ENVIRONMENTAL ENGINEERING, INC
2680 Bishop Drive, Suite 203, San Ramon, CA 94583
TEL (510) 244-6600 • FAX (510) 244-6601

ADDITIONAL CHARACTERIZATION ACTIVITIES
FORMER MOBIL OIL BULK TERMINAL
OAKLAND, CALIFORNIA

April 1, 1996

Project No. 96-2100

Prepared by

SOMA Environmental Engineering
2680 Bishop Drive, Suite 203
San Ramon, California 94583

Cal/EPA

Pete Wilson
Governor

San Francisco Bay
Regional Water
Quality Control Board

2101 Webster Street
Suite 500
Oakland, CA 94612
(510) 286-1255
FAX (510) 286-1380

October 9, 1997
File No. 2223.09 (RA)

Mr. John Prall
Port of Oakland
530 Water Street
Oakland, CA 94607

Mr. Steve Pao
Mobil Oil Corporation
3700 West 190th Street
Building TPT-2
Torrance, CA 90509-2929

Subject: Former Mobil Oil Terminal Facility, 909 Ferry Street Oakland, California

Dear Gentlemen:

Regional Board staff (staff) have completed the review of the report entitled "Groundwater Flow and Contaminant Transport Modeling Report, Former Mobil Oil Terminal, 909 Ferry Street, Oakland, California", dated January 9, 1997, prepared by SOMA Environmental Engineering, Inc. (SOMA) on behalf of Mobil Oil Company. This report was prepared in accordance with the Work Plan, dated April 7, 1995 also prepared by SOMA and approved by staff. The intent of the Work Plan was to assess the potential for migration of residual pollutants remaining beneath the former Mobil Oil terminal facility to San Francisco Bay.

SOMA's Work Plan was implemented in two phases. The first phase included the following tasks:

1. Compile Existing data and Construct Conceptual Model
2. Tidal Fluctuation Study
3. Collect and Analyze Vadose Zone Soil Samples
4. Perform Soil and Groundwater Sampling for Hydrogeologic Characterization
5. Conduct Aquifer Testing

The field work related to the April 7, 1995 Work Plan was conducted during the summer of 1995. The report "Additional Characterization Activities, Former Mobil Oil

3. A demonstration that free product beneath the site has been removed to the extent practicable or, if not, a plan for removal of additional free product until Mobil can make such a demonstration.

Thank you for your patience on this matter. Should you have any questions or require any clarification of the issues discussed above, please contact either Ravi Arulanantham at 510-286-1331 or Mark Johnson at 510-286-0305.

Sincerely,

Loretta K. Barsamian
Executive Officer

Stephen I. Morse
Chief, Toxics Cleanup Division

cc: Susan Hugo, ACDEH
Kevin Graves, RWQCB
Michele Heffes, Port of Oakland
Chris Amantea
Jonathan Redding
Mansour Sepehr, SOMA

ENVIRONMENTAL PROTECTION
97 OCT 16 AM 9:46

ENVIRONMENTAL ENGINEERING, INC
2680 Bishop Drive, Suite 203, San Ramon, CA 94583
TEL (510) 244-6600 • FAX (510) 244-6601

April 1, 1996

VIA UPS

Mr. John Prall
Port Of Oakland
530 Water Street
2nd Floor
Oakland, California 94607

Subject: Our Report Entitled "Additional Site Characterization Activities, Former Mobil Oil Bulk Terminal, Oakland, California"

Dear Mr. Prall:

This letter transmits the above referenced report for your review. The report summarizes the work performed under Part I of Scope of Work described in the April 7, 1995 approved Work Plan by the Regional Water Quality Control Board (RWQCB). However, the report excludes the soil vapor pilot testing. The soil vapor pilot testing has been postponed pending the results of the chemical transport modeling.

An additional copy of the report is also enclosed. Please review the report and call me if you have any questions or comments. In case, you do not have any comments, the additional copy should be submitted to Dr. Ravi Arulanantham of RWQCB. Please do not hesitate to call me at (510) 244-6600 if you need any assistance.

Sincerely,

Mansour Sepehr, Ph.D., P.E.
Principal Hydrogeologist

cc: Mr. Steve Pao, Mobil Oil Corporation
cc: Mr. Brady Nagle, Alisto Engineering Group

Enclosures

ADDITIONAL CHARACTERIZATION ACTIVITIES
FORMER MOBIL OIL BULK TERMINAL
OAKLAND, CALIFORNIA

April 1, 1996

Project No 96-2100

Prepared by

SOMA Environmental Engineering
2680 Bishop Drive, Suite 203
San Ramon, California 94583

TABLE OF CONTENTS

TABLE OF CONTENTS i

TABLES ii

FIGURES iii

APPENDICES v

1.0 INTRODUCTION 1

2.0 FIELD INVESTIGATIONS 3

2.1 VADOSE ZONE SAMPLING AND ANALYSIS 3
2.2 DEEP SOIL BORING SAMPLING AND ANALYSIS 4
2.3 DEEP PIEZOMETER INSTALLATION 6
2.4 AQUIFER TESTING 6
2.4.1 Initial Step-Drawdown Tests 6
2.4.2 Monitor Well Installation 8
2.4.3 Constant-Discharge Tests 9
2.5 TIDAL SURVEY 11
2.5.1 Filtering Tidal Effects 11
2.5.2 Estimating Hydraulic Parameters 12

3.0 RESULTS 16

3.1 PETROLEUM HYDROCARBONS IN THE VADOSE ZONE 16
3.2 HYDROGEOLOGIC CONDITIONS 17
3.3 GROUNDWATER OCCURRENCE AND MOVEMENT 19
3.4 GROUNDWATER QUALITY 22
3.4.1 Total Petroleum Hydrocarbons 22
3.4.2 Benzene 23
3.4.3 Saltwater Intrusion 24

4.0 SUMMARY 26

5.0 REFERENCES CITED 30

TABLES

Number	Title
1	ANALYTICAL RESULTS OF SHALLOW SOIL SAMPLES
2	ANALYTICAL RESULTS OF DISCRETE GROUNDWATER SAMPLES, DEEP SOIL BORINGS
3	PHYSICAL PARAMETERS, DEEP SOIL BORING SAMPLES
4	HYDRAULIC PARAMETER ESTIMATES
5	SUMMARY OF RESULTS OF GROUNDWATER SAMPLING

FIGURES

Number	Title
1	SITE VICINITY MAP
2	SHALLOW SOIL BORING LOCATIONS
3	TOTAL PETROLEUM HYDROCARBONS IN SHALLOW SOIL, 3 FEET BLS
4	TOTAL PETROLEUM HYDROCARBONS IN SHALLOW SOIL, 6 FEET BLS
5	BENZENE IN SHALLOW SOIL, 3 FEET BLS
6	BENZENE IN SHALLOW SOIL, 3 FEET BLS
7	LOCATION OF DEEP SOIL BORINGS, NEWLY INSTALLED MONITOR WELLS, AQUIFER TESTS AND TIDAL SURVEY
8	CROSS SECTION LOCATION
9	HYDROGEOLOGIC CROSS SECTION
10	WATER LEVEL FLUCTUATIONS IN MONITOR WELLS
11	SIMULATED VERSUS MEASURED WATER LEVELS, MONITOR WELL MW-7A
12	HYDRAULIC GRADIENT FLUCTUATIONS, MONITOR WELL MW-7A
13	WATER LEVEL ELEVATIONS IN SHALLOW GROUNDWATER, NOVEMBER 1995
14	TOTAL PETROLEUM HYDROCARBONS IN SHALLOW GROUNDWATER, NOVEMBER 1995

FIGURES CONTINUED

Number	Title
15	BENZENE IN SHALLOW GROUNDWATER, NOVEMBER 1995
16	TOTAL DISSOLVED SOLIDS CONCENTRATIONS IN SOIL BORING SB-1-DEEP
17	TOTAL DISSOLVED SOLIDS CONCENTRATIONS IN SOIL BORING SB-2-DEEP
18	TOTAL DISSOLVED SOLIDS CONCENTRATIONS IN SOIL BORING SB-3-DEEP

APPENDICES

Appendix	Title
A	FIELD METHODS
B	ANALYTICAL RESULTS OF SHALLOW SOIL SAMPLES, SEQUOIA ANALYTICAL
C	DEEP SOIL BORING LITHOLOGIC LOGS
D	ANALYTICAL RESULTS OF DISCRETE GROUNDWATER SAMPLES FROM DEEP SOIL BORINGS
E	ANALYTICAL RESULTS OF SOIL SAMPLES FROM DEEP SOIL BORINGS
F	PIEZOMETER AND MONITOR WELL LITHOLOGIC LOGS, COMPLETION DIAGRAMS, AND DEVELOPMENT FORMS
G	MONITOR WELL REHABILITATION DEVELOPMENT FORMS
H	AQUIFER TEST DATA AND ANALYSES
I	TIDAL SURVEY DATA

96 - 2100 March 20, 1996

ADDITIONAL CHARACTERIZATION ACTIVITIES
FORMER MOBIL OIL BULK TERMINAL
OAKLAND, CALIFORNIA

1.0 INTRODUCTION

This report has been prepared on behalf of Mobil Oil Corporation (Mobil) by SOMA Environmental Engineering (SOMA) to describe the additional characterization activities conducted at Mobil's Former Bulk Terminal (the site), located at 909 Ferry Street, Oakland, California (Figure 1). The work was performed in cooperation with Alisto Engineering Group (Alisto) to collect additional site-specific data to further characterize hydrogeologic conditions and the distribution of petroleum hydrocarbons in subsurface soil and groundwater to perform chemical fate and transport modeling. The results of the chemical fate and transport modeling will be used to estimate the chemical flux into the bay , if any.

The additional characterization activities summarized in this report were conducted as according to Part 1 of the scope of work outlined in the April 7, 1995 work plan prepared for Mobil (SOMA, 1995). The work plan was approved by the Alameda County Health Care Services Agency (ACHCSA) on June 12, 1995 (ACHCSA, 1995). The objectives of the additional characterization activities were as follows:

1. To further assess the extent of petroleum hydrocarbon contamination in vadose zone soils and free product on the groundwater surface.

2. To further characterize hydrogeologic conditions which affect contaminant fate and transport in the subsurface.

3. To assess the vertical extent of groundwater contamination.

4. To estimate the hydraulic properties of shallow saturated sediments.

5. To evaluate the hydraulic relationship between shallow groundwater and the San Francisco Bay.

6. To determine the effect of tidal fluctuations on the groundwater gradient and flow direction and petroleum hydrocarbon plume migration, if any.

7. To assess the extent of saltwater intrusion in the subsurface.

2.0 FIELD INVESTIGATIONS

The additional site characterization activities were conducted during the period July 1994 through December 1995. The following field activities were performed:

1. Vadose zone sampling and analysis
2. Deep boring sampling and analysis
3. Deep piezometer installation
4. Aquifer testing, including monitor well rehabilitation and monitor well installation

In addition, a tidal survey was conducted in September-October 1994. The results of the tidal survey are also described in this report.

The field methods used to perform these activities are described in Appendix A. Results of the additional characterization activities, including the tidal survey, are presented in Section 3.0 of this report.

2.1 VADOSE ZONE SAMPLING AND ANALYSIS

Thirty shallow soil borings were drilled and sampled in July 1995 to further assess the nature and extent of petroleum hydrocarbons in the vadose zone (Figure 2). Soil borings were located along approximately 200-foot centers on a grid across the site. A total of 30 soil borings were drilled and samples were collected at depths of approximately 3 and 6 feet below land surface (bls) at each location.

Soil samples were analyzed for total petroleum hydrocarbons as gasoline (TPH-G) and for benzene, toluene, ethylbenzene, and total xylenes (BTEX) using U.S.

Environmental Protection Agency (EPA) Methods 5030/8015 and 5030/8020, respectively. Six soil samples were also analyzed for total organic carbon (TOC) and the physical parameters, such as bulk density and soil moisture content. Analyses were performed by Sequoia Analytical of Concord, California, which is a state certified laboratory. Analytical results of soil samples have been summarized in Table 1. Laboratory reports for these analyses are provided in Appendix B. The distributions of TPH-G and benzene in the vadose zone are presented in Figures 3 through 6.

Borings SB-A4, SB-C4, and SB-D4 were extended to a depth of 13 feet bls and converted to temporary 2-inch monitor wells. These temporary wells were located along an alignment in the western portion of the site (Figure 2). These temporary wells were used to monitor the presence or absence non-aqueous phase liquid (LNAPL). Groundwater was collected from each temporary monitor well using a bailer. LNAPL was observed in the bailer collected from SB-A4 and SB-D4 and an iridescence was observed in the bailer collected from SB-C4.

2.2 DEEP SOIL BORING SAMPLING AND ANALYSIS

Three deep soil borings were drilled and sampled in July and September 1995 to assess the nature and vertical extent of petroleum hydrocarbons and saltwater intrusion in the groundwater in the first and second water-bearing zones beneath the site. Deep borings SB-1-Deep, SB-2-Deep, SB-3-Deep were drilled along an east-west profile across the site to depths of approximately 75 to 80 feet bls (Figure 7). The soil borings were advanced through the first sand and clay, through a second sand, and approximately 5 feet into a second clay. These lithologic units were originally identified in lithologic logs for borings B-8 and B-10 drilled prior to installation of the concrete wharf (Port of Oakland, 1975).

The soil borings were drilled using conventional hollow-stem auger techniques (Appendix A). Conductor casing was cemented in-place to depths of approximately 15 feet bls in soil borings SB-1-Deep and SB-2-Deep.

Lithologic logs have been prepared for the three deep soil borings and are provided in Appendix C. A cross section showing the schematic interpretation of the subsurface was prepared based on the lithology encountered in the three deep borings and lithologic logs prepared for monitor wells that also intersect the cross section (Figures 8 and 9).

Discrete groundwater samples were collected at 5-foot intervals in the first sand and at 10-foot intervals in the second sand (Appendix A). Water samples were collected by lowering a Hydropunch (trademark) sampler through the augers to approximately 1.5 feet below the auger. The sampler was pulled up approximately 1.5 feet to expose a screen located inside the sampler. A bailer was used to extract a discrete groundwater sample at each sample location.

Groundwater samples collected from borings SB-1-Deep, SB-2-Deep, and SB-3-Deep were analyzed for total dissolved solids (TDS) using EPA Method 160.1. Electrical conductivity was measured in the field. Two groundwater samples collected from the first sand and 3 to 8 groundwater samples collected from the second sand were also analyzed for TPH-G and BTEX using EPA Method 5030/8015 and 8020, respectively. Analyses were performed by Sequoia Analytical.

Analytical results of the discrete groundwater samples are tabulated in Table 2. Laboratory reports for these analyses are provided in Appendix D.

Additionally, soil samples were collected from each deep boring and analyzed for TOC, bulk density, soil moisture, and permeability. Analytical results of these soil samples are tabulated in Table 3. Laboratory reports for these analyses are provided in Appendix E.

2.3 DEEP PIEZOMETER INSTALLATION

One deep piezometer was installed in September 1995 adjacent to existing monitoring well MW-8A, located near the concrete wharf, to evaluate the vertical leakage (upward/downward) of groundwater near the sheetpile bulkhead (Figure 7). Deep soil boring SB-1-Deep was converted to a 2-inch diameter piezometer using monitor well construction methods described in Appendix A. Piezometer PZ-1-1 is screened from approximately 29 feet to 34 feet bls in the second sand. The lithologic log for boring SB-1-Deep, the monitor well completion diagram, and the well development form for piezometer PZ-1-1 is provided in Appendix F.

2.4 AQUIFER TESTING

Aquifer testing was performed during the period October to December 1995 to estimate hydraulic parameters and assess the hydrogeologic characteristics of the site. Aquifer tests were conducted to estimate the hydraulic conductivity, transmissivity, and storage coefficient of the shallow water-bearing zone.

2.4.1 Initial Step-Drawdown Tests

Step-drawdown tests were initially conducted on monitor wells MW-1, MW-4A, MW-5A, MW-6A, MW-7A, MW-9, and MW-23 to select pumping wells for extended constant-discharge tests and to estimate the optimum flow rates for each test. Monitor wells

MW-4A, MW-5A, MW-6A, and MW-7A could not sustain pumping. These wells were evacuated within the first 3 to 5 minutes of pumping (Appendix A). Hydraulic parameters estimated from the initial step tests conducted on monitor wells MW-1, MW-9, and MW-23 are tabulated in Table 4 (Appendix H).

The initial step-drawdown tests resulted in anomalous water level data indicating possible clogging of the screened intervals with algae and/or fine silt or clay. Monitor wells MW-5A, MW-6A, MW-7A, MW-8A, MW-9, and MW-23 were rehabilitated by swabbing and jetting the screened intervals. The wells were pumped and the process was repeated. Approximately 6 to 10 casing volumes of water were removed from each monitor well. Monitor well rehabilitation development forms are provided in Appendix G.

After the wells were rehabilitated, additional step-drawdown tests were conducted on MW-7A, MW-8A, MW-9, and MW-23 (Appendix H). Hydraulic parameters estimated from the step-drawdown tests are tabulated in Table 4.

Results of the step-drawdown tests conducted on monitor wells MW-7A and MW-8A indicated that the wells could not sustain pumping, even after rehabilitation. The wells were evacuated within the first 3 to 5 minutes of pumping. Recovery water level data were obtained after the wells were evacuated. Results of these tests were evaluated using a slug test method of interpretation (Table 4).

Monitor well MW-8A was originally selected for aquifer testing to evaluate the transmissivity of the fine-grained sediments near the wharf. In addition, monitor well MW-8A was selected because of its proximity to the wharf to evaluate the integrity of the sheetpile bulkhead which may be an impermeable barrier to groundwater flow. The results of the tests attempted on monitor well MW-8A indicated that the well may have

been damaged during well construction. A replacement well was installed adjacent to monitor well MW-8A (Section 2.4.2) and monitor well MW-8A was used for an observation well.

The step-drawdown test conducted on monitor well MW-23 was used to estimate the sustainable discharge rate for a constant-discharge test. The results were also used to estimate the optimum location of an observation well. Monitor well MW-23 was pumped at a discharge rate ranging from 1.5 gallons per minute (gpm) to 3 gpm for approximately 75 minutes. Recovery water level data was also measured for approximately 15 minutes after the pump was shut off. Water levels in the well had recovered to within 90 percent of the static water level after 15 minutes.

Based on the results of the step-drawdown test, monitor well MW-23 was selected for a constant-discharge test. The sustainable pumping rate is 3 gpm and the optimum distance for an observation well is 10 feet.

2.4.2 Monitor Well Installation

Two monitor wells were installed next to MW-8A and MW-23, respectively, to monitor water levels during aquifer testing (Figure 7). Field methods used to install these wells were consistent with previous methods used to install monitor wells MW-9 through MW-32 (Appendix A)(Alisto, 1995). Monitor wells MW-33 and MW-34 are screened from approximately 5 to 20 feet bls in the first sand. The lithologic logs, monitor well completion diagrams, and well development forms for monitor wells MW-33 and MW-34 are provided in Appendix F.

2.4.3 Constant-Discharge Tests

Results of the attempted aquifer test conducted on monitor well MW-8A indicated that the well could not sustain pumping. A step-drawdown test was attempted on monitor well MW-33 as a replacement for monitor well MW-8A. Water levels were measured in pumping well MW-33, observation well MW-8A, and piezometer PZ-1-1. Pumping well MW-33 is located approximately 5 feet east of monitor well MW-8A and approximately 10 feet south of piezometer PZ-1-1.

Pumping could not be sustained in monitor well MW-33 except at very low rates. MW-33 was pumped at average discharge rate of approximately 0.3 gpm for approximately 115 minutes. Water levels in observation well MW-8A and piezometer PZ-1-1 were not affected by pumping MW-33. Recovery water level data was also measured in these wells for approximately 250 minutes after the pump was shut off.

The results of the aquifer test were analyzed using the Theis solution for an unconfined aquifer using an average discharge rate of 0.3 gpm (Appendix H). Hydraulic parameters estimated from the attempted aquifer test conducted on monitor well MW-33 are tabulated in Table 4 and are discussed in Section 3.0 of this report.

Monitor well MW-23 was pumped at an average discharge rate of 2.9 gpm for approximately 380 minutes. Water levels were measured in pumping well MW-23 and observation well MW-34. Pumping well MW-23 is located approximately 10 feet west of observation well MW-34. Recovery water level data were also measured in these wells for approximately 30 minutes after the pump was shut off.

The results of the constant-discharge test conducted on pumping well MW-23 were analyzed using the Theis solution for an unconfined aquifer (Appendix H). Hydraulic

parameters estimated from the constant-discharge test are tabulated in Table 4 and are discussed in Section 3.0 of this report.

2.5 TIDAL SURVEY

A tidal survey was conducted in September-October 1994 to determine the effect of the tides on observed groundwater levels at the site. Water level elevations were monitored continuously during high and low tides for a period of 9 days in three monitor wells located across the site (Figure 7)(Appendix A). In addition, temporary monitoring station TS-1 was installed along the edge of the wharf to monitor the sea level fluctuation in the San Francisco Bay.

The water level data collected from monitor wells MW-7A, MW-19, and MW-30 are plotted for the first 72-hours that were monitored (Figure 10). The water level elevation in the bay has also been plotted for comparison. The figure indicates the extent of tidal influence on water level elevations inland of monitor well MW-7A is not significant. These data indicate that the tides affect groundwater levels inland between monitor wells MW-7A and MW-19.

Serfes (1991) developed methods to evaluate tidal influences on water level elevations in aquifers located adjacent to large surface water bodies, such as the San Francisco Bay. Results of the tidal survey were analyzed using these methods to:

1. Estimate the average water level elevation in monitor well MW-7A by filtering the effects of tides.
2. Estimate hydraulic parameters, independent of aquifer test results.
3. Estimate the hydraulic gradient fluctuations in monitor well MW-7A.

2.5.1 Filtering Tidal Effects

Serfes (1991) developed a filtering method to remove the tidal influence on water level data. The resulting "corrected" water level elevation is the average water level elevation estimated for a representative 72-hour period.

The filtering method involves removing all diurnal and semidiurnal lunar and solar harmonics from 72-consecutive, hourly, water level measurements. Using moving averages it yields a filtered mean level for the median time of 72 hours. The filtering method can be expressed mathematically as follows:

The consecutive hourly water level measurement values are O(1), O(2), O(3),.....,O(72).

The first sequence of means (X_i) is

$$X_i = \sum_{K=0}^{23} \frac{O(K+i)}{24} \text{ where } i = 1,2,3,...48 \qquad \textbf{(Eq. 1)}$$

The second sequence of means (Y_j) is

$$Y_j = \sum_{i=0}^{23} \frac{X(i+j)}{24} \text{ where } j = 1,2,3,....25; \qquad \textbf{(Eq. 2)}$$

The mean water level (M) at hour 36 is:

$$M = \sum_{j=1}^{25} \frac{Y_i}{25} \qquad \textbf{(Eq. 3)}$$

The above methodology was used to calculate the corrected water level elevation in monitor well MW-7A. Water level data obtained during the first 72 hours of monitoring were evaluated. The corrected water level elevation in monitor well MW-7A is 1.37 feet mean sea level (msl).

2.5.2 Estimating Hydraulic Parameters

A mathematical relationship described by Serfes (1991) was used to estimate hydraulic properties of the shallow water-bearing zone as follows:

$$h(x,t) = h_o e^{-x\sqrt{\frac{\pi S}{t_p T}}} \sin\left(\frac{2\pi t}{t_p} - x\sqrt{\frac{\pi S}{t_p T}}\right) \qquad \textbf{(Eq. 4)}$$

The variables in equation (4) are:

h(x,t)	=	the net rise or fall of water level with respect to a known reference point, such as mean sea level
h_o	=	tidal amplitude
x	=	distance from ocean or surface water body to measuring point
t_p	=	tidal period
S	=	storage coefficient of aquifer
t	=	time
T	=	transmissivity

Equation (4) was used to estimate the transmissivity and storage coefficient of the shallow water-bearing zone by simulating the net rise and fall of groundwater levels in monitor well MW-7A. The following input data were used in the simulations:

- Tidal data for San Francisco Bay was obtained from the temporary station TS-1 installed along the wharf (Figure 10). The tidal amplitude (h_o) was calculated to be 1.2 feet.

- The distance (x) from the shoreline to monitor well MW-7A is 40 feet.

- The tidal period (tp) was 25 hours.

- Initial transmissivity and storage coefficient values were estimated based on interpretation of the lithologic logs from borings drilled along the wharf.

The simulated water levels in monitor well MW-7A were compared with measured water levels. The transmissivity and storage coefficient values were adjusted in a trial-and-error procedure until a better match was established between simulated and measured water levels. Figure 11 presents the simulated and measured water levels fluctuations in monitor well MW-7A. The amplitude and period of the simulated water levels closely match those of the measured water levels. This indicates a "good" match.

The transmissivity and storage coefficient estimated from Equation (4) are tabulated in (Table 4). These results have been compared with transmissivity and storage coefficient values estimated from aquifer test conducted at the site and are discussed in Section 3.0.

The hydraulic gradient in the vicinity of monitor well MW-7A also fluctuates as a result of tidal effects. At certain times of the day, it is possible for the hydraulic gradient to reverse entirely due to the tides. The first derivative of Equation (4) was used to evaluate the variations of hydraulic gradient with time at the shoreline. The derivative of h(x,t) with respect to x in equation (1) is:

$$\frac{\partial h}{\partial x}\Big|_{x,t} = -\sqrt{\frac{\pi S}{t_p T}}\, h_o e^{-x\sqrt{\frac{\pi S}{t_p T}}} \left[\sin\left(\frac{2\pi t}{t_p} - x\sqrt{\frac{\pi S}{t_p T}} \right) + \cos\left(\frac{2\pi t}{t_p} - x\sqrt{\frac{\pi S}{t_p T}} \right) \right] \qquad \textbf{(Eq. 5)}$$

Equation (5) was used to calculate the hydraulic gradient ($\partial h/\partial x$) at monitor well MW-7A, located within the affected radius of tides, over a 25-hour period. The following input parameters were used:

- The transmissivity and storage coefficient were based on the calibrated values obtained from Equation (4).

- The tidal period was 25 hours.

The estimated hydraulic gradient fluctuations at monitor well MW-7A were added to the hydraulic gradient observed across the site. The site-wide hydraulic gradient is approximately 0.001. These data are plotted in Figure 12. The figure indicates that the hydraulic gradient changes from approximately 0.015 to approximately -0.014. During low tides, the gradient is positive and flow is toward the bay. Conversely, during high tides, the gradient is negative and flow is inland. The average hydraulic gradient is 0.0025 with flow toward the bay.

3.0 RESULTS

The results of the additional characterization activities provide site-specific data to develop a conceptual model of the site. The conceptual model consists of the following components:

- nature and extent of petroleum hydrocarbons in the vadose zone and the physical parameters that control the fate and transport of petroleum hydrocarbons,

- hydrogeologic conditions, including the lithologic description of sediments occurring in the subsurface and the physical parameters that control the fate and transport of petroleum hydrocarbons,

- groundwater occurrence and movement, including the effects of tidal fluctuations and estimated hydraulic parameters,

- groundwater quality, including the nature and extent of petroleum hydrocarbons in groundwater and salt water intrusion.

The conceptual model will be used to conduct fate and transport modeling to be used to assess the magnitude and rate of chemical mass transport into the bay, if any.

3.1 PETROLEUM HYDROCARBONS IN THE VADOSE ZONE

Results of shallow soil samples were used to evaluate the nature and extent of petroleum hydrocarbons in the vadose zone. The lithology of the sediments encountered during drilling consisted of silty sand indicative of the hydraulic fill

previously encountered at the site (Alisto 1993). The analytical results of shallow soil samples collected across the site indicate that petroleum hydrocarbons are limited to the vicinity of the former above ground storage tanks located on the western portion of the site (Figures 3 through 6). TPH-G concentrations ranged between less than 1 milligrams per kilogram (mg/kg) to 2,400 mg/kg (Table 1; Figures 3 and 4).

The distribution of benzene in the shallow soil is similar to TPH-G, although the concentrations are lower (Figures 4 and 5). Benzene concentrations ranged between less than 0.005 mg/kg to 21 mg/kg (Table 1).

Six soil samples were collected and analyzed for physical parameters. TOC concentrations ranged between 110 mg/kg and 1,700 mg/kg in the six samples analyzed (Table 1). The bulk density ranged between 1.2 grams per cubic centimeter (g/cm^3) and 2.38 g/cm^3. The percent moisture ranged between 4 and 15. Results of the physical parameters analyses will be used in the fate and transport model.

LNAPL was observed in a bailed sample collected from temporary monitor wells installed at locations SB-A4 and SB-D4. An iridescence was observed in the bailer collected from temporary monitor well installed at location SB-C4.

3.2 HYDROGEOLOGIC CONDITIONS

Lithologic, water level, and water quality data collected from deep soil borings, monitor wells, and recovery wells have been used to evaluate the hydrogeologic conditions at the site. Thirty-six shallow, 4-inch diameter monitor wells are screened from approximately 5 to 20 feet bls, including three monitor wells installed at the Former Ashland Oil Bulk Terminal (Figure 7). One deeper, 4-inch monitor well is screened

from approximately 5 to 30 feet bls. One 2-inch piezometer is screened from approximately 29 to 34 feet bls.

In addition, five shallow recovery wells are located in the central portion of the site (Figure 7). Recovery wells RW-A through RW-E are 2-foot diameter wells installed to recover LNAPL. Water level data collected from these wells are adjusted to account for the effects of LNAPL.

The lithology encountered at the site consists of hydraulic fill underlain by Bay Mud and Older Alluvium (Alameda County Flood Control and Water Conservation District 1988). Hydraulic fill was encountered from below the asphalt cap to depths ranging from approximately 15 to 20 feet bls (Figures 8 and 9, Appendix C). The hydraulic fill consists of fine to medium sand interbedded with silty sand, clayey sand, and sandy silt. The Bay Mud was encountered below the fill and consists of clay and silty clay with lenses of sand and silt. Dark gray clay and silty clay were encountered at depths ranging from approximately 15 to 20 feet bls. The clay unit ranges in thickness between 6 inches at monitor well MW-32 and 0.5 feet at boring SB-2 (Alisto, 1993 and 1995). A sand unit was encountered below the clay and consists of fine to medium sand with silty sand and clayey sand lenses. The sand unit is approximately 50 feet thick based on lithologic logs of the three deep borings (Appendix C). Silty clay was encountered below the sand unit at a depth of approximately 70 feet bls. The clay was penetrated up to 5 feet in deep boring SB-3-Deep.

Fifteen soil samples were collected and analyzed for physical parameters from the three deep borings (Table 3). All samples were collected below the water table. TOC concentrations ranged between 52 mg/kg in a soil sample collected from clayey sand in boring SB-1-Deep and 2,900 mg/kg in a soil sample collected from silty clay in boring SB-3-Deep. The bulk density ranged between 1.4 g/cm^3 and 2.28 g/cm^3. The percent

moisture ranged between 14 and 16. The saturated hydraulic conductivity results measured in the laboratory are consistent with the fine-grained material encountered at the site (Freeze and Cherry, 1979). This parameter ranged between 5.8 x 10^{-8} centimeters per second (cm/sec) and 7.1 x 10^{-6} cm/sec.

3.3 GROUNDWATER OCCURRENCE AND MOVEMENT

Water level measurements and groundwater samples have been collected from monitor wells since February 1993 (Table 5). In general, water levels have fluctuated up to about 2 feet in shallow monitor wells located across the site, with the following exceptions:

- The results of the tidal survey indicate that monitor wells MW-7A is in hydraulic contact with the San Francisco Bay (Figure 10). Water levels fluctuate up to 2.5 feet over the 72-hours monitored. Similar water level fluctuations have been observed in monitor wells MW-4A, MW-8A, MW-11, and MW-28 since February 1993. Water level data obtained from these monitor wells were not used to construct the water level elevation contours depicted in Figure 13, with the exception of monitor well MW-7A. The average water level elevation was estimated for monitor well MW-7A based on the tidal survey analysis described in Section 2.5.

- Other anomalous water level data have been observed in monitor wells MW-15 and MW-24. Results of the tidal survey indicate that the tides do not effect water levels in monitor wells MW-30 and MW-19, located approximately 400 feet and 850 feet, respectively from the wharf. Monitor wells MW-15 and MW-24 are located greater than 900 feet inland from the wharf. Their respective locations relative to the wharf suggest that the anomalous water levels in monitor well

MW-15 and MW-24 cannot be attributed to the effects of tides. Water level data obtained from these monitor wells were not used to construct the water level elevation contours depicted in Figure 13.

Water level elevation data obtained from shallow monitor wells on November 13, 1995, were used to evaluate the directions of groundwater flow and the horizontal hydraulic gradients at the site. Depth to water in shallow monitor wells in November 1995 ranged from approximately 5.8 feet bls in monitor well MW-26 to approximately 10.3 feet bls in monitor well MW-8A (Table 5). Water level elevations in shallow monitor wells ranged from 1.33 feet mean sea level (msl) in monitor well MW-6A to 3.13 feet msl in monitor well MW-26 (Figure 13).

Based on water levels measured in shallow monitor wells in November 1995, the general direction of groundwater flow was predominantly to the west (Figure 13). A groundwater depression occurred in the vicinity of monitor well MW-13 and a groundwater mound occurred near monitor well MW-32. These trends are consistent with groundwater fluctuations observed in previous monitoring events (Alisto, 1993 and 1995).

In November 1995, the horizontal hydraulic gradient was approximately 0.001 across the site. The horizontal hydraulic gradient is consistent with previous data obtained from the site (Alisto, 1993). The average hydraulic gradient at monitor well MW-7A is about 0.0025 (Section 2.5).

The vertical component of groundwater flow can be evaluated by comparing water level data obtained from adjacent monitor wells screened at different depth intervals. Monitor wells MW-8A and MW-33 are screened from 5 to 20 feet bls. Piezometer PZ-1-1, located adjacent to these wells, is screened from 29 to 34 feet bls. Based on

water level data obtained from these three wells prior to conducting the step-drawdown test in monitor well MW-33, there does not appear to be an upward or downward component of flow. Water level data obtained from piezometer PZ-1-1 are consistent with water level data obtained from the nearby monitor wells MW-8A and MW-33. Water levels for these wells were within approximately 0.2 feet during the initial measurements collected before the step-drawdown test was conducted.

The transmissivity and storage coefficient of the shallow water bearing zone were estimated from results of aquifer testing and the tidal survey (Sections 2.4 and 2.5). Results of the aquifer tests conducted on monitor wells MW-1, MW-9, and MW-23 indicate an average transmissivity of 210 feet squared per day (ft^2/day)(Table 4). Aquifer test results from monitor wells MW-7A, MW-8A, and MW-33 indicate a lower transmissivity compared to the estimates derived from the other monitor wells tested. The average transmissivity estimated from the three wells located along the wharf is 9 ft^2/day.

By comparison, the transmissivity estimated using the tidal survey data collected from monitor well MW-7A (Section 2.5) is 17 ft^2/day. This estimate is consistent with the aquifer test results of the three wells located along the wharf (Table 4). The relatively low transmissivity estimated from the wharf monitor wells indicates that the sediments near the wharf may act as a low permeable zone, retarding chemical transport to the bay.

The storage coefficient was estimated from the aquifer test conducted at monitor well MW-23. A storage coefficient can be estimated from data collected from observation well MW-34. The storage coefficient is approximately 0.007. By comparison, the storage coefficient estimated using the tidal survey data collected from monitor well MW-7A is 0.004.

3.4 GROUNDWATER QUALITY

Groundwater samples collected from monitor wells installed at the site have been analyzed for TPH-G and BTEX using EPA Method Modified 8015 and 8020, respectively. LNAPL thickness is measured prior to obtaining water level measurements. The groundwater quality at the site was evaluated based on the analytical results for TPH-G, BTEX and TDS detected in groundwater samples collected from shallow monitor wells in November 1995 and from discrete groundwater samples collected from deep soil borings SB-1-Deep, SB-2-Deep, and SB-3-Deep.

3.4.1 Total Petroleum Hydrocarbons

TPH-G has historically been detected at concentrations ranging from 50 micrograms per liter (ug/l) to 44,000 ug/l (Table 5). The highest TPH-G concentrations have been detected in the central portion of the site near the recovery wells (Figure 14).

LNAPL was observed in recovery wells RW-A through RW-E and in monitor wells MW-30 and MW-32 (Figure 14). LNAPL thickness ranged between 0.5 feet and 1.2 feet (Table 5). LNAPL has been historically observed in monitor wells MW-30 and MW-32. November 1995 was the first occurrence of LNAPL in the recovery wells RW-A, RW-B, RW-C, and RW-D. Water level elevations observed in November 1995 appear to have risen since the previous round of water levels were measured in August 1995.

LNAPL was also observed in two of the three shallow soil borings that were drilled in July 1995. Borings SB-A4, SB-C4 and SB-D4 were drilled to a depth of 13 feet bls and converted to temporary 2-inch monitor wells. LNAPL was observed in bailed samples collected from SB-A4 and SB-D4 and an iridescence was observed in the bailer collected from SB-C4 (Figure 2).

Table 2 presents TPH-G concentrations of groundwater samples collected from the deep soil borings. These data indicate that TPH-G concentrations decrease sharply with depth in the subsurface at locations SB-1-Deep and SB-2-Deep. TPH-G concentrations ranged between 270 ug/l and 1,100 ug/l in samples collected below approximately 15 feet in boring SB-1-Deep. TPH-G concentrations ranged between 650 ug/l and 70,000 ug/l in samples collected below approximately 15 feet in boring SB-2-Deep. TPH-G detected below the upper sand in borings SB-1-DEEP and SB-2-DEEP may have resulted from groundwater at shallow depths mixing with deeper groundwater. TPH-G was not detected in samples collected from boring SB-3-Deep.

3.4.2 Benzene

Benzene is the most mobile constituent of gasoline and will be evaluated in the fate and transport model. The distribution of benzene in groundwater is similar to the pattern of TPH-G distribution (Figure 15). Benzene has historically been detected at concentrations ranging from 0.88 ug/l to 19,000 ug/l (Table 5). The highest benzene concentrations have been detected in the central portion of the site near the recovery wells.

Benzene has been detected in samples collected from monitor well MW-6A at concentrations ranging from 820 to 2,500 ug/l (Table 5). Although benzene is present at this location, the transport of benzene to the bay is limited for the following reasons:

- Based on the results of pumping tests, the hydraulic conductivity of the sediments encountered near the wharf is lower than up-gradient sediments;

- Due to the tidal effect, the average hydraulic gradient of the shallow water bearing formations at the shoreline is relatively low (0.0025), and;

- The presence of sheet pile bulkhead at the interface between the bay and the shoreline may further slowdown the horizontal transport of chemicals into the bay. The sheetpile bulkhead extends from the ground surface to about 40 feet depth.

However, the results of the tidal study indicate that there is a fair amount of communication between the bay and the sediments, indicating that the wharf does not completely inhibit flow to the bay.

Table 2 presents the benzene concentration of groundwater collected from the deep soil borings. Similar to TPH-G concentrations, benzene concentrations decreases sharply with depth in the subsurface at locations SB-1-Deep and SB-2-Deep. Benzene concentrations ranged between less than 0.5 ug/l and 8.2 ug/l in samples collected below approximately 15 feet in boring SB-1-Deep. Benzene concentrations ranged between 40 ug/l and 8,500 ug/l in samples collected below approximately 15 feet in boring SB-2-Deep. Benzene detected below the upper sand in borings SB-1-DEEP and SB-2-DEEP may have resulted from groundwater at shallow depths mixing with deeper groundwater. Benzene was not detected in samples collected from boring SB-3-Deep.

