
1,4-Dichlorobenzene	19.0200	0.50	0.17	20.0000		95.1	80 - 114	0.792	20	
2,2-Dichloropropane	19.0400	0.50	0.38	20.0000		95.2	58 - 132	0.941	20	
2-Chlorotoluene	18.5000	0.50	0.11	20.0000		92.5	71 - 119	2.03	20	
4-Chlorotoluene	18.9400	0.50	0.12	20.0000		94.7	72 - 122	2.71	20	
4-Isopropyltoluene	19.5000	0.50	0.11	20.0000		97.5	69 - 126	1.02	20	
Benzene	37.3700	0.50	0.13	40.0000		93.4	80 - 116	0.693	20	
Bromobenzene	18.8500	0.50	0.21	20.0000		94.2	77 - 118	0.159	20	
Bromochloromethane	19.8900	0.50	0.16	20.0000		99.4	68 - 121	1.88	20	
Bromodichloromethane	19.3800	0.50	0.14	20.0000		96.9	73 - 118	0.617	20	
Bromoform	18.4600	0.50	0.20	20.0000		92.3	65 - 133	3.36	20	
Bromomethane	14.0400	0.50	0.40	20.0000		70.2	7 - 205	24.0	20	R
Carbon disulfide	16.6600	1.0	0.07	20.0000		83.3	55 - 131	6.06	20	
Carbon tetrachloride	19.6300	0.50	0.09	20.0000		98.2	63 - 133	4.00	20	
Chlorobenzene	18.6400	0.50	0.13	20.0000		93.2	86 - 113	0.375	20	
Chloroethane	37.3300	0.50	0.15	20.0000		187	66 - 141	6.56	20	L5
Chloroform	18.6500	0.50	0.11	20.0000		93.2	63 - 127	0.484	20	
Chloromethane	20.7300	0.50	0.12	20.0000		104	0 - 207	7.35	20	
cis-1,2-Dichloroethene	18.5800	0.50	0.14	20.0000		92.9	64 - 126	0.0538	20	
cis-1,3-Dichloropropene	19.7600	0.50	0.13	20.0000		98.8	70 - 141	0.253	20	
Di-isopropyl ether	18.2100	0.50	0.15	20.0000		91.0	56 - 131	0.766	20	
Dibromochloromethane	19.2400	0.50	0.16	20.0000		96.2	67 - 135	2.90	20	
Dibromomethane	19.9500	0.50	0.19	20.0000		99.8	74 - 118	3.94	20	
Dichlorodifluoromethane	19.6600	0.50	0.18	20.0000		98.3	14 - 181	0.561	20	
Ethyl Acetate	179.400	10	8.7	200.000		89.7	49 - 128	9.90	20	
Ethyl Ether	192.660	10	2.0	200.000		96.3	53 - 143	1.54	20	
Ethyl tert-butyl ether	17.8300	0.50	0.21	20.0000		89.2	54 - 132	0.392	20	
Ethylbenzene	37.4700	0.50	0.13	40.0000		93.7	77 - 118	0.612	20	
Freon-113	20.1800	0.50	0.13	20.0000		101	68 - 145	6.13	20	
Hexachlorobutadiene	18.5700	0.50	0.15	20.0000		92.8	66 - 125	4.17	20	
Isopropylbenzene	19.0400	0.50	0.10	20.0000		95.2	68 - 137	0.158	20	
m,p-Xylene	37.0600	1.0	0.19	40.0000		92.6	78 - 126	0.00	20	
Methylene chloride	19.3000	1.0	0.71	20.0000		96.5	51 - 149	0.728	20	
MTBE	18.3000	0.50	0.26	20.0000		91.5	63 - 128	2.55	20	
n-Butylbenzene	19.2400	0.50	0.11	20.0000		96.2	63 - 127	1.80	20	
n-Propylbenzene	18.8800	0.50	0.10	20.0000		94.4	69 - 124	1.16	20	
Naphthalene	19.6300	0.50	0.41	20.0000		98.2	60 - 126	2.47	20	
o-Xylene	37.8300	0.50	0.13	40.0000		94.6	79 - 126	0.422	20	
sec-Butylbenzene	19.1600	0.50	0.09	20.0000		95.8	69 - 124	0.314	20	

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Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B0A0003 - MSVOA_LL_W (continued)										
LCS Dup (B0A0003-BSD1) - Continued					Prepared: 1/2/2020 Analyzed: 1/2/2020					
Styrene	19.3200	0.50	0.13	20.0000		96.6	80 - 127	0.568	20	
tert-Amyl methyl ether	19.1800	0.50	0.41	20.0000		95.9	49 - 130	2.37	20	
tert-Butanol	78.8200	10	2.4	100.000		78.8	29 - 163	51.3	20	R
tert-Butylbenzene	18.6500	0.50	0.09	20.0000		93.2	71 - 124	1.44	20	
Tetrachloroethene	18.6600	0.50	0.10	20.0000		93.3	73 - 129	1.62	20	
Toluene	38.3200	0.50	0.12	40.0000		95.8	78 - 121	0.209	20	
trans-1,2-Dichloroethene	18.0000	0.50	0.09	20.0000		90.0	58 - 141	0.390	20	
trans-1,3-Dichloropropene	19.5200	0.50	0.23	20.0000		97.6	68 - 128	1.68	20	
Trichloroethene	18.9200	0.50	0.10	20.0000		94.6	73 - 126	2.52	20	
Trichlorofluoromethane	19.9500	0.50	0.23	20.0000		99.8	62 - 146	3.21	20	
Vinyl acetate	204.440	10	1.7	200.000		102	53 - 153	0.142	20	
Vinyl chloride	17.9800	0.50	0.13	20.0000		89.9	61 - 137	1.91	20	
Surrogate: 1,2-Dichloroethane-d4	*24.13*			*25.0000*		*96.5*	*59 - 158*			
Surrogate: 4-Bromofluorobenzene	*24.20*			*25.0000*		*96.8*	*71 - 127*			
Surrogate: Dibromofluoromethan	*24.65*			*25.0000*		*98.6*	*66 - 147*			
Surrogate: Toluene-d8	*24.79*			*25.0000*		*99.2*	*77 - 138*			

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Volatile Organic Compounds by EPA 5035 / EPA 8260B - Quality Control

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B0A0015 - MSVOA_S										
Blank (B0A0015-BLK1)					Prepared: 1/3/2020 Analyzed: 1/3/2020					
1,1,1,2-Tetrachloroethane	ND	5.0	0.40							
1,1,1-Trichloroethane	ND	5.0	0.79							
1,1,2,2-Tetrachloroethane	ND	5.0	0.70							
1,1,2-Trichloroethane	ND	5.0	0.57							
1,1-Dichloroethane	ND	5.0	0.63							
1,1-Dichloroethene	ND	5.0	2.9							
1,1-Dichloropropene	ND	5.0	0.26							
1,2,3-Trichloropropane	ND	5.0	0.72							
1,2,3-Trichlorobenzene	ND	5.0	0.57							
1,2,4-Trichlorobenzene	ND	5.0	0.61							
1,2,4-Trimethylbenzene	ND	5.0	1.0							
1,2-Dibromo-3-chloropropane	ND	10	1.2							
1,2-Dibromoethane	ND	5.0	0.28							
1,2-Dichlorobenzene	ND	5.0	0.45							
1,2-Dichloroethane	ND	5.0	0.88							
1,2-Dichloropropane	ND	5.0	0.67							
1,3,5-Trimethylbenzene	ND	5.0	0.35							
1,3-Dichlorobenzene	ND	5.0	0.41							
1,3-Dichloropropane	ND	5.0	0.49							
1,4-Dichlorobenzene	ND	5.0	0.39							
2,2-Dichloropropane	ND	5.0	0.61							
2-Chlorotoluene	ND	5.0	0.26							
4-Chlorotoluene	ND	5.0	0.20							
4-Isopropyltoluene	ND	5.0	0.28							
Benzene	ND	5.0	0.37							
Bromobenzene	ND	5.0	0.44							
Bromochloromethane	ND	5.0	0.99							
Bromodichloromethane	ND	5.0	0.58							
Bromoform	ND	5.0	0.37							
Bromomethane	ND	5.0	4.7							
Carbon disulfide	ND	5.0	3.2							
Carbon tetrachloride	ND	5.0	0.65							
Chlorobenzene	ND	5.0	0.29							
Chloroethane	ND	5.0	4.0							
Chloroform	ND	5.0	0.75							
Chloromethane	ND	5.0	0.98							
cis-1,2-Dichloroethene	ND	5.0	0.82							
cis-1,3-Dichloropropene	ND	5.0	0.22							
Di-isopropyl ether	ND	5.0	0.55							
Dibromochloromethane	ND	5.0	0.20							
Dibromomethane	ND	5.0	0.56							

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Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B0A0015 - MSVOA_S (continued)										
Blank (B0A0015-BLK1) - Continued					Prepared: 1/3/2020 Analyzed: 1/3/2020					
Dichlorodifluoromethane	ND	5.0	2.6							
Ethyl Acetate	ND	50	10							
Ethyl Ether	ND	50	20							
Ethyl tert-butyl ether	ND	5.0	0.32							
Ethylbenzene	ND	5.0	0.26							
Freon-113	ND	5.0	3.7							
Hexachlorobutadiene	ND	5.0	0.40							
Isopropylbenzene	ND	5.0	0.32							
m,p-Xylene	ND	10	0.86							
Methylene chloride	ND	5.0	3.4							
MTBE	ND	5.0	1.3							
n-Butylbenzene	ND	5.0	0.42							
n-Propylbenzene	ND	5.0	0.25							
Naphthalene	ND	5.0	0.50							
o-Xylene	ND	5.0	0.46							
sec-Butylbenzene	ND	5.0	0.36							
Styrene	ND	5.0	0.38							
tert-Amyl methyl ether	ND	5.0	0.43							
tert-Butanol	ND	100	7.4							
tert-Butylbenzene	ND	5.0	0.33							
Tetrachloroethene	ND	5.0	0.31							
Toluene	ND	5.0	0.47							
trans-1,2-Dichloroethene	ND	5.0	1.4							
trans-1,3-Dichloropropene	ND	5.0	0.48							
Trichloroethene	ND	5.0	0.64							
Trichlorofluoromethane	ND	5.0	0.79							
Vinyl acetate	ND	50	9.0							
Vinyl chloride	ND	5.0	0.74							
Surrogate: 1,2-Dichloroethane-d4	*44.50*			*50.0000*		*89.0*	*58 - 160*			
Surrogate: 4-Bromofluorobenzene	*48.19*			*50.0000*		*96.4*	*72 - 121*			
Surrogate: Dibromofluoromethan	*47.54*			*50.0000*		*95.1*	*75 - 139*			
Surrogate: Toluene-d8	*48.93*			*50.0000*		*97.9*	*84 - 115*			
LCS (B0A0015-BS1)					Prepared: 1/3/2020 Analyzed: 1/3/2020					
1,1,1,2-Tetrachloroethane	51.0100	5.0	0.40	50.0000		102	80 - 114			
1,1,1-Trichloroethane	48.7700	5.0	0.79	50.0000		97.5	71 - 127			
1,1,2,2-Tetrachloroethane	49.0200	5.0	0.70	50.0000		98.0	73 - 113			
1,1,2-Trichloroethane	49.3300	5.0	0.57	50.0000		98.7	78 - 112			
1,1-Dichloroethane	47.0300	5.0	0.63	50.0000		94.1	73 - 123			
1,1-Dichloroethene	59.4200	5.0	2.9	50.0000		119	59 - 139			
1,1-Dichloropropene	53.4600	5.0	0.26	50.0000		107	78 - 131			

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Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B0A0015 - MSVOA_S (continued)										
LCS (B0A0015-BS1) - Continued					Prepared: 1/3/2020 Analyzed: 1/3/2020					
1,2,3-Trichloropropane	49.1000	5.0	0.72	50.0000		98.2	71 - 117			
1,2,3-Trichlorobenzene	56.3600	5.0	0.57	50.0000		113	68 - 134			
1,2,4-Trichlorobenzene	58.5300	5.0	0.61	50.0000		117	72 - 141			
1,2,4-Trimethylbenzene	53.1600	5.0	1.0	50.0000		106	81 - 122			
1,2-Dibromo-3-chloropropane	51.0400	10	1.2	50.0000		102	64 - 134			
1,2-Dibromoethane	50.6200	5.0	0.28	50.0000		101	78 - 113			
1,2-Dichlorobenzene	50.2500	5.0	0.45	50.0000		100	79 - 119			
1,2-Dichloroethane	46.2500	5.0	0.88	50.0000		92.5	62 - 126			
1,2-Dichloropropane	49.6600	5.0	0.67	50.0000		99.3	77 - 120			
1,3,5-Trimethylbenzene	54.4600	5.0	0.35	50.0000		109	80 - 123			
1,3-Dichlorobenzene	51.0100	5.0	0.41	50.0000		102	80 - 118			
1,3-Dichloropropane	49.8800	5.0	0.49	50.0000		99.8	80 - 114			
1,4-Dichlorobenzene	51.4200	5.0	0.39	50.0000		103	80 - 117			
2,2-Dichloropropane	50.9600	5.0	0.61	50.0000		102	66 - 133			
2-Chlorotoluene	51.5400	5.0	0.26	50.0000		103	79 - 117			
4-Chlorotoluene	51.9700	5.0	0.20	50.0000		104	80 - 117			
4-Isopropyltoluene	54.4700	5.0	0.28	50.0000		109	81 - 130			
Benzene	94.1900	5.0	0.37	100.000		94.2	79 - 116			
Bromobenzene	50.7200	5.0	0.44	50.0000		101	76 - 113			
Bromochloromethane	47.9300	5.0	0.99	50.0000		95.9	74 - 113			
Bromodichloromethane	48.6500	5.0	0.58	50.0000		97.3	74 - 115			
Bromoform	51.8400	5.0	0.37	50.0000		104	70 - 118			
Bromomethane	61.7200	5.0	4.7	50.0000		123	41 - 170			
Carbon disulfide	46.2400	5.0	3.2	50.0000		92.5	53 - 139			
Carbon tetrachloride	50.8000	5.0	0.65	50.0000		102	71 - 131			
Chlorobenzene	50.7400	5.0	0.29	50.0000		101	83 - 114			
Chloroethane	49.4600	5.0	4.0	50.0000		98.9	61 - 165			
Chloroform	46.6400	5.0	0.75	50.0000		93.3	73 - 117			
Chloromethane	53.6400	5.0	0.98	50.0000		107	51 - 147			
cis-1,2-Dichloroethene	48.2000	5.0	0.82	50.0000		96.4	73 - 121			
cis-1,3-Dichloropropene	52.7200	5.0	0.22	50.0000		105	81 - 136			
Di-isopropyl ether	41.7700	5.0	0.55	50.0000		83.5	66 - 126			
Dibromochloromethane	50.1700	5.0	0.20	50.0000		100	77 - 114			
Dibromomethane	48.6900	5.0	0.56	50.0000		97.4	78 - 110			
Dichlorodifluoromethane	56.1500	5.0	2.6	50.0000		112	22 - 172			
Ethyl Acetate	442.570	50	10	500.000		88.5	48 - 147			
Ethyl Ether	497.130	50	20	500.000		99.4	40 - 155			
Ethyl tert-butyl ether	51.9700	5.0	0.32	50.0000		104	50 - 150			
Ethylbenzene	95.1400	5.0	0.26	100.000		95.1	73 - 128			
Freon-113	54.7700	5.0	3.7	50.0000		110	60 - 144			
Hexachlorobutadiene	51.3000	5.0	0.40	50.0000		103	72 - 147			
Isopropylbenzene	52.8200	5.0	0.32	50.0000		106	79 - 134			

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Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B0A0015 - MSVOA_S (continued)										
LCS (B0A0015-BS1) - Continued					Prepared: 1/3/2020 Analyzed: 1/3/2020					
m,p-Xylene	99.6600	10	0.86	100.000		99.7	79 - 128			
Methylene chloride	46.7000	5.0	3.4	50.0000		93.4	60 - 131			
MTBE	47.9700	5.0	1.3	50.0000		95.9	57 - 131			
n-Butylbenzene	54.0100	5.0	0.42	50.0000		108	82 - 134			
n-Propylbenzene	53.0500	5.0	0.25	50.0000		106	78 - 127			
Naphthalene	43.1300	5.0	0.50	50.0000		86.3	67 - 131			
o-Xylene	98.3900	5.0	0.46	100.000		98.4	79 - 126			
sec-Butylbenzene	53.5400	5.0	0.36	50.0000		107	79 - 130			
Styrene	51.3600	5.0	0.38	50.0000		103	81 - 125			
tert-Amyl methyl ether	55.1800	5.0	0.43	50.0000		110	50 - 142			
tert-Butanol	222.290	100	7.4	250.000		88.9	0 - 168			
tert-Butylbenzene	54.4100	5.0	0.33	50.0000		109	80 - 126			
Tetrachloroethene	53.2500	5.0	0.31	50.0000		106	76 - 127			
Toluene	93.9400	5.0	0.47	100.000		93.9	79 - 119			
trans-1,2-Dichloroethene	49.5600	5.0	1.4	50.0000		99.1	66 - 128			
trans-1,3-Dichloropropene	50.6900	5.0	0.48	50.0000		101	76 - 117			
Trichloroethene	52.3200	5.0	0.64	50.0000		105	81 - 120			
Trichlorofluoromethane	45.5100	5.0	0.79	50.0000		91.0	63 - 138			
Vinyl acetate	413.330	50	9.0	500.000		82.7	60 - 149			
Vinyl chloride	54.6000	5.0	0.74	50.0000		109	58 - 142			
Surrogate: 1,2-Dichloroethane-d4	*43.01*			*50.0000*		*86.0*	*58 - 160*			
Surrogate: 4-Bromofluorobenzene	*48.13*			*50.0000*		*96.3*	*72 - 121*			
Surrogate: Dibromofluoromethan	*44.26*			*50.0000*		*88.5*	*75 - 139*			
Surrogate: Toluene-d8	*49.35*			*50.0000*		*98.7*	*84 - 115*			
LCS Dup (B0A0015-BSD1)					Prepared: 1/3/2020 Analyzed: 1/3/2020					
1,1,1,2-Tetrachloroethane	51.4500	5.0	0.40	50.0000		103	80 - 114	0.859	20	
1,1,1-Trichloroethane	47.7200	5.0	0.79	50.0000		95.4	71 - 127	2.18	20	
1,1,2,2-Tetrachloroethane	50.1900	5.0	0.70	50.0000		100	73 - 113	2.36	20	
1,1,2-Trichloroethane	50.9500	5.0	0.57	50.0000		102	78 - 112	3.23	20	
1,1-Dichloroethane	46.8300	5.0	0.63	50.0000		93.7	73 - 123	0.426	20	
1,1-Dichloroethene	51.8800	5.0	2.9	50.0000		104	59 - 139	13.5	20	
1,1-Dichloropropene	52.4600	5.0	0.26	50.0000		105	78 - 131	1.89	20	
1,2,3-Trichloropropane	49.6300	5.0	0.72	50.0000		99.3	71 - 117	1.07	20	
1,2,3-Trichlorobenzene	53.6800	5.0	0.57	50.0000		107	68 - 134	4.87	20	
1,2,4-Trichlorobenzene	56.3500	5.0	0.61	50.0000		113	72 - 141	3.80	20	
1,2,4-Trimethylbenzene	51.8500	5.0	1.0	50.0000		104	81 - 122	2.50	20	
1,2-Dibromo-3-chloropropane	52.7300	10	1.2	50.0000		105	64 - 134	3.26	20	
1,2-Dibromoethane	52.6700	5.0	0.28	50.0000		105	78 - 113	3.97	20	
1,2-Dichlorobenzene	51.6700	5.0	0.45	50.0000		103	79 - 119	2.79	20	
1,2-Dichloroethane	47.4800	5.0	0.88	50.0000		95.0	62 - 126	2.62	20	

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Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B0A0015 - MSVOA_S (continued)										
LCS Dup (B0A0015-BSD1) - Continued					Prepared: 1/3/2020 Analyzed: 1/3/2020					
1,2-Dichloropropane	50.7500	5.0	0.67	50.0000		102	77 - 120	2.17	20	
1,3,5-Trimethylbenzene	52.4600	5.0	0.35	50.0000		105	80 - 123	3.74	20	
1,3-Dichlorobenzene	51.5300	5.0	0.41	50.0000		103	80 - 118	1.01	20	
1,3-Dichloropropane	51.3900	5.0	0.49	50.0000		103	80 - 114	2.98	20	
1,4-Dichlorobenzene	52.0600	5.0	0.39	50.0000		104	80 - 117	1.24	20	
2,2-Dichloropropane	50.0600	5.0	0.61	50.0000		100	66 - 133	1.78	20	
2-Chlorotoluene	50.7700	5.0	0.26	50.0000		102	79 - 117	1.51	20	
4-Chlorotoluene	51.0600	5.0	0.20	50.0000		102	80 - 117	1.77	20	
4-Isopropyltoluene	52.7400	5.0	0.28	50.0000		105	81 - 130	3.23	20	
Benzene	95.8000	5.0	0.37	100.000		95.8	79 - 116	1.69	20	
Bromobenzene	50.3200	5.0	0.44	50.0000		101	76 - 113	0.792	20	
Bromochloromethane	48.7400	5.0	0.99	50.0000		97.5	74 - 113	1.68	20	
Bromodichloromethane	49.9100	5.0	0.58	50.0000		99.8	74 - 115	2.56	20	
Bromoform	52.7200	5.0	0.37	50.0000		105	70 - 118	1.68	20	
Bromomethane	55.3300	5.0	4.7	50.0000		111	41 - 170	10.9	20	
Carbon disulfide	41.7600	5.0	3.2	50.0000		83.5	53 - 139	10.2	20	
Carbon tetrachloride	48.5200	5.0	0.65	50.0000		97.0	71 - 131	4.59	20	
Chlorobenzene	51.8600	5.0	0.29	50.0000		104	83 - 114	2.18	20	
Chloroethane	45.6600	5.0	4.0	50.0000		91.3	61 - 165	7.99	20	
Chloroform	46.7600	5.0	0.75	50.0000		93.5	73 - 117	0.257	20	
Chloromethane	48.8200	5.0	0.98	50.0000		97.6	51 - 147	9.41	20	
cis-1,2-Dichloroethene	48.6700	5.0	0.82	50.0000		97.3	73 - 121	0.970	20	
cis-1,3-Dichloropropene	53.9800	5.0	0.22	50.0000		108	81 - 136	2.36	20	
Di-isopropyl ether	57.0400	5.0	0.55	50.0000		114	66 - 126	30.9	20	R
Dibromochloromethane	51.0000	5.0	0.20	50.0000		102	77 - 114	1.64	20	
Dibromomethane	49.9800	5.0	0.56	50.0000		100	78 - 110	2.61	20	
Dichlorodifluoromethane	53.0200	5.0	2.6	50.0000		106	22 - 172	5.73	20	
Ethyl Acetate	451.260	50	10	500.000		90.3	48 - 147	1.94	20	
Ethyl Ether	477.310	50	20	500.000		95.5	40 - 155	4.07	20	
Ethyl tert-butyl ether	52.2400	5.0	0.32	50.0000		104	50 - 150	0.518	20	
Ethylbenzene	95.9000	5.0	0.26	100.000		95.9	73 - 128	0.796	20	
Freon-113	49.5200	5.0	3.7	50.0000		99.0	60 - 144	10.1	20	
Hexachlorobutadiene	48.9800	5.0	0.40	50.0000		98.0	72 - 147	4.63	20	
Isopropylbenzene	50.3700	5.0	0.32	50.0000		101	79 - 134	4.75	20	
m,p-Xylene	100.620	10	0.86	100.000		101	79 - 128	0.959	20	
Methylene chloride	45.0200	5.0	3.4	50.0000		90.0	60 - 131	3.66	20	
MTBE	47.9000	5.0	1.3	50.0000		95.8	57 - 131	0.146	20	
n-Butylbenzene	52.2700	5.0	0.42	50.0000		105	82 - 134	3.27	20	
n-Propylbenzene	50.4000	5.0	0.25	50.0000		101	78 - 127	5.12	20	
Naphthalene	42.5600	5.0	0.50	50.0000		85.1	67 - 131	1.33	20	
o-Xylene	99.4100	5.0	0.46	100.000		99.4	79 - 126	1.03	20	
sec-Butylbenzene	51.4400	5.0	0.36	50.0000		103	79 - 130	4.00	20	

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Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B0A0015 - MSVOA_S (continued)										
LCS Dup (B0A0015-BSD1) - Continued					Prepared: 1/3/2020 Analyzed: 1/3/2020					
Styrene	51.5200	5.0	0.38	50.0000		103	81 - 125	0.311	20	
tert-Amyl methyl ether	56.1800	5.0	0.43	50.0000		112	50 - 142	1.80	20	
tert-Butanol	225.780	100	7.4	250.000		90.3	0 - 168	1.56	20	
tert-Butylbenzene	52.0500	5.0	0.33	50.0000		104	80 - 126	4.43	20	
Tetrachloroethene	52.1300	5.0	0.31	50.0000		104	76 - 127	2.13	20	
Toluene	95.6000	5.0	0.47	100.000		95.6	79 - 119	1.75	20	
trans-1,2-Dichloroethene	45.6900	5.0	1.4	50.0000		91.4	66 - 128	8.13	20	
trans-1,3-Dichloropropene	52.4400	5.0	0.48	50.0000		105	76 - 117	3.39	20	
Trichloroethene	51.6100	5.0	0.64	50.0000		103	81 - 120	1.37	20	
Trichlorofluoromethane	45.0600	5.0	0.79	50.0000		90.1	63 - 138	0.994	20	
Vinyl acetate	428.310	50	9.0	500.000		85.7	60 - 149	3.56	20	
Vinyl chloride	48.1100	5.0	0.74	50.0000		96.2	58 - 142	12.6	20	
Surrogate: 1,2-Dichloroethane-d4	*43.70*			*50.0000*		*87.4*	*58 - 160*			
Surrogate: 4-Bromofluorobenzene	*49.79*			*50.0000*		*99.6*	*72 - 121*			
Surrogate: Dibromofluoromethan	*44.71*			*50.0000*		*89.4*	*75 - 139*			
Surrogate: Toluene-d8	*49.87*			*50.0000*		*99.7*	*84 - 115*			

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Volatile Organic Compounds by EPA 5035 / EPA 8260B - Quality Control

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B0A0059 - MSVOA_S										
Blank (B0A0059-BLK1)					Prepared: 1/3/2020 Analyzed: 1/3/2020					
GRO (C4 - C12)	ND	1000	80							
Surrogate: 1,2-Dichloroethane-d4	*44.59*			*50.0000*		*89.2*	*58 - 160*			
Surrogate: 4-Bromofluorobenzene	*50.34*			*50.0000*		*101*	*72 - 121*			
Surrogate: Dibromofluoromethan	*49.39*			*50.0000*		*98.8*	*75 - 139*			
Surrogate: Toluene-d8	*50.97*			*50.0000*		*102*	*84 - 115*			
LCS (B0A0059-BS1)					Prepared: 1/3/2020 Analyzed: 1/3/2020					
Gasoline Range Organics	4680.00	1000	80	5000.00		93.6	70 - 130			
Surrogate: 1,2-Dichloroethane-d4	*48.99*			*50.0000*		*98.0*	*58 - 160*			
Surrogate: 4-Bromofluorobenzene	*50.56*			*50.0000*		*101*	*72 - 121*			
Surrogate: Dibromofluoromethan	*49.03*			*50.0000*		*98.1*	*75 - 139*			
Surrogate: Toluene-d8	*49.92*			*50.0000*		*99.8*	*84 - 115*			
LCS Dup (B0A0059-BSD1)					Prepared: 1/3/2020 Analyzed: 1/3/2020					
Gasoline Range Organics	4990.00	1000	80	5000.00		99.8	70 - 130	6.41	20	
Surrogate: 1,2-Dichloroethane-d4	*48.31*			*50.0000*		*96.6*	*58 - 160*			
Surrogate: 4-Bromofluorobenzene	*50.46*			*50.0000*		*101*	*72 - 121*			
Surrogate: Dibromofluoromethan	*47.66*			*50.0000*		*95.3*	*75 - 139*			
Surrogate: Toluene-d8	*50.48*			*50.0000*		*101*	*84 - 115*			

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Semivolatile Organic Compounds by EPA 8270C - Quality Control

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B0A0093 - MSSEMI_S										
Blank (B0A0093-BLK1)					Prepared: 1/3/2020 Analyzed: 1/3/2020					
1,2,4-Trichlorobenzene	ND	330	50							
1,2-Dichlorobenzene	ND	330	26							
1,3-Dichlorobenzene	ND	330	27							
1,4-Dichlorobenzene	ND	330	27							
2,4,5-Trichlorophenol	ND	330	30							
2,4,6-Trichlorophenol	ND	330	35							
2,4-Dichlorophenol	ND	1600	34							
2,4-Dimethylphenol	ND	330	26							
2,4-Dinitrophenol	ND	1600	86							
2,4-Dinitrotoluene	ND	330	33							
2,6-Dinitrotoluene	ND	330	49							
2-Chloronaphthalene	ND	330	28							
2-Chlorophenol	ND	330	31							
2-Methylnaphthalene	ND	330	27							
2-Methylphenol	ND	330	36							
2-Nitroaniline	ND	1600	43							
2-Nitrophenol	ND	330	45							
3,3´-Dichlorobenzidine	ND	660	280							
3-Nitroaniline	ND	1600	49							
4,6-Dinitro-2-methyphenol	ND	1600	41							
4-Bromophenyl-phenylether	ND	330	64							
4-Chloro-3-methylphenol	ND	660	71							
4-Chloroaniline	ND	660	53							
4-Chlorophenyl-phenylether	ND	330	33							
4-Methylphenol	ND	330	57							
4-Nitroaniline	ND	1600	37							
4-Nitrophenol	ND	330	64							
Acenaphthene	ND	330	43							
Acenaphthylene	ND	330	62							
Anthracene	ND	330	51							
Benzidine (M)	ND	1600	1400							
Benzo(a)anthracene	ND	330	44							
Benzo(a)pyrene	ND	330	64							
Benzo(b)fluoranthene	ND	330	65							
Benzo(g,h,i)perylene	ND	330	81							
Benzo(k)fluoranthene	ND	330	33							
Benzoic acid	ND	1600	890							
Benzyl alcohol	ND	660	32							
bis(2-chloroethoxy)methane	ND	330	64							
bis(2-Chloroethyl)ether	ND	330	66							
bis(2-chloroisopropyl)ether	ND	330	76							

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Semivolatile Organic Compounds by EPA 8270C - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B0A0093 - MSSEMI_S (continued)										
Blank (B0A0093-BLK1) - Continued					Prepared: 1/3/2020 Analyzed: 1/3/2020					
bis(2-ethylhexyl)phthalate	ND	330	63							
Butylbenzylphthalate	ND	330	41							
Chrysene	ND	330	84							
Di-n-butylphthalate	ND	330	51							
Di-n-octylphthalate	ND	330	63							
Dibenz(a,h)anthracene	ND	330	45							
Dibenzofuran	ND	330	58							
Diethyl phthalate	ND	330	58							
Dimethyl phthalate	ND	330	40							
Fluoranthene	ND	330	60							
Fluorene	ND	330	110							
Hexachlorobenzene	ND	330	55							
Hexachlorobutadiene	ND	660	53							
Hexachlorocyclopentadiene	ND	660	70							
Hexachloroethane	ND	330	94							
Indeno(1,2,3-cd)pyrene	ND	330	75							
Isophorone	ND	330	85							
N-Nitroso-di-n propylamine	ND	330	60							
N-Nitrosodiphenylamine	ND	330	32							
Naphthalene	ND	330	56							
Nitrobenzene	ND	330	57							
Pentachlorophenol	ND	1600	50							
Phenanthrene	ND	330	67							
Phenol	ND	330	34							
Pyrene	ND	330	72							
Pyridine	ND	1600	270							
Surrogate: 1,2-Dichlorobenzene-d	*2136*			*3333.33*		*64.1*	*28 - 77*			
Surrogate: 2,4,6-Tribromophenol	*3787*			*3325.00*		*114*	*17 - 157*			
Surrogate: 2-Chlorophenol-d4	*2212*			*3325.00*		*66.5*	*35 - 98*			
Surrogate: 2-Fluorobiphenyl	*2360*			*3333.33*		*70.8*	*35 - 88*			
Surrogate: 2-Fluorophenol	*2104*			*3325.00*		*63.3*	*32 - 88*			
Surrogate: 4-Terphenyl-d14	*2776*			*3333.33*		*83.3*	*35 - 114*			
Surrogate: Nitrobenzene-d5	*2089*			*3333.33*		*62.7*	*27 - 80*			
Surrogate: Phenol-d6	*2193*			*3325.00*		*66.0*	*35 - 98*			
LCS (B0A0093-BS1)					Prepared: 1/3/2020 Analyzed: 1/3/2020					
1,2,4-Trichlorobenzene	2487.00	330	50	3333.33		74.6	52 - 94			
1,2-Dichlorobenzene	2433.67	330	26	3333.33		73.0	47 - 95			
1,3-Dichlorobenzene	2442.67	330	27	3333.33		73.3	50 - 88			
1,4-Dichlorobenzene	2373.33	330	27	3333.33		71.2	47 - 89			
2,4,5-Trichlorophenol	3068.33	330	30	3333.33		92.0	66 - 113			

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Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B0A0093 - MSSEMI_S (continued)										
LCS (B0A0093-BS1) - Continued					Prepared: 1/3/2020 Analyzed: 1/3/2020					
2,4,6-Trichlorophenol	3232.33	330	35	3333.33		97.0	59 - 113			
2,4-Dichlorophenol	2829.67	1600	34	3333.33		84.9	61 - 98			
2,4-Dimethylphenol	3211.00	330	26	3333.33		96.3	54 - 108			
2,4-Dinitrophenol	3562.33	1600	86	3333.33		107	58 - 135			
2,4-Dinitrotoluene	3563.67	330	33	3333.33		107	63 - 115			
2,6-Dinitrotoluene	3572.00	330	49	3333.33		107	67 - 111			
2-Chloronaphthalene	2997.00	330	28	3333.33		89.9	59 - 104			
2-Chlorophenol	2619.00	330	31	3333.33		78.6	50 - 97			
2-Methylnaphthalene	2480.67	330	27	3333.33		74.4	56 - 112			
2-Methylphenol	2520.00	330	36	3333.33		75.6	57 - 102			
2-Nitroaniline	3300.67	1600	43	3333.33		99.0	55 - 118			
2-Nitrophenol	3284.33	330	45	3333.33		98.5	61 - 100			
3,3´-Dichlorobenzidine	2500.67	660	280	3333.33		75.0	47 - 113			
3-Nitroaniline	3468.67	1600	49	3333.33		104	66 - 117			
4,6-Dinitro-2-methyphenol	3587.33	1600	41	3333.33		108	62 - 125			
4-Bromophenyl-phenylether	2784.67	330	64	3333.33		83.5	45 - 137			
4-Chloro-3-methylphenol	2981.33	660	71	3333.33		89.4	64 - 101			
4-Chloroaniline	2884.00	660	53	3333.33		86.5	59 - 110			
4-Chlorophenyl-phenylether	2928.33	330	33	3333.33		87.8	58 - 109			
4-Methylphenol	2444.67	330	57	3333.33		73.3	57 - 106			
4-Nitroaniline	3468.67	1600	37	3333.33		104	70 - 117			
4-Nitrophenol	3556.33	330	64	3333.33		107	62 - 114			
Acenaphthene	2899.33	330	43	3333.33		87.0	59 - 107			
Acenaphthylene	2843.00	330	62	3333.33		85.3	61 - 108			
Anthracene	2916.00	330	51	3333.33		87.5	63 - 106			
Benzidine (M)	2411.33	1600	1400	3333.33		72.3	25 - 109			
Benzo(a)anthracene	3077.67	330	44	3333.33		92.3	60 - 103			
Benzo(a)pyrene	2899.00	330	64	3333.33		87.0	63 - 110			
Benzo(b)fluoranthene	2668.67	330	65	3333.33		80.1	55 - 115			
Benzo(g,h,i)perylene	2824.33	330	81	3333.33		84.7	66 - 107			
Benzo(k)fluoranthene	3012.00	330	33	3333.33		90.4	60 - 115			
Benzoic acid	2772.33	1600	890	3333.33		83.2	16 - 110			
Benzyl alcohol	2497.00	660	32	3333.33		74.9	57 - 107			
bis(2-chloroethoxy)methane	2664.00	330	64	3333.33		79.9	51 - 97			
bis(2-Chloroethyl)ether	2543.67	330	66	3333.33		76.3	45 - 97			
bis(2-chloroisopropyl)ether	2915.33	330	76	3333.33		87.5	2 - 127			
bis(2-ethylhexyl)phthalate	3777.00	330	63	3333.33		113	62 - 115			
Butylbenzylphthalate	3737.67	330	41	3333.33		112	60 - 117			
Chrysene	2987.00	330	84	3333.33		89.6	52 - 120			
Di-n-butylphthalate	3289.33	330	51	3333.33		98.7	65 - 114			
Di-n-octylphthalate	3379.67	330	63	3333.33		101	52 - 128			
Dibenz(a,h)anthracene	2753.67	330	45	3333.33		82.6	62 - 113			

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South San Francisco , CA 94080	Reported : 01/08/2020

Semivolatile Organic Compounds by EPA 8270C - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B0A0093 - MSSEMI_S (continued)										
LCS (B0A0093-BS1) - Continued					Prepared: 1/3/2020 Analyzed: 1/3/2020					
Dibenzofuran	2825.00	330	58	3333.33		84.8	66 - 110			
Diethyl phthalate	3132.00	330	58	3333.33		94.0	61 - 113			
Dimethyl phthalate	3170.67	330	40	3333.33		95.1	64 - 105			
Fluoranthene	2866.67	330	60	3333.33		86.0	62 - 106			
Fluorene	2952.00	330	110	3333.33		88.6	58 - 113			
Hexachlorobenzene	2682.67	330	55	3333.33		80.5	65 - 110			
Hexachlorobutadiene	2226.33	660	53	3333.33		66.8	48 - 96			
Hexachlorocyclopentadiene	2744.00	660	70	3333.33		82.3	46 - 110			
Hexachloroethane	2252.33	330	94	3333.33		67.6	48 - 91			
Indeno(1,2,3-cd)pyrene	2763.33	330	75	3333.33		82.9	60 - 112			
Isophorone	2735.33	330	85	3333.33		82.1	52 - 100			
N-Nitroso-di-n propylamine	2663.33	330	60	3333.33		79.9	51 - 99			
N-Nitrosodiphenylamine	3144.33	330	32	3333.33		94.3	65 - 107			
Naphthalene	2471.00	330	56	3333.33		74.1	53 - 95			
Nitrobenzene	2613.67	330	57	3333.33		78.4	51 - 97			
Pentachlorophenol	3107.67	1600	50	3333.33		93.2	58 - 118			
Phenanthrene	2857.33	330	67	3333.33		85.7	63 - 107			
Phenol	2793.00	330	34	3333.33		83.8	49 - 98			
Pyrene	2840.33	330	72	3333.33		85.2	62 - 106			
Pyridine	1041.00	1600	270	3333.33		31.2	0 - 54			
Surrogate: 1,2-Dichlorobenzene-d	*2155*			*3333.33*		*64.6*	*28 - 77*			
Surrogate: 2,4,6-Tribromophenol	*4328*			*3325.00*		*130*	*17 - 157*			
Surrogate: 2-Chlorophenol-d4	*2363*			*3325.00*		*71.1*	*35 - 98*			
Surrogate: 2-Fluorobiphenyl	*2585*			*3333.33*		*77.5*	*35 - 88*			
Surrogate: 2-Fluorophenol	*2279*			*3325.00*		*68.6*	*32 - 88*			
Surrogate: 4-Terphenyl-d14	*2885*			*3333.33*		*86.6*	*35 - 114*			
Surrogate: Nitrobenzene-d5	*2342*			*3333.33*		*70.3*	*27 - 80*			
Surrogate: Phenol-d6	*2386*			*3325.00*		*71.7*	*35 - 98*			
Matrix Spike (B0A0093-MS1)			**Source: 1904739-01**		Prepared: 1/3/2020 Analyzed: 1/3/2020					
1,2,4-Trichlorobenzene	2482.67	330	50	3333.33	ND	74.5	44 - 98			
1,2-Dichlorobenzene	2455.33	330	26	3333.33	ND	73.7	38 - 101			
1,3-Dichlorobenzene	2385.67	330	27	3333.33	ND	71.6	39 - 95			
1,4-Dichlorobenzene	2371.33	330	27	3333.33	ND	71.1	39 - 94			
2,4,5-Trichlorophenol	3129.67	330	30	3333.33	ND	93.9	53 - 122			
2,4,6-Trichlorophenol	3391.00	330	35	3333.33	ND	102	44 - 126			
2,4-Dichlorophenol	2948.00	1600	34	3333.33	ND	88.4	51 - 105			
2,4-Dimethylphenol	3268.00	330	26	3333.33	ND	98.0	50 - 114			
2,4-Dinitrophenol	2955.00	1600	86	3333.33	ND	88.7	5 - 171			
2,4-Dinitrotoluene	3701.33	330	33	3333.33	ND	111	39 - 139			
2,6-Dinitrotoluene	3726.67	330	49	3333.33	ND	112	36 - 146			

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Semivolatile Organic Compounds by EPA 8270C - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B0A0093 - MSSEMI_S (continued)										
Matrix Spike (B0A0093-MS1) - Continued			**Source: 1904739-01**		Prepared: 1/3/2020 Analyzed: 1/3/2020					
2-Chloronaphthalene	3111.00	330	28	3333.33	ND	93.3	50 - 111			
2-Chlorophenol	2726.33	330	31	3333.33	ND	81.8	40 - 104			
2-Methylnaphthalene	2591.33	330	27	3333.33	ND	77.7	46 - 115			
2-Methylphenol	2641.00	330	36	3333.33	ND	79.2	47 - 109			
2-Nitroaniline	3357.00	1600	43	3333.33	ND	101	49 - 120			
2-Nitrophenol	3259.67	330	45	3333.33	ND	97.8	25 - 139			
3,3′-Dichlorobenzidine	2635.00	660	280	3333.33	ND	79.1	35 - 122			
3-Nitroaniline	3556.67	1600	49	3333.33	ND	107	46 - 131			
4,6-Dinitro-2-methyphenol	3735.67	1600	41	3333.33	ND	112	32 - 158			
4-Bromophenyl-phenylether	2924.67	330	64	3333.33	ND	87.7	35 - 142			
4-Chloro-3-methylphenol	3115.67	660	71	3333.33	ND	93.5	52 - 110			
4-Chloroaniline	2992.33	660	53	3333.33	ND	89.8	48 - 118			
4-Chlorophenyl-phenylether	3083.33	330	33	3333.33	ND	92.5	49 - 114			
4-Methylphenol	2562.67	330	57	3333.33	ND	76.9	48 - 112			
4-Nitroaniline	3556.67	1600	37	3333.33	ND	107	40 - 153			
4-Nitrophenol	3426.33	330	64	3333.33	ND	103	45 - 122			
Acenaphthene	3017.33	330	43	3333.33	ND	90.5	47 - 117			
Acenaphthylene	2941.67	330	62	3333.33	ND	88.3	47 - 120			
Anthracene	3045.33	330	51	3333.33	ND	91.4	50 - 115			
Benzidine (M)	2046.00	1600	1400	3333.33	ND	61.4	25 - 131			
Benzo(a)anthracene	3182.00	330	44	3333.33	ND	95.5	51 - 108			
Benzo(a)pyrene	2924.00	330	64	3333.33	ND	87.7	46 - 120			
Benzo(b)fluoranthene	2754.00	330	65	3333.33	ND	82.6	41 - 120			
Benzo(g,h,i)perylene	2888.33	330	81	3333.33	ND	86.6	50 - 117			
Benzo(k)fluoranthene	3107.67	330	33	3333.33	ND	93.2	33 - 135			
Benzoic acid	ND	1600	890	3333.33	ND	NR	0 - 104			
Benzyl alcohol	2584.67	660	32	3333.33	ND	77.5	41 - 116			
bis(2-chloroethoxy)methane	2666.33	330	64	3333.33	ND	80.0	41 - 101			
bis(2-Chloroethyl)ether	2572.67	330	66	3333.33	ND	77.2	33 - 106			
bis(2-chloroisopropyl)ether	3005.33	330	76	3333.33	ND	90.2	0 - 128			
bis(2-ethylhexyl)phthalate	3906.33	330	63	3333.33	ND	117	45 - 126			
Butylbenzylphthalate	3912.67	330	41	3333.33	ND	117	51 - 125			
Chrysene	3168.33	330	84	3333.33	ND	95.0	38 - 131			
Di-n-butylphthalate	3370.00	330	51	3333.33	ND	101	53 - 124			
Di-n-octylphthalate	3390.33	330	63	3333.33	ND	102	29 - 150			
Dibenz(a,h)anthracene	2765.33	330	45	3333.33	ND	83.0	42 - 123			
Dibenzofuran	2935.33	330	58	3333.33	ND	88.1	55 - 121			
Diethyl phthalate	3263.33	330	58	3333.33	ND	97.9	44 - 127			
Dimethyl phthalate	3229.33	330	40	3333.33	ND	96.9	51 - 114			
Fluoranthene	3018.00	330	60	3333.33	ND	90.5	49 - 114			
Fluorene	3009.33	330	110	3333.33	ND	90.3	45 - 123			
Hexachlorobenzene	2768.33	330	55	3333.33	ND	83.0	51 - 119			

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Semivolatile Organic Compounds by EPA 8270C - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B0A0093 - MSSEMI_S (continued)										
Matrix Spike (B0A0093-MS1) - Continued			**Source: 1904739-01**		Prepared: 1/3/2020 Analyzed: 1/3/2020					
Hexachlorobutadiene	2284.67	660	53	3333.33	ND	68.5	42 - 97			
Hexachlorocyclopentadiene	2823.00	660	70	3333.33	ND	84.7	36 - 115			
Hexachloroethane	2299.33	330	94	3333.33	ND	69.0	35 - 101			
Indeno(1,2,3-cd)pyrene	2832.33	330	75	3333.33	ND	85.0	44 - 118			
Isophorone	2817.67	330	85	3333.33	ND	84.5	42 - 103			
N-Nitroso-di-n propylamine	2848.00	330	60	3333.33	ND	85.4	42 - 103			
N-Nitrosodiphenylamine	3271.33	330	32	3333.33	ND	98.1	52 - 116			
Naphthalene	2534.33	330	56	3333.33	ND	76.0	44 - 101			
Nitrobenzene	2577.33	330	57	3333.33	ND	77.3	44 - 99			
Pentachlorophenol	3272.00	1600	50	3333.33	ND	98.2	39 - 126			
Phenanthrene	2993.33	330	67	3333.33	ND	89.8	51 - 115			
Phenol	2909.00	330	34	3333.33	ND	87.3	39 - 103			
Pyrene	2992.67	330	72	3333.33	ND	89.8	48 - 114			
Pyridine	2283.33	1600	270	3333.33	ND	68.5	20 - 91			
Surrogate: 1,2-Dichlorobenzene-d	*2102*			*3333.33*		*63.1*	*28 - 77*			
Surrogate: 2,4,6-Tribromophenol	*4314*			*3325.00*		*130*	*17 - 157*			
Surrogate: 2-Chlorophenol-d4	*2416*			*3325.00*		*72.7*	*35 - 98*			
Surrogate: 2-Fluorobiphenyl	*2547*			*3333.33*		*76.4*	*35 - 88*			
Surrogate: 2-Fluorophenol	*2244*			*3325.00*		*67.5*	*32 - 88*			
Surrogate: 4-Terphenyl-d14	*3032*			*3333.33*		*91.0*	*35 - 114*			
Surrogate: Nitrobenzene-d5	*2297*			*3333.33*		*68.9*	*27 - 80*			
Surrogate: Phenol-d6	*2399*			*3325.00*		*72.1*	*35 - 98*			
Matrix Spike Dup (B0A0093-MSD1)			**Source: 1904739-01**		Prepared: 1/3/2020 Analyzed: 1/3/2020					
1,2,4-Trichlorobenzene	2569.67	330	50	3333.33	ND	77.1	44 - 98	3.44	20	
1,2-Dichlorobenzene	2370.67	330	26	3333.33	ND	71.1	38 - 101	3.51	20	
1,3-Dichlorobenzene	2363.00	330	27	3333.33	ND	70.9	39 - 95	0.955	20	
1,4-Dichlorobenzene	2335.00	330	27	3333.33	ND	70.1	39 - 94	1.54	20	
2,4,5-Trichlorophenol	3088.00	330	30	3333.33	ND	92.6	53 - 122	1.34	20	
2,4,6-Trichlorophenol	3294.67	330	35	3333.33	ND	98.8	44 - 126	2.88	20	
2,4-Dichlorophenol	2955.33	1600	34	3333.33	ND	88.7	51 - 105	0.248	20	
2,4-Dimethylphenol	3270.67	330	26	3333.33	ND	98.1	50 - 114	0.0816	20	
2,4-Dinitrophenol	2799.33	1600	86	3333.33	ND	84.0	5 - 171	5.41	20	
2,4-Dinitrotoluene	3617.00	330	33	3333.33	ND	109	39 - 139	2.30	20	
2,6-Dinitrotoluene	3583.00	330	49	3333.33	ND	107	36 - 146	3.93	20	
2-Chloronaphthalene	3084.00	330	28	3333.33	ND	92.5	50 - 111	0.872	20	
2-Chlorophenol	2652.33	330	31	3333.33	ND	79.6	40 - 104	2.75	20	
2-Methylnaphthalene	2597.67	330	27	3333.33	ND	77.9	46 - 115	0.244	20	
2-Methylphenol	2609.33	330	36	3333.33	ND	78.3	47 - 109	1.21	20	
2-Nitroaniline	3247.67	1600	43	3333.33	ND	97.4	49 - 120	3.31	20	
2-Nitrophenol	3262.00	330	45	3333.33	ND	97.9	25 - 139	0.0715	20	

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Semivolatile Organic Compounds by EPA 8270C - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B0A0093 - MSSEMI_S (continued)										
Matrix Spike Dup (B0A0093-MSD1) - Continued			**Source: 1904739-01**		Prepared: 1/3/2020 Analyzed: 1/3/2020					
3,3′-Dichlorobenzidine	2606.00	660	280	3333.33	ND	78.2	35 - 122	1.11	20	
3-Nitroaniline	3471.33	1600	49	3333.33	ND	104	46 - 131	2.43	20	
4,6-Dinitro-2-methyphenol	3701.33	1600	41	3333.33	ND	111	32 - 158	0.923	20	
4-Bromophenyl-phenylether	3003.00	330	64	3333.33	ND	90.1	35 - 142	2.64	20	
4-Chloro-3-methylphenol	3094.00	660	71	3333.33	ND	92.8	52 - 110	0.698	20	
4-Chloroaniline	2947.33	660	53	3333.33	ND	88.4	48 - 118	1.52	20	
4-Chlorophenyl-phenylether	3125.00	330	33	3333.33	ND	93.8	49 - 114	1.34	20	
4-Methylphenol	2495.33	330	57	3333.33	ND	74.9	48 - 112	2.66	20	
4-Nitroaniline	3471.33	1600	37	3333.33	ND	104	40 - 153	2.43	20	
4-Nitrophenol	3235.67	330	64	3333.33	ND	97.1	45 - 122	5.72	20	
Acenaphthene	2996.67	330	43	3333.33	ND	89.9	47 - 117	0.687	20	
Acenaphthylene	2930.33	330	62	3333.33	ND	87.9	47 - 120	0.386	20	
Anthracene	2993.33	330	51	3333.33	ND	89.8	50 - 115	1.72	20	
Benzidine (M)	1947.33	1600	1400	3333.33	ND	58.4	25 - 131	4.94	20	
Benzo(a)anthracene	3148.00	330	44	3333.33	ND	94.4	51 - 108	1.07	20	
Benzo(a)pyrene	2963.00	330	64	3333.33	ND	88.9	46 - 120	1.32	20	
Benzo(b)fluoranthene	2787.00	330	65	3333.33	ND	83.6	41 - 120	1.19	20	
Benzo(g,h,i)perylene	2929.67	330	81	3333.33	ND	87.9	50 - 117	1.42	20	
Benzo(k)fluoranthene	3146.00	330	33	3333.33	ND	94.4	33 - 135	1.23	20	
Benzoic acid	ND	1600	890	3333.33	ND	NR	0 - 104	NR	20	
Benzyl alcohol	2516.00	660	32	3333.33	ND	75.5	41 - 116	2.69	20	
bis(2-chloroethoxy)methane	2664.00	330	64	3333.33	ND	79.9	41 - 101	0.0875	20	
bis(2-Chloroethyl)ether	2490.67	330	66	3333.33	ND	74.7	33 - 106	3.24	20	
bis(2-chloroisopropyl)ether	2886.00	330	76	3333.33	ND	86.6	0 - 128	4.05	20	
bis(2-ethylhexyl)phthalate	3804.67	330	63	3333.33	ND	114	45 - 126	2.64	20	
Butylbenzylphthalate	3835.33	330	41	3333.33	ND	115	51 - 125	2.00	20	
Chrysene	3108.00	330	84	3333.33	ND	93.2	38 - 131	1.92	20	
Di-n-butylphthalate	3308.33	330	51	3333.33	ND	99.2	53 - 124	1.85	20	
Di-n-octylphthalate	3310.67	330	63	3333.33	ND	99.3	29 - 150	2.38	20	
Dibenz(a,h)anthracene	2795.67	330	45	3333.33	ND	83.9	42 - 123	1.09	20	
Dibenzofuran	2892.00	330	58	3333.33	ND	86.8	55 - 121	1.49	20	
Diethyl phthalate	3182.00	330	58	3333.33	ND	95.5	44 - 127	2.52	20	
Dimethyl phthalate	3176.00	330	40	3333.33	ND	95.3	51 - 114	1.67	20	
Fluoranthene	2911.00	330	60	3333.33	ND	87.3	49 - 114	3.61	20	
Fluorene	2962.00	330	110	3333.33	ND	88.9	45 - 123	1.59	20	
Hexachlorobenzene	2914.00	330	55	3333.33	ND	87.4	51 - 119	5.13	20	
Hexachlorobutadiene	2327.00	660	53	3333.33	ND	69.8	42 - 97	1.84	20	
Hexachlorocyclopentadiene	2821.00	660	70	3333.33	ND	84.6	36 - 115	0.0709	20	
Hexachloroethane	2208.33	330	94	3333.33	ND	66.2	35 - 101	4.04	20	
Indeno(1,2,3-cd)pyrene	2895.00	330	75	3333.33	ND	86.9	44 - 118	2.19	20	
Isophorone	2813.33	330	85	3333.33	ND	84.4	42 - 103	0.154	20	
N-Nitroso-di-n propylamine	2710.00	330	60	3333.33	ND	81.3	42 - 103	4.97	20	

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Semivolatile Organic Compounds by EPA 8270C - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B0A0093 - MSSEMI_S (continued)										
Matrix Spike Dup (B0A0093-MSD1) - Continued			**Source: 1904739-01**		Prepared: 1/3/2020 Analyzed: 1/3/2020					
N-Nitrosodiphenylamine	3273.00	330	32	3333.33	ND	98.2	52 - 116	0.0509	20	
Naphthalene	2534.00	330	56	3333.33	ND	76.0	44 - 101	0.0131	20	
Nitrobenzene	2603.00	330	57	3333.33	ND	78.1	44 - 99	0.991	20	
Pentachlorophenol	3318.33	1600	50	3333.33	ND	99.6	39 - 126	1.41	20	
Phenanthrene	2999.00	330	67	3333.33	ND	90.0	51 - 115	0.189	20	
Phenol	2803.00	330	34	3333.33	ND	84.1	39 - 103	3.71	20	
Pyrene	2968.33	330	72	3333.33	ND	89.0	48 - 114	0.816	20	
Pyridine	2392.00	1600	270	3333.33	ND	71.8	20 - 91	4.65	20	
Surrogate: 1,2-Dichlorobenzene-d	*2011*			*3333.33*		*60.3*	*28 - 77*			
Surrogate: 2,4,6-Tribromophenol	*4180*			*3325.00*		*126*	*17 - 157*			
Surrogate: 2-Chlorophenol-d4	*2369*			*3325.00*		*71.2*	*35 - 98*			
Surrogate: 2-Fluorobiphenyl	*2555*			*3333.33*		*76.7*	*35 - 88*			
Surrogate: 2-Fluorophenol	*2190*			*3325.00*		*65.9*	*32 - 88*			
Surrogate: 4-Terphenyl-d14	*3126*			*3333.33*		*93.8*	*35 - 114*			
Surrogate: Nitrobenzene-d5	*2262*			*3333.33*		*67.9*	*27 - 80*			
Surrogate: Phenol-d6	*2301*			*3325.00*		*69.2*	*35 - 98*			

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Semivolatile Organic Compounds by EPA 8270C - Quality Control

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B9L0812 - MSSEMI_W										
Blank (B9L0812-BLK1)					Prepared: 12/31/2019 Analyzed: 12/31/2019					
1,2,4-Trichlorobenzene	ND	10	2.3							
1,2-Dichlorobenzene	ND	10	2.0							
1,3-Dichlorobenzene	ND	10	2.0							
1,4-Dichlorobenzene	ND	10	1.9							
2,4,5-Trichlorophenol	ND	10	2.0							
2,4,6-Trichlorophenol	ND	10	1.9							
2,4-Dichlorophenol	ND	10	1.4							
2,4-Dimethylphenol	ND	10	0.83							
2,4-Dinitrophenol	ND	50	3.8							
2,4-Dinitrotoluene	ND	10	2.4							
2,6-Dinitrotoluene	ND	10	1.8							
2-Chloronaphthalene	ND	10	2.2							
2-Chlorophenol	ND	10	1.7							
2-Methylnaphthalene	ND	10	2.8							
2-Methylphenol	ND	10	0.92							
2-Nitroaniline	ND	50	1.2							
2-Nitrophenol	ND	10	1.9							
3,3´-Dichlorobenzidine	ND	20	1.6							
3-Nitroaniline	ND	50	1.1							
4,6-Dinitro-2-methyphenol	ND	50	2.0							
4-Bromophenyl-phenylether	ND	10	2.6							
4-Chloro-3-methylphenol	ND	50	1.0							
4-Chloroaniline	ND	20	0.70							
4-Chlorophenyl-phenylether	ND	10	2.9							
4-Methylphenol	ND	10	0.88							
4-Nitroaniline	ND	20	1.2							
4-Nitrophenol	ND	50	0.51							
Acenaphthene	ND	10	2.1							
Acenaphthylene	ND	10	2.1							
Anthracene	ND	10	2.1							
Benzidine (M)	ND	50	3.4							
Benzo(a)anthracene	ND	10	2.1							
Benzo(a)pyrene	ND	10	1.8							
Benzo(b)fluoranthene	ND	10	2.5							
Benzo(g,h,i)perylene	ND	10	1.8							
Benzo(k)fluoranthene	ND	10	2.8							
Benzoic acid	ND	50	17							
Benzyl alcohol	ND	20	0.60							
bis(2-chloroethoxy)methane	ND	10	1.4							
bis(2-Chloroethyl)ether	ND	10	1.7							
bis(2-chloroisopropyl)ether	ND	10	1.8							

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Semivolatile Organic Compounds by EPA 8270C - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B9L0812 - MSSEMI_W (continued)										
Blank (B9L0812-BLK1) - Continued						Prepared: 12/31/2019 Analyzed: 12/31/2019				
bis(2-ethylhexyl)phthalate	ND	10	1.7							
Butylbenzylphthalate	ND	10	2.6							
Chrysene	ND	10	1.9							
Di-n-butylphthalate	ND	10	1.5							
Di-n-octylphthalate	ND	10	1.8							
Dibenz(a,h)anthracene	ND	10	2.7							
Dibenzofuran	ND	10	2.5							
Diethyl phthalate	ND	10	1.3							
Dimethyl phthalate	ND	10	1.3							
Fluoranthene	ND	10	2.2							
Fluorene	ND	10	2.6							
Hexachlorobenzene	ND	10	3.3							
Hexachlorobutadiene	ND	20	2.7							
Hexachlorocyclopentadiene	ND	10	3.4							
Hexachloroethane	ND	10	1.8							
Indeno(1,2,3-cd)pyrene	ND	10	2.2							
Isophorone	ND	10	1.1							
N-Nitroso-di-n propylamine	ND	10	1.3							
N-Nitrosodiphenylamine	ND	10	1.6							
Naphthalene	ND	10	2.3							
Nitrobenzene	ND	10	1.5							
Pentachlorophenol	ND	50	1.5							
Phenanthrene	ND	10	2.3							
Phenol	ND	10	0.35							
Pyrene	ND	10	2.2							
Pyridine	ND	50	0.55							
Surrogate: 1,2-Dichlorobenzene-d	*57.48*			*100.000*		*57.5*	*30 - 78*			
Surrogate: 2,4,6-Tribromophenol	*100.5*			*99.7500*		*101*	*47 - 158*			
Surrogate: 2-Chlorophenol-d4	*55.29*			*99.7500*		*55.4*	*28 - 84*			
Surrogate: 2-Fluorobiphenyl	*62.71*			*100.000*		*62.7*	*32 - 90*			
Surrogate: 2-Fluorophenol	*26.89*			*99.7500*		*27.0*	*13 - 41*			
Surrogate: 4-Terphenyl-d14	*71.33*			*100.000*		*71.3*	*36 - 112*			
Surrogate: Nitrobenzene-d5	*66.04*			*100.000*		*66.0*	*30 - 82*			
Surrogate: Phenol-d6	*15.88*			*99.7500*		*15.9*	*8 - 26*			
LCS (B9L0812-BS1)						Prepared: 12/31/2019 Analyzed: 12/31/2019				
1,2,4-Trichlorobenzene	77.5800	10	2.3	100.000		77.6	55 - 95			
1,2-Dichlorobenzene	76.7000	10	2.0	100.000		76.7	36 - 90			
1,3-Dichlorobenzene	77.3100	10	2.0	100.000		77.3	53 - 85			
1,4-Dichlorobenzene	75.2600	10	1.9	100.000		75.3	53 - 86			
2,4,5-Trichlorophenol	88.9100	10	2.0	100.000		88.9	68 - 113			

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Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B9L0812 - MSSEMI_W (continued)										
LCS (B9L0812-BS1) - Continued					Prepared: 12/31/2019 Analyzed: 12/31/2019					
2,4,6-Trichlorophenol	94.7000	10	1.9	100.000		94.7	63 - 113			
2,4-Dichlorophenol	83.5000	10	1.4	100.000		83.5	59 - 94			
2,4-Dimethylphenol	79.0000	10	0.83	100.000		79.0	50 - 98			
2,4-Dinitrophenol	106.400	50	3.8	100.000		106	60 - 136			
2,4-Dinitrotoluene	105.000	10	2.4	100.000		105	60 - 126			
2,6-Dinitrotoluene	102.410	10	1.8	100.000		102	65 - 119			
2-Chloronaphthalene	92.0800	10	2.2	100.000		92.1	63 - 103			
2-Chlorophenol	74.1100	10	1.7	100.000		74.1	37 - 86			
2-Methylnaphthalene	76.9300	10	2.8	100.000		76.9	61 - 110			
2-Methylphenol	57.8600	10	0.92	100.000		57.9	33 - 78			
2-Nitroaniline	107.900	50	1.2	100.000		108	61 - 122			
2-Nitrophenol	94.5000	10	1.9	100.000		94.5	56 - 106			
3,3´-Dichlorobenzidine	86.5800	20	1.6	100.000		86.6	52 - 108			
3-Nitroaniline	101.750	50	1.1	100.000		102	66 - 119			
4,6-Dinitro-2-methyphenol	111.240	50	2.0	100.000		111	62 - 132			
4-Bromophenyl-phenylether	85.3500	10	2.6	100.000		85.4	34 - 153			
4-Chloro-3-methylphenol	87.1200	50	1.0	100.000		87.1	48 - 98			
4-Chloroaniline	79.0600	20	0.70	100.000		79.1	40 - 121			
4-Chlorophenyl-phenylether	89.2600	10	2.9	100.000		89.3	63 - 111			
4-Methylphenol	50.0900	10	0.88	100.000		50.1	30 - 69			
4-Nitroaniline	101.750	20	1.2	100.000		102	53 - 127			
4-Nitrophenol	34.7500	50	0.51	100.000		34.8	14 - 42			
Acenaphthene	87.2400	10	2.1	100.000		87.2	63 - 107			
Acenaphthylene	86.9000	10	2.1	100.000		86.9	66 - 107			
Anthracene	89.9000	10	2.1	100.000		89.9	60 - 112			
Benzidine (M)	92.0600	50	3.4	100.000		92.1	0 - 111			
Benzo(a)anthracene	94.2500	10	2.1	100.000		94.2	57 - 105			
Benzo(a)pyrene	88.0100	10	1.8	100.000		88.0	59 - 114			
Benzo(b)fluoranthene	75.5800	10	2.5	100.000		75.6	55 - 112			
Benzo(g,h,i)perylene	84.4000	10	1.8	100.000		84.4	66 - 106			
Benzo(k)fluoranthene	85.6100	10	2.8	100.000		85.6	54 - 120			
Benzoic acid	ND	50	17	100.000		NR	0 - 57			
Benzyl alcohol	57.3900	20	0.60	100.000		57.4	37 - 77			
bis(2-chloroethoxy)methane	91.1900	10	1.4	100.000		91.2	57 - 95			
bis(2-Chloroethyl)ether	90.7800	10	1.7	100.000		90.8	50 - 92			
bis(2-chloroisopropyl)ether	87.9600	10	1.8	100.000		88.0	22 - 122			
bis(2-ethylhexyl)phthalate	114.280	10	1.7	100.000		114	55 - 117			
Butylbenzylphthalate	114.470	10	2.6	100.000		114	55 - 117			
Chrysene	95.0700	10	1.9	100.000		95.1	50 - 109			
Di-n-butylphthalate	100.880	10	1.5	100.000		101	66 - 115			
Di-n-octylphthalate	101.090	10	1.8	100.000		101	53 - 120			
Dibenz(a,h)anthracene	83.2100	10	2.7	100.000		83.2	55 - 121			

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Semivolatile Organic Compounds by EPA 8270C - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B9L0812 - MSSEMI_W (continued)										
LCS (B9L0812-BS1) - Continued					Prepared: 12/31/2019 Analyzed: 12/31/2019					
Dibenzofuran	84.6400	10	2.5	100.000		84.6	69 - 112			
Diethyl phthalate	92.0700	10	1.3	100.000		92.1	61 - 114			
Dimethyl phthalate	94.1700	10	1.3	100.000		94.2	67 - 106			
Fluoranthene	88.8700	10	2.2	100.000		88.9	59 - 114			
Fluorene	85.3100	10	2.6	100.000		85.3	59 - 117			
Hexachlorobenzene	81.9100	10	3.3	100.000		81.9	63 - 117			
Hexachlorobutadiene	70.6600	20	2.7	100.000		70.7	50 - 98			
Hexachlorocyclopentadiene	80.5300	10	3.4	100.000		80.5	52 - 108			
Hexachloroethane	75.9300	10	1.8	100.000		75.9	52 - 87			
Indeno(1,2,3-cd)pyrene	84.7900	10	2.2	100.000		84.8	54 - 122			
Isophorone	92.7400	10	1.1	100.000		92.7	59 - 88			L4
N-Nitroso-di-n propylamine	91.7200	10	1.3	100.000		91.7	55 - 101			
N-Nitrosodiphenylamine	96.2500	10	1.6	100.000		96.2	61 - 112			
Naphthalene	77.6200	10	2.3	100.000		77.6	57 - 95			
Nitrobenzene	91.7200	10	1.5	100.000		91.7	60 - 96			
Pentachlorophenol	96.2900	50	1.5	100.000		96.3	62 - 119			
Phenanthrene	88.6700	10	2.3	100.000		88.7	60 - 111			
Phenol	28.6100	10	0.35	100.000		28.6	11 - 32			
Pyrene	86.7600	10	2.2	100.000		86.8	58 - 114			
Pyridine	31.1400	50	0.55	100.000		31.1	0 - 53			
Surrogate: 1,2-Dichlorobenzene-d	*69.06*			*100.000*		*69.1*	*30 - 78*			
Surrogate: 2,4,6-Tribromophenol	*130.1*			*99.7500*		*130*	*47 - 158*			
Surrogate: 2-Chlorophenol-d4	*67.92*			*99.7500*		*68.1*	*28 - 84*			
Surrogate: 2-Fluorobiphenyl	*80.83*			*100.000*		*80.8*	*32 - 90*			
Surrogate: 2-Fluorophenol	*36.20*			*99.7500*		*36.3*	*13 - 41*			
Surrogate: 4-Terphenyl-d14	*90.55*			*100.000*		*90.6*	*36 - 112*			
Surrogate: Nitrobenzene-d5	*84.06*			*100.000*		*84.1*	*30 - 82*			S3
Surrogate: Phenol-d6	*23.03*			*99.7500*		*23.1*	*8 - 26*			
LCS Dup (B9L0812-BSD1)					Prepared: 12/31/2019 Analyzed: 12/31/2019					
1,2,4-Trichlorobenzene	78.9900	10	2.3	100.000		79.0	55 - 95	1.80	20	
1,2-Dichlorobenzene	77.1000	10	2.0	100.000		77.1	36 - 90	0.520	20	
1,3-Dichlorobenzene	78.3300	10	2.0	100.000		78.3	53 - 85	1.31	20	
1,4-Dichlorobenzene	76.4400	10	1.9	100.000		76.4	53 - 86	1.56	20	
2,4,5-Trichlorophenol	90.4300	10	2.0	100.000		90.4	68 - 113	1.70	20	
2,4,6-Trichlorophenol	95.1500	10	1.9	100.000		95.2	63 - 113	0.474	20	
2,4-Dichlorophenol	84.1500	10	1.4	100.000		84.2	59 - 94	0.775	20	
2,4-Dimethylphenol	78.8000	10	0.83	100.000		78.8	50 - 98	0.253	20	
2,4-Dinitrophenol	104.120	50	3.8	100.000		104	60 - 136	2.17	20	
2,4-Dinitrotoluene	102.890	10	2.4	100.000		103	60 - 126	2.03	20	
2,6-Dinitrotoluene	101.510	10	1.8	100.000		102	65 - 119	0.883	20	

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Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B9L0812 - MSSEMI_W (continued)										
LCS Dup (B9L0812-BSD1) - Continued					Prepared: 12/31/2019 Analyzed: 12/31/2019					
2-Chloronaphthalene	91.7300	10	2.2	100.000		91.7	63 - 103	0.381	20	
2-Chlorophenol	74.1900	10	1.7	100.000		74.2	37 - 86	0.108	20	
2-Methylnaphthalene	77.1500	10	2.8	100.000		77.2	61 - 110	0.286	20	
2-Methylphenol	58.8700	10	0.92	100.000		58.9	33 - 78	1.73	20	
2-Nitroaniline	103.830	50	1.2	100.000		104	61 - 122	3.84	20	
2-Nitrophenol	96.2400	10	1.9	100.000		96.2	56 - 106	1.82	20	
3,3′-Dichlorobenzidine	85.9100	20	1.6	100.000		85.9	52 - 108	0.777	20	
3-Nitroaniline	101.240	50	1.1	100.000		101	66 - 119	0.502	20	
4,6-Dinitro-2-methyphenol	115.070	50	2.0	100.000		115	62 - 132	3.38	20	
4-Bromophenyl-phenylether	90.3100	10	2.6	100.000		90.3	34 - 153	5.65	20	
4-Chloro-3-methylphenol	85.2300	50	1.0	100.000		85.2	48 - 98	2.19	20	
4-Chloroaniline	79.1200	20	0.70	100.000		79.1	40 - 121	0.0759	20	
4-Chlorophenyl-phenylether	87.5700	10	2.9	100.000		87.6	63 - 111	1.91	20	
4-Methylphenol	50.3500	10	0.88	100.000		50.4	30 - 69	0.518	20	
4-Nitroaniline	101.240	20	1.2	100.000		101	53 - 127	0.502	20	
4-Nitrophenol	34.8100	50	0.51	100.000		34.8	14 - 42	0.173	20	
Acenaphthene	86.7700	10	2.1	100.000		86.8	63 - 107	0.540	20	
Acenaphthylene	84.1000	10	2.1	100.000		84.1	66 - 107	3.27	20	
Anthracene	90.4500	10	2.1	100.000		90.4	60 - 112	0.610	20	
Benzidine (M)	90.3600	50	3.4	100.000		90.4	0 - 111	1.86	20	
Benzo(a)anthracene	93.6200	10	2.1	100.000		93.6	57 - 105	0.671	20	
Benzo(a)pyrene	86.0800	10	1.8	100.000		86.1	59 - 114	2.22	20	
Benzo(b)fluoranthene	85.1900	10	2.5	100.000		85.2	55 - 112	12.0	20	
Benzo(g,h,i)perylene	83.3000	10	1.8	100.000		83.3	66 - 106	1.31	20	
Benzo(k)fluoranthene	96.1600	10	2.8	100.000		96.2	54 - 120	11.6	20	
Benzoic acid	ND	50	17	100.000		NR	0 - 57	NR	20	
Benzyl alcohol	57.8700	20	0.60	100.000		57.9	37 - 77	0.833	20	
bis(2-chloroethoxy)methane	91.6500	10	1.4	100.000		91.6	57 - 95	0.503	20	
bis(2-Chloroethyl)ether	91.3900	10	1.7	100.000		91.4	50 - 92	0.670	20	
bis(2-chloroisopropyl)ether	91.1400	10	1.8	100.000		91.1	22 - 122	3.55	20	
bis(2-ethylhexyl)phthalate	113.600	10	1.7	100.000		114	55 - 117	0.597	20	
Butylbenzylphthalate	114.620	10	2.6	100.000		115	55 - 117	0.131	20	
Chrysene	93.0900	10	1.9	100.000		93.1	50 - 109	2.10	20	
Di-n-butylphthalate	102.510	10	1.5	100.000		103	66 - 115	1.60	20	
Di-n-octylphthalate	99.8000	10	1.8	100.000		99.8	53 - 120	1.28	20	
Dibenz(a,h)anthracene	80.6000	10	2.7	100.000		80.6	55 - 121	3.19	20	
Dibenzofuran	83.5200	10	2.5	100.000		83.5	69 - 112	1.33	20	
Diethyl phthalate	92.8900	10	1.3	100.000		92.9	61 - 114	0.887	20	
Dimethyl phthalate	92.7600	10	1.3	100.000		92.8	67 - 106	1.51	20	
Fluoranthene	89.5200	10	2.2	100.000		89.5	59 - 114	0.729	20	
Fluorene	85.6400	10	2.6	100.000		85.6	59 - 117	0.386	20	
Hexachlorobenzene	87.5100	10	3.3	100.000		87.5	63 - 117	6.61	20	

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Semivolatile Organic Compounds by EPA 8270C - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B9L0812 - MSSEMI_W (continued)										
LCS Dup (B9L0812-BSD1) - Continued					Prepared: 12/31/2019 Analyzed: 12/31/2019					
Hexachlorobutadiene	71.1000	20	2.7	100.000		71.1	50 - 98	0.621	20	
Hexachlorocyclopentadiene	83.6000	10	3.4	100.000		83.6	52 - 108	3.74	20	
Hexachloroethane	78.3900	10	1.8	100.000		78.4	52 - 87	3.19	20	
Indeno(1,2,3-cd)pyrene	83.1300	10	2.2	100.000		83.1	54 - 122	1.98	20	
Isophorone	93.3200	10	1.1	100.000		93.3	59 - 88	0.623	20	L4
N-Nitroso-di-n propylamine	92.8700	10	1.3	100.000		92.9	55 - 101	1.25	20	
N-Nitrosodiphenylamine	98.6700	10	1.6	100.000		98.7	61 - 112	2.48	20	
Naphthalene	77.2200	10	2.3	100.000		77.2	57 - 95	0.517	20	
Nitrobenzene	91.7400	10	1.5	100.000		91.7	60 - 96	0.0218	20	
Pentachlorophenol	98.0100	50	1.5	100.000		98.0	62 - 119	1.77	20	
Phenanthrene	89.1200	10	2.3	100.000		89.1	60 - 111	0.506	20	
Phenol	29.1800	10	0.35	100.000		29.2	11 - 32	1.97	20	
Pyrene	87.7100	10	2.2	100.000		87.7	58 - 114	1.09	20	
Pyridine	27.9600	50	0.55	100.000		28.0	0 - 53	10.8	20	
Surrogate: 1,2-Dichlorobenzene-d	*70.30*			*100.000*		*70.3*	*30 - 78*			
Surrogate: 2,4,6-Tribromophenol	*125.7*			*99.7500*		*126*	*47 - 158*			
Surrogate: 2-Chlorophenol-d4	*68.24*			*99.7500*		*68.4*	*28 - 84*			
Surrogate: 2-Fluorobiphenyl	*81.06*			*100.000*		*81.1*	*32 - 90*			
Surrogate: 2-Fluorophenol	*36.47*			*99.7500*		*36.6*	*13 - 41*			
Surrogate: 4-Terphenyl-d14	*90.99*			*100.000*		*91.0*	*36 - 112*			
Surrogate: Nitrobenzene-d5	*82.25*			*100.000*		*82.2*	*30 - 82*			S3
Surrogate: Phenol-d6	*22.74*			*99.7500*		*22.8*	*8 - 26*			

Certificate of Analysis

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Notes and Definitions

S3	Surrogate recovery outside of laboratory acceptance limit. Unable to confirm matrix effects.
S13	Surrogate recovery was below laboratory acceptance limit. Sample reanalysis showed the same low recovery.
R	RPD value outside acceptance criteria. Calculation is based on raw values.
M2	Matrix spike recovery outside of acceptance limit due to possible matrix interference. The analytical batch was validated by the laboratory control sample.
M1	Matrix spike recovery outside of acceptance limit. The analytical batch was validated by the laboratory control sample.
L5	Laboratory Control Sample high biased. Sample result/s was non-detect (ND) for the target analyte; therefore reanalysis was not necessary.
L4	Laboratory Control Sample outside of control limit but within Marginal Exceedance (ME) limit.
ND	Analyte is not detected at or above the Practical Quantitation Limit (PQL). When client requests quantitation against MDL, analyte is not detected at or above the Method Detection Limit (MDL)
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
NR	Not Reported
RPD	Relative Percent Difference
CA2	CA-ELAP (CDPH)
OR1	OR-NELAP (OSPHL)

Notes:
(1) The reported MDL and PQL are based on prep ratio variation and analytical dilution.
(2) The suffix [2C] of specific analytes signifies that the reported result is taken from the instrument's second column.
(3) Results are wet unless otherwise specified.

ADVANCED TECHNOLOGY LABORATORIES
3275 Walnut Ave., Signal Hill, CA 907SS
Tel: (562) 989-404S • Fax: (562) 989-4040

CHAIN OF CUSTODY RECORD

Page 1 of 1

Instruction: Complete all shaded areas.

For Laboratory Use Only — ATLCOC Ver:20191022

Method of Transport	Sample Conditions Upon Receipt					
	Condition	Y	N	Condition	Y	N
☐ Client ☐ ATL	1. CHILLED	☑	☐	5. # OF SAMPLES MATCH COC	☐	☐
☑ FedEx ☐ OnTrac	2. HEADSPACE (VOA)	☐	☐	6. PRESERVED	☐	☐
☐ GSO	3. CONTAINER INTACT	☑	☐	7. COOLER TEMP, deg C:	2.9, 3.1	
☐ Other:	4. SEALED	☐	☐		FCE	

CUSTOMER

Company: Burns & McDonnell Enginnering Company, Inc.		Address: 400 Oyster Point Blvd. Suite 533	Tel: 650-871-2661
		City: South San Francisco State: CA Zip: 94080	Fax: 650-871-2653

SEND REPORT TO:

Attn: sbarber@burnsmcd.com; cdsa@burnsmcd.com	Email:
Company: Burns & McDonnell Engincerign Compnay, Inc.	
Address: 400 Oyster Point Blvd. Suite 533	
City: South San Francisco State: CA Zip: 94080	

SEND INVOICE TO: ☐ same as SEND REPORT TO

Attn: CDSA@burnsmcd.com	Email: supplierinvoices@burnsmcd.com
Company: Burns & McDonnell Engineering Company, Inc.	
Address: 400 Oyster Point Blvd. Suite 533	
City: South San Francisco State: CA Zip: 98040	

EDD
☐ Excel
☐ EDF
☐ Equis
☐ _____

QA/QC
☐ Routine
☐ Caltrans
☐ Legal
☑ RWQCB
☐ Level IV
☐ _____

PROJECT SAMPLES

Project Name: SCVTA
Project No.: 87119- 1218 Abdulkariem
Sampler: Simon Barber
Quote #:
PO #:
Special Instructions/Comments: Run Silica Gel Cleanup

ITEM	Laboratory ID (For Lab Use Only)	Sample Description: Sample ID / Location	Date	Time	Requested Analysis: Select Analysis	Select Analysis	Select Analysis	Select Analysis	Select Analysis	Select Analysis	Select Analysis	Select Analysis	TPHd 8015	TPHmo 8015	TPHg & VOCs 8260	CAM17/Title 22 MEtals 200.8/6010/7470	SVOCs 8270C SIM	OCP/PCBs 8081A/8082	Asbestos PLM-CARB435A	Enter Custom Analysis	Enter Custom Analysis	Enter Custom Analysis	Sample Matrix: Select Soil Matrix	Select Solid Matrix	Select Water Matrix	Select Wastewater Matrix	Select Non-aqueous Matrix	Enter Custom Matrix	Turnaround Time (TAT)	Container: Quantity	Container: Type: 1=Tube; 2=VOA; 3=Liter; 4=Pint; 5=Jar; 6=Tedlar; 7 = Canister	Container: Material: 1=Glass; 2=Plastic; 3=Metal	Container: Preservative: 1=HCl; 2=HNO3; 3=H2SO4; 4=4C; 5=ZnAc2; 6=NaOH; 7=NAA2S2O3	Remarks
1	1904739 -01	B-1d8	12.27.19	1005									X	X	X	X	X	X	X				S						5	5	2 5	1	4	5035
2	-02	B-1d24	12.27.19	1025									X	X	X	X							S						5	4	2 5	1	4	5035
3	-03	B-2d7	12.27.19	1045									X	X	X	X							S						5	4	2 5	1	4	5035
4	-04	B-2d24	12.27.19	1105									X	X	X	X							S						5	4	2 5	1	4	5035
S	-05	B-1	12.27.19	1130									X	X	X	X	X	X	X						GW				5	12	2 3	1 2	1 2	
6																																		
7																																		
8																																		
9																																		
10																																		

TERMS

1. Sample receiving hours: 7:30 AM to 7:30 PM Monday - Friday; Saturday 8:00 AM to 12:00 PM.
2. Samples submitted AFTER 5:00 PM are considered received the following business day at 8:00 AM.
3. The following turnaround time conditions apply:
   - TAT = 0 : Same Business Day if received by 9:00 AM
   - TAT = 1 : 1 Business Day (COB)
   - TAT = 2 : 2 Business Days (COB)
   - TAT = 3 : 3 Business Days (COB)
   - TAT = 4 : 4 Business Days (COB)
   - TAT = 5 : 5 Business Days (COB)
   - TAT = 6 : 5 to 7 Business Days (COB)
4. Weekend, holiday, after-hours work --- ask for quote.
5. Subcontract TAT is 10 - 15 business days. Projects requiring shorter TATs will incur a surcharge respective to the subcontract lab --- ask for quote.
6. Liquid and solid samples will be disposed of after 45 calendar days from receipt of samples; air samples will be disposed of after 14 calendar days after receipt of samples.
7. Electronic records maintained for five (5) years from report date.
8. Hard copy reports will be disposed of after 45 calendar days from report date.
9. Storage and Report Fees:
   - Liquid & solid samples: Complimentary storage for forty-five (45) calendar days from receipt of samples; $2/sample/month if extended storage or hold is requested.
   - Air samples: Complimentary storage for ten (10) calendar days from receipt of samples; $20 sample/week if extended storage is requested.
   - Hard copy and regenerated reports/EDDs: $17.50 per hard copy report requested; $50.00 per regenerated/reformatted report; $35 per reprocessed EDD.
10. Rush TCLP/STLC samples: add 2 days to analysis TAT for extraction procedure.
11. Unanalyzed samples will incur a disposal fee of $7 per sample.
12. The laboratory will randomly select from all QC samples received the sample to spike for Matrix Spike/ Matrix Spike Duplicate (MS/MSD) at no cost. However, if you want the laboratory to additionally perform MS/MSD on your sample, a charge will be assessed for the specific sample used.

CUSTODY

Relinquished by: (Signature and Printed Name)	Date:	Time:	Received by: (Signature and Printed Name)	Date:	Time:
Simon Barber	12.30.19	1900		12/31/19	720
Relinquished by: (Signature and Printed Name)	Date:	Time:	Received by: (Signature and Printed Name)	Date:	Time:
Relinquished by: (Signature and Printed Name)	Date:	Time:	Received by: (Signature and Printed Name)	Date:	Time:

As the authorized agent of the company above, I hereby purchase laboratory services from ATL as shown above and hereby guarantee payment as quoted.

Printed Name _____ Signature _____

Please Reply To:

AmeriSci Los Angeles
24416 S. Main Street, Ste 308
Carson, California 90745
TEL: (310) 834-4868 • FAX: (310) 834-4772

FACSIMILE TELECOPY TRANSMISSION

To:	Rachelle Arada	**From:**	Arturo A. Aldana
	Advanced Technology Laboratories	**AmeriSci Job #:**	919121778
Fax #:		**Subject:**	PLM-CARB 435 - 1000 pt ct 5 day
		Client Project:	1904739

Email: Erick.Ovalle@atlglobal.com,Tina.Nguyen@atlglobal.com,Rahul.Nair@atlglobal.com

Date: Tuesday, January 7, 2020
Time: 10:15:55
Comments:

Number of Pages: 3 (including cover sheet)

AmeriSci Los Angeles
24416 S. Main Street, Ste 308
Carson, California 90745
TEL: (310) 834-4868 • FAX: (310) 834-4772

PLM Bulk Asbestos Report

Advanced Technology Laboratories
Attn: Rachelle Arada
3275 Walnut Street

Signal Hill , CA 90755

Date Received 12/31/19
Date Examined 01/07/20

RE: 1904739

AmeriSci Job # 919121778
P.O. # SC14442
Page 1 **of** 1

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
1904739-01	919121778-01	*No*	NAD [1]
Location: B-1d8			(by 1000 pt ct) by Arturo A. Aldana on 01/07/20

Analyst Description: Brown, Heterogeneous, Non-Fibrous, Soil
Asbestos Types:
Other Material: Non-Asbestos/Inert 100 %

Reporting Notes:

(1) Sample analyzed by California Air Resources Board - Method 435 for serpentine aggregate using 1000 Point Count analysis.

Analyzed By: Arturo A. Aldana aaa; Date Analyzed: 1/7/2020 1/7/20

*NAD = no asbestos detected; Detection Limit <1%; Reporting Limits: CVES = 1%, 400 Pt Ct = 0.25%, 1000 Pt Ct = 0.1%; NA = not analyzed; NA/PS = not analyzed / positive stop; NVA = No Visible Asbestos; PLM (polarized light microscopy) Bulk Asbestos Analysis by EPA 600/R-93/116, including requirements for EPA 600/M4-82-020 per 40 CFR 763 (NVLAP Lab #200346-0); Note: PLM is not consistently reliable in detecting asbestos in floor coverings and similar NOB materials. TEM is currently the only method that can be used to determine if this material can be considered or treated as non-asbestos-containing in New York State (also see EPA Advisory for floor tile, FR 59, 146, 38970, 8/1/94). NIST Accreditation requirements mandate that this report must not be reproduced except in full with the approval of the laboratory. This PLM report relates ONLY to the items tested.

Reviewed By: Paula

ADVANCED TECHNOLOGY LABORATORIES

SUBCONTRACT ORDER

Work Order: 1904739

91912178

SENDING LABORATORY:

Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755
Phone: 562.989.4045
Fax: 562.989.6348
Project Manager: Erick Ovalle

RECEIVING LABORATORY:

AmeriSci Los Angeles
24416 South Main Street, Suite 308
Carson, CA 90745
Phone :(310) 834-4868
Fax: (310) 834-4772
PO#: SC14442- STANDARD TAT

Sampler: Simon Barber

IMPORTANT : Please include Work Order # and PO # in your invoice.

Analysis	Due	Expires	Sampled	Comments
ATL Lab#: 1904739-01 / B-1d8		**Soil**	**12/27/19 10:05**	
Asbestos_CARB_435_1000_SUB	**01/07/20 17:00**	01/03/20 10:05		
[Asbestos CARB 435 (1000 pt ct)]				
1-Glass Jar - 2 oz				
ATL Lab#: 1904739-05 / B-1		**Water**	**12/27/19 11:30**	
Asbestos_TEM_SUB	**01/07/20 17:00**	12/29/19 11:30		
[Asbestos TEM]				
1-Amber Unpres - 1000mL				

Released By	Date	Received By	Date
	13:07 ~~13:07~~ 12-31-19		12/31/19 13:10
Released By	Date	Received By	Date

Please Reply To:

AmeriSci Los Angeles
24416 S. Main Street, Ste 308
Carson, California 90745
TEL: (310) 834-4868 • FAX: (310) 834-4772

FACSIMILE TELECOPY TRANSMISSION

To:	Rachelle Arada Advanced Technology Laboratories	**From:**	Lateef McIntosh
		AmeriSci Job #:	919121768
Fax #:		**Subject:**	Water (waste) 5 day Results
		Client Project:	1904739

Email: Erick.Ovalle@atlglobal.com,Tina.Nguyen@atlglobal.com,Rahul.Nair@atlglobal.com

Date: Tuesday, January 7, 2020
Time: 16:48:08
Comments:

Number of Pages: 3 (including cover sheet)

AmeriSci Job #: **919121768**
Client Name: Advanced Technology Laboratories

Table I
Summary of Transmission Electron Microscopy (TEM) Results for Asbestos (Water)

1904739

AmeriSci Sample #	Client Sample No./Location	Liquid Filtered (liters)	Temp (Celcius)	Structures Detected* (total)	Structures Detected* (>10 µm)	Analytical Sensitivity (MF/L)	Asbestos Conc (total) (MF/L)	Asbestos Conc (>10 µm) (MF/L)	Asbestos Type
01	1904739-05 B-1	0.0001	7	NSD	NSD	10.42	<10.42	<10.42	----

*fiber criteria (>=0.5 microns, 5:1 aspect ratio); NAD/NSD = no asbestos detected, NA = not analyzed, MF/L = million fibers per liter.

NOTE: Drinking water analysis by EPA-600/4-83-043 (100.1), waste water by EPA-600/4-80-005. Analytical sensitivity calculated as though 1 fiber had been detected on the TEM GRID area analyzed. Samples are refrigerated upon receipt when necessary and filtered within four hours.

Reviewed By: _____ ; Analyzed By: _____ Date: 1/7/2020

Lateef McIntosh

ADVANCED TECHNOLOGY LABORATORIES

SUBCONTRACT ORDER

Work Order: 1904739

919121768

SENDING LABORATORY:

Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755
Phone: 562.989.4045
Fax: 562.989.6348
Project Manager: Erick Ovalle

RECEIVING LABORATORY:

AmeriSci Los Angeles
24416 South Main Street, Suite 308
Carson, CA 90745
Phone :(310) 834-4868
Fax: (310) 834-4772
PO#: SC14442- STANDARD TAT

Sampler: Simon Barber

IMPORTANT : Please include Work Order # and PO # in your invoice.

Analysis	Due	Expires	Sampled	Comments
ATL Lab#: 1904739-01 / B-1d8		**Soil**	**12/27/19 10:05**	
Asbestos_CARB_435_1000_SUB	**01/07/20 17:00**	01/03/20 10:05		
[Asbestos CARB 435 (1000 pt ct)]				
1-Glass Jar - 2 oz				
ATL Lab#: 1904739-05 / B-1		**Water**	**12/27/19 11:30**	7°C
Asbestos_TEM_SUB	**01/07/20 17:00**	12/29/19 11:30		
[Asbestos TEM]				
1-Amber Unpres - 1000mL				

Released By	Date	Received By	Date
	13:07 ~~13:07~~ 12-31-19		12/31/19 13:10
Released By	Date	Received By	Date

ATTACHMENT 3 – PHASE II ESA PHOTOGRAPHS

Photograph Log Sheets
Santa Clara Valley Transportation Authority (SCTVA)
1218 Abdulkariem
Phase II Environmental Site Assessment 2019-12-27

Photo 1: Boring B-1 (left) and B-2 (right)

Photo 2: Boring B-2 relocated to the right due to subsurface electric line.

Photo 3: Boring B-1.

Photo 4: Hand clearance and GeoProbe (B-1).

BURNS McDONNELL

CREATE AMAZING.

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Kansas City, MO 64114
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F 816-333-3690
www.burnsmcd.com

C201912-0288
Rcvd 12.24.19

Kennedy Jenks

275 Battery Street, Suite 550
San Francisco, California 94111
415-243-2150

Phase II Environmental Site Assessment Report – Parcel 1236 and Parcel 1240 San Jose, California

23 December 2019

Prepared for

Santa Clara Valley Transportation Authority
3331 North First Street
San Jose, CA 95134

KJ Project No. 1965013.02

Table of Contents

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Section 1: Introduction

Kennedy/Jenks Consultants, Inc. (KJ) presents this *Phase II Environmental Site Assessment Report – Parcel 1236 and Parcel 1240 Report* (Report) to the Santa Clara Valley Transportation Authority (VTA). This Report presents the results of a Limited Phase II Environmental Site Assessment (ESA) of the Subject Properties associated with the upcoming Eastridge to BART Regional Connector Capitol Expressway Light Rail Project (Project) in San Jose, California:

- Parcel 1236
- Parcel 1240

KJ understands that Parcels 1236 and 1240 are currently owned by the County of Santa Clara. VTA-provided information indicates that Parcel 1236 is located on Assessor Parcel Number (APN) 491-15-003 and that Parcel 1240 is located on APN 491-05-020.

The Eastridge to BART Regional Connector project (EBRC) will extend 2.4 miles of Light Rail line from the existing Alum Rock Station to the Eastridge Transit Center. Light rail will operate primarily in the center of Capitol Expressway and new stations will be built at Story Road and the Eastridge Transit Center.

Section 2: Field Work

The purpose for conducting this Limited Phase II ESA is to identify potential impacts to soil and groundwater in the subsurface in the areas within the Fee Take project footprint.

The boring locations are shown on Figure 1 and Figure 2. Photographs of the two parcels are included in Appendix A. The rationale for the boring locations is as follows:

CP1236-SB01: This boring is located on Parcel 1236 closer to the Inbound Aviation site, a site identified in the Notable Findings of the Phase I investigation.

CP1236-SB02: This boring is located on the western side of Parcel 1236.

CP1240-SB01: This boring is on Parcel 1240 in the footprint of Bent 72.

CP1240-SB02: This boring is on Parcel 1240 in the footprint of Bent 73.

2.1 Field Preparation

Access to the parcels was secured under a Permit to Enter agreement between VTA and the Santa Clara County Roads and Airports department.

KJ prepared a Sampling and Analysis Plan (SAP) for Parcels 1236 and 1240. The SAP consisted of a map showing proposed sampling locations and a one-page narrative/tabular summary of sampling locations, rationales, drilling and sampling methods, sample depths, and laboratory analysis.

KJ personnel marked the drilling and sampling locations and notified the Underground Service Alert (USA) system prior to mobilization. KJ also subcontracted GPRS, Inc. (GPRS) to conduct a surface geophysical survey to locate undocumented or private utility lines the week prior to sampling.

KJ also prepared a Site-specific health and safety plan and kept it onsite at all times.

2.2 Field Work

2.2.1 Soil Borings

Drilling and soil sampling were performed by Cascade Drilling (Cascade, C57: 1058336) on 5 November 2019 under KJ supervision. The uppermost 5 feet was drilled with a hand auger for an added measure to avoid undetected underground utilities. Below 5 feet, the rig continuously cored the soil, which was recovered in 2-inch-diameter clean acetate liners. To retain samples, desired sections of the liner were cut off, and the ends were covered with Teflon tape and plastic end caps.

After samples are collected, boreholes were backfilled with cement grout using the temporary polyvinyl chloride (PVC) as tremie pipe. Reusable drilling and sampling equipment were decontaminated between uses by scrubbing in a non-phosphate and water solution, rinsing with clean potable water, and air-drying.

Investigation-derived wastes included used disposable tubing, PVC casing, personal protective equipment, excess soil cores and acetate liners, and decontamination water. The tubing, casing, and personal protective equipment were gathered and discarded as trash by Cascade. Excess soil was placed in DOT-rated 55-gallon drums that were sealed, labeled, and placed at a location designated by VTA. The decon water was consumed in mixing cement.

2.2.2 Soil Sample Collection

Each boring was drilled to 16 feet below ground surface (bgs), below first-encountered groundwater, to allow collection of a groundwater sample. Four soil samples were retained from each soil boring as specified in the SAP. A soil sample was retained from the upper 2 feet; from approximately 5 feet bgs, approximately 8-9 feet bgs, and 12-13 feet bgs. A primary and a duplicate groundwater sample was from boring SB-01 at Parcel 1236, and one groundwater sample was collected at each of the other borings.

2.2.3 Groundwater Sample Collection

Cascade placed new, temporary PVC pipe with a screened lower section into the borehole to temporarily support the borehole while groundwater filled the lower screened section. Tubing with a check valve was then lowered into the pipe to retrieve a sample of the groundwater. The recovered groundwater was collected in new sample containers provided by the laboratory. The water was not filtered.

The sample containers were labeled with boring number, depth, matrix, date, time, and sampler's initials, and placed in a cooler with water ice. The samples remained in the cooler under chain-of-custody documentation until they were delivered to the Eurofins-Calscience Laboratory (Eurofins) receiving facility.

2.2.4 Field Quality Assurance/Quality Control (QA/QC)

Quality control samples were collected and analyzed to demonstrate the validity of the laboratory analytical data. One duplicate groundwater sample was collected and analyzed for the same constituents as the primary sample. One equipment rinsate sample was collected and analyzed for volatile organic compounds (VOCs) to evaluate the decontamination procedure. The rinsate sample was collected by pouring retail distilled deionized water over the decontaminated check valve used to collect the groundwater samples and collecting the water in a sample container provided by the laboratory. A trip blank, consisting of sealed sample containers filled with deionized water at the laboratory, was analyzed for VOCs only as a check for cross-contamination between sample containers during shipping. The trip blank remained in the sample cooler with the primary samples.

2.3 Sample Analysis

The upper three soil samples from each boring were analyzed for petroleum hydrocarbons as diesel and motor oil by U.S. Environmental Protection Agency (EPA) Method 8015B, petroleum hydrocarbons as gasoline, and VOCs by EPA Method 8260B, and CAM17 metals by EPA Methods 200.7/6010B/7470/7471. The shallowest soil sample from each boring was also analyzed for pesticides by EPA Method 8081A. The deepest soil sample from each boring was placed on hold. Groundwater samples were analyzed for all of these constituents.

Section 3: Findings

Soil and groundwater analytical results are compared with Environmental Screening Levels (ESLs) developed by the San Francisco Bay Regional Water Quality Control Board (January 2019 revision 1). Based on the anticipated site use provided by VTA, the Commercial/Industrial Shallow Soil Exposure and Construction Worker ESLs were used to compare with soil analytical results, and the lower of the Gross Contamination and Non-Drinking Water Odor Nuisance ESLs were used to compare with groundwater analytical results.

3.1 Soil Stratigraphy

Soil type is shown on the boring logs included in Appendix B. In general, the subsurface mainly consisted of fine silt and clay mixture to about 5 feet bgs, under which was a fine wet sand, underlain by silt and clay to 12 to 14 feet bgs. Fine sand was encountered below 12-14 feet bgs. No chemical staining or odor was noted.

At Parcel 1236, the shallow sand was about 1.5 feet thick and at Parcel 1240 the shallow sand was thicker, extending from approximately 5 feet to 8 to 9.5 feet bgs.

At both parcels the uppermost sand zone was wet, while the underlying deeper silt and clay was moist to dry, with wet sand observed at 12 to 14 feet bgs.

3.2 Soil Sample Analytical Results

Soil sample organic compound analytical results are summarized in Table 1 and Table 2, metals results are summarized in Table 3, and the laboratory reports are included in Appendix C.

3.2.1 Hydrocarbons and Organic Compounds

Gasoline-range hydrocarbons (GRO) were not detected in any of the soil samples. Diesel-range hydrocarbons (C10-C28 carbon range) (DRO) were detected in every sample except one, typically at low levels, and all were reported with laboratory flags. The concentrations ranged from 4.0 milligrams per kilogram (mg/kg) to 14 mg/kg. All of the DRO detections were flagged as not resembling the fuel standard (a “Z” flag), and five detections were marked with a “J” flag, indicating the concentration was between the method detection limit and the reporting limit. The reported concentrations are lower than the Commercial/Industrial Shallow Soil Exposure and the Construction Worker ESLs.

Motor-oil range hydrocarbons (carbon range C17-C44) (MRO) was detected in seven samples, from 3.8 mg/kg to 11 mg/kg. Each reported detection had a Z, a J, and a B flag, indicating the compound was also detected in the method blank. The reported concentrations are lower than the Commercial/Industrial Shallow Soil Exposure and the Construction Worker ESLs.

As noted above, the nearest-surface sample of each boring was analyzed for organochlorine pesticides. Shown in Table 2, 4-4’-DDE and 4,4’-DDT were detected at 0.0033 mg/kg and 0.0031 mg/kg, respectively, in the sample from CP240-SB02 at 1.5 feet bgs. Both of these

results had “J” flags. The reported concentrations are lower than the Commercial/Industrial Shallow Soil Exposure and the Construction Worker ESLs.

No VOCs, including gasoline-range hydrocarbons or related compounds, were detected in any sample.

3.2.2 Metals

Samples were analyzed for the CAM17 suite of metals, as summarized in Table 3. In general, reported concentrations were less than their respective Commercial/Industrial Shallow Soil Exposure and Construction Worker ESLs, except for arsenic. Arsenic was detected in every sample at concentrations from 2.64 mg/kg to 10.7 mg/kg, with an average concentration of 7.82 mg/kg and a median concentration of 7.75 mg/kg. The values are within the background range of arsenic derived by for the urbanized San Francisco Bay Region (Duverge’ 2011), which can be downloaded from the Regional Water Quality Control Board at https://www.waterboards.ca.gov/sanfranciscobay/water_issues/available_documents/2011_Arsenic_Background_Duverge.pdf.

Nickel was detected at concentrations above the Construction Worker ESL in six samples. The average and median concentrations of nickel (84.1 mg/kg and 82.3 mg/kg, respectively) are less than the Construction Worker ESL of 86 mg/kg.

3.3 Groundwater Level

The water level in the boreholes was measured at 8 to 9 feet bgs after drilling, suggesting the groundwater in the deeper zone is under confined pressure.

3.4 Groundwater Sample Analytical Results

Groundwater sample petroleum hydrocarbon and VOC analytical results are summarized in Table 4, metals results are summarized in Table 5, and the laboratory reports are included in Appendix C.

As shown on Table 4, gasoline-range hydrocarbons were not detected in any sample. Diesel-range hydrocarbons were detected in every sample, with laboratory notes that the concentrations are at J-flagged concentrations and the chromatogram patterns do not resemble a typical fuel pattern. Motor oil-range hydrocarbons were detected in three samples, likewise at J-flag concentrations and not resembling a typical fuel pattern. The reported concentrations are lower than the Groundwater ESLs.

Concentrations of metals are shown in Table 5. Groundwater samples were not filtered prior to analysis so the concentrations represent total metals concentrations. The reported concentrations are lower than the Groundwater ESLs.

3.5 QA/QC

One duplicate groundwater sample was collected from CP1236-SB01. Overall, the results are comparable to the primary sample, although acetone was detected in the duplicate sample between the method detection and reporting limit.

No analytes were detected in the rinsate blank nor the trip blank.

The laboratory notes the samples were received in good condition, the analyses were performed with in the holding times, and the internal QA/QC was acceptable.

Section 4: Conclusions and Recommendations

4.1 Conclusions

The following conclusions are based upon the sample results:

Soil:

Organic compounds were not detected at concentrations above the Commercial/Industrial Shallow Soil Exposure or Construction Worker ESLs.

Reported concentrations of arsenic and nickel were above the Commercial/Industrial Shallow Soil Exposure and/or Construction Worker ESLs. However, because the concentrations of arsenic fall within published background concentrations, the detections are not considered to be related to an anthropogenic release. The mean and average concentrations of nickel are less than the Construction Worker ESL.

Groundwater:

Reported concentrations of petroleum hydrocarbons and metals are below the respective ESLs. Acetone was detected in one sample at a J-flag concentration. Therefore, no evidence was detected that would indicate a contaminant release at either parcel.

As noted above, acetone was detected in the duplicate groundwater sample from Parcel 1236. The concentration was a J-flag low detection and the result was not repeated in the primary sample, so the acetone concentration is not reliable. The State of California Geotracker database does not show any sites nearby with a diesel release to groundwater. The Inbound Aviation site (closed in 2004), located approximately 750 feet south of Parcel 1236, had localized impact to groundwater related to a gasoline underground storage tank. Samples were not analyzed for acetone, but acetone is not a typical component in gasoline-related releases.

4.2 Recommendations

The following recommendations are based upon the conclusions above.

Of the detected compounds in soil, arsenic and nickel exceed the Construction Worker ESLs but are at concentrations comparable background concentrations. No special handling of soil is required, and standard personal protective equipment should be sufficient, but contractors disturbing soil must conform to Best Management Practices for dust and erosion control.

Due to the presence of DRO and MRO in groundwater, it is recommended that groundwater treatment be utilized during dewatering activity for discharge into the storm drain system under a National Pollutant Discharge Elimination System (NPDES) permit or into the sanitary sewer system under a Short-Term Wastewater Discharge permit with the City of San Jose.

References

Duverge' D.J. 2011. *Establishing Background Arsenic in Soil of the Urbanized San Francisco Bay Region*. Thesis for Master of Science. December 2011.

Tables

Table 1: Detections of Petroleum Hydrocarbons in Soil

VTA

				TPH As Gasoline	Diesel Range Organics (C10-C28)	Motor Oil Range Organics (C17-C44)
			Chemical Units	mg/kg	mg/kg	mg/kg
		Commerical/Industrial: Shallow Soil Exposure ESL[(a)]		2,000	1,200	180,000
		Construction Worker Soil ESL		1,800	1,100	54,000
Location	**Date**	**Sample Depths**	**Note**			
Parcel 1236						
CP1236-SB01	11/5/2019	1.5-2.0 ft		< 0.51	**5.2 Z**	**11 JZB**
CP1236-SB01	11/5/2019	5.0-5.5 ft		< 0.5	**6.8 Z**	**3.8 JZB**
CP1236-SB01	11/5/2019	8.0-8.5 ft		< 0.51	**14 Z**	**8.7 JZB**
CP1236-SB01	11/5/2019	12-12.5 ft	Hold	-	**-**	**-**
CP1236-SB02	11/5/2019	1.5-2.0 ft		< 0.49	< 5.0	< 25
CP1236-SB02	11/5/2019	5.0-5.5 ft		< 0.49	**4.0 JZ**	< 25
CP1236-SB02	11/5/2019	9.0-9.5 ft		< 0.5	**9.3 Z**	4.2 JZB
CP1236-SB02	11/5/2019	12-12.5 ft	Hold	-	**-**	**-**
Parcel 1240						
CP1240-SB01	11/5/2019	1.5-2.0 ft		< 0.51	**4.5 JZ**	**8.2 JZB**
CP1240-SB01	11/5/2019	5.0-5.5 ft		< 0.5	**4.3 JZ**	< 25
CP1240-SB01	11/5/2019	9.0-9.5 ft		< 0.5	**7.4 Z**	< 25
CP1240-SB01	11/5/2019	13.0-13.5 ft	Hold	-	**-**	**-**
CP1240-SB02	11/5/2019	1.5-2.0 ft		< 0.49	**4.8 JZ**	**7.9 JZB**
CP1240-SB02	11/5/2019	5.0-5.5 ft		< 0.49	**4.3 JZ**	< 25
CP1240-SB02	11/5/2019	9.0-9.5 ft		< 0.49	**14 Z**	**6.3 JZB**
CP1240-SB02	11/5/2019	13.0-13.5 ft	Hold	-	**-**	**-**

Notes and Abbreviations

B = Analyte detected in the associated method blank sample.
ft = feet
J = Estimated concentrations below the laboratory reporting limit.
mg/kg = milligrams per kilogram
Z = The chromatographic response does not resemble a typical fuel pattern.

(a) Environmental Screening Level (ESL) developed by the San Francisco Bay Regional Water Quality Control Board, January 2019 revision1.

Table 2: Detections of Pesticides in Soil Samples

VTA

				Pesticides	
			Chemical	4,4'-DDE	4,4'-DDT
			Units	mg/kg	mg/kg
			Commercial/Industrial: Shallow Soil Exposure ESL[(a)]	8.3	8.5
			Construction Worker Soil ESL	57	57
Location	**Date**	**Sample Depths**	**Note**		
Parcel 1236					
CP1236-SB01	11/5/2019	1.5-2.0 ft	-	< 0.0050	< 0.0050
CP1236-SB01	11/5/2019	5.0-5.5 ft	-	-	-
CP1236-SB01	11/5/2019	8.0-8.5 ft	-	-	-
CP1236-SB01	11/5/2019	12-12.5 ft	Hold	-	-
CP1236-SB02	11/5/2019	1.5-2.0 ft	-	< 0.0050	< 0.0050
CP1236-SB02	11/5/2019	5.0-5.5 ft	-	-	-
CP1236-SB02	11/5/2019	9.0-9.5 ft	-	-	-
CP1236-SB02	11/5/2019	12-12.5 ft	Hold	-	-
Parcel 1240					
CP1240-SB01	11/5/2019	1.5-2.0 ft	-	< 0.0050	< 0.0050
CP1240-SB01	11/5/2019	5.0-5.5 ft	-	-	-
CP1240-SB01	11/5/2019	9.0-9.5 ft	-	-	-
CP1240-SB01	11/5/2019	13.0-13.5 ft	Hold	-	-
CP1240-SB02	11/5/2019	1.5-2.0 ft	-	**0.0033 J**	**0.0031 J**
CP1240-SB02	11/5/2019	5.0-5.5 ft	-	-	-
CP1240-SB02	11/5/2019	9.0-9.5 ft	-	-	-
CP1240-SB02	11/5/2019	13.0-13.5 ft	Hold	-	-

Notes and Abbreviations:

ft = feet

J = Estimated concentrations below the laboratory reporting limit.

mg/kg = milligrams per kilogram

(a) Environmental Screening Level (ESL) developed by the San Francisco Bay Regional Water Quality Control Board, January 2019 revision1.

Table 3: Metals in Soil Samples

VTA

Location	Date	Sample Depths	Note	Chemical Units	Antimony mg/kg	Arsenic mg/kg	Barium mg/kg	Beryllium mg/kg	Cadmium mg/kg	Chromium, total mg/kg	Cobalt mg/kg	Copper mg/kg	Lead mg/kg	Mercury mg/kg	Molybdenum mg/kg	Nickel mg/kg	Selenium mg/kg	Silver mg/kg	Thallium mg/kg	Vanadium mg/kg	Zinc mg/kg
Commercial/Industrial: Shallow Soil Exposure ESL[(a)]					160	0.31	220,000	230	1,100	NA	350	47,000	320	190	5,800	11,000	5,800	5,800	12	5,800	350,000
Construction Worker Soil ESL					50	0.98	3,000	27	51	NA	28	14,000	160	44	1,800	86	1,700	1,800	4	470	110,000
Parcel 1236																					
CP1236-SB01	11/5/2019	1.5-2.0 ft			**3.33**	**8.62**	**219**	**0.872**	< 0.500	**61.4**	**15.5**	**42.2**	**6.39**	**0.0634 J**	< 0.250	**99.3**	< 0.750	< 0.250	< 0.750	**46.4**	**75.5**
CP1236-SB01	11/5/2019	5.0-5.5 ft			**3.00**	**2.64**	**116**	**0.394**	< 0.505	**44.5**	**10.2**	**19.0**	**3.70**	**0.0287 J**	< 0.253	**75.3**	< 0.758	< 0.253	**0.869**	**28.5**	**42.3**
CP1236-SB01	11/5/2019	8.0-8.5 ft			**3.40**	**10.6**	**186**	**0.553**	< 0.515	**47.6**	**9.72**	**31.3**	**4.64**	**0.0403 J**	< 0.258	**78.9**	< 0.773	< 0.258	**< 0.773**	**36.4**	**56.3**
CP1236-SB01	11/5/2019	12-12.5 ft	Hold		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CP1236-SB02	11/5/2019	1.5-2.0 ft			**4.00**	**9.65**	**213**	**0.703**	< 0.518	**55.0**	**14.6**	**35.7**	**6.82**	**0.0671 J**	< 0.259	**95.5**	< 0.777	< 0.259	**1.12**	**42.1**	**70.1**
CP1236-SB02	11/5/2019	5.0-5.5 ft			**2.21**	**10.3**	**175**	**0.528**	< 0.503	**47.3**	**12.5**	**29.2**	**5.06**	**0.0612 J**	< 0.251	**86.2**	< 0.754	< 0.251	**0.828**	**35.5**	**54.7**
CP1236-SB02	11/5/2019	9.0-9.5 ft			**3.52**	**10.7**	**178**	**0.534**	< 0.498	**46.2**	**14.1**	**31.2**	**5.74**	**0.0623 J**	< 0.249	**80.8**	< 0.746	< 0.249	**1.45**	**36.6**	**58**
CP1236-SB02	11/5/2019	12-12.5 ft	Hold		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Parcel 1240																					
CP1240-SB01	11/5/2019	1.5-2.0 ft			**3.70**	**6.96**	**158**	**0.549**	< 0.526	**53.1**	**11.8**	**24.7**	**6.38**	**0.0554 J**	< 0.263	**89.9**	< 0.789	< 0.263	< 0.789	**35.3**	**54.9**
CP1240-SB01	11/5/2019	5.0-5.5 ft			**4.77**	**6.9**	**164**	**0.492**	< 0.498	**45.9**	**11.8**	**26.8**	**4.97**	**0.0587 J**	< 0.249	**84.3**	< 0.746	< 0.249	**0.396 J**	**34**	**55.3**
CP1240-SB01	11/5/2019	9.0-9.5 ft			**5.18**	**7.08**	**139**	**0.531**	< 0.510	**47.7**	**12.0**	**28.0**	**5.27**	**0.100**	< 0.255	**80.5**	< 0.765	< 0.255	**0.817**	**36.3**	**59.1**
CP1240-SB01	11/5/2019	13.0-13.5 ft	Hold		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CP1240-SB02	11/5/2019	1.5-2.0 ft			**3.86**	**4.96**	**180**	**0.535**	< 0.490	**50.4**	**11.7**	**26.4**	**14.0**	**0.0725 J**	< 0.245	**87.1**	< 0.735	< 0.245	**2.16**	**35.6**	**62.1**
CP1240-SB02	11/5/2019	5.0-5.5 ft			**1.89**	**8.41**	**156**	**0.467**	< 0.513	**45.3**	**11.1**	**25.3**	**5.38**	**0.0492 J**	< 0.256	**81.2**	< 0.769	< 0.256	**0.989**	**34**	**54.6**
CP1240-SB02	11/5/2019	9.0-9.5 ft			**3.26**	**7.01**	**154**	**0.427**	< 0.493	**39.2**	**10.2**	**22.7**	**4.32**	**0.0458 J**	< 0.246	**70.9**	< 0.739	< 0.246	**1.74**	**30.7**	**48.6**
CP1240-SB02	11/5/2019	13.0-13.5 ft	Hold		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes and Abbreviations:
B = Analyte detected in the associated method blank sample.
ft = feet
J = Estimated concentrations below the laboratory reporting limit.
mg/kg = milligrams per kilogram

(a) Environmental Screening Level (ESL) developed by the San Francisco Bay Regional Water Quality Control Board, January 2019 revision1.

Table 4: Detections of Petroleum Hydrocarbons and Volatile Organic Compounds in Groundwater Samples

VTA

				Petroleum Hydrocarbons			Volatile Organic Compounds
			Chemical	Range Organics (C4-C13)	Diesel Range Organics (C10-C28)	Motor Oil Range Organics (C17-C44)	Acetone
			Units	µg/l	µg/l	µg/l	µg/l
			Groundwater ESL	5,000	3,000	NA	50,000
Location	Date	Sample Type	Sample Depths Note				
Parcel 1236							
CP1236-SB01	11/5/2019	N	16.0 ft	< 50	**31 JZ**	< 270	< 20
CP1236-SB01	11/5/2019	FD	16.0 ft	< 50	**33 JZ**	< 280	**14 J**
CP1236-SB02	11/5/2019	N	16.0 ft	< 50	**33 JZ**	**21 JZ**	<20
Parcel 1240							
CP1240-SB01	11/5/2019	N	16.0 ft	< 50	**46 JZ**	**44 JZ**	< 20
CP1240-SB02	11/5/2019	N	16.0 ft	< 50	**41 JZ**	**28 JZ**	<20

Notes and Abbreviations

FD = field duplicate

ft = feet

J = Estimated concentrations below the laboratory reporting limit.

µg/l = micrograms per liter

N = normal sample

Z = The chromatographic response does not resemble a typical fuel pattern.

(a) Environmental Screening Level (ESL) developed by the San Francisco Bay Regional Water Quality Control Board, January 2019 revision2 represents the minimum of the gross contamination and non-drinking water odor nuisance values.

Table 5: Metals in Groundwater Samples

VTA

Location	Date	Sample Type	Sample Depths	Note	Chemical	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium, Total	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
					Units	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l
					Groundwater ESL	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	30	50,000	50,000	50,000	50,000	50,000	50,000	50,000
Parcel 1236																						
CP1236-SB01	11/5/2019	N	16.0			< 100	**105**	**35.8**	< 10.0	**4.55 J**	**13.0 J**	**26.4 J**	**10.8 J**	**23.7 J**	**1.77**	**131**	**56.1**	< 100	< 10.0	**43.6 J**	< 10.0	< 250
CP1236-SB01	11/5/2019	FD	16.0			< 100	**126**	**41.5**	< 10.0	**5.49 J**	**12.4 J**	**32.5 J**	**14.0 J**	**17.2 J**	**1.88**	**143**	**55.2**	< 100	< 10.0	**20.5 J**	< 10.0	< 250
CP1236-SB02	11/5/2019	N	16.0			< 100	**216**	**105**	**3.22 J**	**7.04 J**	**34.3 J**	**55.9**	**48.8 J**	**43.0 J**	< 0.500	< 50.0	**125**	< 100	**3.92 J**	**29.5 J**	< 10.0	**110 J**
Parcel 1240																						
CP1240-SB01	11/5/2019	N	16.0			< 100	< 100	**63.8**	< 10.0	**2.83 J**	**53.2**	< 50.0	< 50.0	**17.8 J**	**0.539**	**154**	< 50.0	< 100	< 10.0	**29.1 J**	< 10.0	< 250
CP1240-SB02	11/5/2019	N	16.0			< 100	< 100	**163**	< 10.0	< 10.0	< 50.0	< 50.0	< 50.0	**20.3 J**	**0.979**	**78.3**	< 50.0	< 100	< 10.0	**24.1 J**	< 10.0	< 250

Notes and Abbreviations

FD = field duplicate

ft = feet

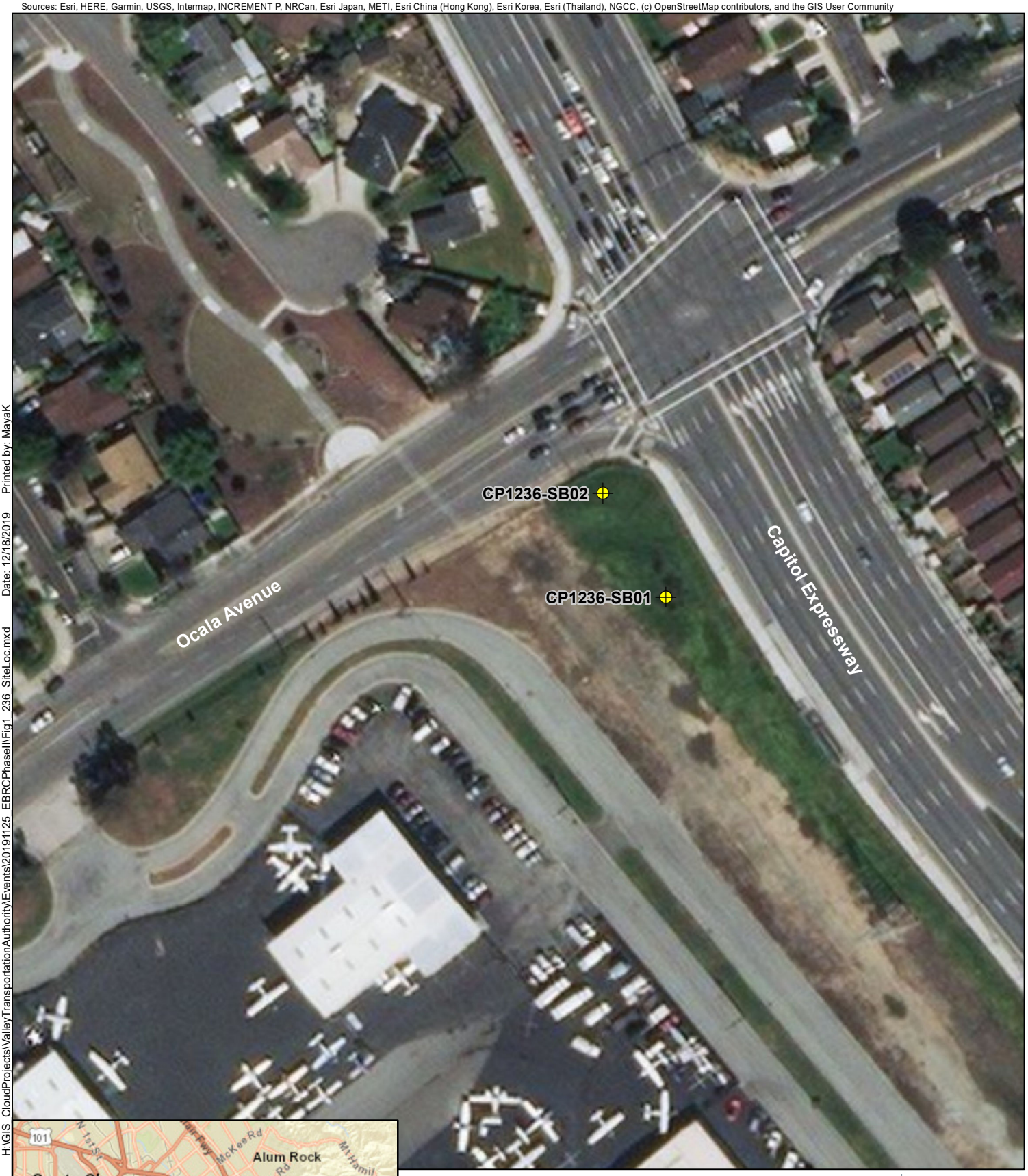
J = Estimated concentrations below the laboratory reporting limit.

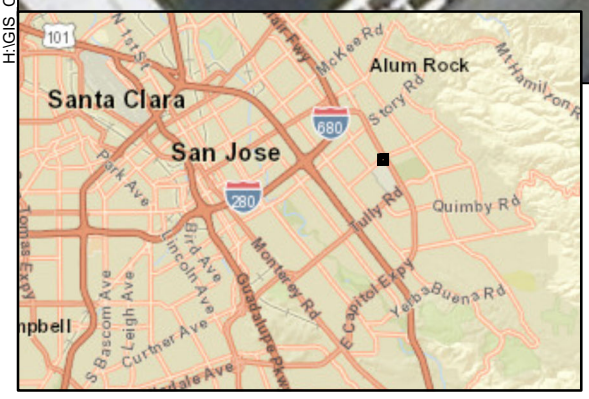
µg/l = micrograms per liter

N = normal sample

(a) Environmental Screening Level (ESL) developed by the San Francisco Bay Regional Water Quality Control Board, January 2019 revision2 represents the minimum of the gross contamination and non-drinking water odor nuisance values.

