

Silicon Valley Rapid Transit Project Tunnel Segment Geotechnical Data Report Volume VI of VI

(P0503-D300-RPT-GEO-002, Rev.0)



Silicon Valley Rapid Transit Project

Tunnel Segment Geotechnical Data Report Volume VI of VI

P0503-D300-RPT-GEO-002
Rev. 0



Prepared by
HMM/Bechtel SVRT,
a Joint Venture



B0508-C006

VOLUME VI

APPENDIX 18: CORROSION TESTING RESULTS – IN PROGRESS

APPENDIX 19: PHOTOGRAPHS OF TUNNEL SEGMENT ALIGNMENT

APPENDIX 20: X-RAY IMAGES OF SOIL SAMPLES

APPENDIX 18
CORROSION TESTING RESULTS
(IN PROGRESS)

The corrosion testing program is currently in progress.

APPENDIX 19
PHOTOGRAPHS OF TUNNEL SEGMENT ALIGNMENT

Appendix 19 presents photographs taken at-grade along the proposed tunnel alignment.

Silicon Valley Rapid Transit Project – Tunnel Segment
Geotechnical Data Report



Figure A19-1. Proposed East Portal (looking south)

Silicon Valley Rapid Transit Project – Tunnel Segment
Geotechnical Data Report



Figure A19-2. Route 101 Freeway (looking south)

Silicon Valley Rapid Transit Project – Tunnel Segment
Geotechnical Data Report



Figure A19-3. San Jose Steel Company (looking north)

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Geotechnical Data Report



Figure A19-4. 27th St. near Santa Clara St. (looking southwest)

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Figure A19-5. Santa Clara St. at 24th St. (looking west)

Silicon Valley Rapid Transit Project – Tunnel Segment
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Figure A19-6. Santa Clara St. at 10th St. (looking west)

Silicon Valley Rapid Transit Project – Tunnel Segment
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Figure A19-7. Santa Clara St. at Market St. (looking west)

Silicon Valley Rapid Transit Project – Tunnel Segment
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Figure A19-8. Santa Clara St. near Route 87 (looking west)

Silicon Valley Rapid Transit Project – Tunnel Segment
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Figure A19-9. Guadalupe River and Route 87 (looking east)

Silicon Valley Rapid Transit Project – Tunnel Segment
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Figure A19-10. Autumn St. near HP Pavilion (looking north)

Silicon Valley Rapid Transit Project – Tunnel Segment
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Figure A19-11. Montgomery St. near HP Pavilion (looking north)

Silicon Valley Rapid Transit Project – Tunnel Segment
Geotechnical Data Report



Figure A19-12. Rail Yard near Cannery Building (looking west)

Silicon Valley Rapid Transit Project – Tunnel Segment
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Figure A19-13. Bush St. near Cannery Building (looking south)

Silicon Valley Rapid Transit Project – Tunnel Segment
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Figure A19-14. The Almaden (looking northwest)

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Figure A19-15. Stockton Ave. near Lenzen Ave. (looking north)

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Figure A19-16. Stockton Ave. at UPRR Tracks (looking north)

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Figure A19-17. Stockton Ave. at University Ave. (looking north)

Silicon Valley Rapid Transit Project – Tunnel Segment
Geotechnical Data Report



Figure A19-18. UPRR Tracks at Hedding St. Overpass Bridge (looking north)

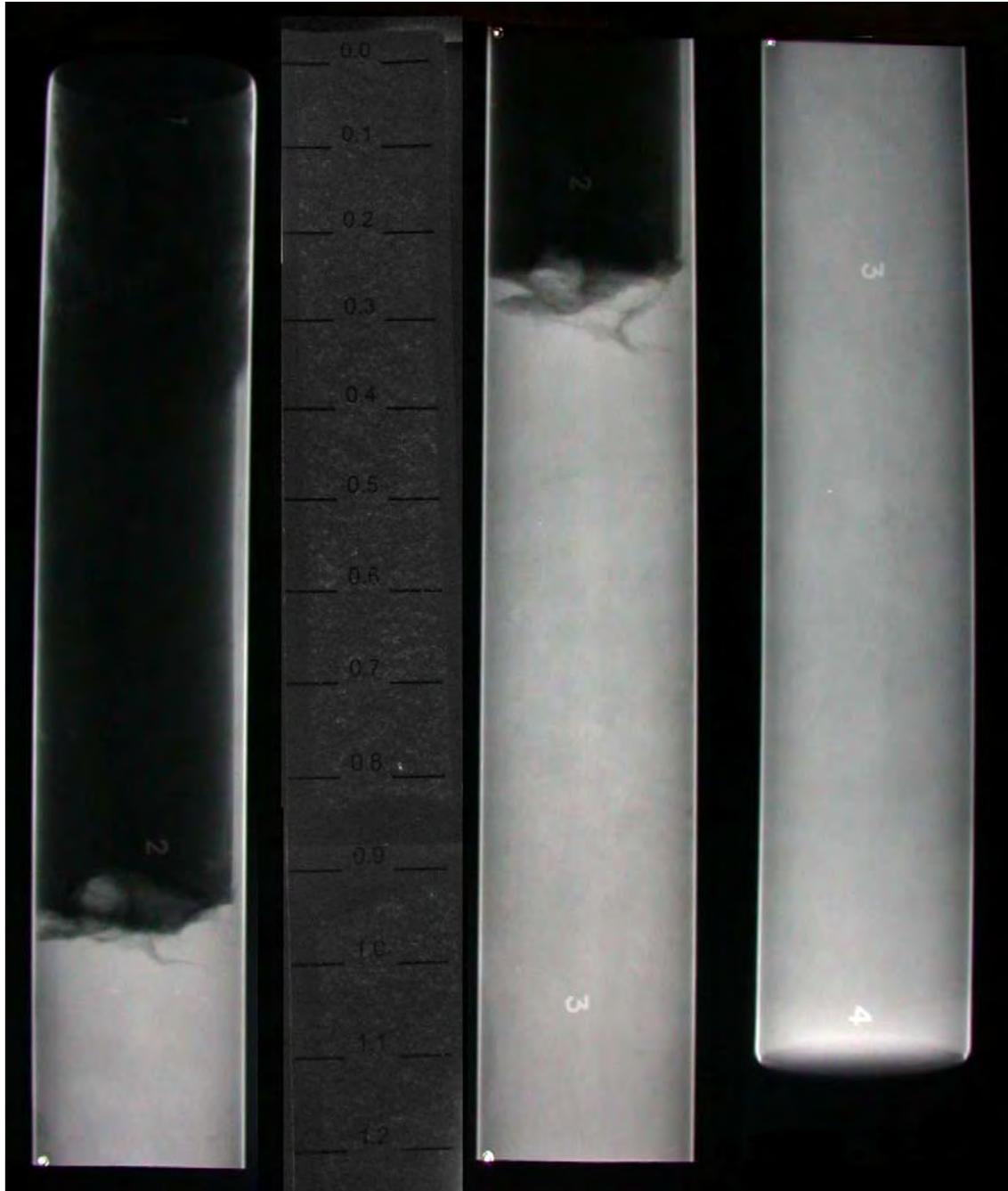
Silicon Valley Rapid Transit Project – Tunnel Segment
Geotechnical Data Report



Figure A19-19. Proposed West Portal - UPRR Yard toward 880 (looking south)

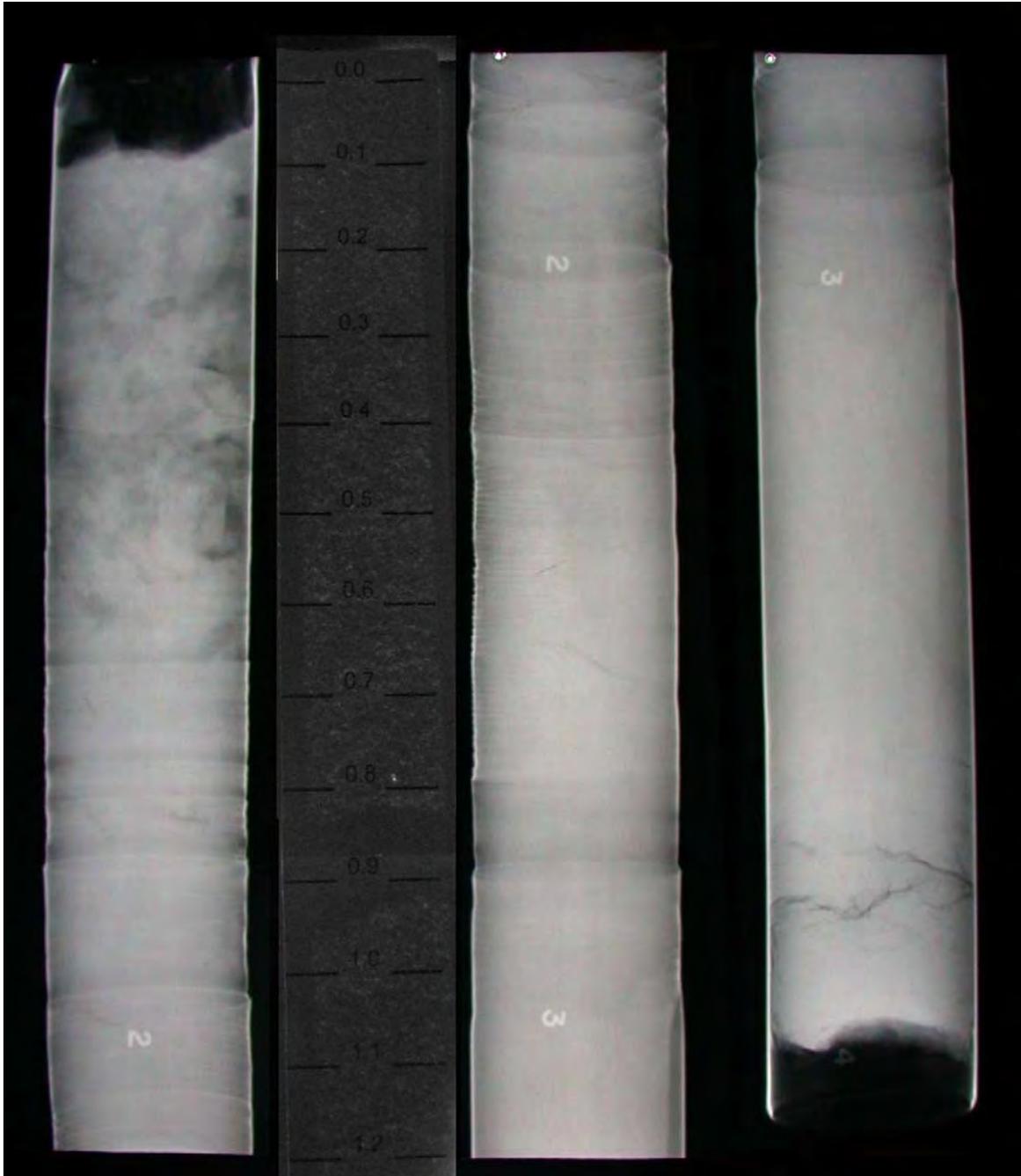
APPENDIX 20
X-RAY IMAGES OF SOIL SAMPLES

Appendix 20 presents x-ray images taken by Fugro of Shelby Tube and Pitcher Barrel soil samples.



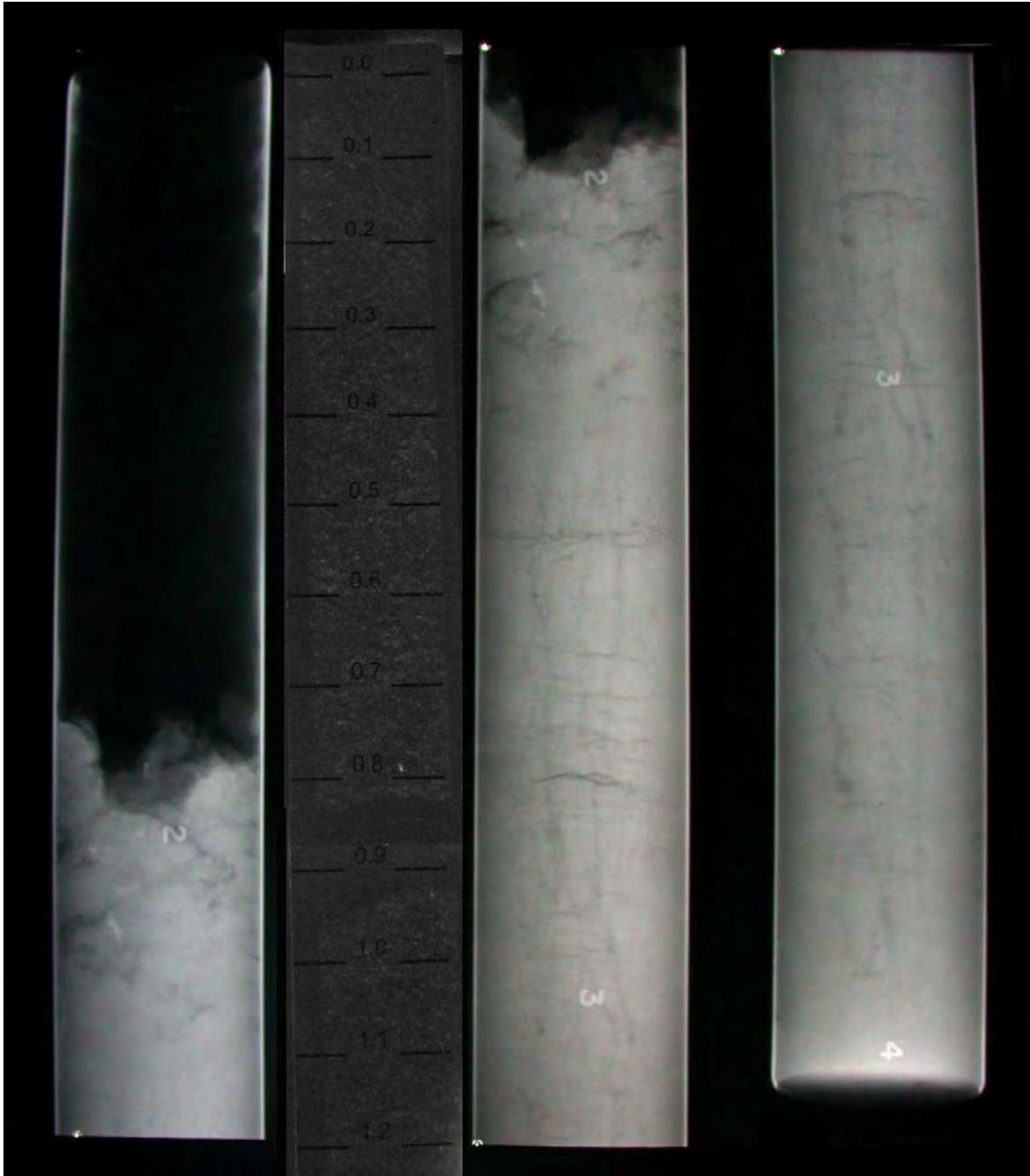
X-RAY IMAGE OF SAMPLE
BH-09, Sample 3
Tunnel Segment of SVRT Project
San Jose, California

FIGURE A20-1



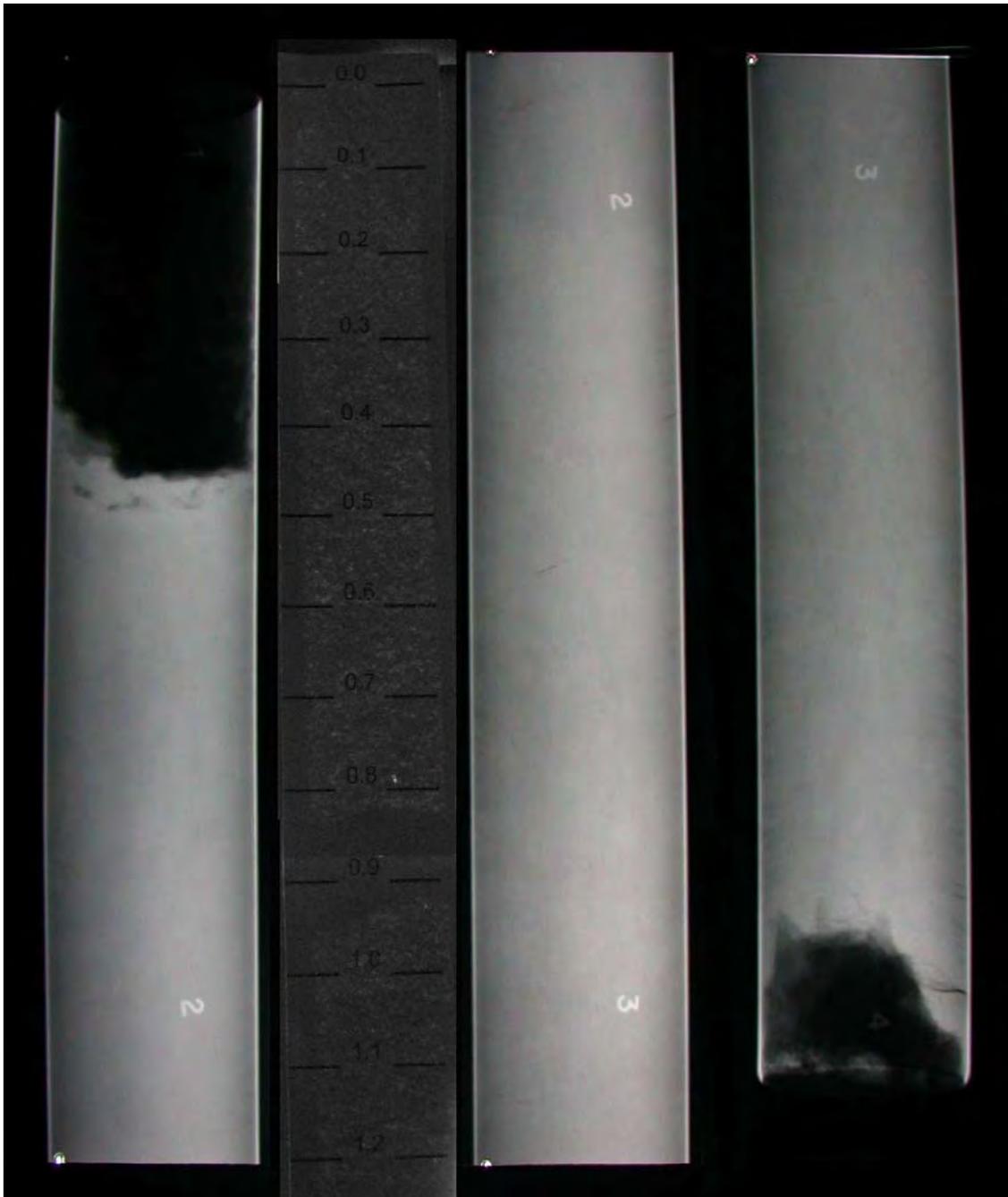
X-RAY IMAGE OF SAMPLE
BH-09, Sample 4
Tunnel Segment of SVRT Project
San Jose, California

FIGURE A20-2



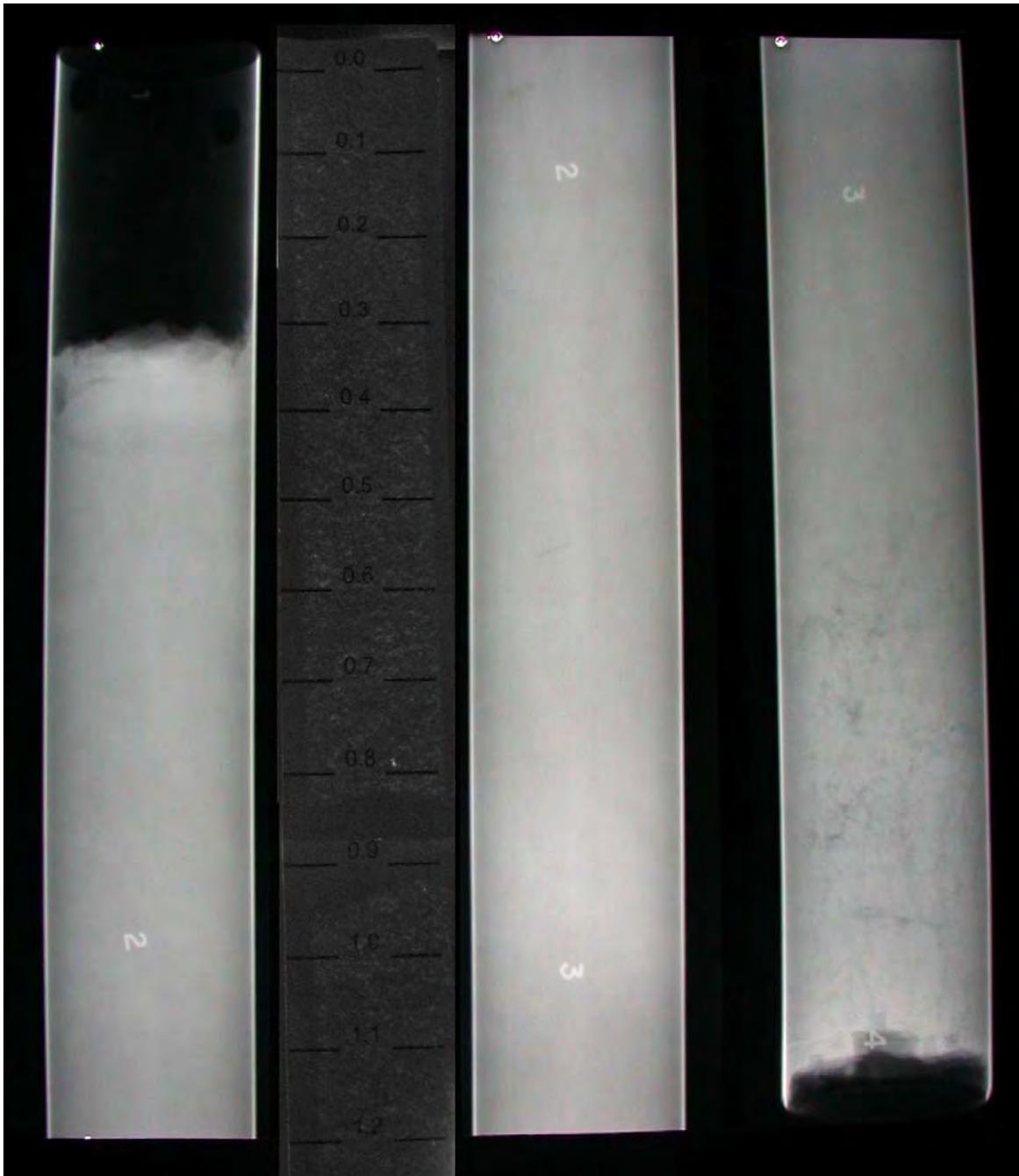
X-RAY IMAGE OF SAMPLE
BH-09, Sample 5
Tunnel Segment of SVRT Project
San Jose, California

FIGURE A20-3



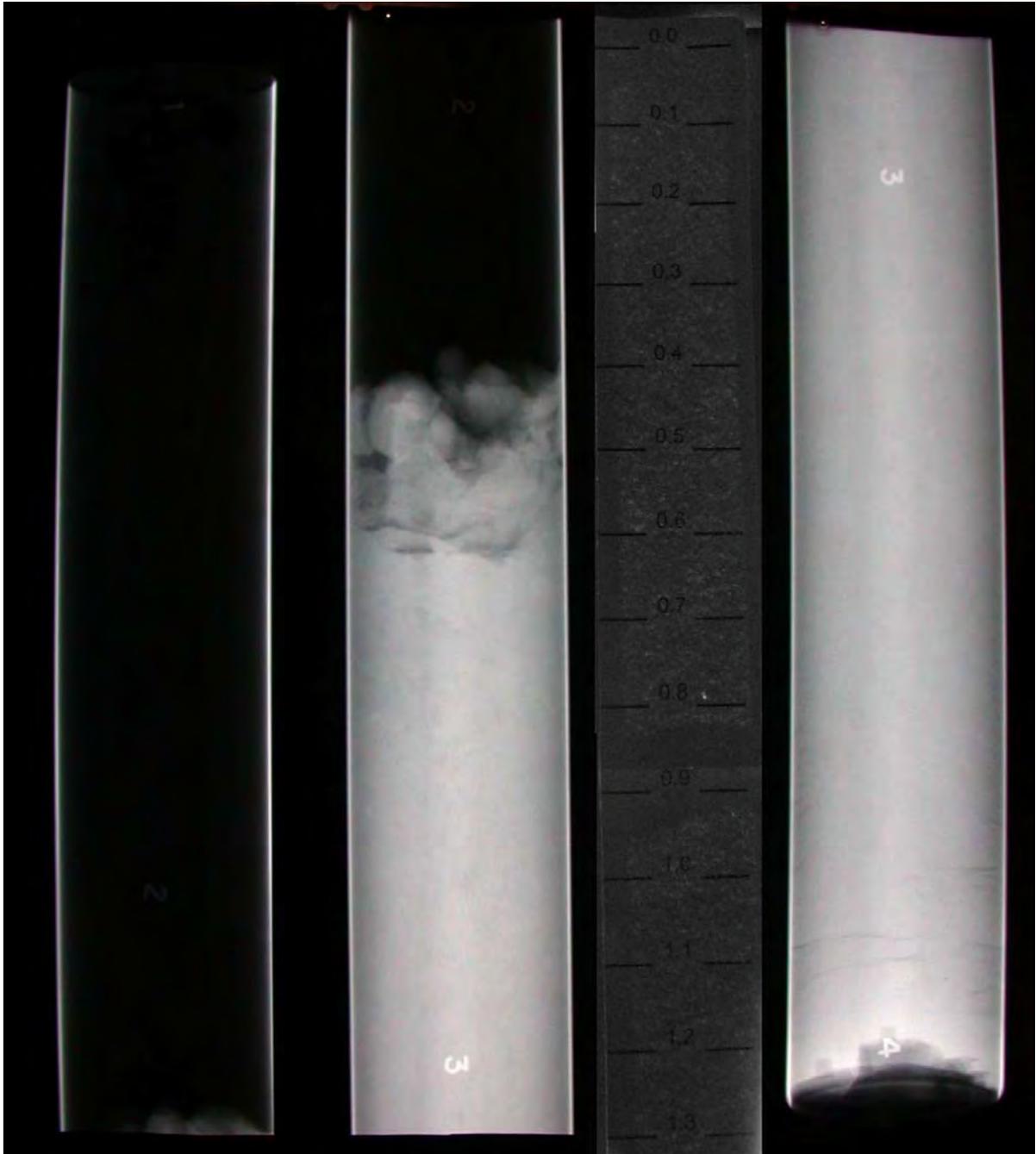
X-RAY IMAGE OF SAMPLE
BH-18, Sample 9
Tunnel Segment of SVRT Project
San Jose, California

FIGURE A20-4



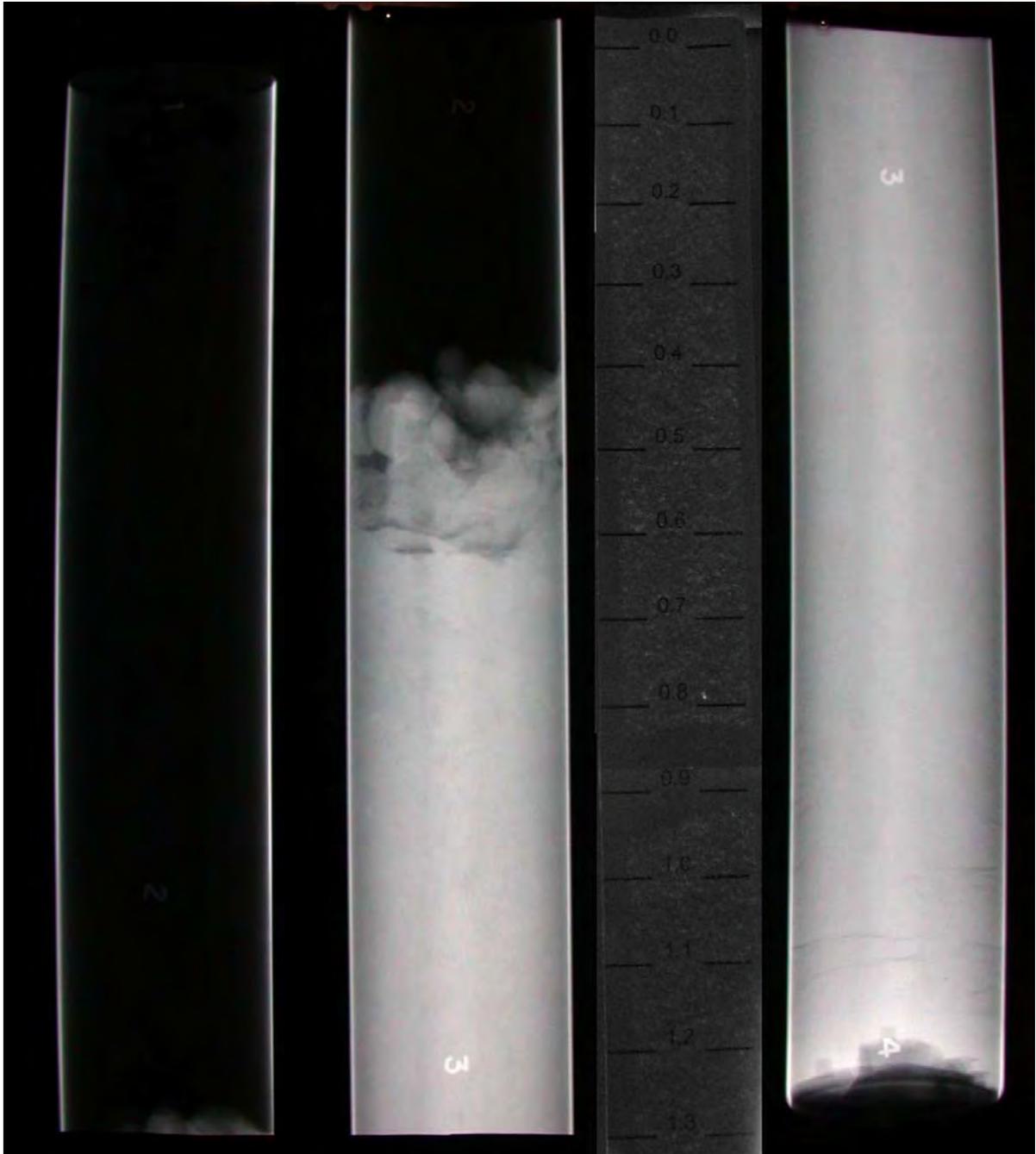
X-RAY IMAGE OF SAMPLE
BH-21, Sample 6
Tunnel Segment of SVRT Project
San Jose, California

FIGURE A20-5



X-RAY IMAGE OF SAMPLE
BH-23, Sample 9
Tunnel Segment of SVRT Project
San Jose, California

FIGURE A20-6

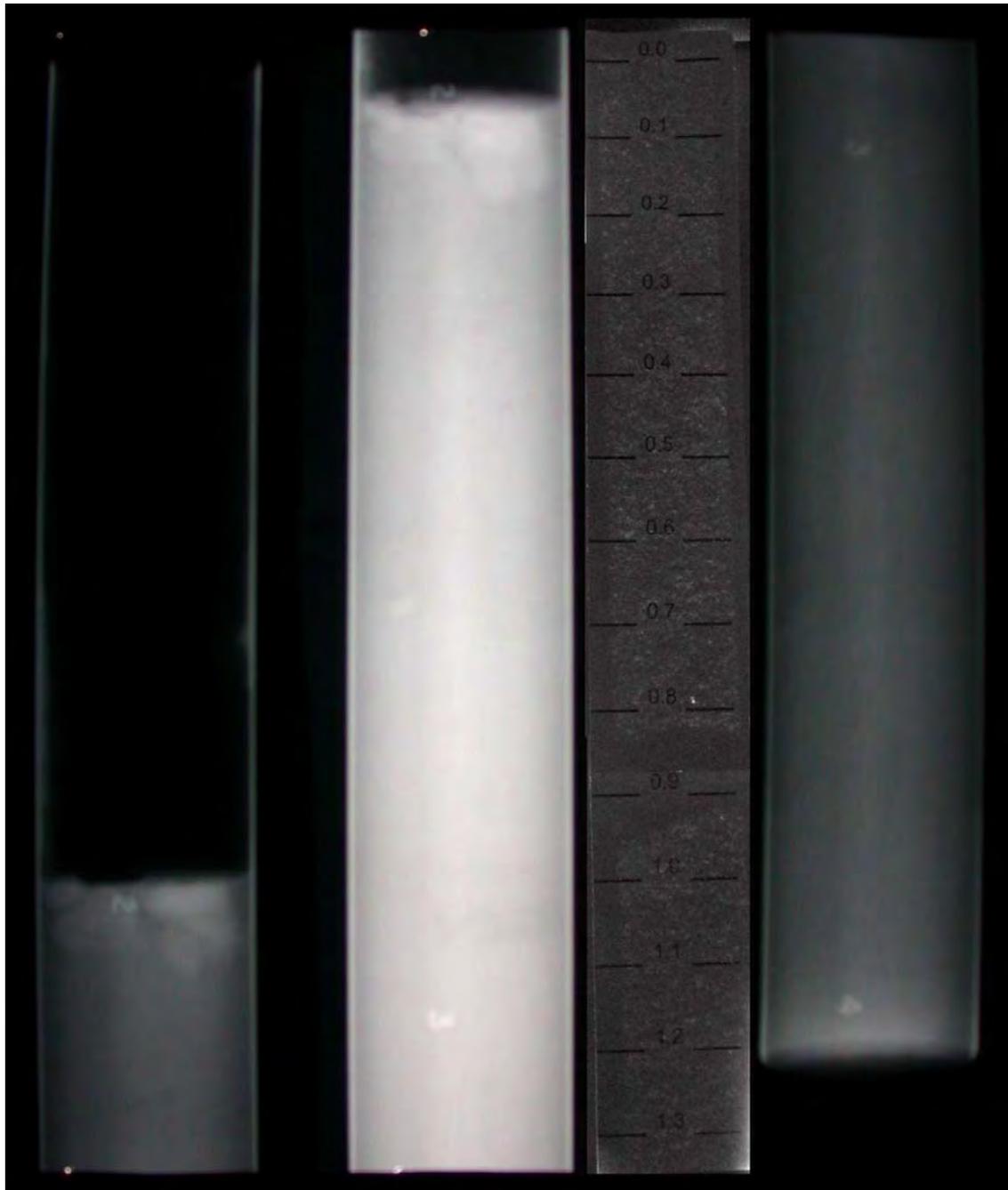


X-RAY IMAGE OF SAMPLE
BH-23, Sample 17
Tunnel Segment of SVRT Project
San Jose, California

