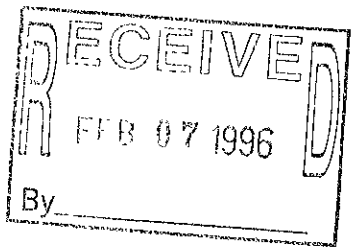
PORT OF OAKLAND

February 6, 1996



Jennifer Eberle
Hazardous Materials Specialist
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, 2nd Floor
Alameda, CA 94502

Dear Ms. Eberle:

SUBJECT: SITE INVESTIGATION REPORT, BUILDING C401, 2277 7TH ST. (Port Contract # 94265)

Enclosed please find the site investigation report for Building C-401, 2277 7th St. Alisto Engineering Group prepared the report on behalf of the Port.

If you have any questions, please feel free to contact me at 272-1220.

Sincerely,

Dan Schoenholz

Dan Schoenholz
Associate Environmental Scientist

Enclosure

cc(w/enclosure): Don Ringsby, Dongary Investments
Rich Hiett, RWQCB

(w/o enclosure): Brady Nagle, Alisto Engineering

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530 Water Street ■ Jack London's Waterfront ■ P.O. Box 2064 ■ Oakland, California 94604-2064
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SITE INVESTIGATION REPORT

Port of Oakland
Building C-401
2277 Seventh Street
Oakland, California

Jan 96

Project No. 10-270

January 1996

SITE INVESTIGATION REPORT

Port of Oakland
Building C-401
2277 Seventh Street
Oakland, California

Project No. 10-270-01-006

Prepared for:

Port of Oakland
530 Water Street
Oakland, California

Prepared by:

Alisto Engineering Group
1575 Treat Boulevard, Suite 201
Walnut Creek, California

January 30, 1996

Brady Nagle
Project Manager

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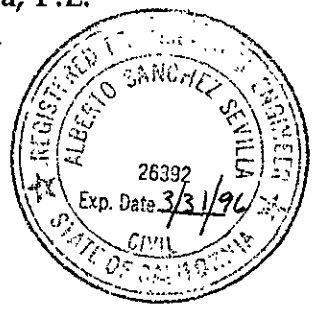
Principal



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APPENDICES

1.0 INTRODUCTION

Alisto Engineering Group was retained by the Port of Oakland to perform a site investigation at the Port of Oakland, Building C-401, 2277 Seventh Street, Oakland, California. The work was performed under Work Order No. 201867, dated April 10, 1995. A site vicinity map is shown on Figure 1.

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 at the site and to comply with the requirements of the regulatory agencies. The scope of work, as outlined in the work plan dated March 30, 1995 (Alisto 1995a), included the following:

- Drilled and logged 11 exploratory soil borings/temporary wells, SB-7 through SB-17, and collected soil and grab groundwater samples.
- Analyzed the soil and grab groundwater samples for specific hydrocarbon constituents.
- Based on the results of the soil and grab water sampling, installed five monitoring wells, MW-4 through MW-8.
- Developed the monitoring wells and surveyed the location and wellhead elevation relative to the wells at the adjacent property at 2225 Seventh Street.
- Sampled the monitoring wells concurrently with wells at 2225 Seventh Street.
- Analyzed the soil and groundwater samples for specific hydrocarbon constituents.
- Evaluated the data and analytical results and prepared this report.

The above tasks and related field and sampling activities were performed in accordance with the requirements of the Alameda County Flood Control and Water Conservation District (Zone 7), Alameda County Health Care Services Agency, and the California Regional Water Quality Control Board, San Francisco Bay Region (RWQCB).

1.2 Site Description and Background

The Port of Oakland property, which includes Building C-401, is leased to SeaLand Services, Inc. Adjacent and to the east of the SeaLand lease property is 2225 Seventh Street, which is owned by the Port of Oakland, leased by Dongary Investments, and subleased by NW Transport Services and SeaLand Services. The northern property line of the site borders the railroad tracks of Southern Pacific Railroad and Bay Area Rapid Transit. A site vicinity map is shown on Figure 1, and aerial photographs showing past and present land uses are

included in Appendix A. Pertinent background information on each of the properties is summarized in the following section.

SeaLand Lease, 2277 Seventh Street, Oakland

In September 1993, four underground storage tanks immediately to the south of Building C-401 were removed from the site. The two 10,000-gallon tanks (CF-17 and CF-18) were used to store gasoline; one 500-gallon tank (CF-19) was used for storage of waste oil; and one 300-gallon tank (CF-20) was apparently used to store diesel and oil. During removal, the tanks were visually inspected and observed to have no holes (Uribe and Associates, 1994a).

Analysis of soil samples collected during tank removal detected up to 1700 milligrams per kilogram (mg/kg) total petroleum hydrocarbons as gasoline (TPH-G) and 5500 mg/kg total petroleum hydrocarbons as diesel (TPH-D). Benzene, toluene, ethylbenzene, and total xylenes (BTEX) were detected in the soil samples at concentrations of up to 6.7 mg/kg benzene. Total petroleum hydrocarbons as oil (TPH-O) and total oil and grease (TOG) were not detected above the reported detection limits in the soil samples. Up to 1600 mg/kg TPH-G, 6700 mg/kg TPH-D, and 5.7 mg/kg benzene were detected in the soil samples collected at the limits of overexcavation. Analysis of grab groundwater samples collected from the tank cavities detected up to 180 milligrams per liter (mg/l) benzene (Uribe and Associates, 1994a).

In May 1994, six soil borings, SB-1 through SB-6, were drilled for soil sampling. Three additional soil borings were drilled and converted into groundwater Monitoring Wells MW-1 through MW-3. TPH-D was detected in all the groundwater samples collected from the soil borings and monitoring wells. Separate-phase product was observed at thicknesses of 0.18 foot in Monitoring Well MW-1 and 6.88 feet in MW-3. Analysis of the groundwater sample collected from MW-2 detected 87 micrograms per liter (ug/l) TPH-G and 470 ug/l TPH-D, however, BTEX constituents were not detected above the reported detection limits. A product sample collected from MW-3 was characterized as diesel fuel (Uribe and Associates, 1994b).

The monitoring wells were again sampled in March 1995, and liquid-phase hydrocarbons were observed in MW-1 and MW-3 and dissolved-phase petroleum hydrocarbons were detected in MW-2. TPH-G and BTEX constituents were not detected in the water samples (Alisto 1995b).

Review of historical aerial photographs of the site and surrounding area showed a former aboveground tank to the east of the property, adjacent to the railroad turntable. This aboveground tank is visible in photographs from 1947 through 1959. In the photograph dated May 1971, the aboveground tank was no longer present, and an excavation was visible near the same location as depicted on Figure 2. This excavation was present in various configurations until 1989, however, in the 1992 aerial photograph, the excavation was no longer visible (Pacific Aerial Surveys, 1949-1989). A review of files at the RWQCB did not reveal information on the contents of the aboveground tank or the duration the

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excavation cavity remained open. Additionally, the site is not on the RWQCB list of reported fuel leaks.

Dongary Investments Lease: SeaLand and NW Transport Subleases, 2225 Seventh Street, Oakland

In 1989, one of the seven 20,000-gallon underground diesel storage tanks at the former ANR Freight sublease property (currently the NW Transport sublease property) failed a tank integrity test. Soil and grab groundwater samples were collected around the tanks for laboratory analysis. Based on the results of the soil and groundwater analysis, the tank that failed the integrity testing was removed in March 1990. Petroleum hydrocarbons were detected in the soil samples collected from the excavation below the former tank location (Ramcon, 1993).

In July 1992, one bulk oil and the six remaining diesel storage tanks were removed from the ANR Freight subleased property. The diesel storage tanks were observed to have no holes, but one hole was observed in the bulk oil tank. Concentrations of TPH-D detected in the 16 soil samples collected from the diesel tank excavation averaged 28000 mg/kg. Liquid-phase hydrocarbons were observed in the diesel tank excavation, the location of which is shown on Figure 2 (Ramcon, 1993).

In August 1992, a 2000-gallon waste oil tank was removed from the SeaLand subleased property, with no holes observed in the tank. Soil samples from the waste oil tank pit were analyzed and concentrations of benzene, TPH-D, TPH-O, halogenated volatile organic compounds, and semi-volatile organic compounds were detected (Ramcon, 1993). The location of the former waste oil tank is shown on Figure 2.

Soil Borings BH-1 through BH-16 were drilled in December 1992, and soil samples were collected for chemical analysis. During drilling and sampling, liquid-phase petroleum hydrocarbons were observed in BH-4, BH-5, BH-7, BH-8, and BH-11. Analysis of soil samples collected from the borings detected TPH-D at concentrations ranging from 42 to 7400 mg/kg in six soil samples, and TPH-O at concentrations ranging from 16 to 77 mg/kg in four soil samples. TPH-G and BTEX constituents were not detected above the reported detection limits. Borings BH-15, BH-16, and BH-13 were subsequently converted into Monitoring Wells MW-1, MW-2, and MW-3. Analysis of groundwater samples collected from the monitoring wells did not detect TPH-D, TPH-O, or BTEX above the reported detection limits. However, analysis of the groundwater sample collected from MW-1 detected volatile organic compounds (Ramcon, 1993).

On May 23, 1995, eight temporary wells, GP-1 through GP-8, were installed onsite. Of the 16 soil samples collected from the borings, TPH-D at concentrations ranging from 40 to 43000 mg/kg were detected in 10 soil samples, and TPH-G at concentrations ranging from 84 to 1100 mg/kg were detected in seven soil samples. Analysis of grab groundwater samples collected from Temporary Wells GP-2, GP-3, and GP-6 detected benzene at concentrations of up to 24 ug/l, TPH-G of up to 200 ug/l, and TPH-D of up to 22000 ug/l. Liquid-phase hydrocarbons were observed in Temporary

Wells GP-1, GP-4, GP-5, GP-7, and GP-8, a sample of which was collected and characterized as being similar to diesel (Groundwater Technology, Inc., 1995c).

Since September 1994, Monitoring Wells MW-1, MW-2, and MW-3 at the Dongary Investments Lease site have been sampled on a quarterly basis. Groundwater gradient at the site has consistently been in a northerly to northwesterly direction during each of the sampling events. Analysis of groundwater samples detected TPH-D at concentrations of up to 10,000 ug/l, TPH-G at up to 110 ug/l in MW-2 and MW-3, and benzene in all the wells at up to 0.9 ug/l (Groundwater Technology, Inc., 1995a, b, and c).

2.0 FIELD METHODS

The field methods used during this investigation for well construction and development, soil and groundwater sampling, and surveying are described in the following section. A permit to install monitoring wells was acquired from Zone 7 and is presented in Appendix B.

2.1 Soil Boring/Temporary Well Installation and Sampling

On May 11 and 12, 1995, 11 exploratory soil borings, SB-7 to SB-17, were drilled to depths of approximately 15 feet. Drilling was performed by Soils Exploration Services, Benicia, California, using a CME 55 drilling rig with direct push capabilities and equipped with 4-inch-diameter casing. Soil samples were collected using a split-spoon sampler and field screened using an organic vapor meter.

Each boring was converted into a temporary well by inserting 1-inch-diameter perforated PVC casing and purging approximately 1 gallon of groundwater using a disposable bailer. Grab groundwater samples were not collected from SB-14 and SB-15 due to the presence of liquid-phase hydrocarbons. The soil and groundwater samples were transported in an iced cooler to a state-certified laboratory following chain of custody procedures. The drilling and soil sampling procedures are presented in Appendix C.

Boring logs were prepared for this investigation using the Unified Soils Classification System, which includes a description of soil characteristics such as color, moisture, consistency, and grain size. The boring logs are presented in Appendix D.

2.2 Monitoring Well Installation and Construction

On August 25, 1995, Monitoring Wells MW-4 through MW-8 were installed in accordance with the field procedures for groundwater monitoring well installation presented in Appendix C. The wells were constructed of 2-inch-diameter, flush-threaded, Schedule 40 PVC casing. The well construction details are included on the boring logs in Appendix D.

2.3 Monitoring Well Development and Sampling

Well development and sampling was in accordance with the guidelines of the governing regulatory agencies (State Water Resources Control Board, 1989 and United States Environmental Protection Agency, 1986). The field procedures for groundwater monitoring well development and sampling are presented in Appendix E.

Monitoring Wells MW-4 through MW-8 were developed on August 25, 1995, after placing the filter pack and before installing the bentonite pellets and cement seal. The wells were developed by removing at least 10 casing volumes while alternately using a surge block and pump. The well development data are presented in the field survey forms in Appendix F.

On September 6 and 11, 1995, groundwater samples were collected from Monitoring Wells MW-2, MW-4, MW-5, and MW-7. Samples were not collected from MW-1, MW-3, MW-6, or MW-8 due to the presence of liquid-phase hydrocarbons or sheen on the groundwater. The wells to be sampled were purged of at least 3 casing volumes before sample collection, while monitoring pH, specific conductivity, and temperature. The samples were transported in an iced cooler to a state-certified laboratory following chain of custody procedures. The groundwater sampling data are presented in the field survey forms in Appendix G.

Coordinated groundwater monitoring and sampling was performed at the site and the neighboring Dongary Investment property on September 28, 1995 to obtain data necessary to assess the nature and extent of the hydrocarbon plume at the two sites. Results from the monitoring conducted at the Dongary Investments property by Groundwater Technology on September 28, 1995 are included in Table 2 (Groundwater Technology, Inc., 1995d). Due to anomalous results in depth to groundwater measurements on September 28, 1995, Groundwater Technology measured the depth to water in the three Dongary Wells on November 20, 1995. As a result, the groundwater elevation measured on September 28, 1995 for MW-1 and the gradient direction calculated by Groundwater Technology, Inc. for that date are not included in Figure 4.

2.4 Groundwater Level Monitoring and Well Surveying

Monitoring Wells MW-1 through MW-8 were surveyed to the top of the well casing by a licensed land surveyor, PLS Surveys, Alameda, California, in reference to the Port of Oakland benchmark. On September 6, 1995, the depth to groundwater and thickness of liquid-phase hydrocarbons were measured in Wells MW-1 through MW-8 from the top of well casing to the nearest 0.01 foot, using an electronic water level indicator. The well survey data and groundwater elevation measurements are presented in Table 1, with a graphical interpretation of the groundwater gradient beneath the site based on the results of the September 6 and 28, 1995 sampling events shown on Figures 3 and 4. The well elevation survey map for the monitoring wells is presented in Appendix G.

3.0 SITE GEOLOGY AND HYDROGEOLOGY

The site is in the Coast Range Geomorphic Province, on the eastern side of San Francisco Bay, approximately 7 miles to the west of the Hayward Fault. The uppermost geologic member consists primarily of Quaternary alluvial deposits. The Quaternary alluvium is composed of unconsolidated to semi-consolidated bay mud, silt, sand, and gravel. The elevation of the site is approximately 10 feet above mean sea level. The topography of the vicinity is generally flat, with a gradual slope to the west, toward San Francisco Bay (Page, Ben M., 1966).

Soil types encountered at the site during drilling included sand, clay, and sandy gravel. In MW-4, clayey sand was encountered from surface grade to approximately 7 feet below grade, underlain by silty sand to approximately 12 feet below grade and clay to the total depth of the boring at 20 feet. In MW-5, sand was encountered from surface grade to approximately 7 feet below grade, overlying clayey sand to approximately 17 feet below grade and silty sand to the total depth of the boring at approximately 19.5 feet.

In MW-6, sand was encountered from surface grade to approximately 7 feet below grade, underlain by silty clay to a depth of approximately 12 feet, sand to a depth of approximately 17 feet, and clay to the total depth of the boring at approximately 19.5 feet. Sand was encountered from surface grade to approximately 7 feet below grade in MW-7, underlain by sandy clay to approximately 12 feet below grade, and sand to the total depth of the boring at approximately 19.5 feet.

In MW-8, gravelly clay was encountered from surface grade to a depth of approximately 7 feet, underlain by sandy gravel to approximately 12 feet below grade, gravelly sand to approximately 17 feet below grade, and sand to the total depth of the boring at approximately 19.5 feet. Hydrogeologic cross sections are shown on Figure 5.

The depth to groundwater in the monitoring wells ranged from 6.56 and 9.85 feet below the top of the casings. The groundwater elevations measured on September 6, 1995 were used to prepare the groundwater potentiometric surface map shown on Figure 3, which indicates a gradient of approximately 0.02 foot per foot in a general northerly direction across the site. Groundwater elevations were also measured on September 28, 1995 in coordination with the monitoring of three wells at the Dongary Investments leased site, and were used to develop the groundwater potentiometric surface map shown on Figure 4. The groundwater elevation data from September 28, 1995 indicate a gradient of approximately 0.01 foot per foot in a north/northeasterly direction across the project site. It should be noted that the groundwater gradient direction at the Dongary Investments site measured on September 28, 1995 was interpreted to be southerly, which is not consistent with the interpreted gradient from previous monitoring events (Groundwater Technology, Inc., 1995a, 1995b, and 1995c).

Groundwater Technology attributed the change in calculated gradient to an anomalous depth to groundwater measurement in MW-1, and, therefore, collected additional depth to groundwater measurements in November 20, 1995.

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4.0 ANALYTICAL METHODS

Soil and groundwater samples collected during this investigation were analyzed by Clayton Environmental Consultants, a state-certified laboratory, using standard test methods of the U.S. Environmental Protection Agency (EPA) and the California Department of Health Services. The soil samples were analyzed for the following:

- TPH-G and BTEX using EPA Methods 8015/8020
- Total petroleum hydrocarbons as kerosene (TPH-K) using EPA Method 8015 modified
- TPH-D using EPA Method 8015 modified
- TPH-O using EPA Method 8015 modified

The groundwater samples were analyzed for the following:

- TPH-G and BTEX using EPA Methods 8015/8020
- TPH-D using EPA Method 8015 modified
- TPH-O using EPA Method 8015 modified

The laboratory results for the soil and groundwater samples are summarized in Tables 1 and 2. The field procedures for chain of custody documentation and the laboratory reports and chain of custody records are presented in Appendix H. The results of groundwater analysis are shown on Figures 6 and 7.

5.0 LIQUID-PHASE HYDROCARBON MONITORING AND RECOVERY

Liquid-phase hydrocarbons have been observed in Monitoring Wells MW-1 and MW-3, and have been recovered on a weekly basis since June 1994. Product thicknesses and the volume of liquid-phase hydrocarbons removed are presented in Table 5. The interpreted extent of liquid-phase hydrocarbons observed in the monitoring wells at the site and at the neighboring site is presented on Figure 8.

6.0 DISCUSSION OF RESULTS

The following are the results of this site investigation including field observations and laboratory analysis:

- Soil types encountered during drilling consisted of sandy gravel and sand from surface grade to approximately 12 to 14 feet below grade underlain by silty clay, sandy clay, or silty sand to the total depth of the borings at approximately 20 feet.

- Liquid-phase hydrocarbons were observed in Monitoring Well MW-1 at a thickness of 1.11 foot, MW-3 at 5.80 feet, and in MW-8 at 0.12 foot.

- Liquid-phase hydrocarbons continue to be removed from MW-1 and MW-3 on a weekly basis.

- Groundwater elevation data indicate a gradient of approximately 0.01 to 0.02 foot per foot in a general northerly direction across the site.

- Analysis of the soil samples collected from the 11 soil borings, SB-7 to SB-17, and four additional monitoring wells, MW-4 through MW-8, detected up to 1100 mg/kg TPH-G, 14000 mg/kg TPH-D, and 2600 mg/kg TPH-O. TPH-K was not detected above the reported detection limits in any of the soil samples.

- Toluene, ethylbenzene, and total xylenes were detected at concentrations of up to 0.013, 0.9, and 1.4 mg/kg in the soil samples collected from Borings SB-7, SB-8, SB-10, and SB-17. Benzene was not detected above the reported detection limits in any of the soil samples. except 2.9 ppm in MW1.

- Analysis of the grab groundwater samples collected from Temporary Wells SB-7 to SB-17 detected up to 140000 and 43000 ug/l dissolved-phase TPH-G and TPH-D. A grab groundwater sample was not collected from SB-14 due to the presence of liquid-phase hydrocarbons, and an emulsified sample was collected from SB-16, analysis of which detected approximately 64 percent diesel-range hydrocarbons.

Rpt Table 3 says 210,000 ppm TPH D in SB1.

- Analysis of samples collected from the monitoring wells at the Port of Oakland site on September 6 and 28, 1995 detected the following:

    - TPH-G at concentrations of up to 120, 210, and 2600 micrograms per liter (ug/l) in the samples collected from Monitoring Wells MW-2, MW-4, and MW-6. The gas chromatogram patterns did not match the typical gasoline signature.

    - TPH-D at concentrations of up to 8400 and 390 ug/l in the samples collected from MW-6 and MW-7. The gas chromatogram patterns did not match the typical diesel signature.

    - TPH-O at concentrations ranging from 400 to 8000 ug/l in the monitoring wells sampled.

    - Benzene, toluene, ethylbenzene, and total xylenes at concentrations of up to 12, 1.4, 9.4, and 5.6 micrograms per liter (ug/l) in the sample collected from MW-6. Benzene was also detected at concentrations of up to 23 ug/l in the sample collected from MW-4.

- Analysis of samples collected from the monitoring wells at the Dongary Investments site on September 28, 1995 detected the following:

    - TPH-G at concentrations of 250 and 51 ug/l in the samples collected from Monitoring Wells MW-2 and MW-3.

    - TPH-D, benzene, toluene, ethylbenzene, and total xylenes were not detected above the reported detection limit in any of the samples. The groundwater samples were not analyzed for TPH-O.

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TABLES

TABLE 1 - SUMMARY OF RESULTS OF MONITORING WELL SAMPLING
PORT OF OAKLAND, BUILDING C-401
2277 SEVENTH STREET, OAKLAND, CALIFORNIA

ALISTO PROJECT NO 10-270

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (feet)	DEPTH TO WATER (feet)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/l)	TPH-D (ug/l)	TPH-O (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	LAB
MW-1	03/29/95	14.14	7.67	0.17	6 60	---	—	—	---	—	---	—	—
MW-1	09/06/95	14.14	9.45	0.77	5.27	—	---	—	—	---	—	—	---
MW-1	09/28/95	14.14	9 85	1.11	5.12	—	—	—	---	—	—	---	---
MW-2	05/27/94	14 36	8 01	—	6.35	87	470	—	ND<0.5	ND<0 5	ND<0.5	ND<0.5	D&M
MW-2	03/29/95	14.36	7.47	—	6.89	ND<50	110	1400	ND<0 4	ND<0.3	ND<0.3	ND<0.4	CEC
QC-1 (c)	03/29/95	---	---	—	—	ND<50	—	—	ND<0.4	ND<0.3	ND<0.3	ND<0.4	CEC
MW-2	09/06/95	14.36	9.04	—	5.32	ND<50	ND<60	400	ND<0.4	ND<0.3	ND<0 3	ND<0.4	CEC
QC-1 (c)	09/06/95	---	---	---	---	ND<50	—	---	ND<0.4	ND<0.3	ND<0.3	ND<0.4	CEC
MW-2	09/28/95	14.36	9.17	—	5.19	120 (d)	ND<100	1300	ND<0.4	ND<0.3	ND<0.3	ND<0.4	CEC
MW-3	05/25/94	14.22	14.93	6.88	4 45	—	---	—	—	—	—	—	—
MW-3	03/29/95	14.22	9.59	2.93	6 83	—	---	---	—	---	—	—	—
MW-3	09/06/95	14 22	13.70	5.22	4 44	—	---	—	—	---	—	—	---
MW-3	09/28/95	14.22	13 60	5.80	4.97	---	—	—	---	—	---	—	—
MW-4	03/29/95	13.15	9.59	---	3.56	---	—	---	---	—	---	—	—
MW-4	09/06/95	13.15	8.48	---	4.67	—	—	---	—	—	—	—	—
MW-4	09/11/95	13.15	8.51	—	4.64	150 (d)	ND<200	500	23	ND<0.3	ND<0.3	ND<0.4	CEC
MW-4	09/28/95	13.15	8.54	—	4 61	210 (d)	ND<50	400	18	ND<0.3	ND<0.3	ND<0.4	
MW-5	09/06/95	13.49	6.90	---	6.59	—	—	---	—	—	---	—	—
MW-5	09/11/95	13.49	6.93	—	6.56	90 (d)	ND<300	2500	3 3	ND<0.3	ND<0 3	ND<0.4	CEC
MW-5	09/28/95	13.49	6.56	---	6.93	ND<50	ND<300	2000	ND<0.4	ND<0 3	ND<0.3	ND<0 4	CEC
MW-6	09/06/95	14.00	7.40	—	6.60	---	---	—	—	—	—	—	---
MW-6	09/28/95	14.00	7.74	—	6.26	2400 (d)	8400	8000 (e)	12	1.4	9.4	5 6	CEC
QC-1 (c)	09/28/95	14.00	—	---	---	2600 (d)	—	---	12	0.9	7.5	4 2	CEC
MW-7	09/06/95	14.35	9.10	---	5.25	ND<50	ND<300	800	ND<0 4	ND<0.3	ND<0.3	ND<0 4	CEC
MW-7	09/28/95	14.35	9.74	---	4.61	ND<50	390 (f)	1200	ND<0 4	ND<0 3	ND<0.3	ND<0 4	CEC
MW-8	09/06/95	12.94	7.84	---	5.10	---	—	---	—	—	---	—	---
MW-8	09/28/95	12 94	8.91	0.12	4.12	—	---	—	—	---	—	—	---
QC-2 (g)	03/29/95	—	—	—	—	ND<50	---	—	ND<0.4	ND<0.3	ND<0 3	ND<0.4	CEC
QC-2 (g)	09/06/95	—	—	—	---	ND<50	—	—	ND<0.4	ND<0.3	ND<0.3	ND<0 4	CEC
QC-2 (g)	09/28/95	---	---	---	---	ND<50	—	---	ND<0.4	ND<0.3	ND<0 3	ND<0 4	CEC

ABBREVIATIONS:

TPH-G	Total petroleum hydrocarbons as gasoline
TPH-D	Total petroleum hydrocarbons as diesel (C10 to C20)
TPH-O	Total petroleum hydrocarbons as oil (C20 to C42)
B	Benzene
T	Toluene
E	Ethylbenzene
X	Total xylenes
ug/l	Micrograms per liter
—	Not analyzed/applicable
ND	Not detected above reported detection limit
D&M	D&M Laboratories
CEC	Clayton Environmental Consultants, Inc.

NOTES.

(a) Top of casing elevations surveyed to the nearest 0.01 foot relative to mean lower low water (3.2 feet below mean sea level), Port of Oakland datum

(b) Groundwater elevations expressed in feet relative to Port of Oakland datum and corrected assuming a specific gravity of 0.75 for separate-phase product.

(c) Blind duplicate.

(d) Purgeable hydrocarbons quantitated as gasoline do not match typical gasoline pattern.

(e) Unidentified hydrocarbons present in oil range; quantitation based on oil

(f) Unidentified hydrocarbons present in diesel range; quantitation based on diesel.

(g) Travel blank.

TABLE 2 - SUMMARY OF RESULTS OF SOIL SAMPLING
PORT OF OAKLAND, BUILDING C-401
2277 SEVENTH STREET, OAKLAND, CALIFORNIA

ALISTO PROJECT NO. 10-270

SAMPLE ID	SAMPLE DEPTH (feet)	DATE OF SAMPLING	TPH-G (mg/kg)	TPH-K (mg/kg)	TPH-D (mg/kg)	TPH-O (mg/kg)	B (mg/kg)	T (mg/kg)	E (mg/kg)	X (mg/kg)	LAB
SB-1	5.0	05/17/94	ND<0.2	---	10	---	ND<0.005	ND<0.005	ND<0.005	ND<0.005	D&M
SB-2	5.0	05/17/94	ND<0.1	---	43	---	ND<0.025	ND<0.025	ND<0.025	ND<0.025	D&M
SB-3	5.0	05/17/94	ND<0.2	---	ND<5	---	ND<0.005	ND<0.005	ND<0.005	ND<0.005	D&M
SB-4	5.0	05/17/94	ND<0.2	---	ND<5	---	ND<0.005	ND<0.005	ND<0.005	ND<0.005	D&M
SB-5	5.0	05/17/94	ND<0.2	---	ND<5	---	ND<0.005	ND<0.005	ND<0.005	ND<0.005	D&M
SB-6	5.0	05/17/94	ND<0.2	---	ND<5	---	ND<0.005	ND<0.005	ND<0.005	ND<0.005	D&M
SB-7	3.0	05/11/95	ND<0.3	---	ND<1	12	*ND<0.005*	*0.006*	*ND<0.005*	*ND<0.005*	CEC
SB-7	9.0	05/11/95	ND<0.3	---	ND<1	ND<4	ND<0.005	ND<0.005	ND<0.005	ND<0.005	CEC
SB-8	3.0	05/11/95	ND<0.3	---	ND<1	260	ND<0.005	ND<0.005	ND<0.005	0.005	CEC
SB-8	9.0	05/11/95	15 (a)	---	2	13	ND<0.005	ND<0.005	ND<0.005	ND<0.005	CEC
SB-9	3.0	05/11/95	2.2 (a)	---	ND<1	520	ND<0.005	ND<0.005	ND<0.005	ND<0.005	CEC
SB-9	9.0	05/11/95	18 (a)	---	230	300	ND<0.005	ND<0.005	ND<0.005	ND<0.005	CEC
SB-10	3.0	05/11/95	0.8 (a)	---	ND<1	340	ND<0.005	ND<0.005	ND<0.005	ND<0.005	CEC
SB-10	9.0	05/11/95	ND<0.3	---	ND<1	ND<4	ND<0.005	0.013	ND<0.005	ND<0.005	CEC
SB-11	9.0	05/11/95	ND<0.3	---	ND<1	14	ND<0.005	ND<0.005	ND<0.005	ND<0.005	CEC
SB-12	9.0	05/11/95	4.7 (a)	---	ND<1	10	ND<0.005	ND<0.005	ND<0.005	ND<0.005	CEC
SB-13	9.0	05/11/95	ND<0.3	---	ND<1	5	ND<0.005	ND<0.005	ND<0.005	ND<0.005	CEC
SB-14	6.0	05/11/95	40 (a)	---	1200	140	ND<0.005	ND<0.005	ND<0.005	ND<0.005	CEC
SB-15	6.0	05/11/95	ND<0.3	---	ND<1	ND<4	ND<0.005	ND<0.005	ND<0.005	ND<0.005	CEC
SB-16	6.0	05/11/95	130 (a)	---	170	120	ND<0.1	ND<0.1	ND<0.1	ND<0.1	CEC
SB-17	6.0	05/11/95	1100 (a)	---	14000	ND<4	ND<0.5	ND<0.5	0.9	1.4	CEC
SB-17	9.0	05/11/95	2.4 (a)	---	26	27	ND<0.005	ND<0.005	ND<0.005	ND<0.005	CEC

conc. > 1000ppm

TABLE 2 - SUMMARY OF RESULTS OF SOIL SAMPLING
PORT OF OAKLAND, BUILDING C-401
2277 SEVENTH STREET, OAKLAND, CALIFORNIA

ALISTO PROJECT NO. 10-270

SAMPLE ID	SAMPLE DEPTH (feet)	DATE OF SAMPLING	TPH-G (mg/kg)	TPH-K (mg/kg)	TPH-D (mg/kg)	TPH-O (mg/kg)	B (mg/kg)	T (mg/kg)	E (mg/kg)	X (mg/kg)	LAB
MW-1	5.0	05/16/94	ND<0.2	---	ND<5	---	2.9	9.7	5.4	30	D&M
MW-2	5.0	05/16/94	ND<0.2	---	ND<5	---	ND<0.005	ND<0.005	ND<0.005	ND<0.005	D&M
MW-3	5.0	05/16/94	ND<0.2	---	ND<5	---	ND<0.005	ND<0.005	ND<0.005	ND<0.005	D&M
MW-4	10.0	08/25/95	ND<0.3	ND<1	ND<1	ND<4	ND<0.005	ND<0.005	ND<0.005	ND<0.005	CEC
MW-5	6.5	08/25/95	ND<0.3	ND<1	ND<1	ND<4	ND<0.005	ND<0.005	ND<0.005	ND<0.005	CEC
MW-5	10.0	08/25/95	ND<0.3	ND<1	5	31	ND<0.005	ND<0.005	ND<0.005	ND<0.005	CEC
MW-6	10.0	08/25/95	ND<0.3	ND<1	ND<1	ND<4	ND<0.005	ND<0.005	ND<0.005	ND<0.005	CEC
MW-7	10.0	08/25/95	ND<0.3	ND<1	ND<1	ND<4	ND<0.005	ND<0.005	ND<0.005	ND<0.005	CEC
MW-8	6.5	08/25/95	47 (a)	ND<1	1300	1700	ND<0.3	ND<0.1	ND<2	ND<0.2	CEC
MW-8	10.0	08/25/95	27 (a)	ND<1	1800	2600	ND<0.3	ND<0.1	ND<1	ND<0.3	CEC

ABBREVIATIONS:

TPH-G	Total petroleum hydrocarbons as gasoline
TPH-K	Total petroleum hydrocarbons as kerosene
TPH-D	Total petroleum hydrocarbons as diesel (C10 to C20 range)
TPH-O	Total petroleum hydrocarbons as oil (C20 to C42 range)
B	Benzene
T	Toluene
E	Ethylbenzene
X	Total xylenes
mg/kg	Milligrams per kilogram
ND	Not detected above reported detection limit
---	Not analyzed
D&M	D&M Laboratories
CEC	Clayton Environmental Consultants

NOTES:

(a) Sample appears to be weathered gasoline.

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conc 7100 ppm

TABLE 3 - SUMMARY OF RESULTS OF TEMPORARY WELL SAMPLING
PORT OF OAKLAND, BUILDING C-401
2277 SEVENTH STREET, OAKLAND, CALIFORNIA

ALISTO PROJECT NO. 10-270

SAMPLE ID	DATE OF SAMPLING	TPH-G (ug/l)	TPH-D (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	LAB
SB-1	05/17/94	ND<50	210000000	4200	1900	ND<0.5	1400	D&M
SB-2	05/17/94	23000	310000	ND<0.5	11	57	130	D&M
SB-3	05/17/94	ND<50	810000	ND<0.5	ND<0.5	3.1	9.3	D&M
SB-4	05/17/94	ND<50	4500	ND<0.5	ND<0.5	ND<0.5	ND<0.5	D&M
SB-5	05/17/94	ND<50	170000	ND<0.5	ND<0.5	ND<0.5	23	D&M
SB-6	05/17/94	ND<50	570000	1.2	ND<0.5	ND<0.5	79	D&M
SB-7	05/11/95	200	ND<50	6.7	0.3	ND<0.3	ND<0.4	CEC
SB-8	05/11/95	7300 (a)	3400	ND<4	ND<3	ND<3	ND<4	CEC
SB-9	05/12/95	29000 (a)	18000 (b)	ND<4	ND<3	ND<3	ND<4	CEC
SB-10	05/12/95	1400 (a)	7400	ND<0.4	ND<0.3	ND<0.3	ND<0.4	CEC
SB-11	05/11/95	970 (a)	1400	0.5	ND<0.3	ND<0.3	ND<0.4	CEC
SB-12	05/11/95	ND<50	ND<50	ND<0.4	ND<0.3	ND<0.3	ND<0.4	CEC
SB-13	05/12/95	130	ND<50	25	1.3	1.2	4.4	CEC
SB-14 (c)	05/12/95	---	---	---	---	---	---	---
SB-15 (c)	05/12/95	---	---	---	---	---	---	---
SB-16	05/12/95	---	64000000 (d)	---	---	---	---	CEC
SB-17	05/12/95	140000 (a)	43000	ND<40	ND<30	30	50	CEC
QC-1 (e)	05/12/95	ND<50	---	ND<0.4	ND<0.3	ND<0.3	ND<0.4	CEC

ABBREVIATIONS:

TPH-G Total petroleum hydrocarbons as gasoline
TPH-D Total petroleum hydrocarbons as diesel (C10 to C20 range)
B Benzene
T Toluene
E Ethylbenzene
X Total xylenes
ug/L Micrograms per liter
ND Not detected at or above reported detection limit
D&M D&M Laboratories
CEC Clayton Environmental Consultants

NOTES:

(a) Sample appears to be weathered gas.