Figures





N

0 50 100

Scale: Feet

Kennedy Jenks

Valley Transportation Authority
Eastridge to BART Regional Connector
San Jose, California

Sample Location Map
Parcel 1236

K/J 1965013.02

Figure 1

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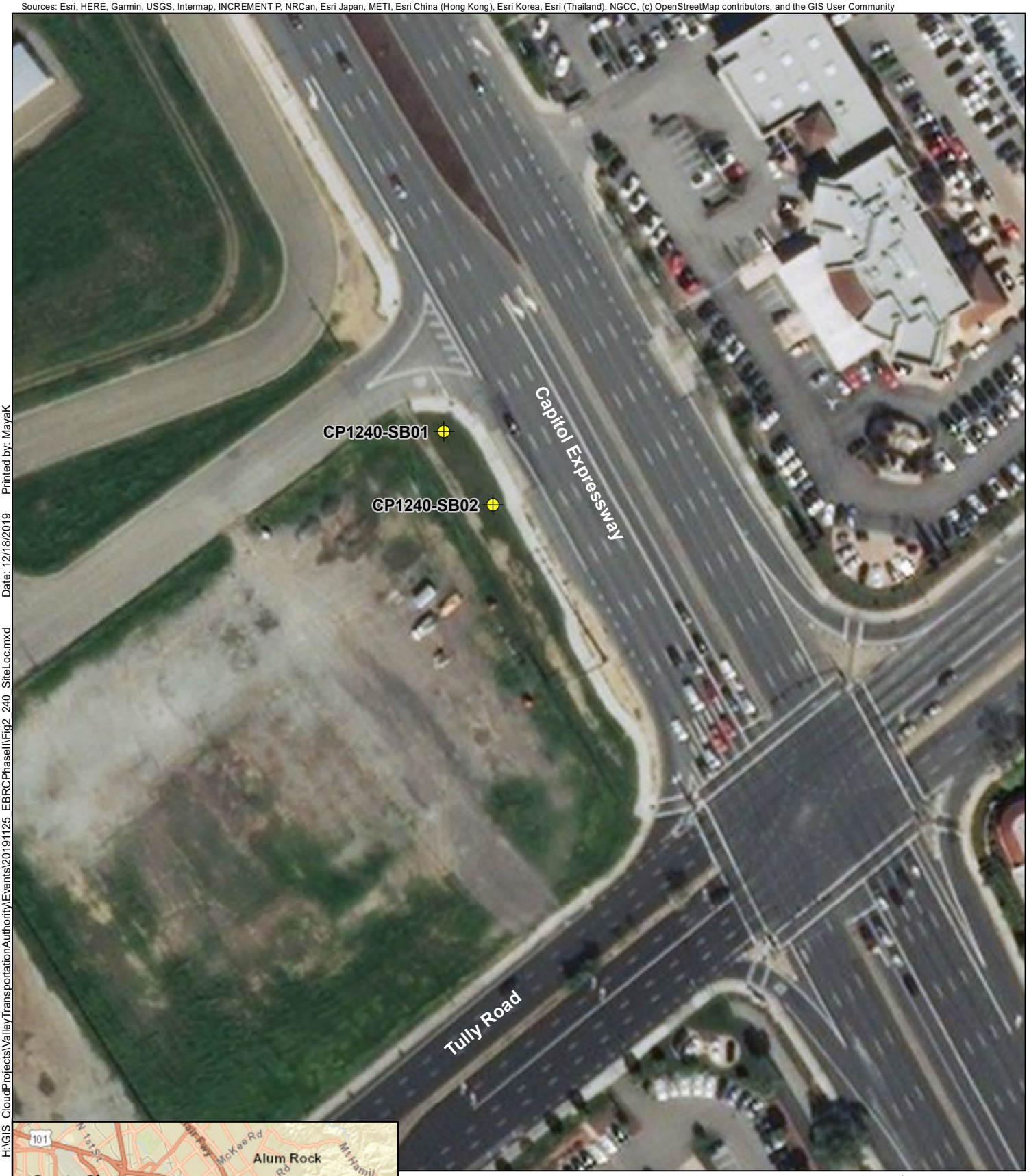
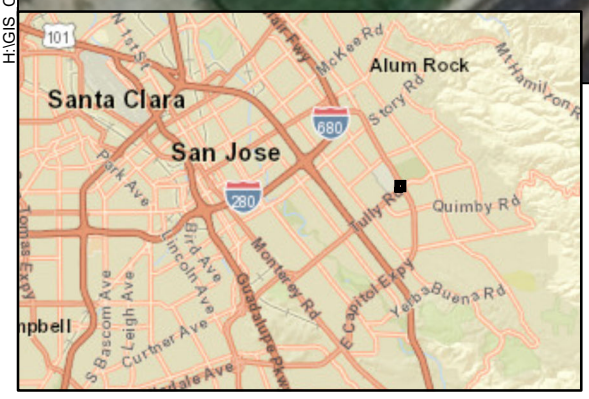




N

0 50 100

Scale: Feet

Kennedy Jenks

Valley Transportation Authority
Eastridge to BART Regional Connector
San Jose, California

Sample Location Map
Parcel 1240

K/J 1965013.02

Figure 2

Appendix A

Photographs

Appendix A: Photographs – Parcel 1236 and Parcel 1240

Figure 1: Parcel 1236, looking southeast

Figure 2: Parcel 1236, Looking northwest

Figure 3: Parcel 1240, looking southeast

Figure 4: Parcel 1240, looking northwest

Appendix B

Soil Boring Logs

Boring & Well Construction Log

Kennedy/Jenks Consultants

BORING LOCATION: CP1236 - East		Boring Name: CP1236-SB01	
DRILLING COMPANY: Cascade Drilling	DRILLER: J. Cervantes	Project Name: SCVTA EBRC Capitol Expwy	
DRILLING METHOD(S): GeoProbe	DRILL BIT(S) SIZE: 2-1/4 inches	Project Number: 1965013.02	
ISOLATION CASING: n/a	FROM n/a TO n/a FT.	ELEVATION AND DATUM: Ground: 119.00 ft.	TOTAL DEPTH: 16.0 ft. bgs
BLANK CASING: 3/4-In. SCH 40 PVC (Temp.)	FROM 0 TO 11 FT.	DATE STARTED: 11/5/19	DATE COMPLETED: 11/5/19
SLOTTED CASING: 3/4-In. SCH 40 PVC 0.010-in. slotted (Temp.)	FROM n/a TO n/a FT.	STATIC WATER ELEVATION: 109.30 ft.	NORTH: 1949033.680
SIZE AND TYPE OF FILTER PACK: n/a	FROM n/a TO n/a FT.	LOGGED BY: M. McLeod	EAST: 6177902.760
SEAL: n/a	FROM n/a TO n/a FT.	SAMPLING METHODS: Continuous	WELL COMPLETION: ☐ SURFACE HOUSING ☐ STAND PIPE n/a FT.
GROUT: Neat Cement	FROM 0 TO 16 FT.		

SAMPLES Type & No.	Recovery (Feet)	Penetr. Resist. Blows/6"	Drill Depth (Feet)	BACKFILL DETAILS	USCS Log	Lithology	Color	SAMPLE DESCRIPTION and DRILLING REMARKS
CP236-SB01-2	HAND AU-GER			Neat Cement	ML		10YR 3/1	**SILT (ML)** VERY DARK GRAY, VERY STIFF, NO PLASTICITY, DRY
								2 FT COLOR CHANGES TO DARK BROWN
					ML		10YR 4/4	**CLAYEY SILT (ML)** DARK YELLOWISH BROWN OVERALL, MEDIUM STIFF, LOW TO NO PLASTICITY, MOIST-DRY
CP236-SB01-5			5					
	2.6			Blank Casing (Temp.)	SM			**SILTY SAND (SM)** DARK YELLOWISH BROWN OVERALL, ~70% FINE GRAINED SAND, ~30% SILT, LOOSE-DENSE, WET
CP236-SB01-8								**CLAY TO SILTY CLAY (CL)** BROWN OVERALL, MEDIUM STIFF-SOFT, LOW TO MEDIUM PLASTICITY, MOIST
	2.5		10	Measured	CL		10YR 4/3	
CP236-SB01-12				Slotted Screen (Tenp.)				
	4							
			15		SM		2.5Y 4/2	**SILTY SAND (SM)** DARK GRAYISH BROWN OVERALL, ~70-60% FINE GRAINED SAND, ~30% FINES, LOOSE, WET

NOTES

1. ALL CONTACTS APPROXIMATE
2. BGS: BELOW GROUND SURFACE
3. COLOR DESIGNATION IN ACCORDANCE WITH THE MUNSELL SOIL COLOR CHARTS (KOLLMORGEN INSTRUMENTS CORPORATION, 1990)
4. SOIL CLASSIFIED IN ACCORDANCE WITH THE UNIFIED SOIL CLASSIFICATION SYSTEM, ASTM D-2488-93
5. GROUNDWATER SAMPLE COLLECTED THROUGH TEMPORARY PVC CASING.

BORING & WELL CONSTRUCTION 1965013.02.GPJ KENNEDY JENKS.GDT 12/18/19

Boring & Well Construction Log

Kennedy/Jenks Consultants

BORING LOCATION: CP1236 - West		Boring Name: CP1236-SB02	
DRILLING COMPANY: Cascade Drilling	DRILLER: J. Cervantes	Project Name: SCVTA EBRC Capitol Expwy	
DRILLING METHOD(S): GeoProbe	DRILL BIT(S) SIZE: 2-1/4 inches	Project Number: 1965013.02	
ISOLATION CASING: n/a	FROM n/a TO n/a FT.	ELEVATION AND DATUM: Ground: 120.00 ft.	TOTAL DEPTH: 16.0 ft. bgs
BLANK CASING: 3/4-In. SCH 40 PVC (Temp.)	FROM 0 TO 11 FT.	DATE STARTED: 11/5/19	DATE COMPLETED: 11/5/19
SLOTTED CASING: 3/4-In. SCH 40 PVC 0.010-in. slotted (Temp.)	FROM n/a TO n/a FT.	STATIC WATER ELEVATION: 111.50 ft.	NORTH: 1949113.050
SIZE AND TYPE OF FILTER PACK: n/a	FROM n/a TO n/a FT.	LOGGED BY: M. McLeod	EAST: 6177854.650
SEAL: n/a	FROM n/a TO n/a FT.	SAMPLING METHODS: Continuous	WELL COMPLETION: ☐ SURFACE HOUSING ☐ STAND PIPE n/a FT.
GROUT: Neat Cement	FROM 0 TO 16 FT.		

SAMPLES Type & No.	Recovery (Feet)	Penetr. Resist. Blows/6"	Drill Depth (Feet)	BACKFILL DETAILS	USCS Log	Lithology	Color	SAMPLE DESCRIPTION and DRILLING REMARKS
CP236-SB02-2	HAND AU-GER			Neat Cement	ML		10YR 4/4	**SILT (ML)** BROWN OVERALL, VERY STIFF, NO PLASTICITY, DRY
CP236-SB02-5	3		5	Blank Casing (Temp.)	SM		10YR 5/4	5 FT. COLOR GRADES TO YELLOWISH BROWN **SILTY SAND (SM)** YELLOWISH BROWN OVERALL, ~60-70% FINE GRAINED SAND, ~40% FINES, LOOSE-MEDIUM DENSE, WET-MOIST
CP236-SB02-9	2.8		10	Measured Slotted Screen (Tenp.)	CL		10YR 4/4 10YR 6/2	**CLAY (CL)** DARK YELLOWISH BROWN AND LIGHT BROWNISH GRAY, MEDIUM STIFF, MEDIUM TO HIGH PLASTICITY, MOIST
CP236-SB02-12	3.3		15		SM		2.5Y 4/4	**SILTY SAND (SM)** OLIVE BROWN OVERALL, ~70% FINE GRAINED SAND, ~20-30% FINES, DENSE, WET

NOTES

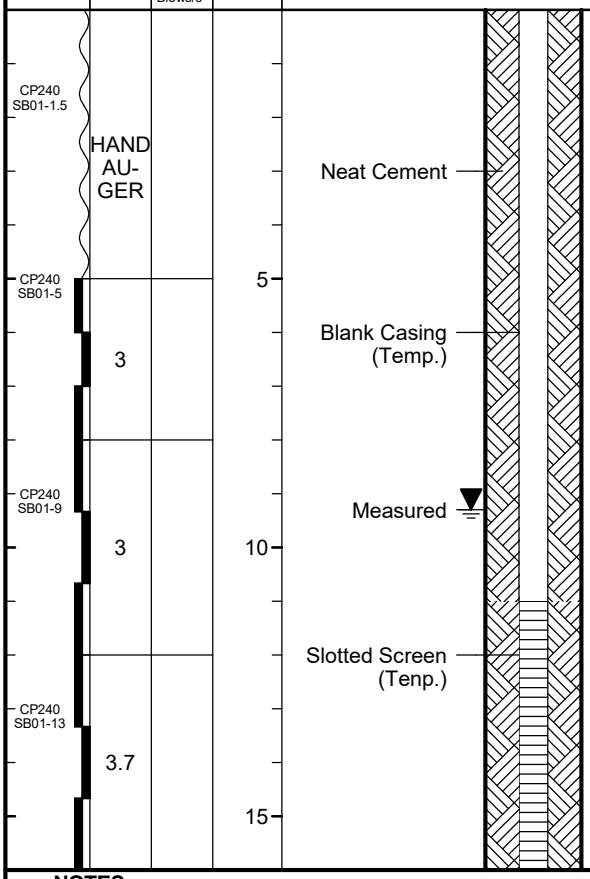
1. ALL CONTACTS APPROXIMATE
2. BGS: BELOW GROUND SURFACE
3. COLOR DESIGNATION IN ACCORDANCE WITH THE MUNSELL SOIL COLOR CHARTS (KOLLMORGEN INSTRUMENTS CORPORATION, 1990)
4. SOIL CLASSIFIED IN ACCORDANCE WITH THE UNIFIED SOIL CLASSIFICATION SYSTEM, ASTM D-2488-93
5. GROUNDWATER SAMPLE COLLECTED THROUGH TEMPORARY PVC CASING.

BORING & WELL CONSTRUCTION 1965013.02.GPJ KENNEDY JENKS.GDT 12/18/19

Boring & Well Construction Log

Kennedy/Jenks Consultants

BORING LOCATION: CP1240 - West		Boring Name: CP1240-SB01	
DRILLING COMPANY: Cascade Drilling	DRILLER: J. Cervantes	Project Name: SCVTA EBRC Capitol Expwy	
DRILLING METHOD(S): GeoProbe	DRILL BIT(S) SIZE: 2-1/4 inches	Project Number: 1965013.02	
ISOLATION CASING: n/a	FROM n/a TO n/a FT.	ELEVATION AND DATUM: Ground: 132.00 ft.	TOTAL DEPTH: 16.0 ft. bgs
BLANK CASING: 3/4-In. SCH 40 PVC (Temp.)	FROM 0 TO 11 FT.	DATE STARTED: 11/5/19	DATE COMPLETED: 11/5/19
SLOTTED CASING: 3/4-In. SCH 40 PVC 0.010-in. slotted (Temp.)	FROM n/a TO n/a FT.	STATIC WATER ELEVATION: 122.70 ft.	NORTH: 1946052.500
SIZE AND TYPE OF FILTER PACK: n/a	FROM n/a TO n/a FT.	LOGGED BY: M. McLeod	EAST: 6179718.400
SEAL: n/a	FROM n/a TO n/a FT.	SAMPLING METHODS: Continuous	WELL COMPLETION: ☐ SURFACE HOUSING ☐ STAND PIPE n/a FT.
GROUT: Neat Cement	FROM 0 TO 16 FT.		



Type & No.	Recovery (Feet)	Penetr. Resist. Blows/6"	Drill Depth (Feet)	USCS Log	Lithology	Color	SAMPLE DESCRIPTION and DRILLING REMARKS
CP240 SB01-1.5	HAND AU-GER			ML			**SILT (ML)** BROWN OVERALL, UP TO ~20% FINE GRAINED SAND, SOFT, NO PLASTICITY, MOIST
CP240 SB01-5	3		5	SM		10YR 4/4	**SILTY SAND (SM)** BROWN OVERALL, ~70% FINE GRAINED SAND, ~30% SILT, LOOSE, WET
CP240 SB01-9	3		10	CL			**CLAY (CL)** BROWN OVERALL, SOFT, MEDIUM PLASTICITY, WET
				SM			**SILTY SAND (SM)** BROWN OVERALL, ~70% FINE GRAINED SAND, ~30% SILT, LOOSE, WET
CP240 SB01-13	3.7		15	ML		2.5Y 4/4	**SILT TO SANDY SILT (ML)** OLIVE BROWN OVERALL, MEDIUM STIFF TO SOFT, MOIST

NOTES

1. ALL CONTACTS APPROXIMATE
2. BGS: BELOW GROUND SURFACE
3. COLOR DESIGNATION IN ACCORDANCE WITH THE MUNSELL SOIL COLOR CHARTS (KOLLMORGEN INSTRUMENTS CORPORATION, 1990)
4. SOIL CLASSIFIED IN ACCORDANCE WITH THE UNIFIED SOIL CLASSIFICATION SYSTEM, ASTM D-2488-93
5. GROUNDWATER SAMPLE COLLECTED THROUGH TEMPORARY PVC CASING.

BORING & WELL CONSTRUCTION 1965013.02.GPJ KENNEDY JENKS.GDT 12/18/19

Boring & Well Construction Log

Kennedy/Jenks Consultants

BORING LOCATION: **CP1240 - East**		**Boring Name**	**CP1240-SB02**
DRILLING COMPANY: **Cascade Drilling**	DRILLER: **J. Cervantes**	**Project Name**	**SCVTA EBRC Capitol Expwy**
DRILLING METHOD(S): **GeoProbe**	DRILL BIT(S) SIZE: **2-1/4 inches**	**Project Number**	**1965013.02**
ISOLATION CASING: **n/a**	FROM **n/a** TO **n/a** FT.	ELEVATION AND DATUM: **Ground: 133.00 ft.**	TOTAL DEPTH: **16.0 ft. bgs**
BLANK CASING: **3/4-In. SCH 40 PVC (Temp.)**	FROM **0** TO **11** FT.	DATE STARTED: **11/5/19**	DATE COMPLETED: **11/5/19**
SLOTTED CASING: **3/4-In. SCH 40 PVC 0.010-in. slotted (Temp.)**	FROM **n/a** TO **n/a** FT.	STATIC WATER ELEVATION: **n/a**	NORTH: **1945996.670**
SIZE AND TYPE OF FILTER PACK: **n/a**	FROM **n/a** TO **n/a** FT.	LOGGED BY: **M. McLeod**	EAST: **6179755.760**
SEAL: **n/a**	FROM **n/a** TO **n/a** FT.	SAMPLING METHODS: **Continuous**	WELL COMPLETION: ☐ SURFACE HOUSING ☐ STAND PIPE **n/a** FT.
GROUT: **Neat Cement**	FROM **0** TO **16** FT.		

SAMPLES Type & No.	Recovery (Feet)	Penetr. Resist. Blows/6"	Drill Depth (Feet)	BACKFILL DETAILS	USCS Log	Lithology	Color	SAMPLE DESCRIPTION and DRILLING REMARKS
CP240 SB02-1.5	HAND AU-GER			Neat Cement	ML		7.5YR 4/6	**SILT (ML)** STRONG BROWN, MEDIUM STIFF, NO PLASTICITY, MOIST TO DRY
CP240 SB02-5	2.9		5	Blank Casing (Temp.)	SM		10YR 5/4	**SILTY SAND (SM)** YELLOWISH BROWN OVERALL, ~70-80% FINE GRAINED SAND, LOOSE, MOIST TO DRY
CP240 SB02-9	4		10	Slotted Screen (Tenp.)	CL			GRADES TO **SANDY CLAY (CL)** YELLOWISH BROWN OVERALL, SOFT, MEDIUM PLASTICITY, WET
CP240 SB02-13	3.3		15		SM		2.5Y 3/2	**SILTY SAND (SM)** VERY DARK GRAYISH BROWN OVERALL, ~70-80% FINE GRAINED SAND, ~30% FINES, WET

NOTES

1. ALL CONTACTS APPROXIMATE
2. BGS: BELOW GROUND SURFACE
3. COLOR DESIGNATION IN ACCORDANCE WITH THE MUNSELL SOIL COLOR CHARTS (KOLLMORGEN INSTRUMENTS CORPORATION, 1990)
4. SOIL CLASSIFIED IN ACCORDANCE WITH THE UNIFIED SOIL CLASSIFICATION SYSTEM, ASTM D-2488-93
5. GROUNDWATER SAMPLE COLLECTED THROUGH TEMPORARY PVC CASING.

BORING & WELL CONSTRUCTION 1965013.02.GPJ KENNEDY JENKS.GDT 12/18/19

Appendix C

Laboratory Reports

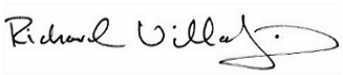
ANALYTICAL REPORT

Eurofins Calscience LLC
7440 Lincoln Way
Garden Grove, CA 92841
Tel: (714)895-5494

Laboratory Job ID: 570-12118-1
Client Project/Site: VTA EBRC / 1965013.00

For:
Kennedy/Jenks Consultants
3200 El Camino Real
Suite 200
Irvine, California 92602

Attn: Mr. Jay Knight



Authorized for release by:
11/15/2019 5:35:29 PM

Richard Villafania, Project Manager I
(714)895-5494
richardvillafania@eurofinsus.com

Table of Contents

Definitions/Glossary

Client: Kennedy/Jenks Consultants
Project/Site: VTA EBRC / 1965013.00

Job ID: 570-12118-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
F1	MS and/or MSD Recovery is outside acceptance limits.
me	LCS Recovery is within Marginal Exdeedance (ME) control limit range (± 4 SD from the mean).

GC Semi VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.
Z	The chromatographic response does not resemble a typical fuel pattern.

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
L	A negative instrument reading had an absolute value greater than the reporting limit

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 570-12118-1

Laboratory: Eurofins Calscience LLC

Narrative

Job Narrative
570-12118-1

Comments
No additional comments.

Receipt
The samples were received on 11/7/2019 10:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.9º C.

Receipt Exceptions

The container label for the following samples did not match the information listed on the Chain-of-Custody (COC): CP236-SB01-2 (570-12118-1), CP236-SB01-5 (570-12118-2), CP236-SB01-8 (570-12118-3), CP236-SB01-12 (570-12118-4), CP236-SB02-2 (570-12118-5), CP236-SB02-5 (570-12118-6), CP236-SB02-9 (570-12118-7), CP236-SB02-12 (570-12118-8), CP240-SB01-1.5 (570-12118-9), CP240-SB01-5 (570-12118-10) and CP240-SB01-9 (570-12118-11). The sampling date(year) per container labels list <2019>, while the COC lists <2016>. Logged-in per sample label (current year).

GC/MS VOA
Method 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 570-32877 and analytical batch 570-32790 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8260B: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 570-32920 and analytical batch 570-32957 recovered outside control limits for the following analyte: 1,2-Dichloropropane. This analyte was biased high in the LCS/LCSD and was not detected in the associated samples; therefore, the data have been reported.

Method 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 570-32920 and analytical batch 570-32957 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA
Method 8015B: The method blank for preparation batch 570-31667 and analytical batch 570-31602 contained MRO (C17-C44) above the method detection limit. This target analyte concentration was less than half of the reporting limit (1/2RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method 8081A: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 570-31971 and analytical batch 570-32082 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
Method 6010B: The absolute response for Molybdenum and Selenium was greater than the method reporting limit (RL) in the following samples: CP236-SB01-2 (570-12118-1), CP236-SB01-5 (570-12118-2), CP236-SB01-8 (570-12118-3), CP236-SB02-2 (570-12118-5), CP236-SB02-5 (570-12118-6), CP236-SB02-9 (570-12118-7), CP240-SB01-1.5 (570-12118-9), CP240-SB01-5 (570-12118-10), CP240-SB01-9 (570-12118-11), CP240-SB02-1.5 (570-12118-13), CP240-SB02-5 (570-12118-14) and CP240-SB02-9 (570-12118-15). The instrument raw data has been manually reviewed and the result can be reported as ND.

Method 6010B: The absolute response for Molybdenum was greater than the method reporting limit (RL) in the following sample: (MB 570-31813/1-A).
The instrument raw data has been manually reviewed and the result can be reported as ND.

Job ID: 570-12118-1 (Continued)

Laboratory: Eurofins Calscience LLC (Continued)

Method 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 570-31813 and analytical batch 570-32832 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 6010B: Due to the high concentration of Chromium, Copper, Nickel, Selenium, and Zinc, the matrix spike / matrix spike duplicate (MS/MSD) for preparation batch 570-31813 and analytical batch 570-32832 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

Method 7471A: Due to the high concentration of Mercury, the matrix spike / matrix spike duplicate (MS/MSD) for preparation batch 570-31814 and analytical batch 570-32357 could not be evaluated for accuracy and precision. The associated laboratory control sample / laboratory control sample duplicate (LCS/LCSD) met acceptance criteria.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Kennedy/Jenks Consultants
Project/Site: VTA EBRC / 1965013.00

Job ID: 570-12118-1

Client Sample ID: CP236-SB01-2 — Lab Sample ID: 570-12118-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
DRO (C10-C28)	5.2	Z	4.9	3.5	mg/Kg	1		8015B	Total/NA
MRO (C17-C44)	11	J Z B	25	3.7	mg/Kg	1		8015B	Total/NA
Arsenic	8.62		0.750	0.259	mg/Kg	1		6010B	Total/NA
Barium	219		0.500	0.154	mg/Kg	1		6010B	Total/NA
Beryllium	0.872		0.250	0.137	mg/Kg	1		6010B	Total/NA
Cobalt	15.5		0.250	0.148	mg/Kg	1		6010B	Total/NA
Chromium	61.4		0.250	0.142	mg/Kg	1		6010B	Total/NA
Copper	42.2		0.500	0.135	mg/Kg	1		6010B	Total/NA
Nickel	99.3		0.250	0.145	mg/Kg	1		6010B	Total/NA
Antimony	3.33		0.750	0.149	mg/Kg	1		6010B	Total/NA
Vanadium	46.4		0.250	0.141	mg/Kg	1		6010B	Total/NA
Zinc	75.5		1.00	0.178	mg/Kg	1		6010B	Total/NA
Lead	6.39		0.500	0.132	mg/Kg	1		6010B	Total/NA
Mercury	0.0634	J	0.0794	0.00559	mg/Kg	1		7471A	Total/NA

Client Sample ID: CP236-SB01-5 — Lab Sample ID: 570-12118-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
DRO (C10-C28)	6.8	Z	4.9	3.5	mg/Kg	1		8015B	Total/NA
MRO (C17-C44)	3.8	J Z B	25	3.7	mg/Kg	1		8015B	Total/NA
Arsenic	2.64		0.758	0.262	mg/Kg	1		6010B	Total/NA
Barium	116		0.505	0.156	mg/Kg	1		6010B	Total/NA
Beryllium	0.394		0.253	0.138	mg/Kg	1		6010B	Total/NA
Cobalt	10.2		0.253	0.149	mg/Kg	1		6010B	Total/NA
Chromium	44.5		0.253	0.143	mg/Kg	1		6010B	Total/NA
Copper	19.0		0.505	0.136	mg/Kg	1		6010B	Total/NA
Nickel	75.3		0.253	0.146	mg/Kg	1		6010B	Total/NA
Antimony	3.00		0.758	0.151	mg/Kg	1		6010B	Total/NA
Thallium	0.869		0.758	0.154	mg/Kg	1		6010B	Total/NA
Vanadium	28.5		0.253	0.142	mg/Kg	1		6010B	Total/NA
Zinc	42.3		1.01	0.180	mg/Kg	1		6010B	Total/NA
Lead	3.70		0.505	0.133	mg/Kg	1		6010B	Total/NA
Mercury	0.0287	J	0.0847	0.00597	mg/Kg	1		7471A	Total/NA

Client Sample ID: CP236-SB01-8 — Lab Sample ID: 570-12118-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
DRO (C10-C28)	14	Z	5.0	3.5	mg/Kg	1		8015B	Total/NA
MRO (C17-C44)	8.7	J Z B	25	3.8	mg/Kg	1		8015B	Total/NA
Arsenic	10.6		0.773	0.267	mg/Kg	1		6010B	Total/NA
Barium	186		0.515	0.159	mg/Kg	1		6010B	Total/NA
Beryllium	0.553		0.258	0.141	mg/Kg	1		6010B	Total/NA
Cobalt	9.72		0.258	0.153	mg/Kg	1		6010B	Total/NA
Chromium	47.6		0.258	0.146	mg/Kg	1		6010B	Total/NA
Copper	31.3		0.515	0.139	mg/Kg	1		6010B	Total/NA
Nickel	78.9		0.258	0.149	mg/Kg	1		6010B	Total/NA
Antimony	3.40		0.773	0.154	mg/Kg	1		6010B	Total/NA
Vanadium	36.4		0.258	0.145	mg/Kg	1		6010B	Total/NA
Zinc	56.3		1.03	0.184	mg/Kg	1		6010B	Total/NA
Lead	4.64		0.515	0.136	mg/Kg	1		6010B	Total/NA
Mercury	0.0403	J	0.0794	0.00559	mg/Kg	1		7471A	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Kennedy/Jenks Consultants
Project/Site: VTA EBRC / 1965013.00

Job ID: 570-12118-1

Client Sample ID: CP236-SB02-2 — Lab Sample ID: 570-12118-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	9.65		0.777	0.268	mg/Kg	1		6010B	Total/NA
Barium	213		0.518	0.160	mg/Kg	1		6010B	Total/NA
Beryllium	0.703		0.259	0.142	mg/Kg	1		6010B	Total/NA
Cobalt	14.6		0.259	0.153	mg/Kg	1		6010B	Total/NA
Chromium	55.0		0.259	0.147	mg/Kg	1		6010B	Total/NA
Copper	35.7		0.518	0.140	mg/Kg	1		6010B	Total/NA
Nickel	95.5		0.259	0.150	mg/Kg	1		6010B	Total/NA
Antimony	4.00		0.777	0.154	mg/Kg	1		6010B	Total/NA
Thallium	1.12		0.777	0.158	mg/Kg	1		6010B	Total/NA
Vanadium	42.1		0.259	0.146	mg/Kg	1		6010B	Total/NA
Zinc	70.1		1.04	0.184	mg/Kg	1		6010B	Total/NA
Lead	6.82		0.518	0.137	mg/Kg	1		6010B	Total/NA
Mercury	0.0671	J	0.0794	0.00559	mg/Kg	1		7471A	Total/NA

Client Sample ID: CP236-SB02-5 — Lab Sample ID: 570-12118-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
DRO (C10-C28)	4.0	J Z	5.0	3.5	mg/Kg	1		8015B	Total/NA
Arsenic	10.3		0.754	0.260	mg/Kg	1		6010B	Total/NA
Barium	175		0.503	0.155	mg/Kg	1		6010B	Total/NA
Beryllium	0.528		0.251	0.138	mg/Kg	1		6010B	Total/NA
Cobalt	12.5		0.251	0.149	mg/Kg	1		6010B	Total/NA
Chromium	47.3		0.251	0.143	mg/Kg	1		6010B	Total/NA
Copper	29.2		0.503	0.136	mg/Kg	1		6010B	Total/NA
Nickel	86.2		0.251	0.146	mg/Kg	1		6010B	Total/NA
Antimony	2.21		0.754	0.150	mg/Kg	1		6010B	Total/NA
Thallium	0.828		0.754	0.153	mg/Kg	1		6010B	Total/NA
Vanadium	35.5		0.251	0.142	mg/Kg	1		6010B	Total/NA
Zinc	54.7		1.01	0.179	mg/Kg	1		6010B	Total/NA
Lead	5.06		0.503	0.133	mg/Kg	1		6010B	Total/NA
Mercury	0.0612	J	0.0877	0.00618	mg/Kg	1		7471A	Total/NA

Client Sample ID: CP236-SB02-9 — Lab Sample ID: 570-12118-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
DRO (C10-C28)	9.3	Z	4.9	3.5	mg/Kg	1		8015B	Total/NA
MRO (C17-C44)	4.2	J Z B	25	3.7	mg/Kg	1		8015B	Total/NA
Arsenic	10.7		0.746	0.258	mg/Kg	1		6010B	Total/NA
Barium	178		0.498	0.153	mg/Kg	1		6010B	Total/NA
Beryllium	0.534		0.249	0.136	mg/Kg	1		6010B	Total/NA
Cobalt	14.1		0.249	0.147	mg/Kg	1		6010B	Total/NA
Chromium	46.2		0.249	0.141	mg/Kg	1		6010B	Total/NA
Copper	31.2		0.498	0.134	mg/Kg	1		6010B	Total/NA
Nickel	80.8		0.249	0.144	mg/Kg	1		6010B	Total/NA
Antimony	3.52		0.746	0.148	mg/Kg	1		6010B	Total/NA
Thallium	1.45		0.746	0.151	mg/Kg	1		6010B	Total/NA
Vanadium	36.6		0.249	0.140	mg/Kg	1		6010B	Total/NA
Zinc	58.0		0.995	0.177	mg/Kg	1		6010B	Total/NA
Lead	5.74		0.498	0.131	mg/Kg	1		6010B	Total/NA
Mercury	0.0623	J	0.0806	0.00568	mg/Kg	1		7471A	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Kennedy/Jenks Consultants
Project/Site: VTA EBRC / 1965013.00

Job ID: 570-12118-1

Client Sample ID: CP240-SB01-1.5 — Lab Sample ID: 570-12118-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
DRO (C10-C28)	4.5	J Z	5.0	3.5	mg/Kg	1		8015B	Total/NA
MRO (C17-C44)	8.2	J Z B	25	3.8	mg/Kg	1		8015B	Total/NA
Arsenic	6.96		0.789	0.273	mg/Kg	1		6010B	Total/NA
Barium	158		0.526	0.162	mg/Kg	1		6010B	Total/NA
Beryllium	0.549		0.263	0.144	mg/Kg	1		6010B	Total/NA
Cobalt	11.8		0.263	0.156	mg/Kg	1		6010B	Total/NA
Chromium	53.1		0.263	0.149	mg/Kg	1		6010B	Total/NA
Copper	24.7		0.526	0.142	mg/Kg	1		6010B	Total/NA
Nickel	89.9		0.263	0.153	mg/Kg	1		6010B	Total/NA
Antimony	3.70		0.789	0.157	mg/Kg	1		6010B	Total/NA
Vanadium	35.3		0.263	0.148	mg/Kg	1		6010B	Total/NA
Zinc	54.9		1.05	0.187	mg/Kg	1		6010B	Total/NA
Lead	6.38		0.526	0.139	mg/Kg	1		6010B	Total/NA
Mercury	0.0554	J	0.0847	0.00597	mg/Kg	1		7471A	Total/NA

Client Sample ID: CP240-SB01-5 — Lab Sample ID: 570-12118-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
DRO (C10-C28)	4.3	J Z	5.0	3.5	mg/Kg	1		8015B	Total/NA
Arsenic	6.90		0.746	0.258	mg/Kg	1		6010B	Total/NA
Barium	164		0.498	0.153	mg/Kg	1		6010B	Total/NA
Beryllium	0.492		0.249	0.136	mg/Kg	1		6010B	Total/NA
Cobalt	11.8		0.249	0.147	mg/Kg	1		6010B	Total/NA
Chromium	45.9		0.249	0.141	mg/Kg	1		6010B	Total/NA
Copper	26.8		0.498	0.134	mg/Kg	1		6010B	Total/NA
Nickel	84.3		0.249	0.144	mg/Kg	1		6010B	Total/NA
Antimony	4.77		0.746	0.148	mg/Kg	1		6010B	Total/NA
Thallium	0.396	J	0.746	0.151	mg/Kg	1		6010B	Total/NA
Vanadium	34.0		0.249	0.140	mg/Kg	1		6010B	Total/NA
Zinc	55.3		0.995	0.177	mg/Kg	1		6010B	Total/NA
Lead	4.97		0.498	0.131	mg/Kg	1		6010B	Total/NA
Mercury	0.0587	J	0.0833	0.00587	mg/Kg	1		7471A	Total/NA

Client Sample ID: CP240-SB01-9 — Lab Sample ID: 570-12118-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
DRO (C10-C28)	7.4	Z	5.0	3.5	mg/Kg	1		8015B	Total/NA
Arsenic	7.08		0.765	0.264	mg/Kg	1		6010B	Total/NA
Barium	139		0.510	0.157	mg/Kg	1		6010B	Total/NA
Beryllium	0.531		0.255	0.140	mg/Kg	1		6010B	Total/NA
Cobalt	12.0		0.255	0.151	mg/Kg	1		6010B	Total/NA
Chromium	47.7		0.255	0.145	mg/Kg	1		6010B	Total/NA
Copper	28.0		0.510	0.138	mg/Kg	1		6010B	Total/NA
Nickel	80.5		0.255	0.148	mg/Kg	1		6010B	Total/NA
Antimony	5.18		0.765	0.152	mg/Kg	1		6010B	Total/NA
Thallium	0.817		0.765	0.155	mg/Kg	1		6010B	Total/NA
Vanadium	36.3		0.255	0.144	mg/Kg	1		6010B	Total/NA
Zinc	59.1		1.02	0.182	mg/Kg	1		6010B	Total/NA
Lead	5.27		0.510	0.135	mg/Kg	1		6010B	Total/NA
Mercury	0.100		0.0820	0.00578	mg/Kg	1		7471A	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Kennedy/Jenks Consultants
Project/Site: VTA EBRC / 1965013.00

Job ID: 570-12118-1

Client Sample ID: CP240-SB02-1.5 — Lab Sample ID: 570-12118-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
DRO (C10-C28)	4.8	J Z	5.0	3.5	mg/Kg	1		8015B	Total/NA
MRO (C17-C44)	7.9	J Z B	25	3.8	mg/Kg	1		8015B	Total/NA
4,4'-DDE	3.3	J	5.0	0.72	ug/Kg	1		8081A	Total/NA
4,4'-DDT	3.1	J	5.0	1.5	ug/Kg	1		8081A	Total/NA
Arsenic	4.96		0.735	0.254	mg/Kg	1		6010B	Total/NA
Barium	180		0.490	0.151	mg/Kg	1		6010B	Total/NA
Beryllium	0.535		0.245	0.134	mg/Kg	1		6010B	Total/NA
Cobalt	11.7		0.245	0.145	mg/Kg	1		6010B	Total/NA
Chromium	50.4		0.245	0.139	mg/Kg	1		6010B	Total/NA
Copper	26.4		0.490	0.132	mg/Kg	1		6010B	Total/NA
Nickel	87.1		0.245	0.142	mg/Kg	1		6010B	Total/NA
Antimony	3.86		0.735	0.146	mg/Kg	1		6010B	Total/NA
Thallium	2.16		0.735	0.149	mg/Kg	1		6010B	Total/NA
Vanadium	35.6		0.245	0.138	mg/Kg	1		6010B	Total/NA
Zinc	62.1		0.980	0.175	mg/Kg	1		6010B	Total/NA
Lead	14.0		0.490	0.129	mg/Kg	1		6010B	Total/NA
Mercury	0.0725	J	0.0833	0.00587	mg/Kg	1		7471A	Total/NA

Client Sample ID: CP240-SB02-5 — Lab Sample ID: 570-12118-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
DRO (C10-C28)	4.3	J Z	5.0	3.5	mg/Kg	1		8015B	Total/NA
Arsenic	8.41		0.769	0.266	mg/Kg	1		6010B	Total/NA
Barium	156		0.513	0.158	mg/Kg	1		6010B	Total/NA
Beryllium	0.467		0.256	0.141	mg/Kg	1		6010B	Total/NA
Cobalt	11.1		0.256	0.152	mg/Kg	1		6010B	Total/NA
Chromium	45.3		0.256	0.146	mg/Kg	1		6010B	Total/NA
Copper	25.3		0.513	0.138	mg/Kg	1		6010B	Total/NA
Nickel	81.2		0.256	0.149	mg/Kg	1		6010B	Total/NA
Antimony	1.89		0.769	0.153	mg/Kg	1		6010B	Total/NA
Thallium	0.989		0.769	0.156	mg/Kg	1		6010B	Total/NA
Vanadium	34.0		0.256	0.145	mg/Kg	1		6010B	Total/NA
Zinc	54.6		1.03	0.183	mg/Kg	1		6010B	Total/NA
Lead	5.38		0.513	0.135	mg/Kg	1		6010B	Total/NA
Mercury	0.0492	J	0.0833	0.00587	mg/Kg	1		7471A	Total/NA

Client Sample ID: CP240-SB02-9 — Lab Sample ID: 570-12118-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
DRO (C10-C28)	14	Z	4.9	3.5	mg/Kg	1		8015B	Total/NA
MRO (C17-C44)	6.3	J Z B	25	3.7	mg/Kg	1		8015B	Total/NA
Arsenic	7.01		0.739	0.255	mg/Kg	1		6010B	Total/NA
Barium	154		0.493	0.152	mg/Kg	1		6010B	Total/NA
Beryllium	0.427		0.246	0.135	mg/Kg	1		6010B	Total/NA
Cobalt	10.2		0.246	0.146	mg/Kg	1		6010B	Total/NA
Chromium	39.2		0.246	0.140	mg/Kg	1		6010B	Total/NA
Copper	22.7		0.493	0.133	mg/Kg	1		6010B	Total/NA
Nickel	70.9		0.246	0.143	mg/Kg	1		6010B	Total/NA
Antimony	3.26		0.739	0.147	mg/Kg	1		6010B	Total/NA
Thallium	1.74		0.739	0.150	mg/Kg	1		6010B	Total/NA
Vanadium	30.7		0.246	0.139	mg/Kg	1		6010B	Total/NA
Zinc	48.6		0.985	0.175	mg/Kg	1		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: CP240-SB02-9 (Continued)

Lab Sample ID: 570-12118-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	4.32		0.493	0.130	mg/Kg	1		6010B	Total/NA
Mercury	0.0458	J	0.0794	0.00559	mg/Kg	1		7471A	Total/NA

This Detection Summary does not include radiochemical test results.

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Client Sample ID: CP236-SB01-2
Date Collected: 11/05/19 09:00
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-1
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TPH (as Gasoline)	ND		510	31	ug/Kg		11/14/19 15:25	11/14/19 15:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*102*		*80 - 120*	*11/14/19 15:25*	*11/14/19 15:57*	*1*

Client Sample ID: CP236-SB01-5
Date Collected: 11/05/19 09:15
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-2
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TPH (as Gasoline)	ND		500	31	ug/Kg		11/14/19 15:41	11/14/19 18:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*104*		*80 - 120*	*11/14/19 15:41*	*11/14/19 18:47*	*1*

Client Sample ID: CP236-SB01-8
Date Collected: 11/05/19 09:24
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-3
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TPH (as Gasoline)	ND		510	32	ug/Kg		11/14/19 15:41	11/14/19 19:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*105*		*80 - 120*	*11/14/19 15:41*	*11/14/19 19:13*	*1*

Client Sample ID: CP236-SB02-2
Date Collected: 11/05/19 09:55
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-5
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TPH (as Gasoline)	ND		490	30	ug/Kg		11/14/19 15:41	11/14/19 19:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*104*		*80 - 120*	*11/14/19 15:41*	*11/14/19 19:38*	*1*

Client Sample ID: CP236-SB02-5
Date Collected: 11/05/19 10:11
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-6
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TPH (as Gasoline)	ND		490	30	ug/Kg		11/14/19 15:41	11/14/19 20:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*105*		*80 - 120*	*11/14/19 15:41*	*11/14/19 20:04*	*1*

Client Sample ID: CP236-SB02-9
Date Collected: 11/05/19 10:15
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-7
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TPH (as Gasoline)	ND		500	31	ug/Kg		11/14/19 15:41	11/14/19 20:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*104*		*80 - 120*	*11/14/19 15:41*	*11/14/19 20:29*	*1*

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Client Sample ID: CP240-SB01-1.5
Date Collected: 11/05/19 12:46
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-9
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TPH (as Gasoline)	ND		510	31	ug/Kg		11/14/19 15:41	11/14/19 20:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*103*		*80 - 120*	*11/14/19 15:41*	*11/14/19 20:55*	*1*

Client Sample ID: CP240-SB01-5
Date Collected: 11/05/19 12:54
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-10
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TPH (as Gasoline)	ND		500	31	ug/Kg		11/14/19 15:41	11/14/19 21:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*103*		*80 - 120*	*11/14/19 15:41*	*11/14/19 21:21*	*1*

Client Sample ID: CP240-SB01-9
Date Collected: 11/05/19 12:59
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-11
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TPH (as Gasoline)	ND		500	31	ug/Kg		11/14/19 21:39	11/15/19 03:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*103*		*80 - 120*	*11/14/19 21:39*	*11/15/19 03:24*	*1*

Client Sample ID: CP240-SB02-1.5
Date Collected: 11/05/19 13:35
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-13
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TPH (as Gasoline)	ND		490	30	ug/Kg		11/14/19 21:39	11/15/19 03:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*107*		*80 - 120*	*11/14/19 21:39*	*11/15/19 03:50*	*1*

Client Sample ID: CP240-SB02-5
Date Collected: 11/05/19 13:46
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-14
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TPH (as Gasoline)	ND		490	31	ug/Kg		11/14/19 21:39	11/15/19 04:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*104*		*80 - 120*	*11/14/19 21:39*	*11/15/19 04:16*	*1*

Client Sample ID: CP240-SB02-9
Date Collected: 11/05/19 13:51
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-15
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TPH (as Gasoline)	ND		490	31	ug/Kg		11/14/19 18:09	11/15/19 01:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*103*		*80 - 120*	*11/14/19 18:09*	*11/15/19 01:41*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: CP236-SB01-2
Date Collected: 11/05/19 09:00
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-1
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.1	0.24	ug/Kg		11/14/19 15:25	11/14/19 15:57	1
1,1,1-Trichloroethane	ND		5.1	0.23	ug/Kg		11/14/19 15:25	11/14/19 15:57	1
1,1,2,2-Tetrachloroethane	ND		5.1	0.35	ug/Kg		11/14/19 15:25	11/14/19 15:57	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		51	0.36	ug/Kg		11/14/19 15:25	11/14/19 15:57	1
1,1,2-Trichloroethane	ND		5.1	0.36	ug/Kg		11/14/19 15:25	11/14/19 15:57	1
1,1-Dichloroethane	ND		5.1	0.21	ug/Kg		11/14/19 15:25	11/14/19 15:57	1
1,1-Dichloroethene	ND		5.1	0.35	ug/Kg		11/14/19 15:25	11/14/19 15:57	1
1,1-Dichloropropene	ND		5.1	0.33	ug/Kg		11/14/19 15:25	11/14/19 15:57	1
1,2,3-Trichlorobenzene	ND	F1	10	0.92	ug/Kg		11/14/19 15:25	11/14/19 15:57	1
1,2,3-Trichloropropane	ND		5.1	0.84	ug/Kg		11/14/19 15:25	11/14/19 15:57	1
1,2,4-Trichlorobenzene	ND	F1	5.1	0.31	ug/Kg		11/14/19 15:25	11/14/19 15:57	1
1,2,4-Trimethylbenzene	ND		5.1	0.59	ug/Kg		11/14/19 15:25	11/14/19 15:57	1
1,2-Dibromo-3-Chloropropane	ND		10	1.8	ug/Kg		11/14/19 15:25	11/14/19 15:57	1
1,2-Dibromoethane	ND		5.1	0.26	ug/Kg		11/14/19 15:25	11/14/19 15:57	1
1,2-Dichlorobenzene	ND		5.1	0.23	ug/Kg		11/14/19 15:25	11/14/19 15:57	1
1,2-Dichloroethane	ND		5.1	0.32	ug/Kg		11/14/19 15:25	11/14/19 15:57	1
1,2-Dichloropropane	ND		5.1	0.44	ug/Kg		11/14/19 15:25	11/14/19 15:57	1
1,3,5-Trimethylbenzene	ND		5.1	0.56	ug/Kg		11/14/19 15:25	11/14/19 15:57	1
1,3-Dichlorobenzene	ND		5.1	0.18	ug/Kg		11/14/19 15:25	11/14/19 15:57	1
1,3-Dichloropropane	ND		5.1	0.26	ug/Kg		11/14/19 15:25	11/14/19 15:57	1
1,4-Dichlorobenzene	ND		5.1	0.22	ug/Kg		11/14/19 15:25	11/14/19 15:57	1
2,2-Dichloropropane	ND		5.1	0.33	ug/Kg		11/14/19 15:25	11/14/19 15:57	1
2-Butanone	ND		51	3.8	ug/Kg		11/14/19 15:25	11/14/19 15:57	1
2-Chlorotoluene	ND		5.1	0.23	ug/Kg		11/14/19 15:25	11/14/19 15:57	1
2-Hexanone	ND		51	1.8	ug/Kg		11/14/19 15:25	11/14/19 15:57	1
4-Chlorotoluene	ND		5.1	0.22	ug/Kg		11/14/19 15:25	11/14/19 15:57	1
4-Methyl-2-pentanone	ND		51	4.4	ug/Kg		11/14/19 15:25	11/14/19 15:57	1
Acetone	ND		120	6.3	ug/Kg		11/14/19 15:25	11/14/19 15:57	1
Benzene	ND		5.1	0.13	ug/Kg		11/14/19 15:25	11/14/19 15:57	1
Bromobenzene	ND		5.1	0.21	ug/Kg		11/14/19 15:25	11/14/19 15:57	1
Bromochloromethane	ND		5.1	0.70	ug/Kg		11/14/19 15:25	11/14/19 15:57	1
Bromodichloromethane	ND		5.1	0.24	ug/Kg		11/14/19 15:25	11/14/19 15:57	1
Bromoform	ND		5.1	0.80	ug/Kg		11/14/19 15:25	11/14/19 15:57	1
Bromomethane	ND		25	9.5	ug/Kg		11/14/19 15:25	11/14/19 15:57	1
cis-1,2-Dichloroethene	ND		5.1	0.28	ug/Kg		11/14/19 15:25	11/14/19 15:57	1
cis-1,3-Dichloropropene	ND		5.1	0.26	ug/Kg		11/14/19 15:25	11/14/19 15:57	1
Carbon disulfide	ND		51	0.31	ug/Kg		11/14/19 15:25	11/14/19 15:57	1
Carbon tetrachloride	ND		5.1	0.29	ug/Kg		11/14/19 15:25	11/14/19 15:57	1
Chlorobenzene	ND		5.1	0.23	ug/Kg		11/14/19 15:25	11/14/19 15:57	1
Chloroethane	ND		5.1	1.5	ug/Kg		11/14/19 15:25	11/14/19 15:57	1
Chloroform	ND		5.1	0.24	ug/Kg		11/14/19 15:25	11/14/19 15:57	1
Chloromethane	ND		25	0.31	ug/Kg		11/14/19 15:25	11/14/19 15:57	1
Dibromochloromethane	ND		5.1	0.58	ug/Kg		11/14/19 15:25	11/14/19 15:57	1
Dibromomethane	ND		5.1	0.78	ug/Kg		11/14/19 15:25	11/14/19 15:57	1
Dichlorodifluoromethane	ND		5.1	0.45	ug/Kg		11/14/19 15:25	11/14/19 15:57	1
Di-isopropyl ether (DIPE)	ND		10	0.49	ug/Kg		11/14/19 15:25	11/14/19 15:57	1
Ethanol	ND		250	85	ug/Kg		11/14/19 15:25	11/14/19 15:57	1
Ethylbenzene	ND		5.1	0.15	ug/Kg		11/14/19 15:25	11/14/19 15:57	1
Ethyl-t-butyl ether (ETBE)	ND		10	0.51	ug/Kg		11/14/19 15:25	11/14/19 15:57	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: CP236-SB01-2
Date Collected: 11/05/19 09:00
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-1
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		5.1	0.55	ug/Kg		11/14/19 15:25	11/14/19 15:57	1
Methylene Chloride	ND		51	1.4	ug/Kg		11/14/19 15:25	11/14/19 15:57	1
Methyl-t-Butyl Ether (MTBE)	ND		5.1	0.30	ug/Kg		11/14/19 15:25	11/14/19 15:57	1
Naphthalene	ND	F1	51	0.82	ug/Kg		11/14/19 15:25	11/14/19 15:57	1
n-Butylbenzene	ND		5.1	0.16	ug/Kg		11/14/19 15:25	11/14/19 15:57	1
N-Propylbenzene	ND		5.1	0.51	ug/Kg		11/14/19 15:25	11/14/19 15:57	1
o-Xylene	ND		5.1	0.56	ug/Kg		11/14/19 15:25	11/14/19 15:57	1
m,p-Xylene	ND		5.1	0.27	ug/Kg		11/14/19 15:25	11/14/19 15:57	1
p-Isopropyltoluene	ND		5.1	0.64	ug/Kg		11/14/19 15:25	11/14/19 15:57	1
sec-Butylbenzene	ND		5.1	0.58	ug/Kg		11/14/19 15:25	11/14/19 15:57	1
Styrene	ND		5.1	0.61	ug/Kg		11/14/19 15:25	11/14/19 15:57	1
trans-1,2-Dichloroethene	ND		5.1	0.51	ug/Kg		11/14/19 15:25	11/14/19 15:57	1
trans-1,3-Dichloropropene	ND		5.1	0.61	ug/Kg		11/14/19 15:25	11/14/19 15:57	1
Tert-amyl-methyl ether (TAME)	ND		10	0.36	ug/Kg		11/14/19 15:25	11/14/19 15:57	1
tert-Butyl alcohol (TBA)	ND		51	5.2	ug/Kg		11/14/19 15:25	11/14/19 15:57	1
tert-Butylbenzene	ND		5.1	0.15	ug/Kg		11/14/19 15:25	11/14/19 15:57	1
Tetrachloroethene	ND		5.1	0.21	ug/Kg		11/14/19 15:25	11/14/19 15:57	1
Toluene	ND		5.1	0.52	ug/Kg		11/14/19 15:25	11/14/19 15:57	1
Trichloroethene	ND		5.1	0.30	ug/Kg		11/14/19 15:25	11/14/19 15:57	1
Trichlorofluoromethane	ND		51	0.38	ug/Kg		11/14/19 15:25	11/14/19 15:57	1
Vinyl acetate	ND	F1	51	4.8	ug/Kg		11/14/19 15:25	11/14/19 15:57	1
Vinyl chloride	ND		5.1	0.51	ug/Kg		11/14/19 15:25	11/14/19 15:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*71 - 155*	*11/14/19 15:25*	*11/14/19 15:57*	*1*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*	*11/14/19 15:25*	*11/14/19 15:57*	*1*
Dibromofluoromethane (Surr)	*92*		*79 - 133*	*11/14/19 15:25*	*11/14/19 15:57*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*	*11/14/19 15:25*	*11/14/19 15:57*	*1*

Client Sample ID: CP236-SB01-5
Date Collected: 11/05/19 09:15
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-2
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.0	0.24	ug/Kg		11/14/19 15:41	11/14/19 18:47	1
1,1,1-Trichloroethane	ND		5.0	0.22	ug/Kg		11/14/19 15:41	11/14/19 18:47	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.35	ug/Kg		11/14/19 15:41	11/14/19 18:47	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		50	0.35	ug/Kg		11/14/19 15:41	11/14/19 18:47	1
1,1,2-Trichloroethane	ND		5.0	0.35	ug/Kg		11/14/19 15:41	11/14/19 18:47	1
1,1-Dichloroethane	ND		5.0	0.21	ug/Kg		11/14/19 15:41	11/14/19 18:47	1
1,1-Dichloroethene	ND		5.0	0.35	ug/Kg		11/14/19 15:41	11/14/19 18:47	1
1,1-Dichloropropene	ND		5.0	0.33	ug/Kg		11/14/19 15:41	11/14/19 18:47	1
1,2,3-Trichlorobenzene	ND		10	0.91	ug/Kg		11/14/19 15:41	11/14/19 18:47	1
1,2,3-Trichloropropane	ND		5.0	0.83	ug/Kg		11/14/19 15:41	11/14/19 18:47	1
1,2,4-Trichlorobenzene	ND		5.0	0.31	ug/Kg		11/14/19 15:41	11/14/19 18:47	1
1,2,4-Trimethylbenzene	ND		5.0	0.59	ug/Kg		11/14/19 15:41	11/14/19 18:47	1
1,2-Dibromo-3-Chloropropane	ND		10	1.7	ug/Kg		11/14/19 15:41	11/14/19 18:47	1
1,2-Dibromoethane	ND		5.0	0.25	ug/Kg		11/14/19 15:41	11/14/19 18:47	1
1,2-Dichlorobenzene	ND		5.0	0.23	ug/Kg		11/14/19 15:41	11/14/19 18:47	1
1,2-Dichloroethane	ND		5.0	0.31	ug/Kg		11/14/19 15:41	11/14/19 18:47	1
1,2-Dichloropropane	ND		5.0	0.44	ug/Kg		11/14/19 15:41	11/14/19 18:47	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: CP236-SB01-5
Date Collected: 11/05/19 09:15
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-2
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		5.0	0.55	ug/Kg		11/14/19 15:41	11/14/19 18:47	1
1,3-Dichlorobenzene	ND		5.0	0.18	ug/Kg		11/14/19 15:41	11/14/19 18:47	1
1,3-Dichloropropane	ND		5.0	0.25	ug/Kg		11/14/19 15:41	11/14/19 18:47	1
1,4-Dichlorobenzene	ND		5.0	0.22	ug/Kg		11/14/19 15:41	11/14/19 18:47	1
2,2-Dichloropropane	ND		5.0	0.33	ug/Kg		11/14/19 15:41	11/14/19 18:47	1
2-Butanone	ND		50	3.8	ug/Kg		11/14/19 15:41	11/14/19 18:47	1
2-Chlorotoluene	ND		5.0	0.23	ug/Kg		11/14/19 15:41	11/14/19 18:47	1
2-Hexanone	ND		50	1.8	ug/Kg		11/14/19 15:41	11/14/19 18:47	1
4-Chlorotoluene	ND		5.0	0.21	ug/Kg		11/14/19 15:41	11/14/19 18:47	1
4-Methyl-2-pentanone	ND		50	4.3	ug/Kg		11/14/19 15:41	11/14/19 18:47	1
Acetone	ND		120	6.2	ug/Kg		11/14/19 15:41	11/14/19 18:47	1
Benzene	ND		5.0	0.13	ug/Kg		11/14/19 15:41	11/14/19 18:47	1
Bromobenzene	ND		5.0	0.21	ug/Kg		11/14/19 15:41	11/14/19 18:47	1
Bromochloromethane	ND		5.0	0.69	ug/Kg		11/14/19 15:41	11/14/19 18:47	1
Bromodichloromethane	ND		5.0	0.23	ug/Kg		11/14/19 15:41	11/14/19 18:47	1
Bromoform	ND		5.0	0.79	ug/Kg		11/14/19 15:41	11/14/19 18:47	1
Bromomethane	ND		25	9.4	ug/Kg		11/14/19 15:41	11/14/19 18:47	1
cis-1,2-Dichloroethene	ND		5.0	0.28	ug/Kg		11/14/19 15:41	11/14/19 18:47	1
cis-1,3-Dichloropropene	ND		5.0	0.25	ug/Kg		11/14/19 15:41	11/14/19 18:47	1
Carbon disulfide	ND		50	0.31	ug/Kg		11/14/19 15:41	11/14/19 18:47	1
Carbon tetrachloride	ND		5.0	0.28	ug/Kg		11/14/19 15:41	11/14/19 18:47	1
Chlorobenzene	ND		5.0	0.22	ug/Kg		11/14/19 15:41	11/14/19 18:47	1
Chloroethane	ND		5.0	1.5	ug/Kg		11/14/19 15:41	11/14/19 18:47	1
Chloroform	ND		5.0	0.24	ug/Kg		11/14/19 15:41	11/14/19 18:47	1
Chloromethane	ND		25	0.30	ug/Kg		11/14/19 15:41	11/14/19 18:47	1
Dibromochloromethane	ND		5.0	0.57	ug/Kg		11/14/19 15:41	11/14/19 18:47	1
Dibromomethane	ND		5.0	0.77	ug/Kg		11/14/19 15:41	11/14/19 18:47	1
Dichlorodifluoromethane	ND		5.0	0.44	ug/Kg		11/14/19 15:41	11/14/19 18:47	1
Di-isopropyl ether (DIPE)	ND		10	0.48	ug/Kg		11/14/19 15:41	11/14/19 18:47	1
Ethanol	ND		250	83	ug/Kg		11/14/19 15:41	11/14/19 18:47	1
Ethylbenzene	ND		5.0	0.15	ug/Kg		11/14/19 15:41	11/14/19 18:47	1
Ethyl-t-butyl ether (ETBE)	ND		10	0.51	ug/Kg		11/14/19 15:41	11/14/19 18:47	1
Isopropylbenzene	ND		5.0	0.55	ug/Kg		11/14/19 15:41	11/14/19 18:47	1
Methylene Chloride	ND		50	1.3	ug/Kg		11/14/19 15:41	11/14/19 18:47	1
Methyl-t-Butyl Ether (MTBE)	ND		5.0	0.29	ug/Kg		11/14/19 15:41	11/14/19 18:47	1
Naphthalene	ND		50	0.81	ug/Kg		11/14/19 15:41	11/14/19 18:47	1
n-Butylbenzene	ND		5.0	0.16	ug/Kg		11/14/19 15:41	11/14/19 18:47	1
N-Propylbenzene	ND		5.0	0.50	ug/Kg		11/14/19 15:41	11/14/19 18:47	1
o-Xylene	ND		5.0	0.56	ug/Kg		11/14/19 15:41	11/14/19 18:47	1
m,p-Xylene	ND		5.0	0.27	ug/Kg		11/14/19 15:41	11/14/19 18:47	1
p-Isopropyltoluene	ND		5.0	0.63	ug/Kg		11/14/19 15:41	11/14/19 18:47	1
sec-Butylbenzene	ND		5.0	0.58	ug/Kg		11/14/19 15:41	11/14/19 18:47	1
Styrene	ND		5.0	0.60	ug/Kg		11/14/19 15:41	11/14/19 18:47	1
trans-1,2-Dichloroethene	ND		5.0	0.50	ug/Kg		11/14/19 15:41	11/14/19 18:47	1
trans-1,3-Dichloropropene	ND		5.0	0.60	ug/Kg		11/14/19 15:41	11/14/19 18:47	1
Tert-amyl-methyl ether (TAME)	ND		10	0.35	ug/Kg		11/14/19 15:41	11/14/19 18:47	1
tert-Butyl alcohol (TBA)	ND		50	5.2	ug/Kg		11/14/19 15:41	11/14/19 18:47	1
tert-Butylbenzene	ND		5.0	0.15	ug/Kg		11/14/19 15:41	11/14/19 18:47	1
Tetrachloroethene	ND		5.0	0.21	ug/Kg		11/14/19 15:41	11/14/19 18:47	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: CP236-SB01-5
Date Collected: 11/05/19 09:15
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-2
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	ND		5.0	0.51	ug/Kg		11/14/19 15:41	11/14/19 18:47	1
Trichloroethene	ND		5.0	0.30	ug/Kg		11/14/19 15:41	11/14/19 18:47	1
Trichlorofluoromethane	ND		50	0.37	ug/Kg		11/14/19 15:41	11/14/19 18:47	1
Vinyl acetate	ND		50	4.7	ug/Kg		11/14/19 15:41	11/14/19 18:47	1
Vinyl chloride	ND		5.0	0.50	ug/Kg		11/14/19 15:41	11/14/19 18:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*71 - 155*	*11/14/19 15:41*	*11/14/19 18:47*	*1*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*	*11/14/19 15:41*	*11/14/19 18:47*	*1*
Dibromofluoromethane (Surr)	*88*		*79 - 133*	*11/14/19 15:41*	*11/14/19 18:47*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*	*11/14/19 15:41*	*11/14/19 18:47*	*1*

Client Sample ID: CP236-SB01-8
Date Collected: 11/05/19 09:24
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-3
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.1	0.24	ug/Kg		11/14/19 15:41	11/14/19 19:13	1
1,1,1-Trichloroethane	ND		5.1	0.23	ug/Kg		11/14/19 15:41	11/14/19 19:13	1
1,1,2,2-Tetrachloroethane	ND		5.1	0.35	ug/Kg		11/14/19 15:41	11/14/19 19:13	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		51	0.36	ug/Kg		11/14/19 15:41	11/14/19 19:13	1
1,1,2-Trichloroethane	ND		5.1	0.36	ug/Kg		11/14/19 15:41	11/14/19 19:13	1
1,1-Dichloroethane	ND		5.1	0.22	ug/Kg		11/14/19 15:41	11/14/19 19:13	1
1,1-Dichloroethene	ND		5.1	0.35	ug/Kg		11/14/19 15:41	11/14/19 19:13	1
1,1-Dichloropropene	ND		5.1	0.33	ug/Kg		11/14/19 15:41	11/14/19 19:13	1
1,2,3-Trichlorobenzene	ND		10	0.93	ug/Kg		11/14/19 15:41	11/14/19 19:13	1
1,2,3-Trichloropropane	ND		5.1	0.85	ug/Kg		11/14/19 15:41	11/14/19 19:13	1
1,2,4-Trichlorobenzene	ND		5.1	0.32	ug/Kg		11/14/19 15:41	11/14/19 19:13	1
1,2,4-Trimethylbenzene	ND		5.1	0.60	ug/Kg		11/14/19 15:41	11/14/19 19:13	1
1,2-Dibromo-3-Chloropropane	ND		10	1.8	ug/Kg		11/14/19 15:41	11/14/19 19:13	1
1,2-Dibromoethane	ND		5.1	0.26	ug/Kg		11/14/19 15:41	11/14/19 19:13	1
1,2-Dichlorobenzene	ND		5.1	0.23	ug/Kg		11/14/19 15:41	11/14/19 19:13	1
1,2-Dichloroethane	ND		5.1	0.32	ug/Kg		11/14/19 15:41	11/14/19 19:13	1
1,2-Dichloropropane	ND		5.1	0.45	ug/Kg		11/14/19 15:41	11/14/19 19:13	1
1,3,5-Trimethylbenzene	ND		5.1	0.56	ug/Kg		11/14/19 15:41	11/14/19 19:13	1
1,3-Dichlorobenzene	ND		5.1	0.18	ug/Kg		11/14/19 15:41	11/14/19 19:13	1
1,3-Dichloropropane	ND		5.1	0.26	ug/Kg		11/14/19 15:41	11/14/19 19:13	1
1,4-Dichlorobenzene	ND		5.1	0.23	ug/Kg		11/14/19 15:41	11/14/19 19:13	1
2,2-Dichloropropane	ND		5.1	0.34	ug/Kg		11/14/19 15:41	11/14/19 19:13	1
2-Butanone	ND		51	3.8	ug/Kg		11/14/19 15:41	11/14/19 19:13	1
2-Chlorotoluene	ND		5.1	0.24	ug/Kg		11/14/19 15:41	11/14/19 19:13	1
2-Hexanone	ND		51	1.8	ug/Kg		11/14/19 15:41	11/14/19 19:13	1
4-Chlorotoluene	ND		5.1	0.22	ug/Kg		11/14/19 15:41	11/14/19 19:13	1
4-Methyl-2-pentanone	ND		51	4.4	ug/Kg		11/14/19 15:41	11/14/19 19:13	1
Acetone	ND		120	6.4	ug/Kg		11/14/19 15:41	11/14/19 19:13	1
Benzene	ND		5.1	0.13	ug/Kg		11/14/19 15:41	11/14/19 19:13	1
Bromobenzene	ND		5.1	0.21	ug/Kg		11/14/19 15:41	11/14/19 19:13	1
Bromochloromethane	ND		5.1	0.70	ug/Kg		11/14/19 15:41	11/14/19 19:13	1
Bromodichloromethane	ND		5.1	0.24	ug/Kg		11/14/19 15:41	11/14/19 19:13	1
Bromoform	ND		5.1	0.81	ug/Kg		11/14/19 15:41	11/14/19 19:13	1
Bromomethane	ND		25	9.6	ug/Kg		11/14/19 15:41	11/14/19 19:13	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: CP236-SB01-8
Date Collected: 11/05/19 09:24
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-3
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		5.1	0.28	ug/Kg		11/14/19 15:41	11/14/19 19:13	1
cis-1,3-Dichloropropene	ND		5.1	0.26	ug/Kg		11/14/19 15:41	11/14/19 19:13	1
Carbon disulfide	ND		51	0.31	ug/Kg		11/14/19 15:41	11/14/19 19:13	1
Carbon tetrachloride	ND		5.1	0.29	ug/Kg		11/14/19 15:41	11/14/19 19:13	1
Chlorobenzene	ND		5.1	0.23	ug/Kg		11/14/19 15:41	11/14/19 19:13	1
Chloroethane	ND		5.1	1.5	ug/Kg		11/14/19 15:41	11/14/19 19:13	1
Chloroform	ND		5.1	0.24	ug/Kg		11/14/19 15:41	11/14/19 19:13	1
Chloromethane	ND		25	0.31	ug/Kg		11/14/19 15:41	11/14/19 19:13	1
Dibromochloromethane	ND		5.1	0.58	ug/Kg		11/14/19 15:41	11/14/19 19:13	1
Dibromomethane	ND		5.1	0.79	ug/Kg		11/14/19 15:41	11/14/19 19:13	1
Dichlorodifluoromethane	ND		5.1	0.45	ug/Kg		11/14/19 15:41	11/14/19 19:13	1
Di-isopropyl ether (DIPE)	ND		10	0.49	ug/Kg		11/14/19 15:41	11/14/19 19:13	1
Ethanol	ND		250	85	ug/Kg		11/14/19 15:41	11/14/19 19:13	1
Ethylbenzene	ND		5.1	0.15	ug/Kg		11/14/19 15:41	11/14/19 19:13	1
Ethyl-t-butyl ether (ETBE)	ND		10	0.52	ug/Kg		11/14/19 15:41	11/14/19 19:13	1
Isopropylbenzene	ND		5.1	0.56	ug/Kg		11/14/19 15:41	11/14/19 19:13	1
Methylene Chloride	ND		51	1.4	ug/Kg		11/14/19 15:41	11/14/19 19:13	1
Methyl-t-Butyl Ether (MTBE)	ND		5.1	0.30	ug/Kg		11/14/19 15:41	11/14/19 19:13	1
Naphthalene	ND		51	0.83	ug/Kg		11/14/19 15:41	11/14/19 19:13	1
n-Butylbenzene	ND		5.1	0.16	ug/Kg		11/14/19 15:41	11/14/19 19:13	1
N-Propylbenzene	ND		5.1	0.51	ug/Kg		11/14/19 15:41	11/14/19 19:13	1
o-Xylene	ND		5.1	0.57	ug/Kg		11/14/19 15:41	11/14/19 19:13	1
m,p-Xylene	ND		5.1	0.27	ug/Kg		11/14/19 15:41	11/14/19 19:13	1
p-Isopropyltoluene	ND		5.1	0.64	ug/Kg		11/14/19 15:41	11/14/19 19:13	1
sec-Butylbenzene	ND		5.1	0.59	ug/Kg		11/14/19 15:41	11/14/19 19:13	1
Styrene	ND		5.1	0.62	ug/Kg		11/14/19 15:41	11/14/19 19:13	1
trans-1,2-Dichloroethene	ND		5.1	0.52	ug/Kg		11/14/19 15:41	11/14/19 19:13	1
trans-1,3-Dichloropropene	ND		5.1	0.62	ug/Kg		11/14/19 15:41	11/14/19 19:13	1
Tert-amyl-methyl ether (TAME)	ND		10	0.36	ug/Kg		11/14/19 15:41	11/14/19 19:13	1
tert-Butyl alcohol (TBA)	ND		51	5.3	ug/Kg		11/14/19 15:41	11/14/19 19:13	1
tert-Butylbenzene	ND		5.1	0.15	ug/Kg		11/14/19 15:41	11/14/19 19:13	1
Tetrachloroethene	ND		5.1	0.21	ug/Kg		11/14/19 15:41	11/14/19 19:13	1
Toluene	ND		5.1	0.52	ug/Kg		11/14/19 15:41	11/14/19 19:13	1
Trichloroethene	ND		5.1	0.31	ug/Kg		11/14/19 15:41	11/14/19 19:13	1
Trichlorofluoromethane	ND		51	0.38	ug/Kg		11/14/19 15:41	11/14/19 19:13	1
Vinyl acetate	ND		51	4.8	ug/Kg		11/14/19 15:41	11/14/19 19:13	1
Vinyl chloride	ND		5.1	0.51	ug/Kg		11/14/19 15:41	11/14/19 19:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*71 - 155*	*11/14/19 15:41*	*11/14/19 19:13*	*1*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*	*11/14/19 15:41*	*11/14/19 19:13*	*1*
Dibromofluoromethane (Surr)	*94*		*79 - 133*	*11/14/19 15:41*	*11/14/19 19:13*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*	*11/14/19 15:41*	*11/14/19 19:13*	*1*

Client Sample ID: CP236-SB02-2
Date Collected: 11/05/19 09:55
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-5
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		4.9	0.24	ug/Kg		11/14/19 15:41	11/14/19 19:38	1
1,1,1-Trichloroethane	ND		4.9	0.22	ug/Kg		11/14/19 15:41	11/14/19 19:38	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: CP236-SB02-2
Date Collected: 11/05/19 09:55
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-5
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		4.9	0.34	ug/Kg		11/14/19 15:41	11/14/19 19:38	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		49	0.35	ug/Kg		11/14/19 15:41	11/14/19 19:38	1
1,1,2-Trichloroethane	ND		4.9	0.35	ug/Kg		11/14/19 15:41	11/14/19 19:38	1
1,1-Dichloroethane	ND		4.9	0.21	ug/Kg		11/14/19 15:41	11/14/19 19:38	1
1,1-Dichloroethene	ND		4.9	0.34	ug/Kg		11/14/19 15:41	11/14/19 19:38	1
1,1-Dichloropropene	ND		4.9	0.32	ug/Kg		11/14/19 15:41	11/14/19 19:38	1
1,2,3-Trichlorobenzene	ND		9.8	0.90	ug/Kg		11/14/19 15:41	11/14/19 19:38	1
1,2,3-Trichloropropane	ND		4.9	0.81	ug/Kg		11/14/19 15:41	11/14/19 19:38	1
1,2,4-Trichlorobenzene	ND		4.9	0.30	ug/Kg		11/14/19 15:41	11/14/19 19:38	1
1,2,4-Trimethylbenzene	ND		4.9	0.57	ug/Kg		11/14/19 15:41	11/14/19 19:38	1
1,2-Dibromo-3-Chloropropane	ND		9.8	1.7	ug/Kg		11/14/19 15:41	11/14/19 19:38	1
1,2-Dibromoethane	ND		4.9	0.25	ug/Kg		11/14/19 15:41	11/14/19 19:38	1
1,2-Dichlorobenzene	ND		4.9	0.22	ug/Kg		11/14/19 15:41	11/14/19 19:38	1
1,2-Dichloroethane	ND		4.9	0.31	ug/Kg		11/14/19 15:41	11/14/19 19:38	1
1,2-Dichloropropane	ND		4.9	0.43	ug/Kg		11/14/19 15:41	11/14/19 19:38	1
1,3,5-Trimethylbenzene	ND		4.9	0.54	ug/Kg		11/14/19 15:41	11/14/19 19:38	1
1,3-Dichlorobenzene	ND		4.9	0.17	ug/Kg		11/14/19 15:41	11/14/19 19:38	1
1,3-Dichloropropane	ND		4.9	0.25	ug/Kg		11/14/19 15:41	11/14/19 19:38	1
1,4-Dichlorobenzene	ND		4.9	0.22	ug/Kg		11/14/19 15:41	11/14/19 19:38	1
2,2-Dichloropropane	ND		4.9	0.32	ug/Kg		11/14/19 15:41	11/14/19 19:38	1
2-Butanone	ND		49	3.7	ug/Kg		11/14/19 15:41	11/14/19 19:38	1
2-Chlorotoluene	ND		4.9	0.23	ug/Kg		11/14/19 15:41	11/14/19 19:38	1
2-Hexanone	ND		49	1.7	ug/Kg		11/14/19 15:41	11/14/19 19:38	1
4-Chlorotoluene	ND		4.9	0.21	ug/Kg		11/14/19 15:41	11/14/19 19:38	1
4-Methyl-2-pentanone	ND		49	4.2	ug/Kg		11/14/19 15:41	11/14/19 19:38	1
Acetone	ND		120	6.1	ug/Kg		11/14/19 15:41	11/14/19 19:38	1
Benzene	ND		4.9	0.13	ug/Kg		11/14/19 15:41	11/14/19 19:38	1
Bromobenzene	ND		4.9	0.21	ug/Kg		11/14/19 15:41	11/14/19 19:38	1
Bromochloromethane	ND		4.9	0.68	ug/Kg		11/14/19 15:41	11/14/19 19:38	1
Bromodichloromethane	ND		4.9	0.23	ug/Kg		11/14/19 15:41	11/14/19 19:38	1
Bromoform	ND		4.9	0.78	ug/Kg		11/14/19 15:41	11/14/19 19:38	1
Bromomethane	ND		25	9.2	ug/Kg		11/14/19 15:41	11/14/19 19:38	1
cis-1,2-Dichloroethene	ND		4.9	0.27	ug/Kg		11/14/19 15:41	11/14/19 19:38	1
cis-1,3-Dichloropropene	ND		4.9	0.25	ug/Kg		11/14/19 15:41	11/14/19 19:38	1
Carbon disulfide	ND		49	0.30	ug/Kg		11/14/19 15:41	11/14/19 19:38	1
Carbon tetrachloride	ND		4.9	0.28	ug/Kg		11/14/19 15:41	11/14/19 19:38	1
Chlorobenzene	ND		4.9	0.22	ug/Kg		11/14/19 15:41	11/14/19 19:38	1
Chloroethane	ND		4.9	1.5	ug/Kg		11/14/19 15:41	11/14/19 19:38	1
Chloroform	ND		4.9	0.23	ug/Kg		11/14/19 15:41	11/14/19 19:38	1
Chloromethane	ND		25	0.30	ug/Kg		11/14/19 15:41	11/14/19 19:38	1
Dibromochloromethane	ND		4.9	0.56	ug/Kg		11/14/19 15:41	11/14/19 19:38	1
Dibromomethane	ND		4.9	0.76	ug/Kg		11/14/19 15:41	11/14/19 19:38	1
Dichlorodifluoromethane	ND		4.9	0.43	ug/Kg		11/14/19 15:41	11/14/19 19:38	1
Di-isopropyl ether (DIPE)	ND		9.8	0.47	ug/Kg		11/14/19 15:41	11/14/19 19:38	1
Ethanol	ND		250	82	ug/Kg		11/14/19 15:41	11/14/19 19:38	1
Ethylbenzene	ND		4.9	0.15	ug/Kg		11/14/19 15:41	11/14/19 19:38	1
Ethyl-t-butyl ether (ETBE)	ND		9.8	0.50	ug/Kg		11/14/19 15:41	11/14/19 19:38	1
Isopropylbenzene	ND		4.9	0.54	ug/Kg		11/14/19 15:41	11/14/19 19:38	1
Methylene Chloride	ND		49	1.3	ug/Kg		11/14/19 15:41	11/14/19 19:38	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: CP236-SB02-2
Date Collected: 11/05/19 09:55
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-5
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl-t-Butyl Ether (MTBE)	ND		4.9	0.29	ug/Kg		11/14/19 15:41	11/14/19 19:38	1
Naphthalene	ND		49	0.80	ug/Kg		11/14/19 15:41	11/14/19 19:38	1
n-Butylbenzene	ND		4.9	0.15	ug/Kg		11/14/19 15:41	11/14/19 19:38	1
N-Propylbenzene	ND		4.9	0.49	ug/Kg		11/14/19 15:41	11/14/19 19:38	1
o-Xylene	ND		4.9	0.55	ug/Kg		11/14/19 15:41	11/14/19 19:38	1
m,p-Xylene	ND		4.9	0.26	ug/Kg		11/14/19 15:41	11/14/19 19:38	1
p-Isopropyltoluene	ND		4.9	0.62	ug/Kg		11/14/19 15:41	11/14/19 19:38	1
sec-Butylbenzene	ND		4.9	0.57	ug/Kg		11/14/19 15:41	11/14/19 19:38	1
Styrene	ND		4.9	0.59	ug/Kg		11/14/19 15:41	11/14/19 19:38	1
trans-1,2-Dichloroethene	ND		4.9	0.50	ug/Kg		11/14/19 15:41	11/14/19 19:38	1
trans-1,3-Dichloropropene	ND		4.9	0.59	ug/Kg		11/14/19 15:41	11/14/19 19:38	1
Tert-amyl-methyl ether (TAME)	ND		9.8	0.35	ug/Kg		11/14/19 15:41	11/14/19 19:38	1
tert-Butyl alcohol (TBA)	ND		49	5.1	ug/Kg		11/14/19 15:41	11/14/19 19:38	1
tert-Butylbenzene	ND		4.9	0.15	ug/Kg		11/14/19 15:41	11/14/19 19:38	1
Tetrachloroethene	ND		4.9	0.21	ug/Kg		11/14/19 15:41	11/14/19 19:38	1
Toluene	ND		4.9	0.51	ug/Kg		11/14/19 15:41	11/14/19 19:38	1
Trichloroethene	ND		4.9	0.29	ug/Kg		11/14/19 15:41	11/14/19 19:38	1
Trichlorofluoromethane	ND		49	0.37	ug/Kg		11/14/19 15:41	11/14/19 19:38	1
Vinyl acetate	ND		49	4.7	ug/Kg		11/14/19 15:41	11/14/19 19:38	1
Vinyl chloride	ND		4.9	0.49	ug/Kg		11/14/19 15:41	11/14/19 19:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*71 - 155*	*11/14/19 15:41*	*11/14/19 19:38*	*1*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*	*11/14/19 15:41*	*11/14/19 19:38*	*1*
Dibromofluoromethane (Surr)	*91*		*79 - 133*	*11/14/19 15:41*	*11/14/19 19:38*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*	*11/14/19 15:41*	*11/14/19 19:38*	*1*

Client Sample ID: CP236-SB02-5
Date Collected: 11/05/19 10:11
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-6
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		4.9	0.23	ug/Kg		11/14/19 15:41	11/14/19 20:04	1
1,1,1-Trichloroethane	ND		4.9	0.22	ug/Kg		11/14/19 15:41	11/14/19 20:04	1
1,1,2,2-Tetrachloroethane	ND		4.9	0.34	ug/Kg		11/14/19 15:41	11/14/19 20:04	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		49	0.34	ug/Kg		11/14/19 15:41	11/14/19 20:04	1
1,1,2-Trichloroethane	ND		4.9	0.35	ug/Kg		11/14/19 15:41	11/14/19 20:04	1
1,1-Dichloroethane	ND		4.9	0.21	ug/Kg		11/14/19 15:41	11/14/19 20:04	1
1,1-Dichloroethene	ND		4.9	0.34	ug/Kg		11/14/19 15:41	11/14/19 20:04	1
1,1-Dichloropropene	ND		4.9	0.32	ug/Kg		11/14/19 15:41	11/14/19 20:04	1
1,2,3-Trichlorobenzene	ND		9.7	0.89	ug/Kg		11/14/19 15:41	11/14/19 20:04	1
1,2,3-Trichloropropane	ND		4.9	0.81	ug/Kg		11/14/19 15:41	11/14/19 20:04	1
1,2,4-Trichlorobenzene	ND		4.9	0.30	ug/Kg		11/14/19 15:41	11/14/19 20:04	1
1,2,4-Trimethylbenzene	ND		4.9	0.57	ug/Kg		11/14/19 15:41	11/14/19 20:04	1
1,2-Dibromo-3-Chloropropane	ND		9.7	1.7	ug/Kg		11/14/19 15:41	11/14/19 20:04	1
1,2-Dibromoethane	ND		4.9	0.25	ug/Kg		11/14/19 15:41	11/14/19 20:04	1
1,2-Dichlorobenzene	ND		4.9	0.22	ug/Kg		11/14/19 15:41	11/14/19 20:04	1
1,2-Dichloroethane	ND		4.9	0.31	ug/Kg		11/14/19 15:41	11/14/19 20:04	1
1,2-Dichloropropane	ND		4.9	0.43	ug/Kg		11/14/19 15:41	11/14/19 20:04	1
1,3,5-Trimethylbenzene	ND		4.9	0.54	ug/Kg		11/14/19 15:41	11/14/19 20:04	1
1,3-Dichlorobenzene	ND		4.9	0.17	ug/Kg		11/14/19 15:41	11/14/19 20:04	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: CP236-SB02-5
Date Collected: 11/05/19 10:11
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-6
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichloropropane	ND		4.9	0.25	ug/Kg		11/14/19 15:41	11/14/19 20:04	1
1,4-Dichlorobenzene	ND		4.9	0.22	ug/Kg		11/14/19 15:41	11/14/19 20:04	1
2,2-Dichloropropane	ND		4.9	0.32	ug/Kg		11/14/19 15:41	11/14/19 20:04	1
2-Butanone	ND		49	3.7	ug/Kg		11/14/19 15:41	11/14/19 20:04	1
2-Chlorotoluene	ND		4.9	0.23	ug/Kg		11/14/19 15:41	11/14/19 20:04	1
2-Hexanone	ND		49	1.7	ug/Kg		11/14/19 15:41	11/14/19 20:04	1
4-Chlorotoluene	ND		4.9	0.21	ug/Kg		11/14/19 15:41	11/14/19 20:04	1
4-Methyl-2-pentanone	ND		49	4.2	ug/Kg		11/14/19 15:41	11/14/19 20:04	1
Acetone	ND		120	6.1	ug/Kg		11/14/19 15:41	11/14/19 20:04	1
Benzene	ND		4.9	0.13	ug/Kg		11/14/19 15:41	11/14/19 20:04	1
Bromobenzene	ND		4.9	0.20	ug/Kg		11/14/19 15:41	11/14/19 20:04	1
Bromochloromethane	ND		4.9	0.67	ug/Kg		11/14/19 15:41	11/14/19 20:04	1
Bromodichloromethane	ND		4.9	0.23	ug/Kg		11/14/19 15:41	11/14/19 20:04	1
Bromoform	ND		4.9	0.77	ug/Kg		11/14/19 15:41	11/14/19 20:04	1
Bromomethane	ND		24	9.2	ug/Kg		11/14/19 15:41	11/14/19 20:04	1
cis-1,2-Dichloroethene	ND		4.9	0.27	ug/Kg		11/14/19 15:41	11/14/19 20:04	1
cis-1,3-Dichloropropene	ND		4.9	0.25	ug/Kg		11/14/19 15:41	11/14/19 20:04	1
Carbon disulfide	ND		49	0.30	ug/Kg		11/14/19 15:41	11/14/19 20:04	1
Carbon tetrachloride	ND		4.9	0.28	ug/Kg		11/14/19 15:41	11/14/19 20:04	1
Chlorobenzene	ND		4.9	0.22	ug/Kg		11/14/19 15:41	11/14/19 20:04	1
Chloroethane	ND		4.9	1.5	ug/Kg		11/14/19 15:41	11/14/19 20:04	1
Chloroform	ND		4.9	0.23	ug/Kg		11/14/19 15:41	11/14/19 20:04	1
Chloromethane	ND		24	0.30	ug/Kg		11/14/19 15:41	11/14/19 20:04	1
Dibromochloromethane	ND		4.9	0.56	ug/Kg		11/14/19 15:41	11/14/19 20:04	1
Dibromomethane	ND		4.9	0.76	ug/Kg		11/14/19 15:41	11/14/19 20:04	1
Dichlorodifluoromethane	ND		4.9	0.43	ug/Kg		11/14/19 15:41	11/14/19 20:04	1
Di-isopropyl ether (DIPE)	ND		9.7	0.47	ug/Kg		11/14/19 15:41	11/14/19 20:04	1
Ethanol	ND		240	81	ug/Kg		11/14/19 15:41	11/14/19 20:04	1
Ethylbenzene	ND		4.9	0.15	ug/Kg		11/14/19 15:41	11/14/19 20:04	1
Ethyl-t-butyl ether (ETBE)	ND		9.7	0.49	ug/Kg		11/14/19 15:41	11/14/19 20:04	1
Isopropylbenzene	ND		4.9	0.53	ug/Kg		11/14/19 15:41	11/14/19 20:04	1
Methylene Chloride	ND		49	1.3	ug/Kg		11/14/19 15:41	11/14/19 20:04	1
Methyl-t-Butyl Ether (MTBE)	ND		4.9	0.29	ug/Kg		11/14/19 15:41	11/14/19 20:04	1
Naphthalene	ND		49	0.79	ug/Kg		11/14/19 15:41	11/14/19 20:04	1
n-Butylbenzene	ND		4.9	0.15	ug/Kg		11/14/19 15:41	11/14/19 20:04	1
N-Propylbenzene	ND		4.9	0.49	ug/Kg		11/14/19 15:41	11/14/19 20:04	1
o-Xylene	ND		4.9	0.54	ug/Kg		11/14/19 15:41	11/14/19 20:04	1
m,p-Xylene	ND		4.9	0.26	ug/Kg		11/14/19 15:41	11/14/19 20:04	1
p-Isopropyltoluene	ND		4.9	0.61	ug/Kg		11/14/19 15:41	11/14/19 20:04	1
sec-Butylbenzene	ND		4.9	0.56	ug/Kg		11/14/19 15:41	11/14/19 20:04	1
Styrene	ND		4.9	0.59	ug/Kg		11/14/19 15:41	11/14/19 20:04	1
trans-1,2-Dichloroethene	ND		4.9	0.49	ug/Kg		11/14/19 15:41	11/14/19 20:04	1
trans-1,3-Dichloropropene	ND		4.9	0.59	ug/Kg		11/14/19 15:41	11/14/19 20:04	1
Tert-amyl-methyl ether (TAME)	ND		9.7	0.34	ug/Kg		11/14/19 15:41	11/14/19 20:04	1
tert-Butyl alcohol (TBA)	ND		49	5.0	ug/Kg		11/14/19 15:41	11/14/19 20:04	1
tert-Butylbenzene	ND		4.9	0.15	ug/Kg		11/14/19 15:41	11/14/19 20:04	1
Tetrachloroethene	ND		4.9	0.20	ug/Kg		11/14/19 15:41	11/14/19 20:04	1
Toluene	ND		4.9	0.50	ug/Kg		11/14/19 15:41	11/14/19 20:04	1
Trichloroethene	ND		4.9	0.29	ug/Kg		11/14/19 15:41	11/14/19 20:04	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: CP236-SB02-5
Date Collected: 11/05/19 10:11
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-6
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichlorofluoromethane	ND		49	0.37	ug/Kg		11/14/19 15:41	11/14/19 20:04	1
Vinyl acetate	ND		49	4.6	ug/Kg		11/14/19 15:41	11/14/19 20:04	1
Vinyl chloride	ND		4.9	0.49	ug/Kg		11/14/19 15:41	11/14/19 20:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*71 - 155*	*11/14/19 15:41*	*11/14/19 20:04*	*1*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*	*11/14/19 15:41*	*11/14/19 20:04*	*1*
Dibromofluoromethane (Surr)	*91*		*79 - 133*	*11/14/19 15:41*	*11/14/19 20:04*	*1*
Toluene-d8 (Surr)	*104*		*80 - 120*	*11/14/19 15:41*	*11/14/19 20:04*	*1*

Client Sample ID: CP236-SB02-9
Date Collected: 11/05/19 10:15
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-7
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.0	0.24	ug/Kg		11/14/19 15:41	11/14/19 20:29	1
1,1,1-Trichloroethane	ND		5.0	0.23	ug/Kg		11/14/19 15:41	11/14/19 20:29	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.35	ug/Kg		11/14/19 15:41	11/14/19 20:29	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		50	0.35	ug/Kg		11/14/19 15:41	11/14/19 20:29	1
1,1,2-Trichloroethane	ND		5.0	0.36	ug/Kg		11/14/19 15:41	11/14/19 20:29	1
1,1-Dichloroethane	ND		5.0	0.21	ug/Kg		11/14/19 15:41	11/14/19 20:29	1
1,1-Dichloroethene	ND		5.0	0.35	ug/Kg		11/14/19 15:41	11/14/19 20:29	1
1,1-Dichloropropene	ND		5.0	0.33	ug/Kg		11/14/19 15:41	11/14/19 20:29	1
1,2,3-Trichlorobenzene	ND		10	0.92	ug/Kg		11/14/19 15:41	11/14/19 20:29	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/Kg		11/14/19 15:41	11/14/19 20:29	1
1,2,4-Trichlorobenzene	ND		5.0	0.31	ug/Kg		11/14/19 15:41	11/14/19 20:29	1
1,2,4-Trimethylbenzene	ND		5.0	0.59	ug/Kg		11/14/19 15:41	11/14/19 20:29	1
1,2-Dibromo-3-Chloropropane	ND		10	1.7	ug/Kg		11/14/19 15:41	11/14/19 20:29	1
1,2-Dibromoethane	ND		5.0	0.26	ug/Kg		11/14/19 15:41	11/14/19 20:29	1
1,2-Dichlorobenzene	ND		5.0	0.23	ug/Kg		11/14/19 15:41	11/14/19 20:29	1
1,2-Dichloroethane	ND		5.0	0.32	ug/Kg		11/14/19 15:41	11/14/19 20:29	1
1,2-Dichloropropane	ND		5.0	0.44	ug/Kg		11/14/19 15:41	11/14/19 20:29	1
1,3,5-Trimethylbenzene	ND		5.0	0.55	ug/Kg		11/14/19 15:41	11/14/19 20:29	1
1,3-Dichlorobenzene	ND		5.0	0.18	ug/Kg		11/14/19 15:41	11/14/19 20:29	1
1,3-Dichloropropane	ND		5.0	0.25	ug/Kg		11/14/19 15:41	11/14/19 20:29	1
1,4-Dichlorobenzene	ND		5.0	0.22	ug/Kg		11/14/19 15:41	11/14/19 20:29	1
2,2-Dichloropropane	ND		5.0	0.33	ug/Kg		11/14/19 15:41	11/14/19 20:29	1
2-Butanone	ND		50	3.8	ug/Kg		11/14/19 15:41	11/14/19 20:29	1
2-Chlorotoluene	ND		5.0	0.23	ug/Kg		11/14/19 15:41	11/14/19 20:29	1
2-Hexanone	ND		50	1.8	ug/Kg		11/14/19 15:41	11/14/19 20:29	1
4-Chlorotoluene	ND		5.0	0.21	ug/Kg		11/14/19 15:41	11/14/19 20:29	1
4-Methyl-2-pentanone	ND		50	4.3	ug/Kg		11/14/19 15:41	11/14/19 20:29	1
Acetone	ND		120	6.3	ug/Kg		11/14/19 15:41	11/14/19 20:29	1
Benzene	ND		5.0	0.13	ug/Kg		11/14/19 15:41	11/14/19 20:29	1
Bromobenzene	ND		5.0	0.21	ug/Kg		11/14/19 15:41	11/14/19 20:29	1
Bromochloromethane	ND		5.0	0.69	ug/Kg		11/14/19 15:41	11/14/19 20:29	1
Bromodichloromethane	ND		5.0	0.23	ug/Kg		11/14/19 15:41	11/14/19 20:29	1
Bromoform	ND		5.0	0.80	ug/Kg		11/14/19 15:41	11/14/19 20:29	1
Bromomethane	ND		25	9.5	ug/Kg		11/14/19 15:41	11/14/19 20:29	1
cis-1,2-Dichloroethene	ND		5.0	0.28	ug/Kg		11/14/19 15:41	11/14/19 20:29	1
cis-1,3-Dichloropropene	ND		5.0	0.26	ug/Kg		11/14/19 15:41	11/14/19 20:29	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: CP236-SB02-9
Date Collected: 11/05/19 10:15
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-7
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	ND		50	0.31	ug/Kg		11/14/19 15:41	11/14/19 20:29	1
Carbon tetrachloride	ND		5.0	0.28	ug/Kg		11/14/19 15:41	11/14/19 20:29	1
Chlorobenzene	ND		5.0	0.23	ug/Kg		11/14/19 15:41	11/14/19 20:29	1
Chloroethane	ND		5.0	1.5	ug/Kg		11/14/19 15:41	11/14/19 20:29	1
Chloroform	ND		5.0	0.24	ug/Kg		11/14/19 15:41	11/14/19 20:29	1
Chloromethane	ND		25	0.31	ug/Kg		11/14/19 15:41	11/14/19 20:29	1
Dibromochloromethane	ND		5.0	0.57	ug/Kg		11/14/19 15:41	11/14/19 20:29	1
Dibromomethane	ND		5.0	0.78	ug/Kg		11/14/19 15:41	11/14/19 20:29	1
Dichlorodifluoromethane	ND		5.0	0.45	ug/Kg		11/14/19 15:41	11/14/19 20:29	1
Di-isopropyl ether (DIPE)	ND		10	0.49	ug/Kg		11/14/19 15:41	11/14/19 20:29	1
Ethanol	ND		250	84	ug/Kg		11/14/19 15:41	11/14/19 20:29	1
Ethylbenzene	ND		5.0	0.15	ug/Kg		11/14/19 15:41	11/14/19 20:29	1
Ethyl-t-butyl ether (ETBE)	ND		10	0.51	ug/Kg		11/14/19 15:41	11/14/19 20:29	1
Isopropylbenzene	ND		5.0	0.55	ug/Kg		11/14/19 15:41	11/14/19 20:29	1
Methylene Chloride	ND		50	1.3	ug/Kg		11/14/19 15:41	11/14/19 20:29	1
Methyl-t-Butyl Ether (MTBE)	ND		5.0	0.30	ug/Kg		11/14/19 15:41	11/14/19 20:29	1
Naphthalene	ND		50	0.82	ug/Kg		11/14/19 15:41	11/14/19 20:29	1
n-Butylbenzene	ND		5.0	0.16	ug/Kg		11/14/19 15:41	11/14/19 20:29	1
N-Propylbenzene	ND		5.0	0.50	ug/Kg		11/14/19 15:41	11/14/19 20:29	1
o-Xylene	ND		5.0	0.56	ug/Kg		11/14/19 15:41	11/14/19 20:29	1
m,p-Xylene	ND		5.0	0.27	ug/Kg		11/14/19 15:41	11/14/19 20:29	1
p-Isopropyltoluene	ND		5.0	0.63	ug/Kg		11/14/19 15:41	11/14/19 20:29	1
sec-Butylbenzene	ND		5.0	0.58	ug/Kg		11/14/19 15:41	11/14/19 20:29	1
Styrene	ND		5.0	0.61	ug/Kg		11/14/19 15:41	11/14/19 20:29	1
trans-1,2-Dichloroethene	ND		5.0	0.51	ug/Kg		11/14/19 15:41	11/14/19 20:29	1
trans-1,3-Dichloropropene	ND		5.0	0.61	ug/Kg		11/14/19 15:41	11/14/19 20:29	1
Tert-amyl-methyl ether (TAME)	ND		10	0.35	ug/Kg		11/14/19 15:41	11/14/19 20:29	1
tert-Butyl alcohol (TBA)	ND		50	5.2	ug/Kg		11/14/19 15:41	11/14/19 20:29	1
tert-Butylbenzene	ND		5.0	0.15	ug/Kg		11/14/19 15:41	11/14/19 20:29	1
Tetrachloroethene	ND		5.0	0.21	ug/Kg		11/14/19 15:41	11/14/19 20:29	1
Toluene	ND		5.0	0.52	ug/Kg		11/14/19 15:41	11/14/19 20:29	1
Trichloroethene	ND		5.0	0.30	ug/Kg		11/14/19 15:41	11/14/19 20:29	1
Trichlorofluoromethane	ND		50	0.38	ug/Kg		11/14/19 15:41	11/14/19 20:29	1
Vinyl acetate	ND		50	4.8	ug/Kg		11/14/19 15:41	11/14/19 20:29	1
Vinyl chloride	ND		5.0	0.51	ug/Kg		11/14/19 15:41	11/14/19 20:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*71 - 155*	*11/14/19 15:41*	*11/14/19 20:29*	*1*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*	*11/14/19 15:41*	*11/14/19 20:29*	*1*
Dibromofluoromethane (Surr)	*90*		*79 - 133*	*11/14/19 15:41*	*11/14/19 20:29*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*	*11/14/19 15:41*	*11/14/19 20:29*	*1*

Client Sample ID: CP240-SB01-1.5
Date Collected: 11/05/19 12:46
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-9
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.1	0.24	ug/Kg		11/14/19 15:41	11/14/19 20:55	1
1,1,1-Trichloroethane	ND		5.1	0.23	ug/Kg		11/14/19 15:41	11/14/19 20:55	1
1,1,2,2-Tetrachloroethane	ND		5.1	0.35	ug/Kg		11/14/19 15:41	11/14/19 20:55	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		51	0.36	ug/Kg		11/14/19 15:41	11/14/19 20:55	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: CP240-SB01-1.5
Date Collected: 11/05/19 12:46
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-9
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		5.1	0.36	ug/Kg		11/14/19 15:41	11/14/19 20:55	1
1,1-Dichloroethane	ND		5.1	0.21	ug/Kg		11/14/19 15:41	11/14/19 20:55	1
1,1-Dichloroethene	ND		5.1	0.35	ug/Kg		11/14/19 15:41	11/14/19 20:55	1
1,1-Dichloropropene	ND		5.1	0.33	ug/Kg		11/14/19 15:41	11/14/19 20:55	1
1,2,3-Trichlorobenzene	ND		10	0.93	ug/Kg		11/14/19 15:41	11/14/19 20:55	1
1,2,3-Trichloropropane	ND		5.1	0.84	ug/Kg		11/14/19 15:41	11/14/19 20:55	1
1,2,4-Trichlorobenzene	ND		5.1	0.31	ug/Kg		11/14/19 15:41	11/14/19 20:55	1
1,2,4-Trimethylbenzene	ND		5.1	0.59	ug/Kg		11/14/19 15:41	11/14/19 20:55	1
1,2-Dibromo-3-Chloropropane	ND		10	1.8	ug/Kg		11/14/19 15:41	11/14/19 20:55	1
1,2-Dibromoethane	ND		5.1	0.26	ug/Kg		11/14/19 15:41	11/14/19 20:55	1
1,2-Dichlorobenzene	ND		5.1	0.23	ug/Kg		11/14/19 15:41	11/14/19 20:55	1
1,2-Dichloroethane	ND		5.1	0.32	ug/Kg		11/14/19 15:41	11/14/19 20:55	1
1,2-Dichloropropane	ND		5.1	0.44	ug/Kg		11/14/19 15:41	11/14/19 20:55	1
1,3,5-Trimethylbenzene	ND		5.1	0.56	ug/Kg		11/14/19 15:41	11/14/19 20:55	1
1,3-Dichlorobenzene	ND		5.1	0.18	ug/Kg		11/14/19 15:41	11/14/19 20:55	1
1,3-Dichloropropane	ND		5.1	0.26	ug/Kg		11/14/19 15:41	11/14/19 20:55	1
1,4-Dichlorobenzene	ND		5.1	0.23	ug/Kg		11/14/19 15:41	11/14/19 20:55	1
2,2-Dichloropropane	ND		5.1	0.34	ug/Kg		11/14/19 15:41	11/14/19 20:55	1
2-Butanone	ND		51	3.8	ug/Kg		11/14/19 15:41	11/14/19 20:55	1
2-Chlorotoluene	ND		5.1	0.23	ug/Kg		11/14/19 15:41	11/14/19 20:55	1
2-Hexanone	ND		51	1.8	ug/Kg		11/14/19 15:41	11/14/19 20:55	1
4-Chlorotoluene	ND		5.1	0.22	ug/Kg		11/14/19 15:41	11/14/19 20:55	1
4-Methyl-2-pentanone	ND		51	4.4	ug/Kg		11/14/19 15:41	11/14/19 20:55	1
Acetone	ND		120	6.3	ug/Kg		11/14/19 15:41	11/14/19 20:55	1
Benzene	ND		5.1	0.13	ug/Kg		11/14/19 15:41	11/14/19 20:55	1
Bromobenzene	ND		5.1	0.21	ug/Kg		11/14/19 15:41	11/14/19 20:55	1
Bromochloromethane	ND		5.1	0.70	ug/Kg		11/14/19 15:41	11/14/19 20:55	1
Bromodichloromethane	ND		5.1	0.24	ug/Kg		11/14/19 15:41	11/14/19 20:55	1
Bromoform	ND		5.1	0.81	ug/Kg		11/14/19 15:41	11/14/19 20:55	1
Bromomethane	ND		25	9.6	ug/Kg		11/14/19 15:41	11/14/19 20:55	1
cis-1,2-Dichloroethene	ND		5.1	0.28	ug/Kg		11/14/19 15:41	11/14/19 20:55	1
cis-1,3-Dichloropropene	ND		5.1	0.26	ug/Kg		11/14/19 15:41	11/14/19 20:55	1
Carbon disulfide	ND		51	0.31	ug/Kg		11/14/19 15:41	11/14/19 20:55	1
Carbon tetrachloride	ND		5.1	0.29	ug/Kg		11/14/19 15:41	11/14/19 20:55	1
Chlorobenzene	ND		5.1	0.23	ug/Kg		11/14/19 15:41	11/14/19 20:55	1
Chloroethane	ND		5.1	1.5	ug/Kg		11/14/19 15:41	11/14/19 20:55	1
Chloroform	ND		5.1	0.24	ug/Kg		11/14/19 15:41	11/14/19 20:55	1
Chloromethane	ND		25	0.31	ug/Kg		11/14/19 15:41	11/14/19 20:55	1
Dibromochloromethane	ND		5.1	0.58	ug/Kg		11/14/19 15:41	11/14/19 20:55	1
Dibromomethane	ND		5.1	0.79	ug/Kg		11/14/19 15:41	11/14/19 20:55	1
Dichlorodifluoromethane	ND		5.1	0.45	ug/Kg		11/14/19 15:41	11/14/19 20:55	1
Di-isopropyl ether (DIPE)	ND		10	0.49	ug/Kg		11/14/19 15:41	11/14/19 20:55	1
Ethanol	ND		250	85	ug/Kg		11/14/19 15:41	11/14/19 20:55	1
Ethylbenzene	ND		5.1	0.15	ug/Kg		11/14/19 15:41	11/14/19 20:55	1
Ethyl-t-butyl ether (ETBE)	ND		10	0.51	ug/Kg		11/14/19 15:41	11/14/19 20:55	1
Isopropylbenzene	ND		5.1	0.55	ug/Kg		11/14/19 15:41	11/14/19 20:55	1
Methylene Chloride	ND		51	1.4	ug/Kg		11/14/19 15:41	11/14/19 20:55	1
Methyl-t-Butyl Ether (MTBE)	ND		5.1	0.30	ug/Kg		11/14/19 15:41	11/14/19 20:55	1
Naphthalene	ND		51	0.83	ug/Kg		11/14/19 15:41	11/14/19 20:55	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: CP240-SB01-1.5
Date Collected: 11/05/19 12:46
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-9
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Butylbenzene	ND		5.1	0.16	ug/Kg		11/14/19 15:41	11/14/19 20:55	1
N-Propylbenzene	ND		5.1	0.51	ug/Kg		11/14/19 15:41	11/14/19 20:55	1
o-Xylene	ND		5.1	0.56	ug/Kg		11/14/19 15:41	11/14/19 20:55	1
m,p-Xylene	ND		5.1	0.27	ug/Kg		11/14/19 15:41	11/14/19 20:55	1
p-Isopropyltoluene	ND		5.1	0.64	ug/Kg		11/14/19 15:41	11/14/19 20:55	1
sec-Butylbenzene	ND		5.1	0.59	ug/Kg		11/14/19 15:41	11/14/19 20:55	1
Styrene	ND		5.1	0.61	ug/Kg		11/14/19 15:41	11/14/19 20:55	1
trans-1,2-Dichloroethene	ND		5.1	0.51	ug/Kg		11/14/19 15:41	11/14/19 20:55	1
trans-1,3-Dichloropropene	ND		5.1	0.61	ug/Kg		11/14/19 15:41	11/14/19 20:55	1
Tert-amyl-methyl ether (TAME)	ND		10	0.36	ug/Kg		11/14/19 15:41	11/14/19 20:55	1
tert-Butyl alcohol (TBA)	ND		51	5.2	ug/Kg		11/14/19 15:41	11/14/19 20:55	1
tert-Butylbenzene	ND		5.1	0.15	ug/Kg		11/14/19 15:41	11/14/19 20:55	1
Tetrachloroethene	ND		5.1	0.21	ug/Kg		11/14/19 15:41	11/14/19 20:55	1
Toluene	ND		5.1	0.52	ug/Kg		11/14/19 15:41	11/14/19 20:55	1
Trichloroethene	ND		5.1	0.30	ug/Kg		11/14/19 15:41	11/14/19 20:55	1
Trichlorofluoromethane	ND		51	0.38	ug/Kg		11/14/19 15:41	11/14/19 20:55	1
Vinyl acetate	ND		51	4.8	ug/Kg		11/14/19 15:41	11/14/19 20:55	1
Vinyl chloride	ND		5.1	0.51	ug/Kg		11/14/19 15:41	11/14/19 20:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*71 - 155*	*11/14/19 15:41*	*11/14/19 20:55*	*1*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*	*11/14/19 15:41*	*11/14/19 20:55*	*1*
Dibromofluoromethane (Surr)	*91*		*79 - 133*	*11/14/19 15:41*	*11/14/19 20:55*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*	*11/14/19 15:41*	*11/14/19 20:55*	*1*

Client Sample ID: CP240-SB01-5
Date Collected: 11/05/19 12:54
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-10
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.0	0.24	ug/Kg		11/14/19 15:41	11/14/19 21:21	1
1,1,1-Trichloroethane	ND		5.0	0.22	ug/Kg		11/14/19 15:41	11/14/19 21:21	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.34	ug/Kg		11/14/19 15:41	11/14/19 21:21	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		50	0.35	ug/Kg		11/14/19 15:41	11/14/19 21:21	1
1,1,2-Trichloroethane	ND		5.0	0.35	ug/Kg		11/14/19 15:41	11/14/19 21:21	1
1,1-Dichloroethane	ND		5.0	0.21	ug/Kg		11/14/19 15:41	11/14/19 21:21	1
1,1-Dichloroethene	ND		5.0	0.34	ug/Kg		11/14/19 15:41	11/14/19 21:21	1
1,1-Dichloropropene	ND		5.0	0.33	ug/Kg		11/14/19 15:41	11/14/19 21:21	1
1,2,3-Trichlorobenzene	ND		9.9	0.91	ug/Kg		11/14/19 15:41	11/14/19 21:21	1
1,2,3-Trichloropropane	ND		5.0	0.83	ug/Kg		11/14/19 15:41	11/14/19 21:21	1
1,2,4-Trichlorobenzene	ND		5.0	0.31	ug/Kg		11/14/19 15:41	11/14/19 21:21	1
1,2,4-Trimethylbenzene	ND		5.0	0.58	ug/Kg		11/14/19 15:41	11/14/19 21:21	1
1,2-Dibromo-3-Chloropropane	ND		9.9	1.7	ug/Kg		11/14/19 15:41	11/14/19 21:21	1
1,2-Dibromoethane	ND		5.0	0.25	ug/Kg		11/14/19 15:41	11/14/19 21:21	1
1,2-Dichlorobenzene	ND		5.0	0.23	ug/Kg		11/14/19 15:41	11/14/19 21:21	1
1,2-Dichloroethane	ND		5.0	0.31	ug/Kg		11/14/19 15:41	11/14/19 21:21	1
1,2-Dichloropropane	ND		5.0	0.44	ug/Kg		11/14/19 15:41	11/14/19 21:21	1
1,3,5-Trimethylbenzene	ND		5.0	0.55	ug/Kg		11/14/19 15:41	11/14/19 21:21	1
1,3-Dichlorobenzene	ND		5.0	0.18	ug/Kg		11/14/19 15:41	11/14/19 21:21	1
1,3-Dichloropropane	ND		5.0	0.25	ug/Kg		11/14/19 15:41	11/14/19 21:21	1
1,4-Dichlorobenzene	ND		5.0	0.22	ug/Kg		11/14/19 15:41	11/14/19 21:21	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: CP240-SB01-5
Date Collected: 11/05/19 12:54
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-10
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,2-Dichloropropane	ND		5.0	0.33	ug/Kg		11/14/19 15:41	11/14/19 21:21	1
2-Butanone	ND		50	3.7	ug/Kg		11/14/19 15:41	11/14/19 21:21	1
2-Chlorotoluene	ND		5.0	0.23	ug/Kg		11/14/19 15:41	11/14/19 21:21	1
2-Hexanone	ND		50	1.8	ug/Kg		11/14/19 15:41	11/14/19 21:21	1
4-Chlorotoluene	ND		5.0	0.21	ug/Kg		11/14/19 15:41	11/14/19 21:21	1
4-Methyl-2-pentanone	ND		50	4.3	ug/Kg		11/14/19 15:41	11/14/19 21:21	1
Acetone	ND		120	6.2	ug/Kg		11/14/19 15:41	11/14/19 21:21	1
Benzene	ND		5.0	0.13	ug/Kg		11/14/19 15:41	11/14/19 21:21	1
Bromobenzene	ND		5.0	0.21	ug/Kg		11/14/19 15:41	11/14/19 21:21	1
Bromochloromethane	ND		5.0	0.69	ug/Kg		11/14/19 15:41	11/14/19 21:21	1
Bromodichloromethane	ND		5.0	0.23	ug/Kg		11/14/19 15:41	11/14/19 21:21	1
Bromoform	ND		5.0	0.79	ug/Kg		11/14/19 15:41	11/14/19 21:21	1
Bromomethane	ND		25	9.4	ug/Kg		11/14/19 15:41	11/14/19 21:21	1
cis-1,2-Dichloroethene	ND		5.0	0.28	ug/Kg		11/14/19 15:41	11/14/19 21:21	1
cis-1,3-Dichloropropene	ND		5.0	0.25	ug/Kg		11/14/19 15:41	11/14/19 21:21	1
Carbon disulfide	ND		50	0.30	ug/Kg		11/14/19 15:41	11/14/19 21:21	1
Carbon tetrachloride	ND		5.0	0.28	ug/Kg		11/14/19 15:41	11/14/19 21:21	1
Chlorobenzene	ND		5.0	0.22	ug/Kg		11/14/19 15:41	11/14/19 21:21	1
Chloroethane	ND		5.0	1.5	ug/Kg		11/14/19 15:41	11/14/19 21:21	1
Chloroform	ND		5.0	0.24	ug/Kg		11/14/19 15:41	11/14/19 21:21	1
Chloromethane	ND		25	0.30	ug/Kg		11/14/19 15:41	11/14/19 21:21	1
Dibromochloromethane	ND		5.0	0.57	ug/Kg		11/14/19 15:41	11/14/19 21:21	1
Dibromomethane	ND		5.0	0.77	ug/Kg		11/14/19 15:41	11/14/19 21:21	1
Dichlorodifluoromethane	ND		5.0	0.44	ug/Kg		11/14/19 15:41	11/14/19 21:21	1
Di-isopropyl ether (DIPE)	ND		9.9	0.48	ug/Kg		11/14/19 15:41	11/14/19 21:21	1
Ethanol	ND		250	83	ug/Kg		11/14/19 15:41	11/14/19 21:21	1
Ethylbenzene	ND		5.0	0.15	ug/Kg		11/14/19 15:41	11/14/19 21:21	1
Ethyl-t-butyl ether (ETBE)	ND		9.9	0.50	ug/Kg		11/14/19 15:41	11/14/19 21:21	1
Isopropylbenzene	ND		5.0	0.54	ug/Kg		11/14/19 15:41	11/14/19 21:21	1
Methylene Chloride	ND		50	1.3	ug/Kg		11/14/19 15:41	11/14/19 21:21	1
Methyl-t-Butyl Ether (MTBE)	ND		5.0	0.29	ug/Kg		11/14/19 15:41	11/14/19 21:21	1
Naphthalene	ND		50	0.81	ug/Kg		11/14/19 15:41	11/14/19 21:21	1
n-Butylbenzene	ND		5.0	0.16	ug/Kg		11/14/19 15:41	11/14/19 21:21	1
N-Propylbenzene	ND		5.0	0.50	ug/Kg		11/14/19 15:41	11/14/19 21:21	1
o-Xylene	ND		5.0	0.55	ug/Kg		11/14/19 15:41	11/14/19 21:21	1
m,p-Xylene	ND		5.0	0.27	ug/Kg		11/14/19 15:41	11/14/19 21:21	1
p-Isopropyltoluene	ND		5.0	0.63	ug/Kg		11/14/19 15:41	11/14/19 21:21	1
sec-Butylbenzene	ND		5.0	0.57	ug/Kg		11/14/19 15:41	11/14/19 21:21	1
Styrene	ND		5.0	0.60	ug/Kg		11/14/19 15:41	11/14/19 21:21	1
trans-1,2-Dichloroethene	ND		5.0	0.50	ug/Kg		11/14/19 15:41	11/14/19 21:21	1
trans-1,3-Dichloropropene	ND		5.0	0.60	ug/Kg		11/14/19 15:41	11/14/19 21:21	1
Tert-amyl-methyl ether (TAME)	ND		9.9	0.35	ug/Kg		11/14/19 15:41	11/14/19 21:21	1
tert-Butyl alcohol (TBA)	ND		50	5.1	ug/Kg		11/14/19 15:41	11/14/19 21:21	1
tert-Butylbenzene	ND		5.0	0.15	ug/Kg		11/14/19 15:41	11/14/19 21:21	1
Tetrachloroethene	ND		5.0	0.21	ug/Kg		11/14/19 15:41	11/14/19 21:21	1
Toluene	ND		5.0	0.51	ug/Kg		11/14/19 15:41	11/14/19 21:21	1
Trichloroethene	ND		5.0	0.30	ug/Kg		11/14/19 15:41	11/14/19 21:21	1
Trichlorofluoromethane	ND		50	0.37	ug/Kg		11/14/19 15:41	11/14/19 21:21	1
Vinyl acetate	ND		50	4.7	ug/Kg		11/14/19 15:41	11/14/19 21:21	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: CP240-SB01-5
Date Collected: 11/05/19 12:54
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-10
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		5.0	0.50	ug/Kg		11/14/19 15:41	11/14/19 21:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*71 - 155*	*11/14/19 15:41*	*11/14/19 21:21*	*1*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*	*11/14/19 15:41*	*11/14/19 21:21*	*1*
Dibromofluoromethane (Surr)	*91*		*79 - 133*	*11/14/19 15:41*	*11/14/19 21:21*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*	*11/14/19 15:41*	*11/14/19 21:21*	*1*

Client Sample ID: CP240-SB01-9
Date Collected: 11/05/19 12:59
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-11
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.0	0.24	ug/Kg		11/14/19 21:39	11/15/19 03:24	1
1,1,1-Trichloroethane	ND		5.0	0.22	ug/Kg		11/14/19 21:39	11/15/19 03:24	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.34	ug/Kg		11/14/19 21:39	11/15/19 03:24	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		50	0.35	ug/Kg		11/14/19 21:39	11/15/19 03:24	1
1,1,2-Trichloroethane	ND		5.0	0.35	ug/Kg		11/14/19 21:39	11/15/19 03:24	1
1,1-Dichloroethane	ND		5.0	0.21	ug/Kg		11/14/19 21:39	11/15/19 03:24	1
1,1-Dichloroethene	ND		5.0	0.34	ug/Kg		11/14/19 21:39	11/15/19 03:24	1
1,1-Dichloropropene	ND		5.0	0.33	ug/Kg		11/14/19 21:39	11/15/19 03:24	1
1,2,3-Trichlorobenzene	ND		9.9	0.91	ug/Kg		11/14/19 21:39	11/15/19 03:24	1
1,2,3-Trichloropropane	ND		5.0	0.83	ug/Kg		11/14/19 21:39	11/15/19 03:24	1
1,2,4-Trichlorobenzene	ND		5.0	0.31	ug/Kg		11/14/19 21:39	11/15/19 03:24	1
1,2,4-Trimethylbenzene	ND		5.0	0.58	ug/Kg		11/14/19 21:39	11/15/19 03:24	1
1,2-Dibromo-3-Chloropropane	ND		9.9	1.7	ug/Kg		11/14/19 21:39	11/15/19 03:24	1
1,2-Dibromoethane	ND		5.0	0.25	ug/Kg		11/14/19 21:39	11/15/19 03:24	1
1,2-Dichlorobenzene	ND		5.0	0.23	ug/Kg		11/14/19 21:39	11/15/19 03:24	1
1,2-Dichloroethane	ND		5.0	0.31	ug/Kg		11/14/19 21:39	11/15/19 03:24	1
1,2-Dichloropropane	ND	*	5.0	0.44	ug/Kg		11/14/19 21:39	11/15/19 03:24	1
1,3,5-Trimethylbenzene	ND		5.0	0.55	ug/Kg		11/14/19 21:39	11/15/19 03:24	1
1,3-Dichlorobenzene	ND		5.0	0.18	ug/Kg		11/14/19 21:39	11/15/19 03:24	1
1,3-Dichloropropane	ND		5.0	0.25	ug/Kg		11/14/19 21:39	11/15/19 03:24	1
1,4-Dichlorobenzene	ND		5.0	0.22	ug/Kg		11/14/19 21:39	11/15/19 03:24	1
2,2-Dichloropropane	ND		5.0	0.33	ug/Kg		11/14/19 21:39	11/15/19 03:24	1
2-Butanone	ND		50	3.7	ug/Kg		11/14/19 21:39	11/15/19 03:24	1
2-Chlorotoluene	ND		5.0	0.23	ug/Kg		11/14/19 21:39	11/15/19 03:24	1
2-Hexanone	ND		50	1.8	ug/Kg		11/14/19 21:39	11/15/19 03:24	1
4-Chlorotoluene	ND		5.0	0.21	ug/Kg		11/14/19 21:39	11/15/19 03:24	1
4-Methyl-2-pentanone	ND		50	4.3	ug/Kg		11/14/19 21:39	11/15/19 03:24	1
Acetone	ND		120	6.2	ug/Kg		11/14/19 21:39	11/15/19 03:24	1
Benzene	ND	*	5.0	0.13	ug/Kg		11/14/19 21:39	11/15/19 03:24	1
Bromobenzene	ND		5.0	0.21	ug/Kg		11/14/19 21:39	11/15/19 03:24	1
Bromochloromethane	ND		5.0	0.69	ug/Kg		11/14/19 21:39	11/15/19 03:24	1
Bromodichloromethane	ND		5.0	0.23	ug/Kg		11/14/19 21:39	11/15/19 03:24	1
Bromoform	ND		5.0	0.79	ug/Kg		11/14/19 21:39	11/15/19 03:24	1
Bromomethane	ND		25	9.4	ug/Kg		11/14/19 21:39	11/15/19 03:24	1
cis-1,2-Dichloroethene	ND		5.0	0.28	ug/Kg		11/14/19 21:39	11/15/19 03:24	1
cis-1,3-Dichloropropene	ND		5.0	0.25	ug/Kg		11/14/19 21:39	11/15/19 03:24	1
Carbon disulfide	ND		50	0.30	ug/Kg		11/14/19 21:39	11/15/19 03:24	1
Carbon tetrachloride	ND		5.0	0.28	ug/Kg		11/14/19 21:39	11/15/19 03:24	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: CP240-SB01-9
Date Collected: 11/05/19 12:59
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-11
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	ND		5.0	0.22	ug/Kg		11/14/19 21:39	11/15/19 03:24	1
Chloroethane	ND		5.0	1.5	ug/Kg		11/14/19 21:39	11/15/19 03:24	1
Chloroform	ND		5.0	0.24	ug/Kg		11/14/19 21:39	11/15/19 03:24	1
Chloromethane	ND		25	0.30	ug/Kg		11/14/19 21:39	11/15/19 03:24	1
Dibromochloromethane	ND		5.0	0.57	ug/Kg		11/14/19 21:39	11/15/19 03:24	1
Dibromomethane	ND		5.0	0.77	ug/Kg		11/14/19 21:39	11/15/19 03:24	1
Dichlorodifluoromethane	ND		5.0	0.44	ug/Kg		11/14/19 21:39	11/15/19 03:24	1
Di-isopropyl ether (DIPE)	ND		9.9	0.48	ug/Kg		11/14/19 21:39	11/15/19 03:24	1
Ethanol	ND		250	83	ug/Kg		11/14/19 21:39	11/15/19 03:24	1
Ethylbenzene	ND		5.0	0.15	ug/Kg		11/14/19 21:39	11/15/19 03:24	1
Ethyl-t-butyl ether (ETBE)	ND		9.9	0.50	ug/Kg		11/14/19 21:39	11/15/19 03:24	1
Isopropylbenzene	ND		5.0	0.54	ug/Kg		11/14/19 21:39	11/15/19 03:24	1
Methylene Chloride	ND		50	1.3	ug/Kg		11/14/19 21:39	11/15/19 03:24	1
Methyl-t-Butyl Ether (MTBE)	ND		5.0	0.29	ug/Kg		11/14/19 21:39	11/15/19 03:24	1
Naphthalene	ND		50	0.81	ug/Kg		11/14/19 21:39	11/15/19 03:24	1
n-Butylbenzene	ND		5.0	0.16	ug/Kg		11/14/19 21:39	11/15/19 03:24	1
N-Propylbenzene	ND		5.0	0.50	ug/Kg		11/14/19 21:39	11/15/19 03:24	1
o-Xylene	ND		5.0	0.55	ug/Kg		11/14/19 21:39	11/15/19 03:24	1
m,p-Xylene	ND		5.0	0.27	ug/Kg		11/14/19 21:39	11/15/19 03:24	1
p-Isopropyltoluene	ND		5.0	0.63	ug/Kg		11/14/19 21:39	11/15/19 03:24	1
sec-Butylbenzene	ND		5.0	0.57	ug/Kg		11/14/19 21:39	11/15/19 03:24	1
Styrene	ND		5.0	0.60	ug/Kg		11/14/19 21:39	11/15/19 03:24	1
trans-1,2-Dichloroethene	ND		5.0	0.50	ug/Kg		11/14/19 21:39	11/15/19 03:24	1
trans-1,3-Dichloropropene	ND		5.0	0.60	ug/Kg		11/14/19 21:39	11/15/19 03:24	1
Tert-amyl-methyl ether (TAME)	ND		9.9	0.35	ug/Kg		11/14/19 21:39	11/15/19 03:24	1
tert-Butyl alcohol (TBA)	ND		50	5.1	ug/Kg		11/14/19 21:39	11/15/19 03:24	1
tert-Butylbenzene	ND		5.0	0.15	ug/Kg		11/14/19 21:39	11/15/19 03:24	1
Tetrachloroethene	ND		5.0	0.21	ug/Kg		11/14/19 21:39	11/15/19 03:24	1
Toluene	ND		5.0	0.51	ug/Kg		11/14/19 21:39	11/15/19 03:24	1
Trichloroethene	ND		5.0	0.30	ug/Kg		11/14/19 21:39	11/15/19 03:24	1
Trichlorofluoromethane	ND		50	0.37	ug/Kg		11/14/19 21:39	11/15/19 03:24	1
Vinyl acetate	ND		50	4.7	ug/Kg		11/14/19 21:39	11/15/19 03:24	1
Vinyl chloride	ND		5.0	0.50	ug/Kg		11/14/19 21:39	11/15/19 03:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*71 - 155*	*11/14/19 21:39*	*11/15/19 03:24*	*1*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*	*11/14/19 21:39*	*11/15/19 03:24*	*1*
Dibromofluoromethane (Surr)	*93*		*79 - 133*	*11/14/19 21:39*	*11/15/19 03:24*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*	*11/14/19 21:39*	*11/15/19 03:24*	*1*

