

**PRELIMINARY SOIL AND  
GROUNDWATER INVESTIGATION REPORT**

Vicinity of the Above-Ground Diesel Fuel Storage  
Tank at the Compost Production Area  
Main Wastewater Treatment Plant

East Bay Municipal Utility District  
Oakland, California

Alisto Project No. 10-203

October 1994



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at the  
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**East Bay Municipal Utility District  
Oakland, California**

**Project No. 10-203-01-005**

**Prepared for:**

**East Bay Municipal Utility District  
375 Eleventh Street  
Oakland, California**

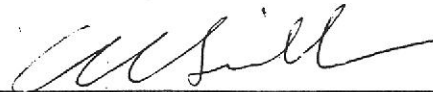
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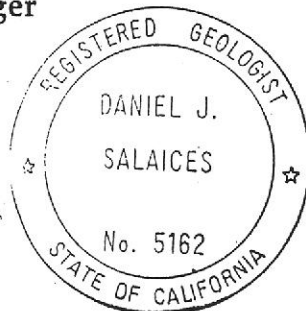
**October 21, 1994**



**Dan Salaices, R.G.  
Project Manager**



**Al Sevilla, P.E.  
Principal**



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## 1.0 INTRODUCTION

East Bay Municipal Utility District (EBMUD) retained Alisto Engineering Group to collect soil and groundwater samples at the EBMUD Main Wastewater Treatment Plant (WWTP), located at the end of Wake Avenue, 1/4 mile east of the Oakland Army Base, in Oakland, California. A site vicinity map and a site plan are shown in Figures 1 and 2.

### 1.1 Purpose and Scope of Work

This work was performed to assess the nature and extent of petroleum hydrocarbons in the subsurface soil and/or groundwater near a 1,000-gallon aboveground diesel storage tank.

The tasks performed during the investigation included the following:

- Drilled and logged eight exploratory soil borings and collected soil samples.
- Collected groundwater grab samples from two of the eight borings.
- Prepared this report presenting the field procedures and findings.

The above tasks and related field and sampling activities were performed in accordance with the requirements and guidelines of the California Regional Water Quality Control Board, San Francisco Bay Region (RWQCB), and the Alameda County Health Care Services Agency (ACHCSA).

### 1.2 Site Location and Description

The project site, is in the immediate vicinity of the above-ground diesel-fuel storage tank at the compost production area of the Main WWTP. Figure 2 shows the layout of the site including the locations of the tank and soil borings.

## 2.0 SITE GEOLOGY AND HYDROGEOLOGY

The site is in Oakland, California, to the east of San Francisco Bay. Oakland is situated in the Coastal Range geomorphic province, characterized by northwesterly-trending mountains and valleys. San Francisco Bay occupies a Pliocene structural depression that has been flooded several times by Pleistocene glacial cycles. The San Francisco Bay Area is underlain by Late Pliocene-Early Pleistocene alluvial sediment. The upper 500 feet of this coarse, poorly-sorted sediment is derived mainly from the Sacramento-San Joaquin drainage system. The recent sediment load in this system has been greatly increased by hydraulic mining and farming. Bay mud, the youngest deposit in San Francisco Bay, is a soft, unconsolidated sediment generally consisting of 90 percent clay and silt-size detritus and is prevalent in the area (Ben M. Page, 1966).

The Main WWTP is situated on land reclaimed with hydraulic fill. The upper sub-aqueous silty clay is covered with hydraulic fill used in land reclamation that generally consisted of sandy material. The plant is approximately 10 feet above mean sea level.



The topography is relatively flat, although the surrounding area slopes gently to the west, toward San Francisco Bay. The general groundwater gradient direction is assumed to be to the west.

### 3.0 FIELD METHODS

The procedures and methods used during field activities are described in the following sections:

#### 3.1 Drilling and Sampling

On March 2, 1994, eight exploratory borings were drilled at the site using a hand auger. The borings were drilled to depths ranging from 1.5 to 9.5 feet below grade. The depths at which samples were collected are presented in Table 1. To minimize the potential for cross-contamination, drilling equipment was decontaminated before and after each use.

During drilling, soil samples were collected beginning at grade and terminating at the total depth of the borings. The samples were collected using a soil core sampler lined with stainless steel tubes. A hammer attachment was used to drive the sampler into undisturbed soil. The sampler was washed using a phosphate-free detergent and rinsed with tap water before and after each use.

A stainless steel tube was removed from the soil sampler for chemical analysis. The sample was retained within the stainless steel tube, and both ends were immediately covered with Teflon sheeting and polyurethane caps. The caps were sealed with tape and labeled with the following information: Alisto Engineering project number, boring number, sample depth interval, sampler's initials, and date of collection. The sample was immediately placed in a cooler containing block ice. Possession of the samples was documented from the field to the EBMUD state-certified analytical laboratory using a chain of custody form.

Soil samples and, when appropriate, drill cuttings were described using the Unified Soils Classification System, and field estimates of soil type, color, moisture, density, consistency, and field readings using a photo-ionization detector were noted on the boring logs. The logs were reviewed by a registered geologist and are presented in Appendix A. Each borehole was backfilled with a neat cement grout to the surface after completion of sampling. A hydrogeologic cross section prepared using boring logs generated during this investigation is shown in Figure 3.

#### 3.2 Qualitative Shallow Groundwater Survey

Soil Borings TW-3 and TW-4 were drilled to approximately 9.5 feet below grade. Groundwater was first encountered at approximately 7.5 feet below grade. A clean, 2-inch-diameter, Schedule 40, polyvinyl chloride (PVC) casing with 0.010-inch slots was inserted into Soil Borings TW-3 and TW-4 to approximately 2 feet below the first groundwater encountered (9.5 feet below grade). Before collecting a groundwater sample, the groundwater was monitored for separate-phase product or sheen.



The groundwater sample was collected using a disposable bailer, and carefully transferred into laboratory-supplied containers. Nitrile gloves were worn at all times during groundwater purging and sampling. The samples were labeled with boring number, site identification, date and time of collection, and sampler's initials, and transported in an iced cooler to the EBMUD state-certified laboratory following proper preservation and chain of custody protocol. After sample collection, the PVC casing was removed before backfilling the borehole to grade with neat cement. A photograph from the location of the field activities is presented in Appendix B.

#### 4.0 ANALYTICAL METHODS

Soil and groundwater samples were analyzed by EBMUD analytical laboratory, Oakland, California, using standard test methods of the EPA and the California Department of Health Services. The official laboratory reports and chain of custody records are included in Appendix C. The following analytical methods were used to analyze the samples:

- Total petroleum hydrocarbons as gasoline (TPH-G) using EPA Methods 5030/8015
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX) using EPA Methods 5030/8020
- Total petroleum hydrocarbons as diesel (TPH-D) using EPA Methods 5030/8015

The results of the laboratory analysis are summarized in Tables 1 and 2.

#### 5.0 DISCUSSION OF FINDINGS

The following are the findings of field activities performed during this preliminary soil and groundwater sampling investigation (See Figure 2 for boring locations):

- A sheen was observed on the water that accumulated in the base rock underlying the asphalt pavement before Soil Borings TW-1 and TW-2 were drilled.
- Soils beneath the site consisted of approximately 2 feet of base rock underlain by silty sand and sand to the total depth of the borings. Silty clay was encountered from approximately 6.5 to 8.5 feet below grade in Soil Borings TW-3 and TW-4.
- Groundwater was encountered at approximately 7.5 feet below grade during drilling.
- Analysis of the soil samples did not detect TPH-G above the reported detection limit of 1 part per million (ppm) except for 1.5 ppm TPH-G in Boring TW-1 at 1 foot below grade. Benzene was detected in soil samples collected from Borings TW-1 through TW-6 at concentrations ranging from 0.039 to 0.050 ppm. The laboratory detection limit for benzene in soil is 0.005 ppm.