FIGURE A20-7



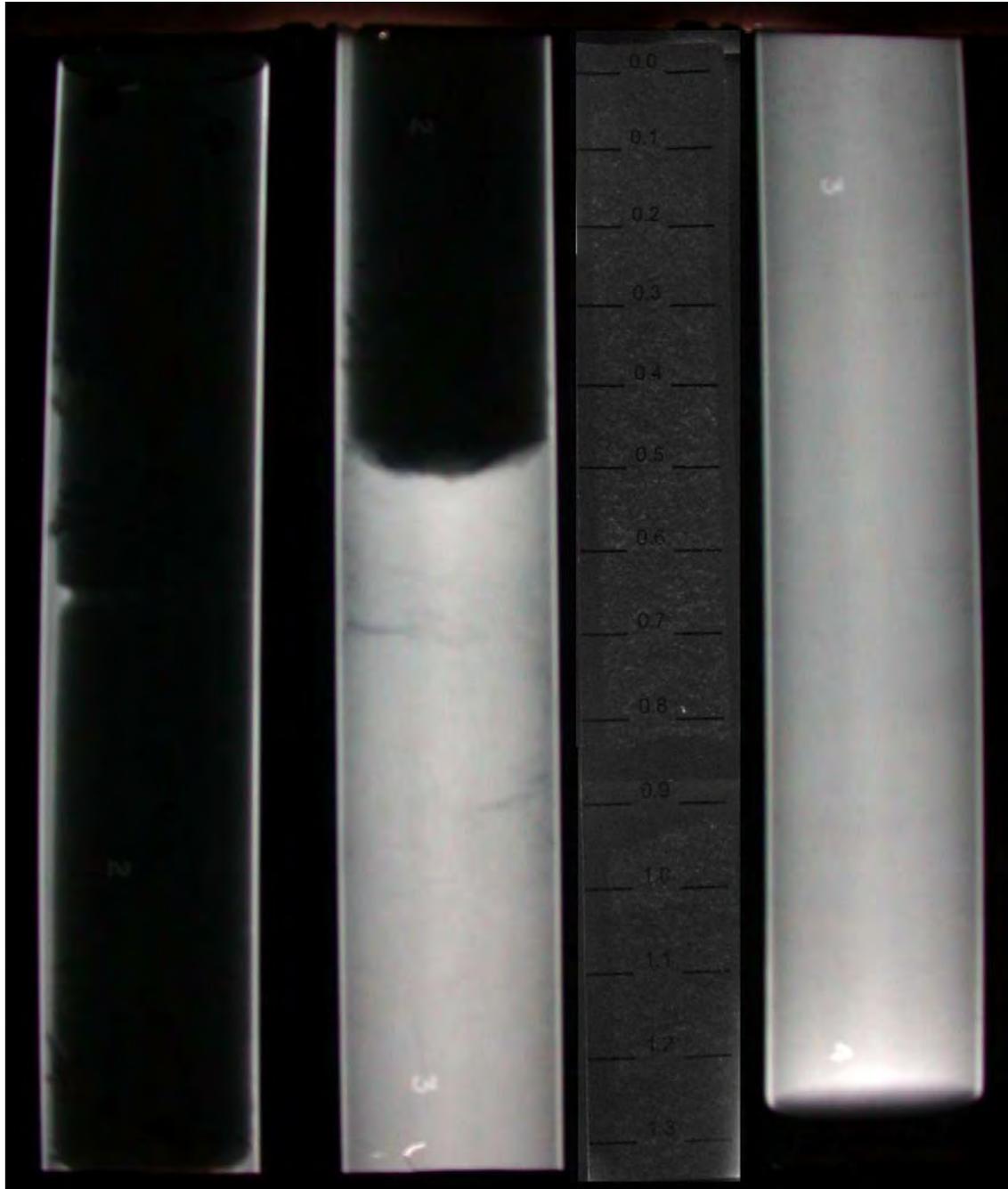
HMM/Bechtel



X-RAY IMAGE OF SAMPLE
BH-23, Sample 18
Tunnel Segment of SVRT Project
San Jose, California

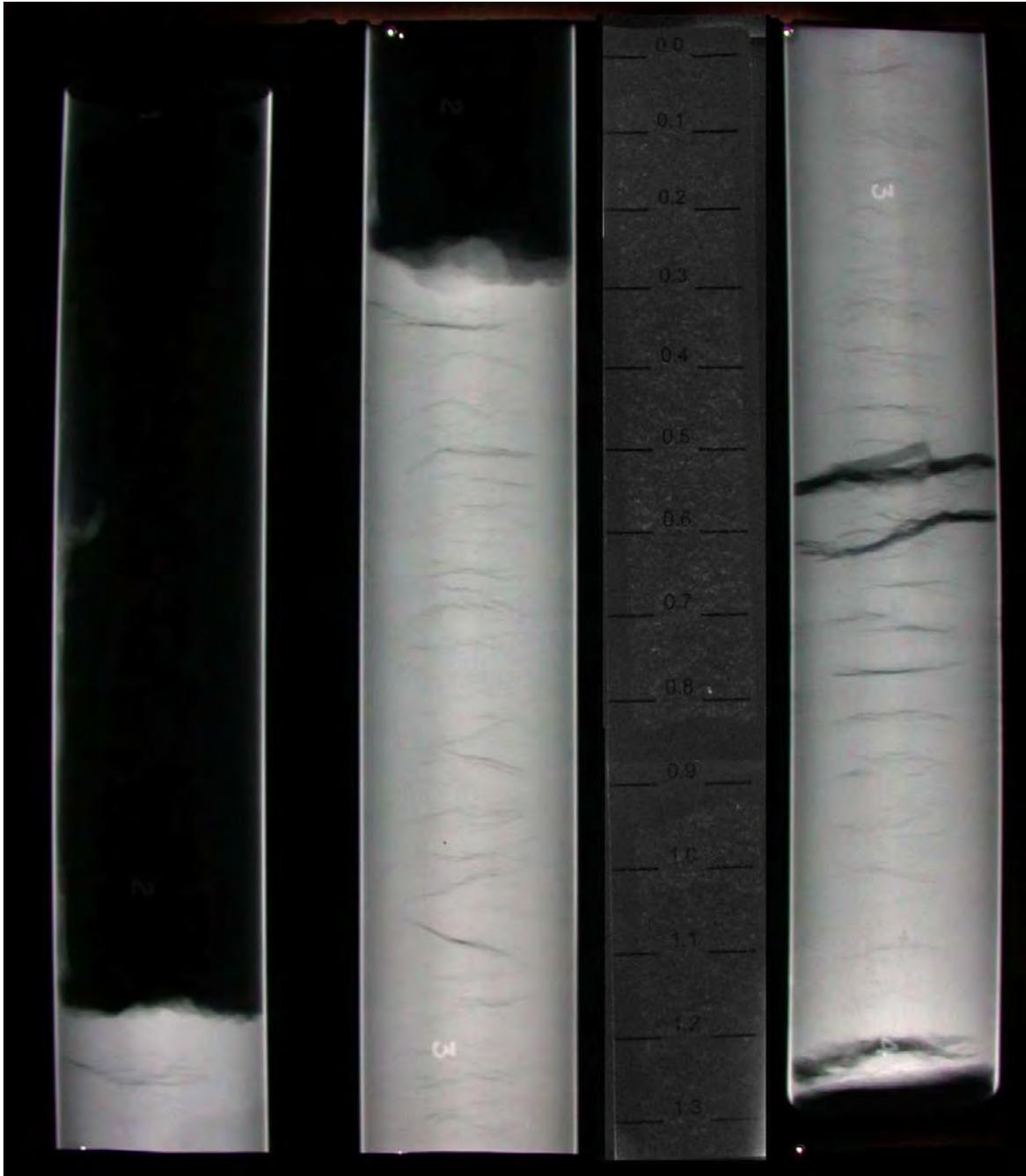
FIGURE A20-8





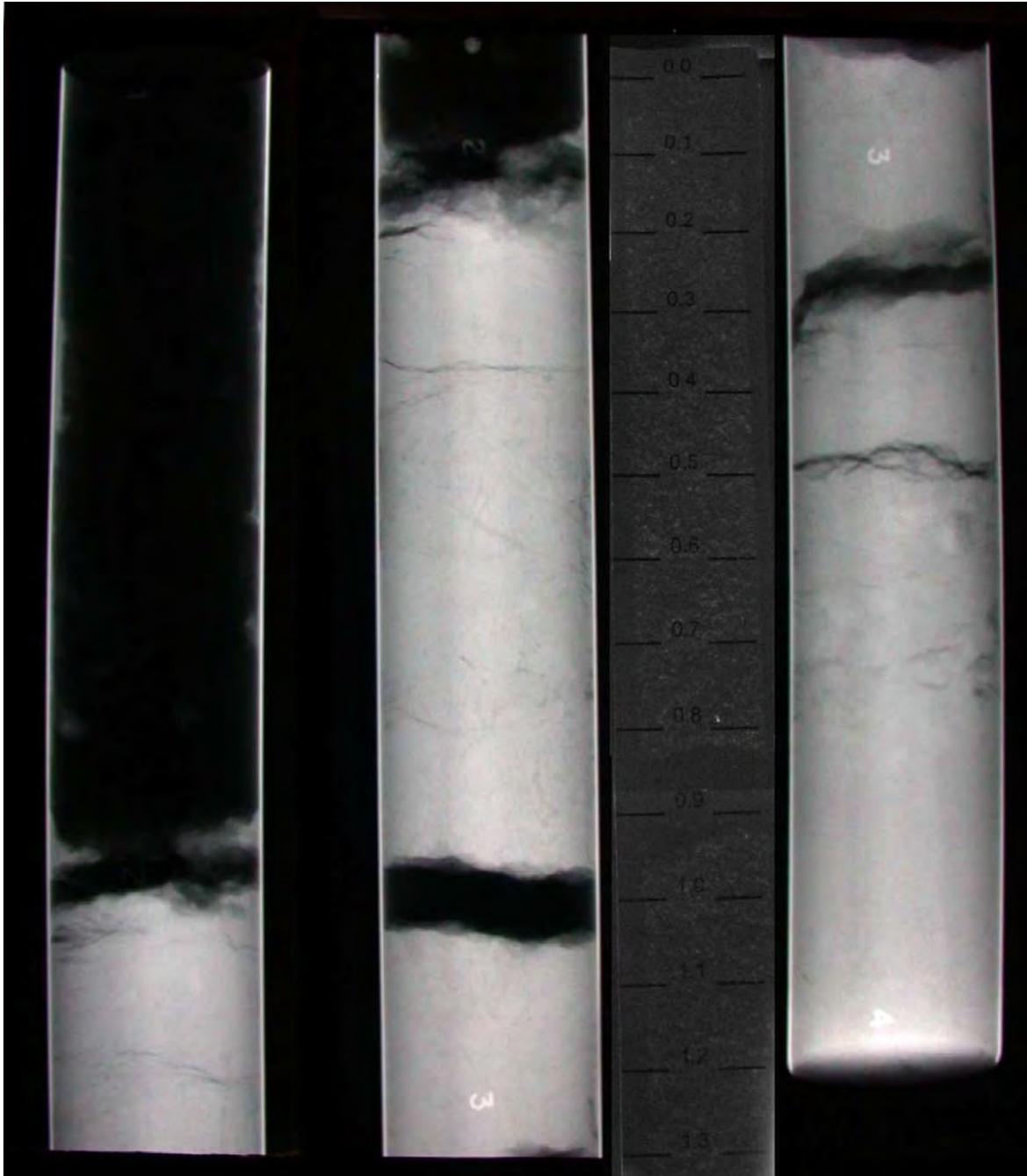
X-RAY IMAGE OF SAMPLE
BH-24, Sample 3
Tunnel Segment of SVRT Project
San Jose, California

FIGURE A20-9



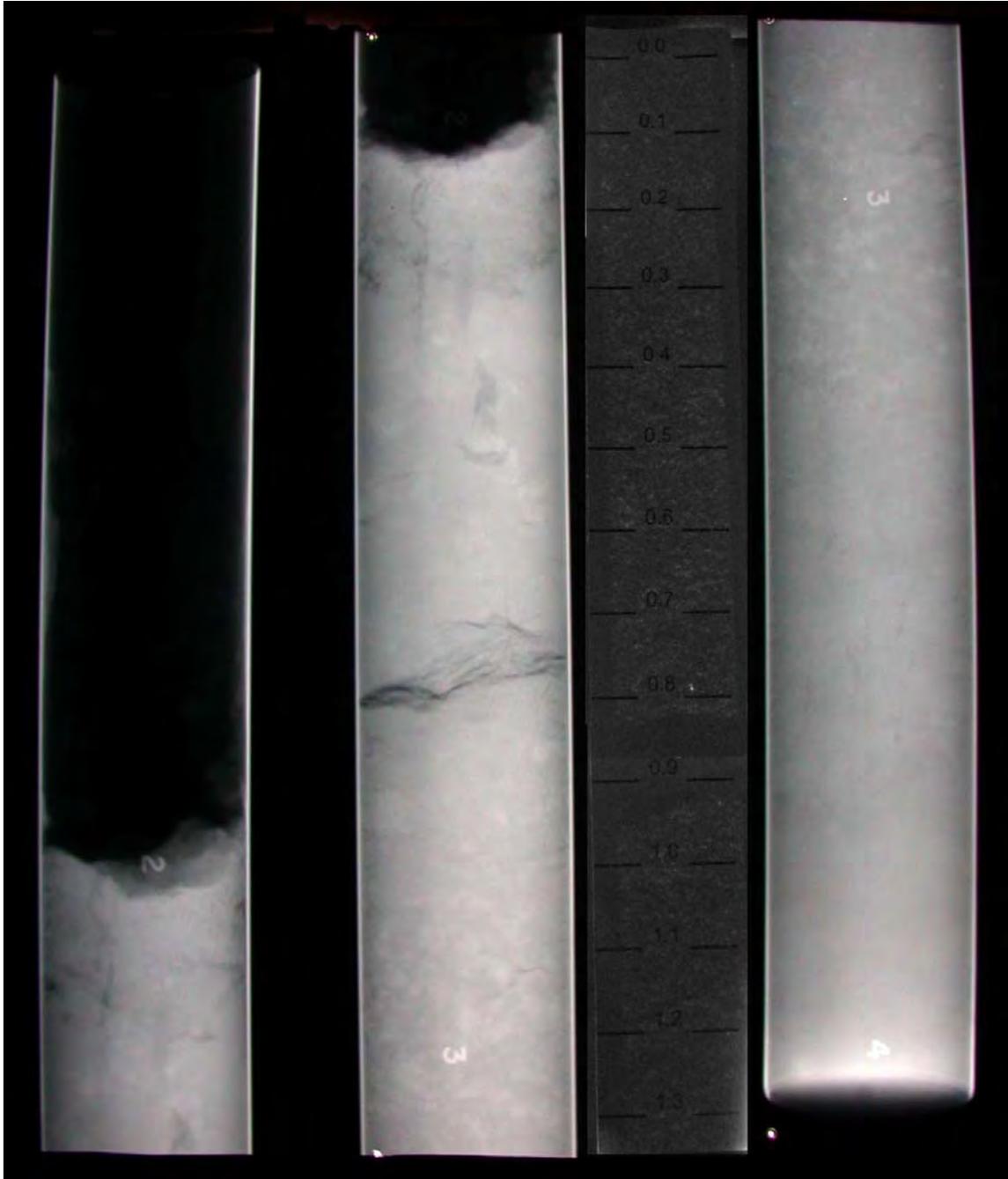
X-RAY IMAGE OF SAMPLE
BH-24, Sample 4
Tunnel Segment of SVRT Project
San Jose, California

FIGURE A20-10



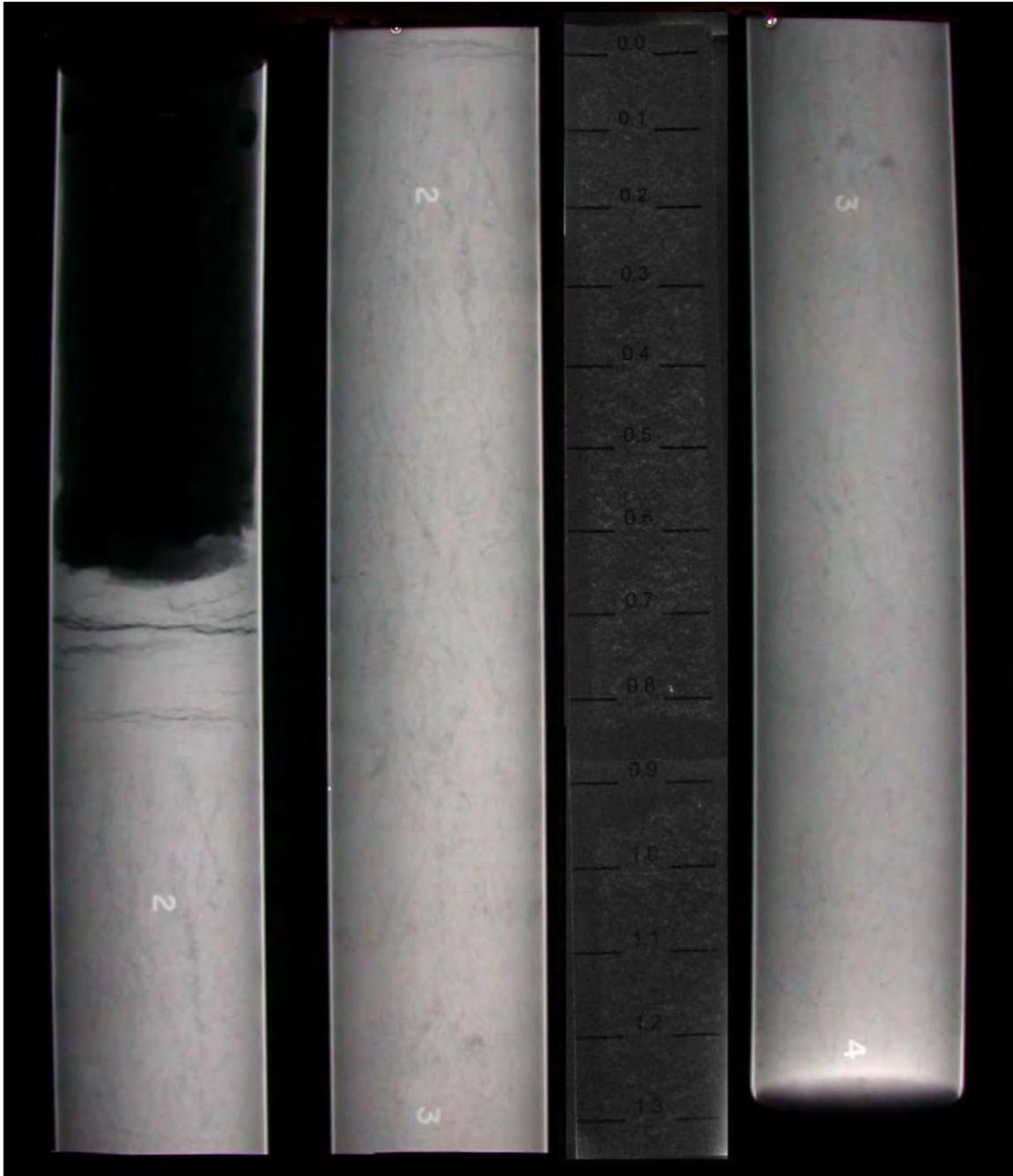
X-RAY IMAGE OF SAMPLE
BH-24, Sample 5
Tunnel Segment of SVRT Project
San Jose, California

FIGURE A20-11



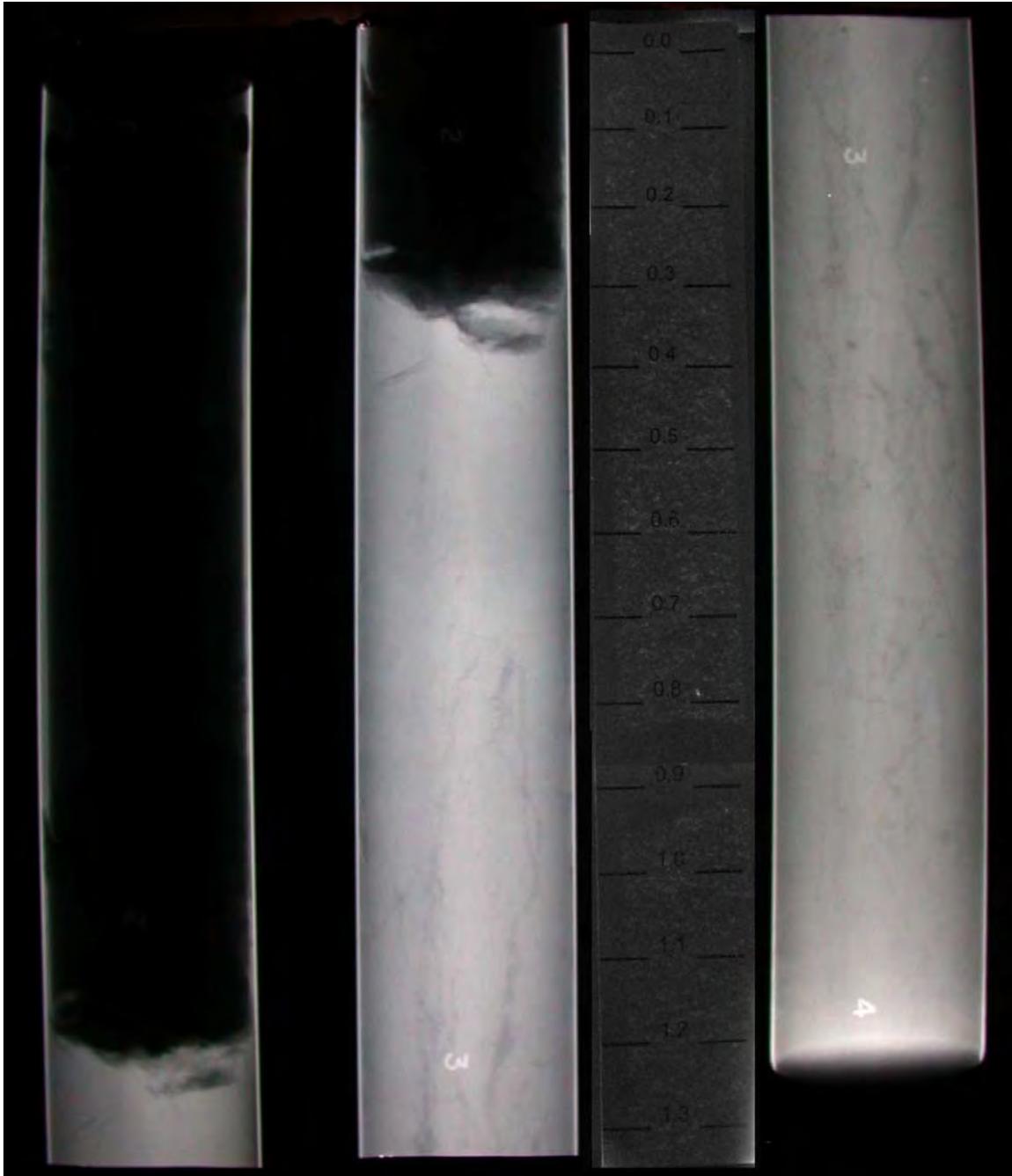
X-RAY IMAGE OF SAMPLE
BH-24, Sample 6
Tunnel Segment of SVRT Project
San Jose, California

FIGURE A20-12



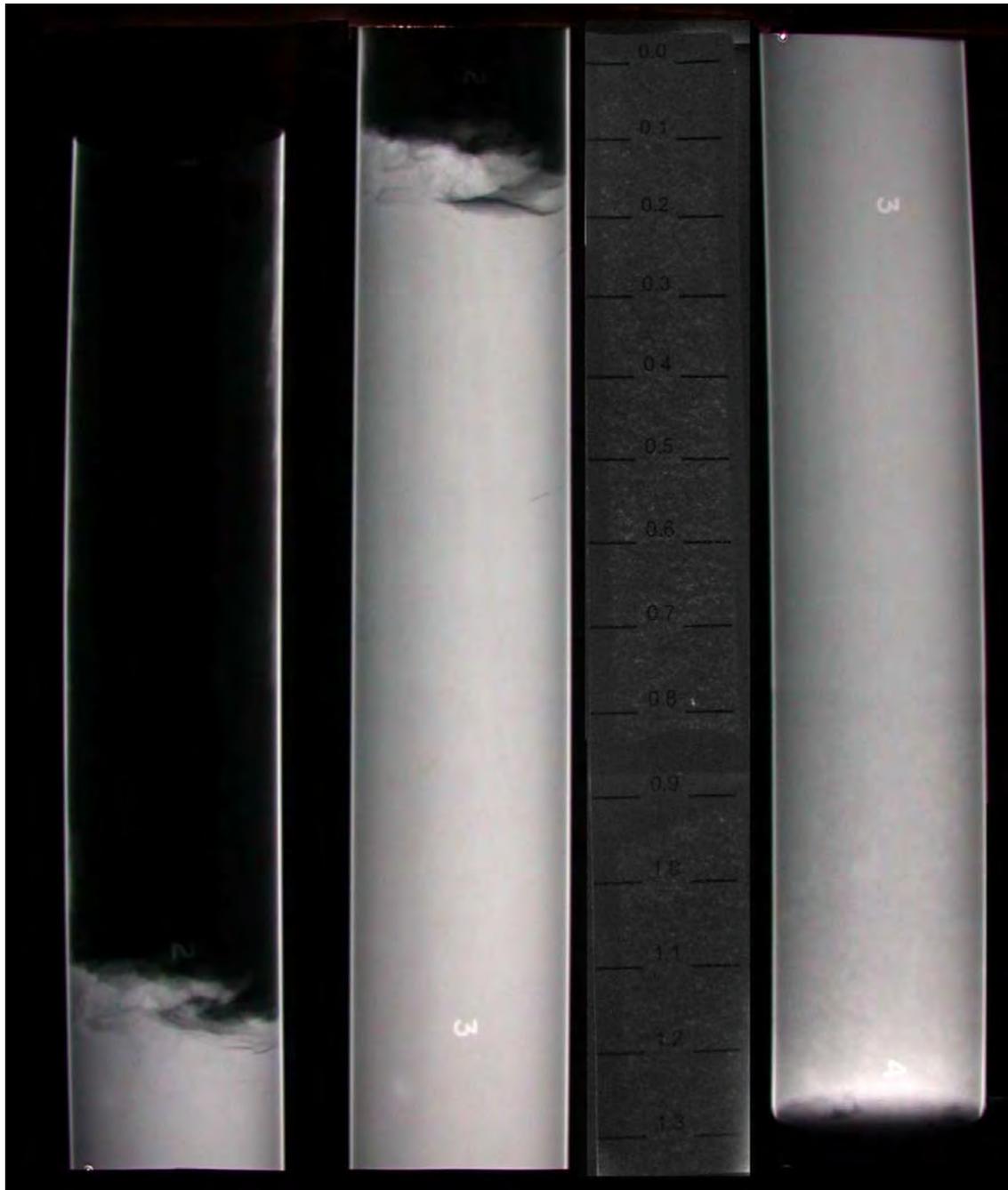
X-RAY IMAGE OF SAMPLE
BH-24, Sample 7
Tunnel Segment of SVRT Project
San Jose, California

FIGURE A20-13



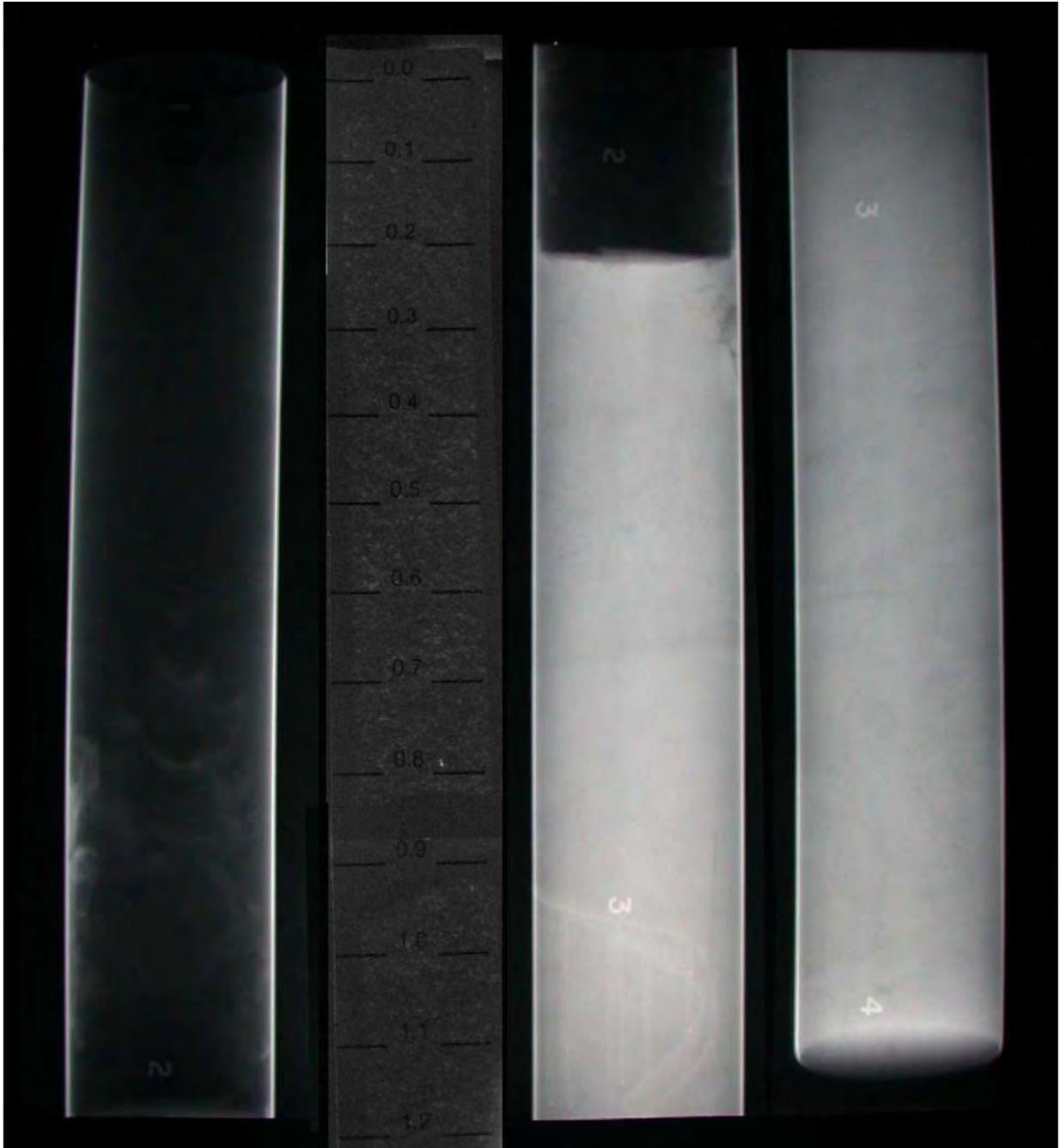
X-RAY IMAGE OF SAMPLE
BH-24, Sample 8
Tunnel Segment of SVRT Project
San Jose, California

FIGURE A20-14



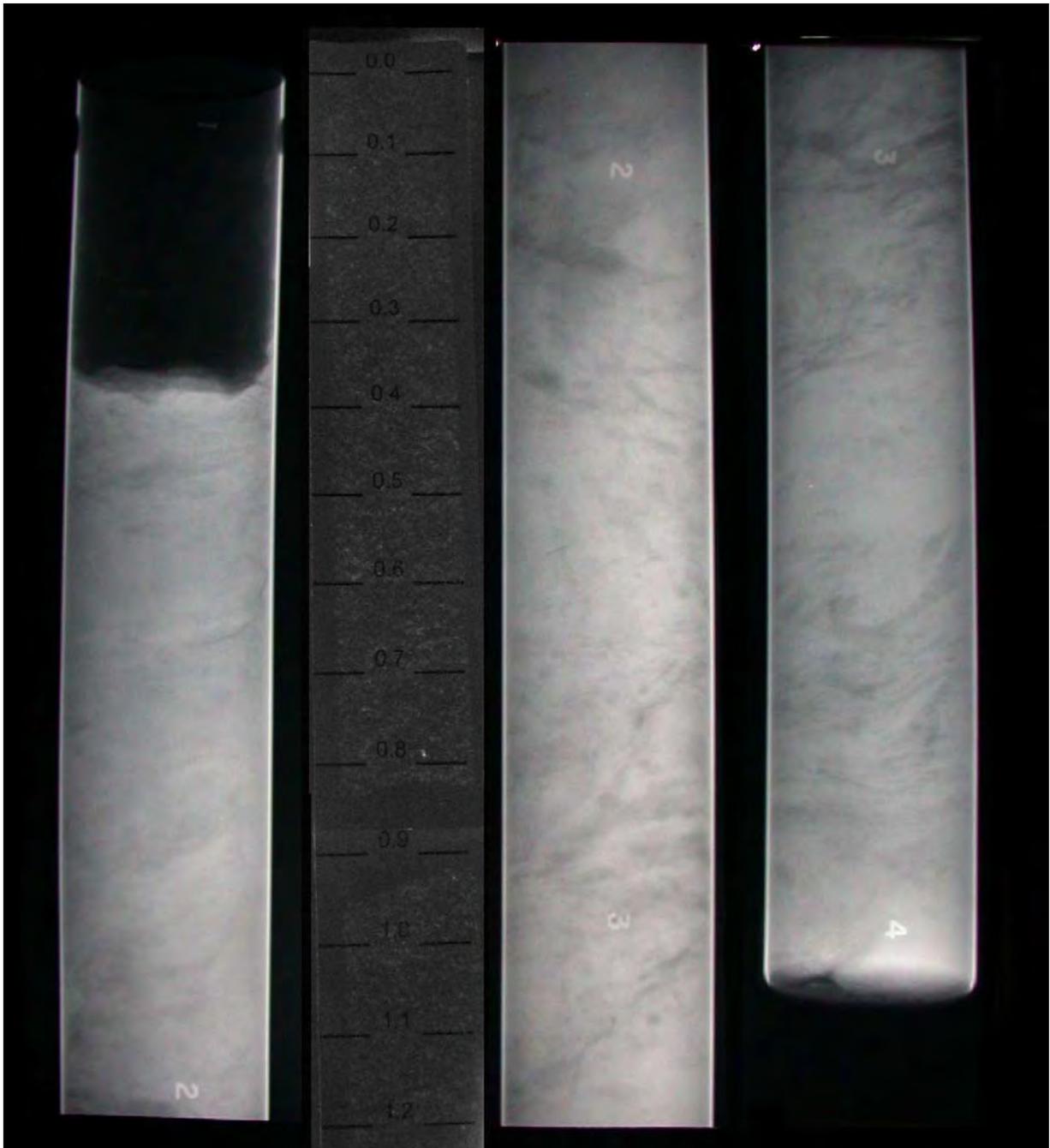
X-RAY IMAGE OF SAMPLE
BH-24, Sample 29
Tunnel Segment of SVRT Project
San Jose, California