Client Sample ID: CP240-SB02-1.5
Date Collected: 11/05/19 13:35
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-13
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		4.9	0.24	ug/Kg		11/14/19 21:39	11/15/19 03:50	1
1,1,1-Trichloroethane	ND		4.9	0.22	ug/Kg		11/14/19 21:39	11/15/19 03:50	1
1,1,2,2-Tetrachloroethane	ND		4.9	0.34	ug/Kg		11/14/19 21:39	11/15/19 03:50	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		49	0.35	ug/Kg		11/14/19 21:39	11/15/19 03:50	1
1,1,2-Trichloroethane	ND		4.9	0.35	ug/Kg		11/14/19 21:39	11/15/19 03:50	1
1,1-Dichloroethane	ND		4.9	0.21	ug/Kg		11/14/19 21:39	11/15/19 03:50	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: CP240-SB02-1.5
Date Collected: 11/05/19 13:35
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-13
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		4.9	0.34	ug/Kg		11/14/19 21:39	11/15/19 03:50	1
1,1-Dichloropropene	ND		4.9	0.32	ug/Kg		11/14/19 21:39	11/15/19 03:50	1
1,2,3-Trichlorobenzene	ND		9.8	0.90	ug/Kg		11/14/19 21:39	11/15/19 03:50	1
1,2,3-Trichloropropane	ND		4.9	0.81	ug/Kg		11/14/19 21:39	11/15/19 03:50	1
1,2,4-Trichlorobenzene	ND		4.9	0.30	ug/Kg		11/14/19 21:39	11/15/19 03:50	1
1,2,4-Trimethylbenzene	ND		4.9	0.57	ug/Kg		11/14/19 21:39	11/15/19 03:50	1
1,2-Dibromo-3-Chloropropane	ND		9.8	1.7	ug/Kg		11/14/19 21:39	11/15/19 03:50	1
1,2-Dibromoethane	ND		4.9	0.25	ug/Kg		11/14/19 21:39	11/15/19 03:50	1
1,2-Dichlorobenzene	ND		4.9	0.22	ug/Kg		11/14/19 21:39	11/15/19 03:50	1
1,2-Dichloroethane	ND		4.9	0.31	ug/Kg		11/14/19 21:39	11/15/19 03:50	1
1,2-Dichloropropane	ND	*	4.9	0.43	ug/Kg		11/14/19 21:39	11/15/19 03:50	1
1,3,5-Trimethylbenzene	ND		4.9	0.54	ug/Kg		11/14/19 21:39	11/15/19 03:50	1
1,3-Dichlorobenzene	ND		4.9	0.17	ug/Kg		11/14/19 21:39	11/15/19 03:50	1
1,3-Dichloropropane	ND		4.9	0.25	ug/Kg		11/14/19 21:39	11/15/19 03:50	1
1,4-Dichlorobenzene	ND		4.9	0.22	ug/Kg		11/14/19 21:39	11/15/19 03:50	1
2,2-Dichloropropane	ND		4.9	0.32	ug/Kg		11/14/19 21:39	11/15/19 03:50	1
2-Butanone	ND		49	3.7	ug/Kg		11/14/19 21:39	11/15/19 03:50	1
2-Chlorotoluene	ND		4.9	0.23	ug/Kg		11/14/19 21:39	11/15/19 03:50	1
2-Hexanone	ND		49	1.7	ug/Kg		11/14/19 21:39	11/15/19 03:50	1
4-Chlorotoluene	ND		4.9	0.21	ug/Kg		11/14/19 21:39	11/15/19 03:50	1
4-Methyl-2-pentanone	ND		49	4.2	ug/Kg		11/14/19 21:39	11/15/19 03:50	1
Acetone	ND		120	6.1	ug/Kg		11/14/19 21:39	11/15/19 03:50	1
Benzene	ND	*	4.9	0.13	ug/Kg		11/14/19 21:39	11/15/19 03:50	1
Bromobenzene	ND		4.9	0.21	ug/Kg		11/14/19 21:39	11/15/19 03:50	1
Bromochloromethane	ND		4.9	0.68	ug/Kg		11/14/19 21:39	11/15/19 03:50	1
Bromodichloromethane	ND		4.9	0.23	ug/Kg		11/14/19 21:39	11/15/19 03:50	1
Bromoform	ND		4.9	0.78	ug/Kg		11/14/19 21:39	11/15/19 03:50	1
Bromomethane	ND		25	9.2	ug/Kg		11/14/19 21:39	11/15/19 03:50	1
cis-1,2-Dichloroethene	ND		4.9	0.27	ug/Kg		11/14/19 21:39	11/15/19 03:50	1
cis-1,3-Dichloropropene	ND		4.9	0.25	ug/Kg		11/14/19 21:39	11/15/19 03:50	1
Carbon disulfide	ND		49	0.30	ug/Kg		11/14/19 21:39	11/15/19 03:50	1
Carbon tetrachloride	ND		4.9	0.28	ug/Kg		11/14/19 21:39	11/15/19 03:50	1
Chlorobenzene	ND		4.9	0.22	ug/Kg		11/14/19 21:39	11/15/19 03:50	1
Chloroethane	ND		4.9	1.5	ug/Kg		11/14/19 21:39	11/15/19 03:50	1
Chloroform	ND		4.9	0.23	ug/Kg		11/14/19 21:39	11/15/19 03:50	1
Chloromethane	ND		25	0.30	ug/Kg		11/14/19 21:39	11/15/19 03:50	1
Dibromochloromethane	ND		4.9	0.56	ug/Kg		11/14/19 21:39	11/15/19 03:50	1
Dibromomethane	ND		4.9	0.76	ug/Kg		11/14/19 21:39	11/15/19 03:50	1
Dichlorodifluoromethane	ND		4.9	0.43	ug/Kg		11/14/19 21:39	11/15/19 03:50	1
Di-isopropyl ether (DIPE)	ND		9.8	0.47	ug/Kg		11/14/19 21:39	11/15/19 03:50	1
Ethanol	ND		250	82	ug/Kg		11/14/19 21:39	11/15/19 03:50	1
Ethylbenzene	ND		4.9	0.15	ug/Kg		11/14/19 21:39	11/15/19 03:50	1
Ethyl-t-butyl ether (ETBE)	ND		9.8	0.50	ug/Kg		11/14/19 21:39	11/15/19 03:50	1
Isopropylbenzene	ND		4.9	0.54	ug/Kg		11/14/19 21:39	11/15/19 03:50	1
Methylene Chloride	ND		49	1.3	ug/Kg		11/14/19 21:39	11/15/19 03:50	1
Methyl-t-Butyl Ether (MTBE)	ND		4.9	0.29	ug/Kg		11/14/19 21:39	11/15/19 03:50	1
Naphthalene	ND		49	0.80	ug/Kg		11/14/19 21:39	11/15/19 03:50	1
n-Butylbenzene	ND		4.9	0.15	ug/Kg		11/14/19 21:39	11/15/19 03:50	1
N-Propylbenzene	ND		4.9	0.49	ug/Kg		11/14/19 21:39	11/15/19 03:50	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: CP240-SB02-1.5
Date Collected: 11/05/19 13:35
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-13
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	ND		4.9	0.55	ug/Kg		11/14/19 21:39	11/15/19 03:50	1
m,p-Xylene	ND		4.9	0.26	ug/Kg		11/14/19 21:39	11/15/19 03:50	1
p-Isopropyltoluene	ND		4.9	0.62	ug/Kg		11/14/19 21:39	11/15/19 03:50	1
sec-Butylbenzene	ND		4.9	0.57	ug/Kg		11/14/19 21:39	11/15/19 03:50	1
Styrene	ND		4.9	0.59	ug/Kg		11/14/19 21:39	11/15/19 03:50	1
trans-1,2-Dichloroethene	ND		4.9	0.50	ug/Kg		11/14/19 21:39	11/15/19 03:50	1
trans-1,3-Dichloropropene	ND		4.9	0.59	ug/Kg		11/14/19 21:39	11/15/19 03:50	1
Tert-amyl-methyl ether (TAME)	ND		9.8	0.35	ug/Kg		11/14/19 21:39	11/15/19 03:50	1
tert-Butyl alcohol (TBA)	ND		49	5.1	ug/Kg		11/14/19 21:39	11/15/19 03:50	1
tert-Butylbenzene	ND		4.9	0.15	ug/Kg		11/14/19 21:39	11/15/19 03:50	1
Tetrachloroethene	ND		4.9	0.21	ug/Kg		11/14/19 21:39	11/15/19 03:50	1
Toluene	ND		4.9	0.51	ug/Kg		11/14/19 21:39	11/15/19 03:50	1
Trichloroethene	ND		4.9	0.29	ug/Kg		11/14/19 21:39	11/15/19 03:50	1
Trichlorofluoromethane	ND		49	0.37	ug/Kg		11/14/19 21:39	11/15/19 03:50	1
Vinyl acetate	ND		49	4.7	ug/Kg		11/14/19 21:39	11/15/19 03:50	1
Vinyl chloride	ND		4.9	0.49	ug/Kg		11/14/19 21:39	11/15/19 03:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*71 - 155*	*11/14/19 21:39*	*11/15/19 03:50*	*1*
4-Bromofluorobenzene (Surr)	*106*		*80 - 120*	*11/14/19 21:39*	*11/15/19 03:50*	*1*
Dibromofluoromethane (Surr)	*103*		*79 - 133*	*11/14/19 21:39*	*11/15/19 03:50*	*1*
Toluene-d8 (Surr)	*106*		*80 - 120*	*11/14/19 21:39*	*11/15/19 03:50*	*1*

Client Sample ID: CP240-SB02-5
Date Collected: 11/05/19 13:46
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-14
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		4.9	0.24	ug/Kg		11/14/19 21:39	11/15/19 04:16	1
1,1,1-Trichloroethane	ND		4.9	0.22	ug/Kg		11/14/19 21:39	11/15/19 04:16	1
1,1,2,2-Tetrachloroethane	ND		4.9	0.34	ug/Kg		11/14/19 21:39	11/15/19 04:16	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		49	0.35	ug/Kg		11/14/19 21:39	11/15/19 04:16	1
1,1,2-Trichloroethane	ND		4.9	0.35	ug/Kg		11/14/19 21:39	11/15/19 04:16	1
1,1-Dichloroethane	ND		4.9	0.21	ug/Kg		11/14/19 21:39	11/15/19 04:16	1
1,1-Dichloroethene	ND		4.9	0.34	ug/Kg		11/14/19 21:39	11/15/19 04:16	1
1,1-Dichloropropene	ND		4.9	0.32	ug/Kg		11/14/19 21:39	11/15/19 04:16	1
1,2,3-Trichlorobenzene	ND		9.9	0.90	ug/Kg		11/14/19 21:39	11/15/19 04:16	1
1,2,3-Trichloropropane	ND		4.9	0.82	ug/Kg		11/14/19 21:39	11/15/19 04:16	1
1,2,4-Trichlorobenzene	ND		4.9	0.31	ug/Kg		11/14/19 21:39	11/15/19 04:16	1
1,2,4-Trimethylbenzene	ND		4.9	0.58	ug/Kg		11/14/19 21:39	11/15/19 04:16	1
1,2-Dibromo-3-Chloropropane	ND		9.9	1.7	ug/Kg		11/14/19 21:39	11/15/19 04:16	1
1,2-Dibromoethane	ND		4.9	0.25	ug/Kg		11/14/19 21:39	11/15/19 04:16	1
1,2-Dichlorobenzene	ND		4.9	0.23	ug/Kg		11/14/19 21:39	11/15/19 04:16	1
1,2-Dichloroethane	ND		4.9	0.31	ug/Kg		11/14/19 21:39	11/15/19 04:16	1
1,2-Dichloropropane	ND	*	4.9	0.43	ug/Kg		11/14/19 21:39	11/15/19 04:16	1
1,3,5-Trimethylbenzene	ND		4.9	0.54	ug/Kg		11/14/19 21:39	11/15/19 04:16	1
1,3-Dichlorobenzene	ND		4.9	0.17	ug/Kg		11/14/19 21:39	11/15/19 04:16	1
1,3-Dichloropropane	ND		4.9	0.25	ug/Kg		11/14/19 21:39	11/15/19 04:16	1
1,4-Dichlorobenzene	ND		4.9	0.22	ug/Kg		11/14/19 21:39	11/15/19 04:16	1
2,2-Dichloropropane	ND		4.9	0.33	ug/Kg		11/14/19 21:39	11/15/19 04:16	1
2-Butanone	ND		49	3.7	ug/Kg		11/14/19 21:39	11/15/19 04:16	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: CP240-SB02-5
Date Collected: 11/05/19 13:46
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-14
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chlorotoluene	ND		4.9	0.23	ug/Kg		11/14/19 21:39	11/15/19 04:16	1
2-Hexanone	ND		49	1.7	ug/Kg		11/14/19 21:39	11/15/19 04:16	1
4-Chlorotoluene	ND		4.9	0.21	ug/Kg		11/14/19 21:39	11/15/19 04:16	1
4-Methyl-2-pentanone	ND		49	4.3	ug/Kg		11/14/19 21:39	11/15/19 04:16	1
Acetone	ND		120	6.2	ug/Kg		11/14/19 21:39	11/15/19 04:16	1
Benzene	ND	*	4.9	0.13	ug/Kg		11/14/19 21:39	11/15/19 04:16	1
Bromobenzene	ND		4.9	0.21	ug/Kg		11/14/19 21:39	11/15/19 04:16	1
Bromochloromethane	ND		4.9	0.68	ug/Kg		11/14/19 21:39	11/15/19 04:16	1
Bromodichloromethane	ND		4.9	0.23	ug/Kg		11/14/19 21:39	11/15/19 04:16	1
Bromoform	ND		4.9	0.78	ug/Kg		11/14/19 21:39	11/15/19 04:16	1
Bromomethane	ND		25	9.3	ug/Kg		11/14/19 21:39	11/15/19 04:16	1
cis-1,2-Dichloroethene	ND		4.9	0.28	ug/Kg		11/14/19 21:39	11/15/19 04:16	1
cis-1,3-Dichloropropene	ND		4.9	0.25	ug/Kg		11/14/19 21:39	11/15/19 04:16	1
Carbon disulfide	ND		49	0.30	ug/Kg		11/14/19 21:39	11/15/19 04:16	1
Carbon tetrachloride	ND		4.9	0.28	ug/Kg		11/14/19 21:39	11/15/19 04:16	1
Chlorobenzene	ND		4.9	0.22	ug/Kg		11/14/19 21:39	11/15/19 04:16	1
Chloroethane	ND		4.9	1.5	ug/Kg		11/14/19 21:39	11/15/19 04:16	1
Chloroform	ND		4.9	0.24	ug/Kg		11/14/19 21:39	11/15/19 04:16	1
Chloromethane	ND		25	0.30	ug/Kg		11/14/19 21:39	11/15/19 04:16	1
Dibromochloromethane	ND		4.9	0.56	ug/Kg		11/14/19 21:39	11/15/19 04:16	1
Dibromomethane	ND		4.9	0.76	ug/Kg		11/14/19 21:39	11/15/19 04:16	1
Dichlorodifluoromethane	ND		4.9	0.44	ug/Kg		11/14/19 21:39	11/15/19 04:16	1
Di-isopropyl ether (DIPE)	ND		9.9	0.48	ug/Kg		11/14/19 21:39	11/15/19 04:16	1
Ethanol	ND		250	82	ug/Kg		11/14/19 21:39	11/15/19 04:16	1
Ethylbenzene	ND		4.9	0.15	ug/Kg		11/14/19 21:39	11/15/19 04:16	1
Ethyl-t-butyl ether (ETBE)	ND		9.9	0.50	ug/Kg		11/14/19 21:39	11/15/19 04:16	1
Isopropylbenzene	ND		4.9	0.54	ug/Kg		11/14/19 21:39	11/15/19 04:16	1
Methylene Chloride	ND		49	1.3	ug/Kg		11/14/19 21:39	11/15/19 04:16	1
Methyl-t-Butyl Ether (MTBE)	ND		4.9	0.29	ug/Kg		11/14/19 21:39	11/15/19 04:16	1
Naphthalene	ND		49	0.80	ug/Kg		11/14/19 21:39	11/15/19 04:16	1
n-Butylbenzene	ND		4.9	0.15	ug/Kg		11/14/19 21:39	11/15/19 04:16	1
N-Propylbenzene	ND		4.9	0.49	ug/Kg		11/14/19 21:39	11/15/19 04:16	1
o-Xylene	ND		4.9	0.55	ug/Kg		11/14/19 21:39	11/15/19 04:16	1
m,p-Xylene	ND		4.9	0.26	ug/Kg		11/14/19 21:39	11/15/19 04:16	1
p-Isopropyltoluene	ND		4.9	0.62	ug/Kg		11/14/19 21:39	11/15/19 04:16	1
sec-Butylbenzene	ND		4.9	0.57	ug/Kg		11/14/19 21:39	11/15/19 04:16	1
Styrene	ND		4.9	0.60	ug/Kg		11/14/19 21:39	11/15/19 04:16	1
trans-1,2-Dichloroethene	ND		4.9	0.50	ug/Kg		11/14/19 21:39	11/15/19 04:16	1
trans-1,3-Dichloropropene	ND		4.9	0.60	ug/Kg		11/14/19 21:39	11/15/19 04:16	1
Tert-amyl-methyl ether (TAME)	ND		9.9	0.35	ug/Kg		11/14/19 21:39	11/15/19 04:16	1
tert-Butyl alcohol (TBA)	ND		49	5.1	ug/Kg		11/14/19 21:39	11/15/19 04:16	1
tert-Butylbenzene	ND		4.9	0.15	ug/Kg		11/14/19 21:39	11/15/19 04:16	1
Tetrachloroethene	ND		4.9	0.21	ug/Kg		11/14/19 21:39	11/15/19 04:16	1
Toluene	ND		4.9	0.51	ug/Kg		11/14/19 21:39	11/15/19 04:16	1
Trichloroethene	ND		4.9	0.30	ug/Kg		11/14/19 21:39	11/15/19 04:16	1
Trichlorofluoromethane	ND		49	0.37	ug/Kg		11/14/19 21:39	11/15/19 04:16	1
Vinyl acetate	ND		49	4.7	ug/Kg		11/14/19 21:39	11/15/19 04:16	1
Vinyl chloride	ND		4.9	0.50	ug/Kg		11/14/19 21:39	11/15/19 04:16	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		71 - 155	11/14/19 21:39	11/15/19 04:16	1
4-Bromofluorobenzene (Surr)	104		80 - 120	11/14/19 21:39	11/15/19 04:16	1
Dibromofluoromethane (Surr)	92		79 - 133	11/14/19 21:39	11/15/19 04:16	1
Toluene-d8 (Surr)	103		80 - 120	11/14/19 21:39	11/15/19 04:16	1

Client Sample ID: CP240-SB02-9
Date Collected: 11/05/19 13:51
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-15
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		4.9	0.24	ug/Kg		11/14/19 18:09	11/15/19 01:41	1
1,1,1-Trichloroethane	ND		4.9	0.22	ug/Kg		11/14/19 18:09	11/15/19 01:41	1
1,1,2,2-Tetrachloroethane	ND		4.9	0.34	ug/Kg		11/14/19 18:09	11/15/19 01:41	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		49	0.35	ug/Kg		11/14/19 18:09	11/15/19 01:41	1
1,1,2-Trichloroethane	ND		4.9	0.35	ug/Kg		11/14/19 18:09	11/15/19 01:41	1
1,1-Dichloroethane	ND		4.9	0.21	ug/Kg		11/14/19 18:09	11/15/19 01:41	1
1,1-Dichloroethene	ND		4.9	0.34	ug/Kg		11/14/19 18:09	11/15/19 01:41	1
1,1-Dichloropropene	ND		4.9	0.32	ug/Kg		11/14/19 18:09	11/15/19 01:41	1
1,2,3-Trichlorobenzene	ND	F1	9.9	0.90	ug/Kg		11/14/19 18:09	11/15/19 01:41	1
1,2,3-Trichloropropane	ND		4.9	0.82	ug/Kg		11/14/19 18:09	11/15/19 01:41	1
1,2,4-Trichlorobenzene	ND		4.9	0.31	ug/Kg		11/14/19 18:09	11/15/19 01:41	1
1,2,4-Trimethylbenzene	ND		4.9	0.58	ug/Kg		11/14/19 18:09	11/15/19 01:41	1
1,2-Dibromo-3-Chloropropane	ND		9.9	1.7	ug/Kg		11/14/19 18:09	11/15/19 01:41	1
1,2-Dibromoethane	ND		4.9	0.25	ug/Kg		11/14/19 18:09	11/15/19 01:41	1
1,2-Dichlorobenzene	ND		4.9	0.23	ug/Kg		11/14/19 18:09	11/15/19 01:41	1
1,2-Dichloroethane	ND		4.9	0.31	ug/Kg		11/14/19 18:09	11/15/19 01:41	1
1,2-Dichloropropane	ND	*	4.9	0.43	ug/Kg		11/14/19 18:09	11/15/19 01:41	1
1,3,5-Trimethylbenzene	ND		4.9	0.54	ug/Kg		11/14/19 18:09	11/15/19 01:41	1
1,3-Dichlorobenzene	ND		4.9	0.17	ug/Kg		11/14/19 18:09	11/15/19 01:41	1
1,3-Dichloropropane	ND		4.9	0.25	ug/Kg		11/14/19 18:09	11/15/19 01:41	1
1,4-Dichlorobenzene	ND		4.9	0.22	ug/Kg		11/14/19 18:09	11/15/19 01:41	1
2,2-Dichloropropane	ND		4.9	0.33	ug/Kg		11/14/19 18:09	11/15/19 01:41	1
2-Butanone	ND		49	3.7	ug/Kg		11/14/19 18:09	11/15/19 01:41	1
2-Chlorotoluene	ND		4.9	0.23	ug/Kg		11/14/19 18:09	11/15/19 01:41	1
2-Hexanone	ND		49	1.7	ug/Kg		11/14/19 18:09	11/15/19 01:41	1
4-Chlorotoluene	ND		4.9	0.21	ug/Kg		11/14/19 18:09	11/15/19 01:41	1
4-Methyl-2-pentanone	ND		49	4.3	ug/Kg		11/14/19 18:09	11/15/19 01:41	1
Acetone	ND	F1	120	6.2	ug/Kg		11/14/19 18:09	11/15/19 01:41	1
Benzene	ND	*	4.9	0.13	ug/Kg		11/14/19 18:09	11/15/19 01:41	1
Bromobenzene	ND		4.9	0.21	ug/Kg		11/14/19 18:09	11/15/19 01:41	1
Bromochloromethane	ND		4.9	0.68	ug/Kg		11/14/19 18:09	11/15/19 01:41	1
Bromodichloromethane	ND		4.9	0.23	ug/Kg		11/14/19 18:09	11/15/19 01:41	1
Bromoform	ND		4.9	0.78	ug/Kg		11/14/19 18:09	11/15/19 01:41	1
Bromomethane	ND		25	9.3	ug/Kg		11/14/19 18:09	11/15/19 01:41	1
cis-1,2-Dichloroethene	ND		4.9	0.28	ug/Kg		11/14/19 18:09	11/15/19 01:41	1
cis-1,3-Dichloropropene	ND		4.9	0.25	ug/Kg		11/14/19 18:09	11/15/19 01:41	1
Carbon disulfide	ND		49	0.30	ug/Kg		11/14/19 18:09	11/15/19 01:41	1
Carbon tetrachloride	ND		4.9	0.28	ug/Kg		11/14/19 18:09	11/15/19 01:41	1
Chlorobenzene	ND		4.9	0.22	ug/Kg		11/14/19 18:09	11/15/19 01:41	1
Chloroethane	ND		4.9	1.5	ug/Kg		11/14/19 18:09	11/15/19 01:41	1
Chloroform	ND		4.9	0.24	ug/Kg		11/14/19 18:09	11/15/19 01:41	1
Chloromethane	ND		25	0.30	ug/Kg		11/14/19 18:09	11/15/19 01:41	1
Dibromochloromethane	ND		4.9	0.56	ug/Kg		11/14/19 18:09	11/15/19 01:41	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: CP240-SB02-9
Date Collected: 11/05/19 13:51
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-15
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibromomethane	ND		4.9	0.77	ug/Kg		11/14/19 18:09	11/15/19 01:41	1
Dichlorodifluoromethane	ND		4.9	0.44	ug/Kg		11/14/19 18:09	11/15/19 01:41	1
Di-isopropyl ether (DIPE)	ND		9.9	0.48	ug/Kg		11/14/19 18:09	11/15/19 01:41	1
Ethanol	ND		250	83	ug/Kg		11/14/19 18:09	11/15/19 01:41	1
Ethylbenzene	ND		4.9	0.15	ug/Kg		11/14/19 18:09	11/15/19 01:41	1
Ethyl-t-butyl ether (ETBE)	ND		9.9	0.50	ug/Kg		11/14/19 18:09	11/15/19 01:41	1
Isopropylbenzene	ND		4.9	0.54	ug/Kg		11/14/19 18:09	11/15/19 01:41	1
Methylene Chloride	ND		49	1.3	ug/Kg		11/14/19 18:09	11/15/19 01:41	1
Methyl-t-Butyl Ether (MTBE)	ND		4.9	0.29	ug/Kg		11/14/19 18:09	11/15/19 01:41	1
Naphthalene	ND	F1	49	0.80	ug/Kg		11/14/19 18:09	11/15/19 01:41	1
n-Butylbenzene	ND		4.9	0.15	ug/Kg		11/14/19 18:09	11/15/19 01:41	1
N-Propylbenzene	ND		4.9	0.50	ug/Kg		11/14/19 18:09	11/15/19 01:41	1
o-Xylene	ND		4.9	0.55	ug/Kg		11/14/19 18:09	11/15/19 01:41	1
m,p-Xylene	ND		4.9	0.26	ug/Kg		11/14/19 18:09	11/15/19 01:41	1
p-Isopropyltoluene	ND		4.9	0.62	ug/Kg		11/14/19 18:09	11/15/19 01:41	1
sec-Butylbenzene	ND		4.9	0.57	ug/Kg		11/14/19 18:09	11/15/19 01:41	1
Styrene	ND		4.9	0.60	ug/Kg		11/14/19 18:09	11/15/19 01:41	1
trans-1,2-Dichloroethene	ND		4.9	0.50	ug/Kg		11/14/19 18:09	11/15/19 01:41	1
trans-1,3-Dichloropropene	ND		4.9	0.60	ug/Kg		11/14/19 18:09	11/15/19 01:41	1
Tert-amyl-methyl ether (TAME)	ND		9.9	0.35	ug/Kg		11/14/19 18:09	11/15/19 01:41	1
tert-Butyl alcohol (TBA)	ND		49	5.1	ug/Kg		11/14/19 18:09	11/15/19 01:41	1
tert-Butylbenzene	ND		4.9	0.15	ug/Kg		11/14/19 18:09	11/15/19 01:41	1
Tetrachloroethene	ND		4.9	0.21	ug/Kg		11/14/19 18:09	11/15/19 01:41	1
Toluene	ND		4.9	0.51	ug/Kg		11/14/19 18:09	11/15/19 01:41	1
Trichloroethene	ND		4.9	0.30	ug/Kg		11/14/19 18:09	11/15/19 01:41	1
Trichlorofluoromethane	ND		49	0.37	ug/Kg		11/14/19 18:09	11/15/19 01:41	1
Vinyl acetate	ND	F1	49	4.7	ug/Kg		11/14/19 18:09	11/15/19 01:41	1
Vinyl chloride	ND		4.9	0.50	ug/Kg		11/14/19 18:09	11/15/19 01:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*71 - 155*	*11/14/19 18:09*	*11/15/19 01:41*	*1*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*	*11/14/19 18:09*	*11/15/19 01:41*	*1*
Dibromofluoromethane (Surr)	*94*		*79 - 133*	*11/14/19 18:09*	*11/15/19 01:41*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*	*11/14/19 18:09*	*11/15/19 01:41*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Client Sample ID: CP236-SB01-2
Date Collected: 11/05/19 09:00
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-1
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C28)	5.2	Z	4.9	3.5	mg/Kg		11/08/19 14:18	11/08/19 21:49	1
MRO (C17-C44)	11	J Z B	25	3.7	mg/Kg		11/08/19 14:18	11/08/19 21:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane (Surr)	*93*		*61 - 145*	*11/08/19 14:18*	*11/08/19 21:49*	*1*

Client Sample ID: CP236-SB01-5
Date Collected: 11/05/19 09:15
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-2
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C28)	6.8	Z	4.9	3.5	mg/Kg		11/08/19 14:18	11/08/19 22:09	1
MRO (C17-C44)	3.8	J Z B	25	3.7	mg/Kg		11/08/19 14:18	11/08/19 22:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane (Surr)	*98*		*61 - 145*	*11/08/19 14:18*	*11/08/19 22:09*	*1*

Client Sample ID: CP236-SB01-8
Date Collected: 11/05/19 09:24
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-3
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C28)	14	Z	5.0	3.5	mg/Kg		11/08/19 14:18	11/08/19 22:28	1
MRO (C17-C44)	8.7	J Z B	25	3.8	mg/Kg		11/08/19 14:18	11/08/19 22:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane (Surr)	*100*		*61 - 145*	*11/08/19 14:18*	*11/08/19 22:28*	*1*

Client Sample ID: CP236-SB02-2
Date Collected: 11/05/19 09:55
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-5
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C28)	ND		5.0	3.5	mg/Kg		11/08/19 14:18	11/08/19 23:08	1
MRO (C17-C44)	ND		25	3.8	mg/Kg		11/08/19 14:18	11/08/19 23:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane (Surr)	*90*		*61 - 145*	*11/08/19 14:18*	*11/08/19 23:08*	*1*

Client Sample ID: CP236-SB02-5
Date Collected: 11/05/19 10:11
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-6
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C28)	4.0	J Z	5.0	3.5	mg/Kg		11/08/19 14:18	11/08/19 23:27	1
MRO (C17-C44)	ND		25	3.8	mg/Kg		11/08/19 14:18	11/08/19 23:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane (Surr)	*96*		*61 - 145*	*11/08/19 14:18*	*11/08/19 23:27*	*1*

Client Sample ID: CP236-SB02-9
Date Collected: 11/05/19 10:15
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-7
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C28)	9.3	Z	4.9	3.5	mg/Kg		11/08/19 14:18	11/08/19 23:48	1
MRO (C17-C44)	4.2	J Z B	25	3.7	mg/Kg		11/08/19 14:18	11/08/19 23:48	1

Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Octacosane (Surr)	99		61 - 145	11/08/19 14:18	11/08/19 23:48	1

Client Sample ID: CP240-SB01-1.5
Date Collected: 11/05/19 12:46
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-9
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C28)	4.5	J Z	5.0	3.5	mg/Kg		11/08/19 14:18	11/09/19 00:27	1
MRO (C17-C44)	8.2	J Z B	25	3.8	mg/Kg		11/08/19 14:18	11/09/19 00:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Octacosane (Surr)	95		61 - 145	11/08/19 14:18	11/09/19 00:27	1

Client Sample ID: CP240-SB01-5
Date Collected: 11/05/19 12:54
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-10
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C28)	4.3	J Z	5.0	3.5	mg/Kg		11/08/19 14:18	11/09/19 00:46	1
MRO (C17-C44)	ND		25	3.8	mg/Kg		11/08/19 14:18	11/09/19 00:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Octacosane (Surr)	93		61 - 145	11/08/19 14:18	11/09/19 00:46	1

Client Sample ID: CP240-SB01-9
Date Collected: 11/05/19 12:59
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-11
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C28)	7.4	Z	5.0	3.5	mg/Kg		11/08/19 14:18	11/09/19 01:45	1
MRO (C17-C44)	ND		25	3.8	mg/Kg		11/08/19 14:18	11/09/19 01:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Octacosane (Surr)	93		61 - 145	11/08/19 14:18	11/09/19 01:45	1

Client Sample ID: CP240-SB02-1.5
Date Collected: 11/05/19 13:35
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-13
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C28)	4.8	J Z	5.0	3.5	mg/Kg		11/08/19 14:18	11/09/19 02:24	1
MRO (C17-C44)	7.9	J Z B	25	3.8	mg/Kg		11/08/19 14:18	11/09/19 02:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Octacosane (Surr)	88		61 - 145	11/08/19 14:18	11/09/19 02:24	1

Client Sample ID: CP240-SB02-5
Date Collected: 11/05/19 13:46
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-14
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C28)	4.3	J Z	5.0	3.5	mg/Kg		11/08/19 14:18	11/09/19 02:44	1
MRO (C17-C44)	ND		25	3.8	mg/Kg		11/08/19 14:18	11/09/19 02:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Octacosane (Surr)	80		61 - 145	11/08/19 14:18	11/09/19 02:44	1

Client: Kennedy/Jenks Consultants
Project/Site: VTA EBRC / 1965013.00

Job ID: 570-12118-1

Method: 8015B - Diesel Range Organics (DRO) (GC)

Client Sample ID: CP240-SB02-9
Date Collected: 11/05/19 13:51
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-15
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C28)	14	Z	4.9	3.5	mg/Kg		11/08/19 14:18	11/09/19 03:03	1
MRO (C17-C44)	6.3	J Z B	25	3.7	mg/Kg		11/08/19 14:18	11/09/19 03:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane (Surr)	*95*		*61 - 145*	*11/08/19 14:18*	*11/09/19 03:03*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Client Sample ID: CP236-SB01-2
Date Collected: 11/05/19 09:00
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-1
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		5.0	0.53	ug/Kg		11/11/19 09:04	11/12/19 13:14	1
4,4'-DDE	ND		5.0	0.72	ug/Kg		11/11/19 09:04	11/12/19 13:14	1
4,4'-DDT	ND		5.0	1.5	ug/Kg		11/11/19 09:04	11/12/19 13:14	1
Aldrin	ND		5.0	0.41	ug/Kg		11/11/19 09:04	11/12/19 13:14	1
alpha-BHC	ND		5.0	0.64	ug/Kg		11/11/19 09:04	11/12/19 13:14	1
alpha-Chlordane	ND		1.0	0.33	ug/Kg		11/11/19 09:04	11/12/19 13:14	1
beta-BHC	ND		5.0	1.7	ug/Kg		11/11/19 09:04	11/12/19 13:14	1
delta-BHC	ND		5.0	0.68	ug/Kg		11/11/19 09:04	11/12/19 13:14	1
Dieldrin	ND		1.0	0.36	ug/Kg		11/11/19 09:04	11/12/19 13:14	1
Endosulfan I	ND		5.0	0.36	ug/Kg		11/11/19 09:04	11/12/19 13:14	1
Endosulfan II	ND		5.0	0.49	ug/Kg		11/11/19 09:04	11/12/19 13:14	1
Endosulfan sulfate	ND		5.0	0.44	ug/Kg		11/11/19 09:04	11/12/19 13:14	1
Endrin	ND		5.0	0.44	ug/Kg		11/11/19 09:04	11/12/19 13:14	1
Endrin aldehyde	ND		5.0	0.85	ug/Kg		11/11/19 09:04	11/12/19 13:14	1
Endrin ketone	ND		5.0	1.2	ug/Kg		11/11/19 09:04	11/12/19 13:14	1
gamma-Chlordane	ND		5.0	1.6	ug/Kg		11/11/19 09:04	11/12/19 13:14	1
gamma-BHC	ND		5.0	0.29	ug/Kg		11/11/19 09:04	11/12/19 13:14	1
Heptachlor	ND		5.0	0.35	ug/Kg		11/11/19 09:04	11/12/19 13:14	1
Heptachlor epoxide	ND		5.0	0.41	ug/Kg		11/11/19 09:04	11/12/19 13:14	1
Methoxychlor	ND		5.0	1.0	ug/Kg		11/11/19 09:04	11/12/19 13:14	1
Toxaphene	ND		25	10	ug/Kg		11/11/19 09:04	11/12/19 13:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*76*		*25 - 145*	*11/11/19 09:04*	*11/12/19 13:14*	*1*
DCB Decachlorobiphenyl (Surr)	*74*		*24 - 168*	*11/11/19 09:04*	*11/12/19 13:14*	*1*

Client Sample ID: CP236-SB02-2
Date Collected: 11/05/19 09:55
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-5
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND	F2 F1	5.0	0.53	ug/Kg		11/11/19 09:04	11/12/19 13:28	1
4,4'-DDE	ND	F2 F1	5.0	0.72	ug/Kg		11/11/19 09:04	11/12/19 13:28	1
4,4'-DDT	ND	F2 F1	5.0	1.5	ug/Kg		11/11/19 09:04	11/12/19 13:28	1
Aldrin	ND	F2 F1	5.0	0.42	ug/Kg		11/11/19 09:04	11/12/19 13:28	1
alpha-BHC	ND	F2 F1	5.0	0.64	ug/Kg		11/11/19 09:04	11/12/19 13:28	1
alpha-Chlordane	ND	F2 F1	1.0	0.33	ug/Kg		11/11/19 09:04	11/12/19 13:28	1
beta-BHC	ND	F2 F1	5.0	1.7	ug/Kg		11/11/19 09:04	11/12/19 13:28	1
delta-BHC	ND	F2 F1	5.0	0.68	ug/Kg		11/11/19 09:04	11/12/19 13:28	1
Dieldrin	ND	F2 F1	1.0	0.36	ug/Kg		11/11/19 09:04	11/12/19 13:28	1
Endosulfan I	ND	F2 F1	5.0	0.36	ug/Kg		11/11/19 09:04	11/12/19 13:28	1
Endosulfan II	ND	F2 F1	5.0	0.49	ug/Kg		11/11/19 09:04	11/12/19 13:28	1
Endosulfan sulfate	ND	F2 F1	5.0	0.44	ug/Kg		11/11/19 09:04	11/12/19 13:28	1
Endrin	ND	F2 F1	5.0	0.44	ug/Kg		11/11/19 09:04	11/12/19 13:28	1
Endrin aldehyde	ND	F2 F1	5.0	0.86	ug/Kg		11/11/19 09:04	11/12/19 13:28	1
Endrin ketone	ND	F2 F1	5.0	1.2	ug/Kg		11/11/19 09:04	11/12/19 13:28	1
gamma-Chlordane	ND	F2 F1	5.0	1.6	ug/Kg		11/11/19 09:04	11/12/19 13:28	1
gamma-BHC	ND	F2 F1	5.0	0.30	ug/Kg		11/11/19 09:04	11/12/19 13:28	1
Heptachlor	ND	F2 F1	5.0	0.35	ug/Kg		11/11/19 09:04	11/12/19 13:28	1
Heptachlor epoxide	ND	F2 F1	5.0	0.41	ug/Kg		11/11/19 09:04	11/12/19 13:28	1
Methoxychlor	ND	F2 F1	5.0	1.0	ug/Kg		11/11/19 09:04	11/12/19 13:28	1

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Client Sample ID: CP236-SB02-2
Date Collected: 11/05/19 09:55
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-5
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toxaphene	ND		25	10	ug/Kg		11/11/19 09:04	11/12/19 13:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*62*		*25 - 145*	*11/11/19 09:04*	*11/12/19 13:28*	*1*
DCB Decachlorobiphenyl (Surr)	*59*		*24 - 168*	*11/11/19 09:04*	*11/12/19 13:28*	*1*

Client Sample ID: CP240-SB01-1.5
Date Collected: 11/05/19 12:46
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-9
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		5.0	0.53	ug/Kg		11/11/19 09:04	11/12/19 13:42	1
4,4'-DDE	ND		5.0	0.72	ug/Kg		11/11/19 09:04	11/12/19 13:42	1
4,4'-DDT	ND		5.0	1.5	ug/Kg		11/11/19 09:04	11/12/19 13:42	1
Aldrin	ND		5.0	0.41	ug/Kg		11/11/19 09:04	11/12/19 13:42	1
alpha-BHC	ND		5.0	0.64	ug/Kg		11/11/19 09:04	11/12/19 13:42	1
alpha-Chlordane	ND		1.0	0.33	ug/Kg		11/11/19 09:04	11/12/19 13:42	1
beta-BHC	ND		5.0	1.7	ug/Kg		11/11/19 09:04	11/12/19 13:42	1
delta-BHC	ND		5.0	0.68	ug/Kg		11/11/19 09:04	11/12/19 13:42	1
Dieldrin	ND		1.0	0.36	ug/Kg		11/11/19 09:04	11/12/19 13:42	1
Endosulfan I	ND		5.0	0.36	ug/Kg		11/11/19 09:04	11/12/19 13:42	1
Endosulfan II	ND		5.0	0.49	ug/Kg		11/11/19 09:04	11/12/19 13:42	1
Endosulfan sulfate	ND		5.0	0.44	ug/Kg		11/11/19 09:04	11/12/19 13:42	1
Endrin	ND		5.0	0.44	ug/Kg		11/11/19 09:04	11/12/19 13:42	1
Endrin aldehyde	ND		5.0	0.85	ug/Kg		11/11/19 09:04	11/12/19 13:42	1
Endrin ketone	ND		5.0	1.2	ug/Kg		11/11/19 09:04	11/12/19 13:42	1
gamma-Chlordane	ND		5.0	1.6	ug/Kg		11/11/19 09:04	11/12/19 13:42	1
gamma-BHC	ND		5.0	0.29	ug/Kg		11/11/19 09:04	11/12/19 13:42	1
Heptachlor	ND		5.0	0.35	ug/Kg		11/11/19 09:04	11/12/19 13:42	1
Heptachlor epoxide	ND		5.0	0.41	ug/Kg		11/11/19 09:04	11/12/19 13:42	1
Methoxychlor	ND		5.0	1.0	ug/Kg		11/11/19 09:04	11/12/19 13:42	1
Toxaphene	ND		25	10	ug/Kg		11/11/19 09:04	11/12/19 13:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*71*		*25 - 145*	*11/11/19 09:04*	*11/12/19 13:42*	*1*
DCB Decachlorobiphenyl (Surr)	*76*		*24 - 168*	*11/11/19 09:04*	*11/12/19 13:42*	*1*

Client Sample ID: CP240-SB02-1.5
Date Collected: 11/05/19 13:35
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-13
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		5.0	0.53	ug/Kg		11/11/19 09:04	11/12/19 13:57	1
4,4'-DDE	**3.3**	**J**	5.0	0.72	ug/Kg		11/11/19 09:04	11/12/19 13:57	1
4,4'-DDT	**3.1**	**J**	5.0	1.5	ug/Kg		11/11/19 09:04	11/12/19 13:57	1
Aldrin	ND		5.0	0.41	ug/Kg		11/11/19 09:04	11/12/19 13:57	1
alpha-BHC	ND		5.0	0.64	ug/Kg		11/11/19 09:04	11/12/19 13:57	1
alpha-Chlordane	ND		0.99	0.33	ug/Kg		11/11/19 09:04	11/12/19 13:57	1
beta-BHC	ND		5.0	1.7	ug/Kg		11/11/19 09:04	11/12/19 13:57	1
delta-BHC	ND		5.0	0.68	ug/Kg		11/11/19 09:04	11/12/19 13:57	1
Dieldrin	ND		0.99	0.36	ug/Kg		11/11/19 09:04	11/12/19 13:57	1
Endosulfan I	ND		5.0	0.36	ug/Kg		11/11/19 09:04	11/12/19 13:57	1

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Client Sample ID: CP240-SB02-1.5
Date Collected: 11/05/19 13:35
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-13
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Endosulfan II	ND		5.0	0.48	ug/Kg		11/11/19 09:04	11/12/19 13:57	1
Endosulfan sulfate	ND		5.0	0.44	ug/Kg		11/11/19 09:04	11/12/19 13:57	1
Endrin	ND		5.0	0.43	ug/Kg		11/11/19 09:04	11/12/19 13:57	1
Endrin aldehyde	ND		5.0	0.85	ug/Kg		11/11/19 09:04	11/12/19 13:57	1
Endrin ketone	ND		5.0	1.2	ug/Kg		11/11/19 09:04	11/12/19 13:57	1
gamma-Chlordane	ND		5.0	1.6	ug/Kg		11/11/19 09:04	11/12/19 13:57	1
gamma-BHC	ND		5.0	0.29	ug/Kg		11/11/19 09:04	11/12/19 13:57	1
Heptachlor	ND		5.0	0.35	ug/Kg		11/11/19 09:04	11/12/19 13:57	1
Heptachlor epoxide	ND		5.0	0.41	ug/Kg		11/11/19 09:04	11/12/19 13:57	1
Methoxychlor	ND		5.0	1.0	ug/Kg		11/11/19 09:04	11/12/19 13:57	1
Toxaphene	ND		25	9.9	ug/Kg		11/11/19 09:04	11/12/19 13:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*65*		*25 - 145*	*11/11/19 09:04*	*11/12/19 13:57*	*1*
DCB Decachlorobiphenyl (Surr)	*65*		*24 - 168*	*11/11/19 09:04*	*11/12/19 13:57*	*1*

Method: 6010B - Metals (ICP)

Client Sample ID: CP236-SB01-2
Date Collected: 11/05/19 09:00
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-1
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.250	0.0857	mg/Kg		11/09/19 12:30	11/14/19 01:31	1
Arsenic	**8.62**		0.750	0.259	mg/Kg		11/09/19 12:30	11/14/19 01:31	1
Barium	**219**		0.500	0.154	mg/Kg		11/09/19 12:30	11/14/19 01:31	1
Beryllium	**0.872**		0.250	0.137	mg/Kg		11/09/19 12:30	11/14/19 01:31	1
Cadmium	ND		0.500	0.135	mg/Kg		11/09/19 12:30	11/14/19 01:31	1
Cobalt	**15.5**		0.250	0.148	mg/Kg		11/09/19 12:30	11/14/19 01:31	1
Chromium	**61.4**		0.250	0.142	mg/Kg		11/09/19 12:30	11/14/19 01:31	1
Copper	**42.2**		0.500	0.135	mg/Kg		11/09/19 12:30	11/14/19 01:31	1
Molybdenum	ND	L	0.250	0.132	mg/Kg		11/09/19 12:30	11/14/19 01:31	1
Nickel	**99.3**		0.250	0.145	mg/Kg		11/09/19 12:30	11/14/19 01:31	1
Antimony	**3.33**		0.750	0.149	mg/Kg		11/09/19 12:30	11/14/19 01:31	1
Selenium	ND	L	0.750	0.300	mg/Kg		11/09/19 12:30	11/14/19 01:31	1
Thallium	ND		0.750	0.152	mg/Kg		11/09/19 12:30	11/14/19 01:31	1
Vanadium	**46.4**		0.250	0.141	mg/Kg		11/09/19 12:30	11/14/19 01:31	1
Zinc	**75.5**		1.00	0.178	mg/Kg		11/09/19 12:30	11/14/19 01:31	1
Lead	**6.39**		0.500	0.132	mg/Kg		11/09/19 12:30	11/14/19 01:31	1

Client Sample ID: CP236-SB01-5
Date Collected: 11/05/19 09:15
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-2
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.253	0.0866	mg/Kg		11/09/19 12:30	11/14/19 01:34	1
Arsenic	**2.64**		0.758	0.262	mg/Kg		11/09/19 12:30	11/14/19 01:34	1
Barium	**116**		0.505	0.156	mg/Kg		11/09/19 12:30	11/14/19 01:34	1
Beryllium	**0.394**		0.253	0.138	mg/Kg		11/09/19 12:30	11/14/19 01:34	1
Cadmium	ND		0.505	0.136	mg/Kg		11/09/19 12:30	11/14/19 01:34	1
Cobalt	**10.2**		0.253	0.149	mg/Kg		11/09/19 12:30	11/14/19 01:34	1
Chromium	**44.5**		0.253	0.143	mg/Kg		11/09/19 12:30	11/14/19 01:34	1
Copper	**19.0**		0.505	0.136	mg/Kg		11/09/19 12:30	11/14/19 01:34	1
Molybdenum	ND	L	0.253	0.133	mg/Kg		11/09/19 12:30	11/14/19 01:34	1
Nickel	**75.3**		0.253	0.146	mg/Kg		11/09/19 12:30	11/14/19 01:34	1
Antimony	**3.00**		0.758	0.151	mg/Kg		11/09/19 12:30	11/14/19 01:34	1
Selenium	ND	L	0.758	0.303	mg/Kg		11/09/19 12:30	11/14/19 01:34	1
Thallium	**0.869**		0.758	0.154	mg/Kg		11/09/19 12:30	11/14/19 01:34	1
Vanadium	**28.5**		0.253	0.142	mg/Kg		11/09/19 12:30	11/14/19 01:34	1
Zinc	**42.3**		1.01	0.180	mg/Kg		11/09/19 12:30	11/14/19 01:34	1
Lead	**3.70**		0.505	0.133	mg/Kg		11/09/19 12:30	11/14/19 01:34	1

Client Sample ID: CP236-SB01-8
Date Collected: 11/05/19 09:24
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-3
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.258	0.0884	mg/Kg		11/09/19 12:30	11/14/19 01:36	1
Arsenic	**10.6**		0.773	0.267	mg/Kg		11/09/19 12:30	11/14/19 01:36	1
Barium	**186**		0.515	0.159	mg/Kg		11/09/19 12:30	11/14/19 01:36	1
Beryllium	**0.553**		0.258	0.141	mg/Kg		11/09/19 12:30	11/14/19 01:36	1
Cadmium	ND		0.515	0.139	mg/Kg		11/09/19 12:30	11/14/19 01:36	1
Cobalt	**9.72**		0.258	0.153	mg/Kg		11/09/19 12:30	11/14/19 01:36	1
Chromium	**47.6**		0.258	0.146	mg/Kg		11/09/19 12:30	11/14/19 01:36	1
Copper	**31.3**		0.515	0.139	mg/Kg		11/09/19 12:30	11/14/19 01:36	1

Method: 6010B - Metals (ICP) (Continued)

Client Sample ID: CP236-SB01-8
Date Collected: 11/05/19 09:24
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-3
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Molybdenum	ND	L	0.258	0.136	mg/Kg		11/09/19 12:30	11/14/19 01:36	1
Nickel	**78.9**		0.258	0.149	mg/Kg		11/09/19 12:30	11/14/19 01:36	1
Antimony	**3.40**		0.773	0.154	mg/Kg		11/09/19 12:30	11/14/19 01:36	1
Selenium	ND	L	0.773	0.309	mg/Kg		11/09/19 12:30	11/14/19 01:36	1
Thallium	ND		0.773	0.157	mg/Kg		11/09/19 12:30	11/14/19 01:36	1
Vanadium	**36.4**		0.258	0.145	mg/Kg		11/09/19 12:30	11/14/19 01:36	1
Zinc	**56.3**		1.03	0.184	mg/Kg		11/09/19 12:30	11/14/19 01:36	1
Lead	**4.64**		0.515	0.136	mg/Kg		11/09/19 12:30	11/14/19 01:36	1

Client Sample ID: CP236-SB02-2
Date Collected: 11/05/19 09:55
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-5
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.259	0.0888	mg/Kg		11/09/19 12:30	11/14/19 01:46	1
Arsenic	**9.65**		0.777	0.268	mg/Kg		11/09/19 12:30	11/14/19 01:46	1
Barium	**213**		0.518	0.160	mg/Kg		11/09/19 12:30	11/14/19 01:46	1
Beryllium	**0.703**		0.259	0.142	mg/Kg		11/09/19 12:30	11/14/19 01:46	1
Cadmium	ND		0.518	0.140	mg/Kg		11/09/19 12:30	11/14/19 01:46	1
Cobalt	**14.6**		0.259	0.153	mg/Kg		11/09/19 12:30	11/14/19 01:46	1
Chromium	**55.0**		0.259	0.147	mg/Kg		11/09/19 12:30	11/14/19 01:46	1
Copper	**35.7**		0.518	0.140	mg/Kg		11/09/19 12:30	11/14/19 01:46	1
Molybdenum	ND	L	0.259	0.137	mg/Kg		11/09/19 12:30	11/14/19 01:46	1
Nickel	**95.5**		0.259	0.150	mg/Kg		11/09/19 12:30	11/14/19 01:46	1
Antimony	**4.00**		0.777	0.154	mg/Kg		11/09/19 12:30	11/14/19 01:46	1
Selenium	ND	L	0.777	0.311	mg/Kg		11/09/19 12:30	11/14/19 01:46	1
Thallium	**1.12**		0.777	0.158	mg/Kg		11/09/19 12:30	11/14/19 01:46	1
Vanadium	**42.1**		0.259	0.146	mg/Kg		11/09/19 12:30	11/14/19 01:46	1
Zinc	**70.1**		1.04	0.184	mg/Kg		11/09/19 12:30	11/14/19 01:46	1
Lead	**6.82**		0.518	0.137	mg/Kg		11/09/19 12:30	11/14/19 01:46	1

Client Sample ID: CP236-SB02-5
Date Collected: 11/05/19 10:11
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-6
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.251	0.0861	mg/Kg		11/09/19 12:30	11/14/19 01:49	1
Arsenic	**10.3**		0.754	0.260	mg/Kg		11/09/19 12:30	11/14/19 01:49	1
Barium	**175**		0.503	0.155	mg/Kg		11/09/19 12:30	11/14/19 01:49	1
Beryllium	**0.528**		0.251	0.138	mg/Kg		11/09/19 12:30	11/14/19 01:49	1
Cadmium	ND		0.503	0.136	mg/Kg		11/09/19 12:30	11/14/19 01:49	1
Cobalt	**12.5**		0.251	0.149	mg/Kg		11/09/19 12:30	11/14/19 01:49	1
Chromium	**47.3**		0.251	0.143	mg/Kg		11/09/19 12:30	11/14/19 01:49	1
Copper	**29.2**		0.503	0.136	mg/Kg		11/09/19 12:30	11/14/19 01:49	1
Molybdenum	ND	L	0.251	0.133	mg/Kg		11/09/19 12:30	11/14/19 01:49	1
Nickel	**86.2**		0.251	0.146	mg/Kg		11/09/19 12:30	11/14/19 01:49	1
Antimony	**2.21**		0.754	0.150	mg/Kg		11/09/19 12:30	11/14/19 01:49	1
Selenium	ND	L	0.754	0.302	mg/Kg		11/09/19 12:30	11/14/19 01:49	1
Thallium	**0.828**		0.754	0.153	mg/Kg		11/09/19 12:30	11/14/19 01:49	1
Vanadium	**35.5**		0.251	0.142	mg/Kg		11/09/19 12:30	11/14/19 01:49	1
Zinc	**54.7**		1.01	0.179	mg/Kg		11/09/19 12:30	11/14/19 01:49	1
Lead	**5.06**		0.503	0.133	mg/Kg		11/09/19 12:30	11/14/19 01:49	1

Method: 6010B - Metals (ICP)

Client Sample ID: CP236-SB02-9
Date Collected: 11/05/19 10:15
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-7
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.249	0.0853	mg/Kg		11/09/19 12:30	11/14/19 01:52	1
Arsenic	**10.7**		0.746	0.258	mg/Kg		11/09/19 12:30	11/14/19 01:52	1
Barium	**178**		0.498	0.153	mg/Kg		11/09/19 12:30	11/14/19 01:52	1
Beryllium	**0.534**		0.249	0.136	mg/Kg		11/09/19 12:30	11/14/19 01:52	1
Cadmium	ND		0.498	0.134	mg/Kg		11/09/19 12:30	11/14/19 01:52	1
Cobalt	**14.1**		0.249	0.147	mg/Kg		11/09/19 12:30	11/14/19 01:52	1
Chromium	**46.2**		0.249	0.141	mg/Kg		11/09/19 12:30	11/14/19 01:52	1
Copper	**31.2**		0.498	0.134	mg/Kg		11/09/19 12:30	11/14/19 01:52	1
Molybdenum	ND	L	0.249	0.131	mg/Kg		11/09/19 12:30	11/14/19 01:52	1
Nickel	**80.8**		0.249	0.144	mg/Kg		11/09/19 12:30	11/14/19 01:52	1
Antimony	**3.52**		0.746	0.148	mg/Kg		11/09/19 12:30	11/14/19 01:52	1
Selenium	ND	L	0.746	0.299	mg/Kg		11/09/19 12:30	11/14/19 01:52	1
Thallium	**1.45**		0.746	0.151	mg/Kg		11/09/19 12:30	11/14/19 01:52	1
Vanadium	**36.6**		0.249	0.140	mg/Kg		11/09/19 12:30	11/14/19 01:52	1
Zinc	**58.0**		0.995	0.177	mg/Kg		11/09/19 12:30	11/14/19 01:52	1
Lead	**5.74**		0.498	0.131	mg/Kg		11/09/19 12:30	11/14/19 01:52	1

Client Sample ID: CP240-SB01-1.5
Date Collected: 11/05/19 12:46
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-9
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.263	0.0902	mg/Kg		11/09/19 12:30	11/14/19 01:54	1
Arsenic	**6.96**		0.789	0.273	mg/Kg		11/09/19 12:30	11/14/19 01:54	1
Barium	**158**		0.526	0.162	mg/Kg		11/09/19 12:30	11/14/19 01:54	1
Beryllium	**0.549**		0.263	0.144	mg/Kg		11/09/19 12:30	11/14/19 01:54	1
Cadmium	ND		0.526	0.142	mg/Kg		11/09/19 12:30	11/14/19 01:54	1
Cobalt	**11.8**		0.263	0.156	mg/Kg		11/09/19 12:30	11/14/19 01:54	1
Chromium	**53.1**		0.263	0.149	mg/Kg		11/09/19 12:30	11/14/19 01:54	1
Copper	**24.7**		0.526	0.142	mg/Kg		11/09/19 12:30	11/14/19 01:54	1
Molybdenum	ND	L	0.263	0.139	mg/Kg		11/09/19 12:30	11/14/19 01:54	1
Nickel	**89.9**		0.263	0.153	mg/Kg		11/09/19 12:30	11/14/19 01:54	1
Antimony	**3.70**		0.789	0.157	mg/Kg		11/09/19 12:30	11/14/19 01:54	1
Selenium	ND	L	0.789	0.316	mg/Kg		11/09/19 12:30	11/14/19 01:54	1
Thallium	ND		0.789	0.160	mg/Kg		11/09/19 12:30	11/14/19 01:54	1
Vanadium	**35.3**		0.263	0.148	mg/Kg		11/09/19 12:30	11/14/19 01:54	1
Zinc	**54.9**		1.05	0.187	mg/Kg		11/09/19 12:30	11/14/19 01:54	1
Lead	**6.38**		0.526	0.139	mg/Kg		11/09/19 12:30	11/14/19 01:54	1

Client Sample ID: CP240-SB01-5
Date Collected: 11/05/19 12:54
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-10
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.249	0.0853	mg/Kg		11/09/19 12:30	11/14/19 01:57	1
Arsenic	**6.90**		0.746	0.258	mg/Kg		11/09/19 12:30	11/14/19 01:57	1
Barium	**164**		0.498	0.153	mg/Kg		11/09/19 12:30	11/14/19 01:57	1
Beryllium	**0.492**		0.249	0.136	mg/Kg		11/09/19 12:30	11/14/19 01:57	1
Cadmium	ND		0.498	0.134	mg/Kg		11/09/19 12:30	11/14/19 01:57	1
Cobalt	**11.8**		0.249	0.147	mg/Kg		11/09/19 12:30	11/14/19 01:57	1
Chromium	**45.9**		0.249	0.141	mg/Kg		11/09/19 12:30	11/14/19 01:57	1
Copper	**26.8**		0.498	0.134	mg/Kg		11/09/19 12:30	11/14/19 01:57	1

Method: 6010B - Metals (ICP) (Continued)

Client Sample ID: CP240-SB01-5
Date Collected: 11/05/19 12:54
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-10
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Molybdenum	ND	L	0.249	0.131	mg/Kg		11/09/19 12:30	11/14/19 01:57	1
Nickel	**84.3**		0.249	0.144	mg/Kg		11/09/19 12:30	11/14/19 01:57	1
Antimony	**4.77**		0.746	0.148	mg/Kg		11/09/19 12:30	11/14/19 01:57	1
Selenium	ND	L	0.746	0.299	mg/Kg		11/09/19 12:30	11/14/19 01:57	1
Thallium	**0.396**	**J**	0.746	0.151	mg/Kg		11/09/19 12:30	11/14/19 01:57	1
Vanadium	**34.0**		0.249	0.140	mg/Kg		11/09/19 12:30	11/14/19 01:57	1
Zinc	**55.3**		0.995	0.177	mg/Kg		11/09/19 12:30	11/14/19 01:57	1
Lead	**4.97**		0.498	0.131	mg/Kg		11/09/19 12:30	11/14/19 01:57	1

Client Sample ID: CP240-SB01-9
Date Collected: 11/05/19 12:59
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-11
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.255	0.0874	mg/Kg		11/09/19 12:30	11/14/19 01:59	1
Arsenic	**7.08**		0.765	0.264	mg/Kg		11/09/19 12:30	11/14/19 01:59	1
Barium	**139**		0.510	0.157	mg/Kg		11/09/19 12:30	11/14/19 01:59	1
Beryllium	**0.531**		0.255	0.140	mg/Kg		11/09/19 12:30	11/14/19 01:59	1
Cadmium	ND		0.510	0.138	mg/Kg		11/09/19 12:30	11/14/19 01:59	1
Cobalt	**12.0**		0.255	0.151	mg/Kg		11/09/19 12:30	11/14/19 01:59	1
Chromium	**47.7**		0.255	0.145	mg/Kg		11/09/19 12:30	11/14/19 01:59	1
Copper	**28.0**		0.510	0.138	mg/Kg		11/09/19 12:30	11/14/19 01:59	1
Molybdenum	ND	L	0.255	0.135	mg/Kg		11/09/19 12:30	11/14/19 01:59	1
Nickel	**80.5**		0.255	0.148	mg/Kg		11/09/19 12:30	11/14/19 01:59	1
Antimony	**5.18**		0.765	0.152	mg/Kg		11/09/19 12:30	11/14/19 01:59	1
Selenium	ND	L	0.765	0.306	mg/Kg		11/09/19 12:30	11/14/19 01:59	1
Thallium	**0.817**		0.765	0.155	mg/Kg		11/09/19 12:30	11/14/19 01:59	1
Vanadium	**36.3**		0.255	0.144	mg/Kg		11/09/19 12:30	11/14/19 01:59	1
Zinc	**59.1**		1.02	0.182	mg/Kg		11/09/19 12:30	11/14/19 01:59	1
Lead	**5.27**		0.510	0.135	mg/Kg		11/09/19 12:30	11/14/19 01:59	1

Client Sample ID: CP240-SB02-1.5
Date Collected: 11/05/19 13:35
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-13
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.245	0.0840	mg/Kg		11/09/19 12:30	11/14/19 02:02	1
Arsenic	**4.96**		0.735	0.254	mg/Kg		11/09/19 12:30	11/14/19 02:02	1
Barium	**180**		0.490	0.151	mg/Kg		11/09/19 12:30	11/14/19 02:02	1
Beryllium	**0.535**		0.245	0.134	mg/Kg		11/09/19 12:30	11/14/19 02:02	1
Cadmium	ND		0.490	0.132	mg/Kg		11/09/19 12:30	11/14/19 02:02	1
Cobalt	**11.7**		0.245	0.145	mg/Kg		11/09/19 12:30	11/14/19 02:02	1
Chromium	**50.4**		0.245	0.139	mg/Kg		11/09/19 12:30	11/14/19 02:02	1
Copper	**26.4**		0.490	0.132	mg/Kg		11/09/19 12:30	11/14/19 02:02	1
Molybdenum	ND	L	0.245	0.129	mg/Kg		11/09/19 12:30	11/14/19 02:02	1
Nickel	**87.1**		0.245	0.142	mg/Kg		11/09/19 12:30	11/14/19 02:02	1
Antimony	**3.86**		0.735	0.146	mg/Kg		11/09/19 12:30	11/14/19 02:02	1
Selenium	ND	L	0.735	0.294	mg/Kg		11/09/19 12:30	11/14/19 02:02	1
Thallium	**2.16**		0.735	0.149	mg/Kg		11/09/19 12:30	11/14/19 02:02	1
Vanadium	**35.6**		0.245	0.138	mg/Kg		11/09/19 12:30	11/14/19 02:02	1
Zinc	**62.1**		0.980	0.175	mg/Kg		11/09/19 12:30	11/14/19 02:02	1
Lead	**14.0**		0.490	0.129	mg/Kg		11/09/19 12:30	11/14/19 02:02	1

Method: 6010B - Metals (ICP)

Client Sample ID: CP240-SB02-5
Date Collected: 11/05/19 13:46
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-14
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.256	0.0879	mg/Kg		11/09/19 12:30	11/14/19 02:04	1
Arsenic	**8.41**		0.769	0.266	mg/Kg		11/09/19 12:30	11/14/19 02:04	1
Barium	**156**		0.513	0.158	mg/Kg		11/09/19 12:30	11/14/19 02:04	1
Beryllium	**0.467**		0.256	0.141	mg/Kg		11/09/19 12:30	11/14/19 02:04	1
Cadmium	ND		0.513	0.138	mg/Kg		11/09/19 12:30	11/14/19 02:04	1
Cobalt	**11.1**		0.256	0.152	mg/Kg		11/09/19 12:30	11/14/19 02:04	1
Chromium	**45.3**		0.256	0.146	mg/Kg		11/09/19 12:30	11/14/19 02:04	1
Copper	**25.3**		0.513	0.138	mg/Kg		11/09/19 12:30	11/14/19 02:04	1
Molybdenum	ND	L	0.256	0.135	mg/Kg		11/09/19 12:30	11/14/19 02:04	1
Nickel	**81.2**		0.256	0.149	mg/Kg		11/09/19 12:30	11/14/19 02:04	1
Antimony	**1.89**		0.769	0.153	mg/Kg		11/09/19 12:30	11/14/19 02:04	1
Selenium	ND	L	0.769	0.308	mg/Kg		11/09/19 12:30	11/14/19 02:04	1
Thallium	**0.989**		0.769	0.156	mg/Kg		11/09/19 12:30	11/14/19 02:04	1
Vanadium	**34.0**		0.256	0.145	mg/Kg		11/09/19 12:30	11/14/19 02:04	1
Zinc	**54.6**		1.03	0.183	mg/Kg		11/09/19 12:30	11/14/19 02:04	1
Lead	**5.38**		0.513	0.135	mg/Kg		11/09/19 12:30	11/14/19 02:04	1

Client Sample ID: CP240-SB02-9
Date Collected: 11/05/19 13:51
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-15
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.246	0.0844	mg/Kg		11/09/19 12:30	11/14/19 02:07	1
Arsenic	**7.01**		0.739	0.255	mg/Kg		11/09/19 12:30	11/14/19 02:07	1
Barium	**154**		0.493	0.152	mg/Kg		11/09/19 12:30	11/14/19 02:07	1
Beryllium	**0.427**		0.246	0.135	mg/Kg		11/09/19 12:30	11/14/19 02:07	1
Cadmium	ND		0.493	0.133	mg/Kg		11/09/19 12:30	11/14/19 02:07	1
Cobalt	**10.2**		0.246	0.146	mg/Kg		11/09/19 12:30	11/14/19 02:07	1
Chromium	**39.2**		0.246	0.140	mg/Kg		11/09/19 12:30	11/14/19 02:07	1
Copper	**22.7**		0.493	0.133	mg/Kg		11/09/19 12:30	11/14/19 02:07	1
Molybdenum	ND	L	0.246	0.130	mg/Kg		11/09/19 12:30	11/14/19 02:07	1
Nickel	**70.9**		0.246	0.143	mg/Kg		11/09/19 12:30	11/14/19 02:07	1
Antimony	**3.26**		0.739	0.147	mg/Kg		11/09/19 12:30	11/14/19 02:07	1
Selenium	ND	L	0.739	0.296	mg/Kg		11/09/19 12:30	11/14/19 02:07	1
Thallium	**1.74**		0.739	0.150	mg/Kg		11/09/19 12:30	11/14/19 02:07	1
Vanadium	**30.7**		0.246	0.139	mg/Kg		11/09/19 12:30	11/14/19 02:07	1
Zinc	**48.6**		0.985	0.175	mg/Kg		11/09/19 12:30	11/14/19 02:07	1
Lead	**4.32**		0.493	0.130	mg/Kg		11/09/19 12:30	11/14/19 02:07	1

Method: 7471A - Mercury (CVAA)

Client Sample ID: CP236-SB01-2
Date Collected: 11/05/19 09:00
Date Received: 11/07/19 10:30
Lab Sample ID: 570-12118-1
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0634	J	0.0794	0.00559	mg/Kg		11/11/19 14:00	11/12/19 16:37	1

Client Sample ID: CP236-SB01-5
Date Collected: 11/05/19 09:15
Date Received: 11/07/19 10:30
Lab Sample ID: 570-12118-2
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0287	J	0.0847	0.00597	mg/Kg		11/11/19 14:00	11/12/19 16:39	1

Client Sample ID: CP236-SB01-8
Date Collected: 11/05/19 09:24
Date Received: 11/07/19 10:30
Lab Sample ID: 570-12118-3
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0403	J	0.0794	0.00559	mg/Kg		11/11/19 14:00	11/12/19 16:41	1

Client Sample ID: CP236-SB02-2
Date Collected: 11/05/19 09:55
Date Received: 11/07/19 10:30
Lab Sample ID: 570-12118-5
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0671	J	0.0794	0.00559	mg/Kg		11/11/19 14:00	11/12/19 16:44	1

Client Sample ID: CP236-SB02-5
Date Collected: 11/05/19 10:11
Date Received: 11/07/19 10:30
Lab Sample ID: 570-12118-6
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0612	J	0.0877	0.00618	mg/Kg		11/11/19 14:00	11/12/19 16:46	1

Client Sample ID: CP236-SB02-9
Date Collected: 11/05/19 10:15
Date Received: 11/07/19 10:30
Lab Sample ID: 570-12118-7
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0623	J	0.0806	0.00568	mg/Kg		11/11/19 14:00	11/12/19 16:48	1

Client Sample ID: CP240-SB01-1.5
Date Collected: 11/05/19 12:46
Date Received: 11/07/19 10:30
Lab Sample ID: 570-12118-9
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0554	J	0.0847	0.00597	mg/Kg		11/11/19 14:00	11/12/19 16:50	1

Client Sample ID: CP240-SB01-5
Date Collected: 11/05/19 12:54
Date Received: 11/07/19 10:30
Lab Sample ID: 570-12118-10
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0587	J	0.0833	0.00587	mg/Kg		11/11/19 14:00	11/12/19 16:53	1

Client Sample ID: CP240-SB01-9
Date Collected: 11/05/19 12:59
Date Received: 11/07/19 10:30
Lab Sample ID: 570-12118-11
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.100		0.0820	0.00578	mg/Kg		11/11/19 14:00	11/12/19 17:00	1

Client: Kennedy/Jenks Consultants
Project/Site: VTA EBRC / 1965013.00

Job ID: 570-12118-1

Method: 7471A - Mercury (CVAA)

Client Sample ID: CP240-SB02-1.5
Date Collected: 11/05/19 13:35
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-13
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0725	J	0.0833	0.00587	mg/Kg		11/11/19 14:00	11/12/19 17:02	1

Client Sample ID: CP240-SB02-5
Date Collected: 11/05/19 13:46
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-14
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0492	J	0.0833	0.00587	mg/Kg		11/11/19 14:00	11/12/19 17:04	1

Client Sample ID: CP240-SB02-9
Date Collected: 11/05/19 13:51
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-15
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0458	J	0.0794	0.00559	mg/Kg		11/11/19 14:00	11/12/19 17:07	1

Surrogate Summary

Client: Kennedy/Jenks Consultants
Project/Site: VTA EBRC / 1965013.00

Job ID: 570-12118-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	DCA (71-155)	BFB (80-120)	DBFM (79-133)	TOL (80-120)
570-12118-1	CP236-SB01-2	99	100	92	101
570-12118-1 MS	CP236-SB01-2	105	96	97	100
570-12118-1 MSD	CP236-SB01-2	109	97	101	102
570-12118-2	CP236-SB01-5	97	100	88	103
570-12118-3	CP236-SB01-8	103	102	94	103
570-12118-5	CP236-SB02-2	100	103	91	103
570-12118-6	CP236-SB02-5	99	105	91	104
570-12118-7	CP236-SB02-9	99	102	90	103
570-12118-9	CP240-SB01-1.5	102	103	91	102
570-12118-10	CP240-SB01-5	100	103	91	102
570-12118-11	CP240-SB01-9	99	103	93	102
570-12118-13	CP240-SB02-1.5	105	106	103	106
570-12118-14	CP240-SB02-5	99	104	92	103
570-12118-15	CP240-SB02-9	99	105	94	102
570-12118-15 MS	CP240-SB02-9	101	97	96	100
570-12118-15 MSD	CP240-SB02-9	103	97	96	99
LCS 570-32877/3-A	Lab Control Sample	100	97	97	102
LCS 570-32920/2-A	Lab Control Sample	103	96	100	101
LCSD 570-32877/4-A	Lab Control Sample Dup	103	99	101	102
LCSD 570-32920/3-A	Lab Control Sample Dup	102	98	98	102
MB 570-32877/1-A	Method Blank	102	104	101	105
MB 570-32920/1-A	Method Blank	102	108	102	107

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	TOL (80-120)
570-12118-1	CP236-SB01-2	102
570-12118-2	CP236-SB01-5	104
570-12118-3	CP236-SB01-8	105
570-12118-5	CP236-SB02-2	104
570-12118-6	CP236-SB02-5	105
570-12118-7	CP236-SB02-9	104
570-12118-9	CP240-SB01-1.5	103
570-12118-10	CP240-SB01-5	103
570-12118-11	CP240-SB01-9	103
570-12118-13	CP240-SB02-1.5	107
570-12118-14	CP240-SB02-5	104
570-12118-15	CP240-SB02-9	103
LCS 570-32789/7	Lab Control Sample	105
LCS 570-32958/6	Lab Control Sample	103
LCSD 570-32789/8	Lab Control Sample Dup	104

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS (Continued)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	TOL (80-120)
LCSD 570-32958/7	Lab Control Sample Dup	102
MB 570-32877/1-A	Method Blank	106
MB 570-32920/1-A	Method Blank	109

Surrogate Legend

TOL = Toluene-d8 (Surr)

Method: 8015B - Diesel Range Organics (DRO) (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	OTCSN1 (61-145)
570-12118-1	CP236-SB01-2	93
570-12118-2	CP236-SB01-5	98
570-12118-3	CP236-SB01-8	100
570-12118-5	CP236-SB02-2	90
570-12118-6	CP236-SB02-5	96
570-12118-7	CP236-SB02-9	99
570-12118-9	CP240-SB01-1.5	95
570-12118-10	CP240-SB01-5	93
570-12118-11	CP240-SB01-9	93
570-12118-13	CP240-SB02-1.5	88
570-12118-14	CP240-SB02-5	80
570-12118-15	CP240-SB02-9	95
570-12128-A-1-D MS	Matrix Spike	98
570-12128-A-1-E MSD	Matrix Spike Duplicate	98
570-12128-A-1-F MS	Matrix Spike	96
570-12128-A-1-G MSD	Matrix Spike Duplicate	97
LCS 570-31667/2-A	Lab Control Sample	102
LCS 570-31667/6-A	Lab Control Sample	99
LCSD 570-31667/3-A	Lab Control Sample Dup	94
LCSD 570-31667/7-A	Lab Control Sample Dup	95
MB 570-31667/1-A	Method Blank	94

Surrogate Legend

OTCSN = n-Octacosane (Surr)

Method: 8081A - Organochlorine Pesticides (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	TCX1 (25-145)	DCB1 (24-168)
570-12118-1	CP236-SB01-2	76	74
570-12118-5	CP236-SB02-2	62	59
570-12118-5 MS	CP236-SB02-2	37	54
570-12118-5 MSD	CP236-SB02-2	27	32
570-12118-9	CP240-SB01-1.5	71	76
570-12118-13	CP240-SB02-1.5	65	65
LCS 570-31971/2-A	Lab Control Sample	81	89
LCSD 570-31971/3-A	Lab Control Sample Dup	83	91

Surrogate Summary

Client: Kennedy/Jenks Consultants
Job ID: 570-12118-1
Project/Site: VTA EBRC / 1965013.00

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Matrix: Solid
Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)									
		TCX1	DCB1								
Lab Sample ID	Client Sample ID	(25-145)	(24-168)								
MB 570-31971/1-A	Method Blank	69	80								

Surrogate Legend

TCX = Tetrachloro-m-xylene

DCB = DCB Decachlorobiphenyl (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 570-32877/1-A
Matrix: Solid
Analysis Batch: 32790

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 32877

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		4.9	0.24	ug/Kg		11/14/19 11:30	11/14/19 15:13	1
1,1,1-Trichloroethane	ND		4.9	0.22	ug/Kg		11/14/19 11:30	11/14/19 15:13	1
1,1,2,2-Tetrachloroethane	ND		4.9	0.34	ug/Kg		11/14/19 11:30	11/14/19 15:13	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		49	0.35	ug/Kg		11/14/19 11:30	11/14/19 15:13	1
1,1,2-Trichloroethane	ND		4.9	0.35	ug/Kg		11/14/19 11:30	11/14/19 15:13	1
1,1-Dichloroethane	ND		4.9	0.21	ug/Kg		11/14/19 11:30	11/14/19 15:13	1
1,1-Dichloroethene	ND		4.9	0.34	ug/Kg		11/14/19 11:30	11/14/19 15:13	1
1,1-Dichloropropene	ND		4.9	0.32	ug/Kg		11/14/19 11:30	11/14/19 15:13	1
1,2,3-Trichlorobenzene	ND		9.9	0.90	ug/Kg		11/14/19 11:30	11/14/19 15:13	1
1,2,3-Trichloropropane	ND		4.9	0.82	ug/Kg		11/14/19 11:30	11/14/19 15:13	1
1,2,4-Trichlorobenzene	ND		4.9	0.31	ug/Kg		11/14/19 11:30	11/14/19 15:13	1
1,2,4-Trimethylbenzene	ND		4.9	0.58	ug/Kg		11/14/19 11:30	11/14/19 15:13	1
1,2-Dibromo-3-Chloropropane	ND		9.9	1.7	ug/Kg		11/14/19 11:30	11/14/19 15:13	1
1,2-Dibromoethane	ND		4.9	0.25	ug/Kg		11/14/19 11:30	11/14/19 15:13	1
1,2-Dichlorobenzene	ND		4.9	0.23	ug/Kg		11/14/19 11:30	11/14/19 15:13	1
1,2-Dichloroethane	ND		4.9	0.31	ug/Kg		11/14/19 11:30	11/14/19 15:13	1
1,2-Dichloropropane	ND		4.9	0.43	ug/Kg		11/14/19 11:30	11/14/19 15:13	1
1,3,5-Trimethylbenzene	ND		4.9	0.54	ug/Kg		11/14/19 11:30	11/14/19 15:13	1
1,3-Dichlorobenzene	ND		4.9	0.17	ug/Kg		11/14/19 11:30	11/14/19 15:13	1
1,3-Dichloropropane	ND		4.9	0.25	ug/Kg		11/14/19 11:30	11/14/19 15:13	1
1,4-Dichlorobenzene	ND		4.9	0.22	ug/Kg		11/14/19 11:30	11/14/19 15:13	1
2,2-Dichloropropane	ND		4.9	0.33	ug/Kg		11/14/19 11:30	11/14/19 15:13	1
2-Butanone	ND		49	3.7	ug/Kg		11/14/19 11:30	11/14/19 15:13	1
2-Chlorotoluene	ND		4.9	0.23	ug/Kg		11/14/19 11:30	11/14/19 15:13	1
2-Hexanone	ND		49	1.7	ug/Kg		11/14/19 11:30	11/14/19 15:13	1
4-Chlorotoluene	ND		4.9	0.21	ug/Kg		11/14/19 11:30	11/14/19 15:13	1
4-Methyl-2-pentanone	ND		49	4.3	ug/Kg		11/14/19 11:30	11/14/19 15:13	1
Acetone	ND		120	6.2	ug/Kg		11/14/19 11:30	11/14/19 15:13	1
Benzene	ND		4.9	0.13	ug/Kg		11/14/19 11:30	11/14/19 15:13	1
Bromobenzene	ND		4.9	0.21	ug/Kg		11/14/19 11:30	11/14/19 15:13	1
Bromochloromethane	ND		4.9	0.68	ug/Kg		11/14/19 11:30	11/14/19 15:13	1
Bromodichloromethane	ND		4.9	0.23	ug/Kg		11/14/19 11:30	11/14/19 15:13	1
Bromoform	ND		4.9	0.78	ug/Kg		11/14/19 11:30	11/14/19 15:13	1
Bromomethane	ND		25	9.3	ug/Kg		11/14/19 11:30	11/14/19 15:13	1
cis-1,2-Dichloroethene	ND		4.9	0.28	ug/Kg		11/14/19 11:30	11/14/19 15:13	1
cis-1,3-Dichloropropene	ND		4.9	0.25	ug/Kg		11/14/19 11:30	11/14/19 15:13	1
Carbon disulfide	ND		49	0.30	ug/Kg		11/14/19 11:30	11/14/19 15:13	1
Carbon tetrachloride	ND		4.9	0.28	ug/Kg		11/14/19 11:30	11/14/19 15:13	1
Chlorobenzene	ND		4.9	0.22	ug/Kg		11/14/19 11:30	11/14/19 15:13	1
Chloroethane	ND		4.9	1.5	ug/Kg		11/14/19 11:30	11/14/19 15:13	1
Chloroform	ND		4.9	0.24	ug/Kg		11/14/19 11:30	11/14/19 15:13	1
Chloromethane	ND		25	0.30	ug/Kg		11/14/19 11:30	11/14/19 15:13	1
Dibromochloromethane	ND		4.9	0.56	ug/Kg		11/14/19 11:30	11/14/19 15:13	1
Dibromomethane	ND		4.9	0.77	ug/Kg		11/14/19 11:30	11/14/19 15:13	1
Dichlorodifluoromethane	ND		4.9	0.44	ug/Kg		11/14/19 11:30	11/14/19 15:13	1
Di-isopropyl ether (DIPE)	ND		9.9	0.48	ug/Kg		11/14/19 11:30	11/14/19 15:13	1
Ethanol	ND		250	83	ug/Kg		11/14/19 11:30	11/14/19 15:13	1
Ethylbenzene	ND		4.9	0.15	ug/Kg		11/14/19 11:30	11/14/19 15:13	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 570-32877/1-A
Matrix: Solid
Analysis Batch: 32790

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 32877

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethyl-t-butyl ether (ETBE)	ND		9.9	0.50	ug/Kg		11/14/19 11:30	11/14/19 15:13	1
Isopropylbenzene	ND		4.9	0.54	ug/Kg		11/14/19 11:30	11/14/19 15:13	1
Methylene Chloride	ND		49	1.3	ug/Kg		11/14/19 11:30	11/14/19 15:13	1
Methyl-t-Butyl Ether (MTBE)	ND		4.9	0.29	ug/Kg		11/14/19 11:30	11/14/19 15:13	1
Naphthalene	ND		49	0.80	ug/Kg		11/14/19 11:30	11/14/19 15:13	1
n-Butylbenzene	ND		4.9	0.15	ug/Kg		11/14/19 11:30	11/14/19 15:13	1
N-Propylbenzene	ND		4.9	0.50	ug/Kg		11/14/19 11:30	11/14/19 15:13	1
o-Xylene	ND		4.9	0.55	ug/Kg		11/14/19 11:30	11/14/19 15:13	1
m,p-Xylene	ND		4.9	0.26	ug/Kg		11/14/19 11:30	11/14/19 15:13	1
p-Isopropyltoluene	ND		4.9	0.62	ug/Kg		11/14/19 11:30	11/14/19 15:13	1
sec-Butylbenzene	ND		4.9	0.57	ug/Kg		11/14/19 11:30	11/14/19 15:13	1
Styrene	ND		4.9	0.60	ug/Kg		11/14/19 11:30	11/14/19 15:13	1
trans-1,2-Dichloroethene	ND		4.9	0.50	ug/Kg		11/14/19 11:30	11/14/19 15:13	1
trans-1,3-Dichloropropene	ND		4.9	0.60	ug/Kg		11/14/19 11:30	11/14/19 15:13	1
Tert-amyl-methyl ether (TAME)	ND		9.9	0.35	ug/Kg		11/14/19 11:30	11/14/19 15:13	1
tert-Butyl alcohol (TBA)	ND		49	5.1	ug/Kg		11/14/19 11:30	11/14/19 15:13	1
tert-Butylbenzene	ND		4.9	0.15	ug/Kg		11/14/19 11:30	11/14/19 15:13	1
Tetrachloroethene	ND		4.9	0.21	ug/Kg		11/14/19 11:30	11/14/19 15:13	1
Toluene	ND		4.9	0.51	ug/Kg		11/14/19 11:30	11/14/19 15:13	1
Trichloroethene	ND		4.9	0.30	ug/Kg		11/14/19 11:30	11/14/19 15:13	1
Trichlorofluoromethane	ND		49	0.37	ug/Kg		11/14/19 11:30	11/14/19 15:13	1
Vinyl acetate	ND		49	4.7	ug/Kg		11/14/19 11:30	11/14/19 15:13	1
Vinyl chloride	ND		4.9	0.50	ug/Kg		11/14/19 11:30	11/14/19 15:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*71 - 155*	*11/14/19 11:30*	*11/14/19 15:13*	*1*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*	*11/14/19 11:30*	*11/14/19 15:13*	*1*
Dibromofluoromethane (Surr)	*101*		*79 - 133*	*11/14/19 11:30*	*11/14/19 15:13*	*1*
Toluene-d8 (Surr)	*105*		*80 - 120*	*11/14/19 11:30*	*11/14/19 15:13*	*1*

Lab Sample ID: LCS 570-32877/3-A
Matrix: Solid
Analysis Batch: 32790

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 32877

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	50.2	50.47		ug/Kg		101	74 - 122
1,2-Dibromoethane	50.2	51.97		ug/Kg		104	70 - 130
1,2-Dichlorobenzene	50.2	51.25		ug/Kg		102	75 - 120
1,2-Dichloroethane	50.2	53.58		ug/Kg		107	70 - 130
Benzene	50.2	56.04		ug/Kg		112	78 - 120
Carbon tetrachloride	50.2	55.14		ug/Kg		110	49 - 139
Chlorobenzene	50.2	53.30		ug/Kg		106	79 - 120
Di-isopropyl ether (DIPE)	50.2	50.76		ug/Kg		101	78 - 120
Ethanol	502	412.2		ug/Kg		82	56 - 140
Ethylbenzene	50.2	52.21		ug/Kg		104	76 - 120
Ethyl-t-butyl ether (ETBE)	50.2	54.15		ug/Kg		108	70 - 124
Methyl-t-Butyl Ether (MTBE)	50.2	53.57		ug/Kg		107	70 - 124
o-Xylene	50.2	52.04		ug/Kg		104	70 - 130

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 570-32877/3-A
Matrix: Solid
Analysis Batch: 32790

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 32877

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
m,p-Xylene			100	102.3		ug/Kg		102	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*71 - 155*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*
Dibromofluoromethane (Surr)	*97*		*79 - 133*
Toluene-d8 (Surr)	*102*		*80 - 120*

Lab Sample ID: LCSD 570-32877/4-A
Matrix: Solid
Analysis Batch: 32790

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 32877

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene			50.0	52.55		ug/Kg		105	74 - 122	4	20
1,2-Dibromoethane			50.0	51.20		ug/Kg		102	70 - 130	1	20
1,2-Dichlorobenzene			50.0	54.57		ug/Kg		109	75 - 120	6	20
1,2-Dichloroethane			50.0	52.26		ug/Kg		105	70 - 130	2	20
Benzene			50.0	56.56		ug/Kg		113	78 - 120	1	20
Carbon tetrachloride			50.0	56.82		ug/Kg		114	49 - 139	3	20
Chlorobenzene			50.0	54.83		ug/Kg		110	79 - 120	3	20
Di-isopropyl ether (DIPE)			50.0	50.24		ug/Kg		100	78 - 120	1	20
Ethanol			500	424.1		ug/Kg		85	56 - 140	3	20
Ethylbenzene			50.0	54.91		ug/Kg		110	76 - 120	5	20
Ethyl-t-butyl ether (ETBE)			50.0	53.21		ug/Kg		106	70 - 124	2	20
Methyl-t-Butyl Ether (MTBE)			50.0	52.06		ug/Kg		104	70 - 124	3	20
o-Xylene			50.0	53.83		ug/Kg		108	70 - 130	3	20
m,p-Xylene			100	107.0		ug/Kg		107	70 - 130	5	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*103*		*71 - 155*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*
Dibromofluoromethane (Surr)	*101*		*79 - 133*
Toluene-d8 (Surr)	*102*		*80 - 120*

Lab Sample ID: 570-12118-1 MS
Matrix: Solid
Analysis Batch: 32790

Client Sample ID: CP236-SB01-2
Prep Type: Total/NA
Prep Batch: 32877

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,1-Dichloroethene	ND		49.5	45.95		ug/Kg		93	47 - 143		
1,2-Dibromoethane	ND		49.5	41.45		ug/Kg		84	64 - 124		
1,2-Dichlorobenzene	ND		49.5	40.71		ug/Kg		82	35 - 131		
1,2-Dichloroethane	ND		49.5	44.07		ug/Kg		89	70 - 130		
Benzene	ND		49.5	49.56		ug/Kg		100	61 - 127		
Carbon tetrachloride	ND		49.5	50.89		ug/Kg		103	51 - 135		
Chlorobenzene	ND		49.5	45.12		ug/Kg		91	57 - 123		
Di-isopropyl ether (DIPE)	ND		49.5	43.71		ug/Kg		88	57 - 129		
Ethanol	ND		495	369.8		ug/Kg		75	17 - 167		

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 570-12118-1 MS
Matrix: Solid
Analysis Batch: 32790

Client Sample ID: CP236-SB01-2
Prep Type: Total/NA
Prep Batch: 32877

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	ND		49.5	46.34		ug/Kg		94	57 - 129
Ethyl-t-butyl ether (ETBE)	ND		49.5	47.18		ug/Kg		95	55 - 127
Methyl-t-Butyl Ether (MTBE)	ND		49.5	45.43		ug/Kg		92	57 - 123
o-Xylene	ND		49.5	45.01		ug/Kg		91	70 - 130
m,p-Xylene	ND		99.0	90.30		ug/Kg		91	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*105*		*71 - 155*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*
Dibromofluoromethane (Surr)	*97*		*79 - 133*
Toluene-d8 (Surr)	*100*		*80 - 120*

Lab Sample ID: 570-12118-1 MSD
Matrix: Solid
Analysis Batch: 32790

Client Sample ID: CP236-SB01-2
Prep Type: Total/NA
Prep Batch: 32877

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene	ND		49.5	48.65		ug/Kg		98	47 - 143	6	25
1,2-Dibromoethane	ND		49.5	44.02		ug/Kg		89	64 - 124	6	20
1,2-Dichlorobenzene	ND		49.5	42.16		ug/Kg		85	35 - 131	4	25
1,2-Dichloroethane	ND		49.5	46.52		ug/Kg		94	70 - 130	5	20
Benzene	ND		49.5	51.40		ug/Kg		104	61 - 127	4	20
Carbon tetrachloride	ND		49.5	52.94		ug/Kg		107	51 - 135	4	29
Chlorobenzene	ND		49.5	45.33		ug/Kg		92	57 - 123	0	20
Di-isopropyl ether (DIPE)	ND		49.5	45.49		ug/Kg		92	57 - 129	4	20
Ethanol	ND		495	381.4		ug/Kg		77	17 - 167	3	47
Ethylbenzene	ND		49.5	47.31		ug/Kg		96	57 - 129	2	22
Ethyl-t-butyl ether (ETBE)	ND		49.5	48.65		ug/Kg		98	55 - 127	3	20
Methyl-t-Butyl Ether (MTBE)	ND		49.5	47.36		ug/Kg		96	57 - 123	4	21
o-Xylene	ND		49.5	45.55		ug/Kg		92	70 - 130	1	20
m,p-Xylene	ND		99.0	90.60		ug/Kg		92	70 - 130	0	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*109*		*71 - 155*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*
Dibromofluoromethane (Surr)	*101*		*79 - 133*
Toluene-d8 (Surr)	*102*		*80 - 120*

Lab Sample ID: MB 570-32920/1-A
Matrix: Solid
Analysis Batch: 32957

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 32920

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.0	0.24	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
1,1,1-Trichloroethane	ND		5.0	0.23	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.35	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		50	0.35	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
1,1,2-Trichloroethane	ND		5.0	0.36	ug/Kg		11/14/19 18:06	11/15/19 01:15	1

Client: Kennedy/Jenks Consultants
Project/Site: VTA EBRC / 1965013.00

Job ID: 570-12118-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 570-32920/1-A
Matrix: Solid
Analysis Batch: 32957

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 32920

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	ND		5.0	0.21	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
1,1-Dichloroethene	ND		5.0	0.35	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
1,1-Dichloropropene	ND		5.0	0.33	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
1,2,3-Trichlorobenzene	ND		10	0.92	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
1,2,4-Trichlorobenzene	ND		5.0	0.31	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
1,2,4-Trimethylbenzene	ND		5.0	0.59	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
1,2-Dibromo-3-Chloropropane	ND		10	1.8	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
1,2-Dibromoethane	ND		5.0	0.26	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
1,2-Dichlorobenzene	ND		5.0	0.23	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
1,2-Dichloroethane	ND		5.0	0.32	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
1,2-Dichloropropane	ND		5.0	0.44	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
1,3,5-Trimethylbenzene	ND		5.0	0.55	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
1,3-Dichlorobenzene	ND		5.0	0.18	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
1,3-Dichloropropane	ND		5.0	0.25	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
1,4-Dichlorobenzene	ND		5.0	0.22	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
2,2-Dichloropropane	ND		5.0	0.33	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
2-Butanone	ND		50	3.8	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
2-Chlorotoluene	ND		5.0	0.23	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
2-Hexanone	ND		50	1.8	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
4-Chlorotoluene	ND		5.0	0.21	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
4-Methyl-2-pentanone	ND		50	4.4	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
Acetone	ND		120	6.3	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
Benzene	ND		5.0	0.13	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
Bromobenzene	ND		5.0	0.21	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
Bromochloromethane	ND		5.0	0.70	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
Bromodichloromethane	ND		5.0	0.23	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
Bromoform	ND		5.0	0.80	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
Bromomethane	ND		25	9.5	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
cis-1,2-Dichloroethene	ND		5.0	0.28	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
cis-1,3-Dichloropropene	ND		5.0	0.26	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
Carbon disulfide	ND		50	0.31	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
Carbon tetrachloride	ND		5.0	0.29	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
Chlorobenzene	ND		5.0	0.23	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
Chloroethane	ND		5.0	1.5	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
Chloroform	ND		5.0	0.24	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
Chloromethane	ND		25	0.31	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
Dibromochloromethane	ND		5.0	0.57	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
Dibromomethane	ND		5.0	0.78	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
Dichlorodifluoromethane	ND		5.0	0.45	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
Di-isopropyl ether (DIPE)	ND		10	0.49	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
Ethanol	ND		250	84	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
Ethylbenzene	ND		5.0	0.15	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
Ethyl-t-butyl ether (ETBE)	ND		10	0.51	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
Isopropylbenzene	ND		5.0	0.55	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
Methylene Chloride	ND		50	1.3	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
Methyl-t-Butyl Ether (MTBE)	ND		5.0	0.30	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
Naphthalene	ND		50	0.82	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
n-Butylbenzene	ND		5.0	0.16	ug/Kg		11/14/19 18:06	11/15/19 01:15	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 570-32920/1-A
Matrix: Solid
Analysis Batch: 32957

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 32920

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		5.0	0.51	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
o-Xylene	ND		5.0	0.56	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
m,p-Xylene	ND		5.0	0.27	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
p-Isopropyltoluene	ND		5.0	0.63	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
sec-Butylbenzene	ND		5.0	0.58	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
Styrene	ND		5.0	0.61	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
trans-1,2-Dichloroethene	ND		5.0	0.51	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
trans-1,3-Dichloropropene	ND		5.0	0.61	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
Tert-amyl-methyl ether (TAME)	ND		10	0.36	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
tert-Butyl alcohol (TBA)	ND		50	5.2	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
tert-Butylbenzene	ND		5.0	0.15	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
Tetrachloroethene	ND		5.0	0.21	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
Toluene	ND		5.0	0.52	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
Trichloroethene	ND		5.0	0.30	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
Trichlorofluoromethane	ND		50	0.38	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
Vinyl acetate	ND		50	4.8	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
Vinyl chloride	ND		5.0	0.51	ug/Kg		11/14/19 18:06	11/15/19 01:15	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*71 - 155*	*11/14/19 18:06*	*11/15/19 01:15*	*1*
4-Bromofluorobenzene (Surr)	*108*		*80 - 120*	*11/14/19 18:06*	*11/15/19 01:15*	*1*
Dibromofluoromethane (Surr)	*102*		*79 - 133*	*11/14/19 18:06*	*11/15/19 01:15*	*1*
Toluene-d8 (Surr)	*107*		*80 - 120*	*11/14/19 18:06*	*11/15/19 01:15*	*1*

Lab Sample ID: LCS 570-32920/2-A
Matrix: Solid
Analysis Batch: 32957

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 32920

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	50.0	56.18		ug/Kg		112	74 - 122
1,2-Dibromoethane	50.0	54.58		ug/Kg		109	70 - 130
1,2-Dichlorobenzene	50.0	57.09		ug/Kg		114	75 - 120
1,2-Dichloroethane	50.0	56.77		ug/Kg		114	70 - 130
Benzene	50.0	60.85	* me	ug/Kg		122	78 - 120
Carbon tetrachloride	50.0	60.52		ug/Kg		121	49 - 139
Chlorobenzene	50.0	57.28		ug/Kg		115	79 - 120
Di-isopropyl ether (DIPE)	50.0	54.15		ug/Kg		108	78 - 120
Ethanol	500	495.7		ug/Kg		99	56 - 140
Ethylbenzene	50.0	57.18		ug/Kg		114	76 - 120
Ethyl-t-butyl ether (ETBE)	50.0	57.43		ug/Kg		115	70 - 124
Methyl-t-Butyl Ether (MTBE)	50.0	56.09		ug/Kg		112	70 - 124
o-Xylene	50.0	56.70		ug/Kg		113	70 - 130
m,p-Xylene	100	112.2		ug/Kg		112	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*103*		*71 - 155*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*
Dibromofluoromethane (Surr)	*100*		*79 - 133*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 570-32920/2-A
Matrix: Solid
Analysis Batch: 32957

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 32920

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	*101*		*80 - 120*

Lab Sample ID: LCSD 570-32920/3-A
Matrix: Solid
Analysis Batch: 32957

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 32920

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene			50.3	56.38		ug/Kg		112	74 - 122	0	20
1,2-Dibromoethane			50.3	54.05		ug/Kg		107	70 - 130	1	20
1,2-Dichlorobenzene			50.3	54.45		ug/Kg		108	75 - 120	5	20
1,2-Dichloroethane			50.3	56.79		ug/Kg		113	70 - 130	0	20
Benzene			50.3	61.25	* me	ug/Kg		122	78 - 120	1	20
Carbon tetrachloride			50.3	60.82		ug/Kg		121	49 - 139	1	20
Chlorobenzene			50.3	56.88		ug/Kg		113	79 - 120	1	20
Di-isopropyl ether (DIPE)			50.3	54.76		ug/Kg		109	78 - 120	1	20
Ethanol			503	479.3		ug/Kg		95	56 - 140	3	20
Ethylbenzene			50.3	57.01		ug/Kg		113	76 - 120	0	20
Ethyl-t-butyl ether (ETBE)			50.3	57.48		ug/Kg		114	70 - 124	0	20
Methyl-t-Butyl Ether (MTBE)			50.3	56.22		ug/Kg		112	70 - 124	0	20
o-Xylene			50.3	55.89		ug/Kg		111	70 - 130	1	20
m,p-Xylene			101	109.4		ug/Kg		109	70 - 130	3	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*102*		*71 - 155*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*
Dibromofluoromethane (Surr)	*98*		*79 - 133*
Toluene-d8 (Surr)	*102*		*80 - 120*

Lab Sample ID: 570-12118-15 MS
Matrix: Solid
Analysis Batch: 32957

Client Sample ID: CP240-SB02-9
Prep Type: Total/NA
Prep Batch: 32920

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	ND		48.4	45.96		ug/Kg		95	47 - 143
1,2-Dibromoethane	ND		48.4	39.45		ug/Kg		82	64 - 124
1,2-Dichlorobenzene	ND		48.4	41.40		ug/Kg		86	35 - 131
1,2-Dichloroethane	ND		48.4	41.45		ug/Kg		86	70 - 130
Benzene	ND	*	48.4	48.62		ug/Kg		101	61 - 127
Carbon tetrachloride	ND		48.4	50.52		ug/Kg		104	51 - 135
Chlorobenzene	ND		48.4	45.25		ug/Kg		94	57 - 123
Di-isopropyl ether (DIPE)	ND		48.4	43.23		ug/Kg		89	57 - 129
Ethanol	ND		484	481.3		ug/Kg		100	17 - 167
Ethylbenzene	ND		48.4	45.95		ug/Kg		95	57 - 129
Ethyl-t-butyl ether (ETBE)	ND		48.4	46.22		ug/Kg		96	55 - 127
Methyl-t-Butyl Ether (MTBE)	ND		48.4	43.91		ug/Kg		91	57 - 123
o-Xylene	ND		48.4	44.09		ug/Kg		91	70 - 130
m,p-Xylene	ND		96.7	87.96		ug/Kg		91	70 - 130

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 570-12118-15 MS
Matrix: Solid
Analysis Batch: 32957

Client Sample ID: CP240-SB02-9
Prep Type: Total/NA
Prep Batch: 32920

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*101*		*71 - 155*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*
Dibromofluoromethane (Surr)	*96*		*79 - 133*
Toluene-d8 (Surr)	*100*		*80 - 120*

Lab Sample ID: 570-12118-15 MSD
Matrix: Solid
Analysis Batch: 32957

Client Sample ID: CP240-SB02-9
Prep Type: Total/NA
Prep Batch: 32920

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene	ND		49.6	45.51		ug/Kg		92	47 - 143	1	25
1,2-Dibromoethane	ND		49.6	41.10		ug/Kg		83	64 - 124	4	20
1,2-Dichlorobenzene	ND		49.6	41.64		ug/Kg		84	35 - 131	1	25
1,2-Dichloroethane	ND		49.6	40.84		ug/Kg		82	70 - 130	1	20
Benzene	ND	*	49.6	48.09		ug/Kg		97	61 - 127	1	20
Carbon tetrachloride	ND		49.6	50.85		ug/Kg		103	51 - 135	1	29
Chlorobenzene	ND		49.6	44.75		ug/Kg		90	57 - 123	1	20
Di-isopropyl ether (DIPE)	ND		49.6	42.37		ug/Kg		85	57 - 129	2	20
Ethanol	ND		496	392.0		ug/Kg		79	17 - 167	20	47
Ethylbenzene	ND		49.6	46.52		ug/Kg		94	57 - 129	1	22
Ethyl-t-butyl ether (ETBE)	ND		49.6	45.02		ug/Kg		91	55 - 127	3	20
Methyl-t-Butyl Ether (MTBE)	ND		49.6	43.64		ug/Kg		88	57 - 123	1	21
o-Xylene	ND		49.6	44.50		ug/Kg		90	70 - 130	1	20
m,p-Xylene	ND		99.2	89.15		ug/Kg		90	70 - 130	1	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*103*		*71 - 155*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*
Dibromofluoromethane (Surr)	*96*		*79 - 133*
Toluene-d8 (Surr)	*99*		*80 - 120*

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Lab Sample ID: LCS 570-32789/7
Matrix: Solid
Analysis Batch: 32789

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
TPPH			1000	910.4		ug/Kg		91	65 - 135		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	*105*		*80 - 120*

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 570-32789/8
Matrix: Solid
Analysis Batch: 32789

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
TPPH			1000	852.7		ug/Kg		85	65 - 135	7	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*104*		*80 - 120*

Lab Sample ID: MB 570-32877/1-A
Matrix: Solid
Analysis Batch: 32789

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 32877

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TPH (as Gasoline)	ND		490	31	ug/Kg		11/14/19 11:30	11/14/19 15:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*106*		*80 - 120*	*11/14/19 11:30*	*11/14/19 15:13*	*1*

Lab Sample ID: MB 570-32920/1-A
Matrix: Solid
Analysis Batch: 32958

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 32920

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TPH (as Gasoline)	ND		500	31	ug/Kg		11/14/19 18:06	11/15/19 01:15	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*109*		*80 - 120*	*11/14/19 18:06*	*11/15/19 01:15*	*1*

Lab Sample ID: LCS 570-32958/6
Matrix: Solid
Analysis Batch: 32958

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
TPPH			1000	1029		ug/Kg		103	65 - 135

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*103*		*80 - 120*

Lab Sample ID: LCSD 570-32958/7
Matrix: Solid
Analysis Batch: 32958

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
TPPH			1000	979.4		ug/Kg		98	65 - 135	5	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*102*		*80 - 120*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 570-31667/1-A
Matrix: Solid
Analysis Batch: 31602

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 31667

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C28)	ND		5.0	3.5	mg/Kg		11/08/19 14:18	11/08/19 18:33	1
MRO (C17-C44)	5.718	J	25	3.8	mg/Kg		11/08/19 14:18	11/08/19 18:33	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane (Surr)	*94*		*61 - 145*	*11/08/19 14:18*	*11/08/19 18:33*	*1*

Lab Sample ID: LCS 570-31667/2-A
Matrix: Solid
Analysis Batch: 31602

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 31667

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
DRO (C10-C28)			399	407.9		mg/Kg		102	67 - 121		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
n-Octacosane (Surr)	*102*		*61 - 145*

Lab Sample ID: LCS 570-31667/6-A
Matrix: Solid
Analysis Batch: 31602

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 31667

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
MRO (C17-C44)			397	430.3		mg/Kg		108	75 - 123		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
n-Octacosane (Surr)	*99*		*61 - 145*

Lab Sample ID: LCSD 570-31667/3-A
Matrix: Solid
Analysis Batch: 31602

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 31667

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
DRO (C10-C28)			394	383.2		mg/Kg		97	67 - 121	6	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
n-Octacosane (Surr)	*94*		*61 - 145*

Lab Sample ID: LCSD 570-31667/7-A
Matrix: Solid
Analysis Batch: 31602

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 31667

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
MRO (C17-C44)			395	435.2		mg/Kg		110	75 - 123	1	12

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
n-Octacosane (Surr)	*95*		*61 - 145*

Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 570-12128-A-1-D MS
Matrix: Solid
Analysis Batch: 31602

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 31667

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
DRO (C10-C28)	ND		394	373.7		mg/Kg		95	33 - 153		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
n-Octacosane (Surr)	*98*		*61 - 145*

Lab Sample ID: 570-12128-A-1-E MSD
Matrix: Solid
Analysis Batch: 31602

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 31667

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
DRO (C10-C28)	ND		398	383.0		mg/Kg		96	33 - 153	2	32

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
n-Octacosane (Surr)	*98*		*61 - 145*

Lab Sample ID: 570-12128-A-1-F MS
Matrix: Solid
Analysis Batch: 31602

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 31667

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
MRO (C17-C44)	ND		397	432.7		mg/Kg		109	64 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
n-Octacosane (Surr)	*96*		*61 - 145*

Lab Sample ID: 570-12128-A-1-G MSD
Matrix: Solid
Analysis Batch: 31602

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 31667

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
MRO (C17-C44)	ND		393	437.0		mg/Kg		111	64 - 130	1	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
n-Octacosane (Surr)	*97*		*61 - 145*

Method: 8081A - Organochlorine Pesticides (GC)

Lab Sample ID: MB 570-31971/1-A
Matrix: Solid
Analysis Batch: 32082

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 31971

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		5.0	0.53	ug/Kg		11/11/19 09:03	11/12/19 12:02	1
4,4'-DDE	ND		5.0	0.72	ug/Kg		11/11/19 09:03	11/12/19 12:02	1
4,4'-DDT	ND		5.0	1.5	ug/Kg		11/11/19 09:03	11/12/19 12:02	1
Aldrin	ND		5.0	0.42	ug/Kg		11/11/19 09:03	11/12/19 12:02	1
alpha-BHC	ND		5.0	0.64	ug/Kg		11/11/19 09:03	11/12/19 12:02	1
alpha-Chlordane	ND		1.0	0.33	ug/Kg		11/11/19 09:03	11/12/19 12:02	1

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MB 570-31971/1-A
Matrix: Solid
Analysis Batch: 32082

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 31971

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
beta-BHC	ND		5.0	1.7	ug/Kg		11/11/19 09:03	11/12/19 12:02	1
delta-BHC	ND		5.0	0.68	ug/Kg		11/11/19 09:03	11/12/19 12:02	1
Dieldrin	ND		1.0	0.36	ug/Kg		11/11/19 09:03	11/12/19 12:02	1
Endosulfan I	ND		5.0	0.36	ug/Kg		11/11/19 09:03	11/12/19 12:02	1
Endosulfan II	ND		5.0	0.49	ug/Kg		11/11/19 09:03	11/12/19 12:02	1
Endosulfan sulfate	ND		5.0	0.44	ug/Kg		11/11/19 09:03	11/12/19 12:02	1
Endrin	ND		5.0	0.44	ug/Kg		11/11/19 09:03	11/12/19 12:02	1
Endrin aldehyde	ND		5.0	0.86	ug/Kg		11/11/19 09:03	11/12/19 12:02	1
Endrin ketone	ND		5.0	1.2	ug/Kg		11/11/19 09:03	11/12/19 12:02	1
gamma-Chlordane	ND		5.0	1.6	ug/Kg		11/11/19 09:03	11/12/19 12:02	1
gamma-BHC	ND		5.0	0.30	ug/Kg		11/11/19 09:03	11/12/19 12:02	1
Heptachlor	ND		5.0	0.35	ug/Kg		11/11/19 09:03	11/12/19 12:02	1
Heptachlor epoxide	ND		5.0	0.41	ug/Kg		11/11/19 09:03	11/12/19 12:02	1
Methoxychlor	ND		5.0	1.0	ug/Kg		11/11/19 09:03	11/12/19 12:02	1
Toxaphene	ND		25	10	ug/Kg		11/11/19 09:03	11/12/19 12:02	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*69*		*25 - 145*	*11/11/19 09:03*	*11/12/19 12:02*	*1*
DCB Decachlorobiphenyl (Surr)	*80*		*24 - 168*	*11/11/19 09:03*	*11/12/19 12:02*	*1*

Lab Sample ID: LCS 570-31971/2-A
Matrix: Solid
Analysis Batch: 32082

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 31971

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	25.0	21.29		ug/Kg		85	50 - 135
4,4'-DDE	25.0	20.26		ug/Kg		81	50 - 135
4,4'-DDT	25.0	21.02		ug/Kg		84	50 - 135
Aldrin	25.0	19.66		ug/Kg		79	50 - 135
alpha-BHC	25.0	21.25		ug/Kg		85	50 - 135
alpha-Chlordane	25.0	19.64		ug/Kg		79	50 - 135
beta-BHC	25.0	19.63		ug/Kg		79	50 - 135
delta-BHC	25.0	20.43		ug/Kg		82	50 - 135
Dieldrin	25.0	20.19		ug/Kg		81	50 - 135
Endosulfan I	25.0	19.43		ug/Kg		78	50 - 135
Endosulfan II	25.0	21.32		ug/Kg		85	50 - 135
Endosulfan sulfate	25.0	22.28		ug/Kg		89	50 - 135
Endrin	25.0	20.03		ug/Kg		80	50 - 135
Endrin aldehyde	25.0	17.87		ug/Kg		71	50 - 135
gamma-Chlordane	25.0	20.52		ug/Kg		82	50 - 135
gamma-BHC	25.0	20.04		ug/Kg		80	50 - 135
Heptachlor	25.0	19.61		ug/Kg		78	50 - 135
Heptachlor epoxide	25.0	19.49		ug/Kg		78	50 - 135
Methoxychlor	25.0	22.36		ug/Kg		89	50 - 135

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*81*		*25 - 145*
DCB Decachlorobiphenyl (Surr)	*89*		*24 - 168*

Method: 8081A - Organochlorine Pesticides (GC)

Lab Sample ID: LCSD 570-31971/3-A
Matrix: Solid
Analysis Batch: 32082

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 31971

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,4'-DDD			25.0	22.21		ug/Kg		89	50 - 135	4	25
4,4'-DDE			25.0	20.77		ug/Kg		83	50 - 135	2	25
4,4'-DDT			25.0	21.72		ug/Kg		87	50 - 135	3	25
Aldrin			25.0	20.13		ug/Kg		81	50 - 135	2	25
alpha-BHC			25.0	20.39		ug/Kg		82	50 - 135	4	25
alpha-Chlordane			25.0	20.05		ug/Kg		80	50 - 135	2	25
beta-BHC			25.0	19.82		ug/Kg		79	50 - 135	1	25
delta-BHC			25.0	20.75		ug/Kg		83	50 - 135	2	25
Dieldrin			25.0	20.76		ug/Kg		83	50 - 135	3	25
Endosulfan I			25.0	19.83		ug/Kg		79	50 - 135	2	25
Endosulfan II			25.0	22.16		ug/Kg		89	50 - 135	4	25
Endosulfan sulfate			25.0	23.34		ug/Kg		93	50 - 135	5	25
Endrin			25.0	20.87		ug/Kg		83	50 - 135	4	25
Endrin aldehyde			25.0	19.27		ug/Kg		77	50 - 135	8	25
gamma-Chlordane			25.0	21.14		ug/Kg		85	50 - 135	3	25
gamma-BHC			25.0	20.15		ug/Kg		81	50 - 135	1	25
Heptachlor			25.0	19.43		ug/Kg		78	50 - 135	1	25
Heptachlor epoxide			25.0	19.92		ug/Kg		80	50 - 135	2	25
Methoxychlor			25.0	23.30		ug/Kg		93	50 - 135	4	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*83*		*25 - 145*
DCB Decachlorobiphenyl (Surr)	*91*		*24 - 168*

Lab Sample ID: 570-12118-5 MS
Matrix: Solid
Analysis Batch: 32082

Client Sample ID: CP236-SB02-2
Prep Type: Total/NA
Prep Batch: 31971

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	ND	F2 F1	25.0	17.48		ug/Kg		70	50 - 135
4,4'-DDE	ND	F2 F1	25.0	15.48		ug/Kg		62	50 - 135
4,4'-DDT	ND	F2 F1	25.0	19.31		ug/Kg		77	50 - 135
Aldrin	ND	F2 F1	25.0	12.34	F1	ug/Kg		49	50 - 135
alpha-BHC	ND	F2 F1	25.0	12.48		ug/Kg		50	50 - 135
alpha-Chlordane	ND	F2 F1	25.0	13.84		ug/Kg		55	50 - 135
beta-BHC	ND	F2 F1	25.0	13.58		ug/Kg		54	50 - 135
delta-BHC	ND	F2 F1	25.0	14.94		ug/Kg		60	50 - 135
Dieldrin	ND	F2 F1	25.0	16.65		ug/Kg		67	50 - 135
Endosulfan I	ND	F2 F1	25.0	13.50		ug/Kg		54	50 - 135
Endosulfan II	ND	F2 F1	25.0	18.55		ug/Kg		74	50 - 135
Endosulfan sulfate	ND	F2 F1	25.0	12.98		ug/Kg		52	50 - 135
Endrin	ND	F2 F1	25.0	16.07		ug/Kg		64	50 - 135
Endrin aldehyde	ND	F2 F1	25.0	14.05	p	ug/Kg		56	50 - 135
gamma-Chlordane	ND	F2 F1	25.0	16.53		ug/Kg		66	50 - 135
gamma-BHC	ND	F2 F1	25.0	12.82		ug/Kg		51	50 - 135
Heptachlor	ND	F2 F1	25.0	11.68	F1	ug/Kg		47	50 - 135
Heptachlor epoxide	ND	F2 F1	25.0	14.95		ug/Kg		60	50 - 135
Methoxychlor	ND	F2 F1	25.0	16.56		ug/Kg		66	50 - 135

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 570-12118-5 MS
Matrix: Solid
Analysis Batch: 32082

Client Sample ID: CP236-SB02-2
Prep Type: Total/NA
Prep Batch: 31971

Surrogate	MS %Recovery	MS Qualifier	Limits
Tetrachloro-m-xylene	*37*		*25 - 145*
DCB Decachlorobiphenyl (Surr)	*54*		*24 - 168*

Lab Sample ID: 570-12118-5 MSD
Matrix: Solid
Analysis Batch: 32082

Client Sample ID: CP236-SB02-2
Prep Type: Total/NA
Prep Batch: 31971

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,4'-DDD	ND	F2 F1	25.0	8.096	F2 F1	ug/Kg		32	50 - 135	73	25
4,4'-DDE	ND	F2 F1	25.0	7.822	F2 F1	ug/Kg		31	50 - 135	66	25
4,4'-DDT	ND	F2 F1	25.0	8.170	F2 F1	ug/Kg		33	50 - 135	81	25
Aldrin	ND	F2 F1	25.0	6.384	F2 F1	ug/Kg		26	50 - 135	64	25
alpha-BHC	ND	F2 F1	25.0	6.467	F2 F1	ug/Kg		26	50 - 135	63	25
alpha-Chlordane	ND	F2 F1	25.0	7.467	F2 F1	ug/Kg		30	50 - 135	60	25
beta-BHC	ND	F2 F1	25.0	6.942	F2 F1	ug/Kg		28	50 - 135	65	25
delta-BHC	ND	F2 F1	25.0	7.442	F2 F1	ug/Kg		30	50 - 135	67	25
Dieldrin	ND	F2 F1	25.0	7.613	F2 F1	ug/Kg		30	50 - 135	74	25
Endosulfan I	ND	F2 F1	25.0	7.166	F2 F1	ug/Kg		29	50 - 135	61	25
Endosulfan II	ND	F2 F1	25.0	8.975	F2 F1	ug/Kg		36	50 - 135	70	25
Endosulfan sulfate	ND	F2 F1	25.0	8.524	F2 F1	ug/Kg		34	50 - 135	41	25
Endrin	ND	F2 F1	25.0	7.483	F2 F1	ug/Kg		30	50 - 135	73	25
Endrin aldehyde	ND	F2 F1	25.0	8.395	F2 F1	ug/Kg		34	50 - 135	50	25
gamma-Chlordane	ND	F2 F1	25.0	7.726	F2 F1	ug/Kg		31	50 - 135	73	25
gamma-BHC	ND	F2 F1	25.0	6.818	F2 F1	ug/Kg		27	50 - 135	61	25
Heptachlor	ND	F2 F1	25.0	6.285	F2 F1	ug/Kg		25	50 - 135	60	25
Heptachlor epoxide	ND	F2 F1	25.0	8.074	F2 F1	ug/Kg		32	50 - 135	60	25
Methoxychlor	ND	F2 F1	25.0	9.195	F2 F1	ug/Kg		37	50 - 135	57	25

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Tetrachloro-m-xylene	*27*		*25 - 145*
DCB Decachlorobiphenyl (Surr)	*32*		*24 - 168*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 570-31813/1-A
Matrix: Solid
Analysis Batch: 32832

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 31813

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.09055	J	0.250	0.0857	mg/Kg		11/09/19 12:30	11/14/19 01:16	1
Arsenic	ND		0.750	0.259	mg/Kg		11/09/19 12:30	11/14/19 01:16	1
Barium	ND		0.500	0.154	mg/Kg		11/09/19 12:30	11/14/19 01:16	1
Beryllium	ND		0.250	0.137	mg/Kg		11/09/19 12:30	11/14/19 01:16	1
Cadmium	ND		0.500	0.135	mg/Kg		11/09/19 12:30	11/14/19 01:16	1
Cobalt	ND		0.250	0.148	mg/Kg		11/09/19 12:30	11/14/19 01:16	1
Chromium	ND		0.250	0.142	mg/Kg		11/09/19 12:30	11/14/19 01:16	1
Copper	ND		0.500	0.135	mg/Kg		11/09/19 12:30	11/14/19 01:16	1
Molybdenum	ND	L	0.250	0.132	mg/Kg		11/09/19 12:30	11/14/19 01:16	1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: MB 570-31813/1-A
Matrix: Solid
Analysis Batch: 32832