- Analysis of soil samples collected from Borings TW-1 through TW-7 detected TPH-D at concentrations ranging from 3.7 to 360 ppm. The laboratory detection limit for TPH-D is 2.5 ppm. Only 2 samples had TPH-D concentrations greater than 50 ppm (TW-4-0 and TW-7-1).
- Analysis of the soil samples did not detect 1,2-dichlorobenzene, 1,3-dichlorobenzene, or 1,4-dichlorobenzene, above reported detection limits of 0.005 ppm.
- Chlorobenzene was detected above the reported detection limit of 0.005 in only one of the borings at a concentration of 0.012 ppm in Boring TW-1 at 1 foot below grade.
- Analysis of grab groundwater samples collected from TW-3 and TW-4 did not detect TPH-G; BTEX; 1,2-dichlorobenzene; 1,3-dichlorobenzene; 1,4-dichlorobenzene; or chlorobenzene above the reported detection limits of 0.2 parts per billion (ppb) for aromatic compounds and 40 ppb for TPH-G. However, TPH-D was detected in samples collected from TW-3 and TW-4 at concentrations of 220 and 200 ppb. The reported laboratory detection limit for TPH-D in groundwater was 40 ppb.

## 6.0 CONCLUSIONS AND RECOMMENDATIONS

Total petroleum hydrocarbons, predominantly of the diesel range, were detected in the subsurface soil and groundwater near the aboveground diesel storage tank at the Main WWTP. At this time, further investigation or remediation is not recommended or warranted based on the following:

- Concentrations of petroleum hydrocarbons detected in the soil and groundwater do not appear to be an imminent threat to public health and the environment.
- The Main WWTP and the immediate surrounding properties have historically been or projected to continually be designated for industrial use.
- The shallow first groundwater at the site does not appear to be suitable or has not been designated as a primary drinking water source.

Maximum contaminant levels (MCLs) for drinking water or action levels for soil and groundwater remediation have not been established for TPH-D and TPH-G. Benzene, for which the primary MCL is 1 ppb, has typically been considered the key parameter in developing cleanup goals for groundwater impacted by petroleum hydrocarbons. For soil, local implementing agencies and RWQCB through their guidance document "The Tri-Regional Board Staff Recommendations for Preliminary Evaluation and Investigation of Underground Tank Sites" have not required further action or groundwater investigation if total petroleum hydrocarbon concentration in the soil is less than 100 ppm.

During tank relocation and construction of the 115 kV substation, a limited amount of impacted soil should be excavated at least within the top 2 feet of the ground surface in the immediate vicinity of the aboveground diesel storage tank. Excavation should be conducted to the extent that residual concentration of TPH-D in the soil does not exceed 100 ppm based



on analysis of soil confirmation samples. Qualified personnel need to be onsite to observe the excavation and collect confirmation soil samples for analysis. Sample analysis would be limited to TPH-D as the chemical of concern. Based on the requirements of disposal facilities and results of this investigation, the excavated soil can be properly disposed of at an approved Class II or III designated facility.





## REFERENCES

California State Department of Health Services, Office of Drinking Water, 1990, Summary of California Drinking Water Standards, October 24, 1990.

Page, Ben M., 1966. Geology of the Coastal Ranges of California. In Geology of Northern California. California Division of Mines and Geology, Bulletin 190, pp. 255-276.

California Regional Water Quality Control Board, Tri-Regional Board Staff Recommendations for Preliminary Evaluation and Investigation of Underground Tank Sites, August 10, 1990.



TABLE 1 - SUMMARY OF RESULTS OF SOIL SAMPLING  
 EAST BAY MUNICIPAL UTILITY DISTRICT  
 MAIN WASTEWATER TREATMENT PLANT  
 OAKLAND, CALIFORNIA

ALISTO PROJECT NO. 10-203

BORING ID	SAMPLE DEPTH (Feet)	DATE OF SAMPLING	TPH-G (ppm)	TPH-D (ppm)	B (ppm)	T (ppm)	E (ppm)	X (ppm)	CHLORO-BENZENE (ppm)	1,2-DICHLORO-BENZENE (ppm)	1,3-DICHLORO-BENZENE (ppm)	1,4-DICHLORO-BENZENE (ppm)	LAB
TW-1	1.0	03/02/94	1.5	4.7	0.044	0.022	ND<0.005	0.020	0.012	ND<0.005	ND<0.005	ND<0.005	EBMUD
TW-1	2.5	03/02/94	ND<1.0	ND<2.5	0.040	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	EBMUD
TW-1	5.0	03/02/94	ND<1.0	16.0	0.042	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	EBMUD
TW-2	2.0	03/02/94	ND<1.0	4.4	0.044	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	EBMUD
TW-2	5.0	03/02/94	ND<1.0	ND<2.5	0.042	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	EBMUD
TW-3	0.0	03/02/94	ND<1.0	32.0	0.046	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	EBMUD
TW-3	2.5	03/02/94	ND<1.0	5.9	0.040	ND<0.005	ND<0.005	0.016	ND<0.005	ND<0.005	ND<0.005	ND<0.005	EBMUD
TW-3	5.0	03/02/94	ND<1.0	6.9	0.042	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	EBMUD
TW-3	7.0	03/02/94	ND<1.0	26.0	0.039	ND<0.005	ND<0.005	0.016	ND<0.005	ND<0.005	ND<0.005	ND<0.005	EBMUD
TW-4	0.0	03/02/94	ND<1.0	360.0	0.048	ND<0.005	0.023	0.064	ND<0.005	ND<0.005	ND<0.005	ND<0.005	EBMUD
TW-4	2.5	03/02/94	ND<1.0	3.7	0.050	ND<0.005	ND<0.005	0.017	ND<0.005	ND<0.005	ND<0.005	ND<0.005	EBMUD
TW-4	5.0	03/02/94	ND<1.0	ND<2.5	0.045	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	EBMUD
TW-5	1.5	03/02/94	ND<1.0	11.0	0.042	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	EBMUD
TW-6	1.5	03/02/94	ND<1.0	5.1	0.048	0.014	ND<0.005	0.019	ND<0.005	ND<0.005	ND<0.005	ND<0.005	EBMUD
TW-7	1.0	03/02/94	ND<1.0	74.0	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	EBMUD

ABBREVIATIONS:

TPH-G Total petroleum hydrocarbons as gasoline  
 TPH-D Total petroleum hydrocarbons as diesel  
 B Benzene  
 T Toluene  
 E Ethylbenzene  
 X Total xylenes

ppm Parts per million  
 ND Not detected above reported detection limit  
 EBMUD East Bay Municipal Utility District  
 Main Wastewater Treatment Plant Laboratory

E3010-203SOIL.WQ1

TABLE 2 - SUMMARY OF RESULTS OF GROUNDWATER SAMPLING  
 EAST BAY MUNICIPAL UTILITY DISTRICT  
 MAIN WASTEWATER TREATMENT PLANT  
 OAKLAND, CALIFORNIA