3.4.3 Saltwater Intrusion

Salt water intrusion can be induced in both unconfined and confined aquifers. Intrusion of saline water occurs where saline water displaces or mixes with fresh water in an aquifer. This phenomenon typically occurs in coastal aquifers. The extent of saltwater intrusion in the subsurface at the site was evaluated using TDS concentrations in discrete groundwater samples collected from borings SB-1-Deep, SB-2-Deep, and SB-3-Deep.

Table 2 and Figures 16 to 18 present the TDS concentration of groundwater collected from the deep soil borings. These data indicate that the TDS concentration, and hence the salinity, of groundwater increases sharply with depth in the subsurface, as follows:

- The average TDS concentration of groundwater samples collected at a depth of approximately 15 feet bls from each boring was approximately 2,500 milligrams per liter (mg/l). The reported range of TDS concentrations for fresh water is 0 to 1,000 mg/l (Freeze and Cherry, 1979).

- The TDS concentrations increase with depth in borings SB-1-Deep and SB-3-Deep. The average TDS concentration of groundwater samples collected at depths ranging from 20 to approximately 60 feet bls from these borings was approximately 18,000 mg/l. The reported range of TDS concentrations for saline water is 10,000 to 100,000 mg/l (Freeze and Cherry, 1979).

- In contrast, the TDS concentrations are relatively constant in groundwater samples collected from boring SB-2-Deep. The average TDS concentration of groundwater samples collected at depths ranging from 15 to approximately 60 feet bls from this boring was approximately 4,100 mg/l. The reported range of TDS concentrations for brackish water is 1,000 to 10,000 mg/l (Freeze and Cherry, 1979).

4.0 CONCLUSION

This report has been prepared on behalf of Mobil Oil Corporation (Mobil) by SOMA Environmental Engineering, Inc. (SOMA) to describe the additional characterization activities conducted at Mobil's Former Bulk Terminal (the site), located at 909 Ferry Street, Oakland, California (Figure 1). The work was performed to collect additional site-specific data to further characterize hydrogeologic conditions and the distribution of petroleum hydrocarbons in subsurface soil and groundwater to perform chemical fate and transport modeling. The results of the chemical fate and transport modeling will be used to assess the flux of chemicals into the bay, if any.

This report includes a detailed description of the procedures and methods used to collect and analyze soil and groundwater data and a discussion of the results.

The following additional characterization activities were conducted:

- Vadose zone sampling and analysis
- Deep boring drilling, sampling, and analysis
- Deep piezometer installation
- Aquifer testing, including monitor well rehabilitation and observation well installation
- Tidal survey and analysis

Results of shallow soil samples were used to evaluate the nature and extent of petroleum hydrocarbons in the vadose zone. The lithology of the sediments encountered during drilling consisted of silty sand indicative of the hydraulic fill previously encountered at the site. The analytical results of shallow soil samples collected at depths up to 6 feet below land surface (bls) across the site indicate that

petroleum hydrocarbons are limited to the vicinity of the former above ground storage tanks located on the western portion of the site.

Lithologic, water level, and water quality data collected from deep soil borings, monitor wells, and recovery wells have been used to evaluate the hydrogeologic conditions at the site. Hydraulic fill was encountered from below the asphalt cap to depths ranging from approximately 15 to 20 feet bls. Dark gray clay and silty clay were encountered at depths ranging from approximately 15 to 20 feet bls. The clay unit ranges in thickness between 0.5 feet and 6 feet. A sand unit was encountered below the clay and consists of fine to medium sand with silty sand and clayey sand lenses. Based on lithologic logs of the three deep borings, the sand unit is approximately 50 feet thick. Silty clay was encountered below the sand unit at a depth of approximately 70 feet bls.

Water level measurements and groundwater samples have been collected from monitor wells since February 1993. Water levels have fluctuated up to about 2 feet in shallow monitor wells located across the site. The results of the tidal survey indicate that monitor wells MW-7A is in hydraulic contact with the San Francisco Bay. Similar water level fluctuations have been observed in monitor wells MW-4A, MW-8A, MW-11, and MW-28. The tidal survey data does not indicate that monitor wells MW-19 or MW-30 are effected by the tides. The data indicates that the tides affect groundwater levels at some distance inland between monitor wells MW-7A and MW-19.

Water level elevation data obtained from shallow monitor wells on November 13, 1995, were used to evaluate the directions of groundwater flow and the horizontal hydraulic gradients at the site. The general direction of groundwater flow was predominantly to the west toward the bay. The horizontal hydraulic gradient was approximately 0.001 across the site. The horizontal hydraulic gradient is consistent with previous data obtained from the site. The tidal survey analysis indicates that the hydraulic gradient

changes from approximately 0.015 to approximately -0.014 in monitor well MW-7A, located at the wharf. During low tides, the gradient is positive and flow is toward the bay. Conversely, during high tides, the gradient is negative and flow is inland. The average hydraulic gradient is 0.0025 with flow toward the bay.

The transmissivity and storage coefficient of the shallow water bearing zone were estimated from results of aquifer testing and the tidal survey. Results of the aquifer tests conducted on monitor wells MW-1, MW-9, and MW-23 indicate an average transmissivity of 210 feet squared per day (ft^2/day). Aquifer test results from monitor wells MW-7A, MW-8A, and MW-33 indicate a lower transmissivity compared to the estimates derived from the other monitor wells tested. The average transmissivity estimated from the three wells located along the wharf is 16 ft^2/day. By comparison, the transmissivity estimated using the tidal survey data collected from monitor well MW-7A is 17 ft^2/day. This estimate is consistent with the aquifer test results of the three wells located along the wharf. The relatively low transmissivity estimated from the wharf monitor wells indicates that the sediments near the wharf may act as low permeable zone, retarding chemical transport to the bay.

The storage coefficient was estimated from the aquifer test conducted at monitor well MW-23. The storage coefficient is approximately 0.007. By comparison, the storage coefficient estimated using the tidal survey data collected from monitor well MW-7A is 0.004.

The groundwater quality at the site was evaluated based on the analytical results for TPH-G, BTEX and TDS detected in groundwater samples collected from shallow monitor wells in August and November 1995 and from discrete groundwater samples collected from deep soil borings. Light non-aqueous phase liquid (LNAPL) thickness was measured prior to obtaining water level measurements.

TPH-G has historically been detected at concentrations ranging from 50 micrograms per liter (ug/l) to 44,000 ug/l. The highest TPH-G concentrations have been detected in the central portion of the site near the recovery wells. Benzene is the most mobile constituent of gasoline and will be evaluated in the fate and transport model. The distribution of benzene in groundwater is similar to the pattern of TPH-G distribution.

LNAPL was observed in recovery wells RW-A through RW-E and in monitor wells MW-30 and MW-32. LNAPL thickness ranged between 0.5 feet and 1.2 feet

LNAPL was also observed in two shallow soil borings that were drilled to a depth of 13 feet bls and converted to temporary monitor wells. LNAPL was observed in bailed samples collected from SB-A4 and SB-D4 and an iridescence was observed in the bailer collected from SB-C4.

Intrusion of saline water occurs where saline water displaces or mixes with fresh water in an aquifer. The extent of saltwater intrusion in the subsurface at the site was evaluated using TDS concentrations in discrete groundwater samples collected from borings SB-1-Deep, SB-2-Deep, and SB-3-Deep. These data indicate that the TDS concentration, and hence the salinity, of groundwater increases sharply with depth in the subsurface. The average TDS concentration of groundwater samples collected at a depth of approximately 15 feet bls from each boring was within the reported range for fresh water. Below 15 feet bls, the TDS concentrations are within the reported range for brackish and saline water.

5.0 REFERENCES CITED

Alisto Engineering Group (Alisto), 1993. Supplemental Site Investigation Report; Prepared for Mobil Oil Corporation, September 27, 1993.

Alameda County Flood Control and Water Conservation District, 1988. Geohydrology and Groundwater - Quality Overview, East Bay Plain Area, Alameda County, California; Report 205 (J); Prepared for California Regional Water Quality Control Board, San Francisco Bay Region; June 1988.

Alameda County Health Care Service Agency (ACHCSA), 1995. Letter from R. Arulanantham, ACHCSA, to S. Gates, Port of Oakland, re: Work Plan Approval, Former Mobil Oil Bulk Terminal, 909 Ferry Street; June 12, 1995.

Freeze, R.A., and J.A. Cherry, 1979. Groundwater; Prentice-Hall, Inc.; Englewood, New Jersey.

Port of Oakland, 1975. Engineering drawings for Construction of Concrete Wharf; File AA-1670.

Serfes, M.E., 1991. "Determining the Mean Hydraulic Gradient of Ground Water Affected by Tidal Fluctuations"; Ground Water, Volume 29, Number 4, pp 549-555, July-August 1991.

SOMA Environmental Engineering (SOMA), 1995. Revised Work Plan for Additional Site Characterization and Chemical Fate and Transport Modeling, Former Mobil Oil Bulk Terminal, 909 Ferry Street, Oakland, California; April 7, 1995.

Table 1: Analytical Results of Shallow Soil Samples

Former Mobil Oil Bulk Terminal
Oakland, California

BORING ID/ SAMPLE DEPTH	DATE OF SAMPLING	TPH-G (mg/Kg)	B (mg/Kg)	T (mg/Kg)	E (mg/Kg)	X (mg/Kg)	TOC (mg/Kg)	BULK DENSITY (g/cm3)	PERCENT MOISTURE	LAB
SB-A1 @ 3'	07/12/95	ND<1.0	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	---	---	---	SEQ
SB-A1 @ 6'	07/12/95	ND<1.0	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	---	---	---	SEQ
SB-A2 @ 3'	07/11/95	14.00	0.020	0.04	0.07	0.07	---	---	---	SEQ
SB-A2 @ 6'	07/11/95	ND<1.0	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	---	---	---	SEQ
SB-A3 @ 3'	07/11/95	6.20	0.04	0.07	0.14	0.41	---	---	---	SEQ
SB-A3 @ 6'	07/11/95	6.60	ND<0.0050	0.01	0.07	0.05	---	---	---	SEQ
SB-A4 @ 3'	07/12/95	68.00	0.18	0.32	1.80	0.40	---	---	---	SEQ
SB-A4 @ 6'	07/12/95	300.00	0.55	1.20	3.90	8.60	680.00	1.60	15	SEQ
SB-A5 @ 3'	07/11/95	ND<1.0	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	---	---	---	SEQ
SB-A5 @ 6'	07/11/95	ND<1.0	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	---	---	---	SEQ
SB-B2 @ 3'	07/11/95	ND<1.0	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	---	---	---	SEQ
SB-B2 @ 6'	07/11/95	ND<1.0	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	---	---	---	SEQ
SB-B3 @ 3'	07/11/95	ND<1.0	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	---	---	---	SEQ
SB-B3 @ 6'	07/11/95	ND<1.0	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	---	---	---	SEQ
SB-B5 @ 3'	07/11/95	12.00	0.09	0.16	0.10	0.32	---	---	---	SEQ
SB-B5 @ 6'	07/11/95	ND<1.0	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	---	---	---	SEQ
SB-C2 @ 3'	07/11/95	ND<1.0	0.050	ND<0.0050	0.02	0.03	---	---	---	SEQ
SB-C2 @ 6'	07/11/95	ND<1.0	0.06	ND<0.0050	0.03	0.04	190.00	1.90	13	SEQ
SB-C3 @ 3'	07/11/95	1.30	0.010	0.01	0.03	0.06	---	---	---	SEQ
SB-C3 @ 6'	07/11/95	6.80	0.58	0.27	0.14	0.59	---	---	---	SEQ
SB-C4 @ 3'	07/12/95	580.00	13.00	4.0	12.00	23.00	---	---	---	SEQ
SB-C4 @ 6'	07/12/95	910.00	12.00	16.00	22.00	73.00	---	---	---	SEQ
SB-C5 @ 3'	07/11/95	160.00	4.30	0.37	2.60	5.70	---	---	---	SEQ
SB-C5 @ 6'	07/11/95	320.00	8.90	0.67	6.0	14.00	---	---	---	SEQ
SB-C6 @ 3'	07/13/95	1.60	0.01	ND<0.0050	ND<0.0050	0.01	---	---	---	SEQ
SB-C6 @ 6'	07/13/95	ND<1.0	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	---	---	---	SEQ
SB-D3 @ 3'	07/12/95	890.00	21.00	6.10	17.00	36.00	---	---	---	SEQ

Table 1: Analytical Results of Shallow Soil Samples

Former Mobil Oil Bulk Terminal
Oakland, California

BORING ID/ SAMPLE DEPTH	DATE OF SAMPLING	TPH-G (mg/Kg)	B (mg/Kg)	T (mg/Kg)	E (mg/Kg)	X (mg/Kg)	TOC (mg/Kg)	BULK DENSITY (g/cm3)	PERCENT MOISTURE	LAB
SB-D3 @ 6'	07/12/95	220.00	5.60	0.84	5.60	12.00	---	---	---	SEQ
SB-D4 @ 3'	07/12/95	1,100.00	8.0	49.00	19.00	100.00	---	---	---	SEQ
SB-D4 @ 6'	07/12/95	280.00	1.50	10.00	6.40	38.00	---	---	---	SEQ
SB-D5 @ 3'	07/11/95	480.00	1.20	4.0	4.60	4.90	---	---	---	SEQ
SB-D5 @ 6'	07/11/95	880.00	1.60	3.60	5.70	6.60	---	---	---	SEQ
SB-D6 @ 3'	07/13/95	590.00	2.0	2.0	1.30	13.00	---	---	---	SEQ
SB-D6 @ 6'	07/13/95	540.00	0.29	0.66	0.25	2.10	---	---	---	SEQ
SB-E4 @ 3'	07/12/95	290.00	1.60	2.0	13.00	2.70	---	---	---	SEQ
SB-E4 @ 6'	07/12/95	170.00	1.30	1.30	6.80	1.30	---	---	---	SEQ
SB-E5 @ 3'	07/12/95	ND<1.0	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	---	---	---	SEQ
SB-E5 @ 6'	07/12/95	ND<1.0	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	190.00	1.20	4.0	SEQ
SB-E6 @ 3'	07/13/95	2.0	0.01	ND<0.0050	ND<0.0050	0.05	---	---	---	SEQ
SB-E6 @ 6'	07/13/95	ND<1.0	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	---	---	---	SEQ
SB-E7 @ 3'	07/13/95	4.30	0.01	0.01	0.02	0.06	---	---	---	SEQ
SB-E7 @ 6'	07/13/95	ND<1.0	ND<0.0050	ND<0.0050	ND<0.0050	0.01	110.00	2.0	4.0	SEQ
SB-F4 @ 3'	07/12/95	140.00	ND<0.25	ND<0.25	ND<0.25	ND<0.25	---	---	---	SEQ
SB-F4 @ 6'	07/12/95	ND<1.0	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	---	---	---	SEQ
SB-F5 @ 3.0'	09/20/95	---	---	---	---	---	1,700.00	2.38	4.60	SEQ
SB-F5 @ 3.5'	09/20/95	590.00	ND<0.25	0.86	1.70	22.00	---	---	---	SEQ
SB-F5 @ 5.5'	09/20/95	2,400.00	ND<0.25	ND<0.25	ND<0.25	20.00	---	---	---	SEQ
SB-F6 @ 3'	07/13/95	17.00	ND<0.025	0.13	0.17	0.50	---	---	---	SEQ
SB-F6 @ 6'	07/13/95	370.00	0.22	1.20	ND<0.25	5.90	---	---	---	SEQ
SB-F7 @ 3'	07/13/95	180.00	0.09	0.11	0.08	1.30	---	---	---	SEQ
SB-F7 @ 6'	07/13/95	18.00	ND<0.0050	0.01	0.14	0.15	---	---	---	SEQ
SB-F8 @ 3'	07/13/95	7.40	0.05	0.01	0.02	0.09	---	---	---	SEQ
SB-F8 @ 6'	07/13/95	1.50	0.01	ND<0.0050	ND<0.0050	0.10	---	---	---	SEQ
SB-G5 @ 3'	07/12/95	ND<1.0	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	---	---	---	SEQ
SB-G5 @ 6'	07/12/95	8.70	ND<0.0050	ND<0.0050	0.08	0.12	---	---	---	SEQ

Table 1: Analytical Results of Shallow Soil Samples

Former Mobil Oil Bulk Terminal
Oakland, California

BORING ID/ SAMPLE DEPTH	DATE OF SAMPLING	TPH-G (mg/Kg)	B (mg/Kg)	T (mg/Kg)	E (mg/Kg)	X (mg/Kg)	TOC (mg/Kg)	BULK DENSITY (g/cm3)	PERCENT MOISTURE	LAB
SB-G6 @ 3'	07/13/95	ND<1.0	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	---	---	---	SEQ
SB-G6 @ 6'	07/13/95	ND<1.0	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	---	---	---	SEQ
SB-G7 @ 3'	07/13/95	ND<1.0	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	---	---	---	SEQ
SB-G7 @ 6'	07/13/95	1.90	ND<0.0050	ND<0.0050	0.01	0.03	1,000.00	1.40	12	SEQ
SB-G8 @ 3'	07/13/95	ND<1.0	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	---	---	---	SEQ
SB-G8 @ 6'	07/13/95	ND<1.0	ND<0.0050	ND<0.0050	ND<0.0050	0.01	---	---	---	SEQ

Abbreviations:

TPH-G	Total petroleum hydrocarbons as gasoline
B	Benzene
T	Toluene
E	Ethylbenzene
X	Total xylenes
mg/Kg	Milligrams per Kilogram
---	Not available/analyzed/measured/applicable
ND	Not detected above reported detection limit
TOC	Total organic carbon
SEQ	Sequoia Analytical

Table 2: Analytical Results of Discrete Groundwater Samples, Deep Soil Borings

Former Mobil Oil Bulk Terminal
Oakland, California

SAMPLE ID	DATE	TPH-G (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	TDS (mg/kg)	LAB	ELECTRICAL CONDUCTIVITY (a) (umhos/cm)	
SB-1-Deep-10-12	09/13/95	130,000.0	900.0	ND<0.50	420.0	1,200.0	2,100.0	SEQ	2,240.0	(b)YSI
SB-1A-Deep-12.5-14	09/26/95	1,100.0	3.3	5.6	8.7	16.0	3,000.0	SEQ	2,190.0	(b)YSI
SB-1-Deep-27.5-29	09/25/95	460.0	ND<0.50	1.3	3.9	5.1	13,000.0	SEQ	18,000.0	(b)YSI
SB-1-Deep-32.5-34	09/25/95	480.0	5.2	1.4	2.2	5.4	16,000.0	SEQ	295.0	(b)YSI
SB-1-Deep-37.5-39	09/25/95	320.0	3.5	ND<1.0	1.6	2.2	15,000.0	SEQ	---	
SB-1-Deep-42.5-44	09/25/95	400.0	4.5	1.2	3.5	5.2	19,000.0	SEQ	167.0	(b)YSI
SB-1-Deep-47.5-49	09/26/95	270.0	2.5	1.1	1.8	2.0	20,000.0	SEQ	1,240.0	(b)YSI
SB-1-Deep-52.5-54	09/26/95	380.0	7.8	1.4	1.9	3.0	15,000.0	SEQ	480.0	(b)YSI
SB-1-Deep-56-57.5	09/26/95	1,100.0	8.2	ND<0.50	4.9	14.0	15,000.0	SEQ	200.0	(b)YSI
SB-1-Deep-61.5-63	09/26/95	3,100.0	5.9	9.1	19.0	86.0	18,000.0	SEQ	13,300.0	(b)YSI
SB-2-Deep-14.5-16.5	07/12/95	46,000.0	14,000.0	1,800.0	500.0	2,300.0	2,000.0	SEQ	3,300.0	(b)YSI
SB-2-Deep-16-19	09/18/95	70,000.0	8,500.0	8,000.0	1,500.0	8,700.0	---	SEQ	1,038.0	(b)YSI
SB-2-Deep-27-28.5	09/18/95	33,000.0	3,800.0	3,400.0	840.0	3,400.0	3,800.0	SEQ	2,480.0	(b)YSI
SB-2-Deep-32.5-34	09/18/95	50,000.0	4,500.0	4,200.0	1,100.0	6,000.0	3,900.0	SEQ	3,430.0	(b)YSI
SB-2-Deep-37.5-39	09/18/95	13,000.0	1,300.0	1,100.0	330.0	1,900.0	---	SEQ	3,930.0	(b)YSI
SB-2-Deep-41.5-43	09/19/95	6,200.0	480.0	420.0	130.0	740.0	5,700.0	SEQ	4,740.0	(b)YSI
SB-2-Deep-46.5-48	09/19/95	12,000.0	1,200.0	1,100.0	340.0	1,900.0	5,200.0	SEQ	4,700.0	(b)YSI
SB-2-Deep-51.5-53	09/19/95	4,900.0	400.0	350.0	99.0	610.0	3,400.0	SEQ	3,600.0	(b)YSI
SB-2-Deep-56-57.5	09/19/95	5,500.0	460.0	400.0	140.0	600.0	4,800.0	SEQ	4,550.0	(b)YSI
SB-2-Deep-66.5-68	09/19/95	650.0	40.0	40.0	15.0	62.0	720.0	SEQ	1,400.0	(b)YSI
SB-3-Deep-12-15	07/10/95	ND<50	ND<0.50	ND<0.50	ND<0.50	1.2	3,200.0	SEQ	6,000.0	(b)Hydac
SB-3-Deep-22-25	07/10/95	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	19,000.0	SEQ	>20,000	(b)Hydac
SB-3-Deep-27-30	07/10/95	---	---	---	---	---	---	---	>50,000	(b)Hydac
SB-3-Deep-32-35	07/10/95	---	---	---	---	---	---	---	>50,000	(b)YSI
SB-3-Deep-37-40	07/10/95	---	---	---	---	---	---	---	>50,000	(b)YSI

C:/2100/JAN31/TABLE-2.XLS

01/31/96

Table 2: Analytical Results of Discrete Groundwater Samples, Deep Soil Borings

Former Mobil Oil Bulk Terminal
Oakland, California

SAMPLE ID	DATE	TPH-G (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	TDS (mg/kg)	LAB	ELECTRICAL CONDUCTIVITY (a) (umhos/cm)	
SB-3-Deep-42-45	07/10/95	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	26,000.0	SEQ	19,500.0	(b)YSI
SB-3-Deep-47-50	07/11/95	---	---	---	---	---	---	---	>50,000	(b)YSI
SB-3-Deep-52-55	07/11/95	ND<50	ND<0.50	0.7	0.5	3.6	22,000.0	SEQ	>50,000	(b)YSI
SB-3-Deep-57-60	07/11/95	---	---	---	---	---	---	---	47,000.0	(b)YSI
SB-3-Deep-7-10	07/10/95	ND<50	ND<0.50	ND<0.50	ND<0.50	1.3	1,300.0	SEQ	2,020.0	(b)Hydac

ABBREVIATIONS:

TPH-G	Total petroleum hydrocarbons as gasoline
B	Benzene
T	Toluene
E	Ethylbenzene
X	Total xylenes
ug/l	Micrograms per liter
mg/l	Milligrams per liter
---	Not available/analyzed/measured/applicable
ND	Not detected above reported detection limit
TDS	Total dissolved solids
SEQ	Sequoia Analytical

NOTES:

(a) Measured in field by Alisto Engineering personnel.

(b) Description of instrument used for conductivity measurements; YSI Model No. 3560 meter; Hydac Model No. 910.

C:/2100/JAN31/TABLE-2.XLS

01/31/96

Table 3: Physical Parameters, Deep Soil Boring Samples

Former Mobil Oil Bunk Terminal
Oakland, California

SAMPLE ID	DATE OF SAMPLING	TOC (mg/l)	BULK DENSITY (g/cm3)	PERCENT MOISTURE	SATURATED HYDRAULIC CONDUCTIVITY (cm/sec)	LAB
SB-1 Deep 15-15.5	09/26/95	---	---	---	2.5x10-7 (a)	RP
SB-1 Deep 16-16.5	09/13/95	2100	---	---	---	SEQ
SB-1-Deep-23-23.5	09/25/95	71	2.28	---	---	SEQ
SB-1-Deep-25.5-26	09/25/95	---	---	---	7.1x10-6 (b)	RP
SB-1-Deep-30.5-31	09/25/95	150	2.18	---	---	SEQ
SB-1-Deep-35.5-36	09/25/95	52	1.72	---	---	SEQ
SB-1-Deep-55.5-56	09/25/95	340	2.00	---	---	SEQ
SB-2 Deep 12.5	07/12/95	54	1.6	15	---	SEQ
SB-2-Deep-20-20.5	09/18/95	1800	---	---	---	SEQ
SB-2-Deep-20.5-21	09/18/95	---	---	---	5.8x10-8 (c)	RP
SB-2-Deep-40.5-41	09/19/95	82	2.41	---	---	SEQ
SB-2-Deep-55	09/19/95	250	1.61	---	---	SEQ
SB-3-Deep-11	07/10/95	240 (d)	1.4	16	---	SEQ
SB-3-Deep-17	07/10/95	2900 (d)	---	---	1.04x10-7 (a)	RP
SB-3-Deep-61	07/11/95	55	1.5	14	---	SEQ

ABBREVIATIONS:

TOC	Total organic carbon
mg/l	Milligrams per liter
---	Not available/analyzed/measured/ applicable
SEQ	Sequoia Analytical
RP	Rogers/Pacific Geological and Geotechnical Engineering
cm/sec	centimeters per second

NOTES:

(a)	Soil sample classified as a silt
(b)	Soil samples classified as a silty sand
(c)	Soil samples classified as a peat (?)
(d)	Analyzed one day outside of the method recommended holding time.

Table 4: Hydraulic Parameter Estimates

Test Type	Monitoring Well	Date	Method of Analysis	Transmissivity (ft2/day)	Storage Coefficient (unitless)	Hydraulic Conductivity (ft/day)
Step-Drawdown	MW-1	10/23/95	Theis, drawdown	39	---	---
		10/23/95	Theis, recovery	145	---	---
Step-Drawdown	MW-7A	11/27/95	Bouwer-Rice, Slug Test	14 (a)	---	1
Step-Drawdown	MW-8A	11/28/95	Bouwer-Rice, Slug Test	10(b)	---	1
Step-Drawdown	MW-9	10/24/95	Theis, drawdown	164	---	---
		10/24/95	Theis, recovery	415	---	---
		11/28/95	Theis, drawdown	104	---	---
		11-2895	Theis, recovery	261	---	---
Step-Drawdown	MW-23	10/23/95	Theis, drawdown	161	---	---
		10/23/95	Theis, recovery	277	---	---
		11/27/95	Theis, drawdown	77	---	---
		11/27/95	Theis, recovery	242	---	---
Constant-Discharge	MW-23 (pump)	12/19/95	Theis, drawdown	107	---	---
		12/19/95	Theis, recovery	194	---	---
	MW-34 (c) (observation)	12/19/95	Theis, drawdown	317	0.0076	---
		12/19/95	Theis, drawdown(d)	442	0.0058	---
Constant-Discharge	MW-33	12/20/95	Theis, drawdown(e)	3	---	---
Tidal Survey	MW-7A	9-94 to 10-94	Serfes	17.3	0.004	---

Notes:
(a) Estimated saturated thickness is 12 feet.
(b) Estimated saturated thickness is 10 feet.
(c) Distance from pumping well is 10 feet.
(d) Average pumping rate in MW-23 is 2.9 gallon per minute.
(e) Assume a constant average pumping rate of 0.3 gallons per minute.
-- Parameter estimate not valid for method of analysis.
Aquifer test data analyzed using AQTESOLVE (trademark) (Geraghty & Miller, Inc.) 1988.

Table 5: Summary of Results of Groundwater Samples
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)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	DO (mg/l)	LAB
MW-1	09/28/92	11.03	---	---	---	---	---	---	---	---	---	---
MW-1	02/01/93	11.03	8.12	0.00	2.91	---	---	---	---	---	---	---
MW-1	03/23/93	11.03	7.98	0.00	3.05	---	---	---	---	---	---	---
MW-1	03/24/93	11.03	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-1	05/25/93	11.03	7.87	0.00	3.16	---	---	---	---	---	---	---
MW-1	05/27/93	11.03	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-1	08/31/93	11.03	8.18	0.00	2.85	---	---	---	---	---	---	---
MW-1	09/01/93	11.03	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-1	12/07/93	11.03	8.20	0.00	2.83	---	---	---	---	---	---	---
MW-1	12/08/93	11.03	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-1	03/02/94	11.03	7.92	0.00	3.11	---	---	---	---	---	---	---
MW-1	03/03/94	11.03	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-1	07/12/94	11.03	8.24	0.00	2.79	---	---	---	---	---	---	---
MW-1	07/14/94	11.03	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-1	10/04/94	11.03	8.48	0.00	2.55	---	---	---	---	---	---	---
MW-1	10/05/94	11.03	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-1	01/30/95	11.03	7.84	0.00	3.19	---	---	---	---	---	---	---
MW-1	01/31/95	11.03	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---	SEQ
MW-1	04/10/95	11.03	7.67	0.00	3.36	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	4.1	SEQ
MW-1	08/24/95	11.03	7.99	0.00	3.04	---	---	---	---	---	---	---
MW-1	08/25/95	11.03	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	4.4	SEQ
MW-1	11/13/95	11.03	8.30	0	2.73	---	---	---	---	---	---	---
MW-2	09/28/92	9.76	---	---	---	---	---	---	---	---	---	---
MW-2	02/01/93	9.76	7.45	0.00	2.31	---	---	---	---	---	---	---
MW-2	03/23/93	9.76	7.20	0.00	2.56	---	---	---	---	---	---	---
MW-2	03/24/93	9.76	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-2	05/25/93	9.76	7.10	0.00	2.66	---	---	---	---	---	---	---
MW-2	05/27/93	9.76	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-2	08/31/93	9.76	7.27	0.00	2.49	---	---	---	---	---	---	---
MW-2	09/01/93	9.76	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-2	12/07/93	9.76	7.52	0.00	2.24	---	---	---	---	---	---	---

Table 5: Summary of Results of Groundwater Samples
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)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	DO (mg/l)	LAB
MW-2	12/08/93	9.76	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-2	03/02/94	9.76	7.26	0.00	2.50	---	---	---	---	---	---	---
MW-2	03/03/94	9.76	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-2	07/12/94	9.76	7.34	0.00	2.42	---	---	---	---	---	---	---
MW-2	07/14/94	9.76	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-2	10/04/94	9.76	7.57	0.00	2.19	---	---	---	---	---	---	---
MW-2	10/05/94	9.76	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-2	01/30/95	9.76	7.11	0	2.65	---	---	---	---	---	---	---
MW-2	01/31/95	9.76	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---	SEQ
MW-2	04/10/95	9.76	6.84	0.00	2.92	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	1.8	SEQ
MW-2	08/24/95	9.76	7.11	0.00	2.65	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	2.90	SEQ
MW-2	11/13/95	9.76	7.41	0	2.35	---	---	---	---	---	---	---
MW-2	11/14/95	9.76	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	3.50	SEQ
MW-3	09/28/92	9.31	---	---	---	---	---	---	---	---	---	---
MW-3	02/01/93	9.31	---	---	---	---	---	---	---	---	---	---
MW-3	03/23/93	9.31	6.72	0.00	2.59	---	---	---	---	---	---	---
MW-3	05/25/93	9.31	6.62	0.00	2.69	---	---	---	---	---	---	---
MW-3	05/27/93	9.31	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-3	08/31/93	9.31	6.79	0.00	2.52	---	---	---	---	---	---	---
MW-3	09/01/93	9.31	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-3	12/07/93	9.31	---	---	---	---	---	---	---	---	---	---
MW-3	03/02/94	9.31	---	---	---	---	---	---	---	---	---	---
MW-3	07/12/94	9.31	---	---	---	---	---	---	---	---	---	---
MW-3	10/04/94	9.31	---	---	---	---	---	---	---	---	---	---
MW-3	01/30/95	9.31	---	---	---	---	---	---	---	---	---	---
MW-3	04/10/95	9.31	6.41	0.00	2.90	---	---	---	---	---	---	---
MW-3	04/11/95	---	---	---	---	---	---	---	---	---	---	---
MW-3	08/24/95	9.31	6.61	0	2.7	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	3.8	SEQ
MW-3	11/13/95	9.31	6.93	0.00	2.38	---	---	---	---	---	---	---
MW-3	11/14/95	9.31	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	2.70	SEQ
::												

Table 5: Summary of Results of Groundwater Samples
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)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	DO (mg/l)	LAB
MW-4A	02/01/93	10.15	7.35	0.00	2.80	---	---	---	---	---	---	---
MW-4A	03/23/93	10.15	7.34	0.00	2.81	---	---	---	---	---	---	---
MW-4A	03/24/93	10.15	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-4A	05/25/93	10.15	7.50	0.00	2.65	---	---	---	---	---	---	---
MW-4A	05/26/93	10.15	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-4A	08/31/93	10.15	---	---	---	---	---	---	---	---	---	---
MW-4A	12/07/93	10.15	8.62	0.00	1.53	---	---	---	---	---	---	---
MW-4A	12/08/93	10.15	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-4A	03/02/94	10.15	---	---	---	---	---	---	---	---	---	---
MW-4A	07/12/94	10.15	8.00	0.00	2.15	---	---	---	---	---	---	---
MW-4A	07/14/94	10.15	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-4A	10/04/94	10.15	8.19	0	1.96	---	---	---	---	---	---	---
MW-4A	10/05/94	10.15	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-4A	01/30/95	10.15	7.19	0	2.96	---	---	---	---	---	---	---
MW-4A	01/31/95	10.15	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---	SEQ
MW-4A	04/10/95	10.15	7.45	0	2.7	---	---	---	---	---	---	---
MW-4A	04/11/95	10.15	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	2.80	SEQ
MW-4A	08/24/95	10.15	7.82	0.00	2.33	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	3.00	SEQ
MW-4A	11/13/95	10.15	---	---	---	---	---	---	---	---	---	---
MW-5A	09/29/92	11.10	---	---	---	---	---	---	---	---	---	---
MW-5A	02/01/93	11.10	8.90	0.00	2.20	---	---	---	---	---	---	---
MW-5A	03/23/93	11.10	9.07	---	2.03	---	---	---	---	---	---	---
MW-5A	03/24/93	11.10	---	---	---	69	1.6	ND<0.5	1.4	0.54	---	SEQ
MW-5A	05/24/93	11.10	9.08	0.00	2.02	---	---	---	---	---	---	---
MW-5A	05/26/93	11.10	---	---	---	90	1	ND<0.5	1	2.4	---	SEQ
MW-5A	08/31/93	11.10	9.23	0.00	1.87	---	---	---	---	---	---	---
MW-5A	09/01/93	11.10	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-5A	12/07/93	11.10	9.18	0.00	1.92	---	---	---	---	---	---	---
MW-5A	12/08/93	11.10	---	---	---	68	0.93	ND<0.5	0.55	1.3	---	SEQ
MW-5A	03/02/94	11.10	9.18	0.00	1.92	---	---	---	---	---	---	---
MW-5A	03/04/94	11.10	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ

Table 5: Summary of Results of Groundwater Samples
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)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	DO (mg/l)	LAB
MW-5A	07/12/94	11.10	9.37	0.00	1.73	---	---	---	---	---	---	---
MW-5A	07/13/94	11.10	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-5A	10/04/94	11.10	9.02	0.00	2.08	---	---	---	---	---	---	---
MW-5A	10/05/94	11.10	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-5A	01/30/95	11.10	8.44	0.00	2.66	---	---	---	---	---	---	---
MW-5A	01/31/95	11.10	---	---	---	81	0.89	ND<0.50	1.2	ND<0.50	---	SEQ
MW-5A	04/10/95	11.10	9.15	0.00	1.95	---	---	---	---	---	---	---
MW-5A	04/11/95	11.10	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	3.00	SEQ
MW-5A	08/24/95	11.10	9.21	0.00	1.89	92.00	3.00	1.40	ND<0.50	2.70	2.60	SEQ
MW-5A	11/13/95	11.10	9.49	0.00	1.61	72	0.63	ND<0.50	ND<0.50	ND<0.50	2.70	SEQ
MW-6A	09/29/92	10.64	---	---	---	---	---	---	---	---	---	---
MW-6A	02/01/93	10.64	8.88	0.00	1.76	---	---	---	---	---	---	---
MW-6A	03/23/93	10.64	9.00	0.00	1.64	---	---	---	---	---	---	---
MW-6A	03/24/93	10.64	---	---	---	7500.00	2000.00	47.00	230.00	130.00	---	SEQ
MW-6A	05/24/93	10.64	9.18	0.00	1.46	---	---	---	---	---	---	---
MW-6A	05/26/93	10.64	---	---	---	6300.00	2500.00	69.00	190.00	170.00	---	SEQ
MW-6A	08/31/93	10.64	9.15	0.00	1.49	---	---	---	---	---	---	---
MW-6A	09/01/93	10.64	---	---	---	3100.00	1200.00	19.00	68.00	23.00	---	SEQ
MW-6A	12/07/93	10.64	9.28	0.00	1.36	---	---	---	---	---	---	---
MW-6A	12/08/93	10.64	---	---	---	6000.00	2000.00	45.00	240.00	150.00	---	SEQ
MW-6A	03/02/94	10.64	9.25	0.00	1.39	---	---	---	---	---	---	---
MW-6A	03/04/94	10.64	---	---	---	4800	1700	16	93	31	---	SEQ
MW-6A	07/12/94	10.64	9.19	0	1.45	---	---	---	---	---	---	---
MW-6A	07/13/94	10.64	---	---	---	5400	1500	23	100	57	---	SEQ
MW-6A	10/04/94	10.64	8.87	0	1.77	---	---	---	---	---	---	---
MW-6A	10/05/94	10.64	---	---	---	5900	1800	45	150	140	---	SEQ
MW-6A	01/30/95	10.64	8.41	0	2.23	---	---	---	---	---	---	---
MW-6A	01/31/95	10.64	---	---	---	4000	1100	43	59	66	---	SEQ
MW-6A	04/10/95	10.64	9.26	0.00	1.38	---	---	---	---	---	---	---
MW-6A	04/11/95	10.64	---	---	---	4600.00	1500.00	27.00	140.00	110.00	2.40	SEQ
MW-6A	08/24/95	10.64	9.13	0.00	1.51	---	---	---	---	---	---	---

