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ALAMEDA POINT
SSIC No. 5090.3

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Northern and Central California, Nevada, and Utah
Contract No. N62474-94-D-7609
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Prepared for:
U.S. DEPARTMENT OF THE NAVY
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San Bruno, California

OU-3 REMEDIAL INVESTIGATION REPORT
FINAL

VOLUME II OF III
(Chapter 6 Figures)

ALAMEDA POINT
ALAMEDA, CALIFORNIA

August 9, 1999

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OU-3 REMEDIAL INVESTIGATION REPORT

DATED 09 AUGUST 1999

THIS RECORD CONTAINS MULTIPLE VOLUMES
WHICH HAVE BEEN ENTERED SEPARATELY

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FINAL OU-3 REMEDIAL INVESTIGATION REPORT
ALAMEDA POINT

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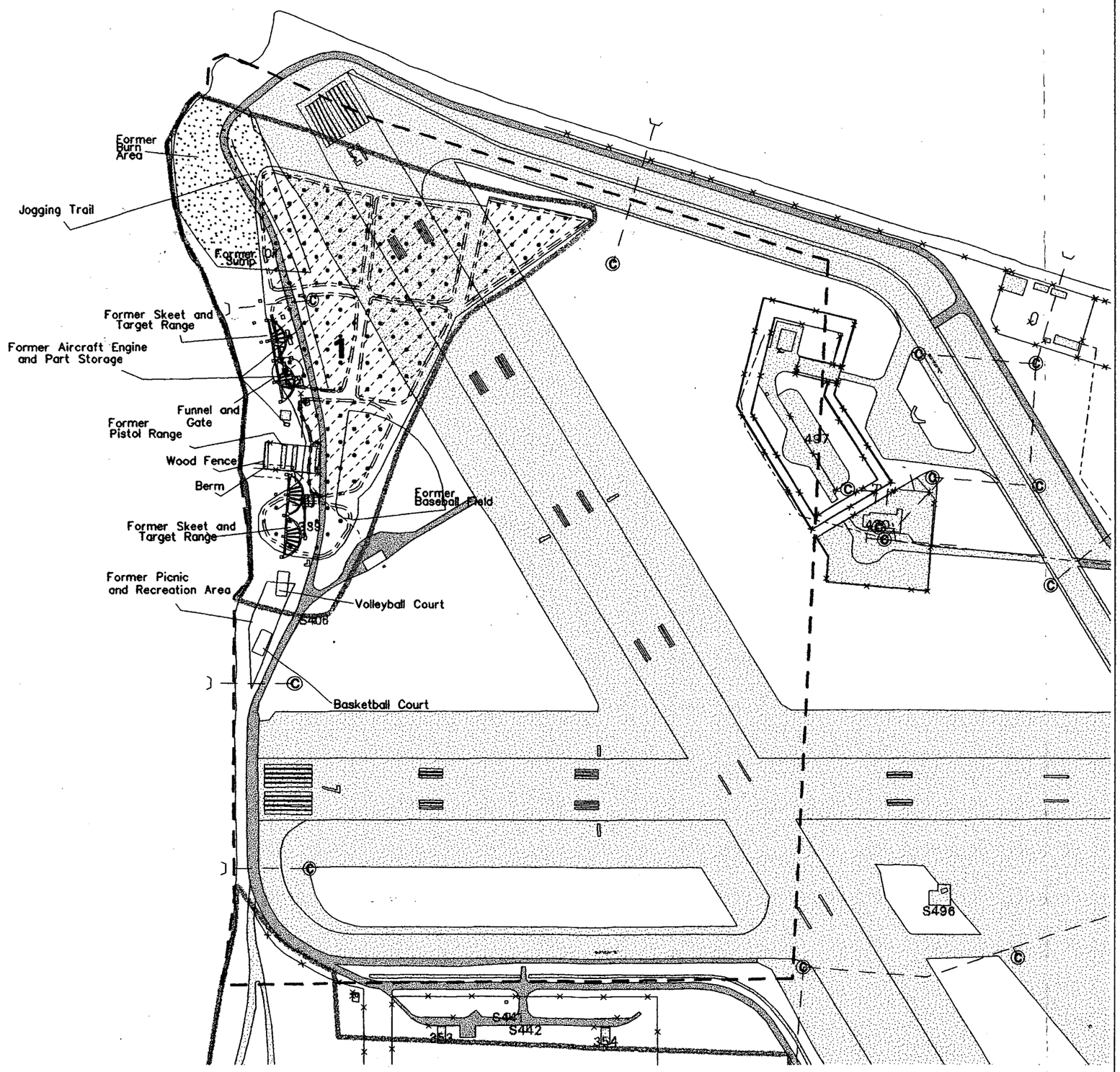


LEGEND

- STORM DRAIN CATCH BASIN
- ORIGINAL INSTALLATION RESTORATION SITE (OUTSIDE BOUNDARY)
- FENCE
- PAVED ROAD OR PARKING LOT
- BUILDING OR CONCRETE, PAVED, OR COVERED AREA
- 1 INSTALLATION RESTORATION SITE (INSIDE BOUNDARY)
- 517 BUILDING AND BUILDING NUMBER
- 1947 DISPOSAL ACTIVITIES
- 1949 DISPOSAL ACTIVITIES
- 1957 DISPOSAL ACTIVITIES
- DISPOSAL CELL BOUNDARY

N

150 0 150 300

SCALE: 1" = 300'

FIGURE 6-1
IR SITE 1
PHYSICAL FEATURES MAP
ALAMEDA POINT
ALAMEDA, CALIFORNIA

11/03/98 data3/alameda/ou3ri/contam1.map contam1117.aml pg

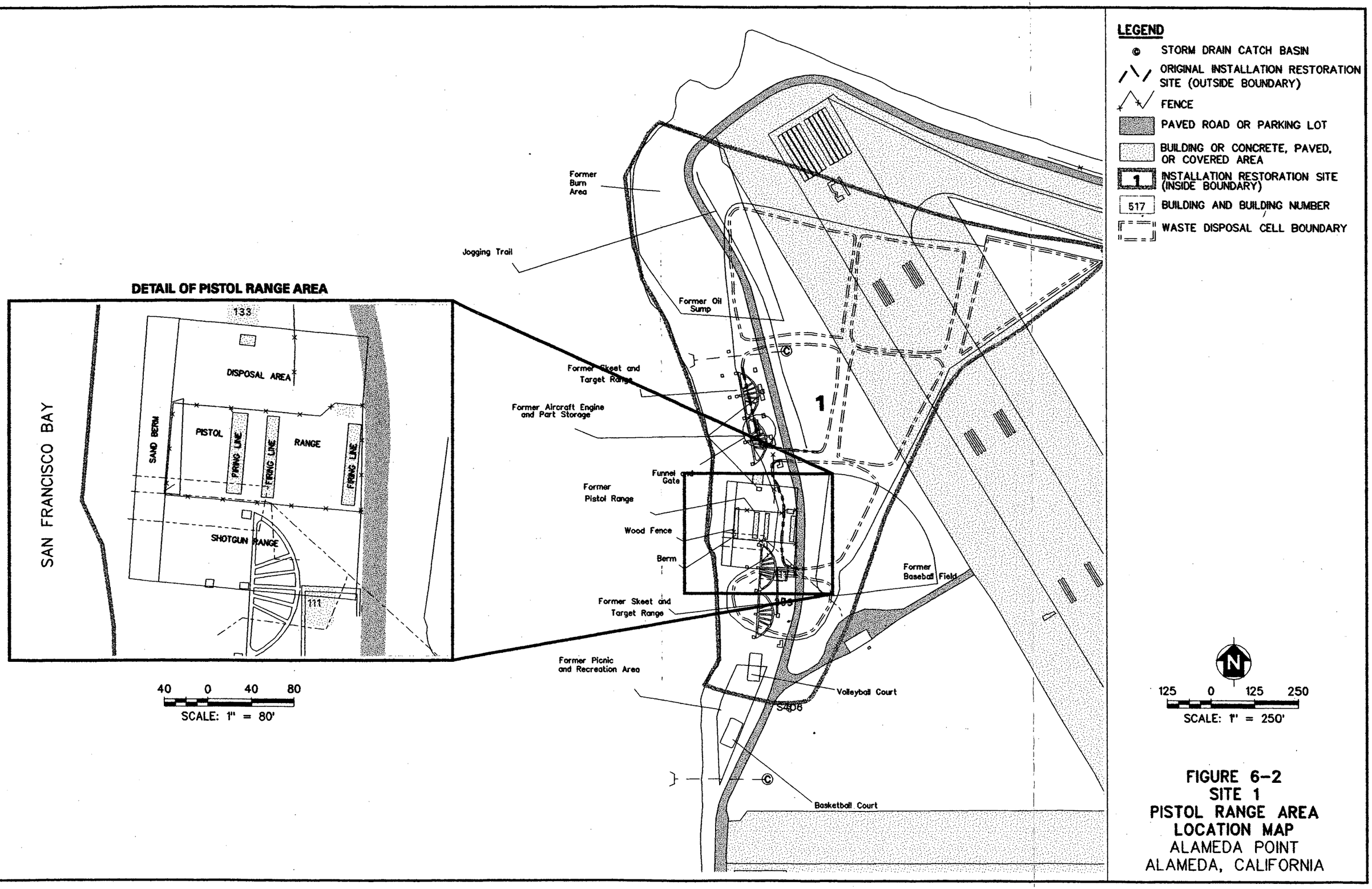
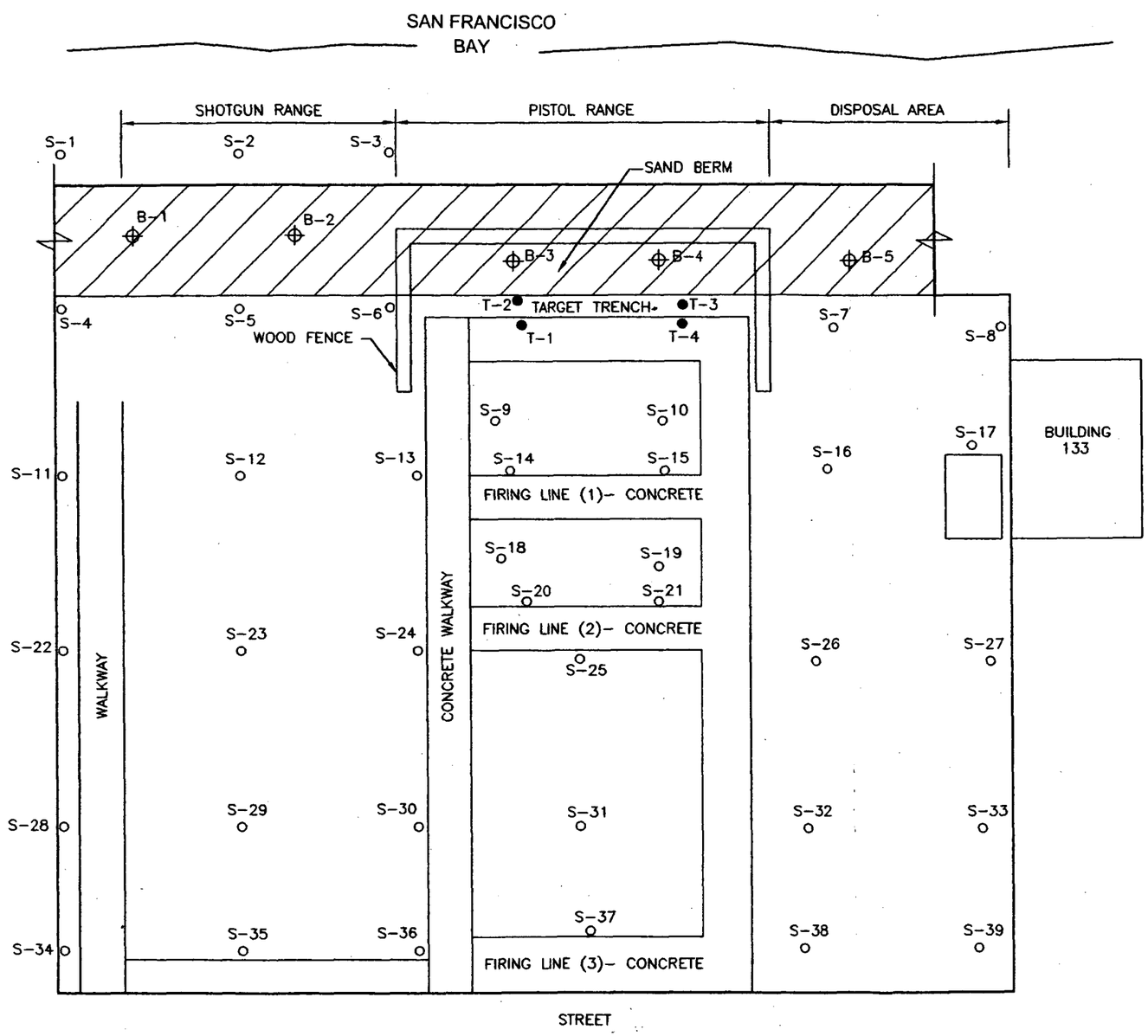


FIGURE 6-2
SITE 1
PISTOL RANGE AREA
LOCATION MAP
ALAMEDA POINT
ALAMEDA, CALIFORNIA

11/11/98 /data3/alameda/ou3ri/pistol.map pistol.aml pg



LEGEND:

B-1 SOIL BORING LOCATION WITHIN THE BERM

T-1 SOIL BORING LOCATION – TARGET TRENCH

S-1 SOIL BORING LOCATION

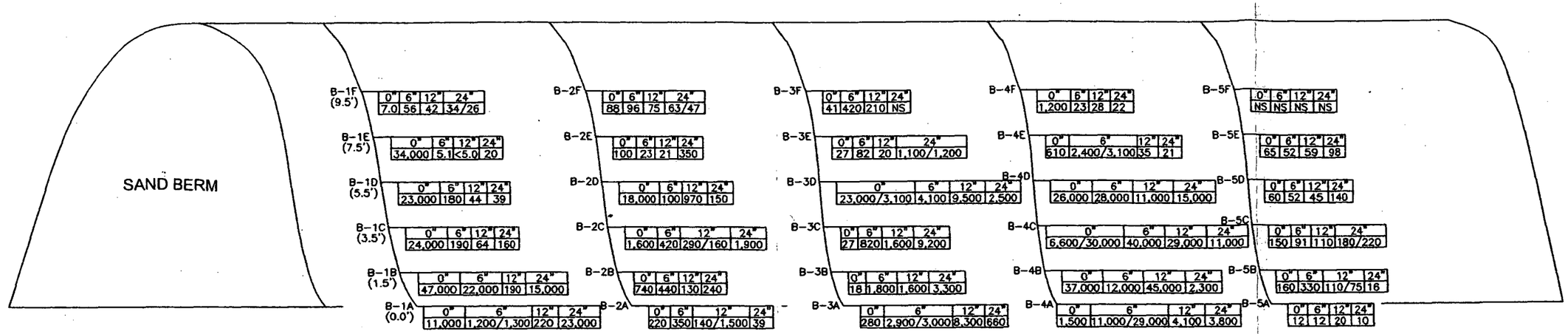
NOTES:

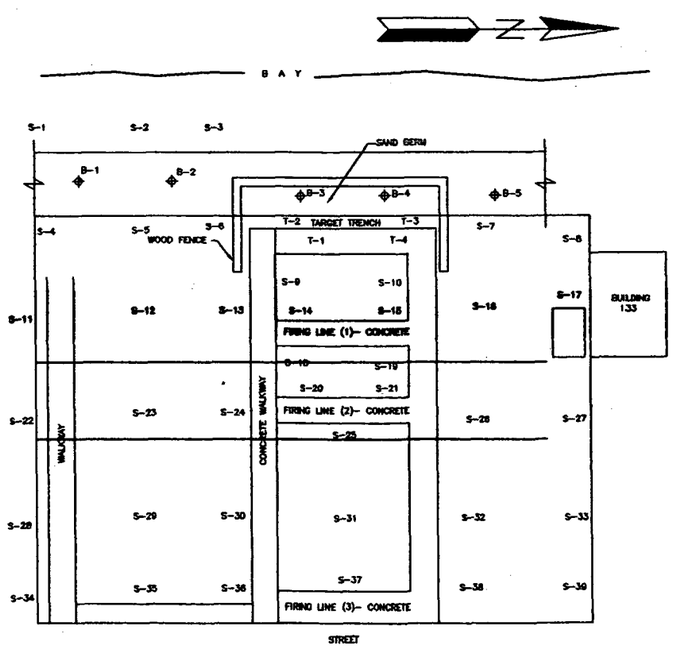
THE SITE LAYOUT AND SAMPLING LOCATIONS ARE ESTIMATED, AND NOT SURVEYED. THE SITE FEATURES SHOWN ARE NOT TO SCALE.

15' 0 15' 30'
SCALE: 1" = 30'

FIGURE 6-3
SAMPLE LOCATION MAP
PISTOL RANGE AREA AT SITE 1
ALAMEDA POINT
ALAMEDA, CALIFORNIA

SOURCE: FIGURE ADAPTED FROM ENVIRONMENTAL INVESTIGATION REPORT FOR THE PISTOL RANGE AREA (AGS, 1998)





SITE MAP AS REFERENCE

NOT TO SCALE

LEGEND:

B-1 — SOIL BORING LOCATION WITHIN THE BERM

T-1 — SOIL BORING LOCATION – TARGET TRENCH

S-1 — SOIL BORING LOCATION

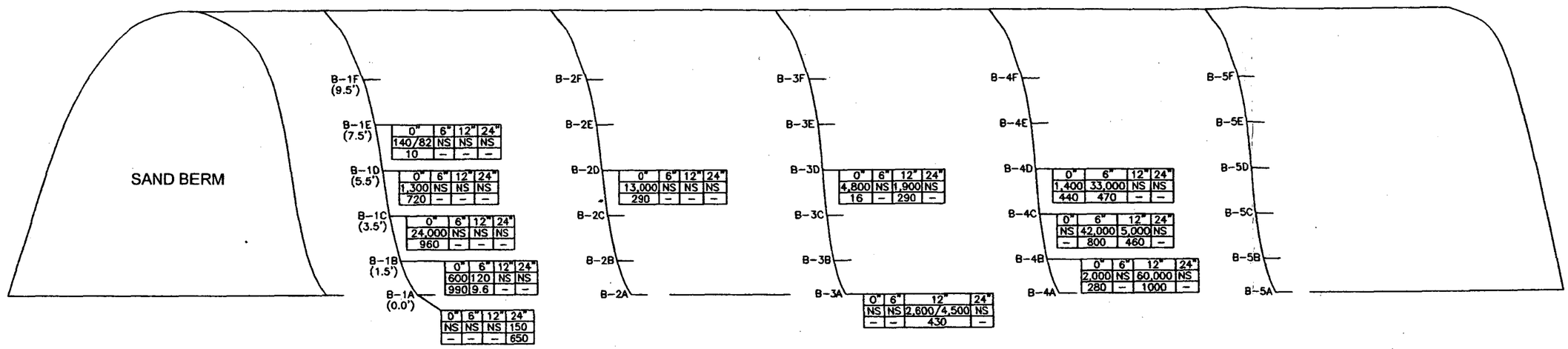
12" / 290/160 — DEPTH OF SAMPLE (inch) / TOTAL LEAD CONCENTRATION/DUPLICATE (mg/kg)

NOTES:

THE SITE LAYOUT AND SAMPLING LOCATIONS ARE ESTIMATED, AND NOT SURVEYED. THE SITE FEATURES SHOWN ARE NOT TO SCALE.

SOURCE: FIGURE ADAPTED FROM ENVIRONMENTAL INVESTIGATION REPORT FOR THE PISTOL RANGE AREA (AGS, 1998)

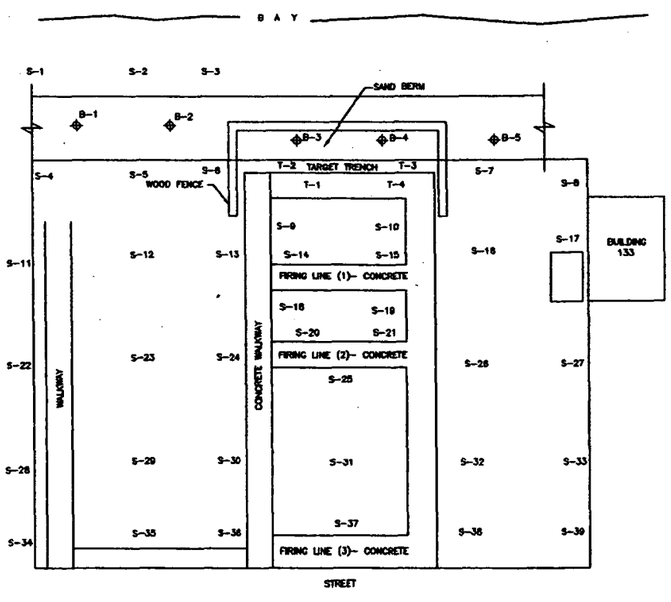
FIGURE 6-4
SOIL LEAD CONCENTRATIONS-BERM AREA (MARCH 1998)
PISTOL RANGE AREA AT SITE 1
ALAMEDA POINT
ALAMEDA, CALIFORNIA



2.5' 0 2.5' 5'

SCALE: 1" = 5'

HORIZONTAL SCALE = VERTICAL SCALE



SITE MAP AS REFERENCE

NOT TO SCALE

LEGEND:

B-1 — SOIL BORING LOCATION WITHIN THE BERM

T-1 — SOIL BORING LOCATION – TARGET TRENCH

S-1 — SOIL BORING LOCATION

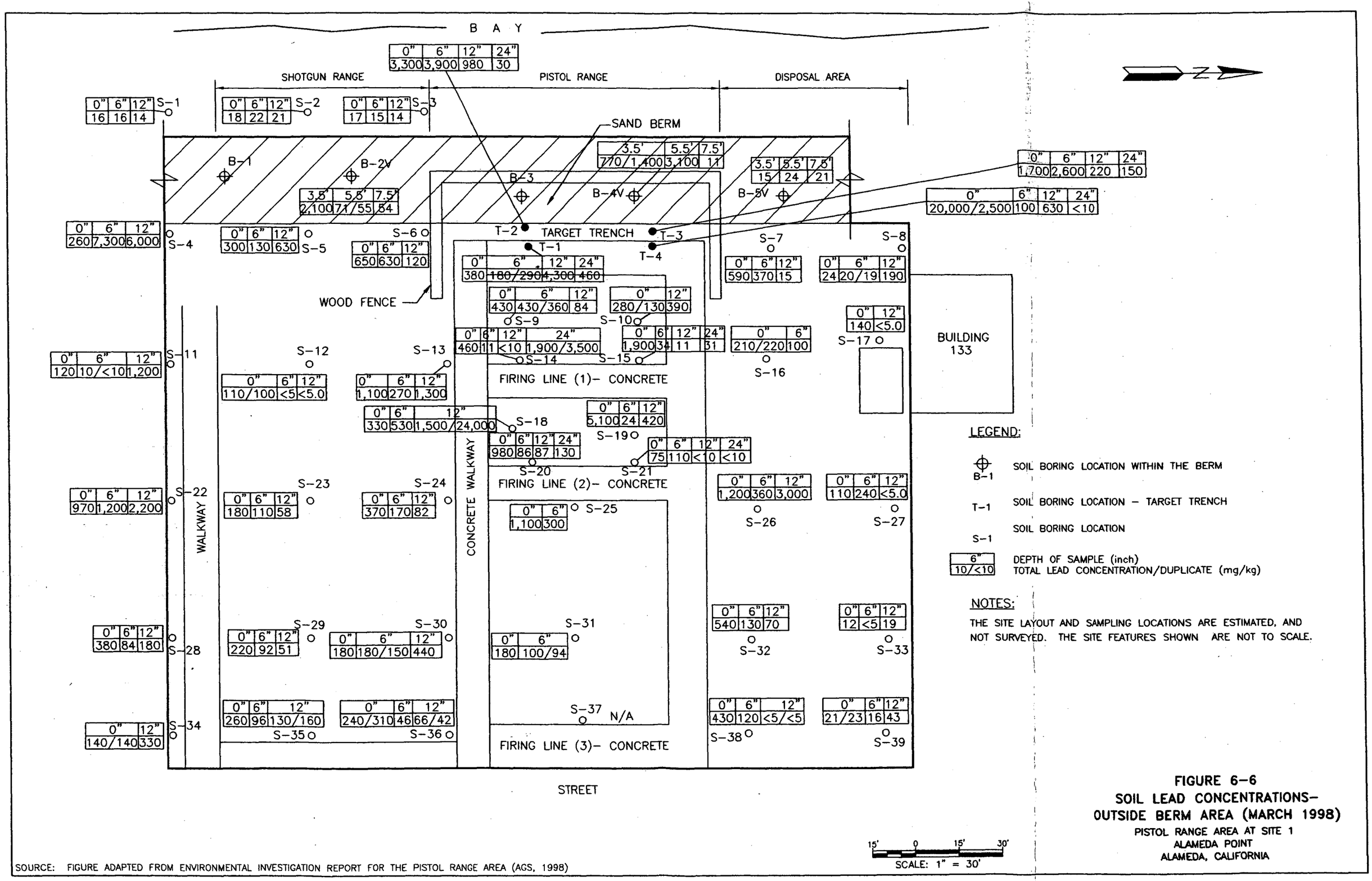
12"	DEPTH OF SAMPLE (inch)
2,600/4,500	TOTAL LEAD CONCENTRATION/DUPLICATE SAMPLE (mg/kg)
430	SOLUBLE LEAD CONCENTRATION USING WET METHOD (mg/L)

NOTES:

- THE SITE LAYOUT AND SAMPLING LOCATIONS ARE ESTIMATED, AND NOT SURVEYED. THE SITE FEATURES SHOWN ARE NOT TO SCALE.

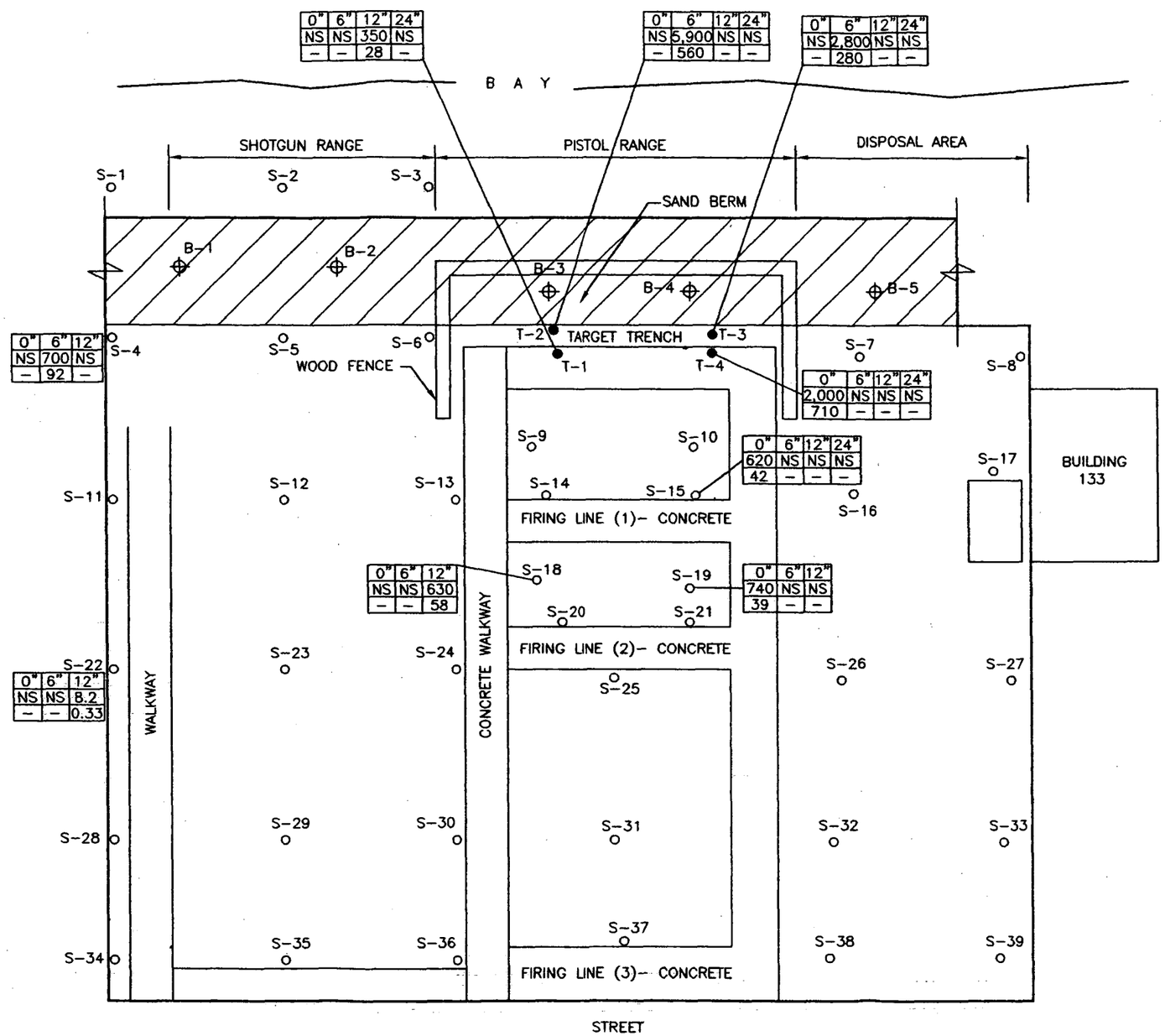
SOURCE: FIGURE ADAPTED FROM ENVIRONMENTAL INVESTIGATION REPORT FOR THE PISTOL RANGE AREA (AGS, 1998)

FIGURE 6-5
SOIL LEAD CONCENTRATIONS-BERM AREA (JULY 1998)
PISTOL RANGE AREA AT SITE 1
ALAMEDA POINT
ALAMEDA, CALIFORNIA



SOURCE: FIGURE ADAPTED FROM ENVIRONMENTAL INVESTIGATION REPORT FOR THE PISTOL RANGE AREA (AGS, 1998)

FIGURE 6-6
SOIL LEAD CONCENTRATIONS-
OUTSIDE BERM AREA (MARCH 1998)
PISTOL RANGE AREA AT SITE 1
ALAMEDA POINT
ALAMEDA, CALIFORNIA



LEGEND:

B-1 — SOIL BORING LOCATION WITHIN THE BERM

T-1 — SOIL BORING LOCATION – TARGET TRENCH

S-1 — SOIL BORING LOCATION

0" — DEPTH OF SAMPLE (inch)
740 — TOTAL LEAD CONCENTRATION (mg/kg)
39 — SOLUBLE LEAD CONCENTRATION USING WET METHOD (mg/L)

NOTES:

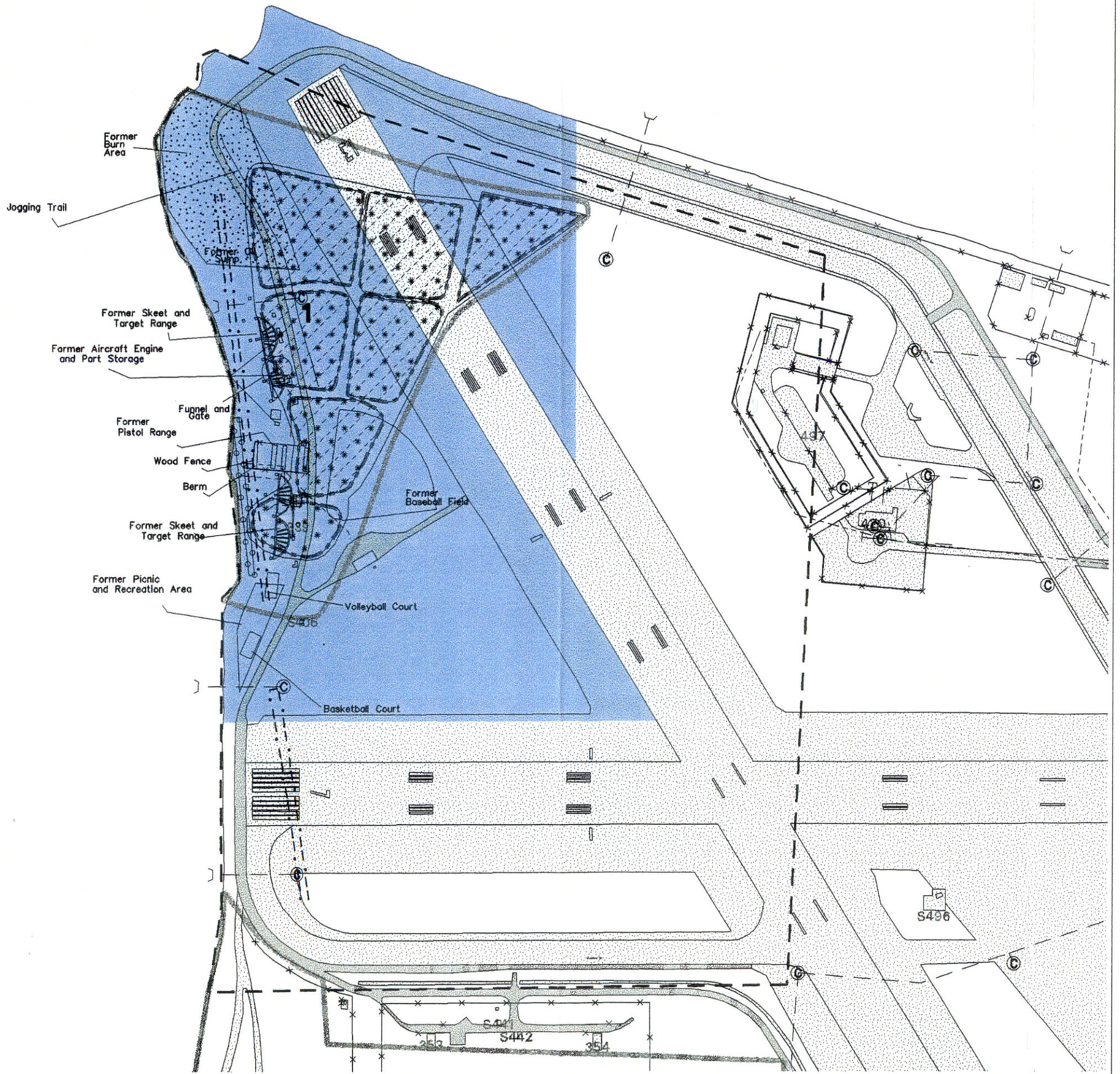
THE SITE LAYOUT AND SAMPLING LOCATIONS ARE ESTIMATED, AND NOT SURVEYED. THE SITE FEATURES SHOWN ARE NOT TO SCALE.