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 31813

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	ND		0.250	0.145	mg/Kg		11/09/19 12:30	11/14/19 01:16	1
Antimony	ND		0.750	0.149	mg/Kg		11/09/19 12:30	11/14/19 01:16	1
Selenium	ND		0.750	0.300	mg/Kg		11/09/19 12:30	11/14/19 01:16	1
Thallium	ND		0.750	0.152	mg/Kg		11/09/19 12:30	11/14/19 01:16	1
Vanadium	ND		0.250	0.141	mg/Kg		11/09/19 12:30	11/14/19 01:16	1
Zinc	ND		1.00	0.178	mg/Kg		11/09/19 12:30	11/14/19 01:16	1
Lead	ND		0.500	0.132	mg/Kg		11/09/19 12:30	11/14/19 01:16	1

Lab Sample ID: LCS 570-31813/2-A
Matrix: Solid
Analysis Batch: 32832

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 31813

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	12.5	13.85		mg/Kg		111	80 - 120
Arsenic	25.0	27.07		mg/Kg		108	80 - 120
Barium	25.0	29.20		mg/Kg		117	80 - 120
Beryllium	25.0	26.13		mg/Kg		105	80 - 120
Cadmium	25.0	27.79		mg/Kg		111	80 - 120
Cobalt	25.0	28.54		mg/Kg		114	80 - 120
Chromium	25.0	28.24		mg/Kg		113	80 - 120
Copper	25.0	28.82		mg/Kg		115	80 - 120
Molybdenum	25.0	25.37		mg/Kg		101	80 - 120
Nickel	25.0	29.31		mg/Kg		117	80 - 120
Antimony	25.0	28.13		mg/Kg		113	80 - 120
Selenium	25.0	27.09		mg/Kg		108	80 - 120
Thallium	25.0	27.28		mg/Kg		109	80 - 120
Vanadium	25.0	26.93		mg/Kg		108	80 - 120
Zinc	25.0	28.26		mg/Kg		113	80 - 120
Lead	25.0	28.71		mg/Kg		115	80 - 120

Lab Sample ID: LCSD 570-31813/3-A
Matrix: Solid
Analysis Batch: 32832

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 31813

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver	12.5	13.82		mg/Kg		111	80 - 120	0	20
Arsenic	25.0	26.61		mg/Kg		106	80 - 120	2	20
Barium	25.0	29.20		mg/Kg		117	80 - 120	0	20
Beryllium	25.0	26.19		mg/Kg		105	80 - 120	0	20
Cadmium	25.0	27.76		mg/Kg		111	80 - 120	0	20
Cobalt	25.0	28.40		mg/Kg		114	80 - 120	0	20
Chromium	25.0	28.36		mg/Kg		113	80 - 120	0	20
Copper	25.0	28.86		mg/Kg		115	80 - 120	0	20
Molybdenum	25.0	25.80		mg/Kg		103	80 - 120	2	20
Nickel	25.0	29.62		mg/Kg		118	80 - 120	1	20
Antimony	25.0	28.14		mg/Kg		113	80 - 120	0	20
Selenium	25.0	27.58		mg/Kg		110	80 - 120	2	20
Thallium	25.0	26.87		mg/Kg		107	80 - 120	2	20
Vanadium	25.0	26.93		mg/Kg		108	80 - 120	0	20

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCSD 570-31813/3-A
Matrix: Solid
Analysis Batch: 32832

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 31813

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Zinc			25.0	28.04		mg/Kg		112	80 - 120	1	20
Lead			25.0	28.71		mg/Kg		115	80 - 120	0	20

Lab Sample ID: 570-12107-B-1-C MS
Matrix: Solid
Analysis Batch: 32832

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 31813

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	ND	L	12.0	10.41		mg/Kg		87	75 - 125
Arsenic	ND	F1 F2 L	24.0	1.031	F1	mg/Kg		4	75 - 125
Barium	73.8		24.0	96.37		mg/Kg		94	75 - 125
Beryllium	0.203	J	24.0	23.88		mg/Kg		98	75 - 125
Cadmium	ND	L	24.0	20.12		mg/Kg		84	75 - 125
Cobalt	16.7		24.0	44.17		mg/Kg		114	75 - 125
Chromium	144	F2	24.0	195.5	4	mg/Kg		214	75 - 125
Copper	600		24.0	536.7	4	mg/Kg		-264	75 - 125
Molybdenum	34.1	F1 F2	24.0	59.14		mg/Kg		104	75 - 125
Nickel	541	F2	24.0	378.0	4	mg/Kg		-678	75 - 125
Antimony	5.79	F1 F2	24.0	16.57	F1	mg/Kg		45	50 - 115
Selenium	291	F2	24.0	589.7	4	mg/Kg		1244	75 - 125
Thallium	3.19	F1 F2	24.0	14.70	F1	mg/Kg		48	75 - 125
Vanadium	33.4	F1	24.0	67.09	F1	mg/Kg		140	75 - 125
Zinc	112		24.0	132.3	4	mg/Kg		84	75 - 125
Lead	14.8	F1 F2	24.0	44.35		mg/Kg		123	75 - 125

Lab Sample ID: 570-12107-B-1-D MSD
Matrix: Solid
Analysis Batch: 32832

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 31813

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver	ND	L	12.4	11.36		mg/Kg		91	75 - 125	9	20
Arsenic	ND	F1 F2 L	24.9	10.15	F1 F2	mg/Kg		41	75 - 125	163	20
Barium	73.8		24.9	92.92		mg/Kg		77	75 - 125	4	20
Beryllium	0.203	J	24.9	25.27		mg/Kg		101	75 - 125	6	20
Cadmium	ND	L	24.9	19.95		mg/Kg		80	75 - 125	1	20
Cobalt	16.7		24.9	46.36		mg/Kg		119	75 - 125	5	20
Chromium	144	F2	24.9	286.9	4 F2	mg/Kg		574	75 - 125	38	20
Copper	600		24.9	654.2	4	mg/Kg		218	75 - 125	20	20
Molybdenum	34.1	F1 F2	24.9	74.16	F1 F2	mg/Kg		161	75 - 125	23	20
Nickel	541	F2	24.9	683.9	4 F2	mg/Kg		575	75 - 125	58	20
Antimony	5.79	F1 F2	24.9	25.13	F2	mg/Kg		78	50 - 115	41	20
Selenium	291	F2	24.9	382.4	4 F2	mg/Kg		369	75 - 125	43	20
Thallium	3.19	F1 F2	24.9	18.58	F1 F2	mg/Kg		62	75 - 125	23	20
Vanadium	33.4	F1	24.9	66.33	F1	mg/Kg		132	75 - 125	1	20
Zinc	112		24.9	120.6	4	mg/Kg		34	75 - 125	9	20
Lead	14.8	F1 F2	24.9	334.3	F1 F2	mg/Kg		1285	75 - 125	153	20

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 570-31814/1-A
Matrix: Solid
Analysis Batch: 32357

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 31814

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0833	0.00587	mg/Kg		11/11/19 14:00	11/12/19 16:18	1

Lab Sample ID: LCS 570-31814/2-A
Matrix: Solid
Analysis Batch: 32357

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 31814

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			0.833	0.8539		mg/Kg		102	85 - 121		

Lab Sample ID: LCSD 570-31814/3-A
Matrix: Solid
Analysis Batch: 32357

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 31814

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury			0.820	0.8441		mg/Kg		103	85 - 121	1	10

Lab Sample ID: 570-12107-B-1-F MS ^100
Matrix: Solid
Analysis Batch: 32357

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 31814

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury	74.7	F2	0.847	109.2	4	mg/Kg		4069	71 - 137		

Lab Sample ID: 570-12107-B-1-G MSD ^100
Matrix: Solid
Analysis Batch: 32357

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 31814

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	74.7	F2	0.877	113.0	4	mg/Kg		4366	71 - 137	3	14

Marginal Exceedance (ME) Summary

Client: Kennedy/Jenks Consultants
Job ID: 570-12118-1
Project/Site: VTA EBRC / 1965013.00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: LCS 570-32920/2-A
Matrix: Solid

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	%Rec	%Rec. Limits	ME %Rec. Limits	Marginal Exceedance Status
1,1-Dichloroethene	50.0	56.18		ug/Kg	112	74 - 122	66 - 130	
1,2-Dibromoethane	50.0	54.58		ug/Kg	109	70 - 130	60 - 140	
1,2-Dichlorobenzene	50.0	57.09		ug/Kg	114	75 - 120	68 - 128	
1,2-Dichloroethane	50.0	56.77		ug/Kg	114	70 - 130	60 - 140	
Benzene	50.0	60.85	* me	ug/Kg	122	78 - 120	71 - 127	ME
Carbon tetrachloride	50.0	60.52		ug/Kg	121	49 - 139	34 - 154	
Chlorobenzene	50.0	57.28		ug/Kg	115	79 - 120	72 - 127	
Di-isopropyl ether (DIPE)	50.0	54.15		ug/Kg	108	78 - 120	71 - 127	
Ethanol	500	495.7		ug/Kg	99	56 - 140	42 - 154	
Ethylbenzene	50.0	57.18		ug/Kg	114	76 - 120	69 - 127	
Ethyl-t-butyl ether (ETBE)	50.0	57.43		ug/Kg	115	70 - 124	61 - 133	
Methyl-t-Butyl Ether (MTBE)	50.0	56.09		ug/Kg	112	70 - 124	61 - 133	
o-Xylene	50.0	56.70		ug/Kg	113	70 - 130	60 - 140	
m,p-Xylene	100	112.2		ug/Kg	112	70 - 130	60 - 140	

Summary

Number of Analytes Reported	Number of Marginal Exceedances Allowed	Number of Marginal Exceedances Found
14	1	1

ME = Marginal Exceedance

Lab Sample ID: LCSD 570-32920/3-A
Matrix: Solid

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	%Rec	%Rec. Limits	ME %Rec. Limits	Marginal Exceedance Status
1,1-Dichloroethene	50.3	56.38		ug/Kg	112	74 - 122	66 - 130	
1,2-Dibromoethane	50.3	54.05		ug/Kg	107	70 - 130	60 - 140	
1,2-Dichlorobenzene	50.3	54.45		ug/Kg	108	75 - 120	68 - 128	
1,2-Dichloroethane	50.3	56.79		ug/Kg	113	70 - 130	60 - 140	
Benzene	50.3	61.25	* me	ug/Kg	122	78 - 120	71 - 127	ME
Carbon tetrachloride	50.3	60.82		ug/Kg	121	49 - 139	34 - 154	
Chlorobenzene	50.3	56.88		ug/Kg	113	79 - 120	72 - 127	
Di-isopropyl ether (DIPE)	50.3	54.76		ug/Kg	109	78 - 120	71 - 127	
Ethanol	503	479.3		ug/Kg	95	56 - 140	42 - 154	
Ethylbenzene	50.3	57.01		ug/Kg	113	76 - 120	69 - 127	
Ethyl-t-butyl ether (ETBE)	50.3	57.48		ug/Kg	114	70 - 124	61 - 133	
Methyl-t-Butyl Ether (MTBE)	50.3	56.22		ug/Kg	112	70 - 124	61 - 133	
o-Xylene	50.3	55.89		ug/Kg	111	70 - 130	60 - 140	
m,p-Xylene	101	109.4		ug/Kg	109	70 - 130	60 - 140	

Summary

Number of Analytes Reported	Number of Marginal Exceedances Allowed	Number of Marginal Exceedances Found
14	1	1

ME = Marginal Exceedance

GC/MS VOA

Analysis Batch: 32789

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-12118-1	CP236-SB01-2	Total/NA	Solid	8260B/CA_LUFT MS	32877
570-12118-2	CP236-SB01-5	Total/NA	Solid	8260B/CA_LUFT MS	32877
570-12118-3	CP236-SB01-8	Total/NA	Solid	8260B/CA_LUFT MS	32877
570-12118-5	CP236-SB02-2	Total/NA	Solid	8260B/CA_LUFT MS	32877
570-12118-6	CP236-SB02-5	Total/NA	Solid	8260B/CA_LUFT MS	32877
570-12118-7	CP236-SB02-9	Total/NA	Solid	8260B/CA_LUFT MS	32877
570-12118-9	CP240-SB01-1.5	Total/NA	Solid	8260B/CA_LUFT MS	32877
570-12118-10	CP240-SB01-5	Total/NA	Solid	8260B/CA_LUFT MS	32877
MB 570-32877/1-A	Method Blank	Total/NA	Solid	8260B/CA_LUFT MS	32877
LCS 570-32789/7	Lab Control Sample	Total/NA	Solid	8260B/CA_LUFT MS	
LCSD 570-32789/8	Lab Control Sample Dup	Total/NA	Solid	8260B/CA_LUFT MS	

Analysis Batch: 32790

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-12118-1	CP236-SB01-2	Total/NA	Solid	8260B	32877
570-12118-2	CP236-SB01-5	Total/NA	Solid	8260B	32877
570-12118-3	CP236-SB01-8	Total/NA	Solid	8260B	32877
570-12118-5	CP236-SB02-2	Total/NA	Solid	8260B	32877
570-12118-6	CP236-SB02-5	Total/NA	Solid	8260B	32877
570-12118-7	CP236-SB02-9	Total/NA	Solid	8260B	32877
570-12118-9	CP240-SB01-1.5	Total/NA	Solid	8260B	32877
570-12118-10	CP240-SB01-5	Total/NA	Solid	8260B	32877
MB 570-32877/1-A	Method Blank	Total/NA	Solid	8260B	32877
LCS 570-32877/3-A	Lab Control Sample	Total/NA	Solid	8260B	32877
LCSD 570-32877/4-A	Lab Control Sample Dup	Total/NA	Solid	8260B	32877
570-12118-1 MS	CP236-SB01-2	Total/NA	Solid	8260B	32877
570-12118-1 MSD	CP236-SB01-2	Total/NA	Solid	8260B	32877

Prep Batch: 32877

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-12118-1	CP236-SB01-2	Total/NA	Solid	5030C	
570-12118-2	CP236-SB01-5	Total/NA	Solid	5030C	
570-12118-3	CP236-SB01-8	Total/NA	Solid	5030C	
570-12118-5	CP236-SB02-2	Total/NA	Solid	5030C	
570-12118-6	CP236-SB02-5	Total/NA	Solid	5030C	
570-12118-7	CP236-SB02-9	Total/NA	Solid	5030C	
570-12118-9	CP240-SB01-1.5	Total/NA	Solid	5030C	
570-12118-10	CP240-SB01-5	Total/NA	Solid	5030C	
MB 570-32877/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 570-32877/3-A	Lab Control Sample	Total/NA	Solid	5030C	
LCSD 570-32877/4-A	Lab Control Sample Dup	Total/NA	Solid	5030C	
570-12118-1 MS	CP236-SB01-2	Total/NA	Solid	5030C	
570-12118-1 MSD	CP236-SB01-2	Total/NA	Solid	5030C	

GC/MS VOA

Prep Batch: 32920

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-12118-11	CP240-SB01-9	Total/NA	Solid	5030C	
570-12118-13	CP240-SB02-1.5	Total/NA	Solid	5030C	
570-12118-14	CP240-SB02-5	Total/NA	Solid	5030C	
570-12118-15	CP240-SB02-9	Total/NA	Solid	5030C	
MB 570-32920/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 570-32920/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCSD 570-32920/3-A	Lab Control Sample Dup	Total/NA	Solid	5030C	
570-12118-15 MS	CP240-SB02-9	Total/NA	Solid	5030C	
570-12118-15 MSD	CP240-SB02-9	Total/NA	Solid	5030C	

Analysis Batch: 32957

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-12118-11	CP240-SB01-9	Total/NA	Solid	8260B	32920
570-12118-13	CP240-SB02-1.5	Total/NA	Solid	8260B	32920
570-12118-14	CP240-SB02-5	Total/NA	Solid	8260B	32920
570-12118-15	CP240-SB02-9	Total/NA	Solid	8260B	32920
MB 570-32920/1-A	Method Blank	Total/NA	Solid	8260B	32920
LCS 570-32920/2-A	Lab Control Sample	Total/NA	Solid	8260B	32920
LCSD 570-32920/3-A	Lab Control Sample Dup	Total/NA	Solid	8260B	32920
570-12118-15 MS	CP240-SB02-9	Total/NA	Solid	8260B	32920
570-12118-15 MSD	CP240-SB02-9	Total/NA	Solid	8260B	32920

Analysis Batch: 32958

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-12118-11	CP240-SB01-9	Total/NA	Solid	8260B/CA_LUFT MS	32920
570-12118-13	CP240-SB02-1.5	Total/NA	Solid	8260B/CA_LUFT MS	32920
570-12118-14	CP240-SB02-5	Total/NA	Solid	8260B/CA_LUFT MS	32920
570-12118-15	CP240-SB02-9	Total/NA	Solid	8260B/CA_LUFT MS	32920
MB 570-32920/1-A	Method Blank	Total/NA	Solid	8260B/CA_LUFT MS	32920
LCS 570-32958/6	Lab Control Sample	Total/NA	Solid	8260B/CA_LUFT MS	
LCSD 570-32958/7	Lab Control Sample Dup	Total/NA	Solid	8260B/CA_LUFT MS	

GC Semi VOA

Analysis Batch: 31602

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-12118-1	CP236-SB01-2	Total/NA	Solid	8015B	31667
570-12118-2	CP236-SB01-5	Total/NA	Solid	8015B	31667
570-12118-3	CP236-SB01-8	Total/NA	Solid	8015B	31667
570-12118-5	CP236-SB02-2	Total/NA	Solid	8015B	31667
570-12118-6	CP236-SB02-5	Total/NA	Solid	8015B	31667
570-12118-7	CP236-SB02-9	Total/NA	Solid	8015B	31667
570-12118-9	CP240-SB01-1.5	Total/NA	Solid	8015B	31667
570-12118-10	CP240-SB01-5	Total/NA	Solid	8015B	31667
570-12118-11	CP240-SB01-9	Total/NA	Solid	8015B	31667
570-12118-13	CP240-SB02-1.5	Total/NA	Solid	8015B	31667

GC Semi VOA (Continued)

Analysis Batch: 31602 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-12118-14	CP240-SB02-5	Total/NA	Solid	8015B	31667
570-12118-15	CP240-SB02-9	Total/NA	Solid	8015B	31667
MB 570-31667/1-A	Method Blank	Total/NA	Solid	8015B	31667
LCS 570-31667/2-A	Lab Control Sample	Total/NA	Solid	8015B	31667
LCS 570-31667/6-A	Lab Control Sample	Total/NA	Solid	8015B	31667
LCSD 570-31667/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B	31667
LCSD 570-31667/7-A	Lab Control Sample Dup	Total/NA	Solid	8015B	31667
570-12128-A-1-D MS	Matrix Spike	Total/NA	Solid	8015B	31667
570-12128-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B	31667
570-12128-A-1-F MS	Matrix Spike	Total/NA	Solid	8015B	31667
570-12128-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B	31667

Prep Batch: 31667

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-12118-1	CP236-SB01-2	Total/NA	Solid	3550C	
570-12118-2	CP236-SB01-5	Total/NA	Solid	3550C	
570-12118-3	CP236-SB01-8	Total/NA	Solid	3550C	
570-12118-5	CP236-SB02-2	Total/NA	Solid	3550C	
570-12118-6	CP236-SB02-5	Total/NA	Solid	3550C	
570-12118-7	CP236-SB02-9	Total/NA	Solid	3550C	
570-12118-9	CP240-SB01-1.5	Total/NA	Solid	3550C	
570-12118-10	CP240-SB01-5	Total/NA	Solid	3550C	
570-12118-11	CP240-SB01-9	Total/NA	Solid	3550C	
570-12118-13	CP240-SB02-1.5	Total/NA	Solid	3550C	
570-12118-14	CP240-SB02-5	Total/NA	Solid	3550C	
570-12118-15	CP240-SB02-9	Total/NA	Solid	3550C	
MB 570-31667/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 570-31667/2-A	Lab Control Sample	Total/NA	Solid	3550C	
LCS 570-31667/6-A	Lab Control Sample	Total/NA	Solid	3550C	
LCSD 570-31667/3-A	Lab Control Sample Dup	Total/NA	Solid	3550C	
LCSD 570-31667/7-A	Lab Control Sample Dup	Total/NA	Solid	3550C	
570-12128-A-1-D MS	Matrix Spike	Total/NA	Solid	3550C	
570-12128-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	3550C	
570-12128-A-1-F MS	Matrix Spike	Total/NA	Solid	3550C	
570-12128-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	3550C	

Prep Batch: 31971

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-12118-1	CP236-SB01-2	Total/NA	Solid	3545	
570-12118-5	CP236-SB02-2	Total/NA	Solid	3545	
570-12118-9	CP240-SB01-1.5	Total/NA	Solid	3545	
570-12118-13	CP240-SB02-1.5	Total/NA	Solid	3545	
MB 570-31971/1-A	Method Blank	Total/NA	Solid	3545	
LCS 570-31971/2-A	Lab Control Sample	Total/NA	Solid	3545	
LCSD 570-31971/3-A	Lab Control Sample Dup	Total/NA	Solid	3545	
570-12118-5 MS	CP236-SB02-2	Total/NA	Solid	3545	
570-12118-5 MSD	CP236-SB02-2	Total/NA	Solid	3545	

Analysis Batch: 32082

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-12118-1	CP236-SB01-2	Total/NA	Solid	8081A	31971

GC Semi VOA (Continued)

Analysis Batch: 32082 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-12118-5	CP236-SB02-2	Total/NA	Solid	8081A	31971
570-12118-9	CP240-SB01-1.5	Total/NA	Solid	8081A	31971
570-12118-13	CP240-SB02-1.5	Total/NA	Solid	8081A	31971
MB 570-31971/1-A	Method Blank	Total/NA	Solid	8081A	31971
LCS 570-31971/2-A	Lab Control Sample	Total/NA	Solid	8081A	31971
LCSD 570-31971/3-A	Lab Control Sample Dup	Total/NA	Solid	8081A	31971
570-12118-5 MS	CP236-SB02-2	Total/NA	Solid	8081A	31971
570-12118-5 MSD	CP236-SB02-2	Total/NA	Solid	8081A	31971

Metals

Prep Batch: 31813

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-12118-1	CP236-SB01-2	Total/NA	Solid	3050B	
570-12118-2	CP236-SB01-5	Total/NA	Solid	3050B	
570-12118-3	CP236-SB01-8	Total/NA	Solid	3050B	
570-12118-5	CP236-SB02-2	Total/NA	Solid	3050B	
570-12118-6	CP236-SB02-5	Total/NA	Solid	3050B	
570-12118-7	CP236-SB02-9	Total/NA	Solid	3050B	
570-12118-9	CP240-SB01-1.5	Total/NA	Solid	3050B	
570-12118-10	CP240-SB01-5	Total/NA	Solid	3050B	
570-12118-11	CP240-SB01-9	Total/NA	Solid	3050B	
570-12118-13	CP240-SB02-1.5	Total/NA	Solid	3050B	
570-12118-14	CP240-SB02-5	Total/NA	Solid	3050B	
570-12118-15	CP240-SB02-9	Total/NA	Solid	3050B	
MB 570-31813/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 570-31813/2-A	Lab Control Sample	Total/NA	Solid	3050B	
LCSD 570-31813/3-A	Lab Control Sample Dup	Total/NA	Solid	3050B	
570-12107-B-1-C MS	Matrix Spike	Total/NA	Solid	3050B	
570-12107-B-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	3050B	

Prep Batch: 31814

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-12118-1	CP236-SB01-2	Total/NA	Solid	7471A	
570-12118-2	CP236-SB01-5	Total/NA	Solid	7471A	
570-12118-3	CP236-SB01-8	Total/NA	Solid	7471A	
570-12118-5	CP236-SB02-2	Total/NA	Solid	7471A	
570-12118-6	CP236-SB02-5	Total/NA	Solid	7471A	
570-12118-7	CP236-SB02-9	Total/NA	Solid	7471A	
570-12118-9	CP240-SB01-1.5	Total/NA	Solid	7471A	
570-12118-10	CP240-SB01-5	Total/NA	Solid	7471A	
570-12118-11	CP240-SB01-9	Total/NA	Solid	7471A	
570-12118-13	CP240-SB02-1.5	Total/NA	Solid	7471A	
570-12118-14	CP240-SB02-5	Total/NA	Solid	7471A	
570-12118-15	CP240-SB02-9	Total/NA	Solid	7471A	
MB 570-31814/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 570-31814/2-A	Lab Control Sample	Total/NA	Solid	7471A	
LCSD 570-31814/3-A	Lab Control Sample Dup	Total/NA	Solid	7471A	
570-12107-B-1-F MS ^100	Matrix Spike	Total/NA	Solid	7471A	
570-12107-B-1-G MSD ^100	Matrix Spike Duplicate	Total/NA	Solid	7471A	

QC Association Summary

Client: Kennedy/Jenks Consultants
Project/Site: VTA EBRC / 1965013.00

Job ID: 570-12118-1

Metals

Analysis Batch: 32357

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-12118-1	CP236-SB01-2	Total/NA	Solid	7471A	31814
570-12118-2	CP236-SB01-5	Total/NA	Solid	7471A	31814
570-12118-3	CP236-SB01-8	Total/NA	Solid	7471A	31814
570-12118-5	CP236-SB02-2	Total/NA	Solid	7471A	31814
570-12118-6	CP236-SB02-5	Total/NA	Solid	7471A	31814
570-12118-7	CP236-SB02-9	Total/NA	Solid	7471A	31814
570-12118-9	CP240-SB01-1.5	Total/NA	Solid	7471A	31814
570-12118-10	CP240-SB01-5	Total/NA	Solid	7471A	31814
570-12118-11	CP240-SB01-9	Total/NA	Solid	7471A	31814
570-12118-13	CP240-SB02-1.5	Total/NA	Solid	7471A	31814
570-12118-14	CP240-SB02-5	Total/NA	Solid	7471A	31814
570-12118-15	CP240-SB02-9	Total/NA	Solid	7471A	31814
MB 570-31814/1-A	Method Blank	Total/NA	Solid	7471A	31814
LCS 570-31814/2-A	Lab Control Sample	Total/NA	Solid	7471A	31814
LCSD 570-31814/3-A	Lab Control Sample Dup	Total/NA	Solid	7471A	31814
570-12107-B-1-F MS ^100	Matrix Spike	Total/NA	Solid	7471A	31814
570-12107-B-1-G MSD ^100	Matrix Spike Duplicate	Total/NA	Solid	7471A	31814

Analysis Batch: 32832

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-12118-1	CP236-SB01-2	Total/NA	Solid	6010B	31813
570-12118-2	CP236-SB01-5	Total/NA	Solid	6010B	31813
570-12118-3	CP236-SB01-8	Total/NA	Solid	6010B	31813
570-12118-5	CP236-SB02-2	Total/NA	Solid	6010B	31813
570-12118-6	CP236-SB02-5	Total/NA	Solid	6010B	31813
570-12118-7	CP236-SB02-9	Total/NA	Solid	6010B	31813
570-12118-9	CP240-SB01-1.5	Total/NA	Solid	6010B	31813
570-12118-10	CP240-SB01-5	Total/NA	Solid	6010B	31813
570-12118-11	CP240-SB01-9	Total/NA	Solid	6010B	31813
570-12118-13	CP240-SB02-1.5	Total/NA	Solid	6010B	31813
570-12118-14	CP240-SB02-5	Total/NA	Solid	6010B	31813
570-12118-15	CP240-SB02-9	Total/NA	Solid	6010B	31813
MB 570-31813/1-A	Method Blank	Total/NA	Solid	6010B	31813
LCS 570-31813/2-A	Lab Control Sample	Total/NA	Solid	6010B	31813
LCSD 570-31813/3-A	Lab Control Sample Dup	Total/NA	Solid	6010B	31813
570-12107-B-1-C MS	Matrix Spike	Total/NA	Solid	6010B	31813
570-12107-B-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	6010B	31813

Lab Chronicle

Client: Kennedy/Jenks Consultants
Project/Site: VTA EBRC / 1965013.00

Job ID: 570-12118-1

Client Sample ID: CP236-SB01-2

Lab Sample ID: 570-12118-1

Date Collected: 11/05/19 09:00

Matrix: Solid

Date Received: 11/07/19 10:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030C			4.94 g	5 mL	32877	11/14/19 15:25	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	32790	11/14/19 15:57	MGX6	ECL 2
	Instrument ID: GCMSLL									
Total/NA	Prep	5030C			4.94 g	5 mL	32877	11/14/19 15:25	P4DI	ECL 2
Total/NA	Analysis	8260B/CA_LUFTMS		1	5 mL	5 mL	32789	11/14/19 15:57	MGX6	ECL 2
	Instrument ID: GCMSLL									
Total/NA	Prep	3550C			10.17 g	10 mL	31667	11/08/19 14:18	SP7J	ECL 1
Total/NA	Analysis	8015B		1			31602	11/08/19 21:49	N5Y3	ECL 1
	Instrument ID: GC50									
Total/NA	Prep	3545			20.08 g	10 mL	31971	11/11/19 09:04	F7UI	ECL 1
Total/NA	Analysis	8081A		1			32082	11/12/19 13:14	UHHN	ECL 1
	Instrument ID: GC51									
Total/NA	Prep	3050B			2.00 g	100 mL	31813	11/09/19 12:30	X7RL	ECL 1
Total/NA	Analysis	6010B		1			32832	11/14/19 01:31	OYW3	ECL 1
	Instrument ID: ICP8									
Total/NA	Prep	7471A			.63 g	100 mL	31814	11/11/19 14:00	X7RL	ECL 1
Total/NA	Analysis	7471A		1			32357	11/12/19 16:37	I3IN	ECL 1
	Instrument ID: HG8									

Client Sample ID: CP236-SB01-5

Lab Sample ID: 570-12118-2

Date Collected: 11/05/19 09:15

Matrix: Solid

Date Received: 11/07/19 10:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030C			5.01 g	5 mL	32877	11/14/19 15:41	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	32790	11/14/19 18:47	MGX6	ECL 2
	Instrument ID: GCMSLL									
Total/NA	Prep	5030C			5.01 g	5 mL	32877	11/14/19 15:41	P4DI	ECL 2
Total/NA	Analysis	8260B/CA_LUFTMS		1	5 mL	5 mL	32789	11/14/19 18:47	MGX6	ECL 2
	Instrument ID: GCMSLL									
Total/NA	Prep	3550C			10.13 g	10 mL	31667	11/08/19 14:18	SP7J	ECL 1
Total/NA	Analysis	8015B		1			31602	11/08/19 22:09	N5Y3	ECL 1
	Instrument ID: GC50									
Total/NA	Prep	3050B			1.98 g	100 mL	31813	11/09/19 12:30	X7RL	ECL 1
Total/NA	Analysis	6010B		1			32832	11/14/19 01:34	OYW3	ECL 1
	Instrument ID: ICP8									
Total/NA	Prep	7471A			.59 g	100 mL	31814	11/11/19 14:00	X7RL	ECL 1
Total/NA	Analysis	7471A		1			32357	11/12/19 16:39	I3IN	ECL 1
	Instrument ID: HG8									

Lab Chronicle

Client: Kennedy/Jenks Consultants
Project/Site: VTA EBRC / 1965013.00

Job ID: 570-12118-1

Client Sample ID: CP236-SB01-8

Date Collected: 11/05/19 09:24
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030C			4.91 g	5 mL	32877	11/14/19 15:41	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	32790	11/14/19 19:13	MGX6	ECL 2
	Instrument ID: GCMSLL									
Total/NA	Prep	5030C			4.91 g	5 mL	32877	11/14/19 15:41	P4DI	ECL 2
Total/NA	Analysis	8260B/CA_LUFTMS		1	5 mL	5 mL	32789	11/14/19 19:13	MGX6	ECL 2
	Instrument ID: GCMSLL									
Total/NA	Prep	3550C			10.06 g	10 mL	31667	11/08/19 14:18	SP7J	ECL 1
Total/NA	Analysis	8015B		1			31602	11/08/19 22:28	N5Y3	ECL 1
	Instrument ID: GC50									
Total/NA	Prep	3050B			1.94 g	100 mL	31813	11/09/19 12:30	X7RL	ECL 1
Total/NA	Analysis	6010B		1			32832	11/14/19 01:36	OYW3	ECL 1
	Instrument ID: ICP8									
Total/NA	Prep	7471A			.63 g	100 mL	31814	11/11/19 14:00	X7RL	ECL 1
Total/NA	Analysis	7471A		1			32357	11/12/19 16:41	I3IN	ECL 1
	Instrument ID: HG8									

Client Sample ID: CP236-SB02-2

Date Collected: 11/05/19 09:55
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-5

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030C			5.10 g	5 mL	32877	11/14/19 15:41	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	32790	11/14/19 19:38	MGX6	ECL 2
	Instrument ID: GCMSLL									
Total/NA	Prep	5030C			5.10 g	5 mL	32877	11/14/19 15:41	P4DI	ECL 2
Total/NA	Analysis	8260B/CA_LUFTMS		1	5 mL	5 mL	32789	11/14/19 19:38	MGX6	ECL 2
	Instrument ID: GCMSLL									
Total/NA	Prep	3550C			10.08 g	10 mL	31667	11/08/19 14:18	SP7J	ECL 1
Total/NA	Analysis	8015B		1			31602	11/08/19 23:08	N5Y3	ECL 1
	Instrument ID: GC50									
Total/NA	Prep	3545			20.00 g	10 mL	31971	11/11/19 09:04	F7UI	ECL 1
Total/NA	Analysis	8081A		1			32082	11/12/19 13:28	UHHN	ECL 1
	Instrument ID: GC51									
Total/NA	Prep	3050B			1.93 g	100 mL	31813	11/09/19 12:30	X7RL	ECL 1
Total/NA	Analysis	6010B		1			32832	11/14/19 01:46	OYW3	ECL 1
	Instrument ID: ICP8									
Total/NA	Prep	7471A			.63 g	100 mL	31814	11/11/19 14:00	X7RL	ECL 1
Total/NA	Analysis	7471A		1			32357	11/12/19 16:44	I3IN	ECL 1
	Instrument ID: HG8									

Lab Chronicle

Client: Kennedy/Jenks Consultants
Project/Site: VTA EBRC / 1965013.00

Job ID: 570-12118-1

Client Sample ID: CP236-SB02-5

Date Collected: 11/05/19 10:11
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-6

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030C			5.13 g	5 mL	32877	11/14/19 15:41	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	32790	11/14/19 20:04	MGX6	ECL 2
	Instrument ID: GCMSLL									
Total/NA	Prep	5030C			5.13 g	5 mL	32877	11/14/19 15:41	P4DI	ECL 2
Total/NA	Analysis	8260B/CA_LUFTMS		1	5 mL	5 mL	32789	11/14/19 20:04	MGX6	ECL 2
	Instrument ID: GCMSLL									
Total/NA	Prep	3550C			10.10 g	10 mL	31667	11/08/19 14:18	SP7J	ECL 1
Total/NA	Analysis	8015B		1			31602	11/08/19 23:27	N5Y3	ECL 1
	Instrument ID: GC50									
Total/NA	Prep	3050B			1.99 g	100 mL	31813	11/09/19 12:30	X7RL	ECL 1
Total/NA	Analysis	6010B		1			32832	11/14/19 01:49	OYW3	ECL 1
	Instrument ID: ICP8									
Total/NA	Prep	7471A			.57 g	100 mL	31814	11/11/19 14:00	X7RL	ECL 1
Total/NA	Analysis	7471A		1			32357	11/12/19 16:46	I3IN	ECL 1
	Instrument ID: HG8									

Client Sample ID: CP236-SB02-9

Date Collected: 11/05/19 10:15
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-7

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030C			4.97 g	5 mL	32877	11/14/19 15:41	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	32790	11/14/19 20:29	MGX6	ECL 2
	Instrument ID: GCMSLL									
Total/NA	Prep	5030C			4.97 g	5 mL	32877	11/14/19 15:41	P4DI	ECL 2
Total/NA	Analysis	8260B/CA_LUFTMS		1	5 mL	5 mL	32789	11/14/19 20:29	MGX6	ECL 2
	Instrument ID: GCMSLL									
Total/NA	Prep	3550C			10.18 g	10 mL	31667	11/08/19 14:18	SP7J	ECL 1
Total/NA	Analysis	8015B		1			31602	11/08/19 23:48	N5Y3	ECL 1
	Instrument ID: GC50									
Total/NA	Prep	3050B			2.01 g	100 mL	31813	11/09/19 12:30	X7RL	ECL 1
Total/NA	Analysis	6010B		1			32832	11/14/19 01:52	OYW3	ECL 1
	Instrument ID: ICP8									
Total/NA	Prep	7471A			.62 g	100 mL	31814	11/11/19 14:00	X7RL	ECL 1
Total/NA	Analysis	7471A		1			32357	11/12/19 16:48	I3IN	ECL 1
	Instrument ID: HG8									

Client Sample ID: CP240-SB01-1.5

Date Collected: 11/05/19 12:46
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-9

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030C			4.93 g	5 mL	32877	11/14/19 15:41	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	32790	11/14/19 20:55	MGX6	ECL 2
	Instrument ID: GCMSLL									

Lab Chronicle

Client: Kennedy/Jenks Consultants
Project/Site: VTA EBRC / 1965013.00

Job ID: 570-12118-1

Client Sample ID: CP240-SB01-1.5

Lab Sample ID: 570-12118-9

Date Collected: 11/05/19 12:46
Matrix: Solid
Date Received: 11/07/19 10:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030C			4.93 g	5 mL	32877	11/14/19 15:41	P4DI	ECL 2
Total/NA	Analysis	8260B/CA_LUFTMS		1	5 mL	5 mL	32789	11/14/19 20:55	MGX6	ECL 2
	Instrument ID: GCMSLL									
Total/NA	Prep	3550C			10.06 g	10 mL	31667	11/08/19 14:18	SP7J	ECL 1
Total/NA	Analysis	8015B		1			31602	11/09/19 00:27	N5Y3	ECL 1
	Instrument ID: GC50									
Total/NA	Prep	3545			20.08 g	10 mL	31971	11/11/19 09:04	F7UI	ECL 1
Total/NA	Analysis	8081A		1			32082	11/12/19 13:42	UHHN	ECL 1
	Instrument ID: GC51									
Total/NA	Prep	3050B			1.90 g	100 mL	31813	11/09/19 12:30	X7RL	ECL 1
Total/NA	Analysis	6010B		1			32832	11/14/19 01:54	OYW3	ECL 1
	Instrument ID: ICP8									
Total/NA	Prep	7471A			.59 g	100 mL	31814	11/11/19 14:00	X7RL	ECL 1
Total/NA	Analysis	7471A		1			32357	11/12/19 16:50	I3IN	ECL 1
	Instrument ID: HG8									

Client Sample ID: CP240-SB01-5

Lab Sample ID: 570-12118-10

Date Collected: 11/05/19 12:54
Matrix: Solid
Date Received: 11/07/19 10:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030C			5.03 g	5 mL	32877	11/14/19 15:41	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	32790	11/14/19 21:21	MGX6	ECL 2
	Instrument ID: GCMSLL									
Total/NA	Prep	5030C			5.03 g	5 mL	32877	11/14/19 15:41	P4DI	ECL 2
Total/NA	Analysis	8260B/CA_LUFTMS		1	5 mL	5 mL	32789	11/14/19 21:21	MGX6	ECL 2
	Instrument ID: GCMSLL									
Total/NA	Prep	3550C			10.08 g	10 mL	31667	11/08/19 14:18	SP7J	ECL 1
Total/NA	Analysis	8015B		1			31602	11/09/19 00:46	N5Y3	ECL 1
	Instrument ID: GC50									
Total/NA	Prep	3050B			2.01 g	100 mL	31813	11/09/19 12:30	X7RL	ECL 1
Total/NA	Analysis	6010B		1			32832	11/14/19 01:57	OYW3	ECL 1
	Instrument ID: ICP8									
Total/NA	Prep	7471A			0.60 g	100 mL	31814	11/11/19 14:00	X7RL	ECL 1
Total/NA	Analysis	7471A		1			32357	11/12/19 16:53	I3IN	ECL 1
	Instrument ID: HG8									

Client Sample ID: CP240-SB01-9

Lab Sample ID: 570-12118-11

Date Collected: 11/05/19 12:59
Matrix: Solid
Date Received: 11/07/19 10:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030C			5.03 g	5 mL	32920	11/14/19 21:39	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	32957	11/15/19 03:24	U4JL	ECL 2
	Instrument ID: GCMSLL									

Client Sample ID: CP240-SB01-9

Lab Sample ID: 570-12118-11

Date Collected: 11/05/19 12:59

Matrix: Solid

Date Received: 11/07/19 10:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030C			5.03 g	5 mL	32920	11/14/19 21:39	P4DI	ECL 2
Total/NA	Analysis	8260B/CA_LUFTMS		1	5 mL	5 mL	32958	11/15/19 03:24	U4JL	ECL 2
	Instrument ID: GCMSLL									
Total/NA	Prep	3550C			10.06 g	10 mL	31667	11/08/19 14:18	SP7J	ECL 1
Total/NA	Analysis	8015B		1			31602	11/09/19 01:45	N5Y3	ECL 1
	Instrument ID: GC50									
Total/NA	Prep	3050B			1.96 g	100 mL	31813	11/09/19 12:30	X7RL	ECL 1
Total/NA	Analysis	6010B		1			32832	11/14/19 01:59	OYW3	ECL 1
	Instrument ID: ICP8									
Total/NA	Prep	7471A			.61 g	100 mL	31814	11/11/19 14:00	X7RL	ECL 1
Total/NA	Analysis	7471A		1			32357	11/12/19 17:00	I3IN	ECL 1
	Instrument ID: HG8									

Client Sample ID: CP240-SB02-1.5

Lab Sample ID: 570-12118-13

Date Collected: 11/05/19 13:35

Matrix: Solid

Date Received: 11/07/19 10:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030C			5.10 g	5 mL	32920	11/14/19 21:39	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	32957	11/15/19 03:50	U4JL	ECL 2
	Instrument ID: GCMSLL									
Total/NA	Prep	5030C			5.10 g	5 mL	32920	11/14/19 21:39	P4DI	ECL 2
Total/NA	Analysis	8260B/CA_LUFTMS		1	5 mL	5 mL	32958	11/15/19 03:50	U4JL	ECL 2
	Instrument ID: GCMSLL									
Total/NA	Prep	3550C			10.05 g	10 mL	31667	11/08/19 14:18	SP7J	ECL 1
Total/NA	Analysis	8015B		1			31602	11/09/19 02:24	N5Y3	ECL 1
	Instrument ID: GC50									
Total/NA	Prep	3545			20.12 g	10 mL	31971	11/11/19 09:04	F7UI	ECL 1
Total/NA	Analysis	8081A		1			32082	11/12/19 13:57	UHHN	ECL 1
	Instrument ID: GC51									
Total/NA	Prep	3050B			2.04 g	100 mL	31813	11/09/19 12:30	X7RL	ECL 1
Total/NA	Analysis	6010B		1			32832	11/14/19 02:02	OYW3	ECL 1
	Instrument ID: ICP8									
Total/NA	Prep	7471A			.60 g	100 mL	31814	11/11/19 14:00	X7RL	ECL 1
Total/NA	Analysis	7471A		1			32357	11/12/19 17:02	I3IN	ECL 1
	Instrument ID: HG8									

Client Sample ID: CP240-SB02-5

Lab Sample ID: 570-12118-14

Date Collected: 11/05/19 13:46

Matrix: Solid

Date Received: 11/07/19 10:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030C			5.07 g	5 mL	32920	11/14/19 21:39	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	32957	11/15/19 04:16	U4JL	ECL 2
	Instrument ID: GCMSLL									

Lab Chronicle

Client: Kennedy/Jenks Consultants
Project/Site: VTA EBRC / 1965013.00

Job ID: 570-12118-1

Client Sample ID: CP240-SB02-5

Date Collected: 11/05/19 13:46
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-14

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030C			5.07 g	5 mL	32920	11/14/19 21:39	P4DI	ECL 2
Total/NA	Analysis	8260B/CA_LUFTMS		1	5 mL	5 mL	32958	11/15/19 04:16	U4JL	ECL 2
	Instrument ID: GCMSLL									
Total/NA	Prep	3550C			10.10 g	10 mL	31667	11/08/19 14:18	SP7J	ECL 1
Total/NA	Analysis	8015B		1			31602	11/09/19 02:44	N5Y3	ECL 1
	Instrument ID: GC50									
Total/NA	Prep	3050B			1.95 g	100 mL	31813	11/09/19 12:30	X7RL	ECL 1
Total/NA	Analysis	6010B		1			32832	11/14/19 02:04	OYW3	ECL 1
	Instrument ID: ICP8									
Total/NA	Prep	7471A			.60 g	100 mL	31814	11/11/19 14:00	X7RL	ECL 1
Total/NA	Analysis	7471A		1			32357	11/12/19 17:04	I3IN	ECL 1
	Instrument ID: HG8									

Client Sample ID: CP240-SB02-9

Date Collected: 11/05/19 13:51
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12118-15

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030C			5.06 g	5 mL	32920	11/14/19 18:09	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	32957	11/15/19 01:41	U4JL	ECL 2
	Instrument ID: GCMSLL									
Total/NA	Prep	5030C			5.06 g	5 mL	32920	11/14/19 18:09	P4DI	ECL 2
Total/NA	Analysis	8260B/CA_LUFTMS		1	5 mL	5 mL	32958	11/15/19 01:41	U4JL	ECL 2
	Instrument ID: GCMSLL									
Total/NA	Prep	3550C			10.17 g	10 mL	31667	11/08/19 14:18	SP7J	ECL 1
Total/NA	Analysis	8015B		1			31602	11/09/19 03:03	N5Y3	ECL 1
	Instrument ID: GC50									
Total/NA	Prep	3050B			2.03 g	100 mL	31813	11/09/19 12:30	X7RL	ECL 1
Total/NA	Analysis	6010B		1			32832	11/14/19 02:07	OYW3	ECL 1
	Instrument ID: ICP8									
Total/NA	Prep	7471A			.63 g	100 mL	31814	11/11/19 14:00	X7RL	ECL 1
Total/NA	Analysis	7471A		1			32357	11/12/19 17:07	I3IN	ECL 1
	Instrument ID: HG8									

Laboratory References:

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494
ECL 2 = Eurofins Calscience LLC Lampson, 7445 Lampson Ave, Garden Grove, CA 92841, TEL (714)895-5494

Accreditation/Certification Summary

Client: Kennedy/Jenks Consultants
Project/Site: VTA EBRC / 1965013.00

Job ID: 570-12118-1

Laboratory: Eurofins Calscience LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arizona	State	AZ0781	03-13-20
California	SCAQMD LAP	17LA0919	11-30-19
California	State	2944	09-29-20
Hawaii	State	<cert No.>	07-02-20
Nevada	State	CA00111	07-31-20
Oregon	NELAP	CA300001	01-29-20

Method Summary

Client: Kennedy/Jenks Consultants
Project/Site: VTA EBRC / 1965013.00

Job ID: 570-12118-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	ECL 2
8260B/CA_LUFTMS	Volatile Organic Compounds by GC/MS	SW846	ECL 2
8015B	Diesel Range Organics (DRO) (GC)	SW846	ECL 1
8081A	Organochlorine Pesticides (GC)	SW846	ECL 1
6010B	Metals (ICP)	SW846	ECL 1
7471A	Mercury (CVAA)	SW846	ECL 1
3050B	Preparation, Metals	SW846	ECL 1
3545	Pressurized Fluid Extraction	SW846	ECL 1
3550C	Ultrasonic Extraction	SW846	ECL 1
5030C	Purge and Trap	SW846	ECL 2
7471A	Preparation, Mercury	SW846	ECL 1

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

ECL 2 = Eurofins Calscience LLC Lampson, 7445 Lampson Ave, Garden Grove, CA 92841, TEL (714)895-5494

Sample Summary

Client: Kennedy/Jenks Consultants
Project/Site: VTA EBRC / 1965013.00

Job ID: 570-12118-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
570-12118-1	CP236-SB01-2	Solid	11/05/19 09:00	11/07/19 10:30	
570-12118-2	CP236-SB01-5	Solid	11/05/19 09:15	11/07/19 10:30	
570-12118-3	CP236-SB01-8	Solid	11/05/19 09:24	11/07/19 10:30	
570-12118-5	CP236-SB02-2	Solid	11/05/19 09:55	11/07/19 10:30	
570-12118-6	CP236-SB02-5	Solid	11/05/19 10:11	11/07/19 10:30	
570-12118-7	CP236-SB02-9	Solid	11/05/19 10:15	11/07/19 10:30	
570-12118-9	CP240-SB01-1.5	Solid	11/05/19 12:46	11/07/19 10:30	
570-12118-10	CP240-SB01-5	Solid	11/05/19 12:54	11/07/19 10:30	
570-12118-11	CP240-SB01-9	Solid	11/05/19 12:59	11/07/19 10:30	
570-12118-13	CP240-SB02-1.5	Solid	11/05/19 13:35	11/07/19 10:30	
570-12118-14	CP240-SB02-5	Solid	11/05/19 13:46	11/07/19 10:30	
570-12118-15	CP240-SB02-9	Solid	11/05/19 13:51	11/07/19 10:30	

Loc: 570
12118

Sample Chain-of-Custody/Analysis Request

Kennedy/Jenks Consultants

Possible Hazards: Analytes

Client: VTA | Report to: Jay Knight

Site: EBRC | Company: K/J

Project No.: 1965013.00 | Address:

Sampler Name: M. Meheel

Telephone: 415-243-2508 | Fax: Jay.Knight@kennedyjenks.com

Lab Destination: Eurofins

Address: 7440 Lincoln Way, Garden Grove

Telephone: 714-895-5494

Carrier/Way Bill No.: n/a

(1) Lab ID No.	(1) Client ID No.	Collection Date	Collection Time	(2) Type	Depth	(3) Comp.	(4) Pres.	Turn-around	(5) Analyses Requested: CAM 17 metals 6010/7470	8260 TPHg VOCs	8015 TPHd_MO	8081 Pest.						Comment/Conditions (container type, container number, etc.)
1	CP236-SB01-2	11/5/2019	0900	S	2	N.	4°C	STD	X	X	X	X					X	
2	CP236-SB01-5		0915		5				X	X	X							
3	CP236-SB01-8		0924		8				X	X	X							
4	CP236-SB01-12		0924		12				X	X	X						X	
5	CP236-SB02-2		0935		2				X	X	X	X						
6	CP236-SB02-5		1011		5				X	X	X							
7	CP236-SB02-9		1015		9				X	X	X							
8	CP-236-SB02-12		1019		12												X	
9	CP240-SB01-1.5		1246		1.5				X	X	X	X						
10	CP240-SB01-5		1254		5				X	X	X							
11	CP240-SB01-9		1259		9				X	X	X							

570-12118 Chain of Custody

(1) Write only one sample number in each space.
(2) Specify type of sample(s): Water (W), Solid (S), or indicate type.
(3) Mark each sample which should be composited in Laboratory as follows: Place an "A" in box for each sample that should be composited into one sample; use sequential letter for additional groups.
(4) Preservation of sample.
(5) Write each analysis requested across top. Place an "X" in appropriate column to indicate type of analysis needed for each sample.

Sample Relinquished By: Print Name	Signature	Company	Date	Time	Sample Received By: Print Name	Signature	Company	Date	Time
Mike Meheel		K/J	11/6/2019	1234	MARK Valentini		EA ER	11/6/19	1234
MARK Valentini		TO EOS	11/6/19	1630	PEGGY SOMERS			11/7/19	1030

1.4/1.9 SC custody Seal

Page 01 of 03

11/15/2019

Sample Chain-of-Custody/Analysis Request

Kennedy/Jenks Consultants

Possible Hazards See Page 1

Client _____ Report to _____

Site _____ Company _____

Project No. _____ Address _____

Sampler Name _____

Telephone _____ Fax _____

Lab Destination Eurofins

Address 7440 Lincoln Way
Garden Grove

Telephone 714-895-5494

Carrier/Way Bill No. n/a

(1) Lab ID No.	(1) Client ID No.	Collection Date	Collection Time	(2) Type	Depth	(3) Comp.	(4) Pres.	Turn-around	(5) Analyses Requested: Cam 17 metals (6010/7470)	TPHg, Voc (8260)	TPHd, mo (8015M)	Pest (8081A)					Hold	Comment/Conditions (container type, container number, etc.)
12	CP240-SB01-13	11/5/2019	1305	S	13	No	4°C	STD									X	
13	CP240-SB02-1.5	"	1335		1.5				X	X	X	X						
14	CP240-SB02-5	"	1346		5				X	X	X							
15	CP240-SB02-9	"	1351		9				X	X	X							
16	CP240-SB02-13		1355		13												X	

(1) Write only one sample number in each space.
(2) Specify type of sample(s): Water (W), Solid (S), or indicate type.
(3) Mark each sample which should be composited in Laboratory as follows: Place an "A" in box for each sample that should be composited into one sample; use sequential letter for additional groups.
(4) Preservation of sample.
(5) Write each analysis requested across top. Place an "X" in appropriate column to indicate type of analysis needed for each sample.

Sample Relinquished By: Print Name	Signature	Company	Date	Time	Sample Received By: Print Name	Signature	Company	Date	Time
Mike Mellor		K/J	11/6/2019	1234	MARK Valentini		ECI	11/6/19	1234
Mark Valentini	~~Other~~ to GSO		11/6/19	1630	PHILLY SQUARE		CE	11/7/19	10:30

Login Sample Receipt Checklist

Client: Kennedy/Jenks Consultants

Job Number: 570-12118-1

Login Number: 12118
List Number: 1
Creator: Castro, Joy

List Source: Eurofins Calscience

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	Refer to Job Narrative for details.
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

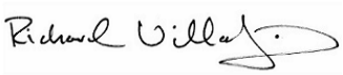
ANALYTICAL REPORT

Eurofins Calscience LLC
7440 Lincoln Way
Garden Grove, CA 92841
Tel: (714)895-5494

Laboratory Job ID: 570-12112-1
Client Project/Site: VTA

For:
Kennedy/Jenks Consultants
3200 El Camino Real
Suite 200
Irvine, California 92602

Attn: Mr. Jay Knight



Authorized for release by:
11/15/2019 5:11:43 PM

Richard Villafania, Project Manager I
(714)895-5494
richardvillafania@eurofinsus.com

Table of Contents

Definitions/Glossary

Client: Kennedy/Jenks Consultants
Project/Site: VTA

Job ID: 570-12112-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
Z	The chromatographic response does not resemble a typical fuel pattern.

Metals

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
L	A negative instrument reading had an absolute value greater than the reporting limit

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: Kennedy/Jenks Consultants
Project/Site: VTA

Job ID: 570-12112-1

Job ID: 570-12112-1

Laboratory: Eurofins Calscience LLC

Narrative

Job Narrative
570-12112-1

Comments
No additional comments.

Receipt
The samples were received on 11/7/2019 10:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.9º C.

Receipt Exceptions
The container label for the following samples did not match the information listed on the Chain-of-Custody (COC): CP236-SB01 (570-12112-2) and CP240-SB01 (570-12112-5). The container labels list CP236-SB01 (20191105), while the COC lists CP236-SB01. The container labels list CP240-SB01 (20191105), while the COC lists CP240-SB01.

GC/MS VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Kennedy/Jenks Consultants
Project/Site: VTA

Job ID: 570-12112-1

Client Sample ID: CP236-SB02 (20191105) — Lab Sample ID: 570-12112-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
TPH as Diesel (C10-C28)	33	J Z	51	17	ug/L	1		8015B	Total/NA
TPH as Motor Oil (C17-C44)	21	J Z	260	20	ug/L	1		8015B	Total/NA
Silver	0.00392	J	0.0100	0.00298	mg/L	1		6010B	Total/NA
Arsenic	0.216		0.100	0.0181	mg/L	1		6010B	Total/NA
Barium	0.105		0.0100	0.00308	mg/L	1		6010B	Total/NA
Beryllium	0.00322	J	0.0100	0.00252	mg/L	1		6010B	Total/NA
Cadmium	0.00704	J	0.0100	0.00210	mg/L	1		6010B	Total/NA
Cobalt	0.0559		0.0500	0.00362	mg/L	1		6010B	Total/NA
Chromium	0.0343	J	0.0500	0.00688	mg/L	1		6010B	Total/NA
Copper	0.0488	J	0.0500	0.00614	mg/L	1		6010B	Total/NA
Nickel	0.125		0.0500	0.00784	mg/L	1		6010B	Total/NA
Thallium	0.0295	J	0.0500	0.0161	mg/L	1		6010B	Total/NA
Zinc	0.110	J	0.250	0.0682	mg/L	1		6010B	Total/NA
Lead	0.0430	J	0.0500	0.00821	mg/L	1		6010B	Total/NA

Client Sample ID: CP236-SB01 — Lab Sample ID: 570-12112-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
TPH as Diesel (C10-C28)	31	J Z	54	18	ug/L	1		8015B	Total/NA
Arsenic	0.105		0.100	0.0181	mg/L	1		6010B	Total/NA
Barium	0.0358		0.0100	0.00308	mg/L	1		6010B	Total/NA
Cadmium	0.00455	J	0.0100	0.00210	mg/L	1		6010B	Total/NA
Cobalt	0.0264	J	0.0500	0.00362	mg/L	1		6010B	Total/NA
Chromium	0.0130	J	0.0500	0.00688	mg/L	1		6010B	Total/NA
Copper	0.0108	J	0.0500	0.00614	mg/L	1		6010B	Total/NA
Molybdenum	0.131		0.0500	0.00509	mg/L	1		6010B	Total/NA
Nickel	0.0561		0.0500	0.00784	mg/L	1		6010B	Total/NA
Thallium	0.0436	J	0.0500	0.0161	mg/L	1		6010B	Total/NA
Lead	0.0237	J	0.0500	0.00821	mg/L	1		6010B	Total/NA
Mercury	0.00177		0.000500	0.0000453	mg/L	1		7470A	Total/NA

Client Sample ID: DUP01 (20191105) — Lab Sample ID: 570-12112-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	14	J	20	10	ug/L	1		8260B	Total/NA
TPH as Diesel (C10-C28)	33	J Z	56	19	ug/L	1		8015B	Total/NA
Arsenic	0.126		0.100	0.0181	mg/L	1		6010B	Total/NA
Barium	0.0415		0.0100	0.00308	mg/L	1		6010B	Total/NA
Cadmium	0.00549	J	0.0100	0.00210	mg/L	1		6010B	Total/NA
Cobalt	0.0325	J	0.0500	0.00362	mg/L	1		6010B	Total/NA
Chromium	0.0124	J	0.0500	0.00688	mg/L	1		6010B	Total/NA
Copper	0.0140	J	0.0500	0.00614	mg/L	1		6010B	Total/NA
Molybdenum	0.143		0.0500	0.00509	mg/L	1		6010B	Total/NA
Nickel	0.0552		0.0500	0.00784	mg/L	1		6010B	Total/NA
Thallium	0.0205	J	0.0500	0.0161	mg/L	1		6010B	Total/NA
Lead	0.0172	J	0.0500	0.00821	mg/L	1		6010B	Total/NA
Mercury	0.00188		0.000500	0.0000453	mg/L	1		7470A	Total/NA

Client Sample ID: CP240-SB02 (20191105) — Lab Sample ID: 570-12112-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
TPH as Diesel (C10-C28)	41	J Z	51	17	ug/L	1		8015B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Calscience LLC

Detection Summary

Client: Kennedy/Jenks Consultants
Project/Site: VTA

Job ID: 570-12112-1

Client Sample ID: CP240-SB02 (20191105) (Continued) — Lab Sample ID: 570-12112-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
TPH as Motor Oil (C17-C44)	28	J Z	260	20	ug/L	1		8015B	Total/NA
Barium	0.163		0.0100	0.00308	mg/L	1		6010B	Total/NA
Molybdenum	0.0783		0.0500	0.00509	mg/L	1		6010B	Total/NA
Thallium	0.0241	J	0.0500	0.0161	mg/L	1		6010B	Total/NA
Lead	0.0203	J	0.0500	0.00821	mg/L	1		6010B	Total/NA
Mercury	0.000979		0.000500	0.0000453	mg/L	1		7470A	Total/NA

Client Sample ID: CP240-SB01 — Lab Sample ID: 570-12112-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
TPH as Diesel (C10-C28)	46	J Z	51	17	ug/L	1		8015B	Total/NA
TPH as Motor Oil (C17-C44)	44	J Z	260	20	ug/L	1		8015B	Total/NA
Barium	0.0638		0.0100	0.00308	mg/L	1		6010B	Total/NA
Cadmium	0.00283	J	0.0100	0.00210	mg/L	1		6010B	Total/NA
Chromium	0.0532		0.0500	0.00688	mg/L	1		6010B	Total/NA
Molybdenum	0.154		0.0500	0.00509	mg/L	1		6010B	Total/NA
Thallium	0.0291	J	0.0500	0.0161	mg/L	1		6010B	Total/NA
Lead	0.0178	J	0.0500	0.00821	mg/L	1		6010B	Total/NA
Mercury	0.000539		0.000500	0.0000453	mg/L	1		7470A	Total/NA

Client Sample ID: EB01 (20191105) — Lab Sample ID: 570-12112-6

No Detections.

Client Sample ID: Trip Blank — Lab Sample ID: 570-12112-7

No Detections.

This Detection Summary does not include radiochemical test results.

Client: Kennedy/Jenks Consultants
Project/Site: VTA

Job ID: 570-12112-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: CP236-SB02 (20191105)
Date Collected: 11/05/19 10:45
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12112-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		2.0	0.43	ug/L			11/14/19 18:34	1
1,1,1-Trichloroethane	ND		1.0	0.31	ug/L			11/14/19 18:34	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.17	ug/L			11/14/19 18:34	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	0.62	ug/L			11/14/19 18:34	1
1,1,2-Trichloroethane	ND		1.0	0.22	ug/L			11/14/19 18:34	1
1,1-Dichloroethane	ND		1.0	0.28	ug/L			11/14/19 18:34	1
1,1-Dichloroethene	ND		1.0	0.22	ug/L			11/14/19 18:34	1
1,1-Dichloropropene	ND		1.0	0.17	ug/L			11/14/19 18:34	1
1,2,3-Trichlorobenzene	ND		1.0	0.28	ug/L			11/14/19 18:34	1
1,2,3-Trichloropropane	ND		5.0	0.22	ug/L			11/14/19 18:34	1
1,2,4-Trichlorobenzene	ND		1.0	0.34	ug/L			11/14/19 18:34	1
1,2,4-Trimethylbenzene	ND		1.0	0.21	ug/L			11/14/19 18:34	1
1,2-Dibromo-3-Chloropropane	ND		10	2.1	ug/L			11/14/19 18:34	1
1,2-Dibromoethane	ND		1.0	0.27	ug/L			11/14/19 18:34	1
1,2-Dichlorobenzene	ND		1.0	0.14	ug/L			11/14/19 18:34	1
1,2-Dichloroethane	ND		0.50	0.19	ug/L			11/14/19 18:34	1
1,2-Dichloropropane	ND		1.0	0.20	ug/L			11/14/19 18:34	1
1,3,5-Trimethylbenzene	ND		1.0	0.17	ug/L			11/14/19 18:34	1
1,3-Butadiene	ND		25	0.95	ug/L			11/14/19 18:34	1
1,3-Dichlorobenzene	ND		1.0	0.19	ug/L			11/14/19 18:34	1
1,3-Dichloropropane	ND		1.0	0.14	ug/L			11/14/19 18:34	1
1,4-Dichlorobenzene	ND		1.0	0.24	ug/L			11/14/19 18:34	1
2,2-Dichloropropane	ND		1.0	0.44	ug/L			11/14/19 18:34	1
2-Butanone	ND		20	3.6	ug/L			11/14/19 18:34	1
2-Chlorotoluene	ND		1.0	0.16	ug/L			11/14/19 18:34	1
2-Hexanone	ND		10	5.3	ug/L			11/14/19 18:34	1
4-Chlorotoluene	ND		1.0	0.18	ug/L			11/14/19 18:34	1
Acetone	ND		20	10	ug/L			11/14/19 18:34	1
Benzene	ND		1.0	0.14	ug/L			11/14/19 18:34	1
Bromobenzene	ND		1.0	0.19	ug/L			11/14/19 18:34	1
Bromochloromethane	ND		2.0	0.46	ug/L			11/14/19 18:34	1
Bromodichloromethane	ND		1.0	0.23	ug/L			11/14/19 18:34	1
Bromoform	ND		5.0	1.8	ug/L			11/14/19 18:34	1
Bromomethane	ND		50	19	ug/L			11/14/19 18:34	1
cis-1,2-Dichloroethene	ND		1.0	0.27	ug/L			11/14/19 18:34	1
cis-1,3-Dichloropropene	ND		0.50	0.20	ug/L			11/14/19 18:34	1
Carbon disulfide	ND		10	0.70	ug/L			11/14/19 18:34	1
Carbon tetrachloride	ND		0.50	0.23	ug/L			11/14/19 18:34	1
Chlorobenzene	ND		1.0	0.16	ug/L			11/14/19 18:34	1
Chloroethane	ND		5.0	0.76	ug/L			11/14/19 18:34	1
Chloroform	ND		1.0	0.18	ug/L			11/14/19 18:34	1
Chloromethane	ND		10	0.50	ug/L			11/14/19 18:34	1
Dibromochloromethane	ND		2.0	0.46	ug/L			11/14/19 18:34	1
Dibromomethane	ND		1.0	0.30	ug/L			11/14/19 18:34	1
Dichlorodifluoromethane	ND		5.0	0.28	ug/L			11/14/19 18:34	1
Ethylbenzene	ND		1.0	0.14	ug/L			11/14/19 18:34	1
Isopropylbenzene	ND		1.0	0.16	ug/L			11/14/19 18:34	1
Methylene Chloride	ND		10	4.0	ug/L			11/14/19 18:34	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.16	ug/L			11/14/19 18:34	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: CP236-SB02 (20191105)
Date Collected: 11/05/19 10:45
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12112-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		10	5.1	ug/L			11/14/19 18:34	1
n-Butylbenzene	ND		1.0	0.30	ug/L			11/14/19 18:34	1
o-Xylene	ND		1.0	0.15	ug/L			11/14/19 18:34	1
m,p-Xylene	ND		2.0	0.31	ug/L			11/14/19 18:34	1
p-Isopropyltoluene	ND		1.0	0.22	ug/L			11/14/19 18:34	1
sec-Butylbenzene	ND		1.0	0.19	ug/L			11/14/19 18:34	1
Styrene	ND		1.0	0.15	ug/L			11/14/19 18:34	1
trans-1,2-Dichloroethene	ND		1.0	0.40	ug/L			11/14/19 18:34	1
trans-1,3-Dichloropropene	ND		0.50	0.23	ug/L			11/14/19 18:34	1
tert-Butylbenzene	ND		1.0	0.25	ug/L			11/14/19 18:34	1
Tetrachloroethene	ND		1.0	0.24	ug/L			11/14/19 18:34	1
Toluene	ND		1.0	0.13	ug/L			11/14/19 18:34	1
Trichloroethene	ND		1.0	0.24	ug/L			11/14/19 18:34	1
Trichlorofluoromethane	ND		10	0.28	ug/L			11/14/19 18:34	1
Vinyl acetate	ND		10	2.9	ug/L			11/14/19 18:34	1
Vinyl chloride	ND		0.50	0.16	ug/L			11/14/19 18:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*80 - 129*		*11/14/19 18:34*	*1*
4-Bromofluorobenzene (Surr)	*102*		*77 - 120*		*11/14/19 18:34*	*1*
Dibromofluoromethane	*99*		*80 - 128*		*11/14/19 18:34*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*11/14/19 18:34*	*1*

Client Sample ID: CP236-SB01
Date Collected: 11/05/19 11:15
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12112-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		2.0	0.43	ug/L			11/14/19 19:01	1
1,1,1-Trichloroethane	ND		1.0	0.31	ug/L			11/14/19 19:01	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.17	ug/L			11/14/19 19:01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	0.62	ug/L			11/14/19 19:01	1
1,1,2-Trichloroethane	ND		1.0	0.22	ug/L			11/14/19 19:01	1
1,1-Dichloroethane	ND		1.0	0.28	ug/L			11/14/19 19:01	1
1,1-Dichloroethene	ND		1.0	0.22	ug/L			11/14/19 19:01	1
1,1-Dichloropropene	ND		1.0	0.17	ug/L			11/14/19 19:01	1
1,2,3-Trichlorobenzene	ND		1.0	0.28	ug/L			11/14/19 19:01	1
1,2,3-Trichloropropane	ND		5.0	0.22	ug/L			11/14/19 19:01	1
1,2,4-Trichlorobenzene	ND		1.0	0.34	ug/L			11/14/19 19:01	1
1,2,4-Trimethylbenzene	ND		1.0	0.21	ug/L			11/14/19 19:01	1
1,2-Dibromo-3-Chloropropane	ND		10	2.1	ug/L			11/14/19 19:01	1
1,2-Dibromoethane	ND		1.0	0.27	ug/L			11/14/19 19:01	1
1,2-Dichlorobenzene	ND		1.0	0.14	ug/L			11/14/19 19:01	1
1,2-Dichloroethane	ND		0.50	0.19	ug/L			11/14/19 19:01	1
1,2-Dichloropropane	ND		1.0	0.20	ug/L			11/14/19 19:01	1
1,3,5-Trimethylbenzene	ND		1.0	0.17	ug/L			11/14/19 19:01	1
1,3-Butadiene	ND		25	0.95	ug/L			11/14/19 19:01	1
1,3-Dichlorobenzene	ND		1.0	0.19	ug/L			11/14/19 19:01	1
1,3-Dichloropropane	ND		1.0	0.14	ug/L			11/14/19 19:01	1
1,4-Dichlorobenzene	ND		1.0	0.24	ug/L			11/14/19 19:01	1
2,2-Dichloropropane	ND		1.0	0.44	ug/L			11/14/19 19:01	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: CP236-SB01
Date Collected: 11/05/19 11:15
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12112-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone	ND		20	3.6	ug/L			11/14/19 19:01	1
2-Chlorotoluene	ND		1.0	0.16	ug/L			11/14/19 19:01	1
2-Hexanone	ND		10	5.3	ug/L			11/14/19 19:01	1
4-Chlorotoluene	ND		1.0	0.18	ug/L			11/14/19 19:01	1
Acetone	ND		20	10	ug/L			11/14/19 19:01	1
Benzene	ND		1.0	0.14	ug/L			11/14/19 19:01	1
Bromobenzene	ND		1.0	0.19	ug/L			11/14/19 19:01	1
Bromochloromethane	ND		2.0	0.46	ug/L			11/14/19 19:01	1
Bromodichloromethane	ND		1.0	0.23	ug/L			11/14/19 19:01	1
Bromoform	ND		5.0	1.8	ug/L			11/14/19 19:01	1
Bromomethane	ND		50	19	ug/L			11/14/19 19:01	1
cis-1,2-Dichloroethene	ND		1.0	0.27	ug/L			11/14/19 19:01	1
cis-1,3-Dichloropropene	ND		0.50	0.20	ug/L			11/14/19 19:01	1
Carbon disulfide	ND		10	0.70	ug/L			11/14/19 19:01	1
Carbon tetrachloride	ND		0.50	0.23	ug/L			11/14/19 19:01	1
Chlorobenzene	ND		1.0	0.16	ug/L			11/14/19 19:01	1
Chloroethane	ND		5.0	0.76	ug/L			11/14/19 19:01	1
Chloroform	ND		1.0	0.18	ug/L			11/14/19 19:01	1
Chloromethane	ND		10	0.50	ug/L			11/14/19 19:01	1
Dibromochloromethane	ND		2.0	0.46	ug/L			11/14/19 19:01	1
Dibromomethane	ND		1.0	0.30	ug/L			11/14/19 19:01	1
Dichlorodifluoromethane	ND		5.0	0.28	ug/L			11/14/19 19:01	1
Ethylbenzene	ND		1.0	0.14	ug/L			11/14/19 19:01	1
Isopropylbenzene	ND		1.0	0.16	ug/L			11/14/19 19:01	1
Methylene Chloride	ND		10	4.0	ug/L			11/14/19 19:01	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.16	ug/L			11/14/19 19:01	1
Naphthalene	ND		10	5.1	ug/L			11/14/19 19:01	1
n-Butylbenzene	ND		1.0	0.30	ug/L			11/14/19 19:01	1
o-Xylene	ND		1.0	0.15	ug/L			11/14/19 19:01	1
m,p-Xylene	ND		2.0	0.31	ug/L			11/14/19 19:01	1
p-Isopropyltoluene	ND		1.0	0.22	ug/L			11/14/19 19:01	1
sec-Butylbenzene	ND		1.0	0.19	ug/L			11/14/19 19:01	1
Styrene	ND		1.0	0.15	ug/L			11/14/19 19:01	1
trans-1,2-Dichloroethene	ND		1.0	0.40	ug/L			11/14/19 19:01	1
trans-1,3-Dichloropropene	ND		0.50	0.23	ug/L			11/14/19 19:01	1
tert-Butylbenzene	ND		1.0	0.25	ug/L			11/14/19 19:01	1
Tetrachloroethene	ND		1.0	0.24	ug/L			11/14/19 19:01	1
Toluene	ND		1.0	0.13	ug/L			11/14/19 19:01	1
Trichloroethene	ND		1.0	0.24	ug/L			11/14/19 19:01	1
Trichlorofluoromethane	ND		10	0.28	ug/L			11/14/19 19:01	1
Vinyl acetate	ND		10	2.9	ug/L			11/14/19 19:01	1
Vinyl chloride	ND		0.50	0.16	ug/L			11/14/19 19:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*80 - 129*		*11/14/19 19:01*	*1*
4-Bromofluorobenzene (Surr)	*103*		*77 - 120*		*11/14/19 19:01*	*1*
Dibromofluoromethane	*99*		*80 - 128*		*11/14/19 19:01*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*11/14/19 19:01*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: DUP01 (20191105)
Date Collected: 11/05/19 00:00
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12112-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		2.0	0.43	ug/L			11/14/19 19:28	1
1,1,1-Trichloroethane	ND		1.0	0.31	ug/L			11/14/19 19:28	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.17	ug/L			11/14/19 19:28	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	0.62	ug/L			11/14/19 19:28	1
1,1,2-Trichloroethane	ND		1.0	0.22	ug/L			11/14/19 19:28	1
1,1-Dichloroethane	ND		1.0	0.28	ug/L			11/14/19 19:28	1
1,1-Dichloroethene	ND		1.0	0.22	ug/L			11/14/19 19:28	1
1,1-Dichloropropene	ND		1.0	0.17	ug/L			11/14/19 19:28	1
1,2,3-Trichlorobenzene	ND		1.0	0.28	ug/L			11/14/19 19:28	1
1,2,3-Trichloropropane	ND		5.0	0.22	ug/L			11/14/19 19:28	1
1,2,4-Trichlorobenzene	ND		1.0	0.34	ug/L			11/14/19 19:28	1
1,2,4-Trimethylbenzene	ND		1.0	0.21	ug/L			11/14/19 19:28	1
1,2-Dibromo-3-Chloropropane	ND		10	2.1	ug/L			11/14/19 19:28	1
1,2-Dibromoethane	ND		1.0	0.27	ug/L			11/14/19 19:28	1
1,2-Dichlorobenzene	ND		1.0	0.14	ug/L			11/14/19 19:28	1
1,2-Dichloroethane	ND		0.50	0.19	ug/L			11/14/19 19:28	1
1,2-Dichloropropane	ND		1.0	0.20	ug/L			11/14/19 19:28	1
1,3,5-Trimethylbenzene	ND		1.0	0.17	ug/L			11/14/19 19:28	1
1,3-Butadiene	ND		25	0.95	ug/L			11/14/19 19:28	1
1,3-Dichlorobenzene	ND		1.0	0.19	ug/L			11/14/19 19:28	1
1,3-Dichloropropane	ND		1.0	0.14	ug/L			11/14/19 19:28	1
1,4-Dichlorobenzene	ND		1.0	0.24	ug/L			11/14/19 19:28	1
2,2-Dichloropropane	ND		1.0	0.44	ug/L			11/14/19 19:28	1
2-Butanone	ND		20	3.6	ug/L			11/14/19 19:28	1
2-Chlorotoluene	ND		1.0	0.16	ug/L			11/14/19 19:28	1
2-Hexanone	ND		10	5.3	ug/L			11/14/19 19:28	1
4-Chlorotoluene	ND		1.0	0.18	ug/L			11/14/19 19:28	1
Acetone	**14**	**J**	20	10	ug/L			11/14/19 19:28	1
Benzene	ND		1.0	0.14	ug/L			11/14/19 19:28	1
Bromobenzene	ND		1.0	0.19	ug/L			11/14/19 19:28	1
Bromochloromethane	ND		2.0	0.46	ug/L			11/14/19 19:28	1
Bromodichloromethane	ND		1.0	0.23	ug/L			11/14/19 19:28	1
Bromoform	ND		5.0	1.8	ug/L			11/14/19 19:28	1
Bromomethane	ND		50	19	ug/L			11/14/19 19:28	1
cis-1,2-Dichloroethene	ND		1.0	0.27	ug/L			11/14/19 19:28	1
cis-1,3-Dichloropropene	ND		0.50	0.20	ug/L			11/14/19 19:28	1
Carbon disulfide	ND		10	0.70	ug/L			11/14/19 19:28	1
Carbon tetrachloride	ND		0.50	0.23	ug/L			11/14/19 19:28	1
Chlorobenzene	ND		1.0	0.16	ug/L			11/14/19 19:28	1
Chloroethane	ND		5.0	0.76	ug/L			11/14/19 19:28	1
Chloroform	ND		1.0	0.18	ug/L			11/14/19 19:28	1
Chloromethane	ND		10	0.50	ug/L			11/14/19 19:28	1
Dibromochloromethane	ND		2.0	0.46	ug/L			11/14/19 19:28	1
Dibromomethane	ND		1.0	0.30	ug/L			11/14/19 19:28	1
Dichlorodifluoromethane	ND		5.0	0.28	ug/L			11/14/19 19:28	1
Ethylbenzene	ND		1.0	0.14	ug/L			11/14/19 19:28	1
Isopropylbenzene	ND		1.0	0.16	ug/L			11/14/19 19:28	1
Methylene Chloride	ND		10	4.0	ug/L			11/14/19 19:28	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.16	ug/L			11/14/19 19:28	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: DUP01 (20191105)
Date Collected: 11/05/19 00:00
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12112-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		10	5.1	ug/L			11/14/19 19:28	1
n-Butylbenzene	ND		1.0	0.30	ug/L			11/14/19 19:28	1
o-Xylene	ND		1.0	0.15	ug/L			11/14/19 19:28	1
m,p-Xylene	ND		2.0	0.31	ug/L			11/14/19 19:28	1
p-Isopropyltoluene	ND		1.0	0.22	ug/L			11/14/19 19:28	1
sec-Butylbenzene	ND		1.0	0.19	ug/L			11/14/19 19:28	1
Styrene	ND		1.0	0.15	ug/L			11/14/19 19:28	1
trans-1,2-Dichloroethene	ND		1.0	0.40	ug/L			11/14/19 19:28	1
trans-1,3-Dichloropropene	ND		0.50	0.23	ug/L			11/14/19 19:28	1
tert-Butylbenzene	ND		1.0	0.25	ug/L			11/14/19 19:28	1
Tetrachloroethene	ND		1.0	0.24	ug/L			11/14/19 19:28	1
Toluene	ND		1.0	0.13	ug/L			11/14/19 19:28	1
Trichloroethene	ND		1.0	0.24	ug/L			11/14/19 19:28	1
Trichlorofluoromethane	ND		10	0.28	ug/L			11/14/19 19:28	1
Vinyl acetate	ND		10	2.9	ug/L			11/14/19 19:28	1
Vinyl chloride	ND		0.50	0.16	ug/L			11/14/19 19:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*80 - 129*		*11/14/19 19:28*	*1*
4-Bromofluorobenzene (Surr)	*101*		*77 - 120*		*11/14/19 19:28*	*1*
Dibromofluoromethane	*95*		*80 - 128*		*11/14/19 19:28*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*11/14/19 19:28*	*1*

Client Sample ID: CP240-SB02 (20191105)
Date Collected: 11/05/19 14:25
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12112-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		2.0	0.43	ug/L			11/14/19 19:54	1
1,1,1-Trichloroethane	ND		1.0	0.31	ug/L			11/14/19 19:54	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.17	ug/L			11/14/19 19:54	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	0.62	ug/L			11/14/19 19:54	1
1,1,2-Trichloroethane	ND		1.0	0.22	ug/L			11/14/19 19:54	1
1,1-Dichloroethane	ND		1.0	0.28	ug/L			11/14/19 19:54	1
1,1-Dichloroethene	ND		1.0	0.22	ug/L			11/14/19 19:54	1
1,1-Dichloropropene	ND		1.0	0.17	ug/L			11/14/19 19:54	1
1,2,3-Trichlorobenzene	ND		1.0	0.28	ug/L			11/14/19 19:54	1
1,2,3-Trichloropropane	ND		5.0	0.22	ug/L			11/14/19 19:54	1
1,2,4-Trichlorobenzene	ND		1.0	0.34	ug/L			11/14/19 19:54	1
1,2,4-Trimethylbenzene	ND		1.0	0.21	ug/L			11/14/19 19:54	1
1,2-Dibromo-3-Chloropropane	ND		10	2.1	ug/L			11/14/19 19:54	1
1,2-Dibromoethane	ND		1.0	0.27	ug/L			11/14/19 19:54	1
1,2-Dichlorobenzene	ND		1.0	0.14	ug/L			11/14/19 19:54	1
1,2-Dichloroethane	ND		0.50	0.19	ug/L			11/14/19 19:54	1
1,2-Dichloropropane	ND		1.0	0.20	ug/L			11/14/19 19:54	1
1,3,5-Trimethylbenzene	ND		1.0	0.17	ug/L			11/14/19 19:54	1
1,3-Butadiene	ND		25	0.95	ug/L			11/14/19 19:54	1
1,3-Dichlorobenzene	ND		1.0	0.19	ug/L			11/14/19 19:54	1
1,3-Dichloropropane	ND		1.0	0.14	ug/L			11/14/19 19:54	1
1,4-Dichlorobenzene	ND		1.0	0.24	ug/L			11/14/19 19:54	1
2,2-Dichloropropane	ND		1.0	0.44	ug/L			11/14/19 19:54	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: CP240-SB02 (20191105)
Date Collected: 11/05/19 14:25
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12112-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone	ND		20	3.6	ug/L			11/14/19 19:54	1
2-Chlorotoluene	ND		1.0	0.16	ug/L			11/14/19 19:54	1
2-Hexanone	ND		10	5.3	ug/L			11/14/19 19:54	1
4-Chlorotoluene	ND		1.0	0.18	ug/L			11/14/19 19:54	1
Acetone	ND		20	10	ug/L			11/14/19 19:54	1
Benzene	ND		1.0	0.14	ug/L			11/14/19 19:54	1
Bromobenzene	ND		1.0	0.19	ug/L			11/14/19 19:54	1
Bromochloromethane	ND		2.0	0.46	ug/L			11/14/19 19:54	1
Bromodichloromethane	ND		1.0	0.23	ug/L			11/14/19 19:54	1
Bromoform	ND		5.0	1.8	ug/L			11/14/19 19:54	1
Bromomethane	ND		50	19	ug/L			11/14/19 19:54	1
cis-1,2-Dichloroethene	ND		1.0	0.27	ug/L			11/14/19 19:54	1
cis-1,3-Dichloropropene	ND		0.50	0.20	ug/L			11/14/19 19:54	1
Carbon disulfide	ND		10	0.70	ug/L			11/14/19 19:54	1
Carbon tetrachloride	ND		0.50	0.23	ug/L			11/14/19 19:54	1
Chlorobenzene	ND		1.0	0.16	ug/L			11/14/19 19:54	1
Chloroethane	ND		5.0	0.76	ug/L			11/14/19 19:54	1
Chloroform	ND		1.0	0.18	ug/L			11/14/19 19:54	1
Chloromethane	ND		10	0.50	ug/L			11/14/19 19:54	1
Dibromochloromethane	ND		2.0	0.46	ug/L			11/14/19 19:54	1
Dibromomethane	ND		1.0	0.30	ug/L			11/14/19 19:54	1
Dichlorodifluoromethane	ND		5.0	0.28	ug/L			11/14/19 19:54	1
Ethylbenzene	ND		1.0	0.14	ug/L			11/14/19 19:54	1
Isopropylbenzene	ND		1.0	0.16	ug/L			11/14/19 19:54	1
Methylene Chloride	ND		10	4.0	ug/L			11/14/19 19:54	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.16	ug/L			11/14/19 19:54	1
Naphthalene	ND		10	5.1	ug/L			11/14/19 19:54	1
n-Butylbenzene	ND		1.0	0.30	ug/L			11/14/19 19:54	1
o-Xylene	ND		1.0	0.15	ug/L			11/14/19 19:54	1
m,p-Xylene	ND		2.0	0.31	ug/L			11/14/19 19:54	1
p-Isopropyltoluene	ND		1.0	0.22	ug/L			11/14/19 19:54	1
sec-Butylbenzene	ND		1.0	0.19	ug/L			11/14/19 19:54	1
Styrene	ND		1.0	0.15	ug/L			11/14/19 19:54	1
trans-1,2-Dichloroethene	ND		1.0	0.40	ug/L			11/14/19 19:54	1
trans-1,3-Dichloropropene	ND		0.50	0.23	ug/L			11/14/19 19:54	1
tert-Butylbenzene	ND		1.0	0.25	ug/L			11/14/19 19:54	1
Tetrachloroethene	ND		1.0	0.24	ug/L			11/14/19 19:54	1
Toluene	ND		1.0	0.13	ug/L			11/14/19 19:54	1
Trichloroethene	ND		1.0	0.24	ug/L			11/14/19 19:54	1
Trichlorofluoromethane	ND		10	0.28	ug/L			11/14/19 19:54	1
Vinyl acetate	ND		10	2.9	ug/L			11/14/19 19:54	1
Vinyl chloride	ND		0.50	0.16	ug/L			11/14/19 19:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*80 - 129*		*11/14/19 19:54*	*1*
4-Bromofluorobenzene (Surr)	*103*		*77 - 120*		*11/14/19 19:54*	*1*
Dibromofluoromethane	*97*		*80 - 128*		*11/14/19 19:54*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*11/14/19 19:54*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: CP240-SB01
Date Collected: 11/05/19 14:50
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12112-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		2.0	0.43	ug/L			11/14/19 20:21	1
1,1,1-Trichloroethane	ND		1.0	0.31	ug/L			11/14/19 20:21	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.17	ug/L			11/14/19 20:21	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	0.62	ug/L			11/14/19 20:21	1
1,1,2-Trichloroethane	ND		1.0	0.22	ug/L			11/14/19 20:21	1
1,1-Dichloroethane	ND		1.0	0.28	ug/L			11/14/19 20:21	1
1,1-Dichloroethene	ND		1.0	0.22	ug/L			11/14/19 20:21	1
1,1-Dichloropropene	ND		1.0	0.17	ug/L			11/14/19 20:21	1
1,2,3-Trichlorobenzene	ND		1.0	0.28	ug/L			11/14/19 20:21	1
1,2,3-Trichloropropane	ND		5.0	0.22	ug/L			11/14/19 20:21	1
1,2,4-Trichlorobenzene	ND		1.0	0.34	ug/L			11/14/19 20:21	1
1,2,4-Trimethylbenzene	ND		1.0	0.21	ug/L			11/14/19 20:21	1
1,2-Dibromo-3-Chloropropane	ND		10	2.1	ug/L			11/14/19 20:21	1
1,2-Dibromoethane	ND		1.0	0.27	ug/L			11/14/19 20:21	1
1,2-Dichlorobenzene	ND		1.0	0.14	ug/L			11/14/19 20:21	1
1,2-Dichloroethane	ND		0.50	0.19	ug/L			11/14/19 20:21	1
1,2-Dichloropropane	ND		1.0	0.20	ug/L			11/14/19 20:21	1
1,3,5-Trimethylbenzene	ND		1.0	0.17	ug/L			11/14/19 20:21	1
1,3-Butadiene	ND		25	0.95	ug/L			11/14/19 20:21	1
1,3-Dichlorobenzene	ND		1.0	0.19	ug/L			11/14/19 20:21	1
1,3-Dichloropropane	ND		1.0	0.14	ug/L			11/14/19 20:21	1
1,4-Dichlorobenzene	ND		1.0	0.24	ug/L			11/14/19 20:21	1
2,2-Dichloropropane	ND		1.0	0.44	ug/L			11/14/19 20:21	1
2-Butanone	ND		20	3.6	ug/L			11/14/19 20:21	1
2-Chlorotoluene	ND		1.0	0.16	ug/L			11/14/19 20:21	1
2-Hexanone	ND		10	5.3	ug/L			11/14/19 20:21	1
4-Chlorotoluene	ND		1.0	0.18	ug/L			11/14/19 20:21	1
Acetone	ND		20	10	ug/L			11/14/19 20:21	1
Benzene	ND		1.0	0.14	ug/L			11/14/19 20:21	1
Bromobenzene	ND		1.0	0.19	ug/L			11/14/19 20:21	1
Bromochloromethane	ND		2.0	0.46	ug/L			11/14/19 20:21	1
Bromodichloromethane	ND		1.0	0.23	ug/L			11/14/19 20:21	1
Bromoform	ND		5.0	1.8	ug/L			11/14/19 20:21	1
Bromomethane	ND		50	19	ug/L			11/14/19 20:21	1
cis-1,2-Dichloroethene	ND		1.0	0.27	ug/L			11/14/19 20:21	1
cis-1,3-Dichloropropene	ND		0.50	0.20	ug/L			11/14/19 20:21	1
Carbon disulfide	ND		10	0.70	ug/L			11/14/19 20:21	1
Carbon tetrachloride	ND		0.50	0.23	ug/L			11/14/19 20:21	1
Chlorobenzene	ND		1.0	0.16	ug/L			11/14/19 20:21	1
Chloroethane	ND		5.0	0.76	ug/L			11/14/19 20:21	1
Chloroform	ND		1.0	0.18	ug/L			11/14/19 20:21	1
Chloromethane	ND		10	0.50	ug/L			11/14/19 20:21	1
Dibromochloromethane	ND		2.0	0.46	ug/L			11/14/19 20:21	1
Dibromomethane	ND		1.0	0.30	ug/L			11/14/19 20:21	1
Dichlorodifluoromethane	ND		5.0	0.28	ug/L			11/14/19 20:21	1
Ethylbenzene	ND		1.0	0.14	ug/L			11/14/19 20:21	1
Isopropylbenzene	ND		1.0	0.16	ug/L			11/14/19 20:21	1
Methylene Chloride	ND		10	4.0	ug/L			11/14/19 20:21	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.16	ug/L			11/14/19 20:21	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: CP240-SB01
Date Collected: 11/05/19 14:50
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12112-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		10	5.1	ug/L			11/14/19 20:21	1
n-Butylbenzene	ND		1.0	0.30	ug/L			11/14/19 20:21	1
o-Xylene	ND		1.0	0.15	ug/L			11/14/19 20:21	1
m,p-Xylene	ND		2.0	0.31	ug/L			11/14/19 20:21	1
p-Isopropyltoluene	ND		1.0	0.22	ug/L			11/14/19 20:21	1
sec-Butylbenzene	ND		1.0	0.19	ug/L			11/14/19 20:21	1
Styrene	ND		1.0	0.15	ug/L			11/14/19 20:21	1
trans-1,2-Dichloroethene	ND		1.0	0.40	ug/L			11/14/19 20:21	1
trans-1,3-Dichloropropene	ND		0.50	0.23	ug/L			11/14/19 20:21	1
tert-Butylbenzene	ND		1.0	0.25	ug/L			11/14/19 20:21	1
Tetrachloroethene	ND		1.0	0.24	ug/L			11/14/19 20:21	1
Toluene	ND		1.0	0.13	ug/L			11/14/19 20:21	1
Trichloroethene	ND		1.0	0.24	ug/L			11/14/19 20:21	1
Trichlorofluoromethane	ND		10	0.28	ug/L			11/14/19 20:21	1
Vinyl acetate	ND		10	2.9	ug/L			11/14/19 20:21	1
Vinyl chloride	ND		0.50	0.16	ug/L			11/14/19 20:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*80 - 129*		*11/14/19 20:21*	*1*
4-Bromofluorobenzene (Surr)	*101*		*77 - 120*		*11/14/19 20:21*	*1*
Dibromofluoromethane	*98*		*80 - 128*		*11/14/19 20:21*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*11/14/19 20:21*	*1*

Client Sample ID: EB01 (20191105)
Date Collected: 11/05/19 15:15
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12112-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		2.0	0.43	ug/L			11/14/19 17:41	1
1,1,1-Trichloroethane	ND		1.0	0.31	ug/L			11/14/19 17:41	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.17	ug/L			11/14/19 17:41	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	0.62	ug/L			11/14/19 17:41	1
1,1,2-Trichloroethane	ND		1.0	0.22	ug/L			11/14/19 17:41	1
1,1-Dichloroethane	ND		1.0	0.28	ug/L			11/14/19 17:41	1
1,1-Dichloroethene	ND		1.0	0.22	ug/L			11/14/19 17:41	1
1,1-Dichloropropene	ND		1.0	0.17	ug/L			11/14/19 17:41	1
1,2,3-Trichlorobenzene	ND		1.0	0.28	ug/L			11/14/19 17:41	1
1,2,3-Trichloropropane	ND		5.0	0.22	ug/L			11/14/19 17:41	1
1,2,4-Trichlorobenzene	ND		1.0	0.34	ug/L			11/14/19 17:41	1
1,2,4-Trimethylbenzene	ND		1.0	0.21	ug/L			11/14/19 17:41	1
1,2-Dibromo-3-Chloropropane	ND		10	2.1	ug/L			11/14/19 17:41	1
1,2-Dibromoethane	ND		1.0	0.27	ug/L			11/14/19 17:41	1
1,2-Dichlorobenzene	ND		1.0	0.14	ug/L			11/14/19 17:41	1
1,2-Dichloroethane	ND		0.50	0.19	ug/L			11/14/19 17:41	1
1,2-Dichloropropane	ND		1.0	0.20	ug/L			11/14/19 17:41	1
1,3,5-Trimethylbenzene	ND		1.0	0.17	ug/L			11/14/19 17:41	1
1,3-Butadiene	ND		25	0.95	ug/L			11/14/19 17:41	1
1,3-Dichlorobenzene	ND		1.0	0.19	ug/L			11/14/19 17:41	1
1,3-Dichloropropane	ND		1.0	0.14	ug/L			11/14/19 17:41	1
1,4-Dichlorobenzene	ND		1.0	0.24	ug/L			11/14/19 17:41	1
2,2-Dichloropropane	ND		1.0	0.44	ug/L			11/14/19 17:41	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: EB01 (20191105)
Date Collected: 11/05/19 15:15
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12112-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone	ND		20	3.6	ug/L			11/14/19 17:41	1
2-Chlorotoluene	ND		1.0	0.16	ug/L			11/14/19 17:41	1
2-Hexanone	ND		10	5.3	ug/L			11/14/19 17:41	1
4-Chlorotoluene	ND		1.0	0.18	ug/L			11/14/19 17:41	1
Acetone	ND		20	10	ug/L			11/14/19 17:41	1
Benzene	ND		1.0	0.14	ug/L			11/14/19 17:41	1
Bromobenzene	ND		1.0	0.19	ug/L			11/14/19 17:41	1
Bromochloromethane	ND		2.0	0.46	ug/L			11/14/19 17:41	1
Bromodichloromethane	ND		1.0	0.23	ug/L			11/14/19 17:41	1
Bromoform	ND		5.0	1.8	ug/L			11/14/19 17:41	1
Bromomethane	ND		50	19	ug/L			11/14/19 17:41	1
cis-1,2-Dichloroethene	ND		1.0	0.27	ug/L			11/14/19 17:41	1
cis-1,3-Dichloropropene	ND		0.50	0.20	ug/L			11/14/19 17:41	1
Carbon disulfide	ND		10	0.70	ug/L			11/14/19 17:41	1
Carbon tetrachloride	ND		0.50	0.23	ug/L			11/14/19 17:41	1
Chlorobenzene	ND		1.0	0.16	ug/L			11/14/19 17:41	1
Chloroethane	ND		5.0	0.76	ug/L			11/14/19 17:41	1
Chloroform	ND		1.0	0.18	ug/L			11/14/19 17:41	1
Chloromethane	ND		10	0.50	ug/L			11/14/19 17:41	1
Dibromochloromethane	ND		2.0	0.46	ug/L			11/14/19 17:41	1
Dibromomethane	ND		1.0	0.30	ug/L			11/14/19 17:41	1
Dichlorodifluoromethane	ND		5.0	0.28	ug/L			11/14/19 17:41	1
Ethylbenzene	ND		1.0	0.14	ug/L			11/14/19 17:41	1
Isopropylbenzene	ND		1.0	0.16	ug/L			11/14/19 17:41	1
Methylene Chloride	ND		10	4.0	ug/L			11/14/19 17:41	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.16	ug/L			11/14/19 17:41	1
Naphthalene	ND		10	5.1	ug/L			11/14/19 17:41	1
n-Butylbenzene	ND		1.0	0.30	ug/L			11/14/19 17:41	1
o-Xylene	ND		1.0	0.15	ug/L			11/14/19 17:41	1
m,p-Xylene	ND		2.0	0.31	ug/L			11/14/19 17:41	1
p-Isopropyltoluene	ND		1.0	0.22	ug/L			11/14/19 17:41	1
sec-Butylbenzene	ND		1.0	0.19	ug/L			11/14/19 17:41	1
Styrene	ND		1.0	0.15	ug/L			11/14/19 17:41	1
trans-1,2-Dichloroethene	ND		1.0	0.40	ug/L			11/14/19 17:41	1
trans-1,3-Dichloropropene	ND		0.50	0.23	ug/L			11/14/19 17:41	1
tert-Butylbenzene	ND		1.0	0.25	ug/L			11/14/19 17:41	1
Tetrachloroethene	ND		1.0	0.24	ug/L			11/14/19 17:41	1
Toluene	ND		1.0	0.13	ug/L			11/14/19 17:41	1
Trichloroethene	ND		1.0	0.24	ug/L			11/14/19 17:41	1
Trichlorofluoromethane	ND		10	0.28	ug/L			11/14/19 17:41	1
Vinyl acetate	ND		10	2.9	ug/L			11/14/19 17:41	1
Vinyl chloride	ND		0.50	0.16	ug/L			11/14/19 17:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*80 - 129*		*11/14/19 17:41*	*1*
4-Bromofluorobenzene (Surr)	*103*		*77 - 120*		*11/14/19 17:41*	*1*
Dibromofluoromethane	*99*		*80 - 128*		*11/14/19 17:41*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*11/14/19 17:41*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: Trip Blank
Date Collected: 11/05/19 00:00
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12112-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		2.0	0.43	ug/L			11/14/19 17:14	1
1,1,1-Trichloroethane	ND		1.0	0.31	ug/L			11/14/19 17:14	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.17	ug/L			11/14/19 17:14	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	0.62	ug/L			11/14/19 17:14	1
1,1,2-Trichloroethane	ND		1.0	0.22	ug/L			11/14/19 17:14	1
1,1-Dichloroethane	ND		1.0	0.28	ug/L			11/14/19 17:14	1
1,1-Dichloroethene	ND		1.0	0.22	ug/L			11/14/19 17:14	1
1,1-Dichloropropene	ND		1.0	0.17	ug/L			11/14/19 17:14	1
1,2,3-Trichlorobenzene	ND		1.0	0.28	ug/L			11/14/19 17:14	1
1,2,3-Trichloropropane	ND		5.0	0.22	ug/L			11/14/19 17:14	1
1,2,4-Trichlorobenzene	ND		1.0	0.34	ug/L			11/14/19 17:14	1
1,2,4-Trimethylbenzene	ND		1.0	0.21	ug/L			11/14/19 17:14	1
1,2-Dibromo-3-Chloropropane	ND		10	2.1	ug/L			11/14/19 17:14	1
1,2-Dibromoethane	ND		1.0	0.27	ug/L			11/14/19 17:14	1
1,2-Dichlorobenzene	ND		1.0	0.14	ug/L			11/14/19 17:14	1
1,2-Dichloroethane	ND		0.50	0.19	ug/L			11/14/19 17:14	1
1,2-Dichloropropane	ND		1.0	0.20	ug/L			11/14/19 17:14	1
1,3,5-Trimethylbenzene	ND		1.0	0.17	ug/L			11/14/19 17:14	1
1,3-Butadiene	ND		25	0.95	ug/L			11/14/19 17:14	1
1,3-Dichlorobenzene	ND		1.0	0.19	ug/L			11/14/19 17:14	1
1,3-Dichloropropane	ND		1.0	0.14	ug/L			11/14/19 17:14	1
1,4-Dichlorobenzene	ND		1.0	0.24	ug/L			11/14/19 17:14	1
2,2-Dichloropropane	ND		1.0	0.44	ug/L			11/14/19 17:14	1
2-Butanone	ND		20	3.6	ug/L			11/14/19 17:14	1
2-Chlorotoluene	ND		1.0	0.16	ug/L			11/14/19 17:14	1
2-Hexanone	ND		10	5.3	ug/L			11/14/19 17:14	1
4-Chlorotoluene	ND		1.0	0.18	ug/L			11/14/19 17:14	1
Acetone	ND		20	10	ug/L			11/14/19 17:14	1
Benzene	ND		1.0	0.14	ug/L			11/14/19 17:14	1
Bromobenzene	ND		1.0	0.19	ug/L			11/14/19 17:14	1
Bromochloromethane	ND		2.0	0.46	ug/L			11/14/19 17:14	1
Bromodichloromethane	ND		1.0	0.23	ug/L			11/14/19 17:14	1
Bromoform	ND		5.0	1.8	ug/L			11/14/19 17:14	1
Bromomethane	ND		50	19	ug/L			11/14/19 17:14	1
cis-1,2-Dichloroethene	ND		1.0	0.27	ug/L			11/14/19 17:14	1
cis-1,3-Dichloropropene	ND		0.50	0.20	ug/L			11/14/19 17:14	1
Carbon disulfide	ND		10	0.70	ug/L			11/14/19 17:14	1
Carbon tetrachloride	ND		0.50	0.23	ug/L			11/14/19 17:14	1
Chlorobenzene	ND		1.0	0.16	ug/L			11/14/19 17:14	1
Chloroethane	ND		5.0	0.76	ug/L			11/14/19 17:14	1
Chloroform	ND		1.0	0.18	ug/L			11/14/19 17:14	1
Chloromethane	ND		10	0.50	ug/L			11/14/19 17:14	1
Dibromochloromethane	ND		2.0	0.46	ug/L			11/14/19 17:14	1
Dibromomethane	ND		1.0	0.30	ug/L			11/14/19 17:14	1
Dichlorodifluoromethane	ND		5.0	0.28	ug/L			11/14/19 17:14	1
Ethylbenzene	ND		1.0	0.14	ug/L			11/14/19 17:14	1
Isopropylbenzene	ND		1.0	0.16	ug/L			11/14/19 17:14	1
Methylene Chloride	ND		10	4.0	ug/L			11/14/19 17:14	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.16	ug/L			11/14/19 17:14	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: Trip Blank
Date Collected: 11/05/19 00:00
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12112-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		10	5.1	ug/L			11/14/19 17:14	1
n-Butylbenzene	ND		1.0	0.30	ug/L			11/14/19 17:14	1
o-Xylene	ND		1.0	0.15	ug/L			11/14/19 17:14	1
m,p-Xylene	ND		2.0	0.31	ug/L			11/14/19 17:14	1
p-Isopropyltoluene	ND		1.0	0.22	ug/L			11/14/19 17:14	1
sec-Butylbenzene	ND		1.0	0.19	ug/L			11/14/19 17:14	1
Styrene	ND		1.0	0.15	ug/L			11/14/19 17:14	1
trans-1,2-Dichloroethene	ND		1.0	0.40	ug/L			11/14/19 17:14	1
trans-1,3-Dichloropropene	ND		0.50	0.23	ug/L			11/14/19 17:14	1
tert-Butylbenzene	ND		1.0	0.25	ug/L			11/14/19 17:14	1
Tetrachloroethene	ND		1.0	0.24	ug/L			11/14/19 17:14	1
Toluene	ND		1.0	0.13	ug/L			11/14/19 17:14	1
Trichloroethene	ND		1.0	0.24	ug/L			11/14/19 17:14	1
Trichlorofluoromethane	ND		10	0.28	ug/L			11/14/19 17:14	1
Vinyl acetate	ND		10	2.9	ug/L			11/14/19 17:14	1
Vinyl chloride	ND		0.50	0.16	ug/L			11/14/19 17:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*80 - 129*		*11/14/19 17:14*	*1*
4-Bromofluorobenzene (Surr)	*101*		*77 - 120*		*11/14/19 17:14*	*1*
Dibromofluoromethane	*97*		*80 - 128*		*11/14/19 17:14*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*11/14/19 17:14*	*1*

Method: 8015B - Gasoline Range Organics - (GC)

Client Sample ID: CP236-SB02 (20191105)
Date Collected: 11/05/19 10:45
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12112-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Gasoline (C4-C13)	ND		50	29	ug/L			11/07/19 19:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*70*		*38 - 134*		*11/07/19 19:56*	*1*

Client Sample ID: CP236-SB01
Date Collected: 11/05/19 11:15
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12112-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Gasoline (C4-C13)	ND		50	29	ug/L			11/07/19 20:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*66*		*38 - 134*		*11/07/19 20:24*	*1*

Client Sample ID: DUP01 (20191105)
Date Collected: 11/05/19 00:00
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12112-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Gasoline (C4-C13)	ND		50	29	ug/L			11/07/19 20:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*70*		*38 - 134*		*11/07/19 20:53*	*1*

Client Sample ID: CP240-SB02 (20191105)
Date Collected: 11/05/19 14:25
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12112-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Gasoline (C4-C13)	ND		50	29	ug/L			11/07/19 21:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*70*		*38 - 134*		*11/07/19 21:21*	*1*

Client Sample ID: CP240-SB01
Date Collected: 11/05/19 14:50
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12112-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Gasoline (C4-C13)	ND		50	29	ug/L			11/07/19 21:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*72*		*38 - 134*		*11/07/19 21:49*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Client Sample ID: CP236-SB02 (20191105)
Date Collected: 11/05/19 10:45
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12112-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Diesel (C10-C28)	33	J Z	51	17	ug/L		11/08/19 09:16	11/11/19 20:48	1
TPH as Motor Oil (C17-C44)	21	J Z	260	20	ug/L		11/08/19 09:16	11/11/19 20:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane (Surr)	*109*		*68 - 140*	*11/08/19 09:16*	*11/11/19 20:48*	*1*

Client Sample ID: CP236-SB01
Date Collected: 11/05/19 11:15
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12112-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Diesel (C10-C28)	31	J Z	54	18	ug/L		11/08/19 09:16	11/11/19 21:08	1
TPH as Motor Oil (C17-C44)	ND		270	21	ug/L		11/08/19 09:16	11/11/19 21:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane (Surr)	*118*		*68 - 140*	*11/08/19 09:16*	*11/11/19 21:08*	*1*

Client Sample ID: DUP01 (20191105)
Date Collected: 11/05/19 00:00
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12112-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Diesel (C10-C28)	33	J Z	56	19	ug/L		11/08/19 09:16	11/11/19 21:28	1
TPH as Motor Oil (C17-C44)	ND		280	21	ug/L		11/08/19 09:16	11/11/19 21:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane (Surr)	*117*		*68 - 140*	*11/08/19 09:16*	*11/11/19 21:28*	*1*

Client Sample ID: CP240-SB02 (20191105)
Date Collected: 11/05/19 14:25
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12112-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Diesel (C10-C28)	41	J Z	51	17	ug/L		11/08/19 09:16	11/11/19 21:48	1
TPH as Motor Oil (C17-C44)	28	J Z	260	20	ug/L		11/08/19 09:16	11/11/19 21:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane (Surr)	*111*		*68 - 140*	*11/08/19 09:16*	*11/11/19 21:48*	*1*

Client Sample ID: CP240-SB01
Date Collected: 11/05/19 14:50
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12112-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Diesel (C10-C28)	46	J Z	51	17	ug/L		11/08/19 09:16	11/11/19 22:07	1
TPH as Motor Oil (C17-C44)	44	J Z	260	20	ug/L		11/08/19 09:16	11/11/19 22:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane (Surr)	*118*		*68 - 140*	*11/08/19 09:16*	*11/11/19 22:07*	*1*

Method: 6010B - Metals (ICP)

Client Sample ID: CP236-SB02 (20191105)
Date Collected: 11/05/19 10:45
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12112-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	**0.00392**	**J**	0.0100	0.00298	mg/L		11/11/19 08:00	11/12/19 14:21	1
Arsenic	**0.216**		0.100	0.0181	mg/L		11/11/19 08:00	11/12/19 14:21	1
Barium	**0.105**		0.0100	0.00308	mg/L		11/11/19 08:00	11/12/19 14:21	1
Beryllium	**0.00322**	**J**	0.0100	0.00252	mg/L		11/11/19 08:00	11/12/19 14:21	1
Cadmium	**0.00704**	**J**	0.0100	0.00210	mg/L		11/11/19 08:00	11/12/19 14:21	1
Cobalt	**0.0559**		0.0500	0.00362	mg/L		11/11/19 08:00	11/12/19 14:21	1
Chromium	**0.0343**	**J**	0.0500	0.00688	mg/L		11/11/19 08:00	11/12/19 14:21	1
Copper	**0.0488**	**J**	0.0500	0.00614	mg/L		11/11/19 08:00	11/12/19 14:21	1
Molybdenum	ND		0.0500	0.00509	mg/L		11/11/19 08:00	11/12/19 14:21	1
Nickel	**0.125**		0.0500	0.00784	mg/L		11/11/19 08:00	11/12/19 14:21	1
Antimony	ND		0.100	0.0329	mg/L		11/11/19 08:00	11/12/19 14:21	1
Selenium	ND		0.100	0.0244	mg/L		11/11/19 08:00	11/12/19 14:21	1
Thallium	**0.0295**	**J**	0.0500	0.0161	mg/L		11/11/19 08:00	11/12/19 14:21	1
Vanadium	ND		0.0100	0.00297	mg/L		11/11/19 08:00	11/12/19 14:21	1
Zinc	**0.110**	**J**	0.250	0.0682	mg/L		11/11/19 08:00	11/12/19 14:21	1
Lead	**0.0430**	**J**	0.0500	0.00821	mg/L		11/11/19 08:00	11/12/19 14:21	1

Client Sample ID: CP236-SB01
Date Collected: 11/05/19 11:15
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12112-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0100	0.00298	mg/L		11/11/19 08:00	11/12/19 14:23	1
Arsenic	**0.105**		0.100	0.0181	mg/L		11/11/19 08:00	11/12/19 14:23	1
Barium	**0.0358**		0.0100	0.00308	mg/L		11/11/19 08:00	11/12/19 14:23	1
Beryllium	ND		0.0100	0.00252	mg/L		11/11/19 08:00	11/12/19 14:23	1
Cadmium	**0.00455**	**J**	0.0100	0.00210	mg/L		11/11/19 08:00	11/12/19 14:23	1
Cobalt	**0.0264**	**J**	0.0500	0.00362	mg/L		11/11/19 08:00	11/12/19 14:23	1
Chromium	**0.0130**	**J**	0.0500	0.00688	mg/L		11/11/19 08:00	11/12/19 14:23	1
Copper	**0.0108**	**J**	0.0500	0.00614	mg/L		11/11/19 08:00	11/12/19 14:23	1
Molybdenum	**0.131**		0.0500	0.00509	mg/L		11/11/19 08:00	11/12/19 14:23	1
Nickel	**0.0561**		0.0500	0.00784	mg/L		11/11/19 08:00	11/12/19 14:23	1
Antimony	ND		0.100	0.0329	mg/L		11/11/19 08:00	11/12/19 14:23	1
Selenium	ND	L	0.100	0.0244	mg/L		11/11/19 08:00	11/12/19 14:23	1
Thallium	**0.0436**	**J**	0.0500	0.0161	mg/L		11/11/19 08:00	11/12/19 14:23	1
Vanadium	ND		0.0100	0.00297	mg/L		11/11/19 08:00	11/12/19 14:23	1
Zinc	ND		0.250	0.0682	mg/L		11/11/19 08:00	11/12/19 14:23	1
Lead	**0.0237**	**J**	0.0500	0.00821	mg/L		11/11/19 08:00	11/12/19 14:23	1

Client Sample ID: DUP01 (20191105)
Date Collected: 11/05/19 00:00
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12112-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0100	0.00298	mg/L		11/11/19 08:00	11/12/19 14:33	1
Arsenic	**0.126**		0.100	0.0181	mg/L		11/11/19 08:00	11/12/19 14:33	1
Barium	**0.0415**		0.0100	0.00308	mg/L		11/11/19 08:00	11/12/19 14:33	1
Beryllium	ND		0.0100	0.00252	mg/L		11/11/19 08:00	11/12/19 14:33	1
Cadmium	**0.00549**	**J**	0.0100	0.00210	mg/L		11/11/19 08:00	11/12/19 14:33	1
Cobalt	**0.0325**	**J**	0.0500	0.00362	mg/L		11/11/19 08:00	11/12/19 14:33	1
Chromium	**0.0124**	**J**	0.0500	0.00688	mg/L		11/11/19 08:00	11/12/19 14:33	1
Copper	**0.0140**	**J**	0.0500	0.00614	mg/L		11/11/19 08:00	11/12/19 14:33	1

Method: 6010B - Metals (ICP) (Continued)

Client Sample ID: DUP01 (20191105)
Date Collected: 11/05/19 00:00
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12112-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Molybdenum	**0.143**		0.0500	0.00509	mg/L		11/11/19 08:00	11/12/19 14:33	1
Nickel	**0.0552**		0.0500	0.00784	mg/L		11/11/19 08:00	11/12/19 14:33	1
Antimony	ND		0.100	0.0329	mg/L		11/11/19 08:00	11/12/19 14:33	1
Selenium	ND		0.100	0.0244	mg/L		11/11/19 08:00	11/12/19 14:33	1
Thallium	**0.0205**	**J**	0.0500	0.0161	mg/L		11/11/19 08:00	11/12/19 14:33	1
Vanadium	ND		0.0100	0.00297	mg/L		11/11/19 08:00	11/12/19 14:33	1
Zinc	ND		0.250	0.0682	mg/L		11/11/19 08:00	11/12/19 14:33	1
Lead	**0.0172**	**J**	0.0500	0.00821	mg/L		11/11/19 08:00	11/12/19 14:33	1

Client Sample ID: CP240-SB02 (20191105)
Date Collected: 11/05/19 14:25
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12112-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0100	0.00298	mg/L		11/11/19 08:00	11/12/19 14:36	1
Arsenic	ND		0.100	0.0181	mg/L		11/11/19 08:00	11/12/19 14:36	1
Barium	**0.163**		0.0100	0.00308	mg/L		11/11/19 08:00	11/12/19 14:36	1
Beryllium	ND		0.0100	0.00252	mg/L		11/11/19 08:00	11/12/19 14:36	1
Cadmium	ND		0.0100	0.00210	mg/L		11/11/19 08:00	11/12/19 14:36	1
Cobalt	ND		0.0500	0.00362	mg/L		11/11/19 08:00	11/12/19 14:36	1
Chromium	ND		0.0500	0.00688	mg/L		11/11/19 08:00	11/12/19 14:36	1
Copper	ND		0.0500	0.00614	mg/L		11/11/19 08:00	11/12/19 14:36	1
Molybdenum	**0.0783**		0.0500	0.00509	mg/L		11/11/19 08:00	11/12/19 14:36	1
Nickel	ND		0.0500	0.00784	mg/L		11/11/19 08:00	11/12/19 14:36	1
Antimony	ND		0.100	0.0329	mg/L		11/11/19 08:00	11/12/19 14:36	1
Selenium	ND		0.100	0.0244	mg/L		11/11/19 08:00	11/12/19 14:36	1
Thallium	**0.0241**	**J**	0.0500	0.0161	mg/L		11/11/19 08:00	11/12/19 14:36	1
Vanadium	ND		0.0100	0.00297	mg/L		11/11/19 08:00	11/12/19 14:36	1
Zinc	ND		0.250	0.0682	mg/L		11/11/19 08:00	11/12/19 14:36	1
Lead	**0.0203**	**J**	0.0500	0.00821	mg/L		11/11/19 08:00	11/12/19 14:36	1

Client Sample ID: CP240-SB01
Date Collected: 11/05/19 14:50
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12112-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0100	0.00298	mg/L		11/11/19 08:00	11/12/19 14:38	1
Arsenic	ND		0.100	0.0181	mg/L		11/11/19 08:00	11/12/19 14:38	1
Barium	**0.0638**		0.0100	0.00308	mg/L		11/11/19 08:00	11/12/19 14:38	1
Beryllium	ND		0.0100	0.00252	mg/L		11/11/19 08:00	11/12/19 14:38	1
Cadmium	**0.00283**	**J**	0.0100	0.00210	mg/L		11/11/19 08:00	11/12/19 14:38	1
Cobalt	ND		0.0500	0.00362	mg/L		11/11/19 08:00	11/12/19 14:38	1
Chromium	**0.0532**		0.0500	0.00688	mg/L		11/11/19 08:00	11/12/19 14:38	1
Copper	ND		0.0500	0.00614	mg/L		11/11/19 08:00	11/12/19 14:38	1
Molybdenum	**0.154**		0.0500	0.00509	mg/L		11/11/19 08:00	11/12/19 14:38	1
Nickel	ND		0.0500	0.00784	mg/L		11/11/19 08:00	11/12/19 14:38	1
Antimony	ND		0.100	0.0329	mg/L		11/11/19 08:00	11/12/19 14:38	1
Selenium	ND		0.100	0.0244	mg/L		11/11/19 08:00	11/12/19 14:38	1
Thallium	**0.0291**	**J**	0.0500	0.0161	mg/L		11/11/19 08:00	11/12/19 14:38	1
Vanadium	ND		0.0100	0.00297	mg/L		11/11/19 08:00	11/12/19 14:38	1
Zinc	ND		0.250	0.0682	mg/L		11/11/19 08:00	11/12/19 14:38	1
Lead	**0.0178**	**J**	0.0500	0.00821	mg/L		11/11/19 08:00	11/12/19 14:38	1

Method: 7470A - Mercury (CVAA)

Client Sample ID: CP236-SB02 (20191105)
Date Collected: 11/05/19 10:45
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12112-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.000500	0.0000453	mg/L		11/11/19 12:00	11/11/19 15:43	1

Client Sample ID: CP236-SB01
Date Collected: 11/05/19 11:15
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12112-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.00177**		0.000500	0.0000453	mg/L		11/11/19 12:00	11/11/19 15:46	1

Client Sample ID: DUP01 (20191105)
Date Collected: 11/05/19 00:00
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12112-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.00188**		0.000500	0.0000453	mg/L		11/11/19 12:00	11/11/19 15:48	1

Client Sample ID: CP240-SB02 (20191105)
Date Collected: 11/05/19 14:25
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12112-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.000979**		0.000500	0.0000453	mg/L		11/11/19 12:00	11/11/19 15:50	1

Client Sample ID: CP240-SB01
Date Collected: 11/05/19 14:50
Date Received: 11/07/19 10:30

Lab Sample ID: 570-12112-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.000539**		0.000500	0.0000453	mg/L		11/11/19 12:00	11/11/19 15:57	1

Surrogate Summary

Client: Kennedy/Jenks Consultants
Project/Site: VTA

Job ID: 570-12112-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	DCA (80-129)	BFB (77-120)	DBFM (80-128)	TOL (80-120)
570-12112-1	CP236-SB02 (20191105)	104	102	99	101
570-12112-2	CP236-SB01	101	103	99	102
570-12112-3	DUP01 (20191105)	95	101	95	100
570-12112-4	CP240-SB02 (20191105)	97	103	97	102
570-12112-5	CP240-SB01	99	101	98	102
570-12112-6	EB01 (20191105)	99	103	99	101
570-12112-7	Trip Blank	98	101	97	102
LCS 570-32794/4	Lab Control Sample	95	99	93	101
LCSD 570-32794/5	Lab Control Sample Dup	96	100	96	101
MB 570-32794/8	Method Blank	99	101	99	100

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

Method: 8015B - Gasoline Range Organics - (GC)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	BFB1 (38-134)
570-11841-D-1 MS	Matrix Spike	76
570-11841-D-1 MSD	Matrix Spike Duplicate	78
570-12112-1	CP236-SB02 (20191105)	70
570-12112-2	CP236-SB01	66
570-12112-3	DUP01 (20191105)	70
570-12112-4	CP240-SB02 (20191105)	70
570-12112-5	CP240-SB01	72
LCS 570-31361/3	Lab Control Sample	80
LCSD 570-31361/4	Lab Control Sample Dup	75
MB 570-31361/6	Method Blank	69

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

Method: 8015B - Diesel Range Organics (DRO) (GC)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	OTCSN1 (68-140)
570-12112-1	CP236-SB02 (20191105)	109
570-12112-2	CP236-SB01	118
570-12112-3	DUP01 (20191105)	117
570-12112-4	CP240-SB02 (20191105)	111
570-12112-5	CP240-SB01	118
LCS 570-31536/2-A	Lab Control Sample	89
LCS 570-31536/4-A	Lab Control Sample	90
LCSD 570-31536/3-A	Lab Control Sample Dup	89

Surrogate Summary

Client: Kennedy/Jenks Consultants
Job ID: 570-12112-1
Project/Site: VTA

Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

Matrix: Water
Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)							
Lab Sample ID	**Client Sample ID**	**OTCSN1 (68-140)**							
LCSD 570-31536/5-A	Lab Control Sample Dup	93							
MB 570-31536/1-A	Method Blank	84							

Surrogate Legend

OTCSN = n-Octacosane (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 570-32794/8
Matrix: Water
Analysis Batch: 32794

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		2.0	0.43	ug/L			11/14/19 13:39	1
1,1,1-Trichloroethane	ND		1.0	0.31	ug/L			11/14/19 13:39	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.17	ug/L			11/14/19 13:39	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	0.62	ug/L			11/14/19 13:39	1
1,1,2-Trichloroethane	ND		1.0	0.22	ug/L			11/14/19 13:39	1
1,1-Dichloroethane	ND		1.0	0.28	ug/L			11/14/19 13:39	1
1,1-Dichloroethene	ND		1.0	0.22	ug/L			11/14/19 13:39	1
1,1-Dichloropropene	ND		1.0	0.17	ug/L			11/14/19 13:39	1
1,2,3-Trichlorobenzene	ND		1.0	0.28	ug/L			11/14/19 13:39	1
1,2,3-Trichloropropane	ND		5.0	0.22	ug/L			11/14/19 13:39	1
1,2,4-Trichlorobenzene	ND		1.0	0.34	ug/L			11/14/19 13:39	1
1,2,4-Trimethylbenzene	ND		1.0	0.21	ug/L			11/14/19 13:39	1
1,2-Dibromo-3-Chloropropane	ND		10	2.1	ug/L			11/14/19 13:39	1
1,2-Dibromoethane	ND		1.0	0.27	ug/L			11/14/19 13:39	1
1,2-Dichlorobenzene	ND		1.0	0.14	ug/L			11/14/19 13:39	1
1,2-Dichloroethane	ND		0.50	0.19	ug/L			11/14/19 13:39	1
1,2-Dichloropropane	ND		1.0	0.20	ug/L			11/14/19 13:39	1
1,3,5-Trimethylbenzene	ND		1.0	0.17	ug/L			11/14/19 13:39	1
1,3-Butadiene	ND		25	0.95	ug/L			11/14/19 13:39	1
1,3-Dichlorobenzene	ND		1.0	0.19	ug/L			11/14/19 13:39	1
1,3-Dichloropropane	ND		1.0	0.14	ug/L			11/14/19 13:39	1
1,4-Dichlorobenzene	ND		1.0	0.24	ug/L			11/14/19 13:39	1
2,2-Dichloropropane	ND		1.0	0.44	ug/L			11/14/19 13:39	1
2-Butanone	ND		20	3.6	ug/L			11/14/19 13:39	1
2-Chlorotoluene	ND		1.0	0.16	ug/L			11/14/19 13:39	1
2-Hexanone	ND		10	5.3	ug/L			11/14/19 13:39	1
4-Chlorotoluene	ND		1.0	0.18	ug/L			11/14/19 13:39	1
Acetone	ND		20	10	ug/L			11/14/19 13:39	1
Benzene	ND		1.0	0.14	ug/L			11/14/19 13:39	1
Bromobenzene	ND		1.0	0.19	ug/L			11/14/19 13:39	1
Bromochloromethane	ND		2.0	0.46	ug/L			11/14/19 13:39	1
Bromodichloromethane	ND		1.0	0.23	ug/L			11/14/19 13:39	1
Bromoform	ND		5.0	1.8	ug/L			11/14/19 13:39	1
Bromomethane	ND		50	19	ug/L			11/14/19 13:39	1
cis-1,2-Dichloroethene	ND		1.0	0.27	ug/L			11/14/19 13:39	1
cis-1,3-Dichloropropene	ND		0.50	0.20	ug/L			11/14/19 13:39	1
Carbon disulfide	ND		10	0.70	ug/L			11/14/19 13:39	1
Carbon tetrachloride	ND		0.50	0.23	ug/L			11/14/19 13:39	1
Chlorobenzene	ND		1.0	0.16	ug/L			11/14/19 13:39	1
Chloroethane	ND		5.0	0.76	ug/L			11/14/19 13:39	1
Chloroform	ND		1.0	0.18	ug/L			11/14/19 13:39	1
Chloromethane	ND		10	0.50	ug/L			11/14/19 13:39	1
Dibromochloromethane	ND		2.0	0.46	ug/L			11/14/19 13:39	1
Dibromomethane	ND		1.0	0.30	ug/L			11/14/19 13:39	1
Dichlorodifluoromethane	ND		5.0	0.28	ug/L			11/14/19 13:39	1
Ethylbenzene	ND		1.0	0.14	ug/L			11/14/19 13:39	1
Isopropylbenzene	ND		1.0	0.16	ug/L			11/14/19 13:39	1
Methylene Chloride	ND		10	4.0	ug/L			11/14/19 13:39	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 570-32794/8
Matrix: Water
Analysis Batch: 32794