Table 5: Summary of Results of Groundwater Samples
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)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	DO (mg/l)	LAB
MW-6A	08/28/95	10.64	---	---	---	3100	1300	ND<0.50	94	28.0	2.70	SEQ
MW-6A	11/13/95	10.64	9.31	---	1.33	2200.00	820.00	ND<5.0	ND<5.0	ND<5.0	2.80	SEQ
::												
MW-7A	09/29/92	11.05	---	---	---	---	---	---	---	---	---	---
MW-7A	02/01/93	11.05	9.48	0.00	1.57	---	---	---	---	---	---	---
MW-7A	03/23/93	11.05	10.08	0.00	0.97	---	---	---	---	---	---	---
MW-7A	03/24/93	11.05	---	---	---	830	51	ND<0.5	1.5	6	---	SEQ
MW-7A	05/24/93	11.05	10.50	0.00	0.55	---	---	---	---	---	---	---
MW-7A	05/27/93	11.05	---	---	---	230	3.9	0.54	3.7	2.7	---	SEQ
MW-7A	08/31/93	11.05	10.32	0.00	0.73	---	---	---	---	---	---	---
MW-7A	09/01/93	11.05	---	---	---	390	19	0.66	1.3	5.7	---	SEQ
MW-7A	12/07/93	11.05	9.32	0.00	1.73	---	---	---	---	---	---	---
MW-7A	12/08/93	11.05	---	---	---	210	7.1	ND<0.5	1.5	2.9	---	SEQ
MW-7A	03/02/94	11.05	10.39	0.00	0.66	---	---	---	---	---	---	---
MW-7A	03/04/94	11.05	---	---	---	390	23	0.72	2.3	3	---	SEQ
MW-7A	07/12/94	11.05	10.24	0.00	0.81	---	---	---	---	---	---	---
MW-7A	07/13/94	11.05	---	---	---	530	33	ND<1.0	1.5	5.3	---	SEQ
MW-7A	10/04/94	11.05	9.25	0.00	1.80	---	---	---	---	---	---	---
MW-7A	10/05/94	11.05	---	---	---	330	15	1.2	2.8	10	---	SEQ
MW-7A	01/30/95	11.05	8.81	0.00	2.24	---	---	---	---	---	---	---
MW-7A	01/31/95	11.05	---	---	---	240.00	19.00	ND<1	1.10	4.80	---	SEQ
MW-7A	04/10/95	11.05	10.22	0.00	0.83	---	---	---	---	---	---	---
MW-7A	04/11/95	11.05	---	---	---	300.00	26.00	0.95	1.10	2.00	7.60	SEQ
MW-7A	08/24/95	11.05	10.24	0.00	0.81	---	---	---	---	---	---	---
MW-7A	08/28/95	11.05	---	---	---	170.00	24.00	2.00	0.61	53.00	6.50	SEQ
MW-7A	11/13/95	11.05	10.19	---	0.86	200.00	21.00	ND<0.50	ND<0.50	ND<0.50	2.20	SEQ
MW-8A	09/29/92	11.21	---	---	---	---	---	---	---	---	---	---
MW-8A	02/01/93	11.21	9.55	0.00	1.66	---	---	---	---	---	---	---
MW-8A	03/23/93	11.21	10.36	0.00	0.85	---	---	---	---	---	---	---
MW-8A	05/24/93	11.21	10.77	0.00	0.44	---	---	---	---	---	---	---
MW-8A	08/31/93	11.21	10.54	0.00	0.67	---	---	---	---	---	---	---

Table 5: Summary of Results of Groundwater Samples
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)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	DO (mg/l)	LAB
MW-8A	12/07/93	11.21	9.50	0.00	1.71	---	---	---	---	---	---	---
MW-8A	03/02/94	11.21	10.26	0	0.95	---	---	---	---	---	---	---
MW-8A	03/04/94	11.21	---	---	---	5300	41	36	12	140	---	SEQ
MW-8A	07/12/94	11.21	10.4	0	0.81	---	---	---	---	---	---	---
MW-8A	07/13/94	11.21	---	---	---	4300	33	22	77	23	---	SEQ
MW-8A	10/04/94	11.21	9.38	0.00	1.83	---	---	---	---	---	---	---
MW-8A	10/05/94	11.21	---	---	---	3400	56	32	59	43	---	SEQ
MW-8A	01/30/95	11.21	8.82	0.00	2.39	---	---	---	---	---	---	---
MW-8A	01/31/95	11.21	---	---	---	2800	72	8.4	34	43	---	SEQ
MW-8A	04/10/95	11.21	10.51	0.00	0.70	---	---	---	---	---	---	---
MW-8A	04/11/95	11.21	---	---	---	3100	110	14	28	29	---	SEQ
QC-1	04/11/95	---	---	---	---	2900	89	25	7.5	39	2.60	SEQ
MW-8A	08/24/95	11.21	10.46	0.00	0.75	---	---	---	---	---	---	---
MW-8A	08/28/95	11.21	---	---	---	1900	80	13	37	15	2.90	SEQ
MW-8A	11/13/95	11.21	10.34	---	0.87	2300.00	47.00	ND<5.0	18.00	ND<5.0	2.60	SEQ
MW-9	05/24/93	11.31	9.64	0.00	1.67	---	---	---	---	---	---	---
MW-9	05/27/93	11.31	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-9	08/31/93	11.31	9.58	0.00	1.73	---	---	---	---	---	---	---
MW-9	09/01/93	11.31	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-9	12/07/93	11.31	9.88	0.00	1.43	65	ND<0.5	0.51	ND<0.5	ND<0.5	---	SEQ
MW-9	03/02/94	11.31	9.71	0	1.6	---	---	---	---	---	---	---
MW-9	03/03/94	11.31	---	---	---	66	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-9	07/12/94	11.31	9.77	0.00	1.54	---	---	---	---	---	---	---
MW-9	07/13/94	11.31	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-9	10/04/94	11.31	9.65	0.00	1.66	---	---	---	---	---	---	---
MW-9	10/05/94	11.31	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-9	01/30/95	11.31	9.32	0.00	1.99	---	---	---	---	---	---	---
MW-9	01/31/95	11.31	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---	SEQ
MW-9	04/10/95	11.31	9.76	0.00	1.55	---	---	---	---	---	---	---
MW-9	04/11/95	11.31	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	1.90	SEQ
MW-9	08/24/95	11.31	9.67	0.00	1.64	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	2.10	SEQ

Table 5: Summary of Results of Groundwater Samples
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)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	DO (mg/l)	LAB
MW-9	11/13/95	11.31	9.88	0.00	1.43	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	2.60	SEQ
::												
MW-10	05/24/93	11.56	9.78	0.00	1.78	---	---	---	---	---	---	---
MW-10	05/27/93	11.56	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-10	08/31/93	11.56	9.79	0.00	1.77	---	---	---	---	---	---	---
MW-10	09/01/93	11.56	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-10	12/07/93	11.56	10.10	0.00	1.46	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-10	03/02/94	11.56	10.01	0.00	1.55	---	---	---	---	---	---	---
MW-10	03/03/94	11.56	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-10	07/12/94	11.56	9.92	0.00	1.64	---	---	---	---	---	---	---
MW-10	07/13/94	11.56	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-10	10/04/94	11.56	9.79	0.00	1.77	---	---	---	---	---	---	---
MW-10	10/05/94	11.56	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-10	01/30/95	11.56	9.46	0.00	2.10	---	---	---	---	---	---	---
MW-10	01/31/95	11.56	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---	SEQ
MW-10	04/10/95	11.56	9.67	0.00	1.89	---	---	---	---	---	---	---
MW-10	04/11/95	11.56	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	1.80	SEQ
MW-10	08/24/95	11.56	9.76	0.00	1.80	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	2.00	SEQ
MW-10	11/13/95	11.56	10.00	0.00	1.56	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	2.30	SEQ
MW-11	05/24/93	9.45	7.54	0.00	1.91	---	---	---	---	---	---	---
MW-11	05/27/93	9.45	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-11	08/31/93	9.45	7.69	0.00	1.76	---	---	---	---	---	---	---
MW-11	09/01/93	9.45	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-11	12/07/93	9.45	8.96	0.00	0.49	---	---	---	---	---	---	---
MW-11	12/08/93	9.45	---	---	---	ND<50	1.20	2.10	0.54	2.70	---	SEQ
MW-11	03/02/94	9.45	7.49	0.00	1.96	---	---	---	---	---	---	---
MW-11	03/03/94	9.45	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-11	07/12/94	9.45	7.72	0	1.73	---	---	---	---	---	---	---
MW-11	07/19/94	9.45	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-11	10/04/94	9.45	9.61	0	-0.16	---	---	---	---	---	---	---
MW-11	10/05/94	9.45	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ

Table 5: Summary of Results of Groundwater Samples

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)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	DO (mg/l)	LAB
MW-11	01/30/95	9.45	7.1	0	2.35	---	---	---	---	---	---	---
MW-11	01/31/95	9.45	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---	SEQ
MW-11	04/10/95	9.45	7.12	0	2.33	---	---	---	---	---	---	---
MW-11	04/11/95	9.45	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	1.80	SEQ
MW-11	08/24/95	9.45	7.56	0.00	1.89	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	1.90	SEQ
MW-11	11/13/95	9.45	7.78	0.00	1.67	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	2.60	SEQ
MW-12	05/25/93	9.64	6.87	0.00	2.77	---	---	---	---	---	---	---
MW-12	05/27/93	9.64	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-12	08/31/93	9.64	7.15	0.00	2.49	---	---	---	---	---	---	---
MW-12	09/01/93	9.64	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-12	12/07/93	9.64	7.42	0.00	2.22	---	---	---	---	---	---	---
MW-12	12/08/93	9.64	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-12	03/02/94	9.64	7.13	0.00	2.51	---	---	---	---	---	---	---
MW-12	03/03/94	9.64	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-12	07/12/94	9.64	7.22	0	2.42	---	---	---	---	---	---	---
MW-12	07/13/94	9.64	---	---	---	210	43	7.1	5.8	15	---	SEQ
MW-12	10/04/94	9.56	7.45	0	2.11	---	---	---	---	---	---	---
MW-12	10/05/94	9.56	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-12	01/30/95	9.56	6.60	0.00	2.96	---	---	---	---	---	---	---
MW-12	01/31/95	9.56	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---	SEQ
MW-12	04/10/95	9.56	6.26	0.00	3.30	---	---	---	---	---	---	---
MW-12	04/11/95	9.56	---	---	---	ND<50	1.1	ND<0.50	ND<0.50	ND<0.50	5.40	SEQ
MW-12	08/24/95	9.56	6.82	0.00	2.74	---	---	---	---	---	---	---
MW-12	08/25/95	9.56	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	4.70	SEQ
MW-12	11/13/95	9.56	7.30	0.00	2.26	---	---	---	---	---	---	---
MW-12	11/14/95	9.56	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	3.20	SEQ
::												
MW-13	05/24/93	9.57	7.80	0.00	1.77	---	---	---	---	---	---	---
MW-13	05/26/93	9.57	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-13	08/31/93	9.57	8.01	0.00	1.56	---	---	---	---	---	---	---
MW-13	09/02/93	9.57	---	---	---	110	2	ND<0.5	ND<0.5	1.1	---	SEQ

Table 5: Summary of Results of Groundwater Samples
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)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	DO (mg/l)	LAB
QC-1	09/02/93	---	---	---	---	110	2.4	ND<0.5	ND<0.5	0.79	---	SEQ
MW-13	12/07/93	9.57	8.08	0	1.49	100	ND<0.5	0.53	ND<0.5	1.8	---	SEQ
MW-13	03/02/94	9.57	7.68	0.00	1.89	---	---	---	---	---	---	---
MW-13	03/03/94	9.57	---	---	---	63	ND<0.5	ND<0.5	ND<0.5	0.88	---	SEQ
MW-13	07/12/94	9.57	8.05	0.00	1.52	---	---	---	---	---	---	---
MW-13	07/14/94	9.57	---	---	---	130	3.4	1	ND<0.5	1.8	---	SEQ
MW-13	10/04/94	9.57	8.31	0	1.26	---	---	---	---	---	---	---
MW-13	10/05/94	9.57	---	---	---	120.00	ND<0.5	ND<0.5	ND<0.5	1.10	---	SEQ
MW-13	01/30/95	9.57	7.37	0.00	2.20	---	---	---	---	---	---	---
MW-13	01/31/95	9.57	---	---	---	90.00	0.58	ND<0.50	ND<0.50	ND<0.50	---	SEQ
MW-13	04/10/95	9.57	7.44	0.00	2.13	---	---	---	---	---	---	---
MW-13	04/11/95	9.57	---	---	---	230	1.2	ND<0.50	1.1	3.6	1.80	SEQ
MW-13	08/24/95	9.57	7.84	0.00	1.73	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	2.60	SEQ
MW-13	11/13/95	9.57	8.20	0.00	1.37	---	---	---	---	---	---	---
MW-13	11/14/95	9.57	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	2.50	SEQ
MW-14	05/24/93	9.31	7.26	0.00	2.05	---	---	---	---	---	---	---
MW-14	05/26/93	9.31	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-14	08/31/93	9.31	6.95	0.00	2.36	---	---	---	---	---	---	---
MW-14	09/02/93	9.31	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-14	12/07/93	9.31	7.18	0.00	2.13	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-14	03/02/94	9.31	7.91	0.00	1.40	---	---	---	---	---	---	---
MW-14	03/03/94	9.31	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-14	07/12/94	9.54	7.52	0.00	2.02	---	---	---	---	---	---	---
MW-14	07/13/94	9.54	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-14	10/04/94	9.54	7.82	0.00	1.72	---	---	---	---	---	---	---
MW-14	10/05/94	9.54	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-14	01/30/95	9.54	6.71	0.00	2.83	---	---	---	---	---	---	---
MW-14	01/31/95	9.54	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---	SEQ
MW-14	04/10/95	9.54	6.89	0.00	2.65	---	---	---	---	---	---	---
MW-14	04/11/95	9.54	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	4.30	SEQ
MW-14	08/24/95	9.54	7.30	0.00	2.24	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	3.90	SEQ

Table 5: Summary of Results of Groundwater Samples
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)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	DO (mg/l)	LAB
MW-14	11/13/95	9.54	7.73	0.00	1.81	---	---	---	---	---	---	---
MW-14	11/14/95	9.54	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	2.90	SEQ
MW-15	05/24/93	9.05	6.25	0	2.8	---	---	---	---	---	---	---
MW-15	05/26/93	9.05	---	---	---	200	ND<0.5	0.56	ND<0.5	1.7	---	SEQ
MW-15	08/31/93	9.05	6.56	0	2.49	---	---	---	---	---	---	---
MW-15	09/02/93	9.05	---	---	---	270	1.7	0.96	ND<0.5	2.9	---	SEQ
MW-15	12/07/93	9.05	6.64	0.00	2.41	98	ND<0.5	ND<0.5	1.7	1.4	---	SEQ
MW-15	03/02/94	9.05	7.39	0	1.66	---	---	---	---	---	---	---
MW-15	03/03/94	9.05	---	---	---	160.00	0.81	ND<0.5	ND<0.5	1.20	---	SEQ
MW-15	07/12/94	9.05	8.13	0.00	0.92	---	---	---	---	---	---	---
MW-15	07/14/94	9.05	---	---	---	170.00	0.82	ND<0.5	ND<0.5	1.80	---	SEQ
MW-15	10/04/94	9.05	8.40	0.00	0.65	---	---	---	---	---	---	---
MW-15	10/05/94	9.05	---	---	---	---	---	---	---	---	---	---
MW-15	01/31/95	9.05	5.92	0.00	3.13	160.00	0.55	1.20	ND<0.50	1.50	---	SEQ
MW-15	04/10/95	9.05	5.96	0.00	3.09	---	---	---	---	---	---	---
MW-15	04/11/95	9.05	---	---	---	140.00	0.88	ND<0.50	0.51	2.20	2.10	SEQ
MW-15	08/24/95	9.05	---	---	---	---	---	---	---	---	---	---
MW-15	11/13/95	9.05	---	---	---	---	---	---	---	---	---	---
::												
MW-16	05/24/93	10.61	7.81	0.00	2.80	---	---	---	---	---	---	---
MW-16	05/26/93	10.61	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-16	08/31/93	10.61	8.09	0.00	2.52	---	---	---	---	---	---	---
MW-16	09/02/93	10.61	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-16	12/07/93	10.61	7.24	0.00	3.37	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-16	03/02/94	10.61	7.96	0.00	2.65	---	---	---	---	---	---	---
MW-16	03/03/94	10.61	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-16	07/12/94	10.61	8.42	0.00	2.19	---	---	---	---	---	---	---
MW-16	07/13/94	10.61	---	---	---	79	ND<0.5	2.2	0.9	10	---	SEQ
MW-16	10/04/94	10.61	8.70	0.00	1.91	---	---	---	---	---	---	---
MW-16	10/05/94	10.61	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-16	01/30/95	10.61	7.83	0.00	2.78	---	---	---	---	---	---	---

Table 5: Summary of Results of Groundwater Samples
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)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	DO (mg/l)	LAB
MW-16	01/31/95	10.61	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---	SEQ
MW-16	04/10/95	10.61	7.92	0.00	2.69	---	---	---	---	---	---	---
MW-16	04/11/95	10.61	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	3.20	SEQ
MW-16	08/24/95	10.61	8.24	0.00	2.37	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	3.60	SEQ
MW-16	11/13/95	10.61	8.61	0.00	2.00	---	---	---	---	---	---	---
MW-16	11/14/95	10.61	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	2.20	SEQ
MW-17	05/24/93	9.98	7.12	0.00	2.86	---	---	---	---	---	---	---
MW-17	05/26/93	9.98	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-17	08/31/93	9.98	7.41	0.00	2.57	---	---	---	---	---	---	---
MW-17	09/02/93	9.98	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-17	12/07/93	9.98	8.54	0.00	1.44	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-17	03/02/94	9.98	7.34	0	2.64	---	---	---	---	---	---	---
MW-17	03/03/94	9.98	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-17	07/12/94	9.98	7.68	0.00	2.30	---	---	---	---	---	---	---
MW-17	07/13/94	9.98	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-17	10/04/94	9.98	8.00	0.00	1.98	---	---	---	---	---	---	---
MW-17	10/05/94	9.98	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-17	01/30/95	9.98	6.90	0.00	3.08	---	---	---	---	---	---	---
MW-17	01/31/95	9.98	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---	SEQ
MW-17	04/10/95	9.98	7.06	0.00	2.92	---	---	---	---	---	---	---
MW-17	04/11/95	9.98	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	4.70	SEQ
MW-17	08/24/95	9.98	7.71	0.00	2.27	ND<50	0.91	ND<0.50	ND<0.50	ND<0.50	4.40	SEQ
MW-17	11/13/95	9.98	8.13	0.00	1.85	---	---	---	---	---	---	---
MW-17	11/14/95	9.98	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	2.40	SEQ
MW-18	05/24/93	10.26	6.49	0	3.77	---	---	---	---	---	---	---
MW-18	05/26/93	10.26	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-18	08/31/93	10.26	6.84	0.00	3.42	---	---	---	---	---	---	---
MW-18	09/01/93	10.26	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-18	12/07/93	10.26	7.12	0.00	3.14	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-18	03/02/94	10.26	7.83	0	2.43	---	---	---	---	---	---	---

Table 5: Summary of Results of Groundwater Samples
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)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	DO (mg/l)	LAB
MW-18	03/03/94	10.26	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-18	07/12/94	10.26	6.84	0.00	3.42	---	---	---	---	---	---	---
MW-18	07/14/94	10.26	---	---	---	ND<50	2.40	0.68	ND<0.5	1.10	---	SEQ
MW-18	10/04/94	10.26	7.12	0.00	3.14	---	---	---	---	---	---	---
MW-18	10/05/94	10.26	---	---	---	15000.00	1000.00	640.00	87.00	630.00	---	SEQ
MW-18	11/09/94	10.26	7.38	0.00	2.88	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-18	01/30/95	10.26	6.58	0.00	3.68	---	---	---	---	---	---	---
MW-18	01/31/95	10.26	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---	SEQ
MW-18	04/10/95	10.26	6.35	0.00	3.91	---	---	---	---	---	---	---
MW-18	04/11/95	10.26	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	5.00	SEQ
MW-18	08/24/95	10.26	6.73	0.00	3.53	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	4.40	SEQ
MW-18	11/13/95	10.26	---	---	---	---	---	---	---	---	---	---
::												
MW-19	05/25/93	8.87	6.25	0	2.62	---	---	---	---	---	---	---
MW-19	05/26/93	8.87	---	---	---	420	ND<0.5	ND<0.5	1.9	0.78	---	SEQ
QC-1	05/26/93	---	---	---	---	400	ND<0.5	ND<0.5	ND<0.5	0.81	---	SEQ
MW-19	08/31/93	8.87	6.51	0.00	2.36	---	---	---	---	---	---	---
MW-19	09/01/93	8.87	---	---	---	100	ND<0.5	ND<0.5	ND<0.5	1.2	---	SEQ
MW-19	12/07/93	8.87	6.58	0.00	2.29	---	---	---	---	---	---	---
MW-19	12/08/93	8.87	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
QC-1	12/08/93	---	---	---	---	57.00	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-19	03/02/94	8.87	6.18	0.00	2.69	---	---	---	---	---	---	---
MW-19	03/03/94	8.87	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	0.59	---	SEQ
MW-19	07/12/94	8.87	6.64	0.00	2.23	---	---	---	---	---	---	---
MW-19	07/19/94	8.87	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-19	10/04/94	8.87	6.89	0.00	1.98	---	---	---	---	---	---	---
MW-19	10/05/94	8.87	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-19	01/30/95	8.87	6.03	0.00	2.84	---	---	---	---	---	---	---
MW-19	01/31/95	8.87	---	---	---	120.00	0.74	ND<0.50	0.66	1.70	---	SEQ
MW-19	04/10/95	8.87	6.00	0.00	2.87	97	ND<0.50	ND<0.50	ND<0.50	4.1	1.60	SEQ
MW-19	08/24/95	8.87	6.42	0.00	2.45	---	---	---	---	---	---	---
MW-19	08/25/95	8.87	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	2.40	SEQ

Table 5: Summary of Results of Groundwater Samples
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)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	DO (mg/l)	LAB
MW-19	11/13/95	8.87	6.81	0.00	2.06	---	---	---	---	---	---	---
MW-19	11/14/95	8.87	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	2.40	SEQ
MW-20	05/24/93	9.42	7.33	0	2.09	---	---	---	---	---	---	---
MW-20	05/27/93	9.42	---	---	---	72.00	0.93	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-20	08/31/93	9.42	7.33	0.00	2.09	---	---	---	---	---	---	---
MW-20	09/01/93	9.42	---	---	---	1400.00	720.00	5.20	ND<0.5	17.00	---	SEQ
MW-20	12/07/93	9.42	7.62	0.00	1.80	---	---	---	---	---	---	---
MW-20	12/08/93	9.42	---	---	---	170.00	9.80	ND<0.5	ND<0.5	6.60	---	SEQ
MW-20	03/02/94	9.42	7.36	0.00	2.06	---	---	---	---	---	---	---
MW-20	03/03/94	9.42	---	---	---	500.00	110.00	2.20	ND<2	8.60	---	SEQ
MW-20	07/12/94	9.42	7.55	0.00	1.87	---	---	---	---	---	---	---
MW-20	07/19/94	9.42	---	---	---	190.00	38.00	0.54	ND<0.5	1.50	---	SEQ
MW-20	10/04/94	9.42	7.66	0.00	1.76	---	---	---	---	---	---	---
MW-20	10/05/94	9.42	---	---	---	320.00	99.00	ND<0.5	ND<0.5	9.20	---	SEQ
MW-20	01/30/95	9.42	7.23	0.00	2.19	---	---	---	---	---	---	---
MW-20	01/31/95	9.42	---	---	---	950.00	320.00	11.00	ND<0.50	14.00	---	SEQ
MW-20	04/10/95	9.42	7.28	0.00	2.14	---	---	---	---	---	---	---
MW-20	04/11/95	9.42	---	---	---	1800.00	840.00	ND<0.50	ND<0.50	19.00	3.10	SEQ
MW-20	08/24/95	9.42	7.39	0.00	2.03	---	---	---	---	---	---	---
MW-20	08/28/95	9.42	---	---	---	1600	960	13	ND<0.50	24	3.30	SEQ
MW-20	11/13/95	9.42	7.61	0	1.81	---	---	---	---	---	---	---
MW-20	11/14/95	9.42	---	---	---	180	58	0.69	ND<0.50	1.5	2.40	SEQ
MW-21	05/24/93	10.8	8.43	0.00	2.37	---	---	---	---	---	---	---
MW-21	05/27/93	10.8	---	---	---	24000	16000	270	280	970	---	SEQ
MW-21	08/31/93	10.8	8.54	0.00	2.26	---	---	---	---	---	---	---
MW-21	09/01/93	10.8	---	---	---	36000	18000	200	220	660	---	SEQ
MW-21	12/07/93	10.80	8.72	0.00	2.08	---	---	---	---	---	---	---
MW-21	12/08/93	10.80	---	---	---	28000	18000	220	400	1300	---	SEQ
MW-21	03/02/94	10.80	8.51	0.00	2.29	---	---	---	---	---	---	---
MW-21	03/03/94	10.80	---	---	---	56000	20000	660	1400	3900	---	SEQ

Table 5: Summary of Results of Groundwater Samples
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)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	DO (mg/l)	LAB
MW-21	07/12/94	10.80	7.63	0.00	3.17	---	---	---	---	---	---	---
MW-21	07/19/94	10.80	---	---	---	48000	18000	ND<200	ND<200	300	---	SEQ
MW-21	10/04/94	10.80	8.80	0.00	2.00	---	---	---	---	---	---	---
MW-21	10/05/94	10.80	---	---	---	18000	16000	ND<0.5	ND<0.5	260	---	SEQ
MW-21	01/30/95	10.80	8.30	0.00	2.50	---	---	---	---	---	---	---
MW-21	01/31/95	10.80	---	---	---	22000	12000	350	470	2100	---	SEQ
MW-21	04/10/95	10.80	8.20	0.00	2.60	---	---	---	---	---	---	---
MW-21	04/11/95	10.80	---	---	---	47000	16000	590	970	3400	1.00	SEQ
MW-21	08/24/95	10.80	8.49	0.00	2.31	---	---	---	---	---	---	---
MW-21	08/28/95	10.8	---	---	---	29000	21000	310	ND<0.50	270	2.30	SEQ
QC-1	08/28/95	---	---	---	---	32000	20000	ND<0.50	ND<0.50	300	---	SEQ
MW-21	11/13/95	10.8	8.73	0	2.07	---	---	---	---	---	---	---
MW-21	11/14/95	10.8	---	---	---	44000.00	19000.00	ND<125	150.00	440.00	3.70	SEQ
::												
MW-22	05/25/93	9.84	7.22	0.00	2.62	---	---	---	---	---	---	---
MW-22	05/27/93	9.84	---	---	---	70.00	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-22	08/31/93	9.84	7.38	0.00	2.46	---	---	---	---	---	---	---
MW-22	09/01/93	9.84	---	---	---	100.00	ND<0.5	ND<0.5	ND<0.5	1.10	---	SEQ
MW-22	12/07/93	9.84	7.62	0.00	2.22	---	---	---	---	---	---	---
MW-22	12/08/93	9.84	---	---	---	54	ND<0.5	0.78	ND<0.5	0.98	---	SEQ
MW-22	03/02/94	9.84	7.33	0.00	2.51	---	---	---	---	---	---	---
MW-22	03/03/94	9.84	---	---	---	190	1.4	1.3	ND<0.5	4	---	SEQ
MW-22	07/12/94	9.84	7.48	0.00	2.36	---	---	---	---	---	---	---
MW-22	07/19/94	9.84	---	---	---	57	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
QC-1	07/19/94	---	---	---	---	53.00	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-22	10/04/94	9.84	7.68	0.00	2.16	---	---	---	---	---	---	---
MW-22	10/05/94	9.84	---	---	---	110	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-22	01/30/95	9.84	7.19	0	2.65	---	---	---	---	---	---	---
MW-22	01/31/95	9.84	---	---	---	80	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---	SEQ
MW-22	04/10/95	9.84	6.94	0	2.9	---	---	---	---	---	---	---
MW-22	04/11/95	9.84	---	---	---	69	0.52	ND<0.50	ND<0.50	ND<0.50	4.8	SEQ
MW-22	08/24/95	9.84	7.23	0.00	2.61	---	---	---	---	---	---	

Table 5: Summary of Results of Groundwater Samples
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)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	DO (mg/l)	LAB
MW-22	08/25/95	9.84	---	---	---	73	0.95	ND<0.50	ND<0.50	4.9	3.3	SEQ
MW-22	11/13/95	9.84	6.58	0.00	3.26	---	---	---	---	---	---	---
MW-22	11/14/95	9.84	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	2.10	SEQ
MW-23	05/25/93	10.96	8.23	0.00	2.73	---	---	---	---	---	---	---
MW-23	05/26/93	10.96	---	---	---	5500	2300	130	140	540	---	SEQ
MW-23	08/31/93	10.96	8.35	0.00	2.61	---	---	---	---	---	---	---
MW-23	09/01/93	10.96	---	---	---	3900	2600	42	140	110	---	SEQ
MW-23	12/07/93	10.96	8.58	0.00	2.38	---	---	---	---	---	---	---
MW-23	12/08/93	10.96	---	---	---	4500	2400	42	110	66	---	SEQ
MW-23	03/02/94	10.96	8.23	0.00	2.73	---	---	---	---	---	---	---
MW-23	03/03/94	10.96	---	---	---	2600	750	41	53	150	---	SEQ
MW-23	07/12/94	10.96	8.64	0.00	2.32	---	---	---	---	---	---	---
MW-23	07/13/94	10.96	---	---	---	2800	930	19	22	100	---	SEQ
MW-23	10/04/94	10.96	8.76	0.00	2.20	---	---	---	---	---	---	---
MW-23	10/05/94	10.96	---	---	---	1100	330	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-23	01/30/95	10.96	8.04	0.00	2.92	---	---	---	---	---	---	---
MW-23	01/31/95	10.96	---	---	---	1300.00	ND<10	ND<10	19.00	55.00	---	SEQ
MW-23	04/10/95	10.96	8.04	0.00	2.92	---	---	---	---	---	---	---
MW-23	04/11/95	10.96	---	---	---	2600	550	ND<0.50	ND<0.50	45	4.10	SEQ
MW-23	08/24/95	10.96	8.52	0.20	2.59	---	---	---	---	---	---	---
MW-23	08/28/95	10.96	---	---	---	330	110	2.1	4.6	15	2.90	SEQ
MW-23	11/13/95	10.96	9.85	---	1.11	1400	480	ND<5.0	ND<5.0	ND<5.0	2.70	SEQ
MW-24	05/24/93	7.75	4.90	0.00	2.85	---	---	---	---	---	---	---
MW-24	05/26/93	7.75	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-24	08/31/93	7.75	5.23	0.00	2.52	---	---	---	---	---	---	---
MW-24	09/02/93	7.75	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-24	12/07/93	7.75	8.52	0.00	-0.77	100	ND<0.5	ND<0.5	ND<0.5	1.3	---	SEQ
MW-24	03/02/94	7.75	9.25	0.00	-1.50	---	---	---	---	---	---	---
MW-24	03/03/94	7.75	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-24	07/12/94	7.75	5.66	0.00	2.09	---	---	---	---	---	---	---

Table 5: Summary of Results of Groundwater Samples
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)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	DO (mg/l)	LAB
MW-24	07/19/94	7.75	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-24	10/04/94	7.75	5.94	0.00	1.81	---	---	---	---	---	---	---
MW-24	10/05/94	7.75	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-24	01/30/95	7.75	5.06	0.00	2.69	---	---	---	---	---	---	---
MW-24	01/31/95	7.75	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---	SEQ
MW-24	04/10/95	7.75	5.22	0.00	2.53	---	---	---	---	---	---	---
MW-24	04/11/95	7.75	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	0.80	SEQ
MW-24	08/24/95	7.75	5.57	0.00	2.18	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	4.20	SEQ
MW-24	11/13/95	7.75	5.97	0.00	1.78	---	---	---	---	---	---	---
MW-24	11/14/95	7.75	---	---	---	ND<50	5.4	0.82	ND<0.50	1.8	2.80	SEQ
::												
MW-25	05/24/93	10.04	7.46	0.00	2.58	---	---	---	---	---	---	---
MW-25	05/26/93	10.04	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-25	08/31/93	10.04	7.70	0.00	2.34	---	---	---	---	---	---	---
MW-25	09/01/93	10.04	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-25	12/07/93	10.04	7.98	0.00	2.06	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-25	03/02/94	10.04	8.69	0.00	1.35	---	---	---	---	---	---	---
MW-25	03/03/94	10.04	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-25	07/12/94	10.04	7.86	0.00	2.18	---	---	---	---	---	---	---
MW-25	07/14/94	10.04	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-25	10/04/94	10.04	8.15	0.00	1.89	---	---	---	---	---	---	---
MW-25	10/05/94	10.04	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-25	01/30/95	10.04	7.51	0.00	2.53	---	---	---	---	---	---	---
MW-25	01/31/95	10.04	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---	SEQ
MW-25	04/10/95	10.04	7.40	0.00	2.64	---	---	---	---	---	---	---
MW-25	04/11/95	10.04	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	6.40	SEQ
MW-25	08/24/95	10.04	7.71	0.00	2.33	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	6.10	SEQ
MW-25	11/13/95	10.04	---	---	---	---	---	---	---	---	---	---
MW-26	05/24/93	8.96	5.33	0.00	3.63	---	---	---	---	---	---	---
MW-26	05/26/93	8.96	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-26	08/31/93	8.96	5.62	0.00	3.34	---	---	---	---	---	---	---
MW-26	09/01/93	8.96	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ

Table 5: Summary of Results of Groundwater Samples
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)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	DO (mg/l)	LAB
MW-26	12/07/93	8.96	5.80	0.00	3.16	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-26	03/02/94	8.96	6.53	0	2.43	---	---	---	---	---	---	---
MW-26	03/03/94	8.96	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-26	07/12/94	8.96	5.65	0.00	3.31	---	---	---	---	---	---	---
MW-26	07/14/94	8.96	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-26	10/04/94	8.96	5.96	0.00	3.00	---	---	---	---	---	---	---
MW-26	10/05/94	8.96	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-26	01/30/95	8.96	5.27	0.00	3.69	---	---	---	---	---	---	---
MW-26	01/31/95	8.96	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---	SEQ
MW-26	04/10/95	8.96	5.15	0.00	3.81	---	---	---	---	---	---	---
MW-26	04/11/95	8.96	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	8.30	SEQ
MW-26	08/24/95	8.96	5.53	0.00	3.43	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	7.90	SEQ
MW-26	11/13/95	8.96	5.83	0.00	3.13	---	---	---	---	---	---	---
MW-26	11/14/95	8.96	---	---	---	ND<50	3.90	0.77	ND<0.50	1.60	1.60	SEQ
QC-1	11/14/95	---	---	---	---	ND<50	4.9	0.95	0.56	2	---	SEQ
MW-27	05/25/93	9.36	6.85	0.00	2.51	---	---	---	---	---	---	---
MW-27	05/27/93	9.36	---	---	---	8900.00	3900.00	750.00	ND<50	800.00	---	SEQ
MW-27	08/31/93	9.36	6.97	0.00	2.39	---	---	---	---	---	---	---
MW-27	09/01/93	9.36	---	---	---	25000	5000	3200	300	1600	---	SEQ
MW-27	12/07/93	9.36	7.18	0	2.18	---	---	---	---	---	---	---
MW-27	12/08/93	9.36	---	---	---	53000	17000	9900	1000	4600	---	SEQ
MW-27	03/02/94	9.36	6.87	0.00	2.49	---	---	---	---	---	---	---
MW-27	03/03/94	9.36	---	---	---	37000	6700	2700	390	1800	---	SEQ
MW-27	07/12/94	9.36	7.07	0.00	2.29	---	---	---	---	---	---	---
MW-27	07/14/94	9.36	---	---	---	9800	6400	1200	170	890	---	SEQ
MW-27	10/04/94	9.36	7.27	0.00	2.09	---	---	---	---	---	---	---
MW-27	10/05/94	9.36	---	---	---	8400	5900	670	150	690	---	SEQ
MW-27	01/30/95	9.36	6.73	0.00	2.63	---	---	---	---	---	---	---
MW-27	01/31/95	9.36	---	---	---	18000	9800	1700	310	1700	---	SEQ
MW-27	04/10/95	9.36	6.52	0.00	2.84	62000.00	17000.00	#######	1200.00	5700.00	1.00	SEQ
MW-27	08/24/95	9.36	6.85	0.00	2.51	---	---	---	---	---	---	---
MW-27	08/28/95	9.36	---	---	---	25000.00	13000.00	#######	370.00	1300.00	2.50	SEQ
MW-27	11/13/95	9.36	7.16	0.00	2.20	---	---	---	---	---	---	---
MW-27	11/14/95	9.36	---	---	---	17000.00	6800.00	450.00	60.00	370.00	3.10	SEQ
::												
MW-28	05/25/93	10.64	9.44	0.00	1.20	---	---	---	---	---	---	---

Table 5: Summary of Results of Groundwater Samples
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)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	DO (mg/l)	LAB
MW-28	05/27/93	10.64	---	---	---	ND<50	ND<0.1	ND<0.1	ND<0.5	0.65	---	SEQ
MW-28	08/31/93	10.64	9.18	0.00	1.46	---	---	---	---	---	---	---
MW-28	09/02/93	10.64	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-28	12/07/93	10.64	---	---	---	---	---	---	---	---	---	---
MW-28	03/02/94	10.64	---	---	---	---	---	---	---	---	---	---
MW-28	03/03/94	10.64	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-28	07/12/94	10.64	7.10	0.00	3.54	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-28	10/04/94	10.64	7.70	0.00	2.94	---	---	---	---	---	---	---
MW-28	10/05/94	10.64	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-28	01/30/95	10.64	8.47	0.00	2.17	---	---	---	---	---	---	---
MW-28	01/31/95	10.64	---	---	---	ND<50	ND<0.50	0.76	ND<0.50	ND<0.50	---	SEQ
MW-28	04/10/95	10.64	---	---	---	---	---	---	---	---	---	---
MW-28	08/24/95	10.64	9.24	0.00	1.40	---	---	---	---	---	---	---
MW-28	08/28/95	10.64	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	3.70	SEQ
MW-28	11/13/95	10.64	8.91	0.00	1.73	---	---	---	---	---	---	---
MW-28	11/14/95	10.64	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	2.80	SEQ
MW-29	05/25/93	9.16	6.21	0.00	2.95	---	---	---	---	---	---	---
MW-29	05/26/93	9.16	---	---	---	510	ND<0.5	ND<0.5	1.9	3.8	---	SEQ
MW-29	08/31/93	9.16	6.43	0.00	2.73	---	---	---	---	---	---	---
MW-29	09/01/93	9.16	---	---	---	170	ND<0.5	ND<0.5	0.65	1.7	---	SEQ
MW-29	12/07/93	9.16	6.62	0.00	2.54	---	---	---	---	---	---	---
MW-29	12/08/93	9.16	---	---	---	270	ND<0.5	2.1	1.1	2.1	---	SEQ
MW-29	03/02/94	9.16	6.30	0.00	2.86	---	---	---	---	---	---	---
MW-29	03/03/94	9.16	---	---	---	120	ND<0.5	0.7	0.62	5.3	---	SEQ
MW-29	07/12/94	9.16	6.50	0.00	2.66	---	---	---	---	---	---	---
MW-29	07/19/94	9.16	---	---	---	150	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
MW-29	10/04/94	9.16	6.75	0.00	2.41	---	---	---	---	---	---	---
MW-29	10/05/94	9.16	---	---	---	5100.00	3600.00	100.00	100.00	180	---	SEQ
MW-29	01/30/95	9.16	6.06	0.00	3.10	---	---	---	---	---	---	---
MW-29	01/31/95	9.16	---	---	---	110.00	0.51	0.51	ND<0.50	4.4	---	SEQ
QC-1	01/30/95	---	---	---	---	77.00	ND<0.50	ND<0.50	ND<0.50	2.1	---	SEQ
MW-29	04/10/95	9.16	5.86	0.00	3.30	120.00	0.75	0.71	ND<0.50	1.4	1.40	SEQ
MW-29	08/24/95	9.16	6.27	0.00	2.89	---	---	---	---	---	---	---
MW-29	08/25/95	9.16	---	---	---	110	0.73	ND<0.50	0.98	4.6	2.2	SEQ
MW-29	11/13/95	9.16	6.60	0.00	2.56	---	---	---	---	---	---	---
MW-29	11/14/95	9.16	---	---	---	50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	2.6	SEQ