ALISTO PROJECT NO. 10-203

SAMPLE ID	DATE OF SAMPLING	TPH-G (ppb)	TPH-D (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	CHLORO-BENZENE (ppb)	1,2-DICHLORO-BENZENE (ppb)	1,3-DICHLORO-BENZENE (ppb)	1,4-DICHLORO-BENZENE (ppb)	LAB
TW-3 (a)	03/02/94	ND<40	220	ND<0.20	ND<0.20	ND<0.20	ND<0.20	ND<0.20	ND<0.20	ND<0.20	ND<0.20	EBMUD
TW-4 (a)	03/02/94	ND<40	200	ND<0.20	ND<0.20	ND<0.20	ND<0.20	ND<0.20	ND<0.20	ND<0.20	ND<0.20	EBMUD
TP (b)	03/02/94	ND<40	---	ND<0.20	ND<0.20	ND<0.20	ND<0.20	ND<0.20	ND<0.20	ND<0.20	ND<0.20	EBMUD
MCL	---	---	---	1	---	680	1750	---	---	---	5	---

ABBREVIATIONS:

TPH-G Total petroleum hydrocarbons as gasoline  
 TPH-D Total petroleum hydrocarbons as diesel  
 B Benzene  
 T Toluene  
 E Ethylbenzene  
 X Total xylenes  
 ppb Parts per billion  
 ND Not detected above reported detection limit  
 --- Not analyzed  
 EBMUD East Bay Municipal Utility District  
 Main Wastewater Treatment Plant Laboratory  
 MCL Maximum Contaminant Level

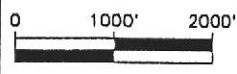
NOTES:

(a) Groundwater samples are grab samples.  
 (b) Trip blank.

E3010-203GW.WQ1



SOURCE:  
 USGS MAP, OAKLAND WEST QUADRANGLE,  
 CALIFORNIA, 7.5 MINUTE SERIES, 1959.  
 PHOTOREVISED 1980.



**FIGURE 1**

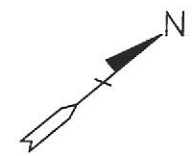
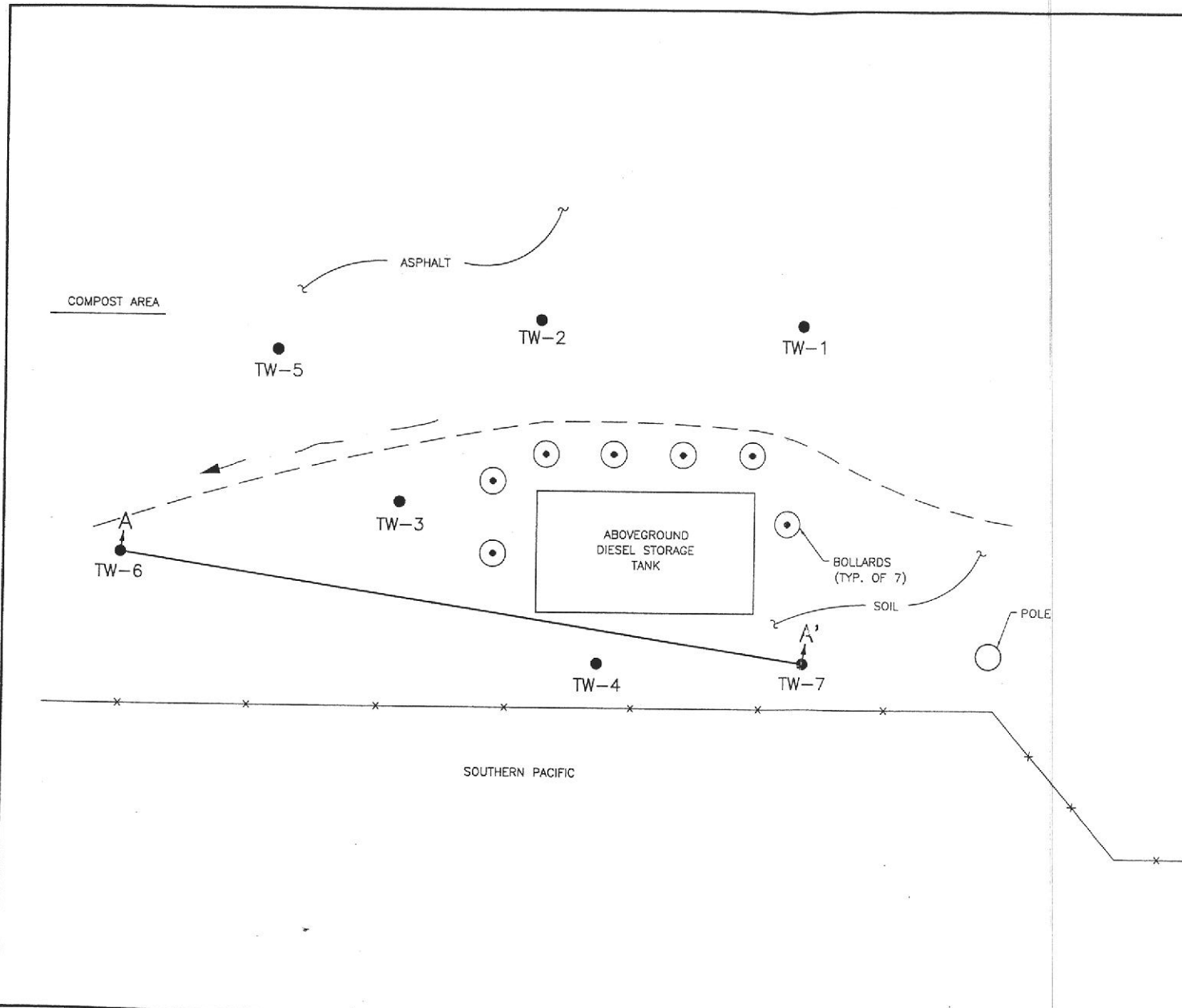
**VICINITY MAP**

**EAST BAY MUNICIPAL UTILITY DISTRICT  
 MAIN WASTEWATER TREATMENT PLANT  
 OAKLAND, CALIFORNIA**

**PROJECT NO. 10-203**



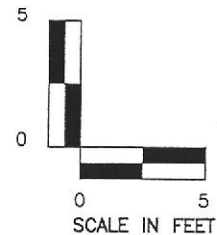
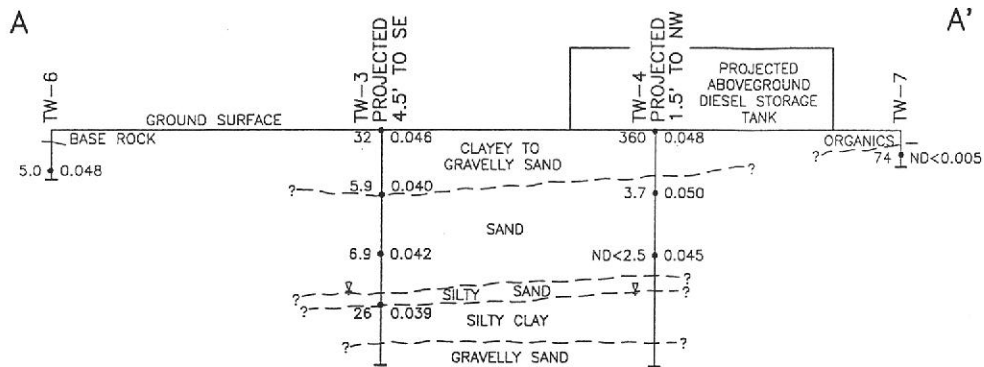
**ALISTO ENGINEERING GROUP**  
 WALNUT CREEK, CALIFORNIA