FIGURE A20-15



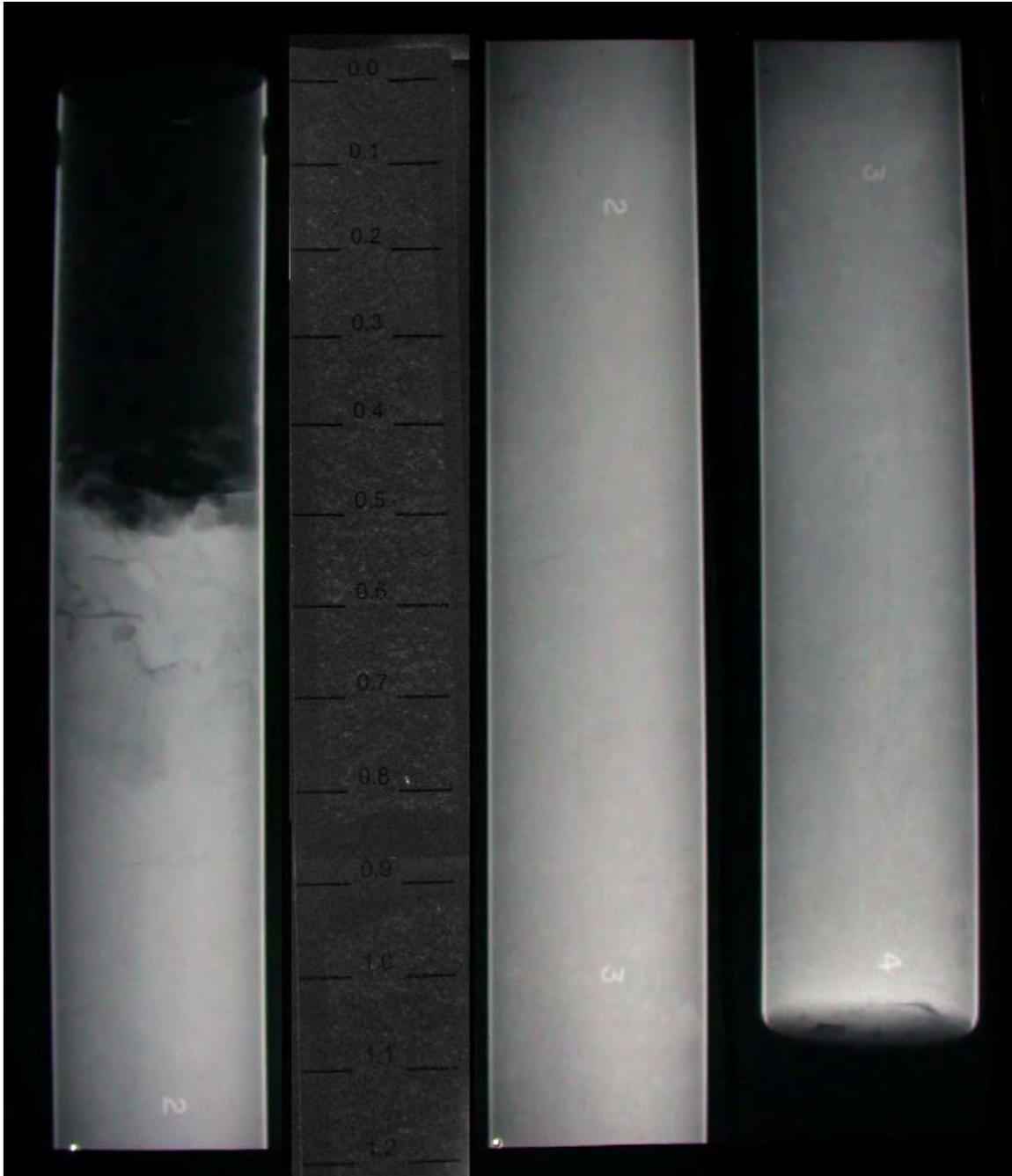
X-RAY IMAGE OF SAMPLE
BH-25, Sample 3
Tunnel Segment of SVRT Project
San Jose, California

FIGURE A20-16



X-RAY IMAGE OF SAMPLE
BH-25, Sample 4
Tunnel Segment of SVRT Project
San Jose, California

FIGURE A20-17



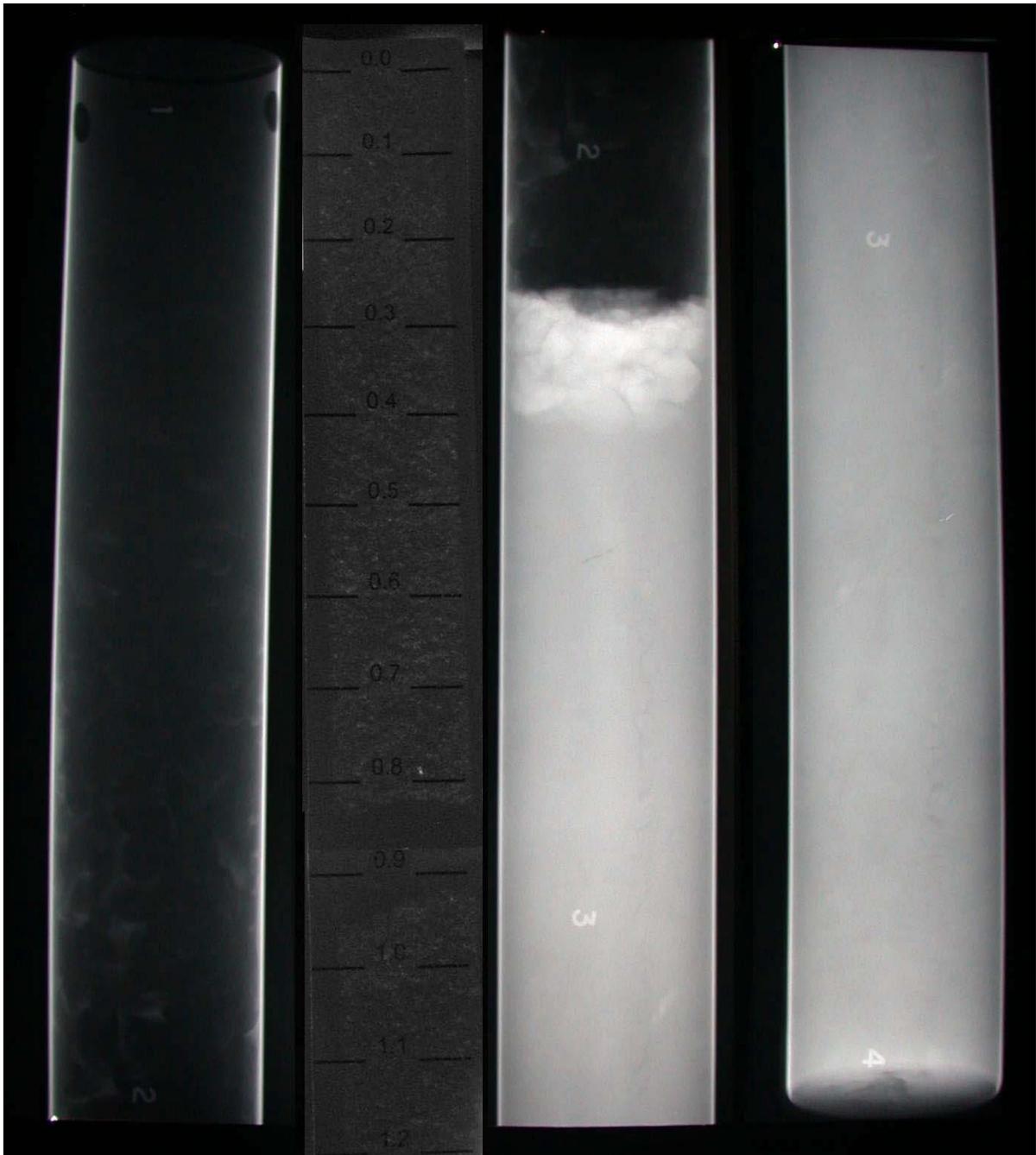
X-RAY IMAGE OF SAMPLE
BH-25, Sample 16
Tunnel Segment of SVRT Project
San Jose, California

FIGURE A20-18



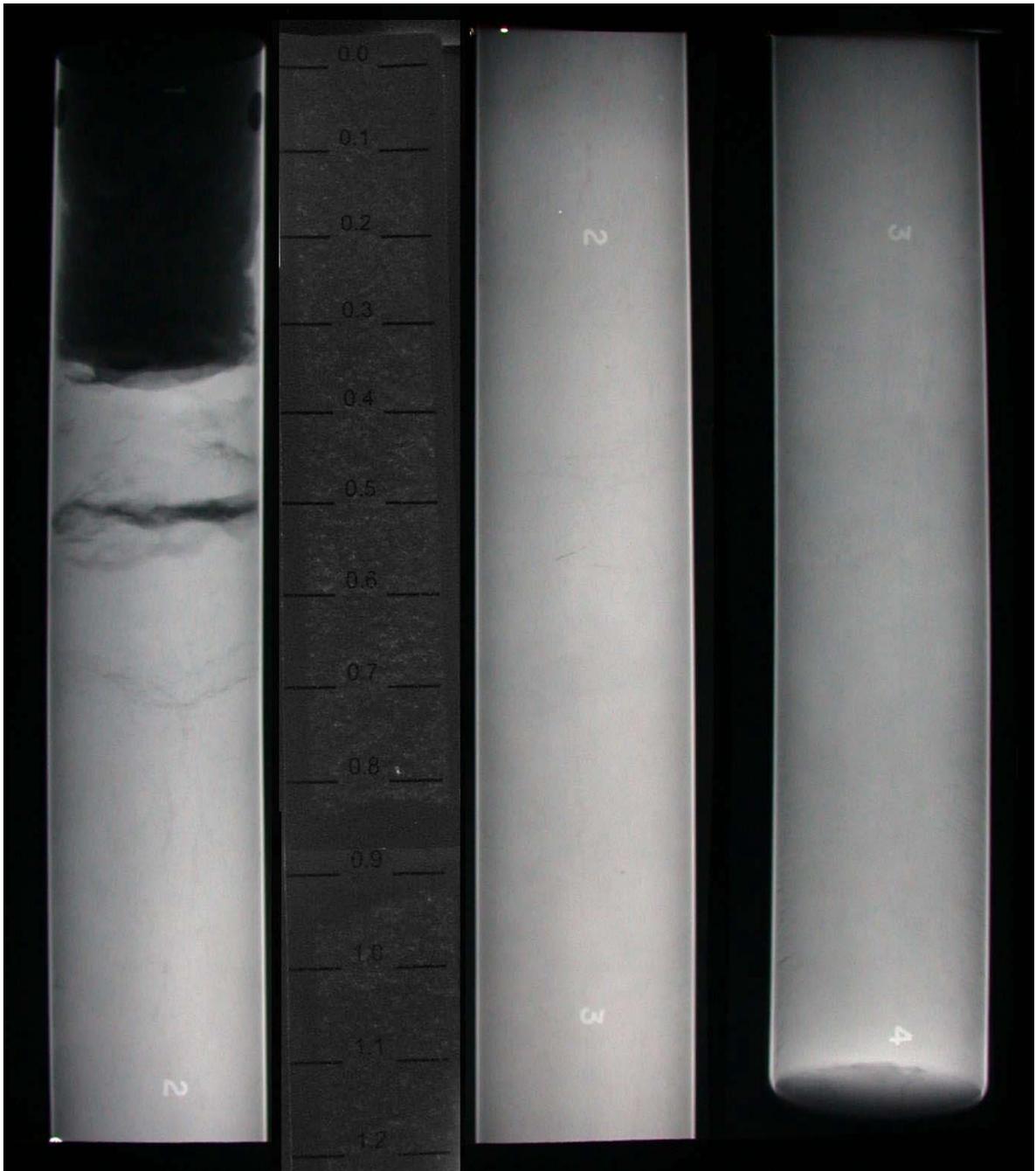
X-RAY IMAGE OF SAMPLE
BH-25, Sample 21
Tunnel Segment of SVRT Project
San Jose, California

FIGURE A20-19



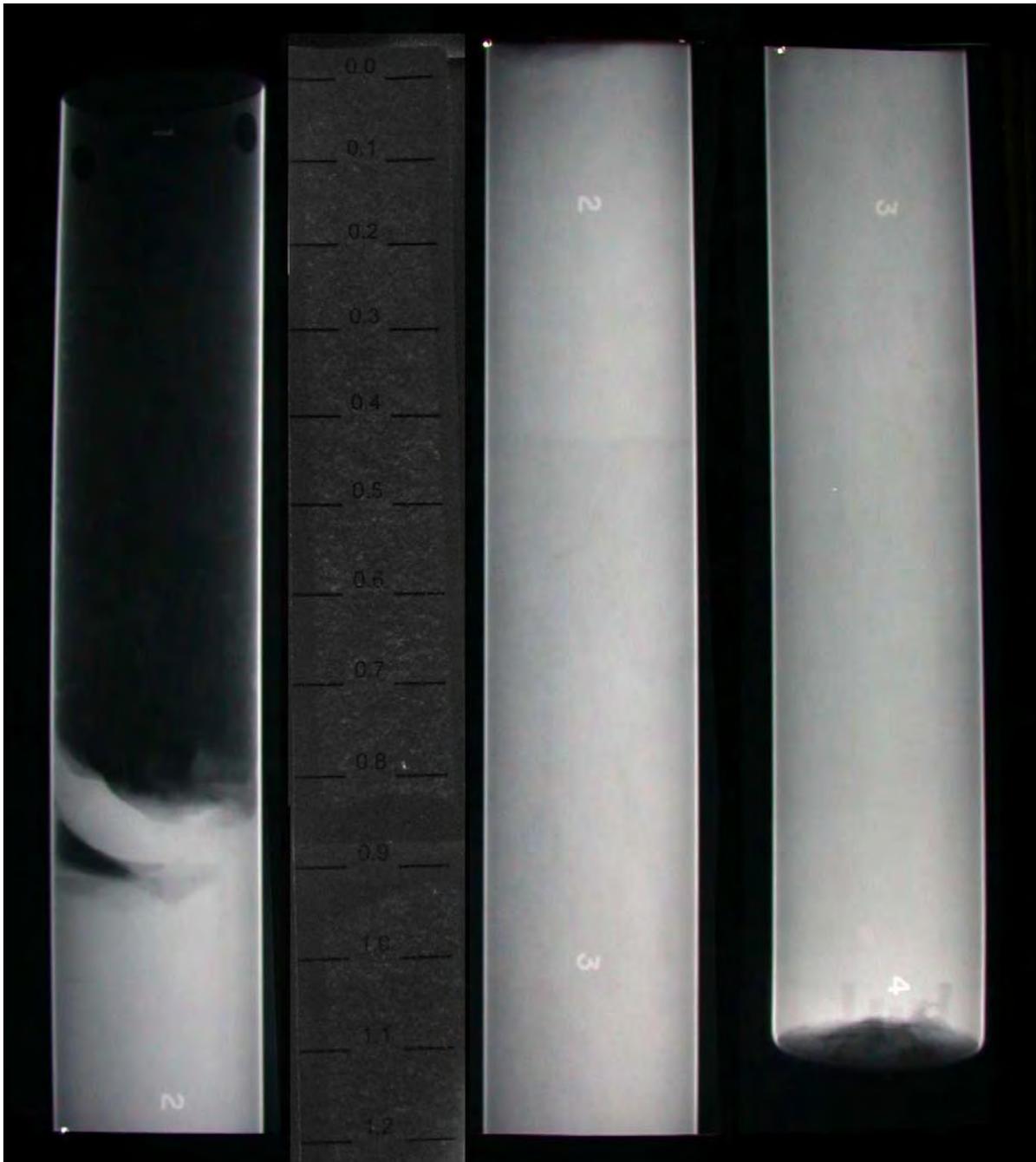
X-RAY IMAGE OF SAMPLE
BH-25, Sample 22
Tunnel Segment of SVRT Project
San Jose, California

FIGURE A20-20



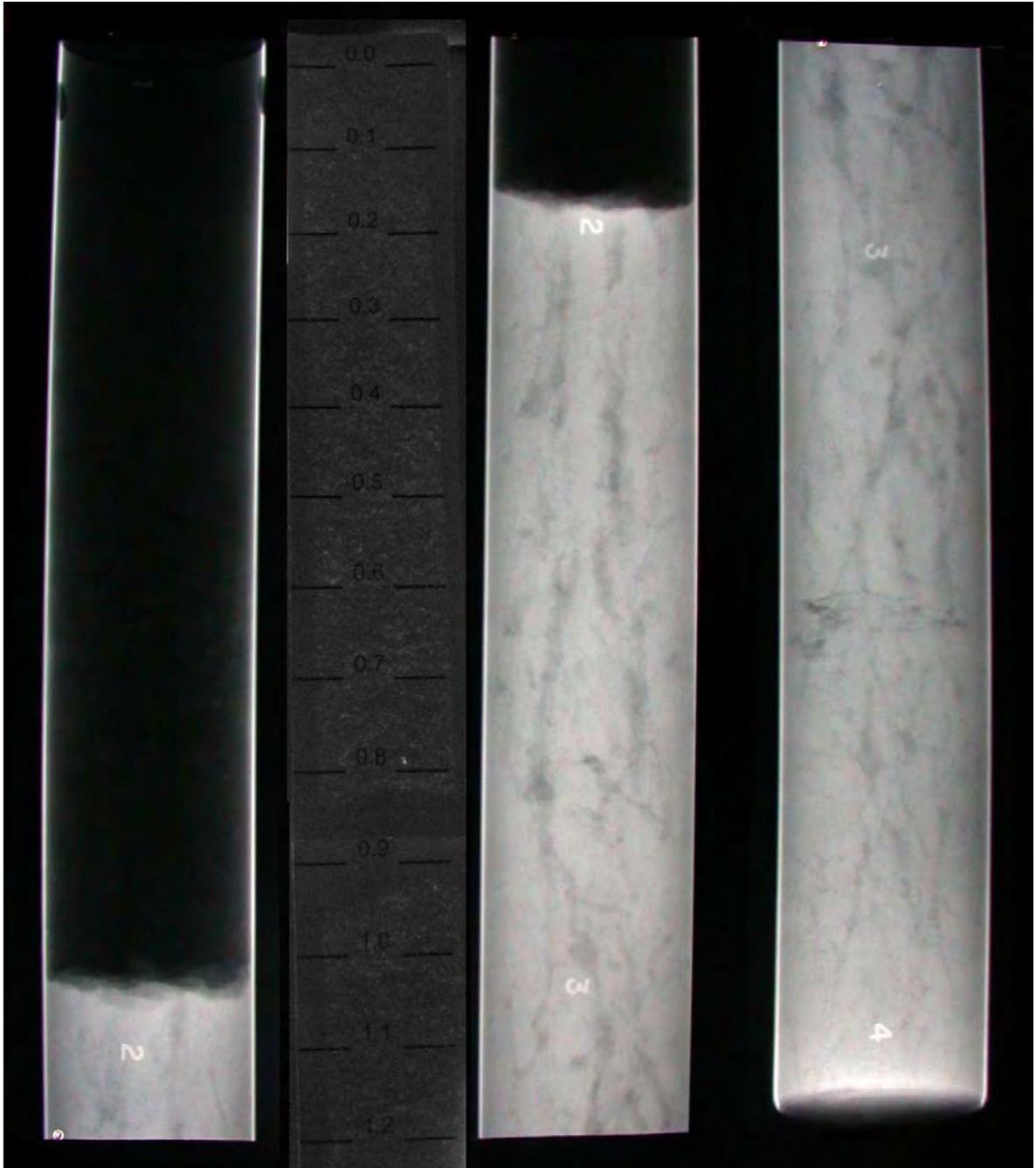
X-RAY IMAGE OF SAMPLE
BH-26, Sample 2
Tunnel Segment of SVRT Project
San Jose, California

FIGURE A20-21



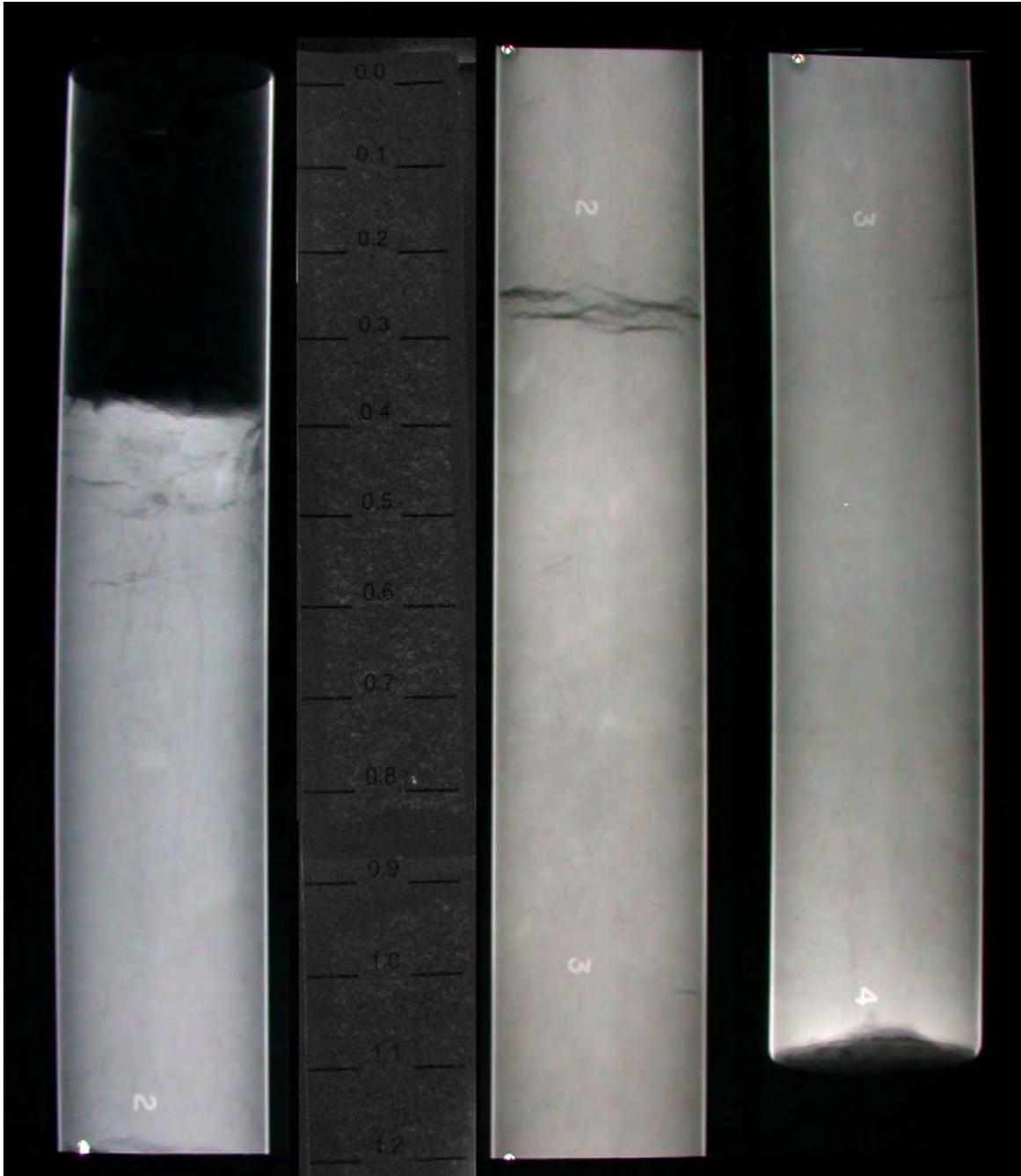
X-RAY IMAGE OF SAMPLE
BH-26, Sample 5
Tunnel Segment of SVRT Project
San Jose, California

FIGURE A20-22



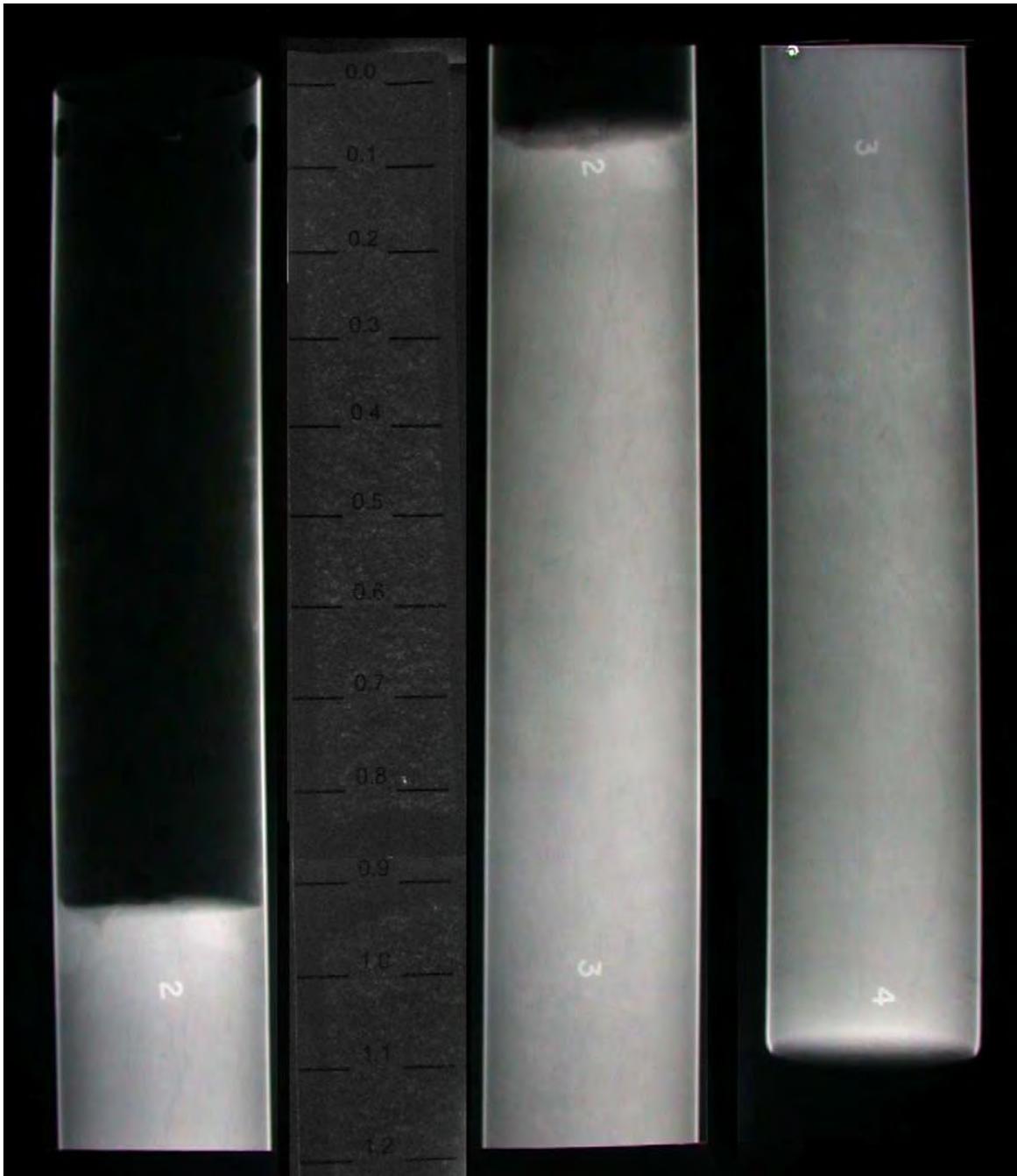
X-RAY IMAGE OF SAMPLE
BH-33, Sample 1
Tunnel Segment of SVRT Project
San Jose, California

FIGURE A20-23



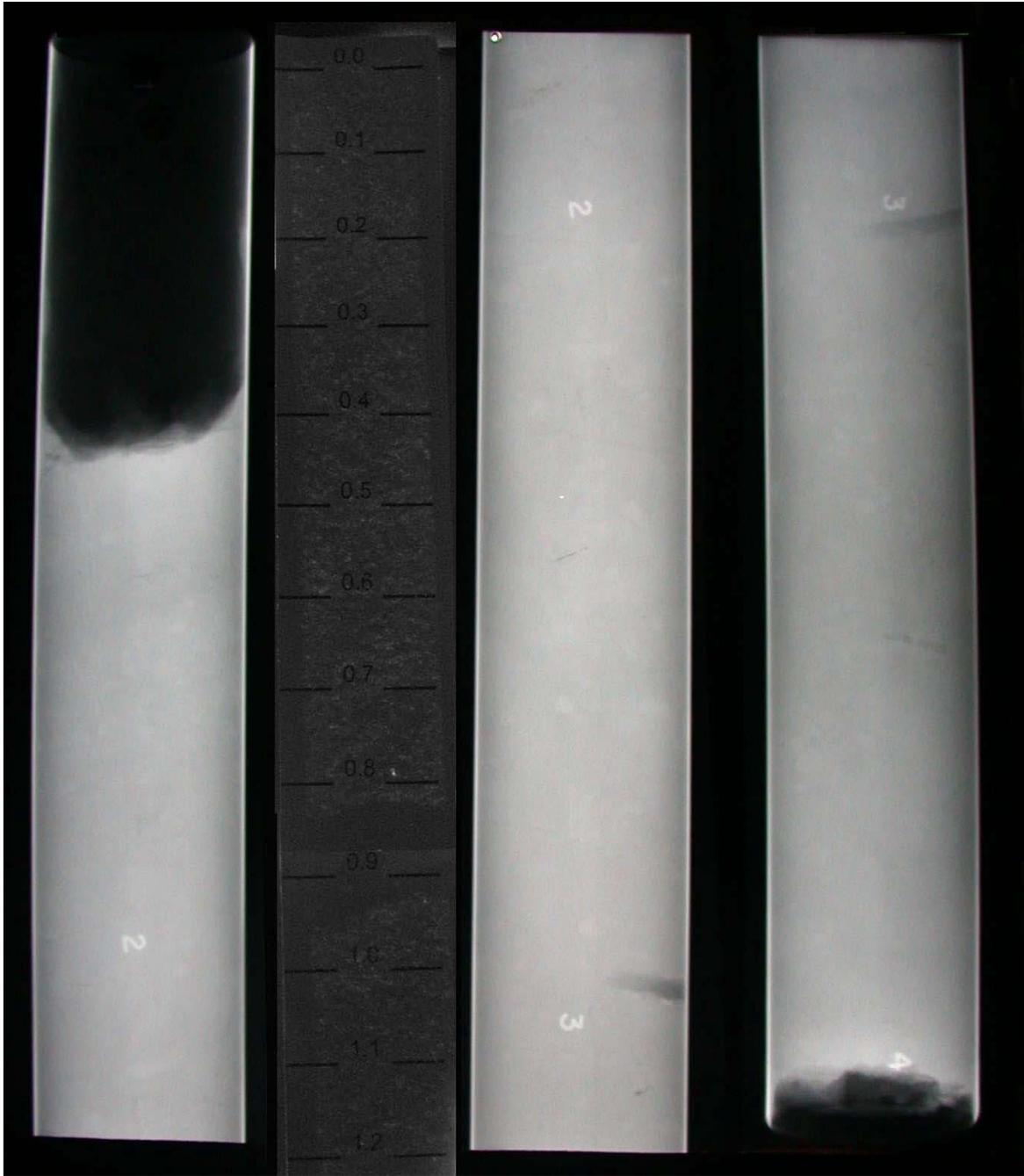
X-RAY IMAGE OF SAMPLE
BH-33, Sample 3
Tunnel Segment of SVRT Project
San Jose, California