15' 0 15' 30'
SCALE: 1" = 30'

FIGURE 6-7
SOIL LEAD CONCENTRATIONS–
OUTSIDE BERM AREA (JULY 1998)

PISTOL RANGE AREA AT SITE 1
ALAMEDA POINT
ALAMEDA, CALIFORNIA

SOURCE: FIGURE ADAPTED FROM ENVIRONMENTAL INVESTIGATION REPORT FOR THE PISTOL RANGE AREA (AGS, 1998)



LEGEND

- STORM DRAIN CATCH BASIN
- ORIGINAL INSTALLATION RESTORATION SITE (OUTSIDE BOUNDARY)
- FENCE
- PAVED ROAD OR PARKING LOT
- BUILDING OR CONCRETE, PAVED, OR COVERED AREA
- 1 INSTALLATION RESTORATION SITE (INSIDE BOUNDARY)
- 517 BUILDING AND BUILDING NUMBER
- 1947 DISPOSAL ACTIVITIES
- 1949 DISPOSAL ACTIVITIES
- 1957 DISPOSAL ACTIVITIES
- WASTE DISPOSAL CELL BOUNDARY
- BARGE LINES (1949 AERIAL SURVEY)
- BARGE LINES (1957 AERIAL SURVEY)
- AREA PREVIOUSLY SURVEYED

ANOMALY LOCATIONS ARE SHOWN IN FIGURE 6–9

NOTE: BARGE LINES ARE INFERRED

N

150 0 150 300

SCALE: 1" = 300'

FIGURE 6–8
SITE 1
RADIOLOGICAL SURVEY MAP
ALAMEDA POINT
ALAMEDA, CALIFORNIA

05/14/99 ta3/alameda/ou3ri/radsurvey.map radsurvey.aml BB

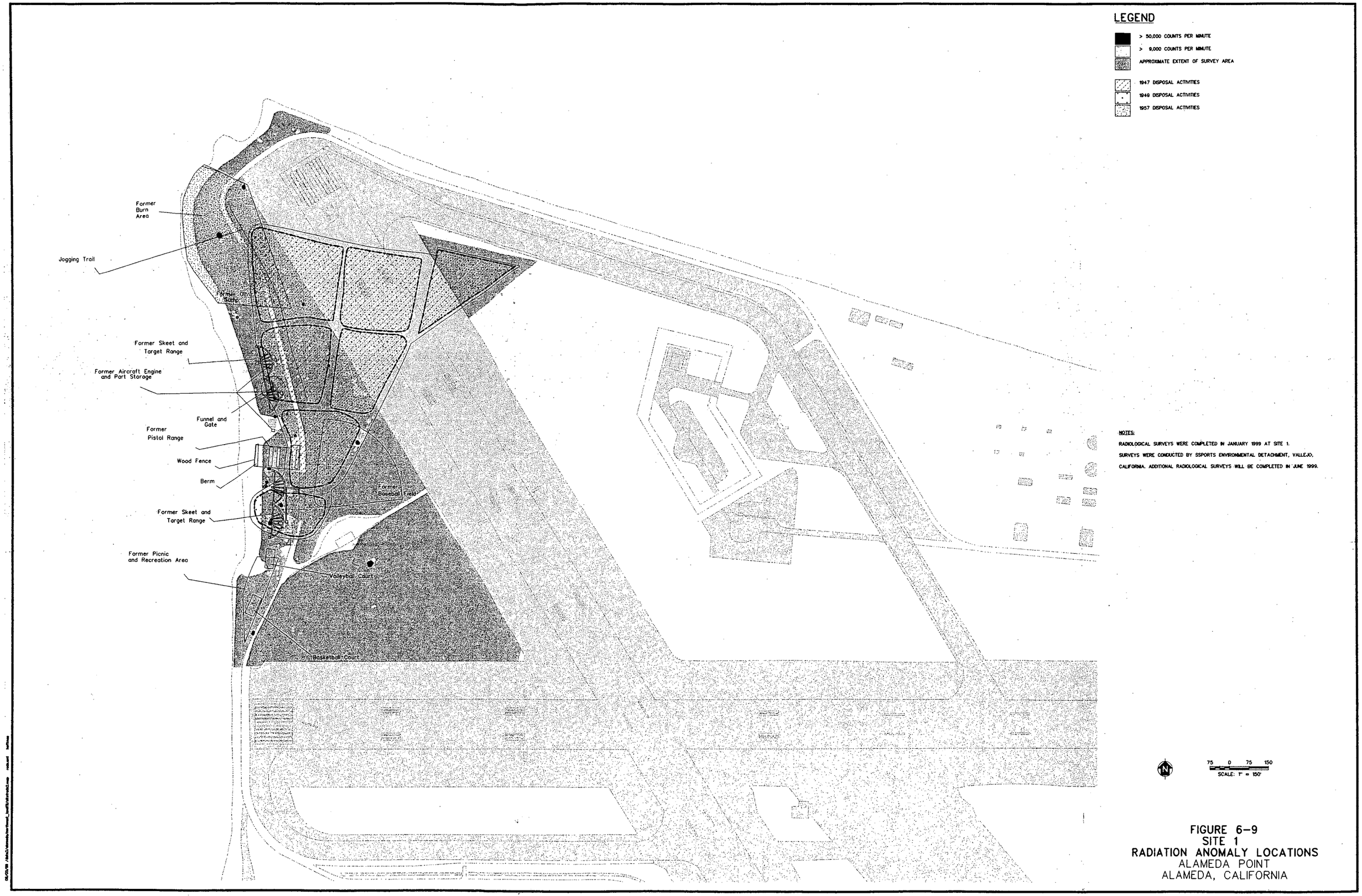


FIGURE 6-9
SITE 1
RADIATION ANOMALY LOCATIONS
ALAMEDA POINT
ALAMEDA, CALIFORNIA

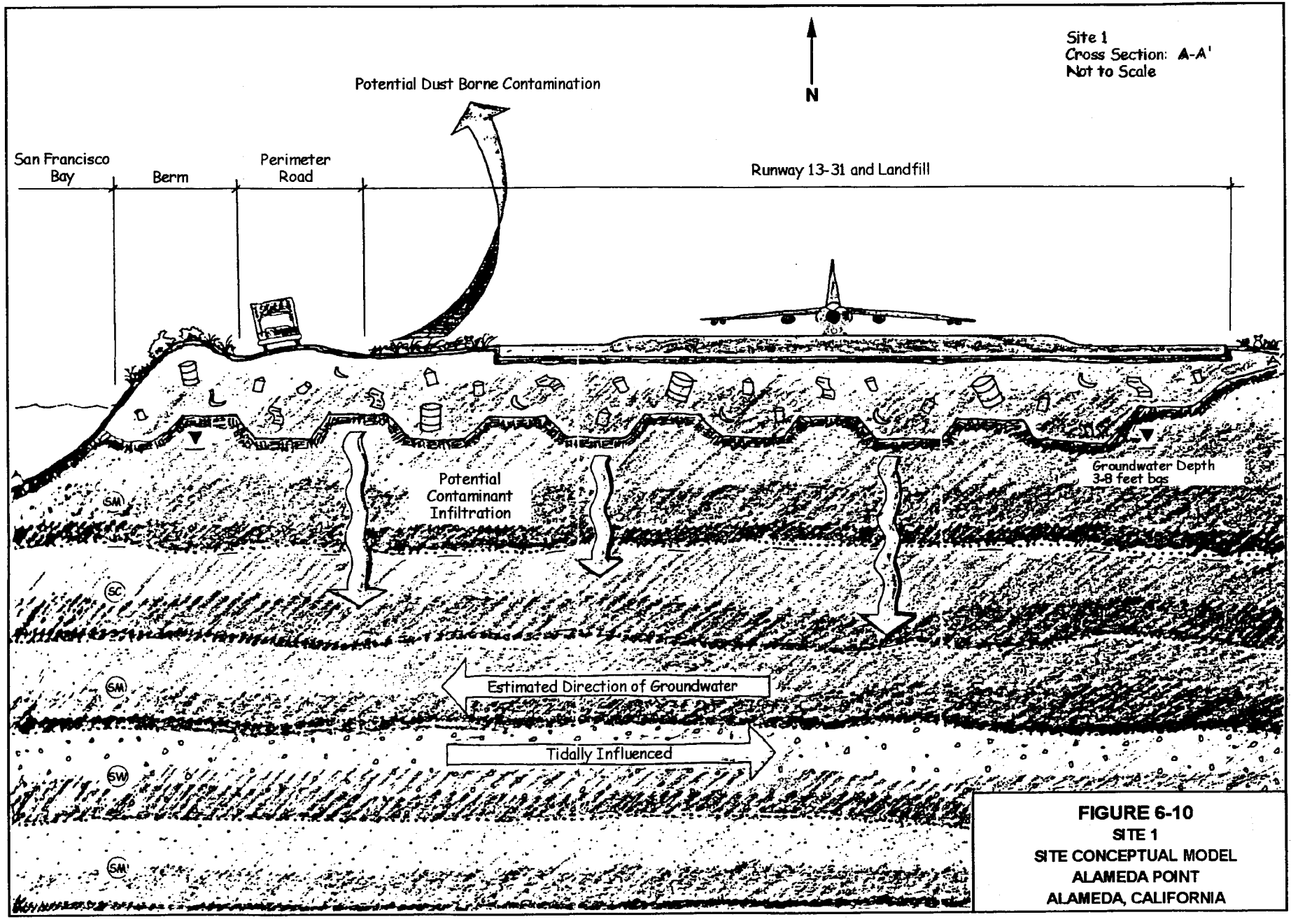
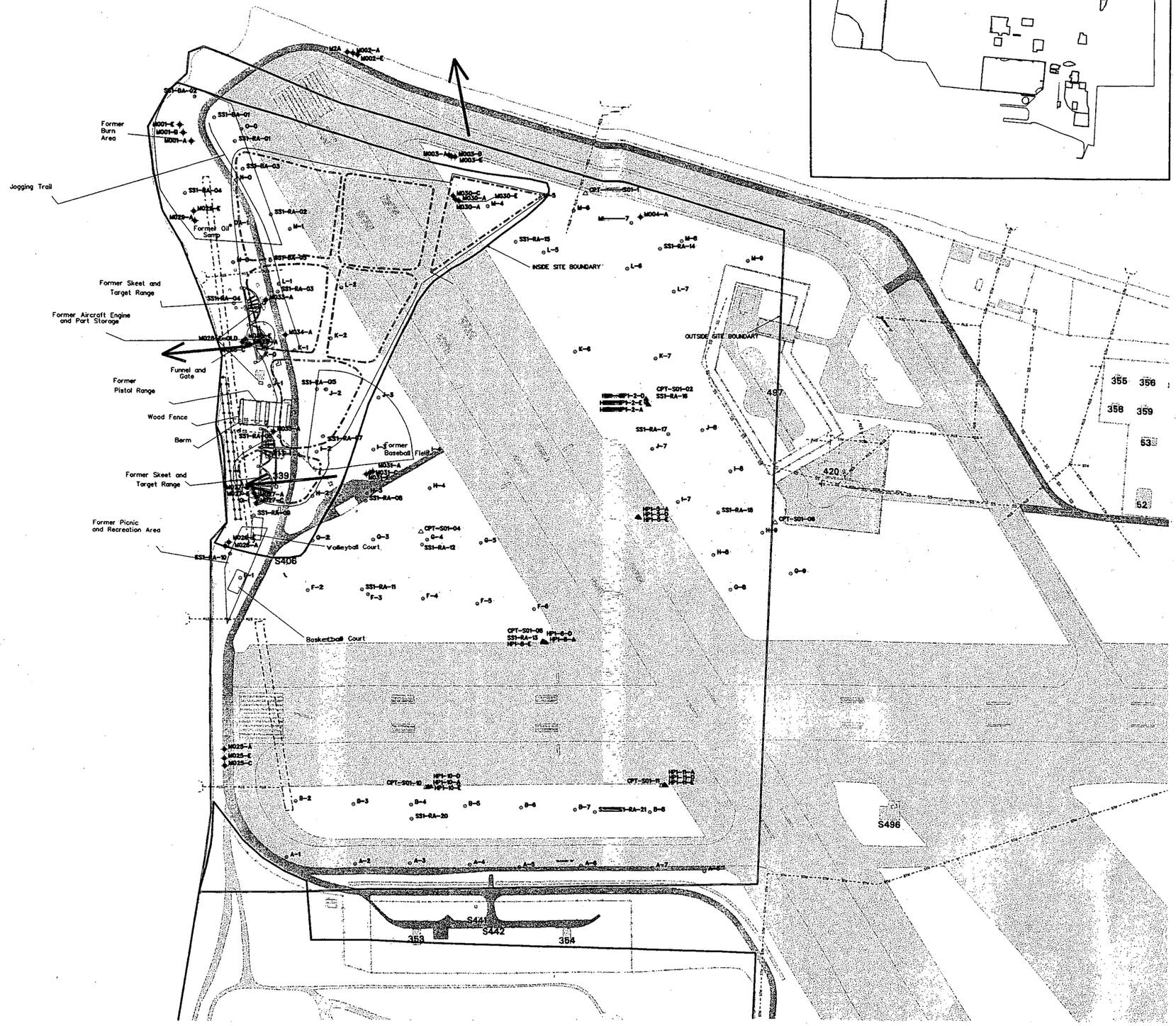


FIGURE 6-10
SITE 1
SITE CONCEPTUAL MODEL
ALAMEDA POINT
ALAMEDA, CALIFORNIA



SITE 1
LOCATOR MAP

LEGEND

- MONITORING WELL LOCATION
- SOIL BORING LOCATION
- HYDROPUNCH LOCATION
- CONE PENETROMETER TEST LOCATION
- GEOPROBE LOCATION
- SURFACE SOIL SAMPLE
- STORM DRAIN CATCH BASIN
- STORM DRAIN MANHOLE
- STORM DRAIN LINE
- SANITARY SEWER LINE
- FUEL LINE
- INDUSTRIAL WASTE LINE
- FENCE
- RAILROAD
- PAVED ROAD OR PARKING LOT
- BUILDING OR CONCRETE, PAVED, OR COVERED AREA
- FORMER INSTALLATION RESTORATION SITE BOUNDARY
- INSTALLATION RESTORATION SITE
- BUILDING AND BUILDING NUMBER
- FORMER BUILDING
- WASTE DISPOSAL CELL
- BARGE LINE (INFERRED FROM 1949 PHOTO)
- BARGE LINE (INFERRED FROM 1957 PHOTO)
- GROUNDWATER FLOW DIRECTION

NOTES:

1. UTILITY LOCATIONS ARE APPROXIMATE.
2. ONLY SOIL REMOVAL ACTION CONFIRMATION SAMPLING LOCATIONS AND SOIL SAMPLING LOCATIONS NOT IMPACTED BY THE REMOVAL ACTION ARE SHOWN.
3. GROUNDWATER FLOW DIRECTION BASED ON FWBZU HYDRAULIC GRADIENTS

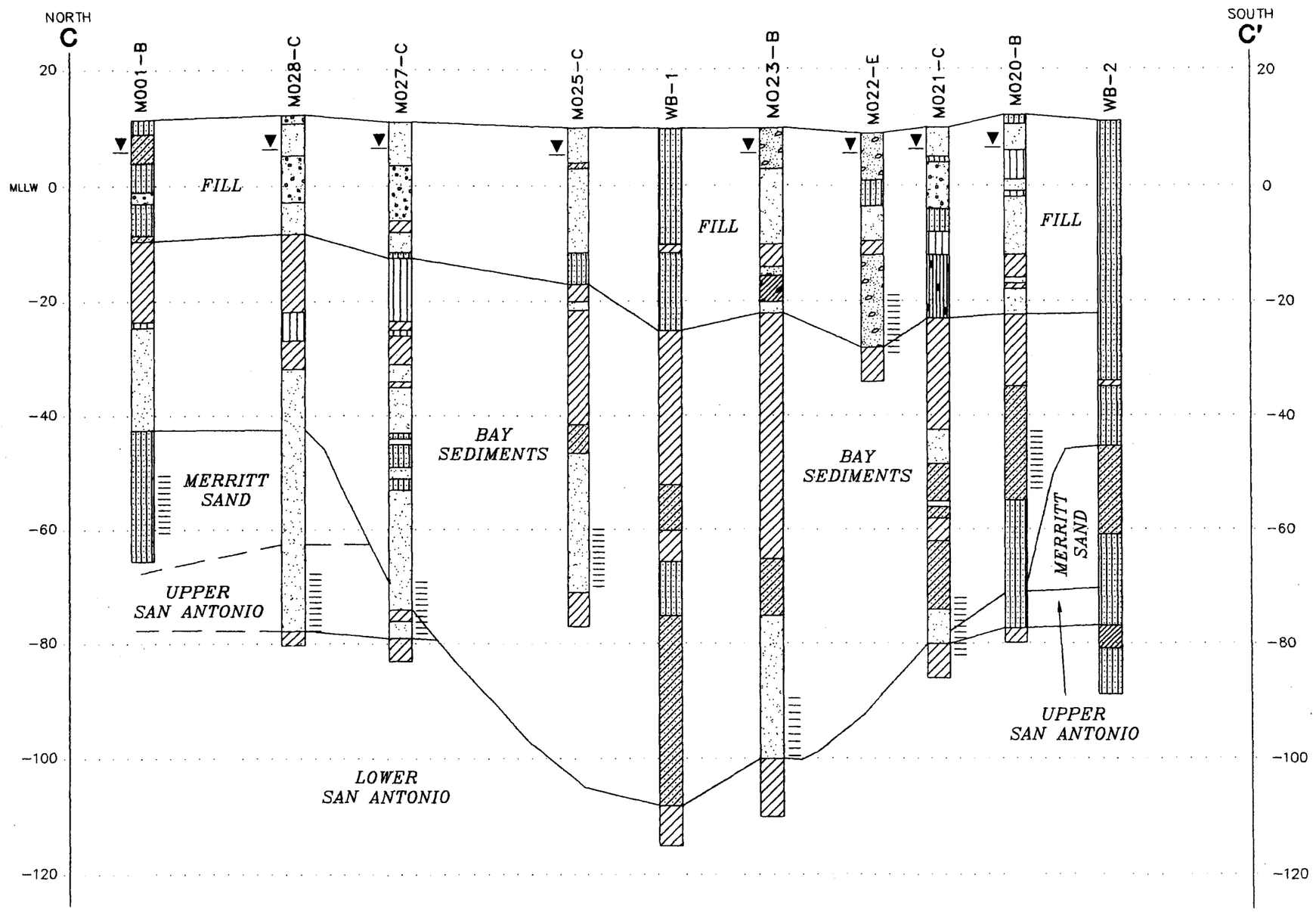
ACRONYMS:

FWBZU – FIRST WATER BEARING ZONE UPPER

N

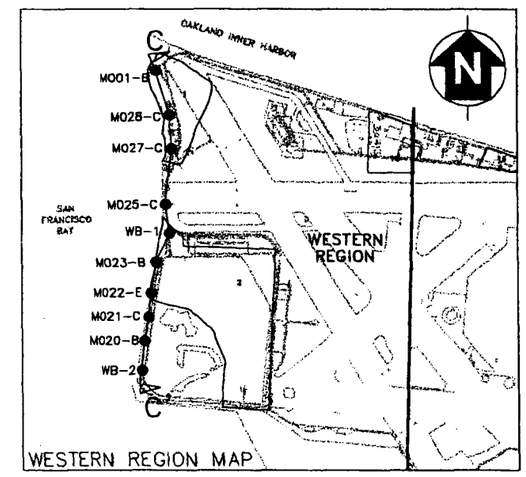
85 0 85 170
SCALE: 1" = 170'

FIGURE 6-11
SITE 1
SOIL AND GROUNDWATER SAMPLING LOCATION MAP
ALAMEDA POINT
ALAMEDA, CALIFORNIA



LEGEND

- GW – WELL-GRADED GRAVELS
- GM – SILTY GRAVELS
- GC – CLAYEY GRAVELS
- SW – WELL-GRADED SANDS
- SP – POORLY GRADED SANDS
- SM – SILTY SANDS
- SC – CLAYEY SANDS
- ML – SANDY SILTS, SILTY CLAYS
- CL – SANDY CLAYS, SILTY CLAYS
- CH – ORGANIC CLAYS, HIGH PLASTICITY
- CONTACT
- INFERRED CONTACT
- APPROXIMATE WATER LEVEL MEASURED DURING DRILLING ACTIVITIES
- MONITORING WELL SCREENED INTERVAL
- MLLW MEAN LOWER LOW WATER



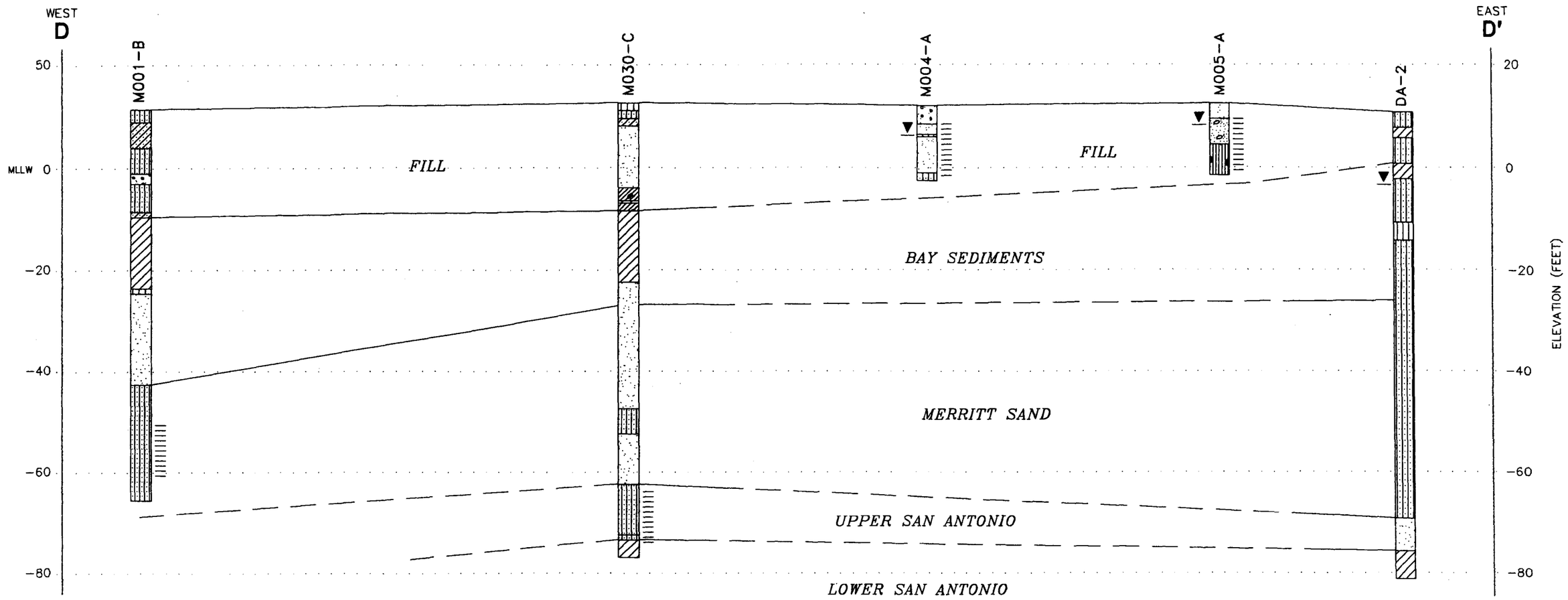
300' 0 300' 600'
HORIZONTAL SCALE: 1" = 600'

NOTE: GROUND SURFACE ELEVATIONS FOR WB-1 AND WB-2 ARE ESTIMATED.
VERTICAL EXAGGERATION IS 30X.

FIGURE 6-12

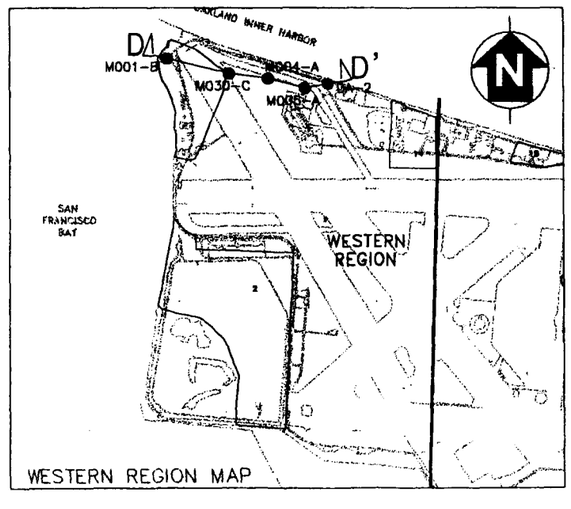
GEOLOGICAL CROSS SECTION C–C'
WESTERN REGION
ALAMEDA POINT
ALAMEDA, CALIFORNIA

1_XY.DWG – 05/23/97 – CFR – 044-0316IRRIRP



LEGEND

- GW – WELL-GRADED GRAVELS
- GM – SILTY GRAVELS
- GC – CLAYEY GRAVELS
- SW – WELL-GRADED SANDS
- SP – POORLY GRADED SANDS
- SM – SILTY SANDS
- SC – CLAYEY SANDS
- ML – SANDY SILTS, SILTY CLAYS
- CL – SANDY CLAYS, SILTY CLAYS
- CONTACT
- INFERRED CONTACT
- APPROXIMATE WATER LEVEL MEASURED DURING DRILLING ACTIVITIES
- MONITORING WELL SCREENED INTERVAL
- MLLW MEAN LOWER LOW WATER



WESTERN REGION MAP

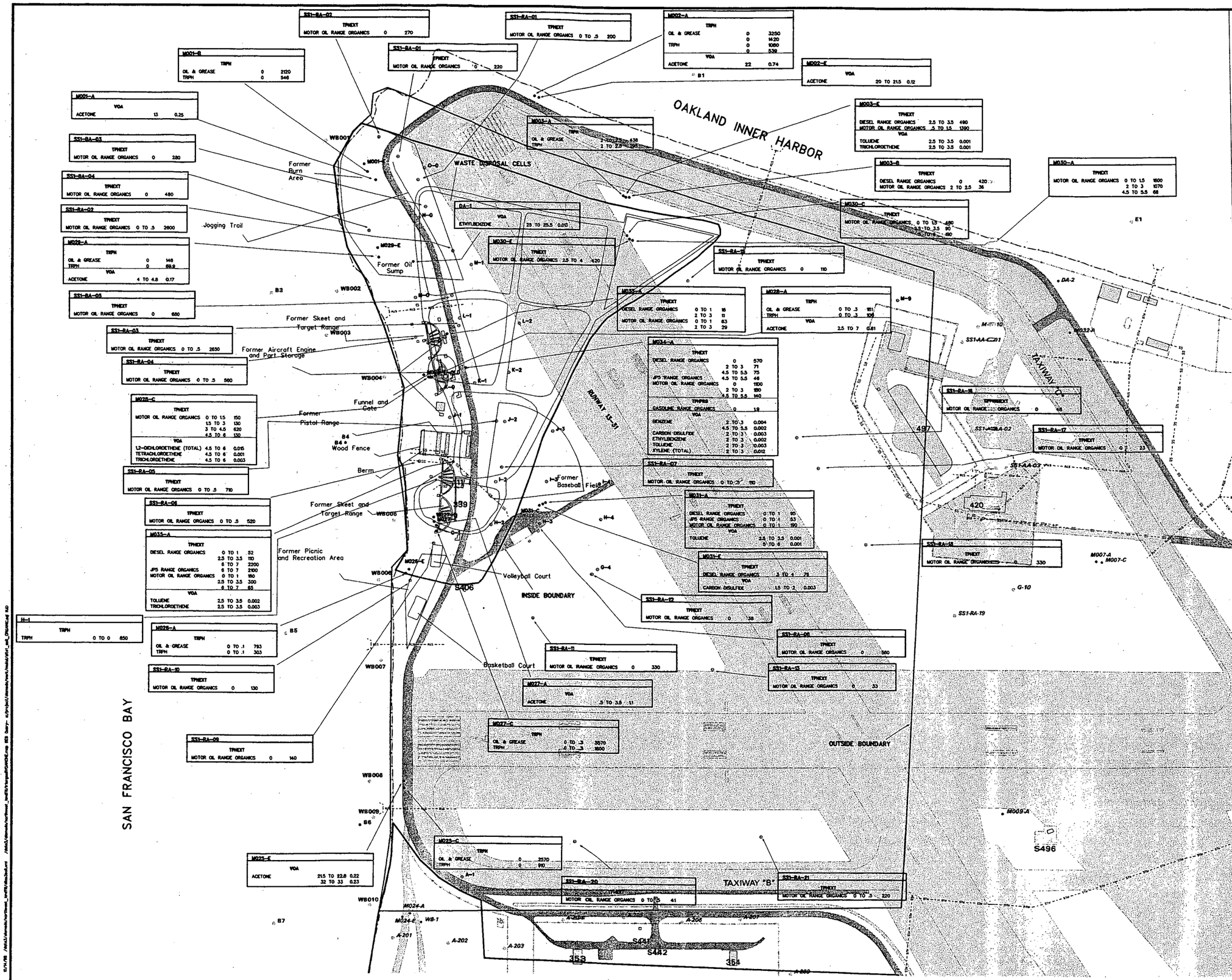
NOTE: GROUND SURFACE ELEVATIONS FOR DA-2 IS ESTIMATED.
VERTICAL EXAGGERATION IS 10X.

100' 0 100' 200'
HORIZONTAL SCALE: 1" = 200'

FIGURE 6-13

GEOLOGICAL CROSS SECTION D–D'
WESTERN REGION
ALAMEDA POINT
ALAMEDA, CALIFORNIA

1_X2.DWG – 05/23/97 – CFR – 044-0316RRIRP



LEGEND

- SURFACE SAMPLING LOCATION
- SOIL BORING LOCATION
- SOIL PUNCH LOCATION
- GEOPROBE LOCATION
- STORM DRAIN LINE
- SANITARY SEWER LINE
- STEAM LINE
- FUEL LINE
- INDUSTRIAL WASTE LINE
- FENCE
- RAILROAD
- SHORELINE
- PAVED ROAD OR PARKING LOT
- BUILDING OR CONCRETE, PAVED, OR COVERED AREA
- 617 BUILDING AND BUILDING NUMBER
- INSTALLATION RESTORATION SITE

SAMPLE ID	B06-09		SAMPLE DEPTH (FEET BGS)
COMPOUND CLASS	VOA		
ANALYTE	ACETONE	.14 TO 15.3 / 4 TO 14	1.5 / 9.6 (P) — CONCENTRATION (mg/kg); QUALIFIER

QUALIFIERS:
P - CONCENTRATION EXCEEDS RESIDENTIAL PRG FOR THE ANALYTE

NOTES:

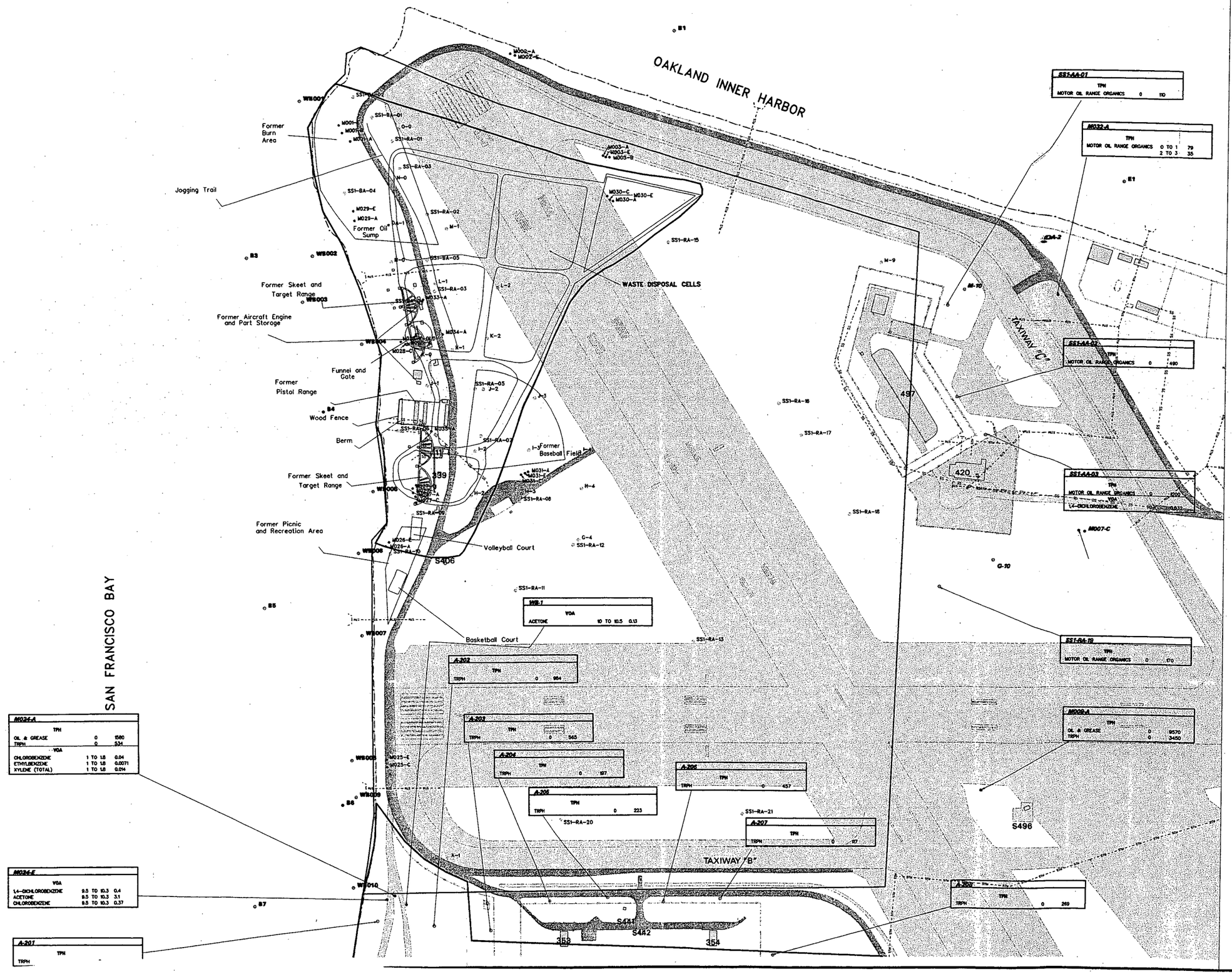
1. ANALYTICAL DATA FOR OFFSHORE SAMPLES ARE NOT PRESENTED ON THIS MAP. THESE DATA WILL BE ADDRESSED IN THE OU-4 RI REPORT.
2. ANALYTES NOT ANALYZED FOR OR ANALYTES NOT DETECTED ARE NOT SHOWN ON THIS MAP. A LIST OF ANALYSES PERFORMED FOR EACH SAMPLE FROM SITE 1 IS PRESENTED IN TABLES 6-11 AND 6-12. ANALYTICAL DATA FOR EACH SAMPLE ARE PRESENTED IN APPENDIX L A SAMPLING POINT ON THE MAP WITHOUT A DATA BOX INDICATES NO DETECTIONS.
3. ITALICIZED SAMPLING POINTS INDICATE POINTS OUTSIDE THE SITE 1 DATA SET. DATA FOR THESE POINTS ARE PRESENTED IN FIGURE 6-13.

ACRONYMS:

BGS - BELOW GROUND SURFACE
mg/kg - MILLIGRAMS PER KILOGRAM
OU4 - OPERABLE UNIT 4
PRG - PRELIMINARY REMEDIATION GOAL
RI - REMEDIAL INVESTIGATION
TPH - TOTAL PETROLEUM HYDROCARBONS
TPHEXT - TOTAL PETROLEUM HYDROCARBONS (EXTRACTABLE)
TPHPRG - TOTAL PETROLEUM HYDROCARBONS (PURGEABLE)
TRPH - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS
VOA - VOLATILE ORGANIC ANALYSIS
VOC - VOLATILE ORGANIC COMPOUND

75 0 75 150
SCALE: 1" = 150'

FIGURE 6-14
SITE 1
ORGANIC CHEMICALS
DETECTED IN SOIL:
TPH AND VOCs
ALAMEDA POINT
ALAMEDA, CALIFORNIA



LEGEND

- SURFACE SAMPLING LOCATION
- SOIL BORING LOCATION
- SOIL PUNCH LOCATION
- GEOPROBE LOCATION
- STORM DRAIN LINE
- SANITARY SEWER LINE
- STEAM LINE
- FUEL LINE
- INDUSTRIAL WASTE LINE
- FENCE
- RAILROAD
- SHORELINE
- PAVED ROAD OR PARKING LOT
- BUILDING OR CONCRETE, PAVED, OR COVERED AREA
- BUILDING AND BUILDING NUMBER
- INSTALLATION RESTORATION SITE

SAMPLE ID	M07A-09			SAMPLE DEPTH (FEET BGS)
COMPOUND CLASS	VOA			
ANALYTE	ACETONE	.3 TO .8	3.9	CONCENTRATION (mg/kg)
		1 TO 1.8	9.6 (P)	QUALIFIER

QUALIFIERS:
P – CONCENTRATION EXCEEDS RESIDENTIAL PRG FOR THE ANALYTE

NOTES:

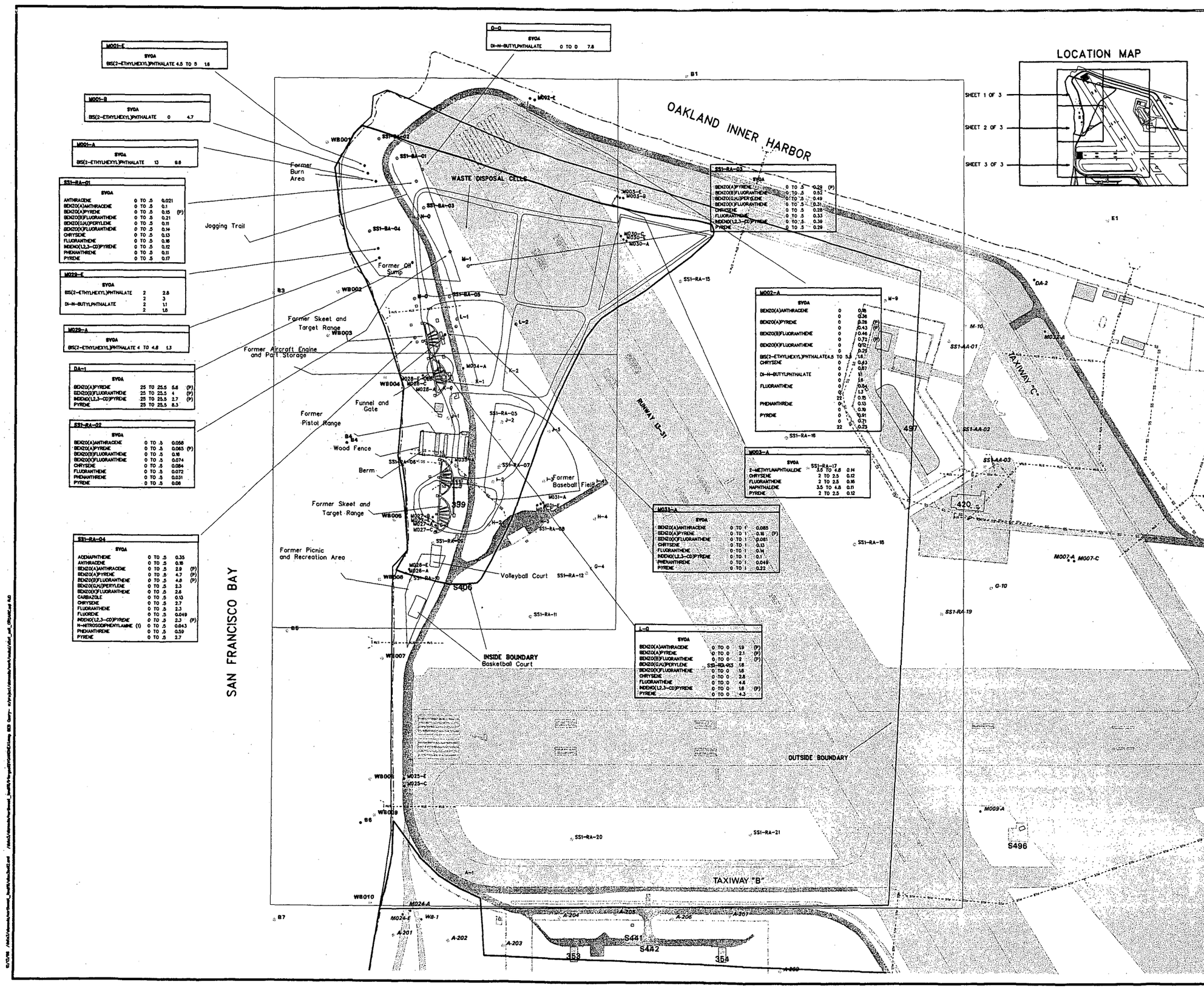
1. ANALYTES NOT ANALYZED FOR OR ANALYTES NOT DETECTED ARE NOT SHOWN ON THIS MAP. A LIST OF ANALYSES PERFORMED FOR EACH SAMPLE FROM SITE 1 IS PRESENTED IN TABLES 6–12 AND 6–13. ANALYTICAL DATA FOR EACH SAMPLE ARE PRESENTED IN APPENDIX L. A SAMPLING POINT ON THE MAP WITHOUT A DATA BOX INDICATES NO DETECTIONS.
2. ITALICIZED SAMPLING POINTS INDICATE POINTS OUTSIDE SITE 1.
3. BOLDED SAMPLING POINTS INDICATE POINTS OFFSHORE OF SITE 1. ANALYTICAL DATA FOR OFFSHORE SAMPLES ARE NOT PRESENTED ON THIS MAP. THESE DATA WILL BE ADDRESSED IN THE OU–4 RI REPORT.