- LEGEND**
- SOIL BORING
  - A-A' LINE OF HYDROGEOLOGIC CROSS SECTION
  - ↑ ↓

**FIGURE 2**  
**SITE PLAN**  
 EAST BAY MUNICIPAL UTILITY DISTRICT  
 MAIN WASTEWATER TREATMENT PLANT  
 OAKLAND, CALIFORNIA  
 PROJECT NO. 10-203

10-203-006 24-24 10/11



**LEGEND**

- ┆ SOIL BORING
- - - - - GEOLOGIC CONTACT
- 5.9 • SOIL SAMPLE AND TOTAL PETROLEUM HYDROCARBONS AS DIESEL CONCENTRATION IN PARTS PER MILLION
- 0.040 SOIL SAMPLE AND BENZENE CONCENTRATION IN PARTS PER MILLION
- ND NOT DETECTED ABOVE REPORTED DETECTION LIMIT
- 7.4 † GROUNDWATER ELEVATION DURING DRILLING

**FIGURE 3**  
**HYDROGEOLOGIC CROSS SECTIONS**  
**A-A'**

EAST BAY MUNICIPAL UTILITY DISTRICT  
MAIN WASTEWATER TREATMENT PLANT  
OAKLAND, CALIFORNIA

PROJECT NO. 10-203





SEE SITE PLAN

ALISTO PROJECT NO: 10-203-01      DATE DRILLED: 03/02/94

CLIENT: East Bay Municipal Utility District

LOCATION: Diesel Tank at Main WWTP, Oakland, California

DRILLING METHOD: Hand Auger (2.5")

DRILLING COMPANY: N/A

CASING ELEVATION: N/A

LOGGED BY: Dan Salaiques

APPROVED BY: Dan Salaiques

BLOWS/6 IN.	PID VALUES	WELL DIAGRAM	DEPTH feet	SAMPLES	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION
N/A	9		1				Asphalt/concrete.
			1				Baserock: moist to wet with sheen.
			1	GC			clayey SAND/GRAVEL: dark gray, wet; fine- to medium-grained sand. Sample collected 1 - 1.5' (TW-1-1).
			2				Asphalt/concrete.
			2				Baserock.
			3			SP	SAND: tan, damp; medium-grained sand; minor fines. Sample collected 2.5 - 3' (TW-1-2.5).
			4				
			5				Same. Sample collected 5 - 5.5' (TW-1-5).
			6				Boring terminated at 5.5'.
			7				
			8				
			9				
			10				
			11				
			12				
			13				



# LOG OF BORING TW-2

SEE SITE PLAN

ALISTO PROJECT NO: 10-203-01      DATE DRILLED: 03/02/94

CLIENT: East Bay Municipal Utility District

LOCATION: Diesel Tank at Main WWTP, Oakland, California

DRILLING METHOD: Hand Auger (2.5")

DRILLING COMPANY: N/A

CASING ELEVATION: N/A

LOGGED BY: Dan Salaiques

APPROVED BY: Dan Salaiques

BLOWS/6 IN.	PTD VALUES	WELL DIAGRAM	DEPTH feet	SAMPLES	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION
N/A	22		0				Asphalt/concrete.
			1				Baserock: moist to wet with sheen.
			1				Asphalt/concrete.
			1				Baserock.
			2	■	●	SP	SAND: tan, damp to moist; medium-grained sand. Sample collected 2 - 2.5' (TW-2-2).
			3				
			4				
			5	■	●		Same. Sample collected 5 - 5.5' (TW-2-5).
			6				Boring terminated at 5.5'.
			7				
			8				
			9				
			10				
			11				
			12				
			13				





SEE SITE PLAN

ALISTO PROJECT NO: 10-203-01      DATE DRILLED: 03/02/94

CLIENT: East Bay Municipal Utility District

LOCATION: Diesel Tank at Main WWTP, Oakland, California

DRILLING METHOD: Hand Auger (2.5")

DRILLING COMPANY: N/A

CASING ELEVATION: N/A

LOGGED BY: Ted Moise

APPROVED BY: Dan Salices

BLOWS/6 IN.	PID VALUES	WELL DIAGRAM	DEPTH feet	SAMPLES	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION
N/A	9	<p>Neat Cement</p>	1			SC	clayey SAND: dark brown, damp; fine- to coarse-grained sand; minor rounded gravel to 1/2".
N/A	11		2				
N/A			3			SP	SAND: tan, damp; medium-grained sand.  Shell fragments @ 4.0' in cuttings.  Same: minor rounded gravel to 3/4".
N/A	9		4				
N/A			5				
N/A			6				
N/A	10		7			SM	silty SAND: gray, very moist; very fine-grained sand; abundant silt.
			8			CL	silty CLAY: black, very moist to wet.
			9			SP	gravelly SAND: medium gray, wet; fine- to coarse-grained sand; fine gravel to approximately 20-40%.
			10				Boring terminated at 8.5'.



# LOG OF BORING TW-4

SEE SITE PLAN




ALISTO PROJECT NO: 10-203-01      DATE DRILLED: 03/02/94  
 CLIENT: East Bay Municipal Utility District  
 LOCATION: Diesel Tank at Main WWTP, Oakland, California  
 DRILLING METHOD: Hand Auger (2.5")  
 DRILLING COMPANY: N/A      CASING ELEVATION: N/A  
 LOGGED BY: Dan Salices      APPROVED BY: Dan Salices

BLOWS/6 IN.	PID VALUES	WELL DIAGRAM	DEPTH feet	SAMPLES	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	
N/A	14		0			SP	Sample collected 0 - 0.5' (TW-4-0). gravelly SAND (fill): dark brown, damp; fine- to coarse-grained sand; rounded gravel to 1/2".	
			1					
			2				SP	
N/A	14		3				SP	SAND/gravelly SAND (fill): tan, moist; glass fragments and shells present. Sample collected 2.5 - 3.0' (TW-4-2.5).
			4					
			5					Sample collected 5 - 5.5' (TW-4-5).
N/A	13		6				SM	silty SAND: gray, very moist; very fine-grained sand; silt % may equal sand.
			7				CL	silty CLAY: dark olive/gray, wet.
			8					
			9				SP	gravelly SAND: medium gray, wet; fine- to coarse-grained sand; fine gravel to approximately 20-40%.
		10					Boring terminated at 9.5'.	
		11						
		12						
		13						



SEE SITE PLAN

ALISTO PROJECT NO: 10-203-01      DATE DRILLED: 03/02/94  
 CLIENT: East Bay Municipal Utility District  
 LOCATION: Diesel Tank at Main WWTP, Oakland, California  
 DRILLING METHOD: Hand Auger (2.5")  
 DRILLING COMPANY: N/A      CASING ELEVATION: N/A  
 LOGGED BY: Dan Salasces      APPROVED BY: Dan Salasces

BLOWS/6 IN.	PTD VALUES	WELL DIAGRAM	DEPTH feet	SAMPLES	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION
N/A	13		1				Asphalt/concrete.
			1.5				Baselock with sand, gravel, and fines.
			2			SP	SAND: tan, damp to moist; medium-grained sand; minor fines. Sample collected 1.5 - 2.0' (TW-5-1.5).
			2.0				Boring terminated at 2.0'.
			3				
			4				
			5				
			6				
			7				
			8				
			9				
			10				
			11				
			12				
			13				