(b) Sample was a mixture of weathered gas, diesel, and oil.

(c) Temporary well not sampled due to the presence of liquid-phase hydrocarbons.

(d) Emulsifed product (64% diesel).

(e) Travel blank.

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TABLE 4 - SUMMARY OF RESULTS OF GROUNDWATER SAMPLING
DONGARY INVESTMENTS
2225 SEVENTH STREET, OAKLAND, CALIFORNIA

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (feet)	DEPTH TO WATER (feet)		PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/l)	TPH-D (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)
MW-1	01/15/93	13.72	5.21		---	8.51	ND<50	ND<50	ND<0.3	ND<0.3	ND<0.3	ND<0.3
MW-1	09/12/94	13.72	6.37		---	7.35	ND<10	10000	0 5	ND<0.3	ND<0.3	ND<0.3
MW-1	11/30/94	13.72	5.76		---	7.96	ND<10	2800	ND<0.3	ND<0.3	ND<0.3	ND<0.3
MW-1	03/29/95	13.72	4.57		---	9.15	ND<50	ND<50	ND<0.3	ND<0.3	ND<0.3	ND<0.3
MW-1	05/25/95	13.72	5.14		---	8.58	---	---	---	---	---	---
MW-1	06/21/95	13 72	5.41		---	8.31	ND<50	ND<50	ND<0.3	ND<0.3	ND<0.3	ND<0.3
MW-1	06/23/95	13.72	5.44		---	8.28	---	---	---	---	---	---
MW-1	09/28/95	13.72	6.90	(c)	---	6.82	ND<50	ND<50	ND<0.3	ND<0.3	ND<0.3	ND<0.3
MW-1	11/20/95	13.72	6.28		---	7.44	---	---	---	---	---	---
MW-2	01/15/93	13 80	6.21		---	7.59	ND<50	ND<50	ND<0.3	ND<0.3	ND<0.3	ND<0.3
MW-2	09/12/94	13.80	6 47		---	7.33	34	ND<50	0.5	ND<0.3	ND<0.3	ND<0.3
MW-2	11/30/94	13.80	6.34		---	7.46	ND<10	81	0.9	ND<0.3	ND<0.3	ND<0.3
MW-2	03/29/95	13.80	5.51		---	8.29	ND<50	75	0.3	ND<0.3	ND<0.3	ND<0.3
MW-2	05/25/95	13.80	5.60		---	8.20	---	---	---	---	---	---
MW-2	06/21/95	13.80	5.72		---	8.08	ND<50	ND<50	ND<0.3	ND<0.3	ND<0.3	ND<0.3
MW-2	06/23/95	13 80	5.72		---	8.08	---	---	---	---	---	---
MW-2	09/28/95	13 80	6.15		---	7.65	250	ND<50	ND<0.3	ND<0.3	ND<0 3	ND<0.3
MW-2	11/20/95	13.80	6.42		---	7.38	---	---	---	---	---	---
MW-3	01/15/93	15.06	6.44		---	8.62	ND<50	ND<50	ND<0.3	ND<0.3	ND<0.3	ND<0.3
MW-3	09/12/94	15.06	7.35		---	7.71	ND<50	ND<50	0.3	ND<0 3	ND<0.3	ND<0.3
MW-3	11/30/94	15.06	7.12		---	7.94	110	150	ND<0.3	ND<0.3	ND<0 3	ND<0.3
MW-3	03/29/95	15.06	6.31		---	8.75	ND<50	ND<50	ND<0.3	ND<0.3	ND<0.3	ND<0.3
MW-3	05/25/95	15.06	6.75		---	8.31	---	---	---	---	---	---
MW-3	06/21/95	15.06	6 87		---	8.19	ND<50	ND<50	ND<0.3	ND<0.3	ND<0.3	ND<0.3
MW-3	06/23/95	15 06	6 88		---	8.18	---	---	---	---	---	---
MW-3	09/28/95	15.06	7.28		---	7.78	51	ND<50	ND<0.3	ND<0.3	ND<0.3	ND<0.3
MW-3	11/20/95	15.06	7.51		---	7.55	---	---	---	---	---	---

ABBREVIATIONS:

TPH-G	Total petroleum hydrocarbons as gasoline
TPH-D	Total petroleum hydrocarbons as diesel (C10 to C20)
B	Benzene
T	Toluene
E	Ethylbenzene
X	Total xylenes
ug/l	Micrograms per liter
---	Not analyzed/applicable
ND	Not detected above reported detection limit

NOTES:

(a) Top of casing elevations surveyed to the nearest 0.01 foot relative to mean lower low water (3 2 feet below mean sea level), Port of Oakland datum.

(b) Groundwater elevations expressed in feet relative to Port of Oakland datum.

(c) Possible gauging error.

Source: Groundwater Technology, Inc., Third Quarter Groundwater Monitoring and Sampling Report, Ringsby Terminals, Port of Oakland Lease, 2225 Seveth Street, Oakland, California. November 29, 1995.

TABLE 5 - LIQUID-PHASE HYDROCARBON REMOVAL STATUS
PORT OF OAKLAND, BUILDING C-401
2277 SEVENTH STREET, OAKLAND, CALIFORNIA

ALISTO PROJECT NO. 10-270

WELL ID	DATE	CASING ELEVATION (a) (feet)	DEPTH TO WATER (feet)	DEPTH TO PRODUCT	PRODUCT THICKNESS	GROUNDWATER ELEVATION (b) (Feet)	PRODUCT REMOVED (Gallons)	PRODUCT REMOVED CUMULATIVE (Gallons)	
MW-1	06/30/94	14.17	9.75	9.20	0.55	4.83	1.5	1.5	(c)
	07/08/94	14.17	9.88	9.12	0.76	4.86	1.5	3.0	(c)
	07/14/94	14.17	9.90	9.12	0.78	4.86	1.5	4.5	(c)
	7/21-22/94	14.17	9.78	9.16	0 62	4 86	1.5	6 0	(c)
	07/29/94	14.17	10.00	9.13	0.87	4.82	3.0	9.0	(c)
	08/03/94	14.17	10.3	9.19	1.11	4.70	3.0	12.0	(c)
	08/11/94	14.17	10.51	9.24	1.27	4.61	3.0	15.0	(c)
	08/18/94	14.17	10.38	9.25	1.13	4.64	3.0	18.0	(c)
	09/29/94	14.17	10.5	9.30	1.20	4.57	3.0	21.0	(c)
	10/04/94	14.17	9.75	9.30	0.45	4.76	1.5	22.5	(c)
	10/14/94	14.17	10.05	9.25	0.80	4.72	1.5	24.0	(c)
	10/21/94	14.17	10.84	9.49	1.35	4.34	—	24.0	(c)
	11/02/94	14.17	10 26	9.44	0.82	4.53	2.5	26.5	(c)
	11/10/94	14.17	9.80	8.45	1.35	5.38	3.0	29.5	(c)
	11/18/94	14.17	9.76	8.78	0.98	5.15	3.0	32.5	(c)
	12/08/94	14.17	9.46	8.69	0.77	5.29	3.0	35.5	(c)
	01/20/95	14.17	8.01	7.73	0.28	6 37	2.0	37.5	(c)
	01/27/95	14.17	7.54	7.52	0.02	6.65	2.0	39.5	(c)
	02/10/95	14.17	8.15	7.92	0.23	6.19	2.0	41.5	(c)
	02/16/95	14.17	8.40	8.18	0.23	5.94	1.0	42.5	(c)
	02/23/95	14.17	8.46	8.21	0.25	5.90	2.0	44.5	(c)
	03/03/95	14.17	8.25	8.15	0.10	6.00	2.0	46.5	(c)
	03/10/95	14.17	7.63	7.53	0.10	6.62	2.0	48.5	(c)
	03/17/95	14.17	8.00	7.80	0.20	6.32	2.0	50.5	(c)
	04/07/95	14.17	—	—	—	14.17	2.0	52.5	
	04/14/95	14.17	—	—	—	14.17	3.0	55.5	
	04/19/95	14.17	8.34	7.10	0.24	6.01	0.5	56 0	
	04/26/95	14.17	8.26	7.98	0.28	6.12	1.0	57.0	
	05/03/95	14.17	8.77	8.47	0.30	5.63	0.5	57.5	
	05/12/95	14.17	8.33	7.87	0.46	6.19	2.0	59.5	
	05/16/95	14 17	8.42	8.64	0.22	5.92	1.5	61.0	
	05/23/95	14.17	8.68	8.51	0.17	5.62	1.5	62.5	
	05/31/95	14.17	8.71	8.54	0.17	5.59	1.0	63.5	
	06/07/95	14.17	8.77	8.61	0.16	5.52	2.5	66.0	
	06/14/95	14.17	9.51	7.88	1.63	5.88	5.0	71.0	
	06/23/95	14.17	9.60	8.20	1.40	5.62	4.0	75.0	
	06/28/95	14.17	8.41	7.61	0.80	6.36	15.0	90.0	
	07/07/95	14.17	8.70	8.09	0.61	5.93	8.0	98.0	
	07/10/95	14.17	8.91	8.00	0.91	5.94	12.0	110.0	
	07/19/95	14.17	8.87	8.49	0.38	5.59	10.0	120.0	
	07/28/95	14.17	9.01	8.54	0.47	5.51	10.0	130.0	
	08/04/95	14.17	9.20	8.76	0.44	5.30	8.0	138.0	
	08/11/95	14.17	9.30	9.07	0.23	5.04	6.0	144.0	
	08/14/95	14.17	9.06	8.52	0.54	5.52	4.0	148.0	
	08/17/95	14.17	8.89	8.41	0.48	5.64	8.0	156.0	
	08/23/95	14.17	9.55	8.95	0.60	5.07	5.0	161.0	
	09/07/95	14.17	9.42	8.87	0.55	5.16	11.0	172.0	
	09/15/95	14.17	9.21	8.98	0.23	5.13	12.0	184.0	
	09/20/95	14.17	9.23	8.79	0.44	5.27	5.0	189.0	
	10/06/95	14.17	9.45	9.14	0.31	4.95	8.0	197.0	

TABLE 5 - LIQUID-PHASE HYDROCARBON REMOVAL STATUS
PORT OF OAKLAND, BUILDING C-401
2277 SEVENTH STREET, OAKLAND, CALIFORNIA

ALISTO PROJECT NO. 10-270

WELL ID	DATE	CASING ELEVATION (a) (feet)	DEPTH TO WATER (feet)	DEPTH TO PRODUCT	PRODUCT THICKNESS	GROUNDWATER ELEVATION (b) (Feet)	PRODUCT REMOVED (Gallons)	PRODUCT REMOVED CUMULATIVE (Gallons)
MW-3	06/30/94	14.24	14.97	8.83	6.14	3.88	45.0	45.0
	07/08/94	14.24	14.85	8.34	6.51	4.27	45.0	90.0
	07/14/94	14.24	14.41	8.35	6.06	4.38	45.0	135.0
	7/21-22/94	14 24	14.32	8.45	5.87	4.32	45.0	180.0
	07/29/94	14.24	14.45	8.90	5.55	3.95	18.0	198.0
	08/03/94	14.24	14.45	8.45	6.00	4.29	30.0	228.0
	08/11/94	14.24	14.45	9.52	4.93	3.49	30.0	258.0
	08/18/94	14.24	14.38	9.48	4.90	3.54	45.0	303.0
	09/23/94	14.24	14.45	8.75	5.70	4.07	100.0	403.0
	09/29/94	14.24	14.45	8.85	5.60	3.99	165.0	568.0
	10/04/94	14.24	14.50	8.65	5.85	4.13	165.0	733.0
	10/14/94	14.24	14.50	9.60	4.90	3.42	165.0	898.0
	10/21/94	14.24	14.50	8.88	5.62	3.96	90.0	988.0
	11/02/94	14.24	14.50	8.79	5.71	4.02	50.0	1038.0
	11/10/94	14.24	13.12	8.07	5.05	4.91	—	1038.0
	11/18/94	14.24	13.10	7.91	5.19	5.03	90.0	1128.0
	12/08/94	14.24	13.58	7.95	5.63	4.88	50.0	1178.0
	01/20/95	14.24	10.11	7.09	3 02	6.40	40.0	1218.0
	01/27/95	14.24	11.09	7.15	3.94	6.11	20.0	1238.0
	02/10/95	14.24	11.05	7.05	4.00	6.19	0.0	1238.0
	02/16/95	14.24	12.10	7 20	4.90	5.82	140.0	1378.0
	02/23/95	14.24	12.00	7.33	4.67	5.74	100.0	1478.0
	03/03/95	14.24	12.25	7.40	4.85	5.63	150.0	1628.0
	03/10/95	14.24	10.40	7.10	3.30	6.32	150.0	1778.0
	03/17/95	14.24	9.80	6.90	2.90	6.62	165.0	1943.0
	03/31/95	14.24	—	6.60	—	—	100.0	2043.0
	04/07/95	14.24	—	6.80	—	—	160.0	2203.0
	04/14/95	14.24	—	6.90	—	—	160.0	2363.0
	04/19/95	14.24	11.30	4.26	7.04	8 22	110.0	2473.0
	04/26/95	14.24	11.11	4.83	6.28	7.84	125.0	2598.0
	05/03/95	14.24	10.84	4.89	5.95	7.86	130.0	2728.0
	05/12/95	14.24	11.08	4.86	6.22	7.83	140.0	2868.0
	05/16/95	14 24	11.11	4.72	6.39	7.92	150.0	3018.0
	05/23/95	14.24	11.09	4.63	6.46	8.00	100.0	3118.0
	05/31/95	14 24	10.84	5 20	5.64	7.63	100.0	3218.0
	06/07/95	14.24	12.26	7.33	4.93	5.68	150.0	3368.0
	06/14/95	14.24	12.01	6.21	5.80	6.58	90.0	3458.0
	06/23/95	14.24	12.21	6.12	6.09	6.60	100.0	3558.0
	06/28/95	14.24	11.04	5.76	5.28	7.16	125.0	3683.0
	07/07/95	14.24	10.82	4.61	6.21	8.08	70.0	3753.0
	07/10/95	14.24	10.96	5.25	5.71	7.56	40.0	3793.0
	07/19/95	14.24	10.80	4.80	6.00	7.94	100.0	3893.0
	07/28/95	14.24	10.78	5.68	5.10	7.29	180.0	4073.0
	08/04/95	14.24	12.76	7.88	4.88	5.14	60.0	4133.0
	08/11/95	14.24	12.75	7.52	5.23	5.41	40.0	4173.0
	08/14/95	14.24	13.01	7.99	5.02	5.00	55.0	4228.0
	08/17/95	14.24	14.01	8.02	5.99	4.72	60.0	4288.0
	08/23/95	14.24	13.27	8.42	4.85	4.61	75.0	4363.0
	09/07/95	14.24	12.99	8.33	4.66	4.75	30.0	4393.0
	09/15/95	14.24	10.55	5.66	4.89	7.36	55.0	4448.0
	09/20/95	14.24	12.67	7.45	5.22	5.49	70.0	4518.0
	10/06/95	14.24	13.65	7.77	5.88	5.00	55.0	4573.0

NOTES:

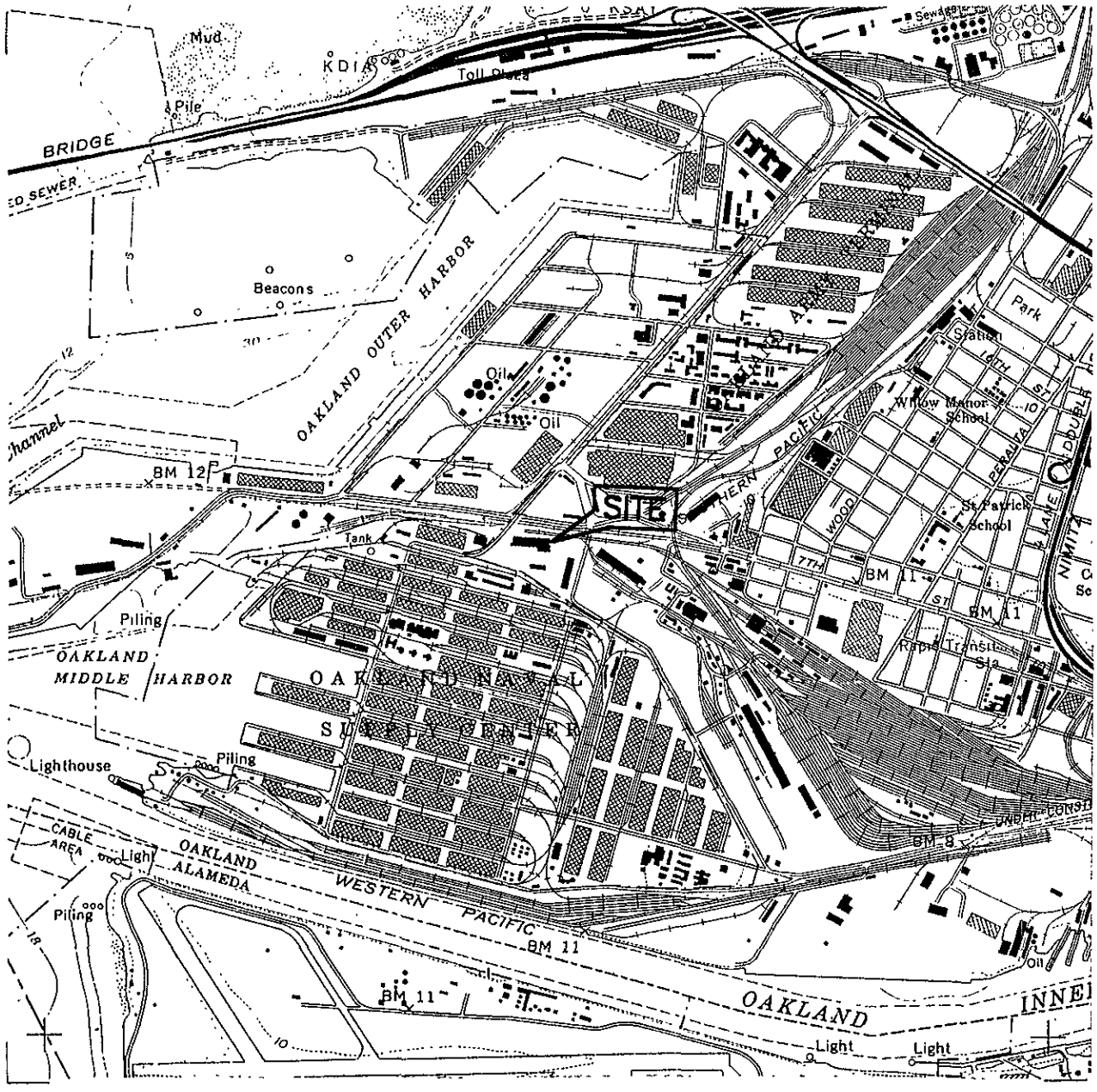
(a) Casing elevations surveyed to the nearest 0.01 foot relative to mean lower low water (3.2 feet below mean sea level) Port of Oakland datum.

(b) Groundwater elevations adjusted assuming a specific gravity of 0.75 for the liquid-phase hydrocarbons.

(c) The estimated amount bailed is approximately 75% product and 25% water.

E:\0\10-270\PRODUCT

FIGURES



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

N

0 1000' 2000'

FIGURE 1

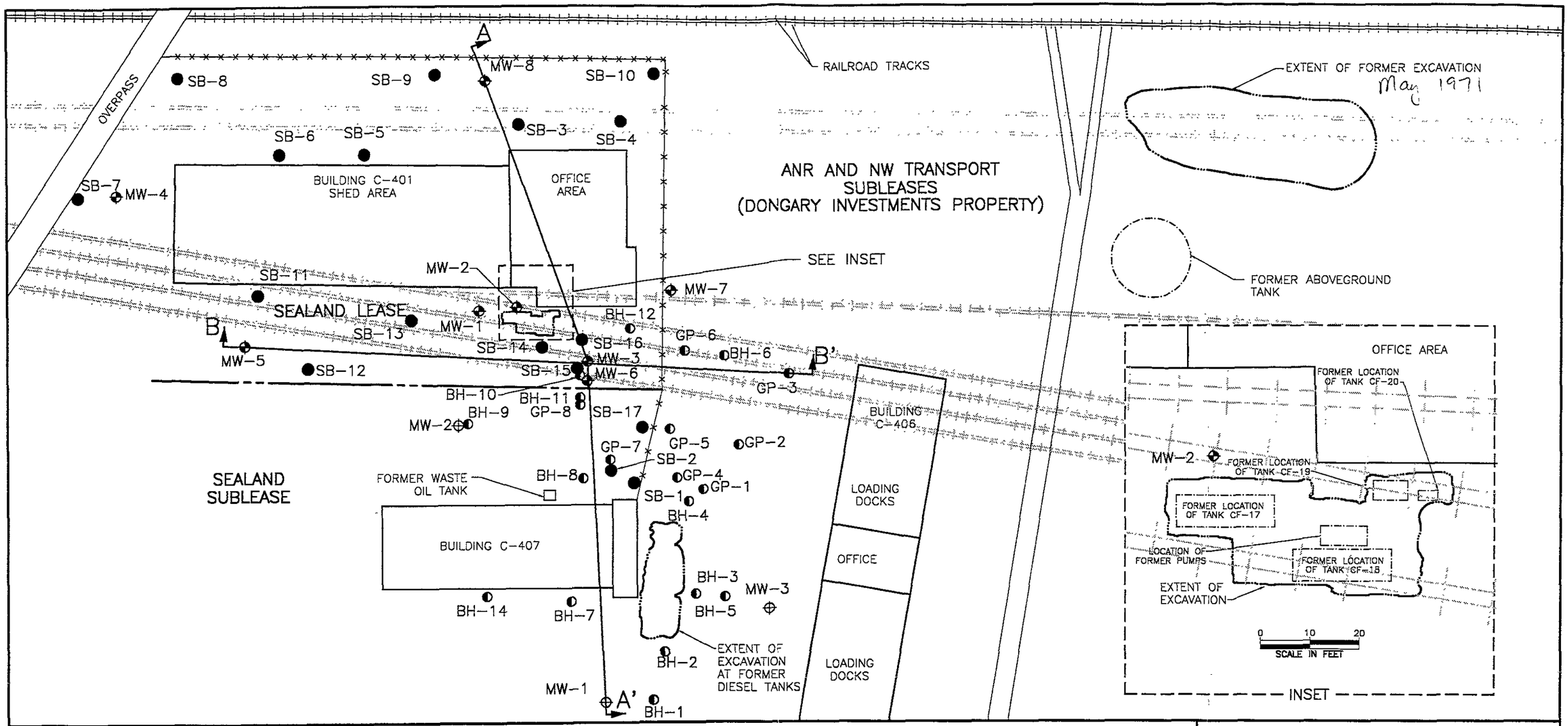
SITE VICINITY MAP

PORT OF OAKLAND
BUILDING C–401
2277 SEVENTH STREET
OAKLAND, CALIFORNIA

PROJECT NO. 10–270

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA

10270B—DWG 5-9-95 R/W 1-1



LEGEND

- EXISTING PORT OF OAKLAND GROUNDWATER MONITORING WELL
- EXISTING DONGARY GROUNDWATER MONITORING WELL
- EXISTING PORT OF OAKLAND SOIL BORING LOCATION
- EXISTING DONGARY SOIL BORING LOCATION
- FORMER RAILROAD TRACK LOCATION (APPROXIMATE) BASED ON AERIAL PHOTOGRAPHS
- A—A' LINE OF HYDROGEOLOGIC CROSS SECTION

SOURCE: PACIFIC AERIAL SURVEYS AERIAL PHOTOGRAPHS

SEPTEMBER 6, 1949 FLIGHT DATE
NEGATIVE AV-28-10-33

OCTOBER 18, 1985 FLIGHT DATE.
NEGATIVE AV-366-6-5

NOVEMBER 29, 1994 FLIGHT DATE.
NEGATIVE AV-4625-7-20

N

0 100 200
SCALE IN FEET

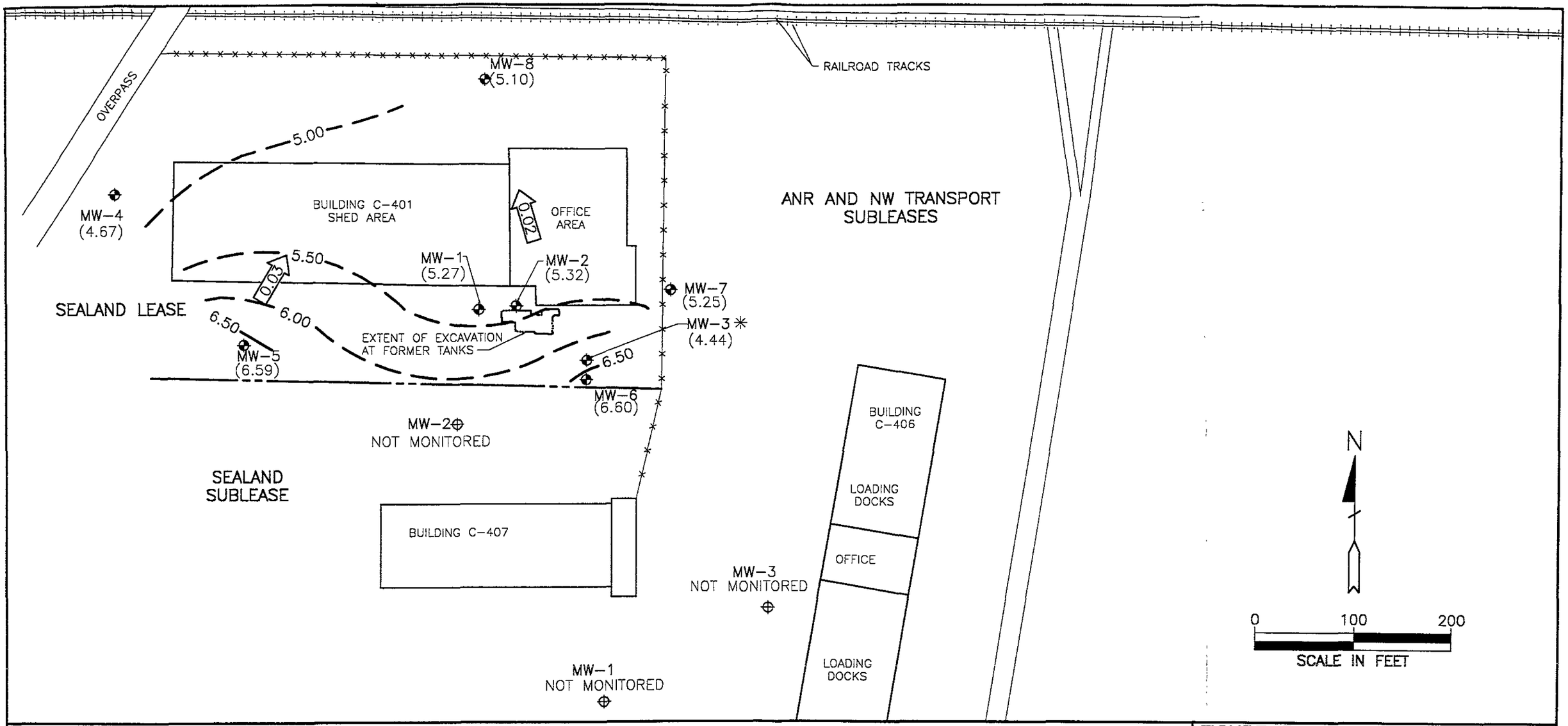
FIGURE 2

SITE PLAN

PORT OF OAKLAND
BUILDING C-401
2277 SEVENTH STREET
OAKLAND, CALIFORNIA

PROJECT NO. 10-270

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA



LEGEND

- ◆ EXISTING PORT OF OAKLAND GROUNDWATER MONITORING WELL
- ⊕ EXISTING DONGARY INVESTMENTS GROUNDWATER MONITORING WELL
- (5.10) GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL
- 5.00 GROUNDWATER ELEVATION CONTOUR IN FEET ABOVE MEAN SEA LEVEL (CONTOUR INTERVAL–0.50 FOOT)
- 0.03 CALCULATED GROUNDWATER GRADIENT DIRECTION AND MAGNITUDE IN FOOT PER FOOT
- * GROUNDWATER ELEVATION NOT USED IN PREPARING CONTOURS

FIGURE 3

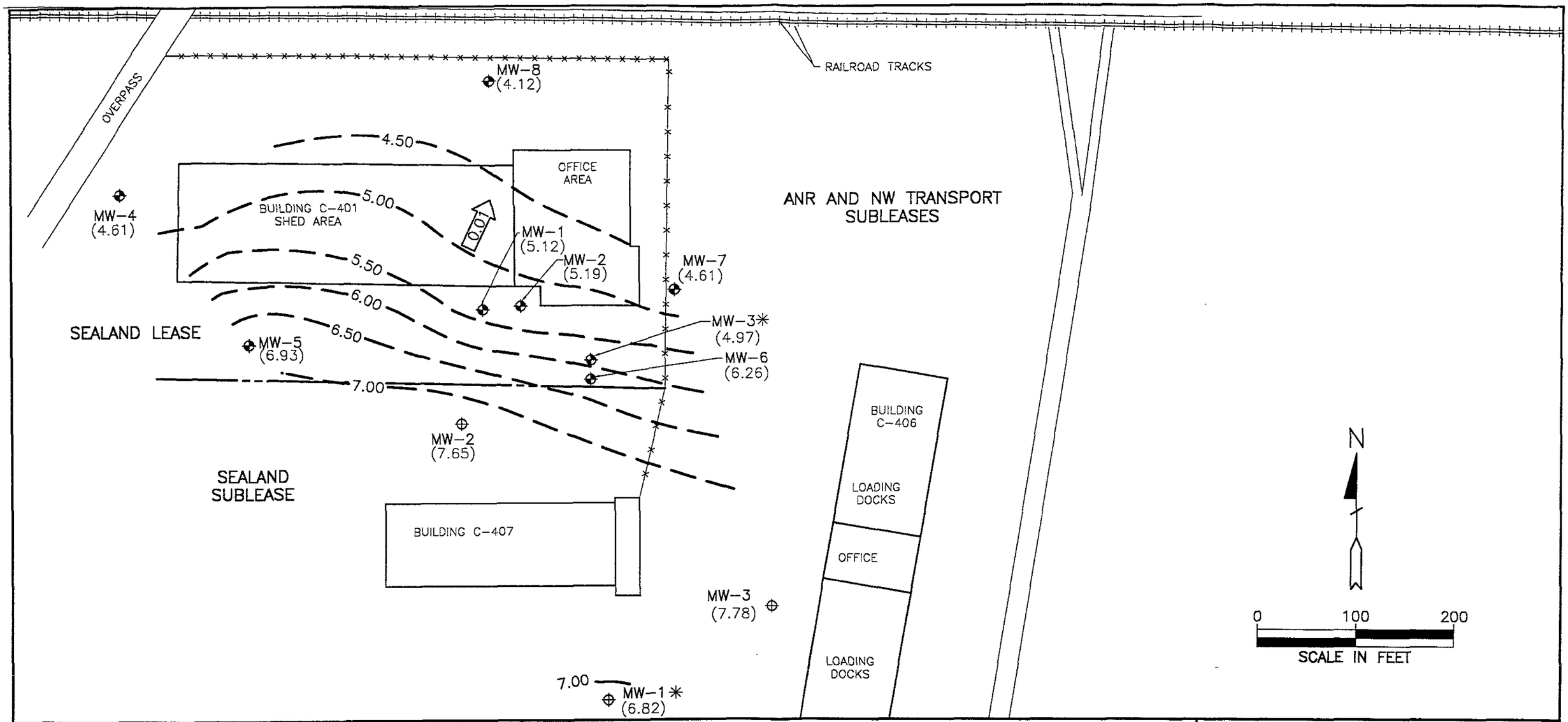
POTENTIOMETRIC GROUNDWATER ELEVATION CONTOUR MAP

SEPTEMBER 6, 1995

PORT OF OAKLAND
BUILDING C–401
2277 SEVENTH STREET
OAKLAND, CALIFORNIA

PROJECT NO. 10–270

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA



LEGEND

- ⊕ EXISTING PORT OF OAKLAND GROUNDWATER MONITORING WELL
- ⊕ EXISTING DONGARY GROUNDWATER MONITORING WELL
- (4.12) GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL
- 4.50 GROUNDWATER ELEVATION CONTOUR IN FEET ABOVE MEAN SEA LEVEL (CONTOUR INTERVAL–0.50 FOOT)
- 0.01 CALCULATED GROUNDWATER GRADIENT DIRECTION AND MAGNITUDE IN FOOT PER FOOT
- * GROUNDWATER ELEVATION NOT USED IN PREPARING CONTOURS

FIGURE 4

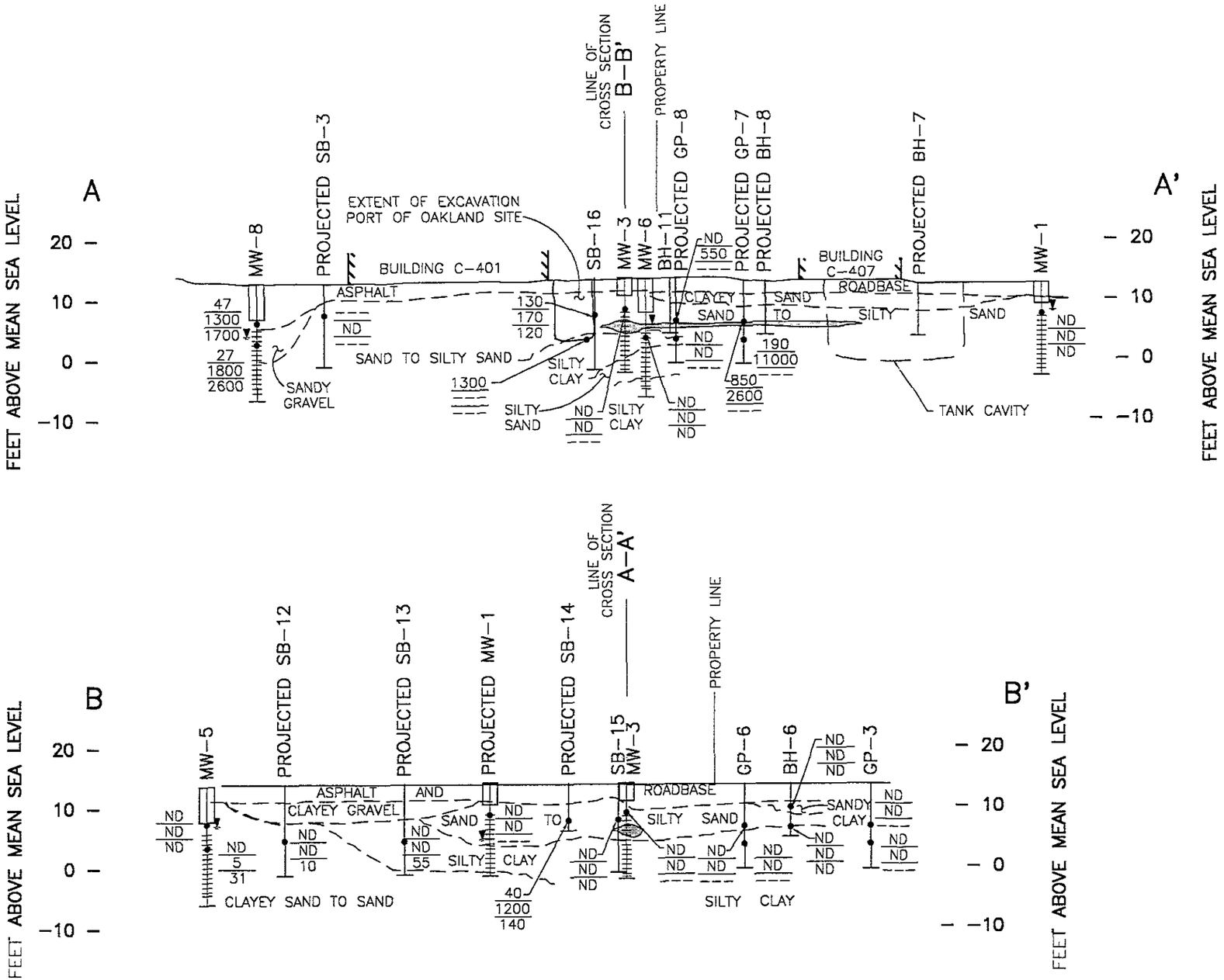
POTENTIOMETRIC GROUNDWATER ELEVATION CONTOUR MAP