FIGURE A20-24



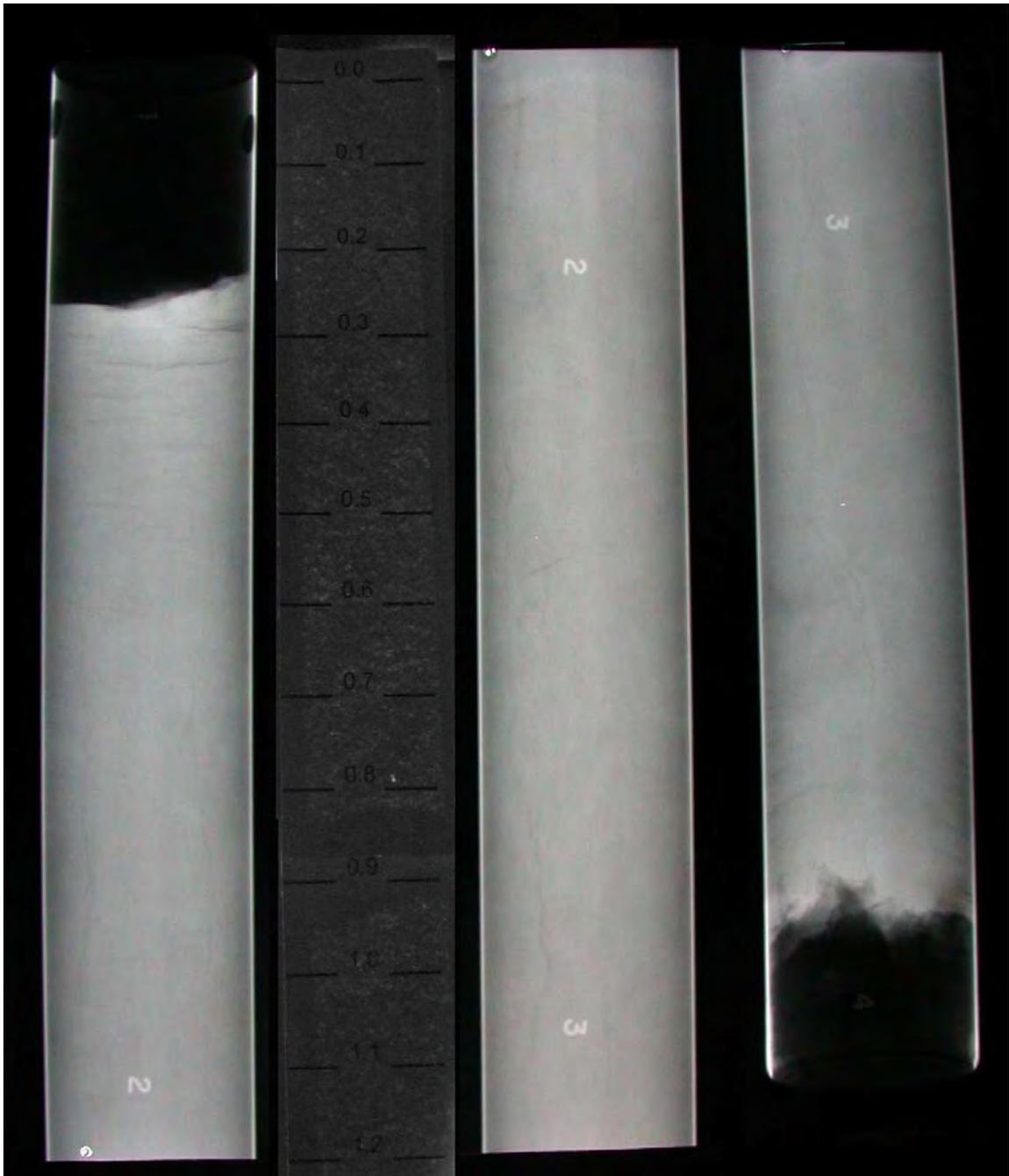
X-RAY IMAGE OF SAMPLE
BH-33, Sample 6
Tunnel Segment of SVRT Project
San Jose, California

FIGURE A20-25



X-RAY IMAGE OF SAMPLE
BH-33, Sample 7
Tunnel Segment of SVRT Project
San Jose, California

FIGURE A20-26



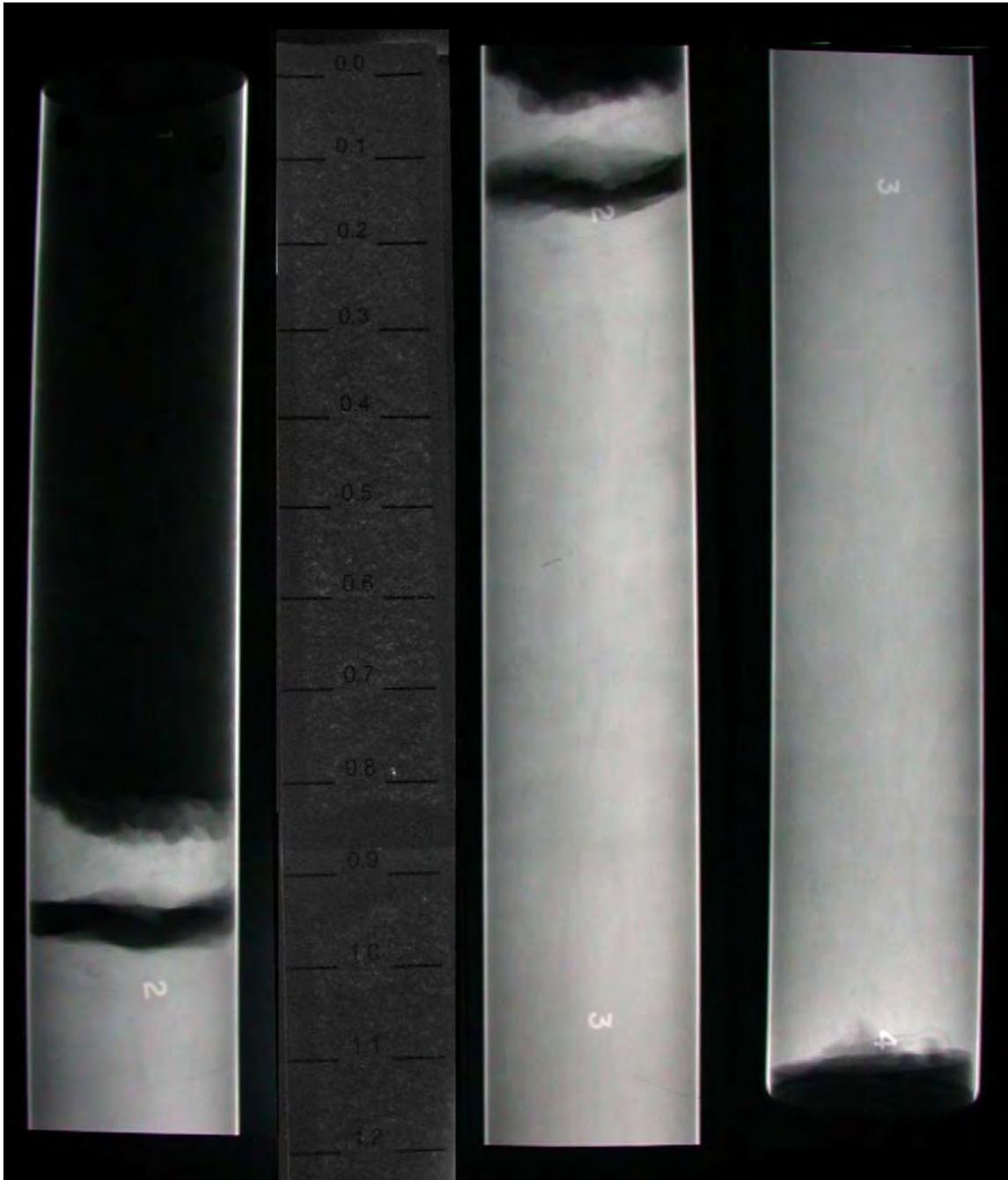
X-RAY IMAGE OF SAMPLE
BH-33, Sample 9
Tunnel Segment of SVRT Project
San Jose, California

FIGURE A20-27



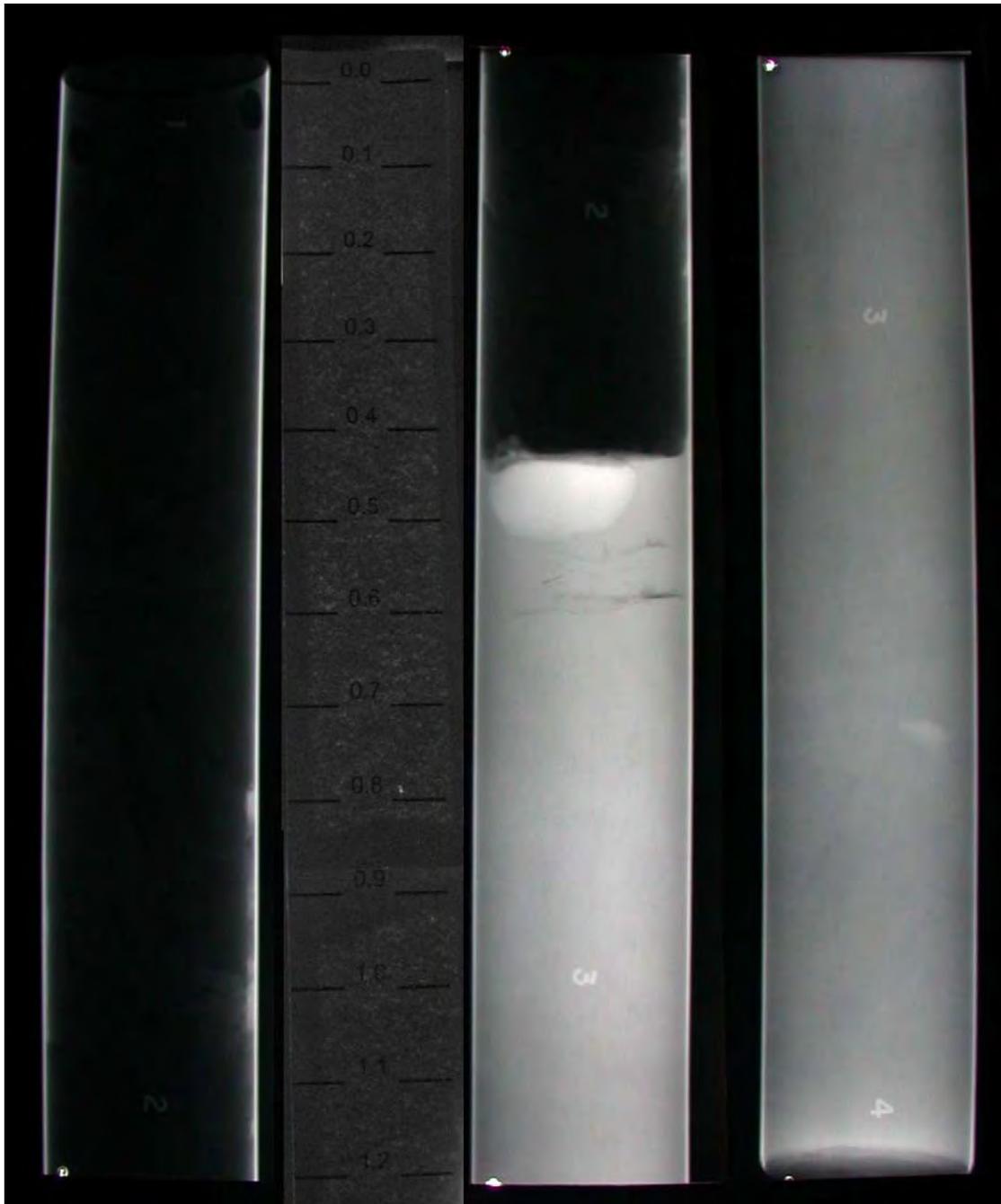
X-RAY IMAGE OF SAMPLE
BH-33, Sample 11
Tunnel Segment of SVRT Project
San Jose, California

FIGURE A20-28



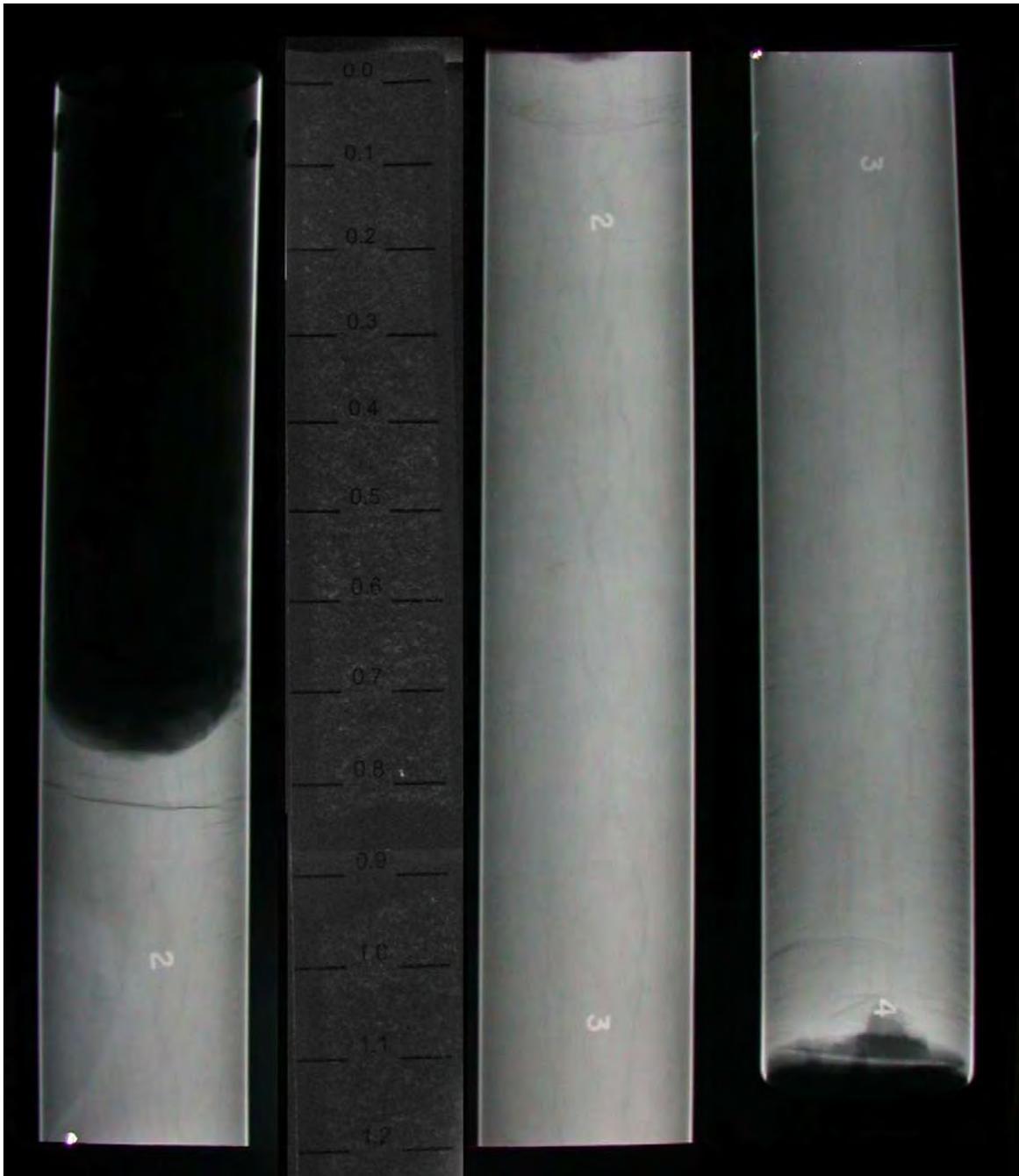
X-RAY IMAGE OF SAMPLE
BH-33, Sample 17
Tunnel Segment of SVRT Project
San Jose, California

FIGURE A20-29



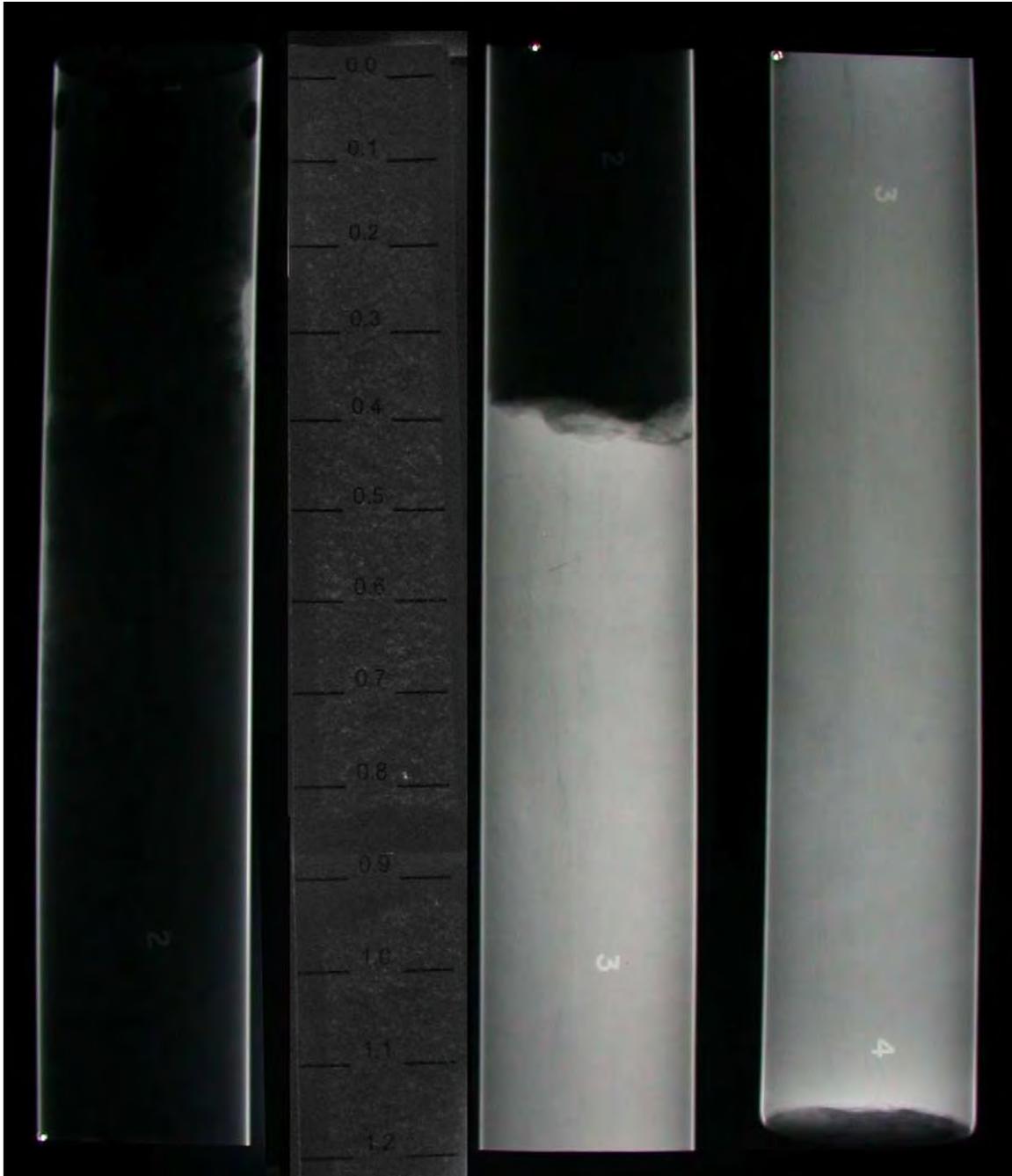
X-RAY IMAGE OF SAMPLE
BH-37, Sample 5
Tunnel Segment of SVRT Project
San Jose, California

FIGURE A20-30



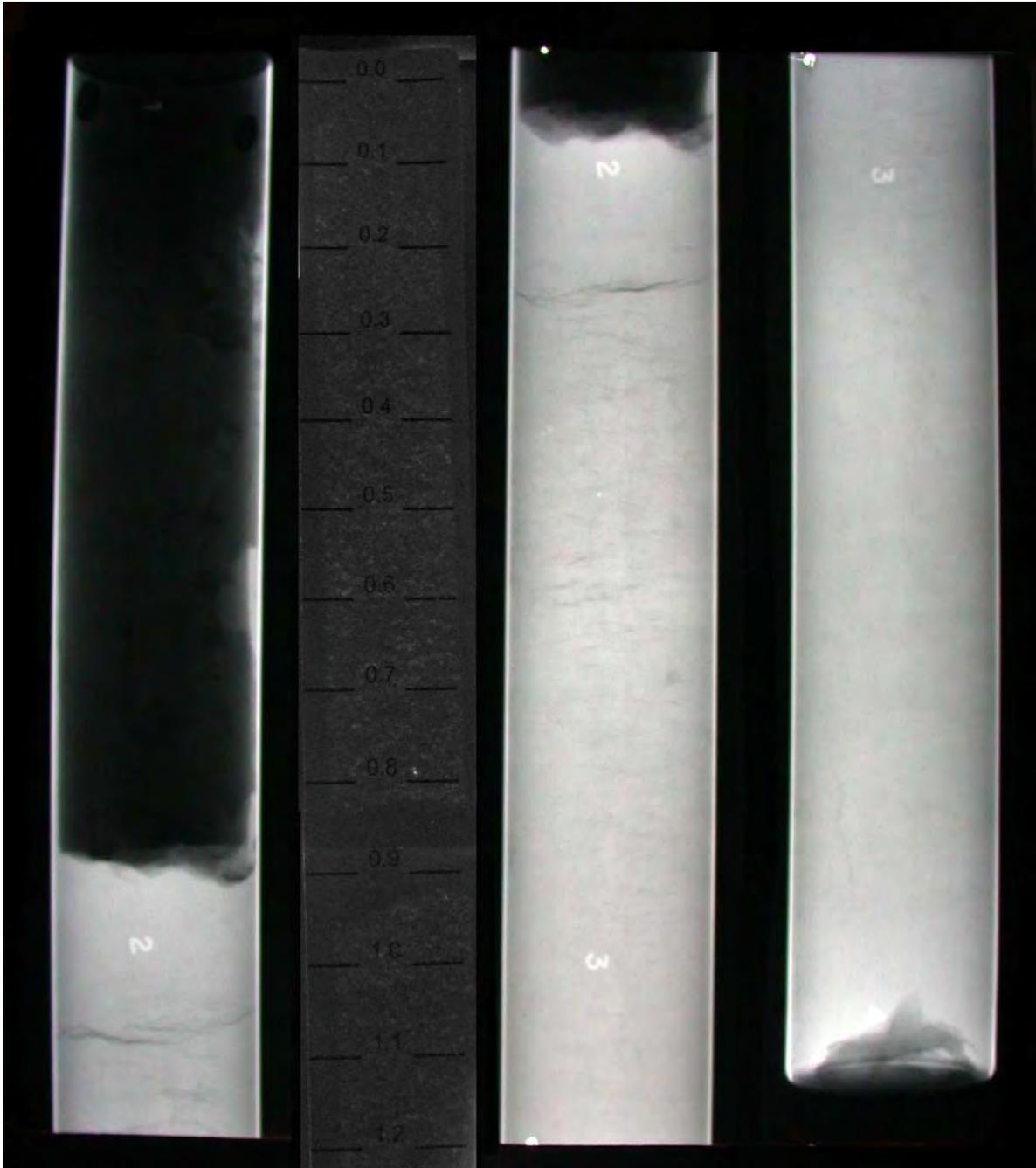
X-RAY IMAGE OF SAMPLE
BH-38, Sample 14
Tunnel Segment of SVRT Project
San Jose, California

FIGURE A20-31



X-RAY IMAGE OF SAMPLE
BH-42, Sample 7
Tunnel Segment of SVRT Project
San Jose, California

FIGURE A20-32



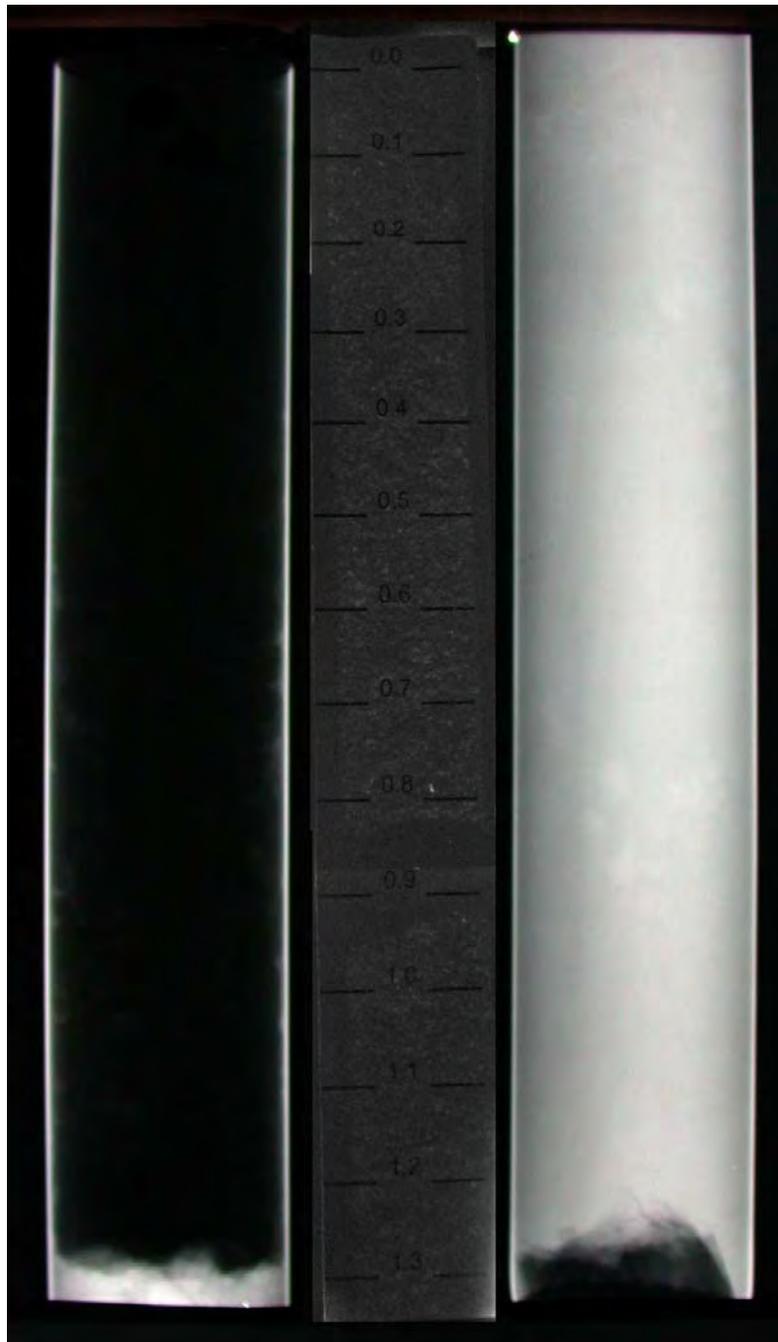
X-RAY IMAGE OF SAMPLE
BH-45, Sample 4
Tunnel Segment of SVRT Project
San Jose, California

FIGURE A20-33



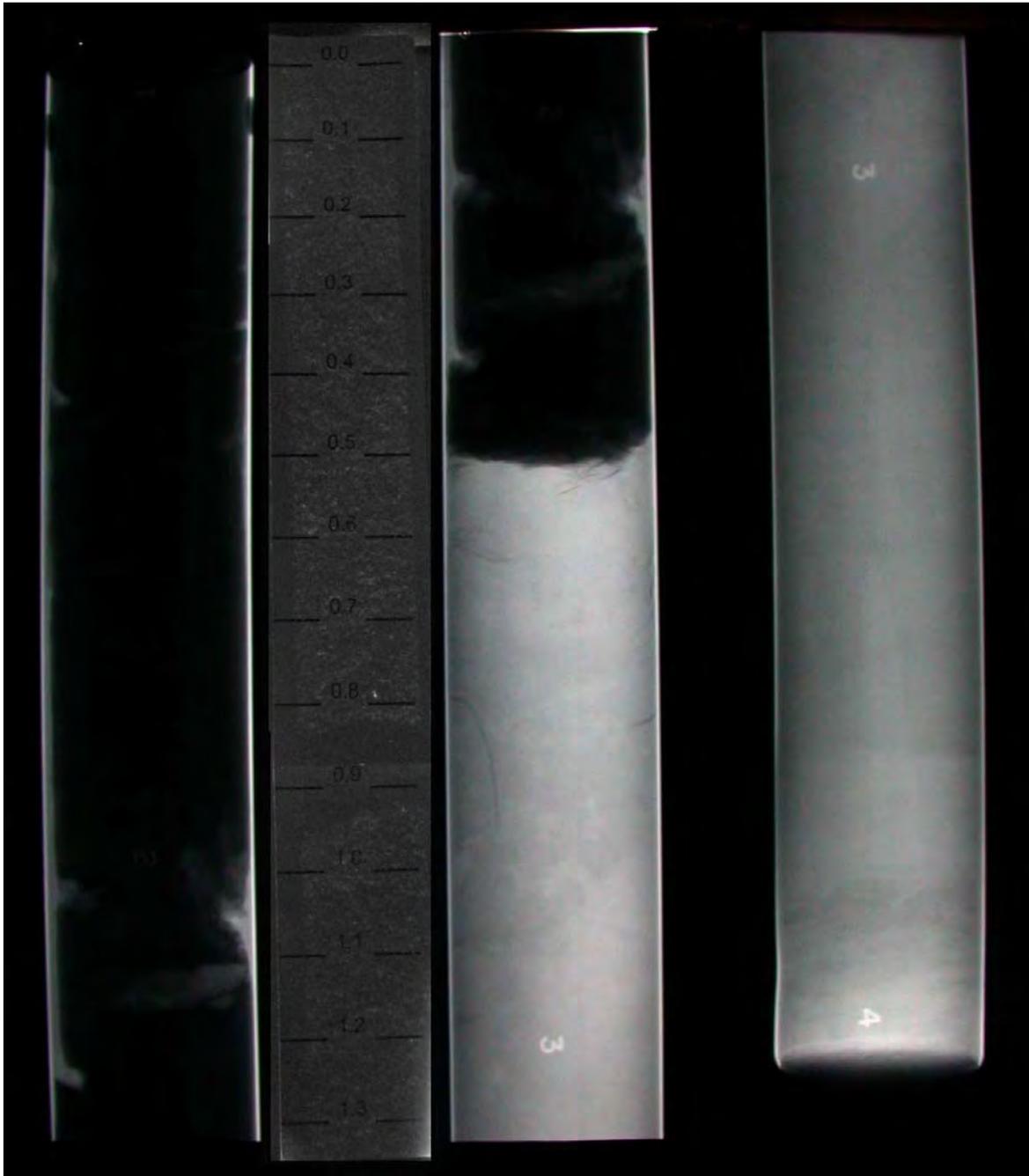
X-RAY IMAGE OF SAMPLE
BH-50, Sample 10
Tunnel Segment of SVRT Project
San Jose, California

FIGURE A20-34



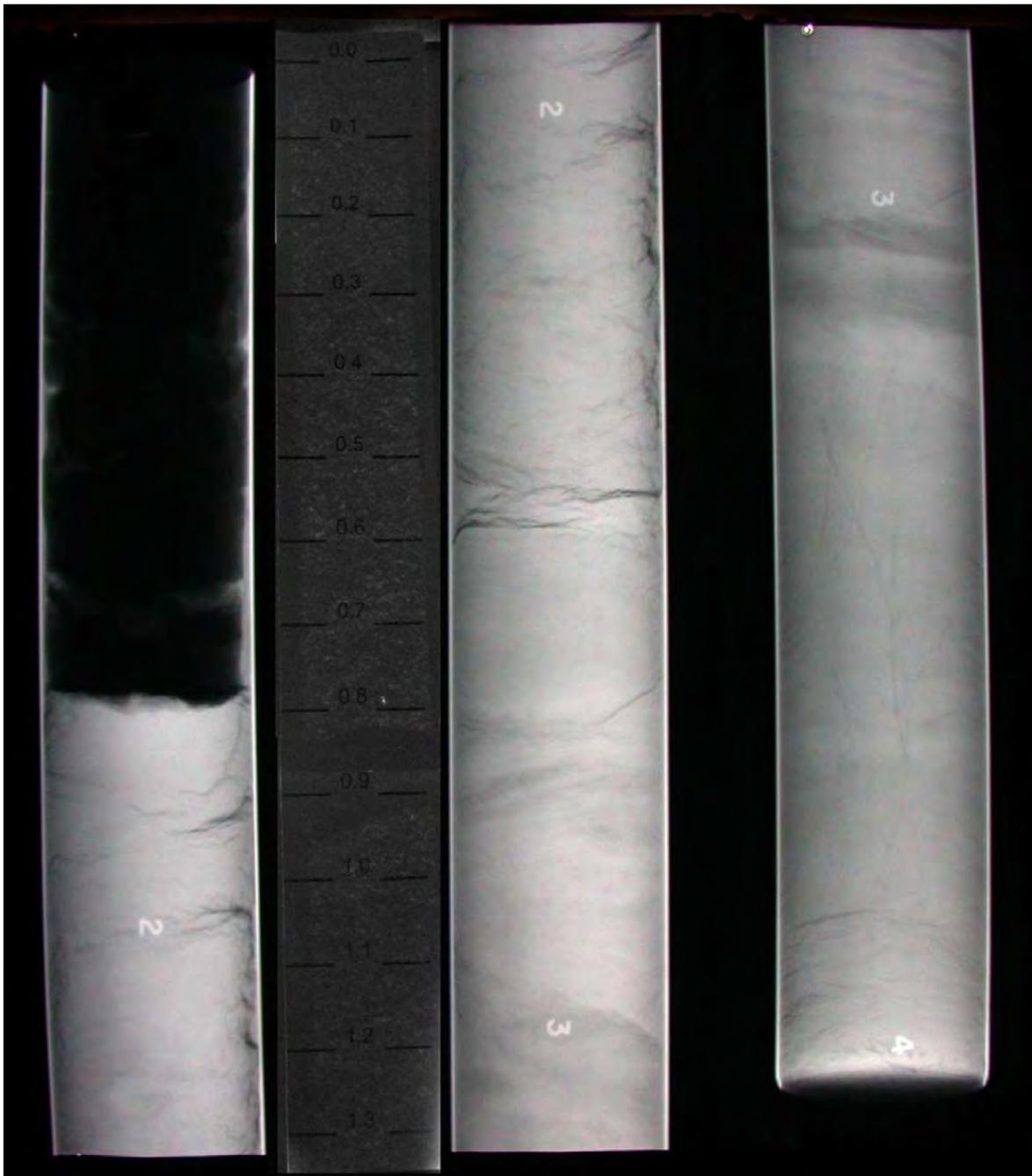
X-RAY IMAGE OF SAMPLE
BH-50, Sample 17
Tunnel Segment of SVRT Project
San Jose, California