**ALISTO ENGINEERING GROUP**  
WALNUT CREEK, CALIFORNIA

# LOG OF BORING TW-6

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SEE SITE PLAN

ALISTO PROJECT NO: 10-203-01      DATE DRILLED: 03/02/94

CLIENT: East Bay Municipal Utility District

LOCATION: Diesel Tank at Main WWTP, Oakland, California



DRILLING METHOD: Hand Auger (2.5")

DRILLING COMPANY: N/A

CASING ELEVATION: N/A

LOGGED BY: Dan Salices

APPROVED BY: Dan Salices




BLOMS/8 IN.	PID VALUES	WELL DIAGRAM	DEPTH feet	SAMPLES	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION
			1			GC	Baserock.
			2				clayey/sandy GRAVEL (fill): dark brown, moist; sand to approximately 40%; gravel to 1-4" to 50%. Sample collected 1.5-2.0' (TW-6-1.5).
			3				Boring terminated at 2.0'.
			4				
			5				
			6				
			7				
			8				
			9				
			10				
			11				
			12				
			13				



# LOG OF BORING TW-7

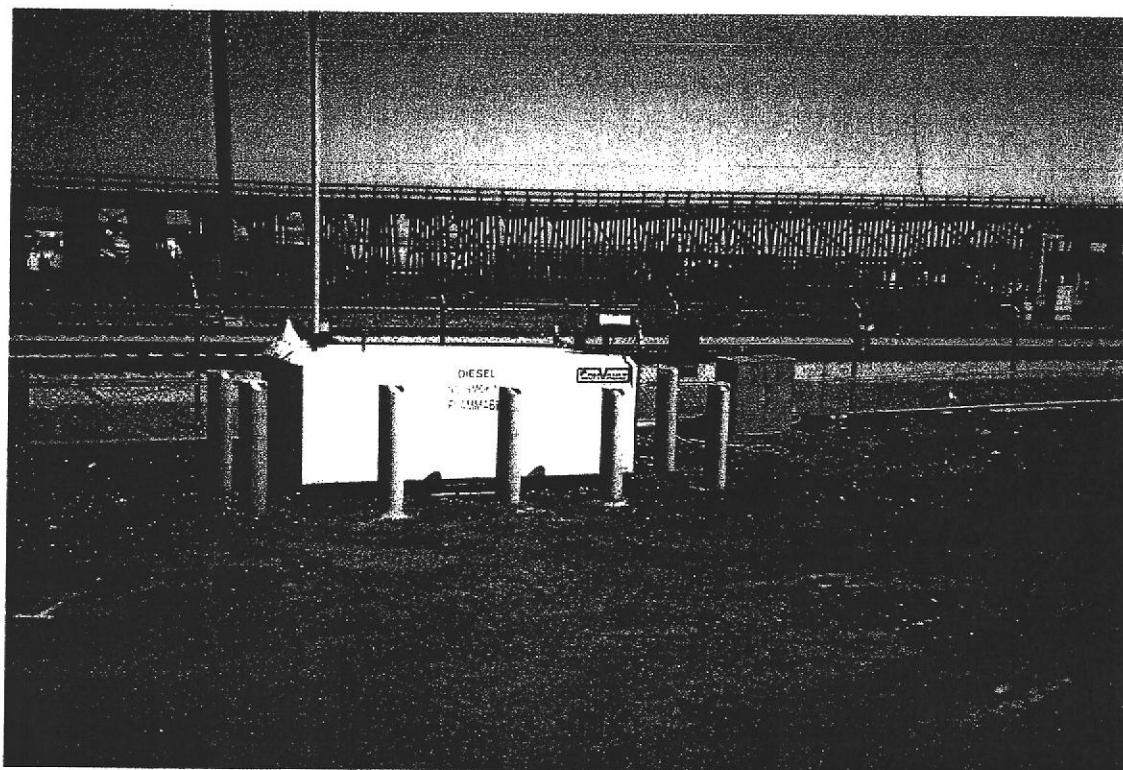
SEE SITE PLAN

ALISTO PROJECT NO: 10-203-01      DATE DRILLED: 03/02/94  
 CLIENT: East Bay Municipal Utility District  
 LOCATION: Diesel Tank at Main WWTP, Oakland, California  
 DRILLING METHOD: Hand Auger (2.5")  
 DRILLING COMPANY: N/A      CASING ELEVATION: N/A  
 LOGGED BY: Dan Salices      APPROVED BY: Dan Salices

BLOWS/6 IN.	PTD VALUES	WELL DIAGRAM	DEPTH feet	SAMPLES	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION
			1			SP	Organic matter. SAND: moderate yellow/brown, moist; fine- to medium-grained sand; gravel from 5-15%. Sample collected 1.0-1.5' (TW-7-1).
			2				Boring terminated at 1.5'.
			3				
			4				
			5				
			6				
			7				
			8				
			9				
			10				
			11				
			12				
			13				

**APPENDIX B**  
**PHOTOGRAPH OF ACTIVITIES LOCATION**

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SOUTHEASTERN VIEW OF ABOVE GROUND DIESEL TANK AT EAST BAY MUNICIPAL UTILITY DISTRICT MAIN WWTP. SAMPLING LOCATIONS TW-1 AND TW-2 ARE IN FOREGROUND. SOUTHERN PACIFIC RAILROAD PROPERTY IN BACKGROUND.

**APPENDIX C**

**FIELD PROCEDURES FOR CHAIN OF CUSTODY DOCUMENTATION,  
OFFICIAL LABORATORY REPORTS, AND CHAIN OF CUSTODY RECORDS**

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**FIELD PROCEDURES  
FOR  
CHAIN OF CUSTODY DOCUMENTATION**

Samples collected were properly handled in accordance with the California Department of Health Services guidelines. Each sample was properly labeled in the field, and immediately stored in coolers and preserved with blue ice for transport to the EBMUD state-certified laboratory for analysis.

The official chain of custody record accompanied the samples, and included the site and sample identification, date and time of sample collection, analysis requested, and the name and signature of the sampling technician. When transferring possession of the samples, the transferee signed and dated the chain of custody record.