Table 5: Summary of Results of Groundwater Samples
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)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	DO (mg/l)	LAB
MW-30	05/24/93	11.19	8.84	0	2.35	---	---	---	---	---	---	---
MW-30	05/27/93	11.19	---	---	---	550	49	1.3	1.1	9.6	---	SEQ
QC-1	05/27/93	---	---	---	---	580	44.0	0.92	1.2	7	---	SEQ
MW-30	08/31/93	11.19	8.94	0.00	2.25	---	---	---	---	---	---	---
MW-30	09/01/93	11.19	---	---	---	900.00	170.00	ND<0.5	24.00	8.5	---	SEQ
MW-30	12/07/93	11.19	9.08	0.00	2.11	---	---	---	---	---	---	---
MW-30	12/08/93	11.19	---	---	---	5800.00	2300.00	24.00	100.00	80	---	SEQ
MW-30	03/02/94	11.19	8.82	0.00	2.37	---	---	---	---	---	---	---
MW-30	03/04/94	11.19	---	---	---	270	59	ND<100	4.7	4	---	SEQ
MW-30	07/12/94	11.19	8.09	0.02	3.115	---	---	---	---	---	---	---
MW-30	07/14/94	11.19	---	---	---	120000	910	290	180	410	---	SEQ
MW-30	10/04/94	11.19	9.96	0.76	1.8	---	---	---	---	---	---	---
MW-30	01/30/95	10.83	8.48	0.27	2.5525	---	---	---	---	---	---	---
MW-30	04/10/95	10.83	8.65	0.02	2.20	---	---	---	---	---	---	---
MW-30	08/24/95	10.83	9.17	0.01	1.6675	---	---	---	---	---	---	---
MW-30	11/13/95	10.83	9.94	1.39	1.9325	---	---	---	---	---	---	---
::												
MW-31	05/25/93	11.05	8.89	0.00	2.16	---	---	---	---	---	---	---
MW-31	08/31/93	11.05	8.93	0.00	2.12	---	---	---	---	---	---	---
MW-31	12/07/93	11.05	9.18	0.00	1.87	---	---	---	---	---	---	---
MW-31	12/08/93	11.05	---	---	---	670.00	300.00	26.00	29.00	46	---	SEQ
MW-31	03/02/94	11.05	9.14	0.00	1.91	670.00	300.00	26.00	29.00	46	---	SEQ
MW-31	03/04/94	11.05	---	---	---	36000.00	13000.00	########	1100.00	2200	---	SEQ
QC-1	03/04/94	---	---	---	---	26000.00	10000.00	########	1200.00	2700	---	SEQ
MW-31	07/12/94	11.05	9.54	0.00	1.51	---	---	---	---	---	---	---
MW-31	07/13/94	11.05	---	---	---	28000	17000	1900	810	2200	---	SEQ
MW-31	10/04/94	11.05	9.42	0.00	1.63	---	---	---	---	---	---	---
MW-31	10/05/94	11.05	---	---	---	18000	9300	340	300	590	---	SEQ
QC-1	10/05/94	---	---	---	---	18000	14000	430	370	810	---	SEQ
MW-31	01/30/95	11.05	8.87	0.00	2.18	---	---	---	---	---	---	---
MW-31	01/31/95	11.05	---	---	---	27000	21000	740	470	1200	---	SEQ
MW-31	04/10/95	11.05	8.92	0.00	2.13	46000	22000	850	660	1700	0.40	SEQ
MW-31	08/24/95	11.05	9.02	0.00	2.03	---	---	---	---	---	---	---
MW-31	08/28/95	11.05	---	---	---	33000	21000	430	480	1600	2.60	SEQ
MW-31	11/13/95	11.05	9.20	---	1.85	42000	13000	210	960	1100	2.50	SEQ

Table 5: Summary of Results of Groundwater Samples
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)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	DO (mg/l)	LAB
MW-32	10/04/94	11.05	10.29	1.60	1.96	---	---	---	---	---	---	---
MW-32	10/05/94	11.05	---	---	---	---	---	---	---	---	---	---
MW-32	01/30/95	11.05	8.85	2.27	3.90	---	---	---	---	---	---	---
MW-32	04/10/95	11.05	8.61	1.62	3.66	---	---	---	---	---	---	---
MW-32	08/24/95	11.05	9.12	1.47	3.03	---	---	---	---	---	---	---
MW-32	11/13/95	11.05	9.87	1.79	2.52	---	---	---	---	---	---	---
RW-A	07/12/94	10.34	11.33	0.00	-0.99	---	---	---	---	---	---	---
RW-A	10/04/94	10.34	11.45	0.00	-1.11	---	---	---	---	---	---	---
RW-A	01/30/95	10.34	10.81	0.00	-0.47	---	---	---	---	---	---	---
RW-A	04/10/95	10.34	8.96	0.00	1.38	---	---	---	---	---	---	---
RW-A	08/24/95	10.34	8.85	0.00	1.49	---	---	---	---	---	---	---
RW-A	11/13/95	10.34	8.87	1.06	2.27	---	---	---	---	---	---	---
RW-B	07/12/94	10.86	9.24	0.00	1.62	---	---	---	---	---	---	---
RW-B	07/14/94	10.86	---	---	---	15000	3500	280	180	1300	---	SEQ
RW-B	10/04/94	10.86	9.36	0.00	1.50	---	---	---	---	---	---	---
RW-B	01/30/95	10.86	8.75	0.00	2.11	---	---	---	---	---	---	---
RW-B	04/10/95	10.86	8.44	0.00	2.42	---	---	---	---	---	---	---
RW-B	08/24/95	10.86	8.87	0.00	1.99	---	---	---	---	---	---	---
RW-B	11/13/95	10.86	8.9	1.10	2.79	---	---	---	---	---	---	---
RW-C	07/12/94	9.84	7.62	0.00	2.22	---	---	---	---	---	---	---
RW-C	07/19/94	9.84	---	---	---	17000	490	610	83	1800	---	SEQ
RW-C	10/04/94	9.84	7.72	0.00	2.12	---	---	---	---	---	---	---
RW-C	01/30/95	9.84	7.06	0.00	2.78	---	---	---	---	---	---	---
RW-C	04/10/95	9.84	7.02	0.00	2.82	---	---	---	---	---	---	---
RW-C	08/24/95	9.84	7.87	0.00	1.97	---	---	---	---	---	---	---
RW-C	11/13/95	9.84	8.15	1.20	2.59	---	---	---	---	---	---	---
RW-D	07/12/94	10.89	8.80	0.00	2.09	---	---	---	---	---	---	---
RW-D	07/19/94	10.89	---	---	---	690	9.5	ND<1.0	4.4	10	---	SEQ
RW-D	10/04/94	10.89	8.93	0.00	1.96	---	---	---	---	---	---	---
RW-D	01/30/95	10.89	8.29	0.00	2.60	---	---	---	---	---	---	---
RW-D	04/10/95	10.89	7.94	0.00	2.95	---	---	---	---	---	---	---
RW-D	08/24/95	10.89	8.72	0.00	2.17	---	---	---	---	---	---	---
RW-D	11/13/95	10.89	9.14	0.50	2.13	---	---	---	---	---	---	---

Table 5: Summary of Results of Groundwater Samples
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)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	DO (mg/l)	LAB
RW-E	07/12/94	10.76	8.84	0.27	2.12	---	---	---	---	---	---	---
RW-E	07/14/94	10.76	---	---	---	220000	2400	210	670	4200	---	SEQ
RW-E	10/04/94	10.76	8.97	0.00	1.79	---	---	---	---	---	---	---
RW-E	01/30/95	10.76	8.3	0.00	2.46	---	---	---	---	---	---	---
RW-E	04/10/95	10.76	8.05	0.00	2.71	---	---	---	---	---	---	---
RW-E	08/24/95	10.76	8.81	0.12	2.04	---	---	---	---	---	---	---
RW-E	11/13/95	10.76	9.31	0.65	1.94	---	---	---	---	---	---	---
::												
QC-2	05/26/93	---	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
QC-2	34116	---	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
QC-2	34311	---	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
QC-2	34395	---	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
QC-2	34534	---	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
QC-2	34611	---	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SEQ
QC-2	34730	---	---	---	---	ND<50	ND<0.50	0.76	ND<0.50	ND<0.50	---	SEQ
QC-2	34800	---	---	---	---	ND<50	1.7	ND<0.50	ND<0.50	0.93	---	SEQ
QC-2	34935	---	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---	SEQ
QC-2	35016	---	---	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---	SEQ
MW-A1(k)	32588	8.99	---	---	---	18000	1100	22	ND<0.5	42	---	CT
MW-A1	33948	8.99	---	---	---	2200	ND<5	ND<5	ND<5	ND<5	---	CEC
MW-A1	34064	8.99	6.62	---	2.37	460	ND<0.5	ND<0.5	3.4	9.9	---	GEO
MW-A1	34114	8.99	6.7	---	2.29	---	---	---	---	---	---	---
MW-A1	34116	8.99	---	---	---	410	ND<0.1	ND<0.1	1.2	6	---	SEQ
MW-A1	34212	8.99	6.86	---	2.13	---	---	---	---	---	---	---
MW-A1	34213	8.99	---	---	---	560	1.4	2.8	4.9	10	---	SEQ
MW-A1	34310	8.99	7.08	---	1.91	---	---	---	---	---	---	---
MW-A1	34311	8.99	---	---	---	1300	8.6	4.6	ND<0.5	12	---	SEQ
MW-A1	34395	8.99	6.96	---	2.03	---	---	---	---	---	---	---
MW-A1	34397	8.99	---	---	---	1700	1.9	4.5	5.3	13	---	SEQ
MW-A1	34527	8.99	7.11	---	1.88	---	---	---	---	---	---	---
MW-A1	34529	8.99	---	---	---	1200	3	2.9	ND<1.0	20	---	SEQ
MW-A1	34611	8.99	7.05	---	1.94	---	---	---	---	---	---	---
MW-A1	34612	8.99	---	---	---	690	3.4	1.4	1.8	15	---	SEQ
MW-A1	34729	8.99	6.43	---	2.56	---	---	---	---	---	---	---

Table 5: Summary of Results of Groundwater Samples
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)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	DO (mg/l)	LAB
MW-A1	34730	8.99	---	---	---	910	ND<0.50	2.4	7.4	17	---	SEQ
MW-A1	34799	8.99	6.4	---	2.59	---	---	---	---	---	---	---
MW-A1	34800	8.99	---	---	---	840	2.5	1.9	7.8	17	2.7	SEQ
MW-A1	34935	8.99	6.71	---	2.28	---	---	---	---	---	---	---
MW-A1	34936	8.99	---	---	---	480	1.1	1.5	6.4	17	2.7	SEQ
MW-A1	35016	8.99	6.96	---	2.03	---	---	---	---	---	---	---
MW-A1	35017	8.99	---	---	---	740	ND<1.0	1.3	ND<1.0	8.8	2.7	SEQ

MW-A2	32588	8.83	---	---	---	4100	160	11	ND<0.5	68	---	CT
MW-A2	33948	8.83	---	---	---	2300	140	10	13	29	---	CEC
MW-A2	34064	8.83	---	---	---	4900	160	25	4.2	40	---	GEO
MW-A2	34064	8.83	6.45	---	2.38	---	---	---	---	---	---	---
MW-A2	34114	8.83	6.42	---	2.41	---	---	---	---	---	---	---
MW-A2	34116	8.83	---	---	---	2300	140	11	5.5	34	---	SEQ
MW-A2	34212	8.83	6.55	---	2.28	---	---	---	---	---	---	---
MW-A2	34213	8.83	---	---	---	1600	51	7.2	ND<0.5	19	---	SEQ
MW-A2	34310	8.83	---	---	---	---	---	---	---	---	---	---
MW-A2	34395	8.83	6.42	---	2.41	---	---	---	---	---	---	---
MW-A2	34397	8.83	---	---	---	6800	230	40	30	89	---	SEQ
MW-A2	34527	8.83	7.04	---	1.79	---	---	---	---	---	---	---
MW-A2	34529	8.83	---	---	---	3800	160	18	23	36	---	SEQ
MW-A2	34611	8.83	6.81	---	2.02	---	---	---	---	---	---	---
MW-A2	34612	8.83	---	---	---	1700	63	4.1	4.4	26	---	SEQ
MW-A2	34729	8.83	6.3	---	2.53	---	---	---	---	---	---	---
MW-A2	34730	8.83	---	---	---	1700	100	12	8.1	27	---	SEQ
MW-A2	34730	8.83	---	---	---	1700	100	12	8.1	27	---	SEQ
MW-A2	34799	8.83	6.16	---	2.67	---	---	---	---	---	---	---
MW-A2	34800	8.83	---	---	---	2000	160	14	9.2	36	2.1	---
MW-A2	34935	8.83	6.41	---	2.42	---	---	---	---	---	---	---
MW-A2	34936	8.83	---	---	---	1100	140	18	4.9	33	2.1	---
MW-A2	35016	8.83	6.7	---	2.13	---	---	---	---	---	---	---
MW-A2	35017	8.83	---	---	---	1400	110	8.3	8.7	22	3.7	---

MW-A3	33875	9.76	---	---	---	---	---	---	---	---	---	---
MW-A3	32588	9.76	---	---	---	270	88	ND<5	ND<5	6	---	---
MW-A3	33948	9.76	---	---	---	350	ND<5	ND<5	ND<5	ND<5	---	---
MW-A3	34001	9.76	7.28	---	2.48	---	---	---	---	---	---	---

ENVIRONMENTAL ENGINEERING, INC
2680 Bishop Drive, Suite 203, San Ramon, CA 94583
TEL (510) 244-6600 • FAX (510) 244-6601

Table 5: Summary of Results of Groundwater Samples
Oakland, California

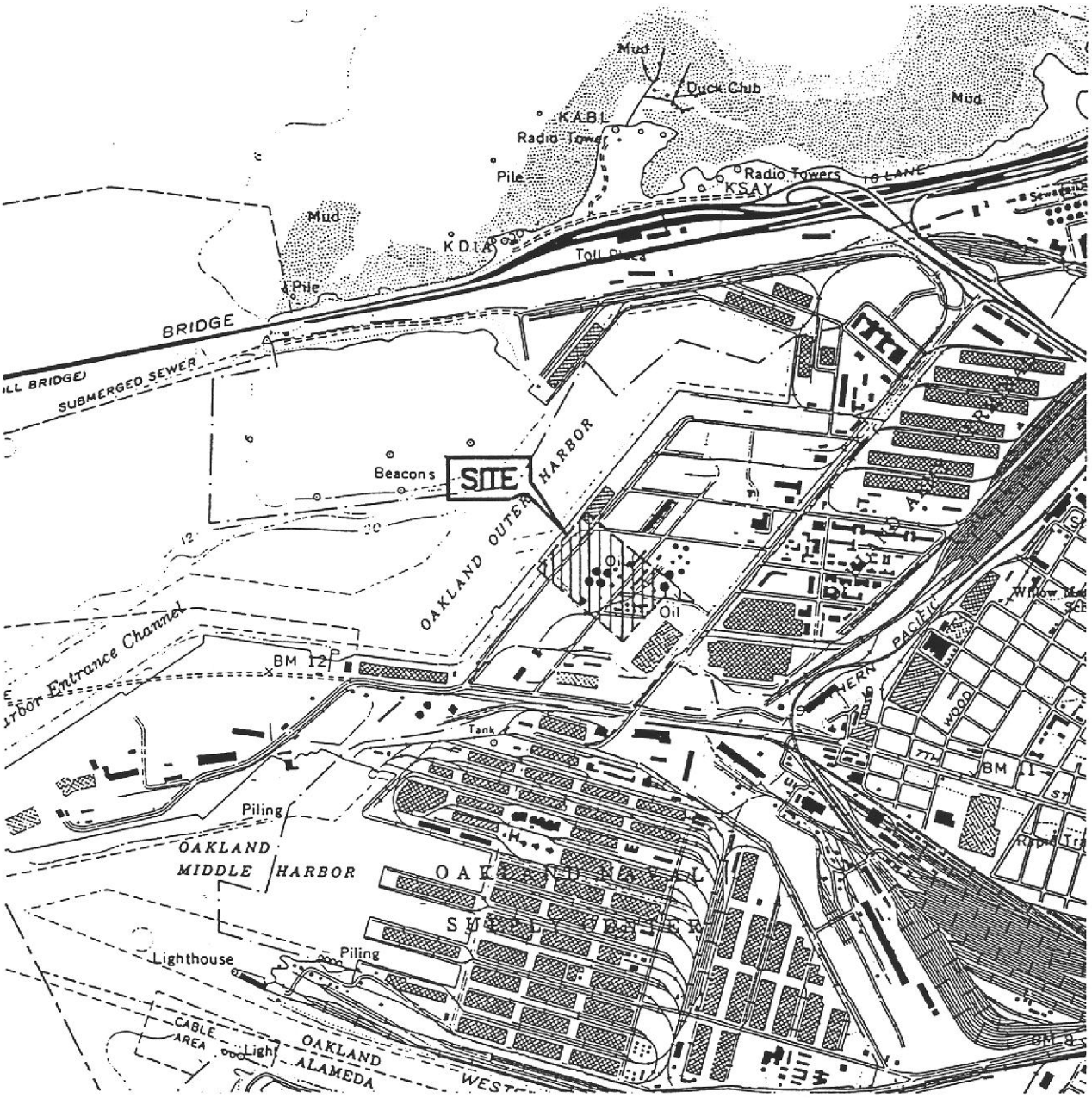
WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION(a) (Feet)	DEPTH TO WATER (Feet)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION(b) (Feet)	TPH-G (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	DO (mg/l)	LAB
MW-A3	34051	9.76	7.06	---	2.7	---	---	---	---	---	---	---
MW-A3	34052	9.76	---	---	---	360	70	1	ND<0.5	14	---	SEQ
MW-A3	34114	9.76	7.1	---	2.66	---	---	---	---	---	---	---
MW-A3	34116	9.76	---	---	---	260	36	ND<0.1	ND<0.1	14	---	SEQ
MW-A3	34212	9.76	7.1	---	2.66	---	---	---	---	---	---	---
MW-A3	34213	9.76	---	---	---	210	29	ND<0.5	ND<0.5	10	---	SEQ
MW-A3	34310	9.76	7.32	---	2.44	---	---	---	---	---	---	---
MW-A3	34311	9.76	---	---	---	600	97	2.1	1.2	3.3	---	SEQ
MW-A3	34395	9.76	7.1	---	2.66	---	---	---	---	---	---	---
MW-A3	34397	9.76	---	---	---	860	79	1	ND<0.5	3.2	---	SEQ
MW-A3	34527	9.76	7.22	---	2.54	---	---	---	---	---	---	---
MW-A3	34534	9.76	---	---	---	480	72	ND<0.5	ND<0.5	1.9	---	SEQ
MW-A3	34611	9.76	7.43	---	2.33	---	---	---	---	---	---	---
MW-A3	34612	9.76	---	---	---	340	44	ND<0.5	ND<0.5	14	---	SEQ
MW-A3	34729	9.76	6.89	---	2.87	---	---	---	---	---	---	---
MW-A3	34730	9.76	---	---	---	320	50	ND<1	ND<1	12	---	SEQ
MW-A3	34799	9.76	6.69	---	3.07	---	---	---	---	---	---	---
MW-A3	34800	9.76	---	---	---	---	---	---	---	---	---	---
MW-A3	34935	9.76	6.91	---	2.85	420	54	1.1	8.4	10	---	SEQ
MW-A3	35016	9.76	7.24	---	2.52	---	---	---	---	---	---	---
MW-A3	35017	9.76	---	---	---	280	32	ND<0.50	ND<0.50	1.3	2.7	SEQ

ABBREVIATIONS:

TPH-G	Total petroleum hydrocarbons as gasoline
B	Benzene
T	Toluene
E	Ethylbenzene
X	Total xylenes
DO	Dissolved oxygen
ug/l	Micrograms per liter
ppm	Parts per million
---	Not available/analyzed/measured/applicable
ND	Not detected above reported detection limit
CT	Sequoia Analytical

NOTES:

(a)	Top of casing elevations surveyed relative to an established benchmark with an elevation of 14.00 feet above mean sea level.
(b)	Groundwater elevations adjusted assuming a specific gravity of 0.75 for free product.
(c)	Well inaccessible.
(d)	Not sampled due to presence of hydrocarbon sheen.
(e)	Blind duplicate.
(f)	Non-gasoline mix C6-C12.
(g)	Discrete peak.
(h)	Top of casing lowered 0.36 foot.
(i)	Gasoline and unidentified hydrocarbon >C8.
(j)	Travel blank.
(k)	Former Ashland Oil Bulk Terminal

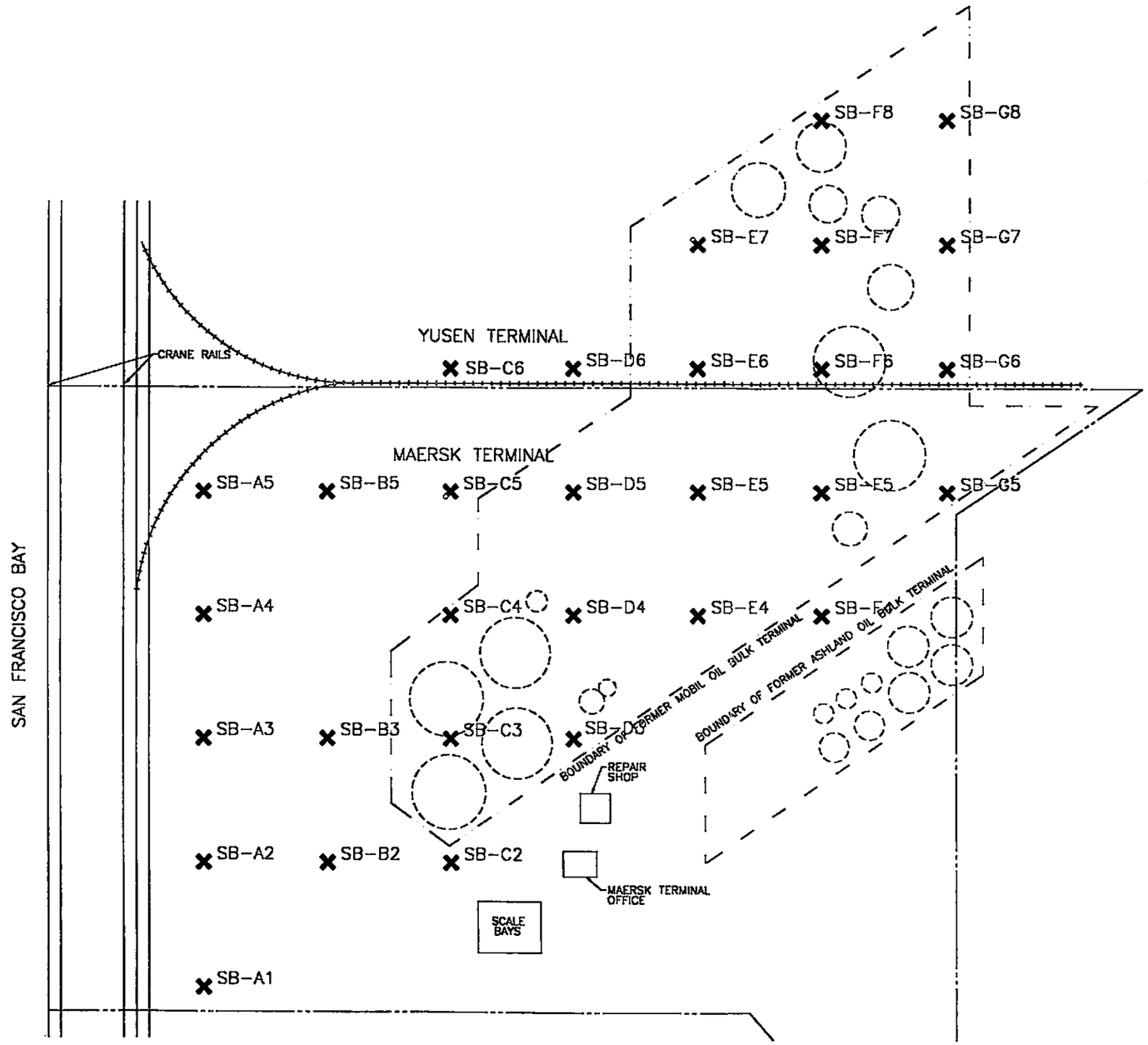


SOURCE:
USGS MAP, OAKLAND WEST QUADRANGLE, CALIFORNIA. 7.5 MINUTE SERIES. 1959. PHOTOREVISED 1980.

Figure 1 : SITE VICINITY MAP
FORMER MOBIL OIL BULK PLANT, PORT OF OAKLAND, OAKLAND, CALIFORNIA

Project No. 96 - 2100

ENVIRONMENTAL ENGINEERING



N

EXPLANATION

✖ SHALLOW SOIL BORING LOCATION

0 100 200

SCALE IN FEET

Figure 2 :

SHALLOW SOIL BORING LOCATIONS

Project No. 96-2100

ENVIRONMENTAL ENGINEERING

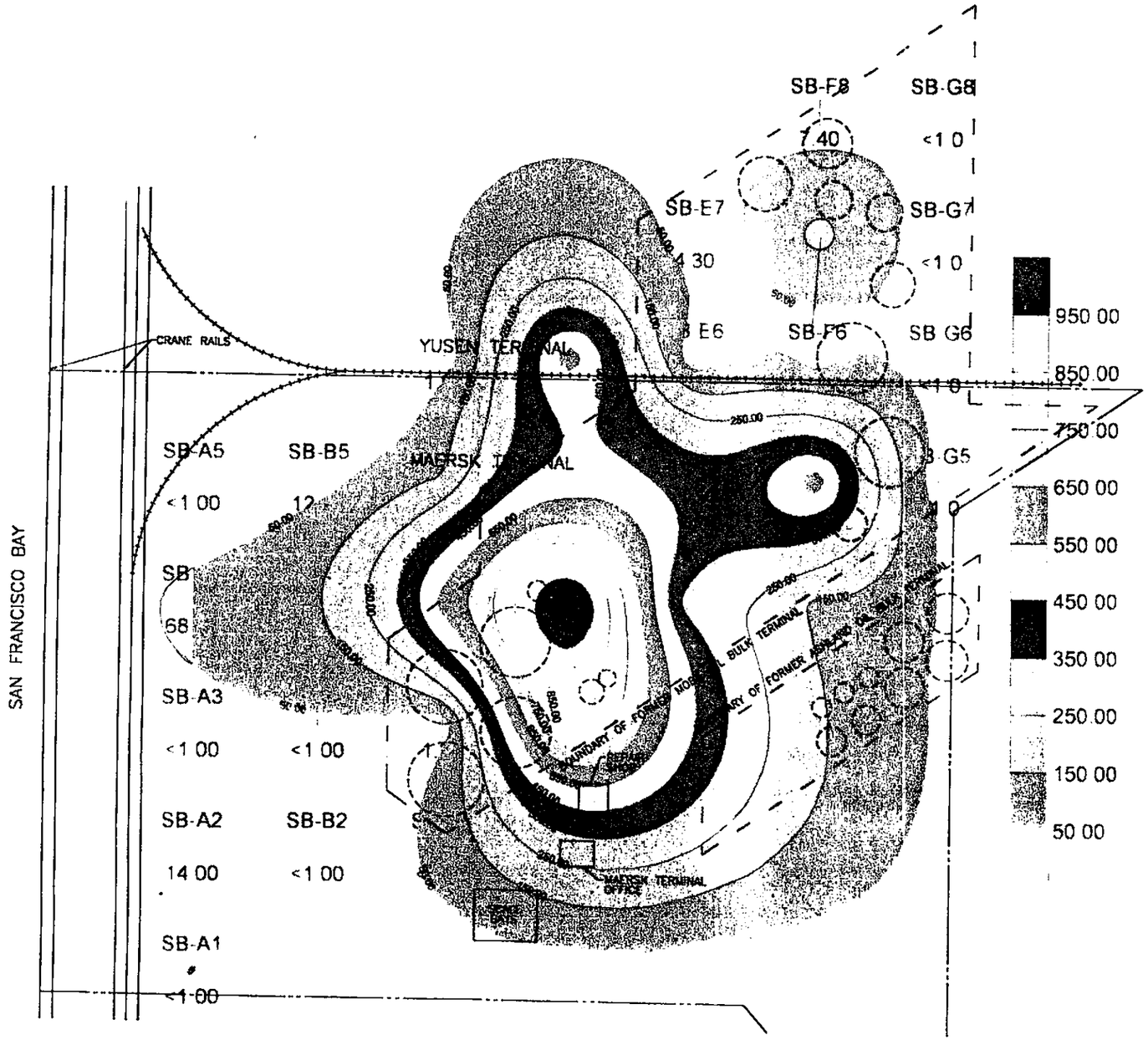


FIGURE 3:

TOTAL PETROLEUM HYDROCARBONS CONCENTRATION (mg/Kg) IN SHALLOW SOILS AT 3 FEET BLS

Project No. 96-2100

SOMA ENVIRONMENTAL ENGINEERING

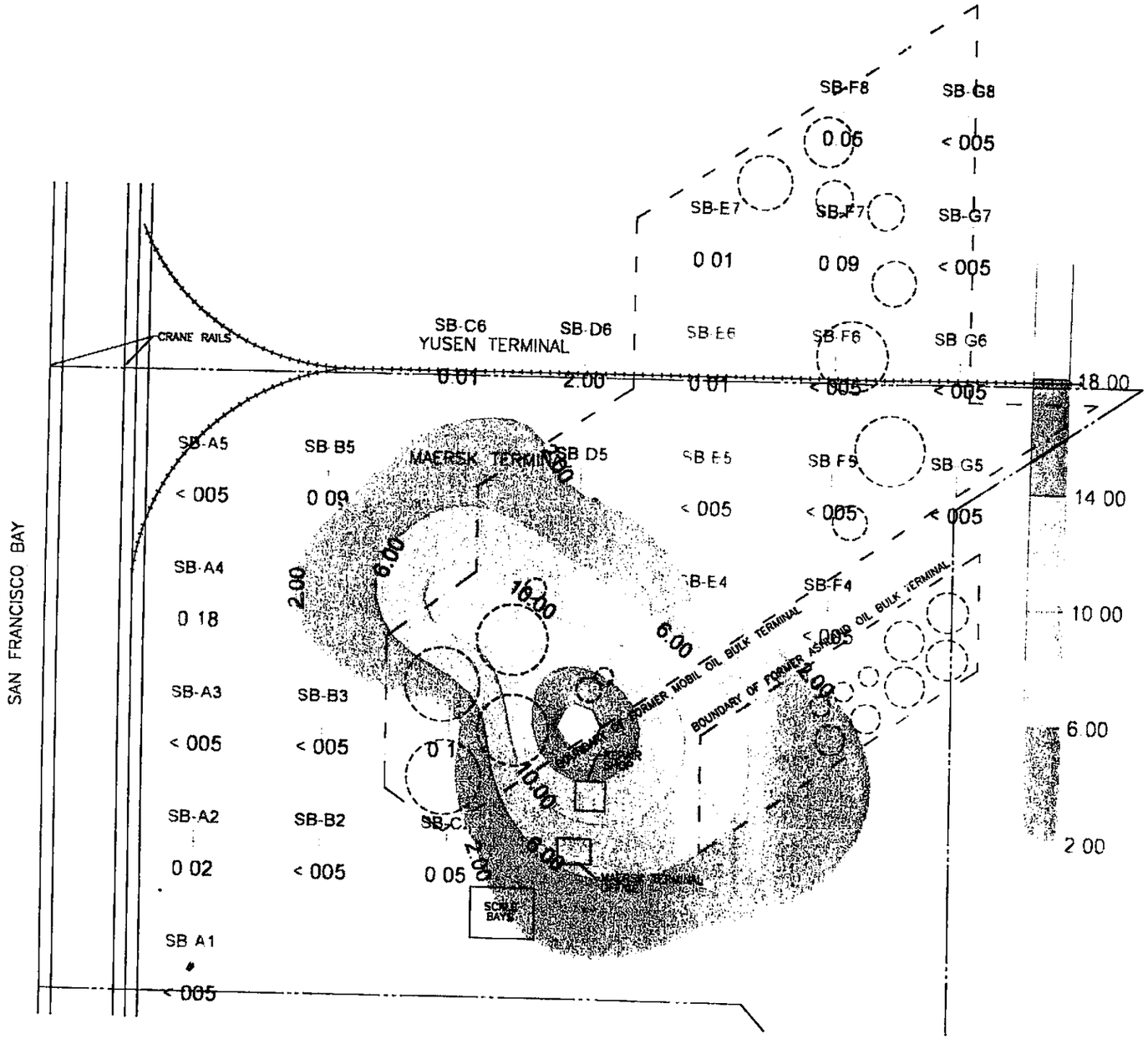


FIGURE 5:

BENZENE CONCENTRATION (mg/Kg) IN SHALLOW SOILS AT 3 FEET BLS

Project No. 96-2100

ENVIRONMENTAL ENGINEERING

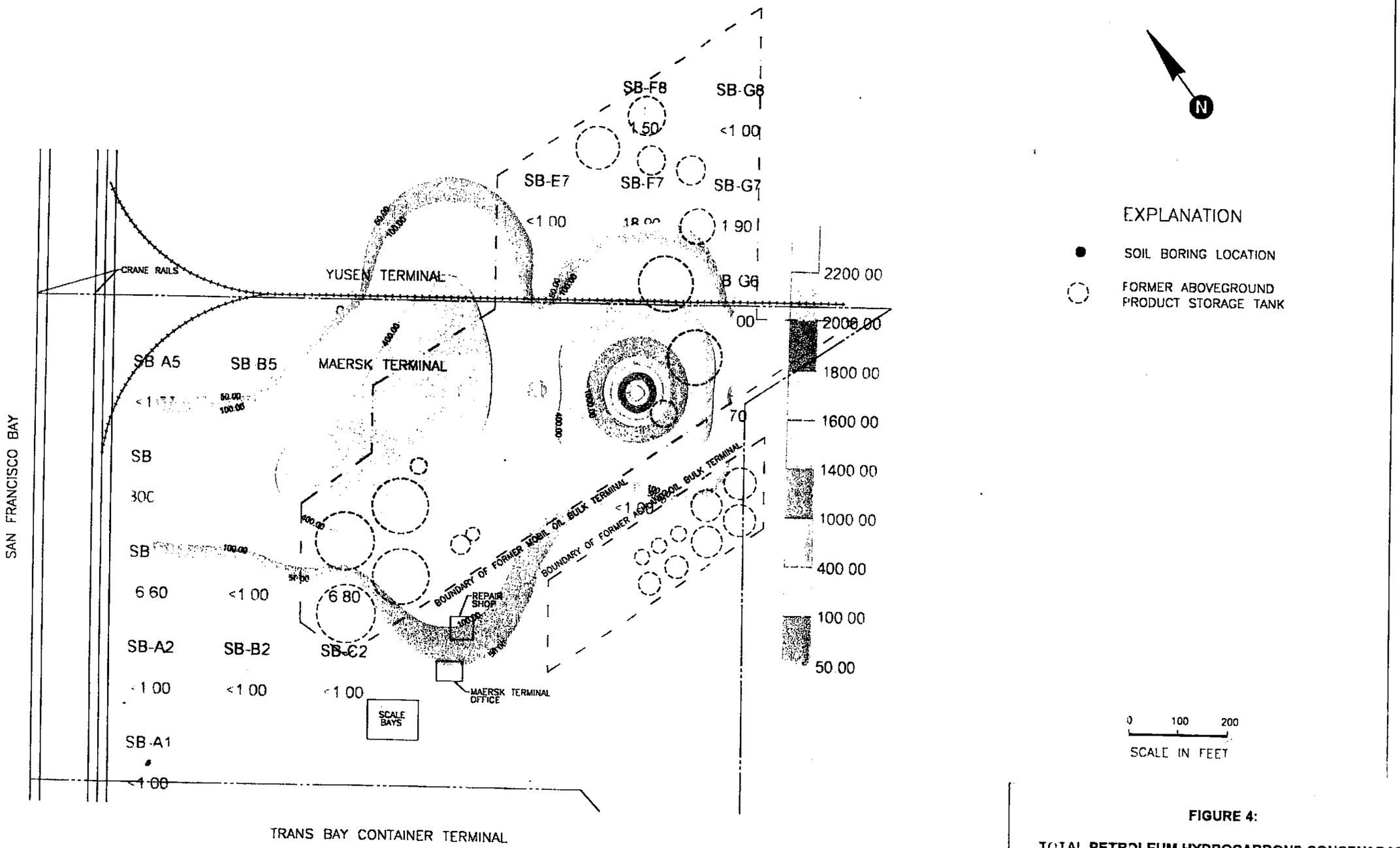
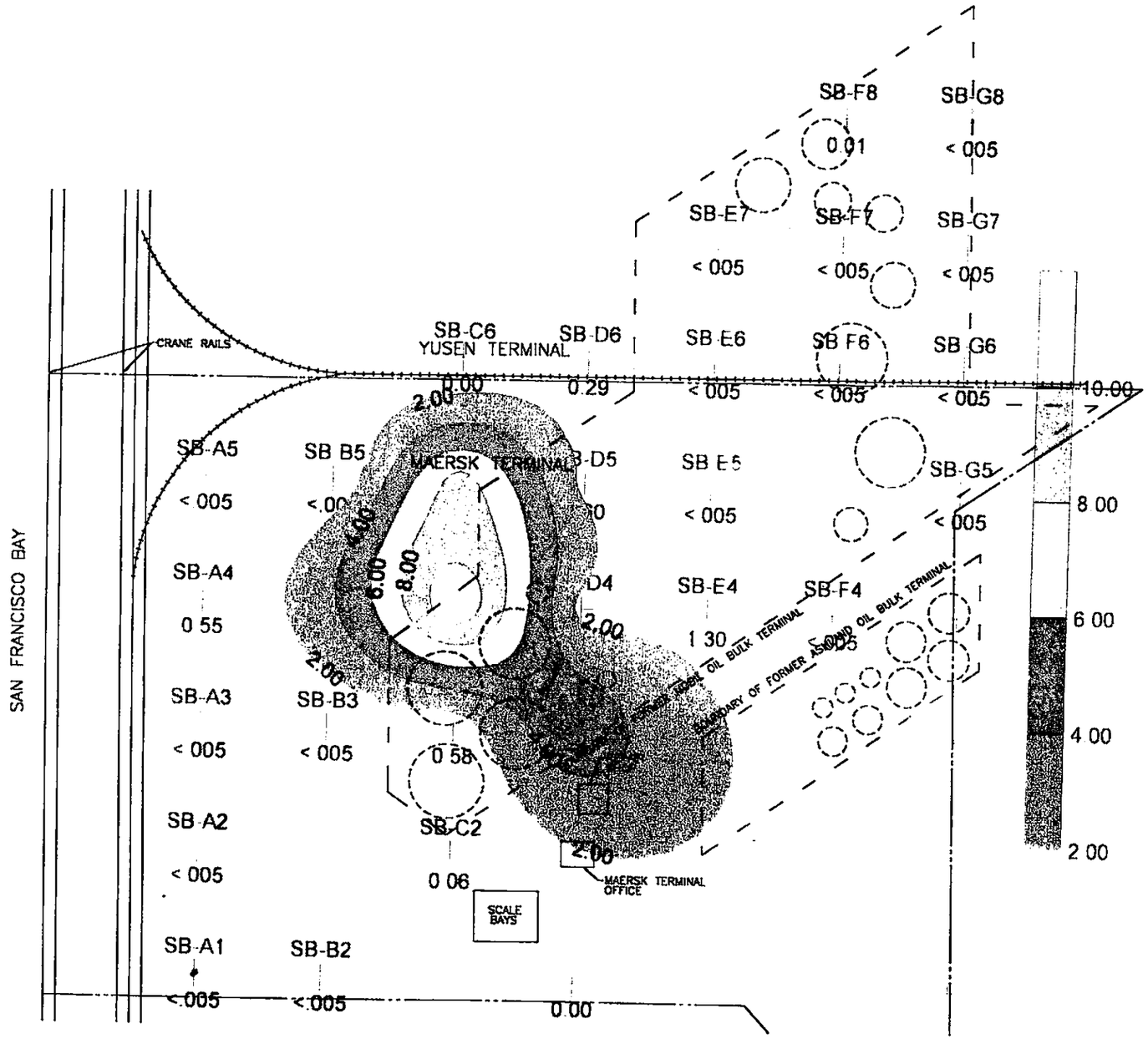