FIGURE A20-35



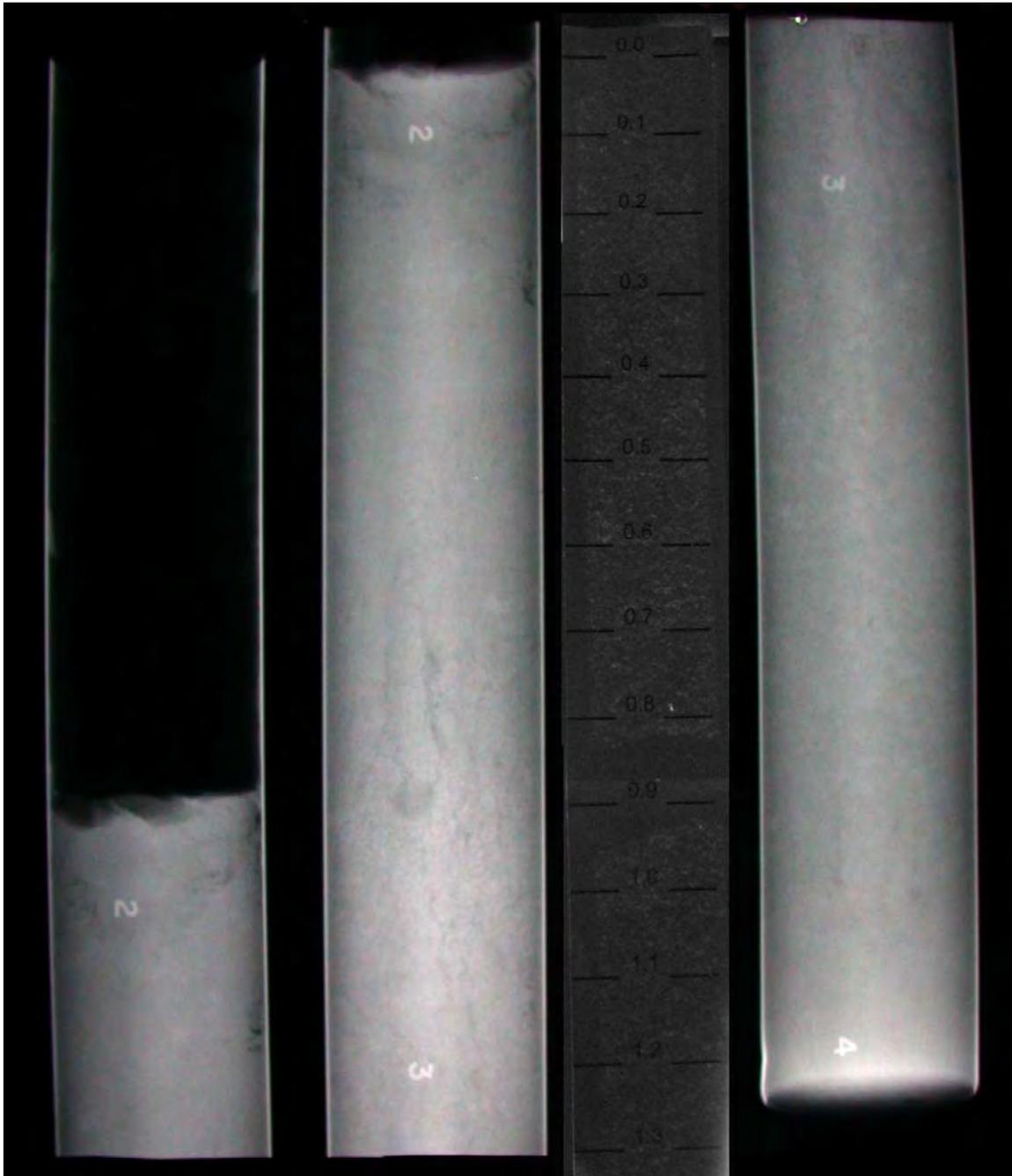
X-RAY IMAGE OF SAMPLE
BH-52, Sample 8
Tunnel Segment of SVRT Project
San Jose, California

FIGURE A20-36



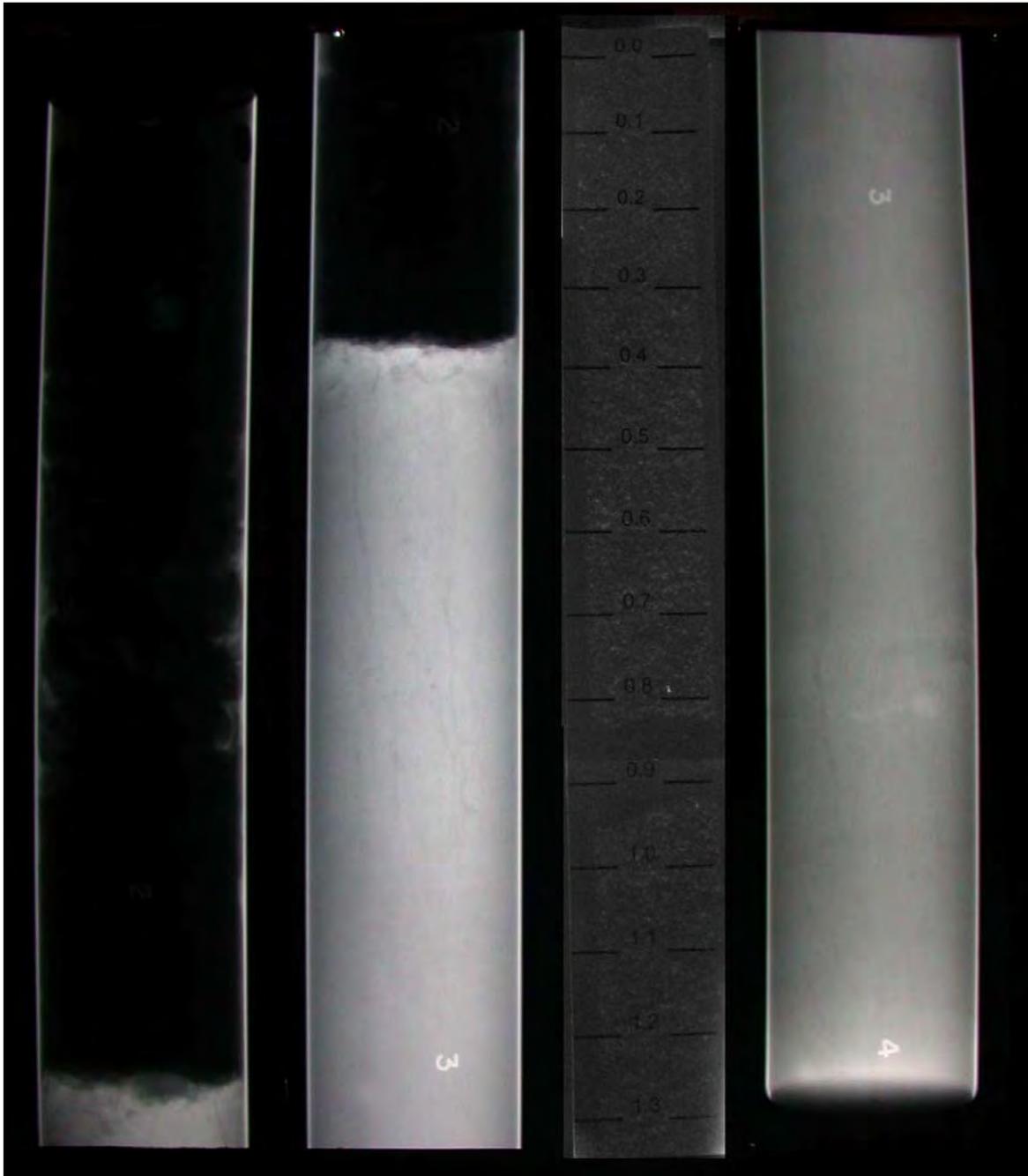
X-RAY IMAGE OF SAMPLE
BH-52, Sample 9
Tunnel Segment of SVRT Project
San Jose, California

FIGURE A20-37



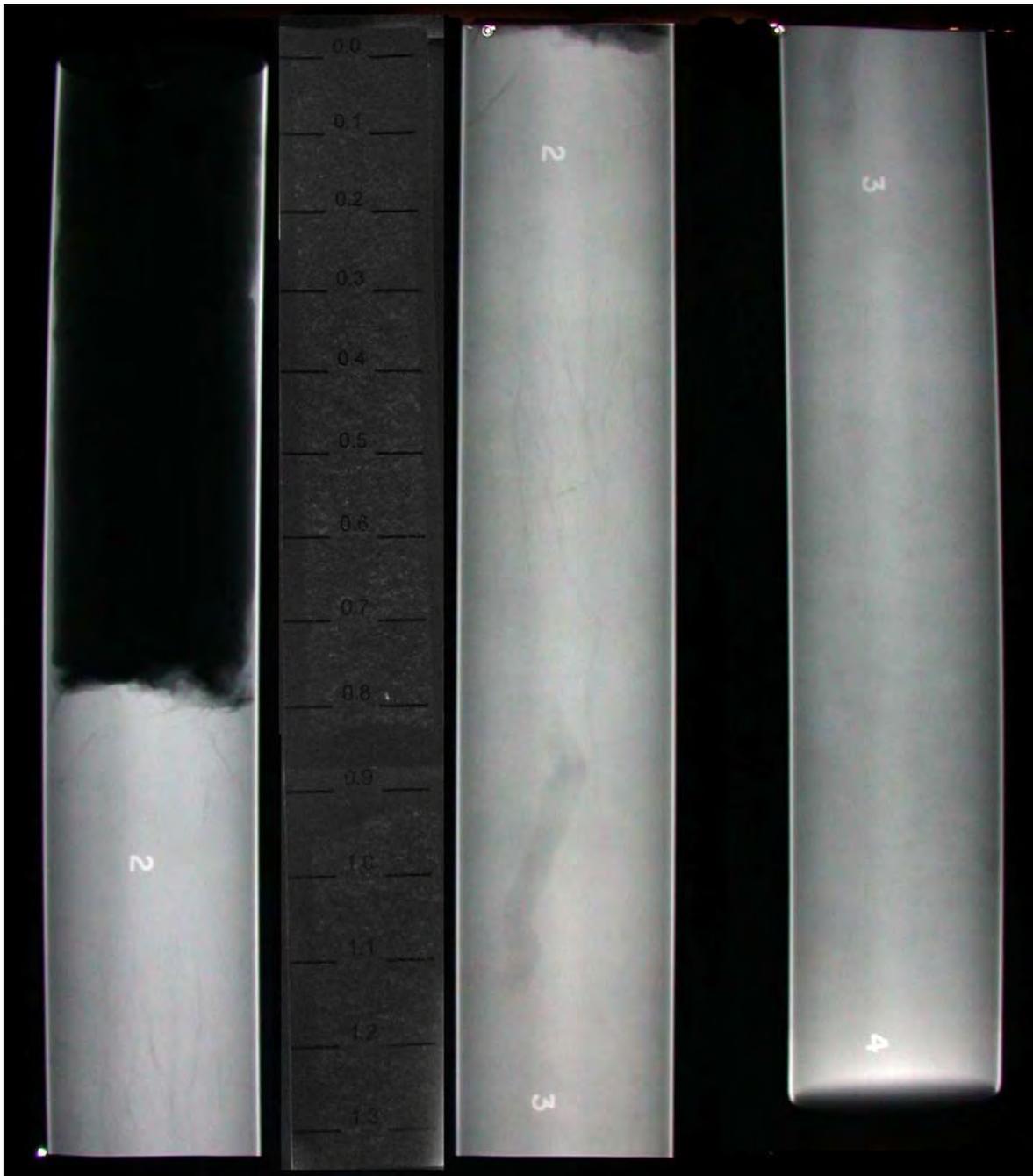
X-RAY IMAGE OF SAMPLE
BH-52, Sample 10
Tunnel Segment of SVRT Project
San Jose, California

FIGURE A20-38



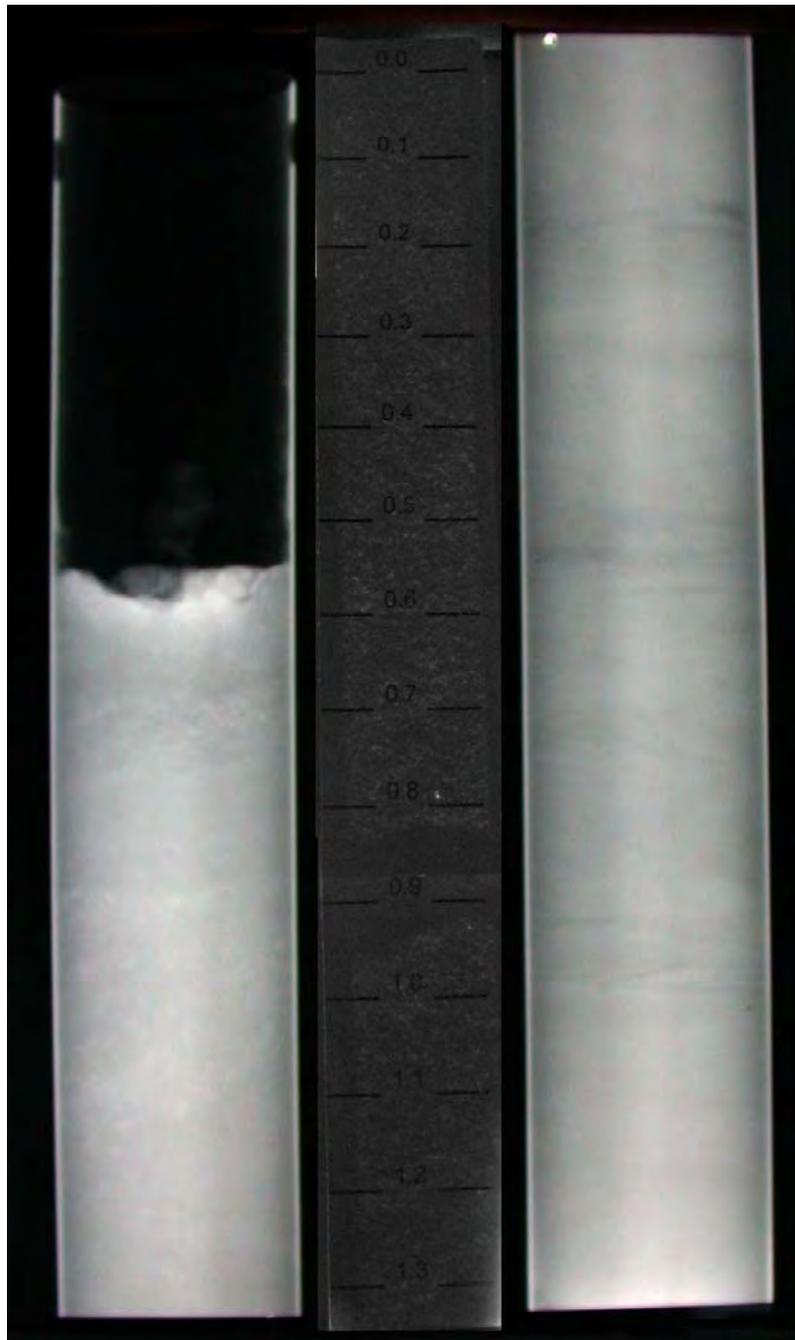
X-RAY IMAGE OF SAMPLE
BH-52, Sample 11
Tunnel Segment of SVRT Project
San Jose, California

FIGURE A20-39



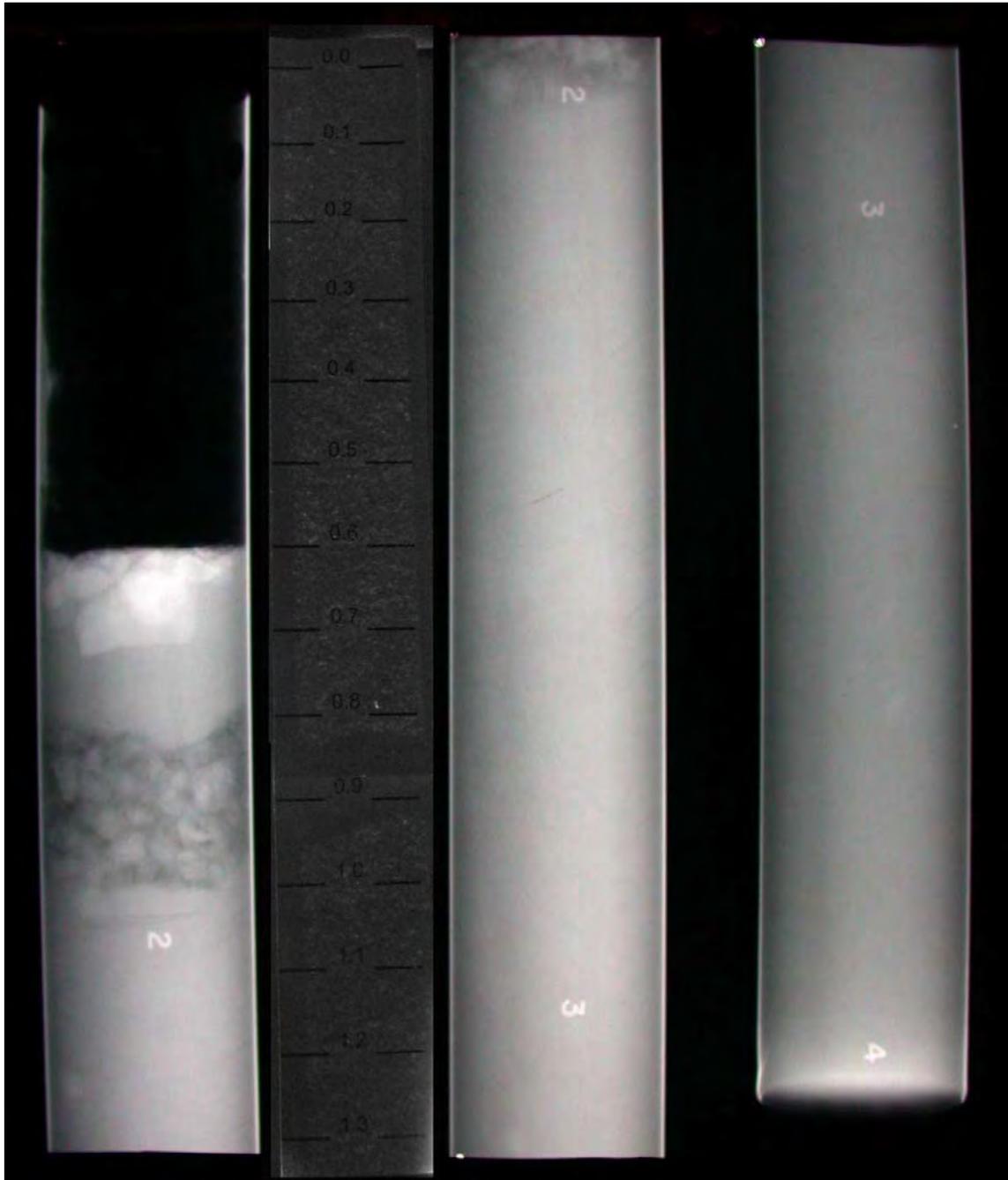
X-RAY IMAGE OF SAMPLE
BH-52, Sample 12
Tunnel Segment of SVRT Project
San Jose, California

FIGURE A20-40



X-RAY IMAGE OF SAMPLE
BH-52, Sample 34
Tunnel Segment of SVRT Project
San Jose, California

FIGURE A20-41



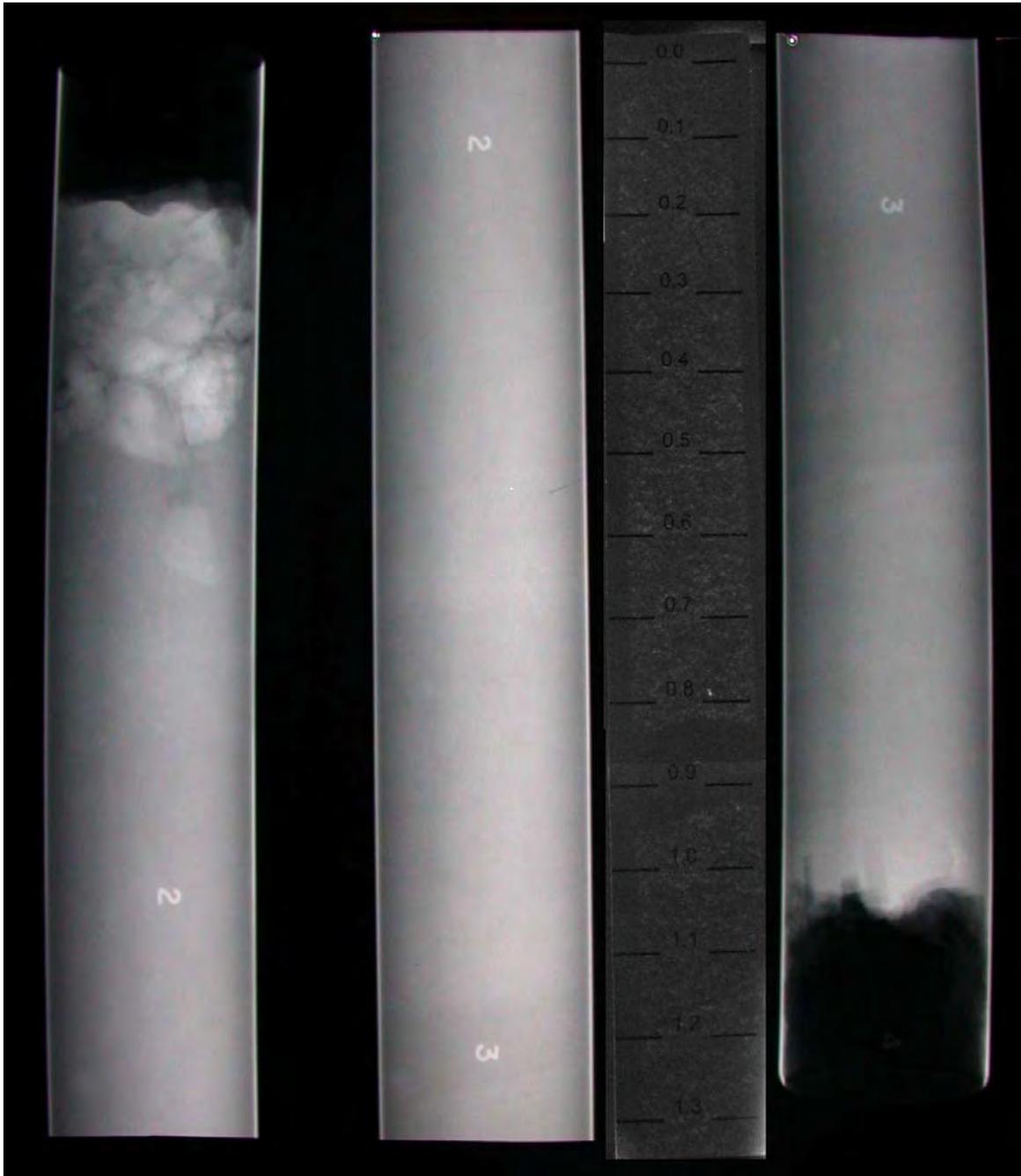
X-RAY IMAGE OF SAMPLE
BH-52, Sample 35
Tunnel Segment of SVRT Project
San Jose, California

FIGURE A20-42



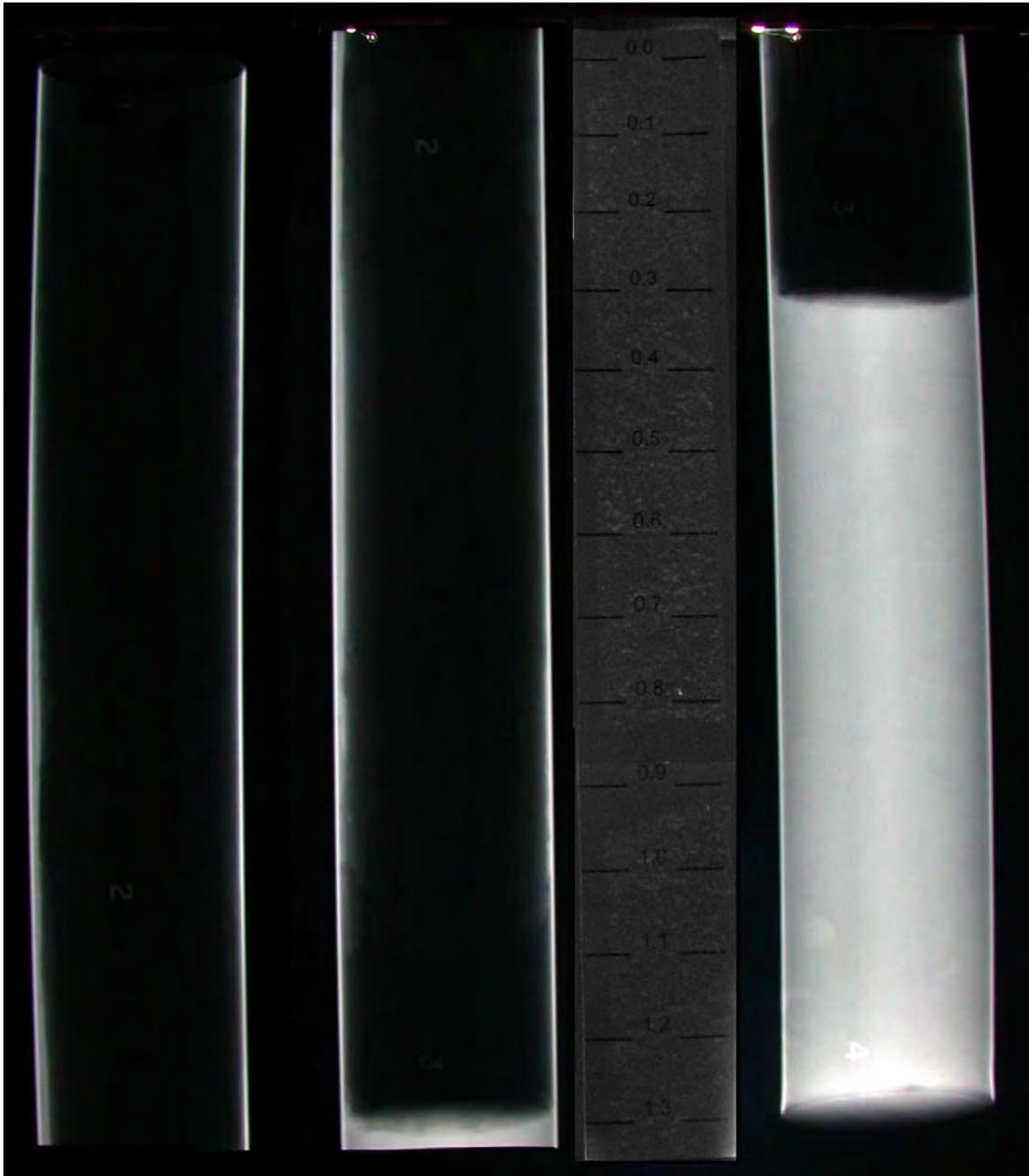
X-RAY IMAGE OF SAMPLE
BH-52, Sample 36
Tunnel Segment of SVRT Project
San Jose, California

FIGURE A20-43



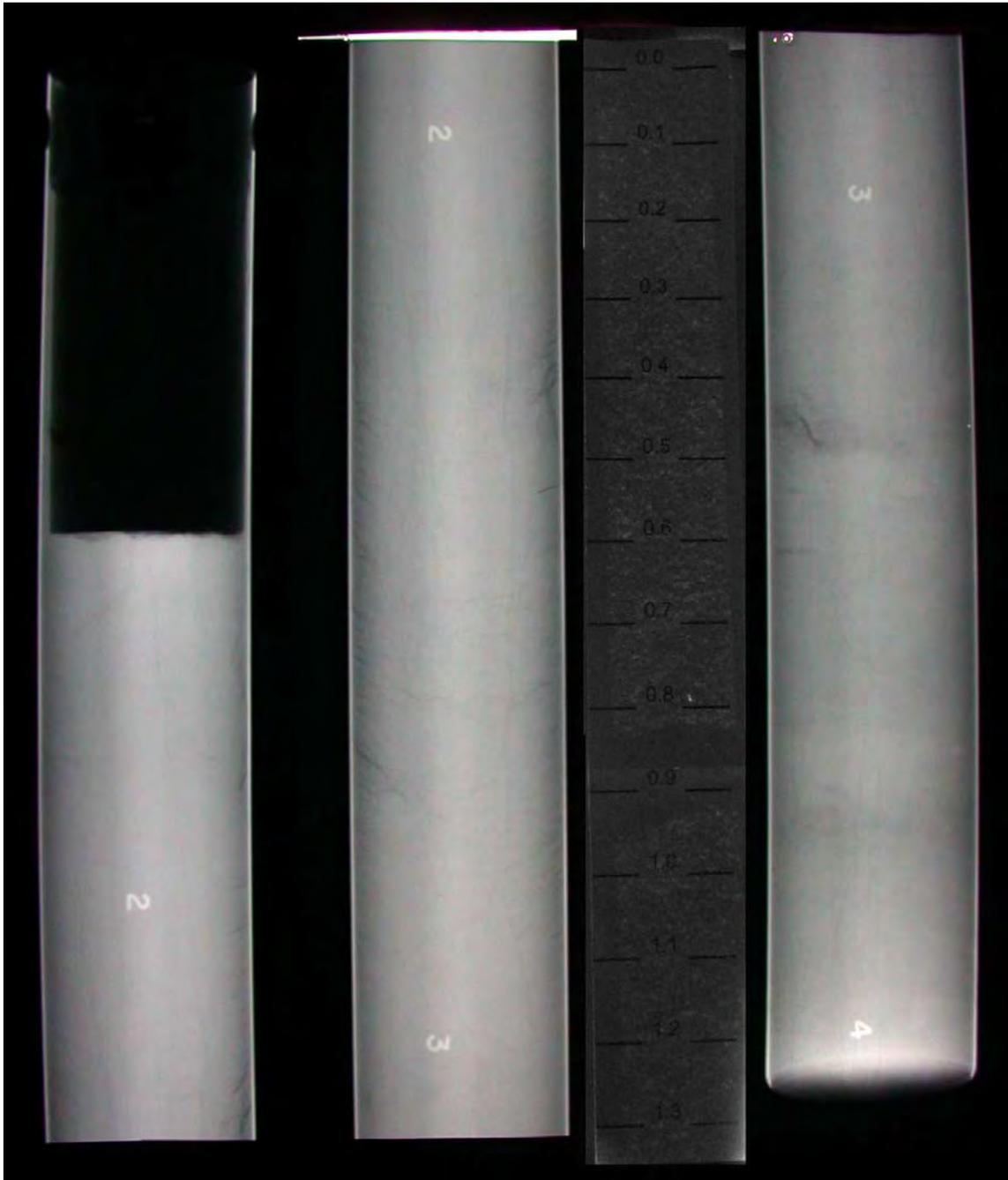
X-RAY IMAGE OF SAMPLE
BH-53, Sample 28
Tunnel Segment of SVRT Project
San Jose, California

FIGURE A20-44



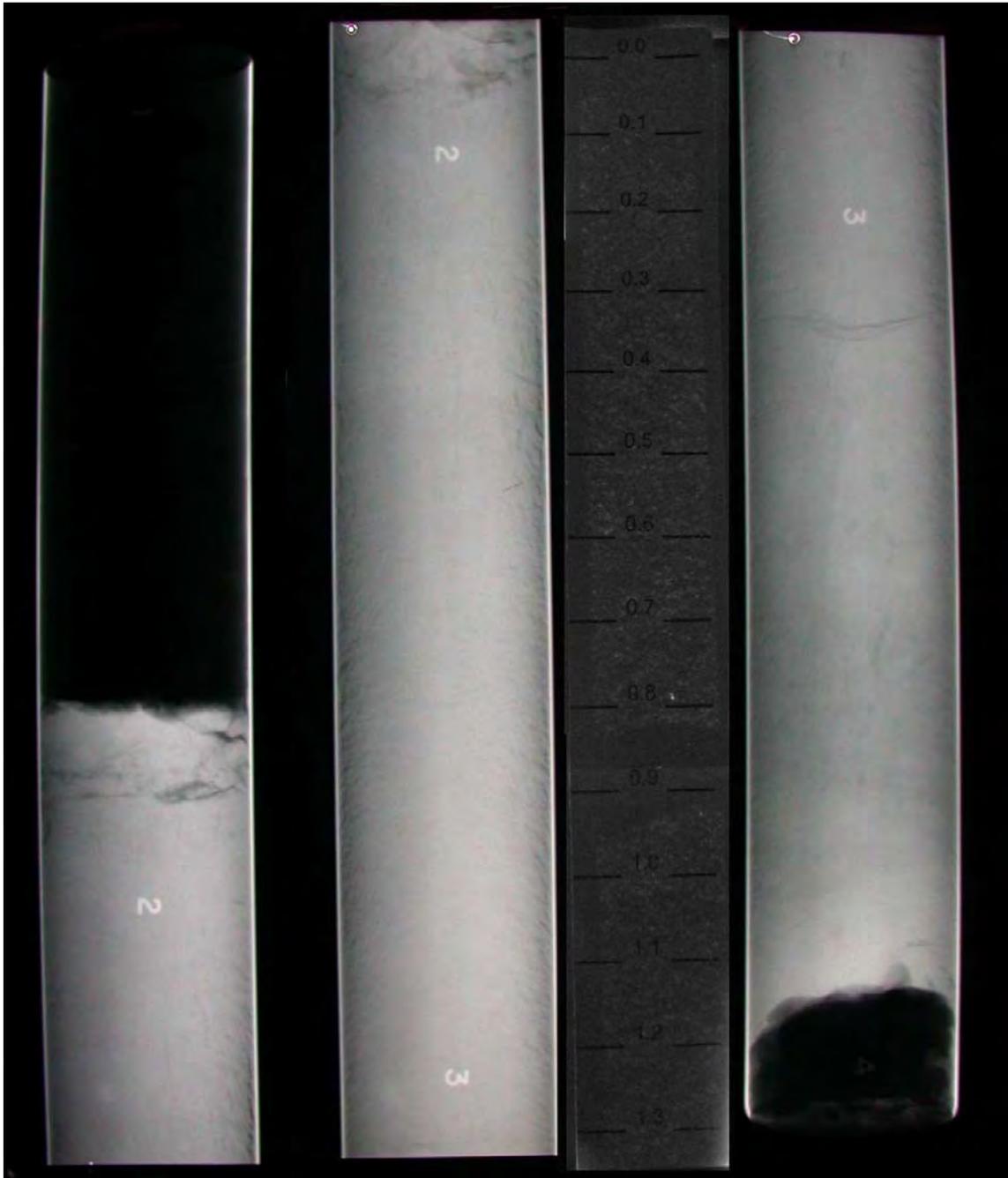
X-RAY IMAGE OF SAMPLE
BH-54, Sample 4
Tunnel Segment of SVRT Project
San Jose, California

