TABLE 3-36

CORRECTIVE ACTION AREA 13
DATA GAP INVESTIGATION SUMMARY TABLE
ALAMEDA POINT, ALAMEDA, CALIFORNIA
(Page 1 of 4)

DATA GAP	FIELD ACTIVITIES	FIELD OBSERVATIONS
Data Gap Type I: Floating Product	• Six soil borings were advanced to 10 feet bgs. • Six piezometers were installed and checked for floating product 24 hours after installation. • Six groundwater samples were collected.	• The soil boring collected at Sampling Location CA13-01 did not have any visible staining or odors (near the aboveground storage tanks). • No floating product was present at Sampling Location CA13-01. • The groundwater sample collected at Sampling Location CA13-01 did not have a hydrocarbon odor or sheen. • Soil borings collected at Sampling Locations CA13-02 through CA13-06 (near Building 397) had a strong hydrocarbon odor and black discoloration. • Floating product (about 6 inches) was present at Sampling Locations CA13-03 and CA13-06; therefore, groundwater samples were not collected at these locations. • No floating product was present at Sampling Locations CA13-02, CA13-04, and CA13-05. • Groundwater samples collected at Sampling Locations CA13-02, CA13-04, and CA13-05 had a strong hydrocarbon odor and a sheen. • Depth to groundwater ranged from 3.3 to 6 feet bgs.

TABLE 3-36

CORRECTIVE ACTION AREA 13
DATA GAP INVESTIGATION SUMMARY TABLE
ALAMEDA POINT, ALAMEDA, CALIFORNIA
(Page 2 of 4)

DATA GAP	FIELD ACTIVITIES	FIELD OBSERVATIONS
Data Gap Type II: Storm Drain Exposure Pathway	• The storm drain reaches located near Buildings 397 and 530 were investigated. • The presence of floating product was checked in MH 5J-2 (east of Building 397). • Two groundwater samples were collected from MH 5-JF (north of Building 530).	• Floating product was present in MH 5J-2. • The storm drain reaches located east of Building 397 are reportedly capped, with no release to an outfall. • Investigation revealed that there is no storm drain reach running in a north-south direction along the western side of Building 530 that connects to MH 5-J. • Water in the storm drain reaches north of Building 530 had a slight hydrocarbon odor, but no sheen. • Groundwater infiltrated the storm drain reach located north of Building 530.
Data Gap Type III: Current Groundwater Total Total Petroleum Hydrocarbons Concentrations Near Storm Drains	• Three soil borings were advanced to 8 feet bgs. • Nine groundwater samples were collected (five at the soil boring locations and four from existing monitoring wells).	• The soil borings did not have any visible staining or odors. • Depth to groundwater ranged from 4 to 6.5 feet bgs. • Groundwater samples had a petroleum odor, but no sheen.

TABLE 3-36

CORRECTIVE ACTION AREA 13
DATA GAP INVESTIGATION SUMMARY TABLE
ALAMEDA POINT, ALAMEDA, CALIFORNIA
(Page 3 of 4)

DATA GAP	FIELD ACTIVITIES	FIELD OBSERVATIONS
Data Gap Type IV: OWSs	• One soil boring was advanced near the OWS located on the southern side of Building 397 to a depth of 8 feet bgs (Sampling Location CA13-26). • Two soil samples were collected at Sampling Location CA13-26 at depths of 3.5 to 4 and 6.5 to 7 feet bgs. • One groundwater sample was collected at Sampling Location CA13-26. • One soil boring was advanced near the OWS located on the western side of Building 530 to a depth of 8 feet bgs (Sampling Location CA13-10). • Two soil samples were collected at Sampling Location CA13-10 at depths of 4 to 4.5 and 6.5 to 7 feet bgs. • Two groundwater samples were collected at Sampling Location CA13-10.	• The soil boring collected at Sampling Location CA13-26 had a hydrocarbon odor. • The groundwater sample collected at Sampling Location CA13-26 had a hydrocarbon odor and sheen. • The soil boring collected at Sampling Location CA13-10 did not have any visible staining or odors. • The groundwater sample collected at Sampling Location CA 13-10 did not have an odor or sheen.

TABLE 3-36

CORRECTIVE ACTION AREA 13
DATA GAP INVESTIGATION SUMMARY TABLE
ALAMEDA POINT, ALAMEDA, CALIFORNIA
(Page 4 of 4)

DATA GAP	FIELD ACTIVITIES	FIELD OBSERVATIONS
Data Gap Type V: Soil Source Areas	• Fifteen soil borings were advanced in the storage unit area. • Thirty-one soil samples were collected. • Sixteen groundwater samples were collected. • Two piezometers were installed and checked for floating product 24 hours after installation at CA13-11 and CA13-12.	• The soil borings collected at Sampling Locations CA13-14, CA13-15, and CA-16 had a hydrocarbon odor. • The soil borings collected at Sampling Locations CA13-17, CA13-20, and CA13-21 had a hydrocarbon odor and discolored soil. • The soil boring collected from 1 to 2 feet bgs at Sampling Location CA13-23 had a tar-like matrix. • Significant soil staining was observed at Sampling Locations CA13-11 and CA13-12, which resulted in a free product investigation at both locations. • No free product was present at Sampling Locations CA13-11, however, a hydrocarbon sheen was present. • Free product was present on groundwater sampling device at Sampling Location CA13-12, but no free product was recovered in the groundwater sample. • Groundwater was encountered between 3 and 7 feet bgs.

Notes:

bgs Below ground surface
OWS Oil water separator

TABLE 3-37

CORRECTIVE ACTION AREA 13
DATA GAP TYPE I ANALYTICAL RESULTS
ALAMEDA POINT, ALAMEDA, CALIFORNIA
(Page 1 of 2)

POINT NAME	CA13-01	CA13-02	CA13-04
SAMPLE IDENTIFICATION	030-CAP-187	030-CAP-188	030-CAP-189
SAMPLE DATE	27-APR-00	11-MAY-00	15-JUN-00
DEPTH (feet below ground surface)	0.0 to 10.0	0.0 to 10.0	0.0 to 10.0
MEDIA (Units)	Water (mg/L)	Water (mg/L)	Water (mg/L)
Volatile Organic Compounds			
Benzene	<0.0005	<0.0005	**0.0005**
Toluene	<0.001	<0.001	<0.001
Ethylbenzene	<0.001	**0.0011**	<0.001
M,P-Xylene	**0.0005**	<0.001	<0.001
O-Xylene	<0.001	**0.0006**	<0.001
Methyl Tertiary Butyl Ether	<0.002	<0.002	<0.002
Total Extractable Petroleum Hydrocarbons			
Diesel-range Organics	**0.6**	**1.1**	**5.6**
Motor-oil-range Organics	<0.5	<0.5	**0.52**
Total Purgeable Petroleum Hydrocarbons			
Gasoline-range Organics	**3.1**	**0.38**	**0.76**
Inorganic Compounds (Dissolved)			
Lead	<0.003	<0.003	<0.003
Monitored Natural Attenuation Parameters			
Methane	**4.2**	**0.042**	**3.9**
Nitrate	<0.5	<0.1	<0.05
Chloride	**300**	**840**	**25**
Sulfate	<2.5	**24**	**1.6**
Total Alkalinity	**2,400**	**1,100**	**870**
Bicarbonate Alkalinity	**2,400**	**1,100**	**870**
Carbonate Alkalinity	<5	<5	<5
Hydroxide Alkalinity	<5	<5	<5

TABLE 3-37

CORRECTIVE ACTION AREA 13
DATA GAP TYPE I ANALYTICAL RESULTS
ALAMEDA POINT, ALAMEDA, CALIFORNIA
(Page 2 of 2)

POINT NAME	CA13-04	CA13-05	CA13-05
SAMPLE IDENTIFICATION	030-CAP-374	030-CAP-423	030-CAP-423A
SAMPLE DATE	15-JUN-00	15-JUN-00	16-JUN-00
DEPTH (feet below ground surface)	0.0 to 10.0	0.0 to 10.0	0.0 to 10.0
MEDIA (Units)	Water (mg/L)	Water (mg/L)	Water (mg/L)
Volatile Organic Compounds			
Benzene	**0.0005**	<0.0005	NA
Toluene	<0.001	<0.001	NA
Ethylbenzene	<0.001	**0.0008**	NA
M,P-Xylene	<0.001	**0.0021**	NA
O-Xylene	<0.001	<0.001	NA
Methyl Tertiary Butyl Ether	<0.002	<0.002	NA
Total Extractable Petroleum Hydrocarbons			
Diesel-range Organics	**5.8**	NA	**0.44**
Motor-oil-range Organics	**0.52**	NA	<0.5
Total Purgeable Petroleum Hydrocarbons			
Gasoline-range Organics	**6**	**0.93**	NA
Inorganic Compounds (Dissolved)			
Lead	**0.0095**	NA	<0.003
Monitored Natural Attenuation Parameters			
Methane	**0.53**	NA	**2.4**
Nitrate	<0.05	<0.05	NA
Chloride	**26**	**19**	NA
Sulfate	**1.3**	**27**	NA
Total Alkalinity	**1,400**	**890**	NA
Bicarbonate Alkalinity	**1,400**	**890**	NA
Carbonate Alkalinity	<5	<5	NA
Hydroxide Alkalinity	<5	<5	NA

Notes:

mg/kg Milligrams per kilograms
mg/L Milligrams per liter
NA Not analyzed

Detected concentrations are bolded.

TABLE 3-38

CORRECTIVE ACTION AREA 13
DATA GAP TYPE II ANALYTICAL RESULTS
ALAMEDA POINT, ALAMEDA, CALIFORNIA

POINT NAME	5-JF	5-JF
SAMPLE IDENTIFICATION	030-CAP-191	030-CAP-375
SAMPLE DATE	03-MAY-00	03-MAY-00
DEPTH (feet below ground surface)		
MEDIA (Units)	Water (mg/L)	Water (mg/L)
Volatile Organic Compounds		
Benzene	<0.0005	<0.0005
Toluene	**0.0009**	**0.001**
Ethylbenzene	<0.0005	<0.0005
M,P-Xylene	**0.0006**	**0.0007**
O-Xylene	<0.0005	<0.0005
Methyl Tertiary Butyl Ether	<0.0005	<0.0005
Total Extractable Petroleum Hydrocarbons		
Diesel-range Organics	<0.1	<0.1
Motor-oil-range Organics	<0.5	<0.5
Total Purgeable Petroleum Hydrocarbons		
Gasoline-range Organics	<0.057	<0.056
Inorganic Compounds (Dissolved)		
Lead	<0.003	<0.003

Notes:

mg/kg Milligrams per kilograms
mg/L Milligrams per liter
NA Not analyzed

Detected concentrations are bolded.

TABLE 3-39

CORRECTIVE ACTION AREA 13
DATA GAP TYPE III ANALYTICAL RESULTS
ALAMEDA POINT, ALAMEDA, CALIFORNIA
(Page 1 of 3)

POINT NAME	CA13-07	CA13-07	CA13-08
SAMPLE IDENTIFICATION	030-CAP-376	030-CAP-200	030-CAP-376A
SAMPLE DATE	26-APR-00	26-APR-00	02-MAY-00
DEPTH (feet below ground surface)	3.0 to 8.0	3.0 to 8.0	3.0 to 8.0
MEDIA (Units)	Water (mg/L)	Water (mg/L)	Water (mg/L)
Volatile Organic Compounds			
Benzene	**0.033**	**0.043**	**0.045**
Toluene	<0.005	<0.002	<0.005
Ethylbenzene	**0.02**	**0.017**	**0.016**
Xylene (Total)	<0.005	<0.002	<0.005
Methyl Tertiary Butyl Ether	<0.01	<0.002	<0.01
Total Extractable Petroleum Hydrocarbons			
Diesel-range Organics	**2.3**	<0.1	**12**
Motor-oil-range Organics	**10**	<0.5	**49**
JP5-Range Organics	**14**	**1.2**	**44**
Total Purgeable Petroleum Hydrocarbons			
Gasoline-range Organics	**0.69**	**0.91**	**0.93**
Inorganic Compounds (Dissolved)			
Lead	<0.003	<0.003	<0.003

TABLE 3-39

CORRECTIVE ACTION AREA 13
DATA GAP TYPE III ANALYTICAL RESULTS
ALAMEDA POINT, ALAMEDA, CALIFORNIA

POINT NAME	CA13-08	CA13-09	M10B-01
SAMPLE IDENTIFICATION	030-CAP-200A	030-CAP-201	030-CAP-198
SAMPLE DATE	02-MAY-00	26-APR-00	25-APR-00
DEPTH (feet below ground surface)	3.0 to 8.0	3.0 to 8.0	
MEDIA (Units)	Water (mg/L)	Water (mg/L)	Water (mg/L)
Volatile Organic Compounds			
Benzene	**0.043**	<0.0005	<0.0005
Toluene	<0.001	<0.001	<0.001
Ethylbenzene	**0.052**	<0.001	<0.001
Xylene (Total)	<0.001	<0.001	<0.001
Methyl Tertiary Butyl Ether	<0.002	<0.002	<0.002
Total Extractable Petroleum Hydrocarbons			
Diesel-range Organics	**22**	<0.1	<0.1
Motor-oil-range Organics	**130**	<0.5	<0.5
JP5-Range Organics	**87**	<0.1	<0.1
Total Purgeable Petroleum Hydrocarbons			
Gasoline-range Organics	**0.8**	<0.05	<0.05
Inorganic Compounds (Dissolved)			
Lead	<0.003	<0.003	<0.003

TABLE 3-39

CORRECTIVE ACTION AREA 13
DATA GAP TYPE III ANALYTICAL RESULTS
ALAMEDA POINT, ALAMEDA, CALIFORNIA
(Page 3 of 3)

POINT NAME	M13-07	MW-1	MW530-1
SAMPLE IDENTIFICATION	030-CAP-199	030-CAP-196	030-CAP-197
SAMPLE DATE	25-APR-00	25-APR-00	26-APR-00
DEPTH (feet below ground surface)			
MEDIA (Units)	Water (mg/L)	Water (mg/L)	Water (mg/L)
Volatile Organic Compounds			
Benzene	<0.0005	<0.0005	<0.0005
Toluene	<0.001	<0.001	<0.001
Ethylbenzene	<0.001	<0.001	**0.0016**
Xylene (Total)	<0.001	<0.001	**0.0044**
Methyl Tertiary Butyl Ether	<0.002	<0.002	<0.002
Total Extractable Petroleum Hydrocarbons			
Diesel-range Organics	<0.1	<0.1	**0.16**
Motor-oil-range Organics	<0.5	<0.5	**1.2**
JP5-Range Organics	**0.16**	<0.1	**0.12**
Total Purgeable Petroleum Hydrocarbons			
Gasoline-range Organics	<0.05	<0.05	**0.1**
Inorganic Compounds (Dissolved)			
Lead	<0.003	<0.003	**0.0035**

Notes:

mg/kg Milligrams per kilograms
mg/L Milligrams per liter
NA Not analyzed

Detected concentrations are bolded.

TABLE 3-40

CORRECTIVE ACTION AREA 13
DATA GAP TYPE IV ANALYTICAL RESULTS
ALAMEDA POINT, ALAMEDA, CALIFORNIA
(Page 1 of 3)

POINT NAME	CA13-10	CA13-10	CA13-26
SAMPLE IDENTIFICATION	030-CAP-202	030-CAP-203	030-CAP-427
SAMPLE DATE	15-JUN-00	15-JUN-00	21-JUN-00
DEPTH (feet below ground surface)	4.0 to 4.5	6.5 to 7.0	3.5 to 4.5
MEDIA (Units)	Soil (mg/kg)	Soil (mg/kg)	Soil (mg/kg)
Volatile Organic Compounds			
Benzene	<0.011	<0.012	<0.012
Toluene	<0.011	<0.012	<0.012
Ethylbenzene	<0.011	<0.012	<0.012
M,P-Xylene	<0.011	<0.012	<0.012
O-Xylene	<0.011	<0.012	<0.012
Methyl Tertiary Butyl Ether	<0.011	<0.012	<0.012
Total Extractable Petroleum Hydrocarbons			
Diesel-range Organics	**7.7**	<1.2	**280**
Motor-oil-range Organics	**54**	<12	<11
Total Purgeable Petroleum Hydrocarbons			
Gasoline-range Organics	<0.58	<0.61	**380**
Inorganic Compounds (Dissolved)			
Lead	NA	NA	NA
Inorganic Compounds (Total)			
Lead	<11	<12	<11

TABLE 3-40

CORRECTIVE ACTION AREA 13
DATA GAP TYPE IV ANALYTICAL RESULTS
ALAMEDA POINT, ALAMEDA, CALIFORNIA
(Page 2 of 3)

POINT NAME	CA13-26	CA13-10	CA13-10
SAMPLE IDENTIFICATION	030-CAP-428	030-CAP-204	030-CAP-377
SAMPLE DATE	21-JUN-00	15-JUN-00	15-JUN-00
DEPTH (feet below ground surface)	6.5 to 7.0	3.0 to 8.0	3.0 to 8.0
MEDIA (Units)	Soil (mg/kg)	Water (mg/L)	Water (mg/L)
Volatile Organic Compounds			
Benzene	<0.022	<0.0005	<0.0005
Toluene	<0.022	<0.001	<0.001
Ethylbenzene	<0.022	<0.001	<0.001
M,P-Xylene	<0.022	<0.001	<0.001
O-Xylene	<0.022	<0.001	<0.001
Methyl Tertiary Butyl Ether	<0.022	<0.002	<0.002
Total Extractable Petroleum Hydrocarbons			
Diesel-range Organics	**210**	<0.1	<0.1
Motor-oil-range Organics	<22	<0.5	<0.5
Total Purgeable Petroleum Hydrocarbons			
Gasoline-range Organics	**1,100**	<0.056	<0.05
Inorganic Compounds (Dissolved)			
Lead	NA	<0.003	<0.003
Inorganic Compounds (Total)			
Lead	<21	NA	NA

TABLE 3-40

CORRECTIVE ACTION AREA 13
DATA GAP TYPE IV ANALYTICAL RESULTS
ALAMEDA POINT, ALAMEDA, CALIFORNIA

POINT NAME	CA13-26
SAMPLE IDENTIFICATION	030-CAP-429
SAMPLE DATE	21-JUN-00
DEPTH (feet below ground surface)	3.0 to 8.0
MEDIA (Units)	Water (mg/L)
Volatile Organic Compounds	
Benzene	<0.0005
Toluene	<0.001
Ethylbenzene	<0.001
M,P-Xylene	<0.001
O-Xylene	<0.001
Methyl Tertiary Butyl Ether	<0.002
Total Extractable Petroleum Hydrocarbons	
Diesel-range Organics	**8.9**
Motor-oil-range Organics	<0.5
Total Purgeable Petroleum Hydrocarbons	
Gasoline-range Organics	**8.6**
Inorganic Compounds (Dissolved)	
Lead	<0.003
Inorganic Compounds (Total)	
Lead	NA

Notes:

mg/kg Milligrams per kilograms
mg/L Milligrams per liter
NA Not analyzed

Detected concentrations are bolded.

TABLE 3-41

CORRECTIVE ACTION AREA 13
DATA GAP TYPE V ANALYTICAL RESULTS
ALAMEDA POINT, ALAMEDA, CALIFORNIA

POINT NAME	CA13-11	CA13-11	CA13-12
SAMPLE IDENTIFICATION	030-CAP-205	030-CAP-206	030-CAP-207
SAMPLE DATE	09-MAY-00	09-MAY-00	09-MAY-00
DEPTH (feet below ground surface)	3.0 to 4.0	7.0 to 8.0	3.0 to 4.0
MEDIA (Units)	Soil (mg/kg)	Soil (mg/kg)	Soil (mg/kg)
Volatile Organic Compounds			
Benzene	**0.088**	<0.01	<0.01
Toluene	**0.11**	<0.01	<0.01
Ethylbenzene	**0.035**	**0.13**	<0.01
M,P-Xylene	NA	NA	NA
O-Xylene	NA	NA	NA
Xylene (Total)	**0.27**	**0.56**	<0.01
Methyl Tertiary Butyl Ether	<0.01	<0.01	<0.01
Total Extractable Petroleum Hydrocarbons			
Diesel-range Organics	**850**	<10	<10
Motor-oil-range Organics	**10,000**	<250	<250
JP5-Range Organics	**80**	<10	<10
Total Purgeable Petroleum Hydrocarbons			
Gasoline-range Organics	**1.3**	**40**	<0.5
Inorganic Compounds (Dissolved)			
Lead	NA	NA	NA
Inorganic Compounds (Total)			
Lead	**42**	<11	<11

TABLE 3-41

CORRECTIVE ACTION AREA 13
DATA GAP TYPE V ANALYTICAL RESULTS
ALAMEDA POINT, ALAMEDA, CALIFORNIA

POINT NAME	CA13-12	CA13-12	CA13-13
SAMPLE IDENTIFICATION	030-CAP-378	030-CAP-208	030-CAP-209
SAMPLE DATE	09-MAY-00	09-MAY-00	11-MAY-00
DEPTH (feet below ground surface)	4.0 to 4.5	4.5 to 5.3	2.8 to 3.8
MEDIA (Units)	Soil (mg/kg)	Soil (mg/kg)	Soil (mg/kg)
Volatile Organic Compounds			
Benzene	<0.01	**0.29**	<0.01
Toluene	<0.01	**0.11**	<0.01
Ethylbenzene	<0.01	**0.055**	<0.01
M,P-Xylene	NA	NA	NA
O-Xylene	NA	NA	NA
Xylene (Total)	<0.01	**0.56**	<0.01
Methyl Tertiary Butyl Ether	<0.01	<0.01	<0.01
Total Extractable Petroleum Hydrocarbons			
Diesel-range Organics	<10	**1,100**	<10
Motor-oil-range Organics	<250	**5,700**	<250
JP5-Range Organics	<10	**170**	<10
Total Purgeable Petroleum Hydrocarbons			
Gasoline-range Organics	<0.5	**9.1**	<0.5
Inorganic Compounds (Dissolved)			
Lead	NA	NA	NA
Inorganic Compounds (Total)			
Lead	**140**	**75**	<12

TABLE 3-41

CORRECTIVE ACTION AREA 13
DATA GAP TYPE V ANALYTICAL RESULTS
ALAMEDA POINT, ALAMEDA, CALIFORNIA

POINT NAME	CA13-13	CA13-14	CA13-14
SAMPLE IDENTIFICATION	030-CAP-210	030-CAP-211	030-CAP-212
SAMPLE DATE	11-MAY-00	11-MAY-00	11-MAY-00
DEPTH (feet below ground surface)	4.5 to 5.5	3.0 to 4.0	7.5 to 8.0
MEDIA (Units)	Soil (mg/kg)	Soil (mg/kg)	Soil (mg/kg)
Volatile Organic Compounds			
Benzene	<0.01	<0.01	<0.01
Toluene	<0.01	<0.01	<0.01
Ethylbenzene	<0.01	<0.01	<0.01
M,P-Xylene	NA	NA	NA
O-Xylene	NA	NA	NA
Xylene (Total)	<0.01	<0.01	<0.01
Methyl Tertiary Butyl Ether	<0.01	<0.01	<0.01
Total Extractable Petroleum Hydrocarbons			
Diesel-range Organics	**390**	<10	<10
Motor-oil-range Organics	**2,600**	<250	<250
JP5-Range Organics	**82**	<10	<10
Total Purgeable Petroleum Hydrocarbons			
Gasoline-range Organics	<0.5	<0.5	<0.5
Inorganic Compounds (Dissolved)			
Lead	NA	NA	NA
Inorganic Compounds (Total)			
Lead	<12	<11	<12

TABLE 3-41

CORRECTIVE ACTION AREA 13
DATA GAP TYPE V ANALYTICAL RESULTS
ALAMEDA POINT, ALAMEDA, CALIFORNIA

POINT NAME	CA13-15	CA13-15	CA13-16
SAMPLE IDENTIFICATION	030-CAP-214	030-CAP-213	030-CAP-215
SAMPLE DATE	11-MAY-00	11-MAY-00	11-MAY-00
DEPTH (feet below ground surface)	3.0 to 4.0	4.0 to 5.0	1.5 to 2.5
MEDIA (Units)	Soil (mg/kg)	Soil (mg/kg)	Soil (mg/kg)
Volatile Organic Compounds			
Benzene	**0.062**	**0.23**	<0.01
Toluene	**0.085**	**0.57**	<0.01
Ethylbenzene	**0.055**	**0.23**	<0.01
M,P-Xylene	NA	NA	NA
O-Xylene	NA	NA	NA
Xylene (Total)	<1.7	**11**	<0.01
Methyl Tertiary Butyl Ether	<0.2	<0.2	<0.01
Total Extractable Petroleum Hydrocarbons			
Diesel-range Organics	**480**	**1,800**	**380**
Motor-oil-range Organics	**6,500**	**10,000**	**2,300**
JP5-Range Organics	**140**	**720**	**14**
Total Purgeable Petroleum Hydrocarbons			
Gasoline-range Organics	**11**	**22**	<0.5
Inorganic Compounds (Dissolved)			
Lead	NA	NA	NA
Inorganic Compounds (Total)			
Lead	**99**	**280**	**74**

TABLE 3-41

CORRECTIVE ACTION AREA 13
DATA GAP TYPE V ANALYTICAL RESULTS
ALAMEDA POINT, ALAMEDA, CALIFORNIA

POINT NAME	CA13-16	CA13-17	CA13-17
SAMPLE IDENTIFICATION	030-CAP-216	030-CAP-217	030-CAP-218
SAMPLE DATE	11-MAY-00	14-JUN-00	14-JUN-00
DEPTH (feet below ground surface)	4.0 to 5.0	3.0 to 3.5	4.0 to 4.5
MEDIA (Units)	Soil (mg/kg)	Soil (mg/kg)	Soil (mg/kg)
Volatile Organic Compounds			
Benzene	**0.033**	**0.043**	**0.0071**
Toluene	**0.016**	<0.012	<0.011
Ethylbenzene	**0.0094**	**0.012**	<0.011
M,P-Xylene	NA	**0.012**	**0.0081**
O-Xylene	NA	<0.012	<0.011
Xylene (Total)	**0.046**	NA	NA
Methyl Tertiary Butyl Ether	<0.01	<0.012	<0.011
Total Extractable Petroleum Hydrocarbons			
Diesel-range Organics	**120**	**36,000**	**18,000**
Motor-oil-range Organics	**2,300**	**30,000**	**23,000**
JP5-Range Organics	**24**	NA	NA
Total Purgeable Petroleum Hydrocarbons			
Gasoline-range Organics	<0.5	**2.9**	**200**
Inorganic Compounds (Dissolved)			
Lead	NA	NA	NA
Inorganic Compounds (Total)			
Lead	**62**	**54**	**94**

TABLE 3-41

CORRECTIVE ACTION AREA 13
DATA GAP TYPE V ANALYTICAL RESULTS
ALAMEDA POINT, ALAMEDA, CALIFORNIA

POINT NAME	CA13-18	CA13-18	CA13-19
SAMPLE IDENTIFICATION	030-CAP-219	030-CAP-220	030-CAP-221
SAMPLE DATE	14-JUN-00	14-JUN-00	14-JUN-00
DEPTH (feet below ground surface)	3.0 to 3.5	4.0 to 4.5	3.0 to 3.5
MEDIA (Units)	Soil (mg/kg)	Soil (mg/kg)	Soil (mg/kg)
Volatile Organic Compounds			
Benzene	<0.011	<0.012	<0.011
Toluene	<0.011	<0.012	<0.011
Ethylbenzene	<0.011	<0.012	<0.011
M,P-Xylene	<0.011	<0.012	<0.011
O-Xylene	<0.011	<0.012	<0.011
Xylene (Total)	NA	NA	NA
Methyl Tertiary Butyl Ether	<0.011	<0.012	<0.011
Total Extractable Petroleum Hydrocarbons			
Diesel-range Organics	**400**	**270**	<1.1
Motor-oil-range Organics	**690**	**460**	<11
JP5-Range Organics	NA	NA	NA
Total Purgeable Petroleum Hydrocarbons			
Gasoline-range Organics	<1.1	<1.2	<1.1
Inorganic Compounds (Dissolved)			
Lead	NA	NA	NA
Inorganic Compounds (Total)			
Lead	**5**	**3.2**	**1.2**

TABLE 3-41

CORRECTIVE ACTION AREA 13
DATA GAP TYPE V ANALYTICAL RESULTS
ALAMEDA POINT, ALAMEDA, CALIFORNIA

POINT NAME	CA13-19	CA13-20	CA13-20
SAMPLE IDENTIFICATION	030-CAP-222	030-CAP-223	030-CAP-224
SAMPLE DATE	14-JUN-00	14-JUN-00	14-JUN-00
DEPTH (feet below ground surface)	4.0 to 4.5	3.0 to 3.5	6.5 to 7.0
MEDIA (Units)	Soil (mg/kg)	Soil (mg/kg)	Soil (mg/kg)
Volatile Organic Compounds			
Benzene	<0.011	**0.098**	<0.061
Toluene	<0.011	**0.1**	<0.061
Ethylbenzene	<0.011	**0.045**	**0.39**
M,P-Xylene	<0.011	**0.19**	<0.061
O-Xylene	<0.011	**0.076**	**0.53**
Xylene (Total)	NA	NA	NA
Methyl Tertiary Butyl Ether	<0.011	<0.013	<0.061
Total Extractable Petroleum Hydrocarbons			
Diesel-range Organics	**33**	**20,000**	**120**
Motor-oil-range Organics	**100**	**16,000**	**120**
JP5-Range Organics	NA	NA	NA
Total Purgeable Petroleum Hydrocarbons			
Gasoline-range Organics	<1.2	**2.5**	**26**
Inorganic Compounds (Dissolved)			
Lead	NA	NA	NA
Inorganic Compounds (Total)			
Lead	**8.1**	**55**	**2.5**

TABLE 3-41

CORRECTIVE ACTION AREA 13
DATA GAP TYPE V ANALYTICAL RESULTS
ALAMEDA POINT, ALAMEDA, CALIFORNIA

POINT NAME	CA13-21	CA13-21	CA13-22
SAMPLE IDENTIFICATION	030-CAP-411	030-CAP-412	030-CAP-414
SAMPLE DATE	14-JUN-00	14-JUN-00	14-JUN-00
DEPTH (feet below ground surface)	3.5 to 4.0	5.5 to 6.0	4.0 to 4.5
MEDIA (Units)	Soil (mg/kg)	Soil (mg/kg)	Soil (mg/kg)
Volatile Organic Compounds			
Benzene	<0.052	<0.012	**0.056**
Toluene	<0.052	<0.012	**0.11**
Ethylbenzene	**0.035**	**0.025**	**0.099**
M,P-Xylene	**0.044**	**0.032**	**0.25**
O-Xylene	**0.12**	**0.071**	**0.15**
Xylene (Total)	NA	NA	NA
Methyl Tertiary Butyl Ether	<0.052	<0.012	<0.045
Total Extractable Petroleum Hydrocarbons			
Diesel-range Organics	**30,000**	**7,400**	**18,000**
Motor-oil-range Organics	**27,000**	**6,100**	**20,000**
JP5-Range Organics	NA	NA	NA
Total Purgeable Petroleum Hydrocarbons			
Gasoline-range Organics	**1,300**	**1,400**	**83**
Inorganic Compounds (Dissolved)			
Lead	NA	NA	NA
Inorganic Compounds (Total)			
Lead	**74**	**3.1**	**5.6**

TABLE 3-41

CORRECTIVE ACTION AREA 13
DATA GAP TYPE V ANALYTICAL RESULTS
ALAMEDA POINT, ALAMEDA, CALIFORNIA

POINT NAME	CA13-22	CA13-23	CA13-23
SAMPLE IDENTIFICATION	030-CAP-415	030-CAP-417	030-CAP-418
SAMPLE DATE	14-JUN-00	15-JUN-00	15-JUN-00
DEPTH (feet below ground surface)	7.5 to 8.0	3.5 to 4.0	5.0 to 6.5
MEDIA (Units)	Soil (mg/kg)	Soil (mg/kg)	Soil (mg/kg)
Volatile Organic Compounds			
Benzene	<0.012	**0.12**	<0.023
Toluene	<0.012	**0.083**	<0.023
Ethylbenzene	<0.012	**0.4**	**0.07**
M,P-Xylene	**0.073**	**1.3**	**0.078**
O-Xylene	**0.018**	**0.65**	**0.11**
Xylene (Total)	NA	NA	NA
Methyl Tertiary Butyl Ether	<0.012	<0.06	<0.023
Total Extractable Petroleum Hydrocarbons			
Diesel-range Organics	**13,000**	**1,200**	**3,300**
Motor-oil-range Organics	**14,000**	**920**	**3,000**
JP5-Range Organics	NA	NA	NA
Total Purgeable Petroleum Hydrocarbons			
Gasoline-range Organics	**27**	**750**	**23**
Inorganic Compounds (Dissolved)			
Lead	NA	NA	NA
Inorganic Compounds (Total)			
Lead	**2.6**	<12	**15**

TABLE 3-41

CORRECTIVE ACTION AREA 13
DATA GAP TYPE V ANALYTICAL RESULTS
ALAMEDA POINT, ALAMEDA, CALIFORNIA

POINT NAME	CA13-24	CA13-24	CA13-25
SAMPLE IDENTIFICATION	030-CAP-420	030-CAP-421	030-CAP-424
SAMPLE DATE	15-JUN-00	15-JUN-00	14-JUN-00
DEPTH (feet below ground surface)	2.5 to 3.0	4.0 to 4.5	3.5 to 4.0
MEDIA (Units)	Soil (mg/kg)	Soil (mg/kg)	Soil (mg/kg)
Volatile Organic Compounds			
Benzene	<0.011	<0.011	<0.011
Toluene	<0.011	<0.011	<0.011
Ethylbenzene	<0.011	<0.011	<0.011
M,P-Xylene	<0.011	<0.011	<0.011
O-Xylene	<0.011	<0.011	<0.011
Xylene (Total)	NA	NA	NA
Methyl Tertiary Butyl Ether	<0.011	<0.011	<0.011
Total Extractable Petroleum Hydrocarbons			
Diesel-range Organics	<1.1	**130**	**4.7**
Motor-oil-range Organics	<11	**130**	<12
JP5-Range Organics	NA	NA	NA
Total Purgeable Petroleum Hydrocarbons			
Gasoline-range Organics	<0.53	<0.53	<1.2
Inorganic Compounds (Dissolved)			
Lead	NA	NA	NA
Inorganic Compounds (Total)			
Lead	<11	<11	**1.9**

TABLE 3-41

CORRECTIVE ACTION AREA 13
DATA GAP TYPE V ANALYTICAL RESULTS
ALAMEDA POINT, ALAMEDA, CALIFORNIA

POINT NAME	CA13-25	CA13-11	CA13-11
SAMPLE IDENTIFICATION	030-CAP-425	030-CAP-379	030-CAP-225
SAMPLE DATE	14-JUN-00	09-MAY-00	09-MAY-00
DEPTH (feet below ground surface)	4.5 to 5.0	0.0 to 10.0	0.0 to 10.0
MEDIA (Units)	Soil (mg/kg)	Water (mg/L)	Water (mg/L)
Volatile Organic Compounds			
Benzene	<0.012	**0.11**	**0.12**
Toluene	<0.012	**0.0074**	**0.0079**
Ethylbenzene	<0.012	**0.014**	**0.015**
M,P-Xylene	<0.012	NA	NA
O-Xylene	<0.012	NA	NA
Xylene (Total)	NA	**0.039**	**0.042**
Methyl Tertiary Butyl Ether	<0.012	<0.01	<0.002
Total Extractable Petroleum Hydrocarbons			
Diesel-range Organics	**11**	**0.52**	**0.42**
Motor-oil-range Organics	**18**	**82**	**92**
JP5-Range Organics	NA	**0.39**	**0.39**
Total Purgeable Petroleum Hydrocarbons			
Gasoline-range Organics	<1.2	**1**	**0.94**
Inorganic Compounds (Dissolved)			
Lead	NA	**0.008**	<0.003
Inorganic Compounds (Total)			
Lead	**3.7**	NA	NA