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.16	ug/L			11/14/19 13:39	1
Naphthalene	ND		10	5.1	ug/L			11/14/19 13:39	1
n-Butylbenzene	ND		1.0	0.30	ug/L			11/14/19 13:39	1
o-Xylene	ND		1.0	0.15	ug/L			11/14/19 13:39	1
m,p-Xylene	ND		2.0	0.31	ug/L			11/14/19 13:39	1
p-Isopropyltoluene	ND		1.0	0.22	ug/L			11/14/19 13:39	1
sec-Butylbenzene	ND		1.0	0.19	ug/L			11/14/19 13:39	1
Styrene	ND		1.0	0.15	ug/L			11/14/19 13:39	1
trans-1,2-Dichloroethene	ND		1.0	0.40	ug/L			11/14/19 13:39	1
trans-1,3-Dichloropropene	ND		0.50	0.23	ug/L			11/14/19 13:39	1
tert-Butylbenzene	ND		1.0	0.25	ug/L			11/14/19 13:39	1
Tetrachloroethene	ND		1.0	0.24	ug/L			11/14/19 13:39	1
Toluene	ND		1.0	0.13	ug/L			11/14/19 13:39	1
Trichloroethene	ND		1.0	0.24	ug/L			11/14/19 13:39	1
Trichlorofluoromethane	ND		10	0.28	ug/L			11/14/19 13:39	1
Vinyl acetate	ND		10	2.9	ug/L			11/14/19 13:39	1
Vinyl chloride	ND		0.50	0.16	ug/L			11/14/19 13:39	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*80 - 129*		*11/14/19 13:39*	*1*
4-Bromofluorobenzene (Surr)	*101*		*77 - 120*		*11/14/19 13:39*	*1*
Dibromofluoromethane	*99*		*80 - 128*		*11/14/19 13:39*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*11/14/19 13:39*	*1*

Lab Sample ID: LCS 570-32794/4
Matrix: Water
Analysis Batch: 32794

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	20.0	21.81		ug/L		109	80 - 126
1,1,1-Trichloroethane	20.0	19.92		ug/L		100	73 - 127
1,1,2,2-Tetrachloroethane	20.0	20.95		ug/L		105	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	11.55		ug/L		58	53 - 155
1,1,2-Trichloroethane	20.0	20.84		ug/L		104	80 - 120
1,1-Dichloroethane	20.0	19.19		ug/L		96	73 - 127
1,1-Dichloroethene	20.0	17.45		ug/L		87	64 - 136
1,1-Dichloropropene	20.0	20.20		ug/L		101	73 - 127
1,2,3-Trichlorobenzene	20.0	20.73		ug/L		104	76 - 130
1,2,3-Trichloropropane	20.0	20.87		ug/L		104	77 - 125
1,2,4-Trichlorobenzene	20.0	20.59		ug/L		103	74 - 134
1,2,4-Trimethylbenzene	20.0	21.78		ug/L		109	80 - 123
1,2-Dibromo-3-Chloropropane	20.0	19.72		ug/L		99	68 - 128
1,2-Dibromoethane	20.0	20.11		ug/L		101	80 - 120
1,2-Dichlorobenzene	20.0	21.22		ug/L		106	80 - 120
1,2-Dichloroethane	20.0	19.41		ug/L		97	75 - 123
1,2-Dichloropropane	20.0	21.15		ug/L		106	80 - 120
1,3,5-Trimethylbenzene	20.0	21.75		ug/L		109	80 - 126
1,3-Butadiene	20.0	14.03	J	ug/L		70	50 - 150

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 570-32794/4
Matrix: Water
Analysis Batch: 32794

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3-Dichlorobenzene	20.0	21.24		ug/L		106	80 - 120
1,3-Dichloropropane	20.0	21.03		ug/L		105	80 - 120
1,4-Dichlorobenzene	20.0	21.08		ug/L		105	80 - 120
2,2-Dichloropropane	20.0	20.49		ug/L		102	53 - 155
2-Butanone	20.0	19.37	J	ug/L		97	53 - 137
2-Chlorotoluene	20.0	21.31		ug/L		107	80 - 121
2-Hexanone	20.0	21.10		ug/L		105	59 - 131
4-Chlorotoluene	20.0	21.52		ug/L		108	80 - 120
Acetone	20.0	18.29	J	ug/L		91	50 - 150
Benzene	20.0	20.58		ug/L		103	78 - 120
Bromobenzene	20.0	21.12		ug/L		106	80 - 120
Bromochloromethane	20.0	19.12		ug/L		96	77 - 125
Bromodichloromethane	20.0	21.32		ug/L		107	80 - 125
Bromoform	20.0	21.22		ug/L		106	68 - 128
Bromomethane	20.0	ND		ug/L		62	50 - 150
cis-1,2-Dichloroethene	20.0	19.79		ug/L		99	78 - 120
cis-1,3-Dichloropropene	20.0	21.82		ug/L		109	80 - 129
Carbon disulfide	20.0	15.55		ug/L		78	50 - 150
Carbon tetrachloride	20.0	21.12		ug/L		106	67 - 139
Chlorobenzene	20.0	21.07		ug/L		105	80 - 120
Chloroethane	20.0	19.73		ug/L		99	64 - 130
Chloroform	20.0	19.35		ug/L		97	77 - 120
Chloromethane	20.0	20.46		ug/L		102	56 - 128
Dibromochloromethane	20.0	21.08		ug/L		105	77 - 125
Dibromomethane	20.0	19.99		ug/L		100	80 - 120
Dichlorodifluoromethane	20.0	13.73		ug/L		69	50 - 150
Ethylbenzene	20.0	21.48		ug/L		107	80 - 120
Isopropylbenzene	20.0	22.34		ug/L		112	80 - 126
Methylene Chloride	20.0	18.59		ug/L		93	73 - 127
Methyl-t-Butyl Ether (MTBE)	20.0	20.00		ug/L		100	77 - 120
Naphthalene	20.0	20.50		ug/L		103	64 - 136
n-Butylbenzene	20.0	22.06		ug/L		110	78 - 132
o-Xylene	20.0	21.48		ug/L		107	80 - 125
m,p-Xylene	40.0	44.16		ug/L		110	80 - 125
p-Isopropyltoluene	20.0	22.51		ug/L		113	80 - 129
sec-Butylbenzene	20.0	22.43		ug/L		112	80 - 125
Styrene	20.0	21.46		ug/L		107	80 - 122
trans-1,2-Dichloroethene	20.0	18.26		ug/L		91	70 - 130
trans-1,3-Dichloropropene	20.0	22.89		ug/L		114	78 - 132
tert-Butylbenzene	20.0	22.57		ug/L		113	80 - 125
Tetrachloroethene	20.0	21.19		ug/L		106	54 - 144
Toluene	20.0	21.25		ug/L		106	80 - 122
Trichloroethene	20.0	20.42		ug/L		102	77 - 125
Trichlorofluoromethane	20.0	19.65		ug/L		98	69 - 141
Vinyl acetate	20.0	17.77		ug/L		89	50 - 150
Vinyl chloride	20.0	17.57		ug/L		88	63 - 135

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 570-32794/4
Matrix: Water
Analysis Batch: 32794

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*95*		*80 - 129*
4-Bromofluorobenzene (Surr)	*99*		*77 - 120*
Dibromofluoromethane	*93*		*80 - 128*
Toluene-d8 (Surr)	*101*		*80 - 120*

Lab Sample ID: LCSD 570-32794/5
Matrix: Water
Analysis Batch: 32794

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane			20.0	20.53		ug/L		103	80 - 126	6	30
1,1,1-Trichloroethane			20.0	18.22		ug/L		91	73 - 127	9	30
1,1,2,2-Tetrachloroethane			20.0	20.87		ug/L		104	76 - 120	0	28
1,1,2-Trichloro-1,2,2-trifluoroethane			20.0	10.89		ug/L		54	53 - 155	6	30
1,1,2-Trichloroethane			20.0	20.40		ug/L		102	80 - 120	2	30
1,1-Dichloroethane			20.0	18.00		ug/L		90	73 - 127	6	30
1,1-Dichloroethene			20.0	16.10		ug/L		81	64 - 136	8	30
1,1-Dichloropropene			20.0	18.67		ug/L		93	73 - 127	8	30
1,2,3-Trichlorobenzene			20.0	20.50		ug/L		102	76 - 130	1	30
1,2,3-Trichloropropane			20.0	20.54		ug/L		103	77 - 125	2	30
1,2,4-Trichlorobenzene			20.0	20.04		ug/L		100	74 - 134	3	30
1,2,4-Trimethylbenzene			20.0	20.32		ug/L		102	80 - 123	7	30
1,2-Dibromo-3-Chloropropane			20.0	20.02		ug/L		100	68 - 128	1	30
1,2-Dibromoethane			20.0	19.32		ug/L		97	80 - 120	4	30
1,2-Dichlorobenzene			20.0	20.33		ug/L		102	80 - 120	4	20
1,2-Dichloroethane			20.0	18.95		ug/L		95	75 - 123	2	24
1,2-Dichloropropane			20.0	19.60		ug/L		98	80 - 120	8	20
1,3,5-Trimethylbenzene			20.0	20.53		ug/L		103	80 - 126	6	20
1,3-Butadiene			20.0	13.01	J	ug/L		65	50 - 150	8	30
1,3-Dichlorobenzene			20.0	20.13		ug/L		101	80 - 120	5	20
1,3-Dichloropropane			20.0	19.61		ug/L		98	80 - 120	7	20
1,4-Dichlorobenzene			20.0	20.23		ug/L		101	80 - 120	4	20
2,2-Dichloropropane			20.0	19.12		ug/L		96	53 - 155	7	30
2-Butanone			20.0	19.54	J	ug/L		98	53 - 137	1	30
2-Chlorotoluene			20.0	20.18		ug/L		101	80 - 121	5	20
2-Hexanone			20.0	20.79		ug/L		104	59 - 131	1	30
4-Chlorotoluene			20.0	20.44		ug/L		102	80 - 120	5	20
Acetone			20.0	17.33	J	ug/L		87	50 - 150	5	30
Benzene			20.0	19.65		ug/L		98	78 - 120	5	21
Bromobenzene			20.0	20.49		ug/L		102	80 - 120	3	20
Bromochloromethane			20.0	18.54		ug/L		93	77 - 125	3	22
Bromodichloromethane			20.0	20.76		ug/L		104	80 - 125	3	20
Bromoform			20.0	20.48		ug/L		102	68 - 128	4	30
Bromomethane			20.0	ND		ug/L		67	50 - 150	8	30
cis-1,2-Dichloroethene			20.0	18.84		ug/L		94	78 - 120	5	23
cis-1,3-Dichloropropene			20.0	20.92		ug/L		105	80 - 129	4	21
Carbon disulfide			20.0	14.50		ug/L		72	50 - 150	7	30
Carbon tetrachloride			20.0	20.01		ug/L		100	67 - 139	5	30

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 570-32794/5
Matrix: Water
Analysis Batch: 32794

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chlorobenzene			20.0	19.95		ug/L		100	80 - 120	5	20
Chloroethane			20.0	18.29		ug/L		91	64 - 130	8	30
Chloroform			20.0	18.29		ug/L		91	77 - 120	6	23
Chloromethane			20.0	19.21		ug/L		96	56 - 128	6	30
Dibromochloromethane			20.0	20.66		ug/L		103	77 - 125	2	21
Dibromomethane			20.0	19.84		ug/L		99	80 - 120	1	20
Dichlorodifluoromethane			20.0	12.61		ug/L		63	50 - 150	8	30
Ethylbenzene			20.0	20.22		ug/L		101	80 - 120	6	20
Isopropylbenzene			20.0	20.82		ug/L		104	80 - 126	7	20
Methylene Chloride			20.0	17.94		ug/L		90	73 - 127	4	25
Methyl-t-Butyl Ether (MTBE)			20.0	19.37		ug/L		97	77 - 120	3	24
Naphthalene			20.0	20.55		ug/L		103	64 - 136	0	30
n-Butylbenzene			20.0	20.60		ug/L		103	78 - 132	7	23
o-Xylene			20.0	20.36		ug/L		102	80 - 125	5	20
m,p-Xylene			40.0	41.27		ug/L		103	80 - 125	7	30
p-Isopropyltoluene			20.0	20.68		ug/L		103	80 - 129	8	20
sec-Butylbenzene			20.0	21.02		ug/L		105	80 - 125	6	20
Styrene			20.0	20.35		ug/L		102	80 - 122	5	20
trans-1,2-Dichloroethene			20.0	16.88		ug/L		84	70 - 130	8	30
trans-1,3-Dichloropropene			20.0	21.05		ug/L		105	78 - 132	8	22
tert-Butylbenzene			20.0	21.14		ug/L		106	80 - 125	7	20
Tetrachloroethene			20.0	20.01		ug/L		100	54 - 144	6	30
Toluene			20.0	19.60		ug/L		98	80 - 122	8	20
Trichloroethene			20.0	19.60		ug/L		98	77 - 125	4	22
Trichlorofluoromethane			20.0	17.87		ug/L		89	69 - 141	10	30
Vinyl acetate			20.0	17.68		ug/L		88	50 - 150	0	30
Vinyl chloride			20.0	16.26		ug/L		81	63 - 135	8	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*80 - 129*
4-Bromofluorobenzene (Surr)	*100*		*77 - 120*
Dibromofluoromethane	*96*		*80 - 128*
Toluene-d8 (Surr)	*101*		*80 - 120*

Method: 8015B - Gasoline Range Organics - (GC)

Lab Sample ID: MB 570-31361/6
Matrix: Water
Analysis Batch: 31361

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Gasoline (C4-C13)	ND		50	29	ug/L			11/07/19 17:07	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*69*		*38 - 134*		*11/07/19 17:07*	*1*

Method: 8015B - Gasoline Range Organics - (GC) (Continued)

Lab Sample ID: LCS 570-31361/3
Matrix: Water
Analysis Batch: 31361

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
TPH as Gasoline (C4-C13)			2000	2100		ug/L		105	78 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*80*		*38 - 134*

Lab Sample ID: LCSD 570-31361/4
Matrix: Water
Analysis Batch: 31361

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
TPH as Gasoline (C4-C13)			2000	2104		ug/L		105	78 - 120	0	10

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*75*		*38 - 134*

Lab Sample ID: 570-11841-D-1 MS
Matrix: Water
Analysis Batch: 31361

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
TPH as Gasoline (C4-C13)	82		2000	2095		ug/L		101	68 - 122		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*76*		*38 - 134*

Lab Sample ID: 570-11841-D-1 MSD
Matrix: Water
Analysis Batch: 31361

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
TPH as Gasoline (C4-C13)	82		2000	2219		ug/L		107	68 - 122	6	18

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*78*		*38 - 134*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 570-31536/1-A
Matrix: Water
Analysis Batch: 31520

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 31536

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Diesel (C10-C28)	ND		50	17	ug/L		11/08/19 09:16	11/08/19 12:01	1
TPH as Motor Oil (C17-C44)	ND		250	19	ug/L		11/08/19 09:16	11/08/19 12:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane (Surr)	*84*		*68 - 140*	*11/08/19 09:16*	*11/08/19 12:01*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCS 570-31536/2-A
Matrix: Water
Analysis Batch: 31520

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 31536

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
TPH as Diesel (C10-C28)			2000	1754		ug/L		88	69 - 123		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
n-Octacosane (Surr)	*89*		*68 - 140*

Lab Sample ID: LCS 570-31536/4-A
Matrix: Water
Analysis Batch: 31520

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 31536

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
TPH as Motor Oil (C17-C44)			2000	1885		ug/L		94	69 - 123		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
n-Octacosane (Surr)	*90*		*68 - 140*

Lab Sample ID: LCSD 570-31536/3-A
Matrix: Water
Analysis Batch: 31520

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 31536

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
TPH as Diesel (C10-C28)			2000	1752		ug/L		88	69 - 123	0	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
n-Octacosane (Surr)	*89*		*68 - 140*

Lab Sample ID: LCSD 570-31536/5-A
Matrix: Water
Analysis Batch: 31520

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 31536

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
TPH as Motor Oil (C17-C44)			2000	1962		ug/L		98	69 - 123	4	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
n-Octacosane (Surr)	*93*		*68 - 140*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 570-32017/1-A
Matrix: Water
Analysis Batch: 32349

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 32017

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0100	0.00298	mg/L		11/11/19 08:00	11/12/19 13:59	1
Arsenic	ND		0.100	0.0181	mg/L		11/11/19 08:00	11/12/19 13:59	1
Barium	ND		0.0100	0.00308	mg/L		11/11/19 08:00	11/12/19 13:59	1
Beryllium	ND		0.0100	0.00252	mg/L		11/11/19 08:00	11/12/19 13:59	1
Cadmium	ND		0.0100	0.00210	mg/L		11/11/19 08:00	11/12/19 13:59	1
Cobalt	ND		0.0500	0.00362	mg/L		11/11/19 08:00	11/12/19 13:59	1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: MB 570-32017/1-A
Matrix: Water
Analysis Batch: 32349

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 32017

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		0.0500	0.00688	mg/L		11/11/19 08:00	11/12/19 13:59	1
Copper	ND		0.0500	0.00614	mg/L		11/11/19 08:00	11/12/19 13:59	1
Molybdenum	ND		0.0500	0.00509	mg/L		11/11/19 08:00	11/12/19 13:59	1
Nickel	ND		0.0500	0.00784	mg/L		11/11/19 08:00	11/12/19 13:59	1
Antimony	ND		0.100	0.0329	mg/L		11/11/19 08:00	11/12/19 13:59	1
Selenium	ND		0.100	0.0244	mg/L		11/11/19 08:00	11/12/19 13:59	1
Thallium	ND		0.0500	0.0161	mg/L		11/11/19 08:00	11/12/19 13:59	1
Vanadium	ND		0.0100	0.00297	mg/L		11/11/19 08:00	11/12/19 13:59	1
Zinc	ND		0.250	0.0682	mg/L		11/11/19 08:00	11/12/19 13:59	1
Lead	ND		0.0500	0.00821	mg/L		11/11/19 08:00	11/12/19 13:59	1

Lab Sample ID: LCS 570-32017/2-A
Matrix: Water
Analysis Batch: 32349

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 32017

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	0.250	0.2505		mg/L		100	80 - 120
Arsenic	0.500	0.4777		mg/L		96	80 - 120
Barium	0.500	0.5383		mg/L		108	80 - 120
Beryllium	0.500	0.4824		mg/L		96	80 - 120
Cadmium	0.500	0.5104		mg/L		102	80 - 120
Cobalt	0.500	0.5149		mg/L		103	80 - 120
Chromium	0.500	0.5286		mg/L		106	80 - 120
Copper	0.500	0.5339		mg/L		107	80 - 120
Molybdenum	0.500	0.4674		mg/L		93	80 - 120
Nickel	0.500	0.5202		mg/L		104	80 - 120
Antimony	0.500	0.5076		mg/L		102	80 - 120
Selenium	0.500	0.4597		mg/L		92	80 - 120
Thallium	0.500	0.4987		mg/L		100	80 - 120
Vanadium	0.500	0.5052		mg/L		101	80 - 120
Zinc	0.500	0.4952		mg/L		99	80 - 120
Lead	0.500	0.5120		mg/L		102	80 - 120

Lab Sample ID: LCSD 570-32017/3-A
Matrix: Water
Analysis Batch: 32349

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 32017

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver	0.250	0.2517		mg/L		101	80 - 120	0	20
Arsenic	0.500	0.4793		mg/L		96	80 - 120	0	20
Barium	0.500	0.5439		mg/L		109	80 - 120	1	20
Beryllium	0.500	0.4812		mg/L		96	80 - 120	0	20
Cadmium	0.500	0.5152		mg/L		103	80 - 120	1	20
Cobalt	0.500	0.5239		mg/L		105	80 - 120	2	20
Chromium	0.500	0.5308		mg/L		106	80 - 120	0	20
Copper	0.500	0.5369		mg/L		107	80 - 120	1	20
Molybdenum	0.500	0.4836		mg/L		97	80 - 120	3	20
Nickel	0.500	0.5214		mg/L		104	80 - 120	0	20
Antimony	0.500	0.5072		mg/L		101	80 - 120	0	20

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCSD 570-32017/3-A
Matrix: Water
Analysis Batch: 32349

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 32017

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Selenium			0.500	0.4760		mg/L		95	80 - 120	3	20
Thallium			0.500	0.5171		mg/L		103	80 - 120	4	20
Vanadium			0.500	0.5087		mg/L		102	80 - 120	1	20
Zinc			0.500	0.5041		mg/L		101	80 - 120	2	20
Lead			0.500	0.5178		mg/L		104	80 - 120	1	20

Lab Sample ID: 570-12168-F-6-C MSD
Matrix: Water
Analysis Batch: 32349

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 32017

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver	ND	F1 F2	0.250	0.1374	F1 F2	mg/L		55	86 - 128	10	7
Arsenic	ND		0.500	0.5383		mg/L		108	80 - 140	1	11
Barium	0.0333		0.500	0.5808		mg/L		109	87 - 123	0	6
Beryllium	ND		0.500	0.5219		mg/L		104	89 - 119	1	8
Cadmium	ND		0.500	0.5234		mg/L		105	82 - 124	1	7
Cobalt	ND		0.500	0.5345		mg/L		107	83 - 125	0	7
Chromium	ND		0.500	0.5472		mg/L		109	86 - 122	0	8
Copper	ND		0.500	0.5696		mg/L		114	78 - 126	0	7
Molybdenum	ND	F1	0.500	0.4132		mg/L		83	78 - 126	7	7
Nickel	ND		0.500	0.5038		mg/L		101	84 - 120	0	7
Antimony	ND		0.500	0.5674		mg/L		113	72 - 132	2	10
Selenium	ND		0.500	0.4970		mg/L		99	79 - 127	4	9
Thallium	0.0253	J	0.500	0.5262		mg/L		100	79 - 121	2	8
Vanadium	ND		0.500	0.5383		mg/L		108	88 - 118	0	7
Zinc	ND		0.500	0.5079		mg/L		102	89 - 131	1	8
Lead	0.0252	J	0.500	0.5206		mg/L		99	84 - 120	2	7

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 570-32018/1-A
Matrix: Water
Analysis Batch: 32104

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 32018

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.000500	0.0000453	mg/L		11/11/19 12:00	11/11/19 16:25	1

Lab Sample ID: LCS 570-32018/2-A
Matrix: Water
Analysis Batch: 32104

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 32018

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			0.0100	0.01002		mg/L		100	80 - 120		

Lab Sample ID: LCSD 570-32018/3-A
Matrix: Water
Analysis Batch: 32104

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 32018

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury			0.0100	0.01003		mg/L		100	80 - 120	0	20

Client: Kennedy/Jenks Consultants
Project/Site: VTA

Job ID: 570-12112-1

Method: 7470A - Mercury (CVAA)

Lab Sample ID: 570-11922-D-1-C MS
Matrix: Water
Analysis Batch: 32104

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 32018

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury	0.000131	J	0.0100	0.008484		mg/L		84	55 - 133		

Lab Sample ID: 570-11922-D-1-D MSD
Matrix: Water
Analysis Batch: 32104

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 32018

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.000131	J	0.0100	0.008784		mg/L		87	55 - 133	3	20

QC Association Summary

Client: Kennedy/Jenks Consultants
Project/Site: VTA

Job ID: 570-12112-1

GC/MS VOA

Analysis Batch: 32794

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-12112-1	CP236-SB02 (20191105)	Total/NA	Water	8260B	
570-12112-2	CP236-SB01	Total/NA	Water	8260B	
570-12112-3	DUP01 (20191105)	Total/NA	Water	8260B	
570-12112-4	CP240-SB02 (20191105)	Total/NA	Water	8260B	
570-12112-5	CP240-SB01	Total/NA	Water	8260B	
570-12112-6	EB01 (20191105)	Total/NA	Water	8260B	
570-12112-7	Trip Blank	Total/NA	Water	8260B	
MB 570-32794/8	Method Blank	Total/NA	Water	8260B	
LCS 570-32794/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 570-32794/5	Lab Control Sample Dup	Total/NA	Water	8260B	

GC VOA

Analysis Batch: 31361

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-12112-1	CP236-SB02 (20191105)	Total/NA	Water	8015B	
570-12112-2	CP236-SB01	Total/NA	Water	8015B	
570-12112-3	DUP01 (20191105)	Total/NA	Water	8015B	
570-12112-4	CP240-SB02 (20191105)	Total/NA	Water	8015B	
570-12112-5	CP240-SB01	Total/NA	Water	8015B	
MB 570-31361/6	Method Blank	Total/NA	Water	8015B	
LCS 570-31361/3	Lab Control Sample	Total/NA	Water	8015B	
LCSD 570-31361/4	Lab Control Sample Dup	Total/NA	Water	8015B	
570-11841-D-1 MS	Matrix Spike	Total/NA	Water	8015B	
570-11841-D-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8015B	

GC Semi VOA

Analysis Batch: 31520

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 570-31536/1-A	Method Blank	Total/NA	Water	8015B	31536
LCS 570-31536/2-A	Lab Control Sample	Total/NA	Water	8015B	31536
LCS 570-31536/4-A	Lab Control Sample	Total/NA	Water	8015B	31536
LCSD 570-31536/3-A	Lab Control Sample Dup	Total/NA	Water	8015B	31536
LCSD 570-31536/5-A	Lab Control Sample Dup	Total/NA	Water	8015B	31536

Prep Batch: 31536

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-12112-1	CP236-SB02 (20191105)	Total/NA	Water	3510C	
570-12112-2	CP236-SB01	Total/NA	Water	3510C	
570-12112-3	DUP01 (20191105)	Total/NA	Water	3510C	
570-12112-4	CP240-SB02 (20191105)	Total/NA	Water	3510C	
570-12112-5	CP240-SB01	Total/NA	Water	3510C	
MB 570-31536/1-A	Method Blank	Total/NA	Water	3510C	
LCS 570-31536/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 570-31536/4-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 570-31536/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
LCSD 570-31536/5-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 31998

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-12112-1	CP236-SB02 (20191105)	Total/NA	Water	8015B	31536

GC Semi VOA (Continued)

Analysis Batch: 31998 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-12112-2	CP236-SB01	Total/NA	Water	8015B	31536
570-12112-3	DUP01 (20191105)	Total/NA	Water	8015B	31536
570-12112-4	CP240-SB02 (20191105)	Total/NA	Water	8015B	31536
570-12112-5	CP240-SB01	Total/NA	Water	8015B	31536

Metals

Prep Batch: 32017

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-12112-1	CP236-SB02 (20191105)	Total/NA	Water	3010A	
570-12112-2	CP236-SB01	Total/NA	Water	3010A	
570-12112-3	DUP01 (20191105)	Total/NA	Water	3010A	
570-12112-4	CP240-SB02 (20191105)	Total/NA	Water	3010A	
570-12112-5	CP240-SB01	Total/NA	Water	3010A	
MB 570-32017/1-A	Method Blank	Total/NA	Water	3010A	
LCS 570-32017/2-A	Lab Control Sample	Total/NA	Water	3010A	
LCSD 570-32017/3-A	Lab Control Sample Dup	Total/NA	Water	3010A	
570-12168-F-6-C MSD	Matrix Spike Duplicate	Total/NA	Water	3010A	

Prep Batch: 32018

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-12112-1	CP236-SB02 (20191105)	Total/NA	Water	7470A	
570-12112-2	CP236-SB01	Total/NA	Water	7470A	
570-12112-3	DUP01 (20191105)	Total/NA	Water	7470A	
570-12112-4	CP240-SB02 (20191105)	Total/NA	Water	7470A	
570-12112-5	CP240-SB01	Total/NA	Water	7470A	
MB 570-32018/1-A	Method Blank	Total/NA	Water	7470A	
LCS 570-32018/2-A	Lab Control Sample	Total/NA	Water	7470A	
LCSD 570-32018/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	
570-11922-D-1-C MS	Matrix Spike	Total/NA	Water	7470A	
570-11922-D-1-D MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	

Analysis Batch: 32104

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-12112-1	CP236-SB02 (20191105)	Total/NA	Water	7470A	32018
570-12112-2	CP236-SB01	Total/NA	Water	7470A	32018
570-12112-3	DUP01 (20191105)	Total/NA	Water	7470A	32018
570-12112-4	CP240-SB02 (20191105)	Total/NA	Water	7470A	32018
570-12112-5	CP240-SB01	Total/NA	Water	7470A	32018
MB 570-32018/1-A	Method Blank	Total/NA	Water	7470A	32018
LCS 570-32018/2-A	Lab Control Sample	Total/NA	Water	7470A	32018
LCSD 570-32018/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	32018
570-11922-D-1-C MS	Matrix Spike	Total/NA	Water	7470A	32018
570-11922-D-1-D MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	32018

Analysis Batch: 32349

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-12112-1	CP236-SB02 (20191105)	Total/NA	Water	6010B	32017
570-12112-2	CP236-SB01	Total/NA	Water	6010B	32017
570-12112-3	DUP01 (20191105)	Total/NA	Water	6010B	32017
570-12112-4	CP240-SB02 (20191105)	Total/NA	Water	6010B	32017

Metals (Continued)

Analysis Batch: 32349 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-12112-5	CP240-SB01	Total/NA	Water	6010B	32017
MB 570-32017/1-A	Method Blank	Total/NA	Water	6010B	32017
LCS 570-32017/2-A	Lab Control Sample	Total/NA	Water	6010B	32017
LCSD 570-32017/3-A	Lab Control Sample Dup	Total/NA	Water	6010B	32017
570-12168-F-6-C MSD	Matrix Spike Duplicate	Total/NA	Water	6010B	32017

Lab Chronicle

Client: Kennedy/Jenks Consultants
Project/Site: VTA

Job ID: 570-12112-1

Client Sample ID: CP236-SB02 (20191105)

Lab Sample ID: 570-12112-1

Date Collected: 11/05/19 10:45
Date Received: 11/07/19 10:30

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	32794	11/14/19 18:34	UPY2	ECL 2
	Instrument ID: GCMSW									
Total/NA	Analysis	8015B		1	5 mL	5 mL	31361	11/07/19 19:56	CVA6	ECL 2
	Instrument ID: GC56									
Total/NA	Prep	3510C			490 mL	2.5 mL	31536	11/08/19 09:16	UFLU	ECL 1
Total/NA	Analysis	8015B		1			31998	11/11/19 20:48	N5Y3	ECL 1
	Instrument ID: GC50									
Total/NA	Prep	3010A			50 mL	50 mL	32017	11/11/19 08:00	WL8G	ECL 1
Total/NA	Analysis	6010B		1			32349	11/12/19 14:21	ULPF	ECL 1
	Instrument ID: ICP8									
Total/NA	Prep	7470A			50 mL	100 mL	32018	11/11/19 12:00	WL8G	ECL 1
Total/NA	Analysis	7470A		1			32104	11/11/19 15:43	I3IN	ECL 1
	Instrument ID: HG8									

Client Sample ID: CP236-SB01

Lab Sample ID: 570-12112-2

Date Collected: 11/05/19 11:15
Date Received: 11/07/19 10:30

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	32794	11/14/19 19:01	UPY2	ECL 2
	Instrument ID: GCMSW									
Total/NA	Analysis	8015B		1	5 mL	5 mL	31361	11/07/19 20:24	CVA6	ECL 2
	Instrument ID: GC56									
Total/NA	Prep	3510C			460 mL	2.5 mL	31536	11/08/19 09:16	UFLU	ECL 1
Total/NA	Analysis	8015B		1			31998	11/11/19 21:08	N5Y3	ECL 1
	Instrument ID: GC50									
Total/NA	Prep	3010A			50 mL	50 mL	32017	11/11/19 08:00	WL8G	ECL 1
Total/NA	Analysis	6010B		1			32349	11/12/19 14:23	ULPF	ECL 1
	Instrument ID: ICP8									
Total/NA	Prep	7470A			50 mL	100 mL	32018	11/11/19 12:00	WL8G	ECL 1
Total/NA	Analysis	7470A		1			32104	11/11/19 15:46	I3IN	ECL 1
	Instrument ID: HG8									

Client Sample ID: DUP01 (20191105)

Lab Sample ID: 570-12112-3

Date Collected: 11/05/19 00:00
Date Received: 11/07/19 10:30

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	32794	11/14/19 19:28	UPY2	ECL 2
	Instrument ID: GCMSW									
Total/NA	Analysis	8015B		1	5 mL	5 mL	31361	11/07/19 20:53	CVA6	ECL 2
	Instrument ID: GC56									
Total/NA	Prep	3510C			450 mL	2.5 mL	31536	11/08/19 09:16	UFLU	ECL 1
Total/NA	Analysis	8015B		1			31998	11/11/19 21:28	N5Y3	ECL 1
	Instrument ID: GC50									

Lab Chronicle

Client: Kennedy/Jenks Consultants
Project/Site: VTA

Job ID: 570-12112-1

Client Sample ID: DUP01 (20191105)

Lab Sample ID: 570-12112-3

Date Collected: 11/05/19 00:00

Matrix: Water

Date Received: 11/07/19 10:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			50 mL	50 mL	32017	11/11/19 08:00	WL8G	ECL 1
Total/NA	Analysis	6010B		1			32349	11/12/19 14:33	ULPF	ECL 1
	Instrument ID: ICP8									
Total/NA	Prep	7470A			50 mL	100 mL	32018	11/11/19 12:00	WL8G	ECL 1
Total/NA	Analysis	7470A		1			32104	11/11/19 15:48	I3IN	ECL 1
	Instrument ID: HG8									

Client Sample ID: CP240-SB02 (20191105)

Lab Sample ID: 570-12112-4

Date Collected: 11/05/19 14:25

Matrix: Water

Date Received: 11/07/19 10:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	32794	11/14/19 19:54	UPY2	ECL 2
	Instrument ID: GCMSW									
Total/NA	Analysis	8015B		1	5 mL	5 mL	31361	11/07/19 21:21	CVA6	ECL 2
	Instrument ID: GC56									
Total/NA	Prep	3510C			490 mL	2.5 mL	31536	11/08/19 09:16	UFLU	ECL 1
Total/NA	Analysis	8015B		1			31998	11/11/19 21:48	N5Y3	ECL 1
	Instrument ID: GC50									
Total/NA	Prep	3010A			50 mL	50 mL	32017	11/11/19 08:00	WL8G	ECL 1
Total/NA	Analysis	6010B		1			32349	11/12/19 14:36	ULPF	ECL 1
	Instrument ID: ICP8									
Total/NA	Prep	7470A			50 mL	100 mL	32018	11/11/19 12:00	WL8G	ECL 1
Total/NA	Analysis	7470A		1			32104	11/11/19 15:50	I3IN	ECL 1
	Instrument ID: HG8									

Client Sample ID: CP240-SB01

Lab Sample ID: 570-12112-5

Date Collected: 11/05/19 14:50

Matrix: Water

Date Received: 11/07/19 10:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	32794	11/14/19 20:21	UPY2	ECL 2
	Instrument ID: GCMSW									
Total/NA	Analysis	8015B		1	5 mL	5 mL	31361	11/07/19 21:49	CVA6	ECL 2
	Instrument ID: GC56									
Total/NA	Prep	3510C			490 mL	2.5 mL	31536	11/08/19 09:16	UFLU	ECL 1
Total/NA	Analysis	8015B		1			31998	11/11/19 22:07	N5Y3	ECL 1
	Instrument ID: GC50									
Total/NA	Prep	3010A			50 mL	50 mL	32017	11/11/19 08:00	WL8G	ECL 1
Total/NA	Analysis	6010B		1			32349	11/12/19 14:38	ULPF	ECL 1
	Instrument ID: ICP8									
Total/NA	Prep	7470A			50 mL	100 mL	32018	11/11/19 12:00	WL8G	ECL 1
Total/NA	Analysis	7470A		1			32104	11/11/19 15:57	I3IN	ECL 1
	Instrument ID: HG8									

Lab Chronicle

Client: Kennedy/Jenks Consultants
Project/Site: VTA

Job ID: 570-12112-1

Client Sample ID: EB01 (20191105)

Lab Sample ID: 570-12112-6

Date Collected: 11/05/19 15:15

Matrix: Water

Date Received: 11/07/19 10:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	32794	11/14/19 17:41	UPY2	ECL 2
	Instrument ID: GCMSW									

Client Sample ID: Trip Blank

Lab Sample ID: 570-12112-7

Date Collected: 11/05/19 00:00

Matrix: Water

Date Received: 11/07/19 10:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	32794	11/14/19 17:14	UPY2	ECL 2
	Instrument ID: GCMSW									

Laboratory References:

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

ECL 2 = Eurofins Calscience LLC Lampson, 7445 Lampson Ave, Garden Grove, CA 92841, TEL (714)895-5494

Accreditation/Certification Summary

Client: Kennedy/Jenks Consultants
Job ID: 570-12112-1
Project/Site: VTA

Laboratory: Eurofins Calscience LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arizona	State	AZ0781	03-13-20
California	SCAQMD LAP	17LA0919	11-30-19
California	State	2944	09-29-20
Hawaii	State	<cert No.>	07-02-20
Nevada	State	CA00111	07-31-20
Oregon	NELAP	CA300001	01-29-20

Method Summary

Client: Kennedy/Jenks Consultants
Project/Site: VTA

Job ID: 570-12112-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	ECL 2
8015B	Gasoline Range Organics - (GC)	SW846	ECL 2
8015B	Diesel Range Organics (DRO) (GC)	SW846	ECL 1
6010B	Metals (ICP)	SW846	ECL 1
7470A	Mercury (CVAA)	SW846	ECL 1
3010A	Preparation, Total Metals	SW846	ECL 1
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	ECL 1
5030C	Purge and Trap	SW846	ECL 2
7470A	Preparation, Mercury	SW846	ECL 1

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

ECL 2 = Eurofins Calscience LLC Lampson, 7445 Lampson Ave, Garden Grove, CA 92841, TEL (714)895-5494

Sample Summary

Client: Kennedy/Jenks Consultants
Project/Site: VTA

Job ID: 570-12112-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
570-12112-1	CP236-SB02 (20191105)	Water	11/05/19 10:45	11/07/19 10:30	
570-12112-2	CP236-SB01	Water	11/05/19 11:15	11/07/19 10:30	
570-12112-3	DUP01 (20191105)	Water	11/05/19 00:00	11/07/19 10:30	
570-12112-4	CP240-SB02 (20191105)	Water	11/05/19 14:25	11/07/19 10:30	
570-12112-5	CP240-SB01	Water	11/05/19 14:50	11/07/19 10:30	
570-12112-6	EB01 (20191105)	Water	11/05/19 15:15	11/07/19 10:30	
570-12112-7	Trip Blank	Water	11/05/19 00:00	11/07/19 10:30	

12112

eurofins

Calscience

7440 Lincoln Way, Garden Grove, CA 92841-1427 • (714) 895-5494

For courier service / sample drop off information, contact us26_sales@eurofinsus.com or call us.

570-12112 Chain of Custody

CHAIN-OF-CUSTODY RECORD

DATE: 11/5/19

PAGE: 1 OF 1

LABORATORY CLIENT: Kennedy/Jenks

ADDRESS: 275 Battery St

CITY: San Francisco STATE: ZIP:

TEL: E-MAIL: JayKnight@KennedyJenks.com

CLIENT PROJECT NAME / NO.: VTA

P.O. NO.: 196013.00

PROJECT CONTACT: Mike McLeod

LAB CONTACT OR QUOTE NO.:

GLOBAL ID: LOG CODE:

SAMPLER(S): (PRINT) M. McLeod

TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):

☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☐ 5 DAYS ☒ STANDARD

EDD:

☐ COELT EDF ☒ OTHER

SPECIAL INSTRUCTIONS:

KJ EQ EDD

REQUESTED ANALYSES

Please check box or fill in blank as needed.

LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	Unpreserved	Preserved HCl, HNO3	Field Filtered	TPH(g) ☒ GRO ✓	TPH(d) ☐ DRO	TPH ☐ C6-C36 ☐ C6-C44	TPHd, TPHmo	BTEX / MTBE ☐ 8260 ☐	VOCs (8260) ✓	Oxygenates (8260) ✓	Prep (5035) ☐ En Core ☐ Terra Core	SVOCs (8270)	Pesticides (8081) ✓	PCBs (8082)	PAHs ☐ 8270 ☐ 8270 SIM	T22 Metals ☒ 6010/747X ☐ 6020/747X Cam 17	Cr(VI) ☐ 7196 ☐ 7199 ☐ 218.6				
1	CP236-SB#2 (20191105)	11/5/19	1045	W	8		X		X			X		X							X				
2	CP236-SB#1	11/5/19	1115	"	"		X		X			X		X							X				
3	DUP#1(20191105)	11/5/19	n/a	"	"		X		X			X		X							X				
4	CP240-SB#2(20191105)	11/5/19	1425	"	"		X		X			X		X							X				
5	CP240-SB#1	"	1450	"	"		X		X			X		X							X				
6	EB#1 (20191105)	"	1515	"	3		X							X											
7	Trip blank	"	n/a	"	3		X							X											

Relinquished by: (Signature) Mike McLeod 11/6/19 1234

Received by: (Signature/Affiliation) 11/6/19 1234

Relinquished by: (Signature) 11/6/19 1630

Received by: (Signature/Affiliation) 11/7/19 1030

Relinquished by: (Signature)

Received by: (Signature/Affiliation)

1.4/1.9 SC6

* Custody Seal

2015-05-13 Revision

Page 44 of 45

11/15/2019

Login Sample Receipt Checklist

Client: Kennedy/Jenks Consultants

Job Number: 570-12112-1

Login Number: 12112
List Number: 1
Creator: Ramos, Maribel

List Source: Eurofins Calscience

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	IDs on containers do not match the COC. Logged in per COC.
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

EC202001-0223

Kennedy Jenks

275 Battery Street, Suite 550
San Francisco, California 94111
415-243-2150

www.KennedyJenks.com

Transmittal

TO: Mr. Dan Pornel, P.E.
Santa Clara Valley Transportation Authority
3331 North First Street
San Jose, CA 95134

FROM: Michael L. McLeod
DATE: 7 January 2020
KJ #: 1965013.02_****_****
SUBJECT: Report – Parcel 1241

VIA: ☐ Fax ## pgs. (inc. cover) ☐ USPS ☒ Fed Ex)

PLEASE FIND ENCLOSED:

Copies	Date	No.	Description
1	3 January 2020		Phase II Environmental Site Assessment Report – Parcel 1241 San Jose, California

THESE ARE SUBMITTED AS CHECKED BELOW:

- ☒ As requested
- ☐ For information and coordination
- ☐ Return material when review complete
- ☐ Return after loan to us
- ☐ For approval by: _____ Return to: _____
- ☐ For review and comment by: _____ Return to: _____
- ☐ Other: _____

REMARKS:

Mr. Pornel, enclosed please find the above-listed report and a Sandisk flash drive with a pdf file of the report. Please call or email if you have any questions or comments. Thanks very much.

Signed: _____

Copies to:

Kennedy Jenks

275 Battery Street, Suite 550
San Francisco, California 94111
415-243-2150

Phase II Environmental Site Assessment Report – Parcel 1241 San Jose, CA

3 January 2020

Prepared for

Santa Clara Valley Transportation Authority
3331 North First Street
San Jose, CA 95134

KJ Project No. 1965013.02

Table of Contents

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Section 1: Introduction

Kennedy/Jenks Consultants, Inc. (KJ) presents this *Phase II Environmental Site Assessment Report – Parcel 1241 Letter Report* proposal to the Santa Clara Valley Transportation Authority (VTA). This Letter Report presents the results of a Limited Phase II Environmental Site Assessment (ESA) of the Subject Property associated with the upcoming Eastridge to BART Regional Connector Capitol Expressway Light Rail Project (Project) in San Jose, California:

- Parcel 1241. KJ understands that Parcel 1241 is currently owned by Financial Title Company. VTA-provided information indicates that the property is located on APN 491-04-012 and APN 491-04-047. The target parcel is an open lot located in front of the Infiniti of San Jose auto dealership at the corner of Tully Road and Capitol Expressway.

The Eastridge to BART Regional Connector project (EBRC) will extend 2.4 miles of Light Rail line from the existing Alum Rock Station to the Eastridge Transit Center. Light rail will operate primarily in the center of Capitol Expressway and new stations will be built at Story Road and the Eastridge Transit Center.

Section 2: Field Work

The purpose for conducting this Limited Phase II ESA is to identify potential impacts to soil and groundwater in the subsurface in the areas within the Fee Take project footprint.

The boring locations are shown on Figure 1. The rationale for the boring locations is as follows:

CP1241-SB01: This boring is in the footprint of Abutment 76.

CP1241-SB02: This boring is located on the eastern side of the parcel, adjacent to the Infiniti of San Jose auto dealer.

Photographs of the site are included in Appendix A.

2.1 Field Preparation

KJ prepared a Sampling and Analysis Plan (SAP) for Parcel 1241. The SAP consisted of a map showing proposed sampling locations and a one-page narrative/tabular summary of sampling locations, rationales, drilling and sampling methods, sample depths, and laboratory analysis.

KJ personnel marked the drilling and sampling locations and notified the Underground Service Alert (USA) system. KJ also subcontracted GPRS, Inc. (GPRS) to conduct a surface geophysical survey to locate undocumented or private utility lines the week prior to sampling.

KJ also prepared a Site-specific health and safety plan and kept it onsite at all times.

Access to the property was secured under a Permit to Enter agreement between VTA and the Financial Title Company.

2.2 Field Work

2.2.1 Soil Borings

Drilling and soil sampling were performed by Cascade Drilling (Cascade, C57: 1058336) on 11 November 2019 under KJ supervision. The uppermost 5 feet was drilled with a hand auger for an added measure to avoid undetected underground utilities. Below 5 feet, the direct-push drilling rig continuously cored the soil, which was recovered in 2-inch-diameter clean acetate liners. To retain samples, desired sections of the liner were cut off, and the ends were covered with Teflon tape and plastic end caps.

After samples were collected, boreholes were backfilled with cement grout using the temporary polyvinyl chloride (PVC) as tremie pipe. Reusable drilling and sampling equipment was decontaminated between uses by scrubbing in a non-phosphate soap and water solution, rinsing with clean potable water, and air-drying.

Investigation-derived wastes included used disposable tubing, PVC casing, personal protective equipment, excess soil cores and acetate liners, and decontamination water. The tubing, casing, and personal protective equipment were gathered and discarded as trash by Cascade. Excess soil was placed in DOT-rated 55-gallon drums that was be sealed, labeled, and placed at a location designated by VTA. The decon water was consumed in mixing cement.

2.2.2 Soil Sample Collection

Each boring was drilled to 16 feet below ground surface (bgs), below first-encountered groundwater, to allow collection of a groundwater sample. Four soil samples were retained from each soil boring as specified in the SAP. A soil sample was retained from the upper 2 feet; from approximately 5 feet bgs, approximately 8 feet bgs, and 10 or 12 feet bgs. One groundwater sample was collected at each boring.

2.2.3 Groundwater Sample Collection

Cascade placed new, temporary PVC pipe with a screened lower section into the borehole to temporarily support the borehole while groundwater filled the lower screened section. Tubing with a check valve was then lowered into the pipe to retrieve a sample of the groundwater. The recovered groundwater was collected in new sample containers provided by the laboratory. The water was not filtered.

The sample containers were labeled with boring number, depth, matrix, date, time, and sampler's initials, and placed in a cooler with water ice. The samples remained in the cooler under chain-of-custody documentation until they were delivered to the Eurofins-Calscience Laboratory (Eurofins) receiving facility.

2.2.4 Field Quality Assurance/Quality Control (QA/QC)

Quality control sampling consisted of collection and analysis of one equipment rinsate sample for volatile organic compounds (VOCs) to evaluate the decontamination procedure. The rinsate sample was collected by pouring retail distilled deionized water over the decontaminated check valve used to collect the groundwater samples and collecting the water in a sample container provided by the laboratory.

2.3 Sample Analysis

The upper three soil samples were analyzed for petroleum hydrocarbons as diesel and motor oil by U.S. Environmental Protection Agency (EPA) Method 8015B, petroleum hydrocarbons as gasoline and VOCs by EPA Method 8260B, and CAM 17 metals by EPA Methods 200.7/6010B/7470/7471. The shallowest soil sample from each boring was also analyzed for pesticides by EPA Method 8081A. The deepest soil sample was placed on hold. Groundwater samples were analyzed for all these constituents.

Section 3: Findings

Soil and groundwater analytical results are compared with Environmental Screening Levels (ESLs) developed by the San Francisco Bay Regional Water Quality Control Board (January 2019 revision 1). Based on the anticipated site use provided by VTA, the Commercial/Industrial Shallow Soil Exposure and Construction Worker ESLs were used to compare with soil analytical results, and the lower of the Gross Contamination and Non-Drinking Water Odor Nuisance ESLs were used to compare with groundwater analytical results.

3.1 Soil Stratigraphy

Soil type is shown on the boring logs included in Appendix B. In general, the subsurface mainly consisted of silt to about 6 feet bgs, under which was silty sand to the total depth of 16 feet. The material was wet at about 8.5 feet bgs but appeared moist from 8.5 feet bgs to the total depth. No chemical staining or odor was noted. The water level was measured at 11.5 to 12 feet bgs.

3.2 Soil Sample Analytical Results

Soil sample organic compound analytical results are summarized in Table 1 and Table 2, metals results are summarized in Table 3, and the laboratory reports are included in Appendix C.

3.2.1 Hydrocarbons and Organic Compounds

Total petroleum hydrocarbons as gasoline (TPHg) was detected in one sample at 0.18 milligrams per kilogram (mg/kg), marked with a “J” flag, The J flag indicates the concentration is estimated and is less than the reporting limit but above the method detection limit. The reported concentration is lower than the Commercial/Industrial Shallow Soil Exposure and the Construction Worker ESLs.

Diesel-range hydrocarbons (C10-C28 carbon range) (DRO) were detected in two samples, at 5 mg/kg and 5.8 mg/kg. These detections were flagged as not resembling the fuel standard (a “Z” flag). The reported concentrations are lower than the Commercial/Industrial Shallow Soil Exposure and the Construction Worker ESLs.

Motor-oil range hydrocarbons (carbon range C17-C44) (MRO) were detected in two samples at 10 mg/kg and 13 mg/kg, both with a Z and a “J” flag, The J flag indicates the concentration is estimated and is less than the reporting limit but above the method detection limit. The reported concentrations are lower than the Commercial/Industrial Shallow Soil Exposure and the Construction Worker ESLs.

As noted above, the nearest-surface sample of each boring was analyzed for organochlorine pesticides. 4-4’-DDE was detected at 0.0029 mg/kg in the sample from SB-01. This detected concentration was marked with a J flag and is less than the Commercial/Industrial Shallow Soil Exposure and the Construction Worker ESLs.

The VOCs acetone, carbon disulfide, cymene, and methyl ethyl ketone (MEK) were detected in two samples at low concentrations. ESLs have been established for acetone and MEK, and the detected concentrations were below the ESLs. ESLs have not been established for carbon disulfide or cymene.

3.2.2 Metals

Samples were analyzed for the CAM17 suite of metals, as summarized in Table 3. In general, reported concentrations were less than their respective Commercial/Industrial Shallow Soil Exposure and the Construction Worker ESLs, except for arsenic.

Arsenic was detected in every sample at concentrations from 7.4 mg/kg to 10.6 mg/kg, with an average concentration of 8.97 mg/kg and a median concentration of 9.05 mg/kg. This is greater than the Commercial/Industrial Shallow Soil and Construction Worker ESLs. However, the values are within the background range of arsenic derived by for the urbanized San Francisco Bay Region (Duverge' 2011), which can be downloaded from the Regional Water Quality Control Board at https://www.waterboards.ca.gov/sanfranciscobay/water_issues/available_documents/2011_Arsenic_Background_Duverge.pdf.

While the detected concentrations of selenium were less than the Commercial/Industrial Shallow Soil and Construction Worker ESLs, three samples had concentrations of selenium above the Total Threshold Leaching Concentration (TTLC) of 100 mg/kg, which would mean that excavated soil would be handled as hazardous waste. Because selenium was detected above the TTLC range of hazardous waste, KJ requested Eurofins to re-extract and analyze the 1.5-2-foot sample CP1241-SB02-1.5, which had a reported concentration of 237 mg/kg. As shown in the laboratory report included in Appendix C and Table 3, selenium was not detected in the second analysis.

Because the initial analyses of two other samples were higher than the TTLC, excavated soil from this area would have to be managed as hazardous waste unless a leaching test was conducted to demonstrate that the leachate did not meet the criteria for designation as hazardous waste. Eurofins was directed to run a Waste Extraction Test (WET) on samples CP1241-SB01-5 ft and CP1241-SB02-5 ft, the remaining two samples with reported selenium exceeding the TTLC. The WET test was also run on CP1241-SB01-12. The WET test uses a citrate compound to mimic potential leaching of compounds from the soil in the subsurface.

The WET test results are presented in Table 3 and the laboratory reports are included in Appendix C. Selenium was not detected in the extract from any of the samples.

Based upon the re-analysis of CP241-SB02-1.5, where selenium was not detected above the reporting limit, and the WET tests on three other samples where selenium was not detected in the leachate, the initial analyses of selenium are considered unreliable, and selenium is not considered to be a concern.

3.3 Groundwater Level

As shown on the boring logs, the water level in the boreholes was measured at 11-12 feet bgs after drilling.

3.4 Groundwater Sample Analytical Results

Metals results are summarized in Table 4, and the laboratory reports are included in Appendix C.

No petroleum hydrocarbons, no VOCs, nor any organochlorine pesticides were detected in the groundwater samples.

As shown in Table 4, the detected concentrations of metals are less than the respective groundwater ESLs. The ESLs shown are the lower between the gross contamination and the non-drinking water odor nuisance values, which are considered appropriate for construction workers who may be exposed to groundwater in the course of excavation and construction.

3.4.1 QA/QC

No analytes were detected in the rinsate blank.

The laboratory notes the samples were received in good condition, the analyses were performed with in the holding times, and the internal QA/QC was acceptable.

Section 4: Conclusions and Recommendations

4.1 Conclusions

The following conclusions are based upon the sample results:

Soil:

No evidence of hydrocarbon releases was detected. Pesticide and some VOCs were detected in soil samples but were below the respective ESLs.

Concentrations of arsenic exceeded the Commercial/Industrial and Construction Worker ESLs but fall within published background concentrations.

The reported selenium concentration in three soil samples was greater than the TTLC – one sample was reanalyzed, and three other samples were subsequently analyzed using the leaching WET test. Selenium was not detected in the re-analyzed sample or in the leachate from the WET test performed on the other three samples. Because the elevated selenium results could not be reproduced and selenium was not detected in leachate, no special handling of soil due to selenium is required.

Groundwater:

No petroleum hydrocarbons, pesticide, or VOCs were detected. Metals were detected but at concentrations lower than the groundwater ESLs.

4.2 Recommendations

The following recommendations are based upon the conclusions above.

Of the detected compounds in soil, arsenic exceed the Construction Worker ESLs but are at concentrations comparable background concentrations. No special handling of soil is required, and standard personal protective equipment should be sufficient, but contractors disturbing soil must conform to Best Management Practices for dust and erosion control.

No special treatment of groundwater is recommended.

References

Duverge' D.J. 2011. *Establishing Background Arsenic in Soil of the Urbanized San Francisco Bay Region*. Thesis for Master of Science. December 2011.

Tables

Table 1: Petroleum Hydrocarbons in Soil Samples Analytical Results Summary VTA

Sample Name	Date	Sample Depths	Note	TPH As Gasoline mg/kg	Diesel Range Organics (C10-C28) mg/kg	Motor Oil Range Organics (C17-C44) mg/kg
		Chemical Units		TPH As Gasoline mg/kg	Diesel Range Organics (C10-C28) mg/kg	Motor Oil Range Organics (C17-C44) mg/kg
		Commerical/Industrial Shallow Soil Exposure ESL[(a)]		2,000	1,200	180,000
		Construction Worker Soil ESL		1,800	1,100	54,000
Parcel 1241						
CP1241-SB01	11/11/2019	1.5-2.0 ft	-	< 0.49	< 5.0	< 25
CP1241-SB01	11/11/2019	5.0-5.5 ft	-	**0.18 J**	< 5.0	< 25
CP1241-SB01	11/11/2019	8.0-8.5 ft	-	< 0.5	**5.0 Z**	**10 JZ**
CP1241-SB01	11/11/2019	12.0-12.5 ft	Hold	-	-	-
CP1241-SB02	11/11/2019	1.5-2.0 ft	-	< 0.51	< 5.0	< 25
CP1241-SB02	11/11/2019	5.0-5.5 ft	-	< 0.49	< 5.0	< 25
CP1241-SB02	11/11/2019	8.0-8.5 ft	-	< 0.5	**5.8 Z**	**13 JZ**
CP1241-SB02	11/11/2019	10.0-10.5 ft	Hold	-	-	-

Notes and Abbreviations

ft = feet

J = Estimated concentrations below the laboratory reporting limit.

mg/kg = milligrams per kilogram

TPH = total petroleum hydrocarbons

Z = The chromatographic response does not resemble a typical fuel pattern.

(a) Environmental Screening Level (ESL) developed by the San Francisco Bay Regional Water Quality Control Board, January 2019 revision1.

Table 2: Pesticides and VOCs in Soil Samples Analytical Results Summary
VTA

				Pesticides		Volatile Organic Compounds			
			Chemical	4,4'-DDE	4,4'-DDT	Acetone	Carbon Disulfide	Cymene (p-Isopropyl-toluene)	Methyl ethyl ketone (2-Butanone)
			Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Commerical/Industrial Shallow Soil Exposure ESL[(a)]				**8.3**	**8.5**	**670,000**	**NA**	**NA**	**200,000**
Construction Worker Soil ESL				**56.8**	**57.3**	**270,000**	**NA**	**NA**	**120,000**
Sample Name	**Date**	**Sample Depths**	**Note**						
Parcel 1241									
CP1241-SB01	11/11/2019	1.5-2.0 ft	-	**0.0029 J**	< 0.01	< 0.12	< 0.049	< 0.0049	< 0.049
CP1241-SB01	11/11/2019	5.0-5.5 ft	-	-	-	**0.25 E**	< 0.051	**0.025**	**0.011 J**
CP1241-SB01	11/11/2019	8.0-8.5 ft	-	-	-	**0.12**	**0.0021 J**	< 0.0050	< 0.05
CP1241-SB01	11/11/2019	12.0-12.5 ft	Hold	-	-	-	-	-	-
CP1241-SB02	11/11/2019	1.5-2.0 ft	-	< 0.0050	< 0.0050	< 0.12	< 0.051	< 0.0051	< 0.051
CP1241-SB02	11/11/2019	5.0-5.5 ft	-	-	-	< 0.12	< 0.049	< 0.0049	< 0.049
CP1241-SB02	11/11/2019	8.0-8.5 ft	-	-	-	< 0.12	< 0.05	< 0.0050	< 0.05
CP1241-SB02	11/11/2019	10.0-10.5 ft	Hold	-	-	-	-	-	-

Notes and Abbreviations
E = Result exceeded calibration range.
ft = feet
J = Estimated concentrations below the laboratory reporting limit.
mg/kg = milligrams per kilogram

(a) Environmental Screening Level (ESL) developed by the San Francisco Bay Regional Water Quality Control Board, January 2019 revision1.

Table 3: Metals in Soil Samples Analytical Results Summary

VTA

Chemical				Antimony	Arsenic	Barium	Ber-yllium	Cad-mium	Chromium, total	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Selenium WET	Silver	Thallium	Van-adium	Zinc
Units				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/l	mg/kg	mg/kg	mg/kg	mg/kg
Commerical/Industrial Shallow Soil Exposure ESL[a]				160	0.31	220,000	230	1,100		350	47,000	320	190	5,800	11,000	5,800		5,800	12	5,800	350,000
Construction Worker Soil ESL				50	1	3,000	27	51		28	14,000	160	44	1,800	86	1,700		1,800	4	470	110,000
Sample Name	**Date**	**Sample Depths**	**Note**																		
Parcel 1241																					
CP1241-SB01	11/11/2019	1.5-2.0 ft		**1.52**	**8.19**	**159**	**0.592**	< 0.518	**46.3**	**12.1**	**28.7**	**16.2**	**0.267**	**1.06**	**77.1**	**31.2**	**-**	< 0.259	< 0.777	**35**	**72.3**
CP1241-SB01	11/11/2019	5.0-5.5 ft		**1.37**	**10.6**	**164**	**0.617**	< 0.490	**47.3**	**12.3**	**30.7**	**4.56**	**0.0555 J**	**0.3**	**82.4**	**213**	-	< 0.245	< 0.735	**36.8**	**69.2**
CP1241-SB01	11/11/2019	5.0-5.5 ft	(b)	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	<1.0	**-**	**-**	**-**	**-**
CP1241-SB01	11/11/2019	8.0-8.5 ft		**0.529 J**	**7.4**	**134**	**0.436**	< 0.476	**37.7**	**9.66**	**21.3**	**3.39**	**0.0646 J**	< 0.238	**63.2**	**83**	**-**	< 0.238	< 0.714	**29**	**49.1**
CP1241-SB01	11/11/2019	12.0-12.5 ft	(b)	-	-	-	-	-	-	-	-	-	-	-	-	-	< 1.0	-	-	-	-
CP1241-SB02	11/11/2019	1.5-2.0 ft		**1.88**	**8.63**	**188**	**0.641**	< 0.524	**52.9**	**13.1**	**29.1**	**5.65**	**0.0488 J**	**3.1**	**85.6**	**237**	**-**	< 0.262	< 0.785	**38**	**57.2**
CP1241-SB02	11/11/2019	1.5-2.0 ft	(c)	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	<0.761	**-**	**-**	**-**	**-**	**-**
CP1241-SB02	11/11/2019	5.0-5.5 ft		**1.58**	**9.59**	**178**	**0.585**	< 0.493	**46.9**	**12.3**	**29.2**	**5.32**	**0.0567 J**	**1.01**	**78.8**	**170**	**-**	< 0.246	< 0.739	**34.8**	**58**
CP1241-SB02	11/11/2019	5.0-5.5 ft	(b)	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	<1.0	**-**	**-**	**-**	**-**
CP1241-SB02	11/11/2019	8.0-8.5 ft		**1.6**	**9.46**	**148**	**0.459**	< 0.505	**34.7**	**9**	**22.5**	**3.67**	**0.0516 J**	< 0.253	**56.7**	**32.8**	**-**	< 0.253	< 0.758	**28.3**	**43.1**
CP1241-SB02	11/11/2019	10.0-10.5 ft	Hold	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes and Abbreviations

B = Analyte detected in the associated method blank sample.
ft = feet
J = Estimated concentrations below the laboratory reporting limit.
mg/kg = milligrams per kilogram
mg/l = milligrams per liter

(a) Environmental Screening Level (ESL) developed by the San Francisco Bay Regional Water Quality Control Board, January 2019 revision1.
(b) WET test = Waste extraction test to analyze potential leachate. Sample extraction conducted with STLC citrate, then analyzed.
(c) Second extraction and analysis conducted to check intitial selenium result.

Table 4: Metals in Groundwater Samples Analytical Results Summary

VTA

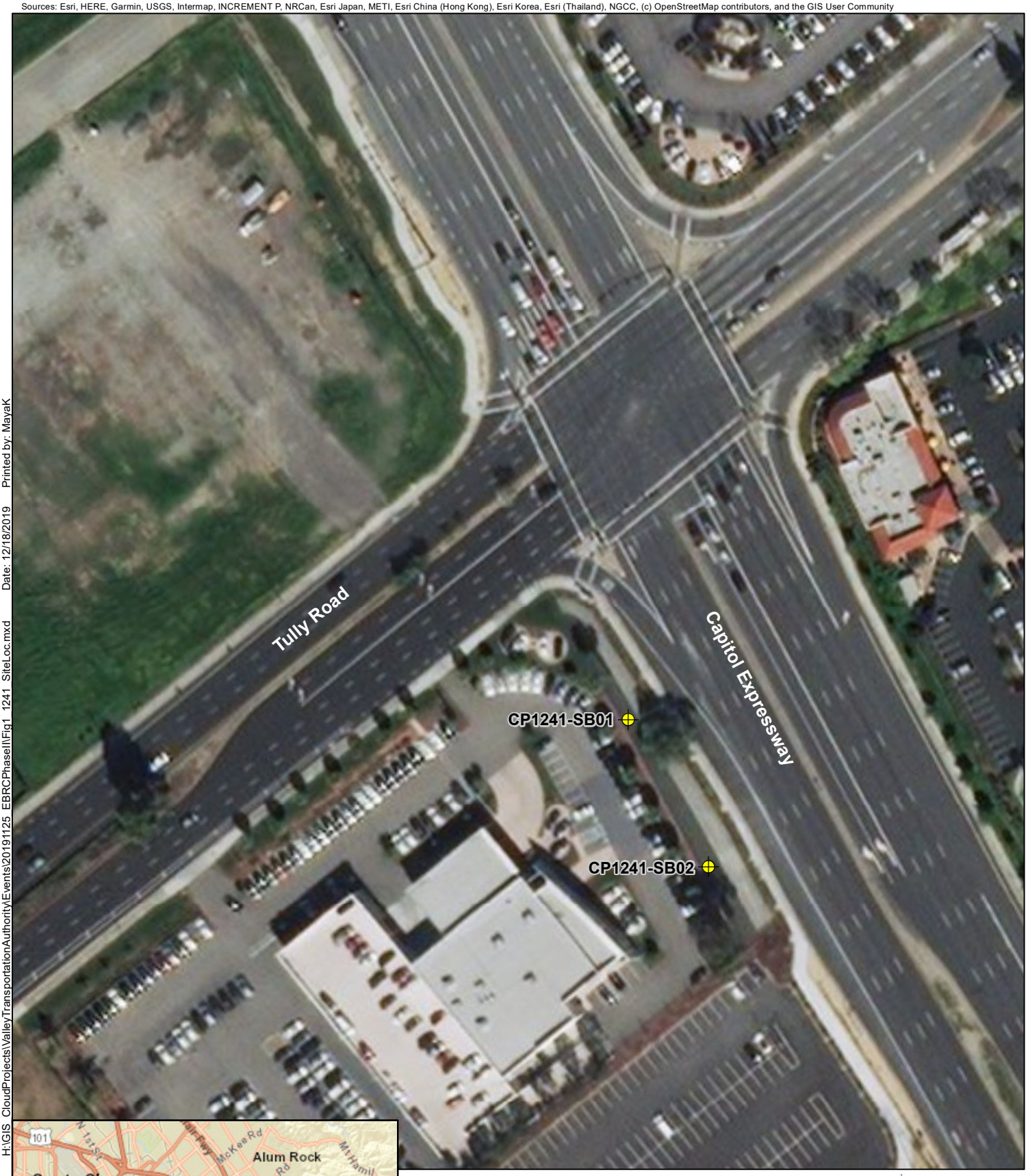
Chemical					Anti-mony	Arsenic	Barium	Beryl-lium	Cad-mium	Chrom-ium, total	Cobalt	Copper	Lead	Mercury	Molyb-denum	Nickel	Sele-nium	Silver	Thallium	Vana-dium	Zinc
Units					µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l
Groundwater ESL					50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	30	50,000	50,000	50,000	50,000	50,000	50,000	50,000
Sample Name	Date	Sample Type	Sample Depths	Note																	
Parcel 1241																					
CP1241-SB01	11/11/2019	N	16.0 ft		< 100	< 100	**115**	< 10.0	< 10.0	< 50.0	< 50.0	< 50.0	**10.0 J**	**3.21 B**	**259**	< 50.0	< 100	< 10.0	< 50.0	< 10.0	< 250
CP1241-SB02	11/11/2019	N	16.0 ft		< 100	< 100	**250**	< 10.0	< 10.0	< 50.0	< 50.0	< 50.0	**9.54 J**	**4.07 B**	**198**	< 50.0	< 100	< 10.0	< 50.0	**3.82 J**	< 250

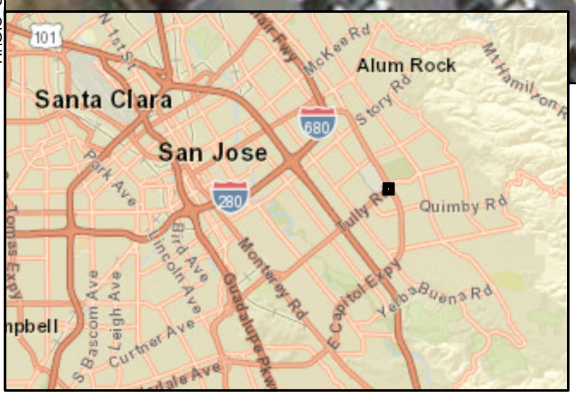
Notes and Abbreviations

B = Analyte detected in the associated method blank sample.
FD = field duplicate
ft = feet
J = Estimated concentrations below the laboratory reporting limit.
mg/l = milligrams per liter
N = normal sample

(a) Environmental Screening Level (ESL) developed by the San Francisco Bay Regional Water Quality Control Board, January 2019 revision2 represents the minimum of the gross contamination and non-drinking water odor nuisance values.

Figure





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N

0 50 100
Scale: Feet

Kennedy Jenks

Valley Transportation Authority
Eastridge to BART Regional Connector
San Jose, California

Sample Location Map
Parcel 1241

K/J 1965013.02

Figure 1

Appendix A

Photographs

Appendix A: Photographs – Parcel 1241

Figure 1: Parcel 1241, looking southeast

Figure 2: Parcel 1241, Looking northwest

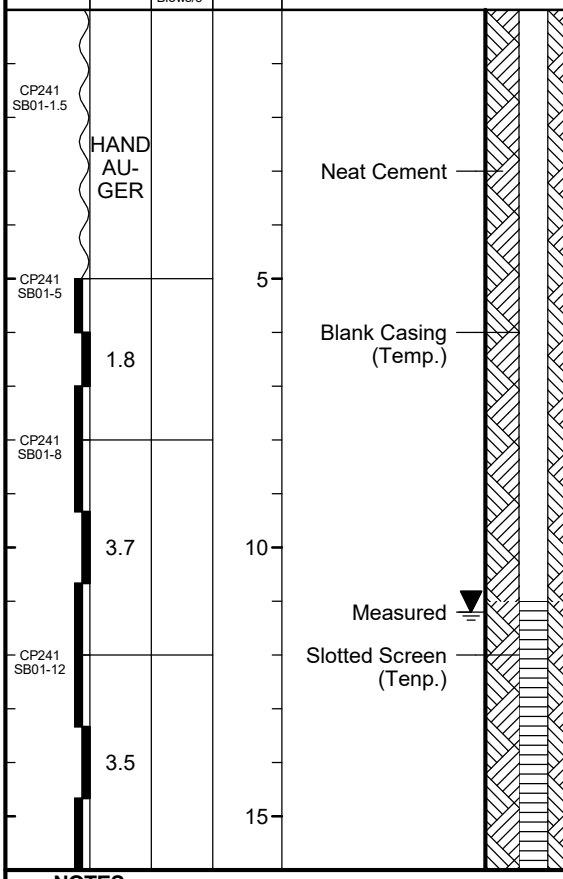
Appendix B

Soil Boring Logs

Boring & Well Construction Log

Kennedy/Jenks Consultants

BORING LOCATION: Parcel 1241 - West		Boring Name: CP1241-SB01	
DRILLING COMPANY: Cascade Drilling	DRILLER: A. Sanchez	Project Name: SCVTA EBRC Capitol Expwy	
DRILLING METHOD(S): GeoProbe	DRILL BIT(S) SIZE: 2-1/4 inches	Project Number: 1965013.02	
ISOLATION CASING: n/a	FROM n/a TO n/a FT.	ELEVATION AND DATUM: Ground: 136.00 ft.	TOTAL DEPTH: 16.0 ft. bgs
BLANK CASING: 3/4-In. SCH 40 PVC (Temp.)	FROM 0 TO 11 FT.	DATE STARTED: 11/11/19	DATE COMPLETED: 11/11/19
SLOTTED CASING: 3/4-In. SCH 40 PVC 0.010-in. slotted (Temp.)	FROM n/a TO n/a FT.	STATIC WATER ELEVATION: 124.80 ft.	NORTH: 1945526.470
SIZE AND TYPE OF FILTER PACK: n/a	FROM n/a TO n/a FT.	LOGGED BY: M. McLeod	EAST: 6179989.790
SEAL: n/a	FROM n/a TO n/a FT.	SAMPLING METHODS: Continuous	WELL COMPLETION: ☐ SURFACE HOUSING ☐ STAND PIPE n/a FT.
GROUT: Neat Cement	FROM 0 TO 16 FT.		



Type & No.	Recovery (Feet)	Penetr. Resist. Blows/6"	Drill Depth (Feet)	USCS Log	Lithology	Color	SAMPLE DESCRIPTION and DRILLING REMARKS
				ML		10YR 4/4	**SILT (ML)** BROWN, STIFF, NO PLASTICITY, DRY
				SM			**SILTY SAND (SM)** BROWN, ~70% FINE GRAINED SAND, ~30% FINES, LOOSE, WET AT 8.5 FT., WET TO MOIST FROM 8.5 FT. - 16 FT.

NOTES

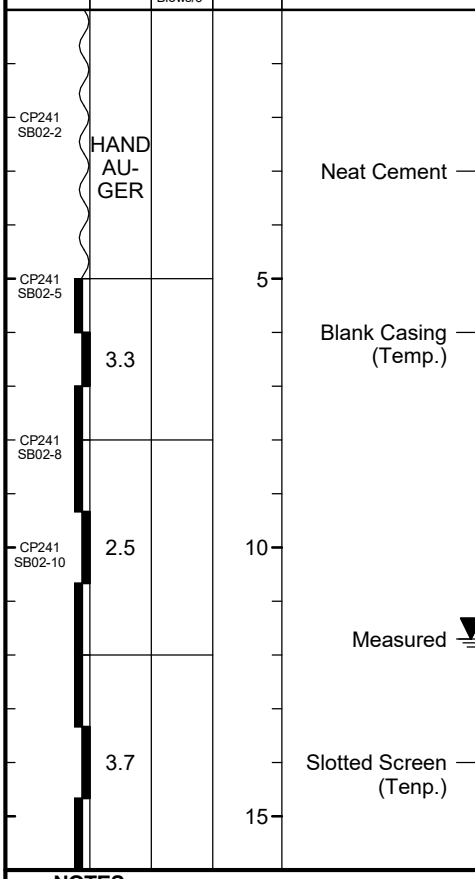
1. ALL CONTACTS APPROXIMATE
2. BGS: BELOW GROUND SURFACE
3. COLOR DESIGNATION IN ACCORDANCE WITH THE MUNSELL SOIL COLOR CHARTS (KOLLMORGEN INSTRUMENTS CORPORATION, 1990)
4. SOIL CLASSIFIED IN ACCORDANCE WITH THE UNIFIED SOIL CLASSIFICATION SYSTEM, ASTM D-2488-93
5. GROUNDWATER SAMPLE COLLECTED THROUGH TEMPORARY PVC CASING.

BORING & WELL CONSTRUCTION 1965013.02.GPJ KENNEDY JENKS.GDT 1/2/20

Boring & Well Construction Log

Kennedy/Jenks Consultants

BORING LOCATION: Parcel 1241 - East		Boring Name: CP1241-SB02	
DRILLING COMPANY: Cascade Drilling	DRILLER: A. Sanchez	Project Name: SCVTA EBRC Capitol Expwy	
DRILLING METHOD(S): GeoProbe	DRILL BIT(S) SIZE: 2-1/4 inches	Project Number: 1965013.02	
ISOLATION CASING: n/a	FROM n/a TO n/a FT.	ELEVATION AND DATUM: Ground: 136.00 ft.	TOTAL DEPTH: 16.0 ft. bgs
BLANK CASING: 3/4-In. SCH 40 PVC (Temp.)	FROM 0 TO 11 FT.	DATE STARTED: 11/11/19	DATE COMPLETED: 11/11/19
SLOTTED CASING: 3/4-In. SCH 40 PVC 0.010-in. slotted (Temp.)	FROM n/a TO n/a FT.	STATIC WATER ELEVATION: 124.30 ft.	NORTH: 1945413.960
SIZE AND TYPE OF FILTER PACK: n/a	FROM n/a TO n/a FT.	LOGGED BY: M. McLeod	EAST: 6180050.770
SEAL: n/a	FROM n/a TO n/a FT.	SAMPLING METHODS: Continuous	WELL COMPLETION: ☐ SURFACE HOUSING ☐ STAND PIPE n/a FT.
GROUT: Neat Cement	FROM 0 TO 16 FT.		



Type & No.	Recovery (Feet)	Penetr. Resist. Blows/6"	Drill Depth (Feet)	USCS Log	Color	SAMPLE DESCRIPTION and DRILLING REMARKS
CP241 SB02-2	HAND AU-GER			ML	10YR 4/4	**SILT (ML)** BROWN AND VERY DARK GRAYISH BROWN, SOFT TO MEDIUM STIFF, NO PLASTICITY, DRY
CP241 SB02-5	3.3		5		10YR 3/2	
CP241 SB02-8				SM		**SILTY SAND (SM)** BROWN OVERALL, ~60-70% FINE GRAINED SAND, ~40% FINES, LOOSE, WET AT 8 FT., WET TO MOIST FROM 8 FT. - 16 FT.
CP241 SB02-10	2.5		10		10YR 4/4	
	3.7		15			

NOTES

1. ALL CONTACTS APPROXIMATE
2. BGS: BELOW GROUND SURFACE
3. COLOR DESIGNATION IN ACCORDANCE WITH THE MUNSELL SOIL COLOR CHARTS (KOLLMORGEN INSTRUMENTS CORPORATION, 1990)
4. SOIL CLASSIFIED IN ACCORDANCE WITH THE UNIFIED SOIL CLASSIFICATION SYSTEM, ASTM D-2488-93
5. GROUNDWATER SAMPLE COLLECTED THROUGH TEMPORARY PVC CASING.

BORING & WELL CONSTRUCTION 1965013.02.GPJ KENNEDY JENKS.GDT 1/2/20

Appendix C

Laboratory Reports

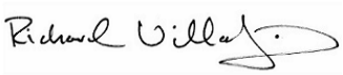
ANALYTICAL REPORT

Eurofins Calscience LLC
7440 Lincoln Way
Garden Grove, CA 92841
Tel: (714)895-5494

Laboratory Job ID: 570-12521-1
Client Project/Site: VTA

For:
Kennedy/Jenks Consultants
3200 El Camino Real
Suite 200
Irvine, California 92602

Attn: Mr. Jay Knight



Authorized for release by:
11/19/2019 1:37:47 PM

Richard Villafania, Project Manager I
(714)895-5494
richardvillafania@eurofinsus.com

Table of Contents

Definitions/Glossary

Client: Kennedy/Jenks Consultants
Project/Site: VTA

Job ID: 570-12521-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
E	Result exceeded calibration range.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
me	LCS Recovery is within Marginal Exdeedance (ME) control limit range (± 4 SD from the mean).

GC Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.
Z	The chromatographic response does not resemble a typical fuel pattern.

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
L	A negative instrument reading had an absolute value greater than the reporting limit

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client: Kennedy/Jenks Consultants
Project/Site: VTA

Job ID: 570-12521-1

Job ID: 570-12521-1

Laboratory: Eurofins Calscience LLC

Narrative

Job Narrative
570-12521-1

Comments
No additional comments.

Receipt
The samples were received on 11/12/2019 10:15 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.9º C.

GC/MS VOA
Method 8260B: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 570-32920 and analytical batch 570-32957 recovered outside control limits for the following analyte: 1,2-Dichloropropane. This analyte was biased high in the LCS/LCSD and was not detected in the associated samples; therefore, the data have been reported.

Method 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 570-32920 and analytical batch 570-32957 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8260B: The result for Acetone was above the upper calibration range and is reported as an Estimated ("E") value in sample: CP241-SB01-5 (570-12521-2) This was due to a non-detect result from the lowest possible dilution from the methanol extract and is the best analytical result achievable.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals
Method 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 570-32599 and analytical batch 570-33361 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 6010B: Due to the high concentration of Barium and Zinc, the matrix spike / matrix spike duplicate (MS/MSD) for preparation batch 570-32599 and analytical batch 570-33361 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

Method 6010B: The absolute response for Cadmium was greater than the method reporting limit (RL) in the following samples: CP241-SB01-5 (570-12521-2), CP241-SB01-8 (570-12521-3), CP241-SB02-2 (570-12521-5) and CP241-SB02-5 (570-12521-6). The instrument raw data has been manually reviewed and the result can be reported as ND.

Method 7471A: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 570-32601 and analytical batch 570-32866 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep
Method 3545: Elevated reporting limits are provided for the following sample due to insufficient sample provided for 3545/8081 preparation/analysis: CP241-SB01-1.5 (570-12521-1).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Kennedy/Jenks Consultants
Project/Site: VTA

Job ID: 570-12521-1

Client Sample ID: CP241-SB01-1.5 — Lab Sample ID: 570-12521-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
4,4'-DDE	2.9	J	10	1.4	ug/Kg	1		8081A	Total/NA
Arsenic	8.19		0.777	0.268	mg/Kg	1		6010B	Total/NA
Barium	159		0.518	0.160	mg/Kg	1		6010B	Total/NA
Beryllium	0.592		0.259	0.142	mg/Kg	1		6010B	Total/NA
Cobalt	12.1		0.259	0.153	mg/Kg	1		6010B	Total/NA
Chromium	46.3		0.259	0.147	mg/Kg	1		6010B	Total/NA
Copper	28.7		0.518	0.140	mg/Kg	1		6010B	Total/NA
Molybdenum	1.06		0.259	0.137	mg/Kg	1		6010B	Total/NA
Nickel	77.1		0.259	0.150	mg/Kg	1		6010B	Total/NA
Antimony	1.52		0.777	0.154	mg/Kg	1		6010B	Total/NA
Selenium	31.2		0.777	0.311	mg/Kg	1		6010B	Total/NA
Vanadium	35.0		0.259	0.146	mg/Kg	1		6010B	Total/NA
Zinc	72.3		1.04	0.184	mg/Kg	1		6010B	Total/NA
Lead	16.2		0.518	0.137	mg/Kg	1		6010B	Total/NA
Mercury	0.267		0.0862	0.00607	mg/Kg	1		7471A	Total/NA

Client Sample ID: CP241-SB01-5 — Lab Sample ID: 570-12521-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
TPH (as Gasoline)	180	J	510	32	ug/Kg	1		8260B/CA_LUFT MS	Total/NA
2-Butanone	11	J	51	3.8	ug/Kg	1		8260B	Total/NA
Acetone	250	E	120	6.4	ug/Kg	1		8260B	Total/NA
p-Isopropyltoluene	25		5.1	0.64	ug/Kg	1		8260B	Total/NA
Arsenic	10.6		0.735	0.254	mg/Kg	1		6010B	Total/NA
Barium	164		0.490	0.151	mg/Kg	1		6010B	Total/NA
Beryllium	0.617		0.245	0.134	mg/Kg	1		6010B	Total/NA
Cobalt	12.3		0.245	0.145	mg/Kg	1		6010B	Total/NA
Chromium	47.3		0.245	0.139	mg/Kg	1		6010B	Total/NA
Copper	30.7		0.490	0.132	mg/Kg	1		6010B	Total/NA
Molybdenum	0.300		0.245	0.129	mg/Kg	1		6010B	Total/NA
Nickel	82.4		0.245	0.142	mg/Kg	1		6010B	Total/NA
Antimony	1.37		0.735	0.146	mg/Kg	1		6010B	Total/NA
Selenium	213		0.735	0.294	mg/Kg	1		6010B	Total/NA
Vanadium	36.8		0.245	0.138	mg/Kg	1		6010B	Total/NA
Zinc	69.2		0.980	0.175	mg/Kg	1		6010B	Total/NA
Lead	4.56		0.490	0.129	mg/Kg	1		6010B	Total/NA
Mercury	0.0555	J	0.0833	0.00587	mg/Kg	1		7471A	Total/NA

Client Sample ID: CP241-SB01-8 — Lab Sample ID: 570-12521-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	120		120	6.3	ug/Kg	1		8260B	Total/NA
Carbon disulfide	2.1	J	50	0.31	ug/Kg	1		8260B	Total/NA
DRO (C10-C28)	5.0	Z	5.0	3.5	mg/Kg	1		8015B	Total/NA
MRO (C17-C44)	10	J Z	25	3.8	mg/Kg	1		8015B	Total/NA
Arsenic	7.40		0.714	0.247	mg/Kg	1		6010B	Total/NA
Barium	134		0.476	0.147	mg/Kg	1		6010B	Total/NA
Beryllium	0.436		0.238	0.130	mg/Kg	1		6010B	Total/NA
Cobalt	9.66		0.238	0.141	mg/Kg	1		6010B	Total/NA
Chromium	37.7		0.238	0.135	mg/Kg	1		6010B	Total/NA
Copper	21.3		0.476	0.129	mg/Kg	1		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: CP241-SB01-8 (Continued) — Lab Sample ID: 570-12521-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	63.2		0.238	0.138	mg/Kg	1		6010B	Total/NA
Antimony	0.529	J	0.714	0.142	mg/Kg	1		6010B	Total/NA
Selenium	83.0		0.714	0.286	mg/Kg	1		6010B	Total/NA
Vanadium	29.0		0.238	0.134	mg/Kg	1		6010B	Total/NA
Zinc	49.1		0.952	0.170	mg/Kg	1		6010B	Total/NA
Lead	3.39		0.476	0.126	mg/Kg	1		6010B	Total/NA
Mercury	0.0646	J	0.0877	0.00618	mg/Kg	1		7471A	Total/NA

Client Sample ID: CP241-SB02-2 — Lab Sample ID: 570-12521-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	8.63		0.785	0.271	mg/Kg	1		6010B	Total/NA
Barium	188		0.524	0.161	mg/Kg	1		6010B	Total/NA
Beryllium	0.641		0.262	0.143	mg/Kg	1		6010B	Total/NA
Cobalt	13.1		0.262	0.155	mg/Kg	1		6010B	Total/NA
Chromium	52.9		0.262	0.149	mg/Kg	1		6010B	Total/NA
Copper	29.1		0.524	0.141	mg/Kg	1		6010B	Total/NA
Molybdenum	3.10		0.262	0.138	mg/Kg	1		6010B	Total/NA
Nickel	85.6		0.262	0.152	mg/Kg	1		6010B	Total/NA
Antimony	1.88		0.785	0.156	mg/Kg	1		6010B	Total/NA
Selenium	237		0.785	0.314	mg/Kg	1		6010B	Total/NA
Vanadium	38.0		0.262	0.148	mg/Kg	1		6010B	Total/NA
Zinc	57.2		1.05	0.186	mg/Kg	1		6010B	Total/NA
Lead	5.65		0.524	0.138	mg/Kg	1		6010B	Total/NA
Mercury	0.0488	J	0.0833	0.00587	mg/Kg	1		7471A	Total/NA

Client Sample ID: CP241-SB02-5 — Lab Sample ID: 570-12521-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	9.59		0.739	0.255	mg/Kg	1		6010B	Total/NA
Barium	178		0.493	0.152	mg/Kg	1		6010B	Total/NA
Beryllium	0.585		0.246	0.135	mg/Kg	1		6010B	Total/NA
Cobalt	12.3		0.246	0.146	mg/Kg	1		6010B	Total/NA
Chromium	46.9		0.246	0.140	mg/Kg	1		6010B	Total/NA
Copper	29.2		0.493	0.133	mg/Kg	1		6010B	Total/NA
Molybdenum	1.01		0.246	0.130	mg/Kg	1		6010B	Total/NA
Nickel	78.8		0.246	0.143	mg/Kg	1		6010B	Total/NA
Antimony	1.58		0.739	0.147	mg/Kg	1		6010B	Total/NA
Selenium	170		0.739	0.296	mg/Kg	1		6010B	Total/NA
Vanadium	34.8		0.246	0.139	mg/Kg	1		6010B	Total/NA
Zinc	58.0		0.985	0.175	mg/Kg	1		6010B	Total/NA
Lead	5.32		0.493	0.130	mg/Kg	1		6010B	Total/NA
Mercury	0.0567	J	0.0833	0.00587	mg/Kg	1		7471A	Total/NA

Client Sample ID: CP241-SB02-8 — Lab Sample ID: 570-12521-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
DRO (C10-C28)	5.8	Z	4.9	3.5	mg/Kg	1		8015B	Total/NA
MRO (C17-C44)	13	J Z	25	3.8	mg/Kg	1		8015B	Total/NA
Arsenic	9.46		0.758	0.262	mg/Kg	1		6010B	Total/NA
Barium	148		0.505	0.156	mg/Kg	1		6010B	Total/NA
Beryllium	0.459		0.253	0.138	mg/Kg	1		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Kennedy/Jenks Consultants
Project/Site: VTA

Job ID: 570-12521-1

Client Sample ID: CP241-SB02-8 (Continued)

Lab Sample ID: 570-12521-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cobalt	9.00		0.253	0.149	mg/Kg	1		6010B	Total/NA
Chromium	34.7		0.253	0.143	mg/Kg	1		6010B	Total/NA
Copper	22.5		0.505	0.136	mg/Kg	1		6010B	Total/NA
Nickel	56.7		0.253	0.146	mg/Kg	1		6010B	Total/NA
Antimony	1.60		0.758	0.151	mg/Kg	1		6010B	Total/NA
Selenium	32.8		0.758	0.303	mg/Kg	1		6010B	Total/NA
Vanadium	28.3		0.253	0.142	mg/Kg	1		6010B	Total/NA
Zinc	43.1		1.01	0.180	mg/Kg	1		6010B	Total/NA
Lead	3.67		0.505	0.133	mg/Kg	1		6010B	Total/NA
Mercury	0.0516	J	0.0877	0.00618	mg/Kg	1		7471A	Total/NA

This Detection Summary does not include radiochemical test results.

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Client Sample ID: CP241-SB01-1.5
Date Collected: 11/11/19 09:28
Date Received: 11/12/19 10:15

Lab Sample ID: 570-12521-1
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TPH (as Gasoline)	ND		490	30	ug/Kg		11/14/19 18:25	11/15/19 04:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*104*		*80 - 120*	*11/14/19 18:25*	*11/15/19 04:42*	*1*

Client Sample ID: CP241-SB01-5
Date Collected: 11/11/19 09:40
Date Received: 11/12/19 10:15

Lab Sample ID: 570-12521-2
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TPH (as Gasoline)	**180**	**J**	510	32	ug/Kg		11/14/19 18:25	11/15/19 05:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*111*		*80 - 120*	*11/14/19 18:25*	*11/15/19 05:08*	*1*

Client Sample ID: CP241-SB01-8
Date Collected: 11/11/19 09:49
Date Received: 11/12/19 10:15

Lab Sample ID: 570-12521-3
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TPH (as Gasoline)	ND		500	31	ug/Kg		11/14/19 18:25	11/15/19 05:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*105*		*80 - 120*	*11/14/19 18:25*	*11/15/19 05:34*	*1*

Client Sample ID: CP241-SB02-2
Date Collected: 11/11/19 10:09
Date Received: 11/12/19 10:15

Lab Sample ID: 570-12521-5
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TPH (as Gasoline)	ND		510	31	ug/Kg		11/14/19 18:25	11/15/19 06:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*104*		*80 - 120*	*11/14/19 18:25*	*11/15/19 06:00*	*1*

Client Sample ID: CP241-SB02-5
Date Collected: 11/11/19 10:17
Date Received: 11/12/19 10:15

Lab Sample ID: 570-12521-6
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TPH (as Gasoline)	ND		490	30	ug/Kg		11/14/19 18:25	11/15/19 06:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*102*		*80 - 120*	*11/14/19 18:25*	*11/15/19 06:26*	*1*

Client Sample ID: CP241-SB02-8
Date Collected: 11/11/19 10:21
Date Received: 11/12/19 10:15

Lab Sample ID: 570-12521-7
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TPH (as Gasoline)	ND		500	31	ug/Kg		11/14/19 18:25	11/15/19 06:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*105*		*80 - 120*	*11/14/19 18:25*	*11/15/19 06:52*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: CP241-SB01-1.5
Date Collected: 11/11/19 09:28
Date Received: 11/12/19 10:15

Lab Sample ID: 570-12521-1
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		4.9	0.23	ug/Kg		11/14/19 18:25	11/15/19 04:42	1
1,1,1-Trichloroethane	ND		4.9	0.22	ug/Kg		11/14/19 18:25	11/15/19 04:42	1
1,1,2,2-Tetrachloroethane	ND		4.9	0.34	ug/Kg		11/14/19 18:25	11/15/19 04:42	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		49	0.34	ug/Kg		11/14/19 18:25	11/15/19 04:42	1
1,1,2-Trichloroethane	ND		4.9	0.35	ug/Kg		11/14/19 18:25	11/15/19 04:42	1
1,1-Dichloroethane	ND		4.9	0.21	ug/Kg		11/14/19 18:25	11/15/19 04:42	1
1,1-Dichloroethene	ND		4.9	0.34	ug/Kg		11/14/19 18:25	11/15/19 04:42	1
1,1-Dichloropropene	ND		4.9	0.32	ug/Kg		11/14/19 18:25	11/15/19 04:42	1
1,2,3-Trichlorobenzene	ND		9.8	0.89	ug/Kg		11/14/19 18:25	11/15/19 04:42	1
1,2,3-Trichloropropane	ND		4.9	0.81	ug/Kg		11/14/19 18:25	11/15/19 04:42	1
1,2,4-Trichlorobenzene	ND		4.9	0.30	ug/Kg		11/14/19 18:25	11/15/19 04:42	1
1,2,4-Trimethylbenzene	ND		4.9	0.57	ug/Kg		11/14/19 18:25	11/15/19 04:42	1
1,2-Dibromo-3-Chloropropane	ND		9.8	1.7	ug/Kg		11/14/19 18:25	11/15/19 04:42	1
1,2-Dibromoethane	ND		4.9	0.25	ug/Kg		11/14/19 18:25	11/15/19 04:42	1
1,2-Dichlorobenzene	ND		4.9	0.22	ug/Kg		11/14/19 18:25	11/15/19 04:42	1
1,2-Dichloroethane	ND		4.9	0.31	ug/Kg		11/14/19 18:25	11/15/19 04:42	1
1,2-Dichloropropane	ND	*	4.9	0.43	ug/Kg		11/14/19 18:25	11/15/19 04:42	1
1,3,5-Trimethylbenzene	ND		4.9	0.54	ug/Kg		11/14/19 18:25	11/15/19 04:42	1
1,3-Dichlorobenzene	ND		4.9	0.17	ug/Kg		11/14/19 18:25	11/15/19 04:42	1
1,3-Dichloropropane	ND		4.9	0.25	ug/Kg		11/14/19 18:25	11/15/19 04:42	1
1,4-Dichlorobenzene	ND		4.9	0.22	ug/Kg		11/14/19 18:25	11/15/19 04:42	1
2,2-Dichloropropane	ND		4.9	0.32	ug/Kg		11/14/19 18:25	11/15/19 04:42	1
2-Butanone	ND		49	3.7	ug/Kg		11/14/19 18:25	11/15/19 04:42	1
2-Chlorotoluene	ND		4.9	0.23	ug/Kg		11/14/19 18:25	11/15/19 04:42	1
2-Hexanone	ND		49	1.7	ug/Kg		11/14/19 18:25	11/15/19 04:42	1
4-Chlorotoluene	ND		4.9	0.21	ug/Kg		11/14/19 18:25	11/15/19 04:42	1
4-Methyl-2-pentanone	ND		49	4.2	ug/Kg		11/14/19 18:25	11/15/19 04:42	1
Acetone	ND		120	6.1	ug/Kg		11/14/19 18:25	11/15/19 04:42	1
Benzene	ND	*	4.9	0.13	ug/Kg		11/14/19 18:25	11/15/19 04:42	1
Bromobenzene	ND		4.9	0.20	ug/Kg		11/14/19 18:25	11/15/19 04:42	1
Bromochloromethane	ND		4.9	0.67	ug/Kg		11/14/19 18:25	11/15/19 04:42	1
Bromodichloromethane	ND		4.9	0.23	ug/Kg		11/14/19 18:25	11/15/19 04:42	1
Bromoform	ND		4.9	0.78	ug/Kg		11/14/19 18:25	11/15/19 04:42	1
Bromomethane	ND		24	9.2	ug/Kg		11/14/19 18:25	11/15/19 04:42	1
cis-1,2-Dichloroethene	ND		4.9	0.27	ug/Kg		11/14/19 18:25	11/15/19 04:42	1
cis-1,3-Dichloropropene	ND		4.9	0.25	ug/Kg		11/14/19 18:25	11/15/19 04:42	1
Carbon disulfide	ND		49	0.30	ug/Kg		11/14/19 18:25	11/15/19 04:42	1
Carbon tetrachloride	ND		4.9	0.28	ug/Kg		11/14/19 18:25	11/15/19 04:42	1
Chlorobenzene	ND		4.9	0.22	ug/Kg		11/14/19 18:25	11/15/19 04:42	1
Chloroethane	ND		4.9	1.5	ug/Kg		11/14/19 18:25	11/15/19 04:42	1
Chloroform	ND		4.9	0.23	ug/Kg		11/14/19 18:25	11/15/19 04:42	1
Chloromethane	ND		24	0.30	ug/Kg		11/14/19 18:25	11/15/19 04:42	1
Dibromochloromethane	ND		4.9	0.56	ug/Kg		11/14/19 18:25	11/15/19 04:42	1
Dibromomethane	ND		4.9	0.76	ug/Kg		11/14/19 18:25	11/15/19 04:42	1
Dichlorodifluoromethane	ND		4.9	0.43	ug/Kg		11/14/19 18:25	11/15/19 04:42	1
Di-isopropyl ether (DIPE)	ND		9.8	0.47	ug/Kg		11/14/19 18:25	11/15/19 04:42	1
Ethanol	ND		240	82	ug/Kg		11/14/19 18:25	11/15/19 04:42	1
Ethylbenzene	ND		4.9	0.15	ug/Kg		11/14/19 18:25	11/15/19 04:42	1
Ethyl-t-butyl ether (ETBE)	ND		9.8	0.49	ug/Kg		11/14/19 18:25	11/15/19 04:42	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: CP241-SB01-1.5
Date Collected: 11/11/19 09:28
Date Received: 11/12/19 10:15

Lab Sample ID: 570-12521-1
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		4.9	0.53	ug/Kg		11/14/19 18:25	11/15/19 04:42	1
Methylene Chloride	ND		49	1.3	ug/Kg		11/14/19 18:25	11/15/19 04:42	1
Methyl-t-Butyl Ether (MTBE)	ND		4.9	0.29	ug/Kg		11/14/19 18:25	11/15/19 04:42	1
Naphthalene	ND		49	0.79	ug/Kg		11/14/19 18:25	11/15/19 04:42	1
n-Butylbenzene	ND		4.9	0.15	ug/Kg		11/14/19 18:25	11/15/19 04:42	1
N-Propylbenzene	ND		4.9	0.49	ug/Kg		11/14/19 18:25	11/15/19 04:42	1
o-Xylene	ND		4.9	0.54	ug/Kg		11/14/19 18:25	11/15/19 04:42	1
m,p-Xylene	ND		4.9	0.26	ug/Kg		11/14/19 18:25	11/15/19 04:42	1
p-Isopropyltoluene	ND		4.9	0.61	ug/Kg		11/14/19 18:25	11/15/19 04:42	1
sec-Butylbenzene	ND		4.9	0.56	ug/Kg		11/14/19 18:25	11/15/19 04:42	1
Styrene	ND		4.9	0.59	ug/Kg		11/14/19 18:25	11/15/19 04:42	1
trans-1,2-Dichloroethene	ND		4.9	0.49	ug/Kg		11/14/19 18:25	11/15/19 04:42	1
trans-1,3-Dichloropropene	ND		4.9	0.59	ug/Kg		11/14/19 18:25	11/15/19 04:42	1
Tert-amyl-methyl ether (TAME)	ND		9.8	0.34	ug/Kg		11/14/19 18:25	11/15/19 04:42	1
tert-Butyl alcohol (TBA)	ND		49	5.1	ug/Kg		11/14/19 18:25	11/15/19 04:42	1
tert-Butylbenzene	ND		4.9	0.15	ug/Kg		11/14/19 18:25	11/15/19 04:42	1
Tetrachloroethene	ND		4.9	0.20	ug/Kg		11/14/19 18:25	11/15/19 04:42	1
Toluene	ND		4.9	0.50	ug/Kg		11/14/19 18:25	11/15/19 04:42	1
Trichloroethene	ND		4.9	0.29	ug/Kg		11/14/19 18:25	11/15/19 04:42	1
Trichlorofluoromethane	ND		49	0.37	ug/Kg		11/14/19 18:25	11/15/19 04:42	1
Vinyl acetate	ND		49	4.6	ug/Kg		11/14/19 18:25	11/15/19 04:42	1
Vinyl chloride	ND		4.9	0.49	ug/Kg		11/14/19 18:25	11/15/19 04:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*71 - 155*	*11/14/19 18:25*	*11/15/19 04:42*	*1*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*	*11/14/19 18:25*	*11/15/19 04:42*	*1*
Dibromofluoromethane (Surr)	*96*		*79 - 133*	*11/14/19 18:25*	*11/15/19 04:42*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*	*11/14/19 18:25*	*11/15/19 04:42*	*1*

Client Sample ID: CP241-SB01-5
Date Collected: 11/11/19 09:40
Date Received: 11/12/19 10:15

Lab Sample ID: 570-12521-2
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.1	0.24	ug/Kg		11/14/19 18:25	11/15/19 05:08	1
1,1,1-Trichloroethane	ND		5.1	0.23	ug/Kg		11/14/19 18:25	11/15/19 05:08	1
1,1,2,2-Tetrachloroethane	ND		5.1	0.35	ug/Kg		11/14/19 18:25	11/15/19 05:08	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		51	0.36	ug/Kg		11/14/19 18:25	11/15/19 05:08	1
1,1,2-Trichloroethane	ND		5.1	0.36	ug/Kg		11/14/19 18:25	11/15/19 05:08	1
1,1-Dichloroethane	ND		5.1	0.22	ug/Kg		11/14/19 18:25	11/15/19 05:08	1
1,1-Dichloroethene	ND		5.1	0.35	ug/Kg		11/14/19 18:25	11/15/19 05:08	1
1,1-Dichloropropene	ND		5.1	0.33	ug/Kg		11/14/19 18:25	11/15/19 05:08	1
1,2,3-Trichlorobenzene	ND		10	0.93	ug/Kg		11/14/19 18:25	11/15/19 05:08	1
1,2,3-Trichloropropane	ND		5.1	0.85	ug/Kg		11/14/19 18:25	11/15/19 05:08	1
1,2,4-Trichlorobenzene	ND		5.1	0.32	ug/Kg		11/14/19 18:25	11/15/19 05:08	1
1,2,4-Trimethylbenzene	ND		5.1	0.60	ug/Kg		11/14/19 18:25	11/15/19 05:08	1
1,2-Dibromo-3-Chloropropane	ND		10	1.8	ug/Kg		11/14/19 18:25	11/15/19 05:08	1
1,2-Dibromoethane	ND		5.1	0.26	ug/Kg		11/14/19 18:25	11/15/19 05:08	1
1,2-Dichlorobenzene	ND		5.1	0.23	ug/Kg		11/14/19 18:25	11/15/19 05:08	1
1,2-Dichloroethane	ND		5.1	0.32	ug/Kg		11/14/19 18:25	11/15/19 05:08	1
1,2-Dichloropropane	ND	*	5.1	0.45	ug/Kg		11/14/19 18:25	11/15/19 05:08	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: CP241-SB01-5
Date Collected: 11/11/19 09:40
Date Received: 11/12/19 10:15

Lab Sample ID: 570-12521-2
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		5.1	0.56	ug/Kg		11/14/19 18:25	11/15/19 05:08	1
1,3-Dichlorobenzene	ND		5.1	0.18	ug/Kg		11/14/19 18:25	11/15/19 05:08	1
1,3-Dichloropropane	ND		5.1	0.26	ug/Kg		11/14/19 18:25	11/15/19 05:08	1
1,4-Dichlorobenzene	ND		5.1	0.23	ug/Kg		11/14/19 18:25	11/15/19 05:08	1
2,2-Dichloropropane	ND		5.1	0.34	ug/Kg		11/14/19 18:25	11/15/19 05:08	1
2-Butanone	**11**	**J**	51	3.8	ug/Kg		11/14/19 18:25	11/15/19 05:08	1
2-Chlorotoluene	ND		5.1	0.24	ug/Kg		11/14/19 18:25	11/15/19 05:08	1
2-Hexanone	ND		51	1.8	ug/Kg		11/14/19 18:25	11/15/19 05:08	1
4-Chlorotoluene	ND		5.1	0.22	ug/Kg		11/14/19 18:25	11/15/19 05:08	1
4-Methyl-2-pentanone	ND		51	4.4	ug/Kg		11/14/19 18:25	11/15/19 05:08	1
Acetone	**250**	**E**	120	6.4	ug/Kg		11/14/19 18:25	11/15/19 05:08	1
Benzene	ND	*	5.1	0.13	ug/Kg		11/14/19 18:25	11/15/19 05:08	1
Bromobenzene	ND		5.1	0.21	ug/Kg		11/14/19 18:25	11/15/19 05:08	1
Bromochloromethane	ND		5.1	0.70	ug/Kg		11/14/19 18:25	11/15/19 05:08	1
Bromodichloromethane	ND		5.1	0.24	ug/Kg		11/14/19 18:25	11/15/19 05:08	1
Bromoform	ND		5.1	0.81	ug/Kg		11/14/19 18:25	11/15/19 05:08	1
Bromomethane	ND		26	9.6	ug/Kg		11/14/19 18:25	11/15/19 05:08	1
cis-1,2-Dichloroethene	ND		5.1	0.29	ug/Kg		11/14/19 18:25	11/15/19 05:08	1
cis-1,3-Dichloropropene	ND		5.1	0.26	ug/Kg		11/14/19 18:25	11/15/19 05:08	1
Carbon disulfide	ND		51	0.31	ug/Kg		11/14/19 18:25	11/15/19 05:08	1
Carbon tetrachloride	ND		5.1	0.29	ug/Kg		11/14/19 18:25	11/15/19 05:08	1
Chlorobenzene	ND		5.1	0.23	ug/Kg		11/14/19 18:25	11/15/19 05:08	1
Chloroethane	ND		5.1	1.5	ug/Kg		11/14/19 18:25	11/15/19 05:08	1
Chloroform	ND		5.1	0.24	ug/Kg		11/14/19 18:25	11/15/19 05:08	1
Chloromethane	ND		26	0.31	ug/Kg		11/14/19 18:25	11/15/19 05:08	1
Dibromochloromethane	ND		5.1	0.58	ug/Kg		11/14/19 18:25	11/15/19 05:08	1
Dibromomethane	ND		5.1	0.79	ug/Kg		11/14/19 18:25	11/15/19 05:08	1
Dichlorodifluoromethane	ND		5.1	0.45	ug/Kg		11/14/19 18:25	11/15/19 05:08	1
Di-isopropyl ether (DIPE)	ND		10	0.49	ug/Kg		11/14/19 18:25	11/15/19 05:08	1
Ethanol	ND		260	85	ug/Kg		11/14/19 18:25	11/15/19 05:08	1
Ethylbenzene	ND		5.1	0.15	ug/Kg		11/14/19 18:25	11/15/19 05:08	1
Ethyl-t-butyl ether (ETBE)	ND		10	0.52	ug/Kg		11/14/19 18:25	11/15/19 05:08	1
Isopropylbenzene	ND		5.1	0.56	ug/Kg		11/14/19 18:25	11/15/19 05:08	1
Methylene Chloride	ND		51	1.4	ug/Kg		11/14/19 18:25	11/15/19 05:08	1
Methyl-t-Butyl Ether (MTBE)	ND		5.1	0.30	ug/Kg		11/14/19 18:25	11/15/19 05:08	1
Naphthalene	ND		51	0.83	ug/Kg		11/14/19 18:25	11/15/19 05:08	1
n-Butylbenzene	ND		5.1	0.16	ug/Kg		11/14/19 18:25	11/15/19 05:08	1
N-Propylbenzene	ND		5.1	0.51	ug/Kg		11/14/19 18:25	11/15/19 05:08	1
o-Xylene	ND		5.1	0.57	ug/Kg		11/14/19 18:25	11/15/19 05:08	1
m,p-Xylene	ND		5.1	0.27	ug/Kg		11/14/19 18:25	11/15/19 05:08	1
p-Isopropyltoluene	**25**		5.1	0.64	ug/Kg		11/14/19 18:25	11/15/19 05:08	1
sec-Butylbenzene	ND		5.1	0.59	ug/Kg		11/14/19 18:25	11/15/19 05:08	1
Styrene	ND		5.1	0.62	ug/Kg		11/14/19 18:25	11/15/19 05:08	1
trans-1,2-Dichloroethene	ND		5.1	0.52	ug/Kg		11/14/19 18:25	11/15/19 05:08	1
trans-1,3-Dichloropropene	ND		5.1	0.62	ug/Kg		11/14/19 18:25	11/15/19 05:08	1
Tert-amyl-methyl ether (TAME)	ND		10	0.36	ug/Kg		11/14/19 18:25	11/15/19 05:08	1
tert-Butyl alcohol (TBA)	ND		51	5.3	ug/Kg		11/14/19 18:25	11/15/19 05:08	1
tert-Butylbenzene	ND		5.1	0.15	ug/Kg		11/14/19 18:25	11/15/19 05:08	1
Tetrachloroethene	ND		5.1	0.21	ug/Kg		11/14/19 18:25	11/15/19 05:08	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: CP241-SB01-5
Date Collected: 11/11/19 09:40
Date Received: 11/12/19 10:15

Lab Sample ID: 570-12521-2
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	ND		5.1	0.53	ug/Kg		11/14/19 18:25	11/15/19 05:08	1
Trichloroethene	ND		5.1	0.31	ug/Kg		11/14/19 18:25	11/15/19 05:08	1
Trichlorofluoromethane	ND		51	0.38	ug/Kg		11/14/19 18:25	11/15/19 05:08	1
Vinyl acetate	ND		51	4.8	ug/Kg		11/14/19 18:25	11/15/19 05:08	1
Vinyl chloride	ND		5.1	0.51	ug/Kg		11/14/19 18:25	11/15/19 05:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*71 - 155*	*11/14/19 18:25*	*11/15/19 05:08*	*1*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*	*11/14/19 18:25*	*11/15/19 05:08*	*1*
Dibromofluoromethane (Surr)	*85*		*79 - 133*	*11/14/19 18:25*	*11/15/19 05:08*	*1*
Toluene-d8 (Surr)	*109*		*80 - 120*	*11/14/19 18:25*	*11/15/19 05:08*	*1*

Client Sample ID: CP241-SB01-8
Date Collected: 11/11/19 09:49
Date Received: 11/12/19 10:15

Lab Sample ID: 570-12521-3
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.0	0.24	ug/Kg		11/14/19 18:25	11/15/19 05:34	1
1,1,1-Trichloroethane	ND		5.0	0.23	ug/Kg		11/14/19 18:25	11/15/19 05:34	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.35	ug/Kg		11/14/19 18:25	11/15/19 05:34	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		50	0.35	ug/Kg		11/14/19 18:25	11/15/19 05:34	1
1,1,2-Trichloroethane	ND		5.0	0.36	ug/Kg		11/14/19 18:25	11/15/19 05:34	1
1,1-Dichloroethane	ND		5.0	0.21	ug/Kg		11/14/19 18:25	11/15/19 05:34	1
1,1-Dichloroethene	ND		5.0	0.35	ug/Kg		11/14/19 18:25	11/15/19 05:34	1
1,1-Dichloropropene	ND		5.0	0.33	ug/Kg		11/14/19 18:25	11/15/19 05:34	1
1,2,3-Trichlorobenzene	ND		10	0.92	ug/Kg		11/14/19 18:25	11/15/19 05:34	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/Kg		11/14/19 18:25	11/15/19 05:34	1
1,2,4-Trichlorobenzene	ND		5.0	0.31	ug/Kg		11/14/19 18:25	11/15/19 05:34	1
1,2,4-Trimethylbenzene	ND		5.0	0.59	ug/Kg		11/14/19 18:25	11/15/19 05:34	1
1,2-Dibromo-3-Chloropropane	ND		10	1.7	ug/Kg		11/14/19 18:25	11/15/19 05:34	1
1,2-Dibromoethane	ND		5.0	0.26	ug/Kg		11/14/19 18:25	11/15/19 05:34	1
1,2-Dichlorobenzene	ND		5.0	0.23	ug/Kg		11/14/19 18:25	11/15/19 05:34	1
1,2-Dichloroethane	ND		5.0	0.32	ug/Kg		11/14/19 18:25	11/15/19 05:34	1
1,2-Dichloropropane	ND	*	5.0	0.44	ug/Kg		11/14/19 18:25	11/15/19 05:34	1
1,3,5-Trimethylbenzene	ND		5.0	0.55	ug/Kg		11/14/19 18:25	11/15/19 05:34	1
1,3-Dichlorobenzene	ND		5.0	0.18	ug/Kg		11/14/19 18:25	11/15/19 05:34	1
1,3-Dichloropropane	ND		5.0	0.25	ug/Kg		11/14/19 18:25	11/15/19 05:34	1
1,4-Dichlorobenzene	ND		5.0	0.22	ug/Kg		11/14/19 18:25	11/15/19 05:34	1
2,2-Dichloropropane	ND		5.0	0.33	ug/Kg		11/14/19 18:25	11/15/19 05:34	1
2-Butanone	ND		50	3.8	ug/Kg		11/14/19 18:25	11/15/19 05:34	1
2-Chlorotoluene	ND		5.0	0.23	ug/Kg		11/14/19 18:25	11/15/19 05:34	1
2-Hexanone	ND		50	1.8	ug/Kg		11/14/19 18:25	11/15/19 05:34	1
4-Chlorotoluene	ND		5.0	0.21	ug/Kg		11/14/19 18:25	11/15/19 05:34	1
4-Methyl-2-pentanone	ND		50	4.3	ug/Kg		11/14/19 18:25	11/15/19 05:34	1
Acetone	**120**		120	6.3	ug/Kg		11/14/19 18:25	11/15/19 05:34	1
Benzene	ND	*	5.0	0.13	ug/Kg		11/14/19 18:25	11/15/19 05:34	1
Bromobenzene	ND		5.0	0.21	ug/Kg		11/14/19 18:25	11/15/19 05:34	1
Bromochloromethane	ND		5.0	0.69	ug/Kg		11/14/19 18:25	11/15/19 05:34	1
Bromodichloromethane	ND		5.0	0.23	ug/Kg		11/14/19 18:25	11/15/19 05:34	1
Bromoform	ND		5.0	0.80	ug/Kg		11/14/19 18:25	11/15/19 05:34	1
Bromomethane	ND		25	9.5	ug/Kg		11/14/19 18:25	11/15/19 05:34	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: CP241-SB01-8
Date Collected: 11/11/19 09:49
Date Received: 11/12/19 10:15

Lab Sample ID: 570-12521-3
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		5.0	0.28	ug/Kg		11/14/19 18:25	11/15/19 05:34	1
cis-1,3-Dichloropropene	ND		5.0	0.26	ug/Kg		11/14/19 18:25	11/15/19 05:34	1
Carbon disulfide	**2.1**	**J**	50	0.31	ug/Kg		11/14/19 18:25	11/15/19 05:34	1
Carbon tetrachloride	ND		5.0	0.28	ug/Kg		11/14/19 18:25	11/15/19 05:34	1
Chlorobenzene	ND		5.0	0.23	ug/Kg		11/14/19 18:25	11/15/19 05:34	1
Chloroethane	ND		5.0	1.5	ug/Kg		11/14/19 18:25	11/15/19 05:34	1
Chloroform	ND		5.0	0.24	ug/Kg		11/14/19 18:25	11/15/19 05:34	1
Chloromethane	ND		25	0.31	ug/Kg		11/14/19 18:25	11/15/19 05:34	1
Dibromochloromethane	ND		5.0	0.57	ug/Kg		11/14/19 18:25	11/15/19 05:34	1
Dibromomethane	ND		5.0	0.78	ug/Kg		11/14/19 18:25	11/15/19 05:34	1
Dichlorodifluoromethane	ND		5.0	0.45	ug/Kg		11/14/19 18:25	11/15/19 05:34	1
Di-isopropyl ether (DIPE)	ND		10	0.49	ug/Kg		11/14/19 18:25	11/15/19 05:34	1
Ethanol	ND		250	84	ug/Kg		11/14/19 18:25	11/15/19 05:34	1
Ethylbenzene	ND		5.0	0.15	ug/Kg		11/14/19 18:25	11/15/19 05:34	1
Ethyl-t-butyl ether (ETBE)	ND		10	0.51	ug/Kg		11/14/19 18:25	11/15/19 05:34	1
Isopropylbenzene	ND		5.0	0.55	ug/Kg		11/14/19 18:25	11/15/19 05:34	1
Methylene Chloride	ND		50	1.3	ug/Kg		11/14/19 18:25	11/15/19 05:34	1
Methyl-t-Butyl Ether (MTBE)	ND		5.0	0.30	ug/Kg		11/14/19 18:25	11/15/19 05:34	1
Naphthalene	ND		50	0.82	ug/Kg		11/14/19 18:25	11/15/19 05:34	1
n-Butylbenzene	ND		5.0	0.16	ug/Kg		11/14/19 18:25	11/15/19 05:34	1
N-Propylbenzene	ND		5.0	0.50	ug/Kg		11/14/19 18:25	11/15/19 05:34	1
o-Xylene	ND		5.0	0.56	ug/Kg		11/14/19 18:25	11/15/19 05:34	1
m,p-Xylene	ND		5.0	0.27	ug/Kg		11/14/19 18:25	11/15/19 05:34	1
p-Isopropyltoluene	ND		5.0	0.63	ug/Kg		11/14/19 18:25	11/15/19 05:34	1
sec-Butylbenzene	ND		5.0	0.58	ug/Kg		11/14/19 18:25	11/15/19 05:34	1
Styrene	ND		5.0	0.61	ug/Kg		11/14/19 18:25	11/15/19 05:34	1
trans-1,2-Dichloroethene	ND		5.0	0.51	ug/Kg		11/14/19 18:25	11/15/19 05:34	1
trans-1,3-Dichloropropene	ND		5.0	0.61	ug/Kg		11/14/19 18:25	11/15/19 05:34	1
Tert-amyl-methyl ether (TAME)	ND		10	0.35	ug/Kg		11/14/19 18:25	11/15/19 05:34	1
tert-Butyl alcohol (TBA)	ND		50	5.2	ug/Kg		11/14/19 18:25	11/15/19 05:34	1
tert-Butylbenzene	ND		5.0	0.15	ug/Kg		11/14/19 18:25	11/15/19 05:34	1
Tetrachloroethene	ND		5.0	0.21	ug/Kg		11/14/19 18:25	11/15/19 05:34	1
Toluene	ND		5.0	0.52	ug/Kg		11/14/19 18:25	11/15/19 05:34	1
Trichloroethene	ND		5.0	0.30	ug/Kg		11/14/19 18:25	11/15/19 05:34	1
Trichlorofluoromethane	ND		50	0.38	ug/Kg		11/14/19 18:25	11/15/19 05:34	1
Vinyl acetate	ND		50	4.8	ug/Kg		11/14/19 18:25	11/15/19 05:34	1
Vinyl chloride	ND		5.0	0.51	ug/Kg		11/14/19 18:25	11/15/19 05:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*71 - 155*	*11/14/19 18:25*	*11/15/19 05:34*	*1*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*	*11/14/19 18:25*	*11/15/19 05:34*	*1*
Dibromofluoromethane (Surr)	*94*		*79 - 133*	*11/14/19 18:25*	*11/15/19 05:34*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*	*11/14/19 18:25*	*11/15/19 05:34*	*1*

Client Sample ID: CP241-SB02-2
Date Collected: 11/11/19 10:09
Date Received: 11/12/19 10:15

Lab Sample ID: 570-12521-5
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.1	0.24	ug/Kg		11/14/19 18:25	11/15/19 06:00	1
1,1,1-Trichloroethane	ND		5.1	0.23	ug/Kg		11/14/19 18:25	11/15/19 06:00	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: CP241-SB02-2
Date Collected: 11/11/19 10:09
Date Received: 11/12/19 10:15