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940302139	MISC Non-routine Sampling Location G 0903 SOIL TW-1-1			
940302139	+602 BTEX		1.000000	DLF*
940302139	VO03 BENZENE		0.044000	mg/KgW
940302139	VO08 CHLORO BENZENE	**	0.012000	mg/KgW
940302139	VO14 1,2-DICHLORO BENZENE	<	0.005000	mg/KgW
940302139	VO15 1,3-DICHLORO BENZENE	<	0.005000	mg/KgW
940302139	VO16 1,4-DICHLORO BENZENE	<	0.005000	mg/KgW
940302139	VO24 ETHYL BENZENE	<	0.005000	mg/KgW
940302139	VO28 TOLUENE	<	0.022000	mg/KgW
940302139	VO47 XYLENES	**	0.020000	mg/KgW
940302139	+8015 TOTAL PETROLEUM HYDROCARBONS		1.000000	DLF*
940302139	DIES DIESEL		4.700000	mg/KgW
940302139	GAS GASOLINE		1.500000	mg/KgW
940302140	MISC Non-routine Sampling Location G 1325 SOIL TW-1-2.5			
940302140	+602 BTEX		1.000000	DLF*
940302140	VO03 BENZENE		0.040000	mg/KgW
940302140	VO08 CHLORO BENZENE	<	0.005000	mg/KgW
940302140	VO14 1,2-DICHLORO BENZENE	<	0.005000	mg/KgW
940302140	VO15 1,3-DICHLORO BENZENE	<	0.005000	mg/KgW
940302140	VO16 1,4-DICHLORO BENZENE	<	0.005000	mg/KgW
940302140	VO24 ETHYL BENZENE	<	0.005000	mg/KgW
940302140	VO28 TOLUENE	<	0.005000	mg/KgW
940302140	VO47 XYLENES	<	0.005000	mg/KgW
940302140	+8015 TOTAL PETROLEUM HYDROCARBONS		1.000000	DLF*
940302140	DIES DIESEL	<	2.500000	mg/KgW
940302140	GAS GASOLINE	<	1.000000	mg/KgW
940302141	MISC Non-routine Sampling Location G 1417 SOIL TW-1-5			
940302141	+602 BTEX		1.000000	DLF*
940302141	VO03 BENZENE		0.042000	mg/KgW
940302141	VO08 CHLORO BENZENE	<	0.005000	mg/KgW
940302141	VO14 1,2-DICHLORO BENZENE	<	0.005000	mg/KgW
940302141	VO15 1,3-DICHLORO BENZENE	<	0.005000	mg/KgW
940302141	VO16 1,4-DICHLORO BENZENE	<	0.005000	mg/KgW
940302141	VO24 ETHYL BENZENE	<	0.005000	mg/KgW
940302141	VO28 TOLUENE	<	0.005000	mg/KgW
940302141	VO47 XYLENES	<	0.005000	mg/KgW

P.O. BOX 24055 . OAKLAND . CA 94623-1055 . (510) 287-1405

BOARD OF DIRECTORS KATHERINE MCKENNEY . STUART FLASHMAN . ANDREW COHEN  
JOHN A. COLEMAN . JOHN M. GIOIA . NANCY J. NADEL . KENNETH H. SIMMONS

\* Detection limit factor (dilution factor)

\*\* Estimated

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940302141	+8015	TOTAL PETROLEUM HYDROCARBONS		1.000000	DLF*
940302141	DIES	DIESEL		16.000000	mg/KgW
940302141	GAS	GASOLINE	<	1.000000	mg/KgW
940302142	MISC	Non-routine Sampling Location G 1338 SOIL		TW-2-2	
940302142	+602	BTEX		1.000000	DLF*
940302142	VO03	BENZENE		0.044000	mg/KgW
940302142	VO08	CHLORO BENZENE	<	0.005000	mg/KgW
940302142	VO14	1,2-DICHLORO BENZENE	<	0.005000	mg/KgW
940302142	VO15	1,3-DICHLORO BENZENE	<	0.005000	mg/KgW
940302142	VO16	1,4-DICHLORO BENZENE	<	0.005000	mg/KgW
940302142	VO24	ETHYL BENZENE	<	0.005000	mg/KgW
940302142	VO28	TOLUENE	<	0.005000	mg/KgW
940302142	VO47	XYLENES	<	0.005000	mg/KgW
940302142	+8015	TOTAL PETROLEUM HYDROCARBONS		1.000000	DLF*
940302142	DIES	DIESEL		4.400000	mg/KgW
940302142	GAS	GASOLINE	<	1.000000	mg/KgW
940302143	MISC	Non-routine Sampling Location G 1400 SOIL		TW-2-5	
940302143	+602	BTEX		1.000000	DLF*
940302143	VO03	BENZENE		0.042000	mg/KgW
940302143	VO08	CHLORO BENZENE	<	0.005000	mg/KgW
940302143	VO14	1,2-DICHLORO BENZENE	<	0.005000	mg/KgW
940302143	VO15	1,3-DICHLORO BENZENE	<	0.005000	mg/KgW
940302143	VO16	1,4-DICHLORO BENZENE	<	0.005000	mg/KgW
940302143	VO24	ETHYL BENZENE	<	0.005000	mg/KgW
940302143	VO28	TOLUENE	<	0.005000	mg/KgW
940302143	VO47	XYLENES	<	0.005000	mg/KgW
940302143	+8015	TOTAL PETROLEUM HYDROCARBONS		1.000000	DLF*
940302143	DIES	DIESEL	<	2.500000	mg/KgW
940302143	GAS	GASOLINE	<	1.000000	mg/KgW
940302144	MISC	Non-routine Sampling Location G 0924 SOIL		TW-3-0	
940302144	+602	BTEX		1.000000	DLF*
940302144	VO03	BENZENE	~* *	0.046000	mg/KgW
940302144	VO08	CHLORO BENZENE	<	0.005000	mg/KgW
940302144	VO14	1,2-DICHLORO BENZENE	<	0.005000	mg/KgW
940302144	VO15	1,3-DICHLORO BENZENE	<	0.005000	mg/KgW
940302144	VO16	1,4-DICHLORO BENZENE	<	0.005000	mg/KgW

\* Detection limit factor (dilution factor)

\*\* Estimated

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940302144	VO24	ETHYL BENZENE	<	0.005000	mg/KgW
940302144	VO28	TOLUENE	<	0.005000	mg/KgW
940302144	VO47	XYLENES	<	0.005000	mg/KgW
940302144	+8015	TOTAL PETROLEUM HYDROCARBONS		1.000000	DLF *
940302144	DIES	DIESEL		32.000000	mg/KgW
940302144	GAS	GASOLINE	<	1.000000	mg/KgW
940302145	MISC	Non-routine Sampling Location G 0946 SOIL		TW-3-2.5	
940302145	+602	BTEX		1.000000	DLF *
940302145	VO03	BENZENE		0.040000	mg/KgW
940302145	VO08	CHLOROBENZENE	<	0.005000	mg/KgW
940302145	VO14	1,2-DICHLOROBENZENE	<	0.005000	mg/KgW
940302145	VO15	1,3-DICHLOROBENZENE	<	0.005000	mg/KgW
940302145	VO16	1,4-DICHLOROBENZENE	<	0.005000	mg/KgW
940302145	VO24	ETHYL BENZENE	<	0.005000	mg/KgW
940302145	VO28	TOLUENE	<	0.005000	mg/KgW
940302145	VO47	XYLENES	**	0.016000	mg/KgW
940302145	+8015	TOTAL PETROLEUM HYDROCARBONS		1.000000	DLF *
940302145	DIES	DIESEL		5.900000	mg/KgW
940302145	GAS	GASOLINE	<	1.000000	mg/KgW
940302146	MISC	Non-routine Sampling Location G 1009 SOIL		TW-3-5	
940302146	+602	BTEX		1.000000	DLF *
940302146	VO03	BENZENE		0.042000	mg/KgW
940302146	VO08	CHLOROBENZENE	<	0.005000	mg/KgW
940302146	VO14	1,2-DICHLOROBENZENE	<	0.005000	mg/KgW
940302146	VO15	1,3-DICHLOROBENZENE	<	0.005000	mg/KgW
940302146	VO16	1,4-DICHLOROBENZENE	<	0.005000	mg/KgW
940302146	VO24	ETHYL BENZENE	<	0.005000	mg/KgW
940302146	VO28	TOLUENE	<	0.005000	mg/KgW
940302146	VO47	XYLENES	<	0.005000	mg/KgW
940302146	+8015	TOTAL PETROLEUM HYDROCARBONS		1.000000	DLF *
940302146	DIES	DIESEL		6.900000	mg/KgW
940302146	GAS	GASOLINE	<	1.000000	mg/KgW
940302147	MISC	Non-routine Sampling Location G 1021 SOIL		TW-3-7	
940302147	+602	BTEX		1.000000	DLF *
940302147	VO03	BENZENE		0.039000	mg/KgW
940302147	VO08	CHLOROBENZENE	<	0.005000	mg/KgW