TABLE 3-41

CORRECTIVE ACTION AREA 13
DATA GAP TYPE V ANALYTICAL RESULTS
ALAMEDA POINT, ALAMEDA, CALIFORNIA

POINT NAME	CA13-12	CA13-13	CA13-14
SAMPLE IDENTIFICATION	030-CAP-226	030-CAP-227	030-CAP-228
SAMPLE DATE	09-MAY-00	11-MAY-00	11-MAY-00
DEPTH (feet below ground surface)	0.0 to 10.0	2.5 to 7.5	3.0 to 8.0
MEDIA (Units)	Water (mg/L)	Water (mg/L)	Water (mg/L)
Volatile Organic Compounds			
Benzene	**1.1**	**0.22**	**0.0014**
Toluene	**0.056**	**0.065**	**0.001**
Ethylbenzene	**0.096**	**0.0081**	<0.001
M,P-Xylene	NA	NA	NA
O-Xylene	NA	NA	NA
Xylene (Total)	**0.45**	**0.055**	**0.0042**
Methyl Tertiary Butyl Ether	<0.01	<0.002	<0.002
Total Extractable Petroleum Hydrocarbons			
Diesel-range Organics	**1.5**	**2.8**	**3.9**
Motor-oil-range Organics	**16**	**20**	**2.4**
JP5-Range Organics	**1.4**	**0.62**	**0.66**
Total Purgeable Petroleum Hydrocarbons			
Gasoline-range Organics	**8.2**	**1.2**	<0.05
Inorganic Compounds (Dissolved)			
Lead	<0.003	**0.0035**	<0.003
Inorganic Compounds (Total)			
Lead	NA	NA	NA

TABLE 3-41

CORRECTIVE ACTION AREA 13
DATA GAP TYPE V ANALYTICAL RESULTS
ALAMEDA POINT, ALAMEDA, CALIFORNIA

POINT NAME	CA13-15	CA13-16	CA13-17
SAMPLE IDENTIFICATION	030-CAP-229	030-CAP-230	030-CAP-231
SAMPLE DATE	11-MAY-00	11-MAY-00	14-JUN-00
DEPTH (feet below ground surface)	3.0 to 8.0	3.0 to 8.0	3.0 to 8.0
MEDIA (Units)	Water (mg/L)	Water (mg/L)	Water (mg/L)
Volatile Organic Compounds			
Benzene	**1.1**	**0.23**	**1.4**
Toluene	<0.02	<0.01	**0.0097**
Ethylbenzene	<0.02	**0.018**	**0.085**
M,P-Xylene	NA	NA	**0.12**
O-Xylene	NA	NA	**0.076**
Xylene (Total)	**0.11**	**0.016**	NA
Methyl Tertiary Butyl Ether	<0.04	<0.02	<0.02
Total Extractable Petroleum Hydrocarbons			
Diesel-range Organics	**7.1**	**0.62**	**31**
Motor-oil-range Organics	**88**	**7.7**	**34**
JP5-Range Organics	**1.3**	**0.41**	NA
Total Purgeable Petroleum Hydrocarbons			
Gasoline-range Organics	**4.5**	**1.7**	**2.3**
Inorganic Compounds (Dissolved)			
Lead	**0.023**	**0.086**	<0.003
Inorganic Compounds (Total)			
Lead	NA	NA	NA

TABLE 3-41

CORRECTIVE ACTION AREA 13
DATA GAP TYPE V ANALYTICAL RESULTS
ALAMEDA POINT, ALAMEDA, CALIFORNIA

POINT NAME	CA13-18	CA13-19	CA13-20
SAMPLE IDENTIFICATION	030-CAP-232	030-CAP-233	030-CAP-234
SAMPLE DATE	14-JUN-00	14-JUN-00	14-JUN-00
DEPTH (feet below ground surface)	3.0 to 8.0	3.0 to 8.0	3.0 to 8.0
MEDIA (Units)	Water (mg/L)	Water (mg/L)	Water (mg/L)
Volatile Organic Compounds			
Benzene	<0.0005	<0.0005	**0.11**
Toluene	<0.001	<0.001	**0.0063**
Ethylbenzene	<0.001	<0.001	**0.036**
M,P-Xylene	<0.001	<0.001	**0.0065**
O-Xylene	<0.001	<0.001	**0.055**
Xylene (Total)	NA	NA	NA
Methyl Tertiary Butyl Ether	<0.002	<0.002	<0.002
Total Extractable Petroleum Hydrocarbons			
Diesel-range Organics	**0.45**	**0.32**	**44**
Motor-oil-range Organics	**0.55**	<0.5	**32**
JP5-Range Organics	NA	NA	NA
Total Purgeable Petroleum Hydrocarbons			
Gasoline-range Organics	<0.11	<0.05	**1.1**
Inorganic Compounds (Dissolved)			
Lead	<0.003	<0.003	**0.077**
Inorganic Compounds (Total)			
Lead	NA	NA	NA

TABLE 3-41

CORRECTIVE ACTION AREA 13
DATA GAP TYPE V ANALYTICAL RESULTS
ALAMEDA POINT, ALAMEDA, CALIFORNIA

POINT NAME	CA13-21	CA13-22	CA13-23
SAMPLE IDENTIFICATION	030-CAP-413	030-CAP-416	030-CAP-419
SAMPLE DATE	14-JUN-00	15-JUN-00	15-JUN-00
DEPTH (feet below ground surface)	3.0 to 8.0	3.0 to 8.0	3.0 to 8.0
MEDIA (Units)	Water (mg/L)	Water (mg/L)	Water (mg/L)
Volatile Organic Compounds			
Benzene	<0.0025	**0.026**	**0.024**
Toluene	<0.005	**0.015**	**0.011**
Ethylbenzene	<0.005	**0.0056**	**0.034**
M,P-Xylene	<0.005	**0.024**	**0.08**
O-Xylene	**0.006**	**0.011**	**0.061**
Xylene (Total)	NA	NA	NA
Methyl Tertiary Butyl Ether	<0.01	<0.02	<0.008
Total Extractable Petroleum Hydrocarbons			
Diesel-range Organics	**10**	**510**	**1.2**
Motor-oil-range Organics	**8.4**	**570**	<0.5
JP5-Range Organics	NA	NA	NA
Total Purgeable Petroleum Hydrocarbons			
Gasoline-range Organics	<0.26	**11**	**5.7**
Inorganic Compounds (Dissolved)			
Lead	<0.003	<0.003	<0.003
Inorganic Compounds (Total)			
Lead	NA	NA	NA

TABLE 3-41

CORRECTIVE ACTION AREA 13
DATA GAP TYPE V ANALYTICAL RESULTS
ALAMEDA POINT, ALAMEDA, CALIFORNIA

POINT NAME	CA13-24	CA13-25
SAMPLE IDENTIFICATION	030-CAP-422	030-CAP-426
SAMPLE DATE	15-JUN-00	14-JUN-00
DEPTH (feet below ground surface)	3.0 to 8.0	3.0 to 8.0
MEDIA (Units)	Water (mg/L)	Water (mg/L)
Volatile Organic Compounds		
Benzene	<0.0028	**0.011**
Toluene	<0.0056	**0.004**
Ethylbenzene	**0.021**	**0.016**
M,P-Xylene	**0.054**	**0.055**
O-Xylene	**0.029**	**0.004**
Xylene (Total)	NA	NA
Methyl Tertiary Butyl Ether	<0.011	<0.002
Total Extractable Petroleum Hydrocarbons		
Diesel-range Organics	**6.6**	**5.7**
Motor-oil-range Organics	**3.1**	**6.2**
JP5-Range Organics	NA	NA
Total Purgeable Petroleum Hydrocarbons		
Gasoline-range Organics	**72**	**1.5**
Inorganic Compounds (Dissolved)		
Lead	<0.003	<0.003
Inorganic Compounds (Total)		
Lead	NA	NA

Notes:

mg/kg Milligrams per kilograms
mg/L Milligrams per liter
NA Not analyzed

Detected concentrations are bolded.

3.13 FUEL LINE CORRECTIVE ACTION AREA A

The following subsections provide a brief summary of (1) the site location and operations conducted, (2) the proposed land reuse and groundwater beneficial use, (3) previous investigations, and (4) the data gap investigation conducted at Fuel Line CAA A.

3.13.1 Site Location and Operations Conducted

Fuel Line CAA A is a narrow corridor about 10 feet wide and 3,900 feet long that formerly held two parallel, 10-inch fuel lines, at a depth of about 4 feet bgs. The fuel lines extended south from the fuel loading station area in the Northwestern Construction and Maintenance Zone (Zone 3), east along the northernmost runway, and then south into the northern portion of the Western Hangar Zone (Zone 3). The fuel lines were used to transport JP5 (TtEMI 2000a). Storm drains intersect Fuel Line CAA A at four locations.

3.13.2 Proposed Land Reuse and Groundwater Beneficial Use

Fuel Line CAA A is designated as part of the Northwest Territories and Civic Core land reuse areas. Land reuse may include offices, research and development areas, industrial workplace areas, manufacturing and distribution facilities, an open space/civic mall area, mixed-use (which may include residential uses), and park areas. Groundwater at Fuel Line CAA A is designated as part of the Western and Central Regions and is not considered a potential drinking water source.

3.13.3 Previous Investigations

IT removed about 7,100 feet of fuel lines associated with Fuel Line CAA A in 1998 (TtEMI 2000a). Confirmation soil and groundwater samples were not collected along the portion of the fuel line excavation located north of former USTs 374-1 and 374-2. Confirmation soil samples were collected along the remaining portion of the fuel line excavation; however; no groundwater samples were collected.

3.13.4 Data Gap Investigation Summary

Current TTPH and TPH-associated compound concentrations in groundwater were assessed under Data Gap Type III at locations adjacent to storm drain intersections. TTPH and TPH-associated compound

concentrations were less than 1.4 mg/L and AWQCs, respectively. Possible soil and groundwater contamination associated with the former fuel line located north of former USTs 374-1 and 374-2 was assessed under Data Gap Type IX. TTPH and TPH-associated compound concentrations did not exceed interim PRCs for soil or groundwater. Data gap sampling locations are shown in Figure 3-13. Table 3-42 summarizes field activities conducted and observations made during the data gap investigation. Analytical results for Fuel Line CAA A are summarized in Tables 3-43 and 3-44 and included in Appendix D.

SENSITIVE RECORD

PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

FIGURE 3-13 – FUEL LINE CORRECTIVE ACTION AREA A DATA GAP SAMPLING LOCATIONS

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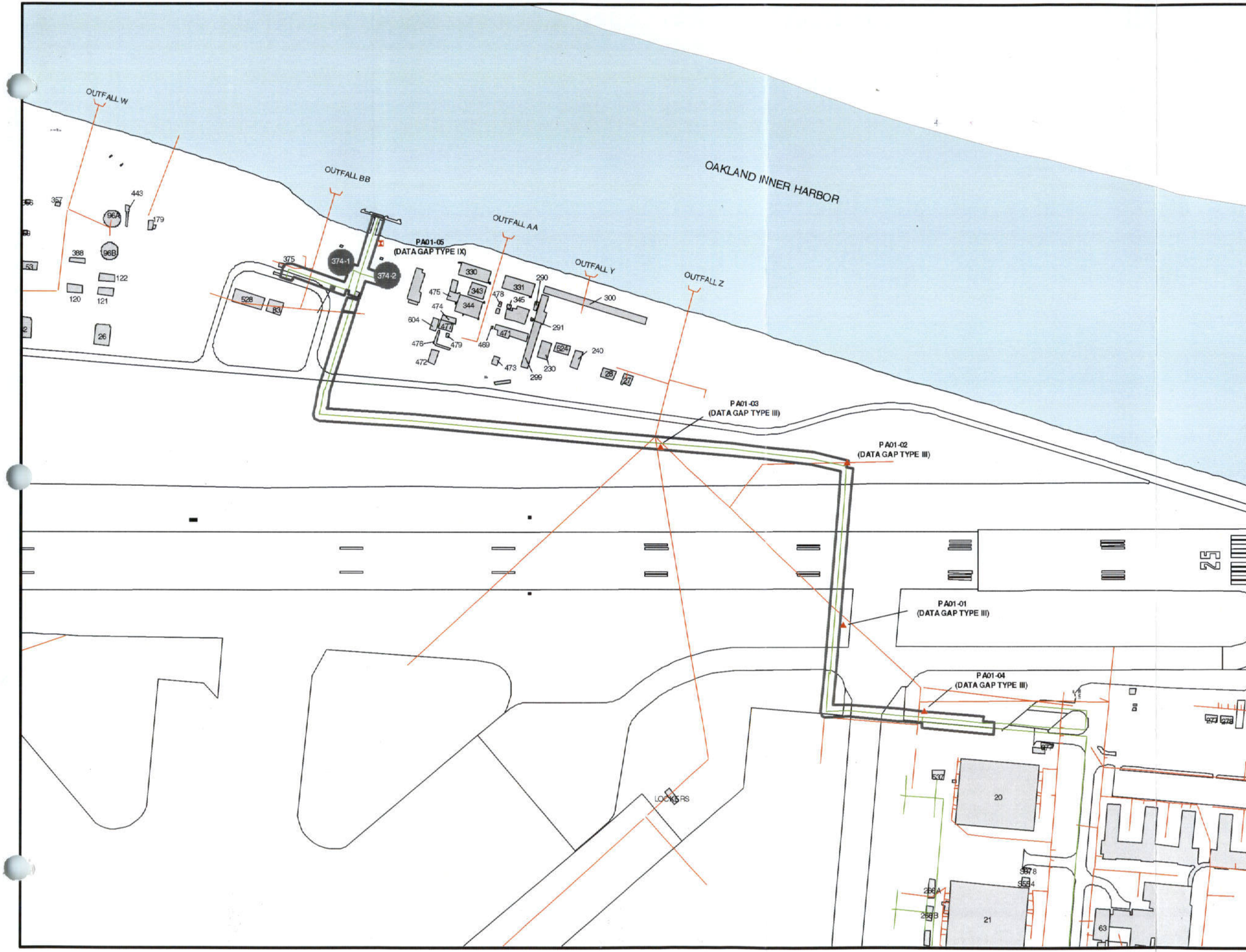
SENSITIVE



LEGEND

BOUNDARIES

- CORRECTIVE ACTION AREA BOUNDARY
- LAND COVER

DATA GAP SAMPLES

- DIRECT-PUSH - GROUNDWATER
- DIRECT-PUSH - SOIL/GROUNDWATER

SITE FEATURES

- BUILDING
- UNDERGROUND STORAGE TANK
- FUEL LINE
- STORM DRAIN LINE

N

150 0 150 300

SCALE: 1"= 300'

FIGURE 3-13
FUEL LINE
CORRECTIVE ACTION AREA A
DATA GAP SAMPLING LOCATIONS

ALAMEDA POINT
ALAMEDA, CALIFORNIA
MARCH 2, 2001

TC.0030.10824

C:\GEORGIES\PROJECT\DGS\CTO30_DG\CAA_JAN1 FIG3-13 LAYOUT

SENSITIVE

TABLE 3-42

FUEL LINE CORRECTIVE ACTION AREA A
DATA GAP INVESTIGATION SUMMARY TABLE
ALAMEDA POINT, ALAMEDA, CALIFORNIA
(Page 1 of 1)

DATA GAP	FIELD ACTIVITIES	FIELD OBSERVATIONS
Data Gap Type III: Current Total Total Petroleum Hydrocarbons Concentrations Near Storm Drains	• Four soil borings were advanced to 8 feet bgs. • Five groundwater samples were collected.	• Soil borings did not have any visible staining or odors. • Depth to groundwater ranged from 3.5 to 4.0 feet bgs. • Groundwater samples did not have an odor or sheen.
Data Gap Type IX: Soil and Groundwater Contamination from Fuel Lines	• One soil boring was advanced to 8 feet bgs. • Two soil samples were collected. • One groundwater sample was collected.	• The soil boring did not have any visible staining or odors. • Depth to groundwater was 6.5 feet bgs. • The groundwater sample did not have an odor or sheen.

Notes:

bgs Below ground surface

TABLE 3-43

FUEL LINE CORRECTIVE ACTION AREA A
DATA GAP TYPE III ANALYTICAL RESULTS
ALAMEDA POINT, ALAMEDA, CALIFORNIA
(Page 1 of 2)

POINT NAME	PA01-01	PA01-02	PA01-03
SAMPLE IDENTIFICATION	030-CAP-260	030-CAP-261	030-CAP-262
SAMPLE DATE	25-APR-00	25-APR-00	25-APR-00
DEPTH (feet below ground surface)	3.0 to 8.0	3.0 to 8.0	3.0 to 8.0
MEDIA (Units)	Water (mg/L)	Water (mg/L)	Water (mg/L)
Volatile Organic Compounds			
Benzene	<0.0005	<0.0005	<0.0005
Toluene	<0.001	<0.001	<0.001
Ethylbenzene	<0.001	<0.001	<0.001
Xylene (Total)	<0.001	<0.001	<0.001
Methyl Tertiary Butyl Ether	<0.002	<0.002	<0.002
Total Extractable Petroleum Hydrocarbons			
Diesel-range Organics	<0.1	<0.1	<0.1
Motor-oil-range Organics	<0.5	<0.5	<0.5
JP5-Range Organics	<0.1	<0.1	<0.1
Total Purgeable Petroleum Hydrocarbons			
Gasoline-range Organics	<0.05	<0.05	<0.05
Inorganic Compounds (Dissolved)			
Lead	<0.003	<0.003	<0.003

TABLE 3-43

FUEL LINE CORRECTIVE ACTION AREA A
DATA GAP TYPE III ANALYTICAL RESULTS
ALAMEDA POINT, ALAMEDA, CALIFORNIA
(Page 2 of 2)

POINT NAME	PA01-04	PA01-04
SAMPLE IDENTIFICATION	030-CAP-263	030-CAP-383
SAMPLE DATE	25-APR-00	25-APR-00
DEPTH (feet below ground surface)	3.0 to 8.0	3.0 to 8.0
MEDIA (Units)	Water (mg/L)	Water (mg/L)
Volatile Organic Compounds		
Benzene	<0.0005	<0.0005
Toluene	<0.001	<0.001
Ethylbenzene	<0.001	<0.001
Xylene (Total)	<0.001	<0.001
Methyl Tertiary Butyl Ether	<0.002	<0.002
Total Extractable Petroleum Hydrocarbons		
Diesel-range Organics	<0.1	<0.1
Motor-oil-range Organics	<0.5	<0.5
JP5-Range Organics	<0.1	<0.1
Total Purgeable Petroleum Hydrocarbons		
Gasoline-range Organics	<0.05	<0.05
Inorganic Compounds (Dissolved)		
Lead	<0.003	<0.003

Notes:

mg/kg Milligrams per kilograms
mg/L Milligrams per liter
NA Not analyzed

Detected concentrations are bolded.

TABLE 3-44

FUEL LINE CORRECTIVE ACTION AREA A
DATA GAP TYPE IX ANALYTICAL RESULTS
ALAMEDA POINT, ALAMEDA, CALIFORNIA
(Page 1 of 1)

POINT NAME	PA01-05	PA01-05	PA01-05
SAMPLE IDENTIFICATION	030-CAP-264	030-CAP-265	030-CAP-266
SAMPLE DATE	25-APR-00	25-APR-00	25-APR-00
DEPTH (feet below ground surface)	3.0 to 4.0	7.0 to 7.5	3.0 to 8.0
MEDIA (Units)	Soil (mg/kg)	Soil (mg/kg)	Water (mg/L)
Volatile Organic Compounds			
Benzene	<0.01	<0.01	<0.0005
Toluene	<0.01	<0.01	<0.001
Ethylbenzene	<0.01	<0.01	<0.001
Xylene (Total)	<0.01	<0.01	<0.001
Methyl Tertiary Butyl Ether	<0.01	<0.01	<0.002
Total Extractable Petroleum Hydrocarbons			
Diesel-range Organics	<10	<10	<0.1
Motor-oil-range Organics	<250	<250	<0.5
JP5-Range Organics	<10	<10	<0.1
Total Purgeable Petroleum Hydrocarbons			
Gasoline-range Organics	<0.5	<0.5	<0.05
Inorganic Compounds (Dissolved)			
Lead	NA	NA	<0.003
Inorganic Compounds (Total)			
Lead	<12	<11	NA

Notes:

mg/kg Milligrams per kilograms
mg/L Milligrams per liter
NA Not analyzed

Detected concentrations are bolded.

3.14 FUEL LINE CORRECTIVE ACTION AREA B

The following subsections provide a brief summary of (1) the site location and operations conducted, (2) the proposed land reuse and groundwater beneficial use, (3) previous investigations, and (4) the data gap investigation conducted at Fuel Line CAA B.

3.14.1 Site Location and Operations Conducted

Fuel Line CAA B is located in the Runway and Southern Hanger Zones (Zones 4 and 11, respectively) and contains three east-west, parallel fuel lines, with multiple crossing fuel lines (about 22,500 feet), that tie together a series of fueling pits. The fuel lines and fueling pits are abandoned in place. The fuel lines are at a depth of about 3 feet bgs and were used to transport jet fuel (TtEMI 2000a). Storm drains intersect Fuel Line CAA B at five locations.

3.14.2 Proposed Land Reuse and Groundwater Beneficial Use

Fuel Line CAA B is designated as part of the Civic Core and Marina District land reuse areas. Land reuse may include a research and development area, an industrial area, an open space/civic mall area, commercial and residential uses, civic/institutional areas, and mixed-use (which may include residential uses). Groundwater at Fuel Line CAA B is designated as part of the Central Region and is not considered a potential drinking water source.

3.14.3 Previous Investigations

Beginning in June 1998, IT created 51 pothole excavations to access the abandoned fuel lines (TtEMI 2000a). Portions of the exposed fuel lines were cut open at each excavation. The fuel lines were then cleaned, inspected, filled with grout, and sealed at the ends. Confirmation sampling was not conducted along the abandoned fuel lines.

3.14.4 Data Gap Investigation Summary

Possible soil and groundwater contamination from the abandoned fuel lines and possible storm drain migration pathways were assessed under Data Gap Type IX. TTPH and TPH-associated compound concentrations did not exceed interim PRCs for soil or groundwater. Data gap sampling locations are

shown in Figure 3-14. Table 3-45 summarizes field activities conducted and observations made during the data gap investigation. Analytical results for Fuel Line CAA B are summarized in Table 3-46 and included in Appendix D.

SENSITIVE RECORD

PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

FIGURE 3-14 – FUEL LINE CORRECTIVE ACTION AREA B DATA GAP SAMPLING LOCATIONS

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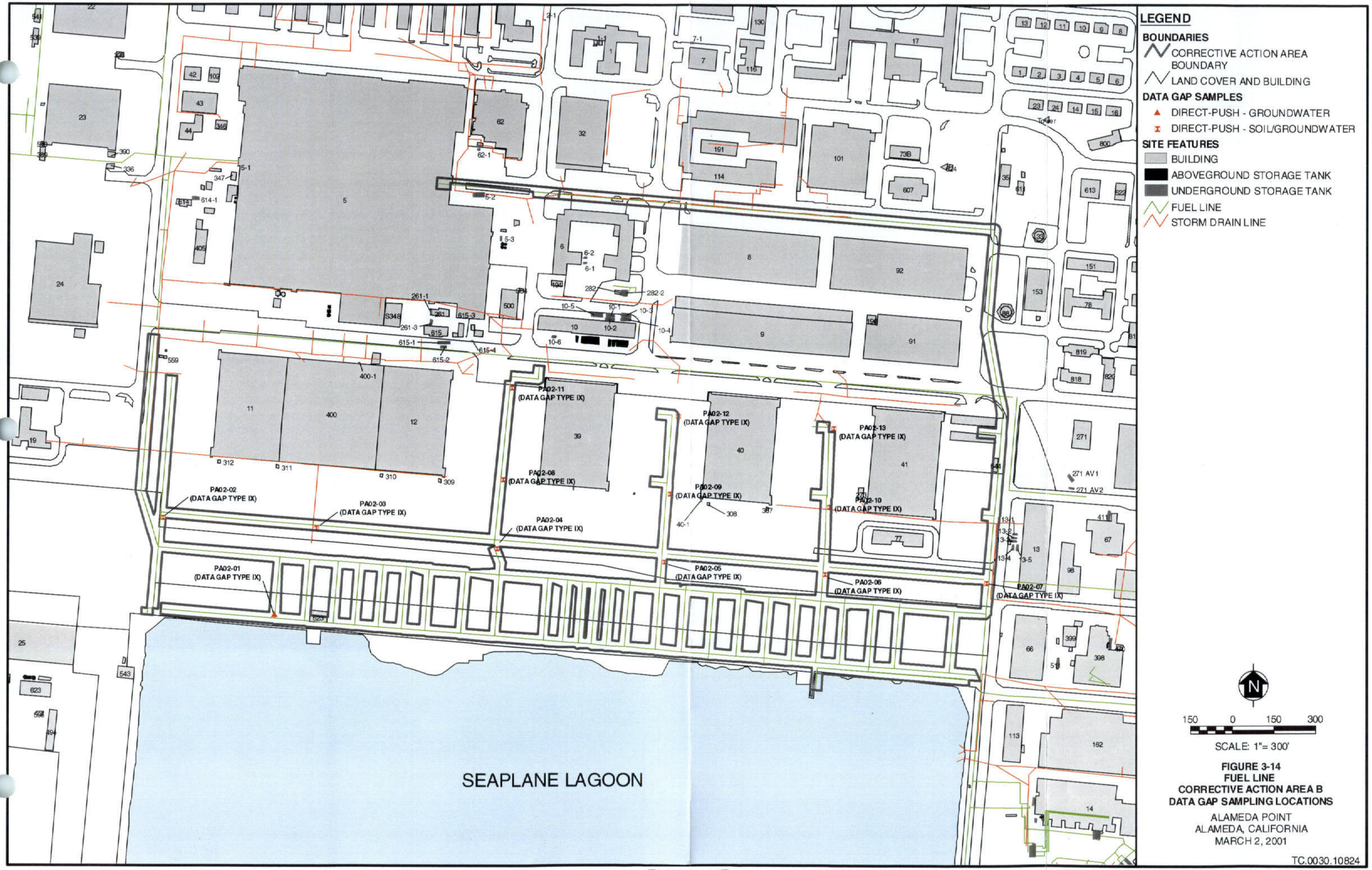

FIGURE 3-14
FUEL LINE
CORRECTIVE ACTION AREA B
DATA GAP SAMPLING LOCATIONS

ALAMEDA POINT
ALAMEDA, CALIFORNIA
MARCH 2, 2001

TC.0030.10824

C:\GEORGIES\PROJECT\DGS\CTO30_DG\CAA_JAN1 FIG3-14 LAYOUT

TABLE 3-45

FUEL LINE CORRECTIVE ACTION AREA B
DATA GAP INVESTIGATION SUMMARY TABLE
ALAMEDA POINT, ALAMEDA, CALIFORNIA
(Page 1 of 1)

DATA GAP	FIELD ACTIVITIES	FIELD OBSERVATIONS
Data Gap Type IX: Soil and Groundwater Contamination from Fuel Lines	• Twelve soil borings were advanced to 10 feet bgs. • Twelve piezometers were installed and checked for floating product 24 hours after installaion. • One direct-push groundwater sample was collected at a depth of 8 feet bgs. • Twenty-four soil samples were collected. • Fifteen groundwater samples were collected.	• Soil borings did not have any visible staining or odors. • Depth to groundwater ranged from 3.5 to 4 feet bgs. • No floating product was present.

Note:

bgs Below ground surface

TABLE 3-46

FUEL LINE CORRECTIVE ACTION AREA B
DATA GAP TYPE IX ANALYTICAL RESULTS
ALAMEDA POINT, ALAMEDA, CALIFORNIA

POINT NAME	PA02-02	PA02-02	PA02-02
SAMPLE IDENTIFICATION	030-CAP-270	030-CAP-271	030-CAP-384
SAMPLE DATE	03-MAY-00	03-MAY-00	03-MAY-00
DEPTH (feet below ground surface)	2.0 to 3.0	5.0 to 6.0	6.0 to 7.0
MEDIA (Units)	Soil (mg/kg)	Soil (mg/kg)	Soil (mg/kg)
Volatile Organic Compounds			
Benzene	<0.01	<0.01	<0.01
Toluene	<0.01	<0.01	<0.01
Ethylbenzene	<0.01	<0.01	<0.01
Xylene (Total)	<0.01	<0.01	<0.01
Methyl Tertiary Butyl Ether	<0.01	<0.01	<0.01
Total Extractable Petroleum Hydrocarbons			
Diesel-range Organics	<10	<10	<10
Motor-oil-range Organics	<250	<250	<250
JP5-Range Organics	<10	<10	<10
Total Purgeable Petroleum Hydrocarbons			
Gasoline-range Organics	**1.6**	<0.5	<0.5
Inorganic Compounds (Dissolved)			
Lead	NA	NA	NA
Inorganic Compounds (Total)			
Lead	<11	<12	<12

TABLE 3-46

FUEL LINE CORRECTIVE ACTION AREA B
DATA GAP TYPE IX ANALYTICAL RESULTS
ALAMEDA POINT, ALAMEDA, CALIFORNIA

POINT NAME	PA02-03	PA02-03	PA02-04
SAMPLE IDENTIFICATION	030-CAP-272	030-CAP-273	030-CAP-274
SAMPLE DATE	03-MAY-00	03-MAY-00	03-MAY-00
DEPTH (feet below ground surface)	2.0 to 3.0	5.0 to 6.0	2.0 to 3.0
MEDIA (Units)	Soil (mg/kg)	Soil (mg/kg)	Soil (mg/kg)
Volatile Organic Compounds			
Benzene	<0.01	<0.01	<0.01
Toluene	<0.01	<0.01	<0.01
Ethylbenzene	<0.01	<0.01	<0.01
Xylene (Total)	<0.01	<0.01	<0.01
Methyl Tertiary Butyl Ether	<0.01	<0.01	<0.01
Total Extractable Petroleum Hydrocarbons			
Diesel-range Organics	<10	<10	<10
Motor-oil-range Organics	<250	<250	<250
JP5-Range Organics	<10	<10	<10
Total Purgeable Petroleum Hydrocarbons			
Gasoline-range Organics	<0.5	<0.5	<0.5
Inorganic Compounds (Dissolved)			
Lead	NA	NA	NA
Inorganic Compounds (Total)			
Lead	<12	<11	<11

TABLE 3-46

FUEL LINE CORRECTIVE ACTION AREA B
DATA GAP TYPE IX ANALYTICAL RESULTS
ALAMEDA POINT, ALAMEDA, CALIFORNIA

POINT NAME	PA02-04	PA02-05	PA02-05
SAMPLE IDENTIFICATION	030-CAP-275	030-CAP-276	030-CAP-277
SAMPLE DATE	03-MAY-00	03-MAY-00	03-MAY-00
DEPTH (feet below ground surface)	5.0 to 6.0	2.0 to 3.0	6.0 to 7.0
MEDIA (Units)	Soil (mg/kg)	Soil (mg/kg)	Soil (mg/kg)
Volatile Organic Compounds			
Benzene	<0.01	<0.01	<0.01
Toluene	<0.01	<0.01	<0.01
Ethylbenzene	<0.01	<0.01	<0.01
Xylene (Total)	<0.01	<0.01	<0.01
Methyl Tertiary Butyl Ether	<0.01	<0.01	<0.01
Total Extractable Petroleum Hydrocarbons			
Diesel-range Organics	<10	<10	<10
Motor-oil-range Organics	<250	<250	<250
JP5-Range Organics	<10	<10	<10
Total Purgeable Petroleum Hydrocarbons			
Gasoline-range Organics	<0.5	<0.5	<0.5
Inorganic Compounds (Dissolved)			
Lead	NA	NA	NA
Inorganic Compounds (Total)			
Lead	<12	<11	<12

TABLE 3-46

FUEL LINE CORRECTIVE ACTION AREA B
DATA GAP TYPE IX ANALYTICAL RESULTS
ALAMEDA POINT, ALAMEDA, CALIFORNIA

POINT NAME	PA02-06	PA02-06	PA02-07
SAMPLE IDENTIFICATION	030-CAP-278	030-CAP-279	030-CAP-280
SAMPLE DATE	08-MAY-00	08-MAY-00	08-MAY-00
DEPTH (feet below ground surface)	3.0 to 4.0	4.0 to 5.0	2.8 to 3.8
MEDIA (Units)	Soil (mg/kg)	Soil (mg/kg)	Soil (mg/kg)
Volatile Organic Compounds			
Benzene	<0.01	<0.01	<0.01
Toluene	<0.01	<0.01	<0.01
Ethylbenzene	<0.01	<0.01	<0.01
Xylene (Total)	<0.01	<0.01	<0.01
Methyl Tertiary Butyl Ether	<0.01	<0.01	<0.01
Total Extractable Petroleum Hydrocarbons			
Diesel-range Organics	<10	<10	<10
Motor-oil-range Organics	<250	<250	<250
JP5-Range Organics	<10	<10	<10
Total Purgeable Petroleum Hydrocarbons			
Gasoline-range Organics	<0.5	<0.5	<0.5
Inorganic Compounds (Dissolved)			
Lead	NA	NA	NA
Inorganic Compounds (Total)			
Lead	<12	<12	<12

TABLE 3-46

FUEL LINE CORRECTIVE ACTION AREA B
DATA GAP TYPE IX ANALYTICAL RESULTS
ALAMEDA POINT, ALAMEDA, CALIFORNIA

POINT NAME	PA02-07	PA02-07	PA02-08
SAMPLE IDENTIFICATION	030-CAP-281	030-CAP-385	030-CAP-282
SAMPLE DATE	08-MAY-00	08-MAY-00	03-MAY-00
DEPTH (feet below ground surface)	4.0 to 5.0	5.0 to 6.0	2.0 to 3.0
MEDIA (Units)	Soil (mg/kg)	Soil (mg/kg)	Soil (mg/kg)
Volatile Organic Compounds			
Benzene	<0.01	<0.01	<0.01
Toluene	<0.01	<0.01	<0.01
Ethylbenzene	<0.01	<0.01	<0.01
Xylene (Total)	<0.01	<0.01	<0.01
Methyl Tertiary Butyl Ether	<0.01	<0.01	<0.01
Total Extractable Petroleum Hydrocarbons			
Diesel-range Organics	<10	<10	<10
Motor-oil-range Organics	<250	<250	<250
JP5-Range Organics	<10	<10	<10
Total Purgeable Petroleum Hydrocarbons			
Gasoline-range Organics	<0.5	<0.5	<0.5
Inorganic Compounds (Dissolved)			
Lead	NA	NA	NA
Inorganic Compounds (Total)			
Lead	<11	<11	<11

TABLE 3-46

FUEL LINE CORRECTIVE ACTION AREA B
DATA GAP TYPE IX ANALYTICAL RESULTS
ALAMEDA POINT, ALAMEDA, CALIFORNIA

POINT NAME	PA02-08	PA02-09	PA02-09
SAMPLE IDENTIFICATION	030-CAP-283	030-CAP-284	030-CAP-285
SAMPLE DATE	03-MAY-00	03-MAY-00	03-MAY-00
DEPTH (feet below ground surface)	6.0 to 7.0	2.0 to 3.0	6.0 to 7.0
MEDIA (Units)	Soil (mg/kg)	Soil (mg/kg)	Soil (mg/kg)
Volatile Organic Compounds			
Benzene	<0.01	<0.01	<0.01
Toluene	<0.01	<0.01	<0.01
Ethylbenzene	<0.01	<0.01	<0.01
Xylene (Total)	<0.01	<0.01	<0.01
Methyl Tertiary Butyl Ether	<0.01	<0.01	<0.01
Total Extractable Petroleum Hydrocarbons			
Diesel-range Organics	<10	<10	<10
Motor-oil-range Organics	<250	<250	<250
JP5-Range Organics	<10	<10	<10
Total Purgeable Petroleum Hydrocarbons			
Gasoline-range Organics	<0.5	<0.5	<0.5
Inorganic Compounds (Dissolved)			
Lead	NA	NA	NA
Inorganic Compounds (Total)			
Lead	<12	<10	<12