ACRONYMS:

BGS – BELOW GROUND SURFACE
LOEL – LOWEST OBSERVED EFFECT LEVEL
mg/kg – MILLIGRAMS PER KILOGRAM
OU4 – OPERABLE UNIT 4
PRG – PRELIMINARY REMEDIATION GOAL
TPH – TOTAL PETROLEUM HYDROCARBONS
TPHEXT – TOTAL PETROLEUM HYDROCARBONS (EXTRACTABLE)
TPHPRG – TOTAL PETROLEUM HYDROCARBONS (PURGEABLE)
TRPH – TOTAL RECOVERABLE PETROLEUM HYDROCARBONS
VOA – VOLATILE ORGANIC ANALYSIS
VOC – VOLATILE ORGANIC COMPOUND

75 0 75 150
SCALE: 1" = 150'

FIGURE 6–15
AREAS ADJACENT TO SITE 1
ORGANIC CHEMICALS
DETECTED IN SOIL:
TPH AND VOCs
ALAMEDA POINT
ALAMEDA, CALIFORNIA



LEGEND

- SURFACE SAMPLING LOCATION
- SOIL BORING LOCATION
- SOIL PUNCH LOCATION
- GEOPROBE LOCATION
- STORM DRAIN LINE
- SANITARY SEWER LINE
- STEAM LINE
- FUEL LINE
- INDUSTRIAL WASTE LINE
- FENCE
- RAILROAD
- SHORELINE
- PAVED ROAD OR PARKING LOT
- BUILDING OR CONCRETE, PAVED, OR COVERED AREA
- 517 BUILDING AND BUILDING NUMBER
- INSTALLATION RESTORATION SITE

SAMPLE ID — B06-09
COMPOUND CLASS — SVOA — SAMPLE DEPTH (FEET BGS)
ANALYTE — BENZO(A)PYRENE 14 to 15.3 1.5 — CONCENTRATION (mg/kg)
4 to 14 9.6 (P) — QUALIFIER

QUALIFIERS:
P - CONCENTRATION EXCEEDS RESIDENTIAL PRG FOR THE ANALYTE

NOTES:

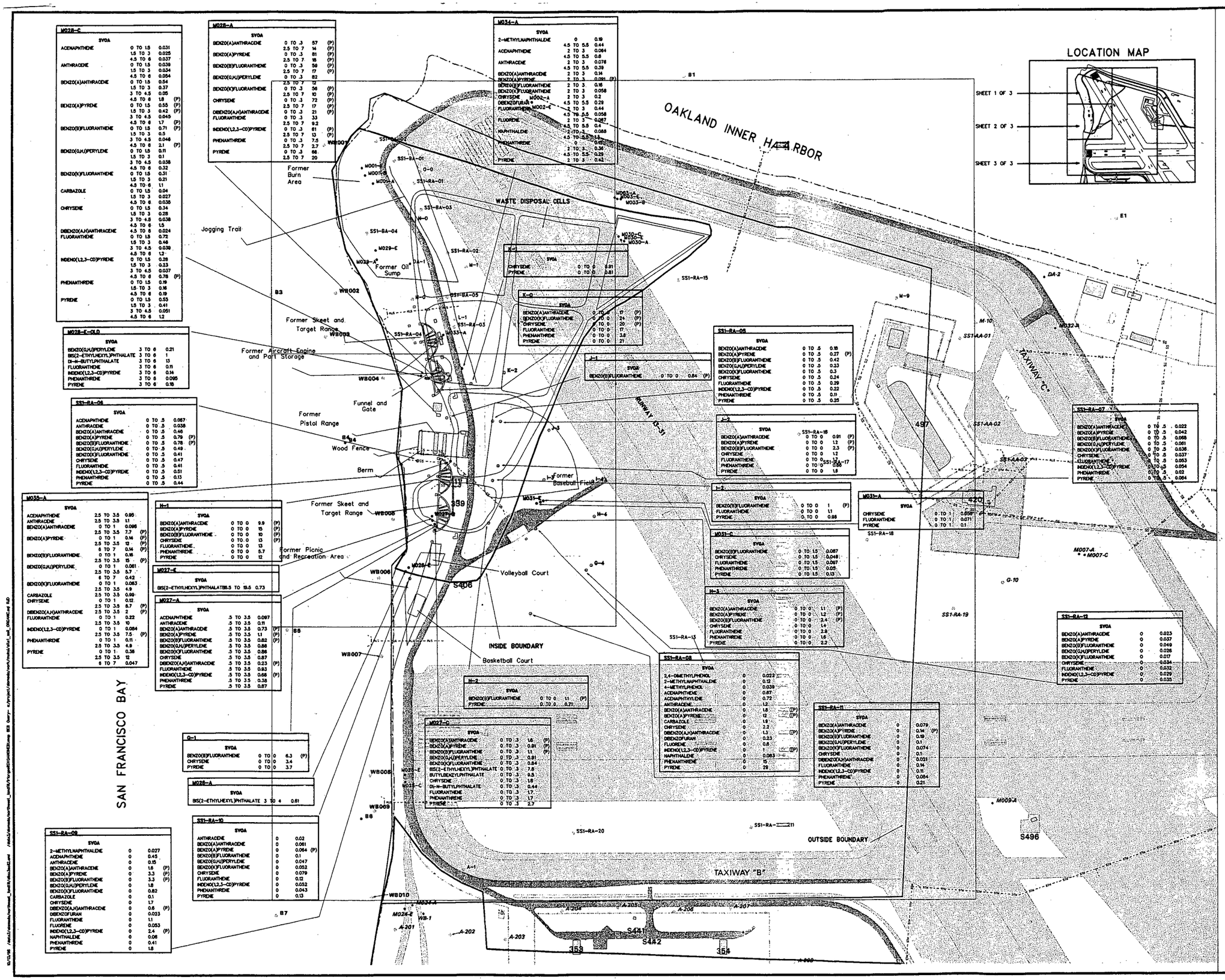
1. THIS MAP PROVIDES DATA FOR THE AREA IDENTIFIED AS SHEET 1 OF 3 ON THE LOCATION MAP ABOVE.
2. ANALYTICAL DATA FOR OFFSHORE SAMPLES ARE NOT PRESENTED ON THIS MAP. THESE DATA WILL BE ADDRESSED IN THE OU-4 RI REPORT.
3. ANALYTES NOT ANALYZED FOR OR ANALYTES NOT DETECTED ARE NOT SHOWN ON THIS MAP. A LIST OF ANALYSES PERFORMED FOR EACH SAMPLE FROM SITE 1 IS PRESENTED IN TABLES 6-11 AND 6-12. ANALYTICAL DATA FOR EACH SAMPLE ARE PRESENTED IN APPENDIX L. A SAMPLING POINT WITHIN THE AREA IDENTIFIED AS SHEET 1 OF 3 WITHOUT A DATA BOX INDICATES NO DETECTIONS.
4. ITALICIZED SAMPLING POINTS INDICATE POINTS OUTSIDE THE SITE 1 DATA SET. DATA FOR THESE POINTS ARE PRESENTED IN FIGURE 6-15.

ACRONYMS:

BGS - BELOW GROUND SURFACE
mg/kg - MILLIGRAMS PER KILOGRAM
OU-4 - OPERABLE UNIT 4
PRG - PRELIMINARY REMEDIATION GOAL
RI - REMEDIAL INVESTIGATION
SVOA - SEMIVOLATILE ORGANIC ANALYSIS
SVOC - SEMIVOLATILE ORGANIC COMPOUND

75 0 75 150
SCALE: 1" = 150'

FIGURE 6-16
SITE 1 (Sheet 1 of 3)
ORGANIC CHEMICALS DETECTED IN SOIL:
SVOCs
ALAMEDA POINT
ALAMEDA, CALIFORNIA



LEGEND

- SURFACE SAMPLING LOCATION
- SOIL BORING LOCATION
- SOIL PUNCH LOCATION
- GEOPROBE LOCATION
- STORM DRAIN LINE
- SANITARY SEWER LINE
- STEAM LINE
- FUEL LINE
- INDUSTRIAL WASTE LINE
- FENCE
- RAILROAD
- SHORELINE
- PAVED ROAD OR PARKING LOT
- BUILDING OR CONCRETE, PAVED, OR COVERED AREA
- 917 BUILDING AND BUILDING NUMBER
- INSTALLATION RESTORATION SITE

SAMPLE ID → B06-09
COMPOUND CLASS → SVOA
ANALYTE → BENZO(A)PYRENE 14 to 15.3 1.5 → SAMPLE DEPTH (FEET BGS)
4 to 14 9.6 (P) → CONCENTRATION (mg/kg)
→ QUALIFIER

QUALIFIERS:
P – CONCENTRATION EXCEEDS RESIDENTIAL PRG FOR THE ANALYTE

NOTES:

1. THIS MAP PROVIDES DATA FOR THE AREA IDENTIFIED AS SHEET 2 OF 3 ON THE LOCATION MAP ABOVE.
2. ANALYTICAL DATA FOR OFFSHORE SAMPLES ARE NOT PRESENTED ON THIS MAP. THESE DATA WILL BE ADDRESSED IN THE OU-4 RI REPORT.
3. ANALYTES NOT ANALYZED FOR OR ANALYTES NOT DETECTED ARE NOT SHOWN ON THIS MAP. A LIST OF ANALYSES PERFORMED FOR EACH SAMPLE FROM SITE 1 IS PRESENTED IN TABLES 6-11 AND 6-12. ANALYTICAL DATA FOR EACH SAMPLE ARE PRESENTED IN APPENDIX L. A SAMPLING POINT WITHIN THE AREA IDENTIFIED AS SHEET 2 OF 3 WITHOUT A DATA BOX INDICATES NO DETECTIONS.
4. ITALICIZED SAMPLING POINTS INDICATE POINTS OUTSIDE THE SITE 1 DATA SET. DATA FOR THESE POINTS ARE PRESENTED IN FIGURE 6-15.

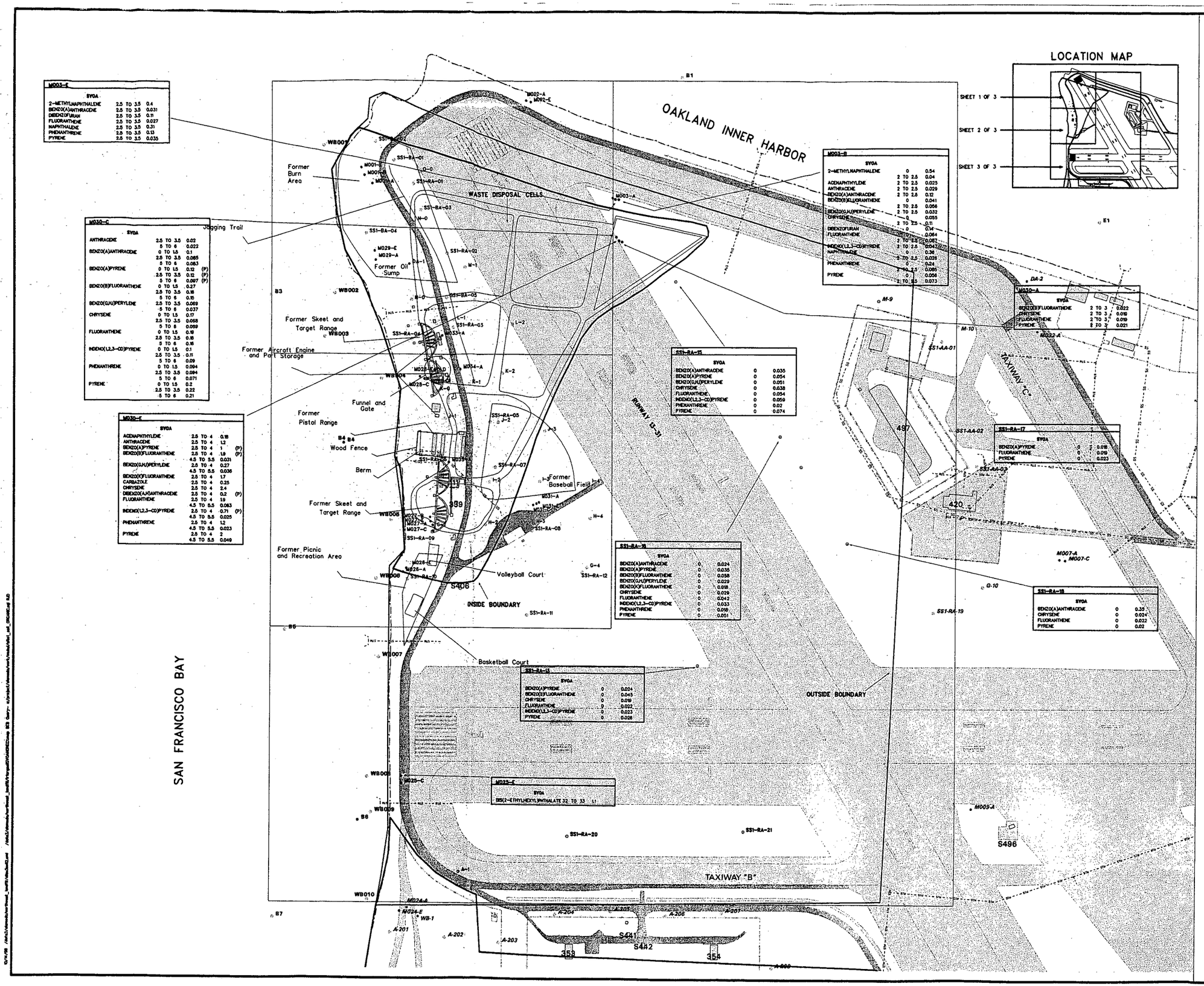
ACRONYMS:

BGS – BELOW GROUND SURFACE
mg/kg – MILLIGRAMS PER KILOGRAM
OU-4 – OPERABLE UNIT 4
PRG – PRELIMINARY REMEDIATION GOAL
RI – REMEDIAL INVESTIGATION
SVOA – SEMIVOLATILE ORGANIC ANALYSIS
SVOC – SEMIVOLATILE ORGANIC COMPOUND

N

SCALE: 1" = 150'
75 0 75 150

FIGURE 6-16
SITE 1 (Sheet 2 of 3)
ORGANIC CHEMICALS DETECTED IN SOIL: SVOCs
ALAMEDA POINT
ALAMEDA, CALIFORNIA



LEGEND

- SURFACE SAMPLING LOCATION
- SOIL BORING LOCATION
- SOIL PUNCH LOCATION
- GEOPROBE LOCATION
- STORM DRAIN LINE
- SANITARY SEWER LINE
- STEAM LINE
- FUEL LINE
- INDUSTRIAL WASTE LINE
- FENCE
- RAILROAD
- SHORELINE
- PAVED ROAD OR PARKING LOT
- BUILDING OR CONCRETE, PAVED, OR COVERED AREA
- 817 BUILDING AND BUILDING NUMBER
- INSTALLATION RESTORATION SITE

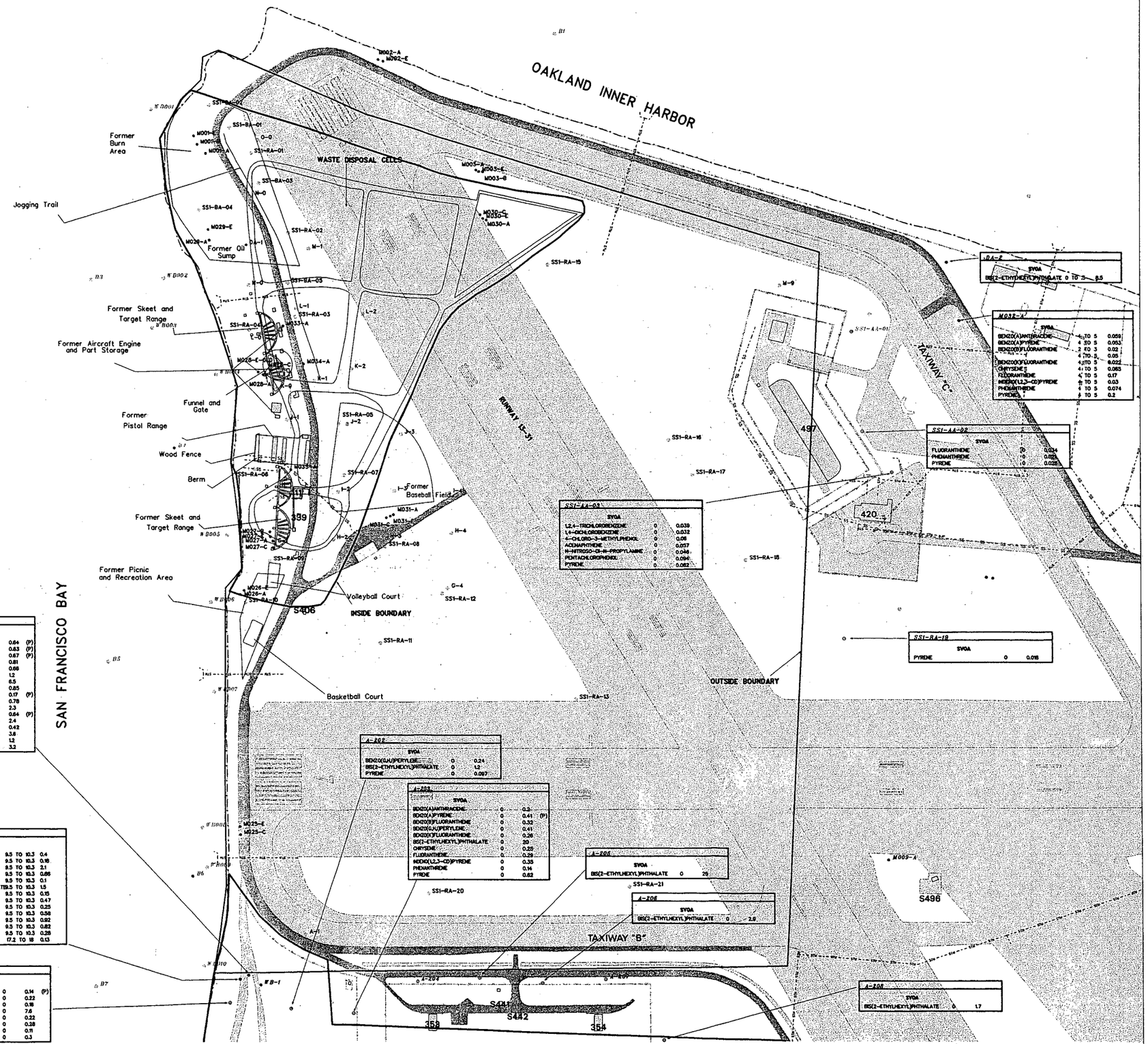
SAMPLE ID — B06-09
COMPOUND CLASS — SVOA — SAMPLE DEPTH (FEET BGS)
ANALYTE — BENZO(A)PYRENE 14 to 15.3 1.5 — CONCENTRATION (mg/kg)
4 to 14 9.6 (P) — QUALIFIER

QUALIFIERS:
P – CONCENTRATION EXCEEDS RESIDENTIAL PRG FOR THE ANALYTE

NOTES:
1. THIS MAP PROVIDES DATA FOR THE AREA IDENTIFIED AS SHEET 3 OF 3 ON THE LOCATION MAP ABOVE
2. ANALYTICAL DATA FOR OFFSHORE SAMPLES ARE NOT PRESENTED ON THIS MAP. THESE DATA WILL BE ADDRESSED IN THE OU-4 RI REPORT.
3. ANALYTES NOT ANALYZED FOR OR ANALYTES NOT DETECTED ARE NOT SHOWN ON THIS MAP. A LIST OF ANALYSES PERFORMED FOR EACH SAMPLE FROM SITE 1 IS PRESENTED IN TABLES 6-11 AND 6-12. ANALYTICAL DATA FOR EACH SAMPLE ARE PRESENTED IN APPENDIX L. A SAMPLING POINT WITHIN THE AREA IDENTIFIED AS SHEET 3 OF 3 WITHOUT A DATA BOX INDICATES NO DETECTIONS.
4. ITALICIZED SAMPLING POINTS INDICATE POINTS OUTSIDE THE SITE 1 DATA SET. DATA FOR THESE POINTS ARE PRESENTED IN FIGURE 6-15.

ACRONYMS:
BGS – BELOW GROUND SURFACE
mg/kg – MILLIGRAMS PER KILOGRAM
OU-4 – OPERABLE UNIT 4
PRG – PRELIMINARY REMEDIATION GOAL
RI – REMEDIAL INVESTIGATION
SVOA – SEMIVOLATILE ORGANIC ANALYSIS
SVOC – SEMIVOLATILE ORGANIC COMPOUND

FIGURE 6-16
SITE 1 (Sheet 3 of 3)
ORGANIC CHEMICALS DETECTED IN SOIL: SVOCs
ALAMEDA POINT
ALAMEDA, CALIFORNIA



LEGEND

- SURFACE SAMPLING LOCATION
- SOIL BORING LOCATION
- SOIL PUNCH LOCATION
- GEOPROBE LOCATION
- STORM DRAIN LINE
- SANITARY SEWER LINE
- STEAM LINE
- FUEL LINE
- INDUSTRIAL WASTE LINE
- FENCE
- RAILROAD
- SHORELINE
- PAVED ROAD OR PARKING LOT
- BUILDING OR CONCRETE, PAVED, OR COVERED AREA
- 517 BUILDING AND BUILDING NUMBER
- INSTALLATION RESTORATION SITE

SAMPLE ID — SG6-09
COMPOUND CLASS — SVOA — SAMPLE DEPTH (FEET BGS)
ANALYTE — BENZO(A)PYRENE 14 to 15.3 1.5 — CONCENTRATION (mg/kg)
4 to 14 9.6 (P) — QUALIFIER

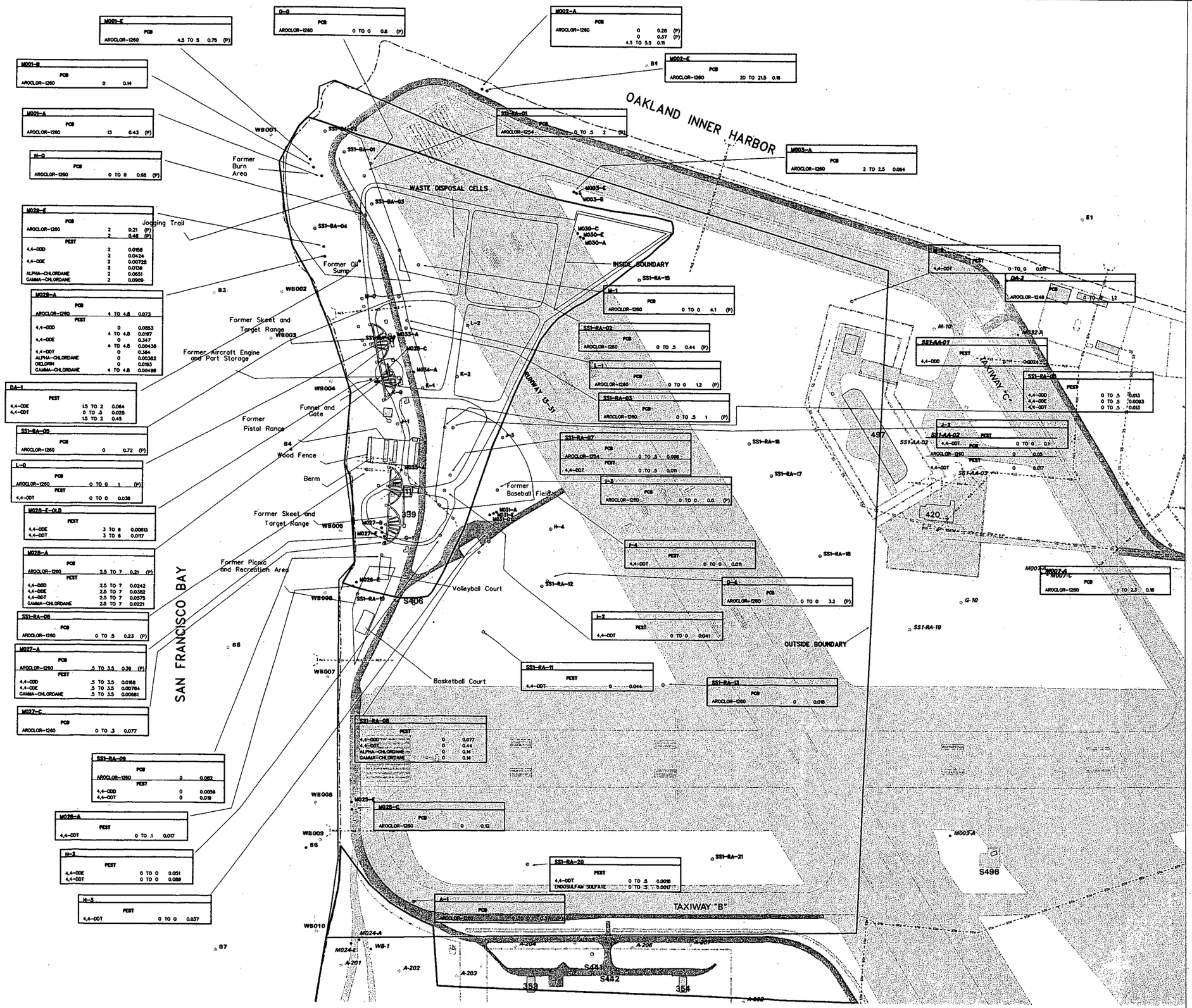
QUALIFIERS:
P - CONCENTRATION EXCEEDS RESIDENTIAL PRG FOR THE ANALYTE

NOTES:
1. ANALYTICAL DATA FOR OFFSHORE SAMPLES ARE NOT PRESENTED ON THE MAP. THESE DATA WILL BE ADDRESSED IN THE OU-4 REPORT.
2. ANALYTES NOT ANALYZED FOR OR ANALYTES NOT DETECTED ARE NOT SHOWN ON THIS MAP. A LIST OF ANALYSES PERFORMED FOR EACH SAMPLE FROM SITE 1 IS PRESENTED IN TABLES 6-11 AND 6-12. ANALYTICAL DATA FOR EACH SAMPLE ARE PRESENTED IN APPENDIX L. A SAMPLING POINT ON THE MAP WITHOUT A DATA BOX INDICATES NO DETECTIONS OF ANALYTES TESTED FOR AT THE SAMPLE LOCATION.
3. ITALICIZED SAMPLING POINTS INDICATE THOSE POINTS OUTSIDE OF SITE 1.

ACRONYMS:
BGS - BELOW GROUND SURFACE
mg/kg - MILLIGRAMS PER KILOGRAM
OU-4 - OPERABLE UNIT
PRG - PRELIMINARY REMEDIATION GOAL
RI - REMEDIAL INVESTIGATION
SVOA - SEMIVOLATILE ORGANIC ANALYSIS
SVOC - SEMIVOLATILE ORGANIC COMPOUND

75 0 75 150
SCALE: 1" = 150'

FIGURE 6-17
AREAS ADJACENT TO SITE 1
ORGANIC CHEMICALS DETECTED IN SOIL:
SVOCs
ALAMEDA POINT
ALAMEDA, CALIFORNIA



LEGEND

- SURFACE SAMPLING LOCATION
- SOIL BORING LOCATION
- SOIL PUNCH LOCATION
- GEOPROBE LOCATION
- STORM DRAIN LINE
- SANITARY SEWER LINE
- STEAM LINE
- FUEL LINE
- INDUSTRIAL WASTE LINE
- FENCE
- RAILROAD
- SHORELINE
- PAVED ROAD OR PARKING LOT
- BUILDING OR CONCRETE, PAVED, OR COVERED AREA
- 517 BUILDING AND BUILDING NUMBER
- INSTALLATION RESTORATION SITE

SAMPLE ID → B06-09 → SAMPLE DEPTH (FEET BGS)
COMPOUND CLASS → PEST
ANALYTE → 4,4-DDD 14 TO 15.3 1.5 → CONCENTRATION (mg/kg)
4 TO 14 9.6 (P) → QUALIFIER

QUALIFIERS:
P - CONCENTRATION EXCEEDS RESIDENTIAL PRG FOR THE ANALYTE

NOTES:

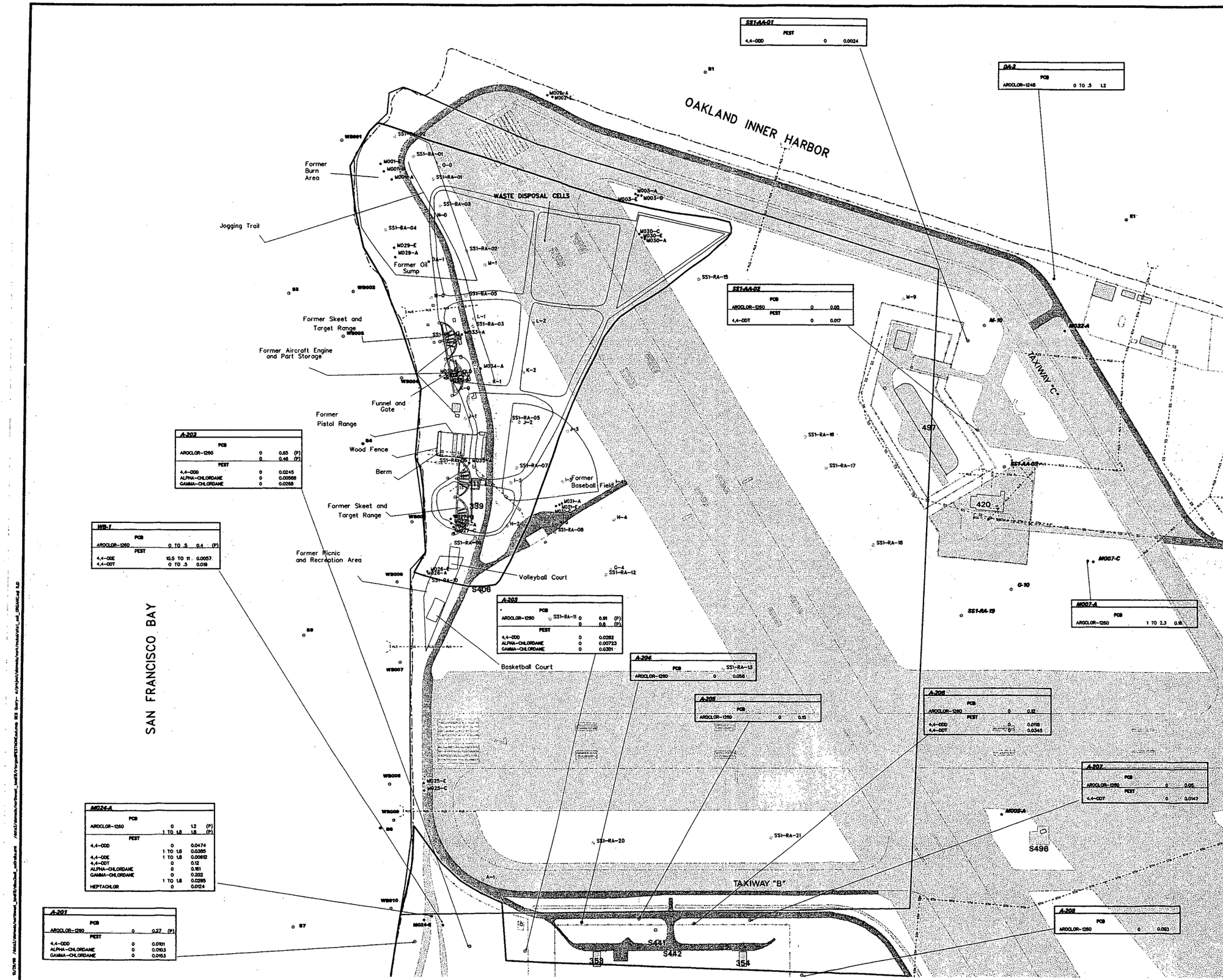
1. ANALYTICAL DATA FOR OFFSHORE SAMPLES ARE NOT PRESENTED ON THIS MAP. THESE DATA WILL BE ADDRESSED IN THE OU-4 RI REPORT.
1. ANALYTES NOT ANALYZED FOR OR ANALYTES NOT DETECTED ARE NOT SHOWN ON THIS MAP. A LIST OF ANALYSES PERFORMED FOR EACH SAMPLE FROM SITE 1 IS PRESENTED IN TABLES 6-11 AND 6-12. ANALYTICAL DATA FOR EACH SAMPLE ARE PRESENTED IN APPENDIX L A SAMPLING POINT ON THE MAP WITHOUT A DATA BOX INDICA NO DETECTIONS.
2. ITALICIZED SAMPLING POINTS INDICATE POINTS OUTSIDE THE SITE 1 DATA SET. DATA FOR THESE POINTS ARE PRESENTED IN FIGURE 6-17.

ACRONYMS:

BGS - BELOW GROUND SURFACE
mg/kg - MILLIGRAMS PER KILOGRAM
OU-4 - OPERABLE UNIT 4
PCB - POLYCHLORINATED BIPHENYL
PEST - PESTICIDES
PRG - PRELIMINARY REMEDIATION GOAL
RI - REMEDIAL INVESTIGATION

75 0 75 150
SCALE: 1" = 150'

FIGURE 6-18
SITE 1
ORGANIC CHEMICALS DETECTED IN SOIL: PESTICIDES AND PCBs
ALAMEDA POINT
ALAMEDA, CALIFORNIA



LEGEND

- SURFACE SAMPLING LOCATION
- SOIL BORING LOCATION
- SOIL PUNCH LOCATION
- GEOPROBE LOCATION
- STORM DRAIN LINE
- SANITARY SEWER LINE
- STEAM LINE
- FUEL LINE
- INDUSTRIAL WASTE LINE
- FENCE
- RAILROAD
- SHORELINE
- PAVED ROAD OR PARKING LOT
- BUILDING OR CONCRETE, PAVED, OR COVERED AREA
- 517 BUILDING AND BUILDING NUMBER
- 1 INSTALLATION RESTORATION SITE

SAMPLE ID	M07A-09		SAMPLE DEPTH (FEET BGS)
COMPOUND CLASS	PEST		
ANALYTE	4,4-DDD	.3 TO .8 3.9	CONCENTRATION (mg/kg)
		1 TO 1.8 9.6 (P)	QUALIFIER

QUALIFIERS:
P - CONCENTRATION EXCEEDS RESIDENTIAL PRG FOR THE ANALYTE

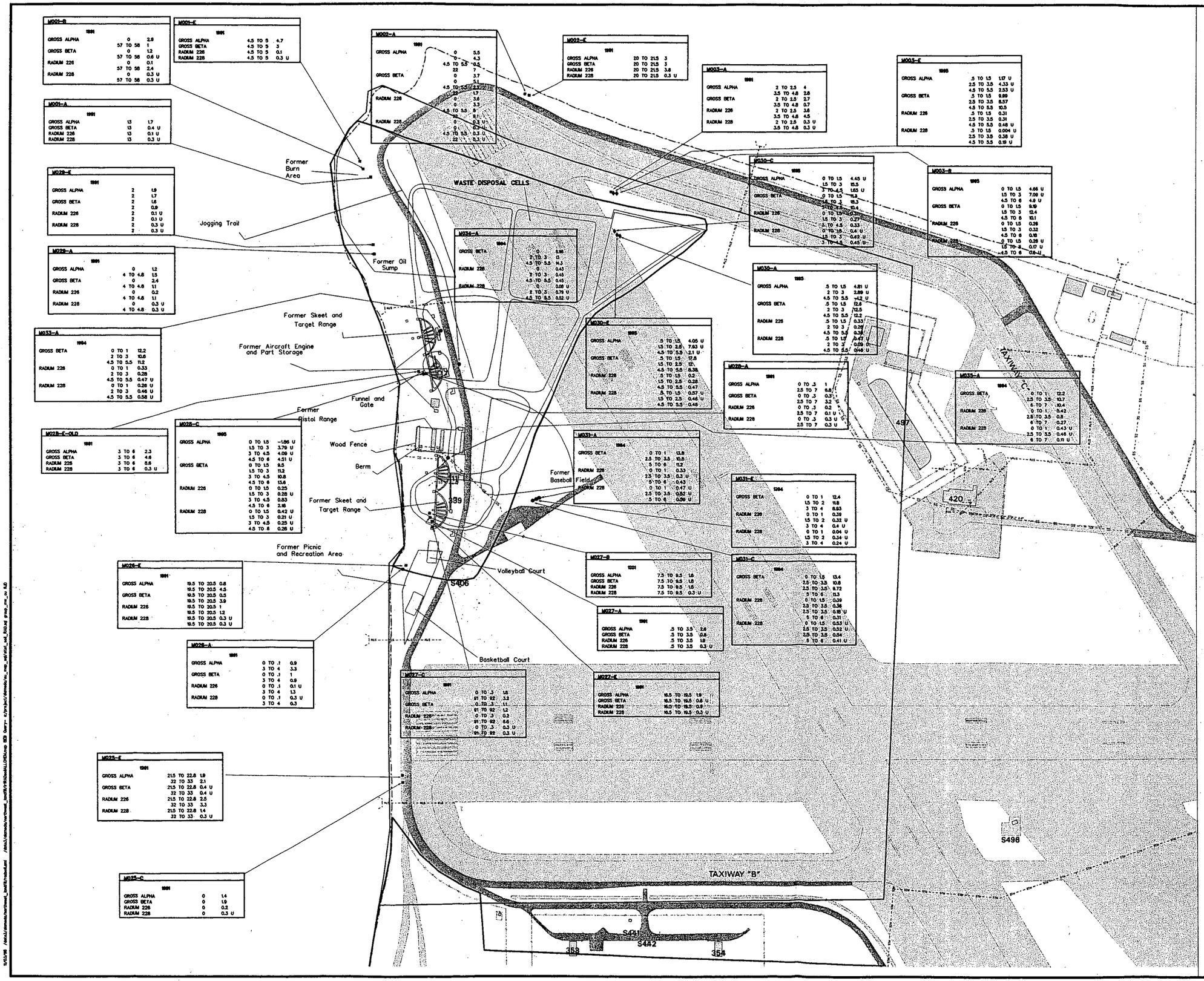
NOTES:

1. ANALYTES NOT ANALYZED FOR OR ANALYTES NOT DETECTED ARE NOT SHOWN ON THIS MAP. A LIST OF ANALYSES PERFORMED FOR EACH SAMPLE FROM SITE 1 IS PRESENTED IN TABLES 6-11 AND 6-12. ANALYTICAL DATA FOR EACH SAMPLE ARE PRESENTED IN APPENDIX L. A SAMPLING POINT ON THE MAP WITHOUT A DATA BOX INDICATES NO DETECTIONS OF ANALYTES TESTED FOR AT THE SAMPLE LOCATION.
2. ITALICIZED SAMPLE POINTS INDICATE THOSE POINTS OUTSIDE OF SITE 1.
3. BOLDED SAMPLING POINTS INDICATE POINTS OFFSHORE OF SITE 1. ANALYTICAL DATA FOR OFFSHORE SAMPLES ARE NOT PRESENTED ON THIS MAP. THESE DATA WILL BE ADDRESSED IN THE OU-4 RI REPORT.