Lab Sample ID: 570-12521-5
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		5.1	0.35	ug/Kg		11/14/19 18:25	11/15/19 06:00	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		51	0.36	ug/Kg		11/14/19 18:25	11/15/19 06:00	1
1,1,2-Trichloroethane	ND		5.1	0.36	ug/Kg		11/14/19 18:25	11/15/19 06:00	1
1,1-Dichloroethane	ND		5.1	0.21	ug/Kg		11/14/19 18:25	11/15/19 06:00	1
1,1-Dichloroethene	ND		5.1	0.35	ug/Kg		11/14/19 18:25	11/15/19 06:00	1
1,1-Dichloropropene	ND		5.1	0.33	ug/Kg		11/14/19 18:25	11/15/19 06:00	1
1,2,3-Trichlorobenzene	ND		10	0.92	ug/Kg		11/14/19 18:25	11/15/19 06:00	1
1,2,3-Trichloropropane	ND		5.1	0.84	ug/Kg		11/14/19 18:25	11/15/19 06:00	1
1,2,4-Trichlorobenzene	ND		5.1	0.31	ug/Kg		11/14/19 18:25	11/15/19 06:00	1
1,2,4-Trimethylbenzene	ND		5.1	0.59	ug/Kg		11/14/19 18:25	11/15/19 06:00	1
1,2-Dibromo-3-Chloropropane	ND		10	1.8	ug/Kg		11/14/19 18:25	11/15/19 06:00	1
1,2-Dibromoethane	ND		5.1	0.26	ug/Kg		11/14/19 18:25	11/15/19 06:00	1
1,2-Dichlorobenzene	ND		5.1	0.23	ug/Kg		11/14/19 18:25	11/15/19 06:00	1
1,2-Dichloroethane	ND		5.1	0.32	ug/Kg		11/14/19 18:25	11/15/19 06:00	1
1,2-Dichloropropane	ND	*	5.1	0.44	ug/Kg		11/14/19 18:25	11/15/19 06:00	1
1,3,5-Trimethylbenzene	ND		5.1	0.56	ug/Kg		11/14/19 18:25	11/15/19 06:00	1
1,3-Dichlorobenzene	ND		5.1	0.18	ug/Kg		11/14/19 18:25	11/15/19 06:00	1
1,3-Dichloropropane	ND		5.1	0.26	ug/Kg		11/14/19 18:25	11/15/19 06:00	1
1,4-Dichlorobenzene	ND		5.1	0.22	ug/Kg		11/14/19 18:25	11/15/19 06:00	1
2,2-Dichloropropane	ND		5.1	0.33	ug/Kg		11/14/19 18:25	11/15/19 06:00	1
2-Butanone	ND		51	3.8	ug/Kg		11/14/19 18:25	11/15/19 06:00	1
2-Chlorotoluene	ND		5.1	0.23	ug/Kg		11/14/19 18:25	11/15/19 06:00	1
2-Hexanone	ND		51	1.8	ug/Kg		11/14/19 18:25	11/15/19 06:00	1
4-Chlorotoluene	ND		5.1	0.22	ug/Kg		11/14/19 18:25	11/15/19 06:00	1
4-Methyl-2-pentanone	ND		51	4.4	ug/Kg		11/14/19 18:25	11/15/19 06:00	1
Acetone	ND		120	6.3	ug/Kg		11/14/19 18:25	11/15/19 06:00	1
Benzene	ND	*	5.1	0.13	ug/Kg		11/14/19 18:25	11/15/19 06:00	1
Bromobenzene	ND		5.1	0.21	ug/Kg		11/14/19 18:25	11/15/19 06:00	1
Bromochloromethane	ND		5.1	0.70	ug/Kg		11/14/19 18:25	11/15/19 06:00	1
Bromodichloromethane	ND		5.1	0.24	ug/Kg		11/14/19 18:25	11/15/19 06:00	1
Bromoform	ND		5.1	0.80	ug/Kg		11/14/19 18:25	11/15/19 06:00	1
Bromomethane	ND		25	9.5	ug/Kg		11/14/19 18:25	11/15/19 06:00	1
cis-1,2-Dichloroethene	ND		5.1	0.28	ug/Kg		11/14/19 18:25	11/15/19 06:00	1
cis-1,3-Dichloropropene	ND		5.1	0.26	ug/Kg		11/14/19 18:25	11/15/19 06:00	1
Carbon disulfide	ND		51	0.31	ug/Kg		11/14/19 18:25	11/15/19 06:00	1
Carbon tetrachloride	ND		5.1	0.29	ug/Kg		11/14/19 18:25	11/15/19 06:00	1
Chlorobenzene	ND		5.1	0.23	ug/Kg		11/14/19 18:25	11/15/19 06:00	1
Chloroethane	ND		5.1	1.5	ug/Kg		11/14/19 18:25	11/15/19 06:00	1
Chloroform	ND		5.1	0.24	ug/Kg		11/14/19 18:25	11/15/19 06:00	1
Chloromethane	ND		25	0.31	ug/Kg		11/14/19 18:25	11/15/19 06:00	1
Dibromochloromethane	ND		5.1	0.58	ug/Kg		11/14/19 18:25	11/15/19 06:00	1
Dibromomethane	ND		5.1	0.78	ug/Kg		11/14/19 18:25	11/15/19 06:00	1
Dichlorodifluoromethane	ND		5.1	0.45	ug/Kg		11/14/19 18:25	11/15/19 06:00	1
Di-isopropyl ether (DIPE)	ND		10	0.49	ug/Kg		11/14/19 18:25	11/15/19 06:00	1
Ethanol	ND		250	85	ug/Kg		11/14/19 18:25	11/15/19 06:00	1
Ethylbenzene	ND		5.1	0.15	ug/Kg		11/14/19 18:25	11/15/19 06:00	1
Ethyl-t-butyl ether (ETBE)	ND		10	0.51	ug/Kg		11/14/19 18:25	11/15/19 06:00	1
Isopropylbenzene	ND		5.1	0.55	ug/Kg		11/14/19 18:25	11/15/19 06:00	1
Methylene Chloride	ND		51	1.4	ug/Kg		11/14/19 18:25	11/15/19 06:00	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: CP241-SB02-2
Date Collected: 11/11/19 10:09
Date Received: 11/12/19 10:15

Lab Sample ID: 570-12521-5
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl-t-Butyl Ether (MTBE)	ND		5.1	0.30	ug/Kg		11/14/19 18:25	11/15/19 06:00	1
Naphthalene	ND		51	0.82	ug/Kg		11/14/19 18:25	11/15/19 06:00	1
n-Butylbenzene	ND		5.1	0.16	ug/Kg		11/14/19 18:25	11/15/19 06:00	1
N-Propylbenzene	ND		5.1	0.51	ug/Kg		11/14/19 18:25	11/15/19 06:00	1
o-Xylene	ND		5.1	0.56	ug/Kg		11/14/19 18:25	11/15/19 06:00	1
m,p-Xylene	ND		5.1	0.27	ug/Kg		11/14/19 18:25	11/15/19 06:00	1
p-Isopropyltoluene	ND		5.1	0.64	ug/Kg		11/14/19 18:25	11/15/19 06:00	1
sec-Butylbenzene	ND		5.1	0.58	ug/Kg		11/14/19 18:25	11/15/19 06:00	1
Styrene	ND		5.1	0.61	ug/Kg		11/14/19 18:25	11/15/19 06:00	1
trans-1,2-Dichloroethene	ND		5.1	0.51	ug/Kg		11/14/19 18:25	11/15/19 06:00	1
trans-1,3-Dichloropropene	ND		5.1	0.61	ug/Kg		11/14/19 18:25	11/15/19 06:00	1
Tert-amyl-methyl ether (TAME)	ND		10	0.36	ug/Kg		11/14/19 18:25	11/15/19 06:00	1
tert-Butyl alcohol (TBA)	ND		51	5.2	ug/Kg		11/14/19 18:25	11/15/19 06:00	1
tert-Butylbenzene	ND		5.1	0.15	ug/Kg		11/14/19 18:25	11/15/19 06:00	1
Tetrachloroethene	ND		5.1	0.21	ug/Kg		11/14/19 18:25	11/15/19 06:00	1
Toluene	ND		5.1	0.52	ug/Kg		11/14/19 18:25	11/15/19 06:00	1
Trichloroethene	ND		5.1	0.30	ug/Kg		11/14/19 18:25	11/15/19 06:00	1
Trichlorofluoromethane	ND		51	0.38	ug/Kg		11/14/19 18:25	11/15/19 06:00	1
Vinyl acetate	ND		51	4.8	ug/Kg		11/14/19 18:25	11/15/19 06:00	1
Vinyl chloride	ND		5.1	0.51	ug/Kg		11/14/19 18:25	11/15/19 06:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*71 - 155*	*11/14/19 18:25*	*11/15/19 06:00*	*1*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*	*11/14/19 18:25*	*11/15/19 06:00*	*1*
Dibromofluoromethane (Surr)	*94*		*79 - 133*	*11/14/19 18:25*	*11/15/19 06:00*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*	*11/14/19 18:25*	*11/15/19 06:00*	*1*

Client Sample ID: CP241-SB02-5
Date Collected: 11/11/19 10:17
Date Received: 11/12/19 10:15

Lab Sample ID: 570-12521-6
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		4.9	0.24	ug/Kg		11/14/19 18:25	11/15/19 06:26	1
1,1,1-Trichloroethane	ND		4.9	0.22	ug/Kg		11/14/19 18:25	11/15/19 06:26	1
1,1,2,2-Tetrachloroethane	ND		4.9	0.34	ug/Kg		11/14/19 18:25	11/15/19 06:26	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		49	0.35	ug/Kg		11/14/19 18:25	11/15/19 06:26	1
1,1,2-Trichloroethane	ND		4.9	0.35	ug/Kg		11/14/19 18:25	11/15/19 06:26	1
1,1-Dichloroethane	ND		4.9	0.21	ug/Kg		11/14/19 18:25	11/15/19 06:26	1
1,1-Dichloroethene	ND		4.9	0.34	ug/Kg		11/14/19 18:25	11/15/19 06:26	1
1,1-Dichloropropene	ND		4.9	0.32	ug/Kg		11/14/19 18:25	11/15/19 06:26	1
1,2,3-Trichlorobenzene	ND		9.8	0.90	ug/Kg		11/14/19 18:25	11/15/19 06:26	1
1,2,3-Trichloropropane	ND		4.9	0.82	ug/Kg		11/14/19 18:25	11/15/19 06:26	1
1,2,4-Trichlorobenzene	ND		4.9	0.31	ug/Kg		11/14/19 18:25	11/15/19 06:26	1
1,2,4-Trimethylbenzene	ND		4.9	0.58	ug/Kg		11/14/19 18:25	11/15/19 06:26	1
1,2-Dibromo-3-Chloropropane	ND		9.8	1.7	ug/Kg		11/14/19 18:25	11/15/19 06:26	1
1,2-Dibromoethane	ND		4.9	0.25	ug/Kg		11/14/19 18:25	11/15/19 06:26	1
1,2-Dichlorobenzene	ND		4.9	0.22	ug/Kg		11/14/19 18:25	11/15/19 06:26	1
1,2-Dichloroethane	ND		4.9	0.31	ug/Kg		11/14/19 18:25	11/15/19 06:26	1
1,2-Dichloropropane	ND	*	4.9	0.43	ug/Kg		11/14/19 18:25	11/15/19 06:26	1
1,3,5-Trimethylbenzene	ND		4.9	0.54	ug/Kg		11/14/19 18:25	11/15/19 06:26	1
1,3-Dichlorobenzene	ND		4.9	0.17	ug/Kg		11/14/19 18:25	11/15/19 06:26	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: CP241-SB02-5
Date Collected: 11/11/19 10:17
Date Received: 11/12/19 10:15

Lab Sample ID: 570-12521-6
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichloropropane	ND		4.9	0.25	ug/Kg		11/14/19 18:25	11/15/19 06:26	1
1,4-Dichlorobenzene	ND		4.9	0.22	ug/Kg		11/14/19 18:25	11/15/19 06:26	1
2,2-Dichloropropane	ND		4.9	0.33	ug/Kg		11/14/19 18:25	11/15/19 06:26	1
2-Butanone	ND		49	3.7	ug/Kg		11/14/19 18:25	11/15/19 06:26	1
2-Chlorotoluene	ND		4.9	0.23	ug/Kg		11/14/19 18:25	11/15/19 06:26	1
2-Hexanone	ND		49	1.7	ug/Kg		11/14/19 18:25	11/15/19 06:26	1
4-Chlorotoluene	ND		4.9	0.21	ug/Kg		11/14/19 18:25	11/15/19 06:26	1
4-Methyl-2-pentanone	ND		49	4.3	ug/Kg		11/14/19 18:25	11/15/19 06:26	1
Acetone	ND		120	6.1	ug/Kg		11/14/19 18:25	11/15/19 06:26	1
Benzene	ND	*	4.9	0.13	ug/Kg		11/14/19 18:25	11/15/19 06:26	1
Bromobenzene	ND		4.9	0.21	ug/Kg		11/14/19 18:25	11/15/19 06:26	1
Bromochloromethane	ND		4.9	0.68	ug/Kg		11/14/19 18:25	11/15/19 06:26	1
Bromodichloromethane	ND		4.9	0.23	ug/Kg		11/14/19 18:25	11/15/19 06:26	1
Bromoform	ND		4.9	0.78	ug/Kg		11/14/19 18:25	11/15/19 06:26	1
Bromomethane	ND		25	9.3	ug/Kg		11/14/19 18:25	11/15/19 06:26	1
cis-1,2-Dichloroethene	ND		4.9	0.28	ug/Kg		11/14/19 18:25	11/15/19 06:26	1
cis-1,3-Dichloropropene	ND		4.9	0.25	ug/Kg		11/14/19 18:25	11/15/19 06:26	1
Carbon disulfide	ND		49	0.30	ug/Kg		11/14/19 18:25	11/15/19 06:26	1
Carbon tetrachloride	ND		4.9	0.28	ug/Kg		11/14/19 18:25	11/15/19 06:26	1
Chlorobenzene	ND		4.9	0.22	ug/Kg		11/14/19 18:25	11/15/19 06:26	1
Chloroethane	ND		4.9	1.5	ug/Kg		11/14/19 18:25	11/15/19 06:26	1
Chloroform	ND		4.9	0.24	ug/Kg		11/14/19 18:25	11/15/19 06:26	1
Chloromethane	ND		25	0.30	ug/Kg		11/14/19 18:25	11/15/19 06:26	1
Dibromochloromethane	ND		4.9	0.56	ug/Kg		11/14/19 18:25	11/15/19 06:26	1
Dibromomethane	ND		4.9	0.76	ug/Kg		11/14/19 18:25	11/15/19 06:26	1
Dichlorodifluoromethane	ND		4.9	0.44	ug/Kg		11/14/19 18:25	11/15/19 06:26	1
Di-isopropyl ether (DIPE)	ND		9.8	0.47	ug/Kg		11/14/19 18:25	11/15/19 06:26	1
Ethanol	ND		250	82	ug/Kg		11/14/19 18:25	11/15/19 06:26	1
Ethylbenzene	ND		4.9	0.15	ug/Kg		11/14/19 18:25	11/15/19 06:26	1
Ethyl-t-butyl ether (ETBE)	ND		9.8	0.50	ug/Kg		11/14/19 18:25	11/15/19 06:26	1
Isopropylbenzene	ND		4.9	0.54	ug/Kg		11/14/19 18:25	11/15/19 06:26	1
Methylene Chloride	ND		49	1.3	ug/Kg		11/14/19 18:25	11/15/19 06:26	1
Methyl-t-Butyl Ether (MTBE)	ND		4.9	0.29	ug/Kg		11/14/19 18:25	11/15/19 06:26	1
Naphthalene	ND		49	0.80	ug/Kg		11/14/19 18:25	11/15/19 06:26	1
n-Butylbenzene	ND		4.9	0.15	ug/Kg		11/14/19 18:25	11/15/19 06:26	1
N-Propylbenzene	ND		4.9	0.49	ug/Kg		11/14/19 18:25	11/15/19 06:26	1
o-Xylene	ND		4.9	0.55	ug/Kg		11/14/19 18:25	11/15/19 06:26	1
m,p-Xylene	ND		4.9	0.26	ug/Kg		11/14/19 18:25	11/15/19 06:26	1
p-Isopropyltoluene	ND		4.9	0.62	ug/Kg		11/14/19 18:25	11/15/19 06:26	1
sec-Butylbenzene	ND		4.9	0.57	ug/Kg		11/14/19 18:25	11/15/19 06:26	1
Styrene	ND		4.9	0.60	ug/Kg		11/14/19 18:25	11/15/19 06:26	1
trans-1,2-Dichloroethene	ND		4.9	0.50	ug/Kg		11/14/19 18:25	11/15/19 06:26	1
trans-1,3-Dichloropropene	ND		4.9	0.60	ug/Kg		11/14/19 18:25	11/15/19 06:26	1
Tert-amyl-methyl ether (TAME)	ND		9.8	0.35	ug/Kg		11/14/19 18:25	11/15/19 06:26	1
tert-Butyl alcohol (TBA)	ND		49	5.1	ug/Kg		11/14/19 18:25	11/15/19 06:26	1
tert-Butylbenzene	ND		4.9	0.15	ug/Kg		11/14/19 18:25	11/15/19 06:26	1
Tetrachloroethene	ND		4.9	0.21	ug/Kg		11/14/19 18:25	11/15/19 06:26	1
Toluene	ND		4.9	0.51	ug/Kg		11/14/19 18:25	11/15/19 06:26	1
Trichloroethene	ND		4.9	0.30	ug/Kg		11/14/19 18:25	11/15/19 06:26	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: CP241-SB02-5
Date Collected: 11/11/19 10:17
Date Received: 11/12/19 10:15

Lab Sample ID: 570-12521-6
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichlorofluoromethane	ND		49	0.37	ug/Kg		11/14/19 18:25	11/15/19 06:26	1
Vinyl acetate	ND		49	4.7	ug/Kg		11/14/19 18:25	11/15/19 06:26	1
Vinyl chloride	ND		4.9	0.50	ug/Kg		11/14/19 18:25	11/15/19 06:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*71 - 155*	*11/14/19 18:25*	*11/15/19 06:26*	*1*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*	*11/14/19 18:25*	*11/15/19 06:26*	*1*
Dibromofluoromethane (Surr)	*93*		*79 - 133*	*11/14/19 18:25*	*11/15/19 06:26*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*	*11/14/19 18:25*	*11/15/19 06:26*	*1*

Client Sample ID: CP241-SB02-8
Date Collected: 11/11/19 10:21
Date Received: 11/12/19 10:15

Lab Sample ID: 570-12521-7
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.0	0.24	ug/Kg		11/14/19 18:25	11/15/19 06:52	1
1,1,1-Trichloroethane	ND		5.0	0.23	ug/Kg		11/14/19 18:25	11/15/19 06:52	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.35	ug/Kg		11/14/19 18:25	11/15/19 06:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		50	0.35	ug/Kg		11/14/19 18:25	11/15/19 06:52	1
1,1,2-Trichloroethane	ND		5.0	0.36	ug/Kg		11/14/19 18:25	11/15/19 06:52	1
1,1-Dichloroethane	ND		5.0	0.21	ug/Kg		11/14/19 18:25	11/15/19 06:52	1
1,1-Dichloroethene	ND		5.0	0.35	ug/Kg		11/14/19 18:25	11/15/19 06:52	1
1,1-Dichloropropene	ND		5.0	0.33	ug/Kg		11/14/19 18:25	11/15/19 06:52	1
1,2,3-Trichlorobenzene	ND		10	0.92	ug/Kg		11/14/19 18:25	11/15/19 06:52	1
1,2,3-Trichloropropane	ND		5.0	0.83	ug/Kg		11/14/19 18:25	11/15/19 06:52	1
1,2,4-Trichlorobenzene	ND		5.0	0.31	ug/Kg		11/14/19 18:25	11/15/19 06:52	1
1,2,4-Trimethylbenzene	ND		5.0	0.59	ug/Kg		11/14/19 18:25	11/15/19 06:52	1
1,2-Dibromo-3-Chloropropane	ND		10	1.7	ug/Kg		11/14/19 18:25	11/15/19 06:52	1
1,2-Dibromoethane	ND		5.0	0.26	ug/Kg		11/14/19 18:25	11/15/19 06:52	1
1,2-Dichlorobenzene	ND		5.0	0.23	ug/Kg		11/14/19 18:25	11/15/19 06:52	1
1,2-Dichloroethane	ND		5.0	0.32	ug/Kg		11/14/19 18:25	11/15/19 06:52	1
1,2-Dichloropropane	ND	*	5.0	0.44	ug/Kg		11/14/19 18:25	11/15/19 06:52	1
1,3,5-Trimethylbenzene	ND		5.0	0.55	ug/Kg		11/14/19 18:25	11/15/19 06:52	1
1,3-Dichlorobenzene	ND		5.0	0.18	ug/Kg		11/14/19 18:25	11/15/19 06:52	1
1,3-Dichloropropane	ND		5.0	0.25	ug/Kg		11/14/19 18:25	11/15/19 06:52	1
1,4-Dichlorobenzene	ND		5.0	0.22	ug/Kg		11/14/19 18:25	11/15/19 06:52	1
2,2-Dichloropropane	ND		5.0	0.33	ug/Kg		11/14/19 18:25	11/15/19 06:52	1
2-Butanone	ND		50	3.8	ug/Kg		11/14/19 18:25	11/15/19 06:52	1
2-Chlorotoluene	ND		5.0	0.23	ug/Kg		11/14/19 18:25	11/15/19 06:52	1
2-Hexanone	ND		50	1.8	ug/Kg		11/14/19 18:25	11/15/19 06:52	1
4-Chlorotoluene	ND		5.0	0.21	ug/Kg		11/14/19 18:25	11/15/19 06:52	1
4-Methyl-2-pentanone	ND		50	4.3	ug/Kg		11/14/19 18:25	11/15/19 06:52	1
Acetone	ND		120	6.3	ug/Kg		11/14/19 18:25	11/15/19 06:52	1
Benzene	ND	*	5.0	0.13	ug/Kg		11/14/19 18:25	11/15/19 06:52	1
Bromobenzene	ND		5.0	0.21	ug/Kg		11/14/19 18:25	11/15/19 06:52	1
Bromochloromethane	ND		5.0	0.69	ug/Kg		11/14/19 18:25	11/15/19 06:52	1
Bromodichloromethane	ND		5.0	0.23	ug/Kg		11/14/19 18:25	11/15/19 06:52	1
Bromoform	ND		5.0	0.80	ug/Kg		11/14/19 18:25	11/15/19 06:52	1
Bromomethane	ND		25	9.5	ug/Kg		11/14/19 18:25	11/15/19 06:52	1
cis-1,2-Dichloroethene	ND		5.0	0.28	ug/Kg		11/14/19 18:25	11/15/19 06:52	1
cis-1,3-Dichloropropene	ND		5.0	0.26	ug/Kg		11/14/19 18:25	11/15/19 06:52	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: CP241-SB02-8
Date Collected: 11/11/19 10:21
Date Received: 11/12/19 10:15

Lab Sample ID: 570-12521-7
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	ND		50	0.31	ug/Kg		11/14/19 18:25	11/15/19 06:52	1
Carbon tetrachloride	ND		5.0	0.28	ug/Kg		11/14/19 18:25	11/15/19 06:52	1
Chlorobenzene	ND		5.0	0.22	ug/Kg		11/14/19 18:25	11/15/19 06:52	1
Chloroethane	ND		5.0	1.5	ug/Kg		11/14/19 18:25	11/15/19 06:52	1
Chloroform	ND		5.0	0.24	ug/Kg		11/14/19 18:25	11/15/19 06:52	1
Chloromethane	ND		25	0.31	ug/Kg		11/14/19 18:25	11/15/19 06:52	1
Dibromochloromethane	ND		5.0	0.57	ug/Kg		11/14/19 18:25	11/15/19 06:52	1
Dibromomethane	ND		5.0	0.78	ug/Kg		11/14/19 18:25	11/15/19 06:52	1
Dichlorodifluoromethane	ND		5.0	0.45	ug/Kg		11/14/19 18:25	11/15/19 06:52	1
Di-isopropyl ether (DIPE)	ND		10	0.48	ug/Kg		11/14/19 18:25	11/15/19 06:52	1
Ethanol	ND		250	84	ug/Kg		11/14/19 18:25	11/15/19 06:52	1
Ethylbenzene	ND		5.0	0.15	ug/Kg		11/14/19 18:25	11/15/19 06:52	1
Ethyl-t-butyl ether (ETBE)	ND		10	0.51	ug/Kg		11/14/19 18:25	11/15/19 06:52	1
Isopropylbenzene	ND		5.0	0.55	ug/Kg		11/14/19 18:25	11/15/19 06:52	1
Methylene Chloride	ND		50	1.3	ug/Kg		11/14/19 18:25	11/15/19 06:52	1
Methyl-t-Butyl Ether (MTBE)	ND		5.0	0.30	ug/Kg		11/14/19 18:25	11/15/19 06:52	1
Naphthalene	ND		50	0.82	ug/Kg		11/14/19 18:25	11/15/19 06:52	1
n-Butylbenzene	ND		5.0	0.16	ug/Kg		11/14/19 18:25	11/15/19 06:52	1
N-Propylbenzene	ND		5.0	0.50	ug/Kg		11/14/19 18:25	11/15/19 06:52	1
o-Xylene	ND		5.0	0.56	ug/Kg		11/14/19 18:25	11/15/19 06:52	1
m,p-Xylene	ND		5.0	0.27	ug/Kg		11/14/19 18:25	11/15/19 06:52	1
p-Isopropyltoluene	ND		5.0	0.63	ug/Kg		11/14/19 18:25	11/15/19 06:52	1
sec-Butylbenzene	ND		5.0	0.58	ug/Kg		11/14/19 18:25	11/15/19 06:52	1
Styrene	ND		5.0	0.61	ug/Kg		11/14/19 18:25	11/15/19 06:52	1
trans-1,2-Dichloroethene	ND		5.0	0.51	ug/Kg		11/14/19 18:25	11/15/19 06:52	1
trans-1,3-Dichloropropene	ND		5.0	0.61	ug/Kg		11/14/19 18:25	11/15/19 06:52	1
Tert-amyl-methyl ether (TAME)	ND		10	0.35	ug/Kg		11/14/19 18:25	11/15/19 06:52	1
tert-Butyl alcohol (TBA)	ND		50	5.2	ug/Kg		11/14/19 18:25	11/15/19 06:52	1
tert-Butylbenzene	ND		5.0	0.15	ug/Kg		11/14/19 18:25	11/15/19 06:52	1
Tetrachloroethene	ND		5.0	0.21	ug/Kg		11/14/19 18:25	11/15/19 06:52	1
Toluene	ND		5.0	0.52	ug/Kg		11/14/19 18:25	11/15/19 06:52	1
Trichloroethene	ND		5.0	0.30	ug/Kg		11/14/19 18:25	11/15/19 06:52	1
Trichlorofluoromethane	ND		50	0.38	ug/Kg		11/14/19 18:25	11/15/19 06:52	1
Vinyl acetate	ND		50	4.8	ug/Kg		11/14/19 18:25	11/15/19 06:52	1
Vinyl chloride	ND		5.0	0.51	ug/Kg		11/14/19 18:25	11/15/19 06:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*71 - 155*	*11/14/19 18:25*	*11/15/19 06:52*	*1*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*	*11/14/19 18:25*	*11/15/19 06:52*	*1*
Dibromofluoromethane (Surr)	*94*		*79 - 133*	*11/14/19 18:25*	*11/15/19 06:52*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*	*11/14/19 18:25*	*11/15/19 06:52*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Client Sample ID: CP241-SB01-1.5
Date Collected: 11/11/19 09:28
Date Received: 11/12/19 10:15

Lab Sample ID: 570-12521-1
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C28)	ND		5.0	3.5	mg/Kg		11/13/19 13:13	11/15/19 06:26	1
MRO (C17-C44)	ND		25	3.8	mg/Kg		11/13/19 13:13	11/15/19 06:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane (Surr)	*105*		*61 - 145*	*11/13/19 13:13*	*11/15/19 06:26*	*1*

Client Sample ID: CP241-SB01-5
Date Collected: 11/11/19 09:40
Date Received: 11/12/19 10:15

Lab Sample ID: 570-12521-2
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C28)	ND		5.0	3.5	mg/Kg		11/13/19 13:13	11/15/19 06:47	1
MRO (C17-C44)	ND		25	3.8	mg/Kg		11/13/19 13:13	11/15/19 06:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane (Surr)	*100*		*61 - 145*	*11/13/19 13:13*	*11/15/19 06:47*	*1*

Client Sample ID: CP241-SB01-8
Date Collected: 11/11/19 09:49
Date Received: 11/12/19 10:15

Lab Sample ID: 570-12521-3
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C28)	**5.0**	**Z**	5.0	3.5	mg/Kg		11/13/19 13:13	11/15/19 07:10	1
MRO (C17-C44)	**10**	**J Z**	25	3.8	mg/Kg		11/13/19 13:13	11/15/19 07:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane (Surr)	*105*		*61 - 145*	*11/13/19 13:13*	*11/15/19 07:10*	*1*

Client Sample ID: CP241-SB02-2
Date Collected: 11/11/19 10:09
Date Received: 11/12/19 10:15

Lab Sample ID: 570-12521-5
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C28)	ND		5.0	3.5	mg/Kg		11/13/19 13:13	11/15/19 07:31	1
MRO (C17-C44)	ND		25	3.8	mg/Kg		11/13/19 13:13	11/15/19 07:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane (Surr)	*101*		*61 - 145*	*11/13/19 13:13*	*11/15/19 07:31*	*1*

Client Sample ID: CP241-SB02-5
Date Collected: 11/11/19 10:17
Date Received: 11/12/19 10:15

Lab Sample ID: 570-12521-6
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C28)	ND		5.0	3.5	mg/Kg		11/13/19 13:13	11/15/19 07:54	1
MRO (C17-C44)	ND		25	3.8	mg/Kg		11/13/19 13:13	11/15/19 07:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane (Surr)	*97*		*61 - 145*	*11/13/19 13:13*	*11/15/19 07:54*	*1*

Client Sample ID: CP241-SB02-8
Date Collected: 11/11/19 10:21
Date Received: 11/12/19 10:15

Lab Sample ID: 570-12521-7
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C28)	**5.8**	**Z**	4.9	3.5	mg/Kg		11/13/19 13:13	11/15/19 08:15	1
MRO (C17-C44)	**13**	**J Z**	25	3.8	mg/Kg		11/13/19 13:13	11/15/19 08:15	1

Client: Kennedy/Jenks Consultants
Project/Site: VTA

Job ID: 570-12521-1

Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Octacosane (Surr)	103		61 - 145	11/13/19 13:13	11/15/19 08:15	1

Method: 8081A - Organochlorine Pesticides (GC)

Client Sample ID: CP241-SB01-1.5
Date Collected: 11/11/19 09:28
Date Received: 11/12/19 10:15

Lab Sample ID: 570-12521-1
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		10	1.1	ug/Kg		11/15/19 12:48	11/18/19 13:25	1
4,4'-DDE	**2.9**	**J**	10	1.4	ug/Kg		11/15/19 12:48	11/18/19 13:25	1
4,4'-DDT	ND		10	3.0	ug/Kg		11/15/19 12:48	11/18/19 13:25	1
Aldrin	ND		10	0.83	ug/Kg		11/15/19 12:48	11/18/19 13:25	1
alpha-BHC	ND		10	1.3	ug/Kg		11/15/19 12:48	11/18/19 13:25	1
alpha-Chlordane	ND		2.0	0.66	ug/Kg		11/15/19 12:48	11/18/19 13:25	1
beta-BHC	ND		10	3.3	ug/Kg		11/15/19 12:48	11/18/19 13:25	1
delta-BHC	ND		10	1.4	ug/Kg		11/15/19 12:48	11/18/19 13:25	1
Dieldrin	ND		2.0	0.72	ug/Kg		11/15/19 12:48	11/18/19 13:25	1
Endosulfan I	ND		10	0.72	ug/Kg		11/15/19 12:48	11/18/19 13:25	1
Endosulfan II	ND		10	0.97	ug/Kg		11/15/19 12:48	11/18/19 13:25	1
Endosulfan sulfate	ND		10	0.88	ug/Kg		11/15/19 12:48	11/18/19 13:25	1
Endrin	ND		10	0.87	ug/Kg		11/15/19 12:48	11/18/19 13:25	1
Endrin aldehyde	ND		10	1.7	ug/Kg		11/15/19 12:48	11/18/19 13:25	1
Endrin ketone	ND		10	2.3	ug/Kg		11/15/19 12:48	11/18/19 13:25	1
gamma-Chlordane	ND		10	3.3	ug/Kg		11/15/19 12:48	11/18/19 13:25	1
gamma-BHC	ND		10	0.59	ug/Kg		11/15/19 12:48	11/18/19 13:25	1
Heptachlor	ND		10	0.71	ug/Kg		11/15/19 12:48	11/18/19 13:25	1
Heptachlor epoxide	ND		10	0.82	ug/Kg		11/15/19 12:48	11/18/19 13:25	1
Methoxychlor	ND		10	2.0	ug/Kg		11/15/19 12:48	11/18/19 13:25	1
Toxaphene	ND		50	20	ug/Kg		11/15/19 12:48	11/18/19 13:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*55*		*25 - 145*	*11/15/19 12:48*	*11/18/19 13:25*	*1*
DCB Decachlorobiphenyl (Surr)	*72*		*24 - 168*	*11/15/19 12:48*	*11/18/19 13:25*	*1*

Client Sample ID: CP241-SB02-2
Date Collected: 11/11/19 10:09
Date Received: 11/12/19 10:15

Lab Sample ID: 570-12521-5
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		5.0	0.53	ug/Kg		11/15/19 12:48	11/18/19 13:39	1
4,4'-DDE	ND		5.0	0.72	ug/Kg		11/15/19 12:48	11/18/19 13:39	1
4,4'-DDT	ND		5.0	1.5	ug/Kg		11/15/19 12:48	11/18/19 13:39	1
Aldrin	ND		5.0	0.42	ug/Kg		11/15/19 12:48	11/18/19 13:39	1
alpha-BHC	ND		5.0	0.64	ug/Kg		11/15/19 12:48	11/18/19 13:39	1
alpha-Chlordane	ND		1.0	0.33	ug/Kg		11/15/19 12:48	11/18/19 13:39	1
beta-BHC	ND		5.0	1.7	ug/Kg		11/15/19 12:48	11/18/19 13:39	1
delta-BHC	ND		5.0	0.68	ug/Kg		11/15/19 12:48	11/18/19 13:39	1
Dieldrin	ND		1.0	0.36	ug/Kg		11/15/19 12:48	11/18/19 13:39	1
Endosulfan I	ND		5.0	0.36	ug/Kg		11/15/19 12:48	11/18/19 13:39	1
Endosulfan II	ND		5.0	0.49	ug/Kg		11/15/19 12:48	11/18/19 13:39	1
Endosulfan sulfate	ND		5.0	0.44	ug/Kg		11/15/19 12:48	11/18/19 13:39	1
Endrin	ND		5.0	0.44	ug/Kg		11/15/19 12:48	11/18/19 13:39	1
Endrin aldehyde	ND		5.0	0.85	ug/Kg		11/15/19 12:48	11/18/19 13:39	1
Endrin ketone	ND		5.0	1.2	ug/Kg		11/15/19 12:48	11/18/19 13:39	1
gamma-Chlordane	ND		5.0	1.6	ug/Kg		11/15/19 12:48	11/18/19 13:39	1
gamma-BHC	ND		5.0	0.29	ug/Kg		11/15/19 12:48	11/18/19 13:39	1
Heptachlor	ND		5.0	0.35	ug/Kg		11/15/19 12:48	11/18/19 13:39	1
Heptachlor epoxide	ND		5.0	0.41	ug/Kg		11/15/19 12:48	11/18/19 13:39	1
Methoxychlor	ND		5.0	1.0	ug/Kg		11/15/19 12:48	11/18/19 13:39	1

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Client Sample ID: CP241-SB02-2
Date Collected: 11/11/19 10:09
Date Received: 11/12/19 10:15

Lab Sample ID: 570-12521-5
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toxaphene	ND		25	10	ug/Kg		11/15/19 12:48	11/18/19 13:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*57*		*25 - 145*	*11/15/19 12:48*	*11/18/19 13:39*	*1*
DCB Decachlorobiphenyl (Surr)	*81*		*24 - 168*	*11/15/19 12:48*	*11/18/19 13:39*	*1*

Method: 6010B - Metals (ICP)

Client Sample ID: CP241-SB01-1.5
Date Collected: 11/11/19 09:28
Date Received: 11/12/19 10:15

Lab Sample ID: 570-12521-1
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.259	0.0888	mg/Kg		11/13/19 15:27	11/16/19 13:00	1
Arsenic	**8.19**		0.777	0.268	mg/Kg		11/13/19 15:27	11/16/19 13:00	1
Barium	**159**		0.518	0.160	mg/Kg		11/13/19 15:27	11/16/19 13:00	1
Beryllium	**0.592**		0.259	0.142	mg/Kg		11/13/19 15:27	11/16/19 13:00	1
Cadmium	ND		0.518	0.140	mg/Kg		11/13/19 15:27	11/16/19 13:00	1
Cobalt	**12.1**		0.259	0.153	mg/Kg		11/13/19 15:27	11/16/19 13:00	1
Chromium	**46.3**		0.259	0.147	mg/Kg		11/13/19 15:27	11/16/19 13:00	1
Copper	**28.7**		0.518	0.140	mg/Kg		11/13/19 15:27	11/16/19 13:00	1
Molybdenum	**1.06**		0.259	0.137	mg/Kg		11/13/19 15:27	11/16/19 13:00	1
Nickel	**77.1**		0.259	0.150	mg/Kg		11/13/19 15:27	11/16/19 13:00	1
Antimony	**1.52**		0.777	0.154	mg/Kg		11/13/19 15:27	11/16/19 13:00	1
Selenium	**31.2**		0.777	0.311	mg/Kg		11/13/19 15:27	11/16/19 13:00	1
Thallium	ND		0.777	0.158	mg/Kg		11/13/19 15:27	11/16/19 13:00	1
Vanadium	**35.0**		0.259	0.146	mg/Kg		11/13/19 15:27	11/16/19 13:00	1
Zinc	**72.3**		1.04	0.184	mg/Kg		11/13/19 15:27	11/16/19 13:00	1
Lead	**16.2**		0.518	0.137	mg/Kg		11/13/19 15:27	11/16/19 13:00	1

Client Sample ID: CP241-SB01-5
Date Collected: 11/11/19 09:40
Date Received: 11/12/19 10:15

Lab Sample ID: 570-12521-2
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.245	0.0840	mg/Kg		11/13/19 15:27	11/16/19 13:03	1
Arsenic	**10.6**		0.735	0.254	mg/Kg		11/13/19 15:27	11/16/19 13:03	1
Barium	**164**		0.490	0.151	mg/Kg		11/13/19 15:27	11/16/19 13:03	1
Beryllium	**0.617**		0.245	0.134	mg/Kg		11/13/19 15:27	11/16/19 13:03	1
Cadmium	ND	L	0.490	0.132	mg/Kg		11/13/19 15:27	11/16/19 13:03	1
Cobalt	**12.3**		0.245	0.145	mg/Kg		11/13/19 15:27	11/16/19 13:03	1
Chromium	**47.3**		0.245	0.139	mg/Kg		11/13/19 15:27	11/16/19 13:03	1
Copper	**30.7**		0.490	0.132	mg/Kg		11/13/19 15:27	11/16/19 13:03	1
Molybdenum	**0.300**		0.245	0.129	mg/Kg		11/13/19 15:27	11/16/19 13:03	1
Nickel	**82.4**		0.245	0.142	mg/Kg		11/13/19 15:27	11/16/19 13:03	1
Antimony	**1.37**		0.735	0.146	mg/Kg		11/13/19 15:27	11/16/19 13:03	1
Selenium	**213**		0.735	0.294	mg/Kg		11/13/19 15:27	11/16/19 13:03	1
Thallium	ND		0.735	0.149	mg/Kg		11/13/19 15:27	11/16/19 13:03	1
Vanadium	**36.8**		0.245	0.138	mg/Kg		11/13/19 15:27	11/16/19 13:03	1
Zinc	**69.2**		0.980	0.175	mg/Kg		11/13/19 15:27	11/16/19 13:03	1
Lead	**4.56**		0.490	0.129	mg/Kg		11/13/19 15:27	11/16/19 13:03	1

Client Sample ID: CP241-SB01-8
Date Collected: 11/11/19 09:49
Date Received: 11/12/19 10:15

Lab Sample ID: 570-12521-3
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.238	0.0816	mg/Kg		11/13/19 15:27	11/16/19 13:05	1
Arsenic	**7.40**		0.714	0.247	mg/Kg		11/13/19 15:27	11/16/19 13:05	1
Barium	**134**		0.476	0.147	mg/Kg		11/13/19 15:27	11/16/19 13:05	1
Beryllium	**0.436**		0.238	0.130	mg/Kg		11/13/19 15:27	11/16/19 13:05	1
Cadmium	ND	L	0.476	0.129	mg/Kg		11/13/19 15:27	11/16/19 13:05	1
Cobalt	**9.66**		0.238	0.141	mg/Kg		11/13/19 15:27	11/16/19 13:05	1
Chromium	**37.7**		0.238	0.135	mg/Kg		11/13/19 15:27	11/16/19 13:05	1
Copper	**21.3**		0.476	0.129	mg/Kg		11/13/19 15:27	11/16/19 13:05	1

Method: 6010B - Metals (ICP) (Continued)

Client Sample ID: CP241-SB01-8
Date Collected: 11/11/19 09:49
Date Received: 11/12/19 10:15

Lab Sample ID: 570-12521-3
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Molybdenum	ND		0.238	0.126	mg/Kg		11/13/19 15:27	11/16/19 13:05	1
Nickel	**63.2**		0.238	0.138	mg/Kg		11/13/19 15:27	11/16/19 13:05	1
Antimony	**0.529**	**J**	0.714	0.142	mg/Kg		11/13/19 15:27	11/16/19 13:05	1
Selenium	**83.0**		0.714	0.286	mg/Kg		11/13/19 15:27	11/16/19 13:05	1
Thallium	ND		0.714	0.145	mg/Kg		11/13/19 15:27	11/16/19 13:05	1
Vanadium	**29.0**		0.238	0.134	mg/Kg		11/13/19 15:27	11/16/19 13:05	1
Zinc	**49.1**		0.952	0.170	mg/Kg		11/13/19 15:27	11/16/19 13:05	1
Lead	**3.39**		0.476	0.126	mg/Kg		11/13/19 15:27	11/16/19 13:05	1

Client Sample ID: CP241-SB02-2
Date Collected: 11/11/19 10:09
Date Received: 11/12/19 10:15

Lab Sample ID: 570-12521-5
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.262	0.0897	mg/Kg		11/13/19 15:27	11/16/19 13:10	1
Arsenic	**8.63**		0.785	0.271	mg/Kg		11/13/19 15:27	11/16/19 13:10	1
Barium	**188**		0.524	0.161	mg/Kg		11/13/19 15:27	11/16/19 13:10	1
Beryllium	**0.641**		0.262	0.143	mg/Kg		11/13/19 15:27	11/16/19 13:10	1
Cadmium	ND	L	0.524	0.141	mg/Kg		11/13/19 15:27	11/16/19 13:10	1
Cobalt	**13.1**		0.262	0.155	mg/Kg		11/13/19 15:27	11/16/19 13:10	1
Chromium	**52.9**		0.262	0.149	mg/Kg		11/13/19 15:27	11/16/19 13:10	1
Copper	**29.1**		0.524	0.141	mg/Kg		11/13/19 15:27	11/16/19 13:10	1
Molybdenum	**3.10**		0.262	0.138	mg/Kg		11/13/19 15:27	11/16/19 13:10	1
Nickel	**85.6**		0.262	0.152	mg/Kg		11/13/19 15:27	11/16/19 13:10	1
Antimony	**1.88**		0.785	0.156	mg/Kg		11/13/19 15:27	11/16/19 13:10	1
Selenium	**237**		0.785	0.314	mg/Kg		11/13/19 15:27	11/16/19 13:10	1
Thallium	ND		0.785	0.159	mg/Kg		11/13/19 15:27	11/16/19 13:10	1
Vanadium	**38.0**		0.262	0.148	mg/Kg		11/13/19 15:27	11/16/19 13:10	1
Zinc	**57.2**		1.05	0.186	mg/Kg		11/13/19 15:27	11/16/19 13:10	1
Lead	**5.65**		0.524	0.138	mg/Kg		11/13/19 15:27	11/16/19 13:10	1

Client Sample ID: CP241-SB02-5
Date Collected: 11/11/19 10:17
Date Received: 11/12/19 10:15

Lab Sample ID: 570-12521-6
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.246	0.0844	mg/Kg		11/13/19 15:27	11/16/19 13:13	1
Arsenic	**9.59**		0.739	0.255	mg/Kg		11/13/19 15:27	11/16/19 13:13	1
Barium	**178**		0.493	0.152	mg/Kg		11/13/19 15:27	11/16/19 13:13	1
Beryllium	**0.585**		0.246	0.135	mg/Kg		11/13/19 15:27	11/16/19 13:13	1
Cadmium	ND	L	0.493	0.133	mg/Kg		11/13/19 15:27	11/16/19 13:13	1
Cobalt	**12.3**		0.246	0.146	mg/Kg		11/13/19 15:27	11/16/19 13:13	1
Chromium	**46.9**		0.246	0.140	mg/Kg		11/13/19 15:27	11/16/19 13:13	1
Copper	**29.2**		0.493	0.133	mg/Kg		11/13/19 15:27	11/16/19 13:13	1
Molybdenum	**1.01**		0.246	0.130	mg/Kg		11/13/19 15:27	11/16/19 13:13	1
Nickel	**78.8**		0.246	0.143	mg/Kg		11/13/19 15:27	11/16/19 13:13	1
Antimony	**1.58**		0.739	0.147	mg/Kg		11/13/19 15:27	11/16/19 13:13	1
Selenium	**170**		0.739	0.296	mg/Kg		11/13/19 15:27	11/16/19 13:13	1
Thallium	ND		0.739	0.150	mg/Kg		11/13/19 15:27	11/16/19 13:13	1
Vanadium	**34.8**		0.246	0.139	mg/Kg		11/13/19 15:27	11/16/19 13:13	1
Zinc	**58.0**		0.985	0.175	mg/Kg		11/13/19 15:27	11/16/19 13:13	1
Lead	**5.32**		0.493	0.130	mg/Kg		11/13/19 15:27	11/16/19 13:13	1

Client: Kennedy/Jenks Consultants
Project/Site: VTA

Job ID: 570-12521-1

Method: 6010B - Metals (ICP)

Client Sample ID: CP241-SB02-8
Date Collected: 11/11/19 10:21
Date Received: 11/12/19 10:15

Lab Sample ID: 570-12521-7
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.253	0.0866	mg/Kg		11/13/19 15:27	11/16/19 13:15	1
Arsenic	**9.46**		0.758	0.262	mg/Kg		11/13/19 15:27	11/16/19 13:15	1
Barium	**148**		0.505	0.156	mg/Kg		11/13/19 15:27	11/16/19 13:15	1
Beryllium	**0.459**		0.253	0.138	mg/Kg		11/13/19 15:27	11/16/19 13:15	1
Cadmium	ND		0.505	0.136	mg/Kg		11/13/19 15:27	11/16/19 13:15	1
Cobalt	**9.00**		0.253	0.149	mg/Kg		11/13/19 15:27	11/16/19 13:15	1
Chromium	**34.7**		0.253	0.143	mg/Kg		11/13/19 15:27	11/16/19 13:15	1
Copper	**22.5**		0.505	0.136	mg/Kg		11/13/19 15:27	11/16/19 13:15	1
Molybdenum	ND		0.253	0.133	mg/Kg		11/13/19 15:27	11/16/19 13:15	1
Nickel	**56.7**		0.253	0.146	mg/Kg		11/13/19 15:27	11/16/19 13:15	1
Antimony	**1.60**		0.758	0.151	mg/Kg		11/13/19 15:27	11/16/19 13:15	1
Selenium	**32.8**		0.758	0.303	mg/Kg		11/13/19 15:27	11/16/19 13:15	1
Thallium	ND		0.758	0.154	mg/Kg		11/13/19 15:27	11/16/19 13:15	1
Vanadium	**28.3**		0.253	0.142	mg/Kg		11/13/19 15:27	11/16/19 13:15	1
Zinc	**43.1**		1.01	0.180	mg/Kg		11/13/19 15:27	11/16/19 13:15	1
Lead	**3.67**		0.505	0.133	mg/Kg		11/13/19 15:27	11/16/19 13:15	1

Client: Kennedy/Jenks Consultants
Project/Site: VTA

Job ID: 570-12521-1

Method: 7471A - Mercury (CVAA)

Client Sample ID: CP241-SB01-1.5
Date Collected: 11/11/19 09:28
Date Received: 11/12/19 10:15

Lab Sample ID: 570-12521-1
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.267		0.0862	0.00607	mg/Kg		11/14/19 12:00	11/14/19 17:02	1

Client Sample ID: CP241-SB01-5
Date Collected: 11/11/19 09:40
Date Received: 11/12/19 10:15

Lab Sample ID: 570-12521-2
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0555	J	0.0833	0.00587	mg/Kg		11/14/19 12:00	11/14/19 17:04	1

Client Sample ID: CP241-SB01-8
Date Collected: 11/11/19 09:49
Date Received: 11/12/19 10:15

Lab Sample ID: 570-12521-3
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0646	J	0.0877	0.00618	mg/Kg		11/14/19 12:00	11/14/19 17:06	1

Client Sample ID: CP241-SB02-2
Date Collected: 11/11/19 10:09
Date Received: 11/12/19 10:15

Lab Sample ID: 570-12521-5
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0488	J	0.0833	0.00587	mg/Kg		11/14/19 12:00	11/14/19 17:11	1

Client Sample ID: CP241-SB02-5
Date Collected: 11/11/19 10:17
Date Received: 11/12/19 10:15

Lab Sample ID: 570-12521-6
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0567	J	0.0833	0.00587	mg/Kg		11/14/19 12:00	11/14/19 17:13	1

Client Sample ID: CP241-SB02-8
Date Collected: 11/11/19 10:21
Date Received: 11/12/19 10:15

Lab Sample ID: 570-12521-7
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0516	J	0.0877	0.00618	mg/Kg		11/14/19 12:00	11/14/19 17:16	1

Surrogate Summary

Client: Kennedy/Jenks Consultants
Project/Site: VTA

Job ID: 570-12521-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	DCA (71-155)	BFB (80-120)	DBFM (79-133)	TOL (80-120)
570-12118-B-15-C MS	Matrix Spike	101	97	96	100
570-12118-B-15-D MSD	Matrix Spike Duplicate	103	97	96	99
570-12521-1	CP241-SB01-1.5	102	104	96	103
570-12521-2	CP241-SB01-5	99	101	85	109
570-12521-3	CP241-SB01-8	100	103	94	103
570-12521-5	CP241-SB02-2	101	105	94	103
570-12521-6	CP241-SB02-5	99	104	93	100
570-12521-7	CP241-SB02-8	100	103	94	103
LCS 570-32920/2-A	Lab Control Sample	103	96	100	101
LCSD 570-32920/3-A	Lab Control Sample Dup	102	98	98	102
MB 570-32920/1-A	Method Blank	102	108	102	107

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	TOL (80-120)
570-12521-1	CP241-SB01-1.5	104
570-12521-2	CP241-SB01-5	111
570-12521-3	CP241-SB01-8	105
570-12521-5	CP241-SB02-2	104
570-12521-6	CP241-SB02-5	102
570-12521-7	CP241-SB02-8	105
LCS 570-32958/6	Lab Control Sample	103
LCSD 570-32958/7	Lab Control Sample Dup	102
MB 570-32920/1-A	Method Blank	109

Surrogate Legend

TOL = Toluene-d8 (Surr)

Method: 8015B - Diesel Range Organics (DRO) (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	OTCSN1 (61-145)
570-12521-1	CP241-SB01-1.5	105
570-12521-1 MS	CP241-SB01-1.5	92
570-12521-1 MS	CP241-SB01-1.5	102
570-12521-1 MSD	CP241-SB01-1.5	102
570-12521-1 MSD	CP241-SB01-1.5	104
570-12521-2	CP241-SB01-5	100
570-12521-3	CP241-SB01-8	105
570-12521-5	CP241-SB02-2	101

Surrogate Summary

Client: Kennedy/Jenks Consultants
Project/Site: VTA

Job ID: 570-12521-1

Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	OTCSN1 (61-145)
570-12521-6	CP241-SB02-5	97
570-12521-7	CP241-SB02-8	103
LCS 570-32559/2-A	Lab Control Sample	107
LCS 570-32559/6-A	Lab Control Sample	106
LCSD 570-32559/3-A	Lab Control Sample Dup	103
LCSD 570-32559/7-A	Lab Control Sample Dup	103
MB 570-32559/1-A	Method Blank	102

Surrogate Legend

OTCSN = n-Octacosane (Surr)

Method: 8081A - Organochlorine Pesticides (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	TCX1 (25-145)	DCB1 (24-168)
570-12521-1	CP241-SB01-1.5	55	72
570-12521-5	CP241-SB02-2	57	81
570-12737-A-3-B MS	Matrix Spike	65	78
570-12737-A-3-C MSD	Matrix Spike Duplicate	60	66
LCS 570-33081/8-A	Lab Control Sample	83	84
LCSD 570-33081/9-A	Lab Control Sample Dup	80	85
MB 570-33081/1-A	Method Blank	81	81

Surrogate Legend

TCX = Tetrachloro-m-xylene

DCB = DCB Decachlorobiphenyl (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 570-32920/1-A
Matrix: Solid
Analysis Batch: 32957

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 32920

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.0	0.24	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
1,1,1-Trichloroethane	ND		5.0	0.23	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.35	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		50	0.35	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
1,1,2-Trichloroethane	ND		5.0	0.36	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
1,1-Dichloroethane	ND		5.0	0.21	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
1,1-Dichloroethene	ND		5.0	0.35	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
1,1-Dichloropropene	ND		5.0	0.33	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
1,2,3-Trichlorobenzene	ND		10	0.92	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
1,2,4-Trichlorobenzene	ND		5.0	0.31	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
1,2,4-Trimethylbenzene	ND		5.0	0.59	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
1,2-Dibromo-3-Chloropropane	ND		10	1.8	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
1,2-Dibromoethane	ND		5.0	0.26	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
1,2-Dichlorobenzene	ND		5.0	0.23	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
1,2-Dichloroethane	ND		5.0	0.32	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
1,2-Dichloropropane	ND		5.0	0.44	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
1,3,5-Trimethylbenzene	ND		5.0	0.55	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
1,3-Dichlorobenzene	ND		5.0	0.18	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
1,3-Dichloropropane	ND		5.0	0.25	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
1,4-Dichlorobenzene	ND		5.0	0.22	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
2,2-Dichloropropane	ND		5.0	0.33	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
2-Butanone	ND		50	3.8	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
2-Chlorotoluene	ND		5.0	0.23	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
2-Hexanone	ND		50	1.8	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
4-Chlorotoluene	ND		5.0	0.21	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
4-Methyl-2-pentanone	ND		50	4.4	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
Acetone	ND		120	6.3	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
Benzene	ND		5.0	0.13	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
Bromobenzene	ND		5.0	0.21	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
Bromochloromethane	ND		5.0	0.70	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
Bromodichloromethane	ND		5.0	0.23	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
Bromoform	ND		5.0	0.80	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
Bromomethane	ND		25	9.5	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
cis-1,2-Dichloroethene	ND		5.0	0.28	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
cis-1,3-Dichloropropene	ND		5.0	0.26	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
Carbon disulfide	ND		50	0.31	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
Carbon tetrachloride	ND		5.0	0.29	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
Chlorobenzene	ND		5.0	0.23	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
Chloroethane	ND		5.0	1.5	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
Chloroform	ND		5.0	0.24	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
Chloromethane	ND		25	0.31	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
Dibromochloromethane	ND		5.0	0.57	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
Dibromomethane	ND		5.0	0.78	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
Dichlorodifluoromethane	ND		5.0	0.45	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
Di-isopropyl ether (DIPE)	ND		10	0.49	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
Ethanol	ND		250	84	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
Ethylbenzene	ND		5.0	0.15	ug/Kg		11/14/19 18:06	11/15/19 01:15	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 570-32920/1-A
Matrix: Solid
Analysis Batch: 32957

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 32920

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethyl-t-butyl ether (ETBE)	ND		10	0.51	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
Isopropylbenzene	ND		5.0	0.55	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
Methylene Chloride	ND		50	1.3	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
Methyl-t-Butyl Ether (MTBE)	ND		5.0	0.30	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
Naphthalene	ND		50	0.82	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
n-Butylbenzene	ND		5.0	0.16	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
N-Propylbenzene	ND		5.0	0.51	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
o-Xylene	ND		5.0	0.56	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
m,p-Xylene	ND		5.0	0.27	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
p-Isopropyltoluene	ND		5.0	0.63	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
sec-Butylbenzene	ND		5.0	0.58	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
Styrene	ND		5.0	0.61	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
trans-1,2-Dichloroethene	ND		5.0	0.51	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
trans-1,3-Dichloropropene	ND		5.0	0.61	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
Tert-amyl-methyl ether (TAME)	ND		10	0.36	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
tert-Butyl alcohol (TBA)	ND		50	5.2	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
tert-Butylbenzene	ND		5.0	0.15	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
Tetrachloroethene	ND		5.0	0.21	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
Toluene	ND		5.0	0.52	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
Trichloroethene	ND		5.0	0.30	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
Trichlorofluoromethane	ND		50	0.38	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
Vinyl acetate	ND		50	4.8	ug/Kg		11/14/19 18:06	11/15/19 01:15	1
Vinyl chloride	ND		5.0	0.51	ug/Kg		11/14/19 18:06	11/15/19 01:15	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*71 - 155*	*11/14/19 18:06*	*11/15/19 01:15*	*1*
4-Bromofluorobenzene (Surr)	*108*		*80 - 120*	*11/14/19 18:06*	*11/15/19 01:15*	*1*
Dibromofluoromethane (Surr)	*102*		*79 - 133*	*11/14/19 18:06*	*11/15/19 01:15*	*1*
Toluene-d8 (Surr)	*107*		*80 - 120*	*11/14/19 18:06*	*11/15/19 01:15*	*1*

Lab Sample ID: LCS 570-32920/2-A
Matrix: Solid
Analysis Batch: 32957

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 32920

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	50.0	56.18		ug/Kg		112	74 - 122
1,2-Dibromoethane	50.0	54.58		ug/Kg		109	70 - 130
1,2-Dichlorobenzene	50.0	57.09		ug/Kg		114	75 - 120
1,2-Dichloroethane	50.0	56.77		ug/Kg		114	70 - 130
Benzene	50.0	60.85	* me	ug/Kg		122	78 - 120
Carbon tetrachloride	50.0	60.52		ug/Kg		121	49 - 139
Chlorobenzene	50.0	57.28		ug/Kg		115	79 - 120
Di-isopropyl ether (DIPE)	50.0	54.15		ug/Kg		108	78 - 120
Ethanol	500	495.7		ug/Kg		99	56 - 140
Ethylbenzene	50.0	57.18		ug/Kg		114	76 - 120
Ethyl-t-butyl ether (ETBE)	50.0	57.43		ug/Kg		115	70 - 124
Methyl-t-Butyl Ether (MTBE)	50.0	56.09		ug/Kg		112	70 - 124
o-Xylene	50.0	56.70		ug/Kg		113	70 - 130

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 570-32920/2-A
Matrix: Solid
Analysis Batch: 32957

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 32920

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
m,p-Xylene			100	112.2		ug/Kg		112	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*103*		*71 - 155*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*
Dibromofluoromethane (Surr)	*100*		*79 - 133*
Toluene-d8 (Surr)	*101*		*80 - 120*

Lab Sample ID: LCSD 570-32920/3-A
Matrix: Solid
Analysis Batch: 32957

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 32920

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene			50.3	56.38		ug/Kg		112	74 - 122	0	20
1,2-Dibromoethane			50.3	54.05		ug/Kg		107	70 - 130	1	20
1,2-Dichlorobenzene			50.3	54.45		ug/Kg		108	75 - 120	5	20
1,2-Dichloroethane			50.3	56.79		ug/Kg		113	70 - 130	0	20
Benzene			50.3	61.25	* me	ug/Kg		122	78 - 120	1	20
Carbon tetrachloride			50.3	60.82		ug/Kg		121	49 - 139	1	20
Chlorobenzene			50.3	56.88		ug/Kg		113	79 - 120	1	20
Di-isopropyl ether (DIPE)			50.3	54.76		ug/Kg		109	78 - 120	1	20
Ethanol			503	479.3		ug/Kg		95	56 - 140	3	20
Ethylbenzene			50.3	57.01		ug/Kg		113	76 - 120	0	20
Ethyl-t-butyl ether (ETBE)			50.3	57.48		ug/Kg		114	70 - 124	0	20
Methyl-t-Butyl Ether (MTBE)			50.3	56.22		ug/Kg		112	70 - 124	0	20
o-Xylene			50.3	55.89		ug/Kg		111	70 - 130	1	20
m,p-Xylene			101	109.4		ug/Kg		109	70 - 130	3	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*102*		*71 - 155*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*
Dibromofluoromethane (Surr)	*98*		*79 - 133*
Toluene-d8 (Surr)	*102*		*80 - 120*

Lab Sample ID: 570-12118-B-15-C MS
Matrix: Solid
Analysis Batch: 32957

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 32920

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	ND		48.4	45.96		ug/Kg		95	47 - 143
1,2-Dibromoethane	ND		48.4	39.45		ug/Kg		82	64 - 124
1,2-Dichlorobenzene	ND		48.4	41.40		ug/Kg		86	35 - 131
1,2-Dichloroethane	ND		48.4	41.45		ug/Kg		86	70 - 130
Benzene	ND	*	48.4	48.62		ug/Kg		101	61 - 127
Carbon tetrachloride	ND		48.4	50.52		ug/Kg		104	51 - 135
Chlorobenzene	ND		48.4	45.25		ug/Kg		94	57 - 123
Di-isopropyl ether (DIPE)	ND		48.4	43.23		ug/Kg		89	57 - 129
Ethanol	ND		484	481.3		ug/Kg		100	17 - 167

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 570-12118-B-15-C MS
Matrix: Solid
Analysis Batch: 32957

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 32920

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	ND		48.4	45.95		ug/Kg		95	57 - 129
Ethyl-t-butyl ether (ETBE)	ND		48.4	46.22		ug/Kg		96	55 - 127
Methyl-t-Butyl Ether (MTBE)	ND		48.4	43.91		ug/Kg		91	57 - 123
o-Xylene	ND		48.4	44.09		ug/Kg		91	70 - 130
m,p-Xylene	ND		96.7	87.96		ug/Kg		91	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*71 - 155*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*
Dibromofluoromethane (Surr)	*96*		*79 - 133*
Toluene-d8 (Surr)	*100*		*80 - 120*

Lab Sample ID: 570-12118-B-15-D MSD
Matrix: Solid
Analysis Batch: 32957

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 32920

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene	ND		49.6	45.51		ug/Kg		92	47 - 143	1	25
1,2-Dibromoethane	ND		49.6	41.10		ug/Kg		83	64 - 124	4	20
1,2-Dichlorobenzene	ND		49.6	41.64		ug/Kg		84	35 - 131	1	25
1,2-Dichloroethane	ND		49.6	40.84		ug/Kg		82	70 - 130	1	20
Benzene	ND	*	49.6	48.09		ug/Kg		97	61 - 127	1	20
Carbon tetrachloride	ND		49.6	50.85		ug/Kg		103	51 - 135	1	29
Chlorobenzene	ND		49.6	44.75		ug/Kg		90	57 - 123	1	20
Di-isopropyl ether (DIPE)	ND		49.6	42.37		ug/Kg		85	57 - 129	2	20
Ethanol	ND		496	392.0		ug/Kg		79	17 - 167	20	47
Ethylbenzene	ND		49.6	46.52		ug/Kg		94	57 - 129	1	22
Ethyl-t-butyl ether (ETBE)	ND		49.6	45.02		ug/Kg		91	55 - 127	3	20
Methyl-t-Butyl Ether (MTBE)	ND		49.6	43.64		ug/Kg		88	57 - 123	1	21
o-Xylene	ND		49.6	44.50		ug/Kg		90	70 - 130	1	20
m,p-Xylene	ND		99.2	89.15		ug/Kg		90	70 - 130	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*103*		*71 - 155*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*
Dibromofluoromethane (Surr)	*96*		*79 - 133*
Toluene-d8 (Surr)	*99*		*80 - 120*

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 570-32920/1-A
Matrix: Solid
Analysis Batch: 32958

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 32920

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TPH (as Gasoline)	ND		500	31	ug/Kg		11/14/19 18:06	11/15/19 01:15	1

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 570-32920/1-A
Matrix: Solid
Analysis Batch: 32958

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 32920

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	109		80 - 120	11/14/19 18:06	11/15/19 01:15	1

Lab Sample ID: LCS 570-32958/6
Matrix: Solid
Analysis Batch: 32958

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
TPPH	1000	1029		ug/Kg		103	65 - 135

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	103		80 - 120

Lab Sample ID: LCSD 570-32958/7
Matrix: Solid
Analysis Batch: 32958

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
TPPH	1000	979.4		ug/Kg		98	65 - 135	5	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Toluene-d8 (Surr)	102		80 - 120

Method: 8015B - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 570-32559/1-A
Matrix: Solid
Analysis Batch: 32820

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 32559

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C28)	ND		5.0	3.5	mg/Kg		11/13/19 13:13	11/15/19 03:07	1
MRO (C17-C44)	ND		25	3.8	mg/Kg		11/13/19 13:13	11/15/19 03:07	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Octacosane (Surr)	102		61 - 145	11/13/19 13:13	11/15/19 03:07	1

Lab Sample ID: LCS 570-32559/2-A
Matrix: Solid
Analysis Batch: 32820

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 32559

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
DRO (C10-C28)	398	431.4		mg/Kg		109	67 - 121

Surrogate	LCS %Recovery	LCS Qualifier	Limits
n-Octacosane (Surr)	107		61 - 145

Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCS 570-32559/6-A
Matrix: Solid
Analysis Batch: 32820

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 32559

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
MRO (C17-C44)			397	406.9		mg/Kg		102	75 - 123		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
n-Octacosane (Surr)	*106*		*61 - 145*

Lab Sample ID: LCSD 570-32559/3-A
Matrix: Solid
Analysis Batch: 32820

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 32559

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
DRO (C10-C28)			400	421.1		mg/Kg		105	67 - 121	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
n-Octacosane (Surr)	*103*		*61 - 145*

Lab Sample ID: LCSD 570-32559/7-A
Matrix: Solid
Analysis Batch: 32820

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 32559

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
MRO (C17-C44)			398	392.3		mg/Kg		99	75 - 123	4	12

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
n-Octacosane (Surr)	*103*		*61 - 145*

Lab Sample ID: 570-12521-1 MS
Matrix: Solid
Analysis Batch: 32820

Client Sample ID: CP241-SB01-1.5
Prep Type: Total/NA
Prep Batch: 32559

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
DRO (C10-C28)	ND		398	410.8		mg/Kg		103	33 - 153		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
n-Octacosane (Surr)	*92*		*61 - 145*

Lab Sample ID: 570-12521-1 MS
Matrix: Solid
Analysis Batch: 32820

Client Sample ID: CP241-SB01-1.5
Prep Type: Total/NA
Prep Batch: 32559

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
MRO (C17-C44)	ND		399	449.1		mg/Kg		112	64 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
n-Octacosane (Surr)	*102*		*61 - 145*

Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 570-12521-1 MSD
Matrix: Solid
Analysis Batch: 32820

Client Sample ID: CP241-SB01-1.5
Prep Type: Total/NA
Prep Batch: 32559

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
DRO (C10-C28)	ND		397	440.7		mg/Kg		111	33 - 153	7	32

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
n-Octacosane (Surr)	*102*		*61 - 145*

Lab Sample ID: 570-12521-1 MSD
Matrix: Solid
Analysis Batch: 32820

Client Sample ID: CP241-SB01-1.5
Prep Type: Total/NA
Prep Batch: 32559

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
MRO (C17-C44)	ND		400	415.6		mg/Kg		104	64 - 130	8	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
n-Octacosane (Surr)	*104*		*61 - 145*

Method: 8081A - Organochlorine Pesticides (GC)

Lab Sample ID: MB 570-33081/1-A
Matrix: Solid
Analysis Batch: 33467

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 33081

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		5.0	0.53	ug/Kg		11/15/19 12:33	11/18/19 11:31	1
4,4'-DDE	ND		5.0	0.72	ug/Kg		11/15/19 12:33	11/18/19 11:31	1
4,4'-DDT	ND		5.0	1.5	ug/Kg		11/15/19 12:33	11/18/19 11:31	1
Aldrin	ND		5.0	0.42	ug/Kg		11/15/19 12:33	11/18/19 11:31	1
alpha-BHC	ND		5.0	0.64	ug/Kg		11/15/19 12:33	11/18/19 11:31	1
alpha-Chlordane	ND		1.0	0.33	ug/Kg		11/15/19 12:33	11/18/19 11:31	1
beta-BHC	ND		5.0	1.7	ug/Kg		11/15/19 12:33	11/18/19 11:31	1
delta-BHC	ND		5.0	0.68	ug/Kg		11/15/19 12:33	11/18/19 11:31	1
Dieldrin	ND		1.0	0.36	ug/Kg		11/15/19 12:33	11/18/19 11:31	1
Endosulfan I	ND		5.0	0.36	ug/Kg		11/15/19 12:33	11/18/19 11:31	1
Endosulfan II	ND		5.0	0.49	ug/Kg		11/15/19 12:33	11/18/19 11:31	1
Endosulfan sulfate	ND		5.0	0.44	ug/Kg		11/15/19 12:33	11/18/19 11:31	1
Endrin	ND		5.0	0.44	ug/Kg		11/15/19 12:33	11/18/19 11:31	1
Endrin aldehyde	ND		5.0	0.86	ug/Kg		11/15/19 12:33	11/18/19 11:31	1
Endrin ketone	ND		5.0	1.2	ug/Kg		11/15/19 12:33	11/18/19 11:31	1
gamma-Chlordane	ND		5.0	1.6	ug/Kg		11/15/19 12:33	11/18/19 11:31	1
gamma-BHC	ND		5.0	0.30	ug/Kg		11/15/19 12:33	11/18/19 11:31	1
Heptachlor	ND		5.0	0.35	ug/Kg		11/15/19 12:33	11/18/19 11:31	1
Heptachlor epoxide	ND		5.0	0.41	ug/Kg		11/15/19 12:33	11/18/19 11:31	1
Methoxychlor	ND		5.0	1.0	ug/Kg		11/15/19 12:33	11/18/19 11:31	1
Toxaphene	ND		25	10	ug/Kg		11/15/19 12:33	11/18/19 11:31	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*81*		*25 - 145*	*11/15/19 12:33*	*11/18/19 11:31*	*1*
DCB Decachlorobiphenyl (Surr)	*81*		*24 - 168*	*11/15/19 12:33*	*11/18/19 11:31*	*1*

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 570-33081/8-A
Matrix: Solid
Analysis Batch: 33467

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 33081

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
4,4'-DDD			25.0	21.34		ug/Kg		85	50 - 135		
4,4'-DDE			25.0	21.33		ug/Kg		85	50 - 135		
4,4'-DDT			25.0	19.97		ug/Kg		80	50 - 135		
Aldrin			25.0	19.76		ug/Kg		79	50 - 135		
alpha-BHC			25.0	21.38		ug/Kg		86	50 - 135		
alpha-Chlordane			25.0	20.44		ug/Kg		82	50 - 135		
beta-BHC			25.0	19.78		ug/Kg		79	50 - 135		
delta-BHC			25.0	21.66		ug/Kg		87	50 - 135		
Dieldrin			25.0	21.07		ug/Kg		84	50 - 135		
Endosulfan I			25.0	20.72		ug/Kg		83	50 - 135		
Endosulfan II			25.0	21.45		ug/Kg		86	50 - 135		
Endosulfan sulfate			25.0	20.63		ug/Kg		83	50 - 135		
Endrin			25.0	20.71		ug/Kg		83	50 - 135		
Endrin aldehyde			25.0	20.18		ug/Kg		81	50 - 135		
gamma-Chlordane			25.0	20.83		ug/Kg		83	50 - 135		
gamma-BHC			25.0	21.02		ug/Kg		84	50 - 135		
Heptachlor			25.0	21.37		ug/Kg		85	50 - 135		
Heptachlor epoxide			25.0	20.50		ug/Kg		82	50 - 135		
Methoxychlor			25.0	19.48		ug/Kg		78	50 - 135		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*83*		*25 - 145*
DCB Decachlorobiphenyl (Surr)	*84*		*24 - 168*

Lab Sample ID: LCSD 570-33081/9-A
Matrix: Solid
Analysis Batch: 33467

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 33081

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,4'-DDD			25.0	20.20		ug/Kg		81	50 - 135	5	25
4,4'-DDE			25.0	20.14		ug/Kg		81	50 - 135	6	25
4,4'-DDT			25.0	18.84		ug/Kg		75	50 - 135	6	25
Aldrin			25.0	18.14		ug/Kg		73	50 - 135	9	25
alpha-BHC			25.0	20.08		ug/Kg		80	50 - 135	6	25
alpha-Chlordane			25.0	19.33		ug/Kg		77	50 - 135	6	25
beta-BHC			25.0	18.66		ug/Kg		75	50 - 135	6	25
delta-BHC			25.0	20.31		ug/Kg		81	50 - 135	6	25
Dieldrin			25.0	19.91		ug/Kg		80	50 - 135	6	25
Endosulfan I			25.0	19.57		ug/Kg		78	50 - 135	6	25
Endosulfan II			25.0	20.37		ug/Kg		81	50 - 135	5	25
Endosulfan sulfate			25.0	19.88		ug/Kg		80	50 - 135	4	25
Endrin			25.0	19.62		ug/Kg		78	50 - 135	5	25
Endrin aldehyde			25.0	18.72		ug/Kg		75	50 - 135	7	25
gamma-Chlordane			25.0	19.65		ug/Kg		79	50 - 135	6	25
gamma-BHC			25.0	19.77		ug/Kg		79	50 - 135	6	25
Heptachlor			25.0	20.06		ug/Kg		80	50 - 135	6	25
Heptachlor epoxide			25.0	19.40		ug/Kg		78	50 - 135	6	25
Methoxychlor			25.0	18.71		ug/Kg		75	50 - 135	4	25

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCSD 570-33081/9-A
Matrix: Solid
Analysis Batch: 33467

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 33081

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Tetrachloro-m-xylene	80		25 - 145
DCB Decachlorobiphenyl (Surr)	85		24 - 168

Lab Sample ID: 570-12737-A-3-B MS
Matrix: Solid
Analysis Batch: 33467

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 33081

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	ND		25.0	21.63		ug/Kg		87	50 - 135
4,4'-DDE	2.2	J	25.0	23.48		ug/Kg		85	50 - 135
4,4'-DDT	ND		25.0	22.08		ug/Kg		88	50 - 135
Aldrin	ND		25.0	19.41		ug/Kg		78	50 - 135
alpha-BHC	ND		25.0	18.69		ug/Kg		75	50 - 135
alpha-Chlordane	ND		25.0	19.36		ug/Kg		78	50 - 135
beta-BHC	ND		25.0	19.86		ug/Kg		80	50 - 135
delta-BHC	ND		25.0	22.51		ug/Kg		90	50 - 135
Dieldrin	ND		25.0	20.88		ug/Kg		84	50 - 135
Endosulfan I	ND		25.0	19.18		ug/Kg		77	50 - 135
Endosulfan II	ND		25.0	20.35		ug/Kg		82	50 - 135
Endosulfan sulfate	ND		25.0	20.42		ug/Kg		82	50 - 135
Endrin	ND		25.0	19.38		ug/Kg		78	50 - 135
Endrin aldehyde	ND		25.0	19.71		ug/Kg		79	50 - 135
gamma-Chlordane	ND		25.0	19.99	p	ug/Kg		80	50 - 135
gamma-BHC	ND		25.0	19.25		ug/Kg		77	50 - 135
Heptachlor	ND		25.0	18.80		ug/Kg		75	50 - 135
Heptachlor epoxide	ND		25.0	20.88		ug/Kg		84	50 - 135
Methoxychlor	ND		25.0	21.41		ug/Kg		86	50 - 135

Surrogate	MS %Recovery	MS Qualifier	Limits
Tetrachloro-m-xylene	65		25 - 145
DCB Decachlorobiphenyl (Surr)	78		24 - 168

Lab Sample ID: 570-12737-A-3-C MSD
Matrix: Solid
Analysis Batch: 33467

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 33081

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,4'-DDD	ND		24.9	20.16		ug/Kg		81	50 - 135	7	25
4,4'-DDE	2.2	J	24.9	23.43		ug/Kg		85	50 - 135	0	25
4,4'-DDT	ND		24.9	19.74		ug/Kg		79	50 - 135	11	25
Aldrin	ND		24.9	17.90		ug/Kg		72	50 - 135	8	25
alpha-BHC	ND		24.9	18.07		ug/Kg		73	50 - 135	3	25
alpha-Chlordane	ND		24.9	17.89		ug/Kg		72	50 - 135	8	25
beta-BHC	ND		24.9	18.42		ug/Kg		74	50 - 135	8	25
delta-BHC	ND		24.9	20.89		ug/Kg		84	50 - 135	7	25
Dieldrin	ND		24.9	19.24		ug/Kg		77	50 - 135	8	25
Endosulfan I	ND		24.9	17.83		ug/Kg		72	50 - 135	7	25
Endosulfan II	ND		24.9	18.57		ug/Kg		75	50 - 135	9	25

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 570-12737-A-3-C MSD
Matrix: Solid
Analysis Batch: 33467

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 33081

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Endosulfan sulfate	ND		24.9	18.60		ug/Kg		75	50 - 135	9	25
Endrin	ND		24.9	18.38		ug/Kg		74	50 - 135	5	25
Endrin aldehyde	ND		24.9	17.33		ug/Kg		70	50 - 135	13	25
gamma-Chlordane	ND		24.9	18.25	p	ug/Kg		73	50 - 135	9	25
gamma-BHC	ND		24.9	18.18		ug/Kg		73	50 - 135	6	25
Heptachlor	ND		24.9	17.54		ug/Kg		70	50 - 135	7	25
Heptachlor epoxide	ND		24.9	19.25		ug/Kg		77	50 - 135	8	25
Methoxychlor	ND		24.9	18.01		ug/Kg		72	50 - 135	17	25

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*60*		*25 - 145*
DCB Decachlorobiphenyl (Surr)	*66*		*24 - 168*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 570-32599/1-A
Matrix: Solid
Analysis Batch: 33361

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 32599

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.246	0.0844	mg/Kg		11/13/19 15:27	11/16/19 11:40	1
Arsenic	ND		0.739	0.255	mg/Kg		11/13/19 15:27	11/16/19 11:40	1
Barium	ND		0.493	0.152	mg/Kg		11/13/19 15:27	11/16/19 11:40	1
Beryllium	ND		0.246	0.135	mg/Kg		11/13/19 15:27	11/16/19 11:40	1
Cadmium	ND		0.493	0.133	mg/Kg		11/13/19 15:27	11/16/19 11:40	1
Cobalt	ND		0.246	0.146	mg/Kg		11/13/19 15:27	11/16/19 11:40	1
Chromium	ND		0.246	0.140	mg/Kg		11/13/19 15:27	11/16/19 11:40	1
Copper	ND		0.493	0.133	mg/Kg		11/13/19 15:27	11/16/19 11:40	1
Molybdenum	ND		0.246	0.130	mg/Kg		11/13/19 15:27	11/16/19 11:40	1
Nickel	ND		0.246	0.143	mg/Kg		11/13/19 15:27	11/16/19 11:40	1
Antimony	ND		0.739	0.147	mg/Kg		11/13/19 15:27	11/16/19 11:40	1
Selenium	ND		0.739	0.296	mg/Kg		11/13/19 15:27	11/16/19 11:40	1
Thallium	ND		0.739	0.150	mg/Kg		11/13/19 15:27	11/16/19 11:40	1
Vanadium	ND		0.246	0.139	mg/Kg		11/13/19 15:27	11/16/19 11:40	1
Zinc	ND		0.985	0.175	mg/Kg		11/13/19 15:27	11/16/19 11:40	1
Lead	ND		0.493	0.130	mg/Kg		11/13/19 15:27	11/16/19 11:40	1

Lab Sample ID: LCS 570-32599/2-A
Matrix: Solid
Analysis Batch: 33361

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 32599

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	12.8	12.99		mg/Kg		101	80 - 120
Arsenic	25.6	23.72		mg/Kg		93	80 - 120
Barium	25.6	26.35		mg/Kg		103	80 - 120
Beryllium	25.6	24.24		mg/Kg		95	80 - 120
Cadmium	25.6	25.32		mg/Kg		99	80 - 120
Cobalt	25.6	26.54		mg/Kg		103	80 - 120
Chromium	25.6	25.82		mg/Kg		101	80 - 120

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 570-32599/2-A
Matrix: Solid
Analysis Batch: 33361

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 32599

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Copper	25.6	25.95		mg/Kg		101	80 - 120
Molybdenum	25.6	23.67		mg/Kg		92	80 - 120
Nickel	25.6	25.95		mg/Kg		101	80 - 120
Antimony	25.6	25.39		mg/Kg		99	80 - 120
Selenium	25.6	24.32		mg/Kg		95	80 - 120
Thallium	25.6	25.66		mg/Kg		100	80 - 120
Vanadium	25.6	24.73		mg/Kg		96	80 - 120
Zinc	25.6	25.23		mg/Kg		98	80 - 120
Lead	25.6	25.70		mg/Kg		100	80 - 120

Lab Sample ID: LCSD 570-32599/3-A
Matrix: Solid
Analysis Batch: 33361

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 32599

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver	12.6	13.09		mg/Kg		104	80 - 120	1	20
Arsenic	25.3	23.63		mg/Kg		94	80 - 120	0	20
Barium	25.3	26.56		mg/Kg		105	80 - 120	1	20
Beryllium	25.3	24.11		mg/Kg		95	80 - 120	1	20
Cadmium	25.3	25.66		mg/Kg		102	80 - 120	1	20
Cobalt	25.3	26.81		mg/Kg		106	80 - 120	1	20
Chromium	25.3	26.11		mg/Kg		103	80 - 120	1	20
Copper	25.3	26.08		mg/Kg		103	80 - 120	1	20
Molybdenum	25.3	23.93		mg/Kg		95	80 - 120	1	20
Nickel	25.3	26.16		mg/Kg		104	80 - 120	1	20
Antimony	25.3	25.63		mg/Kg		102	80 - 120	1	20
Selenium	25.3	24.38		mg/Kg		97	80 - 120	0	20
Thallium	25.3	25.14		mg/Kg		100	80 - 120	2	20
Vanadium	25.3	24.96		mg/Kg		99	80 - 120	1	20
Zinc	25.3	25.20		mg/Kg		100	80 - 120	0	20
Lead	25.3	25.36		mg/Kg		100	80 - 120	1	20

Lab Sample ID: 570-12499-B-1-C MS ^10
Matrix: Solid
Analysis Batch: 33361

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 32599

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	ND		12.2	13.57		mg/Kg		111	75 - 125
Arsenic	44.4	F1	24.4	63.26		mg/Kg		77	75 - 125
Barium	530		24.4	531.9	4	mg/Kg		7	75 - 125
Beryllium	11.4		24.4	35.87		mg/Kg		100	75 - 125
Cadmium	ND		24.4	24.89		mg/Kg		102	75 - 125
Cobalt	5.26		24.4	29.82		mg/Kg		101	75 - 125
Chromium	35.1		24.4	57.49		mg/Kg		92	75 - 125
Copper	20.2		24.4	47.94		mg/Kg		114	75 - 125
Molybdenum	21.0	F1	24.4	33.74	F1	mg/Kg		52	75 - 125
Nickel	13.9		24.4	32.87		mg/Kg		78	75 - 125
Antimony	4.22	J F1	24.4	5.251	J F1	mg/Kg		4	50 - 115
Selenium	ND	F1	24.4	26.85		mg/Kg		110	75 - 125

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 570-12499-B-1-C MS ^10
Matrix: Solid
Analysis Batch: 33361

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 32599

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Thallium	4.58	J	24.4	29.25		mg/Kg		101	75 - 125
Vanadium	43.4		24.4	68.91		mg/Kg		105	75 - 125
Zinc	615		24.4	495.5	4	mg/Kg		-491	75 - 125
Lead	ND	F1 L	24.4	15.18	F1	mg/Kg		62	75 - 125

Lab Sample ID: 570-12499-B-1-D MSD ^10
Matrix: Solid
Analysis Batch: 33361

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 32599

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver	ND		12.5	14.05		mg/Kg		112	75 - 125	3	20
Arsenic	44.4	F1	25.0	61.83	F1	mg/Kg		70	75 - 125	2	20
Barium	530		25.0	508.8	4	mg/Kg		-85	75 - 125	4	20
Beryllium	11.4		25.0	34.99		mg/Kg		94	75 - 125	2	20
Cadmium	ND		25.0	24.35		mg/Kg		97	75 - 125	2	20
Cobalt	5.26		25.0	29.38		mg/Kg		96	75 - 125	1	20
Chromium	35.1		25.0	55.96		mg/Kg		83	75 - 125	3	20
Copper	20.2		25.0	40.32		mg/Kg		80	75 - 125	17	20
Molybdenum	21.0	F1	25.0	33.36	F1	mg/Kg		49	75 - 125	1	20
Nickel	13.9		25.0	33.03		mg/Kg		77	75 - 125	0	20
Antimony	4.22	J F1	25.0	6.145	J F1	mg/Kg		8	50 - 115	16	20
Selenium	ND	F1	25.0	32.25	F1	mg/Kg		129	75 - 125	18	20
Thallium	4.58	J	25.0	26.29		mg/Kg		87	75 - 125	11	20
Vanadium	43.4		25.0	64.99		mg/Kg		86	75 - 125	6	20
Zinc	615		25.0	405.5	4	mg/Kg		-839	75 - 125	20	20
Lead	ND	F1 L	25.0	16.43	F1	mg/Kg		66	75 - 125	8	20

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 570-32601/1-A
Matrix: Solid
Analysis Batch: 32866

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 32601

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0877	0.00618	mg/Kg		11/14/19 12:00	11/14/19 14:19	1

Lab Sample ID: LCS 570-32601/2-A
Matrix: Solid
Analysis Batch: 32866

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 32601

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.833	0.8034		mg/Kg		96	85 - 121

Lab Sample ID: LCSD 570-32601/3-A
Matrix: Solid
Analysis Batch: 32866

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 32601

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.794	0.7720		mg/Kg		97	85 - 121	4	10

Method: 7471A - Mercury (CVAA) (Continued)

Lab Sample ID: 570-12499-B-1-F MS
Matrix: Solid
Analysis Batch: 32866

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 32601

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury	0.0153	J F1 F2	0.862	0.5327	F1	mg/Kg		60	71 - 137		

Lab Sample ID: 570-12499-B-1-G MSD
Matrix: Solid
Analysis Batch: 32866

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 32601

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.0153	J F1 F2	0.794	0.4133	F1 F2	mg/Kg		50	71 - 137	25	14

Marginal Exceedance (ME) Summary

Client: Kennedy/Jenks Consultants
Project/Site: VTA

Job ID: 570-12521-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: LCS 570-32920/2-A
Matrix: Solid

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	%Rec	%Rec. Limits	ME %Rec. Limits	Marginal Exceedance Status
1,1-Dichloroethene	50.0	56.18		ug/Kg	112	74 - 122	66 - 130	
1,2-Dibromoethane	50.0	54.58		ug/Kg	109	70 - 130	60 - 140	
1,2-Dichlorobenzene	50.0	57.09		ug/Kg	114	75 - 120	68 - 128	
1,2-Dichloroethane	50.0	56.77		ug/Kg	114	70 - 130	60 - 140	
Benzene	50.0	60.85	* me	ug/Kg	122	78 - 120	71 - 127	ME
Carbon tetrachloride	50.0	60.52		ug/Kg	121	49 - 139	34 - 154	
Chlorobenzene	50.0	57.28		ug/Kg	115	79 - 120	72 - 127	
Di-isopropyl ether (DIPE)	50.0	54.15		ug/Kg	108	78 - 120	71 - 127	
Ethanol	500	495.7		ug/Kg	99	56 - 140	42 - 154	
Ethylbenzene	50.0	57.18		ug/Kg	114	76 - 120	69 - 127	
Ethyl-t-butyl ether (ETBE)	50.0	57.43		ug/Kg	115	70 - 124	61 - 133	
Methyl-t-Butyl Ether (MTBE)	50.0	56.09		ug/Kg	112	70 - 124	61 - 133	
o-Xylene	50.0	56.70		ug/Kg	113	70 - 130	60 - 140	
m,p-Xylene	100	112.2		ug/Kg	112	70 - 130	60 - 140	

Summary

Number of Analytes Reported	Number of Marginal Exceedances Allowed	Number of Marginal Exceedances Found
14	1	1

ME = Marginal Exceedance

Lab Sample ID: LCSD 570-32920/3-A
Matrix: Solid

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	%Rec	%Rec. Limits	ME %Rec. Limits	Marginal Exceedance Status
1,1-Dichloroethene	50.3	56.38		ug/Kg	112	74 - 122	66 - 130	
1,2-Dibromoethane	50.3	54.05		ug/Kg	107	70 - 130	60 - 140	
1,2-Dichlorobenzene	50.3	54.45		ug/Kg	108	75 - 120	68 - 128	
1,2-Dichloroethane	50.3	56.79		ug/Kg	113	70 - 130	60 - 140	
Benzene	50.3	61.25	* me	ug/Kg	122	78 - 120	71 - 127	ME
Carbon tetrachloride	50.3	60.82		ug/Kg	121	49 - 139	34 - 154	
Chlorobenzene	50.3	56.88		ug/Kg	113	79 - 120	72 - 127	
Di-isopropyl ether (DIPE)	50.3	54.76		ug/Kg	109	78 - 120	71 - 127	
Ethanol	503	479.3		ug/Kg	95	56 - 140	42 - 154	
Ethylbenzene	50.3	57.01		ug/Kg	113	76 - 120	69 - 127	
Ethyl-t-butyl ether (ETBE)	50.3	57.48		ug/Kg	114	70 - 124	61 - 133	
Methyl-t-Butyl Ether (MTBE)	50.3	56.22		ug/Kg	112	70 - 124	61 - 133	
o-Xylene	50.3	55.89		ug/Kg	111	70 - 130	60 - 140	
m,p-Xylene	101	109.4		ug/Kg	109	70 - 130	60 - 140	

Summary

Number of Analytes Reported	Number of Marginal Exceedances Allowed	Number of Marginal Exceedances Found
14	1	1

ME = Marginal Exceedance

Client: Kennedy/Jenks Consultants
Project/Site: VTA

Job ID: 570-12521-1

GC/MS VOA

Prep Batch: 32920

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-12521-1	CP241-SB01-1.5	Total/NA	Solid	5030C	
570-12521-2	CP241-SB01-5	Total/NA	Solid	5030C	
570-12521-3	CP241-SB01-8	Total/NA	Solid	5030C	
570-12521-5	CP241-SB02-2	Total/NA	Solid	5030C	
570-12521-6	CP241-SB02-5	Total/NA	Solid	5030C	
570-12521-7	CP241-SB02-8	Total/NA	Solid	5030C	
MB 570-32920/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 570-32920/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCSD 570-32920/3-A	Lab Control Sample Dup	Total/NA	Solid	5030C	
570-12118-B-15-C MS	Matrix Spike	Total/NA	Solid	5030C	
570-12118-B-15-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5030C	

Analysis Batch: 32957

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-12521-1	CP241-SB01-1.5	Total/NA	Solid	8260B	32920
570-12521-2	CP241-SB01-5	Total/NA	Solid	8260B	32920
570-12521-3	CP241-SB01-8	Total/NA	Solid	8260B	32920
570-12521-5	CP241-SB02-2	Total/NA	Solid	8260B	32920
570-12521-6	CP241-SB02-5	Total/NA	Solid	8260B	32920
570-12521-7	CP241-SB02-8	Total/NA	Solid	8260B	32920
MB 570-32920/1-A	Method Blank	Total/NA	Solid	8260B	32920
LCS 570-32920/2-A	Lab Control Sample	Total/NA	Solid	8260B	32920
LCSD 570-32920/3-A	Lab Control Sample Dup	Total/NA	Solid	8260B	32920
570-12118-B-15-C MS	Matrix Spike	Total/NA	Solid	8260B	32920
570-12118-B-15-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8260B	32920

Analysis Batch: 32958

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-12521-1	CP241-SB01-1.5	Total/NA	Solid	8260B/CA_LUFT MS	32920
570-12521-2	CP241-SB01-5	Total/NA	Solid	8260B/CA_LUFT MS	32920
570-12521-3	CP241-SB01-8	Total/NA	Solid	8260B/CA_LUFT MS	32920
570-12521-5	CP241-SB02-2	Total/NA	Solid	8260B/CA_LUFT MS	32920
570-12521-6	CP241-SB02-5	Total/NA	Solid	8260B/CA_LUFT MS	32920
570-12521-7	CP241-SB02-8	Total/NA	Solid	8260B/CA_LUFT MS	32920
MB 570-32920/1-A	Method Blank	Total/NA	Solid	8260B/CA_LUFT MS	32920
LCS 570-32958/6	Lab Control Sample	Total/NA	Solid	8260B/CA_LUFT MS	
LCSD 570-32958/7	Lab Control Sample Dup	Total/NA	Solid	8260B/CA_LUFT MS	

GC Semi VOA

Prep Batch: 32559

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-12521-1	CP241-SB01-1.5	Total/NA	Solid	3550C	
570-12521-2	CP241-SB01-5	Total/NA	Solid	3550C	
570-12521-3	CP241-SB01-8	Total/NA	Solid	3550C	

GC Semi VOA (Continued)

Prep Batch: 32559 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-12521-5	CP241-SB02-2	Total/NA	Solid	3550C	
570-12521-6	CP241-SB02-5	Total/NA	Solid	3550C	
570-12521-7	CP241-SB02-8	Total/NA	Solid	3550C	
MB 570-32559/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 570-32559/2-A	Lab Control Sample	Total/NA	Solid	3550C	
LCS 570-32559/6-A	Lab Control Sample	Total/NA	Solid	3550C	
LCSD 570-32559/3-A	Lab Control Sample Dup	Total/NA	Solid	3550C	
LCSD 570-32559/7-A	Lab Control Sample Dup	Total/NA	Solid	3550C	
570-12521-1 MS	CP241-SB01-1.5	Total/NA	Solid	3550C	
570-12521-1 MS	CP241-SB01-1.5	Total/NA	Solid	3550C	
570-12521-1 MSD	CP241-SB01-1.5	Total/NA	Solid	3550C	
570-12521-1 MSD	CP241-SB01-1.5	Total/NA	Solid	3550C	

Analysis Batch: 32820

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-12521-1	CP241-SB01-1.5	Total/NA	Solid	8015B	32559
570-12521-2	CP241-SB01-5	Total/NA	Solid	8015B	32559
570-12521-3	CP241-SB01-8	Total/NA	Solid	8015B	32559
570-12521-5	CP241-SB02-2	Total/NA	Solid	8015B	32559
570-12521-6	CP241-SB02-5	Total/NA	Solid	8015B	32559
570-12521-7	CP241-SB02-8	Total/NA	Solid	8015B	32559
MB 570-32559/1-A	Method Blank	Total/NA	Solid	8015B	32559
LCS 570-32559/2-A	Lab Control Sample	Total/NA	Solid	8015B	32559
LCS 570-32559/6-A	Lab Control Sample	Total/NA	Solid	8015B	32559
LCSD 570-32559/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B	32559
LCSD 570-32559/7-A	Lab Control Sample Dup	Total/NA	Solid	8015B	32559
570-12521-1 MS	CP241-SB01-1.5	Total/NA	Solid	8015B	32559
570-12521-1 MS	CP241-SB01-1.5	Total/NA	Solid	8015B	32559
570-12521-1 MSD	CP241-SB01-1.5	Total/NA	Solid	8015B	32559
570-12521-1 MSD	CP241-SB01-1.5	Total/NA	Solid	8015B	32559

Prep Batch: 33081

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-12521-1	CP241-SB01-1.5	Total/NA	Solid	3545	
570-12521-5	CP241-SB02-2	Total/NA	Solid	3545	
MB 570-33081/1-A	Method Blank	Total/NA	Solid	3545	
LCS 570-33081/8-A	Lab Control Sample	Total/NA	Solid	3545	
LCSD 570-33081/9-A	Lab Control Sample Dup	Total/NA	Solid	3545	
570-12737-A-3-B MS	Matrix Spike	Total/NA	Solid	3545	
570-12737-A-3-C MSD	Matrix Spike Duplicate	Total/NA	Solid	3545	

Analysis Batch: 33467

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-12521-1	CP241-SB01-1.5	Total/NA	Solid	8081A	33081
570-12521-5	CP241-SB02-2	Total/NA	Solid	8081A	33081
MB 570-33081/1-A	Method Blank	Total/NA	Solid	8081A	33081
LCS 570-33081/8-A	Lab Control Sample	Total/NA	Solid	8081A	33081
LCSD 570-33081/9-A	Lab Control Sample Dup	Total/NA	Solid	8081A	33081
570-12737-A-3-B MS	Matrix Spike	Total/NA	Solid	8081A	33081
570-12737-A-3-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8081A	33081

Metals

Prep Batch: 32599

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-12521-1	CP241-SB01-1.5	Total/NA	Solid	3050B	
570-12521-2	CP241-SB01-5	Total/NA	Solid	3050B	
570-12521-3	CP241-SB01-8	Total/NA	Solid	3050B	
570-12521-5	CP241-SB02-2	Total/NA	Solid	3050B	
570-12521-6	CP241-SB02-5	Total/NA	Solid	3050B	
570-12521-7	CP241-SB02-8	Total/NA	Solid	3050B	
MB 570-32599/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 570-32599/2-A	Lab Control Sample	Total/NA	Solid	3050B	
LCSD 570-32599/3-A	Lab Control Sample Dup	Total/NA	Solid	3050B	
570-12499-B-1-C MS ^10	Matrix Spike	Total/NA	Solid	3050B	
570-12499-B-1-D MSD ^10	Matrix Spike Duplicate	Total/NA	Solid	3050B	

Prep Batch: 32601

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-12521-1	CP241-SB01-1.5	Total/NA	Solid	7471A	
570-12521-2	CP241-SB01-5	Total/NA	Solid	7471A	
570-12521-3	CP241-SB01-8	Total/NA	Solid	7471A	
570-12521-5	CP241-SB02-2	Total/NA	Solid	7471A	
570-12521-6	CP241-SB02-5	Total/NA	Solid	7471A	
570-12521-7	CP241-SB02-8	Total/NA	Solid	7471A	
MB 570-32601/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 570-32601/2-A	Lab Control Sample	Total/NA	Solid	7471A	
LCSD 570-32601/3-A	Lab Control Sample Dup	Total/NA	Solid	7471A	
570-12499-B-1-F MS	Matrix Spike	Total/NA	Solid	7471A	
570-12499-B-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	7471A	

Analysis Batch: 32866

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-12521-1	CP241-SB01-1.5	Total/NA	Solid	7471A	32601
570-12521-2	CP241-SB01-5	Total/NA	Solid	7471A	32601
570-12521-3	CP241-SB01-8	Total/NA	Solid	7471A	32601
570-12521-5	CP241-SB02-2	Total/NA	Solid	7471A	32601
570-12521-6	CP241-SB02-5	Total/NA	Solid	7471A	32601
570-12521-7	CP241-SB02-8	Total/NA	Solid	7471A	32601
MB 570-32601/1-A	Method Blank	Total/NA	Solid	7471A	32601
LCS 570-32601/2-A	Lab Control Sample	Total/NA	Solid	7471A	32601
LCSD 570-32601/3-A	Lab Control Sample Dup	Total/NA	Solid	7471A	32601
570-12499-B-1-F MS	Matrix Spike	Total/NA	Solid	7471A	32601
570-12499-B-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	7471A	32601

Analysis Batch: 33361

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-12521-1	CP241-SB01-1.5	Total/NA	Solid	6010B	32599
570-12521-2	CP241-SB01-5	Total/NA	Solid	6010B	32599
570-12521-3	CP241-SB01-8	Total/NA	Solid	6010B	32599
570-12521-5	CP241-SB02-2	Total/NA	Solid	6010B	32599
570-12521-6	CP241-SB02-5	Total/NA	Solid	6010B	32599
570-12521-7	CP241-SB02-8	Total/NA	Solid	6010B	32599
MB 570-32599/1-A	Method Blank	Total/NA	Solid	6010B	32599
LCS 570-32599/2-A	Lab Control Sample	Total/NA	Solid	6010B	32599
LCSD 570-32599/3-A	Lab Control Sample Dup	Total/NA	Solid	6010B	32599

Metals (Continued)

Analysis Batch: 33361 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-12499-B-1-C MS ^10	Matrix Spike	Total/NA	Solid	6010B	32599
570-12499-B-1-D MSD ^10	Matrix Spike Duplicate	Total/NA	Solid	6010B	32599

Lab Chronicle

Client: Kennedy/Jenks Consultants
Project/Site: VTA

Job ID: 570-12521-1

Client Sample ID: CP241-SB01-1.5

Lab Sample ID: 570-12521-1

Date Collected: 11/11/19 09:28

Matrix: Solid

Date Received: 11/12/19 10:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030C			5.12 g	5 mL	32920	11/14/19 18:25	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	32957	11/15/19 04:42	U4JL	ECL 2
	Instrument ID: GCMSLL									
Total/NA	Prep	5030C			5.12 g	5 mL	32920	11/14/19 18:25	P4DI	ECL 2
Total/NA	Analysis	8260B/CA_LUFTMS		1	5 mL	5 mL	32958	11/15/19 04:42	U4JL	ECL 2
	Instrument ID: GCMSLL									
Total/NA	Prep	3550C			10.02 g	10 mL	32559	11/13/19 13:13	SP7J	ECL 1
Total/NA	Analysis	8015B		1			32820	11/15/19 06:26	N5Y3	ECL 1
	Instrument ID: GC46									
Total/NA	Prep	3545			10.03 g	10 mL	33081	11/15/19 12:48	USUL	ECL 1
Total/NA	Analysis	8081A		1			33467	11/18/19 13:25	UHHN	ECL 1
	Instrument ID: GC44									
Total/NA	Prep	3050B			1.93 g	100 mL	32599	11/13/19 15:27	X7RL	ECL 1
Total/NA	Analysis	6010B		1			33361	11/16/19 13:00	OYW3	ECL 1
	Instrument ID: ICP8									
Total/NA	Prep	7471A			.58 g	100 mL	32601	11/14/19 12:00	X7RL	ECL 1
Total/NA	Analysis	7471A		1			32866	11/14/19 17:02	I3IN	ECL 1
	Instrument ID: HG8									

Client Sample ID: CP241-SB01-5

Lab Sample ID: 570-12521-2

Date Collected: 11/11/19 09:40

Matrix: Solid

Date Received: 11/12/19 10:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030C			4.90 g	5 mL	32920	11/14/19 18:25	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	32957	11/15/19 05:08	U4JL	ECL 2
	Instrument ID: GCMSLL									
Total/NA	Prep	5030C			4.90 g	5 mL	32920	11/14/19 18:25	P4DI	ECL 2
Total/NA	Analysis	8260B/CA_LUFTMS		1	5 mL	5 mL	32958	11/15/19 05:08	U4JL	ECL 2
	Instrument ID: GCMSLL									
Total/NA	Prep	3550C			10.03 g	10 mL	32559	11/13/19 13:13	SP7J	ECL 1
Total/NA	Analysis	8015B		1			32820	11/15/19 06:47	N5Y3	ECL 1
	Instrument ID: GC46									
Total/NA	Prep	3050B			2.04 g	100 mL	32599	11/13/19 15:27	X7RL	ECL 1
Total/NA	Analysis	6010B		1			33361	11/16/19 13:03	OYW3	ECL 1
	Instrument ID: ICP8									
Total/NA	Prep	7471A			.60 g	100 mL	32601	11/14/19 12:00	X7RL	ECL 1
Total/NA	Analysis	7471A		1			32866	11/14/19 17:04	I3IN	ECL 1
	Instrument ID: HG8									

Lab Chronicle

Client: Kennedy/Jenks Consultants
Project/Site: VTA

Job ID: 570-12521-1

Client Sample ID: CP241-SB01-8

Date Collected: 11/11/19 09:49
Date Received: 11/12/19 10:15

Lab Sample ID: 570-12521-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030C			4.97 g	5 mL	32920	11/14/19 18:25	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	32957	11/15/19 05:34	U4JL	ECL 2
	Instrument ID: GCMSLL									
Total/NA	Prep	5030C			4.97 g	5 mL	32920	11/14/19 18:25	P4DI	ECL 2
Total/NA	Analysis	8260B/CA_LUFTMS		1	5 mL	5 mL	32958	11/15/19 05:34	U4JL	ECL 2
	Instrument ID: GCMSLL									
Total/NA	Prep	3550C			10.06 g	10 mL	32559	11/13/19 13:13	SP7J	ECL 1
Total/NA	Analysis	8015B		1			32820	11/15/19 07:10	N5Y3	ECL 1
	Instrument ID: GC46									
Total/NA	Prep	3050B			2.10 g	100 mL	32599	11/13/19 15:27	X7RL	ECL 1
Total/NA	Analysis	6010B		1			33361	11/16/19 13:05	OYW3	ECL 1
	Instrument ID: ICP8									
Total/NA	Prep	7471A			.57 g	100 mL	32601	11/14/19 12:00	X7RL	ECL 1
Total/NA	Analysis	7471A		1			32866	11/14/19 17:06	I3IN	ECL 1
	Instrument ID: HG8									

Client Sample ID: CP241-SB02-2

Date Collected: 11/11/19 10:09
Date Received: 11/12/19 10:15

Lab Sample ID: 570-12521-5

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030C			4.94 g	5 mL	32920	11/14/19 18:25	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	32957	11/15/19 06:00	U4JL	ECL 2
	Instrument ID: GCMSLL									
Total/NA	Prep	5030C			4.94 g	5 mL	32920	11/14/19 18:25	P4DI	ECL 2
Total/NA	Analysis	8260B/CA_LUFTMS		1	5 mL	5 mL	32958	11/15/19 06:00	U4JL	ECL 2
	Instrument ID: GCMSLL									
Total/NA	Prep	3550C			10.06 g	10 mL	32559	11/13/19 13:13	SP7J	ECL 1
Total/NA	Analysis	8015B		1			32820	11/15/19 07:31	N5Y3	ECL 1
	Instrument ID: GC46									
Total/NA	Prep	3545			20.02 g	10 mL	33081	11/15/19 12:48	USUL	ECL 1
Total/NA	Analysis	8081A		1			33467	11/18/19 13:39	UHHN	ECL 1
	Instrument ID: GC44									
Total/NA	Prep	3050B			1.91 g	100 mL	32599	11/13/19 15:27	X7RL	ECL 1
Total/NA	Analysis	6010B		1			33361	11/16/19 13:10	OYW3	ECL 1
	Instrument ID: ICP8									
Total/NA	Prep	7471A			.60 g	100 mL	32601	11/14/19 12:00	X7RL	ECL 1
Total/NA	Analysis	7471A		1			32866	11/14/19 17:11	I3IN	ECL 1
	Instrument ID: HG8									

Lab Chronicle

Client: Kennedy/Jenks Consultants
Project/Site: VTA

Job ID: 570-12521-1

Client Sample ID: CP241-SB02-5

Date Collected: 11/11/19 10:17
Date Received: 11/12/19 10:15

Lab Sample ID: 570-12521-6

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030C			5.08 g	5 mL	32920	11/14/19 18:25	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	32957	11/15/19 06:26	U4JL	ECL 2
	Instrument ID: GCMSLL									
Total/NA	Prep	5030C			5.08 g	5 mL	32920	11/14/19 18:25	P4DI	ECL 2
Total/NA	Analysis	8260B/CA_LUFTMS		1	5 mL	5 mL	32958	11/15/19 06:26	U4JL	ECL 2
	Instrument ID: GCMSLL									
Total/NA	Prep	3550C			10.03 g	10 mL	32559	11/13/19 13:13	SP7J	ECL 1
Total/NA	Analysis	8015B		1			32820	11/15/19 07:54	N5Y3	ECL 1
	Instrument ID: GC46									
Total/NA	Prep	3050B			2.03 g	100 mL	32599	11/13/19 15:27	X7RL	ECL 1
Total/NA	Analysis	6010B		1			33361	11/16/19 13:13	OYW3	ECL 1
	Instrument ID: ICP8									
Total/NA	Prep	7471A			.60 g	100 mL	32601	11/14/19 12:00	X7RL	ECL 1
Total/NA	Analysis	7471A		1			32866	11/14/19 17:13	I3IN	ECL 1
	Instrument ID: HG8									

Client Sample ID: CP241-SB02-8

Date Collected: 11/11/19 10:21
Date Received: 11/12/19 10:15

Lab Sample ID: 570-12521-7

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030C			4.98 g	5 mL	32920	11/14/19 18:25	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	32957	11/15/19 06:52	U4JL	ECL 2
	Instrument ID: GCMSLL									
Total/NA	Prep	5030C			4.98 g	5 mL	32920	11/14/19 18:25	P4DI	ECL 2
Total/NA	Analysis	8260B/CA_LUFTMS		1	5 mL	5 mL	32958	11/15/19 06:52	U4JL	ECL 2
	Instrument ID: GCMSLL									
Total/NA	Prep	3550C			10.12 g	10 mL	32559	11/13/19 13:13	SP7J	ECL 1
Total/NA	Analysis	8015B		1			32820	11/15/19 08:15	N5Y3	ECL 1
	Instrument ID: GC46									
Total/NA	Prep	3050B			1.98 g	100 mL	32599	11/13/19 15:27	X7RL	ECL 1
Total/NA	Analysis	6010B		1			33361	11/16/19 13:15	OYW3	ECL 1
	Instrument ID: ICP8									
Total/NA	Prep	7471A			.57 g	100 mL	32601	11/14/19 12:00	X7RL	ECL 1
Total/NA	Analysis	7471A		1			32866	11/14/19 17:16	I3IN	ECL 1
	Instrument ID: HG8									

Laboratory References:

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

ECL 2 = Eurofins Calscience LLC Lampson, 7445 Lampson Ave, Garden Grove, CA 92841, TEL (714)895-5494

Accreditation/Certification Summary

Client: Kennedy/Jenks Consultants
Project/Site: VTA

Job ID: 570-12521-1

Laboratory: Eurofins Calscience LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arizona	State	AZ0781	03-13-20
California	SCAQMD LAP	17LA0919	11-30-19
California	State	2944	09-29-20
Hawaii	State	<cert No.>	07-02-20
Nevada	State	CA00111	07-31-20
Oregon	NELAP	CA300001	01-29-20

Method Summary

Client: Kennedy/Jenks Consultants
Project/Site: VTA

Job ID: 570-12521-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	ECL 2
8260B/CA_LUFTMS	Volatile Organic Compounds by GC/MS	SW846	ECL 2
8015B	Diesel Range Organics (DRO) (GC)	SW846	ECL 1
8081A	Organochlorine Pesticides (GC)	SW846	ECL 1
6010B	Metals (ICP)	SW846	ECL 1
7471A	Mercury (CVAA)	SW846	ECL 1
3050B	Preparation, Metals	SW846	ECL 1
3545	Pressurized Fluid Extraction	SW846	ECL 1
3550C	Ultrasonic Extraction	SW846	ECL 1
5030C	Purge and Trap	SW846	ECL 2
7471A	Preparation, Mercury	SW846	ECL 1

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

ECL 2 = Eurofins Calscience LLC Lampson, 7445 Lampson Ave, Garden Grove, CA 92841, TEL (714)895-5494

Sample Summary

Client: Kennedy/Jenks Consultants
Project/Site: VTA

Job ID: 570-12521-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
570-12521-1	CP241-SB01-1.5	Solid	11/11/19 09:28	11/12/19 10:15	
570-12521-2	CP241-SB01-5	Solid	11/11/19 09:40	11/12/19 10:15	
570-12521-3	CP241-SB01-8	Solid	11/11/19 09:49	11/12/19 10:15	
570-12521-5	CP241-SB02-2	Solid	11/11/19 10:09	11/12/19 10:15	
570-12521-6	CP241-SB02-5	Solid	11/11/19 10:17	11/12/19 10:15	
570-12521-7	CP241-SB02-8	Solid	11/11/19 10:21	11/12/19 10:15	

Soil 12521

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570-12521 Chain of Custody

CHAIN OF CUSTODY RECORD

DATE: 11/11/19

PAGE: 1 OF 1

7440 Lincoln Way, Garden Grove, CA 92841-1427 • (714) 895-5494
For courier service / sample drop off information, contact us26_sales@eurofinsus.com or call us.

LABORATORY CLIENT: Kennedy/Jenks
ADDRESS: 275 Battery St
CITY: San Francisco STATE: CA ZIP:
TEL: 415-243-2150 E-MAIL: Jay Knight@kennedyjenks.com

CLIENT PROJECT NAME / NUMBER: VTA
PROJECT CONTACT: Mike Mcleod
P.O. NO.: 1965013.00
SAMPLER(S): (PRINT)

TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):
☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☐ 5 DAYS ☒ STANDARD

☐ COELT EDF GLOBAL ID: LOG CODE:

SPECIAL INSTRUCTIONS:
KJ EQ EDD

REQUESTED ANALYSES

Please check box or fill in blank as needed.

LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	Unpreserved	Preserved 4°C	Field Filtered	☒ TPH(g) ☐ GRO	☐ TPH(d) ☐ DRO	TPH ☐ C6-C36 ☐ C6-C44	TPH(d) TPH as Diesel	BTEX / MTBE ☐ 8260 ☐ ____	VOCs (8260)	Oxygenates (8260)	Prep (5035): ☐ En Core ☐ Terra Core	SVOCs (8270)	Pesticides (8081)	PCBs (8082)	PAHs: ☐ 8270 ☐ 8270 SIM	Total Metals: ☐ 6010/747X ☐ 6020/747X Cam 17	Cr(VI): ☐ 7196 ☐ 7199 ☐ 218.6	HOLD			
1	CP241-SBØ1-1.5	11/11/19	0928	S	1		X		X			X		X				X			X					
2	CP241-SBØ1-5		0940						X			X		X							X					
3	CP241-SBØ1-8		0949						X			X		X							X					
4	CP241-SBØ1-12		0951																				X			
5	SP241-SBØ2-2		1009						X			X		X				X			X					
6	CP241-SBØ2-5		1017						X			X		X							X					
7	CP-241-SBØ2-8		1021						X			X		X							X					
8	CP-241-SBØ2-10		1026																		OR		X			

Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:
[signature] 11/11/19	[signature] EJ	11/11/19	1326
[signature] FO 0850 11/11/19	[signature]	11/12/19	1030
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:

1.2 / 1.4 SG

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11/19/2019

06/02/14 Revision

Login Sample Receipt Checklist

Client: Kennedy/Jenks Consultants

Job Number: 570-12521-1

Login Number: 12521
List Number: 1
Creator: Patel, Jayesh

List Source: Eurofins Calscience

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

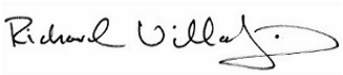
ANALYTICAL REPORT

Eurofins Calscience LLC
7440 Lincoln Way
Garden Grove, CA 92841
Tel: (714)895-5494

Laboratory Job ID: 570-12521-2
Client Project/Site: VTA

For:
Kennedy/Jenks Consultants
3200 El Camino Real
Suite 200
Irvine, California 92602

Attn: Mr. Jay Knight



Authorized for release by:
12/6/2019 4:40:57 PM

Richard Villafania, Project Manager I
(714)895-5494
richardvillafania@eurofinsus.com

Table of Contents

Definitions/Glossary

Client: Kennedy/Jenks Consultants
Project/Site: VTA

Job ID: 570-12521-2

Qualifiers

Metals

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
L	A negative instrument reading had an absolute value greater than the reporting limit

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 570-12521-2

Laboratory: Eurofins Calscience LLC

Narrative

Job Narrative
570-12521-2

Comments
No additional comments.

Receipt
The samples were received on 11/12/2019 10:15 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.9º C.

Metals
Method 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 570-36860 and analytical batch 570-37278 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 6010B: The absolute response for Selenium was greater than the method reporting limit (RL) in the following sample: CP241-SB02-2 (570-12521-5).
The instrument raw data has been manually reviewed and the result can be reported as ND.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: Kennedy/Jenks Consultants
Project/Site: VTA

Job ID: 570-12521-2

Client Sample ID: CP241-SB02-2

Lab Sample ID: 570-12521-5

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Calscience LLC

Client Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: VTA

Job ID: 570-12521-2

Method: 6010B - Metals (ICP)

Client Sample ID: CP241-SB02-2
Date Collected: 11/11/19 10:09
Date Received: 11/12/19 10:15

Lab Sample ID: 570-12521-5
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	ND	L	0.761	0.305	mg/Kg		12/05/19 16:00	12/05/19 20:03	1

QC Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: VTA

Job ID: 570-12521-2

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 570-36860/1-A
Matrix: Solid
Analysis Batch: 37278

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 36860

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	ND		0.732	0.293	mg/Kg		12/05/19 16:00	12/05/19 19:48	1

Lab Sample ID: LCS 570-36860/2-A
Matrix: Solid
Analysis Batch: 37278

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 36860

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Selenium			24.8	22.71		mg/Kg		92	80 - 120		

Lab Sample ID: LCSD 570-36860/3-A
Matrix: Solid
Analysis Batch: 37278

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 36860

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Selenium			25.1	22.85		mg/Kg		91	80 - 120	1	20

Lab Sample ID: 570-14700-A-2-B MS
Matrix: Solid
Analysis Batch: 37278

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 36860

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Selenium	ND	F1	24.4	32.82	F1	mg/Kg		135	75 - 125		

Lab Sample ID: 570-14700-A-2-C MSD
Matrix: Solid
Analysis Batch: 37278

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 36860

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Selenium	ND	F1	25.1	36.47	F1	mg/Kg		145	75 - 125	11	20

QC Association Summary

Client: Kennedy/Jenks Consultants
Project/Site: VTA

Job ID: 570-12521-2

Metals

Prep Batch: 36860

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-12521-5	CP241-SB02-2	Total/NA	Solid	3050B	
MB 570-36860/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 570-36860/2-A	Lab Control Sample	Total/NA	Solid	3050B	
LCSD 570-36860/3-A	Lab Control Sample Dup	Total/NA	Solid	3050B	
570-14700-A-2-B MS	Matrix Spike	Total/NA	Solid	3050B	
570-14700-A-2-C MSD	Matrix Spike Duplicate	Total/NA	Solid	3050B	

Analysis Batch: 37278

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-12521-5	CP241-SB02-2	Total/NA	Solid	6010B	36860
MB 570-36860/1-A	Method Blank	Total/NA	Solid	6010B	36860
LCS 570-36860/2-A	Lab Control Sample	Total/NA	Solid	6010B	36860
LCSD 570-36860/3-A	Lab Control Sample Dup	Total/NA	Solid	6010B	36860
570-14700-A-2-B MS	Matrix Spike	Total/NA	Solid	6010B	36860
570-14700-A-2-C MSD	Matrix Spike Duplicate	Total/NA	Solid	6010B	36860

Lab Chronicle

Client: Kennedy/Jenks Consultants
Project/Site: VTA

Job ID: 570-12521-2

Client Sample ID: CP241-SB02-2

Date Collected: 11/11/19 10:09
Date Received: 11/12/19 10:15

Lab Sample ID: 570-12521-5

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.97 g	100 mL	36860	12/05/19 16:00	FB7R	ECL 1
Total/NA	Analysis	6010B		1			37278	12/05/19 20:03	ULPF	ECL 1
	Instrument ID: ICP8									

Laboratory References:

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

Accreditation/Certification Summary

Client: Kennedy/Jenks Consultants
Job ID: 570-12521-2
Project/Site: VTA

Laboratory: Eurofins Calscience LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arizona	State	AZ0781	03-13-20
California	State	2944	09-29-20
Hawaii	State	<cert No.>	07-02-20
Nevada	State	CA00111	07-31-20
Oregon	NELAP	CA300001	01-29-20

Method Summary

Client: Kennedy/Jenks Consultants
Project/Site: VTA

Job ID: 570-12521-2

Method	Method Description	Protocol	Laboratory
6010B	Metals (ICP)	SW846	ECL 1
3050B	Preparation, Metals	SW846	ECL 1

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

Sample Summary

Client: Kennedy/Jenks Consultants
Project/Site: VTA

Job ID: 570-12521-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
570-12521-5	CP241-SB02-2	Solid	11/11/19 10:09	11/12/19 10:15	

Richard Villafania

From: Mike McLeod <MikeMcLeod@KennedyJenks.com>
Sent: Wednesday, December 04, 2019 11:38 AM
To: Richard Villafania
Cc: Jay Knight; Laura Kennedy; Maya Key
Subject: Re-run one sample

EXTERNAL EMAIL*

Hello Richard,
The selenium concentrations in report J12521-1 are quite extraordinary.

We'd like to check the general picture by re-running one sample. Can you please re-run your sample id 570-12521-5 for Selenium only. If there's enough extract left you can re-run that, or if not then please re-extract and run. Since there's only one sample and one analyte please run it at 48 hr TAT. If you can't meet 48 TAT then let me know and run it at 72 hrs or standard. But we'd like to know sooner rather than later.

Please call or email with question or comments. Thank you.

Michael L. McLeod, PG | **Geologist**
Kennedy/Jenks Consultants
1676 North California Street, Suite 430 | Walnut Creek, California 94596
P: 925-953-1509 | Direct: 415.243.2508 | Cell: 415.533.8530
Service is Our Legacy | EST 1919 | KENNEDYJENKS.COM

soil 12521

eurofins | Calscience

570-12521 Chain of Custody

CHAIN OF CUSTODY RECORD

DATE: 11/11/19

PAGE: 1 OF 1

7440 Lincoln Way, Garden Grove, CA 92841-1427 • (714) 895-5494
For courier service / sample drop off information, contact us26_sales@eurofinsus.com or call us.

LABORATORY CLIENT: Kennedy/Jenks
ADDRESS: 275 Battery St
CITY: San Francisco STATE: CA ZIP:
TEL: 415-243-2150 E-MAIL: Jay Knight@kennedyjenks.com

CLIENT PROJECT NAME / NUMBER: VTA
P.O. NO.: 1965013.00
PROJECT CONTACT: Mike Mcleod
SAMPLER(S): (PRINT)

TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):
☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☐ 5 DAYS ☒ STANDARD

☐ COELT EDF GLOBAL ID: LOG CODE:

SPECIAL INSTRUCTIONS:
KJ EQ EDD

REQUESTED ANALYSES

Please check box or fill in blank as needed.

LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	Unpreserved	Preserved 4°C	Field Filtered	☒ TPH(g) ☐ GRO	☐ TPH(d) ☐ DRO	TPH ☐ C6-C36 ☐ C6-C44	TPH(d) TPHmo	BTEX / MTBE ☐ 8260 ☐	VOCs (8260)	Oxygenates (8260)	Prep (5035): ☐ En Core ☐ Terra Core	SVOCs (8270)	Pesticides (8081)	PCBs (8082)	PAHs: ☐ 8270 ☐ 8270 SIM	Total Metals: ☒ 6010/747X ☐ 6020/747X Comp	Cr(VI): ☐ 7196 ☐ 7199 ☐ 218.6	HOLD
1	CP241-SBØ1-1.5	11/11/19	0928	S	1		X		X			X		X				X			X		
2	CP241-SBØ1-5		0940						X			X		X							X		
3	CP241-SBØ1-8		0949						X			X		X							X		
4	CP241-SBØ1-12		0951																				X
5	SP241-SBØ2-2		1009						X			X		X				X			X		
6	CP241-SBØ2-5		1017						X			X		X							X		
7	CP-241-SBØ2-8		1021						X			X		X							X		
8	CP-241-SBØ2-10		1026																		OR		X

Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:
[signature] 11/11/19	[signature] EJ	11/11/19	1326
[signature] FO 0850 11/11/19	[signature] ia	11/12/19	1030
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:

1.8/1.9 SG

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12/9/2019

06/02/14 Revision

Login Sample Receipt Checklist

Client: Kennedy/Jenks Consultants

Job Number: 570-12521-2

Login Number: 12521
List Number: 1
Creator: Patel, Jayesh

List Source: Eurofins Calscience

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

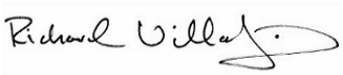
ANALYTICAL REPORT

Eurofins Calscience LLC
7440 Lincoln Way
Garden Grove, CA 92841
Tel: (714)895-5494

Laboratory Job ID: 570-12521-3
Client Project/Site: VTA

For:
Kennedy/Jenks Consultants
3200 El Camino Real
Suite 200
Irvine, California 92602

Attn: Mr. Jay Knight



Authorized for release by:
12/12/2019 6:29:41 PM

Richard Villafania, Project Manager I
(714)895-5494
richardvillafania@eurofinsus.com

Table of Contents

Definitions/Glossary

Client: Kennedy/Jenks Consultants
Project/Site: VTA

Job ID: 570-12521-3

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: Kennedy/Jenks Consultants
Project/Site: VTA

Job ID: 570-12521-3

Job ID: 570-12521-3

Laboratory: Eurofins Calscience LLC

Narrative

Job Narrative
570-12521-3

Comments
No additional comments.