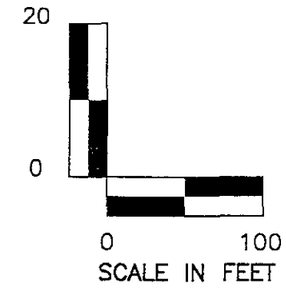
SEPTEMBER 28, 1995

PORT OF OAKLAND
BUILDING C–401
2277 SEVENTH STREET
OAKLAND, CALIFORNIA

PROJECT NO. 10–270

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA





LEGEND

- GROUNDWATER MONITORING WELL SHOWING SEAL AND SCREENED INTERVAL
- SOIL BORING
- GEOLOGIC CONTACT (APPROXIMATE)
- TPH−G / TPH−D / TPH−O — CONCENTRATION OF CONSTITUENTS IN MILLGRAMS PER KILOGRAM
- TPH−G — TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
- TPH−D — TOTAL PETROLEUM HYDROCARBONS AS DIESEL
- TPH−O — TOTAL PETROLEUM HYDROCARBONS AS OIL
- ND — NOT DETECTED ABOVE REPORTED DETECTION LIMIT
- GROUNDWATER ELEVATION AS MEASURED ON SEPTEMBER 28, 1995
- LIQUID−PHASE HYDROCARBON

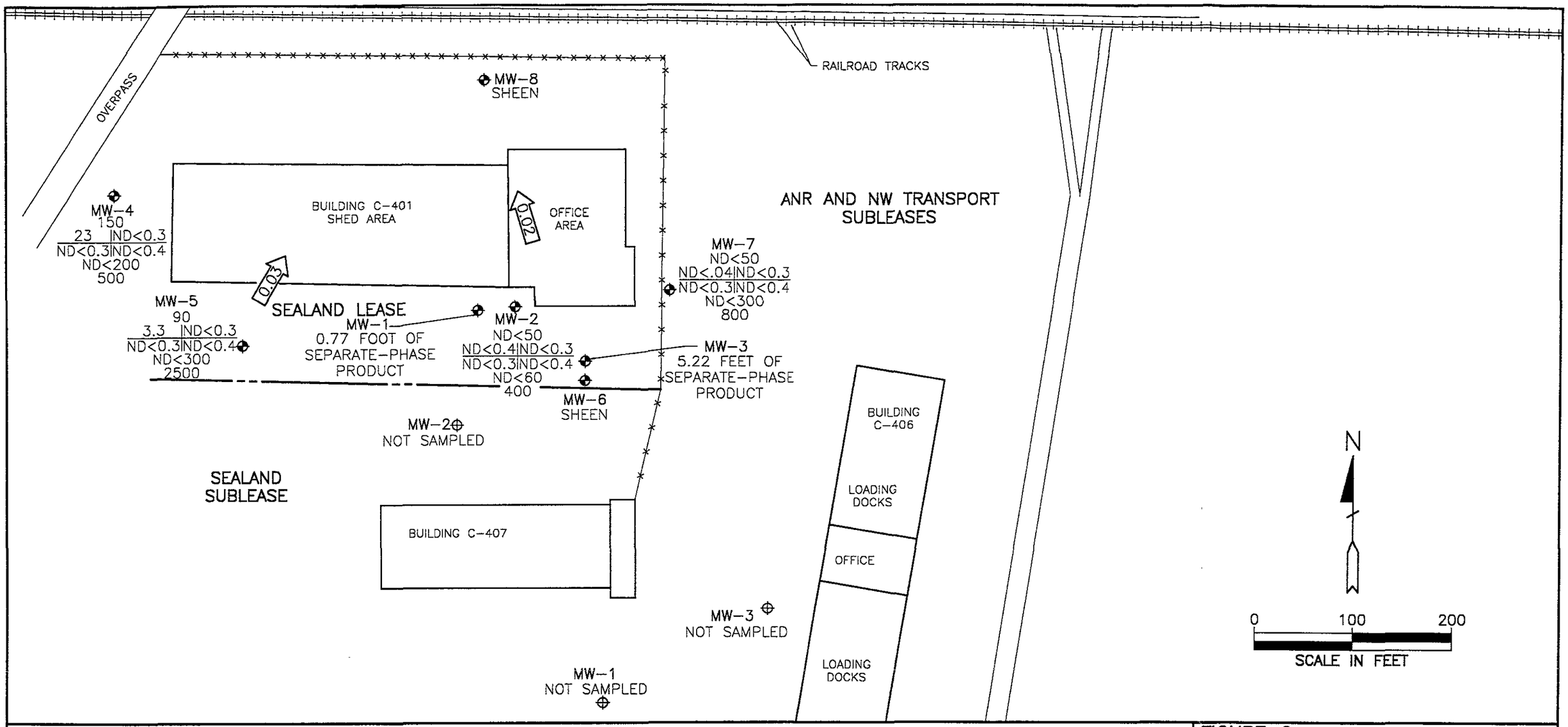
FIGURE 5

HYDROGEOLOGIC CROSS SECTIONS A−A' AND B−B'

PORT OF OAKLAND
BUILDING C−401
2277 SEVENTH STREET
OAKLAND, CALIFORNIA

PROJECT NO. 10−270

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA



LEGEND

- EXISTING PORT OF OAKLAND GROUNDWATER MONITORING WELL
- EXISTING DONGARY GROUNDWATER MONITORING WELL
- TPH-G / B — CONCENTRATION OF CONSTITUENTS IN MICROGRAMS PER LITER
- E / X / TPH-D / TPH-O
- TPH-G — TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
- B — BENZENE
- T — TOLUENE
- E — ETHYLBENZENE
- X — TOTAL XYLENES
- TPH-D — TOTAL PETROLEUM HYDROCARBONS AS DIESEL
- TPH-O — TOTAL PETROLEUM HYDROCARBONS AS OIL
- ND — NOT DETECTED ABOVE REPORTED DETECTION LIMIT
- 0.03 — CALCULATED GROUNDWATER GRADIENT DIRECTION AND MAGNITUDE IN FOOT PER FOOT

FIGURE 6

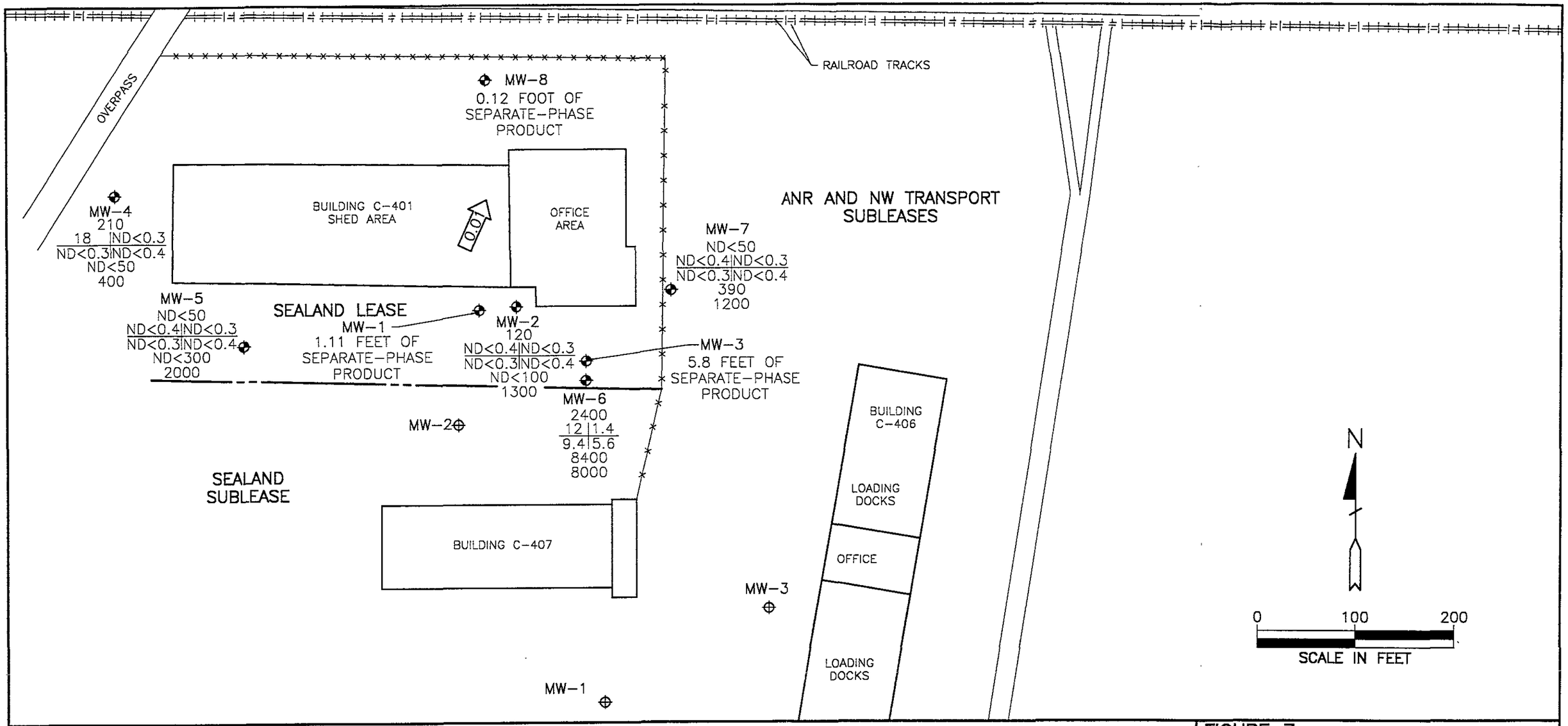
CONCENTRATIONS OF PETROLEUM HYDROCARBONS IN GROUNDWATER

SEPTEMBER 6, 1995

PORT OF OAKLAND
BUILDING C-401
2277 SEVENTH STREET
OAKLAND, CALIFORNIA

PROJECT NO. 10-270

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA



LEGEND

- ⊕ EXISTING PORT OF OAKLAND GROUNDWATER MONITORING WELL
- ⊕ EXISTING DONGARY GROUNDWATER MONITORING WELL
- TPH-G / B — CONCENTRATION OF CONSTITUENTS IN MICROGRAMS PER LITER
- E X TPH-D TPH-G — TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
- B — BENZENE
- T — TOLUENE
- E — ETHYLBENZENE
- X — TOTAL XYLENES
- TPH-D — TOTAL PETROLEUM HYDROCARBONS AS DIESEL
- TPH-O — TOTAL PETROLEUM HYDROCARBONS AS OIL
- ND — NOT DETECTED ABOVE REPORTED DETECTION LIMIT
- ⟵ 0.01 — CALCULATED GROUNDWATER GRADIENT DIRECTION AND MAGNITUDE IN FOOT PER FOOT

FIGURE 7

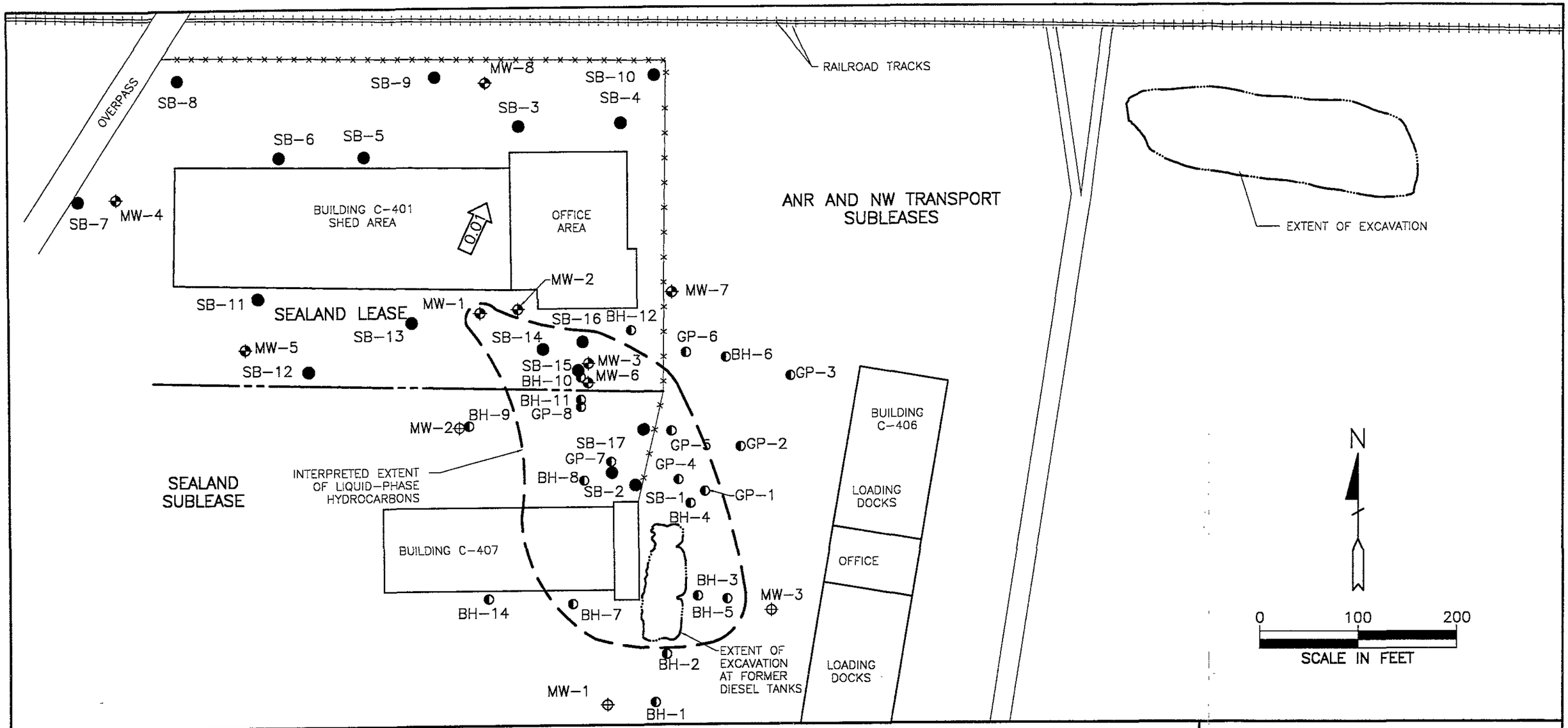
CONCENTRATIONS OF PETROLEUM HYDROCARBONS IN GROUNDWATER

SEPTEMBER 28, 1995

PORT OF OAKLAND
BUILDING C-401
2277 SEVENTH STREET
OAKLAND, CALIFORNIA

PROJECT NO. 10-270

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA



LEGEND

- EXISTING PORT OF OAKLAND GROUNDWATER MONITORING WELL
- EXISTING DONGARY GROUNDWATER MONITORING WELL
- EXISTING PORT OF OAKLAND SOIL BORING LOCATION
- EXISTING DONGARY SOIL BORING LOCATION
- 0.01 CALCULATED GROUNDWATER GRADIENT DIRECTION AND MAGNITUDE IN FOOT PER FOOT AS MEASURED ON SEPTEMBER 28, 1995

SOURCE:

PORT OF OAKLAND WELLS AND BORINGS
SEPTEMBER 28, 1995 MONITORING EVENT

DONGARY "BH" BORINGS
DECEMBER 1992 (RAMCON 1993)

DONGARY "GP" BORINGS"
MAY 1995 (GROUNDWATER TECHNOLOGY, INC. 1995)

FIGURE 8

INTERPRETED LIQUID-PHASE HYDROCARBONS IN GROUNDWATER

PORT OF OAKLAND
BUILDING C-401
2277 SEVENTH STREET
OAKLAND, CALIFORNIA

PROJECT NO. 10-270

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA

APPENDIX A

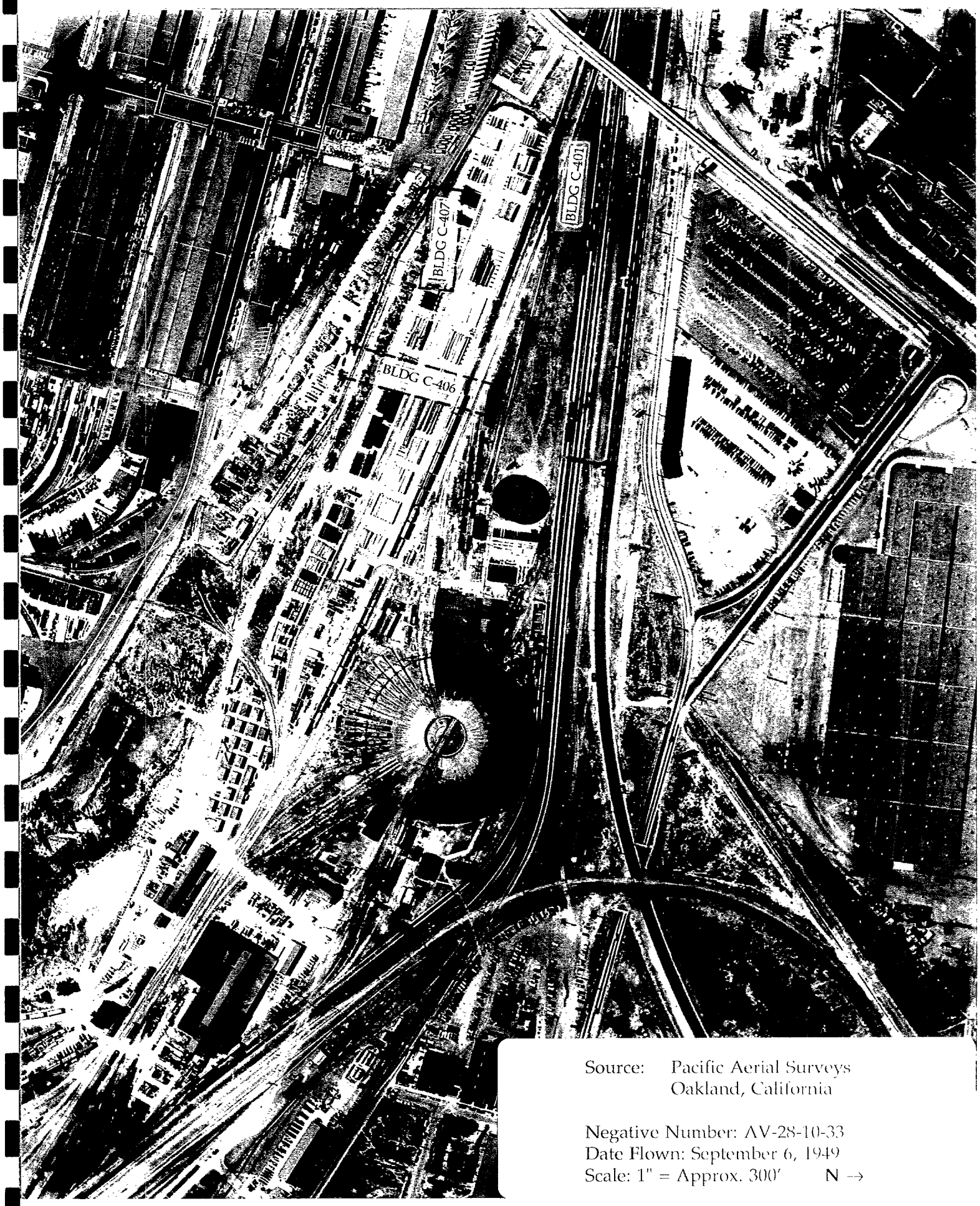
AERIAL PHOTOGRAPHS

Source: Pacific Aerial Surveys
Oakland, California

Negative number AV-3661-6-5
Date flown October 18, 1989
Scale: 1" = Approx. 300' N →

Source: Pacific Aerial Surveys
Oakland, California

Negative Number: AV-4625-7-20
Date Flown: November 29, 1994
Scale: 1" = Approx. 300' N →



Source: Pacific Aerial Surveys
Oakland, California

Negative Number: AV-28-10-33
Date Flown: September 6, 1949
Scale: 1" = Approx. 300' N →

Source: Pacific Aerial Surveys
Oakland, California

Negative number AV-337-04-05
Date flown July 3, 1959
Scale: 1" = Approx. 300' N →

APPENDIX B

WELL INSTALLATION PERMIT

ZONE 7 WATER AGENCY

5997 PARKSIDE DRIVE PLEASANTON, CALIFORNIA 94588 VOICE (510) 484-2600
FAX (510) 462-3914

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT Sea Land Lease
22777 Seventh St
Oakland CA

CLIENT
Name Port of Oakland
Address 530 Water St Voice
City Oakland CA Zip 94607

APPLICANT
Name ALISTO ENGINEERING
C Reinhojmer Fax 510 295 1823
Address 1575 Treat #201 Voice 510 295 1650
City Walnut Creek CA Zip 94598

TYPE OF PROJECT

Well Construction		Geotechnical Investigation	
Cathodic Protection	___	General	___
Water Supply	___	Contamination	___
Monitoring	X	Well Destruction	___

PROPOSED WATER SUPPLY WELL USE
Domestic ___ Industrial ___ Other ___
Municipal ___ Irrigation ___

DRILLING METHOD:
Mud Rotary ___ Air Rotary ___ Auger X
Cable ___ Other ___

DRILLER'S LICENSE NO. Mitchell Drilling C-57 672617

WELL PROJECTS

Drill Hole Diameter	8	in.	Maximum Depth	25	ft.
Casing Diameter	2	in.	Number	5	
Surface Seal Depth	8	ft.			

GEOTECHNICAL PROJECTS

Number of Borings	___		Maximum Depth	___	ft.
Hole Diameter	___	in.			

ESTIMATED STARTING DATE 8-24-95
ESTIMATED COMPLETION DATE 8-25-95

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No 73-68.

APPLICANT'S SIGNATURE [signature] Date 8-15-95

FOR OFFICE USE

PERMIT NUMBER 95534
LOCATION NUMBER ___

PERMIT CONDITIONS

Circled Permit Requirements Apply

(A.) GENERAL
1. A permit application should be submitted so as to arrive at the Zone 7 office five days prior to proposed starting date.
2. Submit to Zone 7 within 60 days after completion of permitted work the original Department of Water Resources Water Well Drillers Report or equivalent for well Projects, or drilling logs and location sketch for geotechnical projects.
3. Permit is void if project not begun within 90 days of approval date.

(B.) WATER WELLS, INCLUDING PIEZOMETERS
1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.

C. GEOTECHNICAL. Backfill bore hole with compacted cuttings or heavy bentonite and upper two feet with compacted material. In areas of known or suspected contamination, tremied cement grout shall be used in place of compacted cuttings.

D. CATHODIC. Fill hole above anode zone with concrete placed by tremie.

E. WELL DESTRUCTION. See attached.

Approved Wyman Hong Date 24 Aug 95
Wyman Hong

91992

APPENDIX C

FIELD PROCEDURES FOR DRILLING, SOIL SAMPLING, AND GROUNDWATER MONITORING WELL INSTALLATION

FIELD PROCEDURES
FOR
DRILLING, SOIL SAMPLING,
AND GROUNDWATER MONITORING WELL INSTALLATION

Drilling Procedures

The soil borings were drilled using 8-inch-diameter, continuous-flight, hollow-stem augers. To avoid cross-contamination, drilling equipment in contact with potentially contaminated material was decontaminated by steam cleaning before and after each use. Decontamination fluids were placed into DOT-approved drums for disposal.

Soil Sampling Procedures

During drilling, samples were collected at approximate 5-foot intervals below grade. Before and after each use, the sampler was washed using a phosphate-free detergent followed by tap water and deionized water rinses. Soil sampling was accomplished using a California-modified split-spoon sampler lined with brass tubes. A 140-pound slide hammer falling 30 inches was used to advance the sampler 18 inches ahead of the hollow-stem augers into undisturbed soil, and blow counts were recorded for every 6 inches of penetration to evaluate the consistency of the soil.

After retrieval from the augers, the sampler was split, the sample tubes removed, and a soil sample was selected for possible chemical analysis. The sample was retained within the brass 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 soil sample was immediately placed in a waterproof plastic bag and stored in a cooler containing blue or dry ice. Possession of the soil samples was documented from the field to a state-certified analytical laboratory by using a chain of custody form.

Soil samples and, when representative, drill cuttings were described by Alisto personnel using the Unified Soil Classification System, and field estimates of soil type, color, moisture, density, and consistency were noted on the boring logs. The logs were reviewed by a civil engineer registered in the State of California.

Groundwater Monitoring Well Installation

Construction of the groundwater monitoring wells was based on the stratigraphy encountered in the soil borings. The well construction materials were introduced into the boring through the hollow-stem augers to centralize the well casing and minimize the possibility of native material entering the annular space of the well.

The 2-inch-diameter PVC well casing consisted of 0.010-inch slotted casing from the bottom of the boring to a depth interval above the highest anticipated water level, and solid casing was installed from the top of the slotted casing to approximately 4 inches below grade.

The annular space surrounding the screened portion was backfilled with No. 3 Lonestar sand (filter pack) to approximately 0.5 to 1 foot above the top of the screened section. An approximately 0.5-foot-thick interval of bentonite pellets was added to the annulus above the filter pack and hydrated with approximately 2 gallons of deionized water to minimize intrusion of well seal into the filter pack. A 0.5-foot-thick interval of concrete was placed above the bentonite and a traffic-rated utility box was installed around the top of the well casing. An expanding, watertight well cap and lock were installed on the top of the well casing to secure the well from surface fluid and tampering.

APPENDIX D

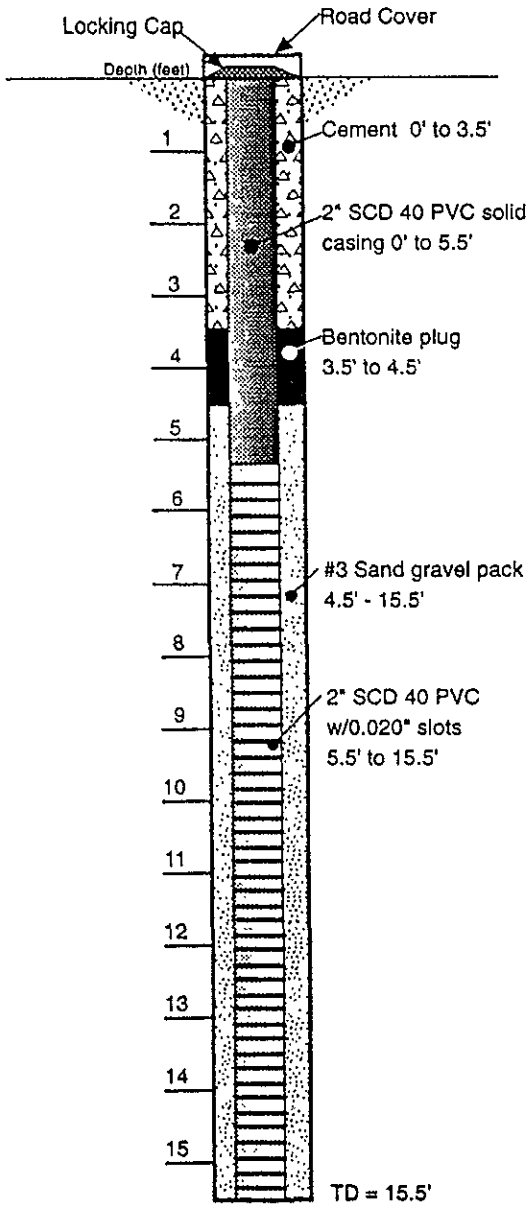
BORING LOGS AND WELL CONSTRUCTION DETAILS

Port of Oakland-2277 Seventh St.

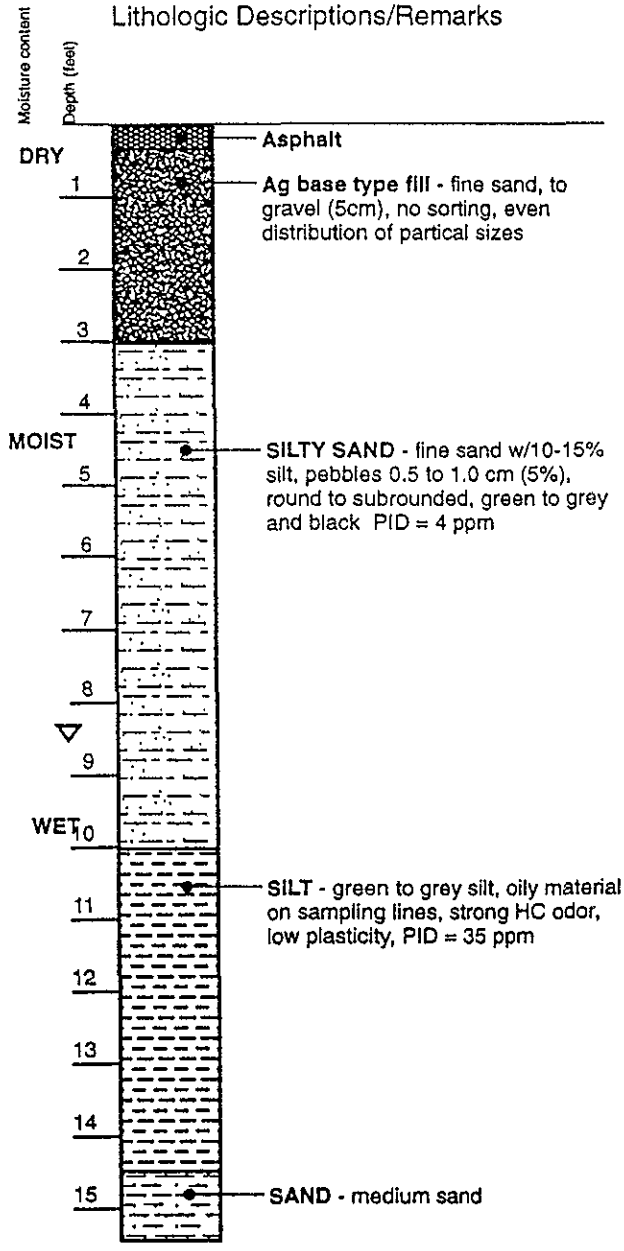
Bore Hole MW-1

Date 5/16/94
Drilling Method HS Auger
Sampling Method 18" Split spoon
Surface Elevation 14.38
Recorded By JC Borrego
Registered Geologist

Well As-Built



Lithologic Descriptions/Remarks



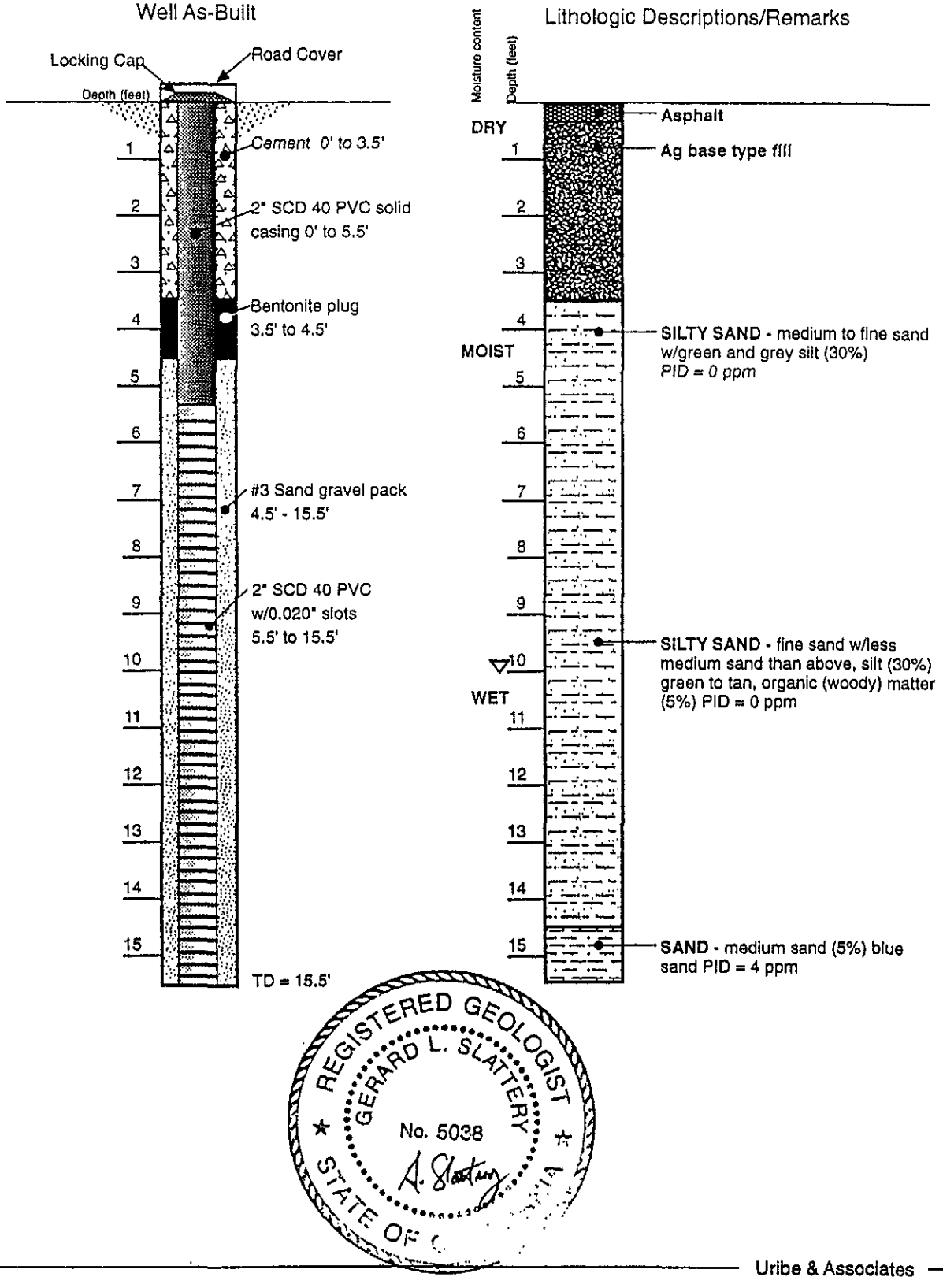
96-209 MW-1 11/10/94 DY FH

Uribe & Associates

Port of Oakland-2277 Seventh St.

Bore Hole MW-2

Date 5/16/94
Drilling Method HS Auger
Sampling Method 18" Split spoon
Surface Elevation 14.38
Recorded By JC Borrego
Registered Geologist



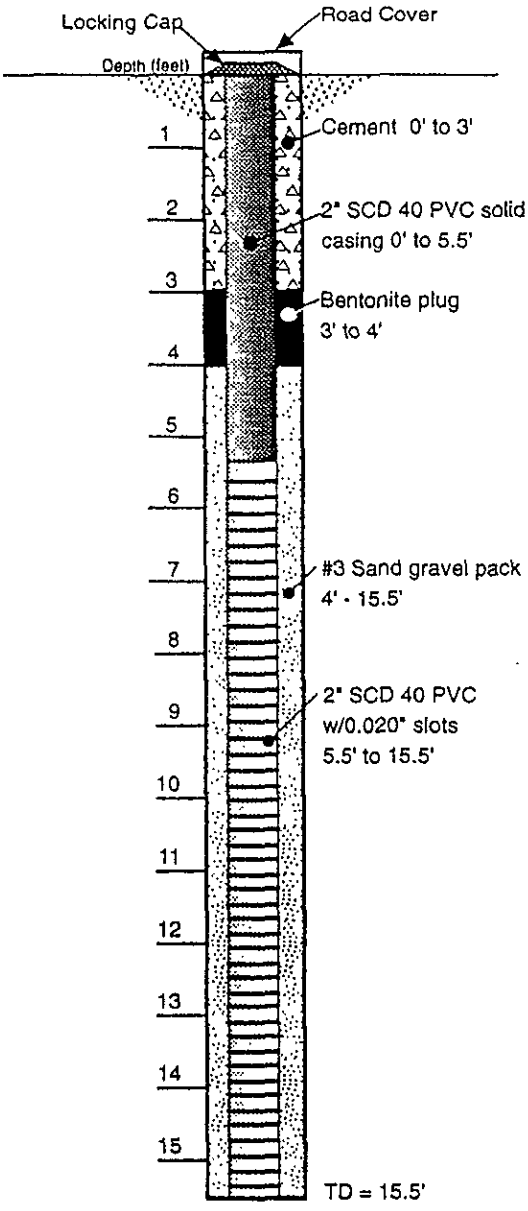
96-209 MW-2 9/27/94 DY FH

Port of Oakland-2277 Seventh St.