FIGURE 4:

TOTAL PETROLEUM HYDROCARBONS CONCENTRATION (mg/Kg) IN SHALLOW SOILS AT 6 FEET BLS

Project No. 96-2100

SOMA ENVIRONMENTAL ENGINEERING



EXPLANATION

- SOIL BORING LOCATION
- FORMER ABOVEGROUND PRODUCT STORAGE TANK

0 100 200

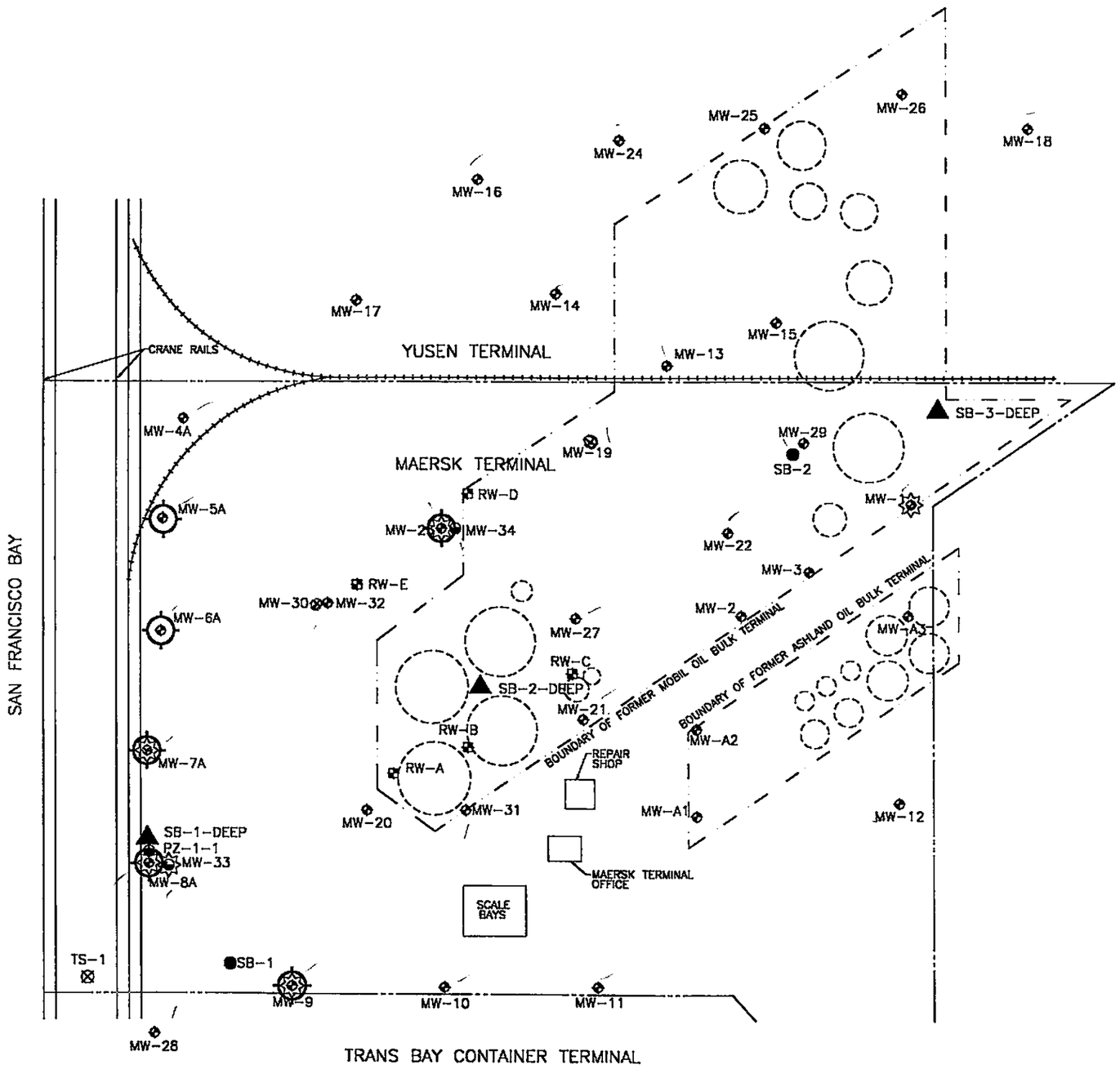
SCALE IN FEET

FIGURE 6:

BENZENE CONCENTRATION (mg/Kg) IN SHALLOW SOILS AT 6 FEET BLS

Project No 6-2100

ENVIRONMENTAL ENGINEERING



N

EXPLANATION

- GROUNDWATER MONITORING WELL
- GROUNDWATER RECOVERY WELL
- SOIL BORING LOCATION
- TIDAL STUDY MONITORING POINT
- FORMER ABOVEGROUND PRODUCT STORAGE TANK
- NEWLY INSTALLED MONITORING WELL
- DEEP SOIL BORING
- AQUIFER TEST
- REHABILITATED WELL

0 100 200

SCALE IN FEET

Figure 7 :
LOCATION OF DEEP SOIL BORINGS, NEWLY INSTALLED MONITORING WELLS, AQUIFER TESTS AND TIDAL SURVEY

Project No. 96-2100

ENVIRONMENTAL ENGINEERING

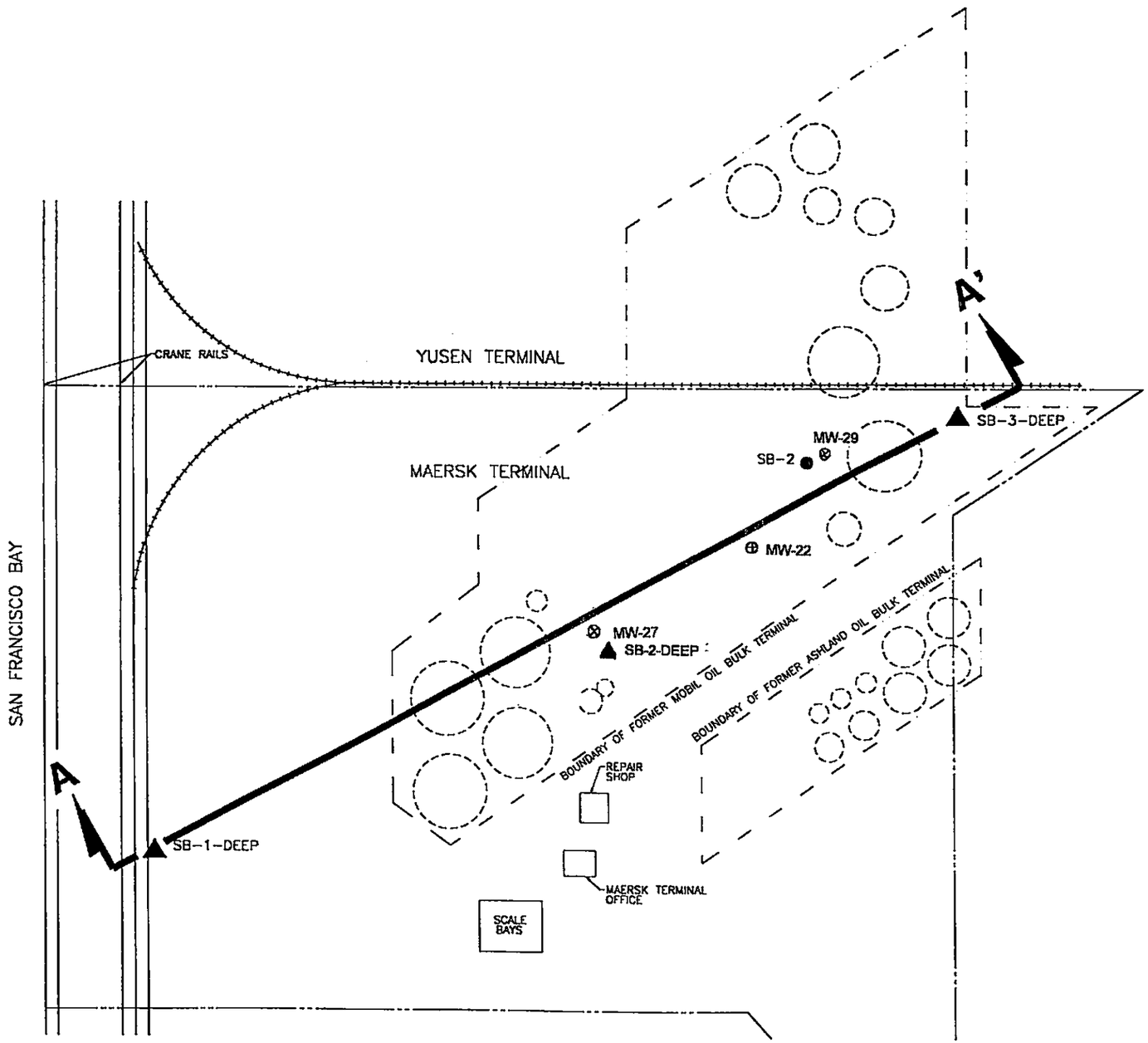


Figure 8 :

CROSS SECTION LOCATION

Project No. 96-2100

ENVIRONMENTAL ENGINEERING

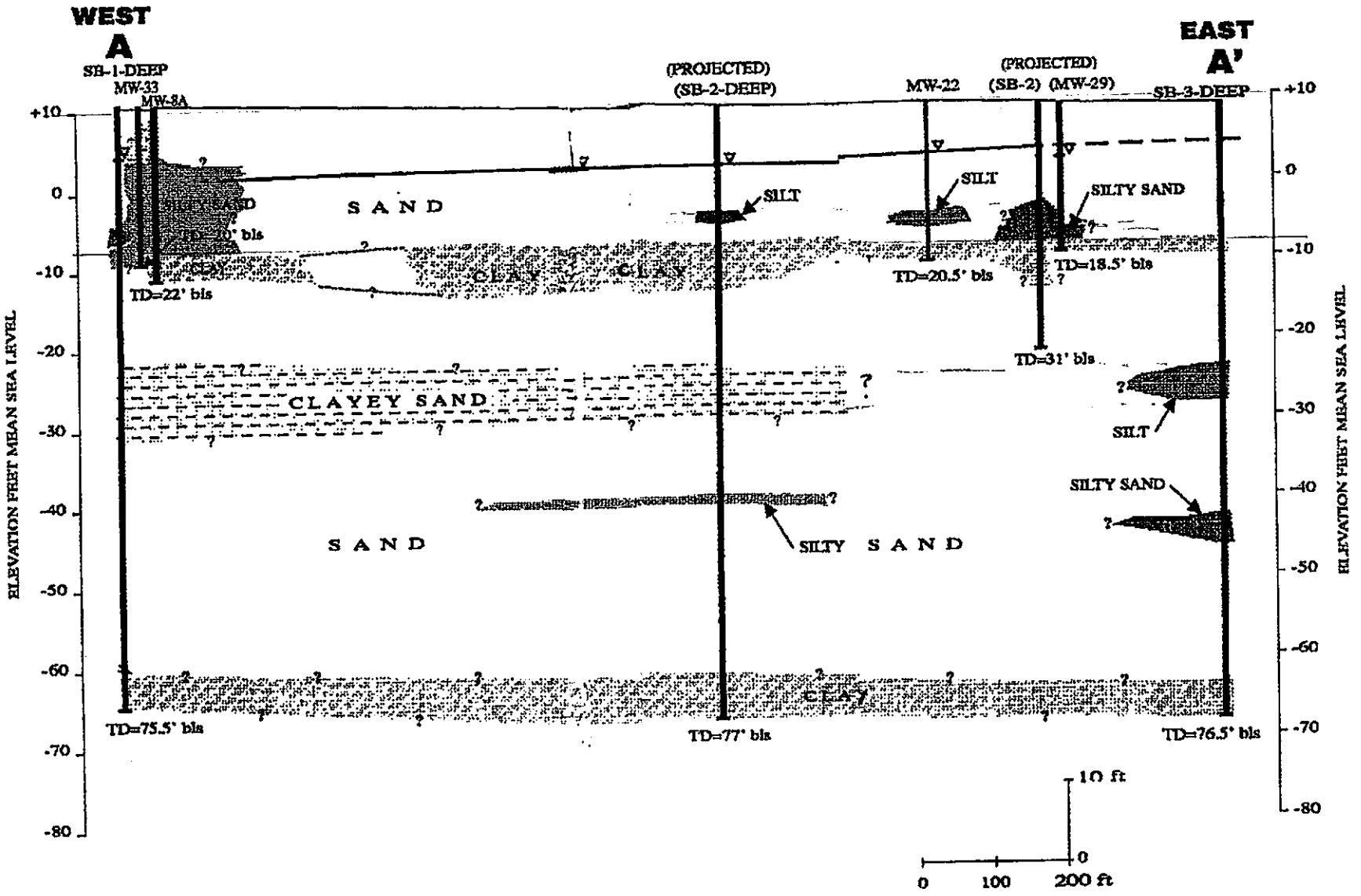


Figure 9 : HYDROGEOLOGIC CROSS SECTION

ENVIRONMENTAL ENGINEERING

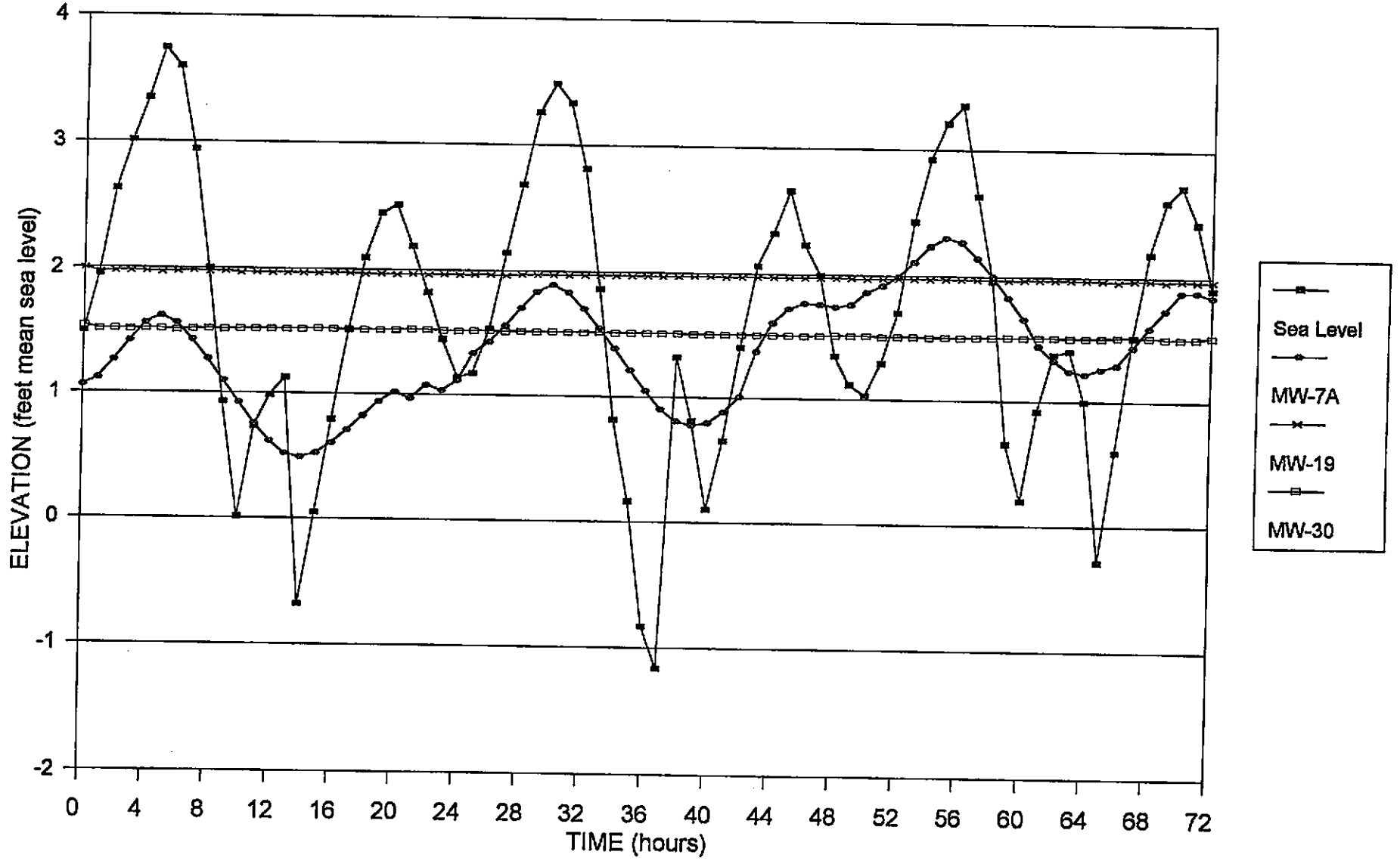


Figure 10: Water Level Fluctuations in the Monitoring Wells

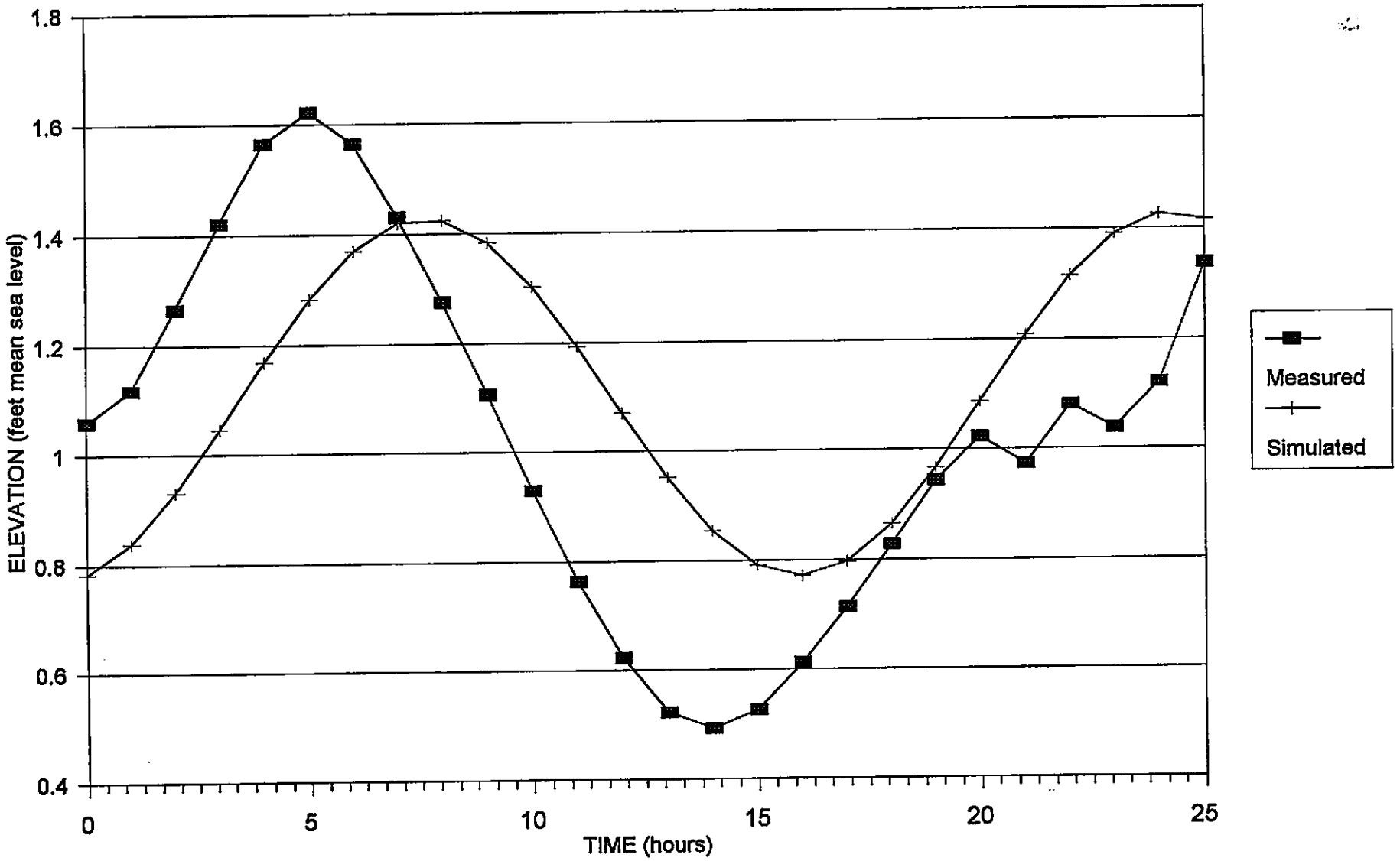


Figure 11: Simulated and Measured Water Levels, Monitoring Well MW-7A

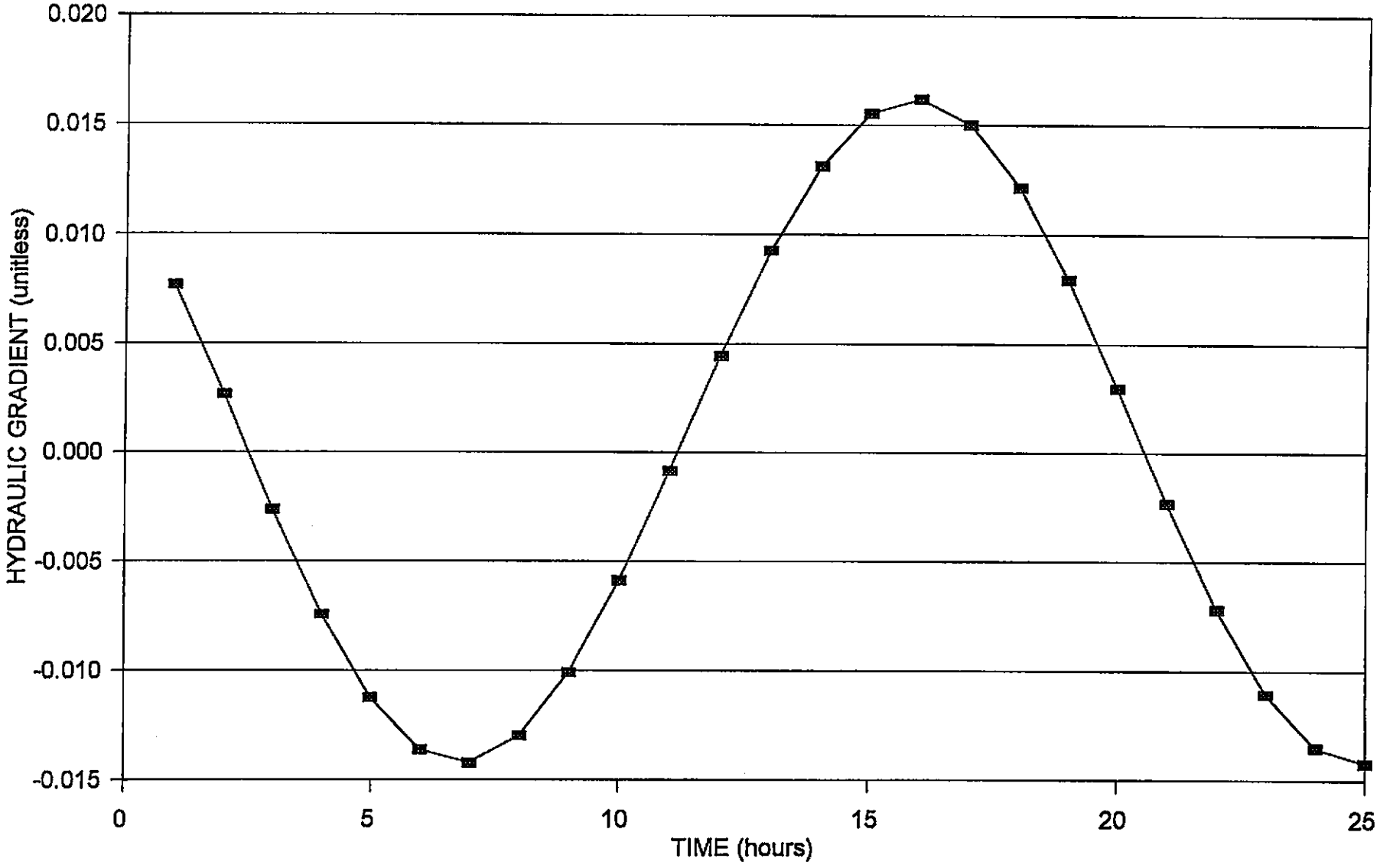
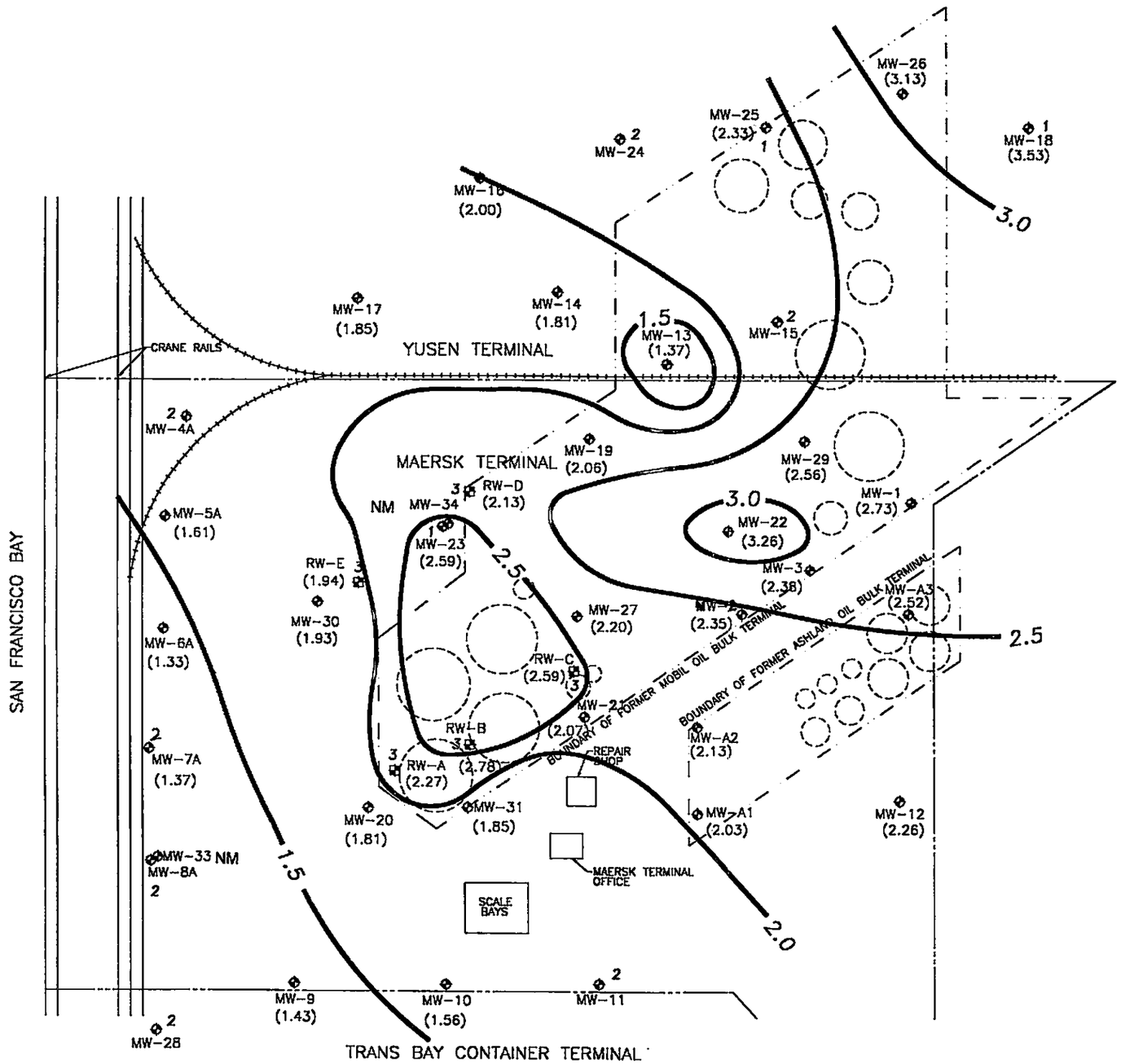


Figure 12: Hydraulic Gradient Fluctuations, Monitoring Well MW-7A



EXPLANATION

- GROUNDWATER MONITORING WELL
- FORMER ABOVEGROUND PRODUCT STORAGE TANK
- (3.53) GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL
- 3.0 GROUNDWATER ELEVATION CONTOUR IN FEET ABOVE MEAN SEA LEVEL (CONTOUR INTERVAL – 0.5 FOOT)
- NM NOT MEASURED

NOTE:

WATER LEVELS MEASURED NOVEMBER 13, 1995 UNLESS OTHERWISE NOTED.

1 { MW18 – 8/24/95; MW23 – 8/24/94; MW25 – 8/24/95

2 WATER LEVEL EFFECTED BY TIDES OR ANOMALOUS DATA, NOT USED

3 FLOATING FREE PRODUCT

0 100 200

SCALE IN FEET

FIGURE 13:
WATER LEVEL ELEVATIONS IN SHALLOW GROUNDWATER, NOVEMBER 1995

Project No. 96-2100

SOMA ENVIRONMENTAL ENGINEERING

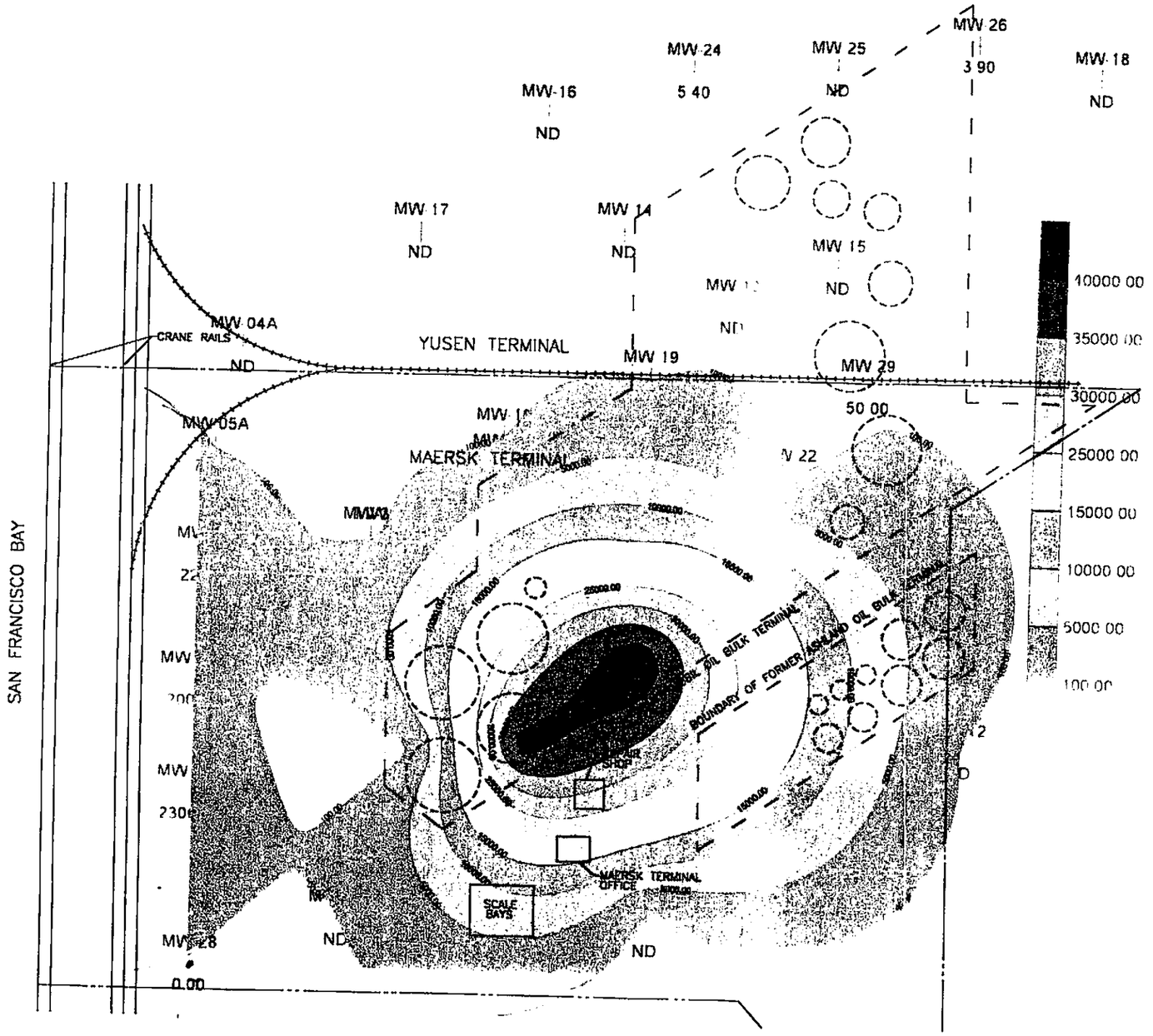


FIGURE 14

TOTAL PETROLEUM HYDROCARBONS CONCENTRATION (µg/l) IN SHALLOW GROUNDWATER, NOVEMBER 1995

Project No. 96-2100

SOMA ENVIRONMENTAL ENGINEERING

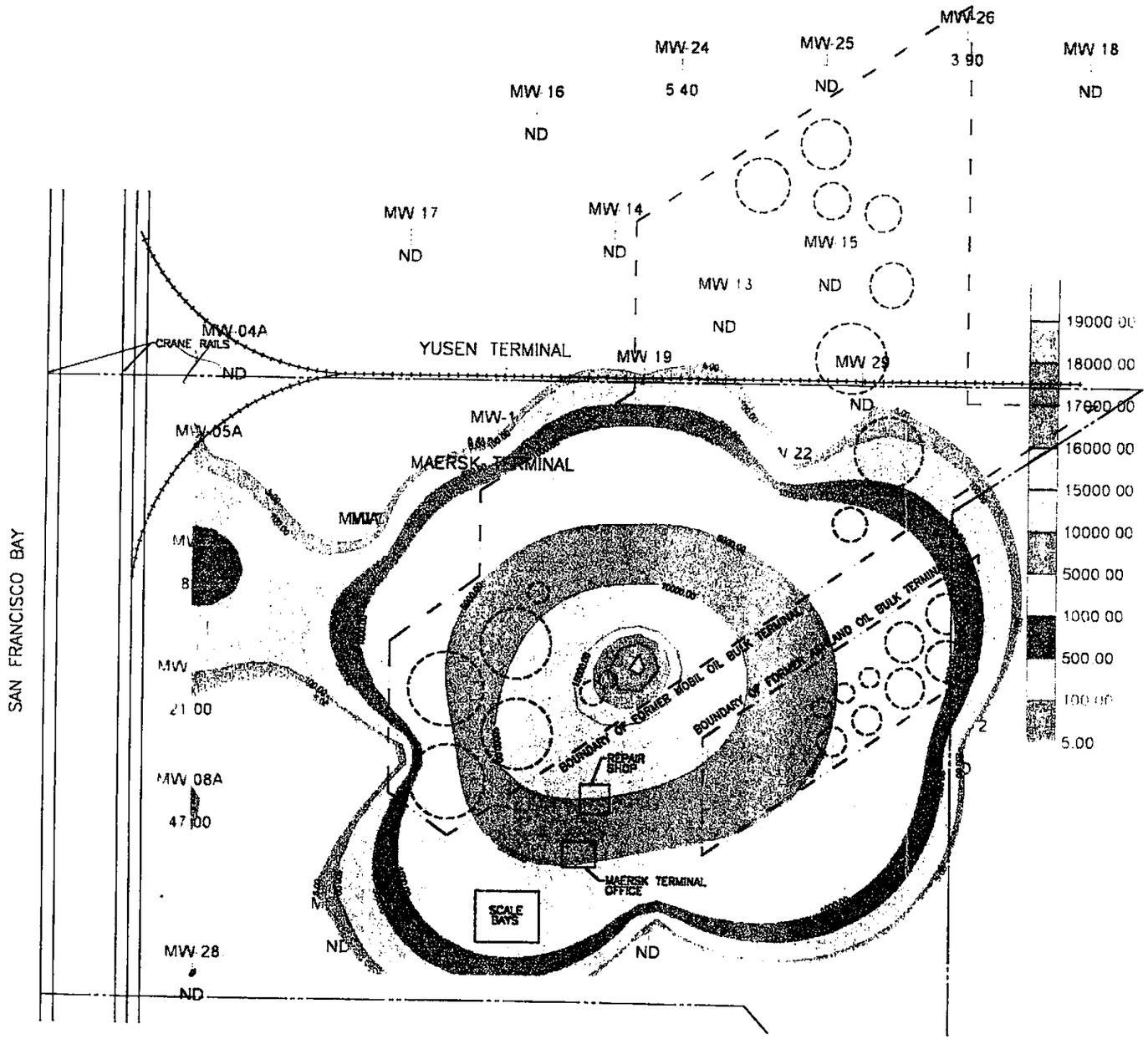


FIGURE 15:

BENZENE CONCENTRATION (µg/l) IN SHALLOW GROUNDWATER, NOVEMBER 1995

Project No. 96-2100

SOMA ENVIRONMENTAL ENGINEERING

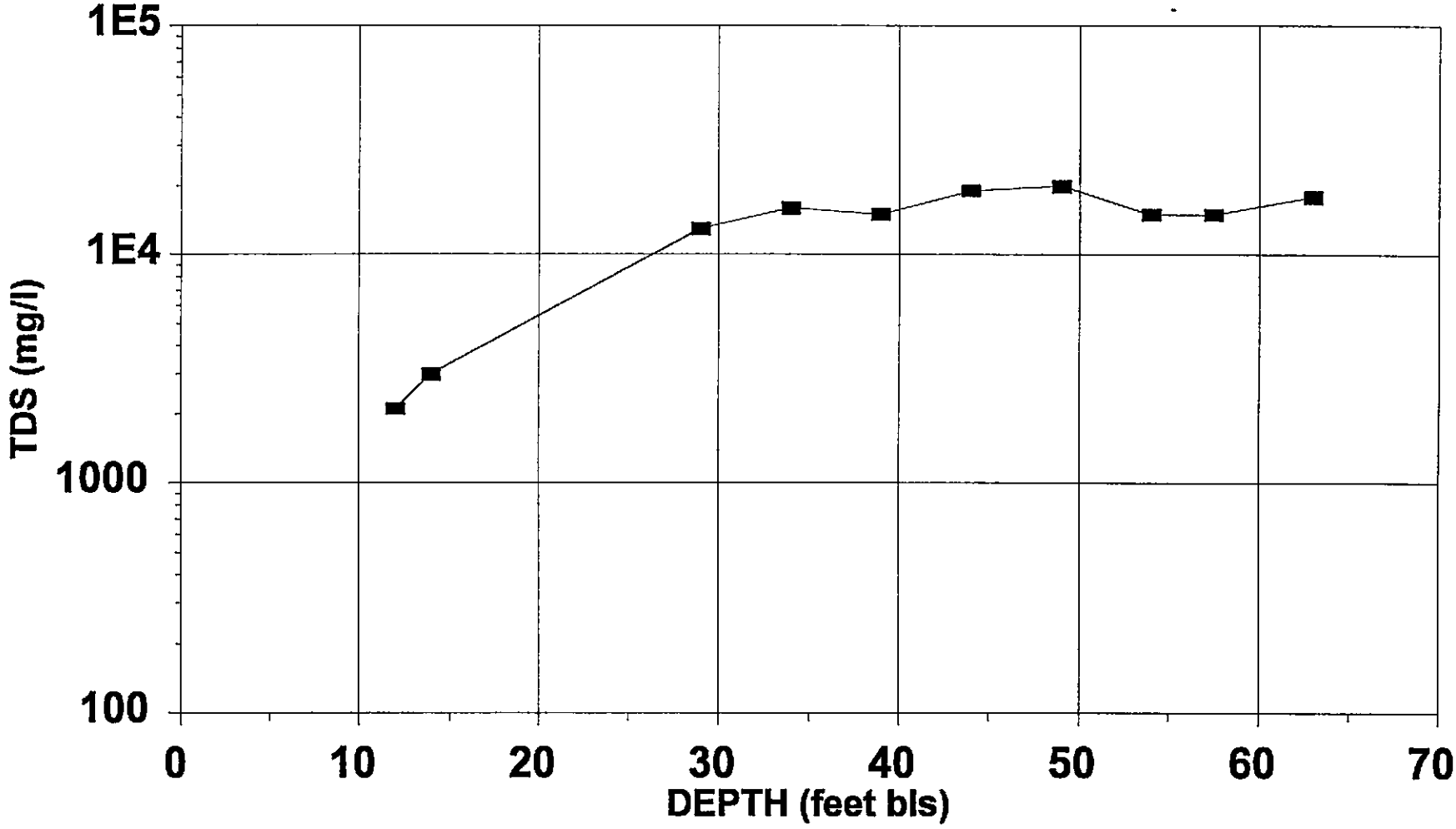


Figure 16. TOTAL DISSOLVED SOLIDS CONCENTRATIONS IN SOIL BORING SB-1-DEEP

ENVIRONMENTAL ENGINEERING

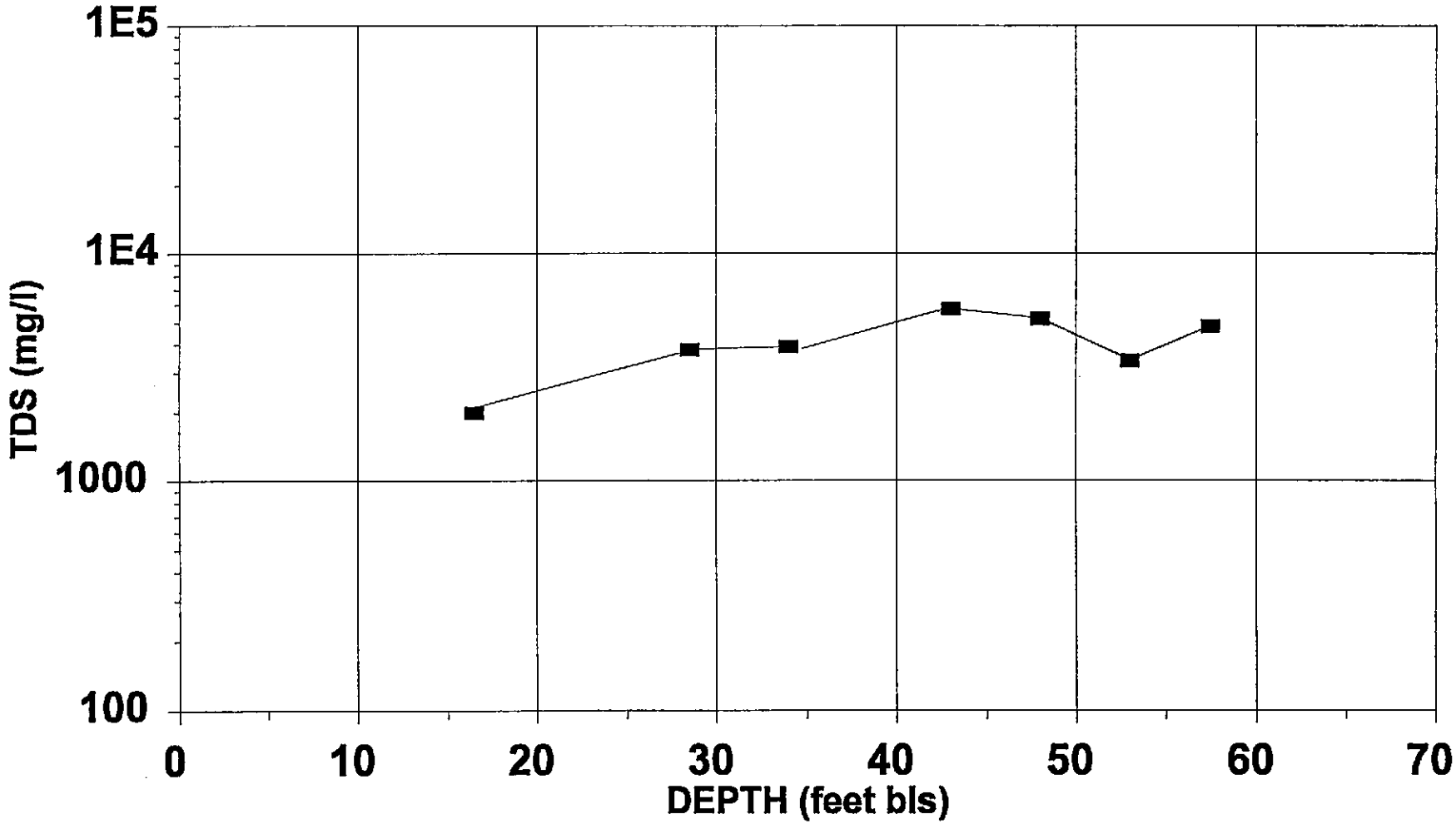


Figure 17. TOTAL DISSOLVED SOLIDS CONCENTRATIONS IN SOIL BORING SB-2-DEEP

ENVIRONMENTAL ENGINEERING

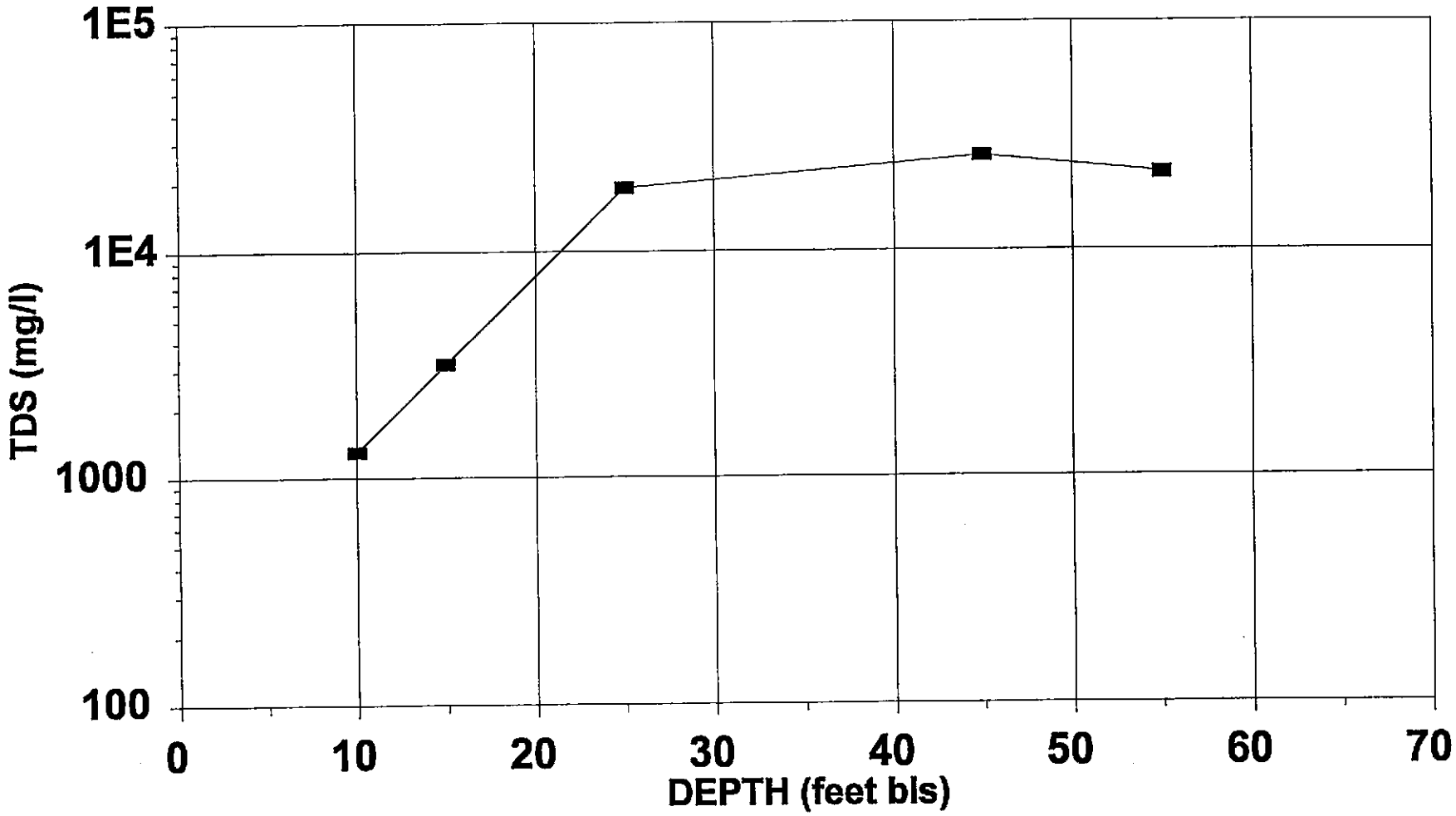


Figure 18. TOTAL DISSOLVED SOLIDS CONCENTRATIONS IN SOIL BORING SB-3-DEEP

ENVIRONMENTAL ENGINEERING

APPENDIX A

Field Methods

APPENDIX A

FIELD METHODS

Field procedures related to the additional characterization activities were conducted in accordance with the site-specific safety plan. The site safety plan was developed by Alisto Engineering Group in accordance with the applicable requirements of the federal and state Occupational Safety and Health Administration.

Prior to the initiation of field work, drilling permits were obtained (Attachment). Available engineering drawings showing the locations of underground utilities at the site were reviewed. In additional Cruz Bros. Subsurface Locators, Milpitas, California, were retained to conduct an underground utility search to clear all proposed boring location prior to drilling.

A-1 Sampling and Analysis of Vadose Zone

Thirty soil borings were drilled to a depth of approximately 6.5 feet with the exception of SB-A4, SB-C4, and SB-D4, which were drilled to depths of 13 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.

During drilling, soil samples were collected using a split-spoon sampler and field screened using an organic vapor meter (Thermo Model 580B). Samples were collected at depths of 3 and 6 feet. Before and after each use, the sampler was washed using a phosphate-free detergent and rinsed with potable tap water. Soil samples were collected using a California-modified split-spoon sampler lined with stainless steel tubes. The sampler was pushed 18 inches ahead of the hollow-stem augers into undisturbed soil. Drilling equipment in contact with potentially contaminated material was decontaminated by steam cleaning before and after each use. Decontamination fluids were placed into storage tanks onsite for subsequent disposal.

After retrieval from the augers, the sampler was split, the sample tubes removed, and a soil sample was selected for physical or chemical analysis. The sample was retained within the stainless steel tube, and both ends were immediately covered with Teflon sheeting and polyurethane caps. The caps were sealed with tape and labeled with the following information: Alisto's 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 an iced cooler. Possession of the soil samples was documented from the field to a state-certified analytical laboratory using a chain of custody form.

Borings SB-A4, SB-C4, and SB-D4 were advanced to a depth of 13 feet and converted into temporary wells by inserting 2-inch-diameter perforated PVC casing. The temporary wells were installed to monitor the groundwater for liquid-phase hydrocarbons. Groundwater samples were bailed from each temporary well. Liquid-phase hydrocarbons were observed in temporary wells installed in SB-A4 and SB-D4, and an iridescence was observed in SB-C4.

A-2 Sampling and Analysis of Deep Borings

Soil Borings SB-1-Deep, SB-2-Deep, and SB-3-Deep were drilled to depths of between 75.5 to 77 feet. Drilling was performed by Soils Exploration Services using a CME 75 drilling rig using 8-inch-diameter, continuous-flight, hollow-stem augers.

Before completion of the borings, conductor casing was installed in SB-1-Deep and SB-2-Deep. Conductor casings were installed by Soils Exploration Services using a Failing F-10 drilling rig equipped with 12-inch-diameter, continuous-flight, hollow-stem augers. After advancing the auger to a depth of 14 feet, 10-inch-diameter steel conductor casing was pushed into the borings to depths of 15.5 to 16 feet. The annulus of the conductor casing was sealed using neat cement jetted to a depth of 14 feet.

During drilling, soil samples were collected using a split-spoon sampler and field screened using an organic vapor meter. Samples were collected at approximately 5-foot intervals to the total depths of the borings. Soil samples were collected using a California-modified split-spoon sampler lined with stainless steel 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. Drilling equipment in contact with potentially contaminated material was decontaminated by steam cleaning before and after each use. The sampler was washed using a phosphate-free detergent and rinsed with potable tap water. Decontamination fluids were placed into storage tanks onsite for subsequent disposal.

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 stainless steel tube, and both ends were immediately covered with Teflon sheeting and polyurethane caps. The caps were sealed with tape and labeled with the following information: Alisto's 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 an iced cooler. Possession of the soil samples was documented from the field to a state-certified analytical laboratory using a chain of custody form.

Groundwater samples were collected for chemical analysis using a Hydropunch (trademark) sampling device. The sampler consists of a screened casing that is

advanced ahead of the hollow-stem auger. A sleeve is raised to expose the screened casing at the predetermined depths. A bottom-filled, 3/4-inch-diameter disposable bailer was then lowered to just below the surface of the water, allowed to fill, and retrieved to the surface. The sample was then transferred into the appropriate laboratory-supplied containers, properly labeled, and placed in an iced cooler. The samples were transported to a state-certified laboratory for analysis following chain of custody procedures.

Selected water samples were analyzed for electrical conductivity in the field using a Hydac Model No. 910 or a YSI Model No. 3560 meter.

After soil and groundwater sampling, Soil Borings SB-2-Deep and SB-3-Deep were sealed with neat cement using the tremie method, and SB-1-Deep was completed as a deep piezometer (see A-3).

Soil samples and drill cuttings, when representative, were described by Alisto personnel using the Unified Soils Classification System, and field estimates of soil type, color, moisture, density, and consistency were noted on the boring logs.

A-3 Deep Piezometer Installation

Soil Boring SB-1-Deep was converted into Piezometer PZ-1-1. Installation was performed by Soils Exploration Services using a CME 75 drilling rig using 8-inch-diameter, continuous-flight, hollow-stem augers.

The piezometer construction materials were installed 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 piezometer was constructed of 2-inch-diameter PVC casing with 0.010-inch slotted casing from 29 to 34 feet and blank casing to the ground surface. The annular space surrounding the screened portion was backfilled with No. 2/12 Lonestar sand (filter pack) approximately 2 feet above the top of the screened section. Approximately 1 foot of bentonite pellets was added to the annulus above the filter pack and hydrated with approximately 5 gallons of water to minimize intrusion of annular seal into the filter pack. The remaining annulus was sealed with neat cement using the tremie method. A traffic-rated utility box was installed around the top of the piezometer casing. An expanding, watertight cap and lock were installed on the top of the casing to secure the piezometer from surface fluid and tampering.

A-4 Groundwater Monitoring Well Installation

Groundwater Monitoring Wells MW-33 and MW-34 were constructed in borings drilled to a depth of approximately 20.5 feet. Drilling was performed by Soils Exploration

Services, Rio Vista, California using a CME 75 drilling rig using 10-inch-diameter, continuous-flight, hollow-stem augers.

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 4-inch-diameter PVC casing consisted of 0.010-inch slotted casing from 4 to 14 feet. The annular space surrounding the screened portion was backfilled with No. 2/12 Lonestar sand (filter pack) to approximately 0.5 foot above the top of the screened section. Approximately 0.5 foot of bentonite pellets was added to the annulus above the filter pack and hydrated with approximately 5 gallons of water to minimize intrusion of annular seal into the filter pack. The remaining annulus was sealed with neat cement using the tremie method. A traffic-rated utility box was installed around the top of the piezometer casing. An expanding, watertight well cap and lock were installed on the top of the casing to secure the well from surface fluid and tampering.

A-5 Groundwater Monitoring Well Development and Surveying

Groundwater Monitoring Wells MW-6A, MW-7A, MW-8A, MW-9 and MW-23 were developed on November 20, 1995. Well development was performed by Bayland Drilling, Foster City, California. The wells ere initially swabbed using a surge block for approximately 15 minutes in an attempt to remove any biological fouling or fines in the perforate interval of the wells. The screened interval of the wells was then jetted using an injection pump while simultaneously pumping the well at the surface using a centrifugal pump. Notes on turbidity and volume of well purge water were collected in the field.

Groundwater Monitoring Wells MW-33 and MW-34 were developed on December 6, 1995, by using a surface pump. Development continued until approximately 10 well volumes were removed or the groundwater was relatively free to sediment.

Well development fluids were placed into above-ground storage tanks prior to removal from the site for disposal.

On December 19, 1995, the top of casing of Monitoring Wells MW-33 and MW-34 and Piezometer PZ1-1 were surveyed by Jim Frame, a state-licensed surveyor. (Attachment)

A-6 Aquifer Testing

A-6.1 Step-Drawdown Pumping Test

A step-drawdown pumping tests was performed at Monitoring Wells MW-1, MW-4A, MW-5A, MW-6A, MW-7A, MW-8A, MW-9, and MW-23. The test consisted of

successively increasing pumping rates. Monitoring Wells MW-4A, MW-5A, MW-6A, and MW-7A were evacuated of water at the initial pumping rates within 3 to 5 minutes. Unless the well was evacuated of water, each pumping rate was maintained for approximately 20 minutes.

Groundwater was pumped using a single-phase, 220-volt, 4-inch-diameter Grundfos submersible pump, and pump discharge was measured using a totalizing flow meter. Drawdown in the test well was measured using an analog pressure-sensitive transducer, and collected using an Aquistar data recorder (Model DL-4A).

A-6.2 Constant-Rate Pumping Test

A constant-rate pumping test was performed at two locations at the site. Monitoring Wells MW-23 and MW-33 were used as pumping wells and PZ-1-1, MW-8A, and MW-34 were used for water level observation.

Monitoring Well MW-23 was pumped using a variable-speed, 110-volt, 2-inch-diameter Grundfos submersible pump, and pump discharge was measured by recording the time to fill a graduated container. Monitoring Well MW-23 was pumped using a single-phase, 220-volt, 4-inch-diameter Grundfos submersible pump, and pump discharge was measured using a totalizing flow meter. During the test, water levels in the pumping and observation wells were measured using an analog pressure-sensitive transducer or an electronic water level meter, and collected using an Aquistar data recorder (Model DL-4A).

Pumping of MW-33 was terminated after approximately 2 hours, when the water level in the pumping well was below minimum measurable level. Pumping of MW-23 was terminated after approximately 2.5 hours. After the pumping was terminated, water level recovery was recorded until 90 percent of the static water level was achieved.

The water generated during the step drawdown and constant-rate pumping tests was placed into onsite storage tanks for subsequent disposal. Before and after each use, the testing equipment in contact with potentially contaminated material was washed using a phosphate-free detergent followed by potable water rinses.

A-7 Tidal Survey

The tidal survey consisted of continuously measuring water levels in monitoring wells MW-7A, MW-19, and MW-30 and in a temporary monitoring station, TS-1, installed in the San Francisco Bay. Water level data was collected for a period of 9 days from September 26, 1994 to October 5, 1994. The temporary monitoring station was constructed with clean, 2- and 4-inch-diameter, flush-threaded, Schedule 40, PVC blank casing and 0.010-inch slotted casing from 20 to 25 feet below grade. The monitoring station was disassemble after the survey was completed.

The changes in water levels were recorded at 15-minute interval using analog pressure-sensitive transducers and data recorders installed in the monitoring wells and temporary monitoring station. The transducers shifted in the casings during the survey, and the water level elevation data have been adjusted to account for the change in transducer elevations as follows:

WELL ID	TRANSDUCER INSTALLATION DATE/TIME	CASING ELEVATION	INITIAL TRANSDUCER ELEVATION	TRANSDUCER REMOVAL DATE/TIME	FINAL TRANSDUCER ELEVATION	ELEVATION CHANGE
TS-1	09/26/94 11:50am	11.22	-3.88	10/05/94 4:50pm	-3.88	0.00
MW-7A	09/26/94 2:05pm	11.05	-4.85	10/05/94 4:37pm	-8.41	-3.56
MW-19	09/26/94 1:41pm	8.87	-5.40	10/05/94 4:24pm	-6.97	-1.57
MW-30	09/26/94	11.20	-5.29	10/05/94 5:12pm	-6.39	-1.10

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 909 Ferry St
Maersk Terminal, Berth 23
Oakland California

CLIENT
Name Mobil Oil Corp
Address 3700 W. 190th St TPT-2 Voice
City Torrance CA Zip 90509-2929

APPLICANT
Name ALISTO ENGINEERING GROUP
Chris Reinheimer Fax 295 1823
Address 1575 Treat Blvd #201 Voice 295 1650
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	X
Municipal	___	Irrigation	___		

DRILLING METHOD:

Mud Rotary	___	Air Rotary	___	Auger	X
Cable	___	Other			

DRILLER'S LICENSE NO. Woodward Drilling P.O. Box 336 Rio Vista 94571 (707) 374 4300 C-57 581639

WELL PROJECTS

Drill Hole Diameter	10	in.	Maximum Depth	20	ft.
Casing Diameter	4"&2"	in.	Number	14	
Surface Seal Depth	5	ft.			

GEOTECHNICAL PROJECTS

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

ESTIMATED STARTING DATE 11-7-95
ESTIMATED COMPLETION DATE 11-15-95

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

FOR OFFICE USE

PERMIT NUMBER 95748
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 6 Nov 95
Wyman Hong

FRAME SURVEYING & MAPPING
2038 East 8th Street Davis, CA 95616
(916) 756-8584 (TEL) (916) 756-8201 (FAX)

FEB 21 1995

February 16, 1995

Chris Reinheimer
Alisto Engineering Group
1777 Oakland Boulevard
Suite 200
Walnut Creek, CA 94596

Dear Chris:

We have completed our update survey at the Port of Oakland Yusen terminal. The coordinate values for the monitoring wells of interest area as follows:

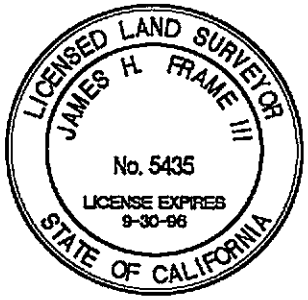
DESCRIPTION	NORTHING	EASTING	ELEV (GROUND)	ELEV (PVC)
MW-13	3826.6	7498.1	10.3	9.57
MW-14	4033.3	7438.5	10.2	9.54
MW-15	3761.2	7681.0	9.8	9.05

Enclosed you will find a diskette containing the updated AutoCAD drawing file, and an invoice.

Please call me if you have any questions.

Sincerely,

Jim Frame



950217a.doc

FRAME SURVEYING & MAPPING
2038 East 8th Street Davis, CA 95616
(916) 756-8584 (TEL) (916) 756-8201 (FAX)

December 19, 1995

Chris Reinheimer
Alisto Engineering Group
1575 Treat Boulevard
Suite 201
Walnut Creek, CA 94598

Re: Port of Oakland

Dear Chris:

Below are the coordinate values for the monitoring wells we located at the Port this morning:

DESCRIPTION	NORTHING	EASTING	ELEV (GROUND)	ELEV (PVC)
MW-33	3754.8	6321.4	11.5	11.07
MW-34	3860.1	7053.4	11.4	11.07
PZ-1-1	3773.3	6327.2	11.4	10.95

I will send the original of this letter, an AutoCAD digital file, and an invoice by mail tomorrow.

Please call if you have any questions.

Regards.

Jim Frame

FRAME SURVEYING & MAPPING
2038 East 8th Street
(916) 756-8584 (TEL)
Davis, CA 95616
(916) 756-8201 (FAX)

October 8, 1994

Chris Reinheimer
Alisto Engineering Group
1777 Oakland Boulevard
Suite 200
Walnut Creek, CA 94596

Dear Chris:

Here are the coordinate values for the wells and soil borings at the Port of Oakland that you wanted surveyed:

	DESCRIPTION	NORTHING	EASTING	ELEV (GROUND)	ELEV (CASING)
1	MW-12	3031.4	7316.4	9.6	9.56
	MW-14	HORIZONTAL NOT VERIFIED		10.2	9.54
2	MW-30	3901.7	6805.7	11.4	11.19
3	MW-32	3890.3	6821.2	11.4	11.05
4	RW-A	3607.9	6719.4	10.4	10.34
5	RW-B	3560.1	6841.1	11.2	10.86
6	RW-C	3541.7	7049.2	10.3	9.84
7	RW-D	3877.6	7114.3	11.1	10.89
8	RW-E	3882.2	6877.9	11.1	10.76
	SB-1	3545.3	6312.6	11.7	
	SB-2	3581.1	7560.3	9.5	
	TS-1	3682.7	6117.7	11.0	11.22

Enclosed you will find a diskette with the AutoCAD digital file, updated to show the correct well and boring locations, and an invoice.

Please call if you have any questions.

Sincerely,

Jim Frame

LICENSED LAND SURVEYOR
JAMES H. FRAME III
No. 5435
STATE OF CALIFORNIA

License expires 9-30-96

9410038b.doc

APPENDIX B

Analytical Results of Shallow Soil Samples, Sequoia Analytical

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alisto Engineering Group	Client Project ID:	Mobil, Maersk Terminal	Sampled: Jul 12, 1995
1575 Treat Blvd., Ste. 201	Sample Matrix:	Soil	Received: Jul 17, 1995
Walnut Creek, CA 94598	Analysis Method:	EPA 5030/8015 Mod./8020	Reported: Jul 25, 1995
Attention: Brady Nagle	First Sample #:	507-0753	

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit mg/kg	Sample I.D. 507-0753 SB-A4 @ 3.0	Sample I.D. 507-0754 SB-A4 @ 6.0	Sample I.D. 507-0755 SB-C4 @ 3.0	Sample I.D. 507-0756 SB-C4 @ 6.0	Sample I.D. 507-0757 SB-D4 @ 3.0	Sample I.D. 507-0758 SB-D4 @ 6.0
QC Batch Number:		SP072195 8020EXA	SP071995 8020EXA	SP071995 8020EXA	SP072095 8020EXA	SP072095 8020EXA	SP071995 8020EXA
Purgeable Hydrocarbons	1.0	68	300	580	910	1,100	280
Benzene	0.0050	0.18	0.55	13	12	8.0	1.5
Toluene	0.0050	0.32	1.2	4.0	16	49	10
Ethyl Benzene	0.0050	1.8	3.9	12	22	19	6.4
Total Xylenes	0.0050	0.40	8.6	23	73	100	38
Chromatogram Pattern:		Gasoline	Gasoline	Gasoline	Gasoline	Gasoline	Gasoline

Quality Control Data

Report Limit Multiplication Factor:	5.0	25	50	50	100	50
Date Analyzed:	7/21/95	7/19/95	7/19/95	7/20/95	7/20/95	7/20/95
Instrument Identification:	HP-4	HP-4	HP-4	HP-4	HP-4	HP-2
Surrogate Recovery, %: (QC Limits = 70-130%)	100	100	124	125	105	116

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

RECEIVED
JUL 28 1995

5070753.ALS <1>

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alisto Engineering Group	Client Project ID:	Mobil, Maersk Terminal	Sampled: Jul 12, 1995
1575 Treat Blvd., Ste. 201	Sample Matrix:	Soil	Received: Jul 17, 1995
Walnut Creek, CA 94598	Analysis Method:	EPA 5030/8015 Mod./8020	Reported: Jul 25, 1995
Attention: Brady Nagle	First Sample #:	507-0759	

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit mg/kg	Sample I.D. 507-0759 SB-E4 @ 3.0	Sample I.D. 507-0760 SB-E4 @ 6.0	Sample I.D. 507-0761 SB-E5 @ 3.0	Sample I.D. 507-0762 SB-E5 @ 6.0	Sample I.D. 507-0763 SB-G5 @ 3.0	Sample I.D. 507-0764 SB-~~G4~~ SB-G5 @ 6.0 CEE 10/19
QC Batch Number:		SP071995 8020EXA	SP071995 8020EXA	SP071995 8020EXA	SP071995 8020EXA	SP071995 8020EXA	SP071995 8020EXA
Purgeable Hydrocarbons	1.0	290	170	N.D.	N.D.	N.D.	8.7
Benzene	0.0050	1.6	1.3	N.D.	N.D.	N.D.	N.D.
Toluene	0.0050	2.0	1.3	N.D.	N.D.	N.D.	N.D.
Ethyl Benzene	0.0050	13	6.8	N.D.	N.D.	N.D.	0.075
Total Xylenes	0.0050	2.7	1.3	N.D.	N.D.	N.D.	0.12
Chromatogram Pattern:		Gasoline	Gasoline	--	--	--	Unidentifed Hydrocarbons > C9

Quality Control Data

Report Limit Multiplication Factor:	50	50	1.0	1.0	1.0	1.0
Date Analyzed:	7/19/95	7/19/95	7/19/95	7/19/95	7/20/95	7/20/95
Instrument Identification:	HP-4	HP-4	HP-2	HP-4	HP-2	HP-2
Surrogate Recovery, %: (QC Limits = 70-130%)	96	101	103	103	111	114

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alisto Engineering Group	Client Project ID:	Mobil, Maersk Terminal	Sampled: Jul 12-13, 1995
1575 Treat Blvd., Ste. 201	Sample Matrix:	Soil	Received: Jul 17, 1995
Walnut Creek, CA 94598	Analysis Method:	EPA 5030/8015 Mod./8020	Reported: Jul 25, 1995
Attention: Brady Nagle	First Sample #:	507-0765	

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit mg/kg	Sample I.D. 507-0765 SB-A1 @ 3.0	Sample I.D. 507-0766 SB-A1 @ 6.0	Sample I.D. 507-0767 SB-D3 @ 3.0	Sample I.D. 507-0768 SB-D3 @ 6.0	Sample I.D. 507-0769 SB-F8 @ 3.0	Sample I.D. 507-0770 SB-F8 @ 6.0
QC Batch Number:		SP071995 8020EXA	SP071995 8020EXA	SP071995 8020EXA	SP071995 8020EXA	SP071995 8020EXA	SP072095 8020EXA
Purgeable Hydrocarbons	1.0	N.D.	N.D.	890	220	7.4	1.5
Benzene	0.0050	N.D.	N.D.	21	5.6	0.052	0.011
Toluene	0.0050	N.D.	N.D.	6.1	0.84	0.0062	N.D.
Ethyl Benzene	0.0050	N.D.	N.D.	17	5.6	0.018	N.D.
Total Xylenes	0.0050	N.D.	N.D.	36	12	0.087	0.095
Chromatogram Pattern:		--	--	Gasoline	Gasoline	Gasoline Unidentifed Hydrocarbons >C9	Unidentifed Hydrocarbons >C9

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	50	50	2.5	1.0
Date Analyzed:	7/19/95	7/19/95	7/19/95	7/19/95	7/20/95	7/20/95
Instrument Identification:	HP-4	HP-4	HP-4	HP-2	HP-2	HP-5
Surrogate Recovery, %: (QC Limits = 70-130%)	103	102	133	137	117	96

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

5070753.ALS <3>

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alisto Engineering Group
1575 Treat Blvd., Ste. 201
Walnut Creek, CA 94598
Attention: Brady Nagle

Client Project ID: Mobil, Maersk Terminal
Sample Matrix: Soil
Analysis Method: EPA 5030/8015 Mod./8020
First Sample #: 507-0771

Sampled: Jul 13, 1995
Received: Jul 17, 1995
Reported: Jul 25, 1995

QC Batch Number:	SP072195	SP072095	SP072195	SP072095	SP072095	SP071995
	8020EXA	8020EXA	8020EXA	8020EXA	8020EXA	8020EXA

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit mg/kg	Sample I.D. 507-0771 SB-G8 @ 3.0	Sample I.D. 507-0772 SB-G8 @ 6.0	Sample I.D. 507-0773 SB-C6 @ 3.0	Sample I.D. 507-0774 SB-C6 @ 6.0	Sample I.D. 507-0775 SB-D6 @ 3.0	Sample I.D. 507-0776 SB-D6 @ 6.0
Purgeable Hydrocarbons	1.0	N.D.	N.D.	1.6	N.D.	590	540
Benzene	0.0050	N.D.	N.D.	0.0072	N.D.	2.0	0.29
Toluene	0.0050	N.D.	N.D.	N.D.	N.D.	2.0	0.66
Ethyl Benzene	0.0050	N.D.	N.D.	N.D.	N.D.	1.7	0.25
Total Xylenes	0.0050	N.D.	0.0091	0.013	N.D.	13	2.1
Chromatogram Pattern:		--	--	Unidentified Hydrocarbons > C9	--	Gasoline & Unidentified Hydrocarbons > C9	Gasoline & Unidentified Hydrocarbons > C8

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	1.0	1.0	250	100
Date Analyzed:	7/21/95	7/20/95	7/21/95	7/20/95	7/20/95	7/20/95
Instrument Identification:	HP-2	HP-5	HP-4	HP-5	HP-5	HP-9
Surrogate Recovery, %: (QC Limits = 70-130%)	113	99	103	97	98	138

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

[redacted]isto Engineering Group	Client Project ID:	Mobil, Maersk Terminal	Sampled: Jul 13, 1995
1575 Treat Blvd., Ste. 201	Sample Matrix:	Soil	Received: Jul 17, 1995
Walnut Creek, CA 94598	Analysis Method:	EPA 5030/8015 Mod./8020	Reported: Jul 25, 1995
Attention: Brady Nagle	First Sample #:	507-0777	

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit mg/kg	Sample I.D. 507-0777 SB-E6 @ 3.0	Sample I.D. 507-0778 SB-E6 @ 6.0	Sample I.D. 507-0779 SB-F6 @ 3.0	Sample I.D. 507-0780 SB-F6 @ 6.0	Sample I.D. 507-0781 SB-G6 @ 3.0	Sample I.D. 507-0782 SB-G6 @ 6.0
QC Batch Number:		SP072095 8020EXA	SP072095 8020EXA	SP071995 8020EXA	SP071995 8020EXA	SP072195 8020EXA	SP072195 8020EXA
Purgeable Hydrocarbons	1.0	2.0	N.D.	17	370	N.D.	N.D.
Benzene	0.0050	0.0085	N.D.	N.D.	0.22	N.D.	N.D.
Toluene	0.0050	N.D.	N.D.	0.13	1.2	N.D.	N.D.
Ethyl Benzene	0.0050	N.D.	N.D.	0.17	N.D.	N.D.	N.D.
Total Xylenes	0.0050	0.046	N.D.	0.50	5.9	N.D.	N.D.
Chromatogram Pattern:		Gasoline & Unidentifed Hydrocarbons >C9	--	Gasoline & Unidentifed Hydrocarbons >C9	Gasoline	--	--

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	5.0	50	1.0	1.0
Date Analyzed:	7/20/95	7/20/95	7/20/95	7/19/95	7/21/95	7/21/95
Instrument Identification:	HP-5	HP-4	HP-2	HP-5	HP-4	HP-4
Surrogate Recovery, %: (QC Limits = 70-130%)	96	101	108	86	105	106

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL, #1271

[redacted]

Kevin Van Slambrook
Project Manager

5070753.ALS <5>

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alisto Engineering Group	Client Project ID:	Mobil, Maersk Terminal	Sampled: Jul 13, 1995
1575 Treat Blvd., Ste. 201	Sample Matrix:	Soil	Received: Jul 17, 1995
Walnut Creek, CA 94598	Analysis Method:	EPA 5030/8015 Mod./8020	Reported: Jul 25, 1995
Attention: Brady Nagle	First Sample #:	507-0783	

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit mg/kg	Sample I.D. 507-0783 SB-F7 @ 3.0	Sample I.D. 507-0784 SB-F7 @ 6.0	Sample I.D. 507-0785 SB-G7 @ 3.0	Sample I.D. 507-0786 SB-G7 @ 6.0	Sample I.D. 507-0787 SB-E7 @ 3.0	Sample I.D. 507-0788 SB-E7 @ 6.0
QC Batch Number:		SP072095 8020EXA	SP072195 8020EXA	SP072195 8020EXA	SP071995 8020EXA	SP072195 8020EXA	SP072095 8020EXA
Purgeable Hydrocarbons	1.0	180	18	N.D.	1.9	4.3	N.D.
Benzene	0.0050	0.092	N.D.	N.D.	N.D.	0.0086	N.D.
Toluene	0.0050	0.11	0.0071	N.D.	N.D.	0.011	N.D.
Ethyl Benzene	0.0050	0.079	0.14	N.D.	0.0055	0.021	N.D.
Total Xylenes	0.0050	1.3	0.15	N.D.	0.033	0.059	0.012
Chromatogram Pattern:		Gasoline	Gasoline & Unidentified Hydrocarbons >C8	--	Unidentified Hydrocarbons >C9	Unidentified Hydrocarbons >C9	--