Receipt
The samples were received on 11/12/2019 10:15 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.9º C.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Kennedy/Jenks Consultants
Project/Site: VTA

Job ID: 570-12521-3

Client Sample ID: CP241-SB01-12 — Lab Sample ID: 570-12521-4

No Detections.

Client Sample ID: CP241-SB02-5 — Lab Sample ID: 570-12521-6

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: VTA

Job ID: 570-12521-3

Method: 6010B - Metals (ICP) – STLC Citrate - STLC Citrate

Client Sample ID: CP241-SB01-12
Date Collected: 11/11/19 09:51
Date Received: 11/12/19 10:15

Lab Sample ID: 570-12521-4
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	ND		1.00	0.244	mg/L		12/11/19 19:35	12/12/19 14:12	1

Client Sample ID: CP241-SB02-5
Date Collected: 11/11/19 10:17
Date Received: 11/12/19 10:15

Lab Sample ID: 570-12521-6
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	ND		1.00	0.244	mg/L		12/11/19 19:35	12/12/19 14:15	1

QC Sample Results

Client: Kennedy/Jenks Consultants
Project/Site: VTA

Job ID: 570-12521-3

Method: 6010B - Metals (ICP) – STLC Citrate

Lab Sample ID: LB4 570-37997/1-B
Matrix: Solid
Analysis Batch: 38663

Client Sample ID: Method Blank
Prep Type: STLC Citrate
Prep Batch: 38441

Analyte	LB4 Result	LB4 Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	ND		1.00	0.244	mg/L		12/11/19 19:35	12/12/19 13:44	1

Lab Sample ID: LCS 570-37997/2-B
Matrix: Solid
Analysis Batch: 38663

Client Sample ID: Lab Control Sample
Prep Type: STLC Citrate
Prep Batch: 38441

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Selenium			5.00	5.365		mg/L		107	80 - 120		

Lab Sample ID: LCSD 570-37997/3-B
Matrix: Solid
Analysis Batch: 38663

Client Sample ID: Lab Control Sample Dup
Prep Type: STLC Citrate
Prep Batch: 38441

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Selenium			5.00	5.416		mg/L		108	80 - 120	1	20

Lab Sample ID: 720-96376-B-1-E MS
Matrix: Solid
Analysis Batch: 38663

Client Sample ID: Matrix Spike
Prep Type: STLC Citrate
Prep Batch: 38441

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Selenium	ND		5.00	5.533		mg/L		111	79 - 127		

Lab Sample ID: 720-96376-B-1-F MSD
Matrix: Solid
Analysis Batch: 38663

Client Sample ID: Matrix Spike Duplicate
Prep Type: STLC Citrate
Prep Batch: 38441

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Selenium	ND		5.00	5.310		mg/L		106	79 - 127	4	9

QC Association Summary

Client: Kennedy/Jenks Consultants
Project/Site: VTA

Job ID: 570-12521-3

Metals

Leach Batch: 37997

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-12521-4	CP241-SB01-12	STLC Citrate	Solid	CA WET Citrate	
570-12521-6	CP241-SB02-5	STLC Citrate	Solid	CA WET Citrate	
LB4 570-37997/1-B	Method Blank	STLC Citrate	Solid	CA WET Citrate	
LCS 570-37997/2-B	Lab Control Sample	STLC Citrate	Solid	CA WET Citrate	
LCSD 570-37997/3-B	Lab Control Sample Dup	STLC Citrate	Solid	CA WET Citrate	
720-96376-B-1-E MS	Matrix Spike	STLC Citrate	Solid	CA WET Citrate	
720-96376-B-1-F MSD	Matrix Spike Duplicate	STLC Citrate	Solid	CA WET Citrate	

Prep Batch: 38441

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-12521-4	CP241-SB01-12	STLC Citrate	Solid	Dilution	37997
570-12521-6	CP241-SB02-5	STLC Citrate	Solid	Dilution	37997
LB4 570-37997/1-B	Method Blank	STLC Citrate	Solid	Dilution	37997
LCS 570-37997/2-B	Lab Control Sample	STLC Citrate	Solid	Dilution	37997
LCSD 570-37997/3-B	Lab Control Sample Dup	STLC Citrate	Solid	Dilution	37997
720-96376-B-1-E MS	Matrix Spike	STLC Citrate	Solid	Dilution	37997
720-96376-B-1-F MSD	Matrix Spike Duplicate	STLC Citrate	Solid	Dilution	37997

Analysis Batch: 38663

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-12521-4	CP241-SB01-12	STLC Citrate	Solid	6010B	38441
570-12521-6	CP241-SB02-5	STLC Citrate	Solid	6010B	38441
LB4 570-37997/1-B	Method Blank	STLC Citrate	Solid	6010B	38441
LCS 570-37997/2-B	Lab Control Sample	STLC Citrate	Solid	6010B	38441
LCSD 570-37997/3-B	Lab Control Sample Dup	STLC Citrate	Solid	6010B	38441
720-96376-B-1-E MS	Matrix Spike	STLC Citrate	Solid	6010B	38441
720-96376-B-1-F MSD	Matrix Spike Duplicate	STLC Citrate	Solid	6010B	38441

Lab Chronicle

Client: Kennedy/Jenks Consultants
Project/Site: VTA

Job ID: 570-12521-3

Client Sample ID: CP241-SB01-12

Lab Sample ID: 570-12521-4

Date Collected: 11/11/19 09:51

Matrix: Solid

Date Received: 11/12/19 10:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
STLC Citrate	Leach	CA WET Citrate			49.96 g	500 mL	37997	12/09/19 17:00	I3IN	ECL 3
STLC Citrate	Prep	Dilution			5 mL	50 mL	38441	12/11/19 19:35	I3IN	ECL 1
STLC Citrate	Analysis	6010B		1			38663	12/12/19 14:12	ULPF	ECL 1

Instrument ID: ICP8

Client Sample ID: CP241-SB02-5

Lab Sample ID: 570-12521-6

Date Collected: 11/11/19 10:17

Matrix: Solid

Date Received: 11/12/19 10:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
STLC Citrate	Leach	CA WET Citrate			50 g	500 mL	37997	12/09/19 17:00	I3IN	ECL 3
STLC Citrate	Prep	Dilution			5 mL	50 mL	38441	12/11/19 19:35	I3IN	ECL 1
STLC Citrate	Analysis	6010B		1			38663	12/12/19 14:15	ULPF	ECL 1

Instrument ID: ICP8

Laboratory References:

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

ECL 3 = Eurofins Calscience LLC Knott, 11380 Knott Street, Garden Grove, CA 92841, TEL (714)895-5494

Accreditation/Certification Summary

Client: Kennedy/Jenks Consultants
Job ID: 570-12521-3
Project/Site: VTA

Laboratory: Eurofins Calscience LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arizona	State	AZ0781	03-13-20
California	SCAQMD LAP	17LA0919	11-30-20
California	State	2944	09-29-20
Hawaii	State	<cert No.>	07-02-20
Nevada	State	CA00111	07-31-20
Oregon	NELAP	CA300001	01-29-20

Method Summary

Client: Kennedy/Jenks Consultants
Project/Site: VTA

Job ID: 570-12521-3

Method	Method Description	Protocol	Laboratory
6010B	Metals (ICP) – STLC Citrate	SW846	ECL 1
CA WET Citrate	California - Waste Extraction Test with Citrate Leach	CA-WET	ECL 3
Dilution	Preparation / Dilution Process	None	ECL 1

Protocol References:

CA-WET = California Waste Extraction Test, from Title 22

None = None

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

ECL 3 = Eurofins Calscience LLC Knott, 11380 Knott Street, Garden Grove, CA 92841, TEL (714)895-5494

Sample Summary

Client: Kennedy/Jenks Consultants
Project/Site: VTA

Job ID: 570-12521-3

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
570-12521-4	CP241-SB01-12	Solid	11/11/19 09:51	11/12/19 10:15	
570-12521-6	CP241-SB02-5	Solid	11/11/19 10:17	11/12/19 10:15	

Richard Villafania

From: Mike McLeod <MikeMcLeod@KennedyJenks.com>
Sent: Monday, December 09, 2019 9:11 AM
To: Richard Villafania
Cc: Laura Kennedy; Jay Knight; Maya Key
Subject: WET test - Selenium - samples 570-12521-4 and 570-12521-6

EXTERNAL EMAIL*

Hello Richard,
For samples 570-12521-4 and 570-12521-6, please run a WET test for selenium.
Can you make a 72 hr. TAT after the extraction is done?

Michael L. McLeod, PG | **Geologist**
Kennedy/Jenks Consultants
1676 North California Street, Suite 430 | Walnut Creek, California 94596
P: 925-953-1509 | Direct: 415.243.2508 | Cell: 415.533.8530
Service is Our Legacy | EST 1919 | KENNEDYJENKS.COM

soil 12521

eurofins | Calscience

570-12521 Chain of Custody

CHAIN OF CUSTODY RECORD

DATE: 11/11/19

PAGE: 1 OF 1

7440 Lincoln Way, Garden Grove, CA 92841-1427 • (714) 895-5494
For courier service / sample drop off information, contact us26_sales@eurofinsus.com or call us.

LABORATORY CLIENT: Kennedy/Jenks
ADDRESS: 275 Battery St
CITY: San Francisco STATE: CA ZIP:
TEL: 415-243-2150 E-MAIL: Jay Knight@kennedyjenks.com

CLIENT PROJECT NAME / NUMBER: VTA
PROJECT CONTACT: Mike Mcleod
P.O. NO.: 1965013.00
SAMPLER(S): (PRINT)

TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):
☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☐ 5 DAYS ☒ STANDARD

☐ COELT EDF GLOBAL ID: LOG CODE:

SPECIAL INSTRUCTIONS:
KJ EQ EDD

REQUESTED ANALYSES

Please check box or fill in blank as needed.

LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	Unpreserved	Preserved 4°C	Field Filtered	☒ TPH(g) ☐ GRO	☐ TPH(d) ☐ DRO	TPH ☐ C6-C36 ☐ C6-C44	TPHd, TPHmo	BTEX / MTBE ☐ 8260 ☐	VOCs (8260)	Oxygenates (8260)	Prep (5035): ☐ En Core ☐ Terra Core	SVOCs (8270)	Pesticides (8081)	PCBs (8082)	PAHs: ☐ 8270 ☐ 8270 SIM	Total Metals: ☒ 6010/747X ☐ 6020/747X Comp	Cr(VI): ☐ 7196 ☐ 7199 ☐ 218.6	HOLD
1	CP241-SBØ1-1.5	11/11/19	0928	S	1		X		X			X		X				X			X		
2	CP241-SBØ1-5		0940						X			X		X							X		
3	CP241-SBØ1-8		0949						X			X		X							X		
4	CP241-SBØ1-12		0951																				X
5	SP241-SBØ2-2		1009						X			X		X				X			X		
6	CP241-SBØ2-5		1017						X			X		X							X		
7	CP-241-SBØ2-8		1021						X			X		X							X		
8	CP-241-SBØ2-10		1026																		OR		X

Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:
[signature] 11/11/19	[signature] EJ	11/11/19	1326
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:
[signature] FO 0850 11/11/19	[signature]	11/12/19	1030
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:

1.8/1.9 SG

06/02/14 Revision

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12/12/2019

Login Sample Receipt Checklist

Client: Kennedy/Jenks Consultants

Job Number: 570-12521-3

Login Number: 12521
List Number: 1
Creator: Patel, Jayesh

List Source: Eurofins Calscience

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

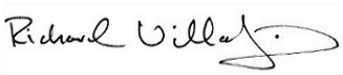
ANALYTICAL REPORT

Eurofins Calscience LLC
7440 Lincoln Way
Garden Grove, CA 92841
Tel: (714)895-5494

Laboratory Job ID: 570-12526-1
Client Project/Site: VTA

For:
Kennedy/Jenks Consultants
3200 El Camino Real
Suite 200
Irvine, California 92602

Attn: Mr. Jay Knight



Authorized for release by:
11/20/2019 5:36:59 PM

Richard Villafania, Project Manager I
(714)895-5494
richardvillafania@eurofinsus.com

Table of Contents

Definitions/Glossary

Client: Kennedy/Jenks Consultants
Project/Site: VTA

Job ID: 570-12526-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client: Kennedy/Jenks Consultants
Project/Site: VTA

Job ID: 570-12526-1

Job ID: 570-12526-1

Laboratory: Eurofins Calscience LLC

Narrative

Job Narrative
570-12526-1

Comments
No additional comments.

Receipt
The samples were received on 11/12/2019 10:15 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.9º C.

GC/MS VOA
Method 8260B: The following samples were diluted due to the nature of the sample matrix: CP241-SB01(20191111) (570-12526-1) and CP241-SB02(20191111) (570-12526-2). Elevated reporting limits (RLs) are provided.

Method 8260B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 570-33929.

Method 8260B: The initial calibration curve analyzed in batch 570-33929 was outside method criteria for the following analyte(s): Bromomethane. As indicated in the reference method, sample analysis may proceed; however, any detection or non-detection for the affected analyte(s) is considered an estimated concentration.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals
Method 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 570-33064 and analytical batch 570-33306 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 7470A: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 570-33065 and analytical batch 570-33144 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep
Method 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 570-32570. LCS/LCSD was performed to meet QC requirement.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Kennedy/Jenks Consultants
Project/Site: VTA

Job ID: 570-12526-1

Client Sample ID: CP241-SB01(20191111) — Lab Sample ID: 570-12526-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.115		0.0100	0.00308	mg/L	1		6010B	Total/NA
Molybdenum	0.259		0.0500	0.00509	mg/L	1		6010B	Total/NA
Lead	0.0100	J	0.0500	0.00821	mg/L	1		6010B	Total/NA
Mercury	0.00321	B	0.000500	0.0000453	mg/L	1		7470A	Total/NA

Client Sample ID: CP241-SB02(20191111) — Lab Sample ID: 570-12526-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.250		0.0100	0.00308	mg/L	1		6010B	Total/NA
Molybdenum	0.198		0.0500	0.00509	mg/L	1		6010B	Total/NA
Vanadium	0.00382	J	0.0100	0.00297	mg/L	1		6010B	Total/NA
Lead	0.00954	J	0.0500	0.00821	mg/L	1		6010B	Total/NA
Mercury	0.00407	B	0.000500	0.0000453	mg/L	1		7470A	Total/NA

Client Sample ID: EB01(20191111) — Lab Sample ID: 570-12526-3

No Detections.

This Detection Summary does not include radiochemical test results.

Client: Kennedy/Jenks Consultants
Project/Site: VTA

Job ID: 570-12526-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: CP241-SB01(20191111)
Date Collected: 11/11/19 11:20
Date Received: 11/12/19 10:15

Lab Sample ID: 570-12526-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		4.0	0.85	ug/L			11/20/19 00:06	2
1,1,1-Trichloroethane	ND		2.0	0.61	ug/L			11/20/19 00:06	2
1,1,2,2-Tetrachloroethane	ND		2.0	0.34	ug/L			11/20/19 00:06	2
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		20	1.2	ug/L			11/20/19 00:06	2
1,1,2-Trichloroethane	ND		2.0	0.44	ug/L			11/20/19 00:06	2
1,1-Dichloroethane	ND		2.0	0.57	ug/L			11/20/19 00:06	2
1,1-Dichloroethene	ND		2.0	0.45	ug/L			11/20/19 00:06	2
1,1-Dichloropropene	ND		2.0	0.34	ug/L			11/20/19 00:06	2
1,2,3-Trichlorobenzene	ND		2.0	0.57	ug/L			11/20/19 00:06	2
1,2,3-Trichloropropane	ND		10	0.44	ug/L			11/20/19 00:06	2
1,2,4-Trichlorobenzene	ND		2.0	0.68	ug/L			11/20/19 00:06	2
1,2,4-Trimethylbenzene	ND		2.0	0.42	ug/L			11/20/19 00:06	2
1,2-Dibromo-3-Chloropropane	ND		20	4.1	ug/L			11/20/19 00:06	2
1,2-Dibromoethane	ND		2.0	0.53	ug/L			11/20/19 00:06	2
1,2-Dichlorobenzene	ND		2.0	0.29	ug/L			11/20/19 00:06	2
1,2-Dichloroethane	ND		1.0	0.38	ug/L			11/20/19 00:06	2
1,2-Dichloropropane	ND		2.0	0.39	ug/L			11/20/19 00:06	2
1,3,5-Trimethylbenzene	ND		2.0	0.34	ug/L			11/20/19 00:06	2
1,3-Butadiene	ND		50	1.9	ug/L			11/20/19 00:06	2
1,3-Dichlorobenzene	ND		2.0	0.37	ug/L			11/20/19 00:06	2
1,3-Dichloropropane	ND		2.0	0.27	ug/L			11/20/19 00:06	2
1,4-Dichlorobenzene	ND		2.0	0.47	ug/L			11/20/19 00:06	2
2,2-Dichloropropane	ND		2.0	0.88	ug/L			11/20/19 00:06	2
2-Butanone	ND		40	7.2	ug/L			11/20/19 00:06	2
2-Chlorotoluene	ND		2.0	0.33	ug/L			11/20/19 00:06	2
2-Hexanone	ND		20	11	ug/L			11/20/19 00:06	2
4-Chlorotoluene	ND		2.0	0.37	ug/L			11/20/19 00:06	2
Acetone	ND		40	20	ug/L			11/20/19 00:06	2
Benzene	ND		2.0	0.28	ug/L			11/20/19 00:06	2
Bromobenzene	ND		2.0	0.38	ug/L			11/20/19 00:06	2
Bromochloromethane	ND		4.0	0.92	ug/L			11/20/19 00:06	2
Bromodichloromethane	ND		2.0	0.47	ug/L			11/20/19 00:06	2
Bromoform	ND		10	3.7	ug/L			11/20/19 00:06	2
Bromomethane	ND		100	39	ug/L			11/20/19 00:06	2
cis-1,2-Dichloroethene	ND		2.0	0.54	ug/L			11/20/19 00:06	2
cis-1,3-Dichloropropene	ND		1.0	0.41	ug/L			11/20/19 00:06	2
Carbon disulfide	ND		20	1.4	ug/L			11/20/19 00:06	2
Carbon tetrachloride	ND		1.0	0.46	ug/L			11/20/19 00:06	2
Chlorobenzene	ND		2.0	0.32	ug/L			11/20/19 00:06	2
Chloroethane	ND		10	1.5	ug/L			11/20/19 00:06	2
Chloroform	ND		2.0	0.37	ug/L			11/20/19 00:06	2
Chloromethane	ND		20	1.0	ug/L			11/20/19 00:06	2
Dibromochloromethane	ND		4.0	0.92	ug/L			11/20/19 00:06	2
Dibromomethane	ND		2.0	0.59	ug/L			11/20/19 00:06	2
Dichlorodifluoromethane	ND		10	0.57	ug/L			11/20/19 00:06	2
Ethylbenzene	ND		2.0	0.28	ug/L			11/20/19 00:06	2
Isopropylbenzene	ND		2.0	0.32	ug/L			11/20/19 00:06	2
Methylene Chloride	ND		20	8.0	ug/L			11/20/19 00:06	2
Methyl-t-Butyl Ether (MTBE)	ND		2.0	0.32	ug/L			11/20/19 00:06	2

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: CP241-SB01(20191111)
Date Collected: 11/11/19 11:20
Date Received: 11/12/19 10:15

Lab Sample ID: 570-12526-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		20	10	ug/L			11/20/19 00:06	2
n-Butylbenzene	ND		2.0	0.60	ug/L			11/20/19 00:06	2
o-Xylene	ND		2.0	0.31	ug/L			11/20/19 00:06	2
m,p-Xylene	ND		4.0	0.61	ug/L			11/20/19 00:06	2
p-Isopropyltoluene	ND		2.0	0.43	ug/L			11/20/19 00:06	2
sec-Butylbenzene	ND		2.0	0.38	ug/L			11/20/19 00:06	2
Styrene	ND		2.0	0.29	ug/L			11/20/19 00:06	2
trans-1,2-Dichloroethene	ND		2.0	0.80	ug/L			11/20/19 00:06	2
trans-1,3-Dichloropropene	ND		1.0	0.46	ug/L			11/20/19 00:06	2
tert-Butylbenzene	ND		2.0	0.49	ug/L			11/20/19 00:06	2
Tetrachloroethene	ND		2.0	0.47	ug/L			11/20/19 00:06	2
Toluene	ND		2.0	0.26	ug/L			11/20/19 00:06	2
Trichloroethene	ND		2.0	0.47	ug/L			11/20/19 00:06	2
Trichlorofluoromethane	ND		20	0.56	ug/L			11/20/19 00:06	2
Vinyl acetate	ND		20	5.7	ug/L			11/20/19 00:06	2
Vinyl chloride	ND		1.0	0.32	ug/L			11/20/19 00:06	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*80 - 129*		*11/20/19 00:06*	*2*
4-Bromofluorobenzene (Surr)	*91*		*77 - 120*		*11/20/19 00:06*	*2*
Dibromofluoromethane	*103*		*80 - 128*		*11/20/19 00:06*	*2*
Toluene-d8 (Surr)	*98*		*80 - 120*		*11/20/19 00:06*	*2*

Client Sample ID: CP241-SB02(20191111)
Date Collected: 11/11/19 11:39
Date Received: 11/12/19 10:15

Lab Sample ID: 570-12526-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		4.0	0.85	ug/L			11/20/19 00:33	2
1,1,1-Trichloroethane	ND		2.0	0.61	ug/L			11/20/19 00:33	2
1,1,2,2-Tetrachloroethane	ND		2.0	0.34	ug/L			11/20/19 00:33	2
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		20	1.2	ug/L			11/20/19 00:33	2
1,1,2-Trichloroethane	ND		2.0	0.44	ug/L			11/20/19 00:33	2
1,1-Dichloroethane	ND		2.0	0.57	ug/L			11/20/19 00:33	2
1,1-Dichloroethene	ND		2.0	0.45	ug/L			11/20/19 00:33	2
1,1-Dichloropropene	ND		2.0	0.34	ug/L			11/20/19 00:33	2
1,2,3-Trichlorobenzene	ND		2.0	0.57	ug/L			11/20/19 00:33	2
1,2,3-Trichloropropane	ND		10	0.44	ug/L			11/20/19 00:33	2
1,2,4-Trichlorobenzene	ND		2.0	0.68	ug/L			11/20/19 00:33	2
1,2,4-Trimethylbenzene	ND		2.0	0.42	ug/L			11/20/19 00:33	2
1,2-Dibromo-3-Chloropropane	ND		20	4.1	ug/L			11/20/19 00:33	2
1,2-Dibromoethane	ND		2.0	0.53	ug/L			11/20/19 00:33	2
1,2-Dichlorobenzene	ND		2.0	0.29	ug/L			11/20/19 00:33	2
1,2-Dichloroethane	ND		1.0	0.38	ug/L			11/20/19 00:33	2
1,2-Dichloropropane	ND		2.0	0.39	ug/L			11/20/19 00:33	2
1,3,5-Trimethylbenzene	ND		2.0	0.34	ug/L			11/20/19 00:33	2
1,3-Butadiene	ND		50	1.9	ug/L			11/20/19 00:33	2
1,3-Dichlorobenzene	ND		2.0	0.37	ug/L			11/20/19 00:33	2
1,3-Dichloropropane	ND		2.0	0.27	ug/L			11/20/19 00:33	2
1,4-Dichlorobenzene	ND		2.0	0.47	ug/L			11/20/19 00:33	2
2,2-Dichloropropane	ND		2.0	0.88	ug/L			11/20/19 00:33	2

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: CP241-SB02(20191111)
Date Collected: 11/11/19 11:39
Date Received: 11/12/19 10:15

Lab Sample ID: 570-12526-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone	ND		40	7.2	ug/L			11/20/19 00:33	2
2-Chlorotoluene	ND		2.0	0.33	ug/L			11/20/19 00:33	2
2-Hexanone	ND		20	11	ug/L			11/20/19 00:33	2
4-Chlorotoluene	ND		2.0	0.37	ug/L			11/20/19 00:33	2
Acetone	ND		40	20	ug/L			11/20/19 00:33	2
Benzene	ND		2.0	0.28	ug/L			11/20/19 00:33	2
Bromobenzene	ND		2.0	0.38	ug/L			11/20/19 00:33	2
Bromochloromethane	ND		4.0	0.92	ug/L			11/20/19 00:33	2
Bromodichloromethane	ND		2.0	0.47	ug/L			11/20/19 00:33	2
Bromoform	ND		10	3.7	ug/L			11/20/19 00:33	2
Bromomethane	ND		100	39	ug/L			11/20/19 00:33	2
cis-1,2-Dichloroethene	ND		2.0	0.54	ug/L			11/20/19 00:33	2
cis-1,3-Dichloropropene	ND		1.0	0.41	ug/L			11/20/19 00:33	2
Carbon disulfide	ND		20	1.4	ug/L			11/20/19 00:33	2
Carbon tetrachloride	ND		1.0	0.46	ug/L			11/20/19 00:33	2
Chlorobenzene	ND		2.0	0.32	ug/L			11/20/19 00:33	2
Chloroethane	ND		10	1.5	ug/L			11/20/19 00:33	2
Chloroform	ND		2.0	0.37	ug/L			11/20/19 00:33	2
Chloromethane	ND		20	1.0	ug/L			11/20/19 00:33	2
Dibromochloromethane	ND		4.0	0.92	ug/L			11/20/19 00:33	2
Dibromomethane	ND		2.0	0.59	ug/L			11/20/19 00:33	2
Dichlorodifluoromethane	ND		10	0.57	ug/L			11/20/19 00:33	2
Ethylbenzene	ND		2.0	0.28	ug/L			11/20/19 00:33	2
Isopropylbenzene	ND		2.0	0.32	ug/L			11/20/19 00:33	2
Methylene Chloride	ND		20	8.0	ug/L			11/20/19 00:33	2
Methyl-t-Butyl Ether (MTBE)	ND		2.0	0.32	ug/L			11/20/19 00:33	2
Naphthalene	ND		20	10	ug/L			11/20/19 00:33	2
n-Butylbenzene	ND		2.0	0.60	ug/L			11/20/19 00:33	2
o-Xylene	ND		2.0	0.31	ug/L			11/20/19 00:33	2
m,p-Xylene	ND		4.0	0.61	ug/L			11/20/19 00:33	2
p-Isopropyltoluene	ND		2.0	0.43	ug/L			11/20/19 00:33	2
sec-Butylbenzene	ND		2.0	0.38	ug/L			11/20/19 00:33	2
Styrene	ND		2.0	0.29	ug/L			11/20/19 00:33	2
trans-1,2-Dichloroethene	ND		2.0	0.80	ug/L			11/20/19 00:33	2
trans-1,3-Dichloropropene	ND		1.0	0.46	ug/L			11/20/19 00:33	2
tert-Butylbenzene	ND		2.0	0.49	ug/L			11/20/19 00:33	2
Tetrachloroethene	ND		2.0	0.47	ug/L			11/20/19 00:33	2
Toluene	ND		2.0	0.26	ug/L			11/20/19 00:33	2
Trichloroethene	ND		2.0	0.47	ug/L			11/20/19 00:33	2
Trichlorofluoromethane	ND		20	0.56	ug/L			11/20/19 00:33	2
Vinyl acetate	ND		20	5.7	ug/L			11/20/19 00:33	2
Vinyl chloride	ND		1.0	0.32	ug/L			11/20/19 00:33	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*80 - 129*		*11/20/19 00:33*	*2*
4-Bromofluorobenzene (Surr)	*91*		*77 - 120*		*11/20/19 00:33*	*2*
Dibromofluoromethane	*103*		*80 - 128*		*11/20/19 00:33*	*2*
Toluene-d8 (Surr)	*97*		*80 - 120*		*11/20/19 00:33*	*2*

Client: Kennedy/Jenks Consultants
Project/Site: VTA

Job ID: 570-12526-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: EB01(20191111)
Date Collected: 11/11/19 11:55
Date Received: 11/12/19 10:15

Lab Sample ID: 570-12526-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		2.0	0.43	ug/L			11/19/19 23:12	1
1,1,1-Trichloroethane	ND		1.0	0.31	ug/L			11/19/19 23:12	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.17	ug/L			11/19/19 23:12	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	0.62	ug/L			11/19/19 23:12	1
1,1,2-Trichloroethane	ND		1.0	0.22	ug/L			11/19/19 23:12	1
1,1-Dichloroethane	ND		1.0	0.28	ug/L			11/19/19 23:12	1
1,1-Dichloroethene	ND		1.0	0.22	ug/L			11/19/19 23:12	1
1,1-Dichloropropene	ND		1.0	0.17	ug/L			11/19/19 23:12	1
1,2,3-Trichlorobenzene	ND		1.0	0.28	ug/L			11/19/19 23:12	1
1,2,3-Trichloropropane	ND		5.0	0.22	ug/L			11/19/19 23:12	1
1,2,4-Trichlorobenzene	ND		1.0	0.34	ug/L			11/19/19 23:12	1
1,2,4-Trimethylbenzene	ND		1.0	0.21	ug/L			11/19/19 23:12	1
1,2-Dibromo-3-Chloropropane	ND		10	2.1	ug/L			11/19/19 23:12	1
1,2-Dibromoethane	ND		1.0	0.27	ug/L			11/19/19 23:12	1
1,2-Dichlorobenzene	ND		1.0	0.14	ug/L			11/19/19 23:12	1
1,2-Dichloroethane	ND		0.50	0.19	ug/L			11/19/19 23:12	1
1,2-Dichloropropane	ND		1.0	0.20	ug/L			11/19/19 23:12	1
1,3,5-Trimethylbenzene	ND		1.0	0.17	ug/L			11/19/19 23:12	1
1,3-Butadiene	ND		25	0.95	ug/L			11/19/19 23:12	1
1,3-Dichlorobenzene	ND		1.0	0.19	ug/L			11/19/19 23:12	1
1,3-Dichloropropane	ND		1.0	0.14	ug/L			11/19/19 23:12	1
1,4-Dichlorobenzene	ND		1.0	0.24	ug/L			11/19/19 23:12	1
2,2-Dichloropropane	ND		1.0	0.44	ug/L			11/19/19 23:12	1
2-Butanone	ND		20	3.6	ug/L			11/19/19 23:12	1
2-Chlorotoluene	ND		1.0	0.16	ug/L			11/19/19 23:12	1
2-Hexanone	ND		10	5.3	ug/L			11/19/19 23:12	1
4-Chlorotoluene	ND		1.0	0.18	ug/L			11/19/19 23:12	1
Acetone	ND		20	10	ug/L			11/19/19 23:12	1
Benzene	ND		1.0	0.14	ug/L			11/19/19 23:12	1
Bromobenzene	ND		1.0	0.19	ug/L			11/19/19 23:12	1
Bromochloromethane	ND		2.0	0.46	ug/L			11/19/19 23:12	1
Bromodichloromethane	ND		1.0	0.23	ug/L			11/19/19 23:12	1
Bromoform	ND		5.0	1.8	ug/L			11/19/19 23:12	1
Bromomethane	ND		50	19	ug/L			11/19/19 23:12	1
cis-1,2-Dichloroethene	ND		1.0	0.27	ug/L			11/19/19 23:12	1
cis-1,3-Dichloropropene	ND		0.50	0.20	ug/L			11/19/19 23:12	1
Carbon disulfide	ND		10	0.70	ug/L			11/19/19 23:12	1
Carbon tetrachloride	ND		0.50	0.23	ug/L			11/19/19 23:12	1
Chlorobenzene	ND		1.0	0.16	ug/L			11/19/19 23:12	1
Chloroethane	ND		5.0	0.76	ug/L			11/19/19 23:12	1
Chloroform	ND		1.0	0.18	ug/L			11/19/19 23:12	1
Chloromethane	ND		10	0.50	ug/L			11/19/19 23:12	1
Dibromochloromethane	ND		2.0	0.46	ug/L			11/19/19 23:12	1
Dibromomethane	ND		1.0	0.30	ug/L			11/19/19 23:12	1
Dichlorodifluoromethane	ND		5.0	0.28	ug/L			11/19/19 23:12	1
Ethylbenzene	ND		1.0	0.14	ug/L			11/19/19 23:12	1
Isopropylbenzene	ND		1.0	0.16	ug/L			11/19/19 23:12	1
Methylene Chloride	ND		10	4.0	ug/L			11/19/19 23:12	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.16	ug/L			11/19/19 23:12	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: EB01(20191111)
Date Collected: 11/11/19 11:55
Date Received: 11/12/19 10:15

Lab Sample ID: 570-12526-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		10	5.1	ug/L			11/19/19 23:12	1
n-Butylbenzene	ND		1.0	0.30	ug/L			11/19/19 23:12	1
o-Xylene	ND		1.0	0.15	ug/L			11/19/19 23:12	1
m,p-Xylene	ND		2.0	0.31	ug/L			11/19/19 23:12	1
p-Isopropyltoluene	ND		1.0	0.22	ug/L			11/19/19 23:12	1
sec-Butylbenzene	ND		1.0	0.19	ug/L			11/19/19 23:12	1
Styrene	ND		1.0	0.15	ug/L			11/19/19 23:12	1
trans-1,2-Dichloroethene	ND		1.0	0.40	ug/L			11/19/19 23:12	1
trans-1,3-Dichloropropene	ND		0.50	0.23	ug/L			11/19/19 23:12	1
tert-Butylbenzene	ND		1.0	0.25	ug/L			11/19/19 23:12	1
Tetrachloroethene	ND		1.0	0.24	ug/L			11/19/19 23:12	1
Toluene	ND		1.0	0.13	ug/L			11/19/19 23:12	1
Trichloroethene	ND		1.0	0.24	ug/L			11/19/19 23:12	1
Trichlorofluoromethane	ND		10	0.28	ug/L			11/19/19 23:12	1
Vinyl acetate	ND		10	2.9	ug/L			11/19/19 23:12	1
Vinyl chloride	ND		0.50	0.16	ug/L			11/19/19 23:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*80 - 129*		*11/19/19 23:12*	*1*
4-Bromofluorobenzene (Surr)	*92*		*77 - 120*		*11/19/19 23:12*	*1*
Dibromofluoromethane	*103*		*80 - 128*		*11/19/19 23:12*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*11/19/19 23:12*	*1*

Client: Kennedy/Jenks Consultants
Project/Site: VTA

Job ID: 570-12526-1

Method: 8015B - Gasoline Range Organics - (GC)

Client Sample ID: CP241-SB01(20191111)
Date Collected: 11/11/19 11:20
Date Received: 11/12/19 10:15

Lab Sample ID: 570-12526-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Gasoline (C4-C13)	ND		50	29	ug/L			11/13/19 02:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*86*		*38 - 134*		*11/13/19 02:44*	*1*

Client Sample ID: CP241-SB02(20191111)
Date Collected: 11/11/19 11:39
Date Received: 11/12/19 10:15

Lab Sample ID: 570-12526-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Gasoline (C4-C13)	ND		50	29	ug/L			11/13/19 03:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*38 - 134*		*11/13/19 03:14*	*1*

Client: Kennedy/Jenks Consultants
Job ID: 570-12526-1
Project/Site: VTA

Method: 8015B - Diesel Range Organics (DRO) (GC)

Client Sample ID: CP241-SB01(20191111)
Lab Sample ID: 570-12526-1
Date Collected: 11/11/19 11:20
Matrix: Water
Date Received: 11/12/19 10:15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Diesel (C10-C28)	ND		60	20	ug/L		11/13/19 13:45	11/14/19 23:56	1
TPH as Motor Oil (C17-C44)	ND		300	23	ug/L		11/13/19 13:45	11/14/19 23:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane (Surr)	*107*		*68 - 140*	*11/13/19 13:45*	*11/14/19 23:56*	*1*

Client Sample ID: CP241-SB02(20191111)
Lab Sample ID: 570-12526-2
Date Collected: 11/11/19 11:39
Matrix: Water
Date Received: 11/12/19 10:15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Diesel (C10-C28)	ND		54	18	ug/L		11/13/19 13:45	11/15/19 00:17	1
TPH as Motor Oil (C17-C44)	ND		270	21	ug/L		11/13/19 13:45	11/15/19 00:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane (Surr)	*89*		*68 - 140*	*11/13/19 13:45*	*11/15/19 00:17*	*1*

Method: 6010B - Metals (ICP)

Client Sample ID: CP241-SB01(20191111)
Date Collected: 11/11/19 11:20
Date Received: 11/12/19 10:15

Lab Sample ID: 570-12526-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0100	0.00298	mg/L		11/15/19 12:00	11/15/19 23:09	1
Arsenic	ND		0.100	0.0181	mg/L		11/15/19 12:00	11/15/19 23:09	1
Barium	**0.115**		0.0100	0.00308	mg/L		11/15/19 12:00	11/15/19 23:09	1
Beryllium	ND		0.0100	0.00252	mg/L		11/15/19 12:00	11/15/19 23:09	1
Cadmium	ND		0.0100	0.00210	mg/L		11/15/19 12:00	11/15/19 23:09	1
Cobalt	ND		0.0500	0.00362	mg/L		11/15/19 12:00	11/15/19 23:09	1
Chromium	ND		0.0500	0.00688	mg/L		11/15/19 12:00	11/15/19 23:09	1
Copper	ND		0.0500	0.00614	mg/L		11/15/19 12:00	11/15/19 23:09	1
Molybdenum	**0.259**		0.0500	0.00509	mg/L		11/15/19 12:00	11/15/19 23:09	1
Nickel	ND		0.0500	0.00784	mg/L		11/15/19 12:00	11/15/19 23:09	1
Antimony	ND		0.100	0.0329	mg/L		11/15/19 12:00	11/15/19 23:09	1
Selenium	ND		0.100	0.0244	mg/L		11/15/19 12:00	11/15/19 23:09	1
Thallium	ND		0.0500	0.0161	mg/L		11/15/19 12:00	11/15/19 23:09	1
Vanadium	ND		0.0100	0.00297	mg/L		11/15/19 12:00	11/15/19 23:09	1
Zinc	ND		0.250	0.0682	mg/L		11/15/19 12:00	11/15/19 23:09	1
Lead	**0.0100**	**J**	0.0500	0.00821	mg/L		11/15/19 12:00	11/15/19 23:09	1

Client Sample ID: CP241-SB02(20191111)
Date Collected: 11/11/19 11:39
Date Received: 11/12/19 10:15

Lab Sample ID: 570-12526-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0100	0.00298	mg/L		11/15/19 12:00	11/15/19 23:12	1
Arsenic	ND		0.100	0.0181	mg/L		11/15/19 12:00	11/15/19 23:12	1
Barium	**0.250**		0.0100	0.00308	mg/L		11/15/19 12:00	11/15/19 23:12	1
Beryllium	ND		0.0100	0.00252	mg/L		11/15/19 12:00	11/15/19 23:12	1
Cadmium	ND		0.0100	0.00210	mg/L		11/15/19 12:00	11/15/19 23:12	1
Cobalt	ND		0.0500	0.00362	mg/L		11/15/19 12:00	11/15/19 23:12	1
Chromium	ND		0.0500	0.00688	mg/L		11/15/19 12:00	11/15/19 23:12	1
Copper	ND		0.0500	0.00614	mg/L		11/15/19 12:00	11/15/19 23:12	1
Molybdenum	**0.198**		0.0500	0.00509	mg/L		11/15/19 12:00	11/15/19 23:12	1
Nickel	ND		0.0500	0.00784	mg/L		11/15/19 12:00	11/15/19 23:12	1
Antimony	ND		0.100	0.0329	mg/L		11/15/19 12:00	11/15/19 23:12	1
Selenium	ND		0.100	0.0244	mg/L		11/15/19 12:00	11/15/19 23:12	1
Thallium	ND		0.0500	0.0161	mg/L		11/15/19 12:00	11/15/19 23:12	1
Vanadium	**0.00382**	**J**	0.0100	0.00297	mg/L		11/15/19 12:00	11/15/19 23:12	1
Zinc	ND		0.250	0.0682	mg/L		11/15/19 12:00	11/15/19 23:12	1
Lead	**0.00954**	**J**	0.0500	0.00821	mg/L		11/15/19 12:00	11/15/19 23:12	1

Client: Kennedy/Jenks Consultants
Job ID: 570-12526-1
Project/Site: VTA

Method: 7470A - Mercury (CVAA)

Client Sample ID: CP241-SB01(20191111)
Lab Sample ID: 570-12526-1
Date Collected: 11/11/19 11:20
Matrix: Water
Date Received: 11/12/19 10:15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00321	B	0.000500	0.0000453	mg/L		11/15/19 11:00	11/15/19 16:12	1

Client Sample ID: CP241-SB02(20191111)
Lab Sample ID: 570-12526-2
Date Collected: 11/11/19 11:39
Matrix: Water
Date Received: 11/12/19 10:15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00407	B	0.000500	0.0000453	mg/L		11/15/19 11:00	11/15/19 16:14	1

Surrogate Summary

Client: Kennedy/Jenks Consultants
Project/Site: VTA

Job ID: 570-12526-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	DCA (80-129)	BFB (77-120)	DBFM (80-128)	TOL (80-120)
570-12526-1	CP241-SB01(20191111)	105	91	103	98
570-12526-2	CP241-SB02(20191111)	105	91	103	97
570-12526-3	EB01(20191111)	104	92	103	98
LCS 570-33929/3	Lab Control Sample	89	102	93	98
LCSD 570-33929/4	Lab Control Sample Dup	91	103	94	99
MB 570-33929/7	Method Blank	100	94	99	97

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

Method: 8015B - Gasoline Range Organics - (GC)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	BFB1 (38-134)
570-12518-F-1 MS	Matrix Spike	109
570-12518-F-1 MSD	Matrix Spike Duplicate	121
570-12526-1	CP241-SB01(20191111)	86
570-12526-2	CP241-SB02(20191111)	98
LCS 570-32294/3	Lab Control Sample	109
LCSD 570-32294/6	Lab Control Sample Dup	103
MB 570-32294/7	Method Blank	89

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

Method: 8015B - Diesel Range Organics (DRO) (GC)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	OTCSN1 (68-140)
570-12526-1	CP241-SB01(20191111)	107
570-12526-2	CP241-SB02(20191111)	89
LCS 570-32570/2-A	Lab Control Sample	103
LCS 570-32570/4-A	Lab Control Sample	97
LCSD 570-32570/3-A	Lab Control Sample Dup	103
LCSD 570-32570/5-A	Lab Control Sample Dup	99
MB 570-32570/1-A	Method Blank	97

Surrogate Legend

OTCSN = n-Octacosane (Surr)

Client: Kennedy/Jenks Consultants
Project/Site: VTA

Job ID: 570-12526-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 570-33929/7
Matrix: Water
Analysis Batch: 33929

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		2.0	0.43	ug/L			11/19/19 21:51	1
1,1,1-Trichloroethane	ND		1.0	0.31	ug/L			11/19/19 21:51	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.17	ug/L			11/19/19 21:51	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	0.62	ug/L			11/19/19 21:51	1
1,1,2-Trichloroethane	ND		1.0	0.22	ug/L			11/19/19 21:51	1
1,1-Dichloroethane	ND		1.0	0.28	ug/L			11/19/19 21:51	1
1,1-Dichloroethene	ND		1.0	0.22	ug/L			11/19/19 21:51	1
1,1-Dichloropropene	ND		1.0	0.17	ug/L			11/19/19 21:51	1
1,2,3-Trichlorobenzene	ND		1.0	0.28	ug/L			11/19/19 21:51	1
1,2,3-Trichloropropane	ND		5.0	0.22	ug/L			11/19/19 21:51	1
1,2,4-Trichlorobenzene	ND		1.0	0.34	ug/L			11/19/19 21:51	1
1,2,4-Trimethylbenzene	ND		1.0	0.21	ug/L			11/19/19 21:51	1
1,2-Dibromo-3-Chloropropane	ND		10	2.1	ug/L			11/19/19 21:51	1
1,2-Dibromoethane	ND		1.0	0.27	ug/L			11/19/19 21:51	1
1,2-Dichlorobenzene	ND		1.0	0.14	ug/L			11/19/19 21:51	1
1,2-Dichloroethane	ND		0.50	0.19	ug/L			11/19/19 21:51	1
1,2-Dichloropropane	ND		1.0	0.20	ug/L			11/19/19 21:51	1
1,3,5-Trimethylbenzene	ND		1.0	0.17	ug/L			11/19/19 21:51	1
1,3-Butadiene	ND		25	0.95	ug/L			11/19/19 21:51	1
1,3-Dichlorobenzene	ND		1.0	0.19	ug/L			11/19/19 21:51	1
1,3-Dichloropropane	ND		1.0	0.14	ug/L			11/19/19 21:51	1
1,4-Dichlorobenzene	ND		1.0	0.24	ug/L			11/19/19 21:51	1
2,2-Dichloropropane	ND		1.0	0.44	ug/L			11/19/19 21:51	1
2-Butanone	ND		20	3.6	ug/L			11/19/19 21:51	1
2-Chlorotoluene	ND		1.0	0.16	ug/L			11/19/19 21:51	1
2-Hexanone	ND		10	5.3	ug/L			11/19/19 21:51	1
4-Chlorotoluene	ND		1.0	0.18	ug/L			11/19/19 21:51	1
Acetone	ND		20	10	ug/L			11/19/19 21:51	1
Benzene	ND		1.0	0.14	ug/L			11/19/19 21:51	1
Bromobenzene	ND		1.0	0.19	ug/L			11/19/19 21:51	1
Bromochloromethane	ND		2.0	0.46	ug/L			11/19/19 21:51	1
Bromodichloromethane	ND		1.0	0.23	ug/L			11/19/19 21:51	1
Bromoform	ND		5.0	1.8	ug/L			11/19/19 21:51	1
Bromomethane	ND		50	19	ug/L			11/19/19 21:51	1
cis-1,2-Dichloroethene	ND		1.0	0.27	ug/L			11/19/19 21:51	1
cis-1,3-Dichloropropene	ND		0.50	0.20	ug/L			11/19/19 21:51	1
Carbon disulfide	ND		10	0.70	ug/L			11/19/19 21:51	1
Carbon tetrachloride	ND		0.50	0.23	ug/L			11/19/19 21:51	1
Chlorobenzene	ND		1.0	0.16	ug/L			11/19/19 21:51	1
Chloroethane	ND		5.0	0.76	ug/L			11/19/19 21:51	1
Chloroform	ND		1.0	0.18	ug/L			11/19/19 21:51	1
Chloromethane	ND		10	0.50	ug/L			11/19/19 21:51	1
Dibromochloromethane	ND		2.0	0.46	ug/L			11/19/19 21:51	1
Dibromomethane	ND		1.0	0.30	ug/L			11/19/19 21:51	1
Dichlorodifluoromethane	ND		5.0	0.28	ug/L			11/19/19 21:51	1
Ethylbenzene	ND		1.0	0.14	ug/L			11/19/19 21:51	1
Isopropylbenzene	ND		1.0	0.16	ug/L			11/19/19 21:51	1
Methylene Chloride	ND		10	4.0	ug/L			11/19/19 21:51	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 570-33929/7
Matrix: Water
Analysis Batch: 33929

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.16	ug/L			11/19/19 21:51	1
Naphthalene	ND		10	5.1	ug/L			11/19/19 21:51	1
n-Butylbenzene	ND		1.0	0.30	ug/L			11/19/19 21:51	1
o-Xylene	ND		1.0	0.15	ug/L			11/19/19 21:51	1
m,p-Xylene	ND		2.0	0.31	ug/L			11/19/19 21:51	1
p-Isopropyltoluene	ND		1.0	0.22	ug/L			11/19/19 21:51	1
sec-Butylbenzene	ND		1.0	0.19	ug/L			11/19/19 21:51	1
Styrene	ND		1.0	0.15	ug/L			11/19/19 21:51	1
trans-1,2-Dichloroethene	ND		1.0	0.40	ug/L			11/19/19 21:51	1
trans-1,3-Dichloropropene	ND		0.50	0.23	ug/L			11/19/19 21:51	1
tert-Butylbenzene	ND		1.0	0.25	ug/L			11/19/19 21:51	1
Tetrachloroethene	ND		1.0	0.24	ug/L			11/19/19 21:51	1
Toluene	ND		1.0	0.13	ug/L			11/19/19 21:51	1
Trichloroethene	ND		1.0	0.24	ug/L			11/19/19 21:51	1
Trichlorofluoromethane	ND		10	0.28	ug/L			11/19/19 21:51	1
Vinyl acetate	ND		10	2.9	ug/L			11/19/19 21:51	1
Vinyl chloride	ND		0.50	0.16	ug/L			11/19/19 21:51	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*80 - 129*		*11/19/19 21:51*	*1*
4-Bromofluorobenzene (Surr)	*94*		*77 - 120*		*11/19/19 21:51*	*1*
Dibromofluoromethane	*99*		*80 - 128*		*11/19/19 21:51*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*11/19/19 21:51*	*1*

Lab Sample ID: LCS 570-33929/3
Matrix: Water
Analysis Batch: 33929

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	50.0	48.66		ug/L		97	80 - 126
1,1,1-Trichloroethane	50.0	48.90		ug/L		98	73 - 127
1,1,2,2-Tetrachloroethane	50.0	47.64		ug/L		95	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	43.19		ug/L		86	53 - 155
1,1,2-Trichloroethane	50.0	45.70		ug/L		91	80 - 120
1,1-Dichloroethane	50.0	43.75		ug/L		87	73 - 127
1,1-Dichloroethene	50.0	50.72		ug/L		101	64 - 136
1,1-Dichloropropene	50.0	53.86		ug/L		108	73 - 127
1,2,3-Trichlorobenzene	50.0	56.70		ug/L		113	76 - 130
1,2,3-Trichloropropane	50.0	44.48		ug/L		89	77 - 125
1,2,4-Trichlorobenzene	50.0	60.59		ug/L		121	74 - 134
1,2,4-Trimethylbenzene	50.0	56.02		ug/L		112	80 - 123
1,2-Dibromo-3-Chloropropane	50.0	41.84		ug/L		84	68 - 128
1,2-Dibromoethane	50.0	47.81		ug/L		96	80 - 120
1,2-Dichlorobenzene	50.0	52.11		ug/L		104	80 - 120
1,2-Dichloroethane	50.0	43.09		ug/L		86	75 - 123
1,2-Dichloropropane	50.0	49.96		ug/L		100	80 - 120
1,3,5-Trimethylbenzene	50.0	53.38		ug/L		107	80 - 126
1,3-Butadiene	50.0	42.33		ug/L		85	50 - 150

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 570-33929/3
Matrix: Water
Analysis Batch: 33929

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3-Dichlorobenzene	50.0	54.12		ug/L		108	80 - 120
1,3-Dichloropropane	50.0	48.19		ug/L		96	80 - 120
1,4-Dichlorobenzene	50.0	50.84		ug/L		102	80 - 120
2,2-Dichloropropane	50.0	54.49		ug/L		109	53 - 155
2-Butanone	50.0	43.38		ug/L		87	53 - 137
2-Chlorotoluene	50.0	54.66		ug/L		109	80 - 121
2-Hexanone	50.0	44.93		ug/L		90	59 - 131
4-Chlorotoluene	50.0	56.74		ug/L		113	80 - 120
Acetone	50.0	43.11		ug/L		86	50 - 150
Benzene	50.0	48.71		ug/L		97	78 - 120
Bromobenzene	50.0	49.76		ug/L		100	80 - 120
Bromochloromethane	50.0	47.80		ug/L		96	77 - 125
Bromodichloromethane	50.0	48.42		ug/L		97	80 - 125
Bromoform	50.0	48.65		ug/L		97	68 - 128
Bromomethane	50.0	45.09	J	ug/L		90	50 - 150
cis-1,2-Dichloroethene	50.0	52.87		ug/L		106	78 - 120
cis-1,3-Dichloropropene	50.0	53.17		ug/L		106	80 - 129
Carbon disulfide	50.0	50.03		ug/L		100	50 - 150
Carbon tetrachloride	50.0	49.15		ug/L		98	67 - 139
Chlorobenzene	50.0	49.40		ug/L		99	80 - 120
Chloroethane	50.0	53.36		ug/L		107	64 - 130
Chloroform	50.0	47.63		ug/L		95	77 - 120
Chloromethane	50.0	48.23		ug/L		96	56 - 128
Dibromochloromethane	50.0	47.33		ug/L		95	77 - 125
Dibromomethane	50.0	46.76		ug/L		94	80 - 120
Dichlorodifluoromethane	50.0	55.27		ug/L		111	50 - 150
Ethylbenzene	50.0	55.53		ug/L		111	80 - 120
Isopropylbenzene	50.0	57.28		ug/L		115	80 - 126
Methylene Chloride	50.0	47.29		ug/L		95	73 - 127
Methyl-t-Butyl Ether (MTBE)	50.0	44.87		ug/L		90	77 - 120
Naphthalene	50.0	48.68		ug/L		97	64 - 136
n-Butylbenzene	50.0	61.49		ug/L		123	78 - 132
o-Xylene	50.0	56.00		ug/L		112	80 - 125
m,p-Xylene	100	113.2		ug/L		113	80 - 125
p-Isopropyltoluene	50.0	60.21		ug/L		120	80 - 129
sec-Butylbenzene	50.0	59.97		ug/L		120	80 - 125
Styrene	50.0	52.48		ug/L		105	80 - 122
trans-1,2-Dichloroethene	50.0	50.60		ug/L		101	70 - 130
trans-1,3-Dichloropropene	50.0	53.59		ug/L		107	78 - 132
tert-Butylbenzene	50.0	60.66		ug/L		121	80 - 125
Tetrachloroethene	50.0	51.97		ug/L		104	54 - 144
Toluene	50.0	50.53		ug/L		101	80 - 122
Trichloroethene	50.0	50.19		ug/L		100	77 - 125
Trichlorofluoromethane	50.0	51.82		ug/L		104	69 - 141
Vinyl acetate	50.0	54.99		ug/L		110	50 - 150
Vinyl chloride	50.0	44.69		ug/L		89	63 - 135

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 570-33929/3
Matrix: Water
Analysis Batch: 33929

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*89*		*80 - 129*
4-Bromofluorobenzene (Surr)	*102*		*77 - 120*
Dibromofluoromethane	*93*		*80 - 128*
Toluene-d8 (Surr)	*98*		*80 - 120*

Lab Sample ID: LCSD 570-33929/4
Matrix: Water
Analysis Batch: 33929

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane			50.0	47.04		ug/L		94	80 - 126	3	30
1,1,1-Trichloroethane			50.0	46.51		ug/L		93	73 - 127	5	30
1,1,2,2-Tetrachloroethane			50.0	49.95		ug/L		100	76 - 120	5	28
1,1,2-Trichloro-1,2,2-trifluoroethane			50.0	37.61		ug/L		75	53 - 155	14	30
1,1,2-Trichloroethane			50.0	46.18		ug/L		92	80 - 120	1	30
1,1-Dichloroethane			50.0	41.61		ug/L		83	73 - 127	5	30
1,1-Dichloroethene			50.0	46.82		ug/L		94	64 - 136	8	30
1,1-Dichloropropene			50.0	49.33		ug/L		99	73 - 127	9	30
1,2,3-Trichlorobenzene			50.0	54.53		ug/L		109	76 - 130	4	30
1,2,3-Trichloropropane			50.0	45.86		ug/L		92	77 - 125	3	30
1,2,4-Trichlorobenzene			50.0	57.25		ug/L		115	74 - 134	6	30
1,2,4-Trimethylbenzene			50.0	52.52		ug/L		105	80 - 123	6	30
1,2-Dibromo-3-Chloropropane			50.0	43.98		ug/L		88	68 - 128	5	30
1,2-Dibromoethane			50.0	48.21		ug/L		96	80 - 120	1	30
1,2-Dichlorobenzene			50.0	49.98		ug/L		100	80 - 120	4	20
1,2-Dichloroethane			50.0	42.17		ug/L		84	75 - 123	2	24
1,2-Dichloropropane			50.0	48.22		ug/L		96	80 - 120	4	20
1,3,5-Trimethylbenzene			50.0	49.69		ug/L		99	80 - 126	7	20
1,3-Butadiene			50.0	37.50		ug/L		75	50 - 150	12	30
1,3-Dichlorobenzene			50.0	51.14		ug/L		102	80 - 120	6	20
1,3-Dichloropropane			50.0	47.80		ug/L		96	80 - 120	1	20
1,4-Dichlorobenzene			50.0	48.21		ug/L		96	80 - 120	5	20
2,2-Dichloropropane			50.0	50.83		ug/L		102	53 - 155	7	30
2-Butanone			50.0	45.58		ug/L		91	53 - 137	5	30
2-Chlorotoluene			50.0	51.64		ug/L		103	80 - 121	6	20
2-Hexanone			50.0	48.76		ug/L		98	59 - 131	8	30
4-Chlorotoluene			50.0	53.64		ug/L		107	80 - 120	6	20
Acetone			50.0	44.86		ug/L		90	50 - 150	4	30
Benzene			50.0	46.53		ug/L		93	78 - 120	5	21
Bromobenzene			50.0	47.98		ug/L		96	80 - 120	4	20
Bromochloromethane			50.0	46.03		ug/L		92	77 - 125	4	22
Bromodichloromethane			50.0	46.94		ug/L		94	80 - 125	3	20
Bromoform			50.0	49.35		ug/L		99	68 - 128	1	30
Bromomethane			50.0	37.40	J	ug/L		75	50 - 150	19	30
cis-1,2-Dichloroethene			50.0	50.66		ug/L		101	78 - 120	4	23
cis-1,3-Dichloropropene			50.0	51.54		ug/L		103	80 - 129	3	21
Carbon disulfide			50.0	46.07		ug/L		92	50 - 150	8	30
Carbon tetrachloride			50.0	45.08		ug/L		90	67 - 139	9	30

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 570-33929/4
Matrix: Water
Analysis Batch: 33929

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chlorobenzene	50.0	47.49		ug/L		95	80 - 120	4	20
Chloroethane	50.0	47.40		ug/L		95	64 - 130	12	30
Chloroform	50.0	45.90		ug/L		92	77 - 120	4	23
Chloromethane	50.0	42.25		ug/L		84	56 - 128	13	30
Dibromochloromethane	50.0	46.55		ug/L		93	77 - 125	2	21
Dibromomethane	50.0	46.26		ug/L		93	80 - 120	1	20
Dichlorodifluoromethane	50.0	47.12		ug/L		94	50 - 150	16	30
Ethylbenzene	50.0	52.43		ug/L		105	80 - 120	6	20
Isopropylbenzene	50.0	53.81		ug/L		108	80 - 126	6	20
Methylene Chloride	50.0	45.25		ug/L		91	73 - 127	4	25
Methyl-t-Butyl Ether (MTBE)	50.0	44.98		ug/L		90	77 - 120	0	24
Naphthalene	50.0	49.42		ug/L		99	64 - 136	2	30
n-Butylbenzene	50.0	56.33		ug/L		113	78 - 132	9	23
o-Xylene	50.0	53.65		ug/L		107	80 - 125	4	20
m,p-Xylene	100	106.2		ug/L		106	80 - 125	6	30
p-Isopropyltoluene	50.0	55.87		ug/L		112	80 - 129	7	20
sec-Butylbenzene	50.0	55.41		ug/L		111	80 - 125	8	20
Styrene	50.0	50.33		ug/L		101	80 - 122	4	20
trans-1,2-Dichloroethene	50.0	47.88		ug/L		96	70 - 130	6	30
trans-1,3-Dichloropropene	50.0	52.69		ug/L		105	78 - 132	2	22
tert-Butylbenzene	50.0	56.53		ug/L		113	80 - 125	7	20
Tetrachloroethene	50.0	47.28		ug/L		95	54 - 144	9	30
Toluene	50.0	47.56		ug/L		95	80 - 122	6	20
Trichloroethene	50.0	46.98		ug/L		94	77 - 125	7	22
Trichlorofluoromethane	50.0	45.91		ug/L		92	69 - 141	12	30
Vinyl acetate	50.0	55.38		ug/L		111	50 - 150	1	30
Vinyl chloride	50.0	40.43		ug/L		81	63 - 135	10	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*91*		*80 - 129*
4-Bromofluorobenzene (Surr)	*103*		*77 - 120*
Dibromofluoromethane	*94*		*80 - 128*
Toluene-d8 (Surr)	*99*		*80 - 120*

Method: 8015B - Gasoline Range Organics - (GC)

Lab Sample ID: MB 570-32294/7
Matrix: Water
Analysis Batch: 32294

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Gasoline (C4-C13)	ND		50	29	ug/L			11/12/19 21:42	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*38 - 134*		*11/12/19 21:42*	*1*

Method: 8015B - Gasoline Range Organics - (GC) (Continued)

Lab Sample ID: LCS 570-32294/3
Matrix: Water
Analysis Batch: 32294

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
TPH as Gasoline (C4-C13)			2000	2197		ug/L		110	78 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*109*		*38 - 134*

Lab Sample ID: LCSD 570-32294/6
Matrix: Water
Analysis Batch: 32294

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
TPH as Gasoline (C4-C13)			2000	2151		ug/L		108	78 - 120	2	10

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*38 - 134*

Lab Sample ID: 570-12518-F-1 MS
Matrix: Water
Analysis Batch: 32294

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
TPH as Gasoline (C4-C13)	52		2000	2080		ug/L		101	68 - 122		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*109*		*38 - 134*

Lab Sample ID: 570-12518-F-1 MSD
Matrix: Water
Analysis Batch: 32294

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
TPH as Gasoline (C4-C13)	52		2000	2057		ug/L		100	68 - 122	1	18

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*121*		*38 - 134*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 570-32570/1-A
Matrix: Water
Analysis Batch: 32818

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 32570

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TPH as Diesel (C10-C28)	ND		50	17	ug/L		11/13/19 13:45	11/14/19 21:33	1
TPH as Motor Oil (C17-C44)	ND		250	19	ug/L		11/13/19 13:45	11/14/19 21:33	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane (Surr)	*97*		*68 - 140*	*11/13/19 13:45*	*11/14/19 21:33*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCS 570-32570/2-A
Matrix: Water
Analysis Batch: 32818

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 32570

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
TPH as Diesel (C10-C28)			2000	2029		ug/L		101	69 - 123		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
n-Octacosane (Surr)	*103*		*68 - 140*

Lab Sample ID: LCS 570-32570/4-A
Matrix: Water
Analysis Batch: 32818

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 32570

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
TPH as Motor Oil (C17-C44)			2000	2061		ug/L		103	69 - 123		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
n-Octacosane (Surr)	*97*		*68 - 140*

Lab Sample ID: LCSD 570-32570/3-A
Matrix: Water
Analysis Batch: 32818

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 32570

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
TPH as Diesel (C10-C28)			2000	2046		ug/L		102	69 - 123	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
n-Octacosane (Surr)	*103*		*68 - 140*

Lab Sample ID: LCSD 570-32570/5-A
Matrix: Water
Analysis Batch: 32818

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 32570

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
TPH as Motor Oil (C17-C44)			2000	2051		ug/L		103	69 - 123	0	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
n-Octacosane (Surr)	*99*		*68 - 140*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 570-33064/1-A
Matrix: Water
Analysis Batch: 33306

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 33064

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0100	0.00298	mg/L		11/15/19 12:00	11/15/19 22:36	1
Arsenic	ND		0.100	0.0181	mg/L		11/15/19 12:00	11/15/19 22:36	1
Barium	ND		0.0100	0.00308	mg/L		11/15/19 12:00	11/15/19 22:36	1
Beryllium	ND		0.0100	0.00252	mg/L		11/15/19 12:00	11/15/19 22:36	1
Cadmium	ND		0.0100	0.00210	mg/L		11/15/19 12:00	11/15/19 22:36	1
Cobalt	ND		0.0500	0.00362	mg/L		11/15/19 12:00	11/15/19 22:36	1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: MB 570-33064/1-A
Matrix: Water
Analysis Batch: 33306

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 33064

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		0.0500	0.00688	mg/L		11/15/19 12:00	11/15/19 22:36	1
Copper	ND		0.0500	0.00614	mg/L		11/15/19 12:00	11/15/19 22:36	1
Molybdenum	ND		0.0500	0.00509	mg/L		11/15/19 12:00	11/15/19 22:36	1
Nickel	ND		0.0500	0.00784	mg/L		11/15/19 12:00	11/15/19 22:36	1
Antimony	ND		0.100	0.0329	mg/L		11/15/19 12:00	11/15/19 22:36	1
Selenium	ND		0.100	0.0244	mg/L		11/15/19 12:00	11/15/19 22:36	1
Thallium	ND		0.0500	0.0161	mg/L		11/15/19 12:00	11/15/19 22:36	1
Vanadium	ND		0.0100	0.00297	mg/L		11/15/19 12:00	11/15/19 22:36	1
Zinc	ND		0.250	0.0682	mg/L		11/15/19 12:00	11/15/19 22:36	1
Lead	ND		0.0500	0.00821	mg/L		11/15/19 12:00	11/15/19 22:36	1

Lab Sample ID: LCS 570-33064/2-A
Matrix: Water
Analysis Batch: 33306

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 33064

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	0.250	0.2640		mg/L		106	80 - 120
Arsenic	0.500	0.4586		mg/L		92	80 - 120
Barium	0.500	0.5292		mg/L		106	80 - 120
Beryllium	0.500	0.4913		mg/L		98	80 - 120
Cadmium	0.500	0.5100		mg/L		102	80 - 120
Cobalt	0.500	0.5305		mg/L		106	80 - 120
Chromium	0.500	0.5387		mg/L		108	80 - 120
Copper	0.500	0.5357		mg/L		107	80 - 120
Molybdenum	0.500	0.4485		mg/L		90	80 - 120
Nickel	0.500	0.5141		mg/L		103	80 - 120
Antimony	0.500	0.4933		mg/L		99	80 - 120
Selenium	0.500	0.4392		mg/L		88	80 - 120
Thallium	0.500	0.4729		mg/L		95	80 - 120
Vanadium	0.500	0.5128		mg/L		103	80 - 120
Zinc	0.500	0.4741		mg/L		95	80 - 120
Lead	0.500	0.4893		mg/L		98	80 - 120

Lab Sample ID: LCSD 570-33064/3-A
Matrix: Water
Analysis Batch: 33306

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 33064

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver	0.250	0.2589		mg/L		104	80 - 120	2	20
Arsenic	0.500	0.4524		mg/L		90	80 - 120	1	20
Barium	0.500	0.5208		mg/L		104	80 - 120	2	20
Beryllium	0.500	0.4845		mg/L		97	80 - 120	1	20
Cadmium	0.500	0.5012		mg/L		100	80 - 120	2	20
Cobalt	0.500	0.5227		mg/L		105	80 - 120	1	20
Chromium	0.500	0.5284		mg/L		106	80 - 120	2	20
Copper	0.500	0.5260		mg/L		105	80 - 120	2	20
Molybdenum	0.500	0.4478		mg/L		90	80 - 120	0	20
Nickel	0.500	0.5078		mg/L		102	80 - 120	1	20
Antimony	0.500	0.4854		mg/L		97	80 - 120	2	20

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCSD 570-33064/3-A
Matrix: Water
Analysis Batch: 33306

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 33064

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Selenium			0.500	0.4526		mg/L		91	80 - 120	3	20
Thallium			0.500	0.4704		mg/L		94	80 - 120	1	20
Vanadium			0.500	0.5035		mg/L		101	80 - 120	2	20
Zinc			0.500	0.4694		mg/L		94	80 - 120	1	20
Lead			0.500	0.4860		mg/L		97	80 - 120	1	20

Lab Sample ID: 570-12551-F-7-B MS
Matrix: Water
Analysis Batch: 33306

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 33064

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	ND	F1	0.250	0.005319	J F1	mg/L		2	86 - 128
Arsenic	ND		0.500	0.4615		mg/L		92	80 - 140
Barium	0.0397	F1	0.500	0.4062	F1	mg/L		73	87 - 123
Beryllium	ND	F1 F2	0.500	0.06877	F1	mg/L		14	89 - 119
Cadmium	ND	F1 F2	0.500	0.1216	F1	mg/L		24	82 - 124
Cobalt	ND	F1	0.500	0.3975	F1	mg/L		80	83 - 125
Chromium	0.00689	J F1 F2	0.500	0.02264	J F1	mg/L		3	86 - 122
Copper	ND	F1	0.500	0.08088	F1	mg/L		16	78 - 126
Molybdenum	0.254	F1	0.500	0.5637	F1	mg/L		62	78 - 126
Nickel	ND	F1	0.500	0.3958	F1	mg/L		79	84 - 120
Antimony	ND		0.500	0.4604		mg/L		92	72 - 132
Selenium	ND		0.500	0.5093		mg/L		102	79 - 127
Thallium	ND	F1	0.500	0.3871	F1	mg/L		77	79 - 121
Vanadium	ND	F1	0.500	0.2850	F1	mg/L		57	88 - 118
Zinc	ND	F1 F2	0.500	0.07222	J F1	mg/L		14	89 - 131
Lead	0.00951	J F1	0.500	ND	F1	mg/L		0	84 - 120

Lab Sample ID: 570-12551-F-7-C MSD
Matrix: Water
Analysis Batch: 33306

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 33064

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver	ND	F1	0.250	0.005220	J F1	mg/L		2	86 - 128	2	7
Arsenic	ND		0.500	0.4767		mg/L		95	80 - 140	3	11
Barium	0.0397	F1	0.500	0.4062	F1	mg/L		73	87 - 123	0	6
Beryllium	ND	F1 F2	0.500	0.07504	F1 F2	mg/L		15	89 - 119	9	8
Cadmium	ND	F1 F2	0.500	0.1358	F1 F2	mg/L		27	82 - 124	11	7
Cobalt	ND	F1	0.500	0.4107	F1	mg/L		82	83 - 125	3	7
Chromium	0.00689	J F1 F2	0.500	0.02756	J F1 F2	mg/L		4	86 - 122	20	8
Copper	ND	F1	0.500	0.08287	F1	mg/L		17	78 - 126	2	7
Molybdenum	0.254	F1	0.500	0.5631	F1	mg/L		62	78 - 126	0	7
Nickel	ND	F1	0.500	0.4050	F1	mg/L		81	84 - 120	2	7
Antimony	ND		0.500	0.4760		mg/L		95	72 - 132	3	10
Selenium	ND		0.500	0.5136		mg/L		103	79 - 127	1	9
Thallium	ND	F1	0.500	0.4093		mg/L		82	79 - 121	6	8
Vanadium	ND	F1	0.500	0.2901	F1	mg/L		58	88 - 118	2	7
Zinc	ND	F1 F2	0.500	0.08741	J F1 F2	mg/L		17	89 - 131	19	8
Lead	0.00951	J F1	0.500	ND	F1	mg/L		0	84 - 120	NC	7

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 570-33065/1-A
Matrix: Water
Analysis Batch: 33144

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 33065

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00005574	J	0.000500	0.0000453	mg/L		11/15/19 11:00	11/15/19 15:58	1

Lab Sample ID: LCS 570-33065/2-A
Matrix: Water
Analysis Batch: 33144

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 33065

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			0.0100	0.008931		mg/L		89	80 - 120		

Lab Sample ID: LCSD 570-33065/3-A
Matrix: Water
Analysis Batch: 33144

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 33065

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury			0.0100	0.009183		mg/L		92	80 - 120	3	20

Lab Sample ID: 570-12551-F-4-B MS
Matrix: Water
Analysis Batch: 33144

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 33065

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury	0.0000628	J F1 B	0.0100	0.004712	F1	mg/L		46	55 - 133		

Lab Sample ID: 570-12551-F-4-C MSD
Matrix: Water
Analysis Batch: 33144

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 33065

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.0000628	J F1 B	0.0100	0.004725	F1	mg/L		47	55 - 133	0	20

QC Association Summary

Client: Kennedy/Jenks Consultants
Project/Site: VTA

Job ID: 570-12526-1

GC/MS VOA

Analysis Batch: 33929

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-12526-1	CP241-SB01(20191111)	Total/NA	Water	8260B	
570-12526-2	CP241-SB02(20191111)	Total/NA	Water	8260B	
570-12526-3	EB01(20191111)	Total/NA	Water	8260B	
MB 570-33929/7	Method Blank	Total/NA	Water	8260B	
LCS 570-33929/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 570-33929/4	Lab Control Sample Dup	Total/NA	Water	8260B	

GC VOA

Analysis Batch: 32294

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-12526-1	CP241-SB01(20191111)	Total/NA	Water	8015B	
570-12526-2	CP241-SB02(20191111)	Total/NA	Water	8015B	
MB 570-32294/7	Method Blank	Total/NA	Water	8015B	
LCS 570-32294/3	Lab Control Sample	Total/NA	Water	8015B	
LCSD 570-32294/6	Lab Control Sample Dup	Total/NA	Water	8015B	
570-12518-F-1 MS	Matrix Spike	Total/NA	Water	8015B	
570-12518-F-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8015B	

GC Semi VOA

Prep Batch: 32570

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-12526-1	CP241-SB01(20191111)	Total/NA	Water	3510C	
570-12526-2	CP241-SB02(20191111)	Total/NA	Water	3510C	
MB 570-32570/1-A	Method Blank	Total/NA	Water	3510C	
LCS 570-32570/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 570-32570/4-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 570-32570/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
LCSD 570-32570/5-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 32818

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-12526-1	CP241-SB01(20191111)	Total/NA	Water	8015B	32570
570-12526-2	CP241-SB02(20191111)	Total/NA	Water	8015B	32570
MB 570-32570/1-A	Method Blank	Total/NA	Water	8015B	32570
LCS 570-32570/2-A	Lab Control Sample	Total/NA	Water	8015B	32570
LCS 570-32570/4-A	Lab Control Sample	Total/NA	Water	8015B	32570
LCSD 570-32570/3-A	Lab Control Sample Dup	Total/NA	Water	8015B	32570
LCSD 570-32570/5-A	Lab Control Sample Dup	Total/NA	Water	8015B	32570

Metals

Prep Batch: 33064

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-12526-1	CP241-SB01(20191111)	Total/NA	Water	3010A	
570-12526-2	CP241-SB02(20191111)	Total/NA	Water	3010A	
MB 570-33064/1-A	Method Blank	Total/NA	Water	3010A	
LCS 570-33064/2-A	Lab Control Sample	Total/NA	Water	3010A	
LCSD 570-33064/3-A	Lab Control Sample Dup	Total/NA	Water	3010A	
570-12551-F-7-B MS	Matrix Spike	Total/NA	Water	3010A	
570-12551-F-7-C MSD	Matrix Spike Duplicate	Total/NA	Water	3010A	

QC Association Summary

Client: Kennedy/Jenks Consultants
Project/Site: VTA

Job ID: 570-12526-1

Metals

Prep Batch: 33065

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-12526-1	CP241-SB01(20191111)	Total/NA	Water	7470A	
570-12526-2	CP241-SB02(20191111)	Total/NA	Water	7470A	
MB 570-33065/1-A	Method Blank	Total/NA	Water	7470A	
LCS 570-33065/2-A	Lab Control Sample	Total/NA	Water	7470A	
LCSD 570-33065/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	
570-12551-F-4-B MS	Matrix Spike	Total/NA	Water	7470A	
570-12551-F-4-C MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	

Analysis Batch: 33144

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-12526-1	CP241-SB01(20191111)	Total/NA	Water	7470A	33065
570-12526-2	CP241-SB02(20191111)	Total/NA	Water	7470A	33065
MB 570-33065/1-A	Method Blank	Total/NA	Water	7470A	33065
LCS 570-33065/2-A	Lab Control Sample	Total/NA	Water	7470A	33065
LCSD 570-33065/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	33065
570-12551-F-4-B MS	Matrix Spike	Total/NA	Water	7470A	33065
570-12551-F-4-C MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	33065

Analysis Batch: 33306

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-12526-1	CP241-SB01(20191111)	Total/NA	Water	6010B	33064
570-12526-2	CP241-SB02(20191111)	Total/NA	Water	6010B	33064
MB 570-33064/1-A	Method Blank	Total/NA	Water	6010B	33064
LCS 570-33064/2-A	Lab Control Sample	Total/NA	Water	6010B	33064
LCSD 570-33064/3-A	Lab Control Sample Dup	Total/NA	Water	6010B	33064
570-12551-F-7-B MS	Matrix Spike	Total/NA	Water	6010B	33064
570-12551-F-7-C MSD	Matrix Spike Duplicate	Total/NA	Water	6010B	33064

Lab Chronicle

Client: Kennedy/Jenks Consultants
Project/Site: VTA

Job ID: 570-12526-1

Client Sample ID: CP241-SB01(20191111)

Lab Sample ID: 570-12526-1

Date Collected: 11/11/19 11:20

Matrix: Water

Date Received: 11/12/19 10:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2	5 mL	5 mL	33929	11/20/19 00:06	NET3	ECL 2
	Instrument ID: GCMSXX									
Total/NA	Analysis	8015B		1	5 mL	5 mL	32294	11/13/19 02:44	CVA6	ECL 2
	Instrument ID: GC57									
Total/NA	Prep	3510C			420 mL	2.5 mL	32570	11/13/19 13:45	UFLU	ECL 1
Total/NA	Analysis	8015B		1			32818	11/14/19 23:56	I9H5	ECL 1
	Instrument ID: GC47									
Total/NA	Prep	3010A			50 mL	50 mL	33064	11/15/19 12:00	WL8G	ECL 1
Total/NA	Analysis	6010B		1			33306	11/15/19 23:09	OYW3	ECL 1
	Instrument ID: ICP8									
Total/NA	Prep	7470A			50 mL	100 mL	33065	11/15/19 11:00	WL8G	ECL 1
Total/NA	Analysis	7470A		1			33144	11/15/19 16:12	I3IN	ECL 1
	Instrument ID: HG8									

Client Sample ID: CP241-SB02(20191111)

Lab Sample ID: 570-12526-2

Date Collected: 11/11/19 11:39

Matrix: Water

Date Received: 11/12/19 10:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2	5 mL	5 mL	33929	11/20/19 00:33	NET3	ECL 2
	Instrument ID: GCMSXX									
Total/NA	Analysis	8015B		1	5 mL	5 mL	32294	11/13/19 03:14	CVA6	ECL 2
	Instrument ID: GC57									
Total/NA	Prep	3510C			460 mL	2.5 mL	32570	11/13/19 13:45	UFLU	ECL 1
Total/NA	Analysis	8015B		1			32818	11/15/19 00:17	I9H5	ECL 1
	Instrument ID: GC47									
Total/NA	Prep	3010A			50 mL	50 mL	33064	11/15/19 12:00	WL8G	ECL 1
Total/NA	Analysis	6010B		1			33306	11/15/19 23:12	OYW3	ECL 1
	Instrument ID: ICP8									
Total/NA	Prep	7470A			50 mL	100 mL	33065	11/15/19 11:00	WL8G	ECL 1
Total/NA	Analysis	7470A		1			33144	11/15/19 16:14	I3IN	ECL 1
	Instrument ID: HG8									

Client Sample ID: EB01(20191111)

Lab Sample ID: 570-12526-3

Date Collected: 11/11/19 11:55

Matrix: Water

Date Received: 11/12/19 10:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	33929	11/19/19 23:12	NET3	ECL 2
	Instrument ID: GCMSXX									

Laboratory References:

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

ECL 2 = Eurofins Calscience LLC Lampson, 7445 Lampson Ave, Garden Grove, CA 92841, TEL (714)895-5494

Accreditation/Certification Summary

Client: Kennedy/Jenks Consultants
Project/Site: VTA

Job ID: 570-12526-1

Laboratory: Eurofins Calscience LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arizona	State	AZ0781	03-13-20
California	SCAQMD LAP	17LA0919	11-30-19
California	State	2944	09-29-20
Hawaii	State	<cert No.>	07-02-20
Nevada	State	CA00111	07-31-20
Oregon	NELAP	CA300001	01-29-20

Method Summary

Client: Kennedy/Jenks Consultants
Project/Site: VTA

Job ID: 570-12526-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	ECL 2
8015B	Gasoline Range Organics - (GC)	SW846	ECL 2
8015B	Diesel Range Organics (DRO) (GC)	SW846	ECL 1
6010B	Metals (ICP)	SW846	ECL 1
7470A	Mercury (CVAA)	SW846	ECL 1
3010A	Preparation, Total Metals	SW846	ECL 1
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	ECL 1
5030C	Purge and Trap	SW846	ECL 2
7470A	Preparation, Mercury	SW846	ECL 1

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

ECL 2 = Eurofins Calscience LLC Lampson, 7445 Lampson Ave, Garden Grove, CA 92841, TEL (714)895-5494

Sample Summary

Client: Kennedy/Jenks Consultants
Project/Site: VTA

Job ID: 570-12526-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
570-12526-1	CP241-SB01(20191111)	Water	11/11/19 11:20	11/12/19 10:15	
570-12526-2	CP241-SB02(20191111)	Water	11/11/19 11:39	11/12/19 10:15	
570-12526-3	EB01(20191111)	Water	11/11/19 11:55	11/12/19 10:15	

Water 12526

eurofins | Calscience

570-12526 Chain of Custody

CHAIN OF CUSTODY RECORD

DATE: 11/11/19

PAGE: 1 OF 1

7440 Lincoln Way, Garden Grove, CA 92841-1427 • (714) 895-5494
For courier service / sample drop off information, contact us26_sales@eurofinsus.com or call us.

LABORATORY CLIENT: Kennedy/Jenks

ADDRESS: 275 Battery St

CITY: San Francisco STATE: CA ZIP:

TEL: 415-243-2150 E-MAIL: JayKnight@KennedyJenks.com

CLIENT PROJECT NAME / NUMBER: VTA

P.O. NO.: 196503.00

PROJECT CONTACT: Mike McLeod

SAMPLER(S): (PRINT)

TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):

☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☐ 5 DAYS ☒ STANDARD

☐ COELT EDF GLOBAL ID: LOG CODE:

SPECIAL INSTRUCTIONS: KJ EQEDD

REQUESTED ANALYSES

Please check box or fill in blank as needed.

LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	TPH(g) ☒ GRO	TPH(d) ☐ DRO	TPH ☐ C6-C36 ☐ C6-C44	TPH ☐ TPHmo	BTEX / MTBE ☐ 8260 ☐	VOCs (8260)	Oxygenates (8260)	Prep (5035): ☐ En Core ☐ Terra Core	SVOCs (8270)	Pesticides (8081)	PCBs (8082)	PAHs: ☐ 8270 ☐ 8270 SIM	22 Metals: ☒ 6010/747X ☐ 6020/747X CAM 7	Cr(VI): ☐ 7196 ☐ 7199 ☐ 218.6
1	CP241-SB01(2019 11 11)	11/11/2019	1120	W	8		X		X			X		X							X	
2	CP241-SB02(2019 11 11)	"	1139	"	"		X		X			X		X							X	
3	EB01(2019 11 11)	"	1155	W	3		X							X								

Relinquished by: (Signature) Mike McLeod 11/11/19 1326

Received by: (Signature/Affiliation) KCI Date: 11/11/19 Time: 1326

Relinquished by: (Signature) 650 11/11/19 1630

Received by: (Signature/Affiliation) Date: 11/12/19 Time: 10:15

Relinquished by: (Signature) Date: Time:

Received by: (Signature/Affiliation) Date: Time:

06/02/14 Revision

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11/20/2019

Login Sample Receipt Checklist

Client: Kennedy/Jenks Consultants

Job Number: 570-12526-1

Login Number: 12526
List Number: 1
Creator: Patel, Jayesh

List Source: Eurofins Calscience

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

EC202001-0143

HALEY & ALDRICH, INC.
2107 N. 1st Street
Suite 380
San Jose, CA 95131
408.961.4805

Letter of Transmittal

Date	8 January 2020
File Number	129899-014
From	Jennifer D. Boyer

To	Santa Clara Valley Transportation Authority (VTA) 3331 North First Street, San Jose, California
Attention	Dan Pornel
Subject	Transmittal of Summary Report – Pre-Demolition, Non-destructive Hazardous Materials Survey - One Building 1091/1093 S. Capitol Avenue, San Jose 95127

Copies	Date	Description
1	1/6/20202	Summary Report – Pre-Demolition, Non-destructive Hazardous Materials Survey - One Building 1091/1093 S. Capitol Avenue, San Jose 95127

Transmitted via ☐ First class mail ☐ Overnight express ☐ Hand delivery ☒ Other

Remarks

Dan - Please see the enclosed Hazardous Materials Survey for the building located at 1091/1093 S. Capitol Avenue, San Jose.

We appreciate the opportunity to support you with this very important project.

Thank you
Jen

SCA

ENVIRONMENTAL, INC.

January 6, 2020

Diana Rattanasith
Senior Scientist
Haley & Aldrich, Inc.
2107 N. First Street | Suite 380
San Jose, California 95131
DRattanasith@haleyaldrich.com

RE: Summary Report – Pre-Demolition, Non-destructive Hazardous Materials Survey
One Building 1091/1093 S. Capitol Avenue, San Jose 95127
SCA Project No: F13116

Dear Ms. Rattanasith,

This report summarizes the results of a pre-demolition, non-destructive survey for asbestos-, lead-containing construction materials, and other hazardous materials for the above-referenced buildings. SCA Environmental, Inc. (SCA) understands the building will undergo upcoming planned demolition.

The non-destructive survey was performed on October 28, 2019 by Tucker Kalman (CAC#15-5384, CDPH, QSP/QSD) and on December 9, 2019 by Luke Swanson (CSST#18-6378, CDPH#31458) of SCA.

The following sections summarize the results of the sampling.

Asbestos

Sampling activities were conducted per Federal AHERA regulations (40 CFR Part 763). Samples of suspect materials were collected following the AHERA sampling protocols, and sample locations were documented on field diagrams. Under these procedures, the first sample is analyzed. If it tests positive for asbestos (>1%), the analysis is suspended for further samples of that material. If the first sample tests only trace positive (between 0.1 to 1%), or negative, the second and/or third samples are analyzed sequentially, in order to determine the possible presence of asbestos. If all samples test negative, the material is considered as non-asbestos. If one or more samples test "trace" positive (<1%), the material is considered to be trace positive. Certain non-homogenous materials, multiple samples would be gathered at various points in the building, with all samples analyzed to determine the possible presence of asbestos.

All samples collected were submitted to Reservoirs Environmental, Inc. (REI) for analysis by polarized light microscopy with dispersion staining (DS/PLM). REI is a NVLAP-accredited facility.

SCA has entered the sampling data into the attached **Table 1: Materials Matrix Report (MMR)** which shows detailed sample results, material description, locations, and quantity estimates. Materials designated as AAA are assumed to contain asbestos and require destructive testing to confirm asbestos content. Sample locations are included on the sample location diagrams (Figures 1 - 2) and laboratory results in **Attachment A**. Note the following:

1. The MMR lists positive, trace, assumed and negative materials, the locations where each material is present, and the quantity estimates in each location. The following summarizes those materials where asbestos was identified:

Table 1: Positive Asbestos Materials

Material ID	Positive Asbestos Material Description
WLSH-5	Unpainted drywall (-) with tape (-) and gray joint compound (+) in exterior hot water and storage closets
FLVCT-13	12"x12" off white floor tiles (-) with black/yellow mastic (+)
WLSH-15	White painted drywall walls and ceiling (-) with texture (-) and joint compound (+)
WLSH-16	White painted drywall (-) with gray joint compound (+)
WL-17	Foam and silicon patching (-) on drywall (-) with gray compound (+). Will be removed with WLSH-15
WLSH-21	White painted drywall (-) with texture (-) and joint compound (+)
WLCER-26	White/Cream Ceramic Wall tile (-) with tan compound (+) and tan adhesive (-)
WLSH-27	White painted drywall (-), white tape (-) and white joint compound (+)

Note: (+) = Asbestos detected; (-) = No Asbestos detected

2. Trace Asbestos Materials – Suspect material tested to contain <1% asbestos is listed below:

Table 2: Trace Asbestos Materials

Material ID	Trace Asbestos Material Description
STUCCO-1	Off white painted exterior stucco (<0.09% Chrysotile asbestos)

3. Assumed Asbestos Materials – Any suspect material not sampled is listed as assumed asbestos-containing, as shown in the MMR. The following material is assumed asbestos, pending additional "destructive testing" if the material will be impacted by the proposed construction activities:

Table 3: Assumed Asbestos Materials

Material ID	Assumed Asbestos Material Description
BROCK-AAA1	Baserock under the entire building and site paving
VAPBAR-AAA2	Vapor or waterproofing membrane assumed present under entire building

Note: AAA = Assumed asbestos containing

4. Non-asbestos Materials – Seventeen (17) suspect materials were tested to be non-asbestos and are summarized in the attached **MMR.**

SCA assumes that in the future, this survey report may be referenced by Demolition and Abatement Contractors providing bids for abatement of materials at the surveyed site. SCA requests that this text portion of the report to be provided to bidding contractors for review. Bidding Contractors are hereby notified that the quantities included herein are estimates only, and all quantities should be field verified by the Contractor for any budgeting, planning or bidding decisions.

Lead

SCA performed limited bulk lead sampling of representative to confirm the presence and extent of lead-containing paints. Samples were analyzed by REI in Denver, CO.

Results
The attached **MMR** shows detailed lead sample results and locations of the sampled materials. Sample locations are included on the sample location diagrams in **Figures 1 through 3**, and laboratory reports in **Attachment B.**

1. Lead concentrations for paints ranged from 0.00056 milligrams/kilogram (mg/kg) -59.6 mg/kg.
2. Lead is assumed present (>1000 mg/kg) on any other containing that may be present in the building that were not sampled.

None of the applicable regulations require removal of lead paint prior to demolition if the paints are securely adhered to the substrates (i.e., non-flaking or non-peeling). Disposal of the demolition debris in this case can be handled as non-hazardous and non-RCRA waste after the loose and flaking paint have been removed, as long as demolition practices do not compromise worker safety and waste stream characterization testing has been performed by the Contractor on the entire waste stream for verification.

Conventional demolition techniques should be employed for all painted surfaces with the Contractor complying with applicable OSHA and Cal/OSHA statutes regarding:

- Worker awareness training;
- Exposure monitoring, as needed;
- Medical examinations, which may include blood lead level testing; and
- Establishing a written respiratory protection program.

As lead was identified in most paints and a detailed inventory of paints was not performed for the project, for the purpose of complying with the Cal/OSHA lead in construction regulation (8 CCR 1532.1), all coated surfaces shall be considered to contain some lead and require demolition dust control procedures and presumed respiratory protection usage for compliance with Cal/OSHA's Construction Lead Standard under 8 CCR 1532.1. The aforementioned regulation contains requirements for lead air monitoring, work practices, respiratory protection, etc., that are triggered by the presence of any detected levels of lead.

Polychlorinated Biphenyls (PCBs) & Mercury-Containing Items

SCA also quantified lighting ballasts that were observed in conjunction with mercury-containing, fluorescent lighting fixtures, and in various locations throughout the survey areas. Quantities and locations are summarized in the attached **MMR**. Laboratory reports can be found in **Attachment C**. Note the following regarding PCBs and mercury-containing items:

1. Lighting ballasts were identified within the building. These ballasts should be inspected for a "No PCBs" label. These items would therefore be considered non-PCB-containing and would not require disposal as PCB wastes. If there are not any "No PCBs" labels, the ballasts will require disposal as PCB waste.

2. SCA collected samples of representative mastics and caulking for PCB analysis, these results are summarized in the attached **MMR**.

3. Mercury-containing fluorescent tubes were identified in some areas. Fluorescent light tubes are required to be either disposed of as hazardous material, or recycled for their mercury contents. Note that costs for fluorescent tube disposal do not tend to be significant compared to overall abatement costs.

4. This building is currently exempt from the Bay Area Stormwater Management Agencies Association's (BASMAA's) PCBs in Priority Building Materials Screening Assessment Process prior to building demolition due to it being wood framed. Note that as wood framed buildings are exempt from screening

assessment, additional PCB sampling of these buildings to comply with the Priority Building Materials Screening Assessment Process is not required; however, some sampling of suspect PCB materials (such as caulkings and putties) is recommended for waste disposal profiling prior to demolition.

If you have any questions or would like more information, please contact us.

Sincerely,
SCA ENVIRONMENTAL, INC.

Tucker Kalman, CAC, CDPH, QSD/QSP
Project Manager
415/723-0962
tkalman@sca-enviro.com

Reviewed by:

Christina Codemo, CHMM, REPA, CAC
President
415/867-9540
ccodemo@sca-enviro.com

Dan Leung, CIH, CSP, CDPH, CAC
Vice President
415/867-9544
dleung@sca-enviro.com

Table 1: Materials Matrix Report

Figures 1 to 3: Sample Location Drawings

Attachments:
A: Asbestos Laboratory Reports
B: Lead Laboratory Reports
C: PCB Laboratory Reports
D: Sample Photographs

Table 1: Materials Matrix Report- 1091-1093 South Capitol Avenue, San Jose, CA 94127

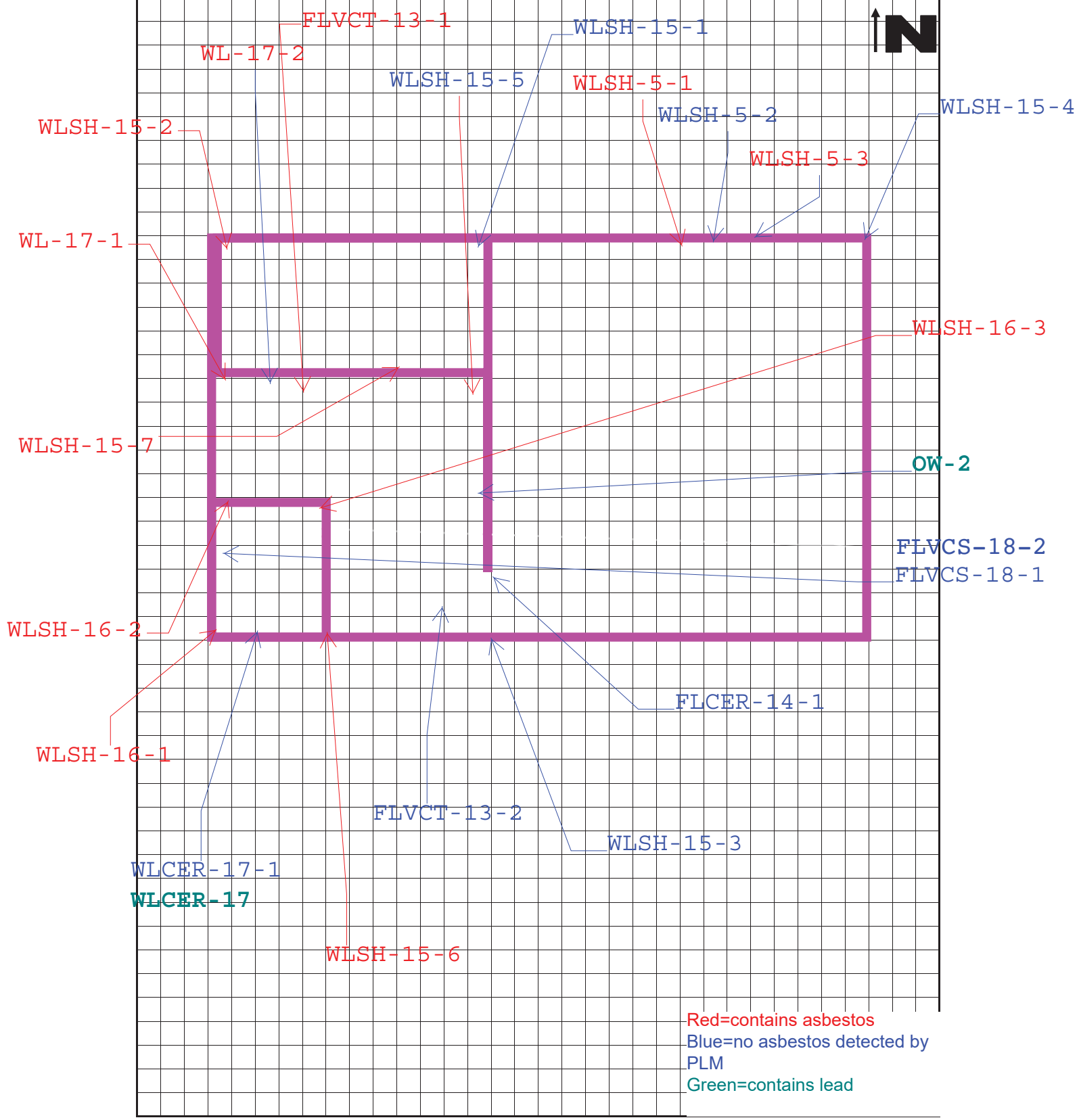
Material ID	Material Description	Sub-sample # 1	2	3	4	5	6	7	Asbestos Positive? Yes. No. Trace. Assumed	UNITS (LF, SF, EA)	1091 Interior	1093 Interior	Exterior	Roof	Shed	TOTAL (+/-15%)
ASBESTOS																
WLSH-5	Unpainted drywall (-) with tape (-) and gray joint compound (+) in exterior hot water and storage closets	4-6% CH	ND	6% CH						SF			400			400
FLVCT-13	12"x12" off white floor tiles (-) with black/yellow mastic (+)	8% CH	NA							SF	340					340
WLSH-15	White painted drywall walls and ceiling (-) with texture (-) and joint compound (+)	ND	3% CH	ND	ND	ND	4% CH	3-4% CH		SF	3200					3200
WLSH-16	White painted drywall (-) with gray joint compound (+)	4% CH	3-4% CH	3-5% CH					**Positive**	SF	350					350
WL-17	Foam and silicon patching (-) on drywall (-) with gray compound (+). Will be removed with WLSH-15	4% CH	3% CH							SF	10					10
WLSH-21	White painted drywall (-) with texture (-) and joint compound (+)	ND	3% CH	4%CH						SF		900				900
WLCER-26	White/Cream Ceramic Wall tile (-) with tan compound (+) and tan adhesive (-)	5% CH	5% CH	ND						SF		80				80
WLSH-27	White painted drywall (-), white tape (-) and white joint compound (+)	4-5% CH	5% CH	4% CH						SF		520				520
STUCCO-1	Off white painted exterior stucco (<0.09%)	<0.09% CH	<0.09% CH	<0.09% CH	<0.09% CH	ND			**Trace**	SF			1800			1800
ASSUMED ASBESTOS (Destructive Testing Required to Confirm)																
BROCK-AAA1	Baserock under the entire building and site paving								**Assumed**	SF			5800			5800
VAPBAR-AAA2	Vapor or waterproofing membrane assumed present under entire building									SF			1400			1400
NON-ASBESTOS																
WL-1	Brown felt paper (-) under exterior stucco	ND	ND							SF			1800			1800
CONC-3	Gray granular concrete slab (-) under entire building. Assumed 6" thick	ND	ND	ND						SF			1400			1400
WL-4	Gray granular mortar (-) holding together decorative stone on exterior	ND	ND	ND						SF			520			520
CONC-6	Gray granular concrete (-) sidewalks approximately 4" thick at front and back of building	ND	ND	ND						SF			400			400
ASPHALT-7	Gray granular asphalt (-) with black tar paving throughout site	ND	ND	ND						SF			5800			5800
MASTIC-8	Limited gray mastic (-) used to patch concrete at front of building	ND	ND							SF			2			2
CONC-9	Limited gray granular concrete (-) pour in back of site	ND	ND							SF			200			200
RFROLL-10	Gray rolled roofing with black fibrous tar mastic (-) on wood	ND	ND	ND						SF				1400		1400
PENMAS-11	Black fibrous penetration tar mastics (-)	ND	ND	ND						SF				100		100
RFMAS-12	Black fibrous roofing mastics (-)	ND	ND						Negative	SF				80		80
FLCER-14	12"x12" off white ceramic floor tiles (-) with white grout and (-) white mortar (-)	ND								SF	340					340
WLCER-17	4"x4" white ceramic wall tile (-) with tan mastic (-) and white grout (-)	ND								SF	160					160
FLVCS-18	Tan vinyl floor sheeting (-) with yellow mastic (-) and gray fibrous leveling (-)	ND	ND							SF	50					50
CONC-19	Gray granular concrete (-) pour under back shed. Assumed 2" thick	ND	ND	ND						SF					600	600
RFSH-20	Multi colored roof shingles (-) on shed roof	ND	ND	ND						SF					400	400
CAULK-22	White Caulking around windows (North Wall/ front entrance interior)	ND	ND	ND						SF		24				24
FLR-23	Wood floors (-), Blue tile like material (-) covering cream tile like material	ND	ND							SF		455				455
CAULK-24	White caulking around South Door/Back door	ND	ND							SF		8				8
BBMAS-25	Cream Mastic (-) behind cream baseboard material (-)	ND	ND							SF		52				52
WL/CLN-NNN	Wooden walls and ceilings making up shed								Not Suspect	SF					PNQ	PNQ
PIPING-NNN	Uninsulated piping running from domestic water heaters									SF					PNQ	PNQ
PCBs									**PPM**							
MASTIC-8	Limited grey mastic used to patch concrete at front of building								<0.50	SF			2			2
CAULK-22	White Caulking around windows (North Wall/ front entrance)								<0.050	SF		8				8
PCBs	PCB-Ballasts (assumed >50 ppm)								Assumed, >50	EA	8	4				12
LEAD									**PPM**							
OW-1	Exterior off white paint								56.1	SF	PNQ					PNQ
OW-2	Interior white paint								6.2	SF	PNQ					PNQ
OW-7	Interior off white paint								0.00056	SF						
WLCER-17	4"x4" white ceramic wall tile with yellow mastic and white grout								59.6	SF	160					160
WLCER-77	Cream Ceramic Wall Tile (Bathroom)								0.04	SF	80					
WH-3	White paint on shed								4.7	SF					PNQ	PNQ
Lead in paints	Lead Containing Paints / Coatings (assumed >1000ppm)								Assumed, >1000	SF	PNQ	PNQ	PNQ	PNQ	PNQ	PNQ
Other Hazardous Materials																
Mercury	Fluorescent Light Tubes								Present	EA	16	8			0	24

Notes:
PNQ = Present, not quantified; CH = Chrysotile; ND = Not detected; NA = Not analyzed

SCA
ENVIRONMENTAL, INC.
320 Justin Drive
SF, CA 94112

Title:	1091 Capitol Avenue Interior Sample Locations
Project:	1091/1093 Capitol Avenue Survey
Project No:	F13116
Drawn By:	TK
Checked By:	CC
Date:	10/25/19
Scale:	NTS

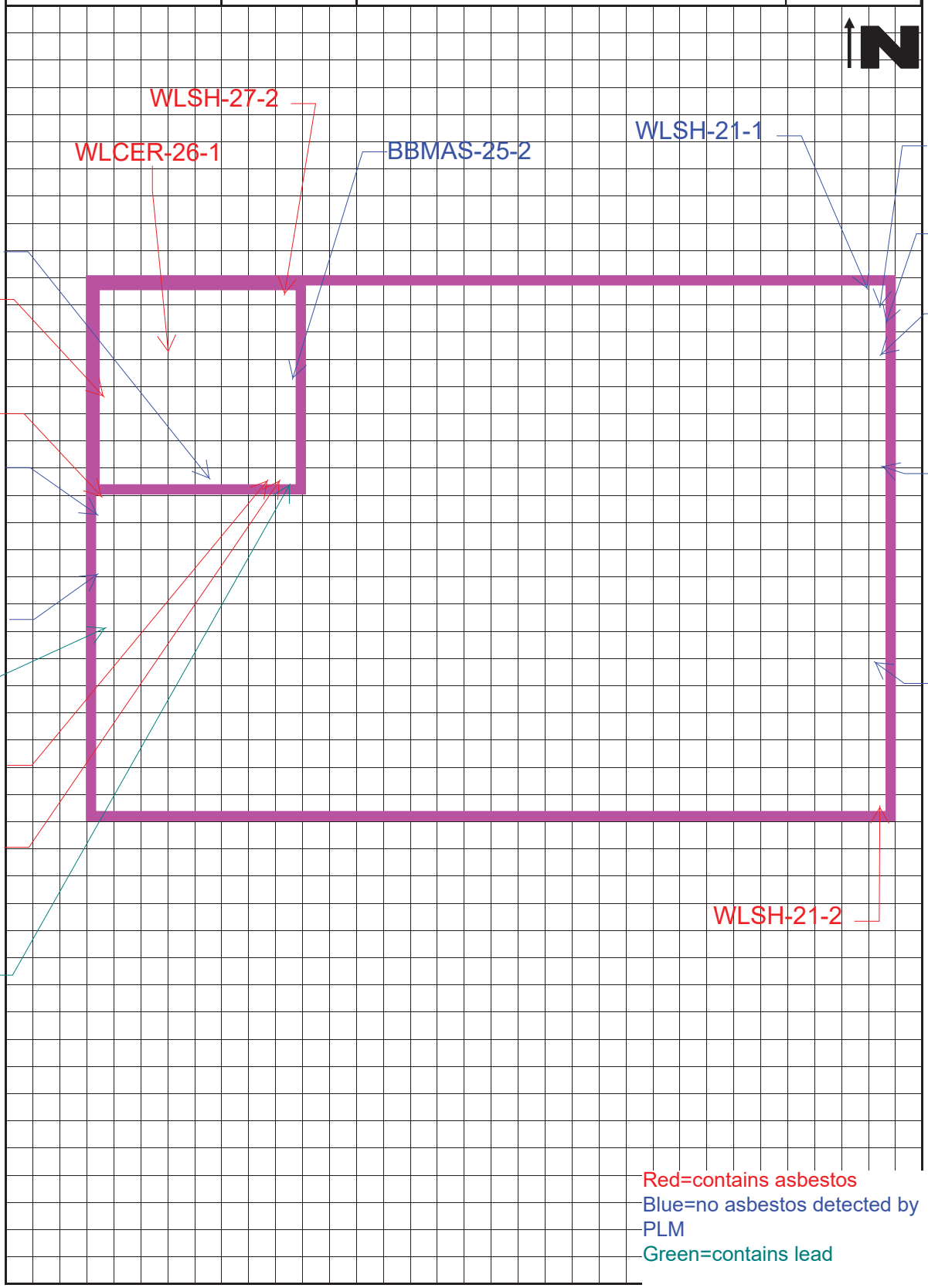
Figure 1



SCA
ENVIRONMENTAL, INC.
320 Justin Drive
SF, CA 94112

Title:	1093 Capitol Avenue Interior Sample Locations
Project:	1091/1093 Capitol Avenue Survey
Project No:	F13116
Drawn By:	LS
Checked By:	CC
Date:	12/9/19
Scale:	NTS

Figure 2



Red=contains asbestos
Blue=no asbestos detected by PLM
Green=contains lead

Red=contains asbestos
Blue=no asbestos detected by PLM
Green=contains lead

SCA ENVIRONMENTAL, INC.

Figure 3: Exterior Sample Locations
1091-1093 Capitol Ave, San Jose, CA 95127
SCA Project No.: F13116
Surveyed: October 25, 2019

Attachment A
Asbestos Laboratory Report

Reservoirs Environmental, Inc.

November 05, 2019

Subcontractor Number:
Laboratory Report: **RES 448210-2**
Project #/P.O. #: **F13116**
Project Description: **SJ Capitol Ave.**

Tucker Kalman
SCA Environmental, Inc.
320 Justin Drive
San Fransisco CA 94112

Dear Tucker,

Reservoirs Environmental, Inc. is an analytical laboratory accredited for the analysis of Industrial Hygiene and Environmental matrices by the National Voluntary Laboratory Accreditation Program (NVLAP), Lab Code 101896-0 for Transmission Electron Microscopy (TEM) and Polarized Light Microscopy (PLM) analysis and the American Industrial Hygiene Association (AIHA), Lab ID 101533 - Accreditation Certificate #480 for Phase Contrast Microscopy (PCM) analysis. This laboratory is currently proficient in both Proficiency Testing and PAT programs respectively.

Reservoirs Environmental, Inc. has analyzed the following samples for asbestos content as per your request. The analysis has been completed in general accordance with the appropriate methodology as stated in the attached analysis table. The results have been submitted to your office.

RES 448210-2 is the job number assigned to this study. This report is considered highly confidential and the sole property of the customer. Reservoirs Environmental, Inc. will not discuss any part of this study with personnel other than those of the client. The results described in this report only apply to the samples analyzed. This report must not be used to claim endorsement of products or analytical results by NVLAP or any agency of the U.S. Government. This report shall not be reproduced except in full, without written approval from Reservoirs Environmental, Inc. Samples will be disposed of after sixty days unless longer storage is requested. If you have any questions about this report, please feel free to call 303-964-1986.

Sincerely,

Piper-Lenore O. Murphy

For Jeanne Spencer
President

RESERVOIRS ENVIRONMENTAL INC.

NVLAP Lab Code 101896-0

TABLE: PLM BULK ANALYSIS, PERCENTAGE COMPOSITION BY VOLUME

RES Job Number: **RES 448210-2**
Client: **SCA Environmental, Inc.**
Client Project Number / P.O.: **F13116**
Client Project Description: **SJ Capitol Ave.**
Date Samples Received: **October 28, 2019**
Method: **EPA 600/R-93/116 - Point Count, Bulk**
Turnaround: **Priority**
Date Samples Analyzed: **October 31, 2019 - November 04, 2019**

ND=None Detected
TR=Trace, <1% Visual Estimate
Trem/Act=Tremolite/Actinolite

Client Sample Number	LAYER	Physical Description	Sub Part (%)	Asbestos Content: Mineral	Asbestos Content: Visual Estimate (%)	Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
STUCCO-1-1	A	Gray granular material	100	**Chrysotile**	**TR**	0	100
				Point Count	**<0.09**		
STUCCO-1-2	A	Off white/multi-colored paint	9		**ND**	0	100
	B	Gray granular material	91	**Chrysotile**	**TR**	0	100
				Point Count	**<0.09**		
STUCCO-1-3	A	Off white paint	8		**ND**	0	100
	B	Gray granular material	92	**Chrysotile**	**TR**	0	100
				Point Count	**<0.09**		
STUCCO-1-4	A	White/multi-colored paint	8		**ND**	0	100
	B	Gray granular material	92	**Chrysotile**	**TR**	0	100
				Point Count	**<0.09**		
STUCCO-1-5	A	Gray granular cementitious material w/ white paint	45		**ND**	0	100
	B	Gray granular material	55		**ND**	0	100
WL-1-1 (Labeled as WL-2-1)	A	Brown felt	100		**ND**	60	40

TEM Analysis recommended for organically bound material (i.e. floor tile) if PLM results are <1%.

RESERVOIRS ENVIRONMENTAL INC.

NVLAP Lab Code 101896-0

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Client Sample Number	LAYER	Physical Description	Sub Part (%)	Asbestos Content: Mineral	Asbestos Content: Visual Estimate (%)	Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
WL-1-2 (Labeled as WL-2-2)	A	Brown felt	100		**ND**	60	40
CONC-3-1	A	Gray granular cementitious material	100		**ND**	0	100
CONC-3-2	A	Gray granular cementitious material	100		**ND**	0	100
CONC-3-3	A	Gray granular cementitious material	100		**ND**	0	100
WL-4-1	A	Gray granular cementitious material w/ white/multi-colored paint	100		**ND**	0	100
WL-4-2	A	Gray granular cementitious material w/ white/multi-colored paint	100		**ND**	0	100
WL-4-3	A	Gray granular cementitious material w/ white/multi-colored paint	100		**ND**	0	100
WLSH-5-1	A	Gray compound	10	**Chrysotile**	**4**	0	96
	B	White tape	18		**ND**	95	5
	C	Gray joint compound	34	**Chrysotile**	**6**	0	94
	D	Off white/tan drywall	38		**ND**	20	80

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Client Sample Number	LAYER	Physical Description	Sub Part (%)	Asbestos Content: Mineral	Asbestos Content: Visual Estimate (%)	Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
WLSH-5-2	A	Off white compound	5		**ND**	0	100
	B	Off white/tan drywall	95		**ND**	15	85
WLSH-5-3	A	White tape	5		**ND**	95	5
	B	Gray joint compound	15	**Chrysotile**	**6**	0	94
	C	Off white/tan drywall	80		**ND**	12	88
CONC-6-1	A	Gray granular cementitious material	100		**ND**	0	100
CONC-6-2	A	Gray granular cementitious material	100		**ND**	0	100
CONC-6-3	A	Gray granular cementitious material	100		**ND**	0	100
ASPHALT-7-1	A	Gray granular material w/ black tar	100		**ND**	0	100
ASPHALT-7-2	A	Gray granular material w/ black tar	100		**ND**	0	100
ASPHALT-7-3	A	Gray granular material w/ black tar	100		**ND**	0	100
MASTIC-8-1	A	Gray adhesive w/ gray granular material	100		**ND**	0	100
MASTIC-8-2	A	Gray adhesive w/ gray granular material	100		**ND**	0	100
CONC-9-1	A	Gray granular cementitious material	100		**ND**	0	100

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Client Sample Number	LAYER	Physical Description	Sub Part (%)	Asbestos Content: Mineral	Asbestos Content: Visual Estimate (%)	Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
CONC-9-2	A	Gray granular cementitious material	100		**ND**	0	100
RFROLL-10-1	A	Gray shingle	15		**ND**	15	85
	B	Black fibrous tar w/ black tar	85		**ND**	12	88
RFROLL-10-2	A	Gray shingle	20		**ND**	15	85
	B	Black fibrous tar w/ black tar	80		**ND**	12	88
RFROLL-10-3	A	Gray shingle	20		**ND**	15	85
	B	Black fibrous tar w/ black tar	80		**ND**	12	88
PENMAS-11-1	A	Black fibrous tar w/ white resinous material & gray granular material	100		**ND**	20	80
PENMAS-11-2	A	Black fibrous tar w/ white resinous material & gray granular material	100		**ND**	20	80
PENMAS-11-3	A	Black fibrous tar w/ white resinous material & gray granular material	100		**ND**	20	80
RFMAS-12-1	A	Black fibrous granular tar	100		**ND**	15	85

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Client Sample Number	LAYER	Physical Description	Sub Part (%)	Asbestos Content: Mineral	Asbestos Content: Visual Estimate (%)	Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
RFMAS-12-2	A	Black fibrous granular tar	100		**ND**	15	85
FLVCT-13-1	A	Black mastic	8	**Chrysotile**	**8**	0	92
	B	Off white/gray tile	92		**ND**	0	100
FLVCT-13-2		Not Analyzed per Client Request.					
FLCER-14-1	A	Tan grout	20		**ND**	0	100
	B	Tan ceramic tile	80		**ND**	0	100
WLSH-15-1	A	White compound w/ white/blue paint	10		**ND**	0	100
	B	White/tan drywall	30		**ND**	10	90
	C	White compound w/ white paint	60		**ND**	0	100
WLSH-15-2	A	White tape	3		**ND**	90	10
	B	White/multi-colored paint	5		**ND**	0	100
	C	White joint compound	8	**Chrysotile**	**3**	0	97
	D	White compound	10	**Chrysotile**	**3**	0	97
	E	Off white/tan drywall	74		**ND**	15	85

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Client Sample Number	LAYER	Physical Description	Sub Part (%)	Asbestos Content: Mineral	Asbestos Content: Visual Estimate (%)	Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
WLSH-15-3	A	White compound w/ white/multi-colored paint	15		**ND**	0	100
	B	White/tan drywall w/ white/multi-colored paint	85		**ND**	10	90
WLSH-15-4	A	Beige paint	2		**ND**	0	100
	B	White tape	5		**ND**	95	5
	C	White joint compound	7		**ND**	0	100
	D	Pink/tan drywall	86		**ND**	12	88
WLSH-15-5	A	White tape	5		**ND**	95	5
	B	White compound	8		**ND**	0	100
	C	White joint compound	9		**ND**	0	100
	D	Pink/tan drywall	78		**ND**	12	88

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Client Sample Number	LAYER	Physical Description	Sub Part (%)	Asbestos Content: Mineral	Asbestos Content: Visual Estimate (%)	Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
WLSH-15-6	A	White/green paint	2		**ND**	0	100
	B	White tape	5		**ND**	95	5
	C	Gray compound	6	**Chrysotile**	**4**	0	96
	D	Off white texture w/ tan/paint	7		**ND**	0	100
	E	Gray joint compound	8	**Chrysotile**	**4**	0	96
	F	Off white/tan drywall	72		**ND**	12	88
WLSH-15-7	A	White tape	8		**ND**	95	5
	B	Off white joint compound	9	**Chrysotile**	**3**	0	97
	C	White/green paint	10		**ND**	0	100
	D	Off white compound w/ tan/multi-colored paint	10		**ND**	0	100
	E	Gray compound	12	**Chrysotile**	**4**	0	96
	F	Off white/tan drywall	51		**ND**	12	88

TEM Analysis recommended for organically bound material (i.e. floor tile) if PLM results are <1%.

RESERVOIRS ENVIRONMENTAL INC.

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Client Sample Number	LAYER	Physical Description	Sub Part (%)	Asbestos Content: Mineral	Asbestos Content: Visual Estimate (%)	Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
WLSH-16-1	A	White/multi-colored paint	6		**ND**	0	100
	B	Gray compound	7	**Chrysotile**	**4**	0	96
	C	Off white/tan drywall	87		**ND**	12	88
WLSH-16-2	A	White/multi-colored paint	5		**ND**	0	100
	B	White tape	5		**ND**	95	5
	C	Gray compound	9	**Chrysotile**	**4**	0	96
	D	Gray joint compound	10	**Chrysotile**	**3**	0	97
	E	Off white/tan drywall	71		**ND**	12	88
WLSH-16-3	A	White/multi-colored paint	5		**ND**	0	100
	B	White tape	6		**ND**	95	5
	C	Gray joint compound	8	**Chrysotile**	**5**	0	95
	D	Gray compound	10	**Chrysotile**	**3**	0	97
	E	Off white/tan drywall	71		**ND**	12	88

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Client Sample Number	LAYER	Physical Description	Sub Part (%)	Asbestos Content: Mineral	Asbestos Content: Visual Estimate (%)	Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
WLCER-17-1	A	Tan adhesive	4		**ND**	0	100
	B	Cream/white ceramic tile	96		**ND**	0	100
WL-17-1	A	Off white compound w/ white paint	12		**ND**	0	100
	B	White/multi-colored paint	13		**ND**	0	100
	C	Gray compound	15	**Chrysotile**	**4**	0	96
	D	White caulk w/ brown paint	25		**ND**	0	100
	E	Tan/pink drywall	35		**ND**	70	30
WL-17-2	A	White/multi-colored paint w/ brown adhesive	7		**ND**	0	100
	B	Off white compound	8	**Chrysotile**	**3**	0	97
	C	White caulk w/ brown paint	15		**ND**	0	100
	D	Off white/tan drywall	70		**ND**	12	88

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Client Sample Number	LAYER	Physical Description	Sub Part (%)	Asbestos Content: Mineral	Asbestos Content: Visual Estimate (%)	Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
FLVCS-18-1	A	Yellow adhesive	12		**ND**	0	100
	B	Tan sheet vinyl w/ tan fibrous backing material	25		**ND**	7	93
	C	Cream/tan sheet vinyl w/ gray fibrous backing material	28		**ND**	12	88
	D	Off white tile	35		**ND**	0	100
FLVCS-18-2	A	Yellow/tan adhesive	6		**ND**	0	100
	B	Pink tile	13		**ND**	0	100
	C	Off white tile	20		**ND**	0	100
	D	Tan sheet vinyl w/ tan fibrous backing material	30		**ND**	6	94
	E	Pink/tan sheet vinyl w/ gray fibrous backing material	31		**ND**	10	90
CONC-19-1	A	Gray granular plaster	100		**ND**	0	100
CONC-19-2	A	Gray granular cementitious material	100		**ND**	0	100
CONC-19-3	A	Tan granular material w/ black tar	100		**ND**	0	100
RFSH-20-1	A	Tan shingle	100		**ND**	15	85

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Client Sample Number	LAYER	Physical Description	Sub Part (%)	Asbestos Content: Mineral	Asbestos Content: Visual Estimate (%)	Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
RFSH-20-2	A	Gray shingle	45		**ND**	15	85
	B	Gray/multi-colored shingle	55		**ND**	15	85
RFSH-20-3	A	Gray shingle	48		**ND**	15	85
	B	Green/multi-colored shingle	52		**ND**	15	85

TEM Analysis recommended for organically bound material (i.e. floor tile) if PLM results are <1%.

Landon Spells — Analyst

Piper-Lenore O. Murphy — Analyst / Data QA

RES 448210

Due Date:_____
Due Time:_____

Reservoirs Environmental, Inc.

REI LAB

5801 Logan St. Denver, CO 80216 • Ph: 303 964-1986 • Fax 303-477-4275 • Toll Free :866 RESI-ENV

After Hours Cell Phone: 720-339-9228

Job #_____
Page 1 of _____

SUBMITTED BY:

Company: SCA Environmental, Inc.
Address: 650 Delancey St. Ste. 222
San Fransisco CA 94107
Project Number and/or P.O. #: F13116
Project Description/Location: SJ Capitol Ave.

INVOICE TO: (IF DIFFERENT)

Company:
Address:

CONTACT INFORMATION:

Contact: T Kalman
Phone:
Fax:
Cell/pager:

Contact: C Lodemo
Phone:
Fax:
Cell/pager:

Final Data Deliverable Email Address:

ASBESTOS LABORATORY HOURS: Weekdays: 7am - 7pm & Sat. 8am - 5pm

PLM / PCM / TEM ____ RUSH (Same Day) ___ PRIORITY (Next Day) X STANDARD (3-5 Day)
(Rush PCM = 2hr, TEM = 6hr.)

CHEMISTRY LABORATORY HOURS: Weekdays: 8am - 5pm

Metal(s) / Dust** ___ RUSH ___ 24 hr. ___3-5 Day
RCRA 8 / Metals & Welding Fume Scan / TCLP** __RUSH (3 Day)__5 Day __10 Day
Organics ___ 24 hr. ___ 3 day ___5 Day

Prior notification is required for RUSH turnarounds.

MICROBIOLOGY LABORATORY HOURS: Weekdays: 9am - 6pm

E.coli and/or Coliforms* ___ 24-48 Hour Other: _____
Pathogens* ___ 24-48 Hour
Microbial Growth* ___ 5-10 Day
Legionella ___ 10 Day
Mold ___ RUSH ___24 Hr ___48 Hr ___3 Day ___5 Day

TAT dependent on speed of microbial growth.

Turnaround times establish a laboratory priority, subject to laboratory volume and are not guaranteed. Additional fees apply for afterhours, weekends and holidays.

Special Instructions:

REQUESTED ANALYSIS

Client sample ID number (Sample ID's must be unique)	PLM - Short report, Point Count, Long report, Qualitative	TEM - AHERA, Level II, 7402, ISO, +/- (Air, Bulk or Dust), Quant, Semi-Quant, Micro-vac, ISO-Indirect Preps	PCM - 7400A, 7400B, OSHA	DUST - Total, Respirable	METALS - Analyte(s) _____ RCRA 8, TCLP, Welding Fume, Metals Scan, pH	ORGANICS - METH, TSS	MICROBIOLOGY: Pathogens: Aerobic Plate Count, Salmonella, E coli O157:H7, Listeria, S aureus, Campylobacter: +/- or Quantification	MICROBIOLOGY: E coli and/or Coliforms: +/- or Quantification State Water (Please Circle One) Yes / No	MICROBIOLOGY: Microbial Growth: Aerobic Plate Count ID, Y & M or Bacteria, Fungal, +/- or Quantification	MICROBIOLOGY: Legionella: +/- or Quantification	MICROBIOLOGY: Other: Bioburden, LAL or Environmental	MICROBIOLOGY: Mold: Spore Trap or Bulk: +/-, Identification, Quantification, Viable or Non-Viable	SAMPLER'S INITIALS OR OTHER NOTES:	Sample Volume (L) / Area	Matrix Code	# Containers	Date Collected mm/dd/yy	Time Collected hh/mm a/p	EM Number (Laboratory Use Only)
1																		
2	(SEE ATTACHED CLIENT COC)																	
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		

VALID MATRIX CODES

Air = A	Bulk = B
Dust = D	Paint = P
Soil = S	Wipe = W
Swab = SW	F = Food
Drinking Water = DW	Waste Water = WW
O = Other	

ASTM E1792 approved wipe media only

LAB NOTES:

Number of samples received: _____ (Additional samples shall be listed on attached long form.)

NOTE: REI will analyze incoming samples based upon information received and will not be responsible for errors or omissions in calculations resulting from the inaccuracy of original data. By signing client/company representative agrees that submission of the following samples for requested analysis as indicated on this Chain of Custody shall constitute an analytical services agreement with payment terms of NET 30 days, failure to comply with payment terms may result in a 1.5% monthly interest surcharge.