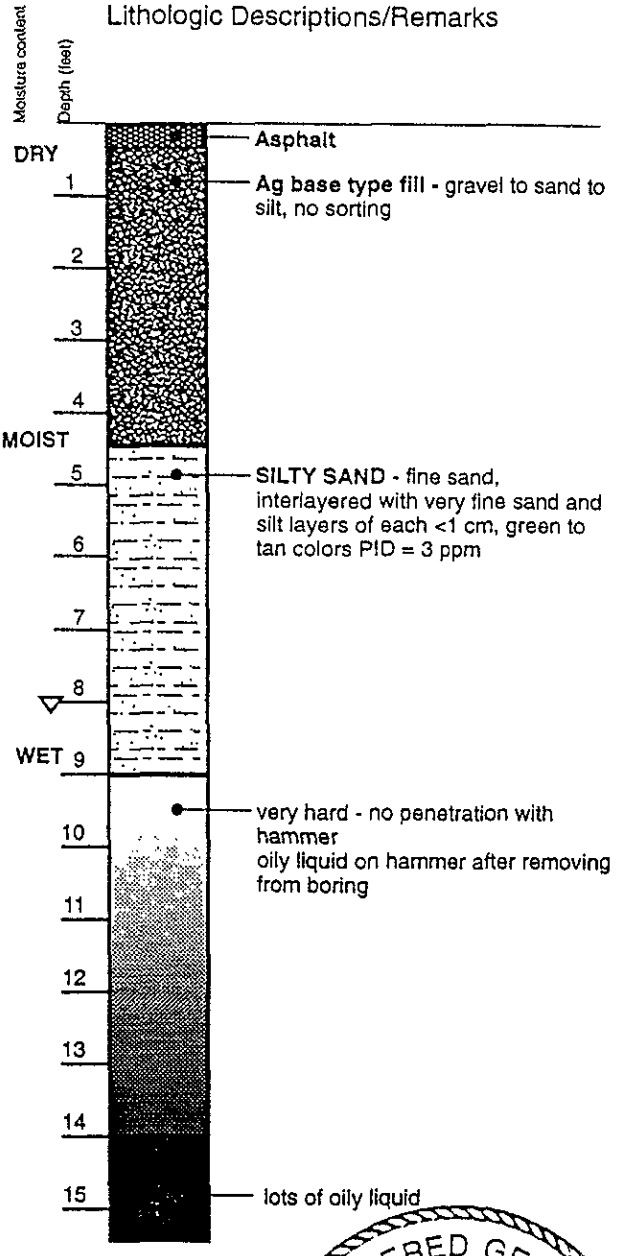
Bore Hole MW-3

Date 5/16/94
Drilling Method HS Auger
Sampling Method 18" Split spoon
Surface Elevation 14.24
Recorded By JC Borrego
Registered Geologist

Well As-Built



Lithologic Descriptions/Remarks



REGISTERED GEOLOGIST
GERARD L. SLATTERY
No. 5028
STATE OF CALIFORNIA

95-209 MW-3 9/27/94 DY FH

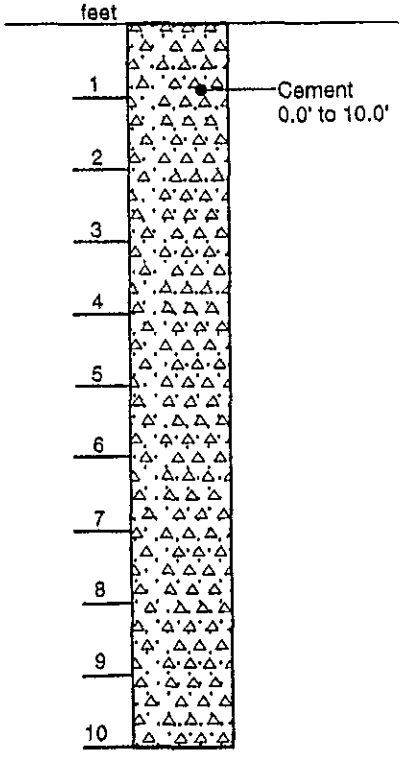
Uribe & Associates

Port of Oakland-2277 Seventh St.

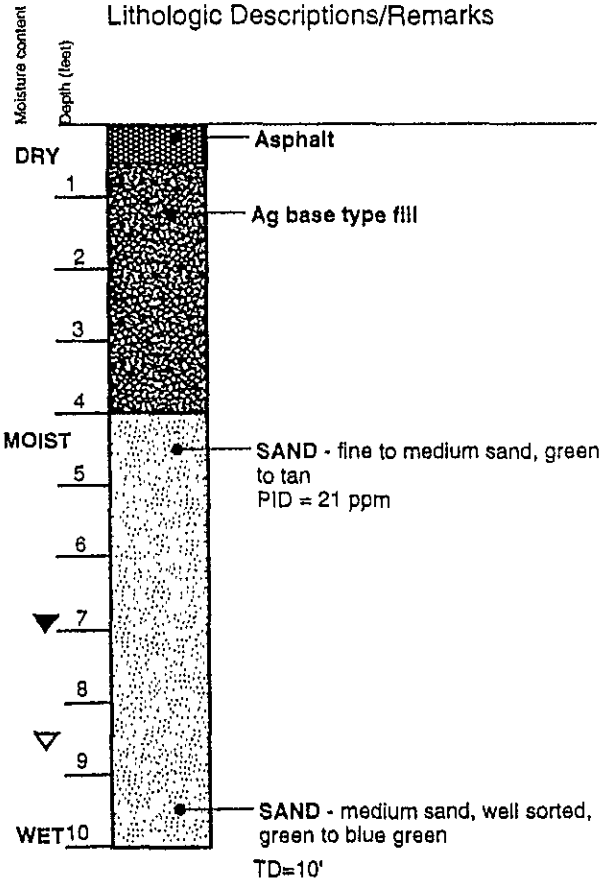
Bore Hole SB-1

Date 5/16/94
Drilling Method HS Auger
Sampling Method 18" Split spoon
Surface Elevation
Recorded By JC Borrego
Registered Geologist

Boring Abandonment



Lithologic Descriptions/Remarks



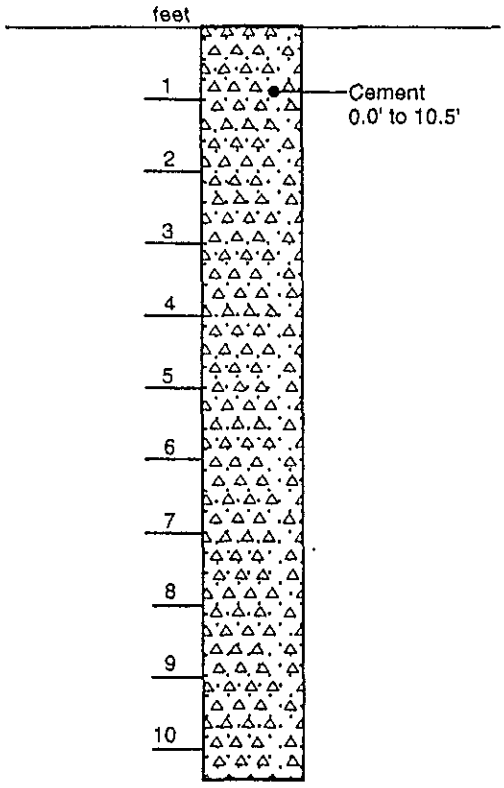
96-209 SB-1 9/27/94 DY FH

Port of Oakland-2277 Seventh St.

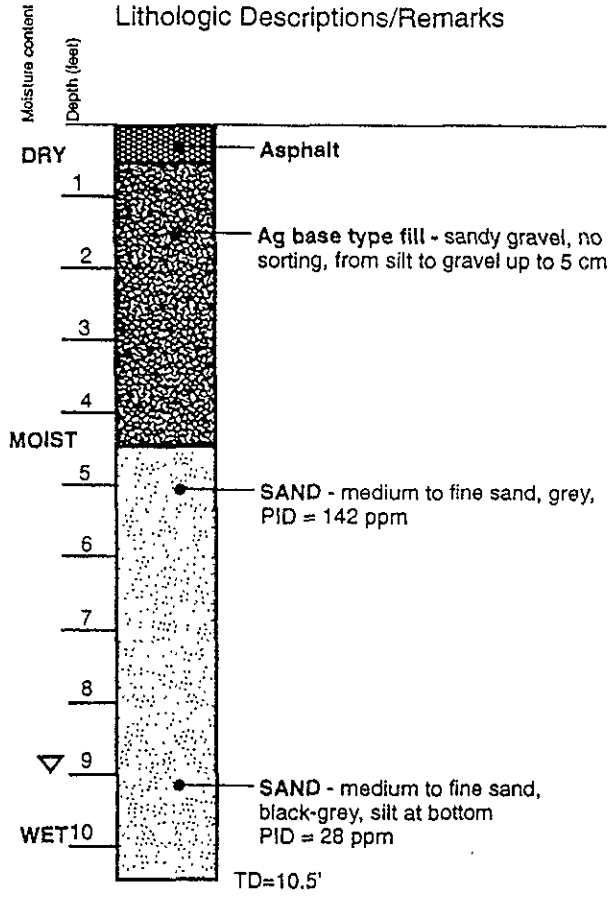
Bore Hole SB-2

Date 5/17/94
Drilling Method HS Auger
Sampling Method 18" Split spoon
Surface Elevation
Recorded By JC Borrego
Registered Geologist

Boring Abandonment



Lithologic Descriptions/Remarks



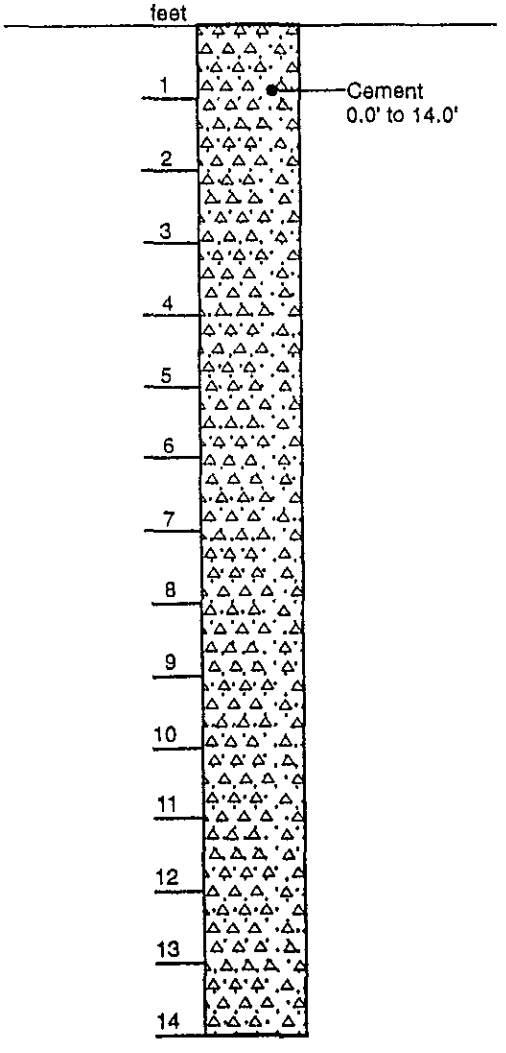
96-209 SB-2 11/10/94 DY FH

Port of Oakland-2277 Seventh St.

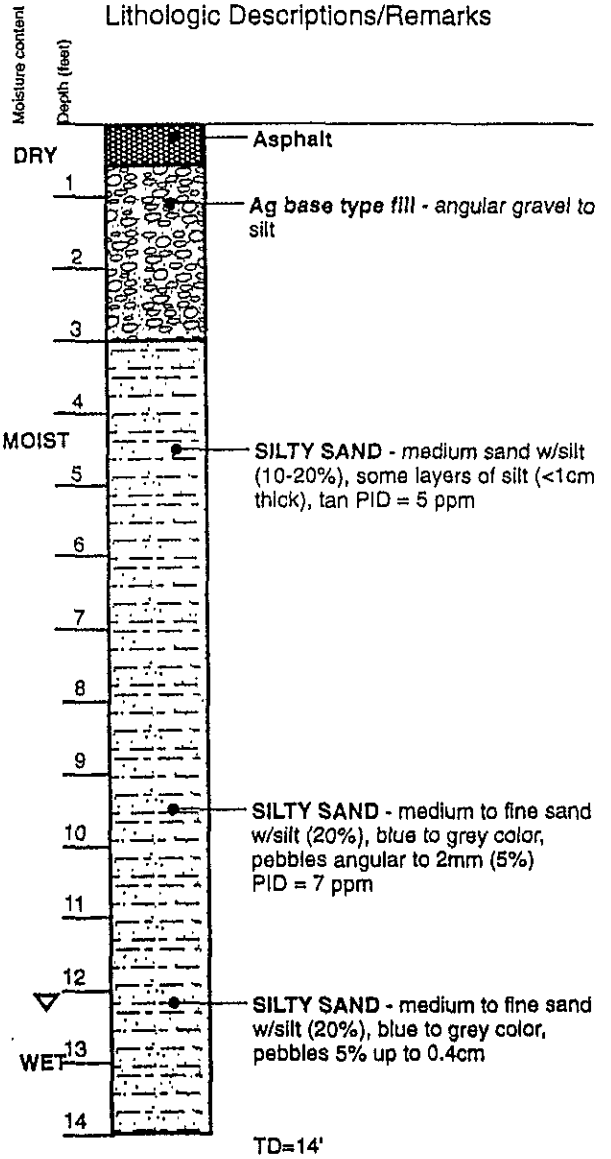
Bore Hole SB-3

Date 5/17/94
Drilling Method HS Auger
Sampling Method 18" Split spoon
Surface Elevation
Recorded By JC Borrego
Registered Geologist

Boring Abandonment



Lithologic Descriptions/Remarks



TD=14'

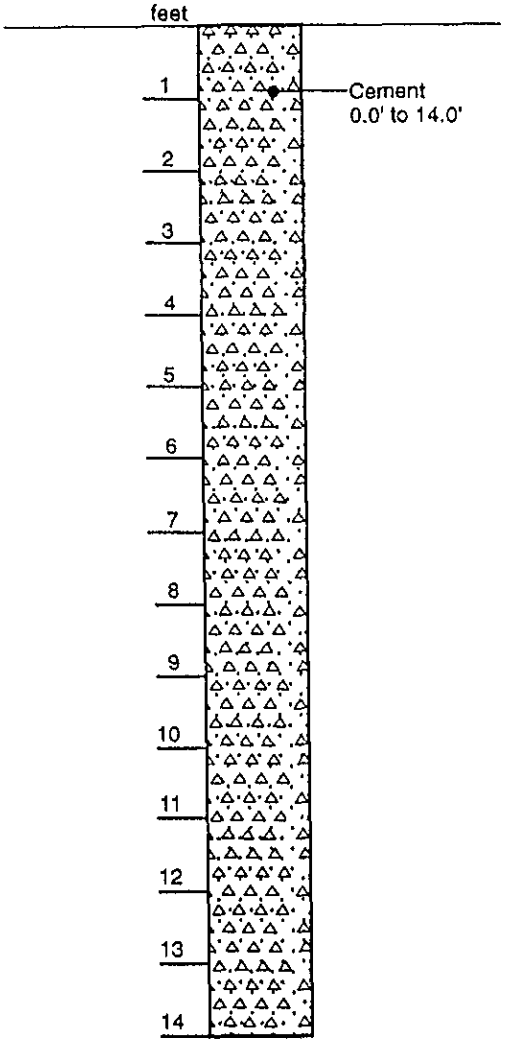
96-209 SB-3 9/27/94 DY FH

Port of Oakland-2277 Seventh St.

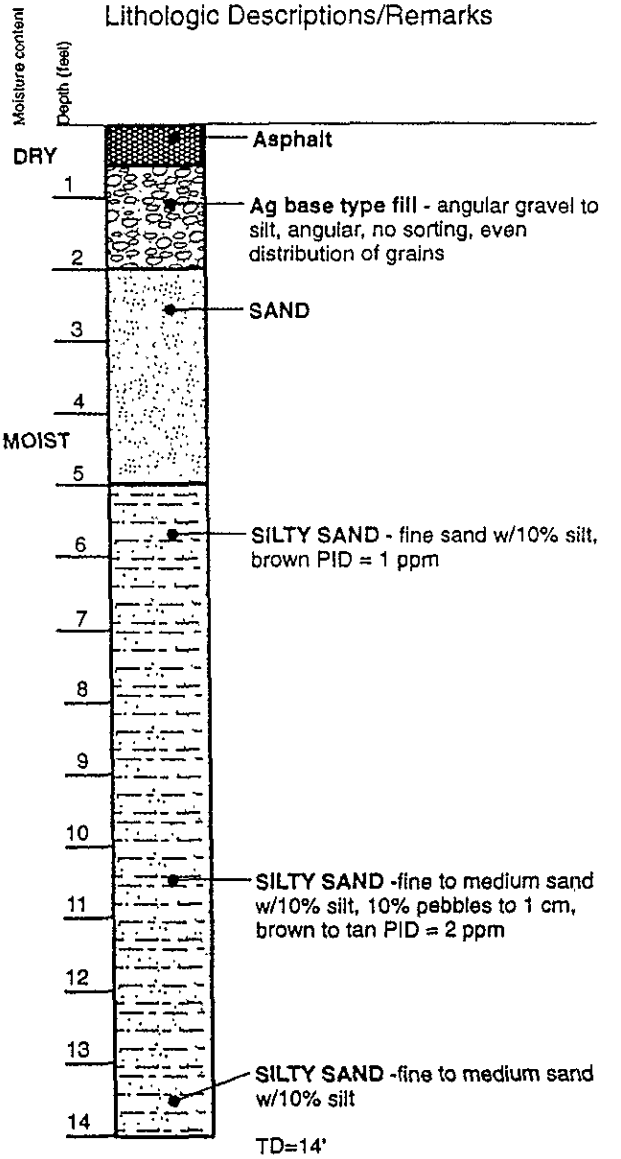
Bore Hole SB-4

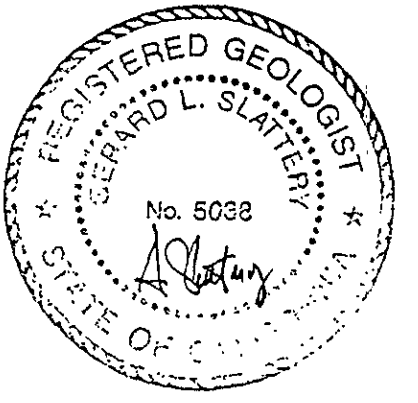
Date 5/17/94
Drilling Method HS Auger
Sampling Method 18" Split spoon
Surface Elevation
Recorded By JC Borrego
Registered Geologist

Boring Abandonment



Lithologic Descriptions/Remarks





86-209 SB-4 11/10/94 DY FH

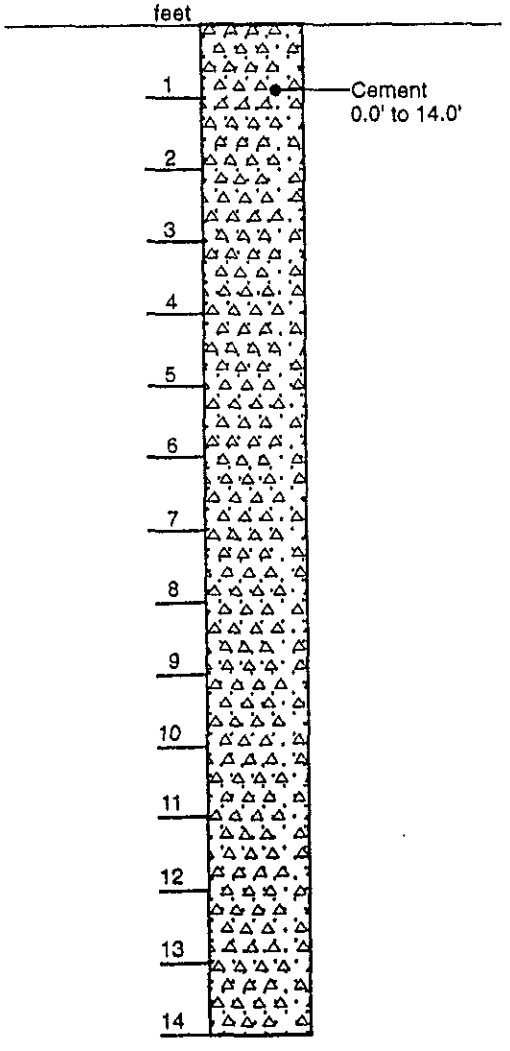
Uribe & Associates

Port of Oakland-2277 Seventh St.

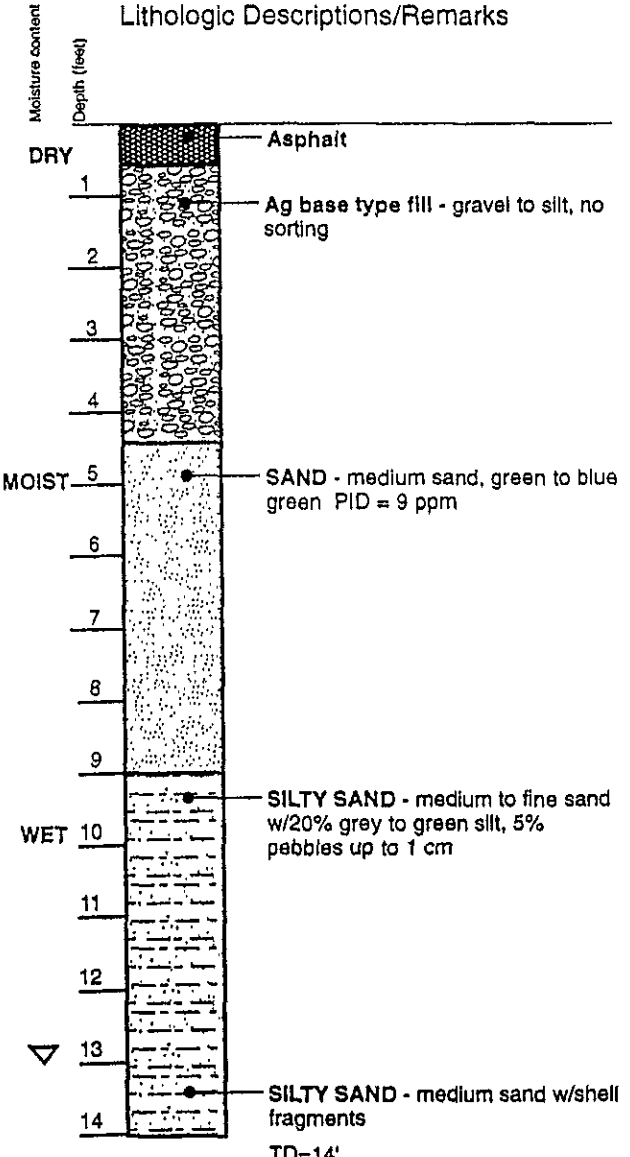
Bore Hole SB-5

Date 5/17/94
Drilling Method HS Auger
Sampling Method 18" Split spoon
Surface Elevation
Recorded By JC Borrego
Registered Geologist

Boring Abandonment



Lithologic Descriptions/Remarks



TD=14'

REGISTERED GEOLOGIST
GERARD L. SLATTERY
No. 5038
STATE OF CALIFORNIA

96-209 SB-5 9/27/94 DY FH

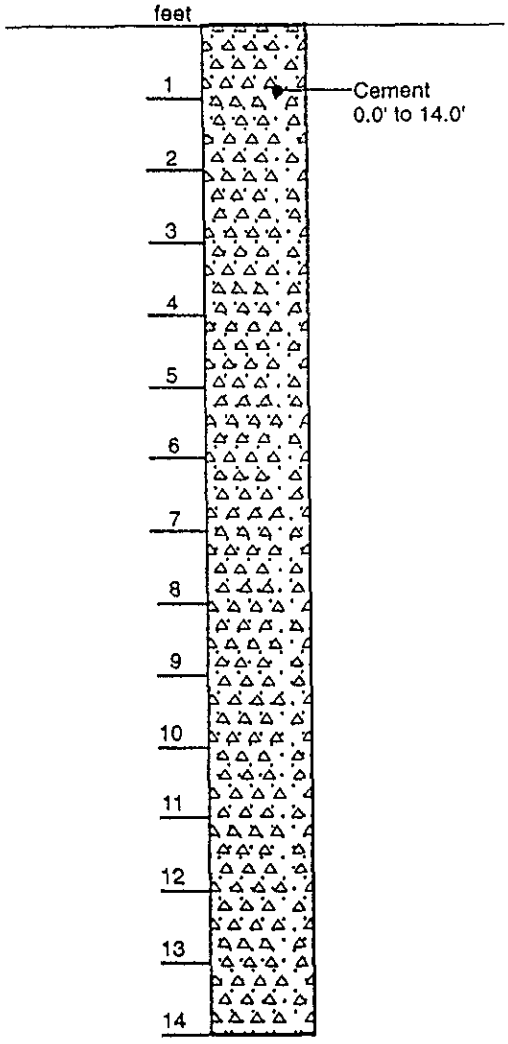
Uribe & Associates

Port of Oakland-2277 Seventh St.

Bore Hole SB-6

Date 5/17/94
Drilling Method HS Auger
Sampling Method 18" Split spoon
Surface Elevation
Recorded By JC Borrego
Registered Geologist

Boring Abandonment



Lithologic Descriptions/Remarks

Moisture content | Depth (feet)

DRY 1 — **Asphalt**

2 — **Ag base type fill** - angular gravel to silt, no sorting

3

4

MOIST 5 — **SANDY SILT** - brown silt w/5% fine sand PID = 24 ppm

6

7

8

9

10 — **SILTY SAND** - medium to fine sand w/20% grey to green silt, 5% pebbles up to 1 cm PID = 3 ppm

▽ WET 11

12

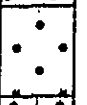
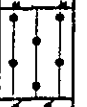
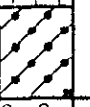
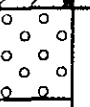
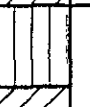
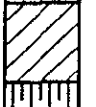
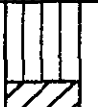
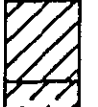
13

14 — **SAND** - medium to fine sand w/shell fragments green to blue-green color

TD=14'

96-209 SB-6 9/27/94 DY FH

GEOLOGIC LEGEND

COARSE-GRAINED SOILS	GRAVELS more than 1/2 of coarse fraction > No. 4 Sieve	LITTLE OR NO FINES		GW	Well-graded gravels, gravel-sand mixtures, little or no fines
				GP	Poorly-graded gravels, gravel-sand mixtures
		APPRECIABLE NO FINES		GM	Silty gravels, gravel-sand-silt mixtures
				GC	Clayey gravels, gravel-sand-clay mixtures
	SANDS more than 1/2 of coarse fraction < No. 4 Sieve	LITTLE OR NO FINES		SW	Well-graded sands, gravelly sands, little or no fines
				SP	Poorly-graded sands, gravelly sands, little or no fines
		APPRECIABLE NO FINES		SM	Silty sands, sand-silt mixtures
				SC	Clayey sands, sand-clay mixtures
FINE-GRAINED SOILS	SILTS AND CLAYS Liquid limit < 50			ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity
				CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays
				OL	Organic silts and organic silty clays of low plasticity
	SILTS AND CLAYS Liquid limit > 50			MH	Inorganic silts, micaceous or diatomoceous fine sandy or silty soils, elastic silts
				CH	Inorganic clays of high plasticity, fat clays
				OH	Organic clays of medium to high plasticity, organic silts
HIGHLY ORGANIC SOILS				Pt	Peat and other highly organic soils

SYMBOL LEGEND:

- Cement
- Sand
- Bentonite
- Driven Interval of Soil Sample
- Sample preserved for possible analysis
- No sample recovered
- Stabilized water level
- Groundwater level encountered during drilling

LEGEND TO BORING LOGS

PORT OF OAKLAND
BUILDING C-401
2277 SEVENTH STREET
OAKLAND, CALIFORNIA

PROJECT NO. 10-270

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA

10287J - DWG 8-5-95 MAP 1=1

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA

LOG OF BORING SB-7

SEE SITE PLAN

ALISTO PROJECT NO: *10-270-01* DATE DRILLED: *05/11/95*

CLIENT: *Port of Oakland*

LOCATION: *2277 Seventh Street, Oakland, California*

DRILLING METHOD: *Cuttingless*

DRILLING COMPANY: *Soils Exploration Srv.* CASING ELEVATION: *N/A*

LOGGED BY: *Chris Reinheimer* APPROVED BY: *Al Sevilla*

BLOWS/6 IN.	PID VALUES	WELL DIAGRAM	DEPTH feet	SAMPLES	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION
							Asphaltic concrete/roadbase.
						SW	gravelly SAND: coarse-grained sand.
N/A	0					CL	sandy CLAY: moderate yellow/brown, damp, medium stiff; medium- to coarse-grained sand.
N/A	0		5			SC	clayey SAND: medium brown, damp, loose; medium- to coarse-grained sand.
N/A	0					SP	SAND: medium tan, wet, loose; medium- to coarse-grained sand; shell fragments to 2%.
N/A	NM		10			SC	clayey SAND: gray/black, wet; organics to 10%; shells to 2%; rare sand to 2%.
			15				Boring terminated at 15 feet.
			20				
			25				
			30				

Neat Cement

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA

LOG OF BORING SB-8

SEE SITE PLAN

ALISTO PROJECT NO: *10-270-01* DATE DRILLED: *05/11/95*

CLIENT: *Port of Oakland*

LOCATION: *2277 Seventh Street, Oakland, California*

DRILLING METHOD: *Cuttingless*

DRILLING COMPANY: *Solls Exploration Srv.* CASING ELEVATION: *N/A*

LOGGED BY: *Chris Reinheimer* *APPROVED BY: Al Sevilla*

BLOWS/6 IN.	PID VALUES	WELL DIAGRAN	DEPTH feet	SAMPLES	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION
							Asphaltic concrete/roadbase.
						GW	GRAVEL with sand-clay mixtures.
N/A	0					GC	clayey GRAVEL: dark brown, damp, hard; coarse-grained sand to 5%.
N/A	0		5			CL	silty CLAY: mottled tan and dark brown, damp, soft; root traces to 2%; gravel to 1 cm approximately 2%.
N/A	0.2					SW	gravelly SAND: dark gray/black, moist to wet; organic fragments (wood) to 10%; oily residue on gravel.
N/A	NM	Neat Cement	10			GW	GRAVEL-sand matrix: dark gray/black, wet; coarse-grained sand; oily globs. Sheen on samples.
			15				Boring terminated at 15 feet.
			20				
			25				
			30				

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA

LOG OF BORING SB-9

SEE SITE PLAN

ALISTO PROJECT NO: *10-270-01* DATE DRILLED: *05/11/95*

CLIENT: *Port of Oakland*

LOCATION: *2277 Seventh Street, Oakland, California*

DRILLING METHOD: *Cuttingless*

DRILLING COMPANY: *Solls Exploration Srv.* CASING ELEVATION: *N/A*

LOGGED BY: *Chris Reinhelmer* APPROVED BY: *Al Sevilla*

BLOWS/6 IN.	PID VALUES	DEPTH feet	SAMPLES	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION
						Asphaltic concrete/roadbase.
					SW	sandy GRAVEL: medium tan, dry.
N/A	0	5	■		GC	clayey GRAVEL: dark gray/brown, damp to moist, dense; wood fragments present.
N/A	0.2		■		CL	silty CLAY: mottled dark brown and green/tan, damp; organics to 2%.
N/A	0.2	10	■			Same: moist.
N/A	NM	15	■		SP	SAND: gray, wet to saturated; fine- to medium-grained sand; shells to 2%.
						Boring terminated at 15 feet.
		20				
		25				
		30				

WELL DIAGRAM: *Neat Cement*

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA

LOG OF BORING SB-11

SEE SITE PLAN

ALISTO PROJECT NO: *10-270-01* DATE DRILLED: *05/11/95*

CLIENT: *Port of Oakland*

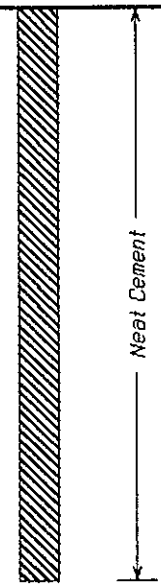
LOCATION: *2277 Seventh Street, Oakland, California*

DRILLING METHOD: *Cuttingless*

DRILLING COMPANY: *Soils Exploration Srv.* CASING ELEVATION: *N/A*

LOGGED BY: *Chris Reinheimer* APPROVED BY: *Al Sevilla*

BLOWS/6 IN.	PID VALUES	WELL DIAGRAM	DEPTH feet	SAMPLES	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION
							Asphaltic concrete/roadbase.
						SP	
N/A	0						SAND: medium gray, damp, loose; fine- to medium-grained sand.
N/A	0		5				Same: moist; shell fragments <2%.
N/A	0						Same: wet; no shell fragments.
N/A	NM		10				Same: sheen and globules. Brown free product.
			15				Boring terminated at 15 feet.
			20				
			25				
			30				



ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA

LOG OF BORING SB-10

SEE SITE PLAN

ALISTO PROJECT NO: *10-270-01* DATE DRILLED: *05/11/95*

CLIENT: *Port of Oakland*

LOCATION: *2277 Seventh Street, Oakland, California*

DRILLING METHOD: *Cuttingless*

DRILLING COMPANY: *Soils Exploration Srv.* CASING ELEVATION: *N/A*

LOGGED BY: *Chris Reinheimer* APPROVED BY: *Al Sevilla*

BLOWS/6 IN.	PID VALUES	WELL DIAGRAM	DEPTH feet	SAMPLES	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION
							Asphaltic concrete/roadbase.
N/A	0					SP	SAND: medium gray, damp to moist; fine- to medium-grained sand.
N/A	0		5			CL	silty CLAY: mottled light brown and gray/black, damp to moist; organics to 5%; gravel to 1 cm <5%.
N/A	0					CL	CLAY: mottled green/gray and black, moist, soft; organics to 10%.
N/A	3.1	Neat Cement	10			SC	gravelly-clayey SAND: mottled tan and green/gray, moist; gravel to 1.5 cm approximately 10%.
			15				Boring terminated at 15 feet.
			20				
			25				
			30				

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA

LOG OF BORING SB-12

SEE SITE PLAN

ALISTO PROJECT NO: 10-270-01 DATE DRILLED: 05/11/95
CLIENT: Port of Oakland
LOCATION: 2277 Seventh Street, Oakland, California
DRILLING METHOD: Cuttingless
DRILLING COMPANY: Soils Exploration Srv. CASING ELEVATION: N/A
LOGGED BY: Chris Reinhelmer APPROVED BY: Al Sevilla

BLOWS/6 IN.	PID VALUES	WELL DIAGRAM	DEPTH feet	SAMPLES	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION
							Asphaltic concrete/roadbase.
						GW	GRAVEL with sand matrix: medium fan gravel; glass, wood, and brick fragments present.
N/A	0					GC	GRAVEL with clay-sand matrix: dark brown, damp, loose; organics, brick, and wood fragments to 20%.
N/A	0		5			SP	SAND: medium gray, damp to moist; fine- to medium-grained; rare shell fragments <1%.
N/A	0		10				Same: wet.
N/A	NM		15			SC	clayey SAND: gray/black, wet to saturated; medium-grained sand; black clay blebs to 20%.
							Boring terminated at 15 feet.
			20				
			25				
			30				