Quality Control Data

Report Limit Multiplication Factor:	10	1.0	1.0	1.0	1.0	1.0
Date Analyzed:	7/20/95	7/21/95	7/21/95	7/20/95	7/21/95	7/20/95
Instrument Identification:	HP-9	HP-4	HP-2	HP-2	HP-2	HP-4
Surrogate Recovery, %: (QC Limits = 70-130%)	103	91	121	119	121	103

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alisto Engineering Group	Client Project ID:	Mobil, Maersk Terminal	Sampled:	Jul 12, 1995
1575 Treat Blvd., Ste. 201	Sample Matrix:	Soil	Received:	Jul 17, 1995
Walnut Creek, CA 94598	Analysis Method:	EPA 5030/8015 Mod./8020	Reported:	Jul 25, 1995
Attention: Brady Nagle	First Sample #:	507-0789		

QC Batch Number: SP72095 SP072195

8020EXA 8020EXA

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit mg/kg	Sample I.D. 507-0789 SB-F4 @ 3.0	Sample I.D. 507-0790 SB-F4 @ 6.0
Purgeable Hydrocarbons	1.0	140	N.D.
Benzene	0.0050	N.D.	N.D.
Toluene	0.0050	N.D.	N.D.
Ethyl Benzene	0.0050	N.D.	N.D.
Total Xylenes	0.0050	N.D.	N.D.
Chromatogram Pattern:		Unidentified Hydrocarbons >C9	--

Quality Control Data

Report Limit Multiplication Factor:	50	1.0
Date Analyzed:	7/20/95	7/21/95
Instrument Identification:	HP-4	HP-5
Surrogate Recovery, %: (QC Limits = 70-130%)	99	96

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

[redacted]listo Engineering Group
1575 Treat Blvd., Ste. 201
Walnut Creek, CA 94598
Attention: Brady Nagle

Client Project ID: Mobil, Maersk Terminal
Matrix: Solid

QC Sample Group: 5070753-90

Reported: Jul 25, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	SP072195	SP072195	SP072195	SP072195
	8020EXA	8020EXA	8020EXA	8020EXA
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	A. Tuzon	A. Tuzon	A. Tuzon	A. Tuzon
MS/MSD #:	5071246	5071246	5071246	5071246
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	7/21/95	7/21/95	7/21/95	7/21/95
Analyzed Date:	7/21/95	7/21/95	7/21/95	7/21/95
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4
Conc. Spiked:	0.40 mg/kg	0.40 mg/kg	0.40 mg/kg	1.2 mg/kg
Result:	0.38	0.40	0.41	1.2
MS % Recovery:	95	100	103	103
Dup. Result:	0.35	0.37	0.38	1.1
MSD % Recov.:	88	93	95	95
RPD:	7.7	7.3	8.1	8.1
RPD Limit:	0-20	0-20	0-20	0-20

LCS #:	2LCS072195	2LCS072195	2LCS072195	2LCS072195
Prepared Date:	7/21/95	7/21/95	7/21/95	7/21/95
Analyzed Date:	7/21/95	7/21/95	7/21/95	7/21/95
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
LCS Result:	20	21	21	64
LCS % Recov.:	101	104	106	106

MS/MSD LCS Control Limits	55-145	47-149	47-155	56-140

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS = Matrix Spike, MSD = MS Duplicate, IS = Instrument Spike, ISD = IS Duplicate, RPD = Relative % Difference

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alisto Engineering Group
1575 Treat Blvd., Ste. 201
Walnut Creek, CA 94598
Attention: Brady Nagle

Client Project ID: Mobil, Maersk Terminal
Matrix: Solid

QC Sample Group: 5070753-90

Reported: Jul 25, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	SP071995	SP071995	SP071995	SP071995
	8020EXA	8020EXA	8020EXA	8020EXA
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	A. Tuzon	A. Tuzon	A. Tuzon	A. Tuzon
MS/MSD #:	5070761	5070761	5070761	5070761
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	7/19/95	7/19/95	7/19/95	7/19/95
Analyzed Date:	7/19/95	7/19/95	7/19/95	7/19/95
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4
Conc. Spiked:	0.40 mg/kg	0.40 mg/kg	0.40 mg/kg	1.2 mg/kg
Result:	0.41	0.43	0.44	1.3
MS % Recovery:	103	108	110	108
Dup. Result:	0.40	0.42	0.44	1.2
MSD % Recov.:	100	105	110	100
RPD:	3.0	2.8	0.0	7.7
RPD Limit:	0-20	0-20	0-20	0-20

LCS #:	2LCS071995	2LCS071995	2LCS071995	2LCS071995
Prepared Date:	7/19/95	7/19/95	7/19/95	7/19/95
Analyzed Date:	7/19/95	7/19/95	7/19/95	7/19/95
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
LCS Result:	16	21	23	68
LCS % Recov.:	79	105	113	114

MS/MSD LCS Control Limits	55-145	47-149	47-155	56-140

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS=Matrix Spike, MSD=MS Duplicate, IS=Instrument Spike, ISD=IS Duplicate, RPD=Relative % Difference

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alisto Engineering Group
1575 Treat Blvd., Ste. 201
Walnut Creek, CA 94598
Attention: Brady Nagle

Client Project ID: Mobil, Maersk Terminal
Matrix: Solid
QC Sample Group: 5070753-90
Reported: Jul 25, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	SP071995	SP071995	SP071995	SP071995
Analy. Method:	8020EXA EPA 8020	8020EXA EPA 8020	8020EXA EPA 8020	8020EXA EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	A. Tuzon	A. Tuzon	A. Tuzon	A. Tuzon
MS/MSD #:	5070761	5070761	5070761	5070761
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	7/19/95	7/19/95	7/19/95	7/19/95
Analyzed Date:	7/19/95	7/19/95	7/19/95	7/19/95
Instrument I.D.#:	HP-2	HP-2	HP-2	HP-2
Conc. Spiked:	0.40 mg/kg	0.40 mg/kg	0.40 mg/kg	1.2 mg/kg
Result:	0.47	0.47	0.48	1.4
MS % Recovery:	118	118	120	119
Dup. Result:	0.42	0.41	0.42	1.3
MSD % Recov.:	105	103	105	106
RPD:	12	14	13	12
RPD Limit:	0-20	0-20	0-20	0-20

LCS #:	1LCS072095	1LCS072095	1LCS072095	1LCS072095
Prepared Date:	7/20/95	7/20/95	7/20/95	7/20/95
Analyzed Date:	7/20/95	7/20/95	7/20/95	7/20/95
Instrument I.D.#:	HP-2	HP-2	HP-2	HP-2
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
LCS Result:	23	23	24	72
LCS % Recov.:	117	114	119	120

MS/MSD LCS Control Limits	55-145	47-149	47-155	56-140

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS = Matrix Spike, MSD = MS Duplicate, IS = Instrument Spike, ISD = IS Duplicate, RPD = Relative % Difference

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alisto Engineering Group
1575 Treat Blvd., Ste. 201
Walnut Creek, CA 94598
Attention: Brady Nagle

Client Project ID: Mobil, Maersk Terminal
Matrix: Solid
QC Sample Group: 5070753-90
Reported: Jul 25, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	SP071995	SP071995	SP071995	SP071995
	8020EXA	8020EXA	8020EXA	8020EXA
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	A. Tuzon	A. Tuzon	A. Tuzon	A. Tuzon
MS/MSD #:	5070761	5070761	5070761	5070761
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	7/19/95	7/19/95	7/19/95	7/19/95
Analyzed Date:	7/19/95	7/19/95	7/19/95	7/19/95
Instrument I.D.#:	HP-2	HP-2	HP-2	HP-2
Conc. Spiked:	0.40 mg/kg	0.40 mg/kg	0.40 mg/kg	1.2 mg/kg
Result:	0.47	0.47	0.48	1.4
MS % Recovery:	118	118	120	119
Dup. Result:	0.42	0.41	0.42	1.3
MSD % Recov.:	105	103	105	106
RPD:	12	14	13	12
RPD Limit:	0-20	0-20	0-20	0-20

LCS #:	1LCS071995	1LCS071995	1LCS071995	1LCS071995
Prepared Date:	7/19/95	7/19/95	7/19/95	7/19/95
Analyzed Date:	7/19/95	7/19/95	7/19/95	7/19/95
Instrument I.D.#:	HP-2	HP-2	HP-2	HP-2
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
LCS Result:	24	24	25	74
LCS % Recov.:	122	119	125	123

MS/MSD LCS Control Limits	55-145	47-149	47-155	56-140

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS=Matrix Spike, MSD=MS Duplicate, IS=Instrument Spike, ISD=IS Duplicate, RPD=Relative % Difference

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alisto Engineering Group
1575 Treat Blvd., Ste. 201
Walnut Creek, CA 94598
Attention: Brady Nagle

Client Project ID: Mobil, Maersk Terminal
Matrix: Solid

QC Sample Group: 5070753-90

Reported: Jul 25, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	SP072095	SP072095	SP072095	SP072095
Analy. Method:	8020EXA EPA 8020	8020EXA EPA 8020	8020EXA EPA 8020	8020EXA EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	M. Creusere	M. Creusere	M. Creusere	M. Creusere
MS/MSD #:	5070778	5070778	5070778	5070778
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	7/20/95	7/20/95	7/20/95	7/20/95
Analyzed Date:	7/20/95	7/20/95	7/20/95	7/20/95
Instrument I.D.#:	HP-5	HP-5	HP-5	HP-5
Conc. Spiked:	0.40 mg/kg	0.40 mg/kg	0.40 mg/kg	1.2 mg/kg
Result:	0.36	0.35	0.35	1.1
MS % Recovery:	90	88	88	92
Dup. Result:	0.34	0.34	0.33	1.0
MSD % Recov.:	85	85	83	83
RPD:	5.7	2.9	5.8	9.5
RPD Limit:	0-20	0-20	0-20	0-20
LCS #:	3LCS072095	3LCS072095	3LCS072095	3LCS072095
Prepared Date:	7/20/95	7/20/95	7/20/95	7/20/95
Analyzed Date:	7/20/95	7/20/95	7/20/95	7/20/95
Instrument I.D.#:	HP-5	HP-5	HP-5	HP-5
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
LCS Result:	19	19	19	57
LCS % Recov.:	97	95	93	96
MS/MSD LCS Control Limits	55-145	47-149	47-155	56-140

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS = Matrix Spike, MSD = MS Duplicate, IS = Instrument Spike, ISD = IS Duplicate, RPD = Relative % Difference

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alisto Engineering Group
1575 Treat Blvd., Ste. 201
Walnut Creek, CA 94598
Attention: Brady Nagle

Client Project ID: Mobil, Maersk Terminal
Matrix: Solid

QC Sample Group: 5070753-90

Reported: Jul 25, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	SP072195	SP072195	SP072195	SP072195
	8020EXA	8020EXA	8020EXA	8020EXA
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	A. Tuzon	A. Tuzon	A. Tuzon	A. Tuzon
MS/MSD #:	5071246	5071246	5071246	5071246
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	7/21/95	7/21/95	7/21/95	7/21/95
Analyzed Date:	7/21/95	7/21/95	7/21/95	7/21/95
Instrument I.D.#:	HP-2	HP-2	HP-2	HP-2
Conc. Spiked:	0.40 mg/kg	0.40 mg/kg	0.40 mg/kg	1.2 mg/kg
Result:	0.38	0.38	0.4	1.2
MS % Recovery:	95	95	100	101
Dup. Result:	0.42	0.42	0.44	1.3
MSD % Recov.:	105	105	110	109
RPD:	10	10	9.5	7.9
RPD Limit:	0-20	0-20	0-20	0-20

LCS #:	1LCS072195	1LCS072195	1LCS072195	1LCS072195
Prepared Date:	7/21/95	7/21/95	7/21/95	7/21/95
Analyzed Date:	7/21/95	7/21/95	7/21/95	7/21/95
Instrument I.D.#:	HP-2	HP-2	HP-2	HP-2
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
LCS Result:	24	23	24	72
LCS % Recov.:	118	115	120	120

MS/MSD LCS Control Limits	55-145	47-149	47-155	56-140

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS = Matrix Spike, MSD = MS Duplicate, IS = Instrument Spike, ISD = IS Duplicate, RPD = Relative % Difference

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alisto Engineering Group
1575 Treat Blvd., Ste. 201
Walnut Creek, CA 94598
Attention: Brady Nagle

Client Project ID: Mobil, Maersk Terminal
Matrix: Solid

QC Sample Group: 5070753-90

Reported: Jul 25, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	SP072095	SP072095	SP072095	SP072095
Analy. Method:	8020EXA EPA 8020	8020EXA EPA 8020	8020EXA EPA 8020	8020EXA EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	A. Tuzon	A. Tuzon	A. Tuzon	A. Tuzon
MS/MSD #:	5070778	5070778	5070778	5070778
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	7/20/95	7/20/95	7/20/95	7/20/95
Analyzed Date:	7/20/95	7/20/95	7/20/95	7/20/95
Instrument I.D.#:	HP-9	HP-9	HP-9	HP-9
Conc. Spiked:	0.40 mg/kg	0.40 mg/kg	0.40 mg/kg	1.2 mg/kg
Result:	0.48	0.50	0.50	1.6
MS % Recovery:	120	125	125	133
Dup. Result:	0.48	0.49	0.49	1.6
MSD % Recov.:	120	123	123	133
RPD:	0.0	2.0	2.0	0.0
RPD Limit:	0-20	0-20	0-20	0-20

LCS #:	4LCS072095	4LCS072095	4LCS072095	4LCS072095
Prepared Date:	7/20/95	7/20/95	7/20/95	7/20/95
Analyzed Date:	7/20/95	7/20/95	7/20/95	7/20/95
Instrument I.D.#:	HP-9	HP-9	HP-9	HP-9
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
LCS Result:	20	20	20	67
LCS % Recov.:	99	101	100	112

MS/MSD LCS Control Limits	55-145	47-149	47-155	56-140

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS = Matrix Spike, MSD = MS Duplicate, IS = Instrument Spike, ISD = IS Duplicate, RPD = Relative % Difference

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alisto Engineering Group
1575 Treat Blvd., Ste. 201
Walnut Creek, CA 94598
Attention: Brady Nagle

Client Project ID: Mobil, Maersk Terminal
Matrix: Solid

QC Sample Group: 5070753-90

Reported: Jul 25, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	SP071995	SP071995	SP071995	SP071995
Analy. Method:	8020EXA EPA 8020	8020EXA EPA 8020	8020EXA EPA 8020	8020EXA EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	A. Tuzon	A. Tuzon	A. Tuzon	A. Tuzon
MS/MSD #:	5070761	5070761	5070761	5070761
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	7/19/95	7/19/95	7/19/95	7/19/95
Analyzed Date:	7/19/95	7/19/95	7/19/95	7/19/95
Instrument I.D.#:	HP-5	HP-5	HP-5	HP-5
Conc. Spiked:	0.40 mg/kg	0.40 mg/kg	0.40 mg/kg	1.2 mg/kg
Result:	0.40	0.40	0.40	1.2
MS % Recovery:	100	100	100	102
Dup. Result:	0.36	0.36	0.35	1.1
MSD % Recov.:	90	90	88	91
RPD:	11	11	13	11
RPD Limit:	0-20	0-20	0-20	0-20

LCS #:	3LCS071995	3LCS071995	3LCS071995	3LCS071995
Prepared Date:	7/19/95	7/19/95	7/19/95	7/19/95
Analyzed Date:	7/19/95	7/19/95	7/19/95	7/19/95
Instrument I.D.#:	HP-5	HP-5	HP-5	HP-5
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
LCS Result:	15	19	20	63
LCS % Recov.:	76	96	101	104

MS/MSD LCS Control Limits	55-145	47-149	47-155	56-140

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS = Matrix Spike, MSD = MS Duplicate, IS = Instrument Spike, ISD = IS Duplicate, RPD = Relative % Difference

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alisto Engineering Group
1575 Treat Blvd., Ste. 201
Walnut Creek, CA 94598
Attention: Brady Nagle

Client Project ID: Mobil, Maersk Terminal
Matrix: Solid
QC Sample Group: 5070753-90
Reported: Jul 25, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	SP072195	SP072195	SP072195	SP072195
Analy. Method:	8020EXA EPA 8020	8020EXA EPA 8020	8020EXA EPA 8020	8020EXA EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	M. Creusere	M. Creusere	M. Creusere	M. Creusere
MS/MSD #:	5071246	5071246	5071246	5071246
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	7/21/95	7/21/95	7/21/95	7/21/95
Analyzed Date:	7/21/95	7/21/95	7/21/95	7/21/95
Instrument I.D.#:	HP-5	HP-5	HP-5	HP-5
Conc. Spiked:	0.40 mg/kg	0.40 mg/kg	0.40 mg/kg	1.2 mg/kg
Result:	0.32	0.37	0.32	0.98
MS % Recovery:	80	80	80	82
Dup. Result:	0.35	0.35	0.35	1.1
MSD % Recov.:	88	88	88	89
RPD:	9.0	9.5	9.5	8.2
RPD Limit:	0-20	0-20	0-20	0-20
LCS #:	3LCS072195	3LCS072195	3LCS072195	3LCS072195
Prepared Date:	7/21/95	7/21/95	7/21/95	7/21/95
Analyzed Date:	7/21/95	7/21/95	7/21/95	7/21/95
Instrument I.D.#:	HP-5	HP-5	HP-5	HP-5
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
LCS Result:	19	19	19	58
LCS % Recov.:	96	95	94	97
MS/MSD LCS Control Limits	55-145	47-149	47-155	56-140

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS=Matrix Spike, MSD=MS Duplicate, IS=Instrument Spike, ISD=IS Duplicate, RPD=Relative % Difference

QUOIA ANALYTICAL
CHAIN OF CUSTODY

☐ 680 Chesa[illegible]e Drive • Redwood City, CA 94063 • (415) 364-9600 FAX (415) 3[illegible]233
☐ 819 Striker Ave., Suite 8 • Sacramento, CA 95834 • (916) 921-9600 FAX (916) [illegible]21-0100
☐ 1900 Bates Ave., Suite LM • Concord, CA 94520 • (510) 686-9600 FAX (510) 686-9689

Mobil Oil Consulting Firm: ALISTO ENGINEERING
Station No./Site Address: ~~[illegible]~~ Mairale Terminal (Former Bulk) 909 Ferry St. Oakland CA
Address: 1575 Treat Blvd #201
Project Contact: Brady Naffle
City: Walnut Creek State: CA Zip: 94598
Mobil Oil Engineer: Steve Pao
Tel: 510 295 1650 Fax.: 510 295 0823
Sampler(s) (signature):

Sample I.D.	Matrix	Date Sampled	Time	Preservation	Number of Containers	Type of Containers	BTEX - EPA 602/8020	BTEX -TPH EPA M602/8015/8020 (GAS)	TPH EPA Modified 8015 ☐ Gas ☐ Diesel	Oil & Grease - EPA 413.2	TPH - EPA 418.1	EPA 601/8010	EPA 624/8240	EPA 625/8270	Title 22 Metals EPA 6010/7000 ☐ TTLC ☐ STLC	Lead Org./DHS ☐ Lead Total	EDB/DBCD - EPA 504	pH	Bioassay - Title 22 Haz. Waste	Bioassay - Effluent	
SB-A4@3.0	Soil	7/14/95		ICE	1			X			5070753										
SB-A4@6.0					1						5070754										
SB-C4@3.0					1						5070755										
SB-C4@6.0					1						5070756										
SB-D4@3.0					1						5070757										
SB-D4@6.0					1						5070758										
SB-E4@3.0					1						5070759										
SB-E4@6.0					1						5070760										
SB-E5@3.0		7/14/95			1			X			5070761										

CODING (check one)

- Code 1 ☐ Emergency Response
- Code 2 ☐ Site Assessment
- Code 3 ☐ Remediation (Plan Devlpmt.)
- Code 4 ☐ Active Remed. (Install./Start-up)
- Code 5 ☐ Active Remed. (O & M)
- Code 6 ☐ Passive Remed/ Monitoring
- Code 7 ☐ Closure
- Code 8 ☐ Construction
- Code 9 ☐ Litigation/Claims Fines

Relinquished by: [signature] Date/Time: 7-14-95 1600
Relinquished by: [signature] Date/Time: 7-17 4:15
Relinquished by: [signature] Date/Time: 7-17 4:30
Relinquished by: Date/Time:
Relinquished in Lab by: [signature] Date/Time: 7-17-95 4:30

Turnaround Time: (check one):
Normal X Same day ____
1 day ____ 2 day ____
5 day ____

Sample Integrity:
Intact ____ On Ice ____

Remarks: Please Fax copy of C.O.C & results to Gail Jones (Somax)

Page 1 of 1 (5)

SEQUOIA ANALYTICAL
CHAIN OF CUSTODY

680 Chesapeake Drive • Redwood City, CA 94063 • (415) 364-9600 FAX (415) 364-9233
819 Striker Ave., Suite 8 • Sacramento, CA 95834 • (916) 921-9600 FAX (916) 921-0100
1900 Bates Ave., Suite LM • Concord, CA 94520 • (510) 686-9600 FAX (510) 686-9689

Mobil Oil Consulting Firm: ALISTO ENGINEERING
Address: 1575 Treat Blvd #201
City: Walnut Creek State: CA Zip: 94598
Tel: 510 295 1650 Fax.: 510 295 1823

Station No./Site Address: ~~Maersk/ATE~~ 909 First St Oakland, Berth 23 #24
Project Contact: Brady Nagle
Mobil Oil Engineer: Steve Pao
Sampler(s) (signature):

Sample I.D.	Matrix	Date Sampled	Time	Preservation	Number of Containers	Type of Containers	BTEX - EPA 602/8020	BTEX -TPH EPA M602/8015/8020 (GAS)	TPH EPA Modified 8015 ☐ Gas ☐ Diesel	Oil & Grease - EPA 413.2	TPH - EPA 418.1	EPA 601/8010	EPA 624/8240	EPA 625/8270	Title 22 Metals EPA 6010/7000 ☐ TTLC ☐ STLC	Lead Org./DHS ☐ Lead Total	EDB/DBCD - EPA 504	pH	Bioassay - Title 22 Haz. Waste	Bioassay - Effluent
SB-E5 @6.0	Soil	7.12.95		Ice	1	1½ x 6"		X		5070762										
SB-G5 @7.0					1					5070763										
SB-G5 @6.0					1					5070764										
SB-A1 @3.0					1					5070765										
SB-A1 @6.0					1					5070766										
SB-D3 @3.0					1					5070767										
SB-D3 @6.0		7-12-95			1	1½ x 6"				5070768										
SB-F8 @3.0		7/13/95			1	2" x 6"				5070769										
SB-F8 @6.0		7/13/95			1			X		5070770										

CODING (check one)

- Code 1 ☐ Emergency Response
- Code 2 ☐ Site Assessment
- Code 3 ☐ Remediation (Plan Devlpmt.)
- Code 4 ☐ Active Remed. (Install./Start-up)
- Code 5 ☐ Active Remed. (O & M)
- Code 6 ☐ Passive Remed/ Monitoring
- Code 7 ☐ Closure
- Code 8 ☐ Construction
- Code 9 ☐ Litigation/Claims Fines

Relinquished by:	Date/Time: 7-14-95 1:00P	Relinquished by:	Date/Time: 7.17 4:15
Relinquished by:	Date/Time: 7/17 4:30	Relinquished by:	Date/Time:
Relinquished by:	Date/Time:	Relinquished in Lab by:	Date/Time: 7-17-95 4:36

Turnaround Time: (check one): Normal X; Same day ___; 1 day ___; 2 day ___; 5 day ___

Sample Integrity: Intact ___ On Ice ___

Remarks: Please fax copy of C.O.C & results to Gail Jones (Sonoma)

Page 2 of 5

QUOIA ANALYTICAL
CHAIN OF CUSTODY

☐ 680 Chesa[illegible]e Drive • Redwood City, CA 94063 • (415) 364-9600 FAX (415) 3[illegible]233
☐ 819 Striker Ave., Suite 8 • Sacramento, CA 95834 • (916) 921-9600 FAX (916) [illegible]1-0100
☐ 1900 Bates Ave., Suite LM • Concord, CA 94520 • (510) 686-9600 FAX (510) 686-9689

Mobil Oil Consulting Firm: ALISTO ENGINEERING
Address: 1575 Treat Blvd #201
City: Walnut Creek State: CA Zip: 94598
Tel: 510 295 1650 Fax.: 510 295 1823

Station No./Site Address: ~~Oakland~~ Former Bulk Plant Terminal Berth 23, Oakland
Project Contact: Brady Nugle
Mobil Oil Engineer: Steve Pao
Sampler(s) (signature):

Sample I.D.	Matrix	Date Sampled	Time	Preservation	Number of Containers	Type of Containers	BTEX - EPA 602/8020	BTEX -TPH EPA M602/8015/8020 (GAS)	TPH EPA Modified 8015 Gas ☐ Diesel ☐	Oil & Grease - EPA 413.2	TPH - EPA 418.1	EPA 601/8010	EPA 624/8240	EPA 625/8270	Title 22 Metals EPA 6010/7000 TTLC ☐ STLC ☐	Lead Org./DHS ☐ Lead Total ☐	EDB/DBCD - EPA 504	pH	Bioassay - Title 22 Haz. Waste	Bioassay - Effluent	
SB-G8 @3.0	Soil	7/13/95		Ice	2x6"			X		5070771											
SB-G8 @ 6.0										5070772											
SB-G6 @3.0										5070773											
SB-G6 @6.0										5070774											
SB-D6 @3.0										5070775											
SB-D6 @ 6.0										5070776											
SB-E6 @3.0										5070777											
SB-E6 @ 6.0										5070778											
SB-F6 @3.0		7/13/95			2x6"			X		5070779											

CODING (check one)

- Code 1 ☐ Emergency Response
- Code 2 ☐ Site Assessment
- Code 3 ☐ Remediation (Plan Devlpmt.)
- Code 4 ☐ Active Remed. (Install./Start-up)
- Code 5 ☐ Active Remed. (O & M)
- Code 6 ☐ Passive Remed/ Monitoring
- Code 7 ☐ Closure
- Code 8 ☐ Construction
- Code 9 ☐ Litigation/Claims Fines

Relinquished by:	Date/Time: 7-14-
Relinquished by:	Date/Time:
Relinquished by:	Date/Time:
Relinquished by:	Date/Time: 7.17 4:15
Relinquished by:	Date/Time: 7.17 4:30
Relinquished in Lab by:	Date/Time: 7-17-95 4:30

Turnaround Time: (check one):
Normal X Same day ____
1 day ____ 2 day ____
5 day ____

Sample Integrity:
Intact ____ On Ice ____

Remarks: Please fax copy of C.O.C results to Gail Jones (somma)

QUOIA ANALYTICAL
CHAIN OF CUSTODY

☐ 680 Chesapeake Drive • Redwood City, CA 94063 • (415) 364-9600 FAX (415) 364-9233
☐ 819 Striker Ave., Suite 8 • Sacramento, CA 95834 • (916) 921-9600 FAX (916) 921-0100
☐ 1900 Bates Ave., Suite LM • Concord, CA 94520 • (510) 686-9600 FAX (510) 686-9689

Mobil Oil Consulting Firm: ALISTO ENGINEERING
Station No./Site Address: ~~Oakland~~ Former Oakl. USEN Terminal, Berth 23, Oakland
Address: 1575 Trent Blvd #201
Project Contact: Brady Nagle
City: Walnut Creek State: CA Zip: 94598
Mobil Oil Engineer: Steve Pao
Tel: 510 295 1650 Fax.: 510 295 1823
Sampler(s) (signature):

Sample I.D.	Matrix	Date Sampled	Time	Preservation	Number of Containers	Type of Containers	BTEX - EPA 602/8020	BTEX - TPH EPA M602/8015/8020 (GAS)	TPH EPA Modified 8015 ☐ Gas ☐ Diesel	Oil & Grease - EPA 413.2	TPH - EPA 418.1	EPA 601/8010	EPA 624/8240	EPA 625/8270	Title 22 Metals EPA 6010/7000 ☐ TTLC ☐ STLC	Lead Org./DHS ☐ Lead Total	EDB/DBCD - EPA 504	pH	Bioassay - Title 22 Haz. Waste	Bioassay - Effluent		
SB-F6@6.0	Soil	7/13/95		Ice	1	2"x6"		X			5070780											
SB-G6@3.0					1						5070781											
SB-G6@6.0					1						5070782											
SB-F7@3.0					1						5070783											
SB-F7@6.0					1						5070784											
SB-G7@3.0					1						5070785											
SB-G7@6.0					1						5070786											
SB-E7@3.0					1						5070787											
SB-E7@6.0		7/13/95			1						5070788											

CODING (check one)

- Code 1 ☐ Emergency Response
- Code 2 ☐ Site Assessment
- Code 3 ☐ Remediation (Plan Devlpmt.)
- Code 4 ☐ Active Remed. (Install./Start-up)
- Code 5 ☐ Active Remed. (O & M)
- Code 6 ☐ Passive Remed/ Monitoring
- Code 7 ☐ Closure
- Code 8 ☐ Construction
- Code 9 ☐ Litigation/Claims Fines

Relinquished by: Date/Time: 7-14-95 1:00P
Relinquished by: Date/Time: 7-17 4:30
Relinquished by: Date/Time:

Relinquished by: Date/Time: 7-17 4:15
Relinquished by: Date/Time:
Relinquished in Lab by: Date/Time: 7-17-95 4:30

Turnaround Time: (check one):
Normal X Same day ____
1 day ____ 2 day ____
5 day ____

Sample Integrity:
Intact ____ On Ice ____

Remarks: Please fax copy of C.O.C. results to Gail Jones (50M4)

QUOIA ANALYTICAL
CHAIN OF CUSTODY

☐ 680 Chesapeake Drive • Redwood City, CA 94063 • (415) 364-9600 FAX (415) 364-9233
☐ 819 Striker Ave., Suite 8 • Sacramento, CA 95834 • (916) 921-9600 FAX (916) 921-0100
☐ 1900 Bates Ave., Suite LM • Concord, CA 94520 • (510) 686-9600 FAX (510) 686-9689

Mobil Oil Consulting Firm: ALISTO ENGINEERING	Station No./Site Address: Maersk Terminal Foppe Bally 909 Ferry St. Oakland CA
Address: 1575 Tice Blvd #201	Project Contact: Brady Nagle
City: Walnut Creek State: CA Zip: 94598	Mobil Oil Engineer: Steve Pao
Tel: 510 295 1650 Fax.:	Sampler(s) (signature):

Sample I.D.	Matrix	Date Sampled	Time	Preservation	Number of Containers	Type of Containers	BTEX - EPA 602/8020	BTEX -TPH EPA M602/8015/8020 (GAS)	TPH EPA Modified 8015 Gas ☐ Diesel ☐	Oil & Grease - EPA 413.2	TPH - EPA 418.1	EPA 601/8010	EPA 624/8240	EPA 625/8270	Title 22 Metals EPA 6010/7000 TTLC ☐ STLC ☐	Lead Org./DHS ☐ Lead Total ☐	EDB/DBCD - EPA 504	pH	Bioassay - Title 22 Haz. Waste	Bioassay - Effluent		
SB-F4c3.0	Soil	7/12/95			1	1½x6		X		5070789												
SB-F4e6.0	Soil	7/12/95			1	1½x6		X		5070790												

CODING (check one)

- Code 1 ☐ Emergency Response
- Code 2 ☐ Site Assessment
- Code 3 ☐ Remediation (Plan Devlpmt.)
- Code 4 ☐ Active Remed. (Install./Start-up)
- Code 5 ☐ Active Remed. (O & M)
- Code 6 ☐ Passive Remed/ Monitoring
- Code 7 ☐ Closure
- Code 8 ☐ Construction
- Code 9 ☐ Litigation/Claims Fines

Relinquished by: Date/Time: 7-14-95 1:20P	Relinquished by: Date/Time: 7.17 4:15
Relinquished by: Date/Time: 7.14 4:30	Relinquished by: Date/Time:
Relinquished by: Date/Time:	Relinquished in Lab by: Date/Time: 7-17-95 4:30

Turnaround Time: (check one): Normal X, Same day ___, 1 day ___, 2 day ___, 5 day ___

Sample Integrity: Intact ___ On Ice ___

Remarks: Please fax copy of C.O.C additions to Gail Jones (SOMA)

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alisto Engineering Group	Client Project ID:	Mobil #Maersk, 909 Ferry St. Oakland	Sampled: Jul 11, 1995
1575 Treat Blvd., Ste. 201	Sample Matrix:	Soil	Received: Jul 11, 1995
Walnut Creek, CA 94598	Analysis Method:	EPA 5030/8015 Mod./8020	Reported: Jul 18, 1995
Attention: Brady Nagle	First Sample #:	507-0386	

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit mg/kg	Sample I.D. 507-0386 SB-A2@3.0	Sample I.D. 507-0387 SB-A2@6.0	Sample I.D. 507-0388 SB-B2@3.0	Sample I.D. 507-0389 SB-B2@6.0	Sample I.D. 507-0390 SB-A3@3.0	Sample I.D. 507-0391 SB-A3@6.0
QC Batch Number:		SP071395 8020EXA	SP071395 8020EXA	SP071395 8020EXA	SP071395 8020EXA	SP071395 8020EXA	SP071395 8020EXA
Purgeable Hydrocarbons	1.0	14	N.D.	N.D.	N.D.	6.2	6.6
Benzene	0.0050	0.020	N.D.	N.D.	N.D.	0.043	N.D.
Toluene	0.0050	0.037	N.D.	N.D.	N.D.	0.074	0.0084
Ethyl Benzene	0.0050	0.065	N.D.	N.D.	N.D.	0.14	0.066
Total Xylenes	0.0050	0.074	N.D.	N.D.	N.D.	0.41	0.051
Chromatogram Pattern:		Gasoline	--	--	--	Gasoline	Gasoline

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	1.0	1.0	1.0	1.0
Date Analyzed:	7/13/95	7/13/95	7/13/95	7/13/95	7/13/95	7/13/95
Instrument Identification:	HP-4	HP-4	HP-4	HP-4	HP-2	HP-4
Surrogate Recovery, %: (QC Limits = 70-130%)	97	100	100	99	140	87

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

RECEIVED
JUL 20 1995

5070386.ALS <1>

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alisto Engineering Group	Client Project ID:	Mobil #Maersk, 909 Ferry St. Oakland	Sampled: Jul 11, 1995
1575 Treat Blvd., Ste. 201	Sample Matrix:	Soil	Received: Jul 11, 1995
Walnut Creek, CA 94598	Analysis Method:	EPA 5030/8015 Mod./8020	Reported: Jul 18, 1995
Attention: Brady Nagle	First Sample #:	507-0392	

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit mg/kg	Sample I.D. 507-0392 SB-C2@3.0	Sample I.D. 507-0393 SB-C2@6.0	Sample I.D. 507-0394 SB-C3@3.0	Sample I.D. 507-0395 SB-C3@6.0	Sample I.D. 507-0396 SB-A5@3.0	Sample I.D. 507-0397 SB-A5@6.0
QC Batch Number:		SP071395	SP071395	SP071395	SP071395	SP071395	SP071395
		8020EXA	8020EXA	8020EXA	8020EXA	8020EXA	8020EXA
Purgeable Hydrocarbons	1.0	N.D.	N.D.	1.3	6.8	N.D.	N.D.
Benzene	0.0050	0.050	0.058	0.10	0.58	N.D.	N.D.
Toluene	0.0050	N.D.	N.D.	0.0058	0.27	N.D.	N.D.
Ethyl Benzene	0.0050	0.019	0.025	0.028	0.14	N.D.	N.D.
Total Xylenes	0.0050	0.033	0.041	0.055	0.59	N.D.	N.D.
Chromatogram Pattern:		--	--	Gasoline	Gasoline	--	--

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	1.0	1.0	1.0	1.0
Date Analyzed:	7/13/95	7/13/95	7/13/95	7/13/95	7/13/95	7/13/95
Instrument Identification:	HP-4	HP-2	HP-2	HP-4	HP-4	HP-4
Surrogate Recovery, %: (QC Limits = 70-130%)	98	94	104	108	98	99

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alisto Engineering Group	Client Project ID:	Mobil #Maersk, 909 Ferry St. Oakland	Sampled: Jul 11, 1995
1575 Treat Blvd., Ste. 201	Sample Matrix:	Soil	Received: Jul 11, 1995
Walnut Creek, CA 94598	Analysis Method:	EPA 5030/8015 Mod./8020	Reported: Jul 18, 1995
Attention: Brady Nagle	First Sample #:	507-0398	

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit mg/kg	Sample I.D. 507-0398 SB-B5@3.0	Sample I.D. 507-0399 SB-B5@6.0	Sample I.D. 507-0400 SB-C5@3.0	Sample I.D. 507-0401 SB-C5@6.0	Sample I.D. 507-0402 SB-D5@3.0	Sample I.D. 507-0403 SB-D5@6.0
QC Batch Number:		SP071395 8020EXA	SP071395 8020EXA	SP071395 8020EXA	SP071395 8020EXA	SP071495 8020EXA	SP071495 8020EXA
Purgeable Hydrocarbons	1.0	12	N.D.	160	320	480	880
Benzene	0.0050	0.086	N.D.	4.3	8.9	1.2	1.6
Toluene	0.0050	0.16	N.D.	0.37	0.67	4.0	3.6
Ethyl Benzene	0.0050	0.099	N.D.	2.6	6.0	4.6	5.7
Total Xylenes	0.0050	0.32	N.D.	5.7	14	4.9	6.6
Chromatogram Pattern:		Gasoline	--	Gasoline	Gasoline	Gasoline	Gasoline

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	50	100	100	100
Date Analyzed:	7/13/95	7/13/95	7/13/95	7/13/95	7/14/95	7/14/95
Instrument Identification:	HP-2	HP-2	HP-2	HP-2	HP-5	HP-5
Surrogate Recovery, %: (QC Limits = 70-130%)	180	106	132	130	72	74

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alisto Engineering Group	Client Project ID:	Mobil #Maersk, 909 Ferry St. Oakland	Sampled: Jul 11, 1995
1575 Treat Blvd., Ste. 201	Sample Matrix:	Soil	Received: Jul 11, 1995
Walnut Creek, CA 94598	Analysis Method:	EPA 5030/8015 Mod./8020	Reported: Jul 18, 1995
Attention: Brady Nagle	First Sample #:	507-0404	

QC Batch Number: SP071395 SP071395

8020EXA 8020EXA

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit mg/kg	Sample I.D. 507-0404 SB-B3@3.0	Sample I.D. 507-0405 SB-B3@6.0
Purgeable Hydrocarbons	1.0	N.D.	N.D.
Benzene	0.0050	N.D.	N.D.
Toluene	0.0050	N.D.	N.D.
Ethyl Benzene	0.0050	N.D.	N.D.
Total Xylenes	0.0050	N.D.	N.D.
Chromatogram Pattern:		--	--

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0
Date Analyzed:	7/13/95	7/13/95
Instrument Identification:	HP-2	HP-2
Surrogate Recovery, %: (QC Limits = 70-130%)	106	106

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alisto Engineering Group
1575 Treat Blvd., Ste. 201
Walnut Creek, CA 94598
Attention: Brady Nagle