TABLE 3-46

FUEL LINE CORRECTIVE ACTION AREA B
DATA GAP TYPE IX ANALYTICAL RESULTS
ALAMEDA POINT, ALAMEDA, CALIFORNIA

POINT NAME	PA02-10	PA02-10	PA02-11
SAMPLE IDENTIFICATION	030-CAP-286	030-CAP-287	030-CAP-288
SAMPLE DATE	08-MAY-00	08-MAY-00	03-MAY-00
DEPTH (feet below ground surface)	2.8 to 3.8	4.0 to 5.0	2.0 to 3.0
MEDIA (Units)	Soil (mg/kg)	Soil (mg/kg)	Soil (mg/kg)
Volatile Organic Compounds			
Benzene	<0.01	<0.01	<0.01
Toluene	<0.01	<0.01	<0.01
Ethylbenzene	<0.01	<0.01	<0.01
Xylene (Total)	<0.01	<0.01	<0.01
Methyl Tertiary Butyl Ether	<0.01	<0.01	<0.01
Total Extractable Petroleum Hydrocarbons			
Diesel-range Organics	<10	<10	<10
Motor-oil-range Organics	<250	<250	<250
JP5-Range Organics	<10	<10	<10
Total Purgeable Petroleum Hydrocarbons			
Gasoline-range Organics	<0.5	<0.5	<0.5
Inorganic Compounds (Dissolved)			
Lead	NA	NA	NA
Inorganic Compounds (Total)			
Lead	<12	<12	<10

TABLE 3-46

FUEL LINE CORRECTIVE ACTION AREA B
DATA GAP TYPE IX ANALYTICAL RESULTS
ALAMEDA POINT, ALAMEDA, CALIFORNIA

POINT NAME	PA02-11	PA02-12	PA02-12
SAMPLE IDENTIFICATION	030-CAP-289	030-CAP-290	030-CAP-291
SAMPLE DATE	03-MAY-00	08-MAY-00	08-MAY-00
DEPTH (feet below ground surface)	6.0 to 7.0	3.0 to 4.0	4.0 to 5.0
MEDIA (Units)	Soil (mg/kg)	Soil (mg/kg)	Soil (mg/kg)
Volatile Organic Compounds			
Benzene	<0.01	<0.01	<0.01
Toluene	<0.01	<0.01	<0.01
Ethylbenzene	<0.01	<0.01	<0.01
Xylene (Total)	<0.01	<0.01	<0.01
Methyl Tertiary Butyl Ether	<0.01	<0.01	<0.01
Total Extractable Petroleum Hydrocarbons			
Diesel-range Organics	<10	<10	<10
Motor-oil-range Organics	<250	<250	<250
JP5-Range Organics	<10	<10	<10
Total Purgeable Petroleum Hydrocarbons			
Gasoline-range Organics	<0.5	<0.5	<0.5
Inorganic Compounds (Dissolved)			
Lead	NA	NA	NA
Inorganic Compounds (Total)			
Lead	<12	<12	<12

TABLE 3-46

FUEL LINE CORRECTIVE ACTION AREA B
DATA GAP TYPE IX ANALYTICAL RESULTS
ALAMEDA POINT, ALAMEDA, CALIFORNIA

POINT NAME	PA02-13	PA02-13	PA02-01
SAMPLE IDENTIFICATION	030-CAP-292	030-CAP-293	030-CAP-386
SAMPLE DATE	08-MAY-00	08-MAY-00	03-MAY-00
DEPTH (feet below ground surface)	2.5 to 3.5	4.0 to 5.0	3.0 to 8.0
MEDIA (Units)	Soil (mg/kg)	Soil (mg/kg)	Water (mg/L)
Volatile Organic Compounds			
Benzene	<0.01	<0.01	<0.0005
Toluene	<0.01	<0.01	<0.001
Ethylbenzene	<0.01	<0.01	<0.001
Xylene (Total)	<0.01	<0.01	<0.001
Methyl Tertiary Butyl Ether	<0.01	<0.01	<0.002
Total Extractable Petroleum Hydrocarbons			
Diesel-range Organics	<10	<10	<0.1
Motor-oil-range Organics	<250	<250	<0.5
JP5-Range Organics	<10	<10	<0.1
Total Purgeable Petroleum Hydrocarbons			
Gasoline-range Organics	<0.5	<0.5	<0.05
Inorganic Compounds (Dissolved)			
Lead	NA	NA	<0.003
Inorganic Compounds (Total)			
Lead	<12	<12	NA

TABLE 3-46

FUEL LINE CORRECTIVE ACTION AREA B
DATA GAP TYPE IX ANALYTICAL RESULTS
ALAMEDA POINT, ALAMEDA, CALIFORNIA

POINT NAME	PA02-01	PA02-02	PA02-03
SAMPLE IDENTIFICATION	030-CAP-294	030-CAP-295	030-CAP-296
SAMPLE DATE	03-MAY-00	03-MAY-00	03-MAY-00
DEPTH (feet below ground surface)	3.0 to 8.0	0.0 to 10.0	0.0 to 10.0
MEDIA (Units)	Water (mg/L)	Water (mg/L)	Water (mg/L)
Volatile Organic Compounds			
Benzene	<0.0005	<0.0005	<0.0005
Toluene	<0.001	<0.001	<0.001
Ethylbenzene	<0.001	<0.001	<0.001
Xylene (Total)	<0.001	<0.001	<0.001
Methyl Tertiary Butyl Ether	<0.002	<0.002	<0.002
Total Extractable Petroleum Hydrocarbons			
Diesel-range Organics	<0.1	<0.1	<0.1
Motor-oil-range Organics	<0.5	<0.5	<0.5
JP5-Range Organics	<0.1	<0.1	<0.1
Total Purgeable Petroleum Hydrocarbons			
Gasoline-range Organics	<0.05	<0.05	<0.05
Inorganic Compounds (Dissolved)			
Lead	<0.003	<0.003	<0.003
Inorganic Compounds (Total)			
Lead	NA	NA	NA

TABLE 3-46

FUEL LINE CORRECTIVE ACTION AREA B
DATA GAP TYPE IX ANALYTICAL RESULTS
ALAMEDA POINT, ALAMEDA, CALIFORNIA

POINT NAME	PA02-04	PA02-05	PA02-06
SAMPLE IDENTIFICATION	030-CAP-297	030-CAP-298	030-CAP-299
SAMPLE DATE	03-MAY-00	03-MAY-00	08-MAY-00
DEPTH (feet below ground surface)	0.0 to 10.0	0.0 to 10.0	0.0 to 10.0
MEDIA (Units)	Water (mg/L)	Water (mg/L)	Water (mg/L)
Volatile Organic Compounds			
Benzene	<0.0005	<0.0005	<0.0005
Toluene	<0.001	<0.001	<0.001
Ethylbenzene	<0.001	<0.001	<0.001
Xylene (Total)	<0.001	<0.001	<0.001
Methyl Tertiary Butyl Ether	<0.002	<0.002	<0.002
Total Extractable Petroleum Hydrocarbons			
Diesel-range Organics	<0.1	<0.1	<0.1
Motor-oil-range Organics	<0.5	<0.5	<0.5
JP5-Range Organics	<0.1	<0.1	<0.1
Total Purgeable Petroleum Hydrocarbons			
Gasoline-range Organics	<0.05	<0.05	<0.05
Inorganic Compounds (Dissolved)			
Lead	<0.003	<0.003	<0.003
Inorganic Compounds (Total)			
Lead	NA	NA	NA

TABLE 3-46

FUEL LINE CORRECTIVE ACTION AREA B
DATA GAP TYPE IX ANALYTICAL RESULTS
ALAMEDA POINT, ALAMEDA, CALIFORNIA

POINT NAME	PA02-07	PA02-08	PA02-09
SAMPLE IDENTIFICATION	030-CAP-300	030-CAP-301	030-CAP-302
SAMPLE DATE	08-MAY-00	03-MAY-00	03-MAY-00
DEPTH (feet below ground surface)	0.0 to 10.0	0.0 to 10.0	0.0 to 10.0
MEDIA (Units)	Water (mg/L)	Water (mg/L)	Water (mg/L)
Volatile Organic Compounds			
Benzene	<0.0005	<0.0005	<0.0005
Toluene	<0.001	<0.001	<0.001
Ethylbenzene	<0.001	<0.001	<0.001
Xylene (Total)	<0.001	<0.001	<0.001
Methyl Tertiary Butyl Ether	<0.002	<0.002	<0.002
Total Extractable Petroleum Hydrocarbons			
Diesel-range Organics	<0.1	<0.1	<0.1
Motor-oil-range Organics	<0.5	<0.5	<0.5
JP5-Range Organics	<0.1	<0.1	<0.1
Total Purgeable Petroleum Hydrocarbons			
Gasoline-range Organics	<0.05	<0.05	<0.05
Inorganic Compounds (Dissolved)			
Lead	<0.003	<0.003	<0.003
Inorganic Compounds (Total)			
Lead	NA	NA	NA

TABLE 3-46

FUEL LINE CORRECTIVE ACTION AREA B
DATA GAP TYPE IX ANALYTICAL RESULTS
ALAMEDA POINT, ALAMEDA, CALIFORNIA

POINT NAME	PA02-10	PA02-11	PA02-12
SAMPLE IDENTIFICATION	030-CAP-303	030-CAP-304	030-CAP-387
SAMPLE DATE	08-MAY-00	03-MAY-00	08-MAY-00
DEPTH (feet below ground surface)	0.0 to 10.0	0.0 to 10.0	0.0 to 10.0
MEDIA (Units)	Water (mg/L)	Water (mg/L)	Water (mg/L)
Volatile Organic Compounds			
Benzene	<0.0005	<0.0005	<0.0005
Toluene	<0.001	<0.001	<0.001
Ethylbenzene	<0.001	<0.001	<0.001
Xylene (Total)	<0.001	<0.001	<0.001
Methyl Tertiary Butyl Ether	<0.002	<0.002	<0.002
Total Extractable Petroleum Hydrocarbons			
Diesel-range Organics	<0.1	<0.1	<0.1
Motor-oil-range Organics	<0.5	<0.5	<0.5
JP5-Range Organics	<0.1	<0.1	<0.1
Total Purgeable Petroleum Hydrocarbons			
Gasoline-range Organics	**0.17**	<0.05	<0.05
Inorganic Compounds (Dissolved)			
Lead	<0.003	<0.003	<0.003
Inorganic Compounds (Total)			
Lead	NA	NA	NA

TABLE 3-46

FUEL LINE CORRECTIVE ACTION AREA B
DATA GAP TYPE IX ANALYTICAL RESULTS
ALAMEDA POINT, ALAMEDA, CALIFORNIA

POINT NAME	PA02-12	PA02-13
SAMPLE IDENTIFICATION	030-CAP-305	030-CAP-306
SAMPLE DATE	08-MAY-00	08-MAY-00
DEPTH (feet below ground surface)	0.0 to 10.0	0.0 to 10.0
MEDIA (Units)	Water (mg/L)	Water (mg/L)
Volatile Organic Compounds		
Benzene	<0.0005	<0.0005
Toluene	<0.001	<0.001
Ethylbenzene	<0.001	<0.001
Xylene (Total)	<0.001	<0.001
Methyl Tertiary Butyl Ether	<0.002	<0.002
Total Extractable Petroleum Hydrocarbons		
Diesel-range Organics	<0.1	<0.1
Motor-oil-range Organics	<0.5	<0.5
JP5-Range Organics	<0.1	<0.1
Total Purgeable Petroleum Hydrocarbons		
Gasoline-range Organics	<0.05	<0.05
Inorganic Compounds (Dissolved)		
Lead	<0.003	<0.003
Inorganic Compounds (Total)		
Lead	NA	NA

Notes:

mg/kg Milligrams per kilograms
mg/L Milligrams per liter
NA Not analyzed

Detected concentrations are bolded.

4.0 ENVIRONMENTAL BASELINE SURVEY PARCELS

The following subsections provide background information and summarize the data gap investigation conducted at each EBS parcel. Background information for each EBS parcel includes site location and operations conducted (International Technology Corporation [IT] 1998), proposed land reuse (Alameda Redevelopment and Reuse Authority 1996), proposed groundwater designation (TtEMI 2000f), and previous investigations. Figures and tables cited in the text appear at the end of each subsection. Data gap results presented in this section will be used to (1) assess the environmental condition of the EBS parcels, (2) categorize the EBS parcels into DOD Categories 1 through 7, and (3) make accelerated decisions on the EBS parcel's suitability for lease or transfer.

4.1 ENVIRONMENTAL BASELINE SURVEY PARCEL 27A

The following subsections provide a brief summary of (1) the site location and operations conducted, (2) the proposed land reuse and groundwater beneficial use, (3) previous investigations, and (4) the data gap investigation conducted at EBS Parcel 27A.

4.1.1 Site Location and Operations Conducted

EBS Parcel 27A is located in the Corrosion Control and Aircraft Testing Zone (Zone 7) and contains Buildings 25, 25A, 451, 494, 515, 595, 622, and 623. Building 25 served as a corrosion control facility. Activities conducted within this building included grit blasting/stripping, washing, and chemical stripping. Building 25A served as an industrial wastewater treatment plant. Chemicals used or generated in Building 25A include paint sludge, wastewater containing paint stripper and anticorrosives, treatment sludge, sulfuric acid, phosphoric acid, and small quantities of phenol, ammonia, phosphate, mercury waste, and spent methylene chloride waste. Building 451 served as an aviation meteorological facility. Building 494 was used for aircraft testing prior to flight and equipment repair. Processes conducted within this building included the use of hydraulic fluid, lube oil, grease, and sealing compound. Building 515 served as an aircraft maintenance building. Building 595 served as a liquid oxygen converter storage shed. Building 622 served as a steam generation building. Building 623 was the air compressor control room for operations conducted in Building 25.

4.1.2 Proposed Land Reuse and Groundwater Beneficial Use

EBS Parcel 27A is designated as part of the Marina District land reuse area. Land reuse may include commercial and residential uses, and mixed-use (which may include residential uses). Groundwater at EBS Parcel 27A is designated as part of the Central Region and is not considered a potential drinking water source.

4.1.3 Previous Investigations

In April 1997, PRC and GAIA Consulting Inc. (GAIA) completed a Sector II EBS, which included Zone 7 (PRC EMI and GAIA 1997) for a Finding of Suitability for Lease for EBS Parcel 27A (PRC EMI 1996). In December 1998, IT completed EBS data evaluation summaries, which included Phase IIa and IIb sample results (IT 1998). Seven groundwater samples were collected during EBS Phase IIb sampling because of concerns with the storage of hazardous waste in underground tunnels at this parcel. Elevated concentrations of aluminum, arsenic, lead, mercury, and vanadium were detected. However, groundwater samples were not filtered prior to analysis, resulting in metals concentrations being biased high.

4.1.4 Data Gap Investigation Summary

Metals concentrations in groundwater at EBS Parcel 27A were investigated under Data Gap Type XI. Aluminum and arsenic were detected at maximum concentrations of 2.9 mg/L and 0.014 mg/L, respectively. Lead, mercury, and vanadium were not detected at any of the Data Gap Type XI sampling locations. Data gap sampling locations are shown in Figure 4-1. Table 4-1 summarizes field activities conducted and observations made during the data gap investigation. Analytical results for EBS Parcel 27A are summarized in Table 4-2 and included in Appendix D.

SENSITIVE RECORD

PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

FIGURE 4-1 – EBS PARCEL 27A
DATA GAP SAMPLING LOCATIONS

FOR ADDITIONAL INFORMATION, CONTACT:

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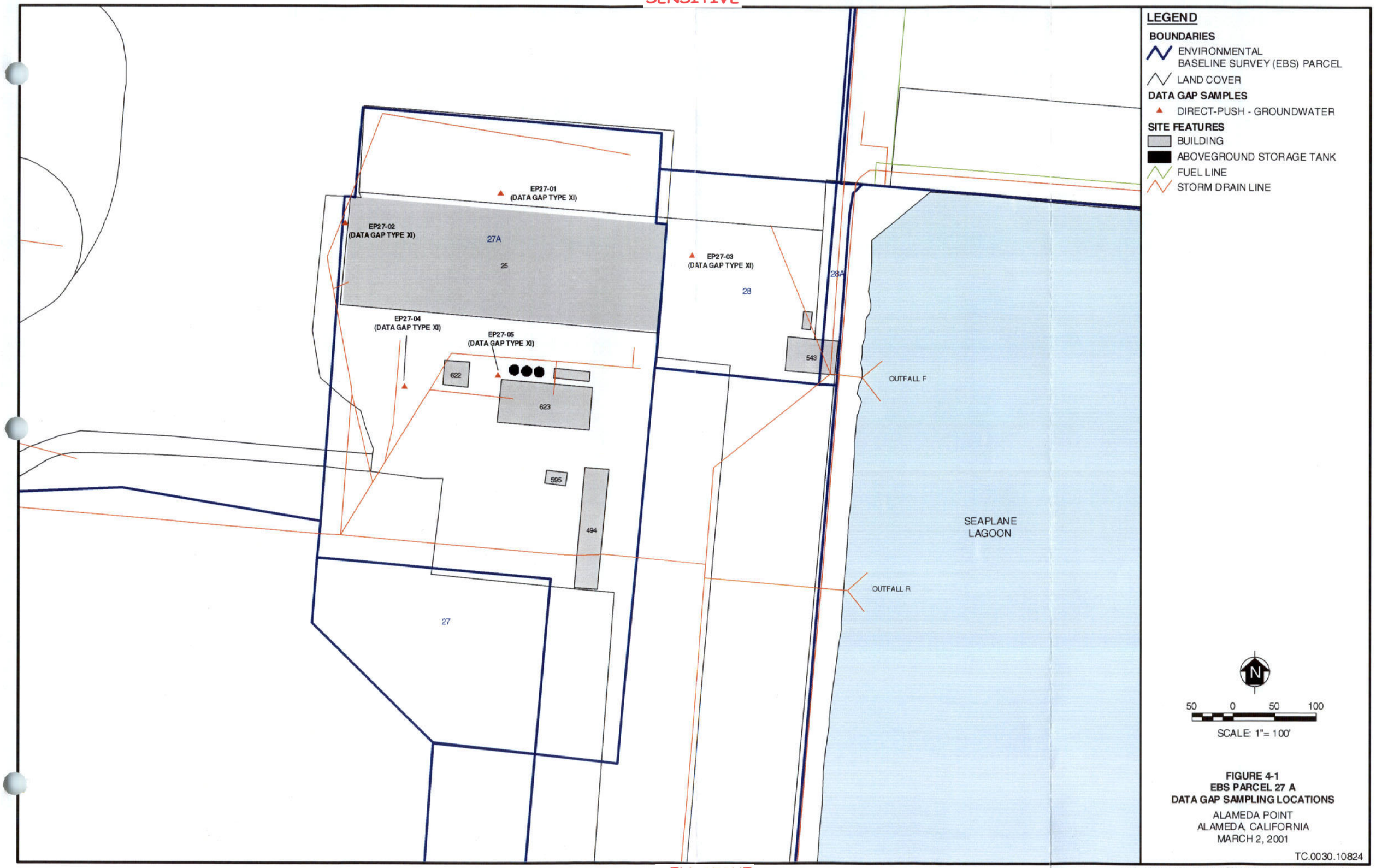


FIGURE 4-1
EBS PARCEL 27 A
DATA GAP SAMPLING LOCATIONS

ALAMEDA POINT
ALAMEDA, CALIFORNIA
MARCH 2, 2001

TC.0030.10824

C:\GEORGIES\PROJECT\DGS\CTO30_DG\CAA_JAN1 FIG4-1 LAYOUT

TABLE 4-1

ENVIRONMENTAL BASELINE SURVEY PARCEL 27A
DATA GAP INVESTIGATION SUMMARY TABLE
ALAMEDA POINT, ALAMEDA, CALIFORNIA
(Page 1 of 1)

DATA GAP	FIELD ACTIVITIES	FIELD OBSERVATIONS
Data Gap Type XI: Confirmation of Metals Concentrations in Groundwater	• Six direct-push groundwater samples were collected at a depth of 6 to 10 feet below ground surface.	• None

TABLE 4-2

ENVIRONMENTAL BASELINE SURVEY PARCEL 27A
DATA GAP TYPE XI ANALYTICAL RESULTS
ALAMEDA POINT, ALAMEDA, CALIFORNIA
(Page 1 of 2)

POINT NAME	EP27-01	EP27-01	EP27-02
SAMPLE IDENTIFICATION	030-CAP-237	030-CAP-380	030-CAP-238
SAMPLE DATE	10-MAY-00	10-MAY-00	15-JUN-00
DEPTH (feet below ground surface)	6.0 to 10.0	6.0 to 10.0	0.0 to 10.0
MEDIA (Units)	Water (mg/L)	Water (mg/L)	Water (mg/L)
Inorganic Compounds (Dissolved)			
Aluminum	**2.9**	**2**	**0.4**
Antimony	<0.06	<0.06	<0.06
Arsenic	**0.013**	**0.013**	**0.014**
Barium	<0.2	<0.2	<0.2
Beryllium	<0.004	<0.004	<0.004
Cadmium	<0.005	<0.005	<0.005
Calcium	<5	<5	**130**
Chromium	**0.017**	**0.011**	<0.01
Cobalt	<0.05	<0.05	<0.05
Copper	<0.025	<0.025	<0.025
Iron	**4.9**	**3.2**	**2.2**
Lead	<0.003	<0.003	<0.003
Magnesium	<5	<5	**280**
Manganese	**0.036**	**0.029**	**1.1**
Mercury	<0.0002	<0.0002	<0.0002
Molybdenum	<0.02	<0.02	<0.02
Nickel	<0.04	<0.04	<0.04
Potassium	**7.2**	**6.2**	**72**
Selenium	<0.005	<0.005	<0.005
Silver	<0.01	<0.01	<0.01
Sodium	**93**	**83**	**2,800**
Thallium	<0.005	<0.005	<0.005
Vanadium	<0.05	<0.05	<0.05
Zinc	<0.02	<0.02	<0.02

TABLE 4-2

ENVIRONMENTAL BASELINE SURVEY PARCEL 27A
DATA GAP TYPE XI ANALYTICAL RESULTS
ALAMEDA POINT, ALAMEDA, CALIFORNIA

POINT NAME	EP27-03	EP27-04	EP27-05
SAMPLE IDENTIFICATION	030-CAP-239	030-CAP-240	030-CAP-241
SAMPLE DATE	10-MAY-00	10-MAY-00	10-MAY-00
DEPTH (feet below ground surface)	6.0 to 10.0	6.0 to 10.0	6.0 to 10.0
MEDIA (Units)	Water (mg/L)	Water (mg/L)	Water (mg/L)
Inorganic Compounds (Dissolved)			
Aluminum	**0.12**	<0.1	<0.1
Antimony	<0.06	<0.06	<0.06
Arsenic	<0.01	<0.01	<0.01
Barium	<0.2	<0.2	**0.37**
Beryllium	<0.004	<0.004	<0.004
Cadmium	<0.005	<0.005	<0.005
Calcium	**39**	**75**	**340**
Chromium	<0.01	<0.01	<0.01
Cobalt	<0.05	<0.05	<0.05
Copper	<0.025	<0.025	<0.025
Iron	<0.1	<0.1	<0.1
Lead	<0.003	<0.003	<0.003
Magnesium	**11**	**41**	**320**
Manganese	**0.069**	**0.65**	**1.6**
Mercury	<0.0002	<0.0002	<0.0002
Molybdenum	<0.02	<0.02	<0.02
Nickel	<0.04	<0.04	<0.04
Potassium	**13**	**16**	**67**
Selenium	<0.005	<0.005	<0.005
Silver	<0.01	<0.01	<0.01
Sodium	**65**	**1,200**	**3,100**
Thallium	<0.005	<0.005	<0.005
Vanadium	<0.05	<0.05	<0.05
Zinc	<0.02	<0.02	**0.021**

Notes:

mg/kg Milligrams per kilograms
mg/L Milligrams per liter
NA Not analyzed

Detected concentrations are bolded.

4.2 ENVIRONMENTAL BASELINE SURVEY PARCELS 41, 44, 64, AND 65

The following subsections provide a brief summary of (1) the site location and operations conducted, (2) the proposed land reuse and groundwater beneficial use, (3) previous investigations, and (4) the data gap investigation conducted at EBS Parcels 41, 44, 64, and 65.

4.2.1 Site Location and Operations Conducted

EBS Parcels 41, 44, 64, and 65 are located in the Enlisted Barracks Zone (Zone 9), near EBS Parcel 45. EBS Parcel 45 includes Building 2. Dry cleaning operations were conducted within Building 2. Groundwater at EBS Parcels 41, 44, 64, and 65 may be impacted by improper disposal of degreasers and chlorinated solvents used in dry cleaning operations conducted within Building 2.

4.2.2 Proposed Land Reuse and Groundwater Beneficial Use

EBS Parcels 41, 44, 64, and 65 are designated as part of the Civic Core land reuse areas. Land reuse may include a research and development area, an industrial area, and an open space/civic mall area. Groundwater at EBS Parcels 41, 44, 64, and 65 is designated as part of the Central Region and is not considered a potential drinking water source.

4.2.3 Previous Investigations

In April 1997, PRC EMI and GAIA completed a Sector II EBS, which included Zone 9 (PRC EMI and GAIA 1997). In December 1998, IT completed EBS data evaluation summaries, which included Phase IIa and IIb sample results (IT 1998). Three of four EBS Phase IIb groundwater samples collected near Building 2 had elevated concentrations of CHCs, commonly found in dry cleaning operations. Groundwater samples were not collected from EBS parcels 41, 44, 64, and 65 during the EBS Phase IIa and IIb investigation.

4.2.4 Data Gap Investigation Summary

CHC concentrations in groundwater at EBS Parcels 41, 44, 64, and 65 were accessed under Data Gap Type VI. CHCs were not detected at any of the Data Gap Type VI sampling locations. Data gap sampling locations are shown in Figure 4-2. Table 4-3 summarizes field activities conducted and observations made during the data gap investigation. Analytical results for EBS Parcels 41, 44, 64, and 65 are summarized in Table 4-4 and included in Appendix D.

LEGEND

BOUNDARIES

- ENVIRONMENTAL BASELINE SURVEY (EBS) PARCEL
- LAND COVER

DATA GAP SAMPLES

- DIRECT PUSH - GROUNDWATER

SITE FEATURES

- BUILDING
- FUEL LINE
- STORM DRAIN LINE
- UNDERGROUND STORAGE TANK

N

100 0 100 200

SCALE: 1"= 200'

FIGURE 4-2
EBS PARCELS 41, 44, 64, AND 65
DATA GAP SAMPLING LOCATIONS

ALAMEDA POINT
ALAMEDA, CALIFORNIA
MARCH 2, 2001

TC.0030.10824

C:\GEORGIES\PROJECT\DGS\CTO30_DG\CAA_JAN1 FIG4-2 LAYOUT

TABLE 4-3

ENVIRONMENTAL BASELINE SURVEY PARCELS 41, 44, 64, AND 65
DATA GAP INVESTIGATION SUMMARY TABLE
ALAMEDA POINT, ALAMEDA, CALIFORNIA
(Page 1 of 1)

DATA GAP	FIELD ACTIVITIES	FIELD OBSERVATIONS
Data Gap Type VI: Chlorinated Hydrocarbons in Groundwater	• Four direct-push groundwater samples were collected at a depth of 6 to 10 feet below ground surface.	• None

TABLE 4-4

ENVIRONMENTAL BASELINE SURVEY PARCELS 41, 44, 64, AND 65
DATA GAP TYPE VI ANALYTICAL RESULTS
ALAMEDA POINT, ALAMEDA, CALIFORNIA

POINT NAME	EP41-01	EP44-01	EP64-01
SAMPLE IDENTIFICATION	030-CAP-242	030-CAP-243	030-CAP-244
SAMPLE DATE	11-MAY-00	11-MAY-00	11-MAY-00
DEPTH (feet below ground surface)	6.0 to 10.0	6.0 to 10.0	6.0 to 10.0
MEDIA (Units)	Water (mg/L)	Water (mg/L)	Water (mg/L)
Volatile Organic Compounds			
1,1,1-Trichloroethane	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.001	<0.001	<0.001
1,1,2-Trichloroethane	<0.001	<0.001	<0.001
1,1-Dichloroethane	<0.001	<0.001	<0.001
1,1-Dichloroethene	<0.001	<0.001	<0.001
1,2,4-Trimethylbenzene	<0.001	<0.001	<0.001
1,2-Dichloroethane	<0.001	<0.001	<0.001
1,2-Dichloropropane	<0.001	<0.001	<0.001
1,3,5-Trimethylbenzene	<0.001	<0.001	<0.001
Bromodichloromethane	<0.001	<0.001	<0.001
Bromoform	<0.001	<0.001	<0.001
Bromomethane	<0.005	<0.005	<0.005
Carbon Tetrachloride	<0.001	<0.001	<0.001
Chlorobenzene	<0.001	<0.001	<0.001
Chloroethane	<0.005	<0.005	<0.005
Chloroform	<0.001	<0.001	<0.001
Chloromethane	<0.005	<0.005	<0.005
Cis-1,2-Dichloroethene	<0.001	<0.001	<0.001
Cis-1,3-Dichloropropene	<0.001	<0.001	<0.001
Dibromochloromethane	<0.001	<0.001	<0.001
Methylene Chloride	<0.002	<0.002	<0.002
Styrene	<0.001	<0.001	<0.001
Tetrachloroethene	<0.001	<0.001	<0.001
Trans-1,2-Dichloroethene	<0.001	<0.001	<0.001
Trans-1,3-Dichloropropene	<0.001	<0.001	<0.001
Trichloroethene	<0.001	<0.001	<0.001
Vinyl Chloride	<0.0005	<0.0005	<0.0005
Benzene	<0.0005	<0.0005	<0.0005
Toluene	<0.001	<0.001	<0.001
Ethylbenzene	<0.001	<0.001	<0.001
M,P-Xylene	<0.001	<0.001	<0.001
O-Xylene	<0.001	<0.001	<0.001
Methyl Tertiary Butyl Ether	<0.002	<0.002	<0.002

TABLE 4-4

ENVIRONMENTAL BASELINE SURVEY PARCELS 41, 44, 64, AND 65
DATA GAP TYPE VI ANALYTICAL RESULTS
ALAMEDA POINT, ALAMEDA, CALIFORNIA
(Page 2 of 3)

POINT NAME	EP65-01
SAMPLE IDENTIFICATION	030-CAP-245
SAMPLE DATE	11-MAY-00
DEPTH (feet below ground surface)	6.0 to 10.0
MEDIA (Units)	Water (mg/L)
Volatile Organic Compounds	
1,1,1-Trichloroethane	<0.001
1,1,2,2-Tetrachloroethane	<0.001
1,1,2-Trichloroethane	<0.001
1,1-Dichloroethane	<0.001
1,1-Dichloroethene	<0.001
1,2,4-Trimethylbenzene	<0.001
1,2-Dichloroethane	<0.001
1,2-Dichloropropane	<0.001
1,3,5-Trimethylbenzene	<0.001
Bromodichloromethane	<0.001
Bromoform	<0.001
Bromomethane	<0.005
Carbon Tetrachloride	<0.001
Chlorobenzene	<0.001
Chloroethane	<0.005
Chloroform	<0.001
Chloromethane	<0.005
Cis-1,2-Dichloroethene	<0.001
Cis-1,3-Dichloropropene	<0.001
Dibromochloromethane	<0.001
Methylene Chloride	<0.002
Styrene	<0.001
Tetrachloroethene	<0.001
Trans-1,2-Dichloroethene	<0.001
Trans-1,3-Dichloropropene	<0.001
Trichloroethene	<0.001
Vinyl Chloride	<0.0005
Benzene	<0.0005
Toluene	<0.001
Ethylbenzene	<0.001
M,P-Xylene	<0.001
O-Xylene	<0.001
Methyl Tertiary Butyl Ether	<0.002

TABLE 4-4

ENVIRONMENTAL BASELINE SURVEY PARCELS 41, 44, 64, AND 65
DATA GAP TYPE VI ANALYTICAL RESULTS
ALAMEDA POINT, ALAMEDA, CALIFORNIA
(Page 3 of 3)

Notes:

mg/kg Milligrams per kilograms
mg/L Milligrams per liter
NA Not analyzed

Detected concentrations are bolded.

4.3 ENVIRONMENTAL BASELINE SURVEY PARCEL 125

The following subsections provide a brief summary of (1) the site location and operations conducted, (2) the proposed land reuse and groundwater beneficial use, (3) previous investigations, and (4) the data gap investigation conducted at EBS Parcel 125.

4.3.1 Site Location and Operations Conducted

EBS Parcel 125 is located in the Engine Testing and Hazardous Materials Storage Zone (Zone 17) and contains Building 66. Building 66 was used for engine testing, which involved the repair and testing of pneumatic, hydraulic, and fuel metering systems. The waste generated included solvents, corrosives, JP5, refrigerant oil, and calibration fluids.

4.3.2 Proposed Land Reuse and Groundwater Beneficial Use

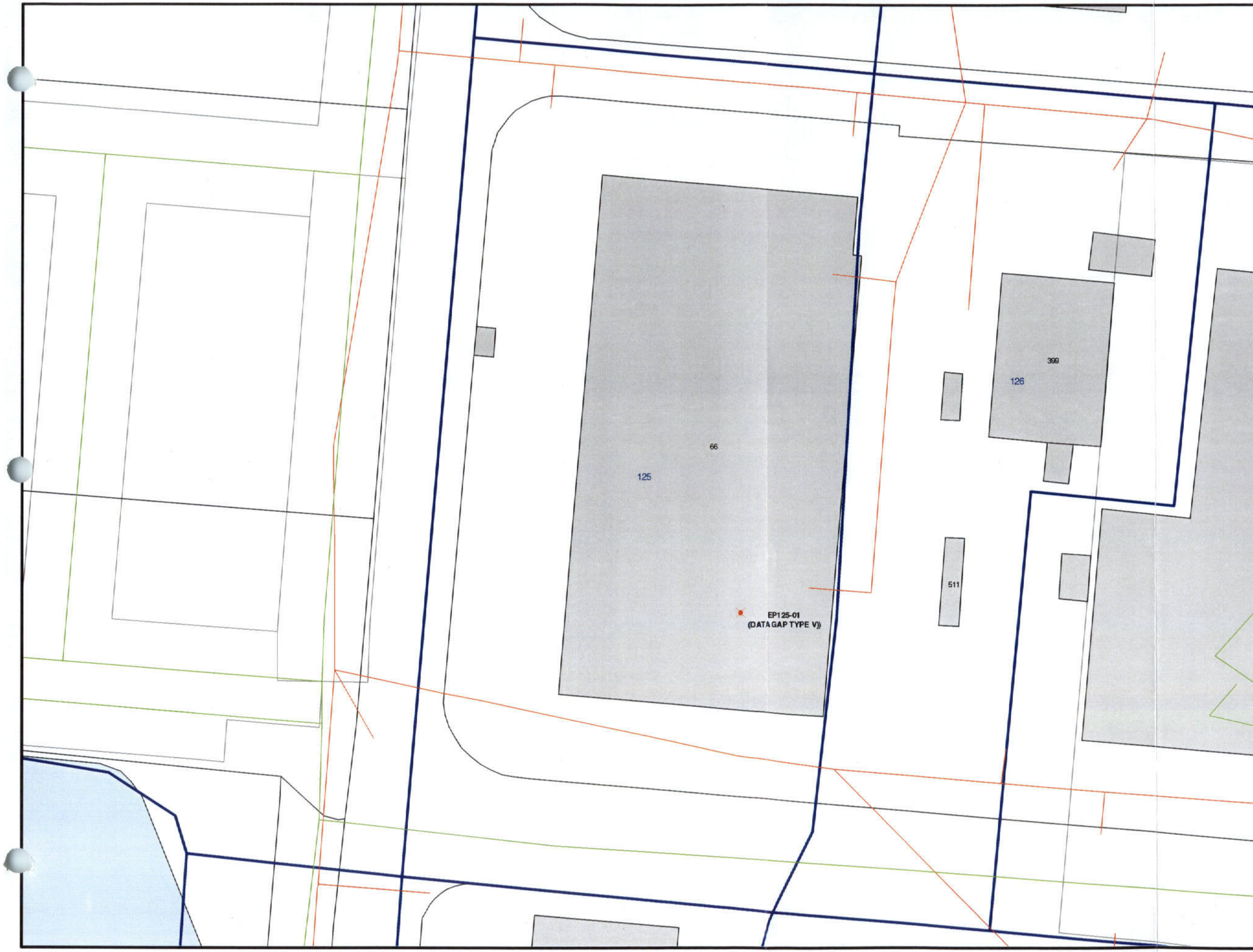
EBS Parcel 125 is designated as part of the Marina District land reuse area. Land reuse may include commercial and residential uses, and mixed-use (which may include residential uses). Groundwater at EBS Parcel 125 is designated as part of the Southeastern Region and is considered a potential drinking water source.