Neat Cement

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA

LOG OF BORING SB-13

SEE SITE PLAN

ALISTO PROJECT NO: *10-270-01* DATE DRILLED: *05/11/95*

CLIENT: *Port of Oakland*

LOCATION: *2277 Seventh Street, Oakland, California*

DRILLING METHOD: *Cuttingless*

DRILLING COMPANY: *Soils Exploration Srv.* CASING ELEVATION: *N/A*

LOGGED BY: *Chris Reinheimer* APPROVED BY: *Al Seville*

BLOWS/6 IN.	PID VALUES	WELL DIAGRAM	DEPTH feet	SAMPLES	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION
							Asphaltic concrete/roadbase.
N/A	0		5	■		GC	GRAVEL with clay-sand matrix: gray black; brick and wood fragments present.
N/A	0			■		CL	sandy CLAY: mottled green/gray and gray/black, damp; organics to 5%; root traces present.
N/A	0.5		10	■			Same.
N/A	NM		15	■		SP	SAND: black, wet; medium-grained sand; silt-clay sand mixtures to <5%; shell fragments to 1%.
							Boring terminted at 15 feet.
			20				
			25				
			30				

Neat Cement

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA

LOG OF BORING SB-14

SEE SITE PLAN

ALISTO PROJECT NO: *10-270-01* DATE DRILLED: *05/11/95*

CLIENT: *Port of Oakland*

LOCATION: *2277 Seventh Street, Oakland, California*

DRILLING METHOD: *Cuttingless*

DRILLING COMPANY: *Soils Exploration Srv.* CASING ELEVATION: *N/A*

LOGGED BY: *Chris Reinheimer* *APPROVED BY: Al Sevilla*

BLOWS/6 IN.	PID VALUES	WELL DIAGRAM	DEPTH feet	SAMPLES	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION
							Asphaltic concrete/roadbase.
						SW	
N/A	0.8						gravelly SAND: gray/black, damp; medium- to coarse-grained sand.
						SP	
			5				
N/A	3.1						SAND: gray, damp to moist; fine- to medium-grained.
							Auger refusal at 8 feet.
							Boring terminated at 8 feet.
			10				
			15				
			20				
			25				
			30				

WELL DIAGRAM: *Neat Cement*

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA

LOG OF BORING SB-15

SEE SITE PLAN

ALISTO PROJECT NO: *10-270-01* DATE DRILLED: *05/11/95*

CLIENT: *Port of Oakland*

LOCATION: *2277 Seventh Street, Oakland, California*

DRILLING METHOD: *Cuttingless*

DRILLING COMPANY: *Soils Exploration Srv.* CASING ELEVATION: *N/A*

LOGGED BY: *Chris Reinheimer* APPROVED BY: *Al Sevilla*

BLOWS/6 IN.	PID VALUES	WELL DIAGRAM	DEPTH feet	SAMPLES	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION
							Asphaltic concrete/roadbase.
N/A	0.2		5	■		SW	gravelly SAND: gray/black, moist; wood and brick fragments present.
N/A	1.2			■		SP	SAND: green/gray, damp to moist; fine- to medium-grained; shells to 20%.
N/A	3.8		10	■		CL	CLAY: mottled gray/black and green/gray, wet; organics to 20%.
N/A	NM		15	I			Rock in shoe; sheen.
							Boring terminated at 14.5 feet.
			20				
			25				
			30				

WELL DIAGRAM: *Neat Cement*

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA

LOG OF BORING SB-16

SEE SITE PLAN

ALISTO PROJECT NO: *10-270-01* DATE DRILLED: *05/11/95*

CLIENT: *Port of Oakland*

LOCATION: *2277 Seventh Street, Oakland, California*

DRILLING METHOD: *Cuttingless*

DRILLING COMPANY: *Soils Exploration Srv.* CASING ELEVATION: *N/A*

LOGGED BY: *Chris Reinheimer* APPROVED BY: *Al Sevilla*

BLOWS/6 IN.	PID VALUES	WELL DIAGRAN	DEPTH feet	SAMPLES	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION
							Asphaltic concrete/roadbase.
N/A	0.8					SW	gravelly SAND: black, damp; medium- to coarse-grained sand; gravel to 2"+; some clay blobs.
N/A	1.8		5			SP	SAND: green/gray, damp to moist; fine- to medium-grained; shells to 5%.
N/A	NM					CL	CLAY: gray, moist to wet; product on sampler.
N/A	NM		10			SC	clayey SAND: gray/black; fine- to medium-grained sand; shells to 5%; sheen on sample.
			15				Boring terminated at 15 feet.
			20				
			25				
			30				

Neat Cement

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA

LOG OF BORING SB-17

SEE SITE PLAN

ALISTO PROJECT NO: *10-270-01* DATE DRILLED: *05/11/95*

CLIENT: *Port of Oakland*

LOCATION: *2277 Seventh Street, Oakland, California*

DRILLING METHOD: *Cuttingless*

DRILLING COMPANY: *Soils Exploration Srv.* CASING ELEVATION: *N/A*

LOGGED BY: *Chris Reinheimer* APPROVED BY: *Al Sevilla*

BLOWS/6 IN.	PID VALUES	WELL DIAGRAM	DEPTH feet	SAMPLES	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION
							Asphaltic concrete/roadbase.
N/A	0.2	Neat Cement	5			SW	gravelly SAND: medium gray/green, damp; fine- to medium-grained sand; gravel to 2" approximately 10%.
N/A	NM					SP	SAND: medium green/gray, moist to wet; fine- to medium-grained; shells to 2%.
N/A	NM		10			CL	CLAY: gray/black; organics to 10%; some medium-grained sand.
N/A	NM		15			SP	SAND: gray/black, wet to saturated; medium- to coarse-grained sand; shell fragments to approximately 1%.
							Boring terminated at 15 feet.
			20				
			25				
			30				

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA

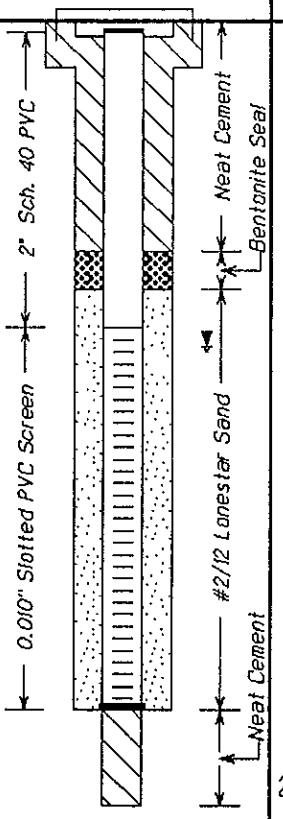
LOG OF BORING MW-4

SEE SITE PLAN

ALISTO PROJECT NO: 10-270-01 DATE DRILLED: 08/25/95
CLIENT: Port of Oakland
LOCATION: 2277 E. 7th Street, Oakland, CA.
DRILLING METHOD: Hollow-stem auger (7 3/4"); 2" split-spoon sampler
DRILLING COMPANY: Mitchell Drilling Envtl. CASING ELEVATION: 13.15 'MSL
LOGGED BY: Chris Reinheimer APPROVED BY: Al Sevilla

BLOWS/6 IN.	PID VALUES	DEPTH feet	SOIL CLASS	GEOLOGIC DESCRIPTION
				3" asphalt; 2.2' roadbase
7,7,7	0	5	SC	clayey SAND: mottled dark brown and medium tan, damp, medium dense; clayey blebs to approximately 10%; organics to approximately 5%.
8,8,11	0	10	SM	silty SAND: dark gray green, moist to wet, medium dense; silty clayey shell fragments to approximately 2%.
4,8,11	NM	15	CL	CLAY: dark gray black, moist to wet, very stiff; organics to approximately 20%; medium-grained sand to approximately 2%.
8,8,11	NM	20		Same: at 19 feet.
		25		Stabilized water level measured on September 8, 1995.
		30		

WELL DIAGRAM



ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA

LOG OF BORING MW-5

SEE SITE PLAN

ALISTO PROJECT NO: *10-270-01* DATE DRILLED: *08/25/95*

CLIENT: *Port of Oakland*

LOCATION: *2277 E. 7th Street, Oakland, CA.*

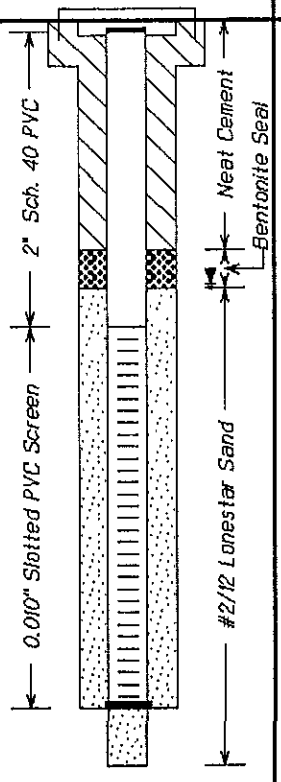
DRILLING METHOD: *Hollow-stem auger (7 3/4"); 2" split-spoon sampler*

DRILLING COMPANY: *Mitchell Drilling Envtl.* CASING ELEVATION: *13.49 'MSL*

LOGGED BY: *Chris Reinheimer* APPROVED BY: *Al Sevilla*

BLOWS/6 IN.	PID VALUES	DEPTH feet	SOIL CLASS	GEOLOGIC DESCRIPTION
				3" asphalt; 2.2' roadbase
6,8,12	3	5	SM	SAND: medium brown, damp, medium dense; clayey blebs to approximately 2%; shell fragments to approximately 2%.
11,11,18	1	10	SC	clayey SAND: dark gray black, wet, very stiff; organics to approximately 10%.
6,8,12	0	15		Same: at 15 feet.
8,8,4	0	20	SM	silty SAND: gray green mottled with Fe oxide stain, wet to saturated, medium dense; shells to approximately 5%; sand moderately well graded.
		25		Stabilized water level measured on September 6, 1995.
		30		

WELL DIAGRAM



ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA

LOG OF BORING MW-7

SEE SITE PLAN

ALISTO PROJECT NO: 10-270-01 DATE DRILLED: 08/25/95

CLIENT: Port of Oakland

LOCATION: 2277 E. 7th Street, Oakland, CA.

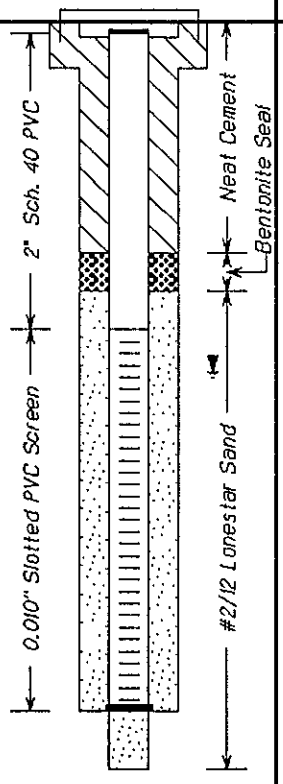
DRILLING METHOD: Hollow-stem auger (7 3/4"); 2" split-spoon sampler

DRILLING COMPANY: Mitchell Drilling Envtl. CASING ELEVATION: 14.35 'MSL

LOGGED BY: C. Ladd APPROVED BY: Al Sevilla

BLOWS/6 IN.	PID VALUES	DEPTH feet	SAMPLES	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION
						4" asphalt
10,12,15	0	5			SM	SAND: gray, damp, medium dense; fine- to medium-grained sand; clayey blebs to 5%.
12,12,17	0	10			SC	sandy CLAY: brown to black gray, moist, very stiff; organics as blebs to appproximately 2%.
11,11,17	0	15			SP	SAND: black gray, wet, medium dense; fine- to medium-grained sand; shell fragments present to 3%.
12,14,20		20				Same: olive brown, wet, dense; fine- to medium-grained sand.
						Stabilized water level measured on September 8, 1995.
		25				
		30				

WELL DIAGRAM



ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA

LOG OF BORING MW-8

SEE SITE PLAN

ALISTO PROJECT NO: *10-270-01* DATE DRILLED: *08/25/95*

CLIENT: *Port of Oakland*

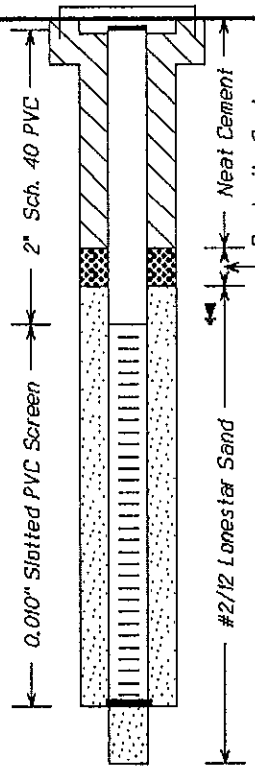
LOCATION: *2277 E. 7th Street, Oakland, CA.*

DRILLING METHOD: *Hollow-stem auger (7 3/4"); 2" split-spoon sampler*

DRILLING COMPANY: *Mitchell Drilling Envtl.* CASING ELEVATION: *12.94 'MSL*

LOGGED BY: *C. Ladd* APPROVED BY: *Al Sevilla*

BLOWS/6 IN.	PID VALUES	WELL DIAGRAN	DEPTH feet	SAMPLES	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION
							4" asphalt
8,8,11	6		5			CL	gravelly CLAY: mottled greenish gray and olive brown, damp, very stiff; subrounded to angular gravel to 1"-diameter.
14,28,36	4		10			GW	sandy GRAVEL: grayish brown, wet, very dense; angular to subrounded gravels to 2"-diameter.
19,21,30	0		15			SW	gravelly SAND: gray, wet, very dense; subrounded gravel to 2"-diameter.
12,15,17	0					SP	SAND: blue gray, saturated, dense; medium-grained sand; well sorted; 1/4"-diameter subrounded gravel to approximately 1%.
			20				Stabilized water level measured on September 6, 1995.
			25				
			30				



APPENDIX E

FIELD PROCEDURES FOR GROUNDWATER MONITORING WELL DEVELOPMENT AND SAMPLING

FIELD PROCEDURES
FOR
GROUNDWATER MONITORING WELL DEVELOPMENT AND SAMPLING

Groundwater Monitoring Well Development

The groundwater monitoring wells were developed to consolidate and stabilize the filter pack to optimize well production and reduce the turbidity of subsequent groundwater samples. The monitoring wells were developed by alternately using a surge block and pump to evacuate the water and sediment. Development continued until the groundwater was relatively free of sediment. Well development fluids were placed into DOT-approved drums for disposal.

Groundwater Level Measurement

Before sampling, the groundwater level in each well was measured from the permanent survey reference point at the top of the well casing. The groundwater in each well was monitored for free-floating product or sheen. The depth to groundwater was measured to an accuracy of 0.01 foot from the top of the PVC well casing using an electronic sounder.

Groundwater Monitoring Well Sampling

To ensure that the groundwater samples were representative of the aquifer, the wells were purged of 3 casing volumes, using a bailer, while monitoring stabilization of pH, electrical conductivity, and temperature.

The groundwater samples were collected using a disposable bailer, and transferred into laboratory-supplied containers. The samples were labeled with well number, site identification, date of collection, and sampler's initials, and transported in an iced cooler to a state-certified laboratory following preservation and chain of custody protocol. The sampling technician wore nitrile gloves during purging and well sampling.

APPENDIX F

GROUNDWATER MONITORING WELL DEVELOPMENT AND SAMPLING FIELD SURVEY FORMS

ALISTO

ENGINEERING
GROUP
1575 TREAT BOULEVARD, SUITE 201
WALNUT CREEK CA 94596 (510) 295-1650 FAX 295-1823

Field Report / Sampling Data Sheet

☒ Groundwater Sampling
☒ Well Development

Date: 9-6-95 Project No. 10-270
Day: Weds Station No. Seaboard
Weather: Clear Address 2277 7th St Oakland
SAMPLER: C Reinheimer

Well ID	SAMPLE#	WATER	DEPTH	Well ID	SAMPLE #	WATER	DEPTH	Well ID	SAMPLE	WATER DEPTH
MW-1	DTP 8.68	9.45	PT=0.77	MW-6	→	7.40				
MW-2	& QC-1	9.04		MW-7	→	9.10				
MW-3	DTP 8.48	13.70	PT=5.99	MW-8	→	7.84				
MW-4		8.48								
MW-5		6.90								

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Thickness	Gal.	Time	Temp °F	pH	E.C.	D.O.
MW-2	9.04	2"	OK	—		2	3:32	70.2	7.91	2.88	NM
						4		69.7	7.86	2.31	↓
						6	3:39	69.4	7.84	2.23	↓

Total Depth - Water Level= x Well Vol. Factor= x#vol. to Purge= PurgeVol.
15.5 - 9.04 = 6.46 x 0.16 = 1.03 x 3 = 3.09
Purge Method: OSurface Pump ODisp.Tube OWinch ODisp. Bailer(s)___ OSys Port
Comments: QC-1 collected from MW-2

○ EPA 601_____
○ TPH-G/BTEX___
○ TPH Diesel____
○ TOG 5520 ___
Time Sampled: 3:50

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Thickness	Gal.	Time	Temp °F	pH	E.C.	D.O.
MW-1	9.45	2"	OK	8.68	6.77						

Total Depth - Water Level= x Well Vol. Factor= x#vol. to Purge= PurgeVol.
Not sampled
Purge Method: OSurface Pump ODisp.Tube OWinch ODisp. Bailer(s)___ OSys Port
Comments: Product dark brown

○ EPA 601_____
○ TPH-G/BTEX___
○ TPH Diesel____
○ TOG 5520 ___
Time Sampled: Not

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Thickness	Gal.	Time	Temp °F	pH	E.C.	D.O.
MW-3	13.70	2"	OK	8.48	5.99						

Total Depth - Water Level= x Well Vol. Factor= x#vol. to Purge= PurgeVol.
Not Sampled
Purge Method: OSurface Pump ODisp.Tube OWinch ODisp. Bailer(s)___ OSys Port
Comments: Product dark brown

○ EPA 601_____
○ TPH-G/BTEX___
○ TPH Diesel____
○ TOG 5520 ___
Time Sampled: Not

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Thickness	Gal.	Time	Temp °F	pH	E.C.	D.O.

Total Depth - Water Level= x Well Vol. Factor= x#vol. to Purge= PurgeVol.
Purge Method: OSurface Pump ODisp.Tube OWinch ODisp. Bailer(s)___ OSys Port
Comments:

○ EPA 601_____
○ TPH-G/BTEX___
○ TPH Diesel____
○ TOG 5520 ___
Time Sampled:

ALISTO

Field Report / Sampling Data Sheet

ENGINEERING GROUP
1575 TREAT BOULEVARD, SUITE 201
WALNUT CREEK CA 94596 (510) 295-1650 FAX 295-1823

⊗ Groundwater Sampling & Well Development

Date: 9-6-95 Project No. 10-270
Day: Wed 5 Station No. Sea Land Lease
Weather: Clear Address 2277 7th St Oakland CA
SAMPLER: C Kellenberger

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Thickness	Gal.	Time	Temp °F	pH	E.C.	D.O.
MW-4	8.48	2"	OK	—	—	5	9:20	69.1	7.02	1.51	NM
						10		67.1	7.11	1.53	↓
						20	9:43	67.1	7.14	1.57	↓

Total Depth - Water Level= x Well Vol. Factor= x#vol. to Purge= PurgeVol.
18.0 - 8.48 = 9.52 x 0.16 = 1.52 x 10 = 15.20
Purge Method: OSurface Pump ODisp.Tube OWinch ODisp. Bailer(s)___ OSys Port
Comments:

O EPA 601____ O TPH-G/BTEX___ O TPH Diesel____ O TOG 5520___
Time Sampled: 9:50A

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Thickness	Gal.	Time	Temp °F	pH	E.C.	D.O.
MW-5	6.90	2"	OK	—	—	10	10:30	66.7	8.11	2.31	NM
						15		66.8	7.46	2.69	↓
						20	10:50	66.7	7.49	2.66	↓

Total Depth - Water Level= x Well Vol. Factor= x#vol. to Purge= PurgeVol.
18.0 - 6.90 = 11.1 x 0.16 = 1.77 x 10 = 17.7
Purge Method: OSurface Pump ODisp.Tube OWinch ODisp. Bailer(s)___ OSys Port
Comments:

O EPA 601____ O TPH-G/BTEX___ O TPH Diesel____ O TOG 5520___
Time Sampled: 11:00A

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Thickness	Gal.	Time	Temp °F	pH	E.C.	D.O.
MW-6	7.40	2"	OK	Sheen	—	10	11:20	67.3	7.21	2.01	NM
						15		67.1	7.58	2.47	↓
						20	11:34	67.2	7.33	2.44	↓

Total Depth - Water Level= x Well Vol. Factor= x#vol. to Purge= PurgeVol.
18.0 - 7.40 = 10.6 x 0.16 = 1.69 x 10 = 16.90
Purge Method: OSurface Pump ODisp.Tube OWinch ODisp. Bailer(s)___ OSys Port
Comments: Sheen on purge, not Sampled

O EPA 601____ O TPH-G/BTEX___ O TPH Diesel____ O TOG 5520___
Time Sampled: Not

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Thickness	Gal.	Time	Temp °F	pH	E.C.	D.O.
MW-7	5.10	2"	OK	—	—	10	12:40	68.7	8.27	2.89	NM
						15		68.2	8.31	2.71	↓
						20	1115	68.1	8.21	2.69	↓

Total Depth - Water Level= x Well Vol. Factor= x#vol. to Purge= PurgeVol.
18.0 - 5.10 = 8.9 x 0.16 = 1.42 x 10 = 14.20
Purge Method: OSurface Pump ODisp.Tube OWinch ODisp. Bailer(s)___ OSys Port
Comments:

O EPA 601____ O TPH-G/BTEX___ O TPH Diesel____ O TOG 5520___
Time Sampled: 1:25P

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Thickness	Gal.	Time	Temp °F	pH	E.C.	D.O.
MW-8	7.84	2"	OK	globs	globs	10	2:44	66.1		2.18	NM
						15					↓
						20	3:08	66.2	7.98	2.11	↓

Total Depth - Water Level= x Well Vol. Factor= x#vol. to Purge= PurgeVol.
18.0 - 7.84 = 10.16 x 0.16 = 1.62 x 10 = 16.2
Purge Method: OSurface Pump ODisp.Tube OWinch ODisp. Bailer(s)___ OSys Port
Comments: Not sampled, black/brown globules

O EPA 601____ O TPH-G/BTEX___ O TPH Diesel____ O TOG 5520___
Time Sampled: Not

ALISTO

ENGINEERING
GROUP
1575 TREAT BOULEVARD, SUITE 201
WALNUT CREEK CA 94596 (510) 295-1650 FAX 295-1823

Field Report / Sampling Data Sheet

☒ Groundwater Sampling
MW-4 & MW-5

Date: 9-11-95 Project No. 10-270
Day: Mon Station No. Sea Land Lease
Weather: Clear Address 2277 7th St Oakland
SAMPLER:

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Thickness	Gal.	Time	Temp °F	pH	E.C.	D.O.	Analyses
MW-4	8.51	2"	OK	—	—	2	2:20	67.9	7.49	1.48	NM	O EPA 601
Total Depth - Water Level=	x Well Vol. Factor=		x#vol. to Purge=		PurgeVol.	4	2:28	67.2	7.61	1.67	↓	O TPH-G/BTEX
18- 8.51						6	2:36	67.2	7.21	1.66	↓	O TPH Diesel
												O TOG 5520
Purge Method: OSurface Pump ODisp.Tube OWinch ODisp. Bailer(s)___ OSys Port												Time Sampled
Comments:												2:43
MW-5	6.93	2"	OK	—	—	2	3:16	66.9	7.92	2.68	NM	O EPA 601
Total Depth - Water Level=	x Well Vol. Factor=		x#vol. to Purge=		PurgeVol.	4	3:21	66.9	7.68	2.67	↓	O TPH-G/BTEX
18 - 6.90						6	3:38	66.9	7.61	2.71	↓	O TPH Diesel
												O TOG 5520
Purge Method: OSurface Pump ODisp.Tube OWinch ODisp. Bailer(s)___ OSys Port												Time Sampled
Comments:												3:42
												O EPA 601
Total Depth - Water Level=	x Well Vol. Factor=		x#vol. to Purge=		PurgeVol.							O TPH-G/BTEX
												O TPH Diesel
												O TOG 5520
Purge Method: OSurface Pump ODisp.Tube OWinch ODisp. Bailer(s)___ OSys Port												Time Sampled
Comments:												
												O EPA 601
Total Depth - Water Level=	x Well Vol. Factor=		x#vol. to Purge=		PurgeVol.							O TPH-G/BTEX
												O TPH Diesel
												O TOG 5520
Purge Method: OSurface Pump ODisp.Tube OWinch ODisp. Bailer(s)___ OSys Port												Time Sampled
Comments:												
												O EPA 601
Total Depth - Water Level=	x Well Vol. Factor=		x#vol. to Purge=		PurgeVol.							O TPH-G/BTEX
												O TPH Diesel
												O TOG 5520
Purge Method: OSurface Pump ODisp.Tube OWinch ODisp. Bailer(s)___ OSys Port												Time Sampled
Comments:												

PAGE______ OF_____

ALISTO ENGINEERING GROUP
GROUNDWATER MONITORING

Client: Port of Oakland
Alisto Project No: 10-370.03-005
Service Station No: Building C401

Date: 9/28/95
Field Personnel: DC
Site Address: 2379 7th St. Oakland CA

FIELD ACTIVITY:

✓ Groundwater Monitoring
✓ Groundwater Sampling
___ Well Development

QUALITY CONTROL SAMPLES:

mw-6 QC-1 Sample Duplicate (Well ID)
X QC-2 Trip Blank
___ QC-3 Rinsate Blank

Well ID	Well Diam	Order Measured/ Sampled	Total Depth	Depth to Water	Depth to Product	Product Thick-ness	Comments
mw-2	2"	1	≈15.00	9.17	∅		
mw-7		2	≈17.15'	9.74			
mw-5		3	≈18.00	6.56'			
mw-4		4	≈17.00'	8.54			
mw-6		5	≈15.00'	~~9.85~~ DC	↓		DTW-7.74' DC
mw-1		6	nm	9.85	8.74'	1.11	not sampled due to FP
mw-8		7	nm	8.91	8.79'	0.12	↓
mw-3	↓	8	nm	13.60	7.80'	5.80'	

Notes:

Pg 1 of 1

FORM: FS2/121592

ALISTO

Field Report / Sampling Data Sheet

ENGINEERING GROUP
1575 TREAT BOULEVARD, SUITE 201
WALNUT CREEK CA 94596 (510) 295-1650 FAX 295-1823

Groundwater Sampling

Date: 9/28/95 Project No. 10-270-03-003
Day: Thurs Station No. Bldg C401
Weather: Sun Address 2277 7th St, Oakland CA
SAMPLER:

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Thickness
MW-2	9.17'	2"	OK	Ø	Ø

Total Depth - Water Level= x Well Vol. Factor= x#vol. to Purge= PurgeVol.
15.00 - 9.17 = 5.83 x .16 = 0.93 x 3 = 2.79

Purge Method: X Surface Pump ODisp.Tube OWinch ODisp. Bailer(s)__ OSys Port

Gal.	Time	Temp °F	pH	E.C.	D.O.
1	1407	75.9	7.90	2.31	
2	1411	71.2	7.84	2.30	
3	1415	70.7	7.82	2.30	

O EPA 601____
X TPH-G/BTEX Ltr
X TPH Diesel Ltr
O TOG 5520 __
Time Sampled: 1420

Comments:

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Thickness
MW-7	9.74	2"	replaced	Ø	Ø

Total Depth - Water Level= x Well Vol. Factor= x#vol. to Purge= PurgeVol.
17.15 - 9.74 = 5.26 x .16 = 0.84 x 3 = 2.53

Purge Method: X Surface Pump ODisp.Tube OWinch ODisp. Bailer(s)__ OSys Port

Gal.	Time	Temp °F	pH	E.C.	D.O.
1	1427	71.7	7.63	1.91	
2	1432	71.7	7.57	1.92	
2.75	1436	71.8	7.53	1.52	

X EPA 601 Ltr
X TPH-G/BTEX Ltr
X TPH Diesel Ltr
O TOG 5520 __
Time Sampled: 1440

Comments:

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Thickness
MW-5	6.56	2"	replaced	Ø	Ø

Total Depth - Water Level= x Well Vol. Factor= x#vol. to Purge= PurgeVol.
18.00 - 6.56 = 11.44 x .16 = 1.83 x 3 = 5.49

Purge Method: X Surface Pump ODisp.Tube OWinch ODisp. Bailer(s)__ OSys Port

Gal.	Time	Temp °F	pH	E.C.	D.O.
2	1447	74.7	7.73	2.34	
4	1453	74.1	7.43	2.40	
5.5	1457	73.6	7.39	2.40	

X EPA 601 Ltr
X TPH-G/BTEX Ltr
X TPH Diesel Ltr
O TOG 5520 __
Time Sampled: 1500

Comments:

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Thickness
MW-4	8.54	2"	replaced	Ø	Ø

Total Depth - Water Level= x Well Vol. Factor= x#vol. to Purge= PurgeVol.
18.00 - 8.54 = 9.46 x .16 = 1.51 x 3 = 4.54

Purge Method: X Surface Pump ODisp.Tube OWinch ODisp. Bailer(s)__ OSys Port

Gal.	Time	Temp °F	pH	E.C.	D.O.
1.5	1506	71.4	7.88	1.40	
3	1509	71.9	7.69	1.34	
4.75	1514	72.2	7.65	1.31	

X EPA 601 Ltr
X TPH-G/BTEX Ltr
X TPH Diesel Ltr
O TOG 5520 __
Time Sampled: 1520

Comments:

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Thickness
MW-6	7.74	2"	replaced	Ø	sheen

Total Depth - Water Level= x Well Vol. Factor= x#vol. to Purge= PurgeVol
15.00 - 7.74 = 7.26 x .16 = 1.16 x 3 = 3.48

Purge Method: X Surface Pump ODisp.Tube OWinch ODisp. Bailer(s)__ OSys Port

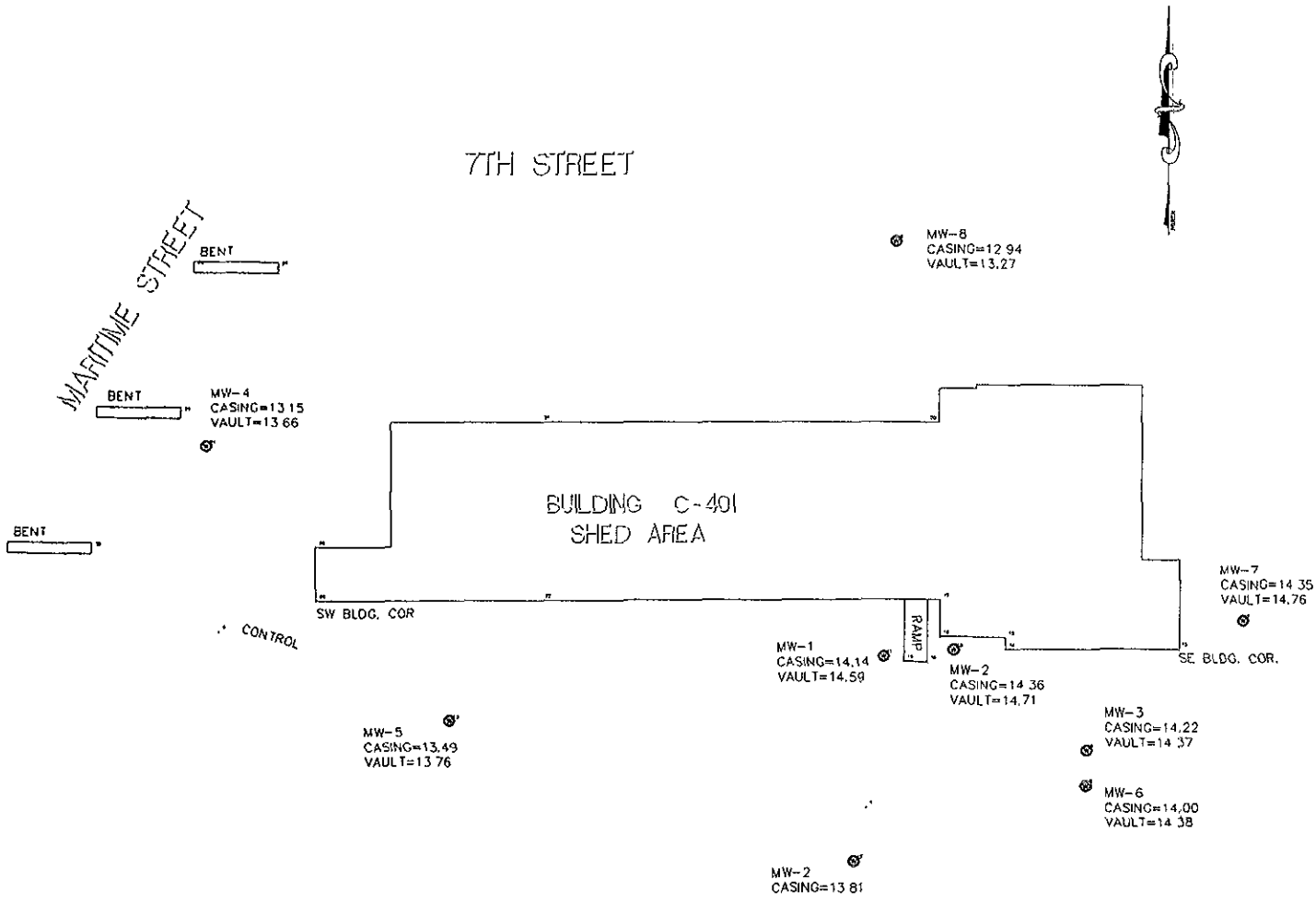
Gal.	Time	Temp °F	pH	E.C.	D.O.
1	1530	71.4	7.44	3.33	
2	1533	72.9	7.31	3.58	
3.5	1537	73.1	7.24	3.62	

X EPA 601 Ltr
X TPH-G/BTEX Ltr
X TPH Diesel Ltr
O TOG 5520 __
Time Sampled: 1540

Comments: QC-1 from this well

APPENDIX G

WELL ELEVATION SURVEY MAP



BENCHMARK:
TOP OF CASING ELEVATIONS, AS SHOWN ON PLANS PROVIDED BY ALISTO ENGINEERING, INC. ON 9-8-95, ON MW-1, PORT OF OAKLAND, AND MW-2, RINGSBY TERMINALS, WERE HELD WITH THE FOLLOWING ELEVATIONS. 14.14(0) & 13.80(9), RESPECTIVELY

STRUCTURE	NORTHING	EASTING	ELEVATION
MW-2, CASING			13.809
MW-1, CASING	5066.49	4976.17	14.140
MW-1, VAULT			14.59
MW-2, CASING	5069.96	5014.05	14.36
MW-2, VAULT			14.71
MW-3, CASING	5014.92	5085.90	14.20
MW-3, VAULT			14.37
MW-4, CASING	5183.91	4604.94	13.15
MW-4, VAULT			13.66
MW-5, CASING	5031.52	4737.19	13.49
MW-5, VAULT			13.76
MW-6, CASING	4995.30	5085.52	14.00
MW-6, VAULT			14.38
MW-7, CASING	5086.35	5171.47	14.35
MW-7, VAULT			14.76
MW-8, CASING	5298.39	4982.89	12.94
MW-8, VAULT			13.27
SW BLDG COR	5096.96	4664.07	
SE BLDG COR	5070.46	5136.09	

LICENSED LAND SURVEYOR
JULIA E. TERRY
Exp. 12/31/96
No. 5984
STATE OF CALIFORNIA

PLS SURVEYS, INC.
1202 LINCOLN AVENUE
ALAMEDA, CA 94501
(510) 522-1790
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PORT OF OAKLAND

BLDG. C-401
2277 SEVENTH STREET
OAKLAND, CALIFORNIA
PROJECT NO. 10-270

SCALE	N.T.S.
DATE	09/28/95
BY	JMB/JET
JOB NO.	95056

APPENDIX H

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

FIELD PROCEDURES
FOR
CHAIN OF CUSTODY DOCUMENTATION

Samples were handled in accordance with the California Department of Health Services guidelines. Each sample was labeled in the field and immediately stored in a cooler and preserved with blue or dry ice for transport to a state-certified laboratory for analysis.