FIGURE A20-45



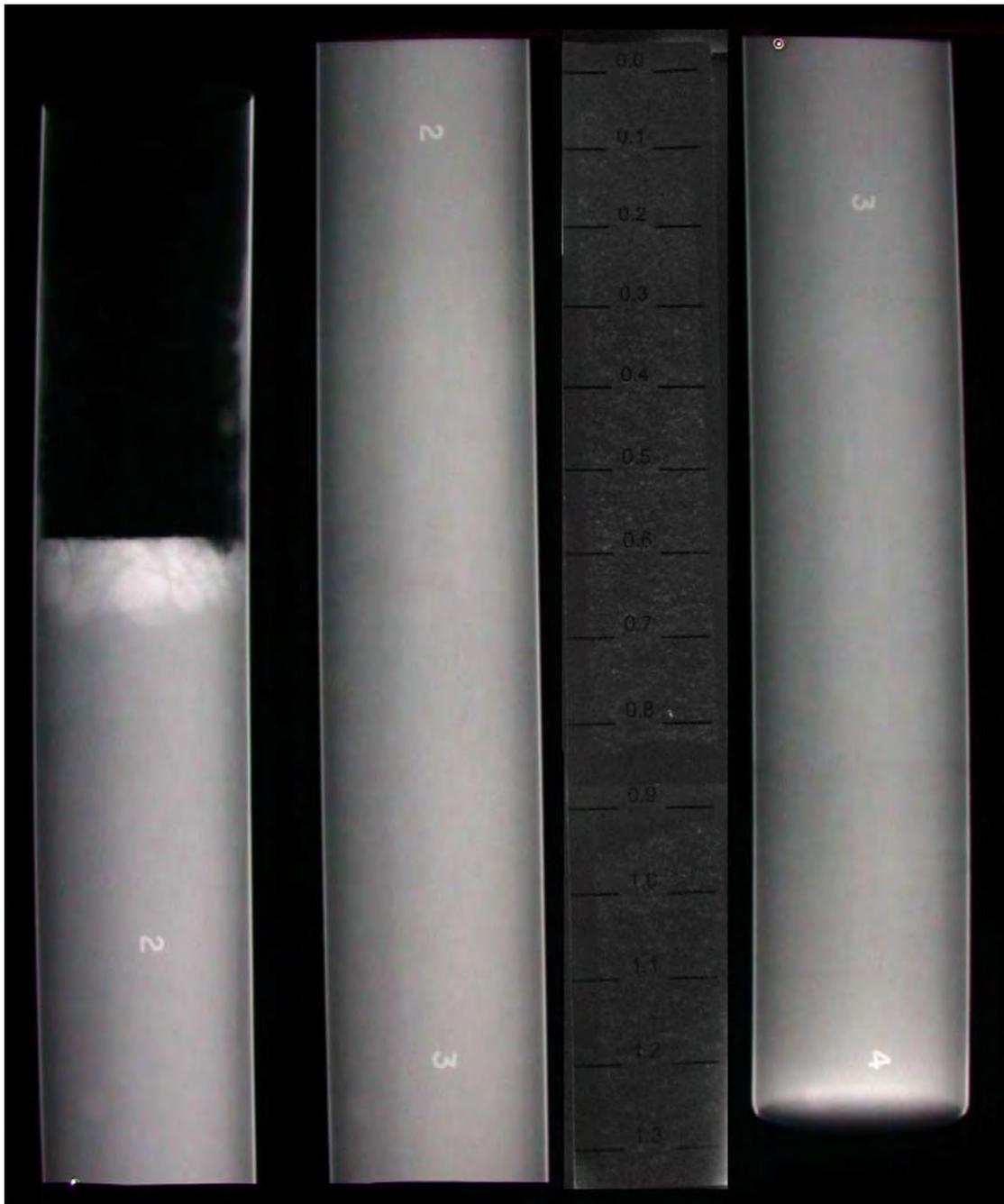
X-RAY IMAGE OF SAMPLE
BH-54, Sample 13
Tunnel Segment of SVRT Project
San Jose, California

FIGURE A20-46



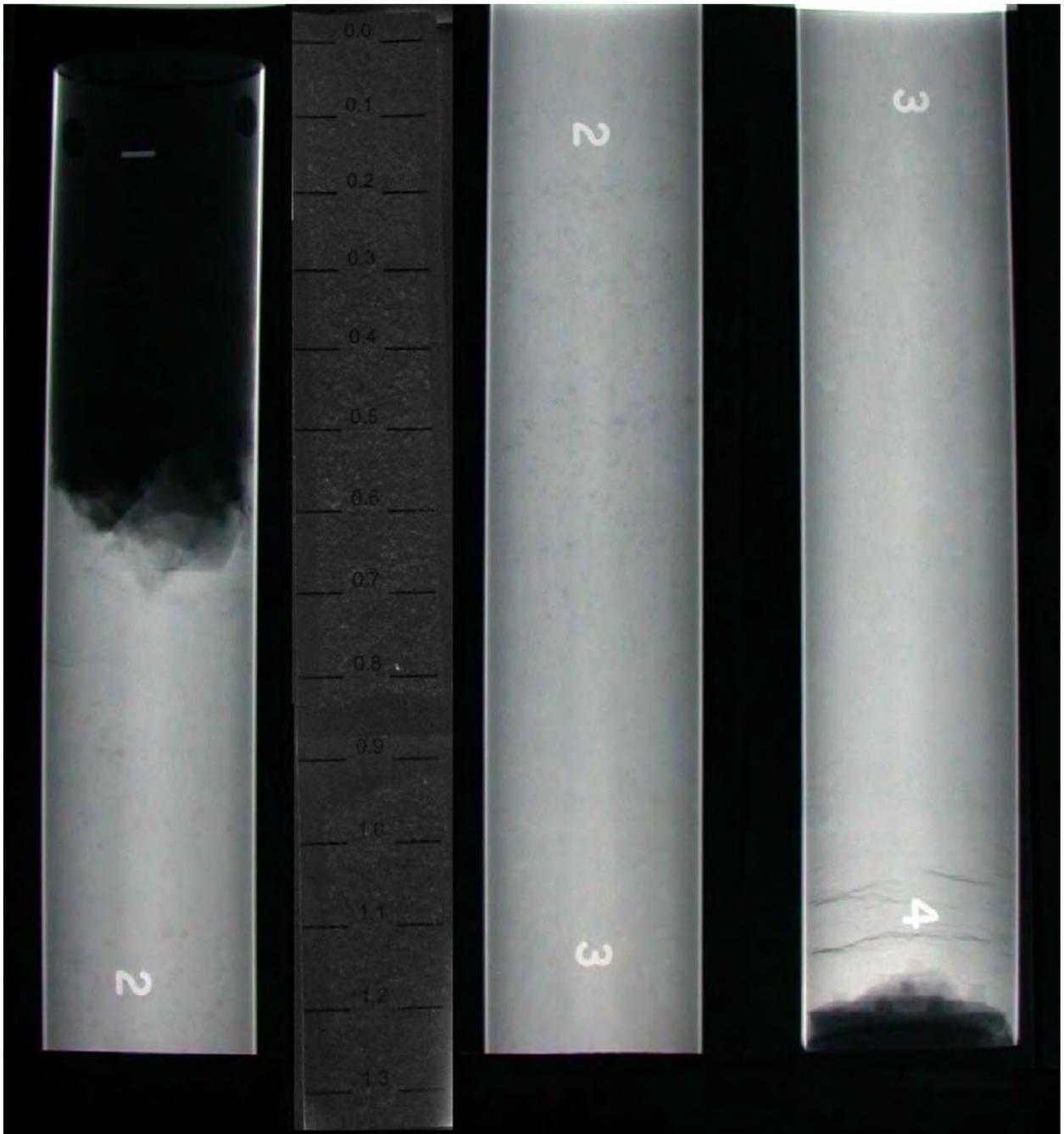
X-RAY IMAGE OF SAMPLE
BH-55, Sample 7
Tunnel Segment of SVRT Project
San Jose, California

FIGURE A20-47



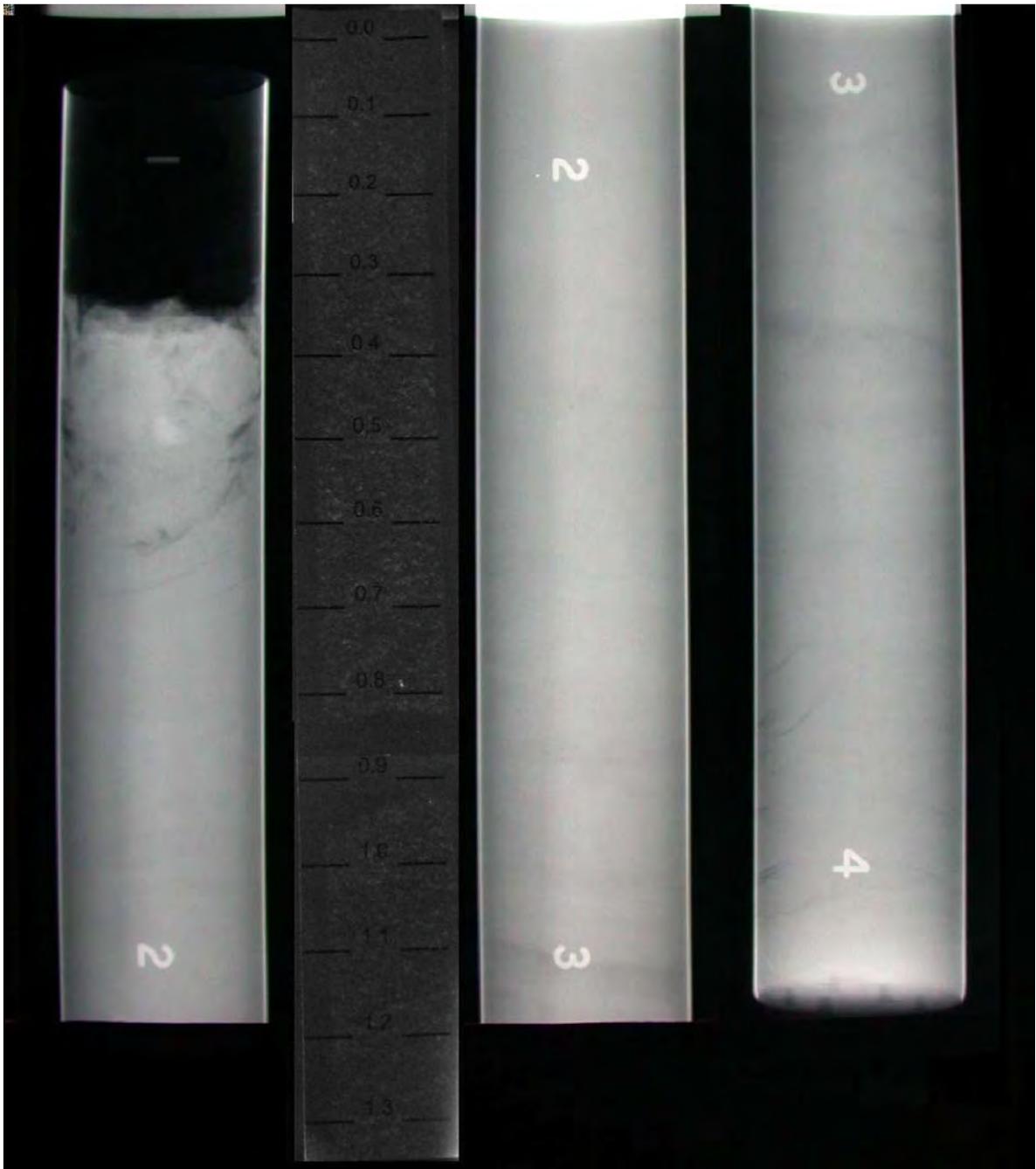
X-RAY IMAGE OF SAMPLE
BH-55, Sample 26
Tunnel Segment of SVRT Project
San Jose, California

FIGURE A20-48



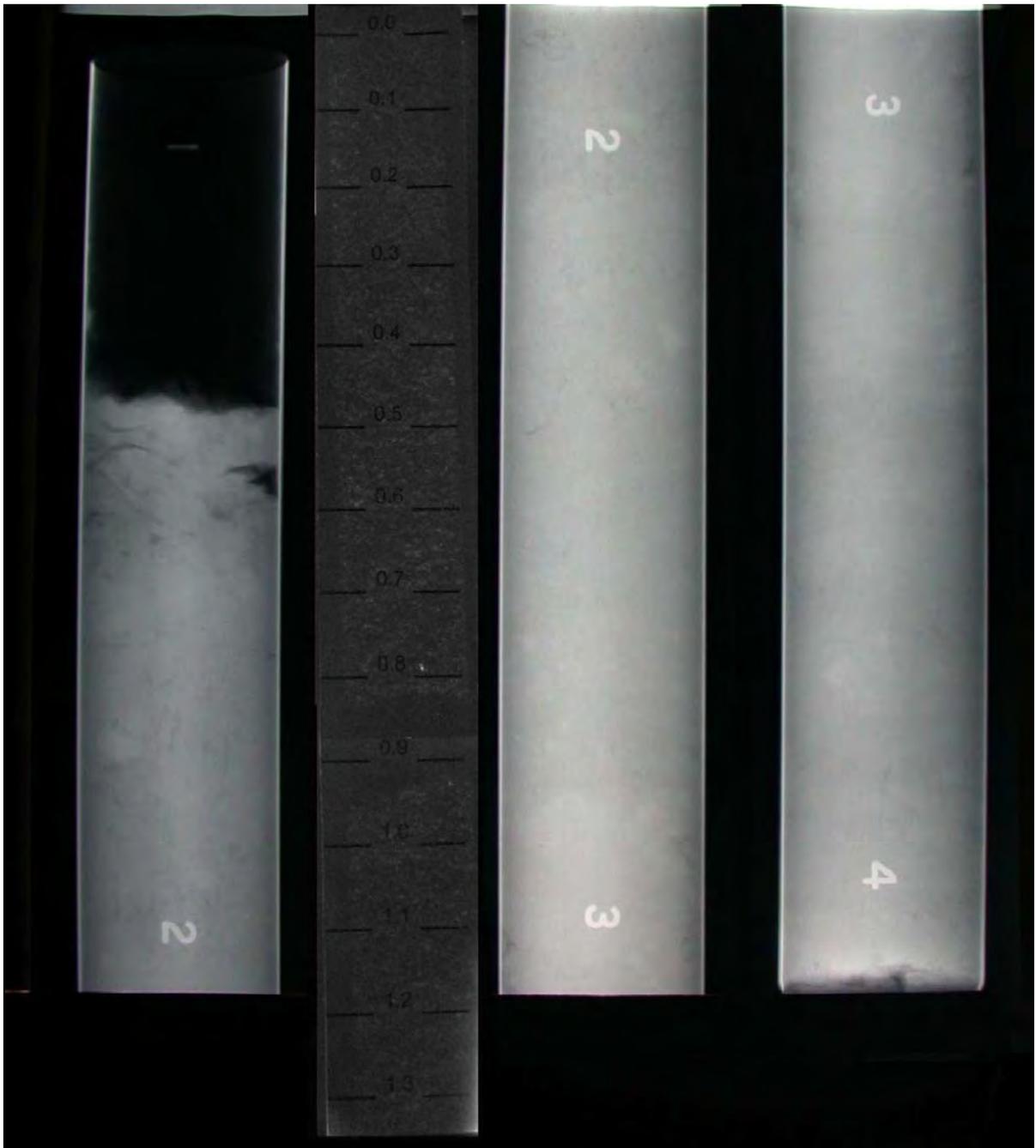
X-RAY IMAGE OF SAMPLE
BH-59, Sample 5
Tunnel Segment of SVRT Project
San Jose, California

FIGURE A20-49



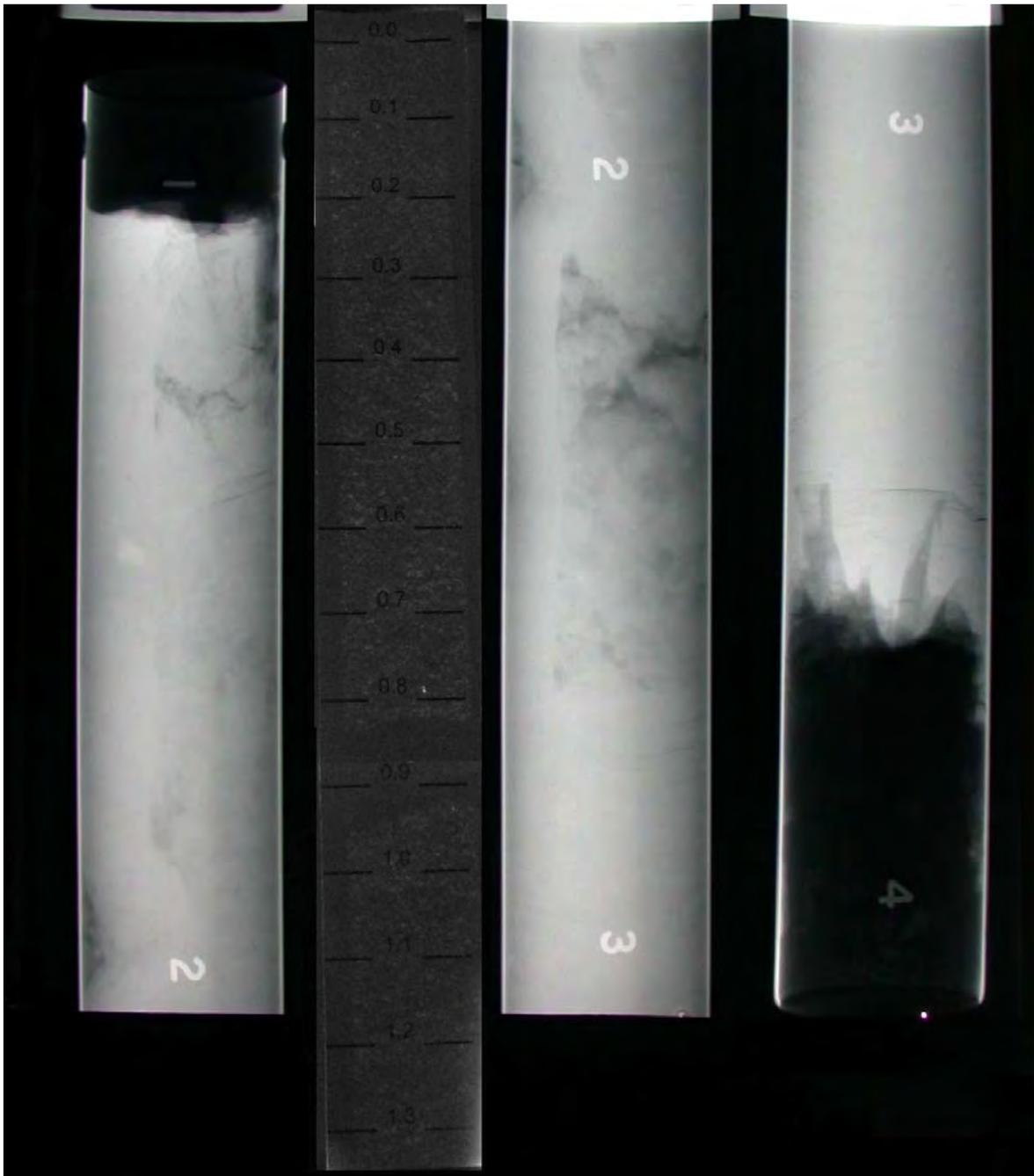
X-RAY IMAGE OF SAMPLE
BH-59, Sample 17
Tunnel Segment of SVRT Project
San Jose, California

FIGURE A20-50



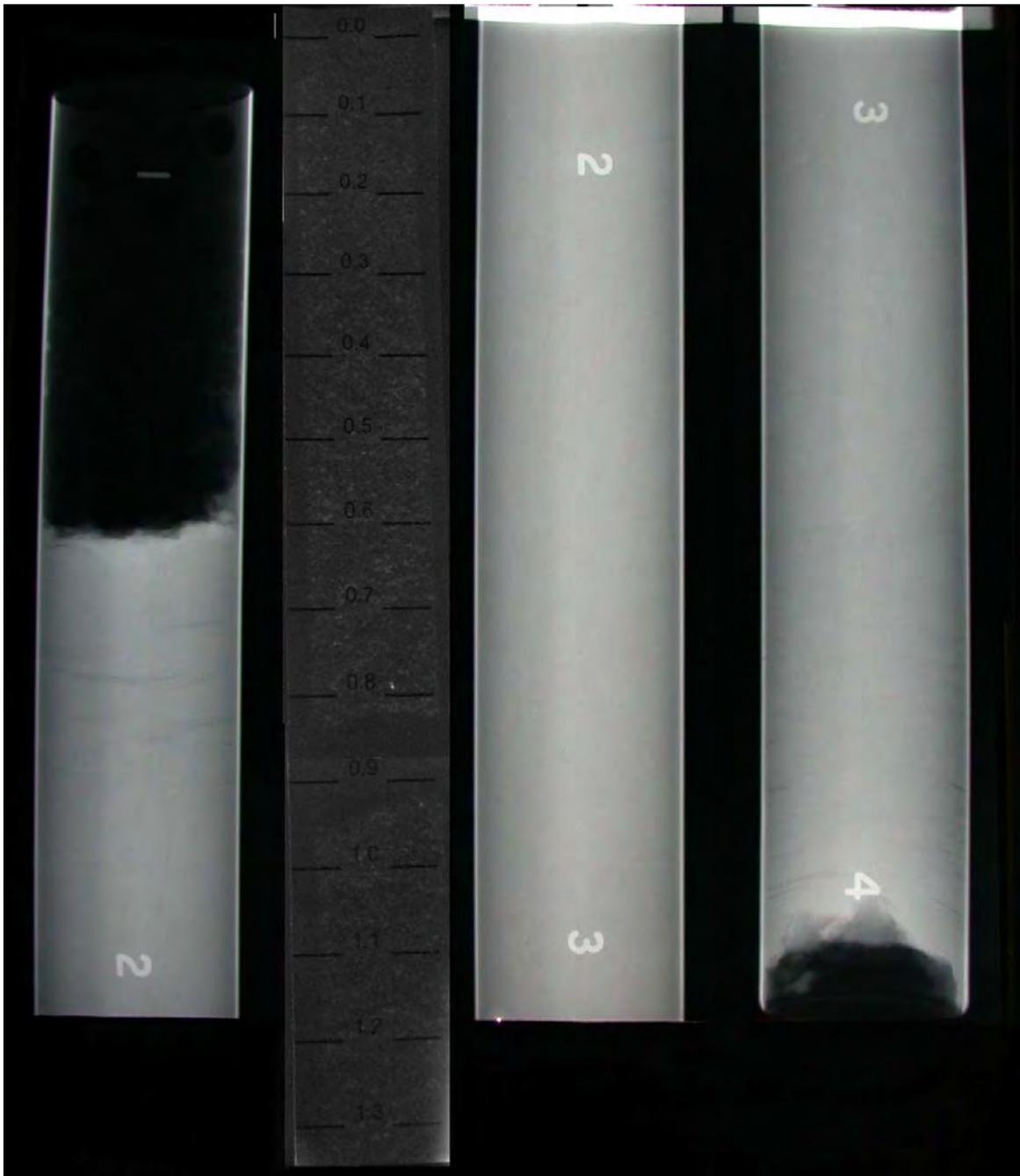
X-RAY IMAGE OF SAMPLE
BH-60, Sample 3
Tunnel Segment of SVRT Project
San Jose, California

FIGURE A20-51



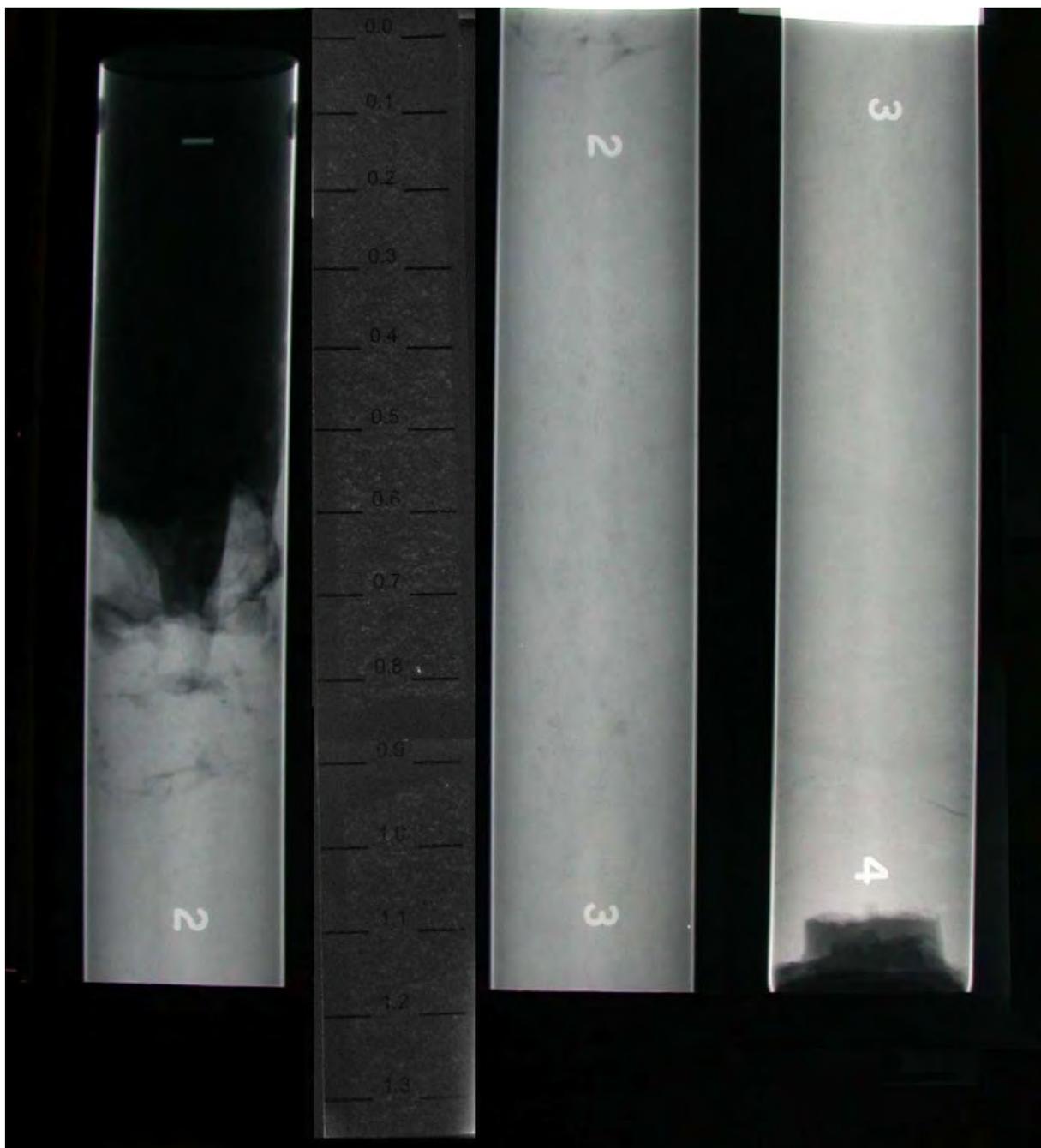
X-RAY IMAGE OF SAMPLE
BH-60, Sample 11
Tunnel Segment of SVRT Project
San Jose, California

FIGURE A20-52



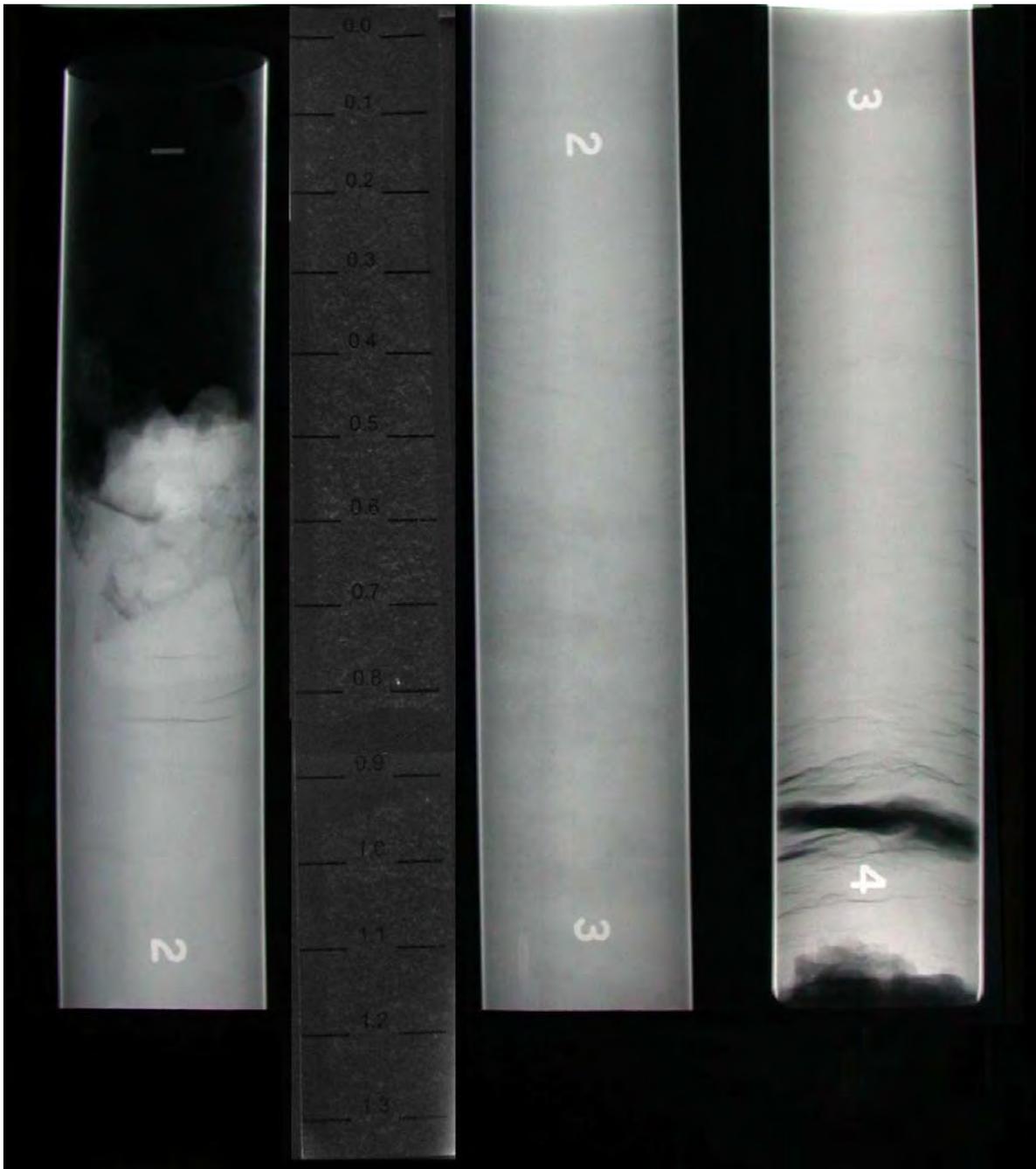
X-RAY IMAGE OF SAMPLE
BH-60, Sample 18
Tunnel Segment of SVRT Project
San Jose, California

FIGURE A20-53



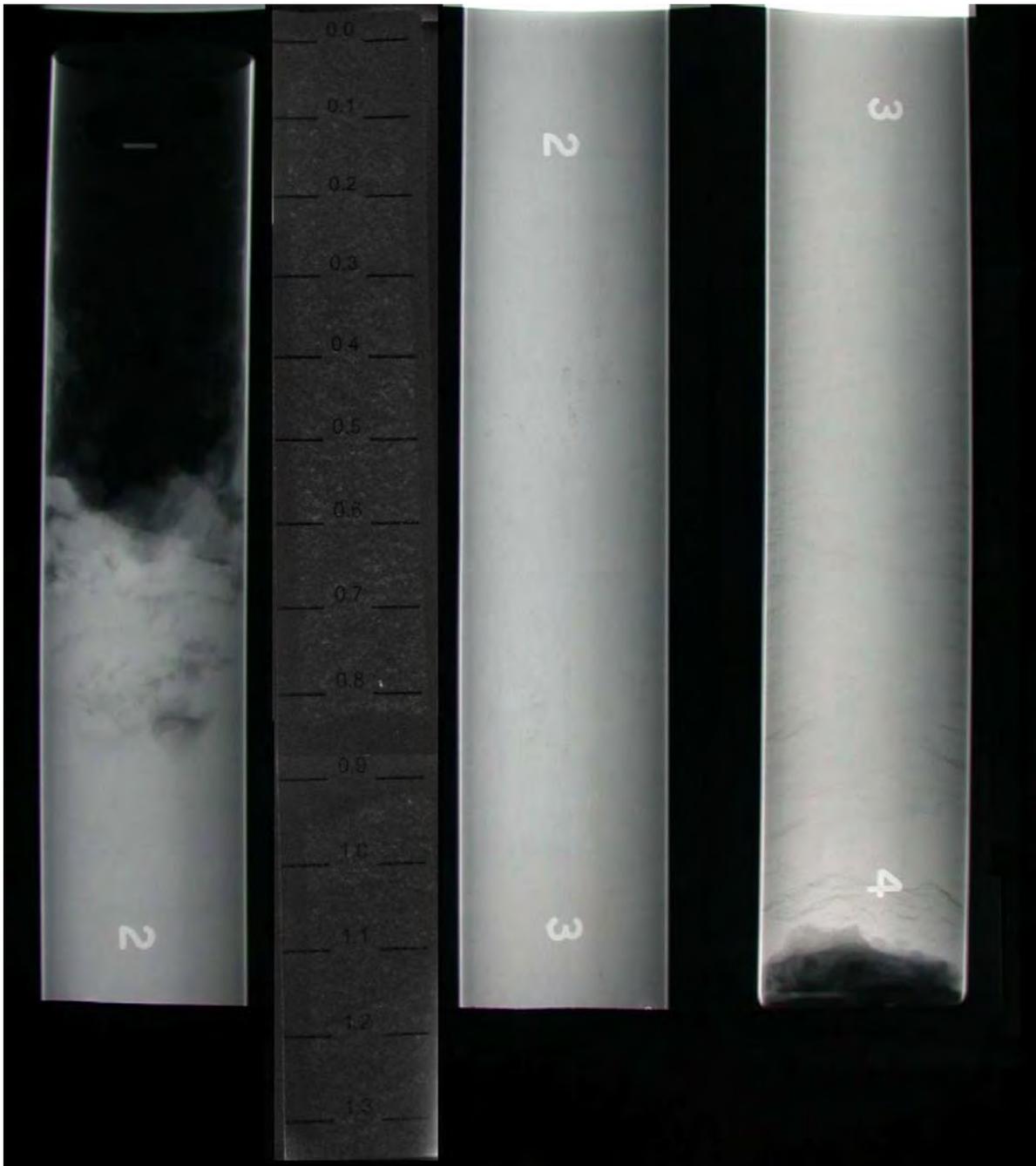
X-RAY IMAGE OF SAMPLE
BH-61, Sample 5
Tunnel Segment of SVRT Project
San Jose, California