Relinquished By: Date/Time:

Laboratory Use Only
Received By: Date/Time: 10/28/19 1005 Carrier: Hand / FedEx / UPS / USPS / Drop Box / Courier

Sample Condition: On Ice Yes / No Sealed Yes / No ~~Intact~~ Yes / No
Temp. (F°) _____

Data Entry QA:	Contact	Phone Email Fax	Date	Time	Initials	Contact	Phone Email Fax	Date	Time	Initials
	Contact	Phone Email Fax	Date	Time	Initials	Contact	Phone Email Fax	Date	Time	Initials

448210

CHAIN OF CUSTODY FORM

Bill to: SCA Environmental

Email report/COC/Invoice to:
hkalman@sca-enviro.com (PROJ MGR)
ccodero@sca-enviro.com (~~TECH~~)
labreports99@gmail.com (ACCT)

EMAIL HEADING:	(Project #) -	(Project Manager Initials) -	(Site Name/Address) -	(Date MMDD)
	F13116	~~EE~~ CC	SJ Capitol Ave	10/25

LAB REI

COURIER UPS

LAB REP NOTIFIED: — Notification DATE/TIME: —

COURIER (UPS, SPC T....) — LAST 5 OF TRACKING NUMBER: —

EST ARRIVAL DATE: ✓ EST. ARRIVAL TIME: ✓

INSTRUCTIONS TO LAB:

Method Reference 7400 PCM **PLM (asbestos)** AHERA TEM (≤0.005 s/cc AnaSen) Flame AA (Lead) CARB-AHERA TEM 0.001 s/cc Ana Sensit ICP (Lead)

Sample Media 25 37 mm 0.45 0.8 micron MCEF (Bulk) Water Wipe

RESULTS DUE: 3-5 Day ~~AM / PM~~

CHAIN OF CUSTODY DATA:

Sending Info 58 samples submitted by JH on 10/25 at ____

Received by Lab: ____ samples received by ____ on ____ at ____

Received by Analyst: ____ samples received by ____ on ____ at ____

SAMPLE ID	~~LITERS~~	~~Description~~ Sample ID	~~Inc Blanks/Outs~~
STUCCO-1-1,2,3,4,5		WLCER-17-1	
WL-1-1,2 (Labeled as WL-2-1,2)		WL-17-1,2	
CONC-3-1,2,3		FLVCS-18-1,2	
WL-4-1,2,3		CONC-19-1,2,3	
WLSH-5-1,2,3		RFSH-20-1,2,3	
CONC-6-1,2,3			
ASPHALT-~~7~~-1,2,3			
MASTIC-8-1,2			
CONC-9-1,2			
RFROLL-10-1,2,3			
PENMAS-11-1,2,3			
RFMAS-12-1,2			
FLVCT-13-1,2			
FLCER-14-1 ~~#4~~			
WLSH-15-1,2,3,4,5,6,7			
WLSH-16-1,2,3			
~~#5~~	~~LITERS~~		~~BLANK~~
	~~LITERS~~		~~BLANK~~
	~~LITERS~~		~~BLANK~~

Supplies /Equipment	Qty
Hi-Vol Pumps (3040)	
Lo-Vol Pumps (3020)	
TEM / Pb cassettes (3520)	
PCM cassettes (3500)	
Bulk sampling supply (3710)	58
Lead Wipes (3266)	
Legionella Bottles (3742)	
Water Bottles (Pb/other) (3743)	
Mold Cassettes (3522)	
Smoke Tubes (3540)	
Matched Weight Cassette (3521)	

INSTRUCTIONS TO LAB (delete items not applicable AND circle items applicable):

1. Pickup requested:
   Contact: _____
   Time of Call: _____
2. **Call contact to acknowledge receipt of samples.**
3. **Analyze samples by PCM only.**
4. Analyze inside samples by PCM first; if any sample >0.01 f/cc, contact project manager.
5. **If all samples are <0.01 f/cc, proceed with items 6, 7 or 8, as noted.**
6. Analyze inside samples only; stop if Avg >70 str/mm^2, contact PM before analyzing outsides or blanks.
7. **Analyze all samples, including outside samples and blanks.**
8. **Do NOT analyze outside or blank samples.**
9. **Analyze by TEM only the inside air sample with the highest PCM result.**
10. Serial analysis; stop at first positive (>1%); first trace (<0.1%);except sheetrock and plaster samples.
11. **Analyze all bulk samples, unless otherwise indicated.**
12. **PCB: <0.05mg/kg detection limit required. Authorized to perform cleanup to meet the detection limit.**
13. _____

Report Number:

Invoice Number:

ver 2015

Reservoirs Environmental, Inc.

December 23, 2019

Subcontractor Number:
Laboratory Report: **RES 452065-1**
Project #/P.O. #: **F13116**
Project Description: **1093 South Capitol Ave**

Christina Codemo
SCA Environmental, Inc.
320 Justin Drive
San Fransisco CA 94112

Dear Christina,

Reservoirs Environmental, Inc. is an analytical laboratory accredited for the analysis of Industrial Hygiene and Environmental matrices by the National Voluntary Laboratory Accreditation Program (NVLAP), Lab Code 101896-0 for Transmission Electron Microscopy (TEM) and Polarized Light Microscopy (PLM) analysis and the American Industrial Hygiene Association (AIHA), Lab ID 101533 - Accreditation Certificate #480 for Phase Contrast Microscopy (PCM) analysis. This laboratory is currently proficient in both Proficiency Testing and PAT programs respectively.

Reservoirs Environmental, Inc. has analyzed the following samples for asbestos content as per your request. The analysis has been completed in general accordance with the appropriate methodology as stated in the attached analysis table. The results have been submitted to your office.

RES 452065-1 is the job number assigned to this study. This report is considered highly confidential and the sole property of the customer. Reservoirs Environmental, Inc. will not discuss any part of this study with personnel other than those of the client. The results described in this report only apply to the samples analyzed. This report must not be used to claim endorsement of products or analytical results by NVLAP or any agency of the U.S. Government. This report shall not be reproduced except in full, without written approval from Reservoirs Environmental, Inc. Samples will be disposed of after sixty days unless longer storage is requested. If you have any questions about this report, please feel free to call 303-964-1986.

Sincerely,


by Andrew Roberts

Jeanne Spencer
President

RESERVOIRS ENVIRONMENTAL INC.

NVLAP Lab Code 101896-0

TABLE: PLM BULK ANALYSIS, PERCENTAGE COMPOSITION BY VOLUME

RES Job Number: **RES 452065-1**
Client: **SCA Environmental, Inc.**
Client Project Number / P.O.: **F13116**
Client Project Description: **1093 South Capitol Ave**
Date Samples Received: **December 18, 2019**
Method: **EPA 600/R-93/116 - Short Report, Bulk**
Turnaround: **Standard 3**
Date Samples Analyzed: **December 23, 2019**

ND=None Detected
TR=Trace, <1% Visual Estimate
Trem/Act=Tremolite/Actinolite

Client Sample Number	LAYER	Physical Description	Sub Part (%)	Asbestos Content: Mineral	Asbestos Content: Visual Estimate (%)	Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
WLSH-21-1	A	White compound w/ white paint	15		**ND**	0	100
	B	Off white compound w/ gray paint	15		**ND**	0	100
	C	Gray/tan drywall	70		**ND**	20	80
WLSH-21-2	A	Gray/yellow paint	6		**ND**	0	100
	B	Off white compound	6	**Chrysotile**	**3**	0	97
	C	White compound w/ white/blue paint	18		**ND**	0	100
	D	Gray/tan drywall	70		**ND**	25	75
WLSH-21-3	A	Gray/yellow paint	5		**ND**	0	100
	B	White compound w/ white/blue paint	15		**ND**	0	100
	C	Off white compound	20	**Chrysotile**	**4**	0	96
	D	Gray/tan drywall	60		**ND**	25	75
CAULK-22-1	A	White caulk w/ white/blue paint	100		**ND**	0	100
CAULK-22-2	A	White caulk w/ white/multi-colored paint	100		**ND**	0	100
CAULK-22-3	A	White caulk w/ white/blue paint	100		**ND**	0	100

TEM Analysis recommended for organically bound material (i.e. floor tile) if PLM results are <1%.

RESERVOIRS ENVIRONMENTAL INC.

NVLAP Lab Code 101896-0

TABLE: PLM BULK ANALYSIS, PERCENTAGE COMPOSITION BY VOLUME

RES Job Number: **RES 452065-1**
Client: **SCA Environmental, Inc.**
Client Project Number / P.O.: **F13116**
Client Project Description: **1093 South Capitol Ave**
Date Samples Received: **December 18, 2019**
Method: **EPA 600/R-93/116 - Short Report, Bulk**
Turnaround: **Standard 3**
Date Samples Analyzed: **December 23, 2019**

ND=None Detected
TR=Trace, <1% Visual Estimate
Trem/Act=Tremolite/Actinolite

Client Sample Number	LAYER	Physical Description	Sub Part (%)	Asbestos Content: Mineral	Asbestos Content: Visual Estimate (%)	Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
FLR-23-1	A	Off white adhesive	15		**ND**	0	100
	B	Gray granular cementitious material	40		**ND**	0	100
	C	White/blue tile	45		**ND**	0	100
FLR-23-2	A	Off white adhesive	15		**ND**	0	100
	B	Gray granular cementitious material	25		**ND**	0	100
	C	White/blue tile	60		**ND**	0	100
FLR-23-3		Sample Not Received.					
CAULK-24-1	A	White caulk	20		**ND**	0	100
	B	White compound	80		**ND**	0	100
CAULK-24-2	A	Tan fibrous material	15		**ND**	95	5
	B	White paint	85		**ND**	0	100
BBMAS-25-1	A	Beige adhesive	100		**ND**	0	100
BBMAS-25-2	A	Beige adhesive	25		**ND**	0	100
	B	Off white cove base	75		**ND**	0	100

TEM Analysis recommended for organically bound material (i.e. floor tile) if PLM results are <1%.

RESERVOIRS ENVIRONMENTAL INC.

NVLAP Lab Code 101896-0

TABLE: PLM BULK ANALYSIS, PERCENTAGE COMPOSITION BY VOLUME

RES Job Number: **RES 452065-1**
Client: **SCA Environmental, Inc.**
Client Project Number / P.O.: **F13116**
Client Project Description: **1093 South Capitol Ave**
Date Samples Received: **December 18, 2019**
Method: **EPA 600/R-93/116 - Short Report, Bulk**
Turnaround: **Standard 3**
Date Samples Analyzed: **December 23, 2019**

ND=None Detected
TR=Trace, <1% Visual Estimate
Trem/Act=Tremolite/Actinolite

Client Sample Number	LAYER	Physical Description	Sub Part (%)	Asbestos Content: Mineral	Asbestos Content: Visual Estimate (%)	Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
WLCER-26-1	A	Tan adhesive w/ green/white paint	7		**ND**	0	100
	B	Tan compound	8	**Chrysotile**	**5**	0	95
	C	White ceramic tile	85		**ND**	0	100
WLCER-26-2	A	Tan compound	10	**Chrysotile**	**5**	0	95
	B	Tan adhesive	15		**ND**	0	100
	C	White ceramic tile	75		**ND**	0	100
WLSH-27-1	A	White tape	4		**ND**	95	5
	B	Off white joint compound	5	**Chrysotile**	**4**	0	96
	C	White/multi-colored paint	6		**ND**	0	100
	D	Off white compound	15	**Chrysotile**	**5**	0	95
	E	Gray/tan drywall	70		**ND**	20	80

TEM Analysis recommended for organically bound material (i.e. floor tile) if PLM results are <1%.

RESERVOIRS ENVIRONMENTAL INC.

NVLAP Lab Code 101896-0

TABLE: PLM BULK ANALYSIS, PERCENTAGE COMPOSITION BY VOLUME

RES Job Number: **RES 452065-1**
Client: **SCA Environmental, Inc.**
Client Project Number / P.O.: **F13116**
Client Project Description: **1093 South Capitol Ave**
Date Samples Received: **December 18, 2019**
Method: **EPA 600/R-93/116 - Short Report, Bulk**
Turnaround: **Standard 3**
Date Samples Analyzed: **December 23, 2019**

ND=None Detected
TR=Trace, <1% Visual Estimate
Trem/Act=Tremolite/Actinolite

Client Sample Number	LAYER	Physical Description	Sub Part (%)	Asbestos Content: Mineral	Asbestos Content: Visual Estimate (%)	Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
WLSH-27-2	A	Green paint	2		**ND**	0	100
	B	White tape	8		**ND**	95	5
	C	White/multi-colored paint w/ white paint	9		**ND**	0	100
	D	Off white joint compound	9	**Chrysotile**	**5**	0	95
	E	Off white compound	12	**Chrysotile**	**5**	0	95
	F	Gray/tan drywall	60		**ND**	30	70
WLSH-27-3	A	White/multi-colored paint	5		**ND**	0	100
	B	White tape	7		**ND**	95	5
	C	Off white joint compound	10	**Chrysotile**	**4**	0	96
	D	Off white compound	13	**Chrysotile**	**4**	0	96
	E	Gray/tan drywall	65		**ND**	25	75

TEM Analysis recommended for organically bound material (i.e. floor tile) if PLM results are <1%.

Analyst / Data QA

Reservoirs Environmental, Inc.

RES Job #: 452065

SUBMITTED BY	INVOICE TO	CONTACT INFORMATION	SERIES
Company: SCA ENVIRONMENTAL, INC.	Company: SCA ENVIRONMENTAL, INC.	Contact: CHRISTINA CODEMO	-1 PLM STANDARD 3
Address: 320 JUSTIN DRIVE	Address: 320 JUSTIN DRIVE	Phone: 4158679540	
		Fax:	
SAN FRANSISCO, CA 94112	SAN FRANSISCO, CA 94112	Cell:	
Project Number and/or P.O. #: F13116		Final Data Deliverable Email Address:	
Project Description/Location: 1093 SOUTH CAPITOL AVE		CCODEMO@SCA-ENVIRO.COM (+ 3 ADDNL. CONTACTS)	

ASBESTOS LABORATORY HOURS: Weekdays: 7am - 7pm & Sat. 8am - 5pm

PLM / PCM / TEM — DTL RUSH PRIORITY STANDARD

CHEMISTRY LABORATORY HOURS: Weekdays: 8am - 5pm

Dust — RUSH PRIORITY STANDARD

Metals — RUSH PRIORITY STANDARD

*PRIOR NOTICE REQUIRED FOR SAME DAY TAT

Organics* — SAME DAY RUSH PRIORITY STANDARD

MICROBIOLOGY LABORATORY HOURS: Weekdays: 8am - 5pm

Viable Analysis** — PRIORITY STANDARD

Medical Device Analysis — RUSH STANDARD

Mold Analysis — RUSH PRIORITY STANDARD

**TAT DEPENDENT ON SPEED OF MICROBIAL GROWTH

****Turnaround times establish a laboratory priority, subject to laboratory volume and are not guaranteed. Additional fees apply for afterhours, weekends and holidays.****

Special Instructions:

VALID MATRIX CODES

Air = A	Bulk = B
Dust = D	Food = F
Paint = P	Soil = S
Surface = SU	Swab = SW
Tape = T	Wipe = W
Drinking Water = DW	
Waste Water = WW	
ASTM E1792 approved wipe media only	

Client Sample ID Number (Sample ID's must be unique)	PLM - Long Report, CARB 435	PLM - Short Report	TEM - AHERA, (+/- or Quantified), Microvac (+/- or Quantified), Wipe (+/- or Quantified), NIOSH 7402, ISO 10312, ISO 13794,Chatfield, Waste Water, Drinking Water, Bulk +/-	PCM - 7400A, 7400B, OSHA	DUST - Total, Respirable	METALS - Analyte(s) Lead Only (7082, 7420, Waste Water, Foodware), Multi Metal (7303, 6020A, 200.8, Waste Water, Foodware), pH (Liquid, Non-Liquid), TCLP, RCRA 8 Scan, Welding Fume Scan, Full Metals Scan	ORGANICS - Methamphetamine, TSS	Viables: Campylobacter, Bacillus, Salmonella (Culturable, 1-2), Listeria, E. coli O157:H7, E.coli/Coliforms - Plated, S. aureus, Yeast & Mold, Areobic Plate Count, Coliforms/E. coli (State Water, Drinking Water, Non-Drinking Water, +/-, Quantification), Lactic Acid, Viable Microbioal Count (wo/ID, w/ID), Enterococcus (+/- or Quantification)	MEDICAL - Bioburden, LAL	MOLD - Spore Trap, Bulk Mold, Particulate Identification	Sample Volume (L) / Area	Matrix Code	Date Collected mm/dd/yy	Laboratory Analysis Instructions
	ASBESTOS				CHEMISTRY			MICROBIOLOGY					
1 WLSH-21-1		X										B	
2 WLSH-21-2		X										B	
3 WLSH-21-3		X										B	
4 CAULK-22-1		X										B	PROG(A)
5 CAULK-22-2		X										B	PROG(A)
6 CAULK-22-3		X										B	PROG(A)
7 FLR-23-1		X										B	PROG(B)
8 FLR-23-2		X										B	PROG(B)
9 FLR-23-3		X										B	NR, PROG(B)
10 CAULK-24-1		X										B	PROG(C)
11 CAULK-24-2		X										B	PROG(C)
12 BBMAS-25-1		X										B	PROG(D)
13 BBMAS-25-2		X										B	PROG(D)

REI will analyze incoming samples based on information received and will not be responsible for errors or omissions in calculations resulting from the inaccuracy of original data. By signing, client/company representative agrees that submission of the following samples for requested analysis as indicated on this Chain of Custody shall consitute an analytical services agreement with payment terms of NET 30 days. Failure to comply with payment terms may result in a 1.5% monthly interest surcharge.

Relinquished By:	Date/Time:	Sample Condition: ACCEPTABLE - INTACT
Received By:	Date/Time: 12/18/2019 12:19:47	Carrier: HAND

Reservoirs Environmental, Inc.

Res Job#: **452065**

Submitted By: **SCA ENVIRONMENTAL, INC.**

Client Sample ID Number (Sample ID's must be unique)	REQUESTED ANALYSIS: ASBESTOS — PLM - Long Report, CARB 435 (Short Report)	ASBESTOS — TEM - AHERA, (+/- or Quantified), Microvac (+/- or Quantified), Wipe (+/- or Quantified), NIOSH 7402, ISO 10312, ISO 13794,Chatfield, Waste Water, Drinking Water, Bulk +/-	ASBESTOS — PCM - 7400A, 7400B, OSHA	CHEMISTRY — DUST - Total, Respirable	CHEMISTRY — METALS - Analyte(s) Lead Only (7082, 7420, Waste Water, Foodware), Multi Metal (7303, 6020A, 200.8, Waste Water, Foodware), pH (Liquid, Non-Liquid), TCLP, RCRA 8 Scan, Welding Fume Scan, Full Metals Scan	CHEMISTRY — ORGANICS - Methamphetamine, TSS	MICROBIOLOGY — Viables: Campylobacter, Bacillus, Salmonella (Culturable, 1-2), Listeria, E.coli O157:H7, E.coli/Coiliforms - Plated, S. aureus, Yeast & Mold, Areobic Plate Count, Coliforms/E.coli (State Water, Drinking Water, Non-Drinking Water, +/-, Quantification), Lactic Acid, Viable Microbioal Count (wo/ID, w/ID), Enterococcus (+/- or Quantification)	MICROBIOLOGY — MEDICAL - Bioburden, LAL	MICROBIOLOGY — MOLD - Spore Trap, Bulk Mold, Particulate Identification	Sample Volume (L) / Area	Matrix Code	Date Collected mm/dd/yy	Laboratory Analysis Instructions
14 **WLCER-26-1**	X										B	PROG(E)
15 **WLCER-26-2**	X										B	PROG(E)
16 **WLSH-27-1**	X										B	
17 **WLSH-27-2**	X										B	
18 **WLSH-27-3**	X										B	

VALID MATRIX CODES

Air = A	Bulk = B
Dust = D	Food = F
Paint = P	Soil = S
Surface = SU	Swab = SW
Tape = T	Wipe = W
Drinking Water = DW	
Waste Water = WW	
ASTM E1792 approved wipe media only	

CHAIN OF CUSTODY FORM

Bill to: SCA Environmental

Email report/COC/Invoice to:
ccodemo@sca-enviro.com (PROJ MGR)
tkalman@sca-enviro.com
lswanson@scaehs.com (TECH)
~~Questions - call 415 283 5882~~
labreports99@gmail.com (ACCT)

EMAIL HEADING:	(Project #) -	(Project Manager Initials) -	(Site Name/Address) -	(Date MMDD)
	F13116	TK	1093 South Capitol AVE	12/9

LAB: BAREI

COURIER: UPS

LAB REP NOTIFIED:		Notification DATE/TIME:	
COURIER (UPS, SPC T....)		LAST 5 OF TRACKING NUMBER:	39429
EST ARRIVAL DATE:		EST. ARRIVAL TIME:	

INSTRUCTIONS TO LAB:
Questions call
415 283 5882

Method Reference: 7400 PCM | AHERA TEM (≤0.005 s/cc AnaSen) | CARB-AHERA TEM 0.001 s/cc Ana Sensi

PLM (asbestos) | Flame AA (Lead) | ICP (Lead)

Sample Media: 25 37 mm | 0.45 0.8 micron | MCEF | (Bulk) | Water | Wipe

RESULTS DUE: 3 ~~DAY~~ DAY TAT AM / PM — 12/18 10:00 AM

CHAIN OF CUSTODY DATA:
Sending Info: 17 samples submitted by LS on ~~12/9~~ at ~~4:00pm~~
Received by Lab: _____ samples received by _____ on _____ at _____
Received by Analyst: _____ samples received by _____ on _____ at _____

SAMPLE ID	LITERS	Description	Ins/Blanks/Outs
WLSH-21-1,2,3			
CAULK-22-1,2,3			
FLR-23-1,2,3			
CAULK-24-1,2			
BBMAS-25-1,2			
WLCER-26-1,2			
WLSH-27-1,2,3			
	0 LITERS		BLANK
	0 LITERS		BLANK
	0 LITERS		BLANK

Supplies /Equipment	Qty
Hi-Vol Pumps (3040)	
Lo-Vol Pumps (3020)	
TEM / Pb cassettes (3520)	
PCM cassettes (3500)	
Bulk sampling supply (3710)	17
Lead Wipes (3266)	
Legionella Bottles (3742)	
Water Bottles (Pb/other) (3743)	
Mold Cassettes (3522)	
Smoke Tubes (3540)	
Matched Weight Cassette (3521)	

INSTRUCTIONS TO LAB (delete items not applicable AND circle items applicable):

1. Pickup requested:
   Contact: _____
   Time of Call: _____
2. **Call contact to acknowledge receipt of samples.**
3. **Analyze samples by PCM only.**
4. Analyze inside samples by PCM first; if any sample >0.01 f/cc, contact project manager.
5. **If all samples are <0.01 f/cc, proceed with items 6, 7 or 8, as noted.**
6. Analyze inside samples only; stop if Avg >70 str/mm^2, contact PM before analyzing outsides or blanks.
7. **Analyze all samples, including outside samples and blanks.**
8. **Do NOT analyze outside or blank samples.**
9. **Analyze by TEM only the inside air sample with the highest PCM result.**
10. Serial analysis; stop at first positive (>1%); first trace (<0.1%);except sheetrock and plaster samples.
11. **Analyze all bulk samples, unless otherwise indicated.**
12. **PCB: <0.05mg/kg detection limit required. Authorized to perform cleanup to meet the detection limit.**
13. _____

Report Number:

Invoice Number:

ver 2015

Attachment B
Lead Laboratory Report

Reservoirs Environmental, Inc.

November 12, 2019

Subcontractor Number:
Laboratory Report: **RES 448209-1**
Project #/P.O. #: **F13116**
Project Description: **SJ Capitol Ave.**

Tucker Kalman
SCA Environmental, Inc.
320 Justin Drive
San Fransisco CA 94112

Dear Tucker,

Reservoirs Environmental, Inc. is an analytical laboratory accredited for the analysis of Industrial Hygiene and Environmental matrices by the American Industrial Hygiene Association, Lab ID 101533 - Accreditation Certificate #480. The laboratory is currently proficient in both IHPAT & ELPAT programs respectively.

Reservoirs has analyzed the following sample(s) using Atomic Absorption Spectroscopy (AAS) / Atomic Emission Spectroscopy - Mass Spectrometry (ICP-MS) per your request. Reported sample results were not blank corrected. The analysis has been completed in general accordance with the appropriate methodology as stated in the analysis table. Results have been sent to your office.

RES 448209-1 is the job number assigned to this study. This report is considered highly confidential and the sole property of the customer. Reservoirs Environmental, Inc. will not discuss any part of this study with personnel other than those of the client. The results described in this report only apply to the samples analyzed. This report must not be used to claim endorsement of products or analytical results by NVLAP or any agency of the U.S. Government. This report shall not be reproduced except in full, without written approval from Reservoirs Environmental, Inc. Samples will be disposed of after sixty days unless longer storage is requested. If you have any questions about this report, please feel free to call 303-964-1986.

Sincerely,

Jeanne Spencer
by Dustin Kramer

Jeanne Spencer
President

RESERVOIRS ENVIRONMENTAL, INC

NVLAP Lab Code 101896-0
AIHA Certificate of Accreditation #480 LAB ID 101533

TABLE: I ANALYSIS: LEAD IN BULK

RES Job Number:	**RES 448209-1**
Client:	**SCA Environmental, Inc.**
Client Project/P.O.:	**F13116**
Client Project Description:	**SJ Capitol Ave.**
Date Samples Received:	**October 28, 2019**
Analysis Type:	**REI CHEMISTRY SOP / USEPA SW846 3050B/6020A-M**
Turnaround:	**Standard**
Date Samples Analyzed:	**November 12, 2019**

NA = Not Analyzed
NR = Not Received
ND = None Detected
TR = Trace; <1 % Visual Estimate
Trem-Act = Tremolite-Actinolite
BAS = Below Analytical Sensitivity
BRL = Below Reporting Limit
CBR = Cannot Be Read

Client ID Number	Reporting Limit (mg/kg)	LEAD CONCENTRATION (mg/kg)
OW-1	0.42	56.1
OW-2	0.87	6.2
WLCER-17	0.59	59.6
WH-3	0.68	4.7

* Unless otherwise noted all quality control samples performed within specifications established by the laboratory

Dustin Kramer
Analyst/Data QA

RES 448209

Due Date:_____
Due Time:_____

REI LAB Reservoirs Environmental, Inc.

5801 Logan St. Denver, CO 80216 • Ph: 303 964-1986 • Fax 303-477-4275 • Toll Free :866 RESI-ENV

Job #_____
Page 1 of _____

After Hours Cell Phone: 720-339-9228

SUBMITTED BY:		INVOICE TO: (IF DIFFERENT)		CONTACT INFORMATION:	
Company:	SCA Environmental, Inc.	Company:		Contact: T. Kalman	Contact: C. Codeno
Address:	650 Delancey St. Ste. 222	Address:		Phone:	Phone:
	San Fransisco CA 94107			Fax:	Fax:
				Cell/pager:	Cell/pager:
Project Number and/or P.O. #:	F13116			Final Data Deliverable Email Address:	
Project Description/Location:	33 Capitol Ave.				

ASBESTOS LABORATORY HOURS: Weekdays: 7am - 7pm & Sat. 8am - 5pm

PLM / PCM / TEM ____ RUSH (Same Day) ___ PRIORITY (Next Day) ___STANDARD (3-5 Day)
(Rush PCM = 2hr, TEM = 6hr.)

CHEMISTRY LABORATORY HOURS: Weekdays: 8am - 5pm

Metal(s) / Dust** ___ RUSH ___ 24 hr. X 3-5 Day
RCRA 8 / Metals & Welding Fume Scan / TCLP** __RUSH (3 Day)__5 Day __10 Day
Organics ___ 24 hr. ___ 3 day ___5 Day
****Prior notification is required for RUSH turnarounds.****

MICROBIOLOGY LABORATORY HOURS: Weekdays: 9am - 6pm

E.coli and/or Coliforms* ___ 24-48 Hour **Other:** _____
Pathogens* ___ 24-48 Hour
Microbial Growth* ___ 5-10 Day
Legionella ___ 10 Day
Mold ___ RUSH ___24 Hr ___48 Hr ___3 Day ___5 Day
TAT dependent on speed of microbial growth.

****Turnaround times establish a laboratory priority, subject to laboratory volume and are not guaranteed. Additional fees apply for afterhours, weekends and holidays.****

Special Instructions:

REQUESTED ANALYSIS

Client sample ID number (Sample ID's must be unique)	PLM - Short report, Point Count, Long report, Qualitative	TEM - AHERA, Level II, 7402, ISO, +/- (Air, Bulk or Dust), Quant, Semi-Quant, Micro-vac, ISO-Indirect Preps	PCM - 7400A, 7400B, OSHA	DUST - Total, Respirable	METALS - Analyte(s) ICP Lead RCRA 8, TCLP, Welding Fume, Metals Scan, pH	ORGANICS - METH, TSS	MICROBIOLOGY: Pathogens: Aerobic Plate Count, Salmonella, E.coli O157:H7, Listeria, S.aureus, Camphlobacter +/- or Quantification	MICROBIOLOGY: E.coli and/or Coliforms: +/- or Quantification State Water (Please Circle One) Yes / No	MICROBIOLOGY: Microbial Growth: Aerobic Plate Count ID, Y & M or Bacteria, Fungal, +/- or Quantification	MICROBIOLOGY: Legionella: +/- or Quantification	MICROBIOLOGY: Other: Bioburden, LAL or Environmental	MICROBIOLOGY: Mold: Spore Trap or Bulk: +/-, Identification, Quantification, Viable or Non-Viable	SAMPLER'S INITIALS OR OTHER NOTES:	Sample Volume (L) / Area	Matrix Code	# Containers	Date Collected mm/dd/yy	Time Collected hh/mm a/p	EM Number (Laboratory Use Only)
1															B			
2	(SEE ATTACHED CLIENT COC)																	
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		

VALID MATRIX CODES

Air = A	Bulk = B
Dust = D	Paint = P
Soil = S	Wipe = W
Swab = SW	F = Food
Drinking Water = DW	Waste Water = WW
O = Other	

****ASTM E1792 approved wipe media only****

LAB NOTES:

Number of samples received: _____ (Additional samples shall be listed on attached long form.)

NOTE: REI will analyze incoming samples based upon information received and will not be responsible for errors or omissions in calculations resulting from the inaccuracy of original data. By signing client/company representative agrees that submission of the following samples for requested analysis as indicated on this Chain of Custody shall constitute an analytical services agreement with payment terms of NET 30 days, failure to comply with payment terms may result in a 1.5% monthly interest surcharge.

Relinquished By: Date/Time:

Laboratory Use Only
Received By: Date/Time: 10/28/19 ~~1040~~ 1005 Carrier: Hand / FedEx / (UPS) / USPS / Drop Box / Courier

Sample Condition: On Ice Yes / No | Sealed Yes / No | Intact (Yes) / No
Temp. (F°) _____

Data Entry QA:	Contact	Phone	Email	Fax	Date	Time	Initials	Contact	Phone	Email	Fax	Date	Time	Initials
	Contact	Phone	Email	Fax	Date	Time	Initials	Contact	Phone	Email	Fax	Date	Time	Initials

448209

CHAIN OF CUSTODY FORM

Bill to: SCA Environmental

Email report/COC/Invoice to:
Halman@sca-enviro.com (~~PROJ MGR~~)
ccodemo@sca-enviro.com (~~TECH~~)
labreports99@gmail.com (ACCT)

EMAIL HEADING: (Project #) - (Project Manager Initials) - (Site Name/Address) - (Date MMDD)

F13116 ~~TB~~ CC 50 Capitol Ave 10/25

LAB REI

COURIER UPS

LAB REP NOTIFIED: — Notification DATE/TIME: —

COURIER (UPS, SPC T....) — LAST 5 OF TRACKING NUMBER: —

EST ARRIVAL DATE: — EST. ARRIVAL TIME: —

INSTRUCTIONS TO LAB:

Method Reference 7400 PCM PLM (asbestos) | AHERA TEM (≤0.005 s/cc AnaSen) Flame AA (Lead) | CARB-AHERA TEM 0.001 s/cc Ana Sensit ICP (Lead)

Sample Media 25 37 mm | 0.45 0.8 micron | MCEF (Bulk) Water Wipe

RESULTS DUE: 3-5 Day ~~AM / PM~~

CHAIN OF CUSTODY DATA:

Sending Info: 4 samples submitted by JH on 10/25 at ____

Received by Lab: ____ samples received by ____ on ____ at ____

Received by Analyst: ____ samples received by ____ on ____ at ____

SAMPLE ID	~~LITERS?~~	Description	Ins/Blanks/Outs
OW-1			
OW-2			
NLCER-17			
NH-3			
	0 LITERS		BLANK
	0 LITERS		BLANK
	0 LITERS		BLANK

Supplies /Equipment	Qty
Hi-Vol Pumps (3040)	
Lo-Vol Pumps (3020)	
TEM / Pb cassettes (3520)	
PCM cassettes (3500)	
Bulk sampling supply (3710)	4
Lead Wipes (3266)	
Legionella Bottles (3742)	
Water Bottles (Pb/other) (3743)	
Mold Cassettes (3522)	
Smoke Tubes (3540)	
Matched Weight Cassette (3521)	

INSTRUCTIONS TO LAB (delete items not applicable AND circle items applicable):

1. Pickup requested:
   Contact: _____
   Time of Call: _____
2. **Call contact to acknowledge receipt of samples.**
3. **Analyze samples by PCM only.**
4. Analyze inside samples by PCM first; if any sample >0.01 f/cc, contact project manager.
5. **If all samples are <0.01 f/cc, proceed with items 6, 7 or 8, as noted.**
6. Analyze inside samples only; stop if Avg >70 str/mm^2, contact PM before analyzing outsides or blanks.
7. **Analyze all samples, including outside samples and blanks.**
8. **Do NOT analyze outside or blank samples.**
9. **Analyze by TEM only the inside air sample with the highest PCM result.**
10. Serial analysis; stop at first positive (>1%); first trace (<0.1%);except sheetrock and plaster samples.
11. **Analyze all bulk samples, unless otherwise indicated.**
12. **PCB: <0.05mg/kg detection limit required. Authorized to perform cleanup to meet the detection limit.**
13. _____

Report Number:

Invoice Number:

ver 2015

Reservoirs Environmental, Inc.

December 23, 2019

Subcontractor Number:
Laboratory Report: **RES 452067-1**
Project #/P.O. #: **F13116**
Project Description: **1093 South Capitol Ave.**

Christina Codemo
SCA Environmental, Inc.
320 Justin Drive
San Francisco CA 94112

Dear Christina,

Reservoirs Environmental, Inc. is an analytical laboratory accredited for the analysis of Industrial Hygiene and Environmental matrices by the American Industrial Hygiene Association, Lab ID 101533 - Accreditation Certificate #480. The laboratory is currently proficient in both IHPAT & ELPAT programs respectively.

Reservoirs has analyzed the following sample(s) using Atomic Absorption Spectroscopy (AAS) / Atomic Emission Spectroscopy - Mass Spectrometry (ICP-MS) per your request. Reported sample results were not blank corrected. The analysis has been completed in general accordance with the appropriate methodology as stated in the analysis table. Results have been sent to your office.

RES 452067-1 is the job number assigned to this study. This report is considered highly confidential and the sole property of the customer. Reservoirs Environmental, Inc. will not discuss any part of this study with personnel other than those of the client. The results described in this report only apply to the samples analyzed. This report must not be used to claim endorsement of products or analytical results by NVLAP or any agency of the U.S. Government. This report shall not be reproduced except in full, without written approval from Reservoirs Environmental, Inc. Samples will be disposed of after sixty days unless longer storage is requested. If you have any questions about this report, please feel free to call 303-964-1986.

Sincerely,

Robin S Klover
by Adam Kelly

Robin Klover
Vice President

RESERVOIRS ENVIRONMENTAL, INC

NVLAP Lab Code 101896-0
AIHA Certificate of Accreditation #480 LAB ID 101533

TABLE: I ANALYSIS: LEAD IN BULK

RES Job Number:	**RES 452067-1**
Client:	**SCA Environmental, Inc.**
Client Project/P.O.:	**F13116**
Client Project Description:	**1093 South Capitol Ave.**
Date Samples Received:	**December 18, 2019**
Analysis Type:	**REI CHEMISTRY SOP / USEPA SW846 3050B/6020A-M**
Turnaround:	**Standard 3**
Date Samples Analyzed:	**December 23, 2019**

NA = Not Analyzed
NR = Not Received
ND = None Detected
TR = Trace; <1 % Visual Estimate
Trem-Act = Tremolite-Actinolite
BAS = Below Analytical Sensitivity
BRL = Below Reporting Limit
CBR = Cannot Be Read

Client ID Number	Reporting Limit (mg/g)	LEAD CONCENTRATION (mg/g)
OW-7	0.00052	0.00056
WLCER-77	0.00067	0.040

* Unless otherwise noted all quality control samples performed within specifications established by the laboratory

Adam Kelly
Analyst/Data QA

Reservoirs Environmental, Inc.

RES Job #: 452067

SUBMITTED BY		INVOICE TO		CONTACT INFORMATION		SERIES
Company:	SCA ENVIRONMENTAL, INC.	Company:	SCA ENVIRONMENTAL, INC.	Contact:	CHRISTINA CODEMO	-1 CHEM STANDARD 3
Address:	320 JUSTIN DRIVE	Address:	320 JUSTIN DRIVE	Phone:	4158679540	
				Fax:		
	SAN FRANSISCO, CA 94112		SAN FRANSISCO, CA 94112	Cell:		
Project Number and/or P.O. #:	F13116			Final Data Deliverable Email Address:		
Project Description/Location:	1093 SOUTH CAPITOL AVE.			CCODEMO@SCA-ENVIRO.COM (+ 3 ADDNL. CONTACTS)		

ASBESTOS LABORATORY HOURS: Weekdays: 7am - 7pm & Sat. 8am - 5pm

PLM / PCM / TEM — DTL RUSH PRIORITY STANDARD

CHEMISTRY LABORATORY HOURS: Weekdays: 8am - 5pm

Dust — RUSH PRIORITY STANDARD

Metals — RUSH PRIORITY STANDARD *PRIOR NOTICE REQUIRED FOR SAME DAY TAT

Organics* — SAME DAY RUSH PRIORITY STANDARD

MICROBIOLOGY LABORATORY HOURS: Weekdays: 8am - 5pm

Viable Analysis** — PRIORITY STANDARD **TAT DEPENDENT ON SPEED OF MICROBIAL GROWTH

Medical Device Analysis — RUSH STANDARD

Mold Analysis — RUSH PRIORITY STANDARD

****Turnaround times establish a laboratory priority, subject to laboratory volume and are not guaranteed. Additional fees apply for afterhours, weekends and holidays.****

Special Instructions:

REQUESTED ANALYSIS

Client Sample ID Number (Sample ID's must be unique)	PLM - Short Report, Long Report, CARB 435	TEM - AHERA, (+/- or Quantified), Microvac (+/- or Quantified), Wipe (+/- or Quantified), NIOSH 7402, ISO 10312, ISO 13794,Chatfield, Waste Water, Drinking Water, Bulk +/-	PCM - 7400A, 7400B, OSHA	DUST - Total, Respirable	METALS - Analyte(s)	ORGANICS - Methamphetamine, TSS	Viables: Campylobacter, Bacillus, Salmonella (Culturable, 1-2), Listeria, E.coli O157:H7, E.coli/Coliforms - Plated, S. aureus, Yeast & Mold, Areobic Plate Count, Coliforms/E.coli (State Water, Drinking Water, Non-Drinking Water, +/- Quantification), Lactic Acid, Viable Microbioal Count (wo/ID, w/ID), Enterococcus (+/- or Quantification)	MEDICAL - Bioburden, LAL	MOLD - Spore Trap, Bulk Mold, Particulate Identification	Sample Volume (L) / Area	Matrix Code	Date Collected mm/dd/yy	Laboratory Analysis Instructions
	ASBESTOS			CHEMISTRY			MICROBIOLOGY					
1 OW-7					X						B	
2 WLCER-77					X						B	

VALID MATRIX CODES

Air = A	Bulk = B
Dust = D	Food = F
Paint = P	Soil = S
Surface = SU	Swab = SW
Tape = T	Wipe = W
Drinking Water = DW	
Waste Water = WW	
ASTM E1792 approved wipe media only	

LAB NOTES

REI will analyze incoming samples based on information received and will not be responsible for errors or omissions in calculations resulting from the inaccuracy of original data. By signing, client/company representative agrees that submission of the following samples for requested analysis as indicated on this Chain of Custody shall consitute an analytical services agreement with payment terms of NET 30 days. Failure to comply with payment terms may result in a 1.5% monthly interest surcharge.

Relinquished By:	Date/Time:	Sample Condition: ACCEPTABLE - INTACT
Received By:	Date/Time: 12/18/2019 12:20:58	Carrier: UPS

452067

CHAIN OF CUSTODY FORM

Bill to: SCA Environmental

Email report/COC/Invoice to:
ccodemo@sca-enviro.com (PROJ MGR)
tkalman@sca-enviro.com
Lswanson@scaehs.com (TECH)
labreports99@gmail.com (ACCT)

EMAIL HEADING: (Project #) - (Project Manager Initials) - (Site Name/Address) - (Date MMDD)

F13116 | TK | 1093 South Capitol Ave | 12/9

LAB REI

COURIER UPS

LAB REP NOTIFIED: | Notification DATE/TIME:

COURIER (UPS, SPC T....) | LAST 5 OF TRACKING NUMBER: 39429

EST ARRIVAL DATE: | EST. ARRIVAL TIME:

INSTRUCTIONS TO LAB:
Questions call
415 283 5882

Method Reference: 7400 PCM | AHERA TEM (≤0.005 s/cc AnaSen) | CARB-AHERA TEM 0.001 s/cc Ana Sensi

PLM (asbestos) | Flame AA (Lead) | (ICP (Lead))

Sample Media: 25 37 mm | 0.45 0.8 micron | MCEF (Bulk) Water Wipe

RESULTS DUE: 3 ~~5~~ DAY TAT AM / PM 12/18 10:00AM

CHAIN OF CUSTODY DATA:

Sending Info: 2 samples submitted by LS on ~~12/9~~ at ~~4:00~~

Received by Lab: _____ samples received by _____ on _____ at _____

Received by Analyst: _____ samples received by _____ on _____ at _____

SAMPLE ID	LITERS	Description	Ins/Blanks/Outs
OW-7			
WLCER-77			
	0 LITERS		BLANK
	0 LITERS		BLANK
	0 LITERS		BLANK

Supplies /Equipment	Qty
Hi-Vol Pumps (3040)	
Lo-Vol Pumps (3020)	
TEM / Pb cassettes (3520)	
PCM cassettes (3500)	
Bulk sampling supply (3710)	2
Lead Wipes (3266)	
Legionella Bottles (3742)	
Water Bottles (Pb/other) (3743)	
Mold Cassettes (3522)	
Smoke Tubes (3540)	
Matched Weight Cassette (3521)	

INSTRUCTIONS TO LAB (delete items not applicable AND circle items applicable):

1. Pickup requested:
   Contact: _____
   Time of Call: _____
2. **Call contact to acknowledge receipt of samples.**
3. **Analyze samples by PCM only.**
4. Analyze inside samples by PCM first; if any sample >0.01 f/cc, contact project manager.
5. **If all samples are <0.01 f/cc, proceed with items 6, 7 or 8, as noted.**
6. Analyze inside samples only; stop if Avg >70 str/mm^2, contact PM before analyzing outsides or blanks.
7. **Analyze all samples, including outside samples and blanks.**
8. **Do NOT analyze outside or blank samples.**
9. **Analyze by TEM only the inside air sample with the highest PCM result.**
10. Serial analysis; stop at first positive (>1%); first trace (<0.1%);except sheetrock and plaster samples.
11. **Analyze all bulk samples, unless otherwise indicated.**
12. **PCB: <0.05mg/kg detection limit required. Authorized to perform cleanup to meet the detection limit.**
13. _____

Report Number:

Invoice Number:

ver 2015

Attachment C

PCB Laboratory Results

McCampbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 1910C91

Report Created for: SCA Environmental, Inc.

320 Justin Drive
San Francisco, CA 94112

Project Contact: Christina Codemo
Project P.O.:
Project: F13116; 1091 Capitol

Project Received: 10/28/2019

Analytical Report reviewed & approved for release on 11/05/2019 by:

Christine Askari
Project Manager

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Glossary of Terms & Qualifier Definitions

Client: SCA Environmental, Inc.
Project: F13116; 1091 Capitol
WorkOrder: 1910C91

Glossary Abbreviation

%D	Serial Dilution Percent Difference
95% Interval	95% Confident Interval
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)
DLT	Dilution Test (Serial Dilution)
DUP	Duplicate
EDL	Estimated Detection Limit
ERS	External reference sample. Second source calibration verification.
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
LQL	Lowest Quantitation Level
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
N/A	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
TZA	TimeZone Net Adjustment for sample collected outside of MAI's UTC.
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)

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Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Glossary of Terms & Qualifier Definitions

Client: SCA Environmental, Inc.
Project: F13116; 1091 Capitol
WorkOrder: 1910C91

Analytical Qualifiers

a4	Reporting limits raised due to the sample's matrix prohibiting a full volume extraction.
h4	Sulfuric acid permanganate (EPA 3665) cleanup

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	SCA Environmental, Inc.	**WorkOrder:**	1910C91
Date Received:	10/28/19 15:25	**Extraction Method:**	SW3550B/3630C
Date Prepared:	10/28/19	**Analytical Method:**	SW8082
Project:	F13116; 1091 Capitol	**Unit:**	mg/kg

Polychlorinated Biphenyls (PCBs) Aroclors w/ Column Style Clean-up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MASTIC-8	**1910C91-001A**	**Solid**	**10/25/2019 15:00**	**GC23 10291943.d**	**187849**

Analytes	Result	MDL	RL	DF	Date Analyzed
Aroclor1016	ND	0.051	0.50	1	10/30/2019 08:45
Aroclor1221	ND	0.11	0.50	1	10/30/2019 08:45
Aroclor1232	ND	0.063	0.50	1	10/30/2019 08:45
Aroclor1242	ND	0.067	0.50	1	10/30/2019 08:45
Aroclor1248	ND	0.040	0.50	1	10/30/2019 08:45
Aroclor1254	ND	0.068	0.50	1	10/30/2019 08:45
Aroclor1260	ND	0.061	0.50	1	10/30/2019 08:45
PCBs, total	ND	NA	0.50	1	10/30/2019 08:45

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	85	70-130	10/30/2019 08:45

Analyst(s): LT Analytical Comments: h4,a4

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Quality Control Report

Client:	SCA Environmental, Inc.	**WorkOrder:**	1910C91
Date Prepared:	10/28/19	**BatchID:**	187849
Date Analyzed:	11/1/19 - 11/4/19	**Extraction Method:**	SW3550B/3630C
Instrument:	GC20	**Analytical Method:**	SW8082
Matrix:	Soil	**Unit:**	mg/kg
Project:	F13116; 1091 Capitol	**Sample ID:**	MB/LCS/LCSD-187849

QC Summary Report for SW8082 w/ Column Clean-up

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Aroclor1016	ND	0.0051	0.050	-	-	-
Aroclor1221	ND	0.011	0.050	-	-	-
Aroclor1232	ND	0.0063	0.050	-	-	-
Aroclor1242	ND	0.0067	0.050	-	-	-
Aroclor1248	ND	0.0040	0.050	-	-	-
Aroclor1254	ND	0.0068	0.050	-	-	-
Aroclor1260	ND	0.0061	0.050	-	-	-
Surrogate Recovery						
Decachlorobiphenyl	0.053			0.05	105	57-145

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Aroclor1016	0.17	0.17	0.15	111	112	61-124	0.432	20
Aroclor1260	0.14	0.15	0.15	97	98	53-172	1.34	20
Surrogate Recovery								
Decachlorobiphenyl	0.047	0.045	0.050	93	90	57-145	3.70	20

McCampbell Analytical, Inc.
1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1910C91 **ClientCode: SCAF**

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☒ EQuIS ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag
☒ Detection Summary ☒ Dry-Weight

Report to:
Christina Codemo
SCA Environmental, Inc.
320 Justin Drive
San Francisco, CA 94112
(415) 867-9540 FAX: (415) 703-0701

Email: ccodemo@sca-enviro.com; labreports99@
cc/3rd Party:
PO:
Project: F13116; 1091 Capitol

Bill to:
Accounts Payable
SCA Environmental, Inc.
320 Justin Drive
San Francisco, CA 94112

Requested TAT: **5 days;**

Date Received: **10/28/2019**
Date Logged: **10/28/2019**

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
1910C91-001	MASTIC-8	Solid	10/25/2019 15:00	☐	A	A										

Test Legend:

1	8082_PCB_SG_Solid [J]	2	PRDisposal Fee	3		4	
5		6		7		8	
9		10		11		12	

Project Manager: Jennifer Lagerbom

Prepared by: Nancy Palacios

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
Hazardous samples will be returned to client or disposed of at client expense.

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

WORK ORDER SUMMARY

Client Name: SCA ENVIRONMENTAL, INC. **Project:** F13116; 1091 Capitol **Work Order:** 1910C91

Client Contact: Christina Codemo **QC Level:** LEVEL 2

Contact's Email: ccodemo@sca-enviro.com; labreports99@gmail.com **Comments:** **Date Logged:** 10/28/2019

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☐ EQuIS ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1910C91-001A	MASTIC-8	Solid	SW8082 (PCBs w/ Column Style Clean-up)	1	Small White Plastic Container	☐	10/25/2019 15:00	5 days		☐	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

McCampbell Analytical, Inc.

1534 Willow Pass Rd. / Pittsburg, Ca. 94565-1701
www.mccampbell.com / main@mccampbell.com
Telephone: (877) 252-9262 / Fax: (925) 252-9269

CHAIN OF CUSTODY RECORD

TURN AROUND TIME: RUSH ☐ 24 HR ☐ 48 HR ☐ 72 HR ☐ 5 DAY ☒ 10 DAY ☐

GeoTracker EDF ☐ PDF ☒ EDD ☐ Write On (DW) ☐ EQuIS ☐

Effluent Sample Requiring "J" flag ☐ UST Clean Up Fund Project ☐; Claim #_____

Report To: Christina Leclerc	**Bill To:** SCA
Company: SCA	✓cleclerc@sca-enviro.com
	✓lapreports99@gmail.com
	✓E-Mail: HKalman@Sca-enviro.com
Tele: (415) 723-0962	**Fax:** ( )
Project #: F13116	**Project Name:** 1091 Capitol
Project Location: 1091 Capitol	**Purchase Order#**
Sampler Signature:	

Analysis Request

SAMPLE ID	Location/ Field Point Name	SAMPLING Date	SAMPLING Time	# Containers	MATRIX: Ground Water	Waste Water	Drinking Water	Sea \ Water	Soil	Air	Sludge	Other	METHOD PRESERVED: HCL	HNO_3	Other	BTEX & TPH as Gas (8021/ 8015 or 8260) / MTBE	TPH as Diesel (8015)	Total Petroleum Oil & Grease (1664 / 5520 E/B&F)	Total Petroleum Hydrocarbons (418.1)	MTBE / BTEX ONLY (EPA 8260/ 8021)	EPA 505/ 608 / 8081 (Cl Pesticides)	EPA 608 / 8082 PCB's ; Aroclors / Congeners	EPA 507 / 8141 (NP Pesticides)	EPA 515 / 8151 (Acidic Cl Herbicides)	EPA 524.2 / 624 / 8260 (VOCs)	EPA 525.2 / 625 / 8270 (SVOCs)	EPA 8270 SIM / 8310 (PAHs / PNAs)	CAM 17 Metals (200.7 / 200.8 / 6010 / 6020)	LUFT 5 Metals (200.7 / 200.8 / 6010 / 6020)	Metals (200.7 / 200.8 / 6010 / 6020)	Filter sample for DISSOLVED metals analysis	X PCBs 8082 + $GC
MW-8		10/25	3P	1								X																					

**MAI clients MUST disclose any dangerous chemicals known to be present in their submitted samples in concentrations that may cause immediate harm or serious future health endangerment as a result of brief, gloved, open air, sample handling by MAI staff. Non-disclosure incurs an immediate $250 surcharge and the client is subject to full legal liability for harm suffered. Thank you for your understanding and for allowing us to work safely.

Relinquished By:	Date:	Time:	Received By:
TCL	10/28	0600	LAP 10/28/14 1200
LAP	10/28/14	1525	Nancy Pallicos

ICE/t°_____
GOOD CONDITION_____
HEAD SPACE ABSENT_____
DECHLORINATED IN LAB_____
APPROPRIATE CONTAINERS_____
PRESERVED IN LAB_____

VOAS O&G METALS OTHER HAZARDOUS:
PRESERVATION_____ pH<2_____

COMMENTS:
PCB
<1 PPM detection limit required.
Authorized to perform cleanup to meet the detection limit

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Sample Receipt Checklist

Client Name:	**SCA Environmental, Inc.**	Date and Time Received	**10/28/2019 15:25**
Project:	**F13116; 1091 Capitol**	Date Logged:	**10/28/2019**
		Received by:	Nancy Palacios
WorkOrder №:	**1910C91** Matrix: Solid	Logged by:	Nancy Palacios
Carrier:	Lorenzo Perez (MAI Courier)		

Chain of Custody (COC) Information

Chain of custody present?	Yes	☑	No	☐	
Chain of custody signed when relinquished and received?	Yes	☑	No	☐	
Chain of custody agrees with sample labels?	Yes	☑	No	☐	
Sample IDs noted by Client on COC?	Yes	☑	No	☐	
Date and Time of collection noted by Client on COC?	Yes	☑	No	☐	
Sampler's name noted on COC?	Yes	☑	No	☐	
COC agrees with Quote?	Yes	☐	No	☐	NA ☑

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes	☐	No	☐	NA ☑
Shipping container/cooler in good condition?	Yes	☑	No	☐	
Samples in proper containers/bottles?	Yes	☑	No	☐	
Sample containers intact?	Yes	☑	No	☐	
Sufficient sample volume for indicated test?	Yes	☑	No	☐	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes	☑	No	☐	NA ☐
Samples Received on Ice?	Yes	☐	No	☑	
Sample/Temp Blank temperature	Temp:				NA ☑
Water - VOA vials have zero headspace / no bubbles?	Yes	☐	No	☐	NA ☑
Sample labels checked for correct preservation?	Yes	☑	No	☐	
pH acceptable upon receipt (Metal: <2; Nitrate 353.2/4500NO3: <2; 522: <4; 218.7: >8)?	Yes	☐	No	☐	NA ☑
UCMR Samples:					
pH tested and acceptable upon receipt (200.8: ≤2; 525.3: ≤4; 530: ≤7; 541: <3; 544: <6.5 & 7.5)?	Yes	☐	No	☐	NA ☑
Free Chlorine tested and acceptable upon receipt (<0.1mg/L)?	Yes	☐	No	☐	NA ☑

Comments:

McCampbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 1912D53

Report Created for: SCA Environmental, Inc.

320 Justin Drive
San Francisco, CA 94112

Project Contact: Christina Codemo
Project P.O.:
Project: F13116; 1093 Capital

Project Received: 12/27/2019

Analytical Report reviewed & approved for release on 01/02/2020 by:

Jennifer Lagerbom
Project Manager

McCampbell Analytical, Inc.
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Glossary of Terms & Qualifier Definitions

Client: SCA Environmental, Inc.
Project: F13116; 1093 Capital
WorkOrder: 1912D53

Glossary Abbreviation

%D	Serial Dilution Percent Difference
95% Interval	95% Confident Interval
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)
DLT	Dilution Test (Serial Dilution)
DUP	Duplicate
EDL	Estimated Detection Limit
ERS	External reference sample. Second source calibration verification.
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
LQL	Lowest Quantitation Level
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
N/A	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
TZA	TimeZone Net Adjustment for sample collected outside of MAI's UTC.
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)

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Glossary of Terms & Qualifier Definitions

Client: SCA Environmental, Inc.
Project: F13116; 1093 Capital
WorkOrder: 1912D53

Analytical Qualifiers

h4	Sulfuric acid permanganate (EPA 3665) cleanup

Quality Control Qualifiers

F2	LCS/LCSD recovery and/or RPD/RSD is out of acceptance criteria.

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Analytical Report

Client:	SCA Environmental, Inc.	**WorkOrder:**	1912D53
Date Received:	12/27/19 11:23	**Extraction Method:**	SW3550B
Date Prepared:	12/27/19	**Analytical Method:**	SW8082
Project:	F13116; 1093 Capital	**Unit:**	mg/kg

Polychlorinated Biphenyls (PCBs) Aroclors

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
CAULK-22	**1912D53-001A**	**Solid**	**12/26/2019 12:00**	**GC23 12301924.d**	**191456**

Analytes	Result	MDL	RL	DF	Date Analyzed
Aroclor1016	ND	0.0051	0.050	1	12/31/2019 04:08
Aroclor1221	ND	0.033	0.050	1	12/31/2019 04:08
Aroclor1232	ND	0.0032	0.050	1	12/31/2019 04:08
Aroclor1242	ND	0.0035	0.050	1	12/31/2019 04:08
Aroclor1248	ND	0.0036	0.050	1	12/31/2019 04:08
Aroclor1254	ND	0.0022	0.050	1	12/31/2019 04:08
Aroclor1260	ND	0.0085	0.050	1	12/31/2019 04:08
PCBs, total	ND	NA	0.050	1	12/31/2019 04:08

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	91	69-143	12/31/2019 04:08

Analyst(s): LT Analytical Comments: h4

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Quality Control Report

Client:	SCA Environmental, Inc.	**WorkOrder:**	1912D53
Date Prepared:	12/27/19	**BatchID:**	191456
Date Analyzed:	12/31/19	**Extraction Method:**	SW3550B
Instrument:	GC40	**Analytical Method:**	SW8082
Matrix:	Soil	**Unit:**	mg/kg
Project:	F13116; 1093 Capital	**Sample ID:**	MB/LCS/LCSD-191456

QC Summary Report for SW8082

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Aroclor1016	ND	0.0051	0.050	-	-	-
Aroclor1221	ND	0.011	0.050	-	-	-
Aroclor1232	ND	0.0063	0.050	-	-	-
Aroclor1242	ND	0.0067	0.050	-	-	-
Aroclor1248	ND	0.0040	0.050	-	-	-
Aroclor1254	ND	0.0068	0.050	-	-	-
Aroclor1260	ND	0.0061	0.050	-	-	-
Surrogate Recovery						
Decachlorobiphenyl	0.062			0.05	123	75-136

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Aroclor1016	0.16	0.17	0.15	109	111	90-125	2.03	20
Aroclor1260	0.19	0.18	0.15	125,F2	120	77-122	3.58	20
Surrogate Recovery								
Decachlorobiphenyl	0.054	0.060	0.050	109	119	75-136	9.12	20

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(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1912D53 **ClientCode: SCAF**

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☐ EQuIS ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag
☐ Detection Summary ☐ Dry-Weight

Report to:
Christina Codemo
SCA Environmental, Inc.
320 Justin Drive
San Francisco, CA 94112
(415) 867-9540 FAX: (415) 703-0701

Email: ccodemo@sca-enviro.com; labreports99@
cc/3rd Party: tkalman@sca-enviro.com; lswanson@scae
PO:
Project: F13116; 1093 Capital

Bill to:
Accounts Payable
SCA Environmental, Inc.
320 Justin Drive
San Francisco, CA 94112

Requested TAT: **5 days;**

Date Received: **12/27/2019**
Date Logged: **12/27/2019**

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
1912D53-001	CAULK-22	Solid	12/26/2019 12:00	☐	A	A										

Test Legend:

1	8082_PCB_ESL_Solid [J]	2	PRDisposal Fee	3		4	
5		6		7		8	
9		10		11		12	

Project Manager: Jennifer Lagerbom

Prepared by: Agustina Venegas

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
Hazardous samples will be returned to client or disposed of at client expense.

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WORK ORDER SUMMARY

Client Name: SCA ENVIRONMENTAL, INC. **Project:** F13116; 1093 Capital **Work Order:** 1912D53
Client Contact: Christina Codemo **QC Level:** LEVEL 2
Contact's Email: ccodemo@sca-enviro.com; labreports99@gmail.com **Comments:** **Date Logged:** 12/27/2019

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☐ EQuIS ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1912D53-001A	CAULK-22	Solid	SW8082 (PCBs Only)	1	Small White Plastic Container	☐	12/26/2019 12:00	5 days		☐	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

1912053

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CHAIN OF CUSTODY RECORD

TURN AROUND TIME: RUSH ☐ 24 HR ☐ 48 HR ☐ 72 HR ☐ 5 DAY ☒ 10 DAY ☐

GeoTracker EDF ☐ PDF ☒ EDD ☐ Write On (DW) ☐ EQuIS ☐

Effluent Sample Requiring "J" flag ☐ UST Clean Up Fund Project ☐; Claim #_____

Report To: Christina Codero	**Bill To:** SCA
Company: SCA	ccodero@sca-enviro.com
tswanson@scaehs.com	lapreports99@gmail.com
	E-Mail: tkellum@sca-enviro.com
Tele: (415) 723-0962	**Fax:** ( )
Project #: F13116	**Project Name:** 1093 Capital
Project Location: Capital	**Purchase Order#**
Sampler Signature: TK	

SAMPLE ID	Location/ Field Point Name	SAMPLING Date	SAMPLING Time	# Containers	MATRIX: Ground Water	Waste Water	Drinking Water	Sea \ Water	Soil	Air	Sludge	Other	METHOD PRESERVED: HCL	HNO_3	Other	BTEX & TPH as Gas (8021/ 8015 or 8260) / MTBE	TPH as Diesel (8015)	Total Petroleum Oil & Grease (1664 / 5520 E/B&F)	Total Petroleum Hydrocarbons (418.1)	MTBE / BTEX ONLY (EPA 8260/ 8021)	EPA 505/ 608 / 8081 (Cl Pesticides)	EPA 608 / 8082 PCB's ; Aroclors / Congeners	EPA 507 / 8141 (NP Pesticides)	EPA 515 / 8151 (Acidic Cl Herbicides)	EPA 524.2 / 624 / 8260 (VOCs)	EPA 525.2 / 625 / 8270 (SVOCs)	EPA 8270 SIM / 8310 (PAHs / PNAs)	CAM 17 Metals (200.7 / 200.8 / 6010 / 6020)	LUFT 5 Metals (200.7 / 200.8 / 6010 / 6020)	Metals (200.7 / 200.8 / 6010 / 6020)	Filter sample for DISSOLVED metals analysis	PCBs 8082 / SGC			
CHALK-22		12/26	12P	1								X																				X				

**MAI clients MUST disclose any dangerous chemicals known to be present in their submitted samples in concentrations that may cause immediate harm or serious future health endangerment as a result of brief, gloved, open air, sample handling by MAI staff. Non-disclosure incurs an immediate $250 surcharge and the client is subject to full legal liability for harm suffered. Thank you for your understanding and for allowing us to work safely.

Relinquished By:	Date:	Time:	Received By:
TK	12/26		
Relinquished By:	Date: 12/27/19	Time: 1123A	Received By:
Relinquished By:	Date:	Time:	Received By:

ICE/t°_____
GOOD CONDITION_____
HEAD SPACE ABSENT_____
DECHLORINATED IN LAB_____
APPROPRIATE CONTAINERS_____
PRESERVED IN LAB_____

PRESERVATION_____ VOAS O&G METALS OTHER HAZARDOUS: pH<2_____

COMMENTS:
PCB
<1 PPM detection limit required.
Authorized to perform cleanup to meet the detection limit

UPS: 1Z8E49990191215830

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Sample Receipt Checklist

Client Name:	**SCA Environmental, Inc.**	Date and Time Received:	**12/27/2019 11:23**
Project:	**F13116; 1093 Capital**	Date Logged:	**12/27/2019**
		Received by:	Agustina Venegas
WorkOrder №:	**1912D53** Matrix: Solid	Logged by:	Agustina Venegas
Carrier:	UPS		

Chain of Custody (COC) Information

Chain of custody present?	Yes	☑	No	☐	
Chain of custody signed when relinquished and received?	Yes	☑	No	☐	
Chain of custody agrees with sample labels?	Yes	☑	No	☐	
Sample IDs noted by Client on COC?	Yes	☑	No	☐	
Date and Time of collection noted by Client on COC?	Yes	☑	No	☐	
Sampler's name noted on COC?	Yes	☑	No	☐	
COC agrees with Quote?	Yes	☐	No	☐	NA ☑

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes	☐	No	☐	NA ☑
Shipping container/cooler in good condition?	Yes	☑	No	☐	
Samples in proper containers/bottles?	Yes	☑	No	☐	
Sample containers intact?	Yes	☑	No	☐	
Sufficient sample volume for indicated test?	Yes	☑	No	☐	

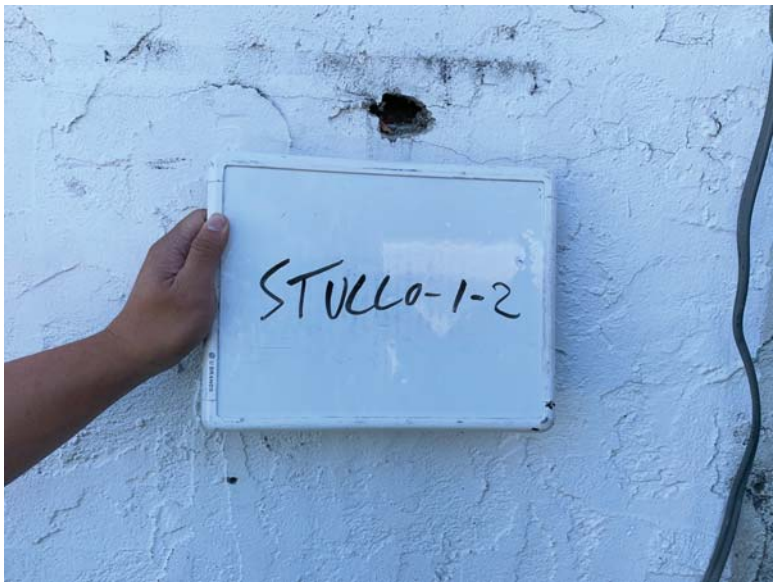
Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes	☑	No	☐	NA ☐
Samples Received on Ice?	Yes	☐	No	☑	
Sample/Temp Blank temperature	Temp:				NA ☑
Water - VOA vials have zero headspace / no bubbles?	Yes	☐	No	☐	NA ☑
Sample labels checked for correct preservation?	Yes	☑	No	☐	
pH acceptable upon receipt (Metal: <2; Nitrate 353.2/4500NO3: <2; 522: <4; 218.7: >8)?	Yes	☐	No	☐	NA ☑
UCMR Samples:					
pH tested and acceptable upon receipt (200.8: ≤2; 525.3: ≤4; 530: ≤7; 541: <3; 544: <6.5 & 7.5)?	Yes	☐	No	☐	NA ☑
Free Chlorine tested and acceptable upon receipt (<0.1mg/L)?	Yes	☐	No	☐	NA ☑

Comments:

Attachment D
Sample Photographs


STUCCO-1-1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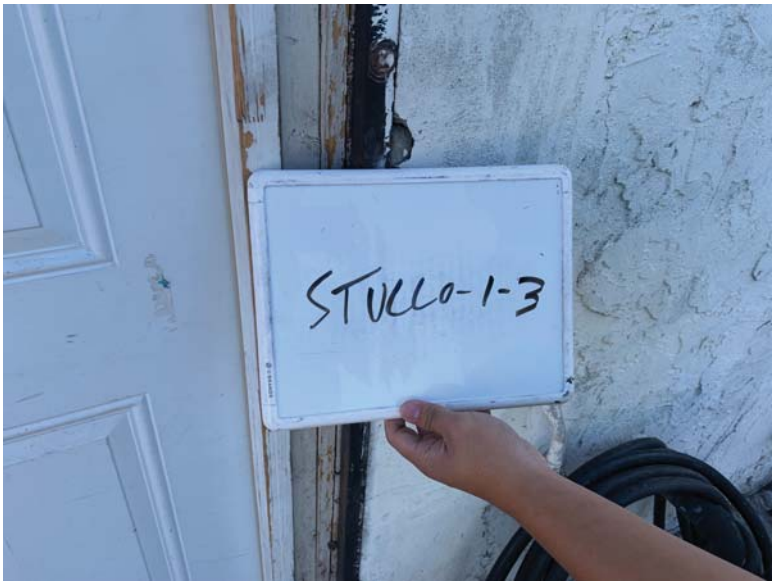
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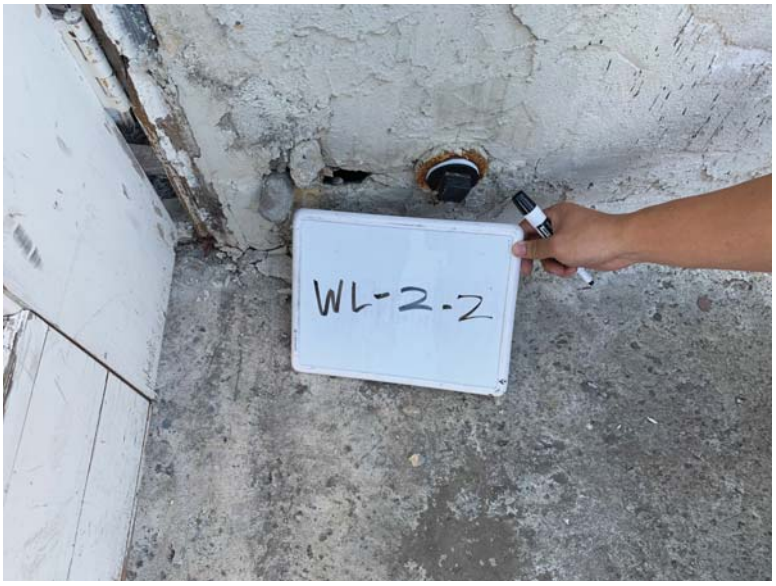
STUCCO-1-4


STUCCO-1-5


WL-2-1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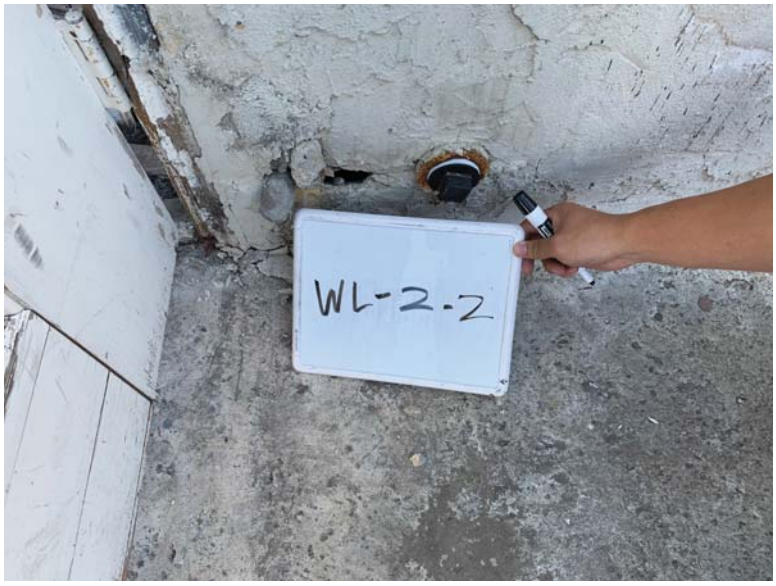
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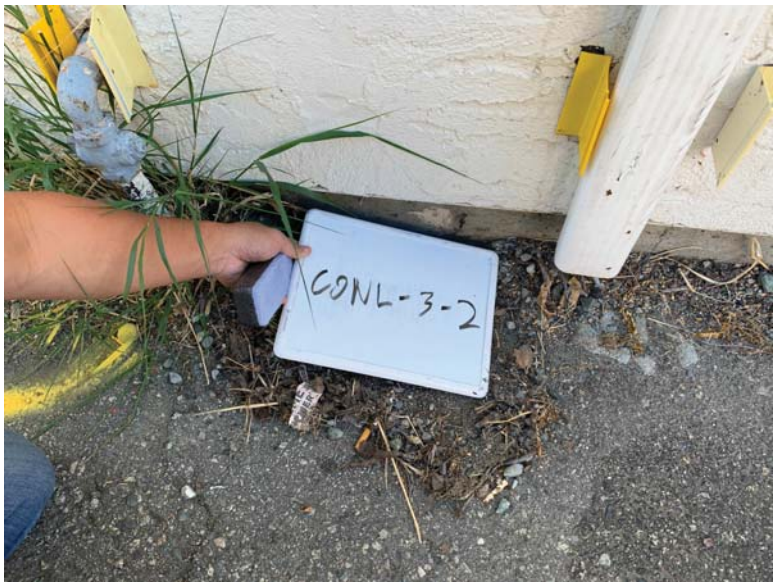
CONL-3-1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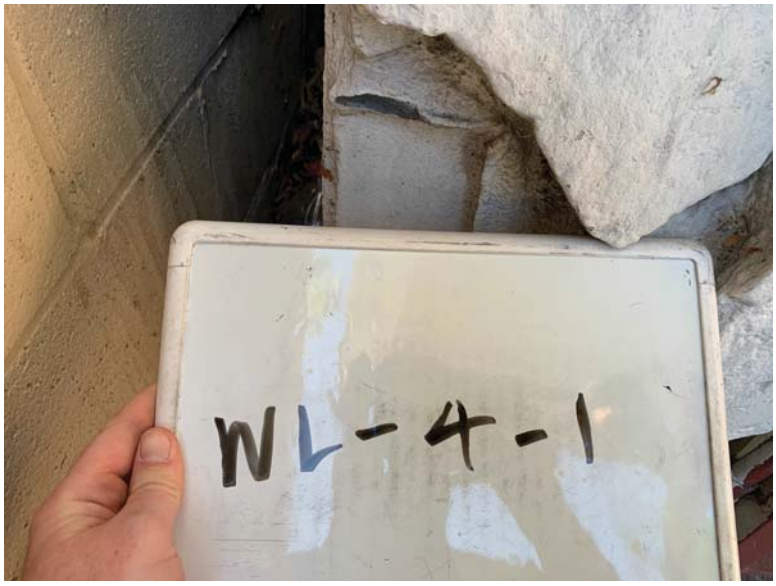
CONL-3-3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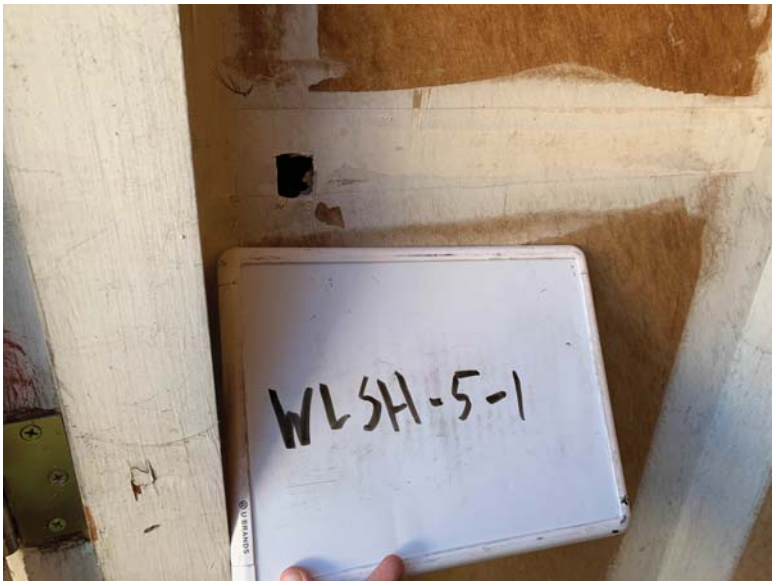
WL-4-2


WL-4-3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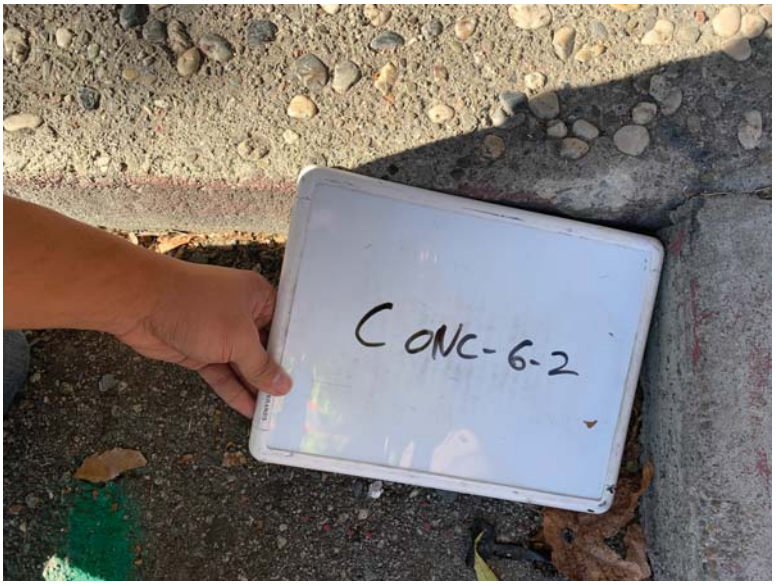
WLSH-5-2


WLSH-5-3


CONC-6-1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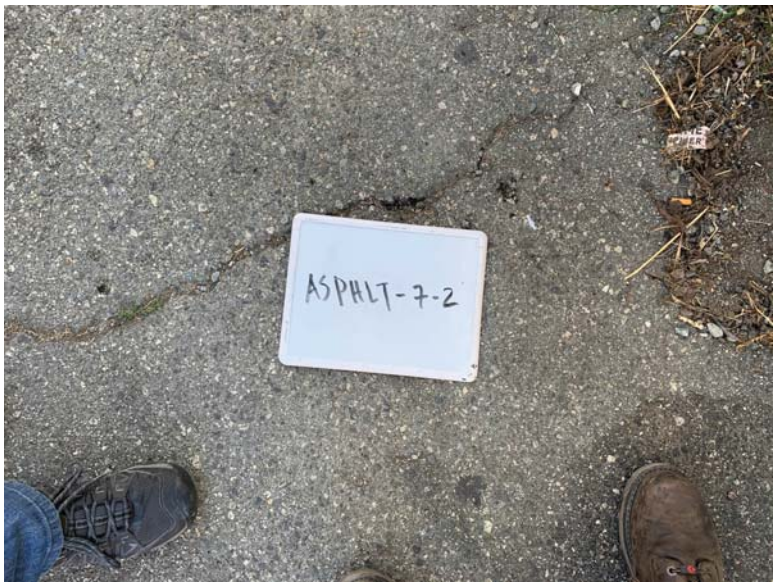
CONC-6-3


ASPHLT-7-1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ASPHLT-7-3


MASTIC-8-1
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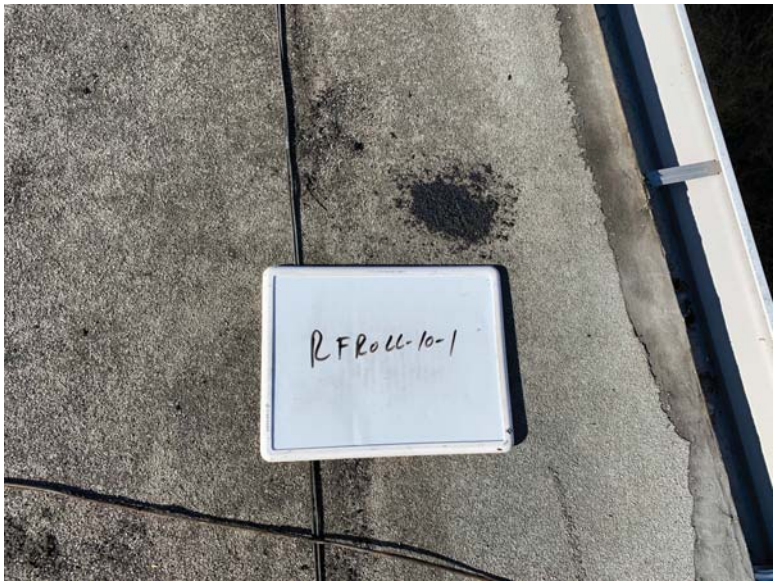
MASTIC-8-2


CONC-9-1


CONC-9-2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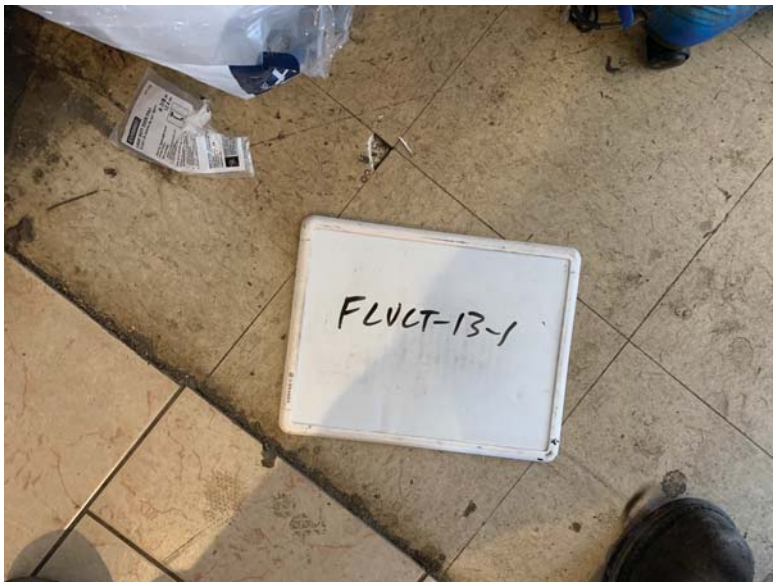
RFRoll-10-2


RFRoll-10-3


PENMAS-11-1


PENMAS-11-2


PENMAS-11-3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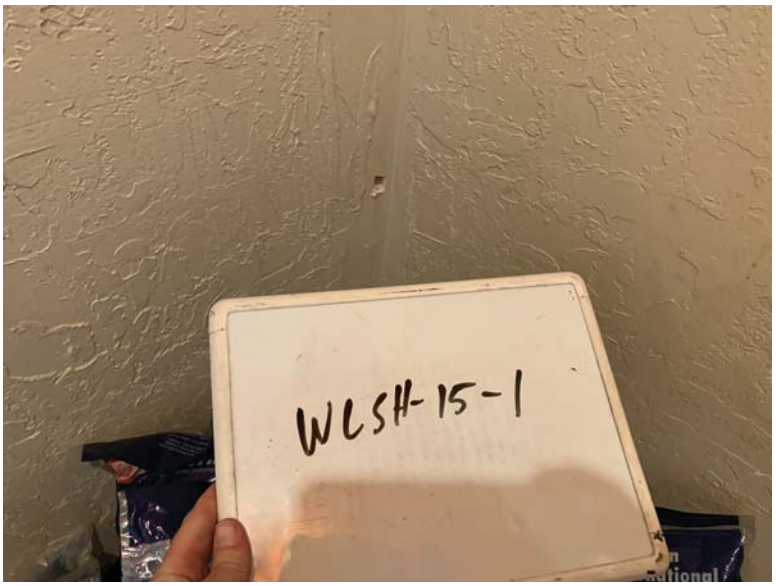
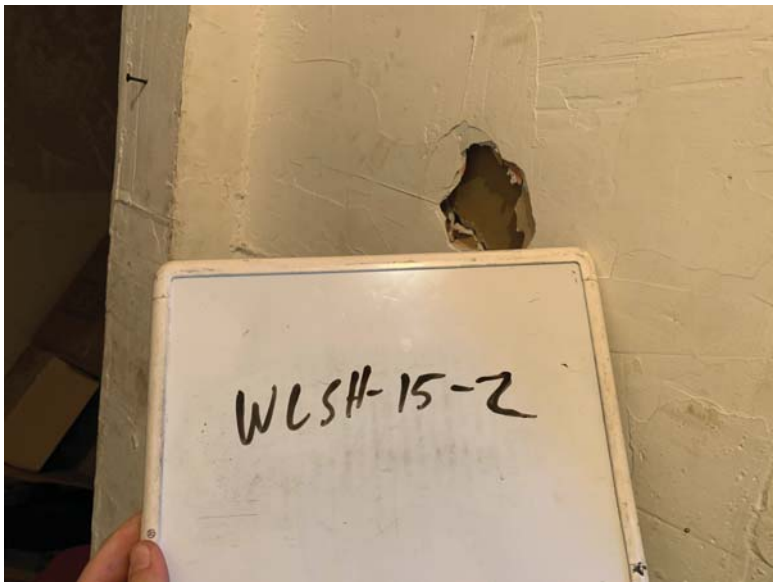
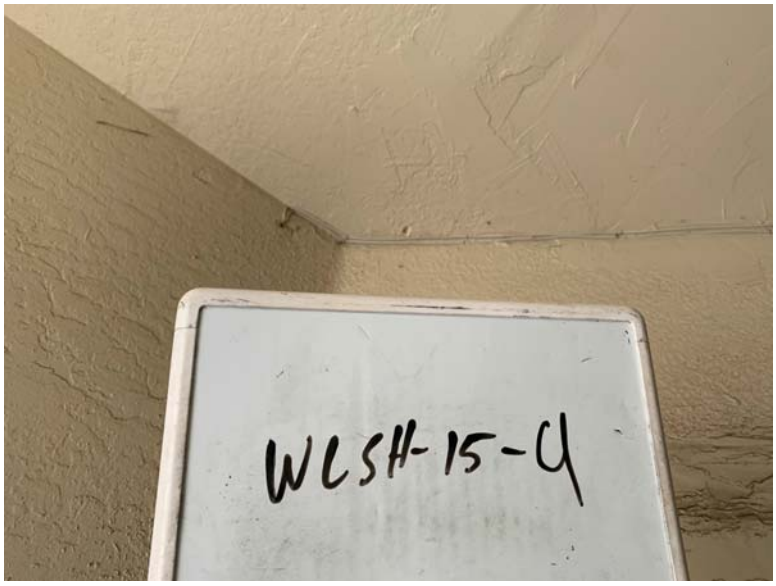
FLVCT-13-2

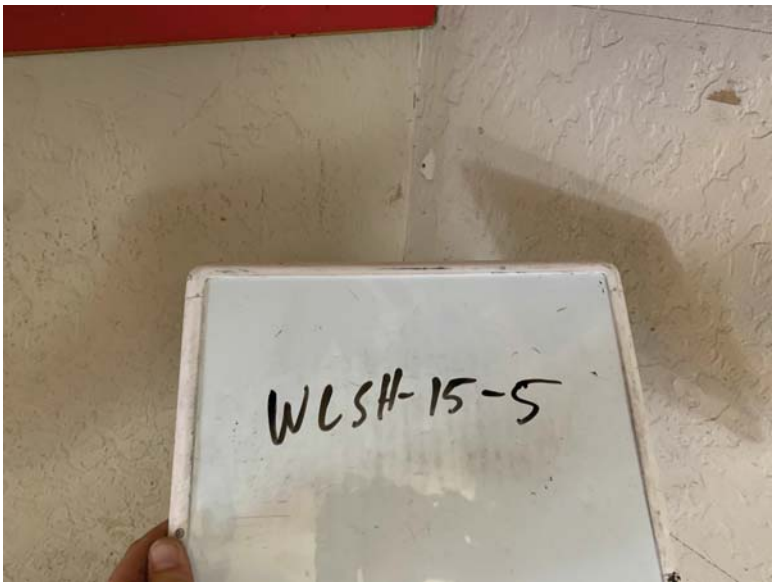

FLCER-11-1

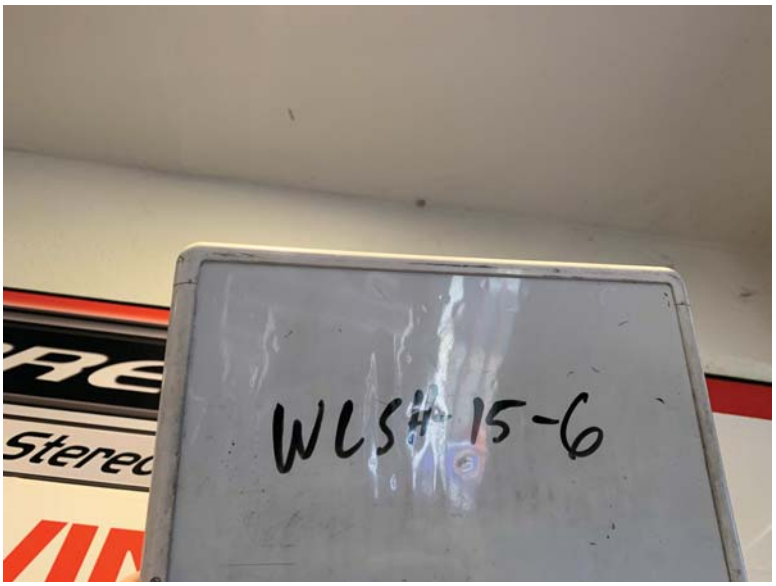

WLSH-15-1

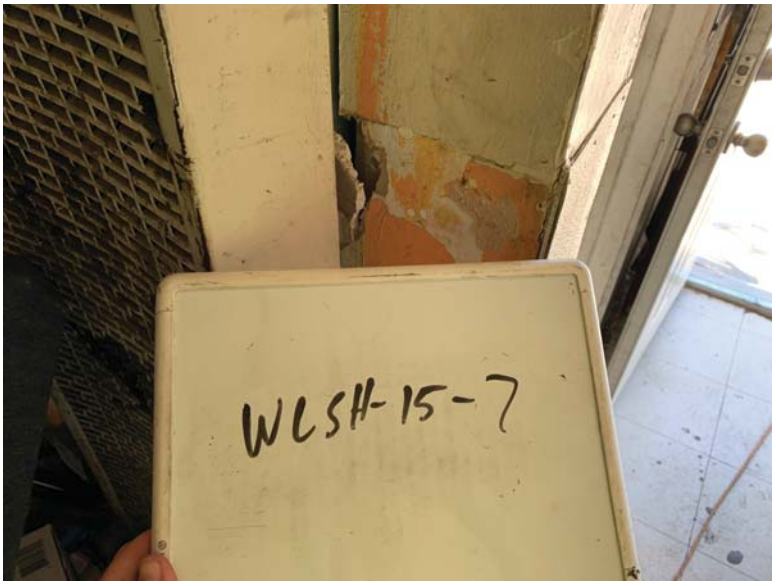

WLSH-15-2

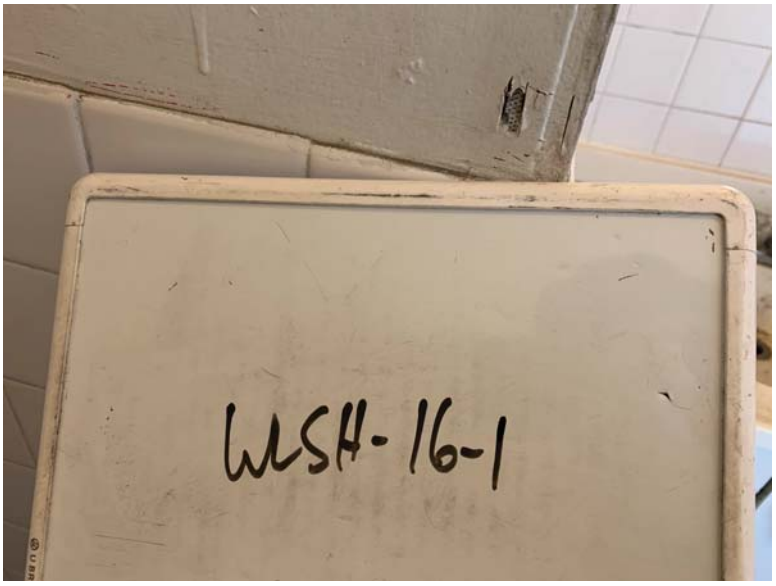

WLSH-15-3

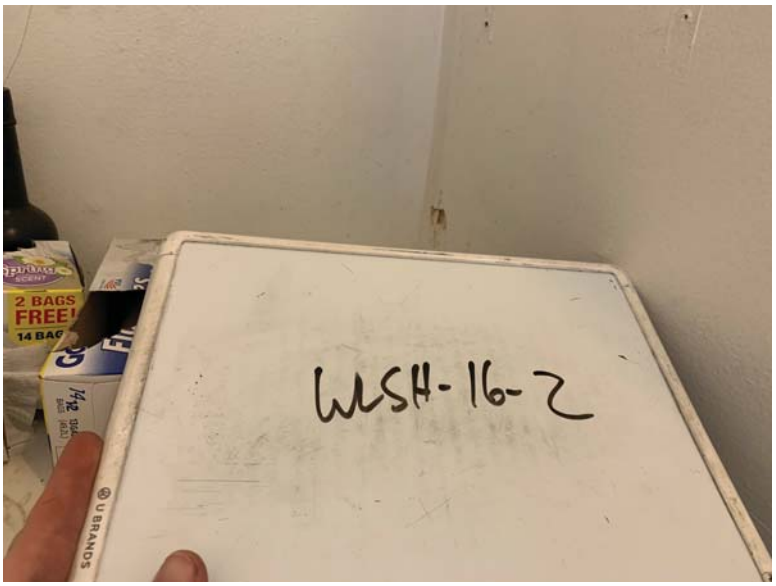

WLSH-15-4


WLSH-15-5


WLSH-15-6


WLSH-15-7


WLSH-16-1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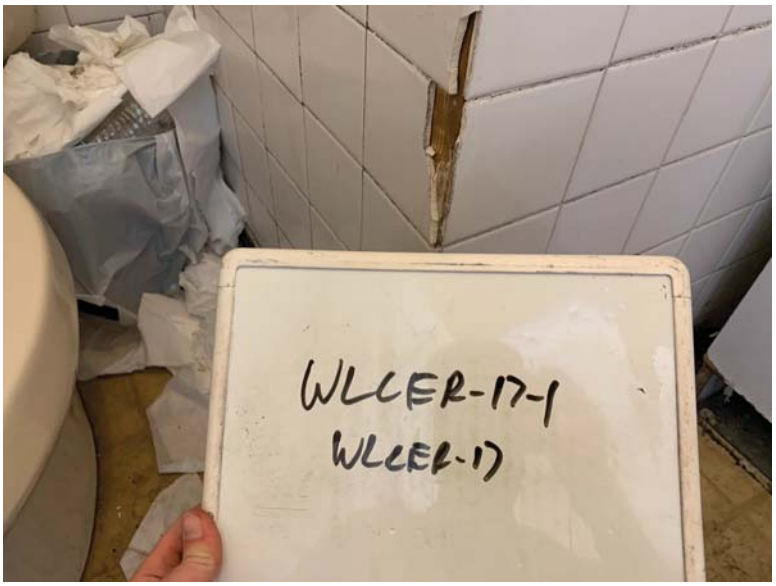
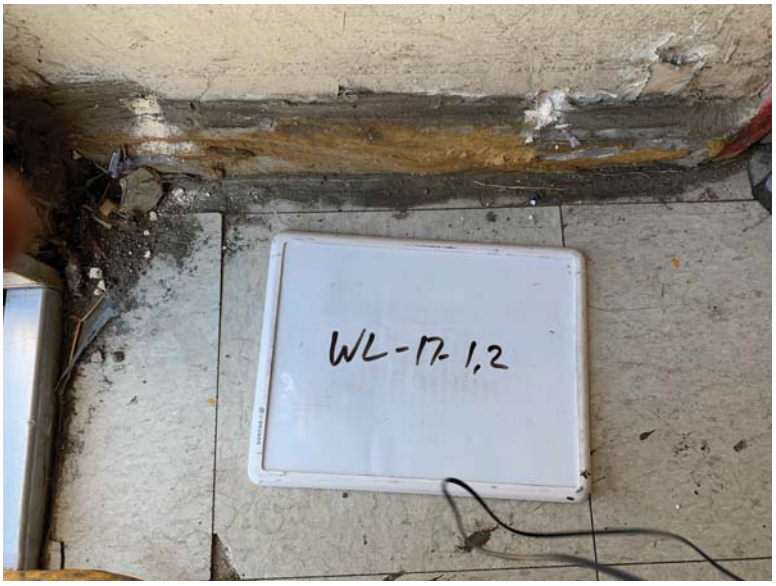

WLCER-17-1
WLCER-17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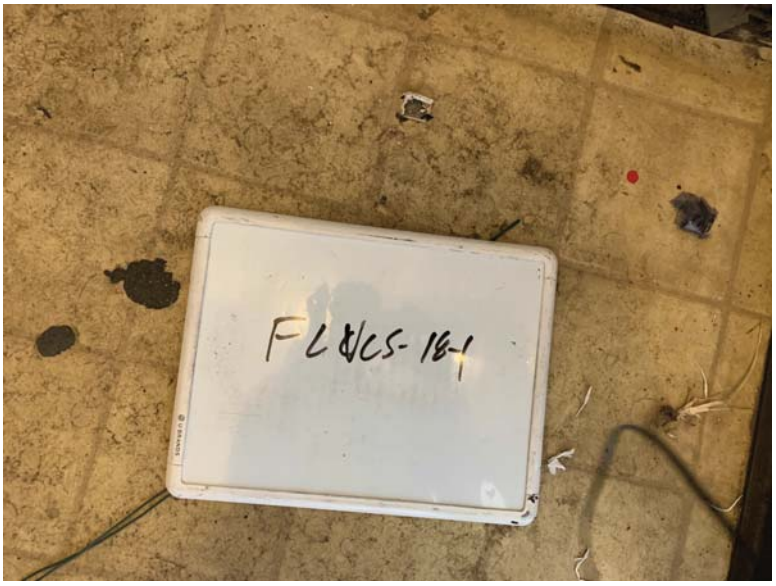
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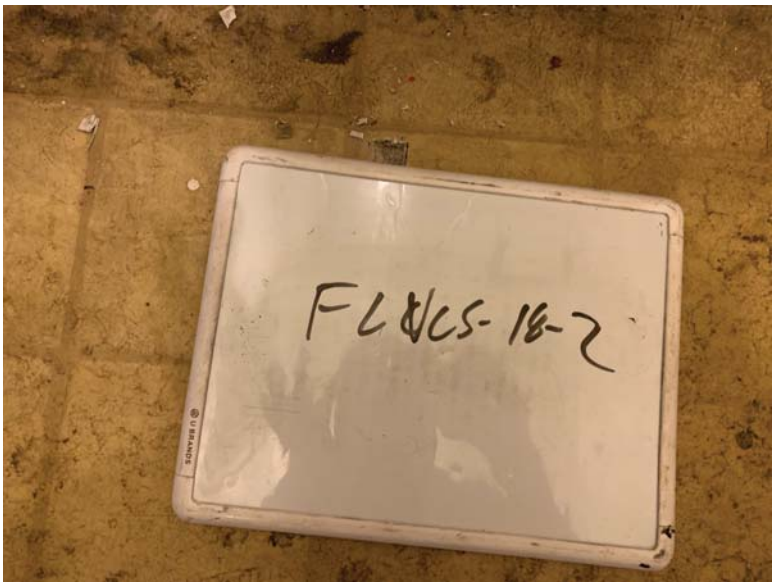
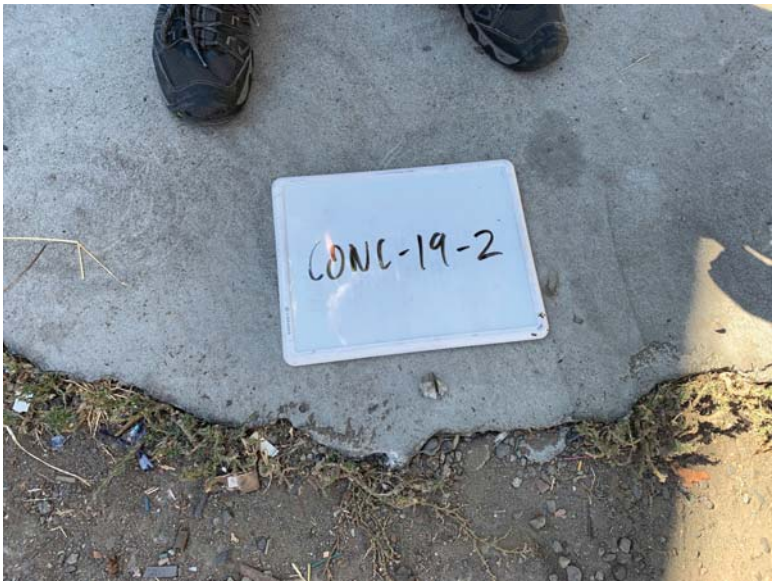
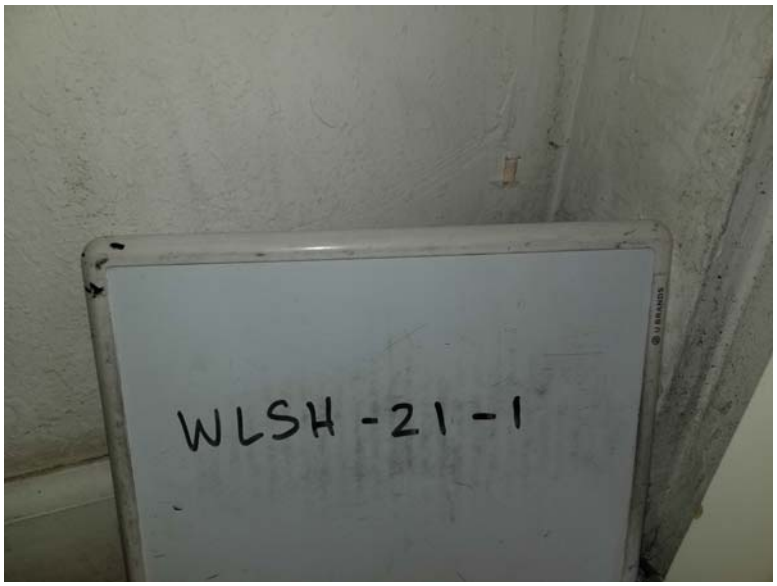

FLVCS-18-2


CONC-19-1


CONC-19-2

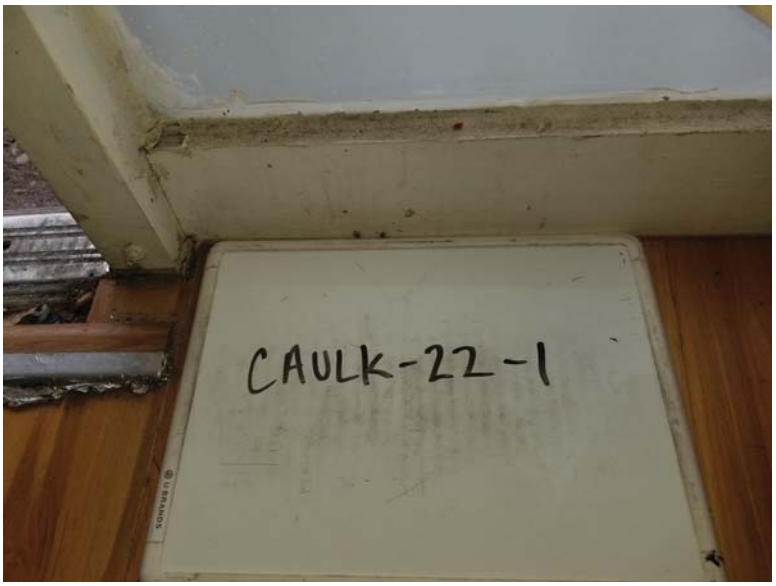

CONC-19-3

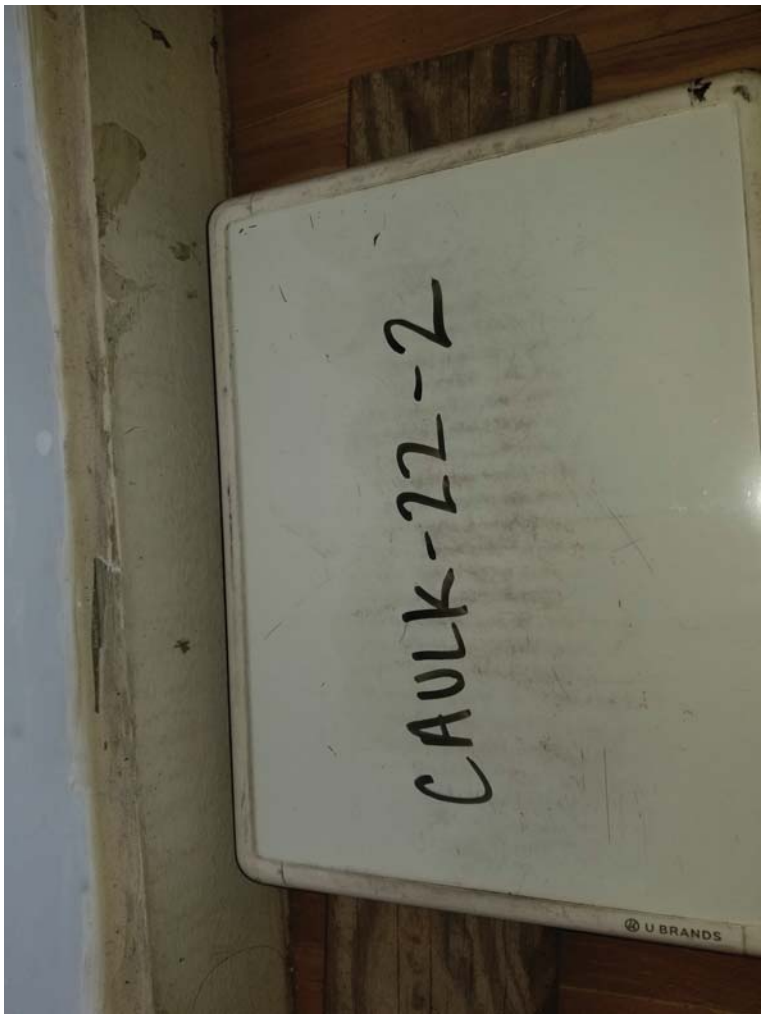

RFSH-20-
1,2,3


WLSH-21-1


WLSH-21-2


WLSH-21-3


CAULK-22-1


CAULK-22-2
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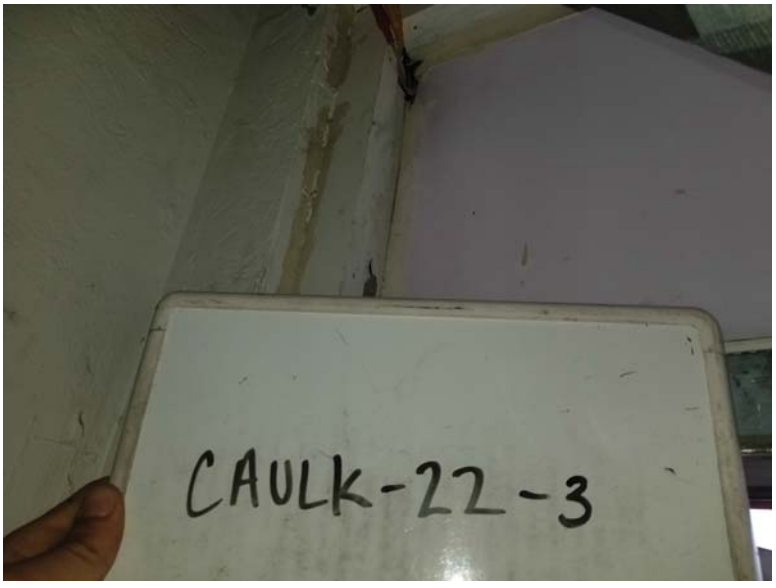
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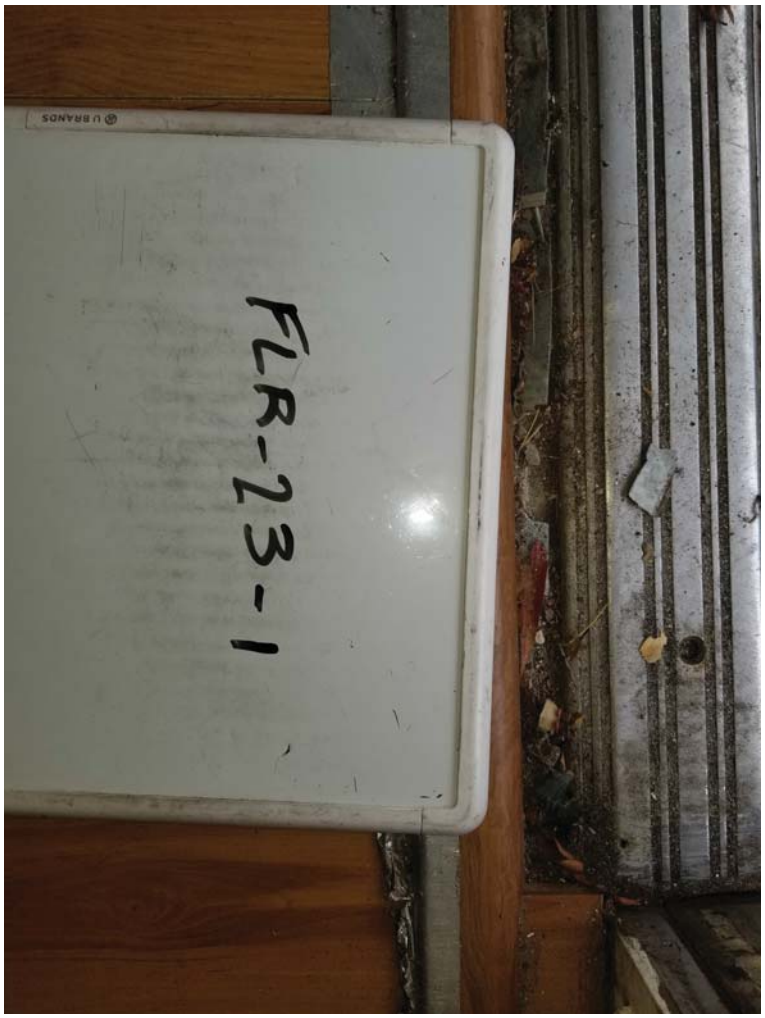
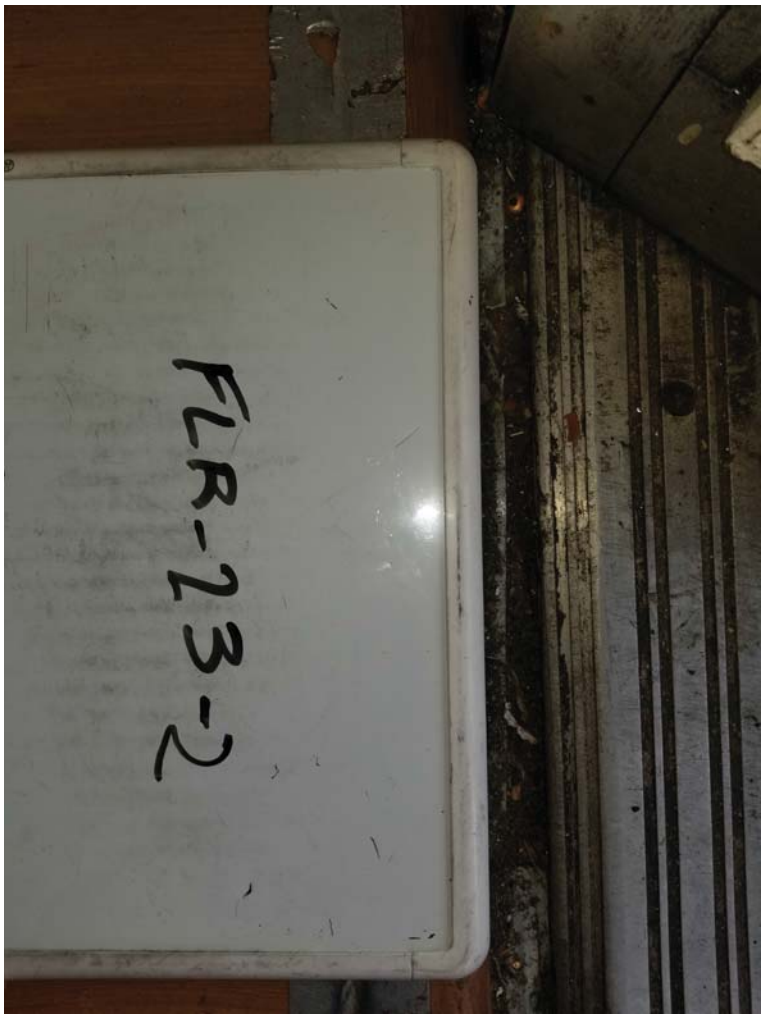

FLR-23-1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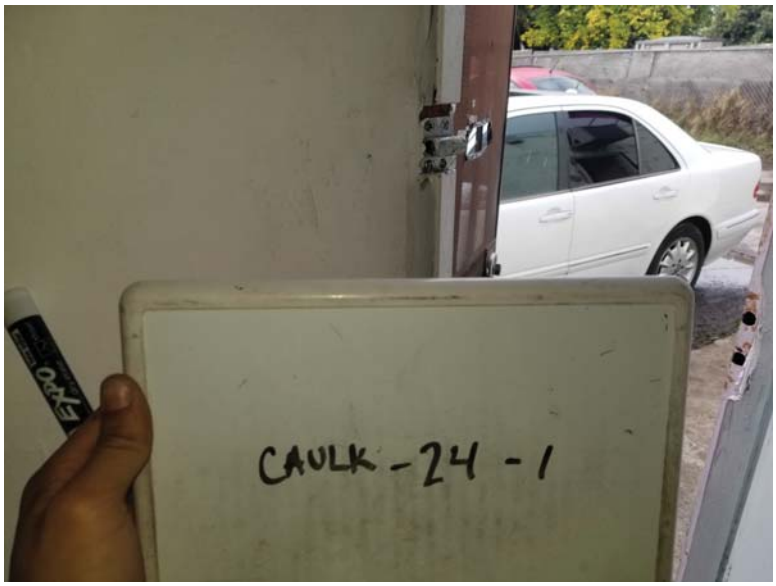
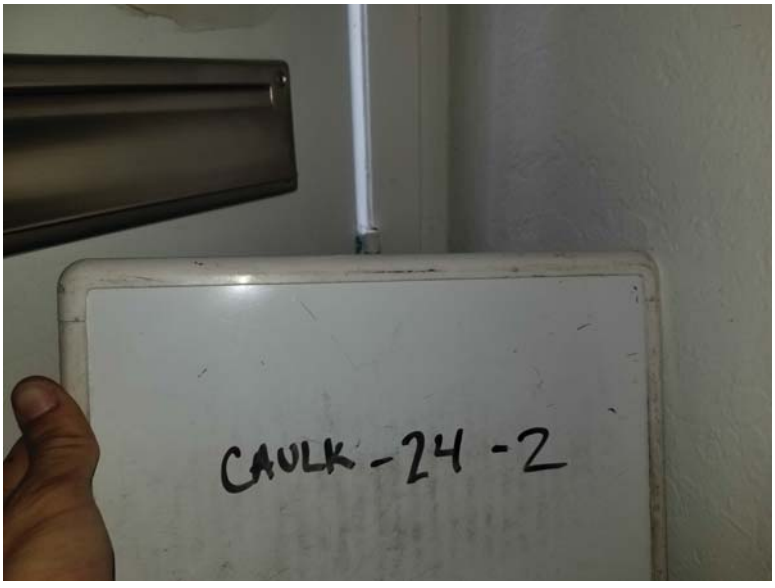

CAULK-24-1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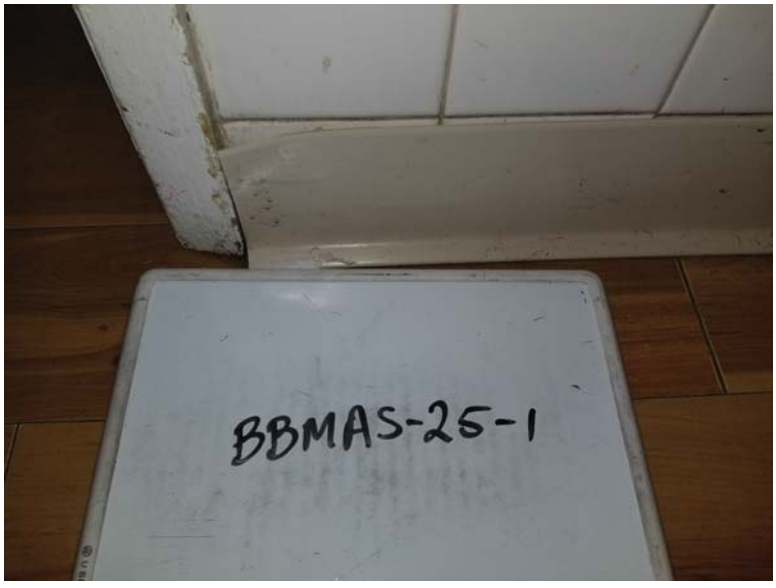
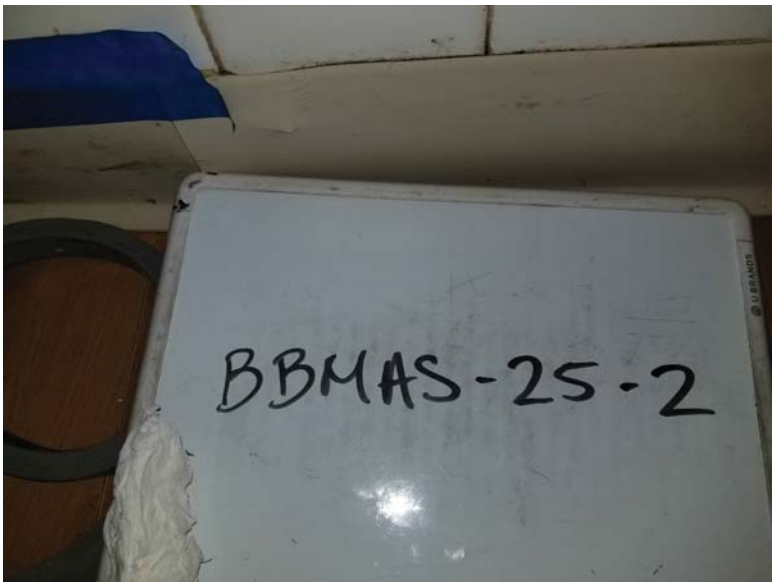

BBMAS-25-1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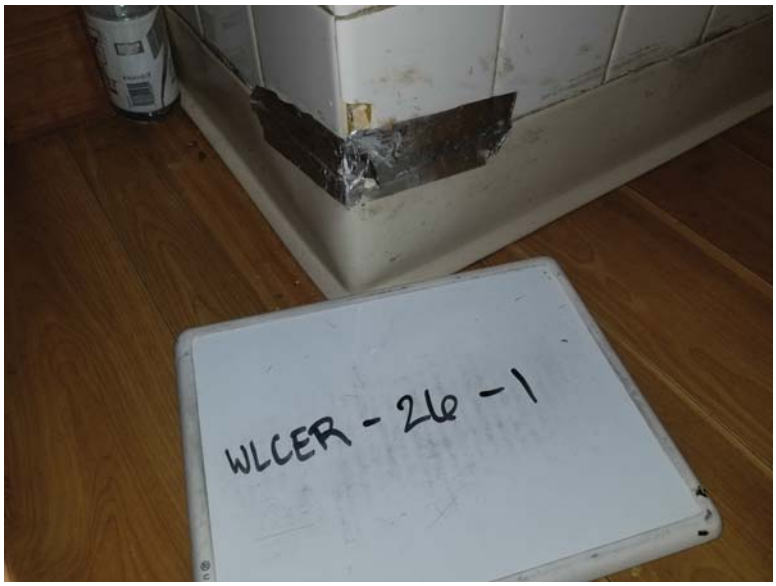
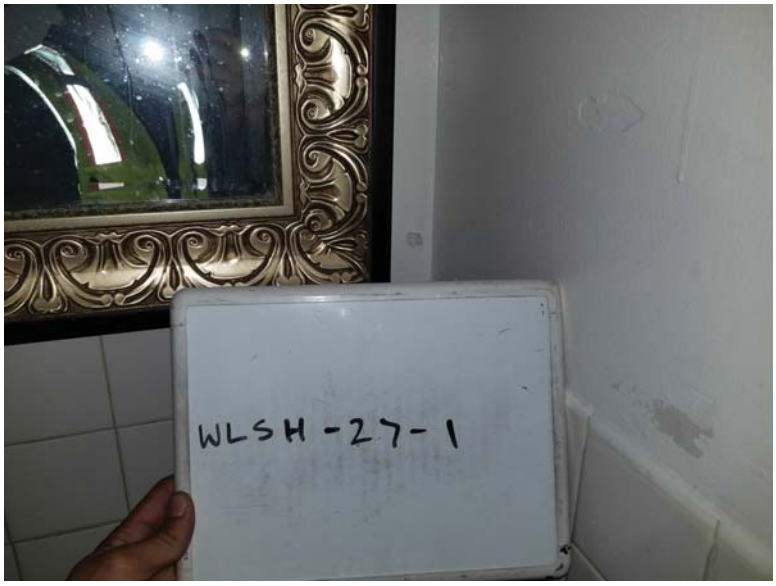
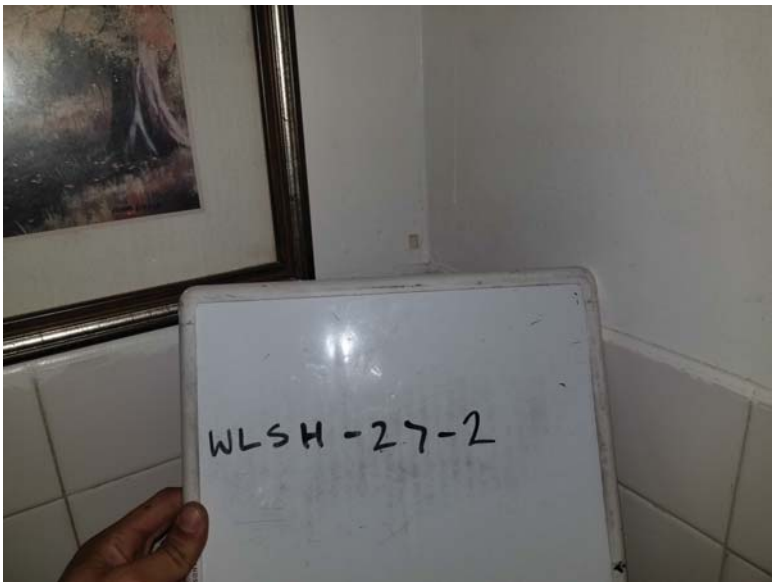

WLCER-26-1


WLCER-26-2


WLSH-27-1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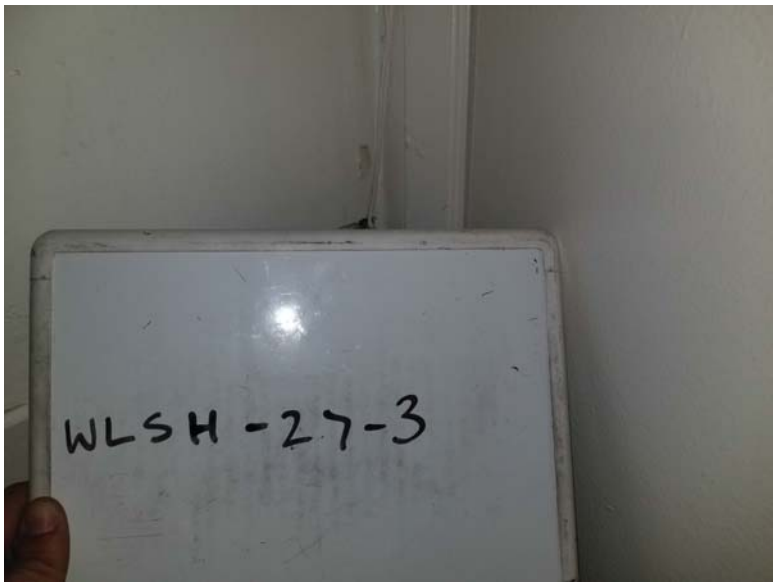
WLSH-27-3


WLCER-77


OW-1


OW-2


WH-3


OW-7