Client Project ID: Mobil #Maersk, 909 Ferry St. Oakland
Matrix: Solid

QC Sample Group: 5070386-405

Reported: Jul 18, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	SP071395	SP071395	SP071395	SP071395
Analy. Method:	8020EXA EPA 8020	8020EXA EPA 8020	8020EXA EPA 8020	8020EXA EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	J. Fontecha	J. Fontecha	J. Fontecha	J. Fontecha
MS/MSD #:	5070502	5070502	5070502	5070502
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	7/12/95	7/12/95	7/12/95	7/12/95
Analyzed Date:	7/13/95	7/13/95	7/13/95	7/13/95
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4
Conc. Spiked:	0.40 mg/kg	0.40 mg/kg	0.40 mg/kg	1.2 mg/kg
Result:	0.40	0.43	0.43	1.3
MS % Recovery:	100	108	108	107
Dup. Result:	0.40	0.43	0.43	1.3
MSD % Recov.:	100	108	108	108
RPD:	0.0	0.0	0.0	0.0093
RPD Limit:	0-20	0-20	0-20	0-20

LCS #:	2LCS071395	2LCS071395	2LCS071395	2LCS071395
Prepared Date:	7/13/95	7/13/95	7/13/95	7/13/95
Analyzed Date:	7/13/95	7/13/95	7/13/95	7/13/95
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4
Conc. Spiked:	0.40 mg/kg	0.40 mg/kg	0.40 mg/kg	1.2 mg/kg
LCS Result:	19	20	21	62
LCS % Recov.:	94	100	103	103

MS/MSD LCS Control Limits	55-145	47-149	47-155	56-140

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS = Matrix Spike, MSD = MS Duplicate, IS = Instrument Spike, ISD = IS Duplicate, RPD = Relative % Difference

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alisto Engineering Group
1575 Treat Blvd., Ste. 201
Walnut Creek, CA 94598
Attention: Brady Nagle

Client Project ID: Mobil #Maersk, 909 Ferry St. Oakland
Matrix: Solid

QC Sample Group: 5070386-405

Reported: Jul 18, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	SP071395	SP071395	SP071395	SP071395
Analy. Method:	8020EXA EPA 8020	8020EXA EPA 8020	8020EXA EPA 8020	8020EXA EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	J. Fontecha	J. Fontecha	J. Fontecha	J. Fontecha
MS/MSD #:	5070502	5070502	5070502	5070502
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	7/13/95	7/13/95	7/13/95	7/13/95
Analyzed Date:	7/13/95	7/13/95	7/13/95	7/13/95
Instrument I.D.#:	HP-2	HP-2	HP-2	HP-2
Conc. Spiked:	0.40 mg/kg	0.40 mg/kg	0.40 mg/kg	1.2 mg/kg
Result:	0.45	0.45	0.47	1.4
MS % Recovery:	113	113	118	118
Dup. Result:	0.40	0.40	0.42	1.3
MSD % Recov.:	100	100	105	104
RPD:	12	12	12	13
RPD Limit:	0-20	0-20	0-20	0-20

LCS #:	1 LCS071395	1 LCS071395	1 LCS071395	1 LCS071395
Prepared Date:	7/13/95	7/13/95	7/13/95	7/13/95
Analyzed Date:	7/13/95	7/13/95	7/13/95	7/13/95
Instrument I.D.#:	HP-2	HP-2	HP-2	HP-2
Conc. Spiked:	0.40 mg/kg	0.40 mg/kg	0.40 mg/kg	1.2 mg/kg
LCS Result:	20	21	22	67
LCS % Recov.:	98	103	109	111

MS/MSD LCS Control Limits	55-145	47-149	47-155	56-140

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS = Matrix Spike, MSD = MS Duplicate, IS = Instrument Spike, ISD = IS Duplicate, RPD = Relative % Difference

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alisto Engineering Group
1575 Treat Blvd., Ste. 201
Walnut Creek, CA 94598
Attention: Brady Nagle

Client Project ID: Mobil #Maersk, 909 Ferry St. Oakland, CA
Matrix: Solid
QC Sample Group: 5070386-405
Reported: Jul 18, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	SP071495	SP071495	SP071495	SP071495
	8020EXA	8020EXA	8020EXA	8020EXA
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	A. Tuzon	A. Tuzon	A. Tuzon	A. Tuzon
MS/MSD #:	5070502	5070502	5070502	5070502
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	7/14/95	7/14/95	7/14/95	7/14/95
Analyzed Date:	7/14/95	7/14/95	7/14/95	7/14/95
Instrument I.D.#:	HP-5	HP-5	HP-5	HP-5
Conc. Spiked:	0.40 mg/kg	0.40 mg/kg	0.40 mg/kg	1.2 mg/kg
Result:	0.33	0.34	0.34	1.1
MS % Recovery:	83	85	85	88
Dup. Result:	0.34	0.34	0.34	1.1
MSD % Recov.:	85	85	85	88
RPD:	2.4	0.0	0.0	0.0
RPD Limit:	0-20	0-20	0-20	0-20

LCS #:	3LCS071495	3LCS071495	3LCS071495	3LCS071495
Prepared Date:	7/14/95	7/14/95	7/14/95	7/14/95
Analyzed Date:	7/14/95	7/14/95	7/14/95	7/14/95
Instrument I.D.#:	HP-5	HP-5	HP-5	HP-5
Conc. Spiked:	0.40 mg/kg	0.40 mg/kg	0.40 mg/kg	1.2 mg/kg
LCS Result:	18	18	18	56
LCS % Recov.:	91	92	91	93

MS/MSD LCS Control Limits	55-145	47-149	47-155	56-140

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS = Matrix Spike, MSD = MS Duplicate, IS = Instrument Spike, ISD = IS Duplicate, RPD = Relative % Difference

QUOIA ANALYTICAL
CHAIN OF CUSTODY

☐ 680 Chesa[illegible]e Drive • Redwood City, CA 94063 • (415) 364-9600 FAX (415) [illegible]9233
☐ 819 Striker Ave., Suite 8 • Sacramento, CA 95834 • (916) 921-9600 FAX (916) 921-0100
☐ 1900 Bates Ave., Suite LM • Concord, CA 94520 • (510) 686-9600 FAX (510) 686-9689

Mobil Oil Consulting Firm: ALISTO ENGINEERING
Station No./Site Address: Maersk 909 Ferry St Oakland CA
Address: 1575 Treat Blvd #201
Project Contact: Brady Nagle
City: Walnut Creek State: CA Zip: 94598
Mobil Oil Engineer: Steve Pao
Tel: 510 295 1650 Fax.: 510 295 1823
Sampler(s) (signature):

Sample I.D.	Matrix	Date Sampled	Time	Preservation	Number of Containers	Type of Containers	BTEX - EPA 602/8020	BTEX - TPH EPA M602/8015/8020 (GAS)	TPH EPA Modified 8015 Gas ☐ Diesel ☐	Oil & Grease - EPA 413.2	TPH - EPA 418.1	EPA 601/8010	EPA 624/8240	EPA 625/8270	Title 22 Metals EPA 6010/7000 TTLC ☐ STLC ☐	Lead Org./DHS ☐ Lead Total ☐	EDB/DBCD - EPA 504	pH	Bioassay - Title 22 Haz. Waste	Bioassay - Effluent		
SB-A2C3.0	Soil	7-11-95		Ice	1	1¼x6		X					5070386									
SB-A2C6.0					1								5070387									
SB-B2C3.0					1								5070388									
SB-B2C6.0					1								5070389									
SB-A3C3.0					1								5070390									
SB-A3C6.0					1								5070391									
SB-C2C3.0					1								5070392									
SB-C2C6.0					1								5070393									
SB-C3C3.0					1			X					5070394									

CODING (check one)

- Code 1 ☐ Emergency Response
- Code 2 ☐ Site Assessment
- Code 3 ☒ Remediation (Plan Devlpmt.)
- Code 4 ☐ Active Remed. (Install./Start-up)
- Code 5 ☐ Active Remed. (O & M)
- Code 6 ☐ Passive Remed/ Monitoring
- Code 7 ☐ Closure
- Code 8 ☐ Construction
- Code 9 ☐ Litigation/Claims Fines

Relinquished by: Date/Time: 7-11-95 4:03P
Relinquished by: Date/Time: 7-11 5120
Relinquished by: Date/Time:

Relinquished by: Date/Time: 7-11-95 4:03
Relinquished by: Date/Time:
Relinquished in Lab by: Date/Time: 7-11-95 17:20

Turnaround Time: (check one)
Normal X Same day ____
1 day ____ 2 day ____
5 day ____

Sample Integrity:
Intact ____ On Ice ____

Remarks: Please fax copy of C.O.C & Results to Gail Jones (SOMA)
510 244 6601

QUOIA ANALYTICAL
CHAIN OF CUSTODY

☐ 680 Chesa[illegible]e Drive • Redwood City, CA 94063 • (415) 364-9600 FAX (415) [illegible]9233
☐ 819 Striker Ave., Suite 8 • Sacramento, CA 95834 • (916) 921-9600 FAX (916) [illegible]21-0100
☐ 1900 Bates Ave., Suite LM • Concord, CA 94520 • (510) 686-9600 FAX (510) 686-9689

Mobil Oil Consulting Firm: ALISTO ENGINEERING
Address: 1575 Treat Blvd #201
City: Walnut Creek State: CA Zip: 94598
Tel: 510 295 1650 Fax: 510 295 1823

Station No./Site Address: Marsh 909 Ferry St Oakland CA
Project Contact: Brady Nagle
Mobil Oil Engineer: Steve Pao
Sampler(s) (signature):

Sample I.D.	Matrix	Date Sampled	Time	Preservation	Number of Containers	Type of Containers	BTEX - EPA 602/8020	BTEX -TPH EPA M602/8015/8020 (GAS)	TPH EPA Modified 8015 Gas ☐ Diesel ☐	Oil & Grease - EPA 413.2	TPH - EPA 418.1	EPA 601/8010	EPA 624/8240	EPA 625/8270	Title 22 Metals EPA 6010/7000 TTLC ☐ STLC ☐	Lead Org./DHS ☐ Lead Total ☐	EDB/DBCD - EPA 504	pH	Bioassay - Title 22 Haz. Waste	Bioassay - Effluent		
SB-C3 @6.0	soil	7/11/95		Ice	1	1½x6		X					5070395									
SB-A5 @3.0					1								5070396									
SB-A5 @6.0					1								5070397									
SB-B5 @3.0					1								5070398									
SB-B5 @6.0					1								5070399									
SB-C5 @3.0					1								5070400									
SB-C5 @6.0					1								5070401									
SB-D5 @3.0					1			"					5070402									
SB-D5 @6.0	"	"		"	1	"		X					5070403									

CODING (check one)

- Code 1 ☐ Emergency Response
- Code 2 ☐ Site Assessment
- Code 3 ☒ Remediation (Plan Devlpmt.)
- Code 4 ☐ Active Remed. (Install./Start-up)
- Code 5 ☐ Active Remed. (O & M)
- Code 6 ☐ Passive Remed/ Monitoring
- Code 7 ☐ Closure
- Code 8 ☐ Construction
- Code 9 ☐ Litigation/Claims Fines

Relinquished by: Date/Time: 7-11-95 4:06
Relinquished by: Date/Time: 7.11 5:20
Relinquished by: Date/Time:

Relinquished by: Date/Time: 7.11.95 4:06
Relinquished by: Date/Time:
Relinquished in Lab by: Date/Time: 7/11/95 17:25

Turnaround Time: (check one):
Normal ___ Same day ___
1 day ___ 2 day ___
5 day ___

Sample Integrity:
Intact ___ On Ice ___

Remarks: Please fax copy of C.O.C & results to Gil Jones SCAMA

SEQUOIA ANALYTICAL
CHAIN OF CUSTODY

☐ 680 Chesapeake Drive • Redwood City, CA 94063 • (415) 364-9600 FAX (415) [illegible]9233
☐ 819 Striker Ave., Suite 8 • Sacramento, CA 95834 • (916) 921-9600 FAX (916) [illegible]21-0100
☐ 1900 Bates Ave., Suite LM • Concord, CA 94520 • (510) 686-9600 FAX (510) 686-9689

Mobil Oil Consulting Firm: ACLSTO ENGINEERN
Station No./Site Address: Maersk 909 Ferry St Oakland CA
Address: 1575 Treat Blvd #201
Project Contact: Brady Nagle
City: Walnut Creek State: CA Zip: 94598
Mobil Oil Engineer: Steve Pao
Tel: 510 295 1650 Fax.: 510 295 1827
Sampler(s) (signature):

Sample I.D.	Matrix	Date Sampled	Time	Preservation	Number of Containers	Type of Containers	BTEX - EPA 602/8020	BTEX - TPH EPA M602/8015/8020 (GAS)	TPH EPA Modified 8015 Gas ☐ Diesel ☐	Oil & Grease - EPA 413.2	TPH - EPA 418.1	EPA 601/8010	EPA 624/8240	EPA 625/8270	Title 22 Metals EPA 6010/7000 TTLC ☐ STLC ☐	Lead Org./DHS ☐ Lead Total ☐	EDB/DBCD - EPA 504	pH	Bioassay - Title 22 Haz. Waste	Bioassay - Effluent		
SB-B3@7.0	soil	7/11/95		Ice	1	1/2 x6		X					5070404									
SB-B3@6.0	Soil	↓		↓	1	↓		X					5070405									

CODING (check one)

- Code 1 ☐ Emergency Response
- Code 2 ☐ Site Assessment
- Code 3 ☒ Remediation (Plan Devlpmt.)
- Code 4 ☐ Active Remed. (Install./Start-up)
- Code 5 ☐ Active Remed. (O & M)
- Code 6 ☐ Passive Remed/ Monitoring
- Code 7 ☐ Closure
- Code 8 ☐ Construction
- Code 9 ☐ Litigation/Claims Fines

Relinquished by: Date/Time: 7-11-95 4:12
Relinquished by: Date/Time: 7-11 1720
Relinquished by: Date/Time:

Relinquished by: Date/Time: 7-11-95 4:18
Relinquished by: Date/Time:
Relinquished in Lab by: Date/Time: 7-11-95 17:20

Turnaround Time: (check one):
Normal ___ Same day ___
1 day ___ 2 day ___
5 day ___

Sample Integrity:
Intact ___ On Ice ___

Remarks:
Please fax COC + Analytical Results to Gail Jones (SOMA) 510 244-6600

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alisto Engineering Group	Client Project ID:	Former Mobil, Maersk Terminal	Sampled:	Jul 11-13, 1995
1575 Treat Blvd., Ste. 201	Sample Descript:	Soil	Received:	Aug 3, 1995
Walnut Creek, CA 94598	Analysis for:	Percent Moisture	Extracted:	Aug 9, 1995
Attention: Brady Nagle	First Sample #:	508-0200	Analyzed:	Aug 9, 1995
			Reported:	Aug 9, 1995

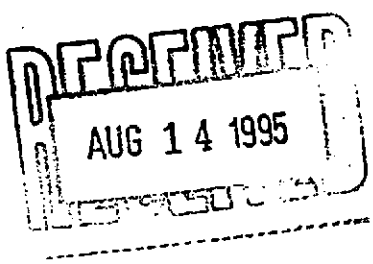
LABORATORY ANALYSIS FOR: Percent Moisture

Sample Number	Sample Description	Detection Limit %	Sample Result %	QC Batch Number	Instrument ID
508-0200	SB-E7@6'	N/A	4.0	IN080995160300A	Manual
508-0201	SB-G7@6'	N/A	12	IN080995160300A	Manual
508-0202	SB-C2@6'	N/A	13	IN080995160300A	Manual
508-0203	SB-E5@6'	N/A	4.0	IN080995160300A	Manual
508-0204	SB-A4@10'	N/A	15	IN080995160300A	Manual

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager



Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

[illegible]sto Engineering Group	Client Project ID:	Former Mobil, Maersk Terminal	Sampled:	Jul 11-13, 1995
[illegible]575 Treat Blvd., Ste. 201	Sample Descript:	Soil	Received:	Aug 3, 1995
Walnut Creek, CA 94598	Analysis for:	Specific Gravity	Extracted:	Aug 9, 1995
Attention: Brady Nagle	First Sample #:	508-0200	Analyzed:	Aug 9, 1995
			Reported:	Aug 9, 1995

LABORATORY ANALYSIS FOR: Specific Gravity

Sample Number	Sample Description	Detection Limit	Sample Result g/cm³	QC Batch Number	Instrument ID
508-0200	SB-E7@6'	N/A	2.0	IN080995213F00A	Manual
508-0201	SB-G7@6'	N/A	1.4	IN080995213F00A	Manual
508-0202	SB-C2@6'	N/A	1.9	IN080995213F00A	Manual
508-0203	SB-E5@6'	N/A	1.2	IN080995213F00A	Manual
508-0204	SB-A4@10'	N/A	1.6	IN080995213F00A	Manual

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

isto Engineering Group	Client Project ID:	Former Mobil, Maersk Terminal	Sampled: Jul 11-13,1995
1575 Treat Blvd., Ste. 201	Sample Descript:	Soil	Received: Aug 3, 1995
Walnut Creek, CA 94598	Analysis for:	TOC	Analyzed: Aug 8, 1995
Attention: Brady Nagle	First Sample #:	508-0200	Reported: Aug 9, 1995

TOTAL ORGANIC CARBON

Sample Number	Sample Description	Detection Limit mg/kg	Sample Result mg/kg
508-0200	SB-E7@6'	50	110
508-0201	SB-G7@6'	50	1,000
508-0202	SB-C2@6'	50	190
508-0203	SB-E5@6'	50	190
508-0204	SB-A4@10'	50	680

SEQUOIA ANALYTICAL, #1267

Kevin Van Slambrook
Project Manager

5080200.ALS <3>

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alisto Engineering Group
1575 Treat Blvd., Ste. 201
Walnut Creek, CA 94598
Attention: Brady Nagle

Client Project ID: Former Mobil, Maersk Terminal
Matrix: Solid
QC Sample Group: 5080200-04
Reported: Aug 9, 1995

QUALITY CONTROL DATA REPORT

ANALYTE	Specific Gravity	Percent Moisture
QC Batch #:	IN080995	IN080995
	213F00A	160300A
Method:	EPA 213F	EPA 160.3
Analyst:	R. Salinas	R. Salinas
Date Analyzed:	8/9/95	8/9/95
Instrument I.D.#:	Manual	Manual
Sample #:	5080204	5080204
Sample Concentration:	1.6 g/cm³	15%
Sample Duplicate Concentration:	1.6 g/cm³	14%
RPD:	0.0	3.4
RPD Control Limits:	0-30	0-30

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alisto Engineering Group	Client Project ID: Former Mobil, Maersk Terminal	Analyst:	R. Wood
1575 Treat Blvd., Ste. 201	Sample Matrix: Solid		J. Wright
Walnut Creek, CA 94598	Units: mg/L (ppm)		
Attention: Brady Nagle	QC Sample Group: 5080200-04	Reported:	Aug 9, 1995

QUALITY CONTROL DATA REPORT

ANALYTE	Total Organic Carbon

Method: EPA 415.1
Date Analyzed: 8/8/95

ACCURACY ASSESSMENT

LCS Spike Conc. Added: 2,500

LCS Spike Result: 2500

LCS Spike % Recovery: 100

Upper Control Limit: 113

Lower Control Limit: 88

PRECISION ASSESSMENT

Sample #: B508116-01

Original: 240

Duplicate: 250

Relative % Difference: RPD values are not reported at sample concentration levels <5 X the Reporting Limit.

Maximum RPD: 32

SEQUOIA ANALYTICAL, #1267

Kevin Van Slambrook
Project Manager

ALISTO ENGINEERING GROUP

5080056

CHAIN OF CUSTODY

Consultant's Name: ALISTO ENGINEERING GROUP — Page 1 of 1

Address: 1575 Treat Blvd #201, Walnut Creek, CA 94598

Project Contact: Brady Negle — Consultant Project #: 10-098-08 — Phone #: 510 295 1650 — Fax #: 510 295 1823

Sampled by (print): Chris Reinheimer — Sampler's Signature:

Shipment Method: — Site Location #: Former Mobil — Site Location: Maersk/STI Berth 23 & 25 Port of Oakland

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

ANALYSIS REQUIRED

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

Sample Description	Collection Date/Time	Matrix Soil/Water	Prsv	# of Cont	Sample #	TPH/GAS/BTEX EPA 8015/8020	TPH/Diesel EPA 8015	Oil & Grease SM 5520	HVOC 8010	Bulk Density	Total Organic Carbon	% Moisture	COMMENTS
SB-E7@6'	7/13/95	Soil		1	5080200					✓	✓	✓	
SB-G7@6'	7/13/95	↓		1	5080201					↓	↓	↓	
SB-C2@6'	7/11/95			1	5080202								
SB-E5@6'	7/12/95			1	5080203								
SB-A4@10'	7/12/95			1	5080204								

Relinquished by/Affiliation	Date	Time	Accepted by/Affiliation	Date	Time
ALISTO	7/14/95	3:00		7/14/95	3:00
	8/3/95	2:41		8/3/95	2:41
	8/3/95	2:00		8/3/95	1500

Additional Comments:

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alisto Engineering Group	Client Project ID:	Maersk Terminal Oakland,909 Ferry St.	Sampled:	Sep 20, 1995
1575 Treat Blvd., Ste. 201	Sample Matrix:	Soil	Received:	Sep 21, 1995
Walnut Creek, CA 94598	Analysis Method:	EPA 5030/8015 Mod./8020	Reported:	Sep 29, 1995
Attention: Brady Nagle	First Sample #:	509-1496		

QC Batch Number: SP092695 SP092695

8020EXA 8020EXA

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit mg/kg	Sample I.D. 509-1496 SB-F5/3.5'	Sample I.D. 509-1497 SB-F5/5.5'
Purgeable Hydrocarbons	1.0	590	2,400
Benzene	0.0050	N.D.	N.D.
Toluene	0.0050	0.86	N.D.
Ethyl Benzene	0.0050	1.7	N.D.
Total Xylenes	0.0050	22	20
Chromatogram Pattern:		Gasoline	Gasoline

Quality Control Data

Report Limit Multiplication Factor:	50	500
Date Analyzed:	9/26/95	9/26/95
Instrument Identification:	HP-4	HP-4
Surrogate Recovery, %: (QC Limits = 70-130%)	80	83

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

RECEIVED
OCT 02 1995

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

5091496.ALS <1>

9509354

EQUOIA ANALYTICAL
CHAIN OF CUSTODY

☐ 680 Ch[illegible]eake Drive • Redwood City, CA 94063 • (415) 364-9600 FAX (4[illegible]64-9233
☐ 819 Striker Ave., Suite 8 • Sacramento, CA 95834 • (916) 921-9600 FAX (916) 921-0100
☐ 1900 Bates Ave., Suite LM • Concord, CA 94520 • (510) 686-9600 FAX (510) 686-9689

Mobil Oil Consulting Firm: AGUSTO ENGINEERING
Station No./Site Address: 509 Ferry St Maersk Terminal Oakland
Address: 1575 Treat Blvd # 201
Project Contact: Brady Nagle
City: Walnut Creek State: CA Zip: 94598
Mobil Oil Engineer: Steve Pao
Tel: 510 295 1650 Fax.: 510 295 1823
Sampler(s) (signature): [signature]

Sample I.D.	Matrix	Date Sampled	Time	Preservation	Number of Containers	Type of Containers	BTEX - EPA 602/8020	BTEX - TPH EPA M602/8015/8020 (GAS)	TPH EPA Modified 8015 Gas ☐ Diesel ☐	Oil & Grease - EPA 413.2	TOC	Bulk Density	EPA 624/8240	EPA 625/8270	Title 22 Metals EPA 6010/7000 TTLC ☐ STLC ☐	Lead Org./DHS ☐ Lead Total ☐	EDB/DBCD - EPA 504	TDS	Bioassay - Title 22 Haz. Waste	Bioassay - Effluent	Moisture Content	HOLD
SB-2 Deep 7.5	SOIL	7/18/95		Ice	1																	X
SB-F5/3.0		7/18/95			1						X	X			5091495						X	
SB-F5/3.5		7/18/95			1			X							5091496							
SB-F5/5.0		7/18/95			1																	X
SB-F5/5.5		7/18/95			1			X							5091497							
SB-2 Deep 16-19	WATER	7/18/95	1:40 PM	NO	2	VOA		X							5091498			AB				
SB-2 Deep 27-28.5			1:40		1L 2 VOA			X							5091499			X				
SB-2 Deep 32.5-34			2:40		1L 2 VOA			X							5091500			X				
SB-2 Deep 37.5-39		7/18/95	3:40		2	VOA		X							5091501							

CODING (check one)
Code 1 ☐ Emergency Response
Code 2 ☒ Site Assessment
Code 3 ☐ Remediation (Plan Devlpmt.)
Code 4 ☐ Active Remed. (Install./Start-up)
Code 5 ☐ Active Remed. (O & M)
Code 6 ☐ Passive Remed/ Monitoring
Code 7 ☐ Closure
Code 8 ☐ Construction
Code 9 ☐ Litigation/Claims Fines

Relinquished by:	Date/Time: 7/21/95 5:55	Relinquished by:	Date/Time:
Relinquished by:	Date/Time:	Relinquished by:	Date/Time:
Relinquished by:	Date/Time:	Relinquished in Lab by: [signature]	Date/Time: 9/14/95 12:23

Remarks: VOA's unpreserved, Liters unpreserved

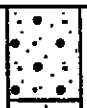
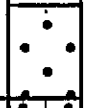
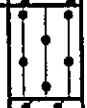
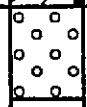
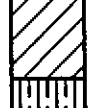
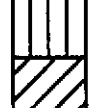
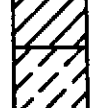
Turnaround Time: (check one):
Normal ☒ Same day ____
1 day ____ 2 day ____
5 day ____

Sample Integrity:
Intact ____ On Ice ____

APPENDIX C

Deep Soil Boring Lithological Logs

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

FORMER MOBIL OIL BULK TERMINAL
909 FERRY STREET
OAKLAND, CALIFORNIA

PROJECT NO. 10-098

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA

10287J---.DWG 8-5-93 MAP 1=1

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA

LOG OF BORING SB-1/PZ-1-1

SEE SITE PLAN

ALISTO PROJECT NO: 10-098-08 DATE DRILLED: 09/25 and 26/95

CLIENT: Mobil Oil Corporation

LOCATION: 909 Ferry Street, Oakland, California

DRILLING METHOD: Hollow-Stem Auger (12")

DRILLING COMPANY: Soils Exploration Srv. CASING ELEVATION: 10.95

LOGGED BY: T.M./C.E.R. APPROVED BY: Al Sevilla

BLOWS/6 IN.	PID VALUES	WELL DIAGRAN	DEPTH feet	SAMPLES	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION
						SP	3" asphalt
6,9,8,18			5				SAND: moderate yellowish brown, damp, medium dense; fine- to medium-grained sand; approximately 10% silt.
							Same: at 7 feet, color change to dark gray.
			10				No sample recovery.
9,12,18,22			15			SM	silty SAND: dark gray, wet, medium dense; fine- to medium-grained sand; approximately 30% fines with silt clasts.
						ML	clayey SILT: dark gray, wet, very stiff; fine- to medium-grained sand; approximately 20% sand.
						SM	sandy SILT: dark gray, wet, very stiff; fine- to medium-grained sand; approximately 25% sand.
							Same: at 17 feet, dusky yellow green, wet, very stiff; approximately 20% fines with sand clasts.
			20			SP	
2,7,12							SAND: mottled red brown and gray green, moist to wet, medium dense.
2,7,12			25				Same
9,11,25			30				Same: medium orange brown, wet, dense; medium-grained.
4,						SC	clayey SAND: medium orange brown, wet, medium dense; medium-grained sand.

WELL DIAGRAN: 4" Sch.40 PVC; Neat Cement; 0.010" Slotted PVC Screen; #2/12 Sand; Bentonite Seal; Bentonite Seal

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA

LOG OF BORING SB-1/PZ-1-1

SEE SITE PLAN

ALISTO PROJECT NO: *10-098-08* DATE DRILLED: *09/25 and 26/95*

CLIENT: *Mobil Oil Corporation*

LOCATION: *909 Ferry Street, Oakland, California*

DRILLING METHOD: *Hollow-Stem Auger (12")*

DRILLING COMPANY: *Solls Exploration Srv.* CASING ELEVATION: *10.95*

LOGGED BY: *T.M./C.E.R.* APPROVED BY: *Al Sevilla*

BLOWS/6 IN.	PID VALUES	WELL DIAGRAM	DEPTH feet	SAMPLES	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION
5,9		Bentonite Seal				SC	clayey SAND: medium orange brown, wet, medium dense; medium-grained sand.
9,11,16			40				Same
						SP	
8,34,50			45				SAND: medium orange brown, saturated, very dense; fine- to medium-grained sand.
4,35, 50 (6")			50				Same: color change to mottled medium tan and red brown.
3,9,50		Slough	55				Same
4,16,40			60				Same
			65				At 63 to 72 feet, encountered heaving sands; could not sample.

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA

LOG OF BORING SB-1/PZ-1-1

SEE SITE PLAN

ALISTO PROJECT NO: *10-098-08* DATE DRILLED: *09/25 and 26/95*

CLIENT: *Mobil Oil Corporation*

LOCATION: *909 Ferry Street, Oakland, California*

DRILLING METHOD: *Hollow-Stem Auger (12")*

DRILLING COMPANY: *Solls Exploration Srv.* CASING ELEVATION: *10.95*

LOGGED BY: *T.M./C.E.R.* APPROVED BY: *Al Sevilla*

BLOWS/6 IN.	PID VALUES	WELL DIAGRAM	DEPTH feet	SAMPLES	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION
						SP	SAND: mottled tan and red, wet, very dense; fine- to medium-grained sand.
4,8,11		Slough	75			CL	CLAY: gray green, moist, very stiff.
							Boring terminated at 75.5 feet.
			80				
			85				
			90				
			95				
			00				

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA

LOG OF BORING SB-2-Deep

SEE SITE PLAN

ALISTO PROJECT NO: *10-098-08* DATE DRILLED: *7/12 and 9/19/95*

CLIENT: *Mobil Oil Corporation*

LOCATION: *Port of Oakland, California*

DRILLING METHOD: *Hollow-Stem Auger (8")*

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

LOGGED BY: *T.M.* APPROVED BY: *Al Sevilla*

BLOWS/6 IN.	PID VALUES	DEPTH feet	SAMPLES	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION
					SP	Sheen at 4 feet below grade on soil cuttings.
8,17,18	822	5				SAND: dark garylsh green, damp, dense; fine- to medium-grained sand; minor shell fragments.
		10				No sample recovery.
5,4,6	NM					SAND: dark graylsh green, wet, medium dense; fine- to medium-grained.
						SILT stringer.
		15			ML	SAND: fine- to medium-grained.
					SP	
					CL	sandy CLAY: approximately 15% fine- to medium-grained sand.
					SP	SAND: fine- to medium-grained. Silt in shoe from 18 to 18.1 feet.
					CL	
		20				CLAY: gray black, damp to moist; some sand; shell fragments to 5%.
					SP	SAND: greenish gray mottled gray black, saturated, medium dense; fine- to medium-grained sand; well graded.
4,12,18	NM	25				
		30				Same: at 30 feet, medium yellowish brown, moist, dense; fine- to medium-grained sand; well graded.
15,18,32	NM					
					SC	clayey SAND: medium yellowish brown, damp, medium dense; Fe oxide stain to 2%; organics to 2%.
4,						

WELL DIAGRAM: *Steel Conductor Casing*; *Neat Cement*

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA

LOG OF BORING SB-2-Deep

SEE SITE PLAN

ALISTO PROJECT NO: *10-098-08* DATE DRILLED: *7/12 and 9/19/95*

CLIENT: *Mobil Oil Corporation*

LOCATION: *Port of Oakland, California*

DRILLING METHOD: *Hollow-Stem Auger (8")*

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

LOGGED BY: *T.M.* APPROVED BY: *Al Sevilla*

BLOWS/6 IN.	PID VALUES	WELL DIAGRAM	DEPTH feet	SAMPLES	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION
8,12	NM	Neat Cement				SC	clayey SAND: medium yellowish brown, damp, medium dense; Fe oxide stain to 2%; organics to 2%.
						SP	
18,34,50	NM		40				SAND: red brown, moist to wet, very dense; fine- to medium-grained sand.
8,12,14	NM		45				Same: olive gray, wet, medium dense; medium-grained sand.
39,50	NM		50				Same
						SM	silty SAND: light olive gray; approximately 30% fines.
28,50	NM		55			SP	SAND: olive gray, wet, very dense; medium-grained sand.
38,82	NM		60				Same
38,50 (4")	NM		65				Same
8,							Same: at 69.5 feet, color change to dark grayish green, very dense; minor fines.

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA

LOG OF BORING SB-2-Deep

SEE SITE PLAN

ALISTO PROJECT NO: *10-098-08* DATE DRILLED: *7/12 and 9/19/95*

CLIENT: *Mobil Oil Corporation*

LOCATION: *Port of Oakland, California*

DRILLING METHOD: *Hollow-Stem Auger (8")*

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

LOGGED BY: *T.M.* APPROVED BY: *Al Sevilla*

BLOWS/6 IN.	PID VALUES	WELL DIAGRAN	DEPTH feet	SAMPLES	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION
38,45	NM	Neat Cement	75			SP	SAND: dark grayish green, wet, very dense; medium-grained sand; minor fines.
						CL	silty CLAY: dark greenish gray, very stiff.
8,7,14	NM						Boring terminated at 77 feet.
			80				
			85				
			90				
			95				
			00				

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA

LOG OF BORING SB-3-Deep

SEE SITE PLAN

ALISTO PROJECT NO: *10-098-08* DATE DRILLED: *07/12/95*

CLIENT: *Mobil Oil Corporation*

LOCATION: *Port of Oakland, California*

DRILLING METHOD: *Hollow-Stem Auger (8")*

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

LOGGED BY: *T.M.* *APPROVED BY: Al Sevilla*

BLOWS/6 IN.	PID VALUES	WELL DIAGRAM	DEPTH feet	SAMPLES	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION
7,7,13	NM	Neat Cement	5			SP	gravelly SAND: brownish gray, damp, medium dense; medium- to coarse-grained sand; minor subrounded gravel to 15 mm.
4,8,7	NM		10			ML	sandy SILT: dark gray, moist, stiff; approximately 10% fine-grained sand; minor clay present.
						SP	SAND: dark gray, wet, medium dense; fine- to medium-grained sand.
4,4,5	NM		15			CL	silty CLAY: medium dark gray, moist, stiff; minor shell fragments.
2,3,3	NM		20			SP	SAND: grayish olive green, wet, loose; fine- to coarse-grained sand; minor shell fragments; minor fines.
11,22,24	NM		25				Same: dark yellowish brown, wet, dense; minor- to coarse-grained sand.
9,26,40	NM		30				Same: moderate yellowish brown, wet, very dense; minor fines.
						ML	sandy SILT: pale yellowish brown, wet, very stiff; approximately 20% fine-grained sand; minor clay.

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA

LOG OF BORING SB-3-Deep

SEE SITE PLAN

ALISTO PROJECT NO: *10-098-08* DATE DRILLED: *07/12/95*

CLIENT: *Mobil Oil Corporation*

LOCATION: *Port of Oakland, California*

DRILLING METHOD: *Hollow-Stem Auger (8")*

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

LOGGED BY: *T.M.* APPROVED BY: *Al Sevilla*

BLOWS/6 IN.	PID VALUES	WELL DIAGRAM	DEPTH feet	SAMPLES	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION
6,10,19	NM	Neat Cement				ML	sandy SILT: pale yellowish brown, wet, very stiff; approximately 20% fine-grained sand; minor clay.
						SP	
2,11,25	NM		40				SAND: dark yellowish brown, wet, dense; medium- to coarse-grained sand; no fines.
17,30,43	NM		45				Same: at 45 feet, very dense.
7,15,13	NM		50				
						SM	silty SAND: pale yellowish brown, wet, very stiff; fine- to medium-grained sand; abundant fines.
						SP	
19,50 (5")	NM		55				SAND: light olive gray, wet, very dense; fine- to medium-grained sand.
2,15, 50 (4")	NM		60				Same
							Heaving sands.
			65				No sample recovery.

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA

LOG OF BORING SB-3-Deep

SEE SITE PLAN

ALISTO PROJECT NO: *10-098-08* DATE DRILLED: *07/12/95*

CLIENT: *Mobil Oil Corporation*

LOCATION: *Port of Oakland, California*

DRILLING METHOD: *Hollow-Stem Auger (8")*

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

LOGGED BY: *T.M.* *APPROVED BY: Al Sevilla*

BLOWS/6 IN.	PID VALUES	WELL DIAGRAN	DEPTH feet	SAMPLES	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION
111 (12")	NM	Neat Cement				SP	Slough; no sample recovery.
						CL	silty CLAY: dark greenish gray to medium bluish gray, moist, hard; approximately 30% fine- to medium-grained sand.
8,17,18	NM		75				No sample recovery; clay in sample shoe.
							Boring terminated at 76.5 feet.
			80				
			85				
			90				
			95				
			00				

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
⊗ New Well Development

Date: 12-6-95 Project No. 10-058-8-17
Day: WEDS Station No. Former Mobil Bulk
Weather: Cloudy Address 909 Ferry St Maersk Terminal Oakland
SAMPLER: C Kerrigan

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Thickness	Gal.	Time	Temp °F	pH	E.C.	D.O.
MW-34	9.82	4"	OK	0	0	15	1:40	66.4	7.68	3.20	
						35	2:08	65.1	7.80	3.21	
						40	2:27	65.4	7.69	3.08	
						55	2:36	65.1	7.71	3.41	

Total Depth - Water Level= x Well Vol. Factor= x#vol. to Purge= PurgeVol.
18.80 − 9.82 = 8.98 × 0.65 = 5.83 × 10 = 58
Purge Method: ⊗Surface Pump ODisp.Tube OWinch ODisp. Baller(s)___ OSys Port
Comments: Iridescence on purge water

○ EPA 601
○ TPH-G/BTEX
○ TPH Diesel
○ TOG 5520
Time Sampled: NOT SAMPLED

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Thickness	Gal.	Time	Temp °F	pH	E.C.	D.O.
MW-33	10.28	4"	OK	0	0	10	2:58	68.1	8.01	0.41	
						20	3:32	66.9	7.74	1.71	
						35	4:02	66.7	7.60	1.84	
						55	4:22	66.7	7.79	1.88	

Total Depth - Water Level= x Well Vol. Factor= x#vol. to Purge= PurgeVol.
19.0 − 10.28 = 8.72 × 0.65 = 5.66 × 10 = 56
Purge Method: ⊗Surface Pump ODisp.Tube OWinch ODisp. Baller(s)___ OSys Port
Comments: Iridescence on purge water, slow producer

○ EPA 601
○ TPH-G/BTEX
○ TPH Diesel
○ TOG 5520
Time Sampled: NOT SAMPLED

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. Baller(s)___ OSys Port
Comments:

○ EPA 601
○ TPH-G/BTEX
○ TPH Diesel
○ TOG 5520
Time Sampled:

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. Baller(s)___ OSys Port
Comments:

○ EPA 601
○ TPH-G/BTEX
○ TPH Diesel
○ TOG 5520
Time Sampled:

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. Baller(s)___ OSys Port
Comments:

○ EPA 601
○ TPH-G/BTEX
○ TPH Diesel
○ TOG 5520
Time Sampled:

APPENDIX D

Analytical Results of Discrete Groundwater
Samples From Deep Soil Borings

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alisto Engineering