FIGURE A20-54



X-RAY IMAGE OF SAMPLE
BH-61, Sample 15
Tunnel Segment of SVRT Project
San Jose, California

FIGURE A20-55



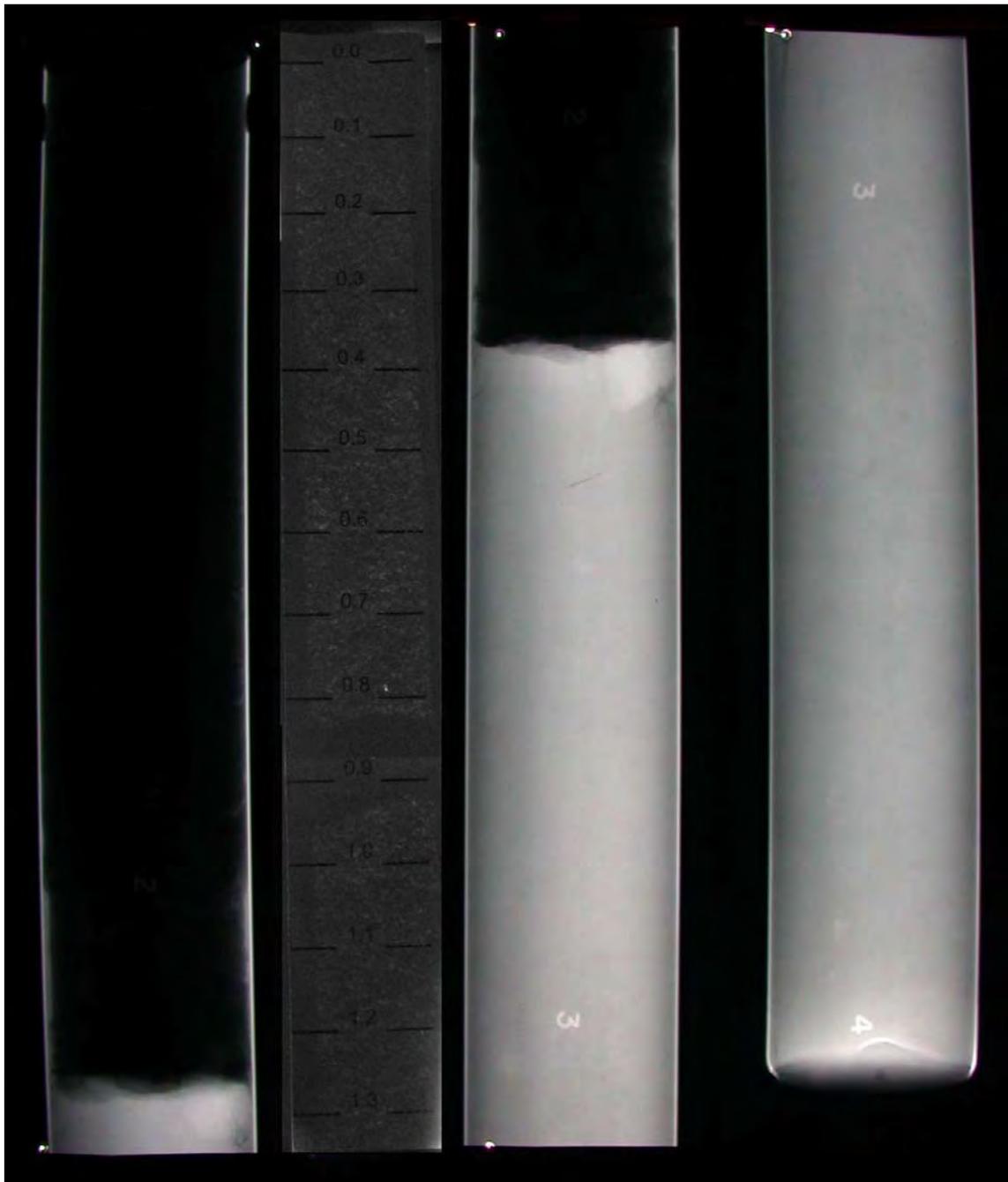
X-RAY IMAGE OF SAMPLE
BH-61, Sample 17
Tunnel Segment of SVRT Project
San Jose, California

FIGURE A20-56



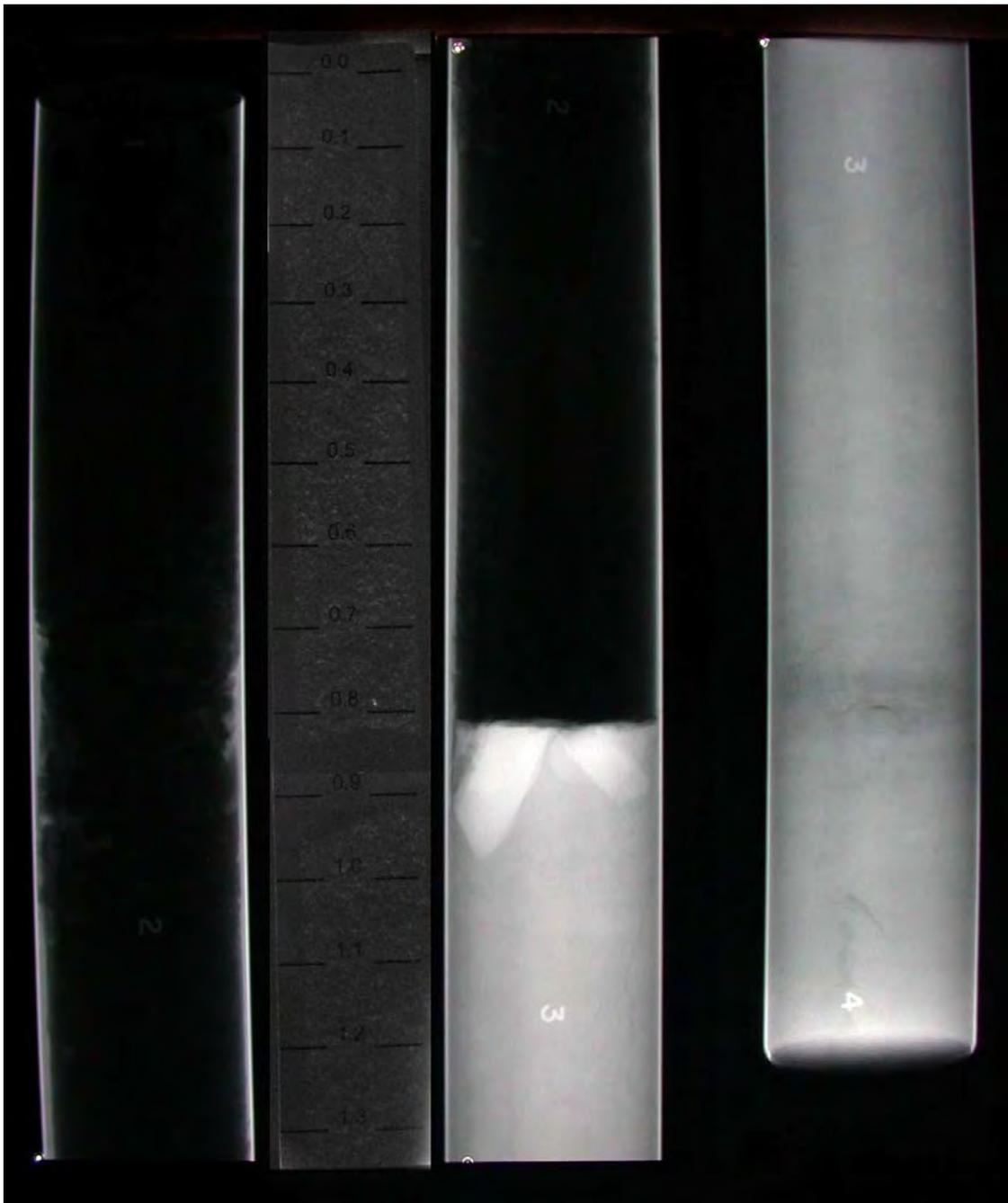
X-RAY IMAGE OF SAMPLE
BH-64, Sample 5
Tunnel Segment of SVRT Project
San Jose, California

FIGURE A20-57



X-RAY IMAGE OF SAMPLE
BH-64, Sample 18
Tunnel Segment of SVRT Project
San Jose, California

FIGURE A20-58



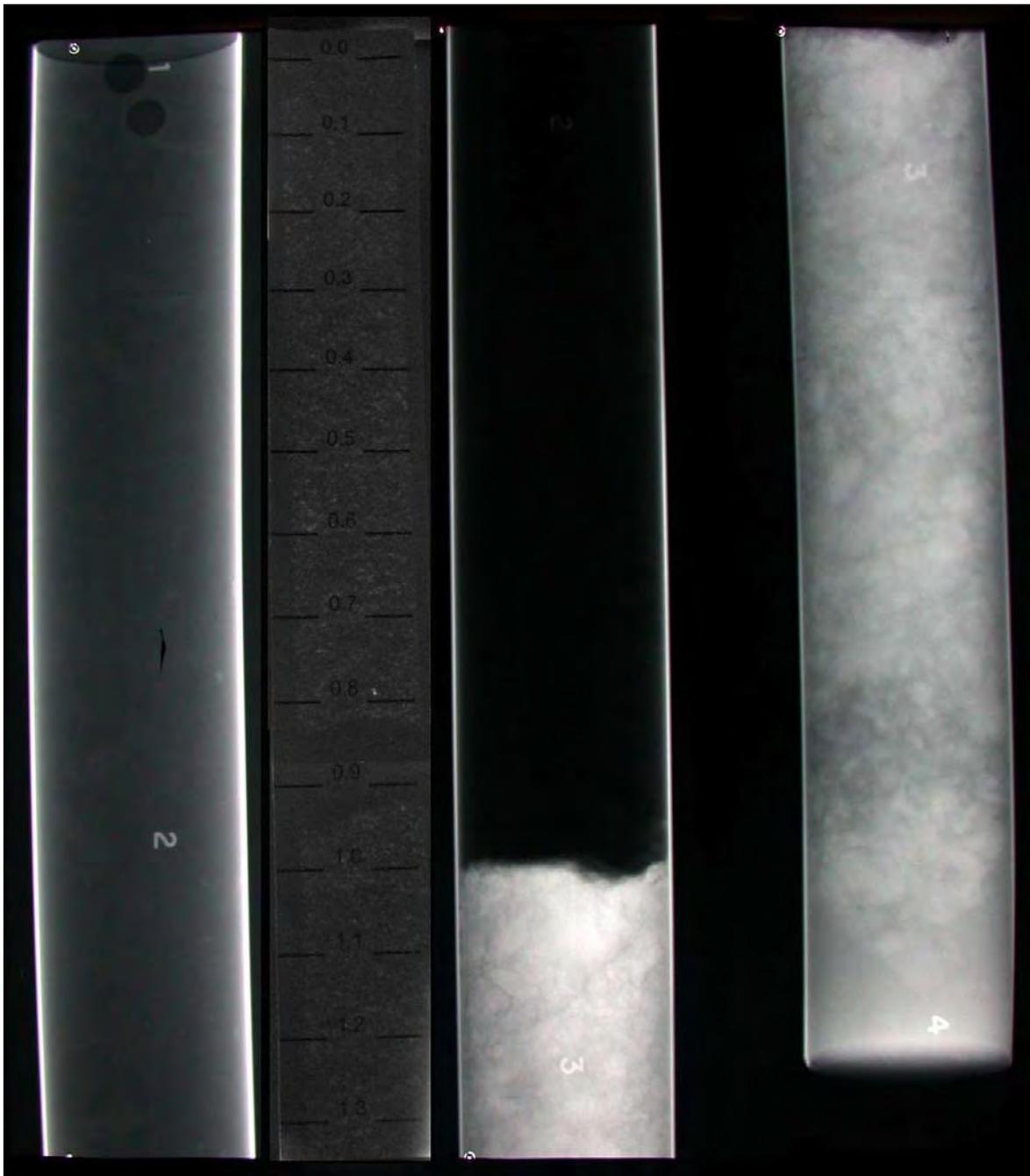
X-RAY IMAGE OF SAMPLE
BH-64, Sample 19
Tunnel Segment of SVRT Project
San Jose, California

FIGURE A20-59



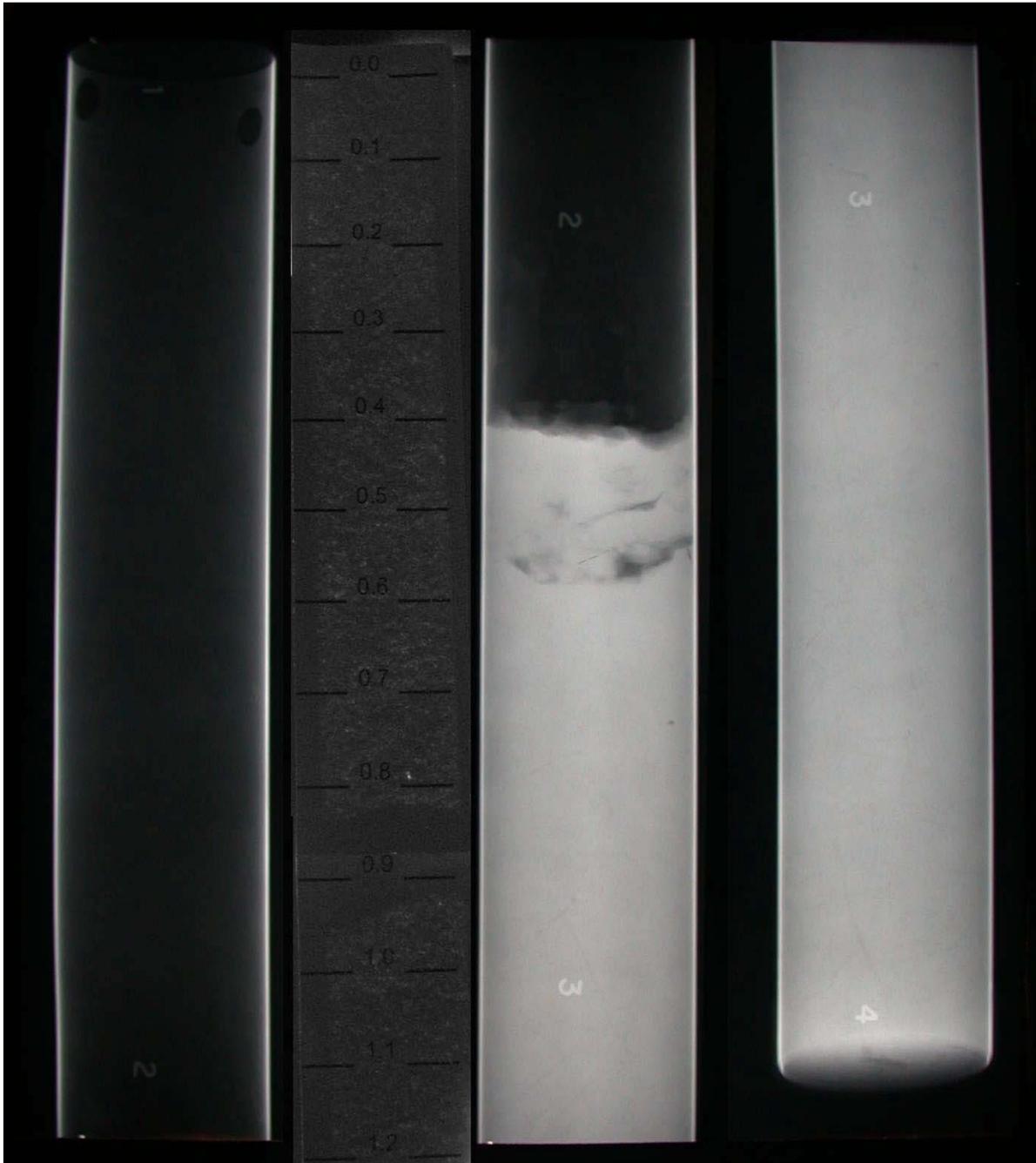
X-RAY IMAGE OF SAMPLE
BH-65, Sample 3
Tunnel Segment of SVRT Project
San Jose, California

FIGURE A20-60



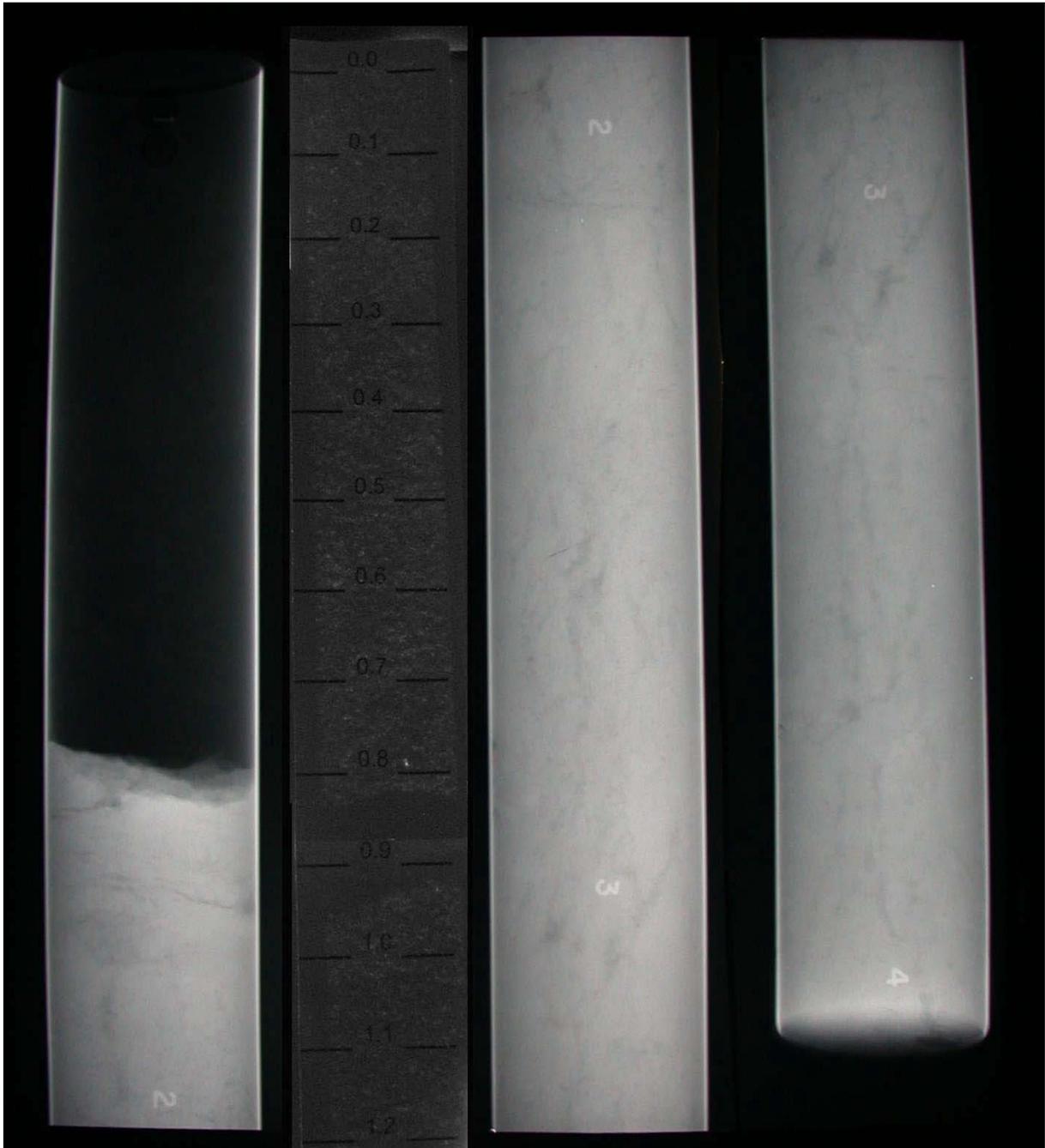
X-RAY IMAGE OF SAMPLE
BH-65, Sample 13
Tunnel Segment of SVRT Project
San Jose, California

FIGURE A20-61



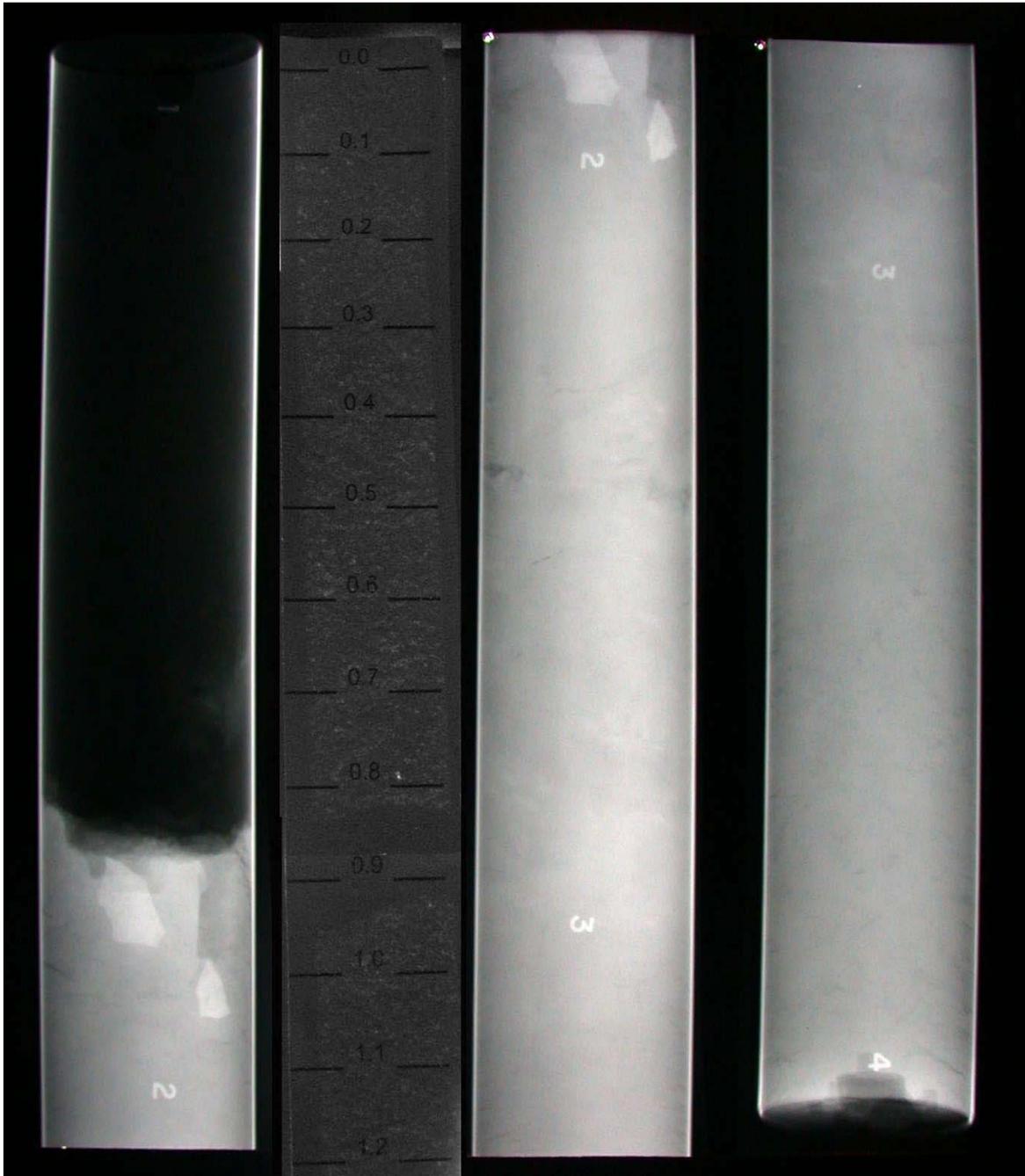
X-RAY IMAGE OF SAMPLE
BH-66, Sample 5
Tunnel Segment of SVRT Project
San Jose, California

FIGURE A20-62



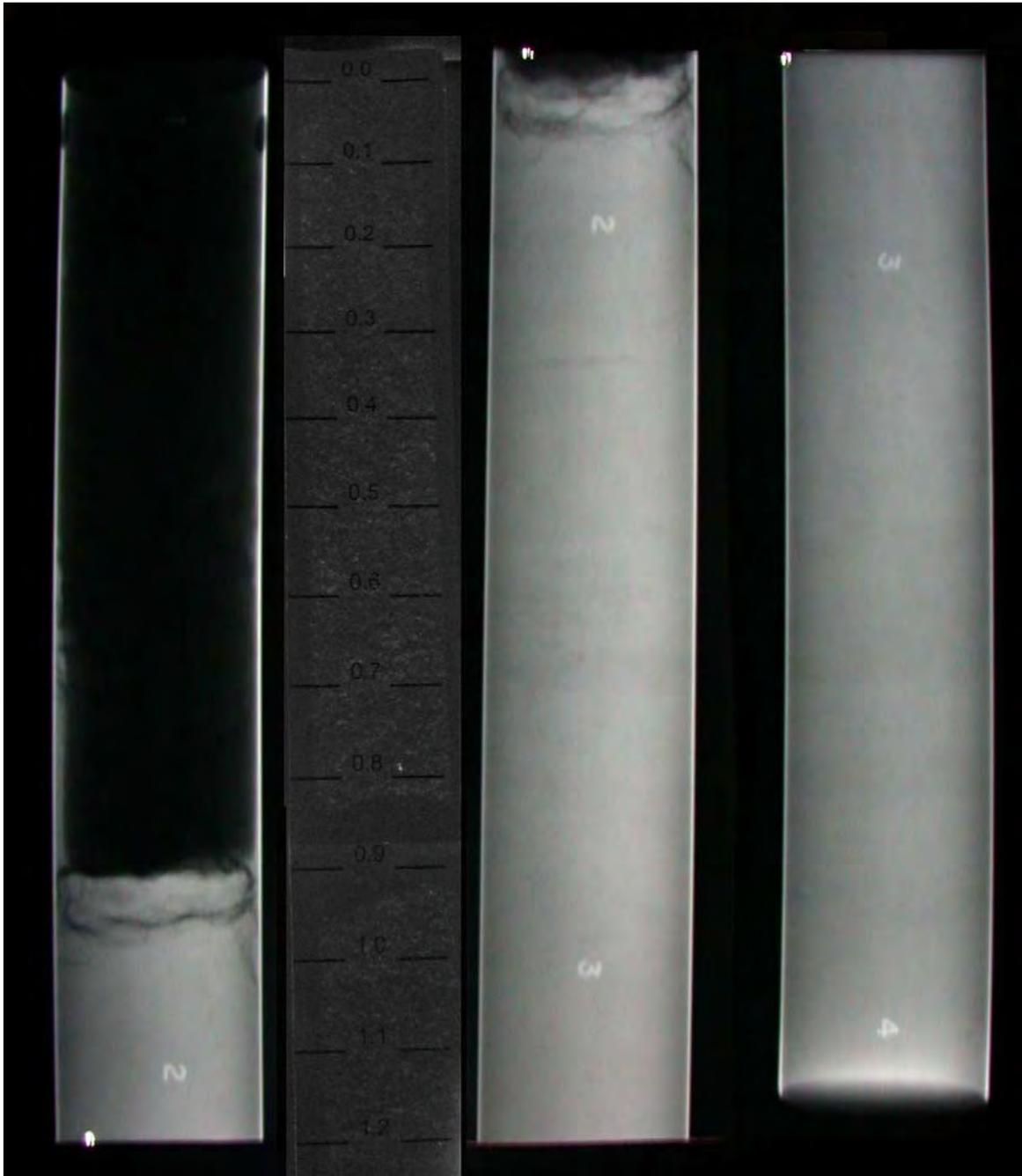
X-RAY IMAGE OF SAMPLE
BH-66, Sample 6
Tunnel Segment of SVRT Project
San Jose, California

FIGURE A20-63



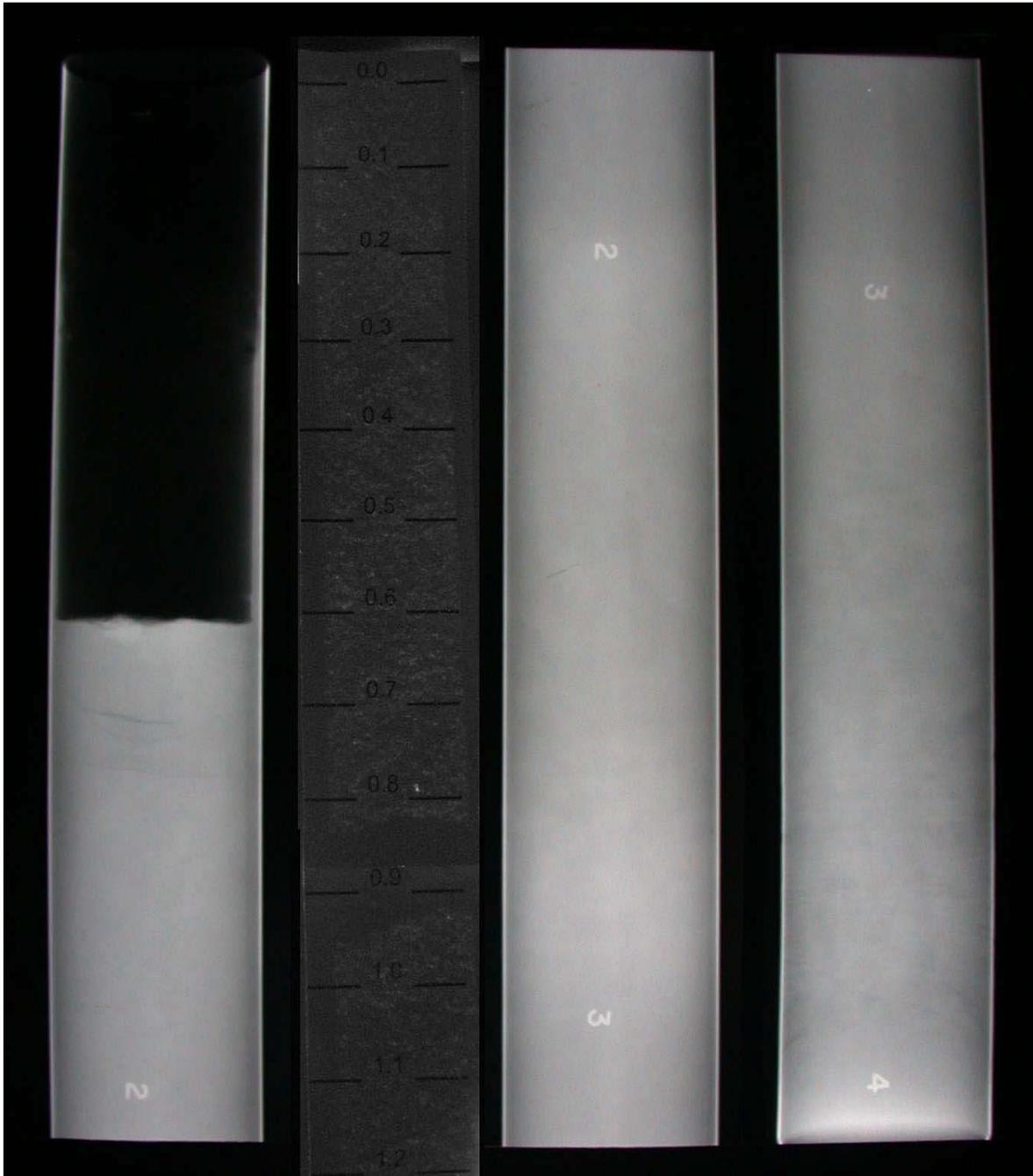
X-RAY IMAGE OF SAMPLE
BH-68, Sample 3
Tunnel Segment of SVRT Project
San Jose, California