A chain of custody record accompanied the samples and included the site and sample identification, date of 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.

LABORATORY REPORTS FOR SOIL SAMPLES

Western Operations

1252 Quarry Lane
P.O. Box 9019
Pleasanton, CA 94566
(510) 426-2600
Fax (510) 426-0106

Clayton
ENVIRONMENTAL
CONSULTANTS

May 30, 1995

Mr. Brady Nagle
ALISTO ENGINEERING GROUP
1575 Treat Blvd., Suite 201
Walnut Creek, CA 94588

Client Ref.: 10-270-01
Clayton Project No.: 95051.87

Dear Mr. Nagle:

Attached is our analytical laboratory report for the samples received on May 15, 1995. Also enclosed is a copy of the Chain-of-Custody record acknowledging receipt of these samples.

Please note that any unused portion of the samples will be discarded after June 29, 1995, unless you have requested otherwise.

We appreciate the opportunity to assist you. If you have any questions concerning this report, please contact Suzanne Haus, Client Services Supervisor, at (510) 426-2657.

Sincerely,

Harriotte A. Hurley, CIH
Director, Laboratory Services
San Francisco Regional Office

HAH/tjb

Attachments

Analytical Results
for
Alisto Engineering Group
Client Reference: 10-270-01
Clayton Project No. 95051.87

Sample Identification:	SB-7 3.0	Date Sampled:	05/11/95
Lab Number:	9505187-01A	Date Received:	05/15/95
Sample Matrix/Media:	SOIL	Date Prepared:	05/23/95
Preparation Method:	EPA 5030	Date Analyzed:	05/24/95
Method Reference:	EPA 8015/8020	Analyst:	WA$

Analyte	CAS #	Concentration (mg/kg)	Method Detection Limit (mg/kg)
BTEX/Gasoline			
Benzene	71-43-2	ND	0.005
Ethylbenzene	100-41-4	ND	0.005
Toluene	108-88-3	0.006	0.005
o-Xylene	95-47-6	ND	0.005
p,m-Xylenes	--	ND	0.005
Gasoline	--	ND	0.3
Surrogates		Recovery (%)	QC Limits (%)
a,a,a-Trifluorotoluene	98-08-8	87	50 - 150

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.

Analytical Results
for
Alisto Engineering Group
Client Reference: 10-270-01
Clayton Project No. 95051.87

Sample Identification:	SB-7 9.0	Date Sampled:	05/11/95
Lab Number:	9505187-03A	Date Received:	05/15/95
Sample Matrix/Media:	SOIL	Date Prepared:	05/23/95
Preparation Method:	EPA 5030	Date Analyzed:	05/24/95
Method Reference:	EPA 8015/8020	Analyst:	WAS

Analyte	CAS #	Concentration (mg/kg)	Method Detection Limit (mg/kg)
BTEX/Gasoline			
Benzene	71-43-2	ND	0.005
Ethylbenzene	100-41-4	ND	0.005
Toluene	108-88-3	ND	0.005
o-Xylene	95-47-6	ND	0.005
p,m-Xylenes	--	ND	0.005
Gasoline	--	ND	0.3
Surrogates		Recovery (%)	QC Limits (%)
a,a,a-Trifluorotoluene	98-08-8	53	50 - 150

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.

Analytical Results
for
Alisto Engineering Group
Client Reference: 10-270-01
Clayton Project No. 95051.87

Sample Identification:	SB-8 3.0	Date Sampled:	05/11/95
Lab Number:	9505187-05A	Date Received:	05/15/95
Sample Matrix/Media:	SOIL	Date Prepared:	05/23/95
Preparation Method:	EPA 5030	Date Analyzed:	05/24/95
Method Reference:	EPA 8015/8020	Analyst:	WAS

Analyte	CAS #	Concentration (mg/kg)	Method Detection Limit (mg/kg)
BTEX/Gasoline			
Benzene	71-43-2	ND	0.005
Ethylbenzene	100-41-4	ND	0.005
Toluene	108-88-3	ND	0.005
o-Xylene	95-47-6	ND	0.005
p,m-Xylenes	--	0.005	0.005
Gasoline	--	ND	0.3
Surrogates		Recovery (%)	QC Limits (%)
a,a,a-Trifluorotoluene	98-08-8	112	50 - 150

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.

Analytical Results
for
Alisto Engineering Group
Client Reference: 10-270-01
Clayton Project No. 95051.87

Sample Identification:	SB-8 9.0	Date Sampled:	05/11/95
Lab Number:	9505187-07A	Date Received:	05/15/95
Sample Matrix/Media:	SOIL	Date Prepared:	05/23/95
Preparation Method:	EPA 5030	Date Analyzed:	05/24/95
Method Reference:	EPA 8015/8020	Analyst:	WAS

Analyte	CAS #	Concentration (mg/kg)	Method Detection Limit (mg/kg)
BTEX/Gasoline			
Benzene	71-43-2	ND	0.005
Ethylbenzene	100-41-4	ND	0.005
Toluene	108-88-3	ND	0.005
o-Xylene	95-47-6	ND	0.005
p,m-Xylenes	--	ND	0.005
Gasoline	--	15 [a]	0.3
Surrogates		Recovery (%)	QC Limits (%)
a,a,a-Trifluorotoluene	98-08-8	76	50 - 150

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.
a Sample appears to be weathered gasoline.

Analytical Results
for
Alisto Engineering Group
Client Reference: 10-270-01
Clayton Project No. 95051.87

Sample Identification:	SB-9 3.0	Date Sampled:	05/11/95
Lab Number:	9505187-09A	Date Received:	05/15/95
Sample Matrix/Media:	SOIL	Date Prepared:	05/23/95
Preparation Method:	EPA 5030	Date Analyzed:	05/24/95
Method Reference:	EPA 8015/8020	Analyst:	WAS

Analyte	CAS #	Concentration (mg/kg)	Method Detection Limit (mg/kg)
BTEX/Gasoline			
Benzene	71-43-2	ND	0.005
Ethylbenzene	100-41-4	ND	0.005
Toluene	108-88-3	ND	0.005
o-Xylene	95-47-6	ND	0.005
p,m-Xylenes	--	ND	0.005
Gasoline	--	2.2 a	0.3
Surrogates		Recovery (%)	QC Limits (%)
a,a,a-Trifluorotoluene	98-08-8	94	50 - 150

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.
a Sample appears to be weathered gasoline.

Analytical Results
for
Alisto Engineering Group
Client Reference: 10-270-01
Clayton Project No. 95051.87

Sample Identification:	SB-9 9.0	Date Sampled:	05/11/95
Lab Number:	9505187-11A	Date Received:	05/15/95
Sample Matrix/Media:	SOIL	Date Prepared:	05/23/95
Preparation Method:	EPA 5030	Date Analyzed:	05/24/95
Method Reference:	EPA 8015/8020	Analyst:	WAS

Analyte	CAS #	Concentration (mg/kg)	Method Detection Limit (mg/kg)
BTEX/Gasoline			
Benzene	71-43-2	ND	0.005
Ethylbenzene	100-41-4	ND	0.005
Toluene	108-88-3	ND	0.005
o-Xylene	95-47-6	ND	0.005
p,m-Xylenes	--	ND	0.005
Gasoline	--	18 a	0.3
Surrogates		Recovery (%)	QC Limits (%)
a,a,a-Trifluorotoluene	98-08-8	80	50 - 150

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.
a Sample appears to be weathered gasoline.

Analytical Results
for
Alisto Engineering Group
Client Reference: 10-270-01
Clayton Project No. 95051.87

Sample Identification:	SB-10 3.0	Date Sampled:	05/11/95
Lab Number:	9505187-13A	Date Received:	05/15/95
Sample Matrix/Media:	SOIL	Date Prepared:	05/23/95
Preparation Method:	EPA 5030	Date Analyzed:	05/24/95
Method Reference:	EPA 8015/8020	Analyst:	WAS

Analyte	CAS #	Concentration (mg/kg)	Method Detection Limit (mg/kg)
BTEX/Gasoline			
Benzene	71-43-2	ND	0.005
Ethylbenzene	100-41-4	ND	0.005
Toluene	108-88-3	ND	0.005
o-Xylene	95-47-6	ND	0.005
p,m-Xylenes	--	ND	0.005
Gasoline	--	0.8 [a]	0.3
Surrogates		Recovery (%)	QC Limits (%)
a,a,a-Trifluorotoluene	98-08-8	121	50 - 150

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.
a Sample appears to be weathered gasoline.

Analytical Results
for
Alisto Engineering Group
Client Reference: 10-270-01
Clayton Project No. 95051.87

Sample Identification:	SB-10 9.0	Date Sampled:	05/11/95
Lab Number:	9505187-15A	Date Received:	05/15/95
Sample Matrix/Media:	SOIL	Date Prepared:	05/23/95
Preparation Method:	EPA 5030	Date Analyzed:	05/24/95
Method Reference:	EPA 8015/8020	Analyst:	WAS

Analyte	CAS #	Concentration (mg/kg)	Method Detection Limit (mg/kg)
BTEX/Gasoline			
Benzene	71-43-2	ND	0.005
Ethylbenzene	100-41-4	ND	0.005
Toluene	108-88-3	0.013	0.005
o-Xylene	95-47-6	ND	0.005
p,m-Xylenes	--	ND	0.005
Gasoline	--	ND	0.3
Surrogates		Recovery (%)	QC Limits (%)
a,a,a-Trifluorotoluene	98-08-8	85	50 - 150

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.

Analytical Results
for
Alisto Engineering Group
Client Reference: 10-270-01
Clayton Project No. 95051.87

Sample Identification:	SB-11 9.0	Date Sampled:	05/11/95
Lab Number:	9505187-18A	Date Received:	05/15/95
Sample Matrix/Media:	SOIL	Date Prepared:	05/23/95
Preparation Method:	EPA 5030	Date Analyzed:	05/24/95
Method Reference:	EPA 8015/8020	Analyst:	WAS

Analyte	CAS #	Concentration (mg/kg)	Method Detection Limit (mg/kg)
BTEX/Gasoline			
Benzene	71-43-2	ND	0.005
Ethylbenzene	100-41-4	ND	0.005
Toluene	108-88-3	ND	0.005
o-Xylene	95-47-6	ND	0.005
p,m-Xylenes	--	ND	0.005
Gasoline	--	ND	0.3
Surrogates		Recovery (%)	QC Limits (%)
a,a,a-Trifluorotoluene	98-08-8	74	50 - 150

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.

Analytical Results
for
Alisto Engineering Group
Client Reference: 10-270-01
Clayton Project No. 95051.87

Sample Identification:	SB-12 9.0	Date Sampled:	05/11/95
Lab Number:	9505187-22A	Date Received:	05/15/95
Sample Matrix/Media:	SOIL	Date Prepared:	05/23/95
Preparation Method:	EPA 5030	Date Analyzed:	05/24/95
Method Reference:	EPA 8015/8020	Analyst:	WAS

Analyte	CAS #	Concentration (mg/kg)	Method Detection Limit (mg/kg)
BTEX/Gasoline			
Benzene	71-43-2	ND	0.005
Ethylbenzene	100-41-4	ND	0.005
Toluene	108-88-3	ND	0.005
o-Xylene	95-47-6	ND	0.005
p,m-Xylenes	--	ND	0.005
Gasoline	--	4.7 a	0.3
Surrogates		Recovery (%)	QC Limits (%)
a,a,a-Trifluorotoluene	98-08-8	64	50 - 150

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.
a Sample appears to be weathered gasoline.

Analytical Results
for
Alisto Engineering Group
Client Reference: 10-270-01
Clayton Project No. 95051.87

Sample Identification:	SB-13 9.0	Date Sampled:	05/11/95
Lab Number:	9505187-26A	Date Received:	05/15/95
Sample Matrix/Media:	SOIL	Date Prepared:	05/23/95
Preparation Method:	EPA 5030	Date Analyzed:	05/24/95
Method Reference:	EPA 8015/8020	Analyst:	WAS

Analyte	CAS #	Concentration (mg/kg)	Method Detection Limit (mg/kg)
BTEX/Gasoline			
Benzene	71-43-2	ND	0.005
Ethylbenzene	100-41-4	ND	0.005
Toluene	108-88-3	ND	0.005
o-Xylene	95-47-6	ND	0.005
p,m-Xylenes	--	ND	0.005
Gasoline	--	ND	0.3
Surrogates		Recovery (%)	QC Limits (%)
a,a,a-Trifluorotoluene	98-08-8	88	50 - 150

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.

Analytical Results
for
Alisto Engineering Group
Client Reference: 10-270-01
Clayton Project No. 95051.87

Sample Identification:	SB-14 6.0	Date Sampled:	05/11/95
Lab Number:	9505187-29A	Date Received:	05/15/95
Sample Matrix/Media:	SOIL	Date Prepared:	05/23/95
Preparation Method:	EPA 5030	Date Analyzed:	05/24/95
Method Reference:	EPA 8015/8020	Analyst:	WAS

Analyte	CAS #	Concentration (mg/kg)	Method Detection Limit (mg/kg)
BTEX/Gasoline			
Benzene	71-43-2	ND	0.05
Ethylbenzene	100-41-4	ND	0.05
Toluene	108-88-3	ND	0.05
o-Xylene	95-47-6	ND	0.05
p,m-Xylenes	--	ND	0.05
Gasoline	--	40 a	3
Surrogates		Recovery (%)	QC Limits (%)
a,a,a-Trifluorotoluene	98-08-8	53	50 - 150

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.
Detection limit increased due to presence of heavier hydrocarbons.
a Sample appears to be weathered gasoline.

Analytical Results
for
Alisto Engineering Group
Client Reference: 10-270-01
Clayton Project No. 95051.87

Sample Identification:	SB-15 6.0	Date Sampled:	05/11/95
Lab Number:	9505187-31A	Date Received:	05/15/95
Sample Matrix/Media:	SOIL	Date Prepared:	05/23/95
Preparation Method:	EPA 5030	Date Analyzed:	05/24/95
Method Reference:	EPA 8015/8020	Analyst:	WAS

Analyte	CAS #	Concentration (mg/kg)	Method Detection Limit (mg/kg)
BTEX/Gasoline			
Benzene	71-43-2	ND	0.005
Ethylbenzene	100-41-4	ND	0.005
Toluene	108-88-3	ND	0.005
o-Xylene	95-47-6	ND	0.005
p,m-Xylenes	--	ND	0.005
Gasoline	--	ND	0.3
Surrogates		Recovery (%)	QC Limits (%)
a,a,a-Trifluorotoluene	98-08-8	90	50 - 150

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.

Analytical Results
for
Alisto Engineering Group
Client Reference: 10-270-01
Clayton Project No. 95051.87

Sample Identification:	SB-16 6.0	Date Sampled:	05/11/95
Lab Number:	9505187-34A	Date Received:	05/15/95
Sample Matrix/Media:	SOIL	Date Prepared:	05/23/95
Preparation Method:	EPA 5030	Date Analyzed:	05/24/95
Method Reference:	EPA 8015/8020	Analyst:	WAS

Analyte	CAS #	Concentration (mg/kg)	Method Detection Limit (mg/kg)
BTEX/Gasoline			
Benzene	71-43-2	ND	0.1
Ethylbenzene	100-41-4	ND	0.1
Toluene	108-88-3	ND	0.1
o-Xylene	95-47-6	ND	0.1
p,m-Xylenes	--	ND	0.1
Gasoline	--	130 a	9
Surrogates		Recovery (%)	QC Limits (%)
a,a,a-Trifluorotoluene	98-08-8	108	50 - 150

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.
Detection limit increased due to presence of heavier hydrocarbons.
a Sample appears to be weathered gasoline.

Analytical Results
for
Alisto Engineering Group
Client Reference: 10-270-01
Clayton Project No. 95051.87

Sample Identification:	SB-17 6.0	Date Sampled:	05/12/95
Lab Number:	9505187-38A	Date Received:	05/15/95
Sample Matrix/Media:	SOIL	Date Prepared:	05/23/95
Preparation Method:	EPA 5030	Date Analyzed:	05/25/95
Method Reference:	EPA 8015/8020	Analyst:	WAS

Analyte	CAS #	Concentration (mg/kg)	Method Detection Limit (mg/kg)
BTEX/Gasoline			
Benzene	71-43-2	ND	0.5
Ethylbenzene	100-41-4	0.9	0.5
Toluene	108-88-3	ND	0.5
o-Xylene	95-47-6	ND	0.5
p,m-Xylenes	--	1.4	0.5
Gasoline	--	1100 [a]	0.3
Surrogates		Recovery (%)	QC Limits (%)
a,a,a-Trifluorotoluene	98-08-8	129	50 - 150

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.
Detection limit increased due to presence of heavier hydrocarbons.
[a] Sample appears to be weathered gasoline.

Analytical Results
for
Alisto Engineering Group
Client Reference: 10-270-01
Clayton Project No. 95051.87

Sample Identification:	SB-17 9.0	Date Sampled:	05/12/95
Lab Number:	9505187-39A	Date Received:	05/15/95
Sample Matrix/Media:	SOIL	Date Prepared:	05/23/95
Preparation Method:	EPA 5030	Date Analyzed:	05/24/95
Method Reference:	EPA 8015/8020	Analyst:	WAS

Analyte	CAS #	Concentration (mg/kg)	Method Detection Limit (mg/kg)
BTEX/Gasoline			
Benzene	71-43-2	ND	0.005
Ethylbenzene	100-41-4	ND	0.005
Toluene	108-88-3	ND	0.005
o-Xylene	95-47-6	ND	0.005
p,m-Xylenes	--	ND	0.005
Gasoline	--	2.4a	0.3
Surrogates		Recovery (%)	QC Limits (%)
a,a,a-Trifluorotoluene	98-08-8	76	50 - 150

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.
a Sample appears to be weathered gasoline.

Analytical Results
for
Alisto Engineering Group
Client Reference: 10-270-01
Clayton Project No. 95051.87

Sample Identification:	METHOD BLANK	Date Sampled:	--
Lab Number:	9505187-41A	Date Received:	--
Sample Matrix/Media:	SOIL	Date Prepared:	05/23/95
Preparation Method:	EPA 5030	Date Analyzed:	05/24/95
Method Reference:	EPA 8015/8020	Analyst:	WAS

Analyte	CAS #	Concentration (mg/kg)	Method Detection Limit (mg/kg)
BTEX/Gasoline			
Benzene	71-43-2	ND	0.005
Ethylbenzene	100-41-4	ND	0.005
Toluene	108-88-3	ND	0.005
o-Xylene	95-47-6	ND	0.005
p,m-Xylenes	--	ND	0.005
Gasoline	--	ND	0.3
Surrogates		Recovery (%)	QC Limits (%)
a,a,a-Trifluorotoluene	98-08-8	96	50 - 150

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.

Analytical Results
for
Alisto Engineering Group
Client Reference: 10-270-01
Clayton Project No. 95051.87

Sample Identification: See Below
Lab Number: 9505187
Sample Matrix/Media: SOIL
Extraction Method: EPA 3550
Method Reference: EPA 8015 (Modified)

Date Received: 05/15/95
Date Extracted: 05/19/95
Date Analyzed: 05/19/95

Lab Number	Sample Identification	Date Sampled	TPH-D (mg/kg)	Method Detection Limit (mg/kg)
-01	SB-7 3.0	05/11/95	ND	1
-03	SB-7 9.0	05/11/95	ND	1
-05	SB-8 3.0	05/11/95	ND	1
-07	SB-8 9.0	05/11/95	2	1
-09	SB-9 3.0	05/11/95	ND	1
-11	SB-9 9.0	05/11/95	230	1
-13	SB-10 3.0	05/11/95	ND	1
-15	SB-10 9.0	05/11/95	ND	1
-18	SB-11 9.0	05/11/95	ND	1
-22	SB-12 9.0	05/11/95	ND	1
-26	SB-13 9.0	05/11/95	ND	1
-29	SB-14 6.0	05/11/95	1200	1
-31	SB-15 6.0	05/11/95	ND	1
-34	SB-16 6.0	05/11/95	170	1
-38	SB-17 6.0	05/12/95	14000	1
-39	SB-17 9.0	05/12/95	26	1
-41	METHOD BLANK	--	ND	1

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.
TPH-D = Extractable petroleum hydrocarbons from C10 to C20 quantitated as diesel.

Analytical Results
for
Alisto Engineering Group
Client Reference: 10-270-01
Clayton Project No. 95051.87

Sample Identification: See Below
Lab Number: 9505187
Sample Matrix/Media: SOIL
Extraction Method: EPA 3550
Method Reference: EPA 8015 (Modified)

Date Received: 05/15/95
Date Extracted: 05/19/95
Date Analyzed: 05/19/95

Lab Number	Sample Identification	Date Sampled	TPH-O (mg/kg)	Method Detection Limit (mg/kg)
-01	SB-7 3.0	05/11/95	12	4
-03	SB-7 9.0	05/11/95	ND	4
-05	SB-8 3.0	05/11/95	260	4
-07	SB-8 9.0	05/11/95	13	4
-09	SB-9 3.0	05/11/95	520	4
-11	SB-9 9.0	05/11/95	300	4
-13	SB-10 3.0	05/11/95	340	4
-15	SB-10 9.0	05/11/95	ND	4
-18	SB-11 9.0	05/11/95	14	4
-22	SB-12 9.0	05/11/95	10	4
-26	SB-13 9.0	05/11/95	5	4
-29	SB-14 6.0	05/11/95	140	4
-31	SB-15 6.0	05/11/95	ND	4
-34	SB-16 6.0	05/11/95	120	4
-38	SB-17 6.0	05/12/95	ND	4
-39	SB-17 9.0	05/12/95	27	4
-41	METHOD BLANK	--	ND	4

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.
TPH-O = Extractable petroleum hydrocarbons from C20 to C42 quantitated as motor oil.

Clayton
ENVIRONMENTAL
CONSULTANTS

Quality Assurance Results Summary

Matrix Spike/Matrix Spike Duplicate Results

for

Clayton Project No. 95051.87

Quality Assurance Results Summary
for
Clayton Project No. 95051.87

Clayton Lab Number:	9505223-LCS	Analytical Method:	EPA8015
Ext./Prep. Method:	EPA3550	Instrument ID:	02883
Date:	05/19/95	Date:	05/19/95
Analyst:	GTL	Time:	21:22
Std. Source:	E950518-01W	Analyst:	GUD
Sample Matrix/Media:	SOIL	Units:	MG/KG

Analyte	Sample Result	Spike Level	Matrix Spike Result	MS Recovery (%)	Matrix Spike Duplicate Result	MSD Recovery (%)	Average Recovery (% R)	LCL (% R)	UCL (% R)	RPD (%)	UCL (%RPD)
DIESEL	ND	20.0	17.5	88	17.5	88	88	51	147	0.0	30

LCS = Laboratory Control Sample
ND = Not detected at or above limit of detection
LCL = Lower Control Limit
UCL = Upper Control Limit
SOR = Spike out of range due to high sample concentration.

Quality Assurance Results Summary
for
Clayton Project No. 95051.87

Clayton Lab Number:	9505187-13A	Analytical Method:	EPA8015
Ext./Prep. Method:	EPA3550	Instrument ID:	02883
Date:	05/19/95	Date:	05/20/95
Analyst:	GTL	Time:	09:05
Std. Source:	E950518-01W	Analyst:	GUD
Sample Matrix/Media:	SOIL	Units:	MG/KG

Analyte	Sample Result	Spike Level	Matrix Spike Result	MS Recovery (%)	Matrix Spike Duplicate Result	MSD Recovery (%)	Average Recovery (% R)	LCL (% R)	UCL (% R)	RPD (%)	UCL (%RPD)
DIESEL	402	20.0	356	SOR	349	SOR	SOR	51	147	1.9	30

LCS = Laboratory Control Sample
LCL = Lower Control Limit
UCL = Upper Control Limit
ND = Not detected at or above limit of detection
SOR = Spike out of range due to high sample concentration.

Quality Assurance Results Summary
for
Clayton Project No. 95051.87

Clayton Lab Number:	9505155-03A	Analytical Method:	EPA8015_8020
Ext./Prep. Method:	EPA 5030	Instrument ID:	05587
Date:	05/23/95	Date:	05/23/95
Analyst:	WAS	Time:	20:16
Std. Source:	V950313-01W	Analyst:	WAS
Sample Matrix/Media:	SOIL	Units:	MG/KG

Analyte		Sample Result	Spike Level	Matrix Spike Result	MS Recovery (%)	Matrix Spike Duplicate Result	MSD Recovery (%)	Average Recovery (% R)	LCL (% R)	UCL (% R)	RPD (%)	UCL (%RPD)
BENZENE	(PID)	ND	0.0437	0.0341	78	0.0361	83	80	53	140	5.7	28
ETHYLBENZENE	(PID)	ND	0.0292	0.0263	90	0.0297	102	96	56	134	12	25
GASOLINE	(FID)	ND	2.50	1.94	78	2.06	82	80	41	164	6.0	37
TOLUENE	(PID)	ND	0.152	0.119	78	0.128	84	81	60	139	7.3	22
TOTAL XYLENE	(PID)	ND	0.178	0.159	89	0.181	102	96	61	129	13	26

LCS = Laboratory Control Sample
LCL = Lower Control Limit
UCL = Upper Control Limit
ND = Not detected at or above limit of detection
SOR = Spike out of range due to high sample concentration.

Clayton ENVIRONMENTAL CONSULTANTS

REQUEST FOR LABORATORY ANALYTICAL SERVICES

For Clayton Use Only	Page 1 of 2
Project No.	pg 1-4 / pg 5
Batch No. Split batch	9505187 / 9505194
Ind. Code	W.P.
Date Logged In 5/16/95	By JM

Alisto Eng. Proj # 10-270-01

REPORT RESULTS TO

Name: Brady Nagle — Title: Project Manager
Company: Alisto Engineering — Dept.:
Mailing Address: 1575 Treat Blvd #201,
City, State, Zip: Walnut Creek CA 94598
Telephone No.: 510 295 1650 — Telefax No.: 510 295 1823

Purchase Order No.: — Client Job No.: 10270-01

SEND INVOICE TO

Name: Port of Oakland
Company: Dan Scheenholz — Dept.:
Address: 530 Water Street
City, State, Zip: Oakland CA

Date Results Req.: — Rush Charges Authorized? ☐ Yes ☐ No — Phone / Fax Results ☐ ☐

Special Instructions: (method, limit of detection, etc.)
TEPH = Total extractable petroleum hydrocarbons w/silica gel cleanup to quantify diesel (C10-20) + motor oil (C20-42) using EPA 8015
* Explanation of Preservative:

Samples are: (check if applicable)
☐ Drinking Water
☐ Collected in the State of New York

ANALYSIS REQUESTED
(Enter an 'X' in the box below to indicate request; Enter a 'P' if Preservative added. *)

CLIENT SAMPLE IDENTIFICATION	DATE SAMPLED	MATRIX/ MEDIA	AIR VOLUME (specify units)	Number of Containers	TPH-C BTEX Range 8015 8020	TPH-Diesel TEPH	FOR LAB USE ONLY
SB-7 3.0	5-11-95	Soil		1	X	X	01A
SB-7 6.0				1			02
SB-7 9.0				1	X	X	03
SB-7 14.0				1			04
SB-8 3.0				1	X	X	05
SB-8 6.0				1			06
SB-8 9.0				1	X	X	07
SB-8 14.0				1			08
SB-9 3.0				1	X	X	09
SB-9 6.0				1			10

9505187

CHAIN OF CUSTODY

Collected by: Chris Reigheimer (print) — Collector's Signature:
Relinquished by: — Date/Time 5/15/95 @ 1730
Relinquished by: Lori Mitchell — Date/Time 5/15/95 @ 1820
Method of Shipment: CEC Courier

Received by: Lori Mitchell — Date/Time 5/15/95 @ 1730
Received at Lab by: Carol Hammerberg — Date/Time 5/15/95 6:20pm
Sample Condition Upon Receipt: ☐ Acceptable ☐ Other (explain)

Authorized by: _____ Date _____
(Client Signature Must Accompany Request)

Please return completed form and samples to one of the Clayton Environmental Consultants, Inc. labs listed below:

22345 Roethel Drive Novi, MI 48375 (810) 344-1770	Raritan Center 160 Fieldcrest Ave. Edison, NJ 08837 (908) 225-6040	400 Chastain Center Blvd., N.W. Suite 490 Kennesaw, GA 30144 (404) 499-7500	1252 Quarry Lane Pleasanton, CA 94566 (510) 426-2657

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Clayton ENVIRONMENTAL CONSULTANTS

REQUEST FOR LABORATORY ANALYTICAL SERVICES

For Clayton Use Only	Page 2 of 5
Project No.	pg 1-4 / pg 5
Batch No.	950518 / 950519
Ind. Code	W.P.
Date Logged In 5/16/95	By JM

Alisto Eng Proj # 10-270-01

REPORT RESULTS TO

Name: Brady Nagle — Title: Proj. Manager
Company: Alisto Engineering — Dept.
Mailing Address: 1575 Treat Blvd Suite 201
City, State, Zip: Walnut Creek CA 94598
Telephone No.: 510 295 1850 — Telefax No.: 510 295 1823

Purchase Order No. — Client Job No.: 10-270-01

SEND INVOICE TO

Name: Port of Oakland
Company: Dan Schoenholz — Dept.
Address: 530 Water Street
City, State, Zip: Oakland, CA

Date Results Req.: — Rush Charges Authorized? ☐ Yes ☐ No — Phone / Fax Results ☐ ☐

Special Instructions: (method, limit of detection, etc.)
TEPH = Total extractable petroleum hydrocarbons w/silica gel cleanup to quantify diesel (C10-20) + motor oil (C20-42) using EPA 8015
*Explanation of Preservative:

Samples are: (check if applicable)
☐ Drinking Water
☐ Collected in the State of New York

ANALYSIS REQUESTED
(Enter an 'X' in the box below to indicate request; Enter a 'P' if Preservative added. *)

CLIENT SAMPLE IDENTIFICATION	DATE SAMPLED	MATRIX/ MEDIA	AIR VOLUME (specify units)	Number of Containers	TPH-Gas BTEX Range	TPH-Diesel	TEPH	FOR LAB USE ONLY
SB-9 9.0	5-11-95	Soil		1	X	X		11 A
SB-9 14.0				1				12
SB-10 3.0				1	X	X		13
SB-10 6.0				1				14
SB-10 9.0				1	X	X		15
SB-11 3.0				1				16
SB-11 6.0				1				17
SB-11 9.0				1	X	X		18
SB-11 14.0				1				19
SB-12 3.0				1				20

CHAIN OF CUSTODY

Collected by: Chris Reichheimer (print) — Collector's Signature:
Relinquished by: — Date/Time @ 1730 5/15/95
Relinquished by: Jim Mitchell — Date/Time @ 1820 5/15/95
Method of Shipment: CEC Courier

Received by: Jim Mitchell — Date/Time @ 1730 5/15/95
Received at Lab by: Carol Hammerberg — Date/Time 5/15/95 6:20pm
Sample Condition Upon Receipt: ☐ Acceptable ☐ Other (explain)

Authorized by: _____ Date _____
(Client Signature Must Accompany Request)

Please return completed form and samples to one of the Clayton Environmental Consultants, Inc. labs listed below:

22345 Roethel Drive Novi, MI 48375 (810) 344-1770	Raritan Center 160 Fieldcrest Ave. Edison, NJ 08837 (908) 225-6040	400 Chastain Center Blvd., N.W. Suite 490 Kennesaw, GA 30144 (404) 499-7500	1252 Quarry Lane Pleasanton, CA 94566 (510) 426-2657

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Clayton ENVIRONMENTAL CONSULTANTS

REQUEST FOR LABORATORY ANALYTICAL SERVICES

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Batch No. Split Batch	9505187 pg 5
Ind. Code	WP: 9505174
Date Logged In 5/16/95	By JG

Alisto Eng. Proj # 10-2570-01

REPORT RESULTS TO

Name	Brady Nagle
Title	Proj. Manager
Company	Alisto Engineering
Dept.	
Mailing Address	1575 Treat Blvd Ste 201
City, State, Zip	Walnut Creek CA 94598
Telephone No.	510 295 1650
Telefax No.	510 295 1823

Purchase Order No.: | Client Job No.:

SEND INVOICE TO

Name	Port of Oakland
Company	Dan Scheenholz
Dept.	
Address	530 Water Street
City, State, Zip	Oakland, CA

Date Results Req.: | Rush Charges Authorized? ☐ Yes ☐ No | Phone / Fax Results ☐ ☐

Special Instructions (method, limit of detection, etc.)
TEPH = Total Petroleum Hydrocarbons w/silica gel cleanup to quantify diesel (C10-20) & Motor oil (C-20-42) using EPA 8015

Explanation of Preservative:

Samples are: (check if applicable)
☐ Drinking Water
☐ Collected in the State of New York

ANALYSIS REQUESTED
(Enter an 'X' in the box below to indicate request; Enter a 'P' if Preservative added. *)

CLIENT SAMPLE IDENTIFICATION	DATE SAMPLED	MATRIX/ MEDIA	AIR VOLUME (specify units)	Number of Containers	TPH-Gas/BTEX	TPH-Diesel	TEPH	8010/8021	FOR LAB USE ONLY
SB-12 6.0	5-11-95	soil		1					21 A
SB-12 9.0				1	X		X		22
SB-12 14.0				1					23
SB-13 3.0				1					24
SB-13 6.0				1					25
SB-13 9.0				1	X		X		26
SB-13 14.0				1					27
SB-14 3.0				1					28
SB-14 6.0				1	X		X		29
SB-15 3.0				1					30

CHAIN OF CUSTODY

Collected by: Chris Reinheimer (print) — Collector's Signature:

Relinquished by: — Date/Time 5/15/95 @ 1730

Relinquished by: — Date/Time 5/15/95 @ 1820

Method of Shipment: GEC Courier

Received by: — Date/Time 5/15/95 @ 1730

Received at Lab by: Carol Hammerberg — Date/Time 5/15/95 6:30PM

Sample Condition Upon Receipt: ☐ Acceptable ☐ Other (explain)

Authorized by: _____ Date _____
(Client Signature Must Accompany Request)

Please return completed form and samples to one of the Clayton Environmental Consultants, Inc. labs listed below:

22345 Roethel Drive Novi, MI 48375 (810) 344-1770	Raritan Center 160 Fieldcrest Ave. Edison, NJ 08837 (908) 225-6040	400 Chastain Center Blvd., N.W. Suite 490 Kennesaw, GA 30144 (404) 499-7500	1252 Quarry Lane Pleasanton, CA 94566 (510) 426-2657

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Clayton ENVIRONMENTAL CONSULTANTS

REQUEST FOR LABORATORY ANALYTICAL SERVICES

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Project No.	pg 1-4
Batch No. Split Batch 9505187	pg 5
Ind. Code	WP 9505190
Date Logged In 5/16/95	By JB

Alisto Eng. Proj. # 10-270-01

REPORT RESULTS TO

Name	Brady Nagle
Title	Project Mgr.
Company	Alisto Engineering
Dept.	
Mailing Address	1575 Trent Blvd Ste 201
City, State, Zip	Walnut Creek CA
Telephone No.	510 295 1650
Telefax No.	510 295 1823

Purchase Order No.