\* Detection limit factor (dilution factor)

\*\* Estimated

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940302147	VO14	1,2-DICHLOROBENZENE	<	0.005000	mg/KgW
940302147	VO15	1,3-DICHLOROBENZENE	<	0.005000	mg/KgW
940302147	VO16	1,4-DICHLOROBENZENE	<	0.005000	mg/KgW
940302147	VO24	ETHYL BENZENE	<	0.005000	mg/KgW
940302147	VO28	TOLUENE	<	0.005000	mg/KgW
940302147	VO47	XYLENES	~ **	0.016000	mg/KgW
940302147	+8015	TOTAL PETROLEUM HYDROCARBONS		1.000000	DLF *
940302147	DIES	DIESEL		26.000000	mg/KgW
940302147	GAS	GASOLINE	<	1.000000	mg/KgW
940302148	MISC	Non-routine Sampling Location G 0931 SOIL		TW-4-0	
940302148	+602	BTEX		1.000000	DLF *
940302148	VO03	BENZENE	~ **	0.048000	mg/KgW
940302148	VO08	CHLOROBENZENE	<	0.005000	mg/KgW
940302148	VO14	1,2-DICHLOROBENZENE	<	0.005000	mg/KgW
940302148	VO15	1,3-DICHLOROBENZENE	<	0.005000	mg/KgW
940302148	VO16	1,4-DICHLOROBENZENE	<	0.005000	mg/KgW
940302148	VO24	ETHYL BENZENE	~ **	0.023000	mg/KgW
940302148	VO28	TOLUENE	<	0.005000	mg/KgW
940302148	VO47	XYLENES	~ **	0.064000	mg/KgW
940302148	+8015	TOTAL PETROLEUM HYDROCARBONS		1.000000	DLF *
940302148	DIES	DIESEL		360.000000	mg/KgW
940302148	GAS	GASOLINE	<	1.000000	mg/KgW
940302149	MISC	Non-routine Sampling Location G 1050 SOIL		TW-4-2.5	
940302149	+602	BTEX		1.000000	DLF *
940302149	VO03	BENZENE		0.050000	mg/KgW
940302149	VO08	CHLOROBENZENE	<	0.005000	mg/KgW
940302149	VO14	1,2-DICHLOROBENZENE	<	0.005000	mg/KgW
940302149	VO15	1,3-DICHLOROBENZENE	<	0.005000	mg/KgW
940302149	VO16	1,4-DICHLOROBENZENE	<	0.005000	mg/KgW
940302149	VO24	ETHYL BENZENE	<	0.005000	mg/KgW
940302149	VO28	TOLUENE	<	0.005000	mg/KgW
940302149	VO47	XYLENES	~ **	0.017000	mg/KgW
940302149	+8015	TOTAL PETROLEUM HYDROCARBONS		1.000000	DLF *
940302149	DIES	DIESEL		3.700000	mg/KgW
940302149	GAS	GASOLINE	<	1.000000	mg/KgW

\* Detection limit factor (dilution factor)  
 \*\* Estimated

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940302150	MISC	Non-routine Sampling Location G 1120	SOIL	TW-4-5		
940302150	+602	BTEX			1.000000	DLF*
940302150	VO03	BENZENE			0.045000	mg/KgW
940302150	VO08	CHLOROBENZENE	<		0.005000	mg/KgW
940302150	VO14	1,2-DICHLOROBENZENE	<		0.005000	mg/KgW
940302150	VO15	1,3-DICHLOROBENZENE	<		0.005000	mg/KgW
940302150	VO16	1,4-DICHLOROBENZENE	<		0.005000	mg/KgW
940302150	VO24	ETHYL BENZENE	<		0.005000	mg/KgW
940302150	VO28	TOLUENE	<		0.005000	mg/KgW
940302150	VO47	XYLENES	<		0.005000	mg/KgW
940302150	+8015	TOTAL PETROLEUM HYDROCARBONS			1.000000	DLF*
940302150	DIES	DIESEL	<		2.500000	mg/KgW
940302150	GAS	GASOLINE	<		1.000000	mg/KgW
940302151	MISC	Non-routine Sampling Location G 1430	SOIL	TW-5-1.5		
940302151	+602	BTEX			1.000000	DLF*
940302151	VO03	BENZENE			0.042000	mg/KgW
940302151	VO08	CHLOROBENZENE	<		0.005000	mg/KgW
940302151	VO14	1,2-DICHLOROBENZENE	<		0.005000	mg/KgW
940302151	VO15	1,3-DICHLOROBENZENE	<		0.005000	mg/KgW
940302151	VO16	1,4-DICHLOROBENZENE	<		0.005000	mg/KgW
940302151	VO24	ETHYL BENZENE	<		0.005000	mg/KgW
940302151	VO28	TOLUENE	<		0.005000	mg/KgW
940302151	VO47	XYLENES	<		0.005000	mg/KgW
940302151	+8015	TOTAL PETROLEUM HYDROCARBONS			1.000000	DLF*
940302151	DIES	DIESEL			11.000000	mg/KgW
940302151	GAS	GASOLINE	<		1.000000	mg/KgW
940302152	MISC	Non-routine Sampling Location G 1500	SOIL	TW-6-1.5		
940302152	+602	BTEX			1.000000	DLF*
940302152	VO03	BENZENE			0.048000	mg/KgW
940302152	VO08	CHLOROBENZENE	<		0.005000	mg/KgW
940302152	VO14	1,2-DICHLOROBENZENE	<		0.005000	mg/KgW
940302152	VO15	1,3-DICHLOROBENZENE	<		0.005000	mg/KgW
940302152	VO16	1,4-DICHLOROBENZENE	<		0.005000	mg/KgW
940302152	VO24	ETHYL BENZENE	<		0.005000	mg/KgW
940302152	VO28	TOLUENE	~**		0.014000	mg/KgW
940302152	VO47	XYLENES	~**		0.019000	mg/KgW

\* Detection limit factor (dilution factor)