FIGURE A20-64



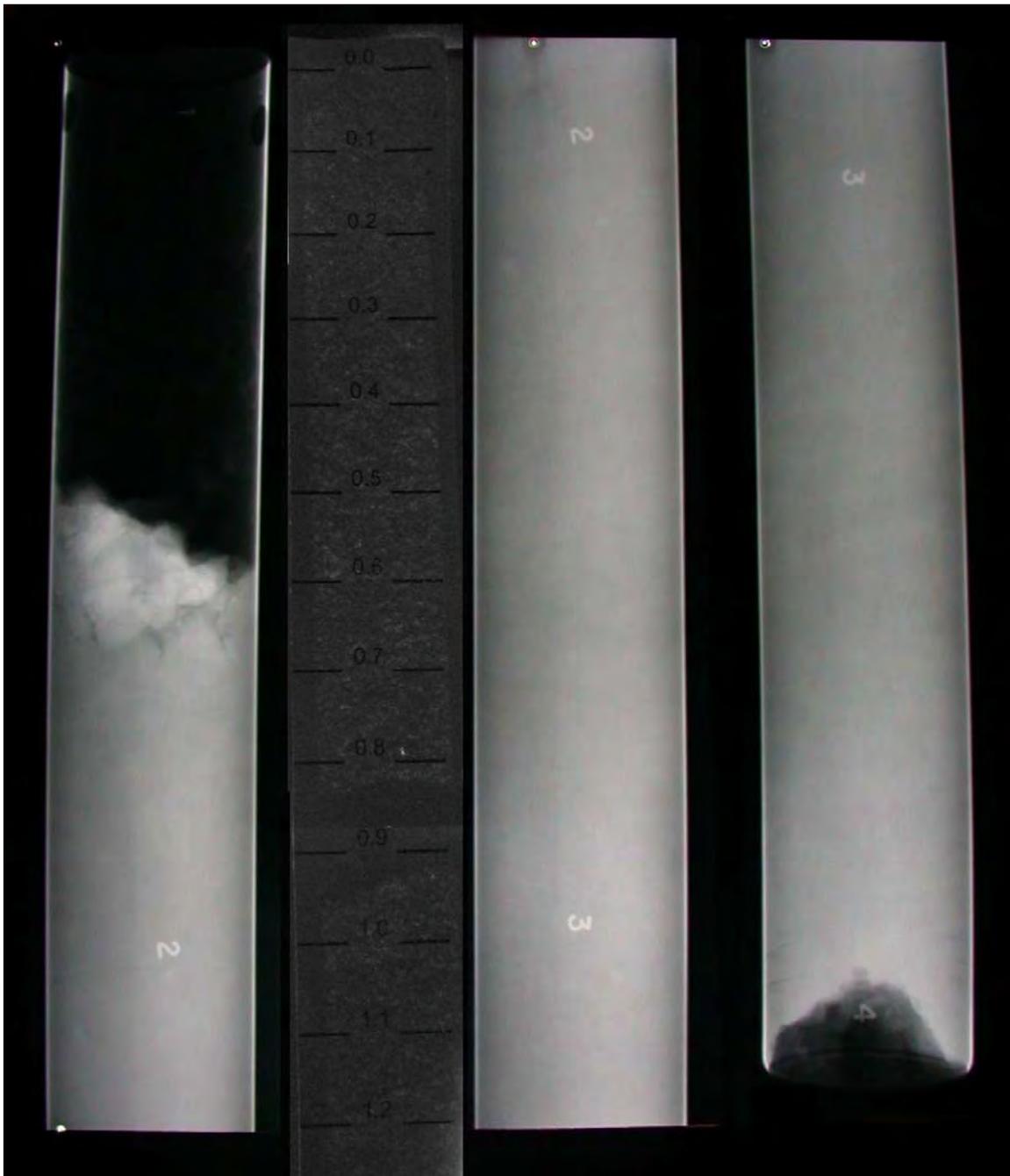
X-RAY IMAGE OF SAMPLE
BH-68, Sample 4
Tunnel Segment of SVRT Project
San Jose, California

FIGURE A20-65



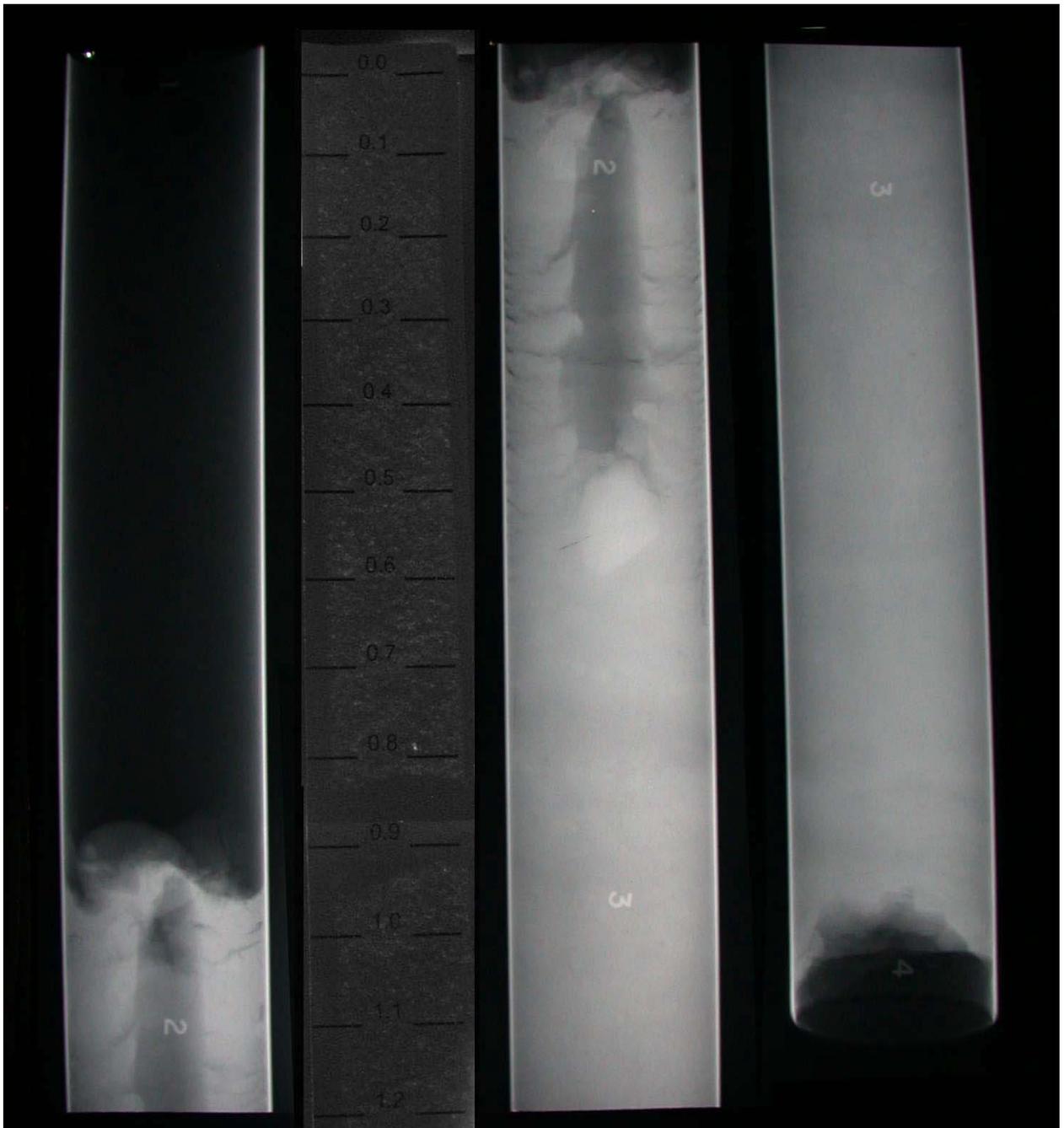
X-RAY IMAGE OF SAMPLE
BH-68, Sample 18
Tunnel Segment of SVRT Project
San Jose, California

FIGURE A20-66



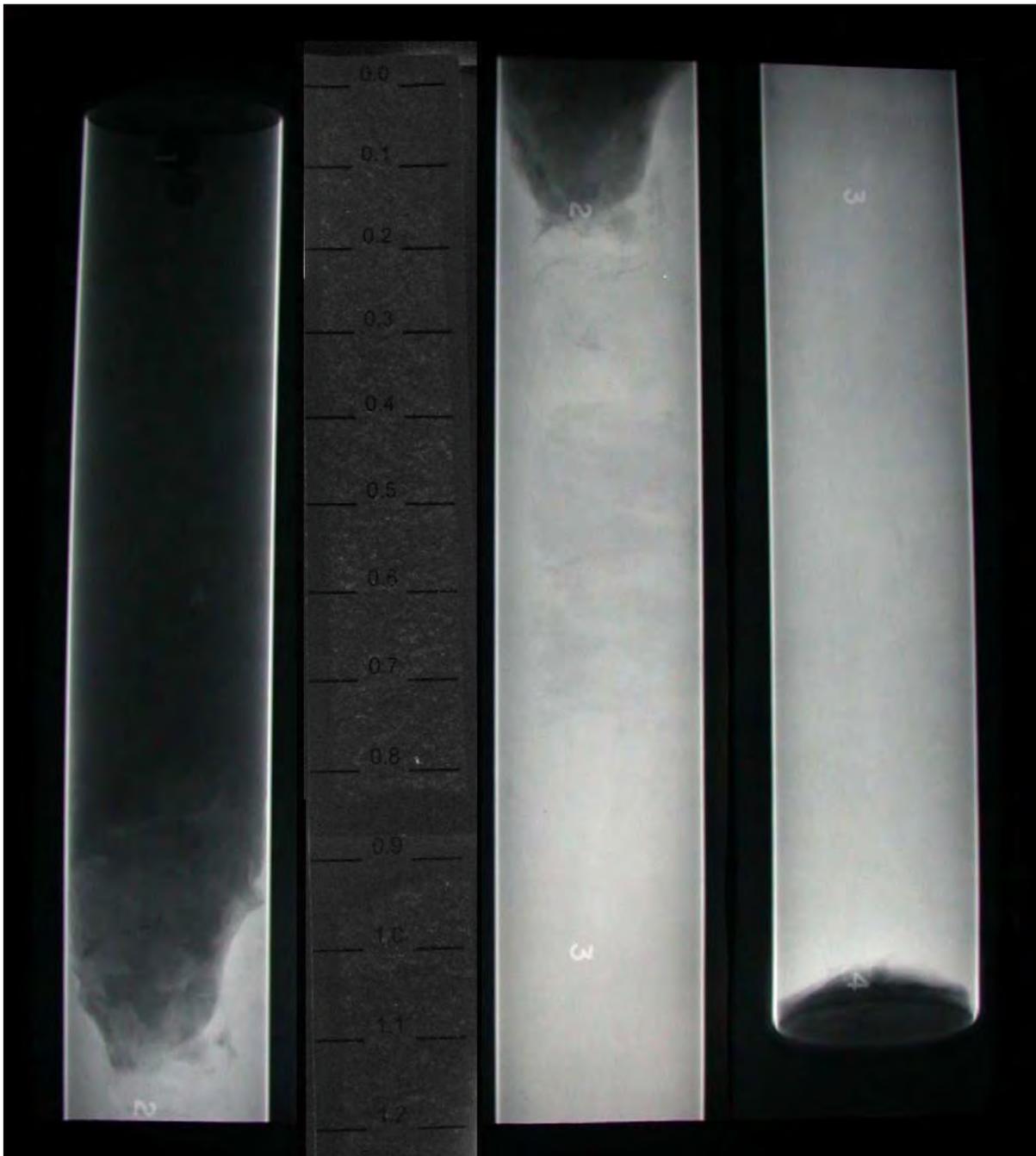
X-RAY IMAGE OF SAMPLE
BH-70, Sample 35
Tunnel Segment of SVRT Project
San Jose, California

FIGURE A20-67



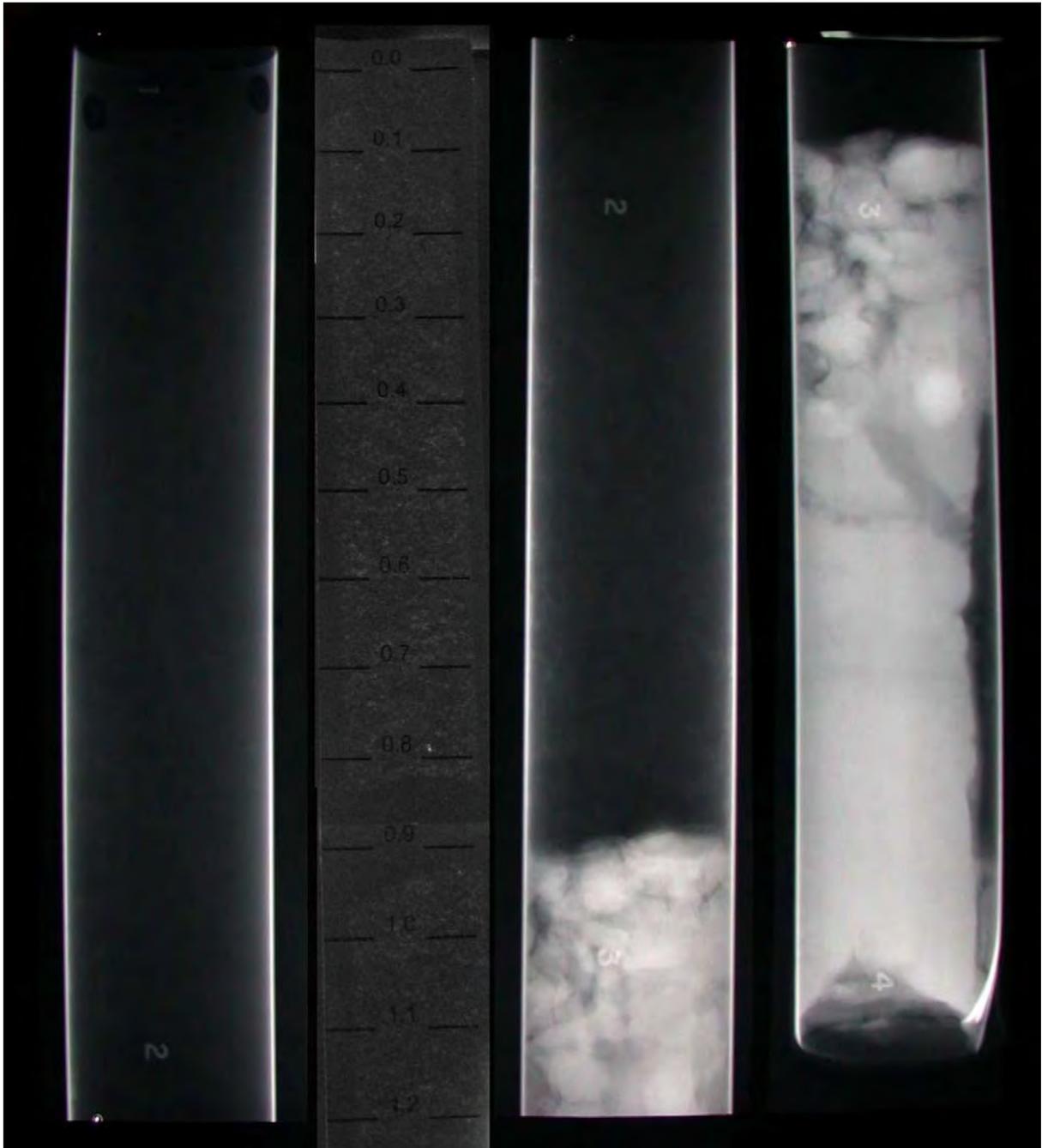
X-RAY IMAGE OF SAMPLE
BH-71, Sample 4
Tunnel Segment of SVRT Project
San Jose, California

FIGURE A20-68



X-RAY IMAGE OF SAMPLE
BH-71, Sample 8
Tunnel Segment of SVRT Project
San Jose, California

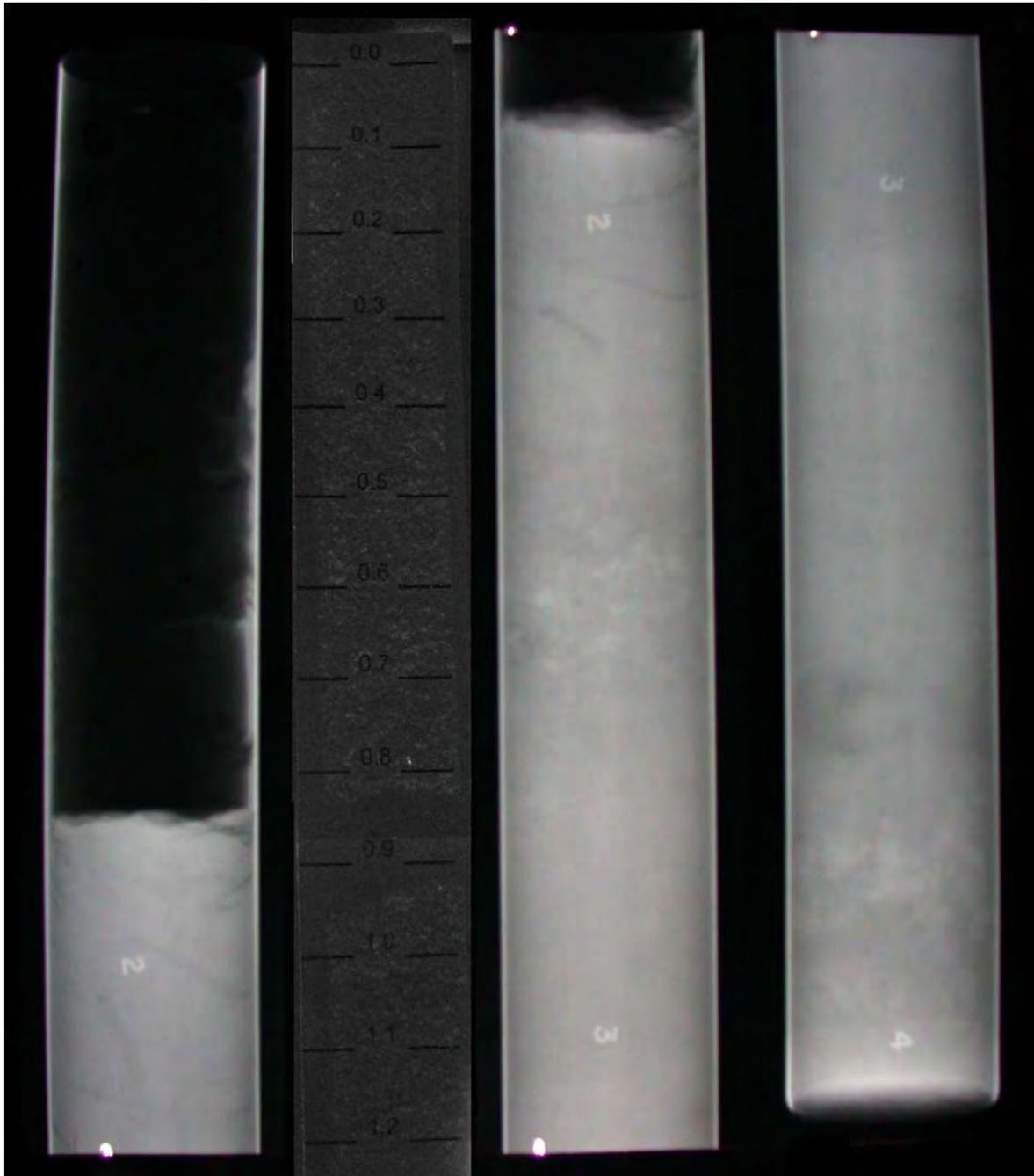
FIGURE A20-69



2

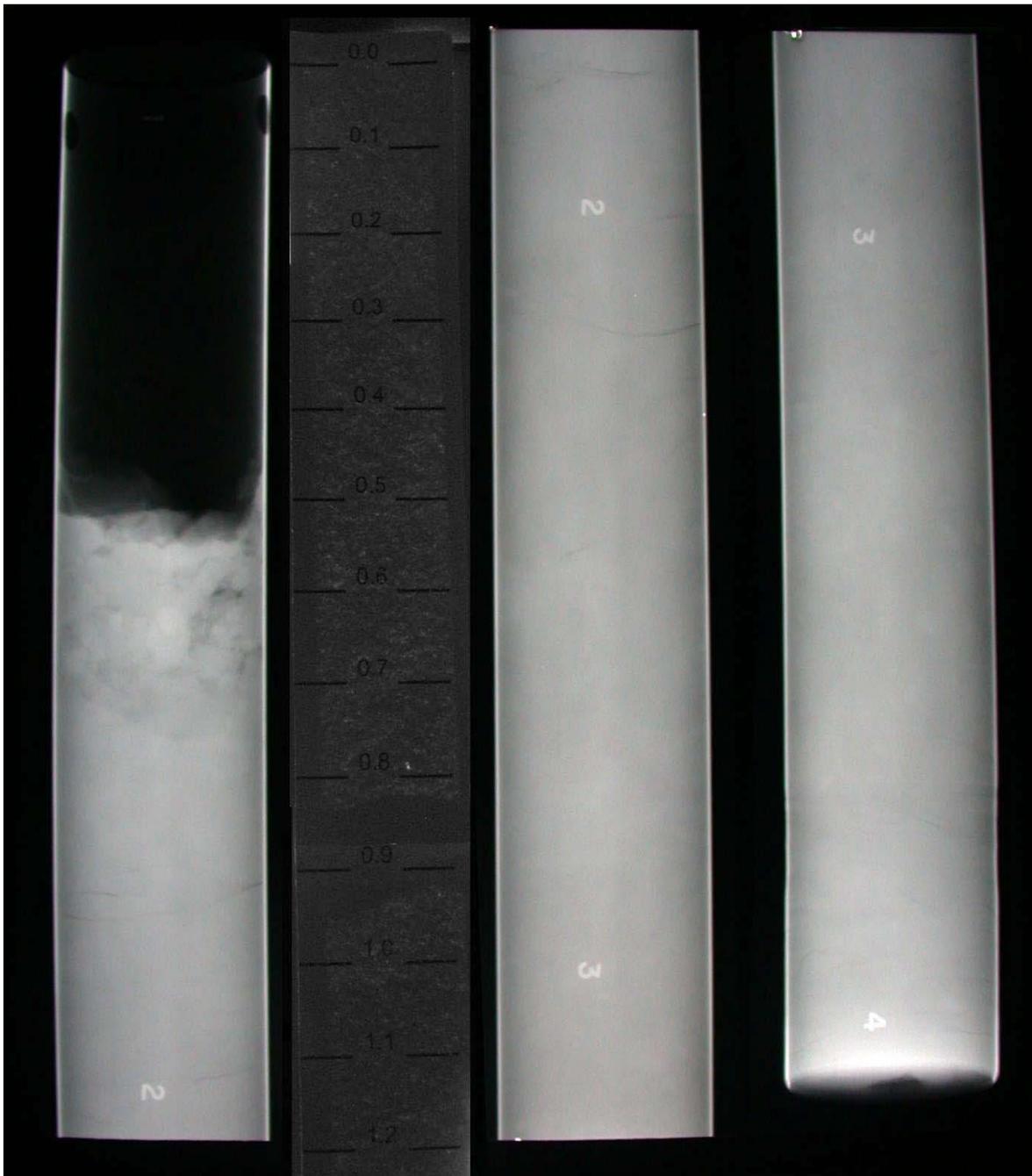
X-RAY IMAGE OF SAMPLE
BH-71, Sample 22
Tunnel Segment of SVRT Project
San Jose, California

FIGURE A20-70



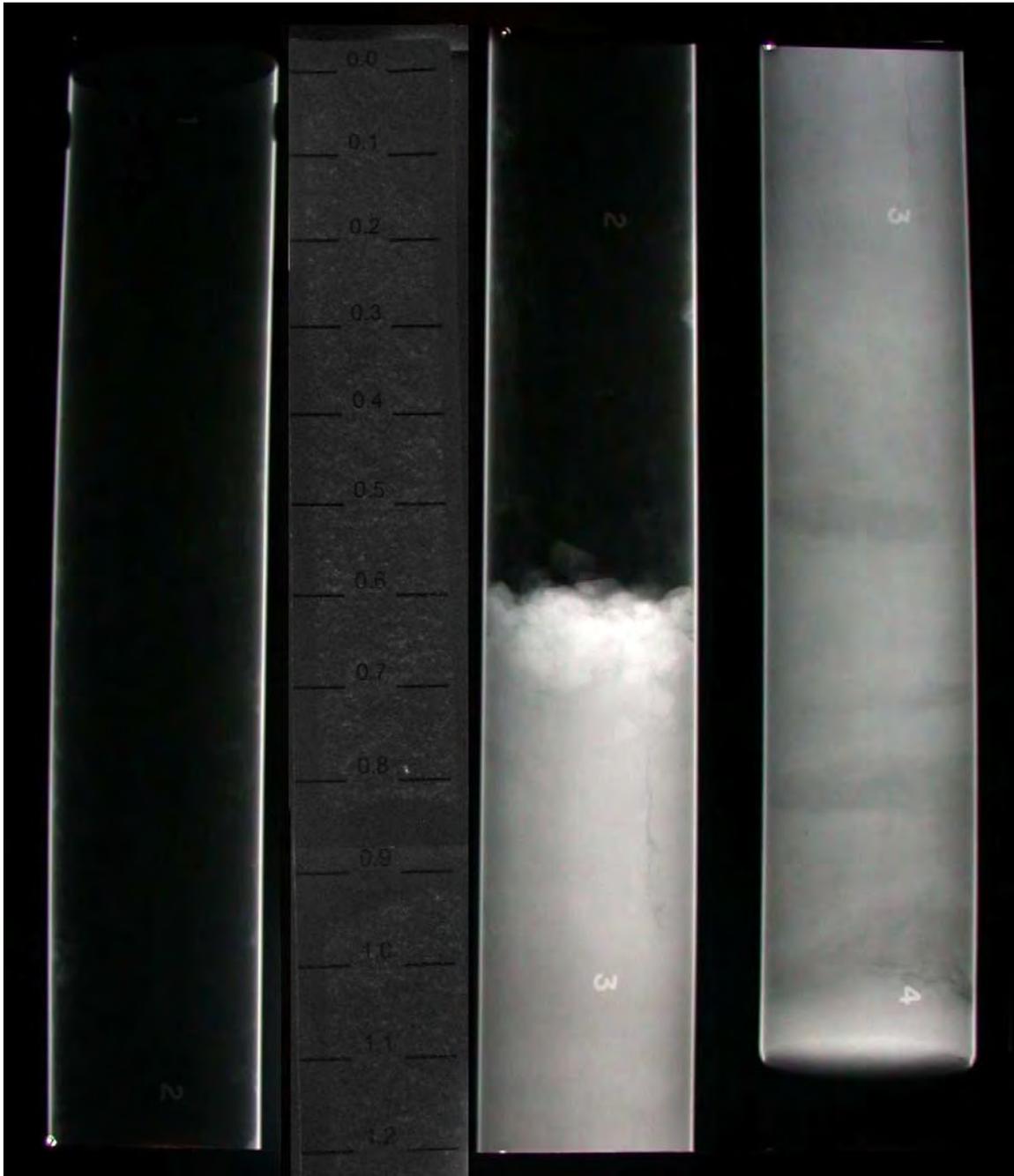
X-RAY IMAGE OF SAMPLE
BH-75, Sample 14
Tunnel Segment of SVRT Project
San Jose, California

FIGURE A20-71



X-RAY IMAGE OF SAMPLE
BH-75, Sample 15
Tunnel Segment of SVRT Project
San Jose, California

FIGURE A20-72



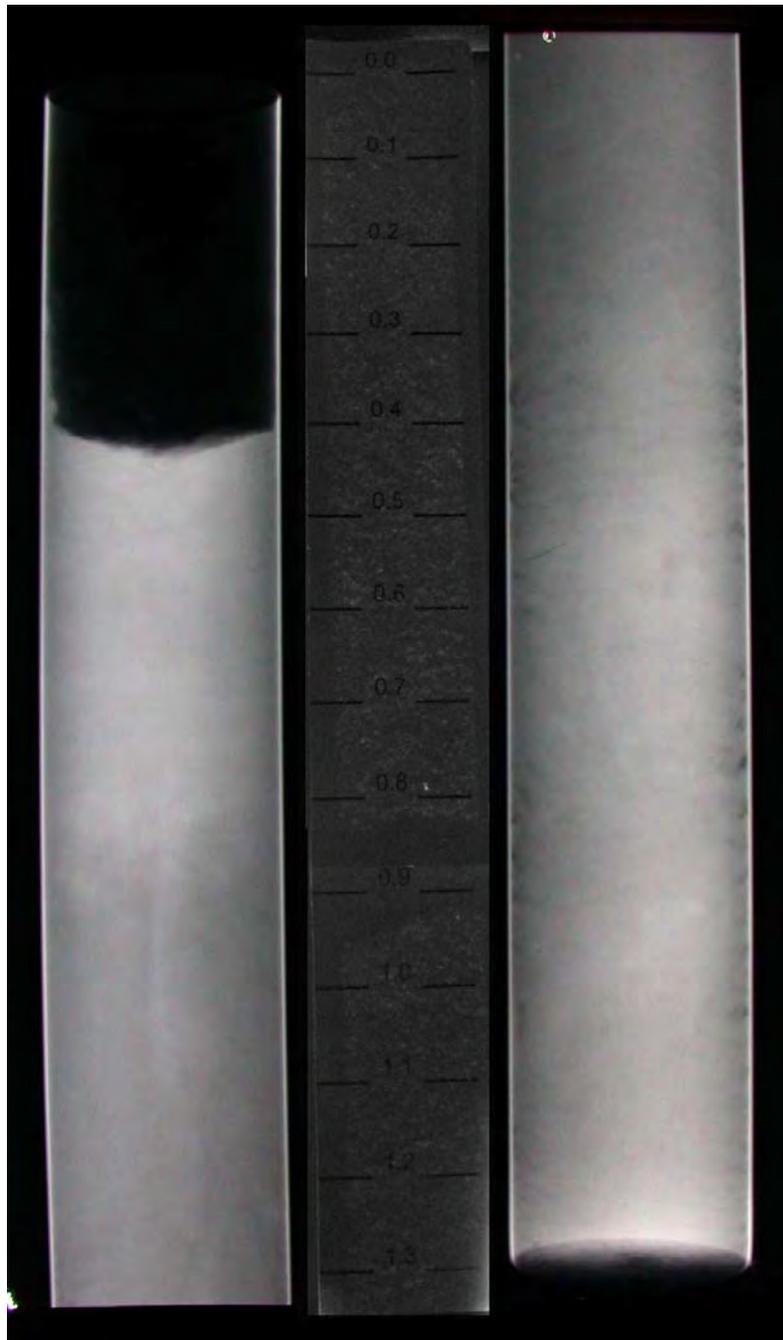
X-RAY IMAGE OF SAMPLE
BH-75, Sample 16
Tunnel Segment of SVRT Project
San Jose, California

FIGURE A20-73



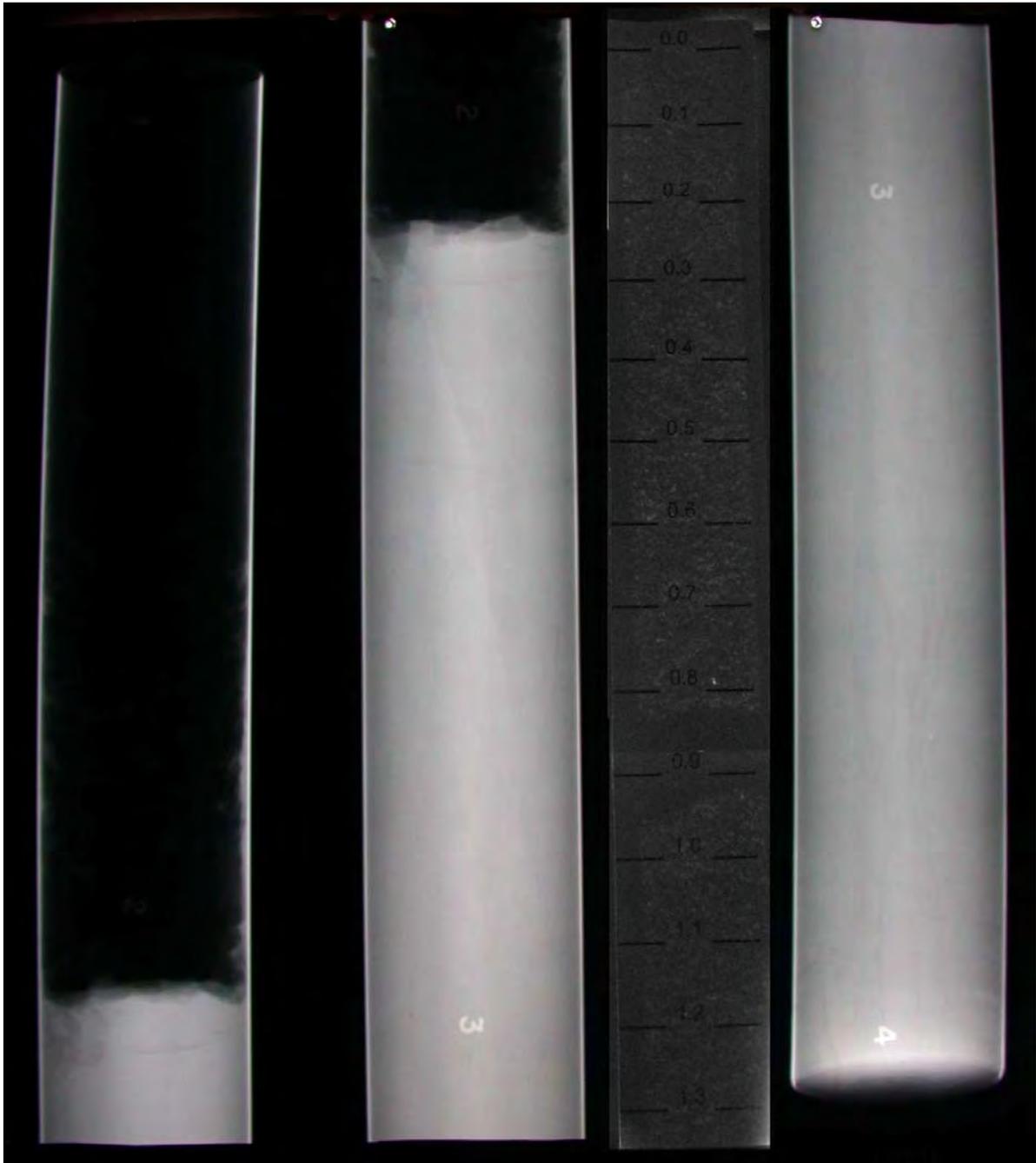
X-RAY IMAGE OF SAMPLE
BH-75, Sample 22
Tunnel Segment of SVRT Project
San Jose, California

FIGURE A20-74



X-RAY IMAGE OF SAMPLE
BH-77, Sample 4
Tunnel Segment of SVRT Project
San Jose, California

FIGURE A20-75



X-RAY IMAGE OF SAMPLE
BH-77, Sample 16
Tunnel Segment of SVRT Project
San Jose, California

FIGURE A20-76