Client Job No. 10-270-01

SEND INVOICE TO

Name	Port of Oakland
Company	Dan Schoenholz
Dept.	
Address	530 Water Street
City, State, Zip	Oakland CA

Date Results Req.:

Rush Charges Authorized? ☐ Yes ☐ No

Phone / Fax Results ☐ ☐

Special Instructions: (method, limit of detection, etc.)
TEPH=Total Extractable Petroleum Hydrocarbons w/silica gel cleanup to quantify diesel (C10-20) & motor oil (C20-42) using EPA 8015

Explanation of Preservative:

Samples are: (check if applicable)
☐ Drinking Water
☐ Collected in the State of New York

ANALYSIS REQUESTED
(Enter an 'X' in the box below to indicate request; Enter a 'P' if Preservative added. *)

CLIENT SAMPLE IDENTIFICATION	DATE SAMPLED	MATRIX/ MEDIA	AIR VOLUME (specify units)	Number of Containers	TPH-Gas Range	BTEX 8015/8020	TPH-Diesel	TEPH	FOR LAB USE ONLY
SB-15 6.0	5-11-95	Soil		1	X		X		31 A
SB-15 9.0				1					32
SB-16 3.0				1					33
SB-16 6.0				1	X		X		34
SB-16 9.0				1					35
SB-16 14.0				1					36
SB-17 3.0	5-12-95			1					37
SB-17 6.0				1	X		X		38
SB-17 9.0				1	X		X		39
SB-17 14.0				1					40

CHAIN OF CUSTODY

Collected by:	Chris Reinheimer (print)	Collector's Signature:
Relinquished by:	Date/Time 5/15/95 @ 1730	Received by: Date/Time 5/15/95 @ 1730
Relinquished by:	Date/Time 5/15/95 @ 1820	Received at Lab by: Carol Hammerberg Date/Time 5/15/95 6:20pm
Method of Shipment: CEC Courier		Sample Condition Upon Receipt: ☐ Acceptable ☐ Other (explain)

Authorized by: _____ Date _____
(Client Signature Must Accompany Request)

Please return completed form and samples to one of the Clayton Environmental Consultants, Inc. labs listed below:

22345 Roethel Drive Novi, MI 48375 (810) 344-1770	Raritan Center 160 Fieldcrest Ave. Edison, NJ 08837 (908) 225-6040	400 Chastain Center Blvd., N.W. Suite 490 Kennesaw, GA 30144 (404) 499-7500	1252 Quarry Lane Pleasanton, CA 94566 (510) 426-2657

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Western Operations

1252 Quarry Lane
P.O. Box 9019
Pleasanton, CA 94566
(510) 426-2600
Fax (510) 426-0106

Clayton
ENVIRONMENTAL
CONSULTANTS

September 14, 1995

Mr. Dale Swain
ALISTO ENGINEERING GROUP
1575 Treat Blvd., Suite 201
Walnut Creek, CA 94598

Client Ref.: 10-270
Clayton Project No.: 95083.65

Dear Mr. Swain:

Attached is our analytical laboratory report for the samples received on August 30, 1995. Also enclosed is a copy of the Chain-of-Custody record acknowledging receipt of these samples.

Please note that any unused portion of the samples will be discarded after October 14, 1995, unless you have requested otherwise.

We appreciate the opportunity to assist you. If you have any questions concerning this report, please contact Suzanne Haus, Client Services Supervisor, at (510) 426-2657.

Sincerely,

Harriotte A. Hurley, CIH
Director, Laboratory Services
San Francisco Regional Office

HAH/tjb

Attachments

RECEIVED
SEP 15 1995

Clayton
ENVIRONMENTAL
CONSULTANTS

Analytical Results
for
Alisto Engineering Group
Client Reference: 10-270
Clayton Project No. 95083.65

Sample Identification:	MW-4 10.0'	Date Sampled:	08/25/95
Lab Number:	9508365-02A	Date Received:	08/30/95
Sample Matrix/Media:	SOIL	Date Prepared:	08/30/95
Preparation Method:	EPA 5030	Date Analyzed:	08/31/95
Method Reference:	EPA 8015/8020	Analyst:	WGK

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
BTEX/Gasoline			
Benzene	71-43-2	ND	0.005
Ethylbenzene	100-41-4	ND	0.005
Toluene	108-88-3	ND	0.005
o-Xylene	95-47-6	ND	0.005
p,m-Xylenes	--	ND	0.005
Gasoline	--	ND	0.3
Surrogates		Recovery (%)	QC Limits (%)
a,a,a-Trifluorotoluene	98-08-8	88	50 - 150

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.

Analytical Results
for
Alisto Engineering Group
Client Reference: 10-270
Clayton Project No. 95083.65

Sample Identification:	MW-5 6.5'	Date Sampled:	08/25/95
Lab Number:	9508365-04A	Date Received:	08/30/95
Sample Matrix/Media:	SOIL	Date Prepared:	08/30/95
Preparation Method:	EPA 5030	Date Analyzed:	08/31/95
Method Reference:	EPA 8015/8020	Analyst:	WGK

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
BTEX/Gasoline			
Benzene	71-43-2	ND	0.005
Ethylbenzene	100-41-4	ND	0.005
Toluene	108-88-3	ND	0.005
o-Xylene	95-47-6	ND	0.005
p,m-Xylenes	--	ND	0.005
Gasoline	--	ND	0.3
Surrogates		Recovery (%)	QC Limits (%)
a,a,a-Trifluorotoluene	98-08-8	88	50 - 150

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.

Analytical Results
for
Alisto Engineering Group
Client Reference: 10-270
Clayton Project No. 95083.65

Sample Identification:	MW-5 10.0'	Date Sampled:	08/25/95
Lab Number:	9508365-05A	Date Received:	08/30/95
Sample Matrix/Media:	SOIL	Date Prepared:	08/30/95
Preparation Method:	EPA 5030	Date Analyzed:	08/31/95
Method Reference:	EPA 8015/8020	Analyst:	WGK

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
BTEX/Gasoline			
Benzene	71-43-2	ND	0.005
Ethylbenzene	100-41-4	ND	0.005
Toluene	108-88-3	ND	0.005
o-Xylene	95-47-6	ND	0.005
p,m-Xylenes	--	ND	0.005
Gasoline	--	ND	0.3
Surrogates		Recovery (%)	QC Limits (%)
a,a,a-Trifluorotoluene	98-08-8	56	50 - 150

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.

Analytical Results
for
Alisto Engineering Group
Client Reference: 10-270
Clayton Project No. 95083.65

Sample Identification:	MW-6 10.0'	Date Sampled:	08/25/95
Lab Number:	9508365-08A	Date Received:	08/30/95
Sample Matrix/Media:	SOIL	Date Prepared:	08/30/95
Preparation Method:	EPA 5030	Date Analyzed:	08/31/95
Method Reference:	EPA 8015/8020	Analyst:	WGK

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
BTEX/Gasoline			
Benzene	71-43-2	ND	0.005
Ethylbenzene	100-41-4	ND	0.005
Toluene	108-88-3	ND	0.005
o-Xylene	95-47-6	ND	0.005
p,m-Xylenes	--	ND	0.005
Gasoline	--	ND	0.3
Surrogates		Recovery (%)	QC Limits (%)
a,a,a-Trifluorotoluene	98-08-8	76	50 - 150

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.

Analytical Results
for
Alisto Engineering Group
Client Reference: 10-270
Clayton Project No. 95083.65

Sample Identification:	MW-7 10.0'	Date Sampled:	08/25/95
Lab Number:	9508365-10A	Date Received:	08/30/95
Sample Matrix/Media:	SOIL	Date Prepared:	08/30/95
Preparation Method:	EPA 5030	Date Analyzed:	08/31/95
Method Reference:	EPA 8015/8020	Analyst:	WGK

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
BTEX/Gasoline			
Benzene	71-43-2	ND	0.005
Ethylbenzene	100-41-4	ND	0.005
Toluene	108-88-3	ND	0.005
o-Xylene	95-47-6	ND	0.005
p,m-Xylenes	--	ND	0.005
Gasoline	--	ND	0.3
Surrogates		Recovery (%)	QC Limits (%)
a,a,a-Trifluorotoluene	98-08-8	84	50 - 150

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.

Analytical Results
for
Alisto Engineering Group
Client Reference: 10-270
Clayton Project No. 95083.65

Sample Identification:	MW-8 6.5'	Date Sampled:	08/25/95
Lab Number:	9508365-13A	Date Received:	08/30/95
Sample Matrix/Media:	SOIL	Date Prepared:	08/30/95
Preparation Method:	EPA 5030	Date Analyzed:	09/01/95
Method Reference:	EPA 8015/8020	Analyst:	WGK

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
BTEX/Gasoline			
Benzene	71-43-2	ND	0.03
Ethylbenzene	100-41-4	ND	2
Toluene	108-88-3	ND	0.1
o-Xylene	95-47-6	ND	0.2
p,m-Xylenes	--	ND	0.2
Gasoline	--	47[a]	2
Surrogates		Recovery (%)	QC Limits (%)
a,a,a-Trifluorotoluene	98-08-8	78	50 - 150

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.
Note: Detection limits increased due to dilution necessary for quantitation.
a Purgeable hydrocarbons quantitated as gasoline may be due to heavier petroleum product.

Analytical Results
for
Alisto Engineering Group
Client Reference: 10-270
Clayton Project No. 95083.65

Sample Identification:	MW-8 10.01'	Date Sampled:	08/25/95
Lab Number:	9508365-14A	Date Received:	08/30/95
Sample Matrix/Media:	SOIL	Date Prepared:	08/30/95
Preparation Method:	EPA 5030	Date Analyzed:	09/01/95
Method Reference:	EPA 8015/8020	Analyst:	WGK

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
BTEX/Gasoline			
Benzene	71-43-2	ND	0.03
Ethylbenzene	100-41-4	ND	1
Toluene	108-88-3	ND	0.1
o-Xylene	95-47-6	ND	0.3
p,m-Xylenes	--	ND	0.3
Gasoline	--	27 a	2
Surrogates		Recovery (%)	QC Limits (%)
a,a,a-Trifluorotoluene	98-08-8	72	50 - 150

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.
Note: Detection limits increased due to dilution necessary for quantitation.
a Purgeable hydrocarbons quantitated as gasoline may be due to heavier petroleum product.

Analytical Results
for
Alisto Engineering Group
Client Reference: 10-270
Clayton Project No. 95083.65

Sample Identification:	METHOD BLANK	Date Sampled:	--
Lab Number:	9508365-15A	Date Received:	--
Sample Matrix/Media:	SOIL	Date Prepared:	08/30/95
Preparation Method:	EPA 5030	Date Analyzed:	08/31/95
Method Reference:	EPA 8015/8020	Analyst:	WGK

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
BTEX/Gasoline			
Benzene	71-43-2	ND	0.005
Ethylbenzene	100-41-4	ND	0.005
Toluene	108-88-3	ND	0.005
o-Xylene	95-47-6	ND	0.005
p,m-Xylenes	--	ND	0.005
Gasoline	--	ND	0.3
Surrogates		Recovery (%)	QC Limits (%)
a,a,a-Trifluorotoluene	98-08-8	112	50 - 150

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.

Analytical Results
for
Alisto Engineering Group
Client Reference: 10-270
Clayton Project No. 95083.65

Sample Identification: See Below
Lab Number: 9508365
Sample Matrix/Media: SOIL
Extraction Method: EPA 3550
Method Reference: EPA 8015 (Modified)

Date Received: 08/30/95
Date Extracted: 08/31/95
Date Analyzed: 09/08/95

Lab Number	Sample Identification	Date Sampled	Kerosene (mg/kg)	Method Detection Limit (mg/kg)
-02	MW-4 10.0'	08/25/95	ND	1
-04	MW-5 6.5'	08/25/95	ND	1
-05	MW-5 10.0'	08/25/95	ND	1
-08	MW-6 10.0'	08/25/95	ND	1
-10	MW-7 10.0'	08/25/95	ND	1
-13	MW-8 6.5'	08/25/95	ND	1
-14	MW-8 10.01'	08/25/95	ND	1
-15	METHOD BLANK	--	ND	1

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Analytical Results
for
Alisto Engineering Group
Client Reference: 10-270
Clayton Project No. 95083.65

Sample Identification: See Below
Lab Number: 9508365
Sample Matrix/Media: SOIL
Extraction Method: EPA 3550
Method Reference: EPA 8015 (Modified)

Date Received: 08/30/95
Date Extracted: 08/31/95
Date Analyzed: 09/08/95

Lab Number	Sample Identification	Date Sampled	TPH-D (mg/kg)	Method Detection Limit (mg/kg)
-02	MW-4 10.0'	08/25/95	ND	1
-04	MW-5 6.5'	08/25/95	ND	1
-05	MW-5 10.0'	08/25/95	5	1
-08	MW-6 10.0'	08/25/95	ND	1
-10	MW-7 10.0'	08/25/95	ND	1
-13	MW-8 6.5'	08/25/95	1300	1
-14	MW-8 10.01'	08/25/95	1800	1
-15	METHOD BLANK	--	ND	1

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.
TPH-D = Extractable petroleum hydrocarbons from C10 to C20 quantitated as diesel.

Analytical Results
for
Alisto Engineering Group
Client Reference: 10-270
Clayton Project No. 95083.65

Sample Identification: See Below
Lab Number: 9508365
Sample Matrix/Media: SOIL
Extraction Method: EPA 3550
Method Reference: EPA 8015 (Modified)

Date Received: 08/30/95
Date Extracted: 08/31/95
Date Analyzed: 09/08/95

Lab Number	Sample Identification	Date Sampled	TPH-O (mg/kg)	Method Detection Limit (mg/kg)
-02	MW-4 10.0'	08/25/95	ND	4
-04	MW-5 6.5'	08/25/95	ND	4
-05	MW-5 10.0'	08/25/95	31	4
-08	MW-6 10.0'	08/25/95	ND	4
-10	MW-7 10.0'	08/25/95	ND	4
-13	MW-8 6.5'	08/25/95	1700	4
-14	MW-8 10.01'	08/25/95	2600	4
-15	METHOD BLANK	--	ND	4

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.
TPH-O = Extractable petroleum hydrocarbons from C20 to C42 quantitated as motor oil.

Clayton ENVIRONMENTAL CONSULTANTS

REQUEST FOR LABORATORY ANALYTICAL SERVICES

For Clayton Use Only | Page 1 of 2

Project No.

Batch No. 9508365

Ind. Code | W.P.

Date Logged In 8/30 | By JONES

REPORT RESULTS TO

Name Dale Swain | Title

Company ALISTO ENGINEERING | Dept.

Mailing Address 575 Treat Blvd #201

City, State, Zip Walnut Creek CA

Telephone No. 510 945 1650 | Telefax No. 510 295 1823

SEND INVOICE TO

Purchase Order No. 201867 | Client Job No. 10-2770

Name Port of Oakland

Company | Dept.

Address

City, State, Zip

Date Results Req.: | Rush Charges Authorized? ☐ Yes ☐ No | Phone / Fax Results ☐ ☐

Special Instructions: (method, limit of detection, etc.)

* Explanation of Preservative:

Samples are: (check if applicable)
☐ Drinking Water
☐ Collected in the State of New York

ANALYSIS REQUESTED
(Enter an 'X' in the box below to indicate request; Enter a 'P' if Preservative added. *)

CLIENT SAMPLE IDENTIFICATION	DATE SAMPLED	MATRIX/ MEDIA	AIR VOLUME (specify units)	Number of Containers	TPH-G/BTEX	TPH-K-D-MO EPA 8015	HOLD	FOR LAB USE ONLY
MW-4 6.5'	8-25-95	Soil	2x6 BC	1			X	01
MW-4 10.0'				1	X	X		02
MW-4 16.5'				1			X	03
MW-5 6.5'				1	X	X		04
MW-5 10.0'				1	X	X		05
MW-5 18.5'			2x6 SSC	1			X	06
MW-6 6.5'				1			X	07
MW-6 10.0'				1	X	X		08
MW-7 6.5				1			X	09
MW-7 10.0				1	X	X		10

CHAIN OF CUSTODY

Collected by: Chris Reinheimer (print) | Collector's Signature:

Relinquished by: | Date/Time 8/25/95 2300 | Received by: | Date/Time 8/26/95 0950

Relinquished by: | Date/Time 8/28/95 1207 | Received at Lab by: Carol Hammerberg | Date/Time 8/28/95 1207pm

Method of Shipment: CEC Courier

Sample Condition Upon Receipt: ☒ Acceptable ☐ Other (explain)

Authorized by: _____ Date _____
(Client Signature Must Accompany Request)

Please return completed form and samples to one of the Clayton Environmental Consultants, Inc. labs listed below:

22345 Roethel Drive, Novi, MI 48375, (313) 344-1770
Raritan Center, 160 Fieldcrest Ave., Edison, NJ 08837, (908) 225-6040
400 Chastain Center Blvd., N.W., Suite 490, Kennesaw, GA 30144, (404) 499-7500
1252 Quarry Lane, Pleasanton, CA 94566, (510) 426-2657

2/92

DISTRIBUTION:
WHITE - Clayton Laboratory
YELLOW - Clayton Accounting
PINK - Client Retains

Clayton ENVIRONMENTAL CONSULTANTS

REQUEST FOR LABORATORY ANALYTICAL SERVICES

For Clayton Use Only	Page 2 of 2
Project No.	
Batch No.	9508365
Ind. Code	W.P.
Date Logged In 8/30	By Konrit

REPORT RESULTS TO

Name	Dale Sarvis
Title	
Company	ALISTO ENGINEERING
Dept.	
Mailing Address	575 Front Blvd #201
City, State, Zip	Walnut Creek CA 94598
Telephone No.	510 295 1650
Telefax No.	510 295 1673

SEND INVOICE TO

Purchase Order No.	
Client Job No.	10-270
Name	Port of Oakland
Company	
Dept.	
Address	
City, State, Zip	

Date Results Req.: | Rush Charges Authorized? ☐ Yes ☐ No | Phone / Fax Results ☐ ☐

Special Instructions: (method, limit of detection, etc.)

* Explanation of Preservative:

Samples are: (check if applicable)
- ☐ Drinking Water
- ☐ Collected in the State of New York

ANALYSIS REQUESTED (Enter an 'X' in the box below to indicate request; Enter a 'P' if Preservative added. *)

CLIENT SAMPLE IDENTIFICATION	DATE SAMPLED	MATRIX/ MEDIA	AIR VOLUME (specify units)	Number of Containers	TPH-G / BTEX	TPH-D (GC/FID)	HOLD	FOR LAB USE ONLY
MW-7 16.5	8/25/95	Soil	24655L	1			X	11
MW-7 19.5	↓	↓	↓	1			X	12
MW-8 6.5'	↓	↓	↓	1	X	X		13
MW-8 10.0'	↓	↓	↓	1	X	X		14

CHAIN OF CUSTODY

Collected by:	Chris Reinheimer (print)	Collector's Signature:
Relinquished by:	Date/Time 8/25/95 7:40	Received by: Date/Time 8/30/95 9:50
Relinquished by:	Date/Time 8/30/95	Received at Lab by: Carol Hammerbeck Date/Time 8/30/95 1:20pm
Method of Shipment:	CEC Courier	Sample Condition Upon Receipt: ☒ Acceptable ☐ Other (explain)

Authorized by: _____ Date _____
(Client Signature Must Accompany Request)

Please return completed form and samples to one of the Clayton Environmental Consultants, Inc. labs listed below:

22345 Roethel Drive Novi, MI 48375 (313) 344-1770	Raritan Center 160 Fieldcrest Ave. Edison, NJ 08837 (908) 225-6040	400 Chastain Center Blvd., N.W. Suite 490 Kennesaw, GA 30144 (404) 499-7500	1252 Quarry Lane Pleasanton, CA 94566 (510) 426-2657

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DISTRIBUTION:
WHITE - Clayton Laboratory
YELLOW - Clayton Accounting
PINK - Client Retains

LABORATORY REPORTS OF GROUNDWATER SAMPLES

Western Operations

1252 Quarry Lane
P.O. Box 9019
Pleasanton, CA 94566
(510) 426-2600
Fax (510) 426-0106

Clayton
ENVIRONMENTAL
CONSULTANTS

May 31, 1995

Mr. Brady Nagle
ALISTO ENGINEERING GROUP
1575 Treat Blvd., Suite 201
Walnut Creek, CA 94588

Client Ref.: 10-270-01
Clayton Project No.: 95051.94

Dear Mr. Nagle:

Attached is our analytical laboratory report for the samples received on May 15, 1995. Also enclosed is a copy of the Chain-of-Custody record acknowledging receipt of these samples.

Please note that any unused portion of the samples will be discarded after June 30, 1995, unless you have requested otherwise.

We appreciate the opportunity to assist you. If you have any questions concerning this report, please contact Suzanne Haus, Client Services Supervisor, at (510) 426-2657.

Sincerely,

Harriotte A. Hurley, CIH
Director, Laboratory Services
San Francisco Regional Office

HAH/tjb

Attachments

Analytical Results
for
Alisto Engineering Group
Client Reference: 10-270-01
Clayton Project No. 95051.94

Sample Identification:	SB-7W	Date Sampled:	05/11/95
Lab Number:	9505194-01A	Date Received:	05/15/95
Sample Matrix/Media:	WATER	Date Prepared:	05/23/95
Preparation Method:	EPA 5030	Date Analyzed:	05/23/95
Method Reference:	EPA 8015/8020	Analyst:	WAS

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
BTEX/Gasoline			
Benzene	71-43-2	6.7	0.4
Ethylbenzene	100-41-4	ND	0.3
Toluene	108-88-3	0.3	0.3
o-Xylene	95-47-6	ND	0.4
p,m-Xylenes	--	ND	0.4
Gasoline	--	200	50
Surrogates		Recovery (%)	QC Limits (%)
a,a,a-Trifluorotoluene	98-08-8	126	50 - 150

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Purgeable hydrocarbons quantitated as gasoline do not match typical gasoline pattern.

Analytical Results
for
Alisto Engineering Group
Client Reference: 10-270-01
Clayton Project No. 95051.94

Sample Identification:	SB-8W	Date Sampled:	05/11/95
Lab Number:	9505194-02A	Date Received:	05/15/95
Sample Matrix/Media:	WATER	Date Prepared:	05/23/95
Preparation Method:	EPA 5030	Date Analyzed:	05/23/95
Method Reference:	EPA 8015/8020	Analyst:	WAS

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
BTEX/Gasoline			
Benzene	71-43-2	ND	4
Ethylbenzene	100-41-4	ND	3
Toluene	108-88-3	ND	3
o-Xylene	95-47-6	ND	4
p,m-Xylenes	--	ND	4
Gasoline	--	7300	500
Surrogates		Recovery (%)	QC Limits (%)
a,a,a-Trifluorotoluene	98-08-8	80	50 - 150

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Detection limit increased due to presence of heavier hydrocarbons.
a Sample appears to be weathered gasoline.

Analytical Results
for
Alisto Engineering Group
Client Reference: 10-270-01
Clayton Project No. 95051.94

Sample Identification:	SB-9W	Date Sampled:	05/12/95
Lab Number:	9505194-03A	Date Received:	05/15/95
Sample Matrix/Media:	WATER	Date Prepared:	05/23/95
Preparation Method:	EPA 5030	Date Analyzed:	05/23/95
Method Reference:	EPA 8015/8020	Analyst:	WAS

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
BTEX/Gasoline			
Benzene	71-43-2	ND	4
Ethylbenzene	100-41-4	ND	3
Toluene	108-88-3	ND	3
o-Xylene	95-47-6	ND	4
p,m-Xylenes	--	ND	4
Gasoline	--	29000	500
Surrogates		Recovery (%)	QC Limits (%)
a,a,a-Trifluorotoluene	98-08-8	86	50 - 150

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Detection limit increased due to presence of heavier hydrocarbons.
a Sample appears to be weathered gasoline.

Analytical Results
for
Alisto Engineering Group
Client Reference: 10-270-01
Clayton Project No. 95051.94

Sample Identification:	SB-10W	Date Sampled:	05/12/95
Lab Number:	9505194-04A	Date Received:	05/15/95
Sample Matrix/Media:	WATER	Date Prepared:	05/23/95
Preparation Method:	EPA 5030	Date Analyzed:	05/23/95
Method Reference:	EPA 8015/8020	Analyst:	WAS

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
BTEX/Gasoline			
Benzene	71-43-2	ND	0.4
Ethylbenzene	100-41-4	ND	0.3
Toluene	108-88-3	ND	0.3
o-Xylene	95-47-6	ND	0.4
p,m-Xylenes	--	ND	0.4
Gasoline	--	1400	50
Surrogates		Recovery (%)	QC Limits (%)
a,a,a-Trifluorotoluene	98-08-8	79	50 - 150

ND: Not detected at or above limit of detection
--: Information not available or not applicable

a Sample appears to be weathered gasoline.

Analytical Results
for
Alisto Engineering Group
Client Reference: 10-270-01
Clayton Project No. 95051.94

Sample Identification:	SB-11W	Date Sampled:	05/11/95
Lab Number:	9505194-05A	Date Received:	05/15/95
Sample Matrix/Media:	WATER	Date Prepared:	05/23/95
Preparation Method:	EPA 5030	Date Analyzed:	05/23/95
Method Reference:	EPA 8015/8020	Analyst:	WAS

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
<u>BTEX/Gasoline</u>			
Benzene	71-43-2	0.5	0.4
Ethylbenzene	100-41-4	ND	0.3
Toluene	108-88-3	ND	0.3
o-Xylene	95-47-6	ND	0.4
p,m-Xylenes	--	ND	0.4
Gasoline	--	970	50
<u>Surrogates</u>		<u>Recovery (%)</u>	<u>QC Limits (%)</u>
a,a,a-Trifluorotoluene	98-08-8	105	50 - 150

ND: Not detected at or above limit of detection
--: Information not available or not applicable

a Sample appears to be weathered gasoline.

Analytical Results
for
Alisto Engineering Group
Client Reference: 10-270-01
Clayton Project No. 95051.94

Sample Identification:	SB-12W	Date Sampled:	05/11/95
Lab Number:	9505194-06A	Date Received:	05/15/95
Sample Matrix/Media:	WATER	Date Prepared:	05/23/95
Preparation Method:	EPA 5030	Date Analyzed:	05/23/95
Method Reference:	EPA 8015/8020	Analyst:	WAS

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
BTEX/Gasoline			
Benzene	71-43-2	ND	0.4
Ethylbenzene	100-41-4	ND	0.3
Toluene	108-88-3	ND	0.3
o-Xylene	95-47-6	ND	0.4
p,m-Xylenes	--	ND	0.4
Gasoline	--	ND	50
Surrogates		Recovery (%)	QC Limits (%)
a,a,a-Trifluorotoluene	98-08-8	94	50 - 150

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Analytical Results
for
Alisto Engineering Group
Client Reference: 10-270-01
Clayton Project No. 95051.94

Sample Identification:	SB-13W	Date Sampled:	05/12/95
Lab Number:	9505194-07A	Date Received:	05/15/95
Sample Matrix/Media:	WATER	Date Prepared:	05/23/95
Preparation Method:	EPA 5030	Date Analyzed:	05/23/95
Method Reference:	EPA 8015/8020	Analyst:	WAS

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
BTEX/Gasoline			
Benzene	71-43-2	25	0.4
Ethylbenzene	100-41-4	1.2	0.3
Toluene	108-88-3	1.3	0.3
o-Xylene	95-47-6	0.4	0.4
p,m-Xylenes	--	4.0	0.4
Gasoline	--	130	50
Surrogates		**Recovery (%)**	**QC Limits (%)**
a,a,a-Trifluorotoluene	98-08-8	100	50 - 150

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Analytical Results
for
Alisto Engineering Group
Client Reference: 10-270-01
Clayton Project No. 95051.94

Sample Identification:	SB-17W	Date Sampled:	05/12/95
Lab Number:	9505194-08A	Date Received:	05/15/95
Sample Matrix/Media:	WATER	Date Prepared:	05/23/95
Preparation Method:	EPA 5030	Date Analyzed:	05/23/95
Method Reference:	EPA 8015/8020	Analyst:	WAS

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
BTEX/Gasoline			
Benzene	71-43-2	ND	40
Ethylbenzene	100-41-4	30	30
Toluene	108-88-3	ND	30
o-Xylene	95-47-6	ND	40
p,m-Xylenes	--	50	40
Gasoline	--	140000	5000
Surrogates		Recovery (%)	QC Limits (%)
a,a,a-Trifluorotoluene	98-08-8	91	50 - 150

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Detection limit increased due to presence of heavier hydrocarbons.
a Sample appears to be weathered gasoline.

Analytical Results
for
Alisto Engineering Group
Client Reference: 10-270-01
Clayton Project No. 95051.94

Sample Identification:	QC-1	Date Sampled:	05/12/95
Lab Number:	9505194-10A	Date Received:	05/15/95
Sample Matrix/Media:	WATER	Date Prepared:	05/23/95
Preparation Method:	EPA 5030	Date Analyzed:	05/23/95
Method Reference:	EPA 8015/8020	Analyst:	WAS

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
BTEX/Gasoline			
Benzene	71-43-2	ND	0.4
Ethylbenzene	100-41-4	ND	0.3
Toluene	108-88-3	ND	0.3
o-Xylene	95-47-6	ND	0.4
p,m-Xylenes	--	ND	0.4
Gasoline	--	ND	50
Surrogates		Recovery (%)	QC Limits (%)
a,a,a-Trifluorotoluene	98-08-8	91	50 - 150

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Analytical Results
for
Alisto Engineering Group
Client Reference: 10-270-01
Clayton Project No. 95051.94

Sample Identification:	METHOD BLANK	Date Sampled:	--
Lab Number:	9505194-11A	Date Received:	--
Sample Matrix/Media:	WATER	Date Prepared:	05/23/95
Preparation Method:	EPA 5030	Date Analyzed:	05/23/95
Method Reference:	EPA 8015/8020	Analyst:	WAS

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
BTEX/Gasoline			
Benzene	71-43-2	ND	0.4
Ethylbenzene	100-41-4	ND	0.3
Toluene	108-88-3	ND	0.3
o-Xylene	95-47-6	ND	0.4
p,m-Xylenes	--	ND	0.4
Gasoline	--	ND	50
Surrogates		Recovery (%)	QC Limits (%)
a,a,a-Trifluorotoluene	98-08-8	96	50 - 150

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Analytical Results
for
Alisto Engineering Group
Client Reference: 10-270-01
Clayton Project No. 95051.94

Sample Identification: See Below
Lab Number: 9505194
Sample Matrix/Media: WATER
Date Received: 05/15/95

Lab Number	Sample Identification	Date Sampled	Fingerprint (%)	Method Detection Limit (%)
03	SB-9W	05/12/95	*	--
09	SB-16W	05/12/95	64% diesel #2	--
-11	METHOD BLANK	--	ND	--

ND: Not detected at or above limit of detection
--: Information not available or not applicable

* Sample SB-9W was a mixture of weathered gas, diesel, and oil. Percent levels were not present in the sample. Refer to the results reported for TPH-D and gasoline.

Analytical Results
for
Alisto Engineering Group
Client Reference: 10-270-01
Clayton Project No. 95051.94

Sample Identification: See Below
Lab Number: 9505194
Sample Matrix/Media: WATER
Extraction Method: EPA 3510
Method Reference: EPA 8015 (Modified)

Date Received: 05/15/95
Date Extracted: 05/18/95
Date Analyzed: 05/24/95

Lab Number	Sample Identification	Date Sampled	TPH-D (ug/L)	Method Detection Limit (ug/L)
-01	SB-7W	05/11/95	ND	50
-02	SB-8W	05/11/95	3400	50
-03	SB-9W	05/12/95	18000	50
-04	SB-10W	05/12/95	7400	50
-05	SB-11W	05/11/95	1400	50
-06	SB-12W	05/11/95	ND	50
-07	SB-13W	05/12/95	ND	50
-08	SB-17W	05/12/95	43000	50
-09	SB-16W	05/12/95	*	50
-11	METHOD BLANK	--	ND	50

ND: Not detected at or above limit of detection
--: Information not available or not applicable

TPH-D = Extractable petroleum hydrocarbons from C10 to C42 quantitated as diesel.
Note : Samples were extracted with hexane followed by a silica gel cleanup.
* Percent levels of diesel #2 present in sample SB-16W. Refer to the results reported for % fingerprint.

Clayton ENVIRONMENTAL CONSULTANTS

REQUEST FOR LABORATORY ANALYTICAL SERVICES

For Clayton Use Only	Page 5 of 5
Project No.	pg 1-4 pg 5
Batch No. (Split batch)	9505187 / 9505194
Ind. Code	W.P.
Date Logged In 5/18/95	By

Alisto Eng Proj. # 10-270-01

REPORT RESULTS TO

Name	Brady Nagle	Title	Proj Mgr.
Company	Alisto Engineering	Dept.	
Mailing Address	1575 Treat Blvd, Ste 201		
City, State, Zip	Walnut Creek CA 94598		
Telephone No.	510 295 1650	Telefax No.	510 295 1823

Purchase Order No. | Client Job No.: 10-270-01

SEND INVOICE TO

Name	Port of Oakland		
Company	Dan Scheebolz	Dept.	
Address	530 Water Street		
City, State, Zip	Oakland CA		

Date Results Req.: | Rush Charges Authorized? ☐ Yes ☐ No | Phone / Fax Results ☐ ☐

Special Instructions: (method, limit of detection, etc.)
TEPH = Total Petroleum Hydrocarbons (extractable) w/ silica gel cleanup to quantify Diesel (C10-20) + Motor Oil (C20-42) using EPA 8015

* Explanation of Preservative: P = preserved with HCl

Samples are: (check if applicable)
☐ Drinking Water
☐ Collected in the State of New York

ANALYSIS REQUESTED
(Enter an 'X' in the box below to indicate request; Enter a 'P' if Preservative added. *)

CLIENT SAMPLE IDENTIFICATION	DATE SAMPLED	MATRIX/ MEDIA	AIR VOLUME (specify units)	Number of Containers	TPH-G / BTEX Range / 8015/8020 TPH-Diesel	TEPH	Project Arsenic Analysis	FOR LAB USE ONLY
SB-7W	5-11-95	water	1Lgl/2x40ml	3	Xp	Xp		9505194 01 A-C
SB-8W	5-11-95		1Lgl/2x40ml	3	Xp	Xp		02
SB-9W	5-12-95		1Lgl/3x40ml	4	Xp	Xp	Xp	03 A-D
SB-10W	5-12-95		1Lgl/2x40ml	3	Xp	Xp		04 A-C
SB-11W	5-11-95		1Lgl/2x40ml	3	Xp	Xp		05
SB-12W	5-11-95		1Lgl/2x40ml	3	Xp	Xp		06
SB-13W	5-12-95		1Lgl/2x40ml	3	Xp	Xp		07
SB-17W	5-12-95		1Lgl/2x40ml	3	Xp	Xp		08
* SB-16W *	5-12-95		1Lgl	1	Xp *	Xp	Xp	09 A
QC-1	5-12-95		2x40ml	2	Xp			10 A,B

CHAIN OF CUSTODY

Collected by:	Chris Reinheimer (print)	Collector's Signature:
Relinquished by:		Date/Time 5/15/95 @ 1730
Relinquished by:		Date/Time 5/15/95 @ 1820
Method of Shipment:	CEC Courier	
Received by:		Date/Time 5/15/95 @ 1730
Received at Lab by:	Carol Hammersberg	Date/Time 5/15/95 6:20pm

Sample Condition Upon Receipt: ☒ Acceptable ☐ Other (explain)
* Black watery liquid

Authorized by: _____ Date _____
(Client Signature Must Accompany Request)

Please return completed form and samples to one of the Clayton Environmental Consultants, Inc. labs listed below:

22345 Roethel Drive Novi, MI 48375 (810) 344-1770	Raritan Center 160 Fieldcrest Ave. Edison, NJ 08837 (908) 225-6040	400 Chastain Center Blvd., N.W. Suite 490 Kennesaw, GA 30144 (404) 499-7500	1252 Quarry Lane Pleasanton, CA 94566 (510) 426-2657

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DISTRIBUTION:
WHITE - Clayton Laboratory
YELLOW - Clayton Accounting
PINK - Client Retains

Western Operations

1252 Quarry Lane
P.O. Box 9019
Pleasanton, CA 94566
(510) 426-2600
Fax (510) 426-0106

Clayton
ENVIRONMENTAL
CONSULTANTS

September 22, 1995

Mr. Brady Nagle
ALISTO ENGINEERING GROUP
1575 Treat Blvd., Suite 201
Walnut Creek, CA 94598

Client Ref.: 10-270-01-004
Clayton Project No.: 95091.08

Dear Mr. Nagle:

Attached is our analytical laboratory report for the samples received on September 8, 1995. Also enclosed is a copy of the Chain-of-Custody record acknowledging receipt of these samples.

Please note that any unused portion of the samples will be discarded after October 22, 1995, unless you have requested otherwise.