4.3.3 Previous Investigations

In November 1996, ERM completed a sector EBS (ERM, GAIA, and PRC EMI 1996), which included Zone 17. In December 1998, IT completed EBS Data Evaluation Summaries for this zone, which included Phase IIa sampling (IT 1998). A soil sample collected beneath Building 66 during the EBS Phase IIa sampling had elevated concentrations of TPH.

4.3.4 Data Gap Investigation Summary

The soil source area located beneath Building 66 was investigated under Data Gap Type V. TTPH and TPH-associated compound concentrations did not exceed interim residential PRCs for soil. The data gap sampling location is shown in Figure 4-3. Table 4-5 summarizes field activities conducted and observations made during the data gap investigation. Analytical results for EBS Parcel 125 are summarized in Table 4-6 and included in Appendix D.



LEGEND

BOUNDARIES
- ENVIRONMENTAL BASELINE SURVEY (EBS) PARCEL
- LAND COVER

DATA GAP SAMPLES
- DIRECT-PUSH - SOIL

SITE FEATURES
- BUILDING
- FUEL LINE
- STORM DRAIN LINE

N

20 0 20 40

SCALE: 1"= 40'

FIGURE 4-3
EBS PARCEL 125
DATA GAP SAMPLING LOCATIONS

ALAMEDA POINT
ALAMEDA, CALIFORNIA
MARCH 2, 2001

TC.0030.10824

C:\GEORGIES\PROJECT\DGS\CTO30_DG\CAA_JAN1 FIG4-3 LAYOUT

TABLE 4-5

ENVIRONMENTAL BASELINE SURVEY PARCEL 125
DATA GAP INVESTIGATION SUMMARY TABLE
ALAMEDA POINT, ALAMEDA, CALIFORNIA
(Page 1 of 1)

DATA GAP	FIELD ACTIVITIES	FIELD OBSERVATIONS
Data Gap Type V: Soil Source Areas	• One direct-push soil boring was advanced to a depth of 4 feet bgs. • Two soil samples were collected at depths of 0.5 to 1.5 and 3.0 to 4.0 feet bgs.	• Soil borings did not have any visible staining or odors. • Depth to groundwater was 4.0 feet bgs.

Note:

bgs Below ground surface

TABLE 4-6

ENVIRONMENTAL BASELINE SURVEY PARCEL 125
DATA GAP TYPE V ANALYTICAL RESULTS
ALAMEDA POINT, ALAMEDA, CALIFORNIA
(Page 1 of 1)

POINT NAME	EP125-01	EP125-01
SAMPLE IDENTIFICATION	030-CAP-235	030-CAP-236
SAMPLE DATE	04-MAY-00	04-MAY-00
DEPTH (feet below ground surface)	0.5 to 1.5	3.0 to 4.0
MEDIA (Units)	Soil (mg/kg)	Soil (mg/kg)
Volatile Organic Compounds		
Benzene	<0.01	<0.01
Toluene	<0.01	<0.01
Ethylbenzene	<0.01	<0.01
Xylene (Total)	<0.01	<0.01
Methyl Tertiary Butyl Ether	<0.01	<0.01
Total Extractable Petroleum Hydrocarbons		
Diesel-range Organics	<10	<10
Motor-oil-range Organics	<250	<250
JP5-Range Organics	<10	<10
Total Purgeable Petroleum Hydrocarbons		
Gasoline-range Organics	<0.5	<0.5
Inorganic Compounds (Total)		
Lead	<11	<11

Notes:

mg/kg Milligrams per kilograms
mg/L Milligrams per liter
NA Not analyzed

Detected concentrations are bolded.

4.4 ENVIRONMENTAL BASELINE SURVEY PARCEL 138

The following subsections provide a brief summary of (1) the site location and operations conducted, (2) the proposed land reuse and groundwater beneficial use, (3) previous investigations, and (4) the data gap investigation conducted at EBS Parcel 138.

4.4.1 Site Location and Operations Conducted

EBS Parcel 138 is located within CAA 11 in the Engine Testing and Hazardous Materials Storage Zone (Zone 17). EBS Parcel 138 contained Building 180, Open Space I (including Structure 598), and Open Space II (including former Buildings 105, 106, and 296). Building 180 served as a pumping station and office space. Diesel and motor fuel were stored in Building 180. Open Space I was a fenced fuel and chemical storage area. Hazardous materials, such as paints, solvents, oils, pesticides, halogenated and nonhalogenated organics, beryllium, and mercury, were stored in this area. Open Space I also contained USTs 37-1 through 37-24 (see Section 3.10.1). Structure 598 is a secondary containment aircraft fuel storage area and contains three 25,000-gallon ASTs. Open Space II covers all parcel areas other than Open Space I. Buildings 105, 106, and 296 served as a warehouse, a temporary air terminal, and a bus station, respectively. Chemical storage was not documented in any of these buildings. Open Space II also contained a storage area for floating OWSs ("donuts").

4.4.2 Proposed Land Reuse and Groundwater Beneficial Use

EBS Parcel 138 is designated as part of the Marina District land reuse area. Land reuse may include commercial and residential uses, and mixed-use (which may include residential uses). Groundwater at EBS Parcel 138 is designated as part of the Southeastern Region and is considered a potential drinking water source.

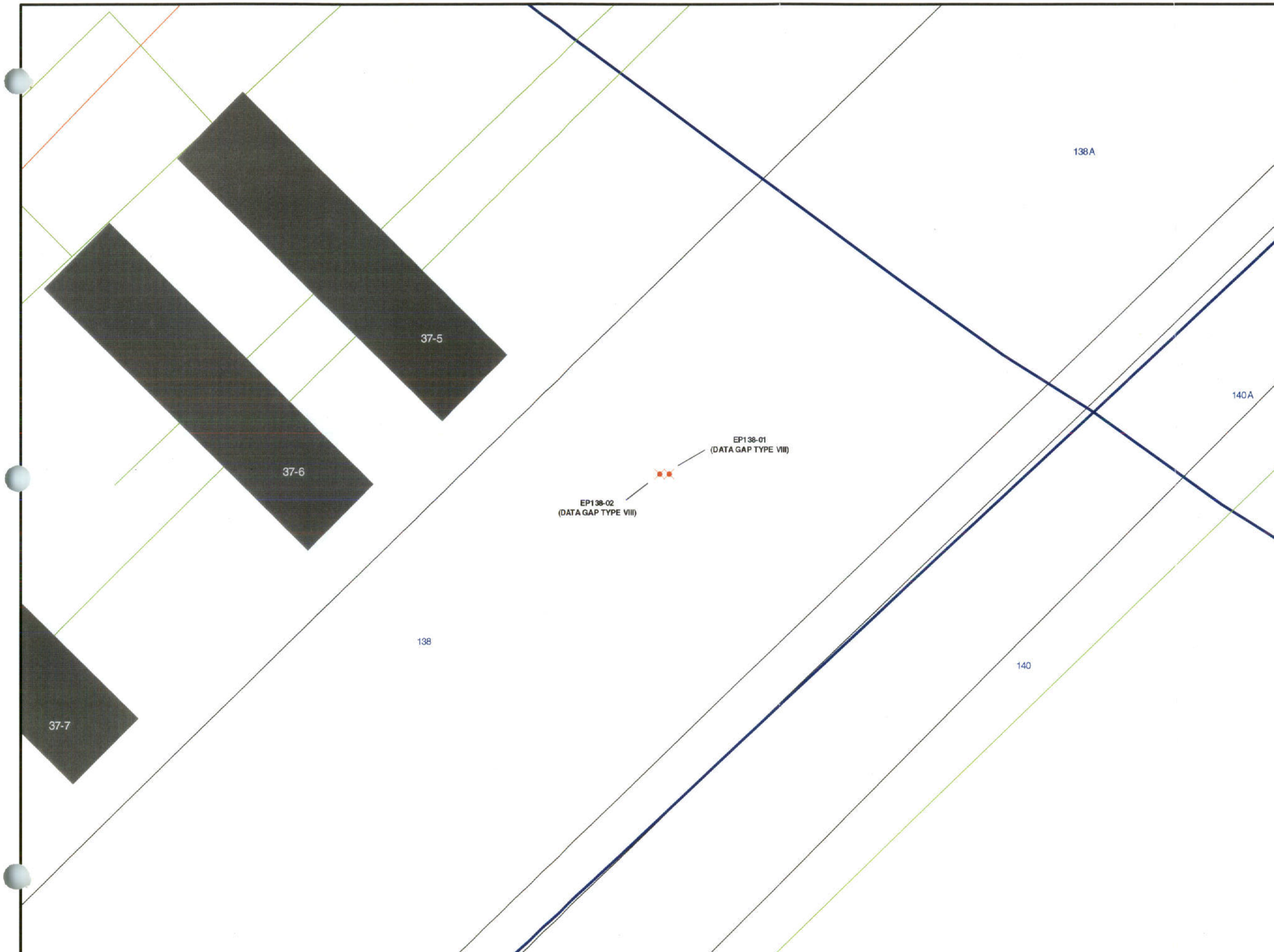
4.4.3 Previous Investigations

In December 1998, IT completed EBS data evaluation summaries, which included EBS Phase IIa and IIb sample results (IT 1998). Ten soil samples were collected during the EBS Phase IIa sampling, based on concerns of suspected releases of hazardous materials stored in the area. Concentrations of the PCBs Aroclor 1254 and 1260 were detected. Two sample points had PCB concentrations above the EPA Region 9 PRG. Four additional soil samples and one groundwater sample were collected and analyzed

for PCBs during the EBS Phase IIb investigation. PCBs were not detected during the EBS Phase IIb investigation.

4.4.4 Data Gap Investigation Summary

PCB concentrations in soil at EBS Parcel 138 were investigated under Data Gap Type VIII. Aroclor-1260 was detected at a maximum concentration of 0.12 mg/kg. All other PCBs were not detected at any Data Gap Type VIII sampling locations. Data gap sampling locations are shown in Figure 4-4. Table 4-7 summarizes field activities conducted and observations made during the data gap investigation. Analytical results for EBS Parcel 138 are summarized in Table 4-8 and included in Appendix D.



LEGEND

BOUNDARIES

- ENVIRONMENTAL BASELINE SURVEY (EBS) PARCEL
- LAND COVER

DATA GAP SAMPLES

- DIRECT-PUSH - SOIL

SITE FEATURES

- FUEL LINE
- STORM DRAIN LINE
- UNDERGROUND STORAGE TANK

N

5 0 5 10

SCALE: 1"= 10'

FIGURE 4-4
EBS PARCEL 138
DATA GAP SAMPLING LOCATION

ALAMEDA POINT
ALAMEDA, CALIFORNIA
MARCH 2, 2001

TC.0030.10824

C:\GEORGIES\PROJECT\DGS\CTO30_DG\CAA_JAN1 FIG4-4 LAYOUT

TABLE 4-7

ENVIRONMENTAL BASELINE SURVEY PARCEL 138
DATA GAP INVESTIGATION SUMMARY TABLE
ALAMEDA POINT, ALAMEDA, CALIFORNIA
(Page 1 of 1)

DATA GAP	FIELD ACTIVITIES	FIELD OBSERVATIONS
Data Gap Type VIII: Current Polychlorinated Biphenyl Soil Concentrations	• Two soil boring were advanced to a depth of 4.0 feet bgs. • Four soil samples were collected at depths of 2 to 3.5 feet bgs.	• The soil borings did not have any visible staining or odors.

Note:

bgs Below ground surface

TABLE 4-8

ENVIRONMENTAL BASELINE SURVEY PARCEL 138
DATA GAP TYPE VIII ANALYTICAL RESULTS
ALAMEDA POINT, ALAMEDA, CALIFORNIA
(Page 1 of 2)

POINT NAME	EP138-01	EP138-01	EP138-01
SAMPLE IDENTIFICATION	030-CAP-156	030-CAP-157	030-CAP-370A
SAMPLE DATE	01-MAY-00	01-MAY-00	01-MAY-00
DEPTH (feet below ground surface)	2.0 to 2.5	2.5 to 3.0	3.0 to 3.5
MEDIA (Units)	Soil (mg/kg)	Soil (mg/kg)	Soil (mg/kg)
Polychlorinated Biphenyls			
Aroclor-1016	<0.017	<0.016	<0.017
Aroclor-1221	<0.035	<0.034	<0.035
Aroclor-1232	<0.017	<0.016	<0.017
Aroclor-1242	<0.017	<0.016	<0.017
Aroclor-1248	<0.017	<0.016	<0.017
Aroclor-1254	<0.017	<0.016	<0.017
Aroclor-1260	**0.024**	<0.016	**0.12**

TABLE 4-8

ENVIRONMENTAL BASELINE SURVEY PARCEL 138
DATA GAP TYPE VIII ANALYTICAL RESULTS
ALAMEDA POINT, ALAMEDA, CALIFORNIA

POINT NAME	EP138-02
SAMPLE IDENTIFICATION	030-CAP-370
SAMPLE DATE	01-MAY-00
DEPTH (feet below ground surface)	2.5 to 3.0
MEDIA (Units)	Soil (mg/kg)
Polychlorinated Biphenyls	
Aroclor-1016	<0.018
Aroclor-1221	<0.036
Aroclor-1232	<0.018
Aroclor-1242	<0.018
Aroclor-1248	<0.018
Aroclor-1254	<0.018
Aroclor-1260	<0.018

Notes:

mg/kg Milligrams per kilograms
mg/L Milligrams per liter
NA Not analyzed

Detected concentrations are bolded.

4.5 ENVIRONMENTAL BASELINE SURVEY PARCEL 149

The following subsections provide a brief summary of (1) the site location and operations conducted, (2) the proposed land reuse and groundwater beneficial use, (3) previous investigations, and (4) the data gap investigation conducted at EBS Parcel 149.

4.5.1 Site Location and Operations Conducted

EBS Parcel 149 is located in the Southeastern Refinery and Heavy Industrial Zone (Zone 22), within IR Site 16. EBS Parcel 149 contains Buildings 338A through 338H and an Open Space. Buildings 338A and 338C were used as offices and for equipment storage. The remaining buildings were used for equipment and material storage only. The open-space contained areas that were used for the storage of paints, solvents, acids, bases, and PCB-containing transformers. It was reported that PCBs were released from transformers stored in this open space. PCBs were also applied to the open space for weed control. Prior to 1948, Parcel 149 was used for aircraft parking.

4.5.2 Proposed Land Reuse and Groundwater Beneficial Use

EBS Parcel 149 is designated as part of the Inner Harbor land reuse area. Proposed land reuse includes offices, research and development areas, mixed-use (which may include residential uses), and park areas. Groundwater at EBS Parcel 149 is designated as part of the Southeastern Region and is considered a potential drinking water source.

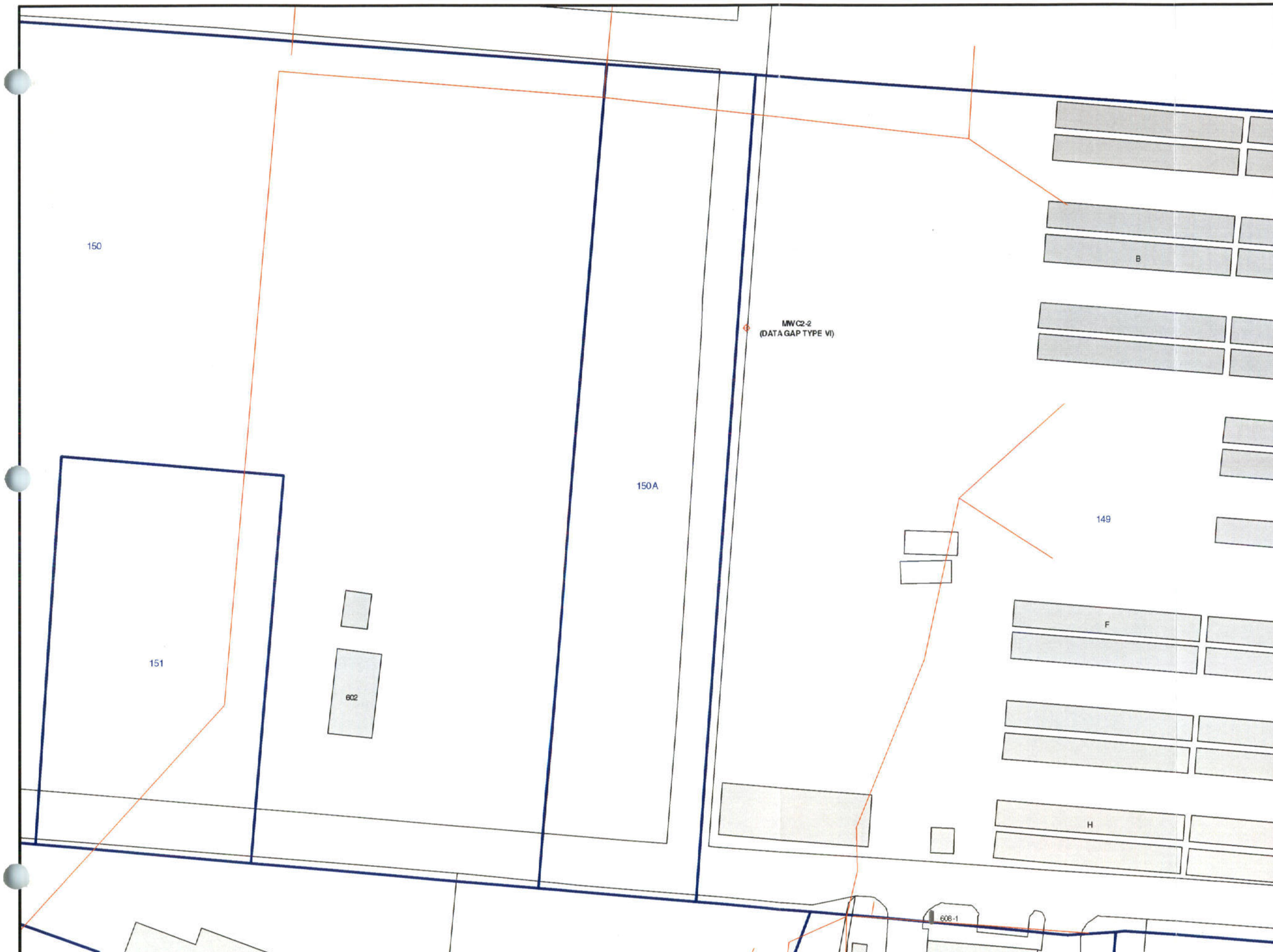
4.5.3 Previous Investigations

RI activities for IR Site 16 were initiated in 1990 and included a soil gas survey, a soil investigation, and a groundwater investigation (TtEMI 1999a). CHCs, including 1,2-dichlorobenzene and trichloroethene, were detected in groundwater samples collected from Monitoring Well MWC2-2. In December 1998, IT completed EBS data evaluation summaries, which included Phase IIa and IIb sample results (IT 1998).

4.5.4 Data Gap Investigation Summary

Current CHC concentrations in groundwater at EBS Parcel 149 were evaluated under Data Gap Type VI. 1,2-Dichlorobenzene was detected above the MCL at a concentration of 0.362 mg/L. All other CHC

concentrations did not exceed MCLs. Data gap sampling locations are shown in Figure 4-5. Table 4-9 summarizes field activities conducted and observations made during the data gap investigation. Analytical results for EBS Parcel 149 are summarized in Table 4-10 and included in Appendix D.



LEGEND

BOUNDARIES
- ENVIRONMENTAL BASELINE SURVEY (EBS) PARCEL
- LAND COVER

DATA GAP SAMPLE
- MONITORING WELL

SITE FEATURES
- BUILDING
- STORM DRAIN LINE
- UNDERGROUND STORAGE TANK

N

35 0 35 70

SCALE: 1"= 70'

FIGURE 4-5
EBS PARCEL 149
DATA GAP SAMPLING LOCATION

ALAMEDA POINT
ALAMEDA, CALIFORNIA
MARCH 2, 2001

TC.0030.10824

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TABLE 4-9

ENVIRONMENTAL BASELINE SURVEY PARCEL 149
DATA GAP INVESTIGATION SUMMARY TABLE
ALAMEDA POINT, ALAMEDA, CALIFORNIA
(Page 1 of 1)

DATA GAP	FIELD ACTIVITIES	FIELD OBSERVATIONS
Data Gap Type VI: Chlorinated Hydrocarbons in Groundwater	• One groundwater sample was collected from an existing monitoring well.	• The groundwater sample did not have an oder or sheen.

TABLE 4-10

ENVIRONMENTAL BASELINE SURVEY PARCEL 149
DATA GAP TYPE VI ANALYTICAL RESULTS
ALAMEDA POINT, ALAMEDA, CALIFORNIA

POINT NAME	MWC2-2
SAMPLE IDENTIFICATION	030-CAP-405
SAMPLE DATE	21-JUN-00
DEPTH (feet below ground surface)	
MEDIA (Units)	Water (mg/L)
Volatile Organic Compounds	
1,1,1-Trichloroethane	<0.005
1,1,2,2-Tetrachloroethane	<0.005
1,1,2-Trichloroethane	<0.005
1,1-Dichloroethane	<0.005
1,1-Dichloroethene	<0.005
1,2-Dichlorobenzene	**0.362**
1,2-Dichloroethane	<0.005
1,2-Dichloroethene (Total)	**0.001**
1,2-Dichloropropane	<0.005
1,3-Dichlorobenzene	**0.005**
1,4-Dichlorobenzene	**0.02**
2-Butanone	<0.1
4-Methyl-2-Pentanone	<0.05
Acetone	<0.1
Bromodichloromethane	<0.005
Bromoform	<0.005
Bromomethane	<0.005
Carbon Disulfide	<0.005
Carbon Tetrachloride	<0.005
Chlorobenzene	**0.001**
Chloroethane	<0.005
Chloroform	<0.005
Chloromethane	<0.005
Cis-1,3-Dichloropropene	<0.005
Dibromochloromethane	<0.005
Methylene Chloride	<0.005
Styrene	<0.005
Tetrachloroethene	<0.005
Trans-1,3-Dichloropropene	<0.005
Trichloroethene	**0.003**
Vinyl Chloride	<0.005
Benzene	<0.005
Toluene	<0.005
Ethylbenzene	<0.005
Xylene (Total)	<0.005
Methyl Tertiary Butyl Ether	<0.005

TABLE 4-10

ENVIRONMENTAL BASELINE SURVEY PARCEL 149
DATA GAP TYPE VI ANALYTICAL RESULTS
ALAMEDA POINT, ALAMEDA, CALIFORNIA

Notes:

mg/kg Milligrams per kilograms
mg/L Milligrams per liter
NA Not analyzed

Detected concentrations are bolded.

4.6 ENVIRONMENTAL BASELINE SURVEY PARCEL 155B

The following subsections provide a brief summary of (1) the site location and operations conducted, (2) the proposed land reuse and groundwater beneficial use, (3) previous investigations, and (4) the data gap investigation conducted at EBS Parcel 155B.

4.6.1 Site Location and Operations Conducted

EBS Parcel 155B is located in the Dock Zone (Zone 18) and consists primarily of paved, open space. EBS Parcel 155B contained an OWS (Building 601) and USTs 15-1 had a capacity of 5,000 gallons and stored diesel fuel (TtEMI 2000c). USTs 15-2 and 15-3 had a capacity of 2,000 gallons and also stored diesel fuel (TtEMI 2000c).

4.6.2 Proposed Land Reuse and Groundwater Beneficial Use

EBS Parcel 155B is designated as part of the Marina District land reuse area. Land reuse may include commercial and residential uses, and mixed-use (which may include residential uses). Groundwater at EBS Parcel 155B is designated as part of the Southeastern Region and is considered a potential drinking water source.

4.6.3 Previous Investigations

PWC removed USTs 15-1 through 15-3 and associated piping in December 1994 (PWC 1996b). Floating product was observed in the excavation of USTs 15-2 and 15-3. Visible soil contamination was present near UST 15-3. Nineteen soil samples and one groundwater sample were collected, and results indicated the presence of TPH in the soil and groundwater. In 1995, ERM completed a soil and groundwater investigation near the former USTs (ERM 1996). Twelve groundwater samples were collected using a Geoprobe® and three groundwater monitoring wells were installed. CHCs, including 1,1-dichloroethane, 1,1-dichloroethene, and trichloroethene, were detected at four Geoprobe® groundwater sampling locations and at all three monitoring well locations. In December 1998, IT completed EBS Data Evaluation Summaries, which included Phase IIa sample results (IT 1998).

4.6.4 Data Gap Investigation Summary

CHC concentrations in groundwater at EBS Parcel 155B were evaluated under Data Gap Type VI. Vinyl chloride and 1,2-dichloroethene (total) exceeded the MCLs and were detected at maximum concentrations of 0.008 mg/L and 0.034 mg/L, respectively. All other CHC concentrations did not exceed MCLs. Data gap sampling locations are shown in Figure 4-6. Table 4-11 summarizes field activities conducted and observations made during the data gap investigation. Analytical results for EBS Parcel 155B are summarized in Table 4-12 and included in Appendix D.

SENSITIVE RECORD

PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

FIGURE 4-6 – EBS PARCEL 155B
DATA GAP SAMPLING LOCATIONS

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SENSITIVE

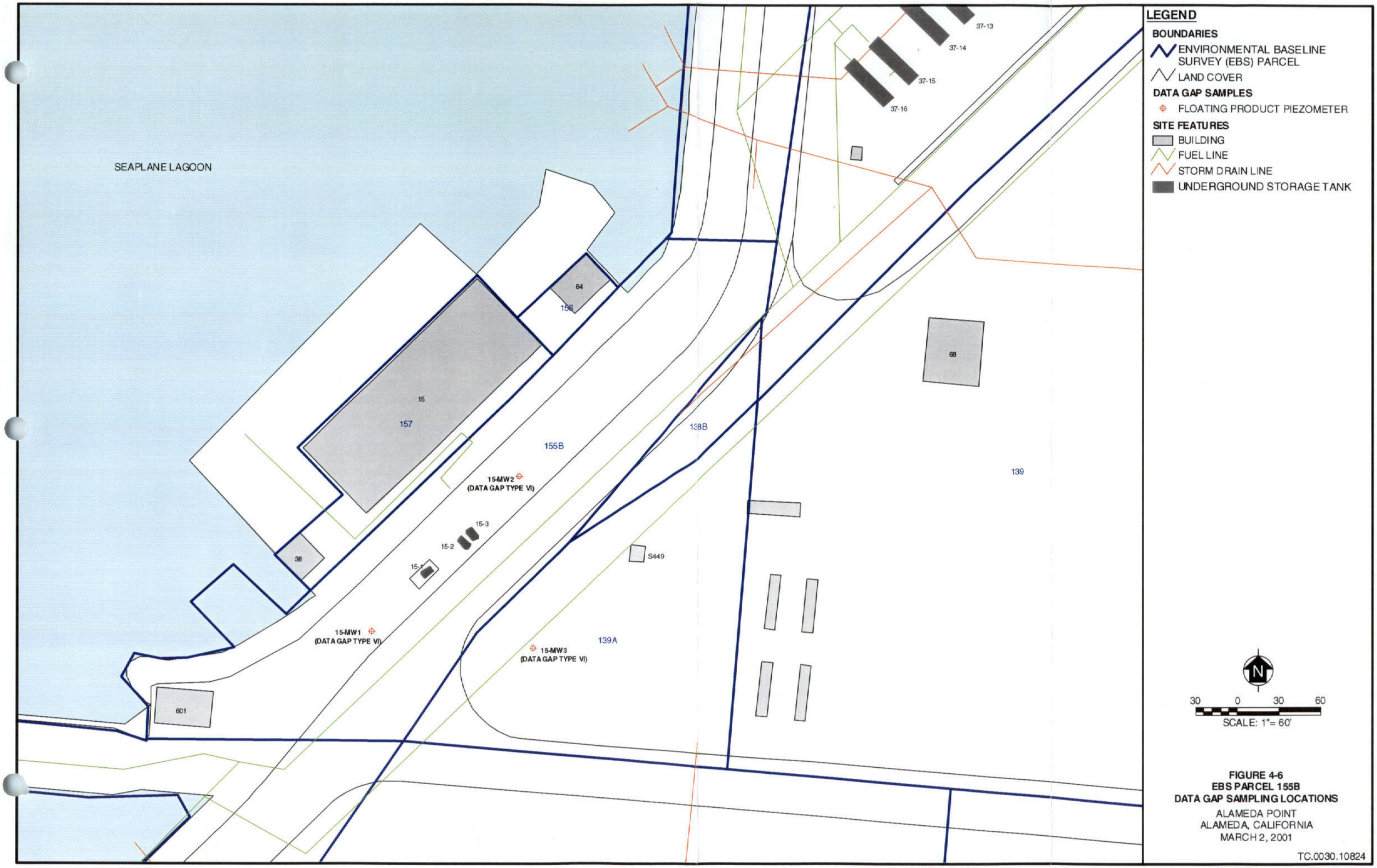

FIGURE 4-6
EBS PARCEL 155B
DATA GAP SAMPLING LOCATIONS
ALAMEDA POINT
ALAMEDA, CALIFORNIA
MARCH 2, 2001

TC.0030.10824

SENSITIVE

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TABLE 4-11

ENVIRONMENTAL BASELINE SURVEY PARCEL 155B
DATA GAP INVESTIGATION SUMMARY TABLE
ALAMEDA POINT, ALAMEDA, CALIFORNIA
(Page 1 of 1)

DATA GAP	FIELD ACTIVITIES	FIELD OBSERVATIONS
Data Gap Type VI: Chlorinated Hydrocarbons in Groundwater	• Four groundwater samples were collected from three existing monitoring wells.	• Groundwater samples did not have an order or sheen.

TABLE 4-12

ENVIRONMENTAL BASELINE SURVEY PARCEL 155B
DATA GAP TYPE VI ANALYTICAL RESULTS
ALAMEDA POINT, ALAMEDA, CALIFORNIA

POINT NAME	15-MW1	15-MW1	15-MW2
SAMPLE IDENTIFICATION	030-CAP-406	030-CAP-409	030-CAP-407
SAMPLE DATE	21-JUN-00	21-JUN-00	21-JUN-00
DEPTH (feet below ground surface)			
MEDIA (Units)	Water (mg/L)	Water (mg/L)	Water (mg/L)
Volatile Organic Compounds			
1,1,1-Trichloroethane	<0.005	<0.005	<0.005
1,1,2,2-Tetrachloroethane	<0.005	<0.005	<0.005
1,1,2-Trichloroethane	<0.005	<0.005	<0.005
1,1-Dichloroethane	**0.003**	**0.003**	**0.001**
1,1-Dichloroethene	<0.005	<0.005	<0.005
1,2-Dichlorobenzene	**0.0006**	<0.005	<0.005
1,2-Dichloroethane	<0.005	<0.005	<0.005
1,2-Dichloroethene (Total)	**0.011**	**0.011**	**0.014**
1,2-Dichloropropane	<0.005	<0.005	<0.005
1,3-Dichlorobenzene	<0.005	<0.005	<0.005
1,4-Dichlorobenzene	<0.005	<0.005	<0.005
2-Butanone	<0.1	<0.1	<0.1
4-Methyl-2-Pentanone	<0.05	<0.05	<0.05
Acetone	<0.1	<0.1	NA
Bromodichloromethane	<0.005	<0.005	<0.005
Bromoform	<0.005	<0.005	<0.005
Bromomethane	<0.005	<0.005	<0.005
Carbon Disulfide	<0.005	<0.005	<0.005
Carbon Tetrachloride	<0.005	<0.005	<0.005
Chlorobenzene	<0.005	<0.005	<0.005
Chloroethane	<0.005	<0.005	<0.005
Chloroform	<0.005	<0.005	<0.005
Chloromethane	<0.005	<0.005	<0.005
Cis-1,3-Dichloropropene	<0.005	<0.005	<0.005
Dibromochloromethane	<0.005	<0.005	<0.005
Methylene Chloride	<0.005	<0.005	<0.005
Styrene	<0.005	<0.005	<0.005
Tetrachloroethene	<0.005	<0.005	**0.0004**
Trans-1,3-Dichloropropene	<0.005	<0.005	<0.005
Trichloroethene	<0.005	<0.005	**0.001**
Vinyl Chloride	**0.008**	**0.007**	**0.001**
Benzene	<0.005	<0.005	<0.005
Toluene	<0.005	<0.005	<0.005
Ethylbenzene	<0.005	<0.005	<0.005
Xylene (Total)	<0.005	<0.005	<0.005
Methyl Tertiary Butyl Ether	**0.0003**	<0.005	<0.005

TABLE 4-12

ENVIRONMENTAL BASELINE SURVEY PARCEL 155B
DATA GAP TYPE VI ANALYTICAL RESULTS
ALAMEDA POINT, ALAMEDA, CALIFORNIA

POINT NAME	15-MW3
SAMPLE IDENTIFICATION	030-CAP-408
SAMPLE DATE	21-JUN-00
DEPTH (feet below ground surface)	
MEDIA (Units)	Water (mg/L)
Volatile Organic Compounds	
1,1,1-Trichloroethane	<0.005
1,1,2,2-Tetrachloroethane	<0.005
1,1,2-Trichloroethane	<0.005
1,1-Dichloroethane	**0.0008**
1,1-Dichloroethene	<0.005
1,2-Dichlorobenzene	<0.005
1,2-Dichloroethane	<0.005
1,2-Dichloroethene (Total)	**0.034**
1,2-Dichloropropane	<0.005
1,3-Dichlorobenzene	<0.005
1,4-Dichlorobenzene	<0.005
2-Butanone	<0.1
4-Methyl-2-Pentanone	<0.05
Acetone	<0.1
Bromodichloromethane	<0.005
Bromoform	<0.005
Bromomethane	<0.005
Carbon Disulfide	<0.005
Carbon Tetrachloride	<0.005
Chlorobenzene	<0.005
Chloroethane	<0.005
Chloroform	<0.005
Chloromethane	<0.005
Cis-1,3-Dichloropropene	<0.005
Dibromochloromethane	<0.005
Methylene Chloride	<0.005
Styrene	<0.005
Tetrachloroethene	<0.005
Trans-1,3-Dichloropropene	<0.005
Trichloroethene	**0.004**
Vinyl Chloride	**0.005**
Benzene	<0.005
Toluene	<0.005
Ethylbenzene	<0.005
Xylene (Total)	<0.005
Methyl Tertiary Butyl Ether	**0.002**

TABLE 4-12

ENVIRONMENTAL BASELINE SURVEY PARCEL 155B
DATA GAP TYPE VI ANALYTICAL RESULTS
ALAMEDA POINT, ALAMEDA, CALIFORNIA

Notes:

mg/kg Milligrams per kilograms
mg/L Milligrams per liter
NA Not analyzed

Detected concentrations are bolded.

5.0 RESOURCE CONSERVATION AND RECOVERY ACT-PERMITTED UNDERGROUND STORAGE TANKS

The following subsections provide background information and summarize the data gap investigation conducted for each RCRA-permitted UST. Background information for each RCRA-permitted UST includes UST-specific information (TtEMI 2000c), proposed land reuse (Alameda Redevelopment and Reuse Authority 1996), proposed groundwater designation (TtEMI 2000f), and previous investigations. Figures and tables cited in the text appear at the end of each subsection. Data gap results presented in this section will be used to fill RCRA closure requirements.

5.1 UNDERGROUND STORAGE TANKS 37-13 THROUGH 37-16

The following subsections provide a brief summary of (1) UST-specific information, (2) proposed land reuse and groundwater beneficial use, (3) previous investigations, and (4) the data gap investigation conducted for USTs 37-13 through 37-16.

5.1.1 Underground Storage Tank-specific Information

USTs 37-13 through 37-16 were installed in 1941; each had a 25,000-gallon capacity, was constructed of steel, and was used to stored jet fuel. USTs 37-13 through 37-16 were originally intended for storage of wastes listed under RCRA; however, these USTs never stored RCRA materials.

5.1.2 Proposed Land Reuse and Groundwater Beneficial Use

The area that contained USTs 37-13 through 37-16 is designated as part of the Marina District land reuse area. Land reuse may include commercial and residential uses, civic/institutional areas, and mixed-use (which may include residential uses). Groundwater in this area is designated as part of the Southeastern Region and is considered a potential drinking water source.

5.1.3 Previous Investigations

Moju conducted a soil and groundwater investigation near USTs 37-13 through 37-16 between September and October 1997 (Moju 1998b). Based on the initial results, Moju installed groundwater monitoring wells and conducted quarterly groundwater monitoring (Moju 1998a, 1998c, 1999a, 1999b). USTs 37-13 through 37-16 were removed by TtEMI in December 1998 (TtEMI 1999f). The sidewalls of the

excavations had visible staining. Five soil samples and two groundwater samples were collected from the base of the excavations. The associated fuel lines were removed by IT between September 1998 and January 1999 (TtEMI 2000a). In October 1999, TtEMI investigated all monitoring wells located near the former USTs for floating product (TtEMI 2000b). DTSC will not close USTs 37-13 through 37-16 under the RCRA program without determining the VOC and metal concentrations in soil and groundwater near the former USTs.

5.1.4 Data Gap Investigation Summary

VOC and metal concentrations in soil and groundwater near former USTs 37-13 through 37-16 were evaluated under Data Gap Type X. Data Gap Type X analytical results will be evaluated by DTSC for closure of USTs 37-13 through 37-16. Data gap sampling locations are shown in Figure 5-1. Table 5-1 summarizes field activities conducted and observations made during the data gap investigation. Analytical results for USTs 37-13 through 37-16 are summarized in Table 5-2 and included in Appendix D.

LEGEND

DATA GAP SAMPLES

- DIRECT PUSH - GROUNDWATER
- DIRECT PUSH - GROUNDWATER/SOIL
- DIRECT PUSH - SOIL

SITE FEATURES

- FUEL LINE
- STORM DRAIN LINE
- UNDERGROUND STORAGE TANK (UST)

N

5 0 5 10

SCALE: 1"= 10'

FIGURE 5-1
USTs 37-13 THROUGH 37-16
DATA GAP SAMPLING LOCATIONS

ALAMEDA POINT
ALAMEDA, CALIFORNIA
MARCH 2, 2001

TC.0030.10824

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TABLE 5-1

UNDERGROUND STORAGE TANKS 37-13 THROUGH 37-16
DATA GAP INVESTIGATION SUMMARY TABLE
ALAMEDA POINT, ALAMEDA, CALIFORNIA
(Page 1 of 1)

DATA GAP	FIELD ACTIVITIES	FIELD OBSERVATIONS
Data Gap Type X: Resource Conservation and Recovery Act Closure Plan Sampling	• Twelve soil borings were advanced to a depth of 8 feet bgs near underground storage tanks 37-13 through 37-16. • Thirteen soil samples were collected at depths ranging from 4.3 to 7 feet bgs. • Four groundwater samples were collected.	• The soil borings did not have any visible staining or odors. • Depth to groundwater ranged from 5.3 to 7.7 feet bgs. • Groundwater samples did not have an odor or sheen.

Notes:

bgs Below-ground surface

TABLE 5-2

UNDERGROUND STORAGE TANKS 37-13 THROUGH 37-16
DATA GAP TYPE X ANALYTICAL RESULTS
ALAMEDA POINT, ALAMEDA, CALIFORNIA

POINT NAME	CA11-26	CA11-27	CA11-28
SAMPLE IDENTIFICATION	030-CAP-172	030-CAP-173	030-CAP-174
SAMPLE DATE	04-MAY-00	05-MAY-00	04-MAY-00
DEPTH (feet below ground surface)	4.3 to 5.3	5.0 to 6.0	4.5 to 5.5
MEDIA (Units)	Soil (mg/kg)	Soil (mg/kg)	Soil (mg/kg)
Volatile Organic Compounds			
1,1,1-Trichloroethane	<0.011	<0.011	<0.01
1,1,2,2-Tetrachloroethane	<0.011	<0.011	<0.01
1,1,2-Trichloroethane	<0.011	<0.011	<0.01
1,1-Dichloroethane	<0.011	<0.011	<0.01
1,1-Dichloroethene	<0.011	<0.011	<0.01
1,2,4-Trimethylbenzene	<0.011	<0.011	<0.01
1,2-Dichloroethane	<0.011	<0.011	<0.01
1,2-Dichloropropane	<0.011	<0.011	<0.01
1,3,5-Trimethylbenzene	<0.011	<0.011	<0.01
Bromodichloromethane	<0.011	<0.011	<0.01
Bromoform	<0.011	<0.011	<0.01
Bromomethane	<0.011	<0.011	<0.01
Carbon Tetrachloride	<0.011	<0.011	<0.01
Chlorobenzene	<0.011	<0.011	<0.01
Chloroethane	<0.011	<0.011	<0.01
Chloroform	<0.011	<0.011	<0.01
Chloromethane	<0.011	<0.011	<0.01
Cis-1,2-Dichloroethene	<0.011	<0.011	<0.01
Cis-1,3-Dichloropropene	<0.011	<0.011	<0.01
Dibromochloromethane	<0.011	<0.011	<0.01
Methylene Chloride	<0.011	<0.016	<0.01
Styrene	<0.011	<0.011	<0.01
Tetrachloroethene	<0.011	<0.011	<0.01
Trans-1,2-Dichloroethene	<0.011	<0.011	<0.01
Trans-1,3-Dichloropropene	<0.011	<0.011	<0.01
Trichloroethene	<0.011	<0.011	<0.01
Vinyl Chloride	<0.011	<0.011	<0.01
Benzene	<0.011	<0.011	<0.01
Toluene	<0.011	<0.011	<0.01
Ethylbenzene	<0.011	<0.011	<0.01
M,P-Xylene	<0.011	<0.011	<0.01
O-Xylene	<0.011	<0.011	<0.01
Methyl Tertiary Butyl Ether	<0.011	<0.011	<0.01
Inorganic Compounds (Dissolved)			
Aluminum	NA	NA	NA
Antimony	NA	NA	NA

TABLE 5-2

UNDERGROUND STORAGE TANKS 37-13 THROUGH 37-16
DATA GAP TYPE X ANALYTICAL RESULTS
ALAMEDA POINT, ALAMEDA, CALIFORNIA

POINT NAME	CA11-29	CA11-29	CA11-30
SAMPLE IDENTIFICATION	030-CAP-372	030-CAP-175	030-CAP-176
SAMPLE DATE	05-MAY-00	05-MAY-00	05-MAY-00
DEPTH (feet below ground surface)	5.0 to 6.0	6.0 to 7.0	6.7 to 7.7
MEDIA (Units)	Soil (mg/kg)	Soil (mg/kg)	Soil (mg/kg)
Volatile Organic Compounds			
1,1,1-Trichloroethane	<0.01	<0.0096	<0.011
1,1,2,2-Tetrachloroethane	<0.01	<0.0096	<0.011
1,1,2-Trichloroethane	<0.01	<0.0096	<0.011
1,1-Dichloroethane	<0.01	<0.0096	<0.011
1,1-Dichloroethene	<0.01	<0.0096	<0.011
1,2,4-Trimethylbenzene	<0.01	<0.0096	<0.011
1,2-Dichloroethane	<0.01	<0.0096	<0.011
1,2-Dichloropropane	<0.01	<0.0096	<0.011
1,3,5-Trimethylbenzene	<0.01	<0.0096	<0.011
Bromodichloromethane	<0.01	<0.0096	<0.011
Bromoform	<0.01	<0.0096	<0.011
Bromomethane	<0.01	<0.0096	<0.011
Carbon Tetrachloride	<0.01	<0.0096	<0.011
Chlorobenzene	<0.01	<0.0096	<0.011
Chloroethane	<0.01	<0.0096	<0.011
Chloroform	<0.01	<0.0096	<0.011
Chloromethane	<0.01	<0.0096	<0.011
Cis-1,2-Dichloroethene	<0.01	<0.0096	<0.011
Cis-1,3-Dichloropropene	<0.01	<0.0096	<0.011
Dibromochloromethane	<0.01	<0.0096	<0.011
Methylene Chloride	**0.16**	<0.029	<0.018
Styrene	<0.01	<0.0096	<0.011
Tetrachloroethene	<0.01	<0.0096	<0.011
Trans-1,2-Dichloroethene	<0.01	<0.0096	<0.011
Trans-1,3-Dichloropropene	<0.01	<0.0096	<0.011
Trichloroethene	<0.01	<0.0096	<0.011
Vinyl Chloride	<0.01	<0.0096	<0.011
Benzene	<0.01	<0.0096	<0.011
Toluene	<0.01	<0.0096	<0.011
Ethylbenzene	<0.01	<0.0096	<0.011
M,P-Xylene	<0.01	<0.0096	<0.011
O-Xylene	<0.01	<0.0096	<0.011
Methyl Tertiary Butyl Ether	<0.01	<0.0096	<0.011
Inorganic Compounds (Dissolved)			
Aluminum	NA	NA	NA
Antimony	NA	NA	NA

TABLE 5-2

UNDERGROUND STORAGE TANKS 37-13 THROUGH 37-16
DATA GAP TYPE X ANALYTICAL RESULTS
ALAMEDA POINT, ALAMEDA, CALIFORNIA

POINT NAME	CA11-31	CA11-32	CA11-33
SAMPLE IDENTIFICATION	030-CAP-177	030-CAP-178	030-CAP-179
SAMPLE DATE	05-MAY-00	05-MAY-00	05-MAY-00
DEPTH (feet below ground surface)	6.0 to 7.0	6.0 to 7.0	5.5 to 6.5
MEDIA (Units)	Soil (mg/kg)	Soil (mg/kg)	Soil (mg/kg)
Volatile Organic Compounds			
1,1,1-Trichloroethane	<0.01	<0.01	<0.012
1,1,2,2-Tetrachloroethane	<0.01	<0.01	<0.012
1,1,2-Trichloroethane	<0.01	<0.01	<0.012
1,1-Dichloroethane	<0.01	<0.01	<0.012
1,1-Dichloroethene	<0.01	<0.01	<0.012
1,2,4-Trimethylbenzene	<0.01	<0.01	<0.012
1,2-Dichloroethane	<0.01	<0.01	<0.012
1,2-Dichloropropane	<0.01	<0.01	<0.012
1,3,5-Trimethylbenzene	<0.01	<0.01	<0.012
Bromodichloromethane	<0.01	<0.01	<0.012
Bromoform	<0.01	<0.01	<0.012
Bromomethane	<0.01	<0.01	<0.012
Carbon Tetrachloride	<0.01	<0.01	<0.012
Chlorobenzene	<0.01	<0.01	<0.012
Chloroethane	<0.01	<0.01	<0.012
Chloroform	<0.01	<0.01	<0.012
Chloromethane	<0.01	<0.01	<0.012
Cis-1,2-Dichloroethene	<0.01	<0.01	<0.012
Cis-1,3-Dichloropropene	<0.01	<0.01	<0.012
Dibromochloromethane	<0.01	<0.01	<0.012
Methylene Chloride	<0.023	<0.021	**0.1**
Styrene	<0.01	<0.01	<0.012
Tetrachloroethene	<0.01	<0.01	<0.012
Trans-1,2-Dichloroethene	<0.01	<0.01	<0.012
Trans-1,3-Dichloropropene	<0.01	<0.01	<0.012
Trichloroethene	<0.01	<0.01	<0.012
Vinyl Chloride	<0.01	<0.01	<0.012
Benzene	<0.01	<0.01	<0.012
Toluene	<0.01	<0.01	<0.012
Ethylbenzene	<0.01	<0.01	<0.012
M,P-Xylene	<0.01	<0.01	<0.012
O-Xylene	<0.01	<0.01	<0.012
Methyl Tertiary Butyl Ether	<0.01	<0.01	<0.012
Inorganic Compounds (Dissolved)			
Aluminum	NA	NA	NA
Antimony	NA	NA	NA

TABLE 5-2

UNDERGROUND STORAGE TANKS 37-13 THROUGH 37-16
DATA GAP TYPE X ANALYTICAL RESULTS
ALAMEDA POINT, ALAMEDA, CALIFORNIA

POINT NAME	CA11-34	CA11-35	CA11-36
SAMPLE IDENTIFICATION	030-CAP-180	030-CAP-181	030-CAP-182
SAMPLE DATE	05-MAY-00	05-MAY-00	05-MAY-00
DEPTH (feet below ground surface)	5.6 to 6.5	5.1 to 6.1	5.8 to 6.8
MEDIA (Units)	Soil (mg/kg)	Soil (mg/kg)	Soil (mg/kg)
Volatile Organic Compounds			
1,1,1-Trichloroethane	<0.01	<0.01	<0.0097
1,1,2,2-Tetrachloroethane	<0.01	<0.01	<0.0097
1,1,2-Trichloroethane	<0.01	<0.01	<0.0097
1,1-Dichloroethane	<0.01	<0.01	<0.0097
1,1-Dichloroethene	<0.01	<0.01	<0.0097
1,2,4-Trimethylbenzene	<0.01	<0.01	<0.0097
1,2-Dichloroethane	<0.01	<0.01	<0.0097
1,2-Dichloropropane	<0.01	<0.01	<0.0097
1,3,5-Trimethylbenzene	<0.01	<0.01	<0.0097
Bromodichloromethane	<0.01	<0.01	<0.0097
Bromoform	<0.01	<0.01	<0.0097
Bromomethane	<0.01	<0.01	<0.0097
Carbon Tetrachloride	<0.01	<0.01	<0.0097
Chlorobenzene	<0.01	<0.01	<0.0097
Chloroethane	<0.01	<0.01	<0.0097
Chloroform	<0.01	<0.01	<0.0097
Chloromethane	<0.01	<0.01	<0.0097
Cis-1,2-Dichloroethene	<0.01	<0.01	<0.0097
Cis-1,3-Dichloropropene	<0.01	<0.01	<0.0097
Dibromochloromethane	<0.01	<0.01	<0.0097
Methylene Chloride	<0.03	**0.068**	<0.024
Styrene	<0.01	<0.01	<0.0097
Tetrachloroethene	<0.01	<0.01	<0.0097
Trans-1,2-Dichloroethene	<0.01	<0.01	<0.0097
Trans-1,3-Dichloropropene	<0.01	<0.01	<0.0097
Trichloroethene	<0.01	<0.01	<0.0097
Vinyl Chloride	<0.01	<0.01	<0.0097
Benzene	<0.01	<0.01	<0.0097
Toluene	<0.01	<0.01	<0.0097
Ethylbenzene	<0.01	<0.01	<0.0097
M,P-Xylene	<0.01	**0.0059**	<0.0097
O-Xylene	<0.01	<0.01	<0.0097
Methyl Tertiary Butyl Ether	<0.01	<0.01	<0.0097
Inorganic Compounds (Dissolved)			
Aluminum	NA	NA	NA
Antimony	NA	NA	NA

TABLE 5-2

UNDERGROUND STORAGE TANKS 37-13 THROUGH 37-16
DATA GAP TYPE X ANALYTICAL RESULTS
ALAMEDA POINT, ALAMEDA, CALIFORNIA

POINT NAME	CA11-37	CA11-31	CA11-31
SAMPLE IDENTIFICATION	030-CAP-183	030-CAP-184	030-CAP-373
SAMPLE DATE	05-MAY-00	05-MAY-00	05-MAY-00
DEPTH (feet below ground surface)	5.7 to 6.7	3.0 to 8.0	3.0 to 8.0
MEDIA (Units)	Soil (mg/kg)	Water (mg/L)	Water (mg/L)
Volatile Organic Compounds			
1,1,1-Trichloroethane	<0.0099	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.0099	<0.001	<0.001
1,1,2-Trichloroethane	<0.0099	<0.001	<0.001
1,1-Dichloroethane	<0.0099	<0.001	<0.001
1,1-Dichloroethene	<0.0099	<0.001	<0.001
1,2,4-Trimethylbenzene	<0.0099	<0.001	<0.001
1,2-Dichloroethane	<0.0099	<0.001	<0.001
1,2-Dichloropropane	<0.0099	<0.001	<0.001
1,3,5-Trimethylbenzene	<0.0099	<0.001	<0.001
Bromodichloromethane	<0.0099	<0.001	<0.001
Bromoform	<0.0099	<0.001	<0.001
Bromomethane	<0.0099	<0.005	<0.005
Carbon Tetrachloride	<0.0099	<0.001	<0.001
Chlorobenzene	<0.0099	<0.001	<0.001
Chloroethane	<0.0099	<0.005	<0.005
Chloroform	<0.0099	<0.001	<0.001
Chloromethane	<0.0099	<0.005	<0.005
Cis-1,2-Dichloroethene	<0.0099	<0.001	<0.001
Cis-1,3-Dichloropropene	<0.0099	<0.001	<0.001
Dibromochloromethane	<0.0099	<0.001	<0.001
Methylene Chloride	<0.016	<0.002	<0.002
Styrene	<0.0099	<0.001	<0.001
Tetrachloroethene	<0.0099	<0.001	<0.001
Trans-1,2-Dichloroethene	<0.0099	<0.001	<0.001
Trans-1,3-Dichloropropene	<0.0099	<0.001	<0.001
Trichloroethene	<0.0099	<0.001	<0.001
Vinyl Chloride	<0.0099	<0.0005	<0.0005
Benzene	<0.0099	<0.0005	<0.0005
Toluene	<0.0099	<0.001	<0.001
Ethylbenzene	<0.0099	<0.001	<0.001
M,P-Xylene	<0.0099	<0.001	<0.001
O-Xylene	<0.0099	<0.001	<0.001
Methyl Tertiary Butyl Ether	<0.0099	<0.002	<0.002
Inorganic Compounds (Dissolved)			
Aluminum	NA	<0.1	**0.14**
Antimony	NA	<0.06	<0.06

TABLE 5-2

UNDERGROUND STORAGE TANKS 37-13 THROUGH 37-16
DATA GAP TYPE X ANALYTICAL RESULTS
ALAMEDA POINT, ALAMEDA, CALIFORNIA

POINT NAME	CA11-37	CA11-40
SAMPLE IDENTIFICATION	030-CAP-185	030-CAP-185A
SAMPLE DATE	05-MAY-00	15-JUN-00
DEPTH (feet below ground surface)	3.0 to 8.0	6.0 to 10.0
MEDIA (Units)	Water (mg/L)	Water (mg/L)
Volatile Organic Compounds		
1,1,1-Trichloroethane	NA	<0.001
1,1,2,2-Tetrachloroethane	NA	<0.001
1,1,2-Trichloroethane	NA	<0.001
1,1-Dichloroethane	NA	<0.001
1,1-Dichloroethene	NA	<0.001
1,2,4-Trimethylbenzene	NA	<0.001
1,2-Dichloroethane	NA	<0.001
1,2-Dichloropropane	NA	<0.001
1,3,5-Trimethylbenzene	NA	<0.001
Bromodichloromethane	NA	<0.001
Bromoform	NA	<0.001
Bromomethane	NA	<0.005
Carbon Tetrachloride	NA	<0.001
Chlorobenzene	NA	<0.001
Chloroethane	NA	<0.005
Chloroform	NA	<0.001
Chloromethane	NA	<0.005
Cis-1,2-Dichloroethene	NA	<0.001
Cis-1,3-Dichloropropene	NA	<0.001
Dibromochloromethane	NA	<0.001
Methylene Chloride	NA	<0.002
Styrene	NA	<0.001
Tetrachloroethene	NA	<0.001
Trans-1,2-Dichloroethene	NA	<0.001
Trans-1,3-Dichloropropene	NA	<0.001
Trichloroethene	NA	<0.001
Vinyl Chloride	NA	<0.0005
Benzene	NA	<0.0005
Toluene	NA	<0.001
Ethylbenzene	NA	<0.001
M,P-Xylene	NA	<0.001
O-Xylene	NA	<0.001
Methyl Tertiary Butyl Ether	NA	<0.002
Inorganic Compounds (Dissolved)		
Aluminum	**0.13**	NA
Antimony	<0.06	NA

TABLE 5-2

UNDERGROUND STORAGE TANKS 37-13 THROUGH 37-16
DATA GAP TYPE X ANALYTICAL RESULTS
ALAMEDA POINT, ALAMEDA, CALIFORNIA

POINT NAME	CA11-26	CA11-27	CA11-28
SAMPLE IDENTIFICATION	030-CAP-172	030-CAP-173	030-CAP-174
SAMPLE DATE	04-MAY-00	05-MAY-00	04-MAY-00
DEPTH (feet below ground surface)	4.3 to 5.3	5.0 to 6.0	4.5 to 5.5
MEDIA (Units)	Soil (mg/kg)	Soil (mg/kg)	Soil (mg/kg)
Inorganic Compounds (Dissolved)			
Arsenic	NA	NA	NA
Barium	NA	NA	NA
Beryllium	NA	NA	NA
Cadmium	NA	NA	NA
Calcium	NA	NA	NA
Chromium	NA	NA	NA
Cobalt	NA	NA	NA
Copper	NA	NA	NA
Iron	NA	NA	NA
Lead	NA	NA	NA
Magnesium	NA	NA	NA
Manganese	NA	NA	NA
Mercury	NA	NA	NA
Molybdenum	NA	NA	NA
Nickel	NA	NA	NA
Potassium	NA	NA	NA
Selenium	NA	NA	NA
Silver	NA	NA	NA
Sodium	NA	NA	NA
Thallium	NA	NA	NA
Vanadium	NA	NA	NA
Zinc	NA	NA	NA
Inorganic Compounds (Total)			
Aluminum	**4,500**	**6,500**	**4,000**
Antimony	<3.4	<3.3	<3.2
Arsenic	**1.3**	**1.9**	**1.2**
Barium	**22**	**33**	**20**
Beryllium	**0.14**	**0.15**	**0.12**
Cadmium	**0.92**	**1.4**	**0.81**
Calcium	**2,000**	**3,000**	**1,800**
Chromium	**27**	**25**	**24**
Cobalt	**4.5**	**5.6**	**4.1**
Copper	**5.4**	**10**	**4.9**
Iron	**7,600**	**13,000**	**6,800**
Lead	**1.5**	**19**	**1.4**
Magnesium	**2,400**	**3,600**	**2,100**

TABLE 5-2

UNDERGROUND STORAGE TANKS 37-13 THROUGH 37-16
DATA GAP TYPE X ANALYTICAL RESULTS
ALAMEDA POINT, ALAMEDA, CALIFORNIA

POINT NAME	CA11-29	CA11-29	CA11-30
SAMPLE IDENTIFICATION	030-CAP-372	030-CAP-175	030-CAP-176
SAMPLE DATE	05-MAY-00	05-MAY-00	05-MAY-00
DEPTH (feet below ground surface)	5.0 to 6.0	6.0 to 7.0	6.7 to 7.7
MEDIA (Units)	Soil (mg/kg)	Soil (mg/kg)	Soil (mg/kg)
Inorganic Compounds (Dissolved)			
Arsenic	NA	NA	NA
Barium	NA	NA	NA
Beryllium	NA	NA	NA
Cadmium	NA	NA	NA
Calcium	NA	NA	NA
Chromium	NA	NA	NA
Cobalt	NA	NA	NA
Copper	NA	NA	NA
Iron	NA	NA	NA
Lead	NA	NA	NA
Magnesium	NA	NA	NA
Manganese	NA	NA	NA
Mercury	NA	NA	NA
Molybdenum	NA	NA	NA
Nickel	NA	NA	NA
Potassium	NA	NA	NA
Selenium	NA	NA	NA
Silver	NA	NA	NA
Sodium	NA	NA	NA
Thallium	NA	NA	NA
Vanadium	NA	NA	NA
Zinc	NA	NA	NA
Inorganic Compounds (Total)			
Aluminum	**10,000**	**7,500**	**7,100**
Antimony	<3.1	<3	<3
Arsenic	**2.4**	**2**	**2.5**
Barium	**83**	**85**	**58**
Beryllium	**0.16**	**0.15**	**0.15**
Cadmium	**1.9**	**1.7**	**1.6**
Calcium	**3,500**	**2,600**	**2,500**
Chromium	**32**	**35**	**22**
Cobalt	**8.7**	**6.7**	**6.2**
Copper	**19**	**15**	**23**
Iron	**18,000**	**16,000**	**14,000**
Lead	**3.6**	**3.1**	**5.6**
Magnesium	**7,300**	**6,500**	**5,300**

TABLE 5-2

UNDERGROUND STORAGE TANKS 37-13 THROUGH 37-16
DATA GAP TYPE X ANALYTICAL RESULTS
ALAMEDA POINT, ALAMEDA, CALIFORNIA

POINT NAME	CA11-31	CA11-32	CA11-33
SAMPLE IDENTIFICATION	030-CAP-177	030-CAP-178	030-CAP-179
SAMPLE DATE	05-MAY-00	05-MAY-00	05-MAY-00
DEPTH (feet below ground surface)	6.0 to 7.0	6.0 to 7.0	5.5 to 6.5
MEDIA (Units)	Soil (mg/kg)	Soil (mg/kg)	Soil (mg/kg)
Inorganic Compounds (Dissolved)			
Arsenic	NA	NA	NA
Barium	NA	NA	NA
Beryllium	NA	NA	NA
Cadmium	NA	NA	NA
Calcium	NA	NA	NA
Chromium	NA	NA	NA
Cobalt	NA	NA	NA
Copper	NA	NA	NA
Iron	NA	NA	NA
Lead	NA	NA	NA
Magnesium	NA	NA	NA
Manganese	NA	NA	NA
Mercury	NA	NA	NA
Molybdenum	NA	NA	NA
Nickel	NA	NA	NA
Potassium	NA	NA	NA
Selenium	NA	NA	NA
Silver	NA	NA	NA
Sodium	NA	NA	NA
Thallium	NA	NA	NA
Vanadium	NA	NA	NA
Zinc	NA	NA	NA
Inorganic Compounds (Total)			
Aluminum	**9,400**	**9,100**	**5,200**
Antimony	<3.2	<3.3	<3.5
Arsenic	**2.1**	**2.6**	**1.9**
Barium	**99**	**67**	**36**
Beryllium	**0.15**	**0.18**	**0.16**
Cadmium	**1.8**	**1.9**	**1.1**
Calcium	**3,000**	**2,700**	**3,200**
Chromium	**27**	**26**	**29**
Cobalt	**8**	**6.7**	**5.3**
Copper	**21**	**22**	**8.6**
Iron	**17,000**	**17,000**	**10,000**
Lead	**3.6**	**7.7**	**5.6**
Magnesium	**6,200**	**4,400**	**2,700**

TABLE 5-2

UNDERGROUND STORAGE TANKS 37-13 THROUGH 37-16
DATA GAP TYPE X ANALYTICAL RESULTS
ALAMEDA POINT, ALAMEDA, CALIFORNIA

POINT NAME	CA11-34	CA11-35	CA11-36
SAMPLE IDENTIFICATION	030-CAP-180	030-CAP-181	030-CAP-182
SAMPLE DATE	05-MAY-00	05-MAY-00	05-MAY-00
DEPTH (feet below ground surface)	5.6 to 6.5	5.1 to 6.1	5.8 to 6.8
MEDIA (Units)	Soil (mg/kg)	Soil (mg/kg)	Soil (mg/kg)
Inorganic Compounds (Dissolved)			
Arsenic	NA	NA	NA
Barium	NA	NA	NA
Beryllium	NA	NA	NA
Cadmium	NA	NA	NA
Calcium	NA	NA	NA
Chromium	NA	NA	NA
Cobalt	NA	NA	NA
Copper	NA	NA	NA
Iron	NA	NA	NA
Lead	NA	NA	NA
Magnesium	NA	NA	NA
Manganese	NA	NA	NA
Mercury	NA	NA	NA
Molybdenum	NA	NA	NA
Nickel	NA	NA	NA
Potassium	NA	NA	NA
Selenium	NA	NA	NA
Silver	NA	NA	NA
Sodium	NA	NA	NA
Thallium	NA	NA	NA
Vanadium	NA	NA	NA
Zinc	NA	NA	NA
Inorganic Compounds (Total)			
Aluminum	**4,900**	**11,000**	**5,300**
Antimony	<3.1	<3.1	<3.1
Arsenic	**1.7**	<0.26	**2.9**
Barium	**39**	**19**	**65**
Beryllium	**0.14**	**0.19**	**0.14**
Cadmium	**1.2**	**2.3**	**1.8**
Calcium	**2,100**	**3,300**	**4,300**
Chromium	**25**	<0.52	**35**
Cobalt	**4.5**	**9.8**	**4.7**
Copper	**9.1**	**4**	**26**
Iron	**9,200**	**22,000**	**10,000**
Lead	**13**	**0.3**	**140**
Magnesium	**2,500**	**7,100**	**3,700**

TABLE 5-2

UNDERGROUND STORAGE TANKS 37-13 THROUGH 37-16
DATA GAP TYPE X ANALYTICAL RESULTS
ALAMEDA POINT, ALAMEDA, CALIFORNIA

POINT NAME	CA11-37	CA11-31	CA11-31
SAMPLE IDENTIFICATION	030-CAP-183	030-CAP-184	030-CAP-373
SAMPLE DATE	05-MAY-00	05-MAY-00	05-MAY-00
DEPTH (feet below ground surface)	5.7 to 6.7	3.0 to 8.0	3.0 to 8.0
MEDIA (Units)	Soil (mg/kg)	Water (mg/L)	Water (mg/L)
Inorganic Compounds (Dissolved)			
Arsenic	NA	<0.01	<0.01
Barium	NA	**0.22**	**0.21**
Beryllium	NA	<0.004	<0.004
Cadmium	NA	<0.005	<0.005
Calcium	NA	**63**	**60**
Chromium	NA	<0.01	<0.01
Cobalt	NA	<0.05	<0.05
Copper	NA	<0.025	<0.025
Iron	NA	<0.1	<0.1
Lead	NA	<0.003	<0.003
Magnesium	NA	**31**	**29**
Manganese	NA	<0.015	<0.015
Mercury	NA	<0.0002	<0.0002
Molybdenum	NA	<0.02	<0.02
Nickel	NA	<0.04	<0.04
Potassium	NA	<5	<5
Selenium	NA	<0.005	<0.005
Silver	NA	<0.01	<0.01
Sodium	NA	**28**	**28**
Thallium	NA	<0.005	<0.005
Vanadium	NA	<0.05	<0.05
Zinc	NA	<0.02	<0.02
Inorganic Compounds (Total)			
Aluminum	**7,300**	NA	NA
Antimony	<3.2	NA	NA
Arsenic	**1.8**	NA	NA
Barium	**64**	NA	NA
Beryllium	**0.14**	NA	NA
Cadmium	**1.6**	NA	NA
Calcium	**2,300**	NA	NA
Chromium	**24**	NA	NA
Cobalt	**6.3**	NA	NA
Copper	**16**	NA	NA
Iron	**15,000**	NA	NA
Lead	**2.9**	NA	NA
Magnesium	**6,200**	NA	NA

TABLE 5-2

UNDERGROUND STORAGE TANKS 37-13 THROUGH 37-16
DATA GAP TYPE X ANALYTICAL RESULTS
ALAMEDA POINT, ALAMEDA, CALIFORNIA

POINT NAME	CA11-37	CA11-40
SAMPLE IDENTIFICATION	030-CAP-185	030-CAP-185A
SAMPLE DATE	05-MAY-00	15-JUN-00
DEPTH (feet below ground surface)	3.0 to 8.0	6.0 to 10.0
MEDIA (Units)	Water (mg/L)	Water (mg/L)
Inorganic Compounds (Dissolved)		
Arsenic	<0.01	NA
Barium	**0.24**	NA
Beryllium	<0.004	NA
Cadmium	<0.005	NA
Calcium	**60**	NA
Chromium	<0.01	NA
Cobalt	<0.05	NA
Copper	<0.025	NA
Iron	<0.1	NA
Lead	<0.003	NA
Magnesium	**26**	NA
Manganese	**0.26**	NA
Mercury	<0.0002	NA
Molybdenum	<0.02	NA
Nickel	<0.04	NA
Potassium	<5	NA
Selenium	<0.005	NA
Silver	<0.01	NA
Sodium	**23**	NA
Thallium	<0.005	NA
Vanadium	<0.05	NA
Zinc	<0.02	NA
Inorganic Compounds (Total)		
Aluminum	NA	NA
Antimony	NA	NA
Arsenic	NA	NA
Barium	NA	NA
Beryllium	NA	NA
Cadmium	NA	NA
Calcium	NA	NA
Chromium	NA	NA
Cobalt	NA	NA
Copper	NA	NA
Iron	NA	NA
Lead	NA	NA
Magnesium	NA	NA

TABLE 5-2

UNDERGROUND STORAGE TANKS 37-13 THROUGH 37-16
DATA GAP TYPE X ANALYTICAL RESULTS
ALAMEDA POINT, ALAMEDA, CALIFORNIA

POINT NAME	CA11-26	CA11-27	CA11-28
SAMPLE IDENTIFICATION	030-CAP-172	030-CAP-173	030-CAP-174
SAMPLE DATE	04-MAY-00	05-MAY-00	04-MAY-00
DEPTH (feet below ground surface)	4.3 to 5.3	5.0 to 6.0	4.5 to 5.5
MEDIA (Units)	Soil (mg/kg)	Soil (mg/kg)	Soil (mg/kg)
Inorganic Compounds (Total)			
Manganese	**92**	**160**	**78**
Mercury	<0.043	<0.14	<0.041
Molybdenum	<1.1	<1.1	<1.1
Nickel	**29**	**28**	**26**
Potassium	**540**	**540**	**470**
Selenium	<0.28	**0.4**	<0.26
Silver	<0.28	<0.27	<0.26
Sodium	**69**	**110**	**56**
Thallium	<0.28	**0.33**	<0.26
Vanadium	**18**	**21**	**16**
Zinc	**17**	**29**	**15**

TABLE 5-2

UNDERGROUND STORAGE TANKS 37-13 THROUGH 37-16
DATA GAP TYPE X ANALYTICAL RESULTS
ALAMEDA POINT, ALAMEDA, CALIFORNIA

POINT NAME	CA11-29	CA11-29	CA11-30
SAMPLE IDENTIFICATION	030-CAP-372	030-CAP-175	030-CAP-176
SAMPLE DATE	05-MAY-00	05-MAY-00	05-MAY-00
DEPTH (feet below ground surface)	5.0 to 6.0	6.0 to 7.0	6.7 to 7.7
MEDIA (Units)	Soil (mg/kg)	Soil (mg/kg)	Soil (mg/kg)
Inorganic Compounds (Total)			
Manganese	480	530	370
Mercury	<0.042	<0.039	<0.042
Molybdenum	<1	<1	<1
Nickel	55	51	37
Potassium	770	640	710
Selenium	0.43	0.41	0.36
Silver	<0.26	<0.25	<0.25
Sodium	100	77	72
Thallium	0.9	0.8	0.62
Vanadium	24	18	17
Zinc	33	31	35

TABLE 5-2

UNDERGROUND STORAGE TANKS 37-13 THROUGH 37-16
DATA GAP TYPE X ANALYTICAL RESULTS
ALAMEDA POINT, ALAMEDA, CALIFORNIA

POINT NAME	CA11-31	CA11-32	CA11-33
SAMPLE IDENTIFICATION	030-CAP-177	030-CAP-178	030-CAP-179
SAMPLE DATE	05-MAY-00	05-MAY-00	05-MAY-00
DEPTH (feet below ground surface)	6.0 to 7.0	6.0 to 7.0	5.5 to 6.5
MEDIA (Units)	Soil (mg/kg)	Soil (mg/kg)	Soil (mg/kg)
Inorganic Compounds (Total)			
Manganese	**440**	**340**	**120**
Mercury	<0.042	<0.14	<0.18
Molybdenum	**1.1**	<1.1	<1.2
Nickel	**48**	**41**	**34**
Potassium	**630**	**750**	**620**
Selenium	**0.59**	<0.27	<0.29
Silver	<0.27	<0.27	<0.29
Sodium	**170**	**87**	**86**
Thallium	**0.87**	**0.63**	<0.29
Vanadium	**20**	**27**	**19**
Zinc	**34**	**35**	**22**

TABLE 5-2

UNDERGROUND STORAGE TANKS 37-13 THROUGH 37-16
DATA GAP TYPE X ANALYTICAL RESULTS
ALAMEDA POINT, ALAMEDA, CALIFORNIA

POINT NAME	CA11-34	CA11-35	CA11-36
SAMPLE IDENTIFICATION	030-CAP-180	030-CAP-181	030-CAP-182
SAMPLE DATE	05-MAY-00	05-MAY-00	05-MAY-00
DEPTH (feet below ground surface)	5.6 to 6.5	5.1 to 6.1	5.8 to 6.8
MEDIA (Units)	Soil (mg/kg)	Soil (mg/kg)	Soil (mg/kg)
Inorganic Compounds (Total)			
Manganese	**200**	**530**	**150**
Mercury	<0.24	<0.041	**0.26**
Molybdenum	<1	<1	<1
Nickel	**29**	**11**	**36**
Potassium	**570**	**610**	**510**
Selenium	**0.31**	**0.47**	**0.39**
Silver	<0.26	<0.26	**1.5**
Sodium	**78**	**140**	**160**
Thallium	**0.5**	**0.89**	<0.26
Vanadium	**18**	**33**	**18**
Zinc	**32**	**19**	**89**

TABLE 5-2

UNDERGROUND STORAGE TANKS 37-13 THROUGH 37-16
DATA GAP TYPE X ANALYTICAL RESULTS
ALAMEDA POINT, ALAMEDA, CALIFORNIA

POINT NAME	CA11-37	CA11-31	CA11-31
SAMPLE IDENTIFICATION	030-CAP-183	030-CAP-184	030-CAP-373
SAMPLE DATE	05-MAY-00	05-MAY-00	05-MAY-00
DEPTH (feet below ground surface)	5.7 to 6.7	3.0 to 8.0	3.0 to 8.0
MEDIA (Units)	Soil (mg/kg)	Water (mg/L)	Water (mg/L)
Inorganic Compounds (Total)			
Manganese	**450**	NA	NA
Mercury	<0.04	NA	NA
Molybdenum	<1.1	NA	NA
Nickel	**48**	NA	NA
Potassium	**640**	NA	NA
Selenium	**0.42**	NA	NA
Silver	<0.27	NA	NA
Sodium	**54**	NA	NA
Thallium	**0.8**	NA	NA
Vanadium	**17**	NA	NA
Zinc	**30**	NA	NA

TABLE 5-2

UNDERGROUND STORAGE TANKS 37-13 THROUGH 37-16
DATA GAP TYPE X ANALYTICAL RESULTS
ALAMEDA POINT, ALAMEDA, CALIFORNIA

POINT NAME	CA11-37	CA11-40
SAMPLE IDENTIFICATION	030-CAP-185	030-CAP-185A
SAMPLE DATE	05-MAY-00	15-JUN-00
DEPTH (feet below ground surface)	3.0 to 8.0	6.0 to 10.0
MEDIA (Units)	Water (mg/L)	Water (mg/L)
Inorganic Compounds (Total)		
Manganese	NA	NA
Mercury	NA	NA
Molybdenum	NA	NA
Nickel	NA	NA
Potassium	NA	NA
Selenium	NA	NA
Silver	NA	NA
Sodium	NA	NA
Thallium	NA	NA
Vanadium	NA	NA
Zinc	NA	NA

Notes:

mg/kg Milligrams per kilograms
mg/L Milligrams per liter
NA Not analyzed

Detected concentrations are bolded.

5.2 UNDERGROUND STORAGE TANK 615-4

The following subsections provide a brief summary of (1) UST-specific information, (2) proposed land reuse and groundwater beneficial use, (3) previous investigations, and (4) the data gap investigation conducted for UST 615-4.

5.2.1 Underground Storage Tank-specific Information

UST 615-4 had a capacity of 80 gallons, was constructed of steel, and was used to store waste oil from an OWS (UST 615-3). The installation date of the UST is unknown.

5.2.2 Proposed Land Reuse and Groundwater Beneficial Use

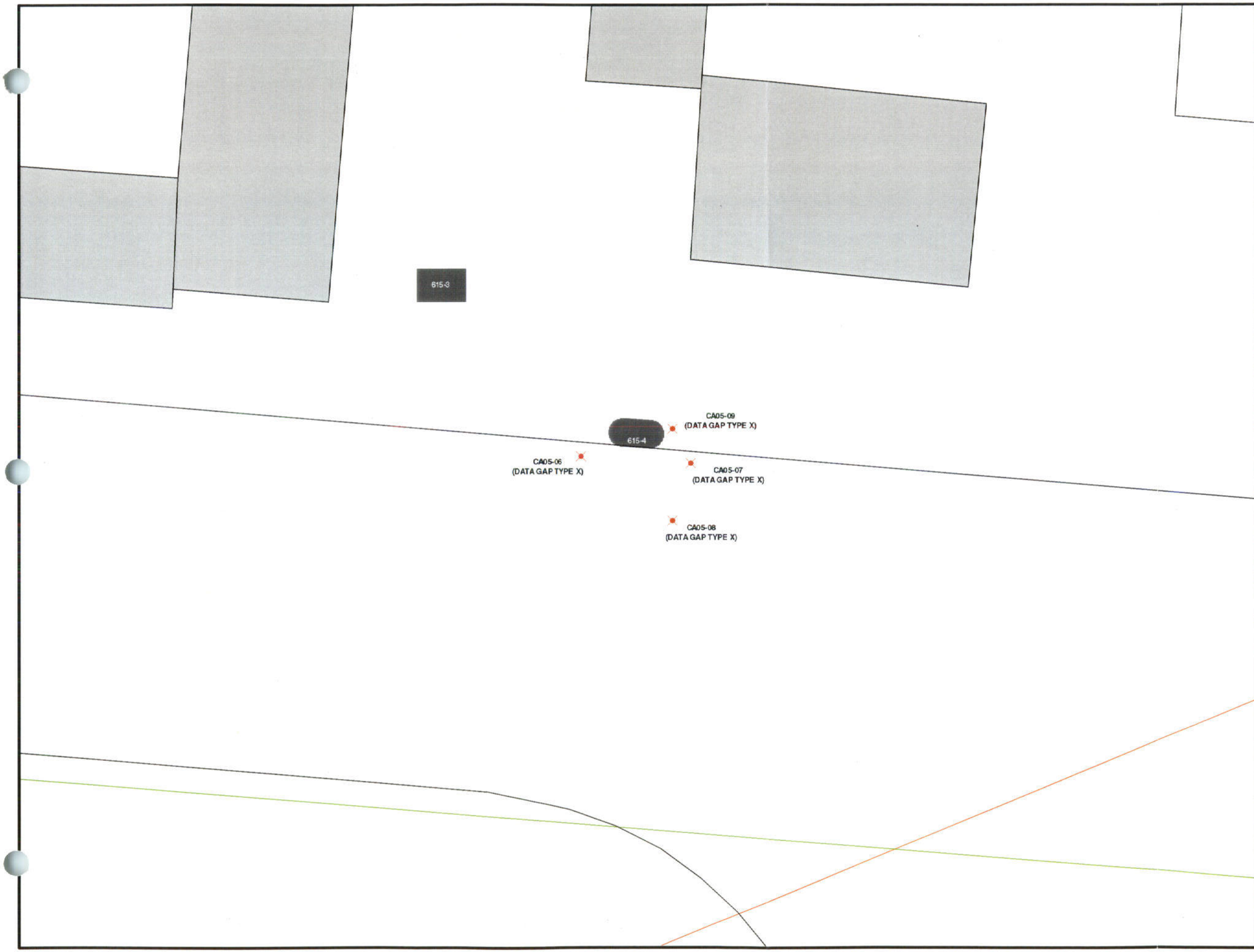
The area that contained UST 615-4 is designated as part of the Civic Core land reuse area. Land reuse may include a research and development area, an industrial workplace area, an open space/civic mall area, and mixed-use (which may include residential uses). Groundwater in this area is designated as part of the Central Region and is not considered a potential drinking water source.

5.2.3 Previous Investigations

TtEMI removed UST 615-4 in December 1998 (TtEMI 1999i). During removal, soil staining and petroleum odors were observed in the excavation. One soil sample was collected from the bottom of the excavation. DTSC will not close UST 615-4 under the RCRA program without determining SVOC and TPH concentrations in soil near the former UST.

5.2.4 Data Gap Investigation Summary

SVOC and TPH concentrations in soil near former UST 615-4 were evaluated under Data Gap Type X. Data Gap Type X analytical results will be evaluated by DTSC for closure of UST 615-4. Data gap sampling locations are shown in Figure 5-2. Table 5-3 summarizes field activities conducted and observations made during the data gap investigation. Analytical results for UST 615-4 are summarized in Table 5-4 and included in Appendix D.



LEGEND

BOUNDARIES
- LAND COVER

DATA GAP SAMPLES
- DIRECT-PUSH - SOIL

SITE FEATURES
- BUILDING
- FUEL LINE
- STORM DRAIN LINE
- UNDERGROUND STORAGE TANK (UST)

N

5 0 5 10

SCALE: 1"= 10'

FIGURE 5-2
UST 615-4
DATA GAP SAMPLING LOCATIONS
ALAMEDA POINT
ALAMEDA, CALIFORNIA
MARCH 2, 2001

TC.0030.10824

C:\GEORGIES\PROJECT\DGS\CTO30_DG\CAA_JAN1 FIG5-2 LAYOUT

TABLE 5-3

UNDERGROUND STORAGE TANK 615-4
DATA GAP INVESTIGATION SUMMARY TABLE
ALAMEDA POINT, ALAMEDA, CALIFORNIA
(Page 1 of 1)

DATA GAP	FIELD ACTIVITIES	FIELD OBSERVATIONS
Data Gap Type X: Resource Conservation and Recovery Act Closure Plan Sampling	• Four soil borings were advanced to 8 feet bgs near each side of the former excavation of underground storage tank 615-4. • Five soil samples were collected directly above the soil-groundwater interface.	• Soil borings did not have any visible staining or odors. • Depth to groundwater was about 4.5 feet bgs.

Notes:

bgs Below ground surface

TABLE 5-4

UNDERGROUND STORAGE TANK 615-4
DATA GAP TYPE X ANALYTICAL RESULTS
ALAMEDA POINT, ALAMEDA, CALIFORNIA

POINT NAME	CA05-06	CA05-06	CA05-07
SAMPLE IDENTIFICATION	030-CAP-371	030-CAP-072	030-CAP-074
SAMPLE DATE	09-MAY-00	09-MAY-00	09-MAY-00
DEPTH (feet below ground surface)	3.5 to 4.0	4.0 to 4.7	4.0 to 4.7
MEDIA (Units)	Soil (mg/kg)	Soil (mg/kg)	Soil (mg/kg)
Volatile Organic Compounds			
1,2-Dichlorobenzene	<0.4	<0.41	<8
1,3-Dichlorobenzene	<0.4	<0.41	<8
1,4-Dichlorobenzene	<0.4	<0.41	<8
Total Extractable Petroleum Hydrocarbons			
Diesel-range Organics	**77**	**21**	**1,200**
Motor-oil-range Organics	**150**	**70**	<120
Total Purgeable Petroleum Hydrocarbons			
Gasoline-range Organics	<0.57	**3.6**	**230,000**
Semi Volatile Organic Compounds			
1,2,4-Trichlorobenzene	<0.4	<0.41	<8
1,2-Dichlorobenzene	<0.4	<0.41	<8
1,3-Dichlorobenzene	<0.4	<0.41	<8
1,4-Dichlorobenzene	<0.4	<0.41	<8
2,2'-Oxybis(1-Chloropropane)	<0.4	<0.41	<8
2,4,5-Trichlorophenol	<1.9	<1.9	<38
2,4,6-Trichlorophenol	<0.4	<0.41	<8
2,4-Dichlorophenol	<0.4	<0.41	<8
2,4-Dimethylphenol	<0.4	<0.41	<8
2,4-Dinitrophenol	<1.9	<1.9	<38
2,4-Dinitrotoluene	<0.4	<0.41	<8
2,6-Dinitrotoluene	<0.4	<0.41	<8
2-Chloronaphthalene	<0.4	<0.41	<8
2-Chlorophenol	<0.4	<0.41	<8
2-Methylnaphthalene	<0.4	<0.41	<8
2-Methylphenol	<0.4	<0.41	<8
2-Nitroaniline	<1.9	<1.9	<38
2-Nitrophenol	<1.9	<1.9	<38
3,3'-Dichlorobenzidine	<1.9	<1.9	<38
3,4-Methylphenol	<0.4	<0.41	<8
3-Nitroaniline	<1.9	<1.9	<38
4,6-Dinitro-2-Methylphenol	<1.9	<1.9	<38
4-Bromophenyl-Phenylether	<0.4	<0.41	<8
4-Chloro-3-Methylphenol	<0.4	<0.41	<8
4-Chloroaniline	<0.4	<0.41	<8
4-Chlorophenyl-Phenylether	<0.4	<0.41	<8

TABLE 5-4

UNDERGROUND STORAGE TANK 615-4
DATA GAP TYPE X ANALYTICAL RESULTS
ALAMEDA POINT, ALAMEDA, CALIFORNIA

POINT NAME	CA05-08	CA05-09
SAMPLE IDENTIFICATION	030-CAP-076	030-CAP-078
SAMPLE DATE	09-MAY-00	09-MAY-00
DEPTH (feet below ground surface)	4.0 to 4.7	4.0 to 4.7
MEDIA (Units)	Soil (mg/kg)	Soil (mg/kg)
Volatile Organic Compounds		
1,2-Dichlorobenzene	<0.37	<0.38
1,3-Dichlorobenzene	<0.37	<0.38
1,4-Dichlorobenzene	<0.37	<0.38
Total Extractable Petroleum Hydrocarbons		
Diesel-range Organics	**15**	**4.2**
Motor-oil-range Organics	**29**	<11
Total Purgeable Petroleum Hydrocarbons		
Gasoline-range Organics	**19**	**4**
Semi Volatile Organic Compounds		
1,2,4-Trichlorobenzene	<0.37	<0.38
1,2-Dichlorobenzene	<0.37	<0.38
1,3-Dichlorobenzene	<0.37	<0.38
1,4-Dichlorobenzene	<0.37	<0.38
2,2'-Oxybis(1-Chloropropane)	<0.37	<0.38
2,4,5-Trichlorophenol	<1.8	<1.8
2,4,6-Trichlorophenol	<0.37	<0.38
2,4-Dichlorophenol	<0.37	<0.38
2,4-Dimethylphenol	<0.37	<0.38
2,4-Dinitrophenol	<1.8	<1.8
2,4-Dinitrotoluene	<0.37	<0.38
2,6-Dinitrotoluene	<0.37	<0.38
2-Chloronaphthalene	<0.37	<0.38
2-Chlorophenol	<0.37	<0.38
2-Methylnaphthalene	<0.37	<0.38
2-Methylphenol	<0.37	<0.38
2-Nitroaniline	<1.8	<1.8
2-Nitrophenol	<1.8	<1.8
3,3'-Dichlorobenzidine	<1.8	<1.8
3,4-Methylphenol	<0.37	<0.38
3-Nitroaniline	<1.8	<1.8
4,6-Dinitro-2-Methylphenol	<1.8	<1.8
4-Bromophenyl-Phenylether	<0.37	<0.38
4-Chloro-3-Methylphenol	<0.37	<0.38
4-Chloroaniline	<0.37	<0.38
4-Chlorophenyl-Phenylether	<0.37	<0.38

TABLE 5-4

UNDERGROUND STORAGE TANK 615-4
DATA GAP TYPE X ANALYTICAL RESULTS
ALAMEDA POINT, ALAMEDA, CALIFORNIA

POINT NAME	CA05-06	CA05-06	CA05-07
SAMPLE IDENTIFICATION	030-CAP-371	030-CAP-072	030-CAP-074
SAMPLE DATE	09-MAY-00	09-MAY-00	09-MAY-00
DEPTH (feet below ground surface)	3.5 to 4.0	4.0 to 4.7	4.0 to 4.7
MEDIA (Units)	Soil (mg/kg)	Soil (mg/kg)	Soil (mg/kg)
Semi Volatile Organic Compounds			
4-Nitroaniline	<1.9	<1.9	<38
4-Nitrophenol	<1.9	<1.9	<38
Acenaphthene	<0.4	<0.41	<8
Acenaphthylene	<0.4	<0.41	<8
Anthracene	<0.4	<0.41	<8
Benzo(A)Anthracene	<0.4	<0.41	<8
Benzo(A)Pyrene	<0.4	<0.41	<8
Benzo(B,K)Fluoranthene	<0.4	<0.41	<8
Benzo(G,H,I)Perylene	<0.4	<0.41	<8
Bis(2-Chloroethoxy)Methane	<0.4	<0.41	<8
Bis(2-Chloroethyl)Ether	<0.4	<0.41	<8
Bis(2-Ethylhexyl)Phthalate	<0.4	<0.59	<8
Butylbenzylphthalate	<0.4	<0.41	<8
Carbazole	<0.4	<0.41	<8
Chrysene	<0.4	<0.41	<8
Di-N-Butylphthalate	<0.4	<0.41	<8
Di-N-Octylphthalate	<0.4	<0.41	<8
Dibenzo(A,H)Anthracene	<0.4	<0.41	<8
Dibenzofuran	<0.4	<0.41	<8
Diethylphthalate	<0.4	<0.41	<8
Dimethylphthalate	<0.4	<0.41	<8
Fluoranthene	<0.4	<0.41	<8
Fluorene	<0.4	<0.41	<8
Hexachlorobenzene	<0.4	<0.41	<8
Hexachlorobutadiene	<0.4	<0.41	<8
Hexachlorocyclopentadiene	<1.9	<1.9	<38
Hexachloroethane	<0.4	<0.41	<8
Indeno(1,2,3-Cd)Pyrene	<0.4	<0.41	<8
Isophorone	<0.4	<0.41	<8
N-Nitroso-Di-N-Propylamine	<0.4	<0.41	<8
N-Nitrosodiphenylamine	<0.4	<0.41	<8
Naphthalene	<0.4	<0.41	<8
Nitrobenzene	<0.4	<0.41	<8
Pentachlorophenol	<1.9	<1.9	<38
Phenanthrene	<0.4	<0.41	<8
Phenol	<0.4	<0.41	<8
Pyrene	<0.4	<0.41	<8

TABLE 5-4

UNDERGROUND STORAGE TANK 615-4
DATA GAP TYPE X ANALYTICAL RESULTS
ALAMEDA POINT, ALAMEDA, CALIFORNIA

POINT NAME	CA05-08	CA05-09
SAMPLE IDENTIFICATION	030-CAP-076	030-CAP-078
SAMPLE DATE	09-MAY-00	09-MAY-00
DEPTH (feet below ground surface)	4.0 to 4.7	4.0 to 4.7
MEDIA (Units)	Soil (mg/kg)	Soil (mg/kg)
Semi Volatile Organic Compounds		
4-Nitroaniline	<1.8	<1.8
4-Nitrophenol	<1.8	<1.8
Acenaphthene	<0.37	<0.38
Acenaphthylene	<0.37	<0.38
Anthracene	<0.37	<0.38
Benzo(A)Anthracene	<0.37	<0.38
Benzo(A)Pyrene	<0.37	<0.38
Benzo(B,K)Fluoranthene	<0.37	<0.38
Benzo(G,H,I)Perylene	<0.37	<0.38
Bis(2-Chloroethoxy)Methane	<0.37	<0.38
Bis(2-Chloroethyl)Ether	<0.37	<0.38
Bis(2-Ethylhexyl)Phthalate	<0.37	<0.38
Butylbenzylphthalate	<0.37	<0.38
Carbazole	<0.37	<0.38
Chrysene	<0.37	<0.38
Di-N-Butylphthalate	<0.37	<0.38
Di-N-Octylphthalate	<0.37	<0.38
Dibenzo(A,H)Anthracene	<0.37	<0.38
Dibenzofuran	<0.37	<0.38
Diethylphthalate	<0.37	<0.38
Dimethylphthalate	<0.37	<0.38
Fluoranthene	<0.37	<0.38
Fluorene	<0.37	<0.38
Hexachlorobenzene	<0.37	<0.38
Hexachlorobutadiene	<0.37	<0.38
Hexachlorocyclopentadiene	<1.8	<1.8
Hexachloroethane	<0.37	<0.38
Indeno(1,2,3-Cd)Pyrene	<0.37	<0.38
Isophorone	<0.37	<0.38
N-Nitroso-Di-N-Propylamine	<0.37	<0.38
N-Nitrosodiphenylamine	<0.37	<0.38
Naphthalene	<0.37	<0.38
Nitrobenzene	<0.37	<0.38
Pentachlorophenol	<1.8	<1.8
Phenanthrene	<0.37	<0.38
Phenol	<0.37	<0.38
Pyrene	<0.37	<0.38

TABLE 5-4

UNDERGROUND STORAGE TANK 615-4
DATA GAP TYPE X ANALYTICAL RESULTS
ALAMEDA POINT, ALAMEDA, CALIFORNIA

Notes:

mg/kg Milligrams per kilograms
mg/L Milligrams per liter
NA Not analyzed

Detected concentrations are bolded.

6.0 OPERABLE UNIT-3

This section provides a brief site background and summarizes the data gap investigation conducted at OU-3. Background information includes site location and operations conducted (TtEMI 1999j), proposed land reuse (Alameda Redevelopment and Reuse Authority 1996), proposed groundwater designation (TtEMI 2000f), and previous investigations. Figures and tables cited in the text appear at the end of this section. Data gap results presented in this section will be used in the RI to access potential threats to human health and the environment.

6.1 SITE LOCATION AND OPERATIONS CONDUCTED

OU-3 is located in the Western Landfill Zone (Zone 1) and consists of the IR Site 1 landfill. The IR Site 1 landfill was operated between 1943 and 1956 as NAS Alameda's main site for waste disposal. The landfill received all waste generated at Alameda, except liquid waste, which was discharged directly to the Seaplane Lagoon (E&E 1983). The disposal method at the site consisted of digging trenches in the hydraulic fill to the water table, filling the trenches with waste, and compacting the material with a bulldozer. Materials known to have been disposed of at the landfill include old aircraft engines, scrap metal, waste oils, paint waste, solvents, cleaning compounds, construction debris, ashes from the base incinerator, and radioactive material from the Naval Air Rework Facility (E&E 1983). The landfill area is currently overlain by soil, the western end of Runway 7-25, and the northern end of Runway 13-31.

6.2 PROPOSED LAND REUSE AND GROUNDWATER BENEFICIAL USE

OU-3 is designated as part of the Northwest Territories land reuse area. Land reuse may include offices, research and development areas, manufacturing and distribution facilities, park areas, and possibly a golf course. No development plans have considered reuse of the area for residential housing. Groundwater at OU-3 is designated as part of the Western Region and is not considered a potential drinking water source.

6.3 PREVIOUS INVESTIGATIONS

Several investigations and removal actions have been conducted at OU-3, including an RI, a pistol range investigation, radiological surveys and removal actions, an unexploded ordnance (UXO) survey and removal action, a plume delineation study, and a previous data gap investigation. During the previous data gap investigation, the diffusive flux of VOCs through the existing soil in the landfill areas was

determined using the EPA-recommended flux chamber. 1,4-Dioxane was reported at seven surface flux sampling locations at concentrations between 3.2 and 6.9 $\mu g/m^3$. The HHRA, conducted as part of the OU-3 RI, indicated that these concentrations did not pose an unacceptable risk for the inhalation pathway. However, 1,4-dioxane was not included as a target analyte for groundwater during previous investigations conducted at OU-3.

6.4 DATA GAP INVESTIGATION SUMMARY

1,4-Dioxane concentrations in groundwater were accessed under Data Gap Type XII. 1,4-Dioxane was not detected at any of the Data Gap Type XII sampling locations. Data gap sampling locations are shown in Figure 6-1. Table 6-1 summarizes field activities conducted and observations made during the data gap investigation. Analytical results for OU-3 are summarized in Table 6-2 and included in Appendix D.

SENSITIVE RECORD

PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

FIGURE 6-1 – OPERABLE UNIT-3
DATA GAP SAMPLING LOCATIONS

FOR ADDITIONAL INFORMATION, CONTACT:

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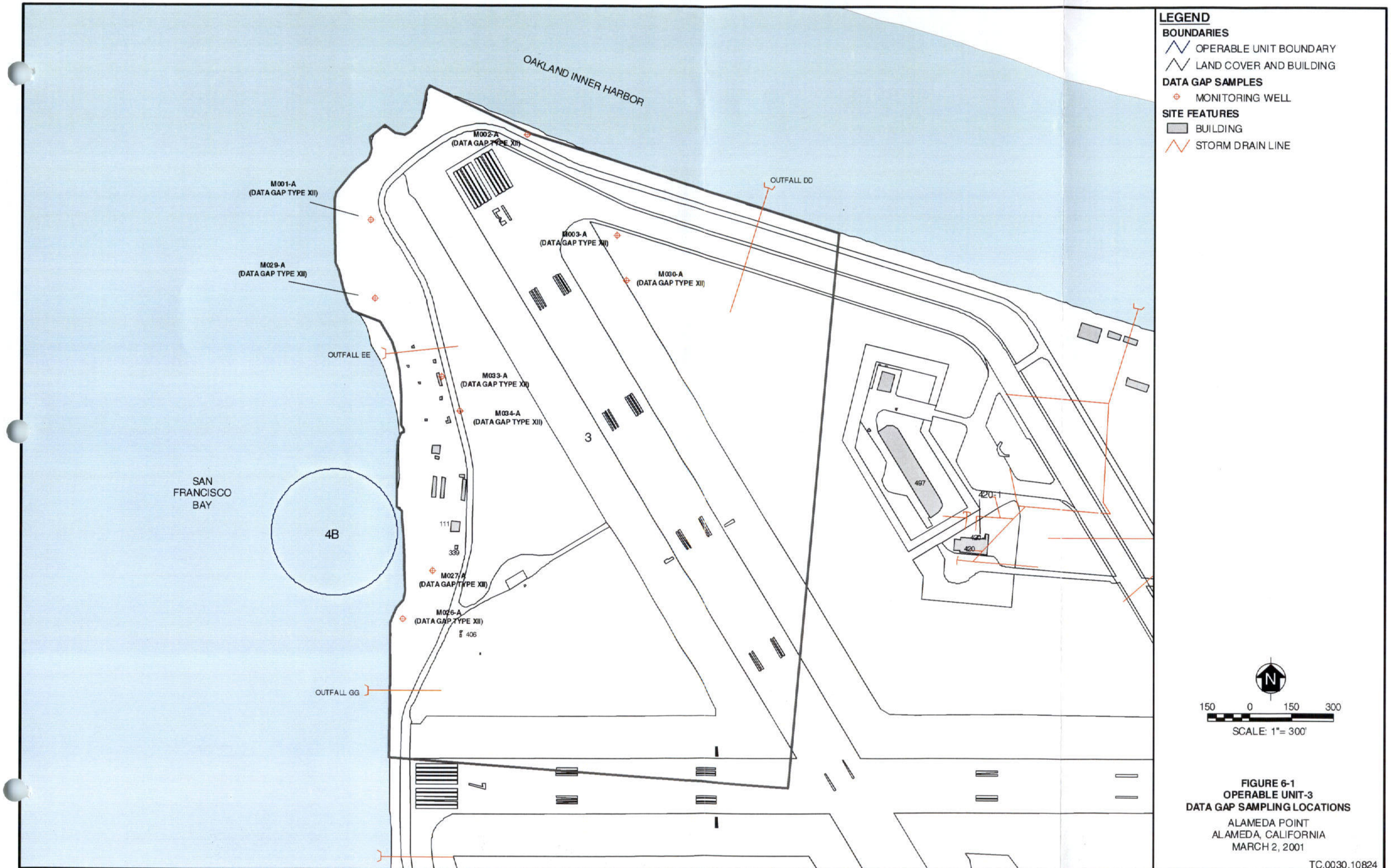

FIGURE 6-1
OPERABLE UNIT-3
DATA GAP SAMPLING LOCATIONS

ALAMEDA POINT
ALAMEDA, CALIFORNIA
MARCH 2, 2001

TC.0030.10824

C:\GEORGIES\PROJECT\DGS\CTO30_DG\CAA_JAN1 FIG6-1 LAYOUT

TABLE 6-1

OPERABLE UNIT-3
DATA GAP INVESTIGATION SUMMARY TABLE
ALAMEDA POINT, ALAMEDA, CALIFORNIA
(Page 1 of 1)

DATA GAP	FIELD ACTIVITIES	FIELD OBSERVATIONS
Data Gap Type XII: 1,4-Dioxane in Groundwater	• Ten groundwater samples were collected from existing monitoring wells.	• Groundwater samples collected from MW M002-A, M026-A, M027-A, and M030-A did not have an odor or sheen. • Groundwater samples collected from MW M001-A, M003-A, M029-A, and M033-A had an organic odor, but no sheen. • The groundwater sample collected from MW M034-A had a strong solvent or methane odor. • Depth to groundwater ranged from 3.83 to 7.0 feet below ground surface.

Note:

MW Monitoring well

TABLE 6-2

OPERABLE UNIT-3
DATA GAP TYPE XII ANALYTICAL RESULTS
ALAMEDA POINT, ALAMEDA, CALIFORNIA

POINT NAME	M001-A	M002-A	M003-A
SAMPLE IDENTIFICATION	030-CAP-252	030-CAP-253	030-CAP-254
SAMPLE DATE	03-MAY-00	02-MAY-00	04-MAY-00
DEPTH (feet below ground surface)			
MEDIA (Units)	Water (mg/L)	Water (mg/L)	Water (mg/L)
Volatile Organic Compounds			
1,4-Dioxane	<0.2	<0.2	<0.2

TABLE 6-2

OPERABLE UNIT-3
DATA GAP TYPE XII ANALYTICAL RESULTS
ALAMEDA POINT, ALAMEDA, CALIFORNIA
(Page 2 of 4)

POINT NAME	M026-A	M027-A	M027-A
SAMPLE IDENTIFICATION	030-CAP-246	030-CAP-247	030-CAP-381
SAMPLE DATE	05-MAY-00	04-MAY-00	04-MAY-00
DEPTH (feet below ground surface)			
MEDIA (Units)	Water (mg/L)	Water (mg/L)	Water (mg/L)
Volatile Organic Compounds			
1,4-Dioxane	<0.2	<0.2	<0.2

TABLE 6-2

OPERABLE UNIT-3
DATA GAP TYPE XII ANALYTICAL RESULTS
ALAMEDA POINT, ALAMEDA, CALIFORNIA
(Page 3 of 4)

POINT NAME	M029-A	M030-A	M033-A
SAMPLE IDENTIFICATION	030-CAP-251	030-CAP-255	030-CAP-250
SAMPLE DATE	03-MAY-00	04-MAY-00	04-MAY-00
DEPTH (feet below ground surface)			
MEDIA (Units)	Water (mg/L)	Water (mg/L)	Water (mg/L)
Volatile Organic Compounds			
1,4-Dioxane	<0.2	<0.2	<0.2

TABLE 6-2

OPERABLE UNIT-3
DATA GAP TYPE XII ANALYTICAL RESULTS
ALAMEDA POINT, ALAMEDA, CALIFORNIA

POINT NAME	M034-A
SAMPLE IDENTIFICATION	030-CAP-249
SAMPLE DATE	04-MAY-00
DEPTH (feet below ground surface)	
MEDIA (Units)	Water (mg/L)
Volatile Organic Compounds	
1,4-Dioxane	<0.2

Notes:

mg/kg Milligrams per kilograms
mg/L Milligrams per liter
NA Not analyzed

Detected concentrations are bolded.

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COMPREHENSIVE LONG-TERM ENVIRONMENTAL ACTION NAVY (CLEAN II)
Northern And Central California, Nevada, and Utah
Contract No. N62474-94-D-7609
Contract Task Order No. 0030

Prepared for

U.S. DEPARTMENT OF THE NAVY
Gregory A. Lorton, Remedial Project Manager
Southwest Division
Naval Facilities Engineering Command
San Diego, California

DATA GAP INVESTIGATION AT CORRECTIVE ACTION AREAS AND OTHER LOCATIONS AT ALAMEDA POINT SUMMARY REPORT

VOLUME II OF II
(Appendices A through E)

ALAMEDA POINT
ALAMEDA, CALIFORNIA

TC.0030.10824

March 2, 2001

Prepared by

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Michelle Reis
Project Manager

APPENDICES

Appendix

A FIELD LOGBOOKS

B SOIL BORING LOGS

C GROUNDWATER SAMPLING FORMS

D ANALYTICAL RESULTS

E SUBTRONIC CORPORATION GEOPHYSICAL SUBSURFACE INVESTIGATION REPORT

DATA GAP INVESTIGATIONS AT CORRECTIVE ACTION AREAS AND OTHER LOCATIONS AT ALAMEDA POINT SUMMARY REPORT

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7	REFERENCES

VOLUME II

APPENDICES A - E

APPENDIX A
FIELD LOGBOOKS

LOGBOOK NO. 170

TITLE

From Page No.

4/13/00
ALAMEDA POINT/CTO
UTILITY CLEARANCE AND KICK-OFF MEETING
PARTLY CLOUDY/SCATTERED SHOWERS
0800 ARRIVE @ ALAMEDA MEET W/ MICHELLE, RONIN & MIKE W/ TTEMI (SAC) & UTILITY LOCA
0820 BEGIN LOOKING @ SITES THAT NEED TO BE CLEARED
1000 MEET W/ JOHN BORREGO, BRENDAN MUCHOLAND, AND REPRESENTATIVES FROM CURTIS AND T
AND MOBILE LAB. / KICK OFF MEETING
1130 LEAVE KICK-OFF MEETING TO JOIN-UP W/ UTILITY LOCATOR
1150 LOCATE CUS LOCATOR AND BEGIN CLEARING LOCATIONS
1600 FINISHED MARKING LOCATIONS FOR THE DAY

4/14/00
ALAMEDA POINT/CTO
UTILITY CLEARANCE /CUS
PARTLY CLOUDY/SCATTERED SHOWERS
0815 ARRIVE @ MAIN GATE OF ALAMEDA PT./MEET PAUL W/ CUS
0830 BEGIN CLEARING LOCATIONS
1600 END MARKING LOCATIONS

4/17/00

1045 ARRIVE @ ALAMEDA PT TO CLEAR UTILITY'S
1100 MEET UP W/ PAUL FROM CUS / BEGIN MARKING LOCATIONS
1500 END MARKING LOCATIONS

MBB

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Witnessed & Understood by me. | Date | Invented by | Date

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1/ -/00
ALAMEDA POINT / CTO 030
DATA GAP INVESTIGATION
MIKE BARNES / EMILY DEAN

00 MEET @ U&A FIELD OFFICE / MOBILIZE LOAD TRUCKS
50 MEET @ FLIGHT PLANE GATE FOR MINI-MEETING / H&S AS WELL
30 GO BACK TO FIELD OFFICE TO ORGANIZE AND GET MORE SUPPLIES
45 SET-UP ON FP-CA09-DG1-01 TO COLLECT H_2O
00 BEGIN MICRO-PURGE
2 END PURGE
5 COLLECT SAMPLE ~~FP-CA09-DG1-01~~ 030-CAP-090
0 SITE SECURED / HEADING TO NEXT LOCATION
5 SET-UP ON FP-CA09-DG1-02
0 BEGIN MICRO-PURGE
12 END PURGE
5 COLLECT SAMPLE 030-CAP-091
5 SITE SECURED / HEADING TO NEXT LOCATION
SET-UP ON MW-CA13-DG3-04
0 BEGIN MICRO PURGE
7 END MICRO PURGE
5 ~~SITE SECURED~~ / H COLLECT SAMPLE 030-CAP-199
5 SITE SECURED / HEADING TO NEXT LOCATION
5 SET-UP ON MW-CA13-DG3-03
5 BEGIN MICRO PURGE
00 END MICRO PURGE
0 COLLECT SAMPLE
5 SITE SECURED / HEADING TO NEXT LOCATION
10 GO TO MOBILE LAB TO DROP OFF SAMPLES
5 SET-UP ON MW-CA13-DG3-01
1 BEGIN MICROPURGE
14 END MICROPURGE
5 COLLECT SAMPLE 030-CAP-082
0 SITE SECURED / HEADING TO ~~NEXT LOCATION~~ FIELD OFFICE
5 LEAVE FIELD OFFICE
DAY DONE

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To Page No.____

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✓ ~~1 CAA 9 PIZ.~~
✓ ~~1 CAA 2 MWS~~
✓ ~~1 CAA 13 MWS~~
✓ ~~1 CAA 1 PIZ.~~
?1 CAA 2 PIZ.

DAYS ACTIVITIES

4/26/00
ALAMEDA POINT / CTO 030
DATA GAP INVESTIGATION
MIKE BARNES

0650 ARRIVE @ U.A FIELD OFFICE / LOAD TRUCKS
0740 LEAVE FIELD OFFICE FOR FIRST LOCATION
0745 SET-UP ON MW-CA13-D63-02
0825 BEGIN MICRO PURGE
0837 END MICRO PURGE
[illegible] COLLECT SAMPLE 030-CAP-197
[illegible]55 SITE SECURED / HEADING TO NEXT LOCATION
0900 SET-UP ON FP-CA09-D61-03
0910 BEGIN MICRO-PURGE
0923 END MICRO-PURGE
0930 COLLECT SAMPLE 030-CAP-092
0945 SITE SECURED / HEADING TO NEXT LOCATION
0950 ~~SET-UP ON~~ HEAD TO MOBILE LAB TO DROP OFF SAMPLES
030 SET-UP ON MW-CA02-D63-02
1040 BEGIN MICRO-PURGE
1053 END MICRO-PURGE
1100 COLLECT SAMPLE 030-CAP-005
1105 SITE SECURED / HEADING TO NEXT LOCATION
1107 SET-UP ON MW-CA02-D63-01
1110 BEGIN MICRO-PURGE
1123 END MICRO-PURGE
130 COLLECT SAMPLE 030-CAP-004
SITE SECURED / HEADING TO NEXT LOCATION
1[illegible]7 SET-UP ON FP-CA02-D61-01
145 BEGIN MICRO-PURGE
1150 END MICRO-PURGE (DUE TO LACK OF RECOVERY ONLY INITIAL [illegible]

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om Page No. / LITER PARAMETERS WERE TAKEN
COLLECT SAMPLE 030-CAP-002
SITE SECURED / HEADING TO NEXT LOCATION
230 SET-UP ON FP-CA01-DG1-01
240 BEGIN MICRO-PURGE
253 END MICRO-PURGE
300 COLLECT SAMPLE, 030-CAP-001
320 SITE SECURED / HEADING TO NEXT LOCATION
335 ~~SET-UP ON~~ RETURN TO FP-CA02-DG1-01 TO COLLECT REMAINING H
340 FLOW-RATE SLOW / WILL TAKE A WHILE TO FILL REMAINING BOTTLES
05 SITE-SECURED / HEADING TO MOBILE LAB TO DROP OFF SAMPLES
30 RETURN TO FIELD OFFICE TO UNLOAD TRUCKS
45 LEAVE FIELD OFFICE
00 DAY DONE

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4/27/00
ALAMEDA POINT / CTO 030
DATA GAP INVESTIGATION
MIKE BARNES

0650 ARRIVE @ USA FIELD OFFICE ALAMEDA POINT / MOBILIZE / LOAD TRUCKS / HEALTH
0750 LEAVE FIELD OFFICE FOR FIRST LOCATION
0800 SET-UP ON FP-CA03-D61-01
0830 BEGIN MICRO-PURGE
0843 END MICRO-PURGE
0845 COLLECT SAMPLE 030-CAP-006
0900 SITE SECURED / HEADING TO NEXT LOCATION
0905 SET-UP ON MW-CA04-D67-01
0920 BEGIN MICRO-PURGE
0932 END MICRO-PURGE
0935 COLLECT SAMPLE 030-CAP-063
0940 SITE SECURED / HEADING TO NEXT LOCATION
0950 SET-UP ON MW-CA04-D67-03
0955 BEGIN MICRO-PURGE
1007 END MICRO-PURGE
1010 COLLECT SAMPLE 030-CAP-~~066~~ 065
~~1013~~ SITE SECURED / HEADING TO NEXT LOCATION
~~1013~~ SET-UP ON MW-CA04-D67-04
1014 BEGIN MICRO-PURGE
1026 END MICRO-PURGE
1030 COLLECT SAMPLE 030-CAP-066
1032 SITE SECURED / HEADING TO NEXT LOCATION
1035 SET-UP ON MW-CA04-D67-02
1038 BEGIN MICRO-PURGE
1051 END MICRO-PURGE
1055 COLLECT SAMPLE 030-CAP-064
1100 SITE SECURED / HEADING TO MOBILE LAB TO DROP OFF SAMPLES
1115 SET-UP ON FP-CA04-D61-01
16 CHECKED FOR "FLOATING PRODUCT" W/ BOTH BAILER & INTERFACE PROBE :,
1140 BEGIN MICRO-PURGE
1153 END MICRO-PURGE
1200 COLLECT SAMPLE 030-CAP-036

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1215 SITE SECURED / HEADING TO NEXT LOCATION
2.. SET-UP ON FP-CA04-DG1-02
213 NO PRODUCT FOUND w/ BOTH INTERFACE PROBE & BAILER
215 BEGIN MICRO-PURGE
228 END MICRO-PURGE
1230 COLLECT SAMPLE 030-CAP.037
255 SITE SECURED / HEADING TO NEXT LOCATION
300 SET-UP ON FP-CA13-DG1-01
302 NO FLOATING PRODUCT FOUND w/ BOTH INTERFACE PROBE & BAILER
1310 BEGIN MICRO-PURGE
322 END MICRO-PURGE (DUE TO LACK OF RECOVERY ONLY ONE PARAMETER TA
330 COLLECT SAMPLE 030-CAP.187
SITE SECURED / HEADING TO FIELD OFFICE TO POUR EQUIPMENT BLANK
ARRIVE @ FIELD OFFICE
5 POUR EQUIPMENT BLANK / WATER RUN THROUGH POLYETHYLENE & SILICON TUBING (030-CAP-342)
5 LEAVE ALAMEDA POINT
0 DAY DONE.

MBB

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7/28/00
ALAMEDA POINT
OPTA GAP INVESTIGATION @ CAA5
MIKE BARNAT
PARTLY OVERCAST / 55° / WINDY

0645 ARRIVE @ FIERO OFFICE / LOAD TRUCK
0745 HEAD OUT TO FIRST LOCATION
0750 SET-UP ON MW-CA07-D67-02 (CUT LOCK)
0805 BEGIN MICRO-PURGE
0817 END MICRO-PURGE
0820 COLLECT SAMPLE 030-CAP-085
0825 SITE SECURED / HEADING TO NEXT LOCATION
0830 SET-UP ON MW-CA07-D67-06
0842 BEGIN MICRO-PURGE
0854 END MICRO-PURGE
55 COLLECT SAMPLE 030-CAP-089
700 COLLECT DUPLICATE SAMPLE 030-CAP-362
0901 SITE SECURED / HEADING TO NEXT LOCATION
0902 SET-UP ON MW-CA07-D67-03
0912 BEGIN MICRO-PURGE
0924 END MICRO-PURGE
0925 COLLECT SAMPLE 030-CAP-086
0927 SITE SECURED / HEADING TO NEXT LOCATION
0929 SET-UP ON MW-CA07-D67-01
0936 BEGIN MICRO-PURGE
0948 END MICRO-PURGE
0950 COLLECT SAMPLE 030-CAP-084
0959 SITE SECURED / HEADING TO NEXT LOCATION
1015 SET-UP ON MW-CA07-D67-05
1030 BEGIN MICRO-PURGE
1042 END MICRO-PURGE
1045 COLLECT SAMPLE 030-CAP-088
SITE SECURED / HEADING TO NEXT LOCATION
1117 SET-UP ON MW-CA07-D67-04
1130 BEGIN MICRO-PURGE
1142 END MICRO-PURGE

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Witnessed & Understood by me,	Date	Invented by	Date

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1145 COLLECT SAMPLE 030-CAP-087
5 SITE SECURED / HEADING TO MOBILE LAB TO DROP OFF SAMPLES
1230 SET-UP ON ~~MW-CA~~ FP-CA10-061-02
1317 BEGIN MICRO-PURGE
1329 END MICRO-PURGE
1330 COLLECT SAMPLE 030-CAP-099
1348 SITE SECURED / HEADING TO NEXT LOCATION
1351 SET-UP ON FP-CA10-061-01
1357 BEGIN MICRO PURGE
1409 END MICRO-PURGE
1410 COLLECT SAMPLE 030-CAP-098
1418 SITE SECURED / HEADING OFF SITE TO GET ICE
1430 ARRIVE @ FIELD OFFICE TO UNLOAD TRUCK
1435 GO TO IDW TO DROP OFF WATER
1530 DAY DONE / HEADING TO U&A
1600 DAY DONE

* NO FLOATING PRODUCT DETECT W/ BOTH INTERFACE PROBE & BAIL

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Witnessed & Understood by me.	Date	Invented by	Date
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5/1/00
ALAMEDA POINT / CTO 030
DATA GAP INVESTIGATION @ CAA'S
MIKE BARNES & KAREN SAWYER

0645 ARRIVE @ FIELD OFFICE / BEGIN LOADING TRUCK / PREPARE DAYS WORK.
0790 LEAVE FIELD OFFICE TO GET ICE AND MAKE COPIES
0825 SET-UP ON MW-CA03-D66-02
0844 BEGIN PURGE
0852 END PURGE
0855 COLLECT SAMPLE 030-CAP-032
0905 SITE SECURED / HEADING TO NEXT LOCATION / 1ST TO FIND JOB TO GET MORE PARAMETER SHEETS
0930 HEAD TO NEXT LOCATION
0957 SET-UP ON MW-CA03-D66-03
1003 BEGIN PURGE
1012 END PURGE
1015 COLLECT SAMPLE 030-CAP-033
1015 SITE SECURED / HEADING TO NEXT LOCATION /
1105 SET-UP ON MW-CA03-D66-04
1120 BEGIN PURGE
1131 END PURGE
1140 COLLECT SAMPLE 030-CAP-034
1200 SITE SECURED / HEADING TO NEXT LOCATION
~~BEGIN PURGE~~
~~END PURGE~~
~~COLLECT SAMPLE 030-CAP-~~
1202 SET-UP ON MW-CA03-D66-01
1219 BEGIN PURGE
1231 END PURGE
1235 COLLECT SAMPLE 030-CAP-031
SITE SECURED / HEADING TO NEXT LOCATION
1238 SET-UP ON MW-CA03-D66-05 (CUT LOCK)
1246 BEGIN PURGE
1256 END PURGE
1300 COLLECT SAMPLE 030-CAP-035

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Witnessed & Understood by me,	Date	Invented by	Date

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1205 COLLECT DUPLICATE SAMPLE 030-CAP-357
1236 SITE SECURED / HEADING TO CHECK IN w/ JOHN B.
1340 GO TO BUILDING #1 TO GET KEYS TO SITE 1
~~1355~~
1415 LEAVE BUILDING / FOR SITE 1
1430 ARRIVE @ SITE 1 / KEYS DON'T WORK / TRY TO GAIN ACCESS THROUGH OTHER GATES / NO LUCK
1500 ARRIVE @ FIELD OFFICE / UNLOADED SAMPLES
1515 LEAVE U:A FIELD OFFICE FOR U:A / OAKLAND OFFICE / CATCH-UP / CHECK
1615 LEAVE U:A / DAY DONE

TC . 0030 . 10824

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5/2/00
ALAMEDA PT. / DATA GAP INVEST. @ CAA'S
MIKE BARNES / KAREN STOVER

0645 ARRIVE @ FIELD OFFICE / LOAD TRUCK
0725 LEAVE FIELD OFFICE FOR SITE 11
0735 SET-UP ON FP-CA11-061-02
0814 BEGIN PURGE
0824 END PURGE
0830 COLLECT SAMPLE 030-CAP-128 * NO "FLOATING PRODUCT"
0845 SITE SECURED / HEADING TO THE NEXT LOCATION
0847 SET-UP ON FP-CA11-061-01 * NO "FLOATING PRODUCT"
0857 BEGIN PURGE
0908 END PURGE
0910 COLLECT SAMPLE 030-CAP-127 * NO "FLOATING PRODUCT"
0920 SITE SECURED / HEADING TO NEXT LOCATION / STOP AT BATHROOM
[illegible] SET-UP ON FP-CA11-061-05
[illegible] BEGIN PURGE
0956 END PURGE
1000 COLLECT SAMPLE 030-CAP-131 * NO "FLOATING PRODUCT"
1015 SITE SECURED / HEADING TO NEXT LOCATION / STOP @ FIELD OFFICE TO GET MORE BOTTLES
1026 SET-UP ON FP-CA11-061-04
1032 BEGIN PURGE
1038 END PURGE
1040 COLLECT SAMPLE 030-CAP-130 * NO "FLOATING PRODUCT"
1050 SITE SECURED / HEADING TO NEXT LOCATION
1100 SET-UP ON FP-CA11-061-03
1116 BEGIN PURGE
1122 END PURGE
1125 COLLECT SAMPLE 030-CAP-129 * "NO FLOATING PRODUCT"
1135 SITE SECURED / HEADING TO NEXT LOCATION
1138 SET-UP ON FP-CA11-061-10
[illegible] BEGIN PURGE
[illegible] END PURGE
1155 COLLECT SAMPLE 030-CAP-136 + MS/MSD NO "FLOATING PRODUCT"
1245 SITE SECURED / HEADING TO NEXT LOCATION / CHECK IN W/ CTB

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Witnessed & Understood by me,	Date	Invented by	Date

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1305 SET-UP ON FP-CA-11-061-12
1330 BEGIN PURGE
1336 END PURGE
1340 COLLECT SAMPLE 030-CAP-138 * NO FLOATING PRODUCT
1357 SITE SECURED / HEADING TO BUILDING #1 TO GET KEYS TO AREA 1
1350 COLLECT SAMPLE 030-CAP-366 (DUPLICATE)
1435 SET-UP ON MW-OU3-0612-08
1453 BEGIN PURGE
1504 END PURGE
1505 COLLECT SAMPLE 030-CAP-253
1515 SITE SECURED / HEADING TO FIELD OFFICE TO UNLOAD
1530 LEAVE FIELD OFFICE FOR USA
1615 LEAVE USA / DAY ONE

To Page No.

Witnessed & Understood by me,	Date	Invented by	Date
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From Page No.

5/3/00
DATA GAP INVESTIGATION @ CAA'S/CTO 036
MIKE BARNES / KAREN SEVER

0645 ARRIVE @ USA FIELD OFFICE / CHECK-IN / MEETINGS
0730 ARRIVE @ ALAMEDA FIELD OFFICE / LOAD TRUCK
0756 SET-UP ON FP-CA11-061-13
0801 BEGIN PURGE
0817 END PURGE * NO FLOATING PRODUCT
0820 COLLECT SAMPLE 030-CAP-139
0835 SITE SECURED / HEADING TO NEXT LOCATION
0840 SET-UP ON FP-CA11-061-12
0847 BEGIN PURGE
0853 END PURGE * NO FLOATING PRODUCT
0855 COLLECT SAMPLE FP-CA11-061-135
0905 SITE SECURED / HEADING TO NEXT LOCATION / STOP @ FIELD OFFICE TO GET
[illegible] SET-UP ON ~~FP-061~~ FP-CA11-061-11
[illegible] BEGIN PURGE
0936 END PURGE
0940 COLLECT SAMPLE 030-CAP-137
0948 SITE SECURED / HEADING TO NEXT LOCATION
0950 STOP @ GP-CA11-DGA-05 THROUGH 06 TO CHECK FOR 'FLOAT
PRODUCT. NONE DETECTED W/ BOTH INTERFACE PROBE AND BAIL
1000 HEADING TO NEXT LOCATION / CHECK IN W/ JOHN B. → STRONG ODOR
1040 SET-UP ON MW-003-D612-07
1108 BEGIN PURGE
1114 END PURGE
1115 COLLECT SAMPLE 030-CAP-252
1125 SITE SECURED / HEADING TO NEXT LOCATION
1128 SET-UP ON MW-003-D612-06
~~BEGIN PURGE~~
~~END PURGE~~
1150 ~~COLLECT SAMPLE 030-CAP-251~~
~~SITE SECURED / HEADING TO MEET COURIER.~~
1138 JOHN B. COMES TO GET US TO SAMPLE STORM DRAIN
1156 SET-UP ON SD-CA13-062-02
1200 COLLECT SAMPLE 030-CAP-191

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12 COLLECT DUPLICATE SAMPLE 030-CAP-375
SITE SECURED / HEADING BACK TO MW-003-D612-06
1240 SET-UP ON MW-003-D612-06
246 BEGIN PURGE * NO FLOATING PRODUCT
1253 END PURGE
1300 COLLECT SAMPLE 030-CAP-251
SITE SECURED / HEADING TO NEXT LOCATION
330 SET-UP ON FP-CA06-D61-01
355 BEGIN PURGE
401 END PURGE * JUST SPOTTED JUVENILE
405 COLLECT SAMPLE 030-CAP-080 GREY OR HUMPBACK WHA
415 SITE / SECURED / HEADING TO NEXT 1/4 MILE OFF OF SITE
1416 SET-UP ON FP-CA06-D61-02 location
427 BEGIN PURGE
133 END PURGE * NO FLOATING PRODUCT
435 COLLECT SAMPLE 030-CAP-400
445 SITE SECURED / ~~HEADING TO NEXT LOCATION~~ GOING TO GET ICE
RETURN TO FIELD OFFICE / UNLOAD TRUCK / QC
LEAVE ~~FOR~~ U.S.A
00 ARRIVE @ USA
30 LEAVE U.S.A / DAY DONE

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5/4/00
DATA GAP INVESTIGATION @ CAA'S / CTO 030
MIKE BARNES / KAREN STOWER

0645 ARRIVE @ U'A / PICK-UP TRUCK
0700 ARRIVE @ ALAMEDA PT FIELD OFFICE / LOAD TRUCK
0745 MEET W/ JOHN B & PRECISION / GET BAILERS
805 SET-UP ON HP-PA02-D69-01
820 NO FLOATING PRODUCT DETECTED W/ BOTH INTERFACE PROBE & BAILER
825 SET-UP ON HPPA02-D69-03
828 NO FLOATING PRODUCT DETECTED W/ BOTH INTERFACE PROBE & BAILER
830 SET-UP ON HP-PA02-D69-02
831 NO FLOATING PRODUCT DETECTED W/ BOTH INTERFACE PROBE & BAI
834 SET-UP ON HP-PA02-D69-04
836 NO FLOATING PRODUCT DETECTED W/ BOTH INTERFACE PROBE & BAILER
837 SET-UP ON HP-PA02-D69-08
[illegible] NO FLOATING PRODUCT DETECTED W/ BOTH INTERFACE PROBE & BAILER
8[illegible] SET-UP ON HP-PA02-D69-11
841 NO PRODUCT DETECTED W/ BOTH INTERFACE PROBE & BAILER
843 SET-UP ON HP-PA02-D69-05
844 NO FLOATING PRODUCT DETECTED W/ BOTH INTERFACE PROBE AND BAILER
845 SET-UP ON HP-PA02-D69-09
847 NO FLOATING PRODUCT DETECTED W/ BOTH INTERFACE PROBE & BAILER
848 HEADING TO SITE ONE TO SAMPLE MONITORING WELLS
905 SET-UP ON MW-003-D612-09
920 BEGIN PURGE
925 END PURGE
930 COLLECT SAMPLE 030-CAP-254
937 SITE SECURED / ~~GOING TO TRY AND GET VOA'S FROM CURTIS & TOMPKINS~~ NEXT
942 SET-UP ON MW-003-D612-10
002 BEGIN PURGE
06 END PURGE
010 COLLECT SAMPLE 030-CAP-255
[illegible] SITE SECURED / TAKING KAREN TO DOCTOR'S APPT. / AND GET SUPPLIES
FROM CURTIS & TOMPKINS
45 SET-UP ON MW-003-D612-05
258 BEGIN PURGE

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1303 END PURGE
1305 COLLECT SAMPLE 030-CAP-250
1308 SITE SECURED / HEADING TO NEXT LOCATION
1309 SET-UP ON MW-OU3-DG12-04
1327 BEGIN PURGE
1332 END PURGE
1335 COLLECT SAMPLE 030-CAP-249
1336 SITE SECURED / HEADING TO NEXT LOCATION
1338 SET-UP ON MW-OU3-DG12-03
~~BEGIN PURGE~~
~~END PURGE~~
~~COLLECT SAMPLE 030-CAP-248~~
~~SITE SECURED~~
* LOCATED 8 M2E
DESTROY
1355 JOHN B. COMES & GET'S US TO COLLECT STORM DRAIN SAMPLE
1400 SET-UP ON SD-CA06-DG2-01
1410 COLLECT SAMPLE 030-CAP-081
1420 SITE / SECURED / HEADING BACK TO SITE-ONE
1430 SET-UP ON MW-OU3-DG12-02
1442 BEGIN PURGE
1448 END PURGE
1450 COLLECT SAMPLE 030-CAP-247
1455 COLLECT DUPLICATE SAMPLE 030-CAP-~~247~~ 381
1500 SITE SECURED / HEADING TO CHECK ON STORM DRAIN PROG
1505 HAVE TO WAIT FOR PLUGGING DRAIN (DOWNTOWN)
1753 RETURN TO SITE 6 / SET-UP ON SD-CA06-DG2-02
1800 COLLECT SAMPLE 030-CAP-404
1807 SITE SECURED / HEADING TO FIELD OFFICE
1845 DAY DONE

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o age No.

5/5/00 "CINCO DE MAYO B"
DATAGAP INVESTIGATION @ CAAS / CT0030
MIKE BARNES / KAREN STOVER

0700 PICK-UP TRUCK @ U&A
0715 ARRIVE @ ALAMEDA FIELD OFFICE / LOAD-UP TRUCKS / GO TO WALGREE
TO GET ICE
0830 SET-UP ON MW-OU3-DG12-01
0905 BEGIN PURGE
0910 END PURGE
0915 COLLECT SAMPLE 030-CAP-246
0930 SITE SECURED / HEADING TO BUILDING #1

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5/8/00

DATA GAP INVESTIGATION @ CAP's / CTO 030
MIKE BARNES

0650 ARRIVE @ ALAMEDA PT FIELD OFFICE
0700 GO OUT TO FRONT GATE TO MEET KIM T. / KIM COMES TO.
0725 GO TO U&A OFFICE / OAKLAND / PICK-UP COOLERS
0810 ARRIVE BACK @ ALAMEDA PT FIELD OFFICE
0900 SET-UP ON FP-CA11-DG1-06
0924 BEGIN PURGE
0944 END PURGE * POOR RECOVERY?
0945 COLLECT SAMPLE 030-CAP-132
1008 SITE SECURED / HEADING TO NEXT LOCATION
1010 SET-UP ON FP-CA11-DG1-07
1017 BEGIN PURGE
1023 END PURGE
1025 COLLECT SAMPLE 030-CAP-133
1042 SITE SECURED / HEADING TO MEET-UP W/ JOHN B + TEAM #2
[illegible] MEET-UP W/ JOHN. BEGIN WORKING W/ HIM. CHANGING LOG BOOKS
1200 MEET CGT COURIER / DROP-OFF SAMPLES
1210 GO TO U&A OFFICE / DROP OFF TIME SHEET / CHECK-IN
1300 ARRIVE BACK @ SITE W/ JOHN B / SEE TEAM 2 LOG BOOK
1305 HEAD BACK TO FIELD OFFICE / UNLOAD TRUCK
1425 LEAVE FOR U&A OFFICE
1445 LEAVE U&A

MBB

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ge No.

7/9/00

645 ARRIVE @ ALAMEDA PT / BEGIN LOADING TRUCK
700 GO OUT TO FRONT GATE TO MEET KIMT.
715 RETURN TO FIELD OFFICE / FOR DAY'S ASSIGNMENT
730 LEAVE FOR FIRST LOCATION
740 SET-UP ON FP-CA11-D61-08
755 BEGIN PURGE
807 END PURGE
810 COLLECT SAMPLE 030-CAP-134
825 SITE SECURED / GOING TO GET ICE
910 MEET-UP W/ JOHN B @ AREA 5 / GET INSTRUCTIONS FOR ANNEX
920 BEGIN ALAMEDA ANNEX WORK (200-82-300)
920 SET-UP ON MW-S37
945 BEGIN PURGE
051 END PURGE
COLLECT SAMPLE 261-S05-001
008 SITE SECURED / HEADING TO NEXT LOCATION
100 SET-UP ON MW-S08
109 BEGIN PURGE
115 END PURGE
1120 COLLECT SAMPLE 261-S05-002
135 SITE SECURED / HEADING TO GET VOAS (NOT IN SHIPMENT)
215 SET-UP ON MW-S38 (*NEED NEW CAP)
285 BEGIN PURGE
1231 END PURGE
1235 COLLECT SAMPLE 261-S05-003
1245 SITE SECURED / HEADING TO NEXT LOCATION
1248 SET-UP ON MW-S39
1253 BEGIN PURGE
1259 END PURGE
1300 COLLECT SAMPLE 261-S05-004
1310 SITE SECURED / HEADING TO NEXT LOCATION
SET-UP ON MW-S40
1325 BEGIN PURGE
1331 END PURGE
1335 COLLECT SAMPLE 261-S05-~~004~~ 005

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1240 SITE SECURED / HEADING TO NEXT LOCATION
1345 SET-UP ON MW-S09 (NEED NEW CAP)
1358 BEGIN PURGE
1404 END PURGE
1405 COLLECT SAMPLE 261-S05-006
1415 COLLECT DUPLICATE SAMPLE 261-S05-007
1420 SITE SECURED / HEADING TO FIND JOHN B. PACK FOR FED-EX / ICC
1350 RETURN TO U&A ~~FIEL~~ OFFICE TO DROP OFF SAMPLES
1435 LEAVE U&A / DAY DONE

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5/10/00
ALAMEDA DATA GAP INVESTIGATION @ CAA's / CTO 030
MIKE BARNES / KIM TOM

0700 MEET KIM @ FIELD OFFICE / LOAD TRUCKS / CLEAN FIELD OFFI
0800 SET-UP ON HP-PA02-069-07
0810 NO FLOATING PRODUCT DETECTED W/ BOTH BAILER & INTERFACE PROBE
0812 SET-UP ON HP-PA02-069-06
0814 NO FLOATING PRODUCT DETECTED W/ BOTH BAILER & INTERFACE PROBE
0815 SET-UP ON HP-PA02-069-10
0817 NO FLOATING PRODUCT DETECTED W/ BOTH BAILER & INTERFACE PROBE
0818 SET-UP ON HP-PA02-069-13
0819 NO FLOATING PRODUCT DETECTED W/ BOTH INTERFACE PROBE & BAILER
0822 SET-UP ON HP-PA02-069-12
0824 NO FLOATING PRODUCT DETECTED W/ BOTH INTERFACE PROBE & BAILER
0900 ARRIVE @ CAA 13 / GET ACCESS
SET-UP ON HP-CA13-065-01
NO "FLOATING PRODUCT" DETECTED WITH BOTH INTERFACE PROBE & BAIL
HOWEVER, STRONG ODOR & HEAVY SHEEN PRESENT
0910 SET-UP ON HP-CA13-065-02
"FLOATING PRODUCT" DETECTED WITH BAILER, BUT NOT INTERFACE P
BAILER COVERED W/ PRODUCT ON OUTSIDE, BUT NOT IN WATER C
0920 HEAD TO NEXT LOCATION

0928 SET-UP ON FP-CA05-061-~~05~~02
0949 BEGIN PURGE
0953 END PURGE
0955 COLLECT SAMPLE 030-CAP-068
1016 SITE SECURED / HEADING TO FIND JOHN B / TO ASK ABOUT PAGE.
1035 HEAD BACK TO CAA13 TO PHOTOGRAPH PRODUCT ON BAILER
1045 RETURN TO CAA5
1102 SET-UP ON FP-CA05-061-01
1109 BEGIN PURGE
1119 END PURGE
COLLECT SAMPLE 030-CAP-067
1120 " DUPLICATE SAMPLE 030-CAP-~~06~~1
1135 SITE SECURED / GOING TO MEET C&T COURIER @ GATE
1200 NO COURIER / RETURN TO AREA 5

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1[illegible]0 RELIEVE PAGE FROM COURIER / GO TO FRONT GATE TO MEET
1250 RETURN TO AREA 5
1254 SET-UP ON FP-CA05-061-03
1257 BEGIN PURGE
1303 END PURGE
1305 COLLECT SAMPLE 080-CAP-069
1330 SITE SECURED / HEADING TO FIND JOHN B.
1405 ARRIVE @ FIELD OFFICE / UNLOAD TRUCK
1415 HEAD TO U&A OFFICE
1430 ARRIVE @ U&A
1515 LEAVE U&A / DAY OFF

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5/11/00
DATA GAP INVESTIGATION @ CAA'S / CTO 030
MIKE BARNES

0700 ARRIVE @ ALAMEDA FIELD OFFICE / LOAD TRUCKS
0800 LEAVE FOR FIRST LOCATION
0810 SET-UP ON FP-CA05-061-04
0833 BEGIN PURGE
0840 END PURGE
0845 COLLECT SAMPLE 030-CAP-070
0900 SITE SECURED / HEADING TO REST ROOM & THEN NEXT LOCATION
0910 SET-UP ON FP-CA13-061-03
~~BEGIN PURGE~~
~~END PURGE~~
~~COLLECT SAMPLE 030-CAP-189~~
0920 PRODUCT PRESENT INTERFACE PROBE DETECTS .4' OF PRODUCT / BAILER FILLED W/ PRODUCT / BEGIN PURGING & PURGE NOTHING BUT PRODUCT (60% PRODUCT / 4 WATER) WILL NOT SAMPLE
0940 GO FIND JOHN B. TO INFORM HIM ABOUT PRODUCT
000 RETURN / PHOTOGRAPH 500 ml CYLINDER W/ PRODUCT
10 SET-UP ON FP-CA13-061-02

20 BEGIN PURGE
28 END PURGE (POOR RECOVERY / ONLY ONE PERAMETER READIN TAK
40 COLLECT SAMPLE 030-CAP-188
122 SITE SECURED / HEADING TO NEXT LOCATION / MEET JOHN B.
200 JOIN-UP W/ JOHN B'S TEAM (TEAM 2) PLEASE REFER TO THAT LOG BOOK
30 LEAVE FIELD OFFICE FOR U&A OFFICE
45 ARRIVE @ U&A OFFICE / CHECK-IN
15 LEAVE U&A / DAY DONE

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CTO 030 INVENTORY

FILTERS = ~~#71~~ 75
POLY TUBING = 2 LG ROLLS
SILICON TUBING = 6 x 50'
XL NITRILE = 5 BOXES
L NITRILE = 3 BOXES
M NITRILE = 2 BOXES
ORANGE MARKING PAINT = 6 CANS
40 ml VOAS w HCL = 107
1 l UNPRES. POLY = 47
250 ml POLYS UNPRES = 28
TYVEK = LOTS @ LEAST 2 L / 2XL
PACKING TAPE = 13.5
ALCONOX = 1 QUART
2 DECON BRUSHES
BUCKETS = 1
DI WATER = 2 GALS.
55 GAL DRUM LINERS = 2 BOXES

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6/14/00
DATA GAP INVESTIGATION @ CAA'S / CTO 030
MIKE BARNES / C.J. CATLETT / JOHN BORREGO / JUAN (PRECISION
HOT / 75° @ 0800 / CLEAR SKIES

0615 MIKE B ARRIVES @ U'A
0630 MEET W/ C.J CATLETT / LOAD TRUCKS / MOBILIZE
0645 24 HOUR FIELD-TRAINING BEGINS FOR C.J. CATLETT.
0800 MEET PRECISION & SUBTRONICS
0900 MEET W/ JOHN BORREGO / LOG BOOK TRANSFERED TO JOHN'S.

NSD

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6/16/00
DATA GAP INVESTIGATION @ CAA'S
MIKE BARNES
OVER-CAST 62°

1015 LEAVE U&A FOR ALAMEDA PT.
2025 ARRIVE @ FIELD OFFICE / LOAD TRUCK
2050 SET-UP ON FP-CA05-DG1-05
1100 COLLECT SAMPLE 030-CAP-071
"NO FLOATING PRODUCT DETECTED W/ BOTH INTERFACE PROBE & BA
1120 SITE SECURED / HEADING TO NEXT LOCATION
1122 SET-UP @ CAA B / TEST CELL AREA
1200 COLLECT SAMPLE 030-CAP-423A
"WEEPER" TAKING A LONG TIME TO COMPLETE BOTTLE SE
1330 FINISHED / COLLECTING SAMPLE / DID SOME GPS.
1335 RETURN TO FIELD OFFICE / DEMOB. / CLEAN-UP.
1405 RETURN TO U&A. / DEMOB / DOWNLOAD GPS DATA
1545 DAY DONE

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LOGBOOK NO. 162

P No. X

0715 • April 24, 2000 @ U+A
• Mob to Alameda point
0800 • Meet w/ Michelle Reis - EtEMI; Juan ~~Morales~~ Morales - Prec
Mike B+ Brendan + John B. - U+A
0815 • Mike + Brendan to Cans for supplies, Michelle to B.-1 for
Key; Juan + John B to air field gate
0818 • Call from Ron Evans - Mobile Chem, gas or diesel today?
• Plan for Today is CAA-2 and PA-A couple of wells,
few geoprobes; soil+gw to mobile lab.
0930 • See Ron Evans ~ lab; new plan to CAA-9
0:00 • DSC Brendan, Mike, Michelle, John Sampling + analysis
:- • Samples to Mobile Chem; set up Ron w/ how to.
:: • Follow up utility clearance.
Bld. 66. guy.
00 • DSC Ron Evans sample 094 - ND 8260 + TPPH:
• At CAA-9 zone 2 - 2 piezometers installed.
• boring DG4-01 drilling.
• soil + gw samples by 13.50; abandoning borings.
:50 • Mob to Site 7 for temp well installation.
:45 • finished drilling for day. Decon + mob IDW to storage area
00 • Brendan leave site for U+A.
30 • Precision leave for Day, over to Mobile Chem location.
0 • leave for Day to U+A
30 • leave U+A for Day

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0700 • April 25, 2000 @ Alameda Pt.
• Emily + Miguel also today
0745 • Mob to Airfield CAA 1, 2 + PA-A; Mike + Emily wells + piezometers @ CAA-13 + CAA-9.
0830 • To C+T for sampling supplies.
10:00 • Back on site; meet up w/ Ron
11:00 • go to PA-A.
12:00 • go to U+A; PM activities
13:00 • Back on site - ✓ on PA-A drilling; get more bottles from Mike + Emily for Brendan and Miguel.
14:45 • Drilling completed for day, sampling HP; then grout + decon.
1/2 * • Call Susan ~ sampling + a limited access rig.
* • Call Kieth W. ~ 2 new times maybe thursday.
* • Call Subt. or J.R. ~ GPR
1700 • leave for Day to lab
1745 • @ C+T deliver samples
[illegible] • leave for Day. Car Mileage 48 miles today.

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0730 • April 26, 2000; a little late today
• To do • concrete coring • GPR • AFAA • limited
✓ Sample containers for C+T; litres, 250 poly's, NAP poly's.
• TPPH through 4/25 samples
030-CAP-199 300 µg/l only detect!
0837 • CAA-11 storm drain infiltration.
look @ site + outfall. no flow. will come back to
* list data.
0930 • CAA-6 storm drain infiltration.
look @ catch basins + drains
lines appear to have been excavated during a Rem
Action? Main man hole has some flow + shem
Clearwater/Fastek figuring out H+S + stuff for
sealing them up.
* • H+S plan to Conrad; more copies for field
10:00 • Mike out to airfield for CAA-2 + PA-A (CAA-1?)
10.10 • H+S an issue for confined space today.
* • New PID + Cal Kit
10.20 • Michelle 916-837-1975 cell.
10.35 • w/ Brendan + Miguel @ CAA-4
11.10 • Samples to Mobile lab
• JP-5 calibration in progress
* • SD sampling equipment
12:00 • w/ Brendan, Miguel + mike pick-up samples
12:45 • Met Courier from C+T.
12:50 • relinquish samples, load bottles into trailer.
1400 • @ CAA 13 FP location
1430 • move IDW to new location; Key will be in Cans hidey.
1515 • Planning for tomorrow
1525 • Mike/Wells CAA3 Piey; CAA4 Piey; CAA13 Piey
*CAA4 4 wells. ER-03 → special for map ✓
1530 • Brendan/Miguel CAA10 + either strip outs @ CAA 3/4 or dup on
16:30 • leave site for Day to U+A
17:30 • leave U+A for Day. 30 miles today

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<750 • April 27, 2000
late today. Brendan @ CAA 10; w/ Miguel
Mike @ CAA 3+4+13

0830 • At CAA 10; drilling FP's; dsc Ron 8260 results.
• Bailer for floating Product + log results
• Review mobile lab results from ABM-01, 02, and 03.

11:30 • Examine floating / non-aqueous phase at CAA4 FP loca and extra well. Extraction well at corner of building hoa thick sheen / dropplets NAPL on exterior of water probe + bailer. Not a measurable amount.

12:00 • Round up samples

12:40 • Met w/ Gerry @ C+T; transfer samples
• Review new TEPH results. 094 + 004 <100 µg/L, 008 likely <D.L., but does have some petroleum response.

13:10 • DSC Mark. Riesig ~ AFAA.

1400 • leave site for U+A;

1430 • @ U+A 25 miles today.

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April 28, 2000

0730 • @ Gate, late again

0749 • Brendan @ CAA 11; start-up along sea wall. 6 HP la
• Mike @ CAA7 6 wells; then 2 pxy @ CAA10.

0000 • Storm drains @ CAA-11
• out fall near Bld 64, between monitoring wells 37-MJ-mw and 37-MJ-mw05 has no flow, ~~top is exposed~~ The Pipe is completely exposed out of the seaplane lagoon.
• several catch basins have standing water, lines appear to be clogged. Generally the lines appear to be 2' to 3' bgs.
• Photo's of outfall and catch basins.

0829 • Well 37-MJ-mw10 ≅ 6.71' bgs
• Tide pretty high now, pipeline just bottom in water.
• Pipe has an infiltration prevent door on end (to prevent seawater infiltration to stormdrain system) visible in photos. When looked at on 4/26 and pipe ~ 1'-2' out of water (low tide) no water was draining

0837 • Catch basin / manhole right before out fall is dry with a depth to sediment in bottom of 4.5' bgs.

0857 • Try to locate + measure ∡ in 37-MJ-mw11; unable to locate based on map.
• Dsc w/ C+T more I/C poly + C-O-C issues

0920 • Von Ron + Review results

1020 • looking like few step outs.

10:30 • Karen S. on way from USA to help out.

11:30 • look @ B1014 Oil/water separators.
• location DG4-07, 08 + HP-DG4 04 @ Site CAA 11 no O/W separator located, photo of area. Vault in photos area electrical.
• Need otis to help look @ other two potential O/W separator ideas

12:15 • samples to mobile lab from CAA-7

12:50 • Mob to parking area to meet C+T courier

[illegible]5 • Transfer samples

13:10 • Met w/ Keith of CH Surveys; mob to CAA-11 O/W Separat

13:40 • @ Mobile Chem w/ samples from Brendan + Miguel.
• Also Mike + Karen @ CAA-10 for Piezometers.

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1 42 • head back to CAA11 + gate to look for Mark R. to helpout w/ locating.

13:55 • msg from Mark R. slight delay. meet 1pm 5/3 wed. @ entry gate pkg (regular place). msg + email @ office

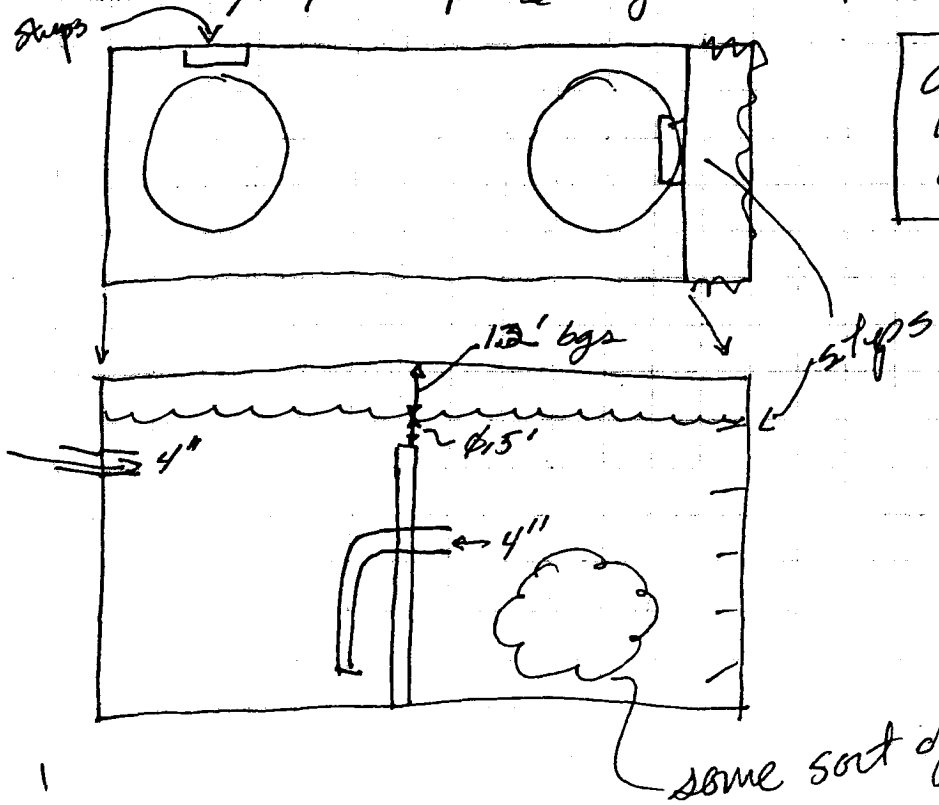
14:05 • DSC ~~Sharon~~ Susan ~ drilling schedule MD- on 5/4 + 5/5.
• AFAA next wk. 5/9 or so mark down here for @ Alameda Pt. meeting

14:15 • Review activities from this week, plan next week.
• American Demo 510 264-1892
• Subtronic 925-686-3747

1425 • Del Secco (510) 475-6313
• Mike Clark - Jeanie monday 8am

1430 • Brendan + Miguel done w/ 2 o/w separators at CAA11 B12
• Decon, grout, + samples to mobile lab.
• Michelle + Ronin + Keith @ CAA6

14:55 • @ Bld 12 o/w seems to be utility vault for e⁻ or similar 8.3' deep w/ step ~~w~~ rungs on both sides.



On second thought it does seem to be an o/w separator

5.21 • Both of ones unsure of before sue o/w type.
• Keith locating two ~~loc~~ borings near.
..40 • Mobile lab Red flag; sample 030-CAP-200 and

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16.10 • Duplicate #376 do not have similar concentrations differ by ~~2 or 3 orders of~~ an order of magnitude

• Maybe 1/2 jars on dups for Extractables; fill one & pour off into another jar?

16:30 • leave site for Day for U+A

16:50 • @ U+A; invoices, mg, email

17:30 • leave for Day 26 miles today

 May 1, 2000

30 · At C+T; drop samples
0600 · At Site; met w/ conc. coring; met w/ Brendan + Miguel + Michelle
08:50 · At Mobile Chem; review results
* · Fax some stuff to Vicki MCTEMI 916-852-0307
0910 · Ron to start TPPH's now. should have most of priority DG03 ones done by ~ noon.
* · Check w/ Ronin other concrete coring. Michelle B.66 + 163
0930 · to U+A; fax, contracts; complain ~ phones
10:30 · Back to Alameda Point
11:00 · Check in w/ Ron; review some data; sample-170 a little strange.
· Check in w/ Del Secco; John Lane has identified ~ 40 locations
1:40 · Check in w/ Brendan, Miguel, Michelle + Juan. completed 4 FPIs + on SB @ CAA 11;
* · Need to call Carol ~ Site 1 samples;
* · Remind ~ trip Blanks
* · GPR contractor for (Bld 398)
12 · Drilling crew break for lunch (to be back ~ 12:30)
· Review lab data and site stepouts
· Check in w/ conc. coring
2:50 · Back out w/ Brendan + crew @ Site 11
· Mike + Karen swing by - need Key to Site 1, sampling going OK.
* · Need to review method for Storm drain sampling likely use peristaltic pump
· DSC data + stepouts w/ Michelle + John L.
13:45 · Eat some lunch.
* · Give Ron's Invoice to Acct.
14:30 · Completed 7 FPIs + one soil @ CAA 11 today.
14:45 · Ron away @ supplies; a few new data points.
5:00 · At Field office review data; Plan for tomorrow.
16:30 · Review CAA-3 storm drains 3.5' + 3.9' bgs is line; Standing water in CB's only.
17:45 · leave site for Day 30 miles today; not quite
18:00 · Check out w/ Ron review data + problems.
18:35 · leave for Day

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0700 · ~~Ap~~ May 2, 2000
0730 · @ gate; mobile chem; field office; CAA11
0830 · @ C&T; drop samples.
0915 · back @ Alameda Pt.; get ice; go to CAA11 ✓ on Brendan, Miguel + Mike + Karen
10:00 · Run Samples to Ron E, mobile chem; Review results
10:15 · check on Mike + Karen, done 4 FP's; no action.
10:30 · Brendan + Miguel done 2 G/W + 1 FP, 1° G/W turned into an FP for 2nd sample + check on 5/3.
✓* · Call Carol @ C&T
* · Arrange GPR
✓* · Call Susan @ Precision
* · Call Del Secco
10:33 · Call Precision re: schedule for rest of work; leave msg for Susan Nyman.
10:39 · DSC Carol @ C&T; Sampling - more vol. for MS/MSD.
11:49 · @ CAA 3 main manhole depth to pipe of interest 6'-3"; ∇ in manhole 6'-8" about one foot high than ~~also~~ when opened initially.
11:29 · Samples to mobile chem; use sample -368 early (0845) toss later -368.
· Review mobile lab results

TPPH Results	µg/Kg	8260	µg/L
Ø3Ø-CAP-141	<500	Ø3Ø-CAP-17Ø	ND but lo of Peaks @ <: and 10 µg/L
-142	<500		
-143	<500		
-144	<500		
-145	<500		
-146	<500		
-368	<500		

12:00 · Gerry from C&T here; Samples from Mike + Karen MS/MSD volume and 5- FP samples
12:45 · take lunch + review done items today.
1:5 · Storm drain @ CAA7 - figuring it out.
13:30 · DSC GLS radio's + budget for Ø3Ø.
13:50 · @ Mobile chem drop redo of HP-CA13-DG13-01 and Duplicate

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z • Review results from Today.

TPPH	µg/L	8260	
030-CAP. 170	32,000	-089	ND
-155	<50	-085	MTBE 750 µg/L
-153	360	-101	69,000 Ethylbenzene µg/k
-369	2,300	•	61,000 Toluene µg/kg
			520,000 Xylene "
			124+125 TMB 220,000, 71

1400 • DSC Kyle, Bill, Lynne staff planning for next week.
1433 • CAA 13 Storm drains; Nadia on site also.
1540 • @ Bld 398? DSC w/ TLEMI. add one soil (vadose zone) to piezometer locations approximately 10. Actually, do the shaker test pretty much accross board.
* • log. mon wells @ CAA3 ▽; Jon Lane has pic's + log of dept
1630 • @ field office; Review data + plan for 5/3.
1644 • Added samples start @ 030-CAP-400.
• list of things to do for:

Mike + Karen ~~Brandon + Miguel~~

* • find out about
FP-CA11-DG1-09 VS. -12
• Check FP @ GP-CA11-DG4-05
no sample
• Check + sample use # for 09
FP-CA11-DG1-11, -12, -13 ; FP-CA06-DG1-01 + -02 new
• OU3 wells
• Maybe work on Storm drains

Brandon + Miguel
~~• CAA-5~~
• Pipline area B; thus limited access; Fri PA-B?; CA5; CA12
1755 • leave field office for mobile chem w/ EB & TB
1810 • Drop samples.
• A few more results

TPPH					
	~~368~~	-376A	800 µg/l	-149	<500 µg/kg
		-200A	930 µg/l	-150	<500 µg/kg

1820 • leave site for Day 43 miles

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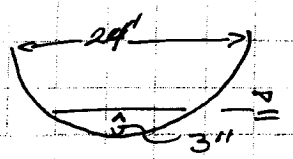
0750 • May 3, 2000 Alameda Point ~~CTO~~ JCB
• Check in w/ Mike + Karen @ CAA 11
• Brendan + Miguel @ PA-B
• Michelle @ PA-B
• Drilling HP's + GP's today
0855 • @ CAA 13 ✓ w/ storm drain program.
0944 • setting plugs @ CAA 11 for SD sampling.
10:10 • Mike + Karen out to CAA-6
10:20 • looking @ pumping vol vs. infiltration
• approx vol. ≈ 3" in pipe 24" pipe



after dewatering with sump pump ~ ½" water from constant infiltration flow.

• from ground surface
Manhole - 9~~10~~' 10.5" or 9.87' bgs
▽ - 9~~00~~' 9.5" or 9.80
• groundwater infiltration from line of interest a from manhole where sample to be collected
10:48 • ▽ 9.54' ~~10~~ 11.5 min after stoping pump.
10:55 • Measured from inside rim of manhole.
10:58 • ▽ 9.52' bgs @ 20 min from pump off
11:08 • ▽ 9.52' bgs @ 30 min ; go to find Mike + Karen
11:55 • Ready to sample CAA-13 SD-02
12:00 • Run to U&A;
12:25 • @ U&A; Michelle to send samples to C&T.
* → • Call Eric Lang @ STL Chicago
13:30 • At AFAA met w/ Mark R. Ttemi look @ Sites 06/04 and
* • * Utility + USA
1400 • Check on Brendan + Miguel; figs Samples to Mobile Chem
1455 • Review results

8260

030-CAP-087 MTBE 5.7 µg/L
-088, 084, 086, 362, 089, ~~085~~ all ND.
-169, -168, -167, -166, -151, -152, -153, all ND.

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May 3, 2000

500 • Review results TEPH J D M in µg/L
030-CAP-118 gas type compounds/in JP5 range

	<100	<100	<500	
-365	<100	<100	<500	
-171	<100	<100	<500	
-170	<100	<100	<500	
-169	<100	<100	<500	
-168	<			
-167	<			
-166	100*	290	<500	

1512 • gas type compounds affect result.

• for result 166, the gas type compounds ~~bar~~ which are not quantified in this method likely lower the quantification of JP5 (i.e. larger than reported

1800 • Test FRS radios; no good break up from CA11 to Bld. 1

1700 • leave for day 30 miles today.

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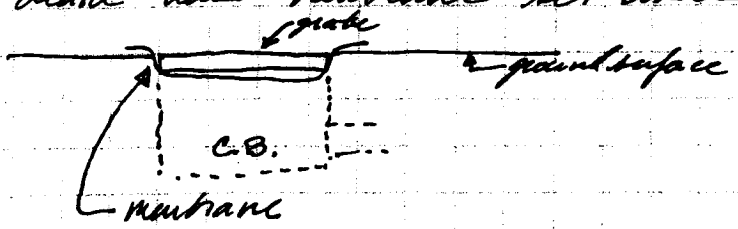
0720 • May 4, 2000 Alameda Point
0730 • at front gate met up w/ Jose w/ MD rig from precision. Plan today is Bld 183 + Bld 66 then to CAA11 RCRA tanks area.
• Ron to do TEPH today + 8260; likely get most done
• Storm drains at CAA6 today;
• Mike + Karen check piezometers @ PA-B; sample out at OV3 wells; + SD if necessary.
0830 • need VOA's from C+T
0923 • @ CAA 6 looking @ upstream line for over vol/need to pump around isolated §?
• flow into manhole from small side inlet line. diffient to observe if flow on trunk line.
0936 • doesn't appear to be raising ↓ in manhole.
10:00 • John Lane to CAA11 to mark locations.
• measuring length + vol for storm drain system purge.
11:00 • Eval. drain w/ sed. for second CAA6 SD sample drain has membrane set under grate to catch sediment



11:40 • @ 76 gpm pump rate ~ 16 K gal to purge going to add 3" pump to dewater ~~always~~ also.
• @ 76 gpm should take ~ 3.5 hrs.
12:00 • Start 3" pump at 76 gpm should be dewatered @ ~ 14:00
12:43 • Von samples @ field office C+T ~ 1300-1315. go get lic
13:30 • @ CAA 6; purged dry; looking to get Mike + Karen for sampling
14:30 • Collected sample @ CAA6 SD-01; now maneuvering set up to collect sample SD-02; some difficulties
15:30 • unable to block upstream sed; need smaller bladder
16:02 • Von Ron w/ Mobile Chem lab; Review data
• 8260

030-CAP-141, -142, -143, -144 ND
-346

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1608 · Review data @ Mobile lab

8260	benzene	ethylbenzene	~~µg/l~~
Ø3Ø-CAP-200A	45	16	
-376A	43	52	

· TEPH

	J	D	M	µg/l
Ø3Ø-CAP-153	55,000	5,000	<500	
-369	37,000	3,600	<500	mg/l
-100	<10	<10	<250	µg/kg
-101	51	69	<250	
-363	27	44	<250	
-141	<10	<10	<250	
-142	<10	15	<250	
-143	<10	<10	<250	

1700 · Purge manifold
1745 · done purging sample # 13 Ø3Ø-CAP-404
1820 · Sample completed
1830 · leave site for day 34.5 miles.

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o Page No. 14

0:30 • May 5, 2000
• At field office; Review work from week so far
✓* • need to Refax some C-O-C's to Vicki diffient to read # 4319; 4322; 4320; 4321; 4316; 4318; 4331;
• duplicate samples w/ same Id.
(*3) • Call Carol ~ C-O-C 4164
• Sample ID's 030-CAP-129 + (138?) extra volume.
• About PCB 030-CAP-370 2x.?
✓* • Call Keith ~ CAA13 few more + AFAA.
0900 • at mobile chem Review results from last couple of days dropp off high priority samples. B.163 + B66
• Most results still ND; CAA11 sites most detects so far pipeline area high; O/W detects; no FP.
0920 • See Bruder + Miguel @ CAA11; bring more 1 l poly's
0945 • Mike + Karen @ CAA11. Try + get AFAA to happen
10:45 • to V+A fax to Vicki; C+T Courier on-site
20 • head back to A.P.
12:00 • At field office; teams to lunch; go to Walgreen's
12:30 • Back to site CAA11
13:00 • over to Mobile lab see Ron
1320 • TEPH

	J	D	M	TEPH
038	<10	<10	<250	-145 all ND
238	<10	<10	<250	-368
236	<10	<10	<250	-146
040	<10	<10	<250	-149

• 8260

038 -	ND	-368	ND
040 -			
041 -			
235 -			
236 -			

-150

• 270, 271, 384 will run TEPH today.
1354 • leave M.L.
1440 • Sample 030-CAP-136 not on C-O-C? Call C+T
• an MNA location. -366 not on extended C-O-C Dup of FP-CA13-09 -253 Needs 1-4, Dioxane
1500 • to V+A
1515 • @ V+A for Day 35.5 miles today.

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m Page No. 15

May 8, 2000 @ U+A
0700 · leave for Alameda Point
0900 · @ CA-11 for 1 FP; change location from fog based on John Layne information
· location FP-CA11-DG1-08; South end fuel lines
0930 · set casing; no staining; odors; or other indications of contamination
0941 · Clean-up area
0945 · Mob to pipeline area & location GP-PA02-DG9-17, -18
10.10 · Start @ GP-PA02-DG9-17, -18 + HP-PA-02-DG9-10
11.00 · oops; mislabled Hole GP-PA-02-DG9-09, -10
11.25 · now do GP-PA02-DG9-17, -18; setting up to do water sample
11:30 · Start @ GP-PA02-DG-9-23 + 24
12:20 · Decon; mob to next location; take lunch
12:40 · @ Mobile Chem; drop samples + review friday's data.

TEPH	results	J	D	H	
030-CAP-	236	<10	<10	<250	mg/Kg
	-038				
	-235				
	-040				
	-041				
	-271				
	-384				
	-295				
	-296	<100	<100	<250	µg/L
	-302				

8260	results			
030-CAP-	150	ND	-274	ND
	-270		-275	
	-271		-282	
	-384		-283	
	-272		-288	

· Ron running TPPH this Am. PA-02 area samples have a small peak w/in gas range; not gas pattern; some large peaks @ outside gas >14min. Jet fuel?
· @ PA-02 location GP-PA02-DG9-21, -22 + HP-12
10.10 · Start drilling

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13.40 • Mob to GP-PA02 DG9-11;-12 + HP-07 location, last for PA-B.
13 45 • Sample -280 GP-11
3 50 • Sample -281 + Dup -385 GP-12
14.10 • set 10' screen; collect water sample
14.30 • Mob to CAA 12 - one HP sample
1500 • Equip. wash # 347
1515 • @ Mobile Chem w/ samples; review data

8260		TPPH
030-CAP-303	ND	170 ug/l

16:30 • leave site for day to O&A
16:45 • @ O&A - Fax to Vicki @ TEEMC; Use GLS communica
17:15 - leave for Day. 0 miles on car

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0750 • @ Alameda Point May 9, 2000
• CAA Ø5; start @ FP-CAØ5-DG1-Ø1
0837 • hole caves; use HP rod to set casing for FP. (10' casing)
• Collected soil for NAPL ~~pt~~ quick test (jar test) from 7.5-8' bgs.
0849 • Starting @ FP-CAØ5-DG1-Ø2.
0857 • putting in 10' screen @ FP-CAØ5-DG1-Ø2.
0915 • Start @ FP-CAØ5-DG1-Ø3
• 639-6115 Mike's pager
0937 • Complete FP-CAØ5-DG1-Ø3
0945 • Ready to Mob to CAA 13 - mini storage area
✓* • Call C+T ~ PCB's; SPG's; 250 poly's
✓* • Call Precision ~ schedule
10:00 • Mob to mini storage ✓in;
10:07 • Start at GP-CA13-DG5-Ø3, -Ø4; HP-Ø2
* • Call Kyle ~ more people for wed/thurs.
• Precision needs geoprobe rig friday.
10:45 • location quite visible contamination!
• Getting set up for GP-CA13-DG5-01; 02 + HP-Ø1
11:10 • 0715 w/ CN on way from previous job.
11:45 • Call from Kyle re: IN/BST
12:30 • Drilling team break for lunch; head to O&A for stuff.
3:00 • Access denied to network.
• Field team to CAA-Ø5 for soil samples @ DG10 type
5:00 • Back @ Site CAAØ5
5:40 • at ~~Site~~ Mobile lab; Dropped samples + check results from May 8 analysis

8260	µg/l
030-CAP-289	ND
-276	↕
-277	
-284	
-285	
-303	t-1,2-DCE 1.9; TCE 1.8; VC 1.3, cis-1,2-DCE 6.2

5:46 • TPPH
-101 - 3,500,000 µg/kg
-100, -363, 270, 271, 384, 272, 273, 274, 275, 282, 283, 288, 289, 277, 284 all <500.

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15:48 • Results from Today

8260		µg/l
-294	cis 1,2 DCE	1.5
-389	↓	1.3
-295, 296, 297		ND
-301	cis 1,2-DCE	1.1
-304	TCE*	1.7
-298, 302, 346,		ND
-299	ND	
-306	1-2. DCE 3.3; TCE 3.8	

* some TCE background also (<DL)

TPPH	µg/Kg	Samples			result
-038	<500	-345	-301	-306	all <50 µ
-040	↓	-294	-304	-305	—
-041		-386	-298	-300	
-235		-295	-302	-387	
-236		-296	-346	-186	
		-297	-299	-347	

6.00 • Waiting on Michelle / head back to field office.
6.07 • Call C&T; msg. to Carol W.
• PCB data all ND on prelim.
• Call C&T ~ 1-4 ~~Dioxa~~ Dioxane + SDG's

~~7~~00 • 8260

Ø63	ND	-Ø87 MTBE 5.2 µg/l
Ø64	↓	
Ø65		
Ø66		

17.31 • need extractable result on -155.

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[illegible] • May 10, 2000, Alameda Point
[illegible] • Start at FP-CA05-DG1-04
0930 • Completed; recorded lith. on tape recorder (dizzy).
0840 • Start @ FP-CA05-DG1-05
0842 • Concrete @ 1.2' bgs? after 6" concrete surface + 8" soil.? then concrete, part of building foundation?
• Put concrete rod on geoprobe; another 4" (.3')
9.05 • Refusal @ 1.4' bgs
9.12 • Mob. to CAA-13; near jet test cell.
0930 • Set up on FP-CA13-DG1-03
0950 • check storm drain manhole in center of area
1010 • approx. 3/8" NAPL on bailer dropper in manhole! Strong HC odor.
10.40 • 030-CAP-235 C&T has no VOAs;
10.42 • Mob to Parcel 27 site + other EBS Parcels
1100 • Start @ HP-EP27-DG11-01 drive screen point to 10' open to 6' bgs
11.15 • Collect samples 030-CAP-237 and duplicate 030-CAP-380.
[illegible] • lunch; Michelle leave for day
[illegible] • At Parcel 27 sampling HP-EP27-DG11-03; 030CAP-239
1300 • Collect sample from 6'-10' bgs.
1310 • setting up at HP-EP27-DG11-04; 030-CAP-240; location adjacent to equipment mounts.
1317 • Starting drilling HP-EP27-DG11-04
13.25 • Collect sample 030-CAP-240
13.35 • Start at HP-EP27-DG11-05
1350 • Collect sample from 6'-10' bgs 030-CAP-241
13.55 • Clean-up @ last two locations, grouting.
14.05 • Setting up at HP-EP27-DG11-02;
14.20 drilling @ HP-EP27-DG11-02; Water coming up out of ground all over - up to 40' from hole location. Jean thinks he may have hit something.
• Call Nadia; says go to Bldg 1. try Steve Edely.
14.30 • Back out to site Parcel 27 w/ Doug DeLong; 2 City of Alameda people show up. D. DeLong cell phone 510-772-8832
[illegible] • EBay Mud come to shut off water
[illegible] • water off; leave site for day.

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0750 • At field office. May 11, 2000
• John + Kim to EBS Parcels; Miguel help grouting; make piezometers.
0830 • Set up @ Parcels 41, 44, 64, + 65
0845 • Met w/ Steve Eddy + Doug Delong about NAPL found yesterday + day before @ CAA13.
• look @ FP's from Bld 397 lots of NAPL in -03
• ~~look~~ Doug D. says storm drains in this area are capped; no release to Bay.
• go to mini storage area. catch basin in entry may have oily material; flow from bldg. 6'x4' Doug. D. says it's been bubbling up out of the ground for years. Storm lines in that area were flushed last year.
0930 • back to Parcels; Kim + Ivan have done
HP-EP64-DG6-01 030-CAP-244 6'-10' bgs
HP-EP63-DG6-01 030-CAP-245 6'-10' bgs
• Collecting sample HP-EP44-DG6-01 030-CAP-243
0935 • Cleaning up + moving to next HP location.
0944 • Start @ HP-EP41-DG6-01 030-CAP-242
0957 • Collected sample from HP-EP41-DG6-01
• Grout + decon from this area.
• DSC w/ Ronin Plan for today and results of water line
10.15 • Review results w/ Ron. from yesterday

TEPH soil	J	D	M mg/kg
-207	<10	<10	<250
-378	↓	↓	↓
-208	470	3,300	21,000
-205	52	440	6,300
-206	<10	<10	<250
-270	31	83	700

TEPH water	J	D	M µg/l
-226	1,400	1,500	16,000
-225	390	420	92,000
-379	390	520	82,000

• 8260 results

-205	ethylbenzene	35, toluene 110, xylene 270
-206	"	130, xylene 560
-208	"	55, toluene 110, xylenes 560
-186	1,1-DCA 18; 1,1,1-TCA 303	

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1 30 • mac 8260

-379	b -110 ; ~~T 704~~ 7.4 ;	ε -14 ;	x 39	
-225	120	7.9	15	42
-226	1100	56	96	450

-378 ; 207 ; 348 ; 387 ; 300 ; 305 ; 226

10:35 • head back to Juan & go to CAA-13 ministorage.
11:00 • set up @ CAA 13 additional borings
12:10 • Precision take lunch
13:00 • drilling next step outs
~~14~~ 15.15 • finished sampling for day.
• finished grouting (Sergio + Miguel)
16:00 • leave site for U+A
1825 • leave U+A for Day.

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0730 • May 12, 2000 Alameda Point
• Clean-up field office; mob rental equipment back office + VSA equip back to office
• Mike B. taking samples to C+T
* • Call Carol + John + talk ~ what to do for SDG Stuff.
• Return truck (Dakota) to Enterprise w/ Kim.
11.30 • Kim drop me @ field office; over to Mobile Ch to see Ron
11.52 • Review results

TEPH µg/L	J	D	M
030-CAP-155	<100	<100	<500
-345	↓	↓	↓
-294			
-386			
-297			
200A	23,000	22,000	120,000
376A	44,000	12,000	49,000

8260: all ND		
030-CAP-286	-253	-281
-287	-290	-385
-278	-291	
-279	-280	
-292		

11.56 • Some samples are coming up w/ detects below the reporting limit on 8260. (Such are diluted samples).
* • Call Vicki + John with info about how SDG's will work.
12.02 • Review data from this morning also

TEPH µg/L	J	D	M
-303	<100	<100	<500
-301	↓	↓	↓
-304			
-298			
-346			

8260	B	T	E	X	
-227	430	130	16	110	124 TMB 19, 135 TMB 11
-228	ND				
-229	1,100	19<RL	13<DL	110	124 TMB 25, 135 8.5<DL.

12.30 • leave site for Day
00 • C VSA; finish clean-up + de-mob.
17.00 • leave for Day

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0910 · Alameda Point June 14, 2000
· CAA-13 test cell B397 area
10:30 · Install FP step outs 04 + 05.
· Decon + prep to mob to CAA 13 - mini storage area to sample @ tar pit.
· Samples GP-CA13-DG5-11, 12, 13, 14, 15, 16, 17, 18.
· HP's HP-CA13-DG5-6, 7, 8, 9.
13:00 · Call Precision about small rig for locations 15/16 + 17/18
12:00 · Sergio on site w/MD
1300 · Sergio + Juan completed MD work; de-mob.
· Juan decon + take lunch
13:40 · Start @ next spot. GP-CA13-DG5-19/20 + HP-10.
17:30 · leave site for Day
1800 · Deliver Samples to C+T

Witnessed & Understood by me, | Date | Invented by | Date

om Page No. 25

June 15, 2000

4700 to Ø945 • Parcel 27 - one HP
• CAA Ø5, Bld 400 - one FP
Ø945 • Very late John B.;
On Site Michelle Reis + Joel
* • Call Precision ~ next wk (tues
* • Call CU Surveys ~ monday 6/19
* • Frank Fromstead 2pm @ 397 ask for Key.
10:35 • CAA 13 - Tar Pit Area
-416 HP from yesterday
-417, 418, 419 GP-CA13-DG5-25/26 + HP-13
-420, 421, 422 V V 27/28 + HP-14
29/30 - 424, ~~45~~ 425; 426 + HP-15
• CAA13 - Test Cell Bld 397
-FP-Ø3 use those #; + dup
-FPØ5 -423
:ØØ • Call E+T about Sample ID's
• leave Alameda mini-storage area. take lunch + mob to CAA 13 o/w separator area.
• Mike + Jason to do B. 397 FP's.
ØØ • Call to Thomas M - SWDIV 619-532-0919 + 0907 - leave msg
345 • Drill GP-CA13-DG4-Ø1/Ø2 + HP-Ø1
45 • Mob to CAA 11 for repeat of HP-CA11-DG10-Ø2 sample -185A.
20 • Collected sample screened 6'-10' bgs using hydropunch type screen tool.
30 • Decon + grout hole; finished drilling for today.
00 • Clean up site (CAA 13)
00 • leave site for Day.

TC . 0030 . 10824

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nessed & Understood by me,	Date	Invented by	Date
		Recorded by	

TITLE

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0700 • At U+A; Mob to Alameda Point
June 21, 2000
0745 • At field office; load up for CAA13 stuff.
0805 • Meet Juan w/Precision @ front; mob to CAA13 for
1. O/W separator sample and
1 FP step out.
• Sample ID's + location ID's
• 030-CAP-427 GP-CA13-DG4-03 ?
030-CAP-428 GP-CA13-DG4-04 ?
030-CAP-429 HP-CA13-DG4-02 ?
030-CAP-430
0830 • Starting @ 1° location; Michelle on-site.
0900 • collected water sample HP-02 # 427
0910 • collected Soil GP-03 # 428
0915 • Collected Soil GP-04 # 429
• Move to FP-06
[illegible]0 • Start @ FP-06 location.
10:[illegible] • Completed FP-CA13-DG1-06
• Decon + grout
10:30 • Juan to grout @ Bld. 400
• Mob to IDW.
10:50 • At IDW area; Juan arrive w/today's IDW; prep to composit
Sample drums. 2 soil + 1 5-gal bucket from AFAA-site05
7 water + 1 from AFAA and 1 w/ product init.
• will collect 1 water 030-CAP-431 from the drums.
Hi 12:30 • leave for C+T.
1300 • At C+T drop samples.
1340 • @ B15 (Fass office) Sample 3 wells.
1530 • to IR16, Sample 1 well.
1700 • leave site for Day
1720 • @ U+A Oak.
1820 • leave U+A for Day.

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Witnessed & Understood by me, | Date | Invented by | Date

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June 22, 2000

11:00 • leave U&A for Alameda Point Site CAA 13, Bld 397 area.

11:30 • at FP-CA13-DG1-06.

11:40 • product 5.18' bgs 0.4' ~~of~~ JEB non aqueous phase liquid in screened area.

▽ 5.58' bgs

• Remove casing + grout FP location.

12:10 • Mob to field office + leave equip. + drum.

~~[illegible]~~ — JEB

1300 • Back @ U&A.

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