ACRONYMS:

BGS - BELOW GROUND SURFACE
LOEL - LOWEST OBSERVED EFFECT LEVEL
mg/kg - MILLIGRAMS PER KILOGRAM
OU4 - OPERABLE UNIT 4
PCB - POLYCHLORINATED BIPHENYLS
PEST - PESTICIDES
PRG - PRELIMINARY REMEDIATION GOAL

FIGURE 6-19
AREAS ADJACENT TO SITE 1
ORGANIC CHEMICALS
DETECTED IN SOIL:
PESTICIDES AND PCBs
ALAMEDA POINT
ALAMEDA, CALIFORNIA



LEGEND

- 1991 SAMPLES
- 1992 SAMPLES
- 1994 SAMPLES
- 1995 SAMPLES
- STORM DRAIN LINE
- SANITARY SEWER LINE
- STEAM LINE
- FUEL LINE
- INDUSTRIAL WASTE LINE
- FENCE
- RAILROAD
- SHORELINE
- PAVED ROAD OR PARKING LOT
- BUILDING OR CONCRETE, PAVED, OR COVERED AREA
- 397 BUILDING AND BUILDING NUMBER
- INSTALLATION RESTORATION SITE

SAMPLE ID — B06-09
YEAR SAMPLED — 1994
ANALYTE — RADIUM 226
SAMPLE DEPTH (FEET BGS) — 6 TO 7 / 4 TO 14
CONCENTRATION (pCi/g) — 27 / 9.6 U
RADIONUCLIDE NOT DETECTED AT METHOD DETECTION LIMIT OF 9.6 pCi/g

NOTES:

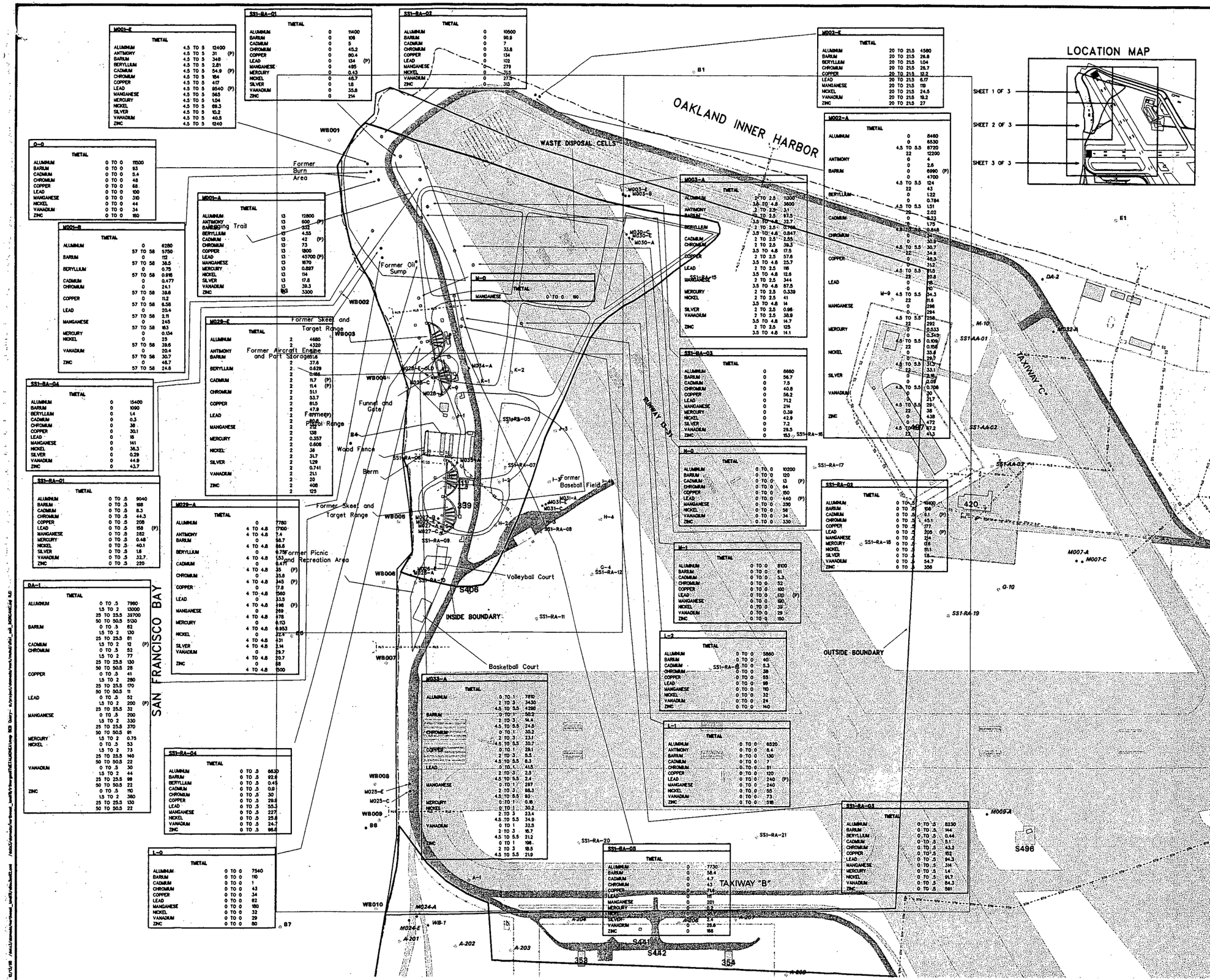
1. ANALYTICAL DATA FOR OFFSHORE SAMPLES ARE NOT PRESENTED ON THIS MAP. THESE DATA WILL BE ADDRESSED IN THE OU-4 RI REPORT.
2. A LIST OF ANALYSES PERFORMED FOR EACH SAMPLE FROM SITE 1 IS PRESENTED IN TABLES 6-11 AND 6-12. ANALYTICAL DATA FOR EACH SAMPLE ARE PRESENTED IN APPENDIX L
3. NEGATIVE VALUES ARE LESS THAN THE DETECTION LIMIT.

ACRONYMS:

BGS - BELOW GROUND SURFACE
pCi/g - PICOCURIES PER GRAM.
OU-4 - OPERABLE UNIT 4
RI - REMEDIAL INVESTIGATION

75 0 75 150
SCALE: 1" = 150'

FIGURE 6-20
SITE 1
RADIONUCLIDES
DETECTED IN SOIL
ALAMEDA POINT
ALAMEDA, CALIFORNIA



LEGEND

- SURFACE SAMPLING LOCATION
- SOIL BORING LOCATION
- SOIL PUNCH LOCATION
- GEOPROBE LOCATION
- STORM DRAIN LINE
- SANITARY SEWER LINE
- STEAM LINE
- FUEL LINE
- INDUSTRIAL WASTE LINE
- FENCE
- RAILROAD
- SHORELINE
- PAVED ROAD OR PARKING LOT
- BUILDING OR CONCRETE, PAVED, OR COVERED AREA
- 517 BUILDING AND BUILDING NUMBER
- INSTALLATION RESTORATION SITE

SAMPLE ID — 006-09
COMPOUND CLASS — TMETAL
ANALYTE — CHROMIUM 14 to 5.3 1.5 / 4 to 14 9.6 (P)
SAMPLE DEPTH (FEET BGS)
CONCENTRATION (mg/kg)
QUALIFIER

QUALIFIERS:
P – CONCENTRATION EXCEEDS RESIDENTIAL PRG FOR THE ANALYTE

NOTES:

1. THIS MAP PROVIDES DATA FOR THE AREA IDENTIFIED AS SHEET 1 OF 3 ON THE LOCATION MAP ABOVE.
2. ANALYTICAL DATA FOR OFFSHORE SAMPLES ARE NOT PRESENTED ON THIS MAP. THESE DATA WILL BE ADDRESSED IN THE OU-4 RI REPORT.
3. ANALYTES NOT ANALYZED FOR OR ANALYTES NOT DETECTED ARE NOT SHOWN ON THIS MAP. A LIST OF ANALYSES PERFORMED FOR EACH SAMPLE FROM SITE 1 IS PRESENTED IN TABLES 6-11 AND 6-12. ANALYTICAL DATA FOR EACH SAMPLE ARE PRESENTED IN APPENDIX L. A SAMPLING POINT WITHIN THE AREA IDENTIFIED AS SHEET 1 OF 3 WITHOUT A DATA BOX INDICATES NO DETECTIONS.
4. ITALICIZED SAMPLING POINTS INDICATE POINTS OUTSIDE THE SITE 1 DATA SET.
5. THE INORGANIC CHEMICALS PRESENTED ON THIS FIGURE WERE SELECTED BASED ON THE FOLLOWING SCREENING CRITERIA: ESSENTIAL NUTRIENT STATUS, FREQUENCY OF DETECTION, AND COMPARISON TO BACKGROUND CONCENTRATIONS. THE SELECTION CRITERIA ARE DISCUSSED IN CHAPTER 5 OF THE OU-3 RI REPORT.

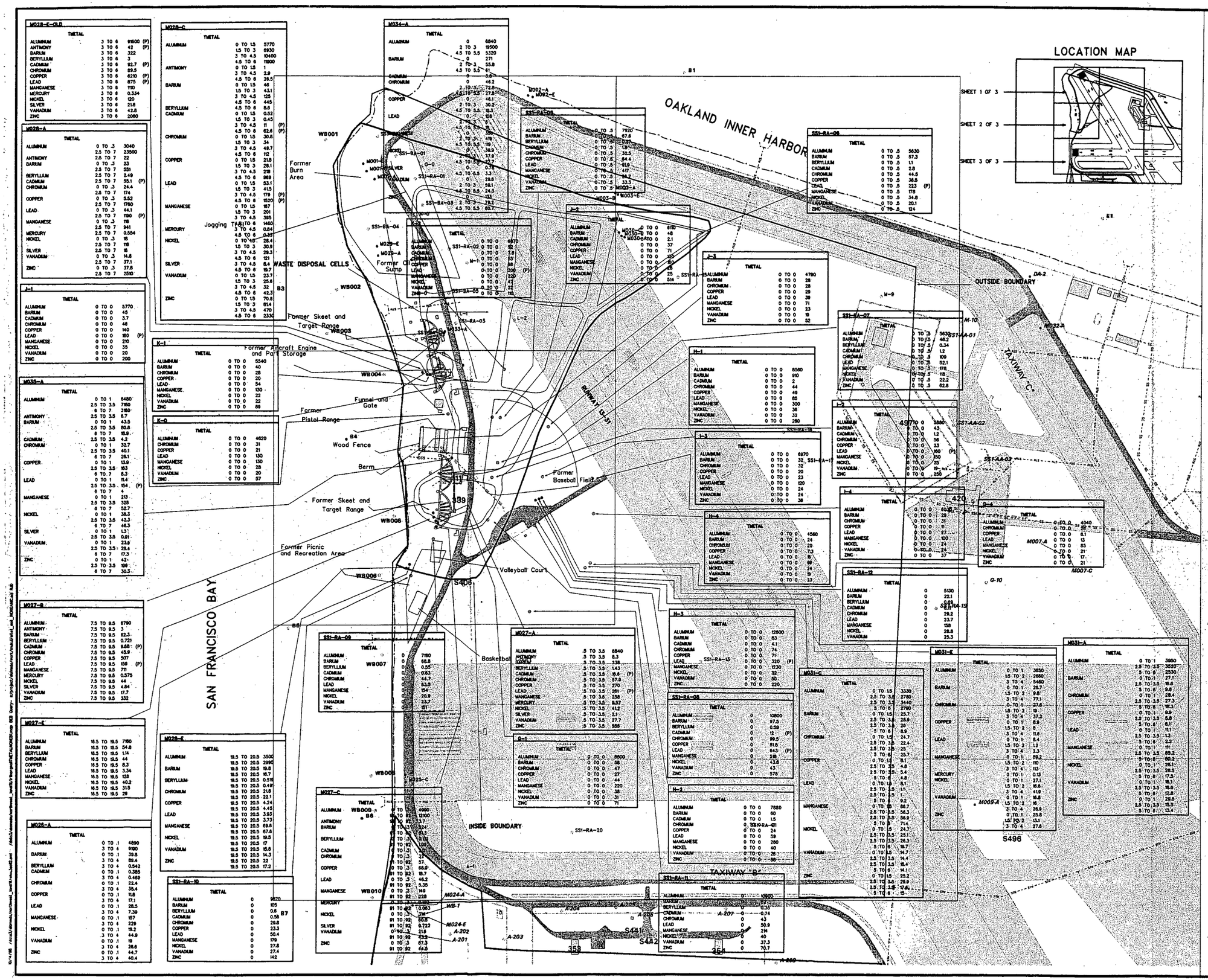
ACRONYMS:

BGS – BELOW GROUND SURFACE
mg/kg – MILLIGRAMS PER KILOGRAM
OU-4 – OPERABLE UNIT 4
PRG – PRELIMINARY REMEDIATION GOAL
RI – REMEDIAL INVESTIGATION
TMETAL – TOTAL METALS

N

75 0 75 150
SCALE: 1" = 150'

FIGURE 6-21
SITE 1 (Sheet 1 of 3)
SELECTED INORGANIC CHEMICALS DETECTED IN SOIL:
TMETAL
ALAMEDA POINT
ALAMEDA, CALIFORNIA



LOCATION MAP

LEGEND

- SURFACE SAMPLING LOCATION
- SOIL BORING LOCATION
- SOIL PUNCH LOCATION
- GEOPROBE LOCATION
- STORM DRAIN LINE
- SANITARY SEWER LINE
- STEAM LINE
- FUEL LINE
- INDUSTRIAL WASTE LINE
- FENCE
- RAILROAD
- SHORELINE
- PAVED ROAD OR PARKING LOT
- BUILDING OR CONCRETE, PAVED, OR COVERED AREA
- 611 BUILDING AND BUILDING NUMBER
- INSTALLATION RESTORATION SITE

SAMPLE ID	B06-09		
COMPOUND CLASS	TMETAL		SAMPLE DEPTH (FEET BGS)
ANALYTE	CHROMIUM	2.5 to 11 / 4 to 14 — 3.9 / 9.6 (P)	CONCENTRATION (mg/kg)
			QUALIFIER

QUALIFIERS:
P – CONCENTRATION EXCEEDS RESIDENTIAL PRG FOR THE ANALYTE

NOTES:

1. THIS MAP PROVIDES DATA FOR THE AREA IDENTIFIED AS SHEET 2 OF 3 ON THE LOCATION MAP ABOVE.
2. ANALYTICAL DATA FOR OFFSHORE SAMPLES ARE NOT PRESENTED ON THIS MAP. THESE DATA WILL BE ADDRESSED IN THE OU-4 RI REPORT.
3. ANALYTES NOT ANALYZED FOR OR ANALYTES NOT DETECTED ARE NOT SHOWN ON THIS MAP. A LIST OF ANALYSES PERFORMED FOR EACH SAMPLE FROM SITE 1 IS PRESENTED IN TABLES 6-11 AND 6-12. ANALYTICAL DATA FOR EACH SAMPLE ARE PRESENTED IN APPENDIX L. A SAMPLING POINT WITHIN THE AREA IDENTIFIED AS SHEET 2 OF 3 WITHOUT A DATA BOX INDICATES NO DETECTIONS.
4. ITALICIZED SAMPLING POINTS INDICATE POINTS OUTSIDE THE SITE 1 DATA SET.
5. THE INORGANIC CHEMICALS PRESENTED ON THIS FIGURE WERE SELECTED BASED ON THE FOLLOWING SCREENING CRITERIA: ESSENTIAL NUTRIENT STATUS, FREQUENCY OF DETECTION, AND COMPARISON TO BACKGROUND CONCENTRATIONS. THE SELECTION CRITERIA ARE DISCUSSED IN CHAPTER 5 OF THE OU-3 RI REPORT.

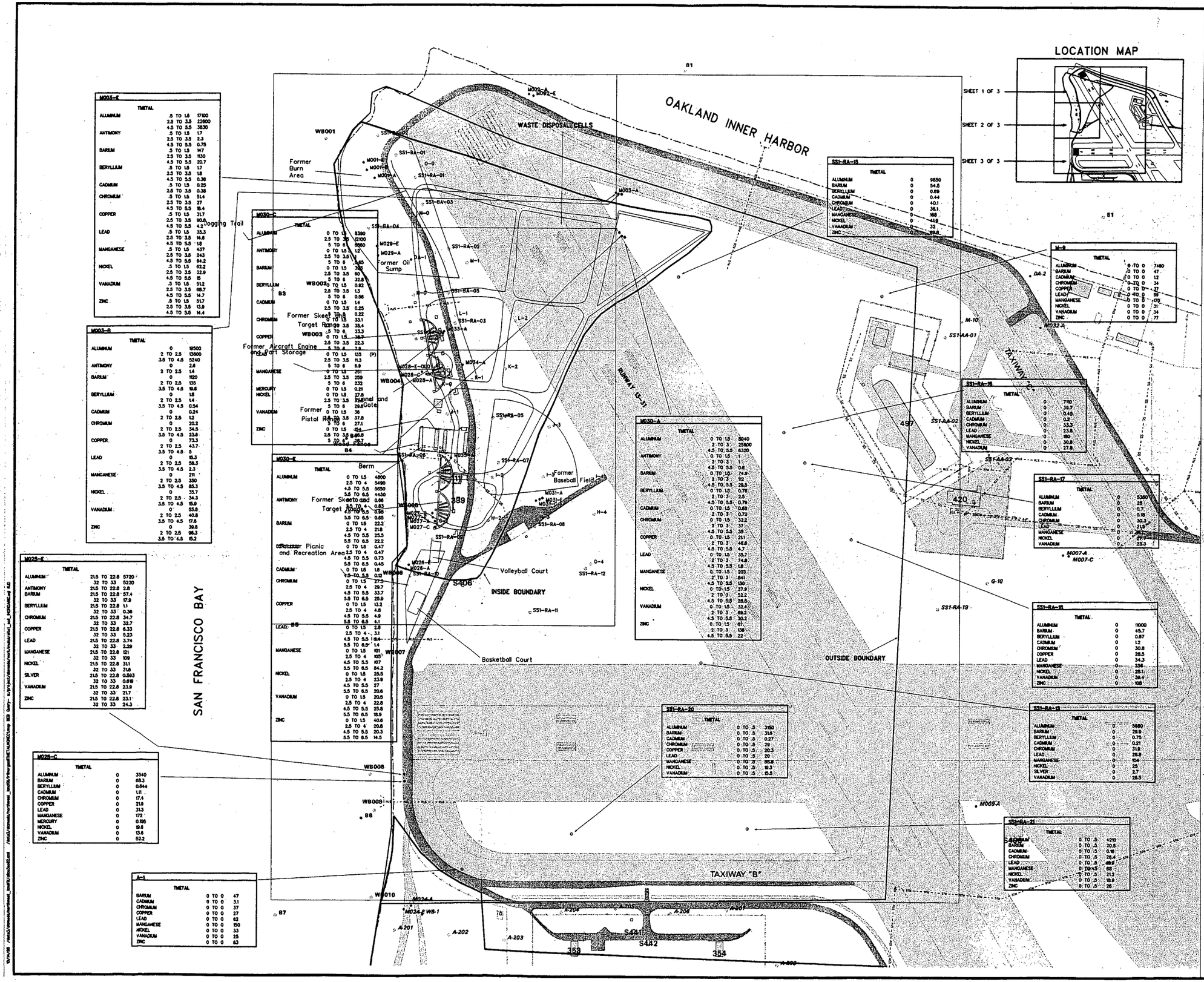
ACRONYMS:

BGS – BELOW GROUND SURFACE
mg/kg – MILLIGRAMS PER KILOGRAM
OU-4 – OPERABLE UNIT 4
PRG – PRELIMINARY REMEDIATION GOAL
RI – REMEDIAL INVESTIGATION
TMETAL – TOTAL METALS

N

75 0 75 150
SCALE: 1" = 150'

FIGURE 6-21
SITE 1 (Sheet 2 of 3)
SELECTED INORGANIC CHEMICALS DETECTED IN SOIL: TMETAL
ALAMEDA POINT
ALAMEDA, CALIFORNIA



M003-E TMETAL		
ALUMINUM	.5 TO 1.5	17100
	2.5 TO 3.5	22900
	4.5 TO 5.5	3830
ANTIMONY	.5 TO 1.5	1.7
	2.5 TO 3.5	2.3
	4.5 TO 5.5	0.75
BARIUM	.5 TO 1.5	147
	2.5 TO 3.5	130
	4.5 TO 5.5	20.7
BERYLLIUM	.5 TO 1.5	1.7
	2.5 TO 3.5	1.8
	4.5 TO 5.5	0.36
CADMIUM	.5 TO 1.5	0.25
	2.5 TO 3.5	0.38
CHROMIUM	.5 TO 1.5	51.4
	2.5 TO 3.5	27
	4.5 TO 5.5	8.4
COPPER	.5 TO 1.5	31.7
	2.5 TO 3.5	90.6
	4.5 TO 5.5	4.2
LEAD	.5 TO 1.5	35.3
	2.5 TO 3.5	14.8
	4.5 TO 5.5	1.8
MANGANESE	.5 TO 1.5	437
	2.5 TO 3.5	243
	4.5 TO 5.5	84.2
NICKEL	.5 TO 1.5	62.2
	2.5 TO 3.5	32.9
	4.5 TO 5.5	15
VANADIUM	.5 TO 1.5	51.2
	2.5 TO 3.5	68.7
	4.5 TO 5.5	14.7
ZINC	.5 TO 1.5	51.7
	2.5 TO 3.5	13.9
	4.5 TO 5.5	14.4

M003-B TMETAL		
ALUMINUM	0	19500
	2 TO 2.5	13800
	3.5 TO 4.5	5240
ANTIMONY	0	2.6
	2 TO 2.5	1.4
BARIUM	0	120
	2 TO 2.5	135
	3.5 TO 4.5	19.8
BERYLLIUM	0	1.8
	2 TO 2.5	1.4
	3.5 TO 4.5	0.54
CADMIUM	0	0.24
	2 TO 2.5	1.2
CHROMIUM	0	20.2
	2 TO 2.5	34.5
	3.5 TO 4.5	23.8
COPPER	0	73.3
	2 TO 2.5	43.7
	3.5 TO 4.5	5
LEAD	0	15.3
	2 TO 2.5	58.3
	3.5 TO 4.5	2.3
MANGANESE	0	211
	2 TO 2.5	350
	3.5 TO 4.5	85.3
NICKEL	0	35.7
	2 TO 2.5	34.3
	3.5 TO 4.5	15.9
VANADIUM	0	55.8
	2 TO 2.5	40.8
	3.5 TO 4.5	17.6
ZINC	0	39.8
	2 TO 2.5	96.3
	3.5 TO 4.5	15.2

M030-C TMETAL		
ALUMINUM	0 TO 1.5	8390
	2.5 TO 3.5	12300
	5 TO 6	6060
ANTIMONY	0 TO 1.5	1.2
	2.5 TO 3.5	1.1
	5 TO 6	1.65
BARIUM	0 TO 1.5	303
	2.5 TO 3.5	60.1
	5 TO 6	32.8
BERYLLIUM	0 TO 1.5	0.82
	2.5 TO 3.5	1.3
	5 TO 6	0.56
CADMIUM	0 TO 1.5	1.4
	2.5 TO 3.5	0.25
	5 TO 6	0.22
CHROMIUM	0 TO 1.5	33.1
	2.5 TO 3.5	35.4
	5 TO 6	33.3
COPPER	0 TO 1.5	38.7
	2.5 TO 3.5	22.3
	5 TO 6	7.8
MANGANESE	0 TO 1.5	135 (P)
	2.5 TO 3.5	11.3
	5 TO 6	6.9
MERCURY	0 TO 1.5	201
	2.5 TO 3.5	289
	5 TO 6	232
NICKEL	0 TO 1.5	0.21
	0 TO 1.5	37.8
	2.5 TO 3.5	29.8
	5 TO 6	29.8
VANADIUM	0 TO 1.5	36
	2.5 TO 3.5	37.8
	5 TO 6	27.1
ZINC	0 TO 1.5	454
	2.5 TO 3.5	46.8
	5 TO 6	28.7

M030-K TMETAL		
ALUMINUM	0 TO 1.5	4800
	2.5 TO 4	5490
	4.5 TO 5.5	5650
	5.5 TO 6.5	4430
ANTIMONY	0 TO 1.5	0.66
	2.5 TO 4	0.63
	4.5 TO 5.5	0.56
	5.5 TO 6.5	0.65
BARIUM	0 TO 1.5	22.2
	2.5 TO 4	21.8
	4.5 TO 5.5	25.5
	5.5 TO 6.5	22.2
BERYLLIUM	0 TO 1.5	0.47
	2.5 TO 4	0.47
	4.5 TO 5.5	0.73
	5.5 TO 6.5	0.45
CADMIUM	0 TO 1.5	1.8
	2.5 TO 4	0.12
CHROMIUM	0 TO 1.5	27.5
	2.5 TO 4	29.7
	4.5 TO 5.5	33.7
	5.5 TO 6.5	25.9
COPPER	0 TO 1.5	13.2
	2.5 TO 4	4.8
	4.5 TO 5.5	4.9
	5.5 TO 6.5	4.1
LEAD	0 TO 1.5	2.8
	2.5 TO 4	3.1
	4.5 TO 5.5	1.64
	5.5 TO 6.5	1.4
MANGANESE	0 TO 1.5	101
	2.5 TO 4	105
	4.5 TO 5.5	107
	5.5 TO 6.5	84.2
NICKEL	0 TO 1.5	25.5
	2.5 TO 4	23.9
	4.5 TO 5.5	27
	5.5 TO 6.5	20.6
VANADIUM	0 TO 1.5	20.5
	2.5 TO 4	22.8
	4.5 TO 5.5	25.8
	5.5 TO 6.5	18.9
ZINC	0 TO 1.5	40.6
	2.5 TO 4	20.6
	4.5 TO 5.5	20.3
	5.5 TO 6.5	14.5

M025-K TMETAL		
ALUMINUM	21.5 TO 22.8	5720
	32 TO 33	5220
ANTIMONY	21.5 TO 22.8	2.8
BARIUM	21.5 TO 22.8	57.4
	32 TO 33	17.9
BERYLLIUM	21.5 TO 22.8	1.1
	32 TO 33	0.36
CHROMIUM	21.5 TO 22.8	34.7
	32 TO 33	32.7
COPPER	21.5 TO 22.8	6.33
	32 TO 33	5.23
LEAD	21.5 TO 22.8	3.74
	32 TO 33	2.29
MANGANESE	21.5 TO 22.8	121
	32 TO 33	109
NICKEL	21.5 TO 22.8	31.1
	32 TO 33	31.6
SILVER	21.5 TO 22.8	0.593
	32 TO 33	0.819
VANADIUM	21.5 TO 22.8	23.8
	32 TO 33	21.7
ZINC	21.5 TO 22.8	23.1
	32 TO 33	24.3

M025-C TMETAL		
ALUMINUM	0	3540
BARIUM	0	68.3
BERYLLIUM	0	0.644
CADMIUM	0	1.11
CHROMIUM	0	17.4
COPPER	0	21.9
LEAD	0	31.3
MANGANESE	0	172
MERCURY	0	0.195
NICKEL	0	19.6
VANADIUM	0	13.6
ZINC	0	52.2

A-1 TMETAL		
BARIUM	0 TO 0	47
CADMIUM	0 TO 0	3.1
CHROMIUM	0 TO 0	37
COPPER	0 TO 0	27
LEAD	0 TO 0	62
MANGANESE	0 TO 0	150
NICKEL	0 TO 0	33
VANADIUM	0 TO 0	25
ZINC	0 TO 0	83

SS1-RA-19 TMETAL		
ALUMINUM	0	9850
BARIUM	0	54.5
BERYLLIUM	0	0.89
CADMIUM	0	0.44
CHROMIUM	0	40.1
LEAD	0	36.1
MANGANESE	0	168
NICKEL	0	41.9
VANADIUM	0	32
ZINC	0	39.8

M-9 TMETAL		
ALUMINUM	0 TO 0	7480
BARIUM	0 TO 0	47
CADMIUM	0 TO 0	1.2
CHROMIUM	0 TO 0	34
COPPER	0 TO 0	37
LEAD	0 TO 0	69
MANGANESE	0 TO 0	170
NICKEL	0 TO 0	31
VANADIUM	0 TO 0	34
ZINC	0 TO 0	77

SS1-RA-16 TMETAL		
ALUMINUM	0	710
BARIUM	0	28.7
BERYLLIUM	0	0.48
CADMIUM	0	0.2
CHROMIUM	0	33.3
LEAD	0	23.8
MANGANESE	0	180
NICKEL	0	30.8
VANADIUM	0	27.8

SS1-RA-17 TMETAL		
ALUMINUM	0	5350
BARIUM	0	25
BERYLLIUM	0	0.7
CADMIUM	0	0.18
CHROMIUM	0	30.3
LEAD	0	21.9
MANGANESE	0	179
NICKEL	0	27.7
VANADIUM	0	23.3

SS1-RA-18 TMETAL		
ALUMINUM	0	11000
BARIUM	0	45.7
BERYLLIUM	0	0.67
CADMIUM	0	1.2
CHROMIUM	0	30.8
COPPER	0	28.5
LEAD	0	34.3
MANGANESE	0	256
NICKEL	0	28.1
VANADIUM	0	39.4
ZINC	0	108

M030-A TMETAL		
ALUMINUM	0 TO 1.5	8040
	2 TO 3	25800
	4.5 TO 5.5	6320
ANTIMONY	0 TO 1.5	1
	2 TO 3	1
	4.5 TO 5.5	0.8
BARIUM	0 TO 1.5	74.9
	2 TO 3	112
	4.5 TO 5.5	28.5
BERYLLIUM	0 TO 1.5	0.76
	2 TO 3	2.5
	4.5 TO 5.5	0.79
CADMIUM	0 TO 1.5	0.68
	2 TO 3	0.72
	0 TO 1.5	33.3
CHROMIUM	2 TO 3	37
	4.5 TO 5.5	35
COPPER	0 TO 1.5	21.1
	2 TO 3	46.8
	4.5 TO 5.5	4.7
LEAD	0 TO 1.5	35.7
	2 TO 3	74.8
	4.5 TO 5.5	1.9
MANGANESE	0 TO 1.5	203
	2 TO 3	841
	4.5 TO 5.5	130
NICKEL	0 TO 1.5	37.9
	2 TO 3	52.2
	4.5 TO 5.5	28.8
VANADIUM	0 TO 1.5	32.4
	2 TO 3	68.2
	4.5 TO 5.5	30.2
ZINC	0 TO 1.5	61
	2 TO 3	138
	4.5 TO 5.5	22

SS1-RA-20 TMETAL		
ALUMINUM	0 TO .5	3150
BARIUM	0 TO .5	31.6
CADMIUM	0 TO .5	0.27
CHROMIUM	0 TO .5	29
COPPER	0 TO .5	20.3
LEAD	0 TO .5	20
MANGANESE	0 TO .5	85.8
NICKEL	0 TO .5	19.3
VANADIUM	0 TO .5	15.5

SS1-RA-13 TMETAL		
ALUMINUM	0	5680
BARIUM	0	29.9
BERYLLIUM	0	0.75
CADMIUM	0	0.21
CHROMIUM	0	31.9
LEAD	0	28.8
MANGANESE	0	104
NICKEL	0	25
SILVER	0	2.7
VANADIUM	0	28.5

SS1-RA-21 TMETAL		
ALUMINUM	0 TO .5	4210
BARIUM	0 TO .5	20.5
CADMIUM	0 TO .5	0.16
CHROMIUM	0 TO .5	26.4
LEAD	0 TO .5	48.9
MANGANESE	0 TO 0.5	68
NICKEL	0 TO .5	21.3
VANADIUM	0 TO .5	18.9
ZINC	0 TO .5	26

LEGEND

- SURFACE SAMPLING LOCATION
- SOIL BORING LOCATION
- SOIL PUNCH LOCATION
- GEOPROBE LOCATION
- STORM DRAIN LINE
- SANITARY SEWER LINE
- STEAM LINE
- FUEL LINE
- INDUSTRIAL WASTE LINE
- FENCE
- RAILROAD
- SHORELINE
- PAVED ROAD OR PARKING LOT
- BUILDING OR CONCRETE, PAVED, OR COVERED AREA
- 419 BUILDING AND BUILDING NUMBER
- INSTALLATION RESTORATION SITE

SAMPLE ID → B06-09
COMPOUND CLASS → TMETAL
ANALYTE → CHROMIUM
SAMPLE DEPTH (FEET BGS) → 2.5 to 11 / 4 to 14
CONCENTRATION (mg/kg) → 3.9 / 9.6 (P)
QUALIFIER

QUALIFIERS:
P - CONCENTRATION EXCEEDS RESIDENTIAL PRG FOR THE ANALYTE

NOTES:

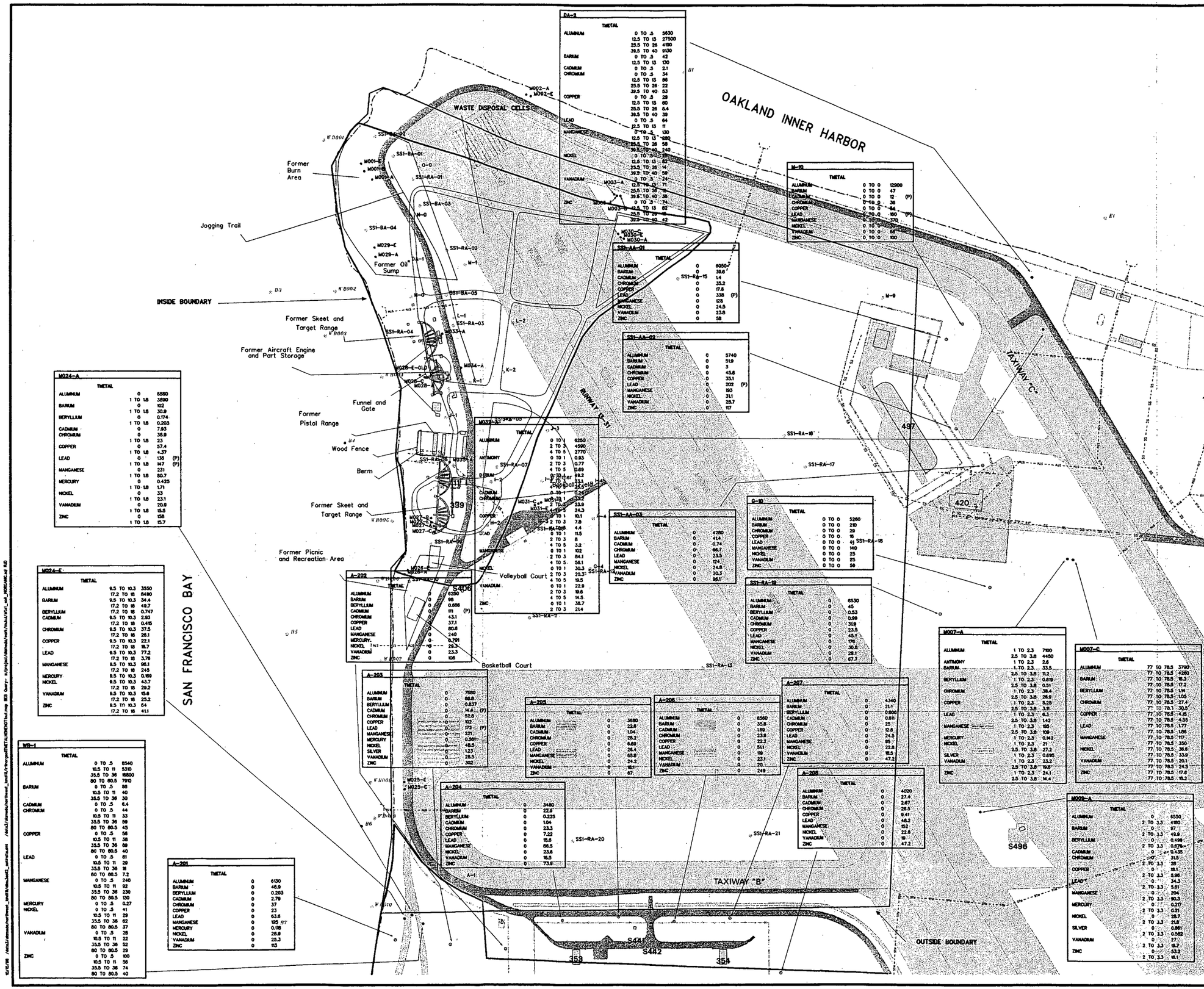
1. THIS MAP PROVIDES DATA FOR THE AREA IDENTIFIED AS SHEET 3 OF 3 ON THE LOCATION MAP ABOVE.
2. ANALYTICAL DATA FOR OFFSHORE SAMPLES ARE NOT PRESENTED ON THIS MAP. THESE DATA WILL BE ADDRESSED IN THE OU-4 RI REPORT.
3. ANALYTES NOT ANALYZED FOR OR ANALYTES NOT DETECTED ARE NOT SHOWN ON THIS MAP. A LIST OF ANALYSES PERFORMED FOR EACH SAMPLE FROM SITE 1 IS PRESENTED IN TABLES 6-11 AND 6-12. ANALYTICAL DATA FOR EACH SAMPLE ARE PRESENTED IN APPENDIX L. A SAMPLING POINT WITHIN THE AREA IDENTIFIED AS SHEET 3 OF 3 WITHOUT A DATA BOX INDICATES NO DETECTIONS.
4. ITALICIZED SAMPLING POINTS INDICATE POINTS OUTSIDE THE SITE 1 DATA SET.
5. THE INORGANIC CHEMICALS PRESENTED ON THIS FIGURE WERE SELECTED BASED ON THE FOLLOWING SCREENING CRITERIA: ESSENTIAL NUTRIENT STATUS, FREQUENCY OF DETECTION, AND COMPARISON TO BACKGROUND CONCENTRATIONS. THE SELECTION CRITERIA ARE DISCUSSED IN CHAPTER 5 OF THE OU-3 RI REPORT.

ACRONYMS:

BGS - BELOW GROUND SURFACE
mg/kg - MILLIGRAMS PER KILOGRAM
OU-4 - OPERABLE UNIT 4
PRG - PRELIMINARY REMEDIATION GOAL
RI - REMEDIAL INVESTIGATION
TMETAL - TOTAL METALS

75 0 75 150
SCALE: 1" = 150'

FIGURE 6-21
SITE 1 (Sheet 3 of 3)
SELECTED INORGANIC CHEMICALS
DETECTED IN SOIL:
TMETAL
ALAMEDA POINT
ALAMEDA, CALIFORNIA



LEGEND

- SURFACE SAMPLING LOCATION
- SOIL BORING LOCATION
- SOIL PUNCH LOCATION
- GEOPROBE LOCATION
- STORM DRAIN LINE
- SANITARY SEWER LINE
- STEAM LINE
- FUEL LINE
- INDUSTRIAL WASTE LINE
- FENCE
- RAILROAD
- SHORELINE
- PAVED ROAD OR PARKING LOT
- BUILDING OR CONCRETE, PAVED, OR COVERED AREA
- 517 BUILDING AND BUILDING NUMBER
- INSTALLATION RESTORATION SITE

SAMPLE ID	606-09			
COMPOUND CLASS	TMETAL			SAMPLE DEPTH (FEET BGS)
ANALYTE	CHROMIUM	14 to 15.3	1.5	CONCENTRATION (mg/kg)
		4 to 14	9.6 (P)	QUALIFIER

QUALIFIERS:

P – CONCENTRATION EXCEEDS RESIDENTIAL PRG FOR THE ANALYTE

NOTES:

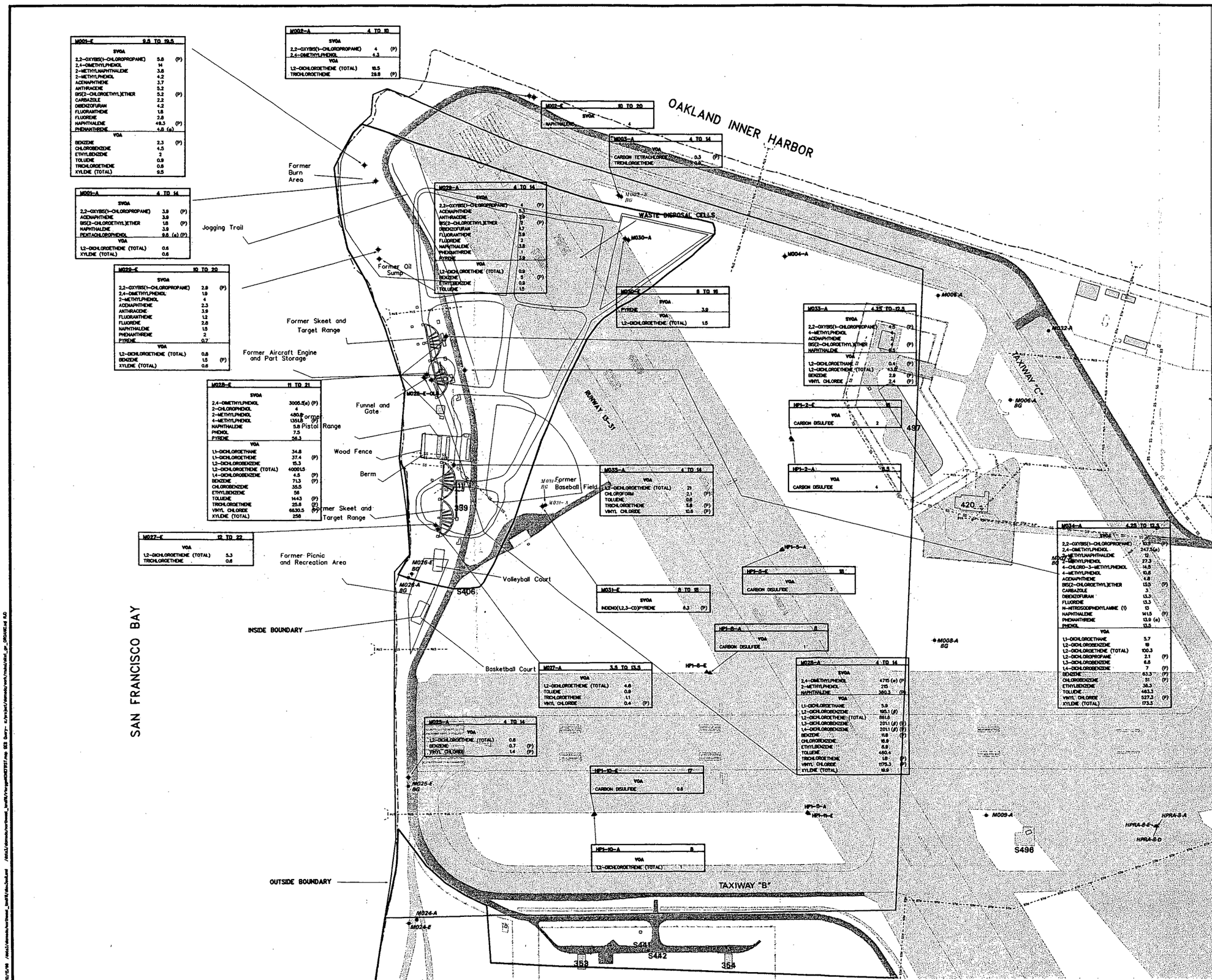
1. ANALYTICAL DATA FOR OFFSHORE SAMPLES ARE NOT PRESENTED ON THIS MAP. THESE DATA WILL BE ADDRESSED IN THE OU-4 RI REPORT.
2. ANALYTES NOT ANALYZED FOR OR ANALYTES NOT DETECTED ARE NOT SHOWN ON THIS MAP. A LIST OF ANALYSES PERFORMED FOR EACH SAMPLE FROM SITE 1 IS PRESENTED IN TABLES 6-11 AND 6-12. ANALYTICAL DATA FOR EACH SAMPLE ARE PRESENTED IN APPENDIX I. A SAMPLING POINT ON THE MAP WITHOUT A DATA BOX INDICATES NO DETECTIONS.
3. ITALICIZED SAMPLING POINTS INDICATE POINTS OUTSIDE THE SITE 1 DATA SET.
4. THE INORGANIC CHEMICALS PRESENTED ON THIS FIGURE WERE SELECTED BASED ON THE FOLLOWING SCREENING CRITERIA: ESSENTIAL NUTRIENT STATUS, FREQUENCY OF DETECTION, AND COMPARISON TO BACKGROUND CONCENTRATIONS. THE SELECTION CRITERIA ARE DISCUSSED IN CHAPTER 5 OF THE OU-3 RI REPORT.

ACRONYMS:

BGS – BELOW GROUND SURFACE
mg/kg – MILLIGRAMS PER KILOGRAM
OU-4 – OPERABLE UNIT 4
PRG – PRELIMINARY REMEDIATION GOAL
RI – REMEDIAL INVESTIGATION
TMETAL – TOTAL METALS

75 0 75 150
SCALE: 1" = 150'

FIGURE 6-22
AREAS ADJACENT TO SITE 1
INORGANIC CHEMICALS DETECTED IN SOIL: TMETAL
ALAMEDA POINT
ALAMEDA, CALIFORNIA



LEGEND

- MONITORING WELL LOCATION
- BACKGROUND MONITORING WELL
- HYDROPUNCH LOCATION
- STORM DRAIN LINE
- SANITARY SEWER LINE
- STEAM LINE
- FUEL LINE
- INDUSTRIAL WASTE LINE
- FENCE
- RAILROAD
- SHORELINE
- PAVED ROAD OR PARKING LOT
- BUILDING OR CONCRETE, PAVED, OR COVERED AREA
- BUILDING AND BUILDING NUMBER
- INSTALLATION RESTORATION SITE

SAMPLE ID	M07A-09	2.5 to 11	SAMPLE DEPTH (SEE NOTES)
COMPOUND CLASS	SVOA		
ANALYTE	FLUORANTHENE	3.9	CONCENTRATION (µg/L)
	PENTACHLOROPHENOL	9.6 (P)	QUALIFIER

QUALIFIERS:

α – CONCENTRATION EXCEEDS PROPOSED CALIFORNIA TOXICS RULE CRITERION

β – CONCENTRATION EXCEEDS NATIONAL TOXICS RULE LOEL

P – CONCENTRATION EXCEEDS RESIDENTIAL PRG

NOTES:

1. ANALYTES NOT ANALYZED FOR OR ANALYTES NOT DETECTED ARE NOT SHOWN ON THIS MAP. A LIST OF ANALYSES PERFORMED FOR EACH SAMPLE FROM SITE 1 IS PRESENTED IN TABLE 6-15. ANALYTICAL DATA FOR EACH SAMPLE ARE PRESENTED IN APPENDIX L. A SAMPLING POINT ON THE MAP WITHOUT A DATA BOX INDICATES NO DETECTIONS OF ANALYTES TESTED FOR AT THE SAMPLING LOCATION.
2. CONCENTRATIONS INDICATED FOR MONITORING WELLS ARE AVERAGE VALUES BASED ON SAMPLING EVENTS CONDUCTED BETWEEN 1994 AND 1996. FOR NONDETECT RESULTS, ONE-HALF OF THE DETECTION LIMIT WAS USED TO CALCULATE THE AVERAGE VALUE.
3. SAMPLE DEPTH FOR HYDROPUNCH SAMPLES INDICATES SAMPLE COLLECTION DEPTH IN FEET BELOW GROUND SURFACE. SAMPLE DEPTH FOR MONITORING WELL SAMPLES INDICATES THE SCREENED INTERVAL DEPTH IN FEET BELOW THE TOP OF THE MONITORING WELL CASING.
4. ITALICIZED SAMPLING POINTS INDICATE POINTS OUTSIDE SITE 1. DATA FOR THESE POINTS ARE PRESENTED IN FIGURE 6-25.

ACRONYMS:

LOEL – LOWEST OBSERVED EFFECT LEVEL

PRG – PRELIMINARY REMEDIATION GOAL

SVOA – SEMIVOLATILE ORGANIC ANALYSIS

SVOC – SEMIVOLATILE ORGANIC COMPOUND

VOA – VOLATILE ORGANIC ANALYSIS

VOC – VOLATILE ORGANIC COMPOUND

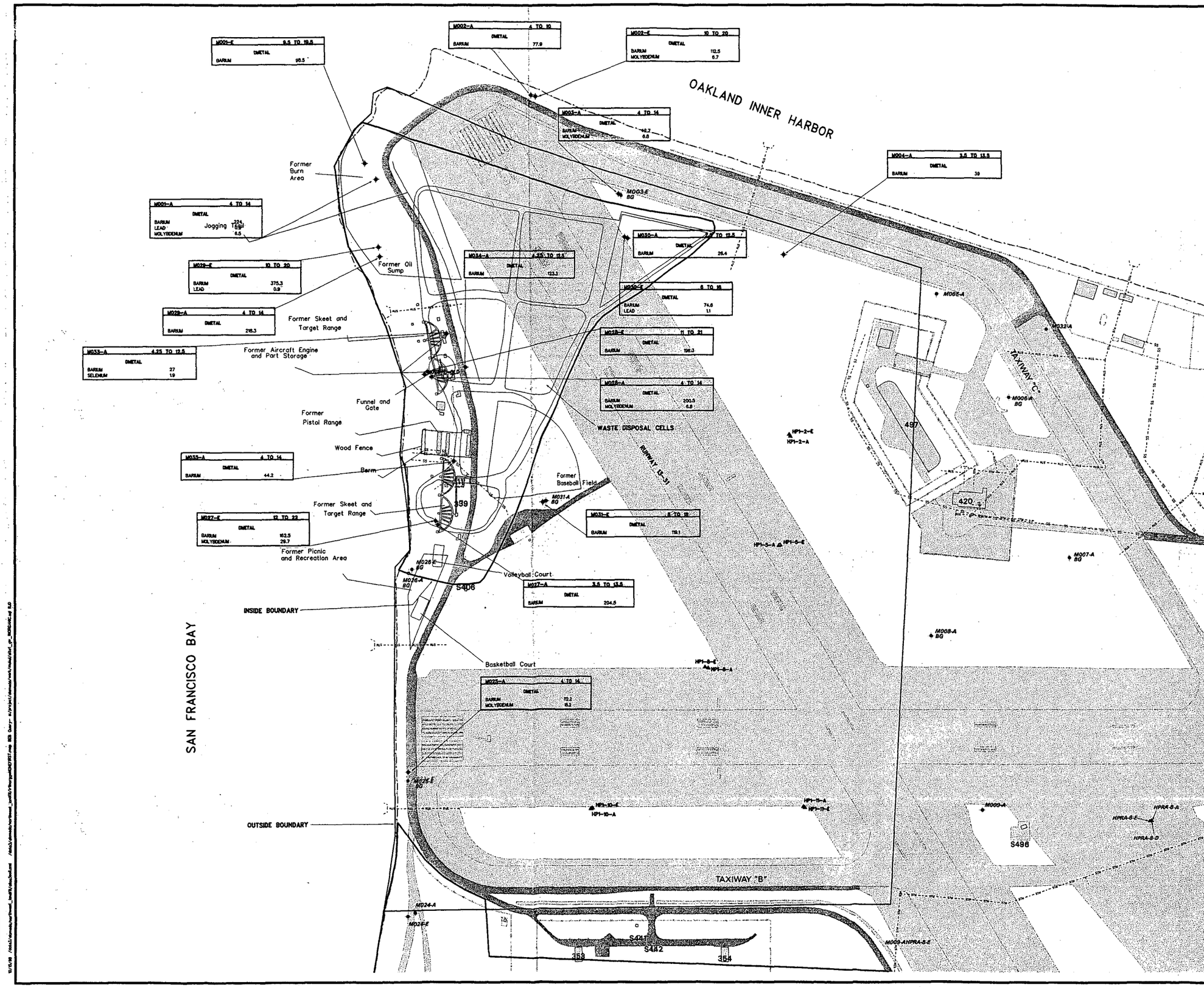
µg/L – MICROGRAMS PER LITER

N

75 0 75 150

SCALE: 1" = 150'

FIGURE 6-23
SITE 1
ORGANIC CHEMICALS
DETECTED IN GROUNDWATER:
FIRST WATER-BEARING ZONE
ALAMEDA POINT
ALAMEDA, CALIFORNIA



LEGEND

- MONITORING WELL LOCATION
- BACKGROUND MONITORING WELL
- HYDROPUNCH LOCATION
- STORM DRAIN LINE
- SANITARY SEWER LINE
- STEAM LINE
- FUEL LINE
- INDUSTRIAL WASTE LINE
- FENCE
- RAILROAD
- SHORELINE
- PAVED ROAD OR PARKING LOT
- BUILDING OR CONCRETE, PAVED, OR COVERED AREA
- 517 BUILDING AND BUILDING NUMBER
- INSTALLATION RESTORATION SITE

SAMPLE ID → M07A-09 2.5 to 11 → SAMPLE DEPTH (SEE NOTES)
COMPOUND CLASS → DMETAL
ANALYTE → ARSENIC 3.9 → CONCENTRATION (µg/L)
BARIUM 9.6

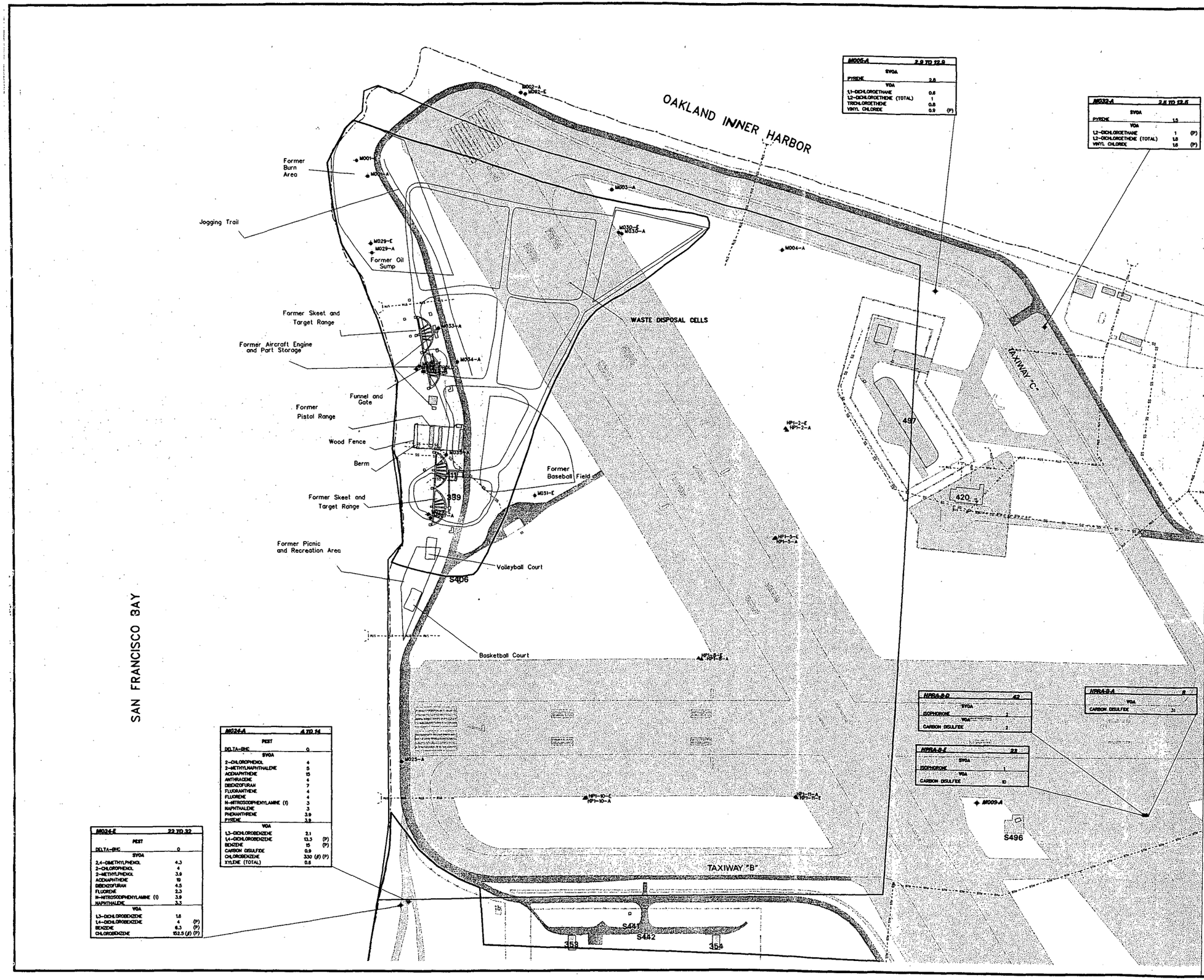
NOTES:

1. ANALYTES NOT ANALYZED FOR OR ANALYTES NOT DETECTED ARE NOT SHOWN ON THIS MAP. A LIST OF ANALYSES PERFORMED FOR EACH SAMPLE FROM SITE 1 IS PRESENTED IN TABLE 6-15. ANALYTICAL DATA FOR EACH SAMPLE ARE PRESENTED IN APPENDIX L. A SAMPLING POINT ON THE MAP WITHOUT A DATA BOX INDICATES NO DETECTIONS.
2. CONCENTRATIONS INDICATED FOR MONITORING WELLS ARE AVERAGE VALUES BASED ON SAMPLING EVENTS CONDUCTED BETWEEN 1994 AND 1996. FOR NONDETECT RESULTS, ONE-HALF OF THE DETECTION LIMIT WAS USED TO CALCULATE THE AVERAGE VALUE.
3. SAMPLE DEPTH FOR HYDROPUNCH SAMPLES INDICATES SAMPLE COLLECTION DEPTH IN FEET BELOW GROUND SURFACE. SAMPLE DEPTH FOR MONITORING WELL SAMPLES INDICATES THE SCREENED INTERVAL DEPTH IN FEET BELOW THE TOP OF THE MONITORING WELL CASING.
4. ITALICIZED SAMPLING POINTS INDICATE POINTS OUTSIDE SITE 1. DATA FOR THESE POINTS ARE PRESENTED IN FIGURE 6-26.
5. THE INORGANIC CHEMICALS PRESENTED ON THIS FIGURE WERE SELECTED BASED ON THE FOLLOWING SCREENING CRITERIA: ESSENTIAL NUTRIENT STATUS, FREQUENCY OF DETECTION, AND COMPARISON TO BACKGROUND CONCENTRATIONS. THE SELECTION CRITERIA ARE DISCUSSED IN CHAPTER 5 OF THE OU-3 RI REPORT.

ACRONYMS:

DMETAL – DISSOLVED METALS
µg/L – MICROGRAMS PER LITER

FIGURE 6-24
SITE 1
SELECTED INORGANIC CHEMICALS DETECTED IN GROUNDWATER: FIRST WATER-BEARING ZONE
ALAMEDA POINT
ALAMEDA, CALIFORNIA



LEGEND

- MONITORING WELL LOCATION
- HYDROPUNCH LOCATION
- STORM DRAIN LINE
- SANITARY SEWER LINE
- STEAM LINE
- FUEL LINE
- INDUSTRIAL WASTE LINE
- FENCE
- RAILROAD
- SHORELINE
- PAVED ROAD OR PARKING LOT
- BUILDING OR CONCRETE, PAVED, OR COVERED AREA
- 817 BUILDING AND BUILDING NUMBER
- 1 INSTALLATION RESTORATION SITE

SAMPLE ID	M07A-09	2.5 to 11	SAMPLE DEPTH (SEE NOTES)
COMPOUND CLASS	SVOA		
AMALYTE	FLUORANTHENE	3.9	CONCENTRATION (µg/L)
	PENTACHLOROPHENOL	9.6 (P)	QUALIFIER

QUALIFIERS:

J - CONCENTRATION EXCEEDS NATIONAL TOXICS RULE LOEL

P - CONCENTRATION EXCEEDS RESIDENTIAL PRG

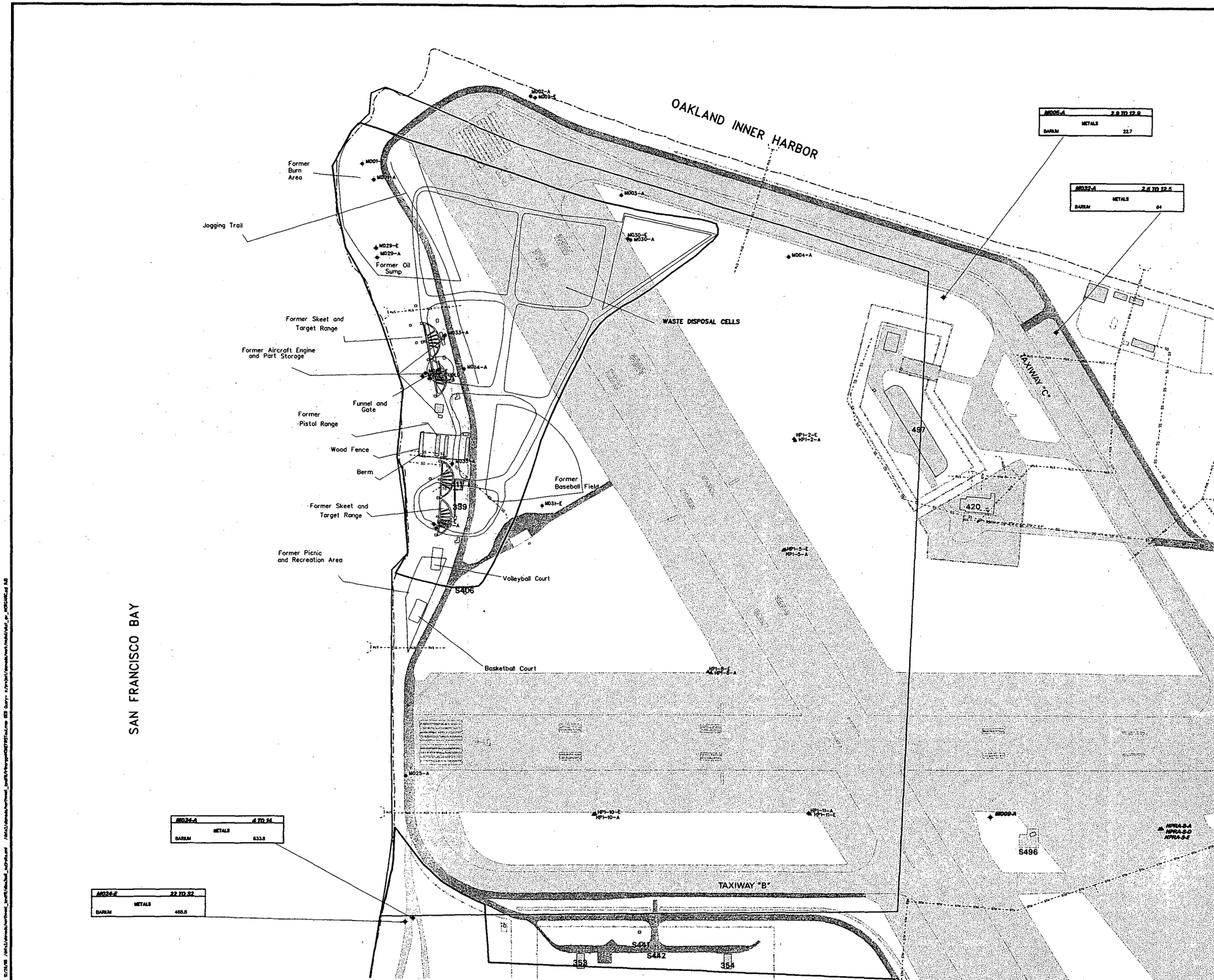
NOTES:

1. ANALYTES NOT ANALYZED FOR OR ANALYTES NOT DETECTED ARE NOT SHOWN ON THIS MAP. A LIST OF ANALYSES PERFORMED FOR EACH SAMPLE FROM SITE 1 IS PRESENTED IN TABLE 6-15. ANALYTICAL DATA FOR EACH SAMPLE ARE PRESENTED IN APPENDIX H. A SAMPLING POINT ON THE MAP WITHOUT A DATA BOX INDICATES NO DETECTIONS.
2. CONCENTRATIONS INDICATED FOR MONITORING WELLS ARE AVERAGE VALUES BASED ON SAMPLING EVENTS CONDUCTED BETWEEN 1994 AND 1996. FOR NONDETECT RESULTS, ONE-HALF OF THE DETECTION LIMIT WAS USED TO CALCULATE THE AVERAGE VALUE.
3. GROUNDWATER FLOW DIRECTION BASED ON APRIL 1996 WATER ELEVATION DATA.
4. SAMPLE DEPTH FOR HYDROPUNCH SAMPLES INDICATES SAMPLE COLLECTION DEPTH IN FEET BELOW GROUND SURFACE. SAMPLE DEPTH FOR MONITORING WELL SAMPLES INDICATES THE SCREENED INTERVAL DEPTH IN FEET BELOW THE TOP OF THE MONITORING WELL CASING.
5. ITALICIZED SAMPLING POINTS INDICATE POINTS OUTSIDE SITE 1.

ACRONYMS:

LOEL - LOWEST OBSERVED EFFECT LEVEL
PEST - PESTICIDES
PRG - PRELIMINARY REMEDIATION GOAL
SVOA - SEMIVOLATILE ORGANIC ANALYSIS
SVOC - SEMIVOLATILE ORGANIC COMPOUND
VOA - VOLATILE ORGANIC ANALYSIS
VOC - VOLATILE ORGANIC COMPOUND
µg/L - MICROGRAMS PER LITER

FIGURE 6-25
AREAS ADJACENT TO SITE 1
ORGANIC CHEMICALS
DETECTED IN GROUNDWATER:
FIRST WATER-BEARING ZONE
ALAMEDA POINT
ALAMEDA, CALIFORNIA



LEGEND

- MONITORING WELL LOCATION
- HYDROPUNCH LOCATION
- STORM DRAIN LINE
- SANITARY SEWER LINE
- STEAM LINE
- FUEL LINE
- INDUSTRIAL WASTE LINE
- FENCE
- RAILROAD
- SHORELINE
- PAVED ROAD OR PARKING LOT
- BUILDING OR CONCRETE, PAVED, OR COVERED AREA
- 517 BUILDING AND BUILDING NUMBER
- 1 INSTALLATION RESTORATION SITE

SAMPLE ID	M07A-09	2.5 to 11	SAMPLE DEPTH (SEE NOTES)
COMPOUND CLASS	DMETAL		
ANALYTE	BARIUM	3.9	CONCENTRATION (µg/L)
		9.6 (P)	QUALIFIER

QUALIFIERS:

α - CONCENTRATION EXCEEDS PROPOSED CALIFORNIA TOXICS RULE CRITERION

β - CONCENTRATION EXCEEDS NATIONAL TOXICS RULE LOEL

P - CONCENTRATION EXCEEDS RESIDENTIAL PRG

NOTES:

1. ANALYTES NOT ANALYZED FOR OR ANALYTES NOT DETECTED ARE NOT SHOWN ON THIS MAP. A SAMPLING POINT ON THE MAP WITHOUT A DATA BOX INDICATES NO DETECTIONS.
2. CONCENTRATIONS INDICATED FOR MONITORING WELLS ARE AVERAGE VALUES BASED ON SAMPLING EVENTS CONDUCTED BETWEEN 1994 AND 1996. FOR NONDETECT RESULTS, ONE-HALF OF THE DETECTION LIMIT WAS USED TO CALCULATE THE AVERAGE VALUE.
3. SAMPLE DEPTH FOR HYDROPUNCH SAMPLES INDICATES SAMPLE COLLECTION DEPTH IN FEET BELOW GROUND SURFACE. SAMPLE DEPTH FOR MONITORING WELL SAMPLES INDICATES THE SCREENED INTERVAL DEPTH IN FEET BELOW THE TOP OF THE MONITORING WELL CASING.
4. ITALICIZED SAMPLING POINTS INDICATE POINTS OUTSIDE SITE 1.
5. THE INORGANIC CHEMICALS PRESENTED ON THIS FIGURE WERE SELECTED BASED ON THE FOLLOWING SCREENING CRITERIA: ESSENTIAL NUTRIENT STATUS, FREQUENCY OF DETECTION, AND COMPARISON TO BACKGROUND CONCENTRATIONS. THE SELECTION CRITERIA ARE DISCUSSED IN CHAPTER 5 OF THE OU-3 RI REPORT.

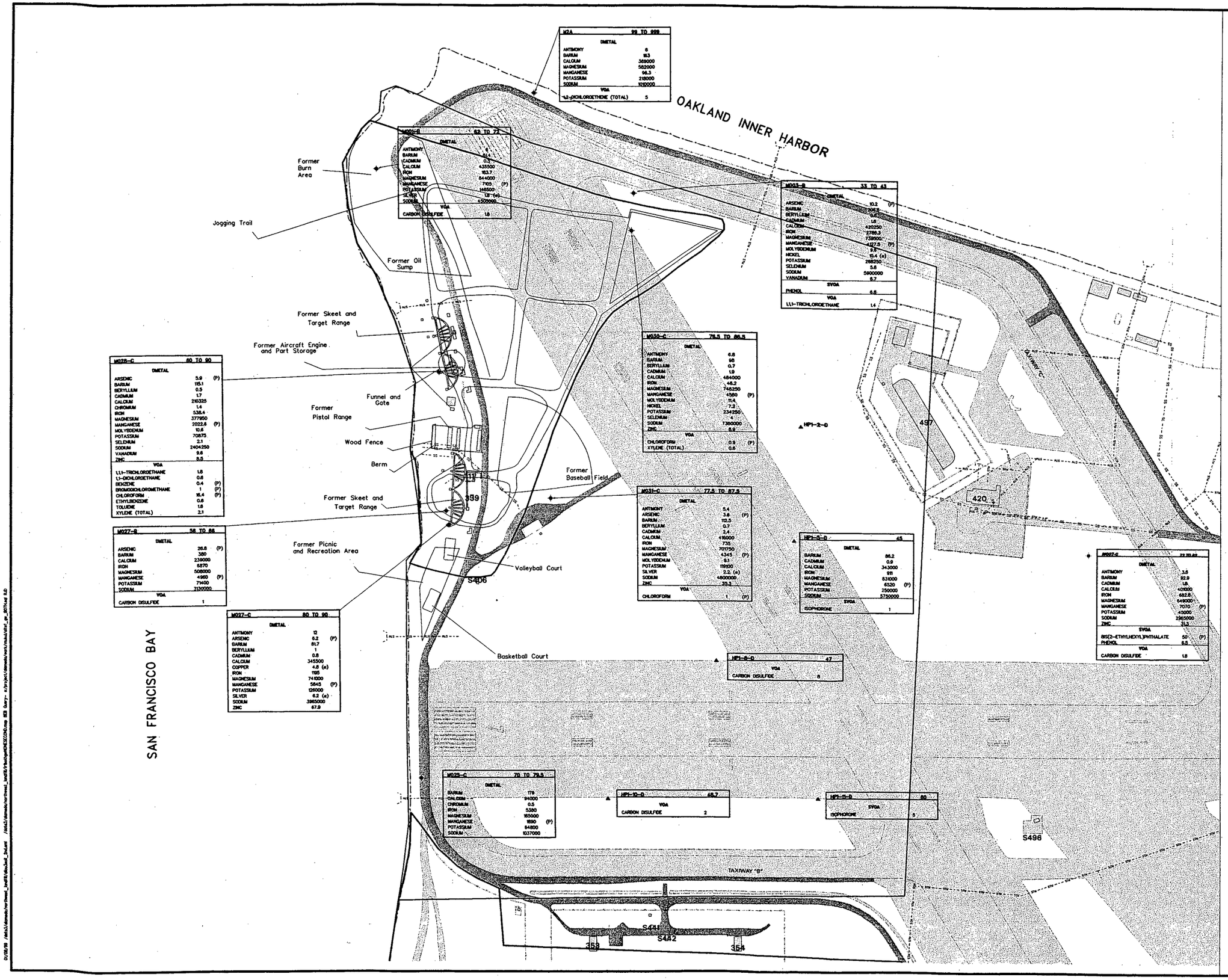
ACRONYMS:

LOEL - LOWEST OBSERVED EFFECT LEVEL
DMETAL - DISSOLVED METALS
PRG - PRELIMINARY REMEDIATION GOAL
µg/L - MICROGRAMS PER LITER

N

75 0 75 150
SCALE: 1" = 150'

FIGURE 6-26
AREAS ADJACENT TO SITE 1
INORGANIC CHEMICALS
DETECTED IN GROUNDWATER:
FIRST WATER-BEARING ZONE
ALAMEDA POINT
ALAMEDA, CALIFORNIA



LEGEND

- MONITORING WELL LOCATION
- BACKGROUND MONITORING WELL
- HYDROPUNCH LOCATION
- STORM DRAIN LINE
- SANITARY SEWER LINE
- STEAM LINE
- FUEL LINE
- INDUSTRIAL WASTE LINE
- FENCE
- RAILROAD
- SHORELINE
- PAVED ROAD OR PARKING LOT
- BUILDING OR CONCRETE, PAVED, OR COVERED AREA
- 817 BUILDING AND BUILDING NUMBER
- INSTALLATION RESTORATION SITE

SAMPLE ID	M07A-09	2.5 to 11	SAMPLE DEPTH (SEE NOTES)
COMPOUND CLASS	SVOA		
ANALYTE	FLUORANTHENE	3.9	CONCENTRATION (µg/L)
	PENTACHLOROPHENOL	9.6 (P)	QUALIFIER

QUALIFIERS:

a - CONCENTRATION EXCEEDS PROPOSED CALIFORNIA TOXICS RULE CRITERION

P - CONCENTRATION EXCEEDS RESIDENTIAL PRG

NOTES:

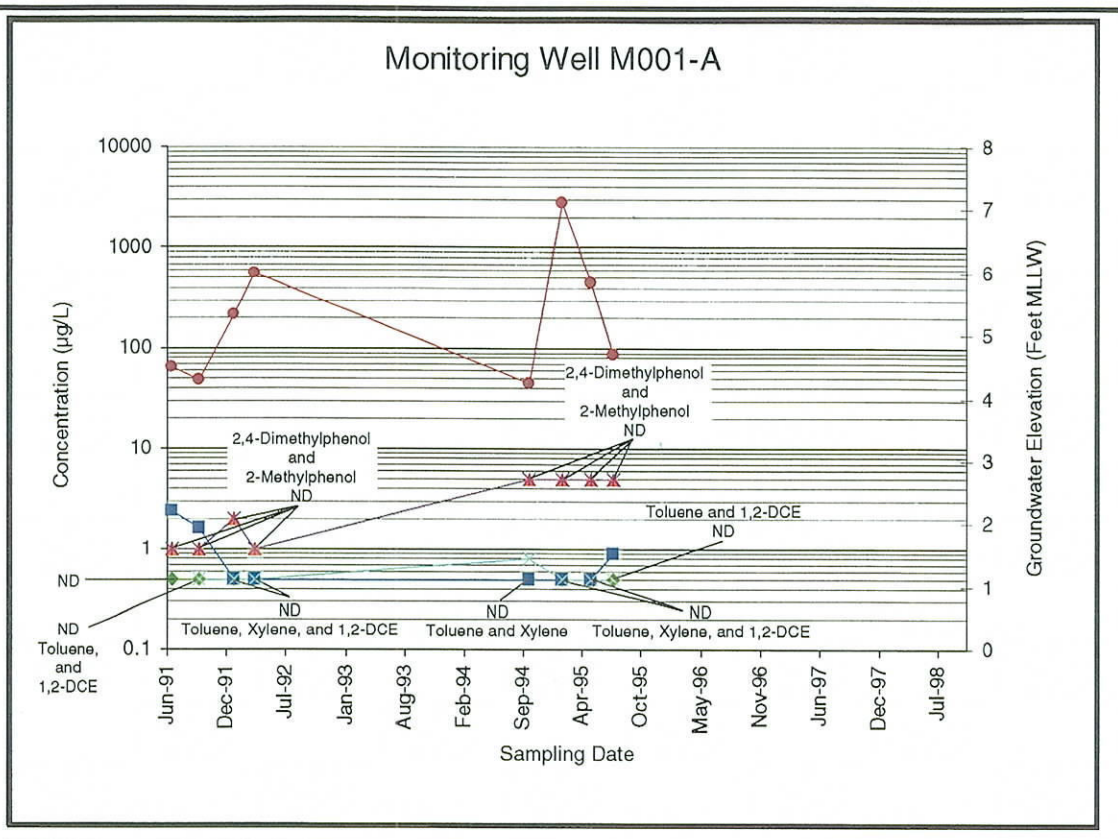
1. ANALYTES NOT ANALYZED FOR OR ANALYTES NOT DETECTED ARE NOT SHOWN ON THIS MAP. A LIST OF ANALYSES PERFORMED FOR EACH SAMPLE FROM SITE 1 IS PRESENTED IN TABLE 6-15. ANALYTICAL DATA FOR EACH SAMPLE ARE PRESENTED IN APPENDIX L. A SAMPLING POINT ON THE MAP WITHOUT A DATA BOX INDICATES NO DETECTIONS.
2. CONCENTRATIONS INDICATED FOR MONITORING WELLS ARE AVERAGE VALUES BASED ON SAMPLING EVENTS CONDUCTED BETWEEN 1994 AND 1996. FOR NONDETECT RESULTS, ONE-HALF OF THE DETECTION LIMIT WAS USED TO CALCULATE THE AVERAGE VALUE.
3. GROUNDWATER FLOW DIRECTION BASED ON APRIL 1998 WATER ELEVATION DATA.
4. SAMPLE DEPTH FOR HYDROPUNCH SAMPLES INDICATES SAMPLE COLLECTION DEPTH IN FEET BELOW GROUND SURFACE. SAMPLE DEPTH FOR MONITORING WELL SAMPLES INDICATES THE SCREENED INTERVAL DEPTH IN FEET BELOW THE TOP OF THE MONITORING WELL CASING.
5. ITALICIZED SAMPLING POINTS INDICATE POINTS OUTSIDE SITE 1.
6. THE INORGANIC CHEMICALS PRESENTED ON THIS FIGURE WERE SELECTED BASED ON THE FOLLOWING SCREENING CRITERIA: ESSENTIAL NUTRIENT STATUS, FREQUENCY OF DETECTION, AND COMPARISON TO BACKGROUND CONCENTRATIONS. THE SELECTION CRITERIA ARE DISCUSSED IN CHAPTER 5 OF THE OU-3 RI REPORT.

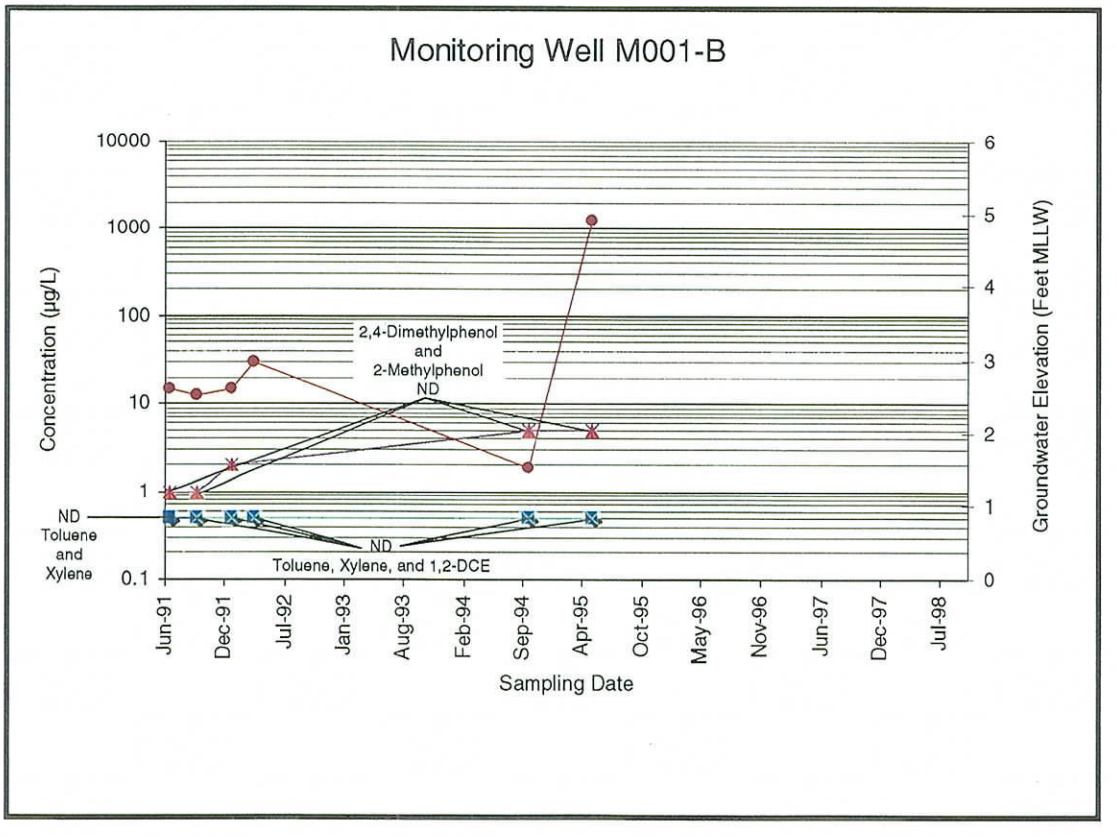
ACRONYMS:

DMETAL - DISSOLVED METALS
LOEL - LOWEST OBSERVED EFFECT LEVEL
PRG - PRELIMINARY REMEDIATION GOAL
SVOA - SEMIVOLATILE ORGANIC ANALYSIS
SVOC - SEMIVOLATILE ORGANIC COMPOUND
VOA - VOLATILE ORGANIC ANALYSIS
VOC - VOLATILE ORGANIC COMPOUND
µg/L - MICROGRAMS PER LITER

75 0 75 150
SCALE: 1" = 150'

FIGURE 6-27
SITE 1
ORGANIC AND INORGANIC CHEMICALS DETECTED IN GROUNDWATER: SECOND WATER-BEARING ZONE
ALAMEDA POINT
ALAMEDA, CALIFORNIA





- TOLUENE
- XYLENE
- 2,4-DIMETHYLPHENOL
- 1,2-DCE
- 2-METHYLPHENOL
- WATER LEVEL

NOTES:

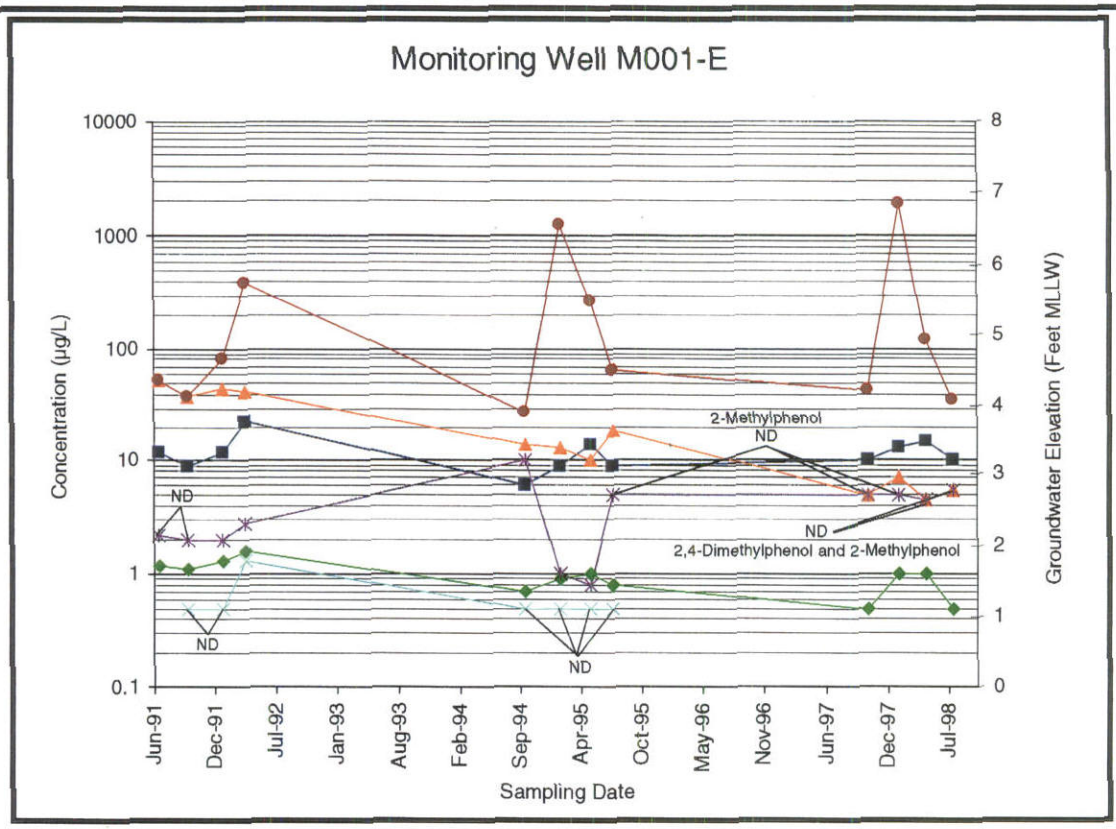
ND - Nondetect; concentration posted for nondetect results is one-half of the detection limit for the sample

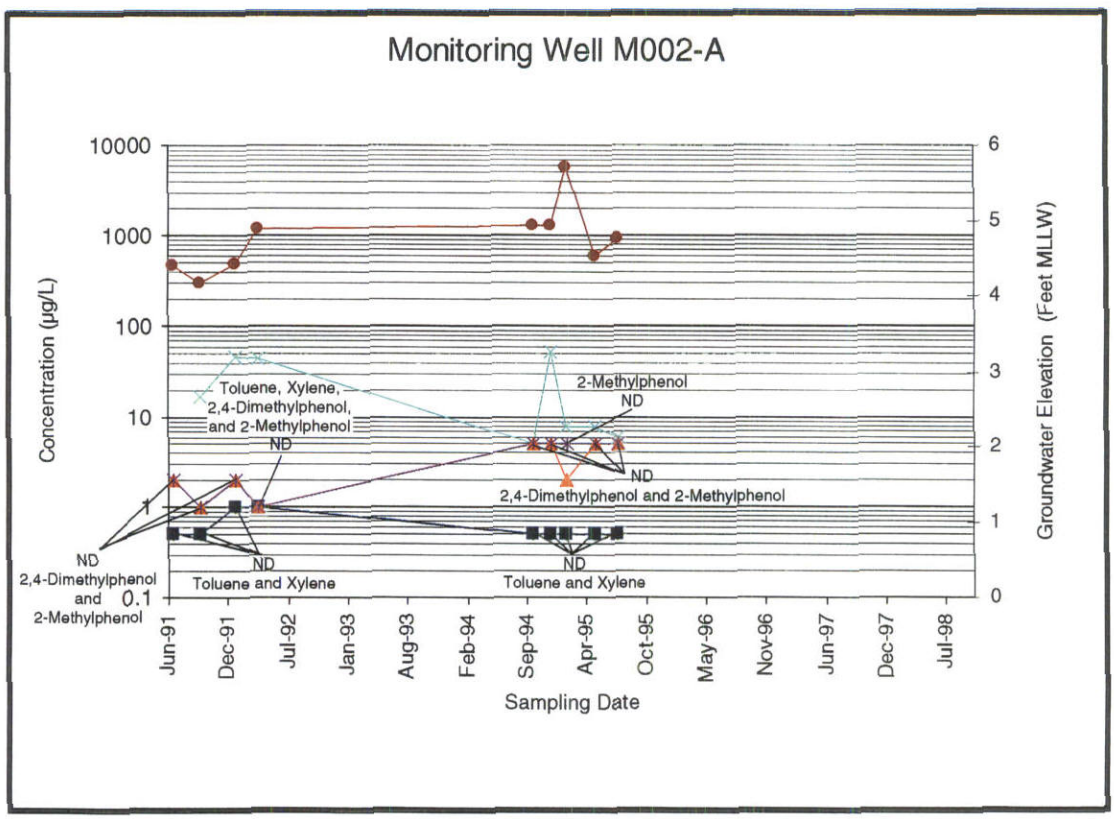
µg/L - Microgram per liter

MLLW - Feet above mean lower low water

FIGURE 6-28
(Sheet 1 of 14)
SITE 1
TIME-SERIES PLOTS
ALAMEDA POINT
ALAMEDA, CALIFORNIA

G0069-168B0302 SITE1-01.P65 GAS 8/10/99





- TOLUENE
- XYLENE
- 2,4-DIMETHYLPHENOL
- 1,2-DCE
- 2-METHYLPHENOL
- WATER LEVEL

NOTES:

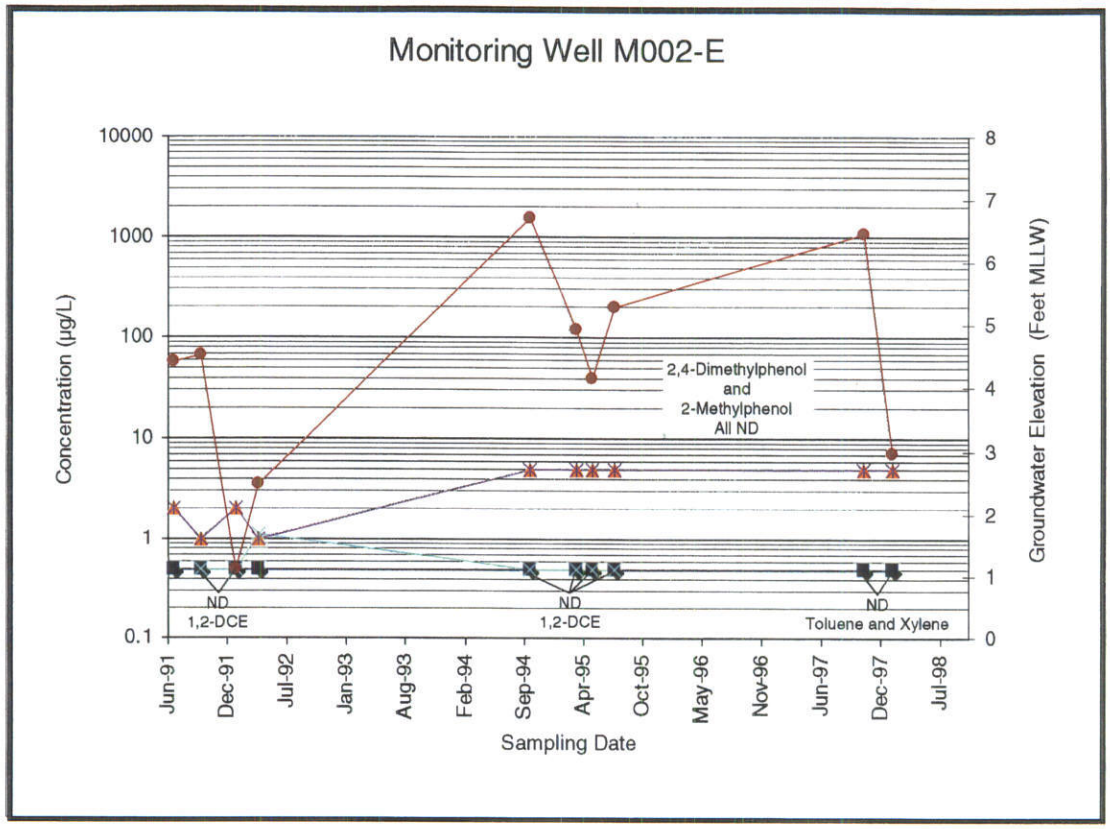
ND - Nondetect; concentration posted for nondetect results is one-half of the detection limit for the sample

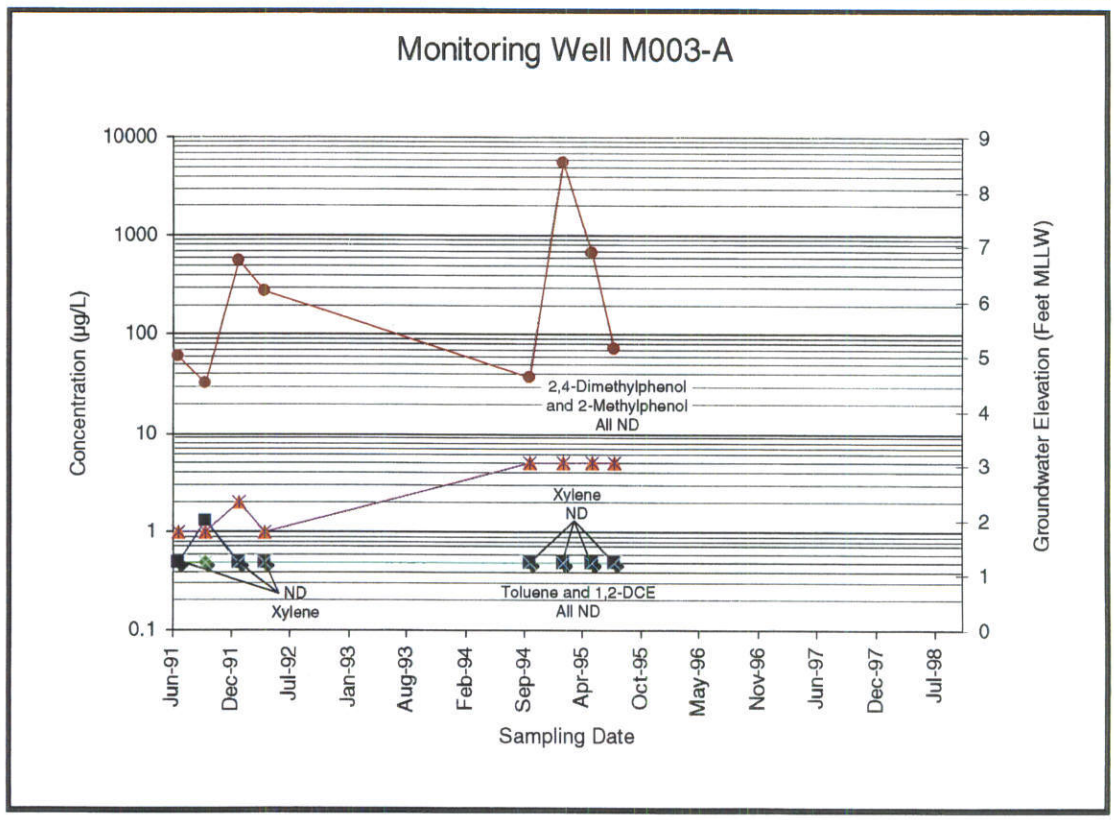
µg/L - Microgram per liter

MLLW - Feet above mean lower low water

FIGURE 6-28
(Sheet 2 of 14)
SITE 1
TIME-SERIES PLOTS
ALAMEDA POINT
ALAMEDA, CALIFORNIA

G0069-168B0302 SITE1-02.P65 GAS 8/11/99





- TOLUENE
- XYLENE
- 2,4-DIMETHYLPHENOL
- 1,2-DCE
- 2-METHYLPHENOL
- WATER LEVEL

NOTES:

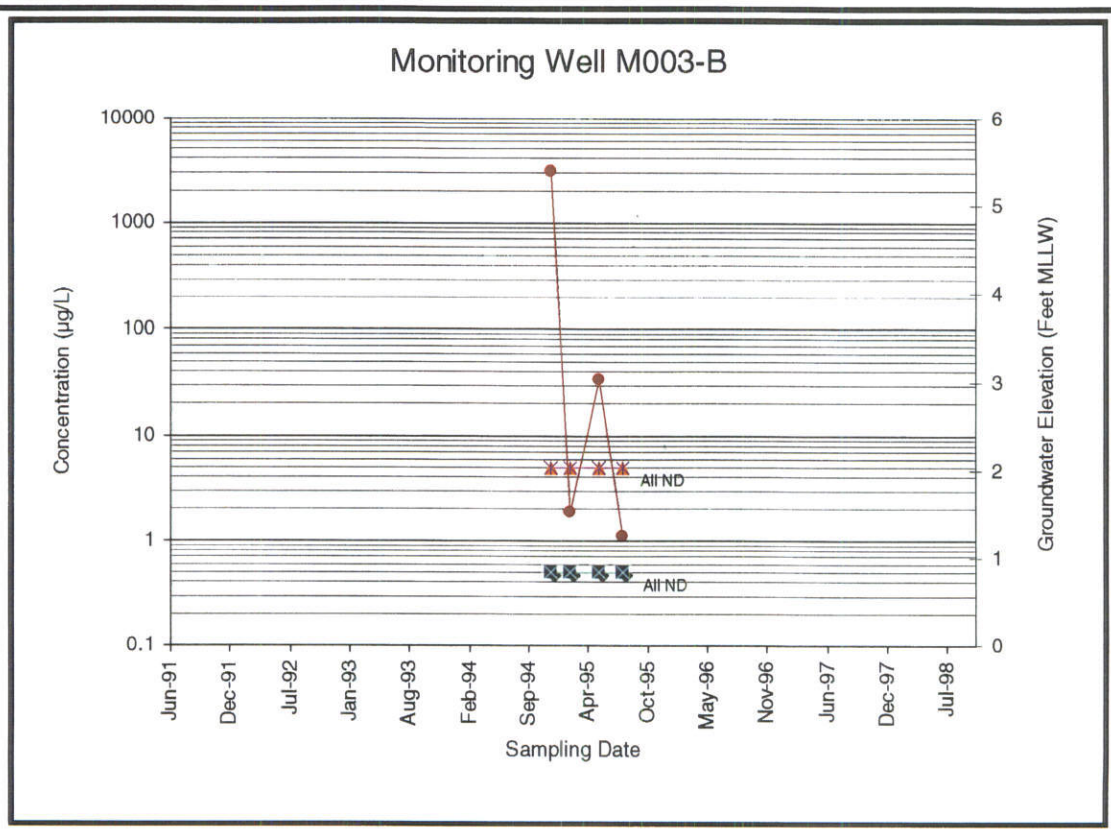
ND - Nondetect; concentration posted for nondetect results is one-half of the detection limit for the sample

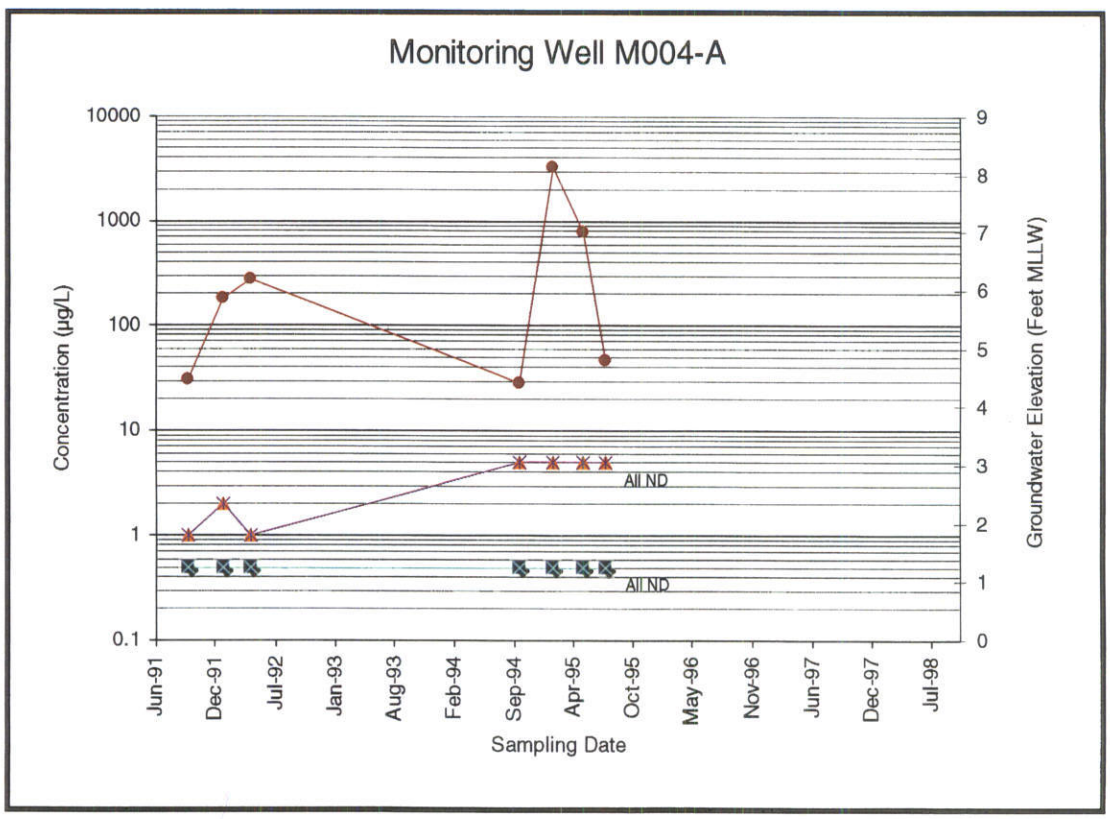
µg/L - Microgram per liter

MLLW - Feet above mean lower low water

FIGURE 6-28
(Sheet 3 of 14)
SITE 1
TIME-SERIES PLOTS
ALAMEDA POINT
ALAMEDA, CALIFORNIA

G0069-168B0302 SITE1-03.P65 GAS 8/11/99





- TOLUENE
- XYLENE
- 2,4-DIMETHYLPHENOL
- 1,2-DCE
- 2-METHYLPHENOL
- WATER LEVEL

NOTES:

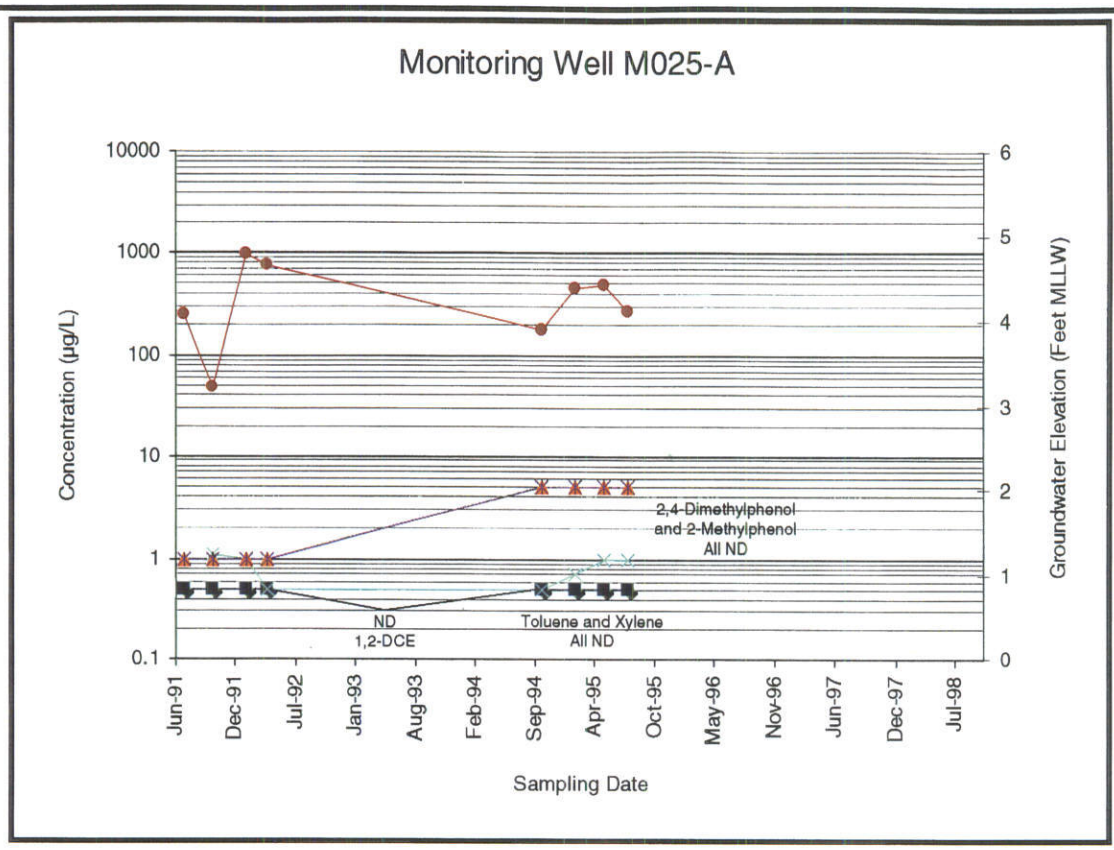
ND - Nondetect; concentration posted for nondetect results is one-half of the detection limit for the sample

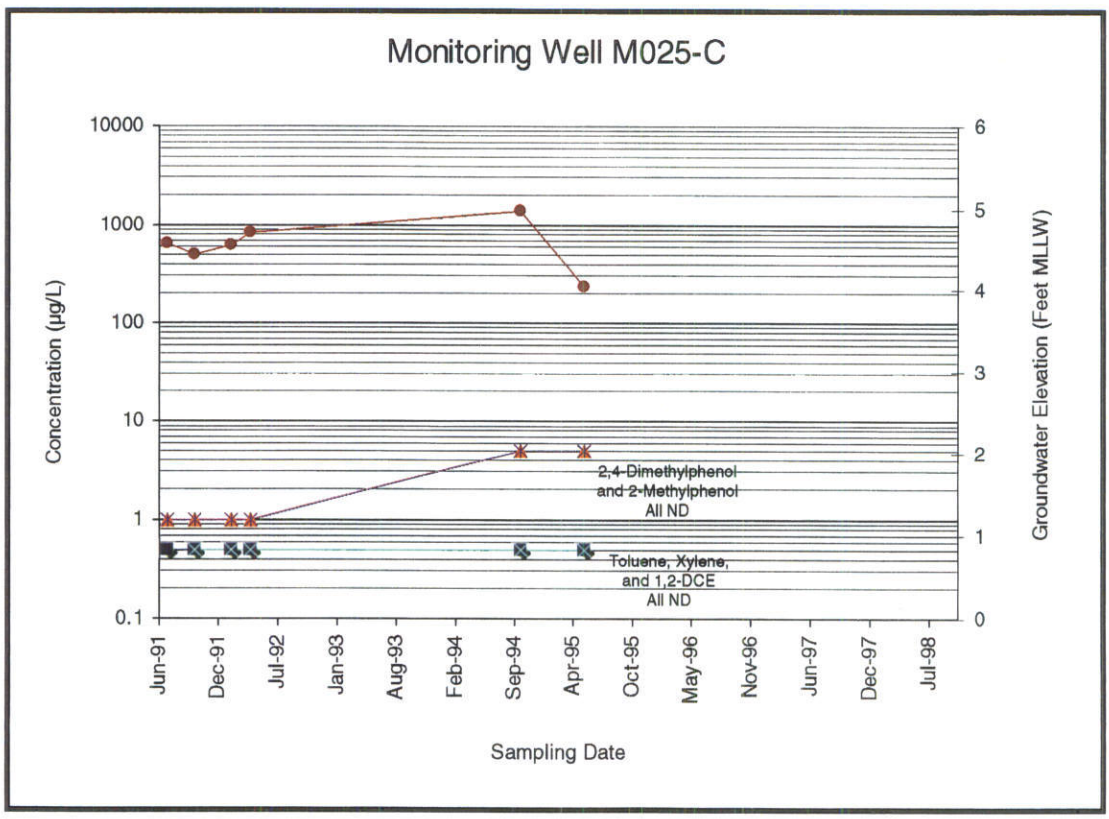
µg/L - Microgram per liter

MLLW - Feet above mean lower low water

FIGURE 6-28
(Sheet 4 of 14)
SITE 1
TIME-SERIES PLOTS
ALAMEDA POINT
ALAMEDA, CALIFORNIA

G0069-168B0302 SITE1-04.P65 GAS 8/10/99





- TOLUENE
- XYLENE
- 2,4-DIMETHYLPHENOL
- 1,2-DCE
- 2-METHYLPHENOL
- WATER LEVEL

NOTES:

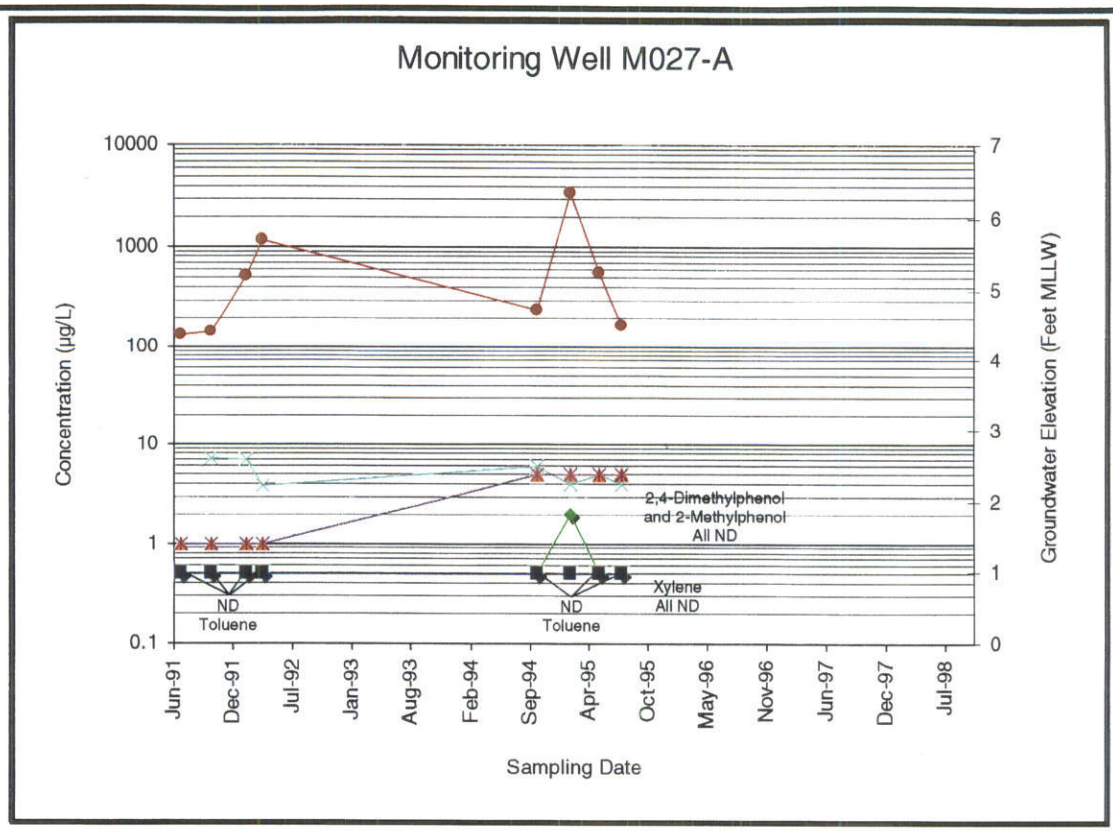
ND - Nondetect; concentration posted for nondetect results is one-half of the detection limit for the sample

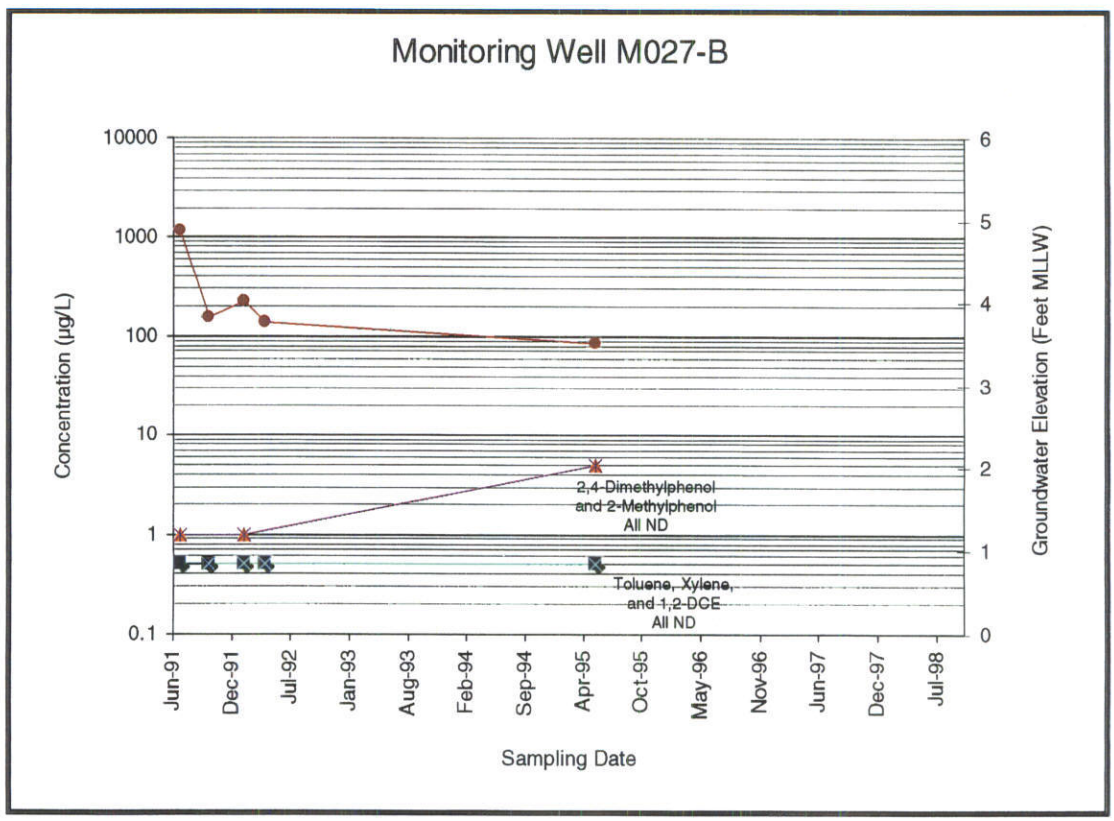
µg/L - Microgram per liter

MLLW - Feet above mean lower low water

FIGURE 6-28
(Sheet 5 of 14)
SITE 1
TIME-SERIES PLOTS
ALAMEDA POINT
ALAMEDA, CALIFORNIA

G0069-168B0302 SITE1-05.P65 GAS 8/10/99





- TOLUENE
- XYLENE
- 2,4-DIMETHYLPHENOL
- 1,2-DCE
- 2-METHYLPHENOL
- WATER LEVEL

NOTES:

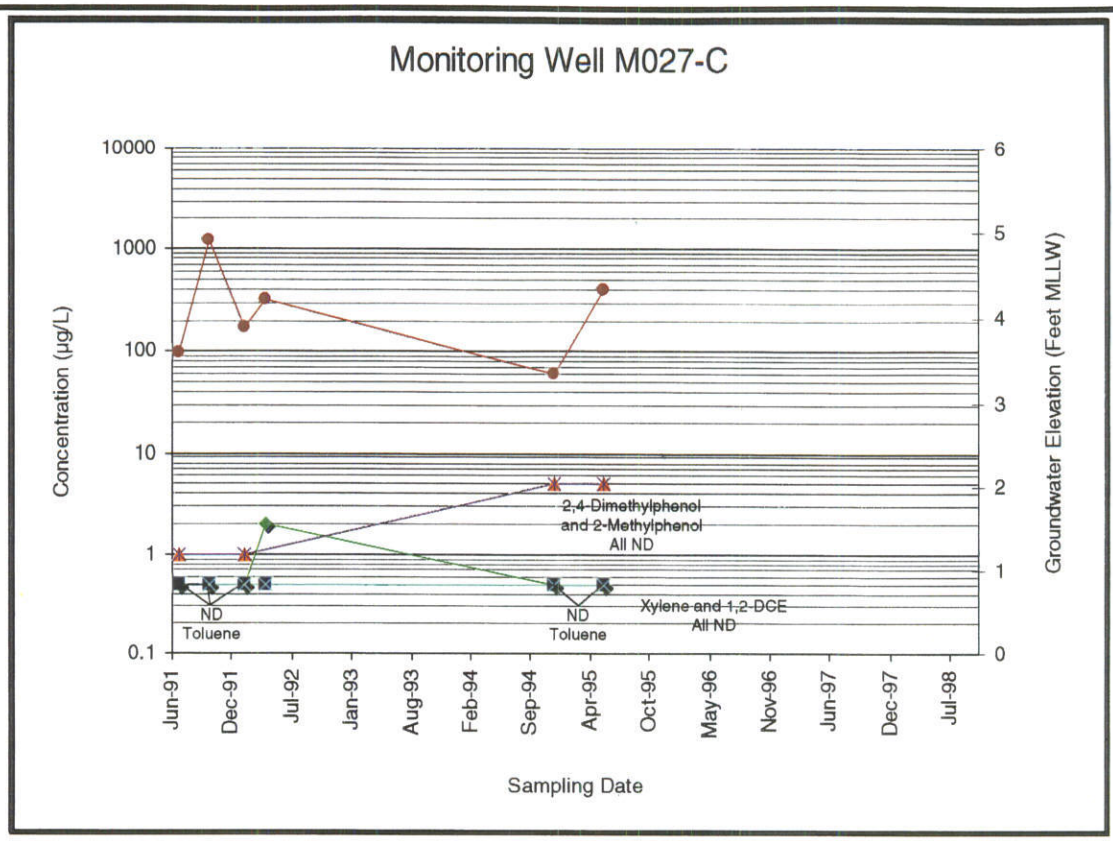
ND - Nondetect; concentration posted for nondetect results is one-half of the detection limit for the sample

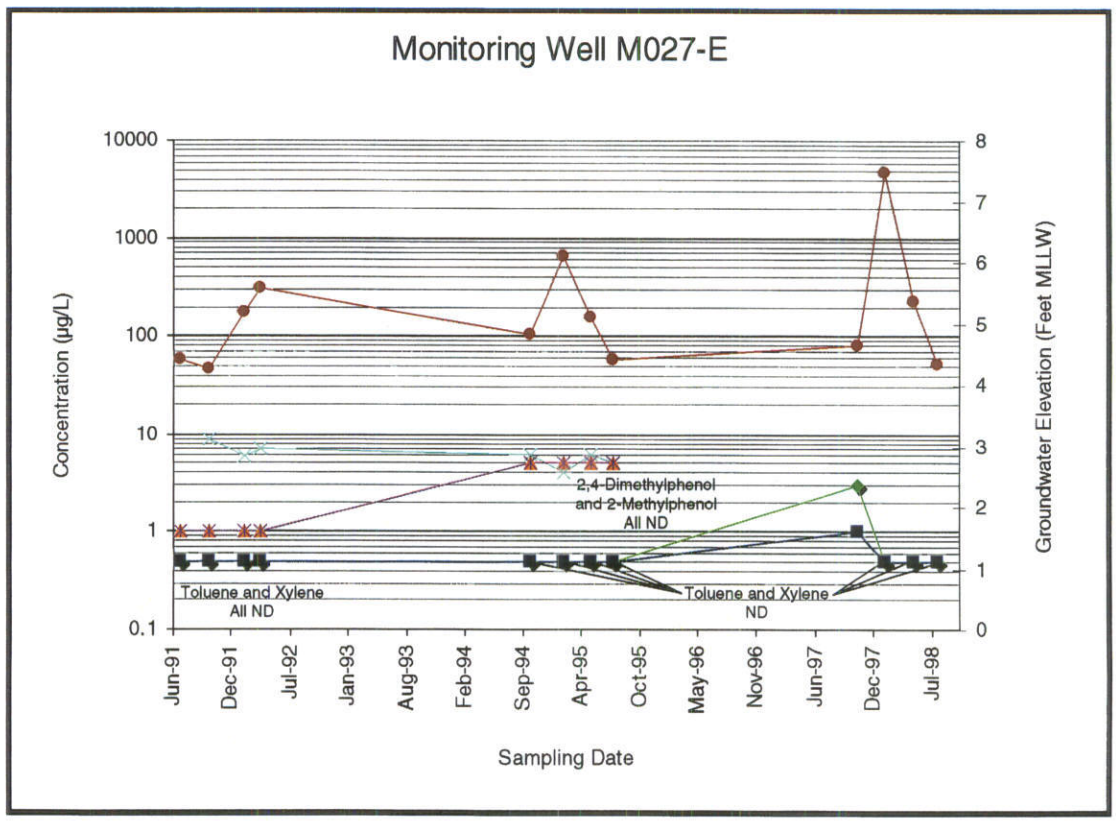
µg/L - Microgram per liter

MLLW - Feet above mean lower low water

FIGURE 6-28
(Sheet 6 of 14)
SITE 1
TIME-SERIES PLOTS
ALAMEDA POINT
ALAMEDA, CALIFORNIA

G0069-168B0302 SITE1-06.P65 GAS 8/10/99





- TOLUENE
- XYLENE
- 2,4-DIMETHYLPHENOL
- 1,2-DCE
- 2-METHYLPHENOL
- WATER LEVEL

NOTES:

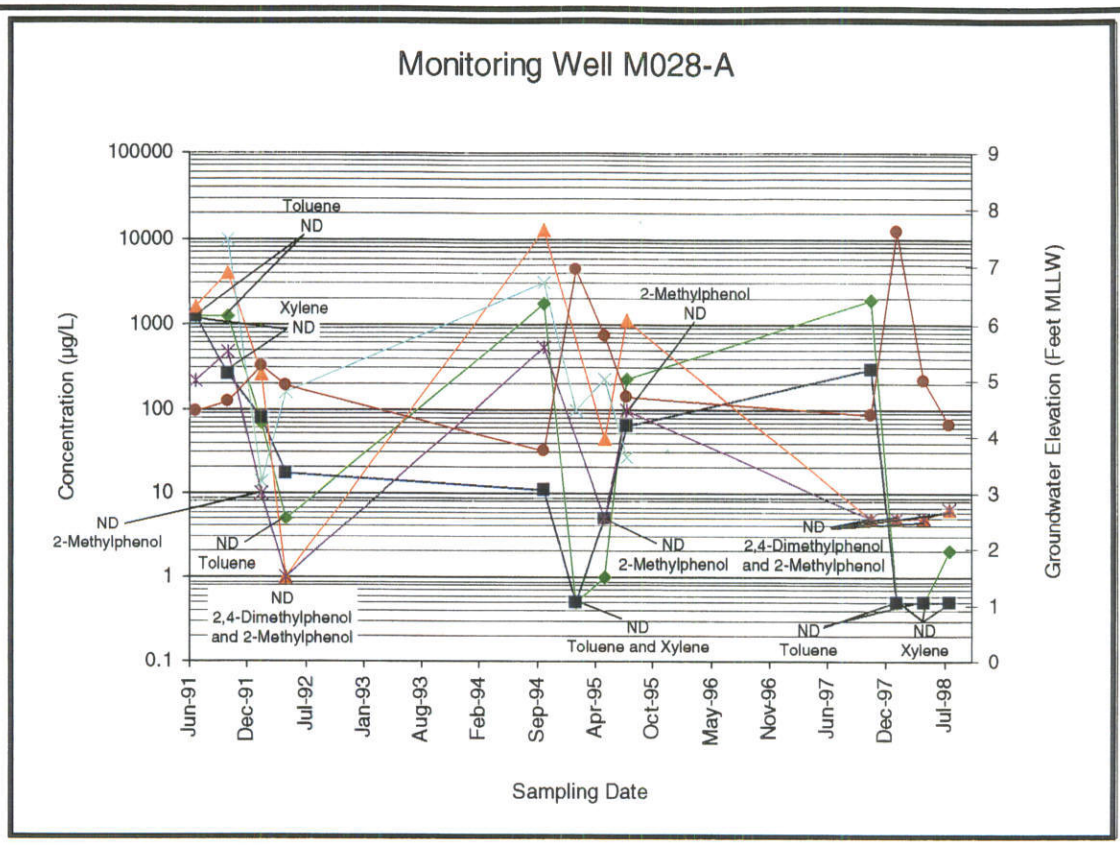
ND - Nondetect; concentration posted for nondetect results is one-half of the detection limit for the sample

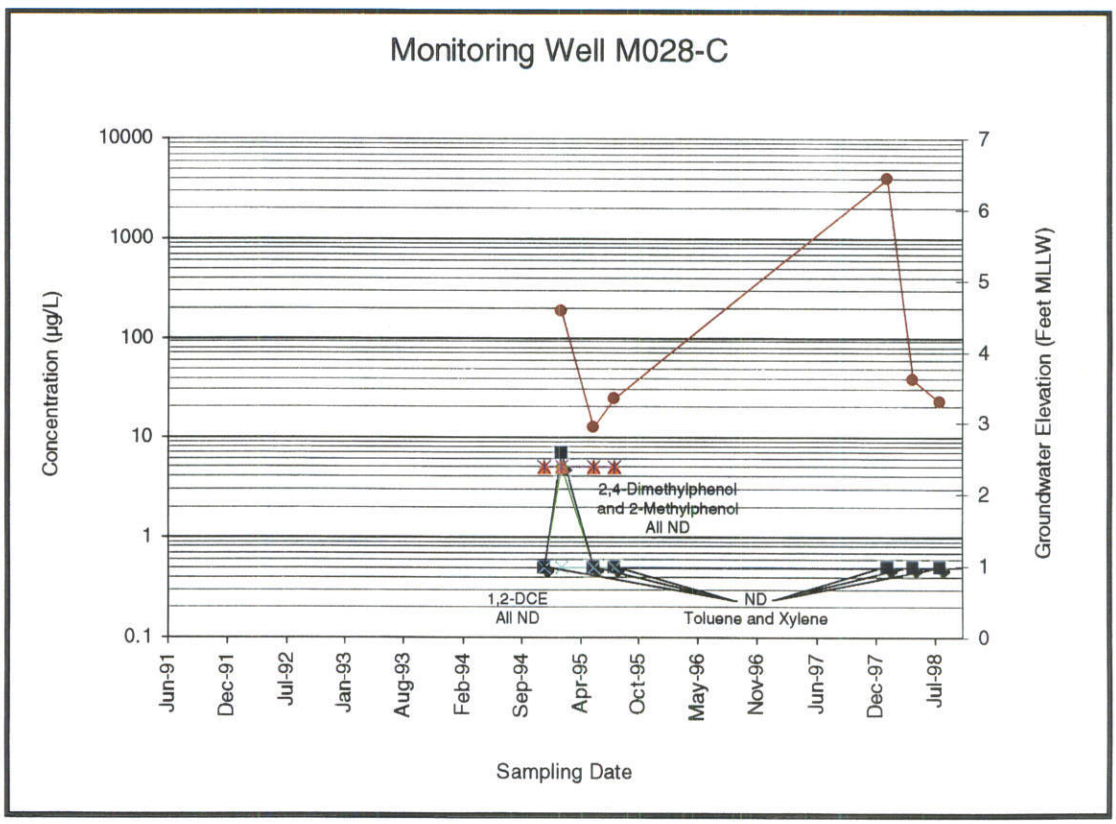
µg/L - Microgram per liter

MLLW - Feet above mean lower low water

FIGURE 6-28
(Sheet 7 of 14)
SITE 1
TIME-SERIES PLOTS
ALAMEDA POINT
ALAMEDA, CALIFORNIA

G0069-168B0302 SITE1-07.P65 GAS 8/11/99





- TOLUENE
- XYLENE
- 2,4-DIMETHYLPHENOL
- 1,2-DCE
- 2-METHYLPHENOL
- WATER LEVEL

NOTES:

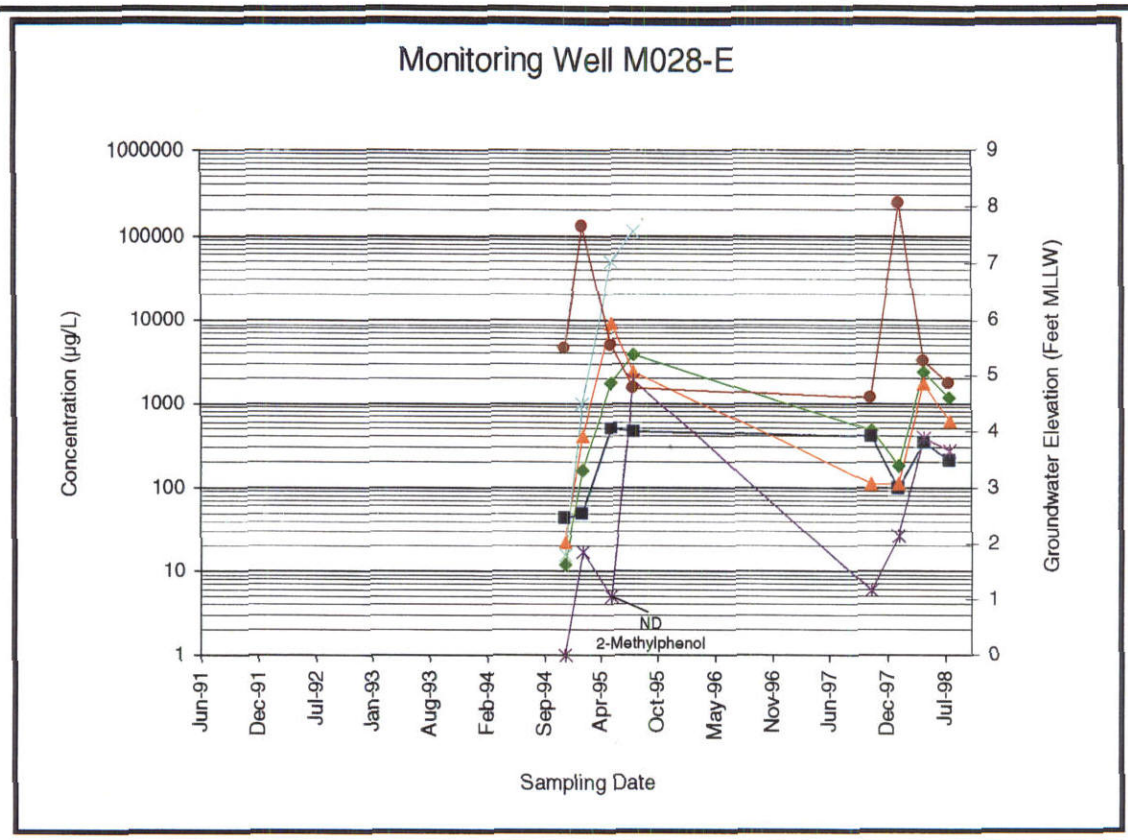
ND - Nondetect; concentration posted for nondetect results is one-half of the detection limit for the sample

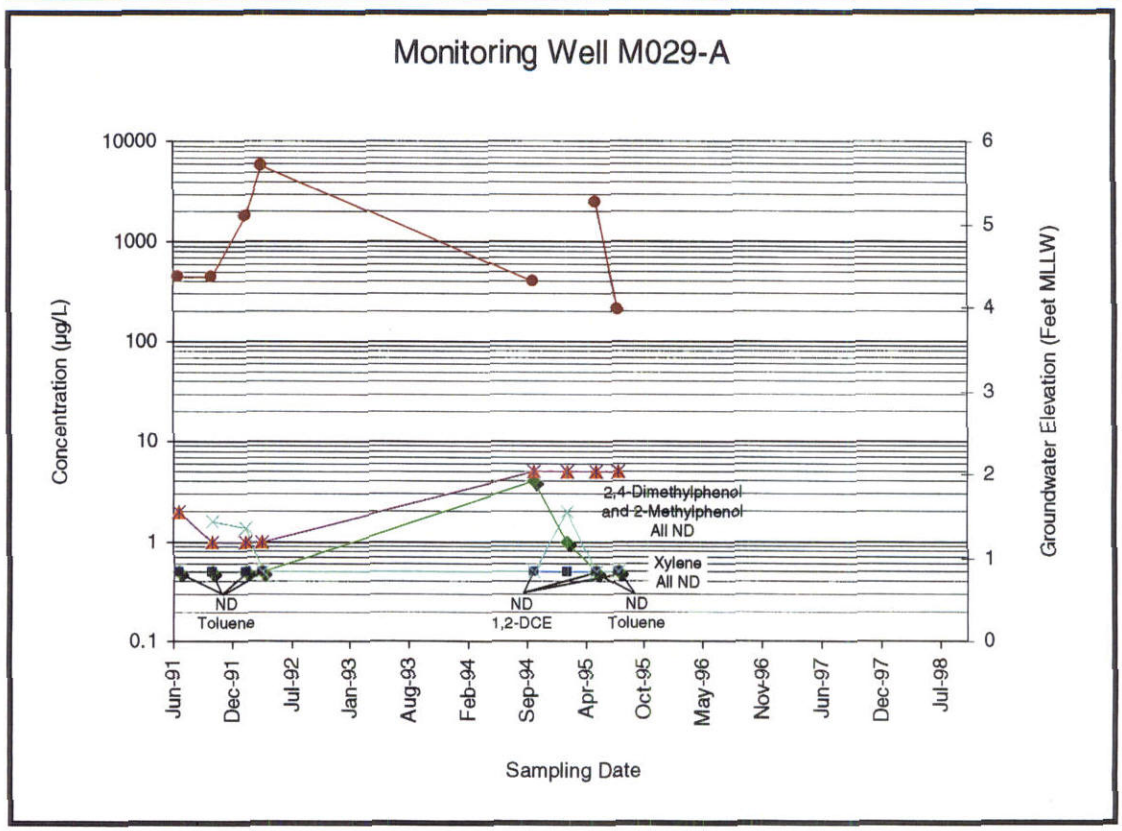
µg/L - Microgram per liter

MLLW - Feet above mean lower low water

FIGURE 6-28
(Sheet 8 of 14)
SITE 1
TIME-SERIES PLOTS
ALAMEDA POINT
ALAMEDA, CALIFORNIA

G0069-168B0302 SITE1-08.P65 GAS 8/10/99





- TOLUENE
- XYLENE
- 2,4-DIMETHYLPHENOL
- 1,2-DCE
- 2-METHYLPHENOL
- WATER LEVEL

NOTES:

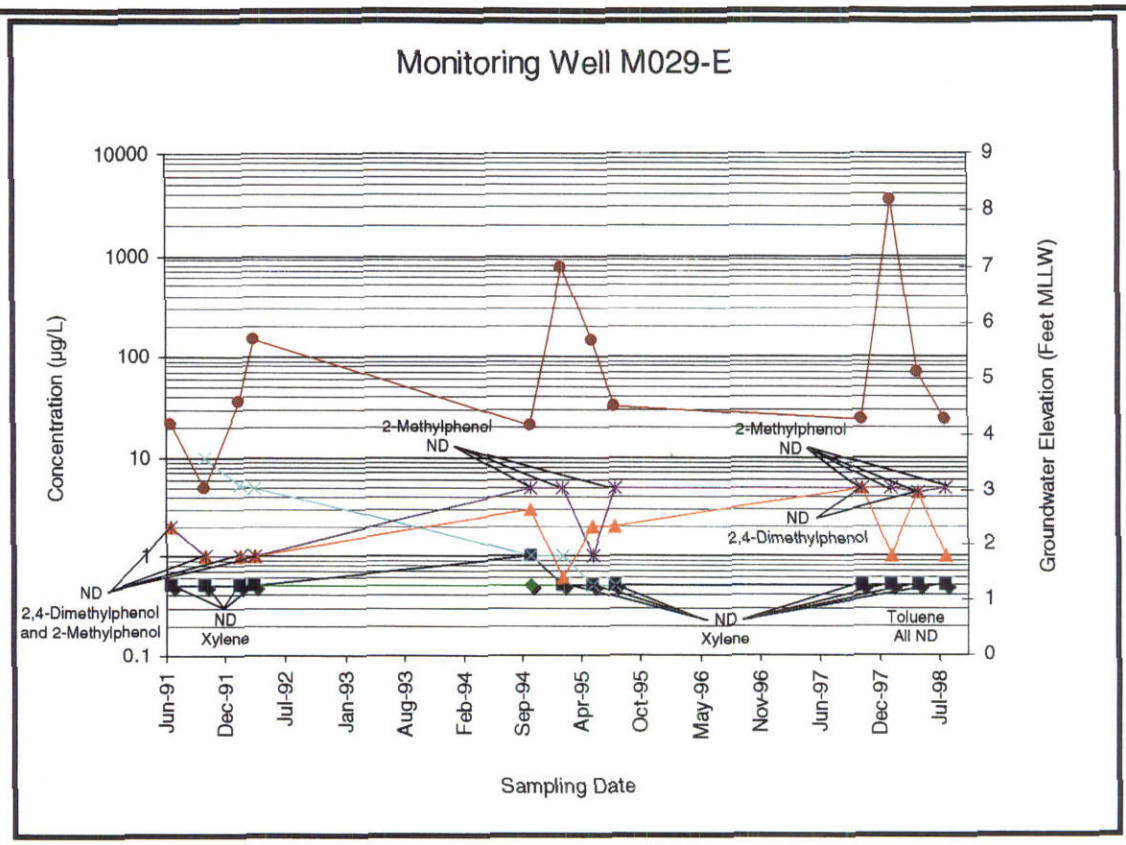
ND - Nondetect; concentration posted for nondetect results is one-half of the detection limit for the sample

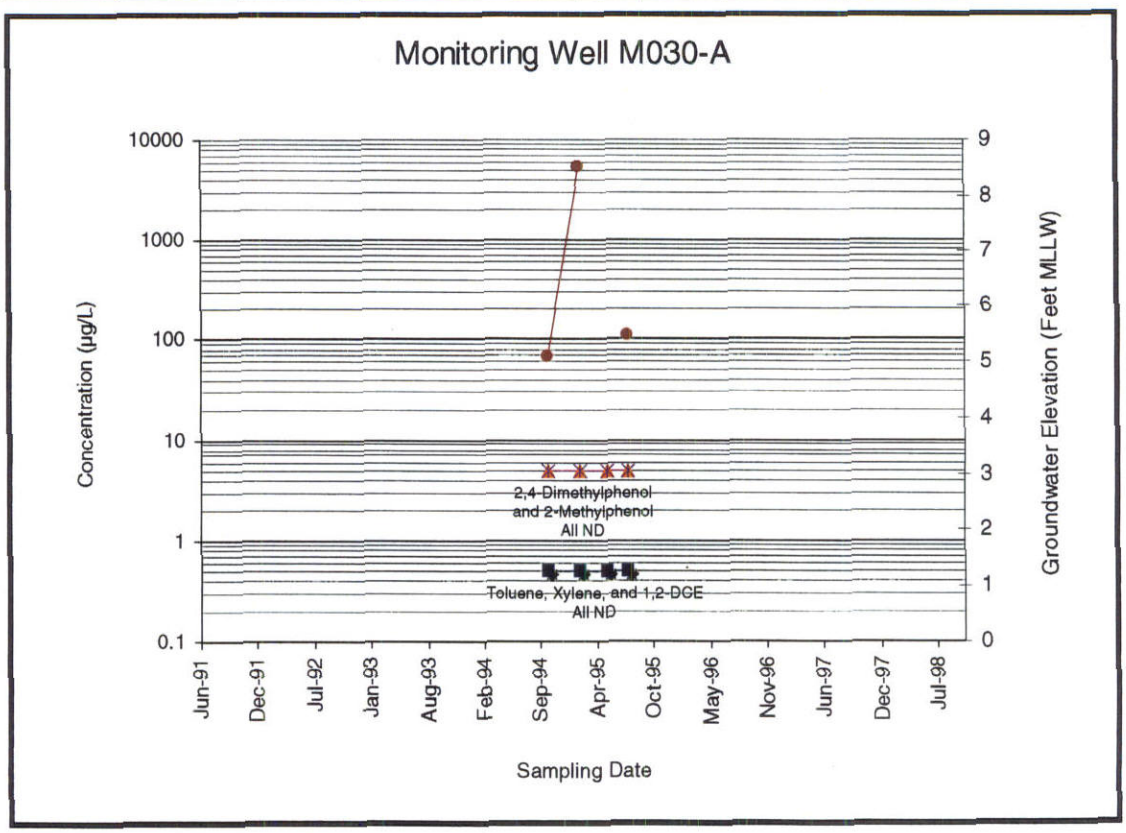
µg/L - Microgram per liter

MLLW - Feet above mean lower low water

FIGURE 6-28
(Sheet 9 of 14)
SITE 1
TIME-SERIES PLOTS
ALAMEDA POINT
ALAMEDA, CALIFORNIA

G0069-168B0302 SITE1-09.P65 GAS 8/11/99





- TOLUENE
- XYLENE
- 2,4-DIMETHYLPHENOL
- 1,2-DCE
- 2-METHYLPHENOL
- WATER LEVEL

NOTES:

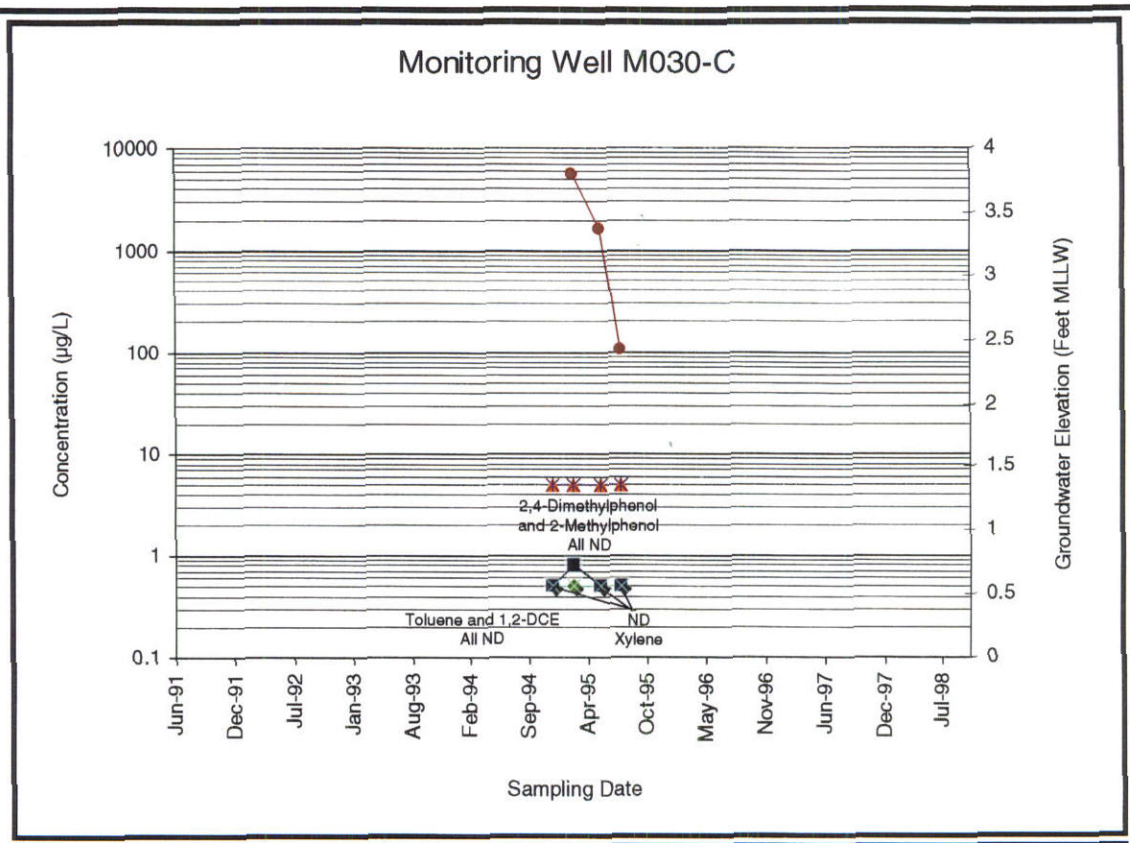
ND - Nondetect; concentration posted for nondetect results is one-half of the detection limit for the sample

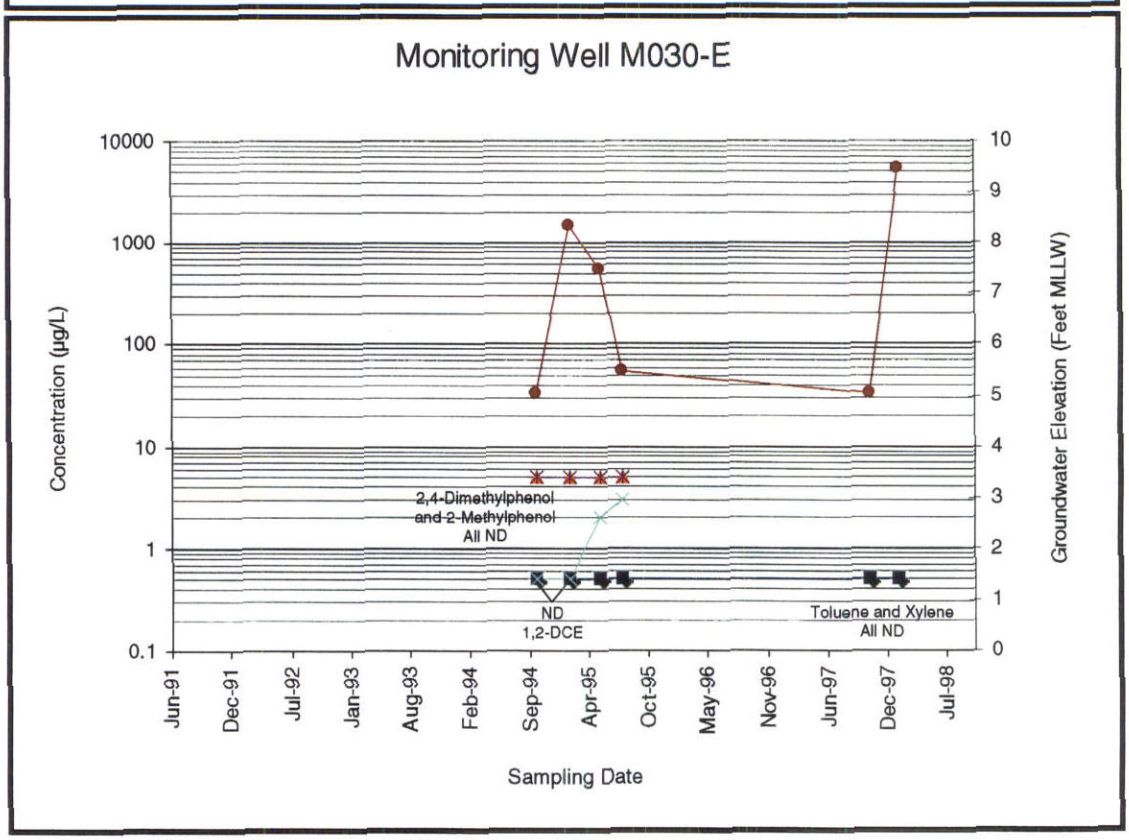
µg/L - Microgram per liter

MLLW - Feet above mean lower low water

FIGURE 6-28
(Sheet 10 of 14)
SITE 1
TIME-SERIES PLOTS
ALAMEDA POINT
ALAMEDA, CALIFORNIA

G0069-168B0302 SITE1-10.P65 GAS 8/10/99





- TOLUENE
- XYLENE
- 2,4-DIMETHYLPHENOL
- 1,2-DCE
- 2-METHYLPHENOL
- WATER LEVEL

NOTES:

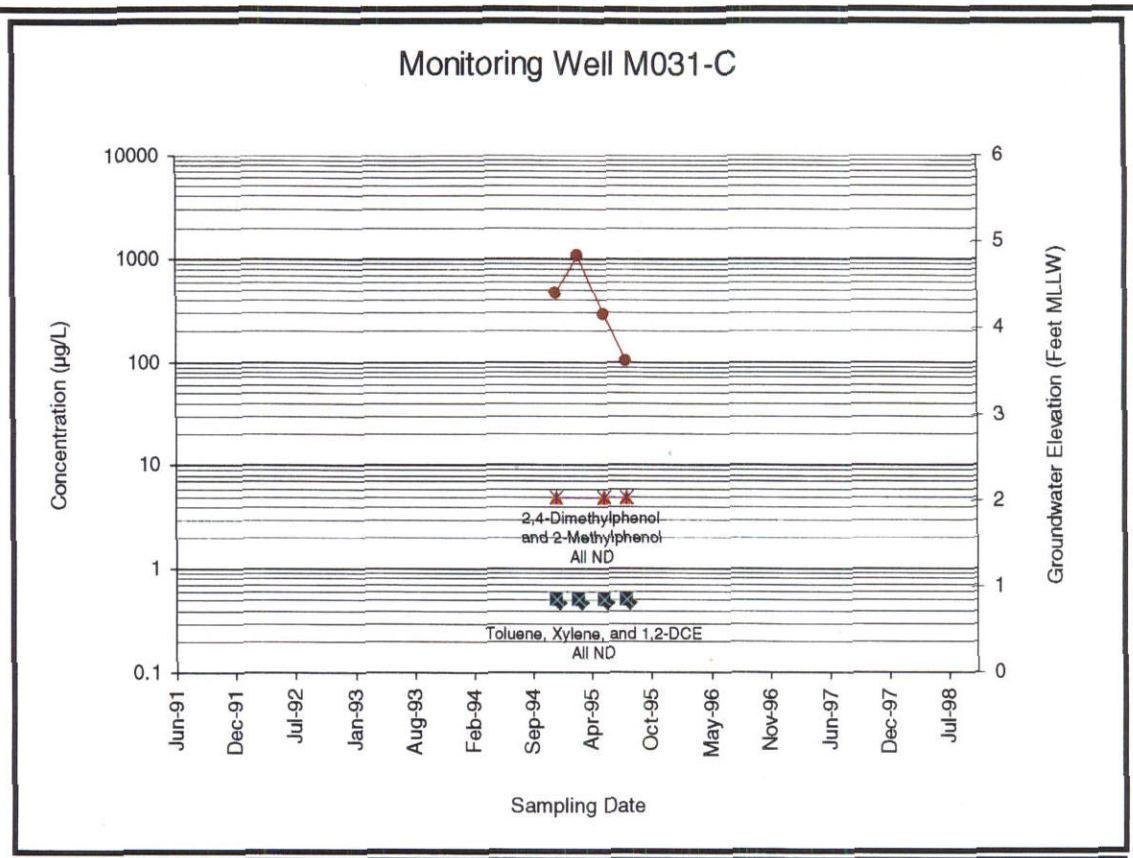
ND - Nondetect; concentration posted for nondetect results is one-half of the detection limit for the sample

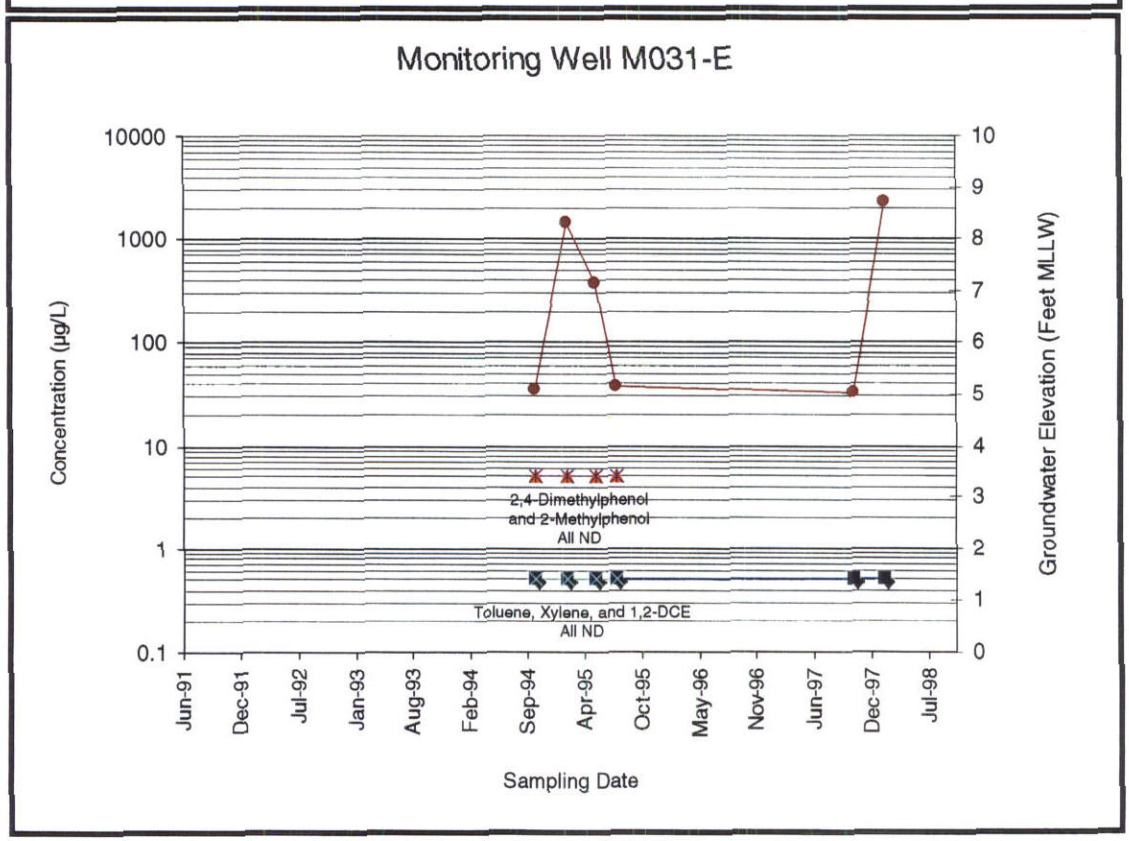
µg/L - Microgram per liter

MLLW - Feet above mean lower low water

FIGURE 6-28
(Sheet 11 of 14)
SITE 1
TIME-SERIES PLOTS
ALAMEDA POINT
ALAMEDA, CALIFORNIA

G0069-168B0302 SITE1-11.P65 GAS 8/10/99





- TOLUENE
- XYLENE
- 2,4-DIMETHYLPHENOL
- 1,2-DCE
- 2-METHYLPHENOL
- WATER LEVEL

NOTES:

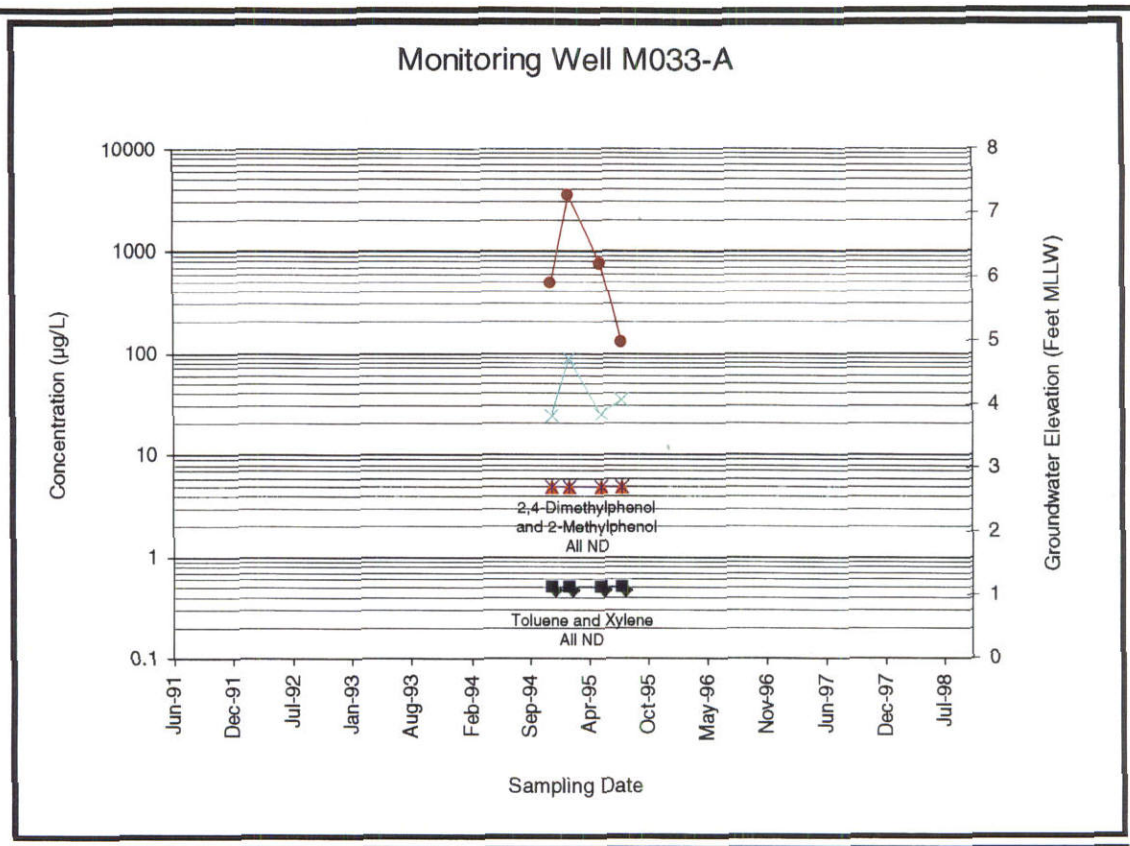
ND - Nondetect; concentration posted for nondetect results is one-half of the detection limit for the sample

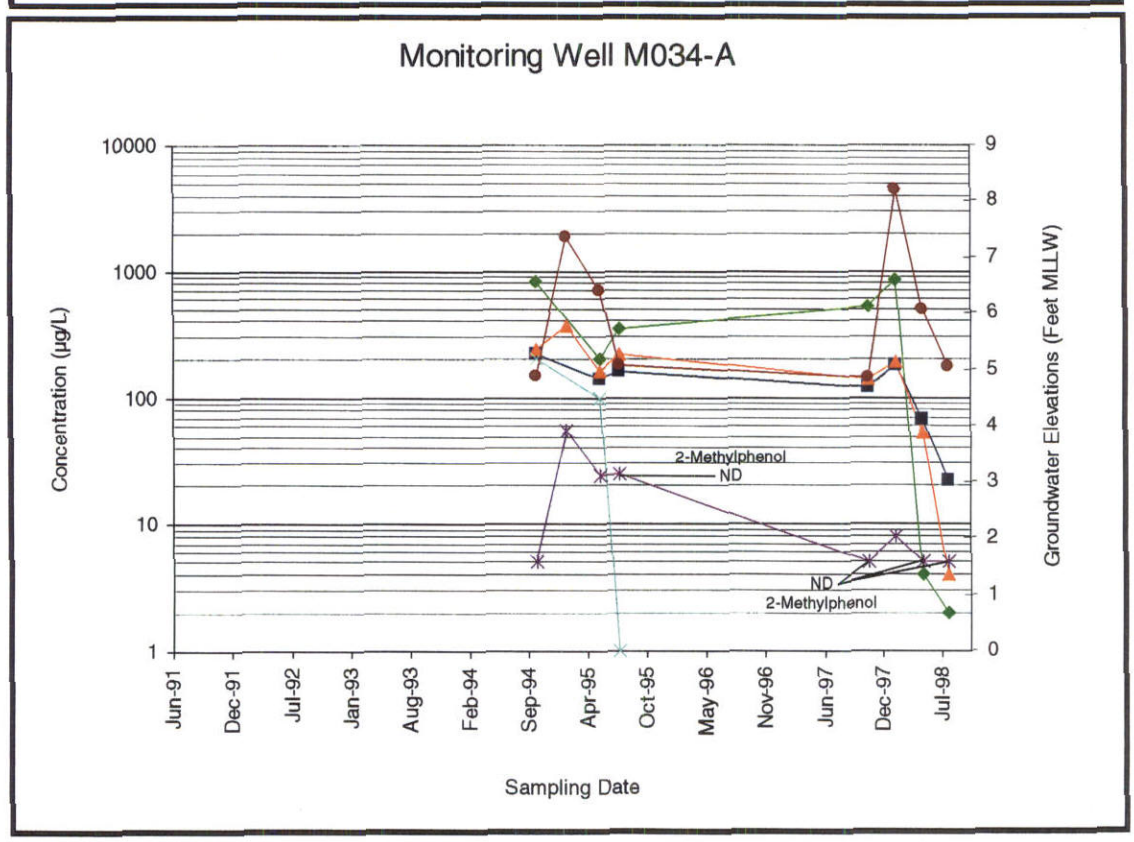
µg/L - Microgram per liter

MLLW - Feet above mean lower low water

FIGURE 6-28
(Sheet 12 of 14)
SITE 1
TIME-SERIES PLOTS
ALAMEDA POINT
ALAMEDA, CALIFORNIA

G0069-168B0302 SITE1-12.P65 GAS 8/10/99





- TOLUENE
- XYLENE
- 2,4-DIMETHYLPHENOL
- 1,2-DCE
- 2-METHYLPHENOL
- WATER LEVEL

NOTES:

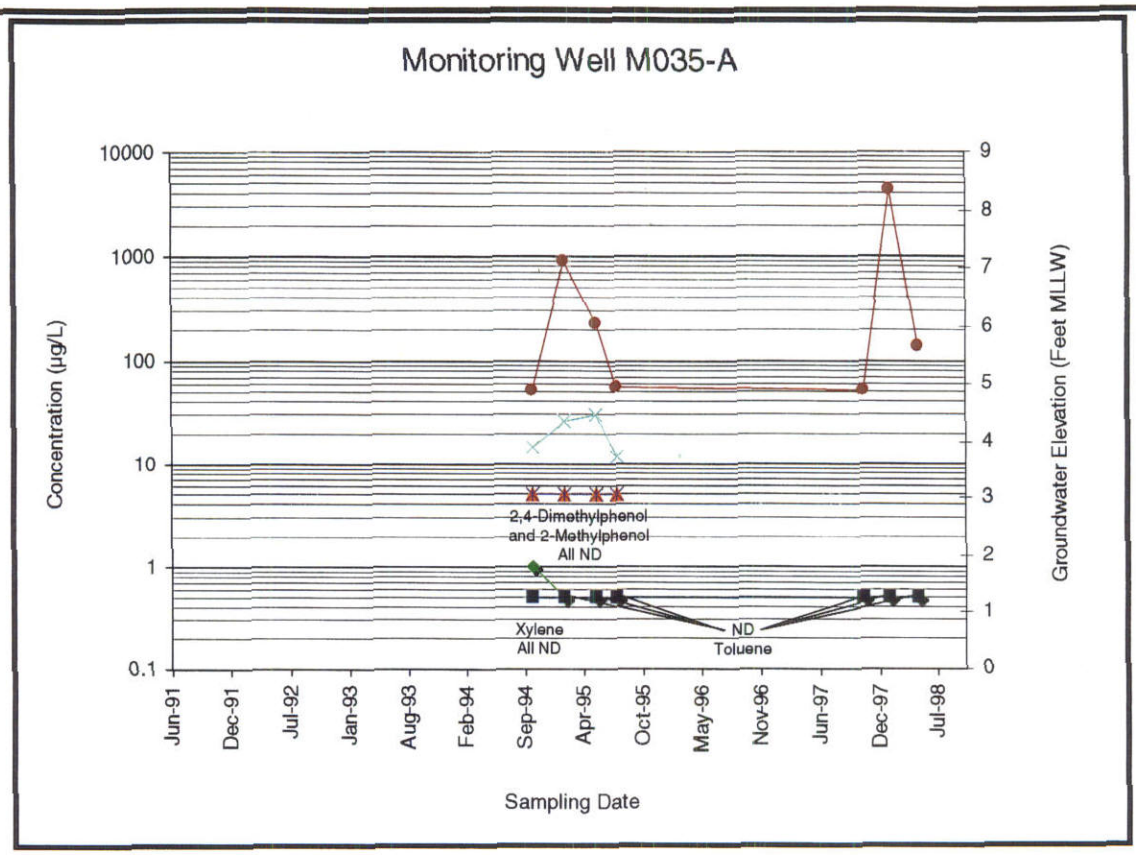
ND - Nondetect; concentration posted for nondetect results is one-half of the detection limit for the sample

µg/L - Microgram per liter

MLLW - Feet above mean lower low water

FIGURE 6-28
(Sheet 13 of 14)
SITE 1
TIME-SERIES PLOTS
ALAMEDA POINT
ALAMEDA, CALIFORNIA

G0069-168B0302 SITE1-13.P65 GAS 8/10/99



- TOLUENE
- XYLENE
- 2,4-DIMETHYLPHENOL
- 1,2-DCE
- 2-METHYLPHENOL
- WATER LEVEL

NOTES:

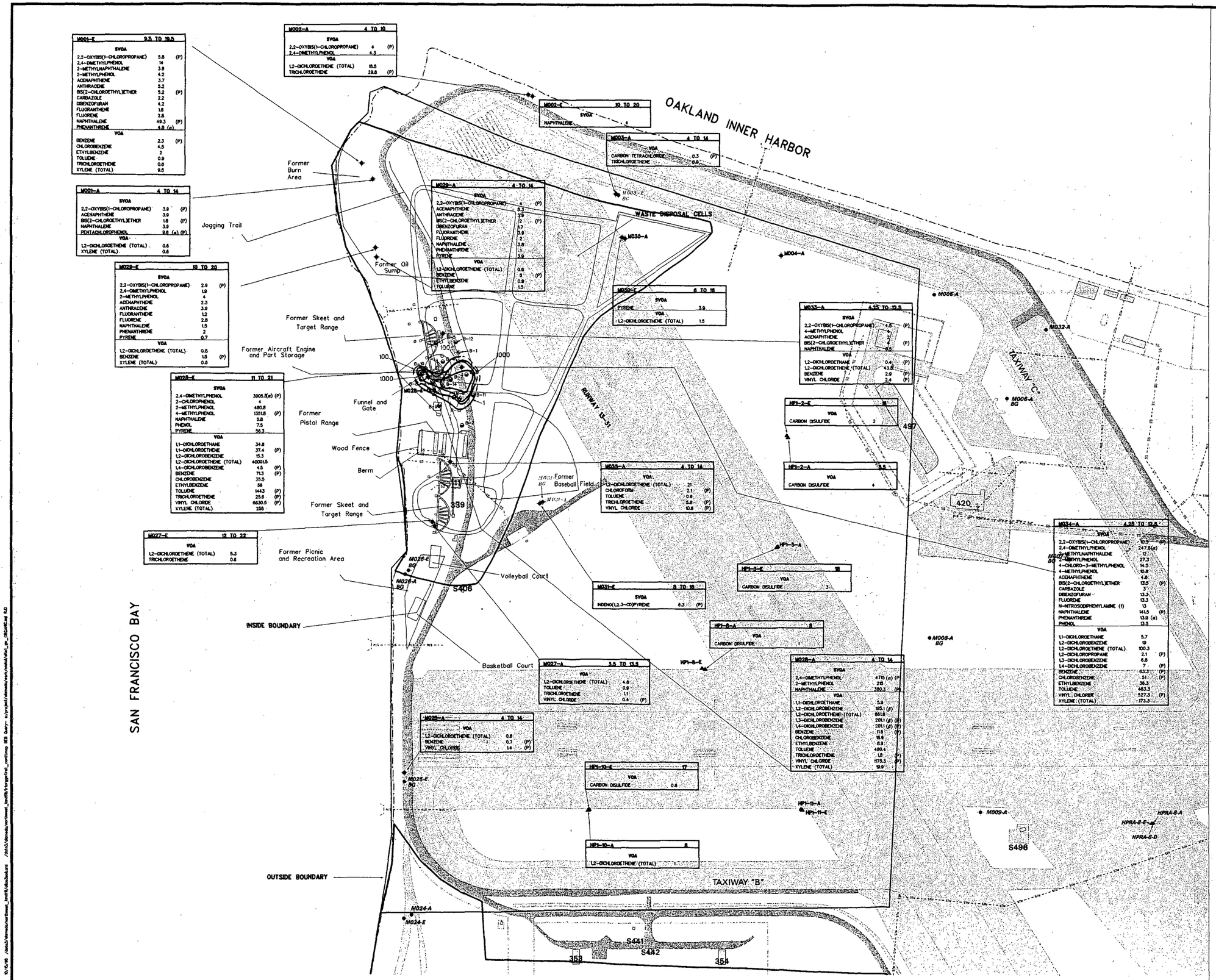
ND - Nondetect; concentration posted for nondetect results is one-half of the detection limit for the sample

µg/L - Microgram per liter

MLLW - Feet above mean lower low water

FIGURE 6-28
(Sheet 14 of 14)
SITE 1
TIME-SERIES PLOTS
ALAMEDA POINT
ALAMEDA, CALIFORNIA

G0069-168B0302 SITE1-14.P65 GAS 8/10/99



LEGEND

- MONITORING WELL LOCATION
- BACKGROUND MONITORING WELL
- HYDROPUNCH LOCATION
- 1-INCH WATERLOO MONITORING WELL
- MULTI-LEVEL WATERLOO GROUNDWATER SAMPLING POINT
- STORM DRAIN LINE
- SANITARY SEWER LINE
- STEAM LINE
- FUEL LINE
- INDUSTRIAL WASTE LINE
- FENCE
- RAILROAD
- SHORELINE
- PAVED ROAD OR PARKING LOT
- BUILDING OR CONCRETE, PAVED, OR COVERED AREA
- 517 BUILDING AND BUILDING NUMBER
- INSTALLATION RESTORATION SITE
- XYLENE CONTOUR (DASHED WHERE INFERRED)
- TOLUENE CONTOUR (DASHED WHERE INFERRED)

SAMPLE ID — M07A-09 2.5 to 11 — SAMPLE DEPTH (SEE NOTES)
COMPOUND CLASS — SVOA
ANALYTE — FLUORANTHENE 3.9 — CONCENTRATION (µg/L)
PENTACHLOROPHENOL 9.6 (P) — QUALIFIER

QUALIFIERS:

a - CONCENTRATION EXCEEDS PROPOSED CALIFORNIA TOXICS RULE CRITERION.

I - CONCENTRATION EXCEEDS NATIONAL TOXICS RULE LOEL

P - CONCENTRATION EXCEEDS RESIDENTIAL PRG

NOTES:

1. ANALYTES NOT ANALYZED FOR OR ANALYTES NOT DETECTED ARE NOT SHOWN ON THIS MAP. A LIST OF ANALYSES PERFORMED FOR EACH SAMPLE FROM SITE 1 IS PRESENTED IN TABLE 6-15. ANALYTICAL DATA FOR EACH SAMPLE ARE PRESENTED IN APPENDIX L A SAMPLING POINT ON THE MAP WITHOUT A DATA BOX INDICATES NO DETECTIONS OF ANALYTES TESTED FOR AT THE SAMPLING LOCATION.
2. CONCENTRATIONS INDICATED FOR MONITORING WELLS ARE AVERAGE VALUES BASED ON SAMPLING EVENTS CONDUCTED BETWEEN 1994 AND 1998. FOR NONDETECT RESULTS, ONE-HALF OF THE DETECTION LIMIT WAS USED TO CALCULATE THE AVERAGE VALUE.
3. SAMPLE DEPTH FOR HYDROPUNCH SAMPLES INDICATES SAMPLE COLLECTION DEPTH IN FEET BELOW GROUND SURFACE. SAMPLE DEPTH FOR MONITORING WELL SAMPLES INDICATES THE SCREENED INTERVAL DEPTH IN FEET BELOW THE TOP OF THE MONITORING WELL CASING.
4. ITALICIZED SAMPLING POINTS INDICATE POINTS OUTSIDE SITE 1. DATA FOR THESE POINTS ARE PRESENTED IN FIGURE 6-25.
5. DATA FROM THE WATERLOO MULTI-LEVEL GROUNDWATER SAMPLING POINTS WAS AVERAGED TO GENERATE ISOCONTOURS. THIS DATA IS PRESENTED IN APPENDIX K.

ACRONYMS:

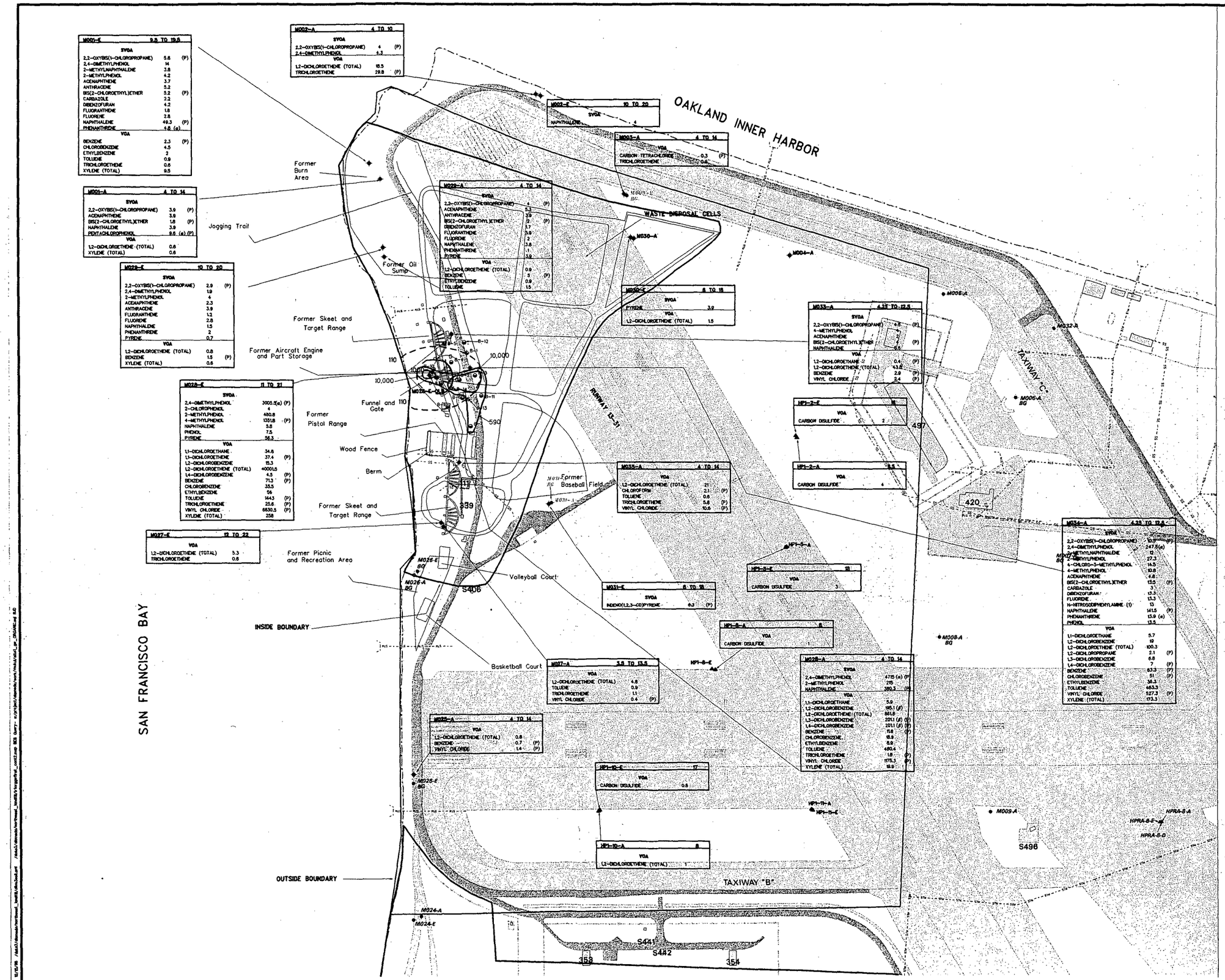
LOEL - LOWEST OBSERVED EFFECT LEVEL
PRG - PRELIMINARY REMEDIATION GOAL
SVOA - SEMIVOLATILE ORGANIC ANALYSIS
SVOC - SEMIVOLATILE ORGANIC COMPOUND
VOA - VOLATILE ORGANIC ANALYSIS
VOC - VOLATILE ORGANIC COMPOUND
µg/L - MICROGRAMS PER LITER

CONTOURED ANALYTES: XYLENE AND TOLUENE

N

75 0 75 150
SCALE: 1" = 150'

FIGURE 6-29
SITE 1
CHEMICAL CONTOURS IN FIRST WATER-BEARING ZONE: XYLENE AND TOLUENE
ALAMEDA POINT
ALAMEDA, CALIFORNIA



LEGEND

- MONITORING WELL LOCATION
- BACKGROUND MONITORING WELL
- HYDROPUNCH LOCATION
- 1-INCH WATERLOO MONITORING WELL
- MULTI-LEVEL WATERLOO GROUNDWATER SAMPLING POINT
- STORM DRAIN LINE
- SANITARY SEWER LINE
- STEAM LINE
- FUEL LINE
- INDUSTRIAL WASTE LINE
- FENCE
- RAILROAD
- SHORELINE
- PAVED ROAD OR PARKING LOT
- BUILDING OR CONCRETE, PAVED, OR COVERED AREA
- BUILDING AND BUILDING NUMBER
- INSTALLATION RESTORATION SITE
- 2,4-DMP CONTOUR (DASHED WHERE INFERRED)
- 1,2 DCE CONTOUR (DASHED WHERE INFERRED)

SAMPLE ID — M07A-09 — 2.5 to 11 — SAMPLE DEPTH (SEE NOTES)
COMPOUND CLASS — SVOA
ANALYTE — FLUORANTHENE — 3.9 — CONCENTRATION (μg/L)
PENTACHLOROPHENOL — 9.6 (P) — QUALIFIER

QUALIFIERS:

α – CONCENTRATION EXCEEDS PROPOSED CALIFORNIA TOXICS RULE CRITERION

β – CONCENTRATION EXCEEDS NATIONAL TOXICS RULE LOEL

P – CONCENTRATION EXCEEDS RESIDENTIAL PRG

NOTES:

1. ANALYTES NOT ANALYZED FOR OR ANALYTES NOT DETECTED ARE NOT SHOWN ON THIS MAP. A LIST OF ANALYSES PERFORMED FOR EACH SAMPLE FROM SITE 1 IS PRESENTED IN TABLE 6-15. ANALYTICAL DATA FOR EACH SAMPLE ARE PRESENTED IN APPENDIX L A. SAMPLING POINT ON THE MAP WITHOUT A DATA BOX INDICATES NO DETECTIONS.
2. CONCENTRATIONS INDICATED FOR MONITORING WELLS ARE AVERAGE VALUES BASED ON SAMPLING EVENTS CONDUCTED BETWEEN 1994 AND 1998. FOR NONDETECT RESULTS, ONE-HALF OF THE DETECTION LIMIT WAS USED TO CALCULATE THE AVERAGE VALUE.
3. SAMPLE DEPTH FOR HYDROPUNCH SAMPLES INDICATES SAMPLE COLLECTION DEPTH IN FEET BELOW GROUND SURFACE. SAMPLE DEPTH FOR MONITORING WELL SAMPLES INDICATES THE SCREENED INTERVAL DEPTH IN FEET BELOW THE TOP OF THE MONITORING WELL CASING.
4. ITALICIZED SAMPLING POINTS INDICATE POINTS OUTSIDE SITE 1. DATA FOR THESE POINTS ARE PRESENTED IN FIGURE 6-23.
5. DATA FROM THE WATERLOO MULTI-LEVEL GROUNDWATER SAMPLING POINTS WAS AVERAGED TO GENERATE ISOCONTOURS. THIS DATA IS PRESENTED IN APPENDIX K.

ACRONYMS:

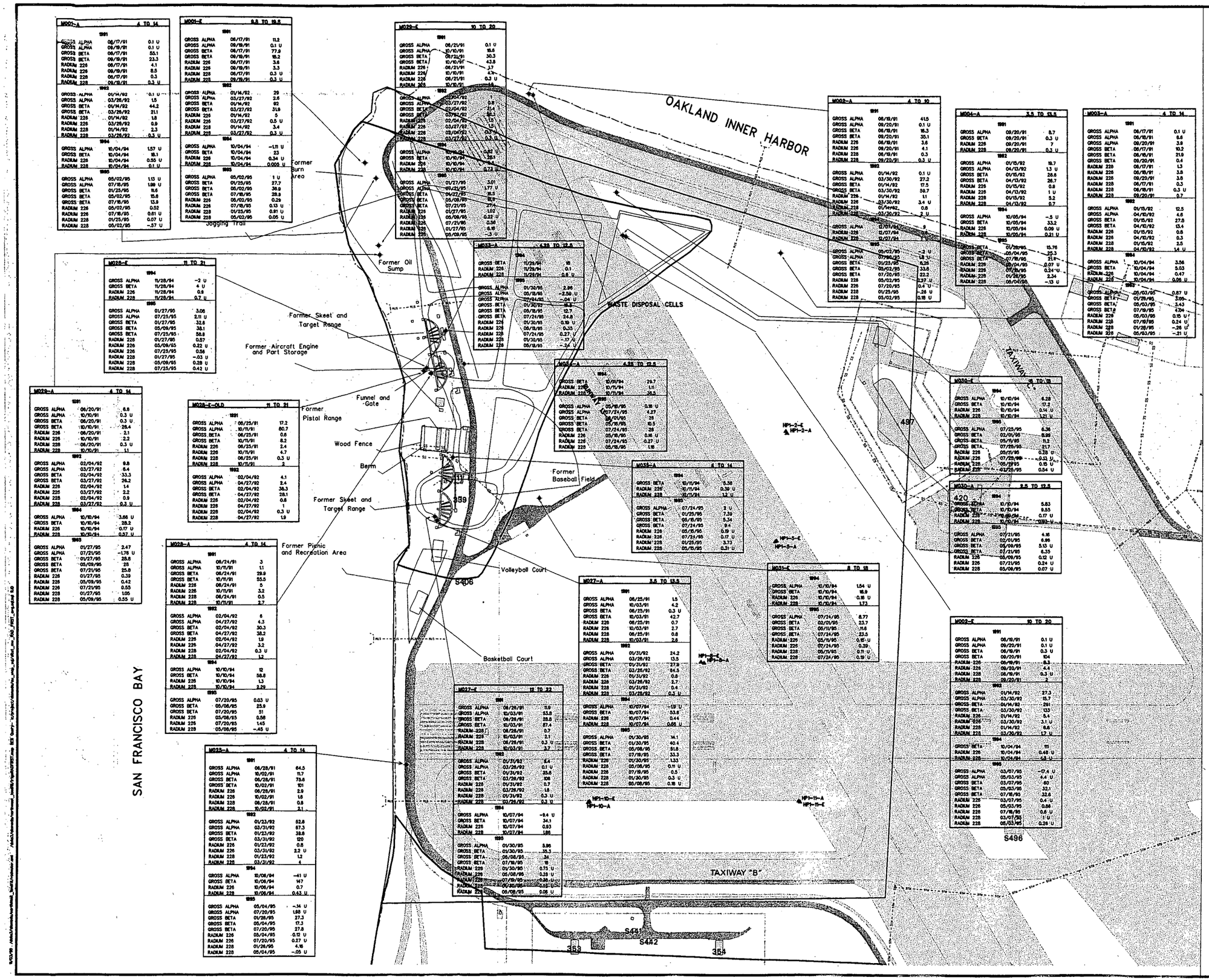
LOEL – LOWEST OBSERVED EFFECT LEVEL
PRG – PRELIMINARY REMEDIATION GOAL
SVOA – SEMIVOLATILE ORGANIC ANALYSIS
SVOC – SEMIVOLATILE ORGANIC COMPOUND
VOA – VOLATILE ORGANIC ANALYSIS
VOC – VOLATILE ORGANIC COMPOUND
μg/L – MICROGRAMS PER LITER
2,4-DMP – 2,4-DIMETHYLPHENOL
1,2-DCE – 1,2 DICHLOROETHENE

CONTOURED ANALYTES: 1,2-DICHLOROETHENE AND 2,4-DIMETHYLPHENOL

N

75 0 75 150
SCALE: 1" = 150'

FIGURE 6-30
SITE 1
CHEMICAL CONTOURS IN FIRST WATER-BEARING ZONE: 1,2-DCE AND 2,4-DMP
ALAMEDA POINT
ALAMEDA, CALIFORNIA



LEGEND

- MONITORING WELL LOCATION
- HYDROPUNCH LOCATION
- STORM DRAIN LINE
- SANITARY SEWER LINE
- STEAM LINE
- FUEL LINE
- INDUSTRIAL WASTE LINE
- FENCE
- RAILROAD
- SHORELINE
- PAVED ROAD OR PARKING LOT
- BUILDING OR CONCRETE, PAVED, OR COVERED AREA
- 817 BUILDING AND BUILDING NUMBER
- INSTALLATION RESTORATION SITE

SAMPLE ID — M07A-09 — 2.5 to 11 — SAMPLE DEPTH (SEE NOTES)
YEAR SAMPLED — 1994 — SAMPLE DATE
ANALYTE — RADIUM 226 12/05/94 — 39 / 9.6 U — CONCENTRATION (pCi/L)
RADIONUCLIDE NOT DETECTED AT METHOD DETECTION LIMIT OF 9.6 pCi/L

NOTES:

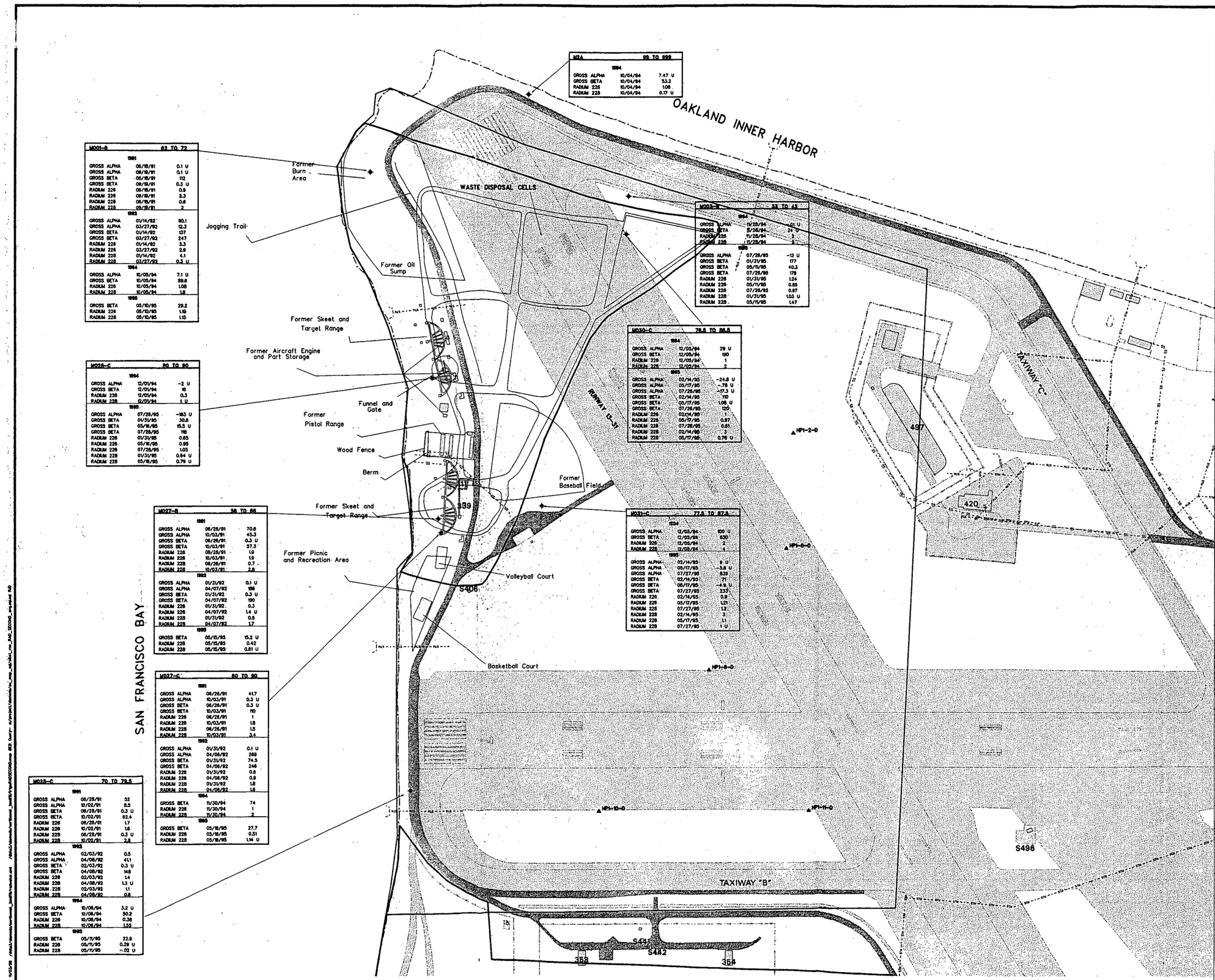
1. A SAMPLING POINT ON THE MAP WITHOUT A DATA BOX INDICATES NO DETECTIONS.
2. SAMPLE DEPTH FOR HYDROPUNCH SAMPLES INDICATES SAMPLE COLLECTION DEPTH IN FEET BELOW GROUND SURFACE. SAMPLE DEPTH FOR MONITORING WELL SAMPLES INDICATES THE SCREENED INTERVAL DEPTH IN FEET BELOW THE TOP OF THE MONITORING WELL CASING.
3. NEGATIVE VALUES ARE LESS THAN THE DETECTION LIMIT.

ACRONYMS:
pCi/L – PICOCURIES PER LITER

N

75 0 75 150
SCALE: 1" = 150'

FIGURE 6-31
SITE 1
RADIONUCLIDES
DETECTED IN GROUNDWATER:
FIRST WATER-BEARING ZONE
ALAMEDA POINT
ALAMEDA, CALIFORNIA



M02A		99 TO 999
1994		
GROSS ALPHA	10/04/94	7.47 U
GROSS BETA	10/04/94	53.2
RADIUM 226	10/04/94	1.06
RADIUM 228	10/04/94	0.17 U

M001-B		62 TO 72
1991		
GROSS ALPHA	06/18/91	0.1 U
GROSS ALPHA	09/19/91	0.1 U
GROSS BETA	06/18/91	112
GROSS BETA	09/19/91	0.3 U
RADIUM 226	06/18/91	0.9
RADIUM 226	09/19/91	2.3
RADIUM 228	06/18/91	0.6
RADIUM 228	09/19/91	2
1992		
GROSS ALPHA	01/14/92	90.1
GROSS ALPHA	03/27/92	12.3
GROSS BETA	01/14/92	137
GROSS BETA	03/27/92	247
RADIUM 226	01/14/92	3.3
RADIUM 226	03/27/92	2.9
RADIUM 228	01/14/92	4.1
RADIUM 228	03/27/92	0.3 U
1994		
GROSS ALPHA	10/05/94	7.1 U
GROSS BETA	10/05/94	89.6
RADIUM 226	10/05/94	1.08
RADIUM 228	10/05/94	1.8
1995		
GROSS BETA	05/10/95	29.2
RADIUM 226	05/10/95	1.19
RADIUM 228	05/10/95	1.15

M003-B		53 TO 63
1994		
GROSS ALPHA	11/28/94	0.1 U
GROSS BETA	11/28/94	24 U
RADIUM 226	11/28/94	3
RADIUM 228	11/28/94	2
1995		
GROSS ALPHA	07/26/95	-13 U
GROSS BETA	01/31/95	177
GROSS BETA	05/11/95	40.3
GROSS BETA	07/25/95	178
RADIUM 226	01/31/95	1.24
RADIUM 226	05/11/95	0.88
RADIUM 226	07/26/95	0.97
RADIUM 228	01/31/95	1.03 U
RADIUM 228	05/11/95	1.47

M030-C		76.5 TO 86.5
1994		
GROSS ALPHA	12/05/94	29 U
GROSS BETA	12/05/94	190
RADIUM 226	12/05/94	1
RADIUM 228	12/05/94	2
1995		
GROSS ALPHA	02/14/95	-24.8 U
GROSS ALPHA	05/17/95	-.78 U
GROSS ALPHA	07/26/95	-17.3 U
GROSS BETA	02/14/95	110
GROSS BETA	05/17/95	1.06 U
GROSS BETA	07/26/95	120
RADIUM 226	02/14/95	1.1
RADIUM 226	05/17/95	0.97
RADIUM 226	07/26/95	0.61
RADIUM 228	02/14/95	3
RADIUM 228	05/17/95	0.76 U

M031-C		77.5 TO 87.5
1994		
GROSS ALPHA	12/05/94	100 U
GROSS BETA	12/05/94	630
RADIUM 226	12/05/94	2
RADIUM 228	12/05/94	4
1995		
GROSS ALPHA	02/14/95	9 U
GROSS ALPHA	05/17/95	-3.8 U
GROSS ALPHA	07/27/95	639
GROSS BETA	02/14/95	71
GROSS BETA	05/17/95	-4.9 U
GROSS BETA	07/27/95	233
RADIUM 226	02/14/95	0.9
RADIUM 226	05/17/95	1.21
RADIUM 226	07/27/95	1.2
RADIUM 228	02/14/95	3
RADIUM 228	05/17/95	1.1
RADIUM 228	07/27/95	1 U

M07B-C		80 TO 90
1994		
GROSS ALPHA	12/01/94	-2 U
GROSS BETA	12/01/94	16
RADIUM 226	12/01/94	0.3
RADIUM 228	12/01/94	1 U
1995		
GROSS ALPHA	07/26/95	-16.3 U
GROSS BETA	01/31/95	30.8
GROSS BETA	05/18/95	15.5 U
GROSS BETA	07/26/95	118
RADIUM 226	01/31/95	0.65
RADIUM 226	05/18/95	0.95
RADIUM 226	07/26/95	1.05
RADIUM 228	01/31/95	0.64 U
RADIUM 228	05/18/95	0.79 U

M027-B		56 TO 66
1991		
GROSS ALPHA	06/26/91	70.6
GROSS ALPHA	10/03/91	45.3
GROSS BETA	06/26/91	0.3 U
GROSS BETA	10/03/91	57.3
RADIUM 226	06/26/91	1.9
RADIUM 226	10/03/91	1.9
RADIUM 228	06/26/91	0.7
RADIUM 228	10/03/91	2.8
1992		
GROSS ALPHA	01/31/92	0.1 U
GROSS ALPHA	04/07/92	188
GROSS BETA	01/31/92	0.3 U
GROSS BETA	04/07/92	190
RADIUM 226	01/31/92	0.3
RADIUM 226	04/07/92	1.4 U
RADIUM 228	01/31/92	0.5
RADIUM 228	04/07/92	1.7
1995		
GROSS BETA	05/15/95	15.2 U
RADIUM 226	05/15/95	0.42
RADIUM 228	05/15/95	0.81 U

M027-C		80 TO 90
1991		
GROSS ALPHA	06/26/91	417
GROSS ALPHA	10/03/91	0.3 U
GROSS BETA	06/26/91	0.3 U
GROSS BETA	10/03/91	110
RADIUM 226	06/26/91	1
RADIUM 226	10/03/91	1.8
RADIUM 228	06/26/91	1.5
RADIUM 228	10/03/91	3.4
1992		
GROSS ALPHA	01/31/92	0.1 U
GROSS ALPHA	04/06/92	289
GROSS BETA	01/31/92	74.5
GROSS BETA	04/06/92	246
RADIUM 226	01/31/92	0.6
RADIUM 226	04/06/92	0.9
RADIUM 228	01/31/92	1.8
RADIUM 228	04/06/92	1.6
1994		
GROSS BETA	11/30/94	74
RADIUM 226	11/30/94	1
RADIUM 228	11/30/94	2
1995		
GROSS BETA	05/18/95	27.7
RADIUM 226	05/18/95	0.51
RADIUM 228	05/18/95	1.14 U

M025-C		70 TO 79.5
1991		
GROSS ALPHA	06/28/91	52
GROSS ALPHA	10/02/91	8.5
GROSS BETA	06/28/91	0.3 U
GROSS BETA	10/02/91	62.4
RADIUM 226	06/28/91	1.7
RADIUM 226	10/02/91	1.6
RADIUM 228	06/28/91	0.3 U
RADIUM 228	10/02/91	2.8
1992		
GROSS ALPHA	02/03/92	0.5
GROSS ALPHA	04/08/92	411
GROSS BETA	02/03/92	0.3 U
GROSS BETA	04/08/92	148
RADIUM 226	02/03/92	1.4
RADIUM 226	04/08/92	1.3 U
RADIUM 226	02/03/92	1.1
RADIUM 228	04/08/92	0.8
1994		
GROSS ALPHA	10/06/94	3.2 U
GROSS BETA	10/06/94	50.2
RADIUM 226	10/06/94	0.38
RADIUM 228	10/06/94	1.55
1995		
GROSS BETA	05/11/95	22.8
RADIUM 226	05/11/95	0.29 U
RADIUM 228	05/11/95	-.02 U

LEGEND

- MONITORING WELL LOCATION
- HYDROPUNCH LOCATION
- STORM DRAIN LINE
- SANITARY SEWER LINE
- STEAM LINE
- FUEL LINE
- INDUSTRIAL WASTE LINE
- FENCE
- RAILROAD
- SHORELINE
- PAVED ROAD OR PARKING LOT
- BUILDING OR CONCRETE, PAVED, OR COVERED AREA
- BUILDING AND BUILDING NUMBER
- INSTALLATION RESTORATION SITE

SAMPLE ID	M07A-09	2.5 to 11	SAMPLE DEPTH (SEE NOTES)
YEAR SAMPLED	1994		SAMPLE DATE
ANALYTE	RADIUM 228 12/05/94	39	CONCENTRATION (pCi/L)
		9.8 U	RADIONUCLIDE NOT DETECTED AT METHOD DETECTION LIMIT OF 9.8 pCi/L

NOTES:

1. A SAMPLING POINT ON THE MAP WITHOUT A DATA BOX INDICATES NO DETECTIONS.
2. SAMPLE DEPTH FOR HYDROPUNCH SAMPLES INDICATES SAMPLE COLLECTION DEPTH IN FEET BELOW GROUND SURFACE. SAMPLE DEPTH FOR MONITORING WELL SAMPLES INDICATES THE SCREENED INTERVAL DEPTH IN FEET BELOW THE TOP OF THE MONITORING WELL CASING.
3. NEGATIVE VALUES ARE LESS THAN THE DETECTION LIMIT.

ACRONYMS:
pCi/L – PICOCURIES PER LITER

75 0 75 150
SCALE: 1" = 150'

FIGURE 6-32
SITE 1
RADIONUCLIDES
DETECTED IN GROUNDWATER:
SECOND WATER-BEARING ZONE
ALAMEDA POINT
ALAMEDA, CALIFORNIA