We appreciate the opportunity to assist you. If you have any questions concerning this report, please contact Suzanne Haus, Client Services Supervisor, at (510) 426-2657.

Sincerely,

Harriotte A. Hurley, CIH
Director, Laboratory Services
San Francisco Regional Office

HAH/tjb

Attachments

Analytical Results
for
Alisto Engineering Group
Client Reference: 10-270-01-004
Clayton Project No. 95091.08

Sample Identification:	MW-4	Date Sampled:	09/11/95
Lab Number:	9509108-01A	Date Received:	09/12/95
Sample Matrix/Media:	WATER	Date Prepared:	09/20/95
Preparation Method:	EPA 5030	Date Analyzed:	09/20/95
Method Reference:	EPA 8015/8020	Analyst:	NAN

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
BTEX/Gasoline			
Benzene	71-43-2	23	0.4
Ethylbenzene	100-41-4	ND	0.3
Toluene	108-88-3	ND	0.3
o-Xylene	95-47-6	ND	0.4
p,m-Xylenes	--	ND	0.4
Gasoline	--	150 a	50
Surrogates		Recovery (%)	QC Limits (%)
a,a,a-Trifluorotoluene	98-08-8	83	50 - 150

ND: Not detected at or above limit of detection
--: Information not available or not applicable

a Purgeable hydrocarbons quantitated as gasoline do not match typical gasoline pattern.

Analytical Results
for
Alisto Engineering Group
Client Reference: 10-270-01-004
Clayton Project No. 95091.08

Sample Identification:	MW-5	Date Sampled:	09/11/95
Lab Number:	9509108-02A	Date Received:	09/12/95
Sample Matrix/Media:	WATER	Date Prepared:	09/20/95
Preparation Method:	EPA 5030	Date Analyzed:	09/20/95
Method Reference:	EPA 8015/8020	Analyst:	NAN

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
BTEX/Gasoline			
Benzene	71-43-2	3.3	0.4
Ethylbenzene	100-41-4	ND	0.3
Toluene	108-88-3	ND	0.3
o-Xylene	95-47-6	ND	0.4
p,m-Xylenes	--	ND	0.4
Gasoline	--	90 a	50
Surrogates		Recovery (%)	QC Limits (%)
a,a,a-Trifluorotoluene	98-08-8	84	50 - 150

ND: Not detected at or above limit of detection
--: Information not available or not applicable

a Purgeable hydrocarbons quantitated as gasoline do not match typical gasoline pattern.

Clayton
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CONSULTANTS

Analytical Results
for
Alisto Engineering Group
Client Reference: 10-270-01-004
Clayton Project No. 95091.08

ample Identification:	MW-2	Date Sampled:	09/06/95
ab Number:	9509108-03A	Date Received:	09/08/95
ample Matrix/Media:	WATER	Date Prepared:	09/20/95
Preparation Method:	EPA 5030	Date Analyzed:	09/20/95
Method Reference:	EPA 8015/8020	Analyst:	NAN

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
TEX/Gasoline			
Benzene	71-43-2	ND	0.4
Ethylbenzene	100-41-4	ND	0.3
Toluene	108-88-3	ND	0.3
o-Xylene	95-47-6	ND	0.4
p,m-Xylenes	--	ND	0.4
Gasoline	--	ND	50
Surrogates		Recovery (%)	QC Limits (%)
a,a,a-Trifluorotoluene	98-08-8	94	50 - 150

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Analytical Results
for
Alisto Engineering Group
Client Reference: 10-270-01-004
Clayton Project No. 95091.08

Sample Identification:	MW-7	Date Sampled:	09/06/95
Lab Number:	9509108-04A	Date Received:	09/08/95
Sample Matrix/Media:	WATER	Date Prepared:	09/20/95
Preparation Method:	EPA 5030	Date Analyzed:	09/20/95
Method Reference:	EPA 8015/8020	Analyst:	NAN

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
BTEX/Gasoline			
Benzene	71-43-2	ND	0.4
Ethylbenzene	100-41-4	ND	0.3
Toluene	108-88-3	ND	0.3
o-Xylene	95-47-6	ND	0.4
p,m-Xylenes	--	ND	0.4
Gasoline	--	ND	50
Surrogates		Recovery (%)	QC Limits (%)
a,a,a-Trifluorotoluene	98-08-8	99	50 - 150

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Analytical Results
for
Alisto Engineering Group
Client Reference: 10-270-01-004
Clayton Project No. 95091.08

Sample Identification:	QC-1	Date Sampled:	09/06/95
Lab Number:	9509108-05A	Date Received:	09/08/95
Sample Matrix/Media:	WATER	Date Prepared:	09/20/95
Preparation Method:	EPA 5030	Date Analyzed:	09/20/95
Method Reference:	EPA 8015/8020	Analyst:	NAN

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
BTEX/Gasoline			
Benzene	71-43-2	ND	0.4
Ethylbenzene	100-41-4	ND	0.3
Toluene	108-88-3	ND	0.3
o-Xylene	95-47-6	ND	0.4
p,m-Xylenes	--	ND	0.4
Gasoline	--	ND	50
Surrogates		Recovery (%)	QC Limits (%)
a,a,a-Trifluorotoluene	98-08-8	90	50 - 150

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Analytical Results
for
Alisto Engineering Group
Client Reference: 10-270-01-004
Clayton Project No. 95091.08

Sample Identification:	QC-2	Date Sampled:	09/06/95
Lab Number:	9509108-06A	Date Received:	09/08/95
Sample Matrix/Media:	WATER	Date Prepared:	09/20/95
Preparation Method:	EPA 5030	Date Analyzed:	09/20/95
Method Reference:	EPA 8015/8020	Analyst:	NAN

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
BTEX/Gasoline			
Benzene	71-43-2	ND	0.4
Ethylbenzene	100-41-4	ND	0.3
Toluene	108-88-3	ND	0.3
o-Xylene	95-47-6	ND	0.4
p,m-Xylenes	--	ND	0.4
Gasoline	--	ND	50
Surrogates		Recovery (%)	QC Limits (%)
a,a,a-Trifluorotoluene	98-08-8	90	50 - 150

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Analytical Results
for
Alisto Engineering Group
Client Reference: 10-270-01-004
Clayton Project No. 95091.08

Sample Identification:	METHOD BLANK	Date Sampled:	--
Lab Number:	9509108-07A	Date Received:	--
Sample Matrix/Media:	WATER	Date Prepared:	09/20/95
Preparation Method:	EPA 5030	Date Analyzed:	09/20/95
Method Reference:	EPA 8015/8020	Analyst:	NAN

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
BTEX/Gasoline			
Benzene	71-43-2	ND	0.4
Ethylbenzene	100-41-4	ND	0.3
Toluene	108-88-3	ND	0.3
o-Xylene	95-47-6	ND	0.4
p,m-Xylenes	--	ND	0.4
Gasoline	--	ND	50
Surrogates		Recovery (%)	QC Limits (%)
a,a,a-Trifluorotoluene	98-08-8	91	50 - 150

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Analytical Results
for
Alisto Engineering Group
Client Reference: 10-270-01-004
Clayton Project No. 95091.08

Sample Identification: See Below
Lab Number: 9509108
Sample Matrix/Media: WATER
Extraction Method: EPA 3510
Method Reference: EPA 8015 (Modified)

Date Received: 09/08/95
Date Extracted: 09/13/95
Date Analyzed: 09/21/95

Lab Number	Sample Identification	Date Sampled	TPH-D (ug/L)	Method Detection Limit (ug/L)	
-01	MW-4	09/06/95	ND	200	a
-02	MW-5	09/06/95	ND	300	a
-03	MW-2	09/06/95	ND	60	a
-04	MW-7	09/06/95	ND	300	a
-07	METHOD BLANK	--	ND	50	

ND: Not detected at or above limit of detection
--: Information not available or not applicable

TPH-D = Extractable petroleum hydrocarbons from C10 to C20 quantitated as diesel.
a Detection limit increased due to presence of heavier hydrocarbons.

Analytical Results
for
Alisto Engineering Group
Client Reference: 10-270-01-004
Clayton Project No. 95091.08

Sample Identification: See Below
Lab Number: 9509108
Sample Matrix/Media: WATER
Preparation Method: EPA 3510
Method Reference: EPA 8015 (Modified)

Date Received: 09/08/95
Date Extracted: 09/13/95
Date Analyzed: 09/21/95

Lab Number	Sample Identification	Date Sampled	TPH-O (ug/L)	Method Detection Limit (ug/L)
-01	MW-4	09/06/95	500	200
-02	MW-5	09/06/95	2500	200
-03	MW-2	09/06/95	400	200
-04	MW-7	09/06/95	800	200
-07	METHOD BLANK	--	ND	200

ND: Not detected at or above limit of detection
--: Information not available or not applicable

TPH-O = Extractable petroleum hydrocarbons from C20 to C42 quantitated as motor oil.

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Quality Assurance Results Summary

Matrix Spike/Matrix Spike Duplicate Results

for

Clayton Project No. 95091.08

Quality Assurance Results Summary - Matrix Spike/Matrix Spike Duplicate
for
Clayton Project No. 95091.08

Clayton Lab Number: 9509107-LCS
Ext./Prep. Method: EPA 3510
Date: 09/13/95
Analyst: HYT
Std. Source: E950901-01W
Sample Matrix/Media: WATER

Analytical Method: EPA 8015
Instrument ID: 02893
Date: 09/21/95
Time: 22:10
Analyst: GUD
Units: UG/L
QC Batch No: 95091315

Analyte	Sample Result	Spike Level	Matrix Spike Result	MS Recovery (%)	Matrix Spike Duplicate Result	MSD Recovery (%)	Average Recovery (% R)	LCL (% R)	UCL (% R)	RPD (%)	UCL (%RPD)
DIESEL	ND	1,000	1,060	106	997	100	103	65	128	6.0	25

ND = Not detected at or above limit of detection
SOR = Spike out of range due to high sample concentration.

LCL = Lower Control Limit

UCL = Upper Control Limit

Quality Assurance Results Summary - Matrix Spike/Matrix Spike Duplicate
for
Clayton Project No. 95091.08

Clayton Lab Number:	9509187-08A	Analytical Method:	EPA 8015/8020
Ext./Prep. Method:	EPA 5030	Instrument ID:	05587
Date:	09/20/95	Date:	09/20/95
Analyst:	JP	Time:	16:10
Std. Source:	V950630-01W	Analyst:	NAN
Sample Matrix/Media:	WATER	Units:	ug/L
		QC Batch No:	950920B1

Analyte		Sample Result	Spike Level	Matrix Spike Result	MS Recovery (%)	Matrix Spike Duplicate Result	MSD Recovery (%)	Average Recovery (% R)	LCL (% R)	UCL (% R)	RPD (%)	UCL (%RPD)
BENZENE	(PID)	ND	5.89	6.13	104	5.96	101	103	81	118	2.8	20
ETHYLBENZENE	(PID)	ND	5.88	6.27	107	6.21	106	106	81	114	1.0	20
GASOLINE	(FID)	ND	500	476	95	474	95	95	80	120	0.4	25
TOLUENE	(PID)	ND	38.1	39.8	104	39.4	103	104	84	118	1.0	20
TOTAL XYLENE	(PID)	ND	36.4	37.8	104	37.5	103	103	85	115	0.8	20

ND = Not detected at or above limit of detection
SOR = Spike out of range due to high sample concentration.
LCL = Lower Control Limit
UCL = Upper Control Limit

Clayton ENVIRONMENTAL CONSULTANTS

REQUEST FOR LABORATORY ANALYTICAL SERVICES

For Clayton Use Only	Page 1 of 1
Project No.	
Batch No. 9509108	
Ind. Code	W.P.
Date Logged In 9/8	By [illegible]

REPORT RESULTS TO
Name: Brady Nagle — Title:
Company: ALISTO ENGINEERING — Dept.:
Mailing Address: 1575 Treat Blvd # 201
City, State, Zip: Walnut Creek CA 94598
Telephone No.: 295-1650 — Telefax No.:

Purchase Order No. — Client Job No. 10-270-01-004

SEND INVOICE TO
Name: Dan Schoenholz
Company: Port of Oakland — Dept.:
Address: 530 Water St
City, State, Zip: Oakland CA

Date Results Req.: — Rush Charges Authorized? ☐ Yes ☒ No — Phone / Fax Results ☐ ☐

Samples are: (check if applicable) ☐ Drinking Water ☐ Collected in the State of New York

Special Instructions: (method, limit of detection, etc.)
Carbon ranges: TPH-D $C_{10}-C_{20}$ | TPH-MO $C_{20}-C_{42}$

* Explanation of Preservative: P - HCl

ANALYSIS REQUESTED (Enter an 'X' in the box below to indicate request; Enter a 'P' if Preservative added. *)

CLIENT SAMPLE IDENTIFICATION	DATE SAMPLED	MATRIX/ MEDIA	AIR VOLUME (specify units)	Number of Containers	TPH-G/BTEX	TPH-D	TPH-MO	FOR LAB USE ONLY
	9/6/95	WATER						
MW-4	9/6/95	WATER	2x40ml 1L amber	4	XP	PX	PX	01 A-D
MW-5	↓	↓	↓	4	P	P	P	02 A-D
MW-3	↓	↓	↓	4	P	P	P	03 A-D
MW-7	↓	↓	↓	4	P	P	P	04 A-D
QC-1	↓	↓	2x40ml	2	P	VP	VPX	05 A-B
QC-2	9/6/95	WATER	↓	2	XP	PX	PX	06 A-B

CHAIN OF CUSTODY
Collected by: Chris Reinheimer (print) — Collector's Signature: [signature]
Relinquished by: — Date/Time — Received by: [signature] — Date/Time 9/8/95 10:35
Relinquished by: [signature] — Date/Time 9/8/95 11:15 — Received at Lab by: [signature] — Date/Time 9/8/95 11:25
Method of Shipment: — Sample Condition Upon Receipt: ☒ Acceptable ☐ Other (explain)
*: Did not receive 1 liter amber [illegible] diesel [illegible]

Authorized by: ______ Date ______
(Client Signature Must Accompany Request)

Please return completed form and samples to one of the Clayton Environmental Consultants, Inc. labs listed below:

22345 Roethel Drive, Novi, MI 48375, (313) 344-1770
Raritan Center, 160 Fieldcrest Ave., Edison, NJ 08837, (908) 225-6040
400 Chastain Center Blvd., N.W., Suite 490, Kennesaw, GA 30144, (404) 499-7500
1252 Quarry Lane, Pleasanton, CA 94566, (510) 426-2657

2/92

DISTRIBUTION:
WHITE - Clayton Laboratory
YELLOW - Clayton Accounting
PINK - Client Retains

Clayton
ENVIRONMENTAL CONSULTANTS

REQUEST FOR LABORATORY ANALYTICAL SERVICES

For Clayton Use Only	Page 1 of 1
Project No.	
Batch No.	9509108 Replacement
Ind. Code	W.P.
Date Logged In 9/12	By Lonise

REPORT RESULTS TO
Name: Brady Nagle   Title:
Company: ALISTO ENGINEERING   Dept.
Mailing Address: 1575 Treat Blvd # 201
City, State, Zip: Walnut Creek CA 94598
Telephone No. 510 295 1650   Telefax No. 510 295 1823

Purchase Order No.   Client Job No. 10-270

SEND INVOICE TO
Name: Port of Oakland
Company: 730 Water Street   Dept.
Address:
City, State, Zip:

Date Results Req.:   Rush Charges Authorized? ☐ Yes ☒ No   Phone / Fax Results ☐ ☐

Samples are: (check if applicable) ☐ Drinking Water ☐ Collected in the State of New York

Special Instructions: (method, limit of detection, etc.)

* Explanation of Preservative: P=HCl

ANALYSIS REQUESTED (Enter an 'X' in the box below to indicate request; Enter a 'P' if Preservative added. *)

CLIENT SAMPLE IDENTIFICATION	DATE SAMPLED	MATRIX/ MEDIA	AIR VOLUME (specify units)	Number of Containers	TPH-G/BTEX	FOR LAB USE ONLY
MW-4	9/11/95	Water	40ml	2	XP	01 AB
MW-5	9/11/95	Water	↓	2	XP	02 ↓

CHAIN OF CUSTODY
Collected by: Chris Reinheimer (print)   Collector's Signature:
Relinquished by: [signature]   Date/Time 9/11/95 4:00   Received by: [signature]   Date/Time 9/12/95 9:25
Relinquished by: Patricia Yelton   Date/Time 9/12/95 9:25   Received at Lab by: Lonise Ohu   Date/Time 9/12/95 12:4
Method of Shipment: Courier (Clayton)   Sample Condition Upon Receipt: ☒ Acceptable ☐ Other (explain)

Authorized by: ______ Date ______
(Client Signature Must Accompany Request)

Replacement Samples

Please return completed form and samples to one of the Clayton Environmental Consultants, Inc. labs listed below:

22345 Roethel Drive
Novi, MI 48375
(313) 344-1770

Raritan Center
160 Fieldcrest Ave.
Edison, NJ 08837
(908) 225-6040

400 Chastain Center Blvd., N.W.
Suite 490
Kennesaw, GA 30144
(404) 499-7500

1252 Quarry Lane
Pleasanton, CA 94566
(510) 426-2657

DISTRIBUTION:
WHITE - Clayton Laboratory
YELLOW - Clayton Accounting
PINK - Client Retains

2/92

Relinquished By: B P Luske 9/12/95 12:45

Western Operations

1252 Quarry Lane
P.O. Box 9019
Pleasanton, CA 94566
(510) 426-2600
Fax (510) 426-0106

Clayton
ENVIRONMENTAL
CONSULTANTS

October 16, 1995

Mr. Dale Swain
ALISTO ENGINEERING GROUP
1575 Treat Blvd., Suite 201
Walnut Creek, CA 94598

Client Ref.: 10-270-03-003
Clayton Project No.: 95094.01

Dear Mr. Swain:

Attached is our analytical laboratory report for the samples received on September 29, 1995. Also enclosed is a copy of the Chain-of-Custody record acknowledging receipt of these samples.

Please note that any unused portion of the samples will be discarded after November 15, 1995, unless you have requested otherwise.

We appreciate the opportunity to assist you. If you have any questions concerning this report, please contact Suzanne Haus, Client Services Supervisor, at (510) 426-2657.

Sincerely,

Harriotte A. Hurley, CIH
Director, Laboratory Services
San Francisco Regional Office

HAH/tjb

Attachments

RECEIVED
OCT 20 1995

Analytical Results
for
Alisto Engineering Group
Client Reference: 10-270-03-003
Clayton Project No. 95094.01

Sample Identification:	MW-2	Date Sampled:	09/28/95
Lab Number:	9509401-01A	Date Received:	09/29/95
Sample Matrix/Media:	WATER	Date Prepared:	10/09/95
Preparation Method:	EPA 5030	Date Analyzed:	10/09/95
Method Reference:	EPA 8015/8020	Analyst:	NAN

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
BTEX/Gasoline			
Benzene	71-43-2	ND	0.4
Ethylbenzene	100-41-4	ND	0.3
Toluene	108-88-3	ND	0.3
o-Xylene	95-47-6	ND	0.4
p,m-Xylenes	--	ND	0.4
Gasoline	--	120 a	50
Surrogates		Recovery (%)	QC Limits (%)
a,a,a-Trifluorotoluene	98-08-8	91	50 - 150

ND: Not detected at or above limit of detection
--: Information not available or not applicable

a Purgeable hydrocarbons quantitated as gasoline do not match typical gasoline pattern.

Analytical Results
for
Alisto Engineering Group
Client Reference: 10-270-03-003
Clayton Project No. 95094.01

Sample Identification:	MW-7	Date Sampled:	09/28/95
Lab Number:	9509401-02A	Date Received:	09/29/95
Sample Matrix/Media:	WATER	Date Prepared:	10/09/95
Preparation Method:	EPA 5030	Date Analyzed:	10/09/95
Method Reference:	EPA 8015/8020	Analyst:	NAN

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
BTEX/Gasoline			
Benzene	71-43-2	ND	0.4
Ethylbenzene	100-41-4	ND	0.3
Toluene	108-88-3	ND	0.3
o-Xylene	95-47-6	ND	0.4
p,m-Xylenes	--	ND	0.4
Gasoline	--	ND	50
Surrogates		Recovery (%)	QC Limits (%)
a,a,a-Trifluorotoluene	98-08-8	94	50 - 150

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Clayton
ENVIRONMENTAL
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Analytical Results
for
Alisto Engineering Group
Client Reference: 10-270-03-003
Clayton Project No. 95094.01

Sample Identification:	MW-5	Date Sampled:	09/28/95
Lab Number:	9509401-03A	Date Received:	09/29/95
Sample Matrix/Media:	WATER	Date Prepared:	10/09/95
Preparation Method:	EPA 5030	Date Analyzed:	10/09/95
Method Reference:	EPA 8015/8020	Analyst:	NAN

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
BTEX/Gasoline			
Benzene	71-43-2	ND	0.4
Ethylbenzene	100-41-4	ND	0.3
Toluene	108-88-3	ND	0.3
o-Xylene	95-47-6	ND	0.4
p,m-Xylenes	--	ND	0.4
Gasoline	--	ND	50
Surrogates		**Recovery (%)**	**QC Limits (%)**
a,a,a-Trifluorotoluene	98-08-8	79	50 - 150

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Analytical Results
for
Alisto Engineering Group
Client Reference: 10-270-03-003
Clayton Project No. 95094.01

Sample Identification:	MW-4	Date Sampled:	09/28/95
Lab Number:	9509401-04A	Date Received:	09/29/95
Sample Matrix/Media:	WATER	Date Prepared:	10/09/95
Preparation Method:	EPA 5030	Date Analyzed:	10/09/95
Method Reference:	EPA 8015/8020	Analyst:	NAN

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
BTEX/Gasoline			
Benzene	71-43-2	18	0.4
Ethylbenzene	100-41-4	ND	0.3
Toluene	108-88-3	ND	0.3
o-Xylene	95-47-6	ND	0.4
p,m-Xylenes	--	ND	0.4
Gasoline	--	210 [a]	50
Surrogates		Recovery (%)	QC Limits (%)
a,a,a-Trifluorotoluene	98-08-8	84	50 - 150

ND: Not detected at or above limit of detection
--: Information not available or not applicable

a Purgeable hydrocarbons quantitated as gasoline do not match typical gasoline pattern.

Analytical Results
for
Alisto Engineering Group
Client Reference: 10-270-03-003
Clayton Project No. 95094.01

Sample Identification:	MW-6	Date Sampled:	09/28/95
Lab Number:	9509401-05A	Date Received:	09/29/95
Sample Matrix/Media:	WATER	Date Prepared:	10/12/95
Preparation Method:	EPA 5030	Date Analyzed:	10/12/95
Method Reference:	EPA 8015/8020	Analyst:	NAN

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
TEX/Gasoline			
Benzene	71-43-2	12	0.4
Ethylbenzene	100-41-4	9.4	0.3
Toluene	108-88-3	1.4	0.3
o-Xylene	95-47-6	3.8	0.4
p,m-Xylenes	--	1.8	0.4
Gasoline	--	2400[a]	50
Surrogates		**Recovery (%)**	**QC Limits (%)**
a,a,a-Trifluorotoluene	98-08-8	101	50 - 150

ND: Not detected at or above limit of detection
--: Information not available or not applicable

a Sample appears to be weathered gasoline.

Analytical Results
for
Alisto Engineering Group
Client Reference: 10-270-03-003
Clayton Project No. 95094.01

Sample Identification:	QC-1	Date Sampled:	09/28/95
Lab Number:	9509401-06A	Date Received:	09/29/95
Sample Matrix/Media:	WATER	Date Prepared:	10/12/95
Preparation Method:	EPA 5030	Date Analyzed:	10/12/95
Method Reference:	EPA 8015/8020	Analyst:	NAN

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
BTEX/Gasoline			
Benzene	71-43-2	12	0.4
Ethylbenzene	100-41-4	7.5	0.3
Toluene	108-88-3	0.9	0.3
o-Xylene	95-47-6	2.8	0.4
p,m-Xylenes	--	1.4	0.4
Gasoline	--	2600 [a]	50
Surrogates		Recovery (%)	QC Limits (%)
a,a,a-Trifluorotoluene	98-08-8	93	50 - 150

ND: Not detected at or above limit of detection
--: Information not available or not applicable

a Sample appears to be weathered gasoline.

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Analytical Results
for
Alisto Engineering Group
Client Reference: 10-270-03-003
Clayton Project No. 95094.01

Sample Identification:	QC-2	Date Sampled:	09/28/95
Lab Number:	9509401-07A	Date Received:	09/29/95
Sample Matrix/Media:	WATER	Date Prepared:	10/10/95
Preparation Method:	EPA 5030	Date Analyzed:	10/10/95
Method Reference:	EPA 8015/8020	Analyst:	NAN

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
BTEX/Gasoline			
Benzene	71-43-2	ND	0.4
Ethylbenzene	100-41-4	ND	0.3
Toluene	108-88-3	ND	0.3
o-Xylene	95-47-6	ND	0.4
p,m-Xylenes	--	ND	0.4
Gasoline	--	ND	50
Surrogates		Recovery (%)	QC Limits (%)
a,a,a-Trifluorotoluene	98-08-8	90	50 - 150

ND: Not detected at or above limit of detection
-: Information not available or not applicable

Analytical Results
for
Alisto Engineering Group
Client Reference: 10-270-03-003
Clayton Project No. 95094.01

Sample Identification:	METHOD BLANK	Date Sampled:	--
Lab Number:	9509401-08A	Date Received:	--
Sample Matrix/Media:	WATER	Date Prepared:	10/10/95
Preparation Method:	EPA 5030	Date Analyzed:	10/10/95
Method Reference:	EPA 8015/8020	Analyst:	NAN

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
BTEX/Gasoline			
Benzene	71-43-2	ND	0.4
Ethylbenzene	100-41-4	ND	0.3
Toluene	108-88-3	ND	0.3
o-Xylene	95-47-6	ND	0.4
p,m-Xylenes	--	ND	0.4
Gasoline	--	ND	50
Surrogates		Recovery (%)	QC Limits (%)
a,a,a-Trifluorotoluene	98-08-8	89	50 - 150

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Analytical Results
for
Alisto Engineering Group
Client Reference: 10-270-03-003
Clayton Project No. 95094.01

Sample Identification: See Below
Lab Number: 9509401
Sample Matrix/Media: WATER
Extraction Method: EPA 3510
Method Reference: EPA 8015 (Modified)

Date Received: 09/29/95
Date Extracted: 10/04/95
Date Analyzed: 10/05/95

Lab Number	Sample Identification	Date Sampled	TPH-D (ug/L)		Method Detection Limit (ug/L)	
-01	MW-2	09/28/95	ND		100	b
-02	MW-7	09/28/95	390	a	50	
-03	MW-5	09/28/95	ND		300	b
-04	MW-4	09/28/95	ND		50	
-05	MW-6	09/28/95	8400		50	b
-08	METHOD BLANK	--	ND		50	

ND: Not detected at or above limit of detection
--: Information not available or not applicable

TPH-D = Extractable petroleum hydrocarbons from C10 to C20 quantitated as diesel.
b Detection limit increased due to presence of heavier hydrocarbons.
a Unidentified hydrocarbons present in diesel range; quantitation based on diesel.

Analytical Results
for
Alisto Engineering Group
Client Reference: 10-270-03-003
Clayton Project No. 95094.01

Sample Identification: See Below
Lab Number: 9509401
Sample Matrix/Media: WATER
Preparation Method: EPA 3510
Method Reference: EPA 8015 (Modified)

Date Received: 09/29/95
Date Extracted: 10/04/95
Date Analyzed: 10/05/95

Lab Number	Sample Identification	Date Sampled	TPH-O (ug/L)		Method Detection Limit (ug/L)
-01	MW-2	09/28/95	1300		200
-02	MW-7	09/28/95	1200		200
-03	MW-5	09/28/95	2000		200
-04	MW-4	09/28/95	400		200
-05	MW-6	09/28/95	8000	a	200
-08	METHOD BLANK	--	ND		200

ND: Not detected at or above limit of detection
--: Information not available or not applicable

TPH-O = Extractable petroleum hydrocarbons from C20 to C42 quantitated as motor oil.
a Unidentified hydrocarbons present in oil range; quantitation based on oil.

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Quality Assurance Results Summary

Matrix Spike/Matrix Spike Duplicate Results

for

Clayton Project No. 95094.01

Quality Assurance Results Summary - Matrix Spike/Matrix Spike Duplicate
for
Clayton Project No. 95094.01

Clayton Lab Number:	9509401-LCS	Analytical Method:	EPA 8015
Ext./Prep. Method:	EPA 3510	Instrument ID:	02893
Date:	10/04/95	Date:	10/05/95
Analyst:	HYT	Time:	02:32
Std. Source:	E950901-01W	Analyst:	GUD
Sample Matrix/Media:	WATER	Units:	UG/L
		QC Batch No:	95100470

Analyte	Sample Result	Spike Level	Matrix Spike Result	MS Recovery (%)	Matrix Spike Duplicate Result	MSD Recovery (%)	Average Recovery (% R)	LCL (% R)	UCL (% R)	RPD (%)	UCL (%RPD)
DIESEL	ND	1,000	835	83	878	88	86	65	128	5.0	25

ND = Not detected at or above limit of detection
SOR = Spike out of range due to high sample concentration.

LCL = Lower Control Limit

UCL = Upper Control Limit

Quality Assurance Results Summary - Matrix Spike/Matrix Spike Duplicate
for
Clayton Project No. 95094.01

Clayton Lab Number:	9509401-01A	Analytical Method:	EPA 8015/8020
Ext./Prep. Method:	EPA 5030	Instrument ID:	05587
Date:	10/09/95	Date:	10/09/95
Analyst:	WGK	Time:	20:59
Std. Source:	V950313-02W	Analyst:	NAN
Sample Matrix/Media:	WATER	Units:	ug/L
		QC Batch No:	951009B1

Analyte		Sample Result	Spike Level	Matrix Spike Result	MS Recovery (%)	Matrix Spike Duplicate Result	MSD Recovery (%)	Average Recovery (% R)	LCL (% R)	UCL (% R)	RPD (%)	UCL (%RPD)
BENZENE	(PID)	ND	3.92	3.91	100	3.94	101	100	79	125	0.8	20
ETHYLBENZENE	(PID)	ND	5.41	5.31	98	5.43	100	99	91	123	2.2	20
GASOLINE	(FID)	116	500	529	83	521	81	82	80	120	1.5	25
TOLUENE	(PID)	ND	26.8	25.2	94	26.8	100	97	84	118	6.2	20
TOTAL XYLENE	(PID)	ND	33.3	33.5	101	33.8	102	101	85	115	0.9	20

ND = Not detected at or above limit of detection
LCL = Lower Control Limit
UCL = Upper Control Limit
SOR = Spike out of range due to high sample concentration.

Quality Assurance Results Summary - Matrix Spike/Matrix Spike Duplicate
for
Clayton Project No. 95094.01

Clayton Lab Number:	9510139-01C	Analytical Method:	EPA 8015/8020
Ext./Prep. Method:	EPA 5030	Instrument ID:	05587
Date:	10/13/95	Date:	10/13/95
Analyst:	FAK	Time:	20:57
Std. Source:	V950630-01W	Analyst:	FAK
Sample Matrix/Media:	WATER	Units:	ug/L
		QC Batch No:	951013B1

Analyte		Sample Result	Spike Level	Matrix Spike Result	MS Recovery (%)	Matrix Spike Duplicate Result	MSD Recovery (%)	Average Recovery (% R)	LCL (% R)	UCL (% R)	RPD (%)	UCL (%RPD)
BENZENE	(PID)	ND	5.61	5.59	100	5.77	103	101	79	125	3.2	20
ETHYLBENZENE	(PID)	ND	8.61	8.46	98	8.79	102	100	91	123	3.8	20
GASOLINE	(FID)	ND	500	482	96	520	104	100	80	120	7.6	25
TOLUENE	(PID)	ND	36.0	36.1	100	37.7	105	103	84	118	4.3	20
TOTAL XYLENE	(PID)	ND	43.9	43.2	98	45.1	103	101	85	115	4.3	20

ND = Not detected at or above limit of detection
SOR = Spike out of range due to high sample concentration.
LCL = Lower Control Limit
UCL = Upper Control Limit

Quality Assurance Results Summary - Laboratory Control Samples (LCS)

for

Clayton Project No. 95094.01

Clayton Lab Number:	9509401-LCS	Analytical Method:	EPA 8015
Ext./Prep. Method:	EPA 3510	Instrument ID:	02893
Date:	10/04/95	Date:	10/05/95
Analyst:	HYT	Time:	04:16
Std. Source:	G950425-01W	Analyst:	GUD
Sample Matrix/Media:	WATER	Units:	UG/L
		QC Batch no:	95100470

Analyte	Blank Result	Spike Level	LCS Result	LCS Recovery (%)	LCL (% R)	UCL (% R)
OIL	ND	1,000	821	82	30	130

ND = Not detected at or above limit of detection LCL = Lower Control Limit UCL = Upper Control Limit

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REQUEST FOR LABORATORY ANALYTICAL SERVICES

For Clayton Use Only	Page 1 of 1
Project No.	
Batch No.	9509401
Ind. Code	W.P.
Date Logged In 9/29	By [illegible]

REPORT RESULTS TO
Name: Dale Swain — Title: Project Manager
Company: Alisto Engineering — Dept.:
Mailing Address: 1575 Treat Blvd
City, State, Zip: Walnut Creek CA 94598
Telephone No. (510) 295-1650 — Telefax No. (510) 295-1823

Purchase Order No. 201867 — Client Job No. 10-270-03-002

SEND INVOICE TO
Name: Susan Gates — Dept.:
Company: Port of Oakland
Address: 530 Water St
City, State, Zip: Oakland CA

Date Results Req.:
Rush Charges Authorized? ☐ Yes ☒ No
Phone / Fax Results ☐ ☒

Samples are: (check if applicable)
☐ Drinking Water
☐ Collected in the State of New York

Special Instructions: (method, limit of detection, etc.)

* Explanation of Preservative: "P" = HCl

ANALYSIS REQUESTED (Enter an 'X' in the box below to indicate request; Enter a 'P' if Preservative added. *)

CLIENT SAMPLE IDENTIFICATION	DATE SAMPLED	MATRIX/ MEDIA	AIR VOLUME (specify units)	Number of Containers	TPH gas BTEX	TPH [illegible] Diesel & Motor Oil								FOR LAB USE ONLY
MW-2 1420	9/28/95	H2O	2×40 1×1L	3	X"P"	X"P"								01 A-C
MW-7 1440	↓	↓	↓	↓	↓	↓								02 ↓
MW-5 1500	↓	↓	↓	↓	↓	↓								03 ↓
MW-4 1520	↓	↓	↓	↓	↓	↓								04 ↓
MW-6 1540	↓	↓	↓	3	↓	↓								05 ↓
QC-1 —	↓	↓	40ml	2	↓									06 A-B
QC-2 —	↓	↓	↓	2	↓									07 ↓

CHAIN OF CUSTODY
Collected by: Dave Wsalek (print) — Collector's Signature: [signature]
Relinquished by: Patricia Uelton — Date/Time 9/29/95 10:3[illegible] — Received by: [signature] — Date/Time 9/29/95 10:38
Relinquished by: [signature] — Date/Time [illegible]/95 11:40 — Received at Lab by: [signature] — Date/Time [illegible]/95 11:40
Method of Shipment: — Sample Condition Upon Receipt: ☒ Acceptable ☐ Other (explain)

Authorized by: [signature] Date ________
(Client Signature Must Accompany Request)

Please return completed form and samples to one of the Clayton Environmental Consultants, Inc. labs listed below:

22345 Roethel Drive, Novi, MI 48375, (810) 344-1770
Raritan Center, 160 Fieldcrest Ave., Edison, NJ 08837, (908) 225-6040
400 Chastain Center Blvd., N.W., Suite 490, Kennesaw, GA 30144, (404) 499-7500
1252 Quarry Lane, Pleasanton, CA 94566, (510) 426-2657

DISTRIBUTION:
WHITE - Clayton Laboratory
YELLOW - Clayton Accounting
PINK - Client Retains

2/92