\*\* Estimated

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940302152	+8015	TOTAL PETROLEUM HYDROCARBONS		1.000000	DLF*
940302152	DIES	DIESEL		5.100000	mg/KgW
940302152	GAS	GASOLINE	<	1.000000	mg/KgW
940302153	MISC	Non-routine Sampling Location G 1510 SOIL		TW-7-1	
940302153	+602	BTEX		1.000000	DLF*
940302153	VO03	BENZENE	<	0.005000	mg/KgW
940302153	VO08	CHLOROBENZENE	<	0.005000	mg/KgW
940302153	VO14	1,2-DICHLOROBENZENE	<	0.005000	mg/KgW
940302153	VO15	1,3-DICHLOROBENZENE	<	0.005000	mg/KgW
940302153	VO16	1,4-DICHLOROBENZENE	<	0.005000	mg/KgW
940302153	VO24	ETHYL BENZENE	<	0.005000	mg/KgW
940302153	VO28	TOLUENE	<	0.005000	mg/KgW
940302153	VO47	XYLENES	<	0.005000	mg/KgW
940302153	+8015	TOTAL PETROLEUM HYDROCARBONS		1.000000	DLF*
940302153	DIES	DIESEL		74.000000	mg/KgW
940302153	GAS	GASOLINE	<	1.000000	mg/KgW
940302154	MISC	Non-routine Sampling Location G 1449 WATER		TW-4	
940302154	+602	EPA 602 - PURGEABLE AROMATICS		1.000000	DLF*
940302154	VO03	BENZENE	<	0.200000	ug/L
940302154	VO08	CHLOROBENZENE	<	0.200000	ug/L
940302154	VO14	1,2-DICHLOROBENZENE	<	0.200000	ug/L
940302154	VO15	1,3-DICHLOROBENZENE	<	0.200000	ug/L
940302154	VO16	1,4-DICHLOROBENZENE	<	0.200000	ug/L
940302154	VO24	ETHYLBENZENE	<	0.200000	ug/L
940302154	VO28	TOLUENE	<	0.200000	ug/L
940302154	VO47	XYLENES	<	0.200000	ug/L
940302154	+8015	TOTAL HYDROCARBONS		1.000000	DLF*
940302154	DIES	DIESEL		200.000000	ug/L
940302154	GAS	GASOLINE	<	40.000000	ug/L
940302155	MISC	Non-routine Sampling Location G 1353 WATER		TW-3	
940302155	+602	EPA 602 - PURGEABLE AROMATICS		1.000000	DLF*
940302155	VO03	BENZENE	<	0.200000	ug/L
940302155	VO08	CHLOROBENZENE	<	0.200000	ug/L
940302155	VO14	1,2-DICHLOROBENZENE	<	0.200000	ug/L
940302155	VO15	1,3-DICHLOROBENZENE	<	0.200000	ug/L
940302155	VO16	1,4-DICHLOROBENZENE	<	0.200000	ug/L

\* Detection limit factor (dilution factor)

\*\* Estimated


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940302155	VO24	ETHYLBENZENE	<	0.200000	ug/L
940302155	VO28	TOLUENE	<	0.200000	ug/L
940302155	VO47	XYLENES	<	0.200000	ug/L
940302155	+8015	TOTAL HYDROCARBONS		1.000000	DLF *
940302155	DIES	DIESEL		220.000000	ug/L
940302155	GAS	GASOLINE	<	40.000000	ug/L
940302157	TRIPQC	Trip Blank G 0000			
940302157	+602	EPA 602 - PURGEABLE AROMATICS		1.000000	DLF *
940302157	VO03	BENZENE	<	0.200000	ug/L
940302157	VO08	CHLOROBENZENE	<	0.200000	ug/L
940302157	VO14	1,2-DICHLOROBENZENE	<	0.200000	ug/L
940302157	VO15	1,3-DICHLOROBENZENE	<	0.200000	ug/L
940302157	VO16	1,4-DICHLOROBENZENE	<	0.200000	ug/L
940302157	VO24	ETHYLBENZENE	<	0.200000	ug/L
940302157	VO28	TOLUENE	<	0.200000	ug/L
940302157	VO47	XYLENES	<	0.200000	ug/L
940302157	+8015	TOTAL HYDROCARBONS		1.000000	DLF *
940302157	GAS	GASOLINE	<	40.000000	ug/L

Reported by:

Date:

  
William M. Bligas  
Manager Laboratory Services Division

3/28/94

Attachment: Copy of the Chain-of-Custody

FR:fr

\* Detection limit factor (dilution factor)  
R# Estimated



200

# ALISTO ENGINEERING GROUP

Send Results to Karl Yakich CHAIN OF CUSTODY

375 Eleventh st, Oakland, CA 94607-4240

Consultant's Name: Alisto Engineering Group

Address: 1777 Oakland Blvd. Suite 200 Walnut Creek CA 94596

Project Contact: Dan Salaiques

Consultant Project #: 10-203-01

Phone #: 510-295-1650  
Fax #:

Sampled by (print): Dan Salaiques / Ted Noise

Sampler's Signature: Dan Salaiques

Shipment Method:

Site Location #:

Site Location: EBMW waste water treatment plant

TAT:  24 hr  48 hr  72 hr  Standard (10 day)

ANALYSIS REQUIRED

Sample Condition as Received  
Temperature ° C: \_\_\_\_\_  
Cooler #: \_\_\_\_\_  
Inbound Seal Yes No  
Outbound Seal Yes No

Sample Description	Collection Date/Time	Matrix Soil/Water	Prsv	# of Cont	-PAGE- Sample #	TPH/GAS/BTEX EPA 8015/8020 802	TPH/Diesel EPA 8015	Oil & Grease SM 5520	HVOC 8010	LMS 70000 USE # FUEL SCAN	COMMENTS	
TW-1-1	9:03a	Soil		1		X	X				1	940302-139
TW-1-2.5	1:25p			1							2	140
TW-1-5	2:17p			1							3	141
TW-2-2	1:38p			1							4	142
TW-2-5	2:00p			1							5	143
TW-3-0	9:24a			1							6	144
TW-3-2.5	9:46a			1							7	145
TW-3-5	10:09a			1							8	146
TW-3-7	10:21a			1							9	147
TW-4-0	9:31a			1							10	148
TW-4-2.5	10:50			1							11	149
TW-4-5	11:20			1							12	150

Relinquished by/Affiliation	Date	Time	Accepted by/Affiliation	Date	Time	Additional Comments:
<u>Dan Salaiques / Alisto</u>	<u>3-2-94</u>	<u>3:45p</u>				
<u>Skyns KNIPE</u>	<u>3-2-94</u>	<u>1:45</u> →				

(9370)

Karl Yakich

# ALISTO ENGINEERING GROUP

CHAIN OF CUSTODY

*copy*

Consultant's Name: Alisto Engineering Group

Address: 1777 Oakland Blvd Suite 200, Walnut Creek, CA 94596

Project Contact: Dan Salaiques Consultant Project #: 10-203-01 Phone #: 510-295-1650 Fax #:

Sampled by (print): Dan Salaiques, Ted Motse Sampler's Signature: Daniel Salaiques

Shipment Method: Site Location #: Site Location: EBMWD Waste Water Treatment Plant

TAT:  24 hr  48 hr  72 hr  Standard (10 day)

ANALYSIS REQUIRED

Sample Description	Collection Date/Time	Matrix Soil/Water	Prsv	# of Cont	PAC# Sample #	TPH/GAS/BTEX EPA 8015/8030	TPH/Diesel EPA 8015	Oil & Grease SM 5520	HVOC 8010								Sample Condition as Received	
																	Temperature ° C:	Cooler #:
														Inbound Seal	Yes No	Outbound Seal	Yes No	
														COMMENTS				
TW-5-1.5	2:30p	Soil		1		X	X										LIB80-13	940302-151
TW-6-1.5	3:00p			1		X	X										14	152
TW-7-1	3:10p			1		X	X										15	153
TW-4	2:49p	Water		3		X											16	VOAs } 154
TW-4	2:40			1			X										↓	1 liter } 154
TW-3	1:53			3		X											17	VOAs } 155
TW-3	1:53			1			X										↓	1 liter } 155
JR TRIPQC				1				8020									18	<del>158</del> 157

Relinquished by/Affiliation	Date	Time	Accepted by/Affiliation	Date	Time	Additional Comments:
Dan Salaiques/Alisto	3-2-94	3:45p				
<i>[Signature]</i>	3-2-94	1545	<i>[Signature]</i>			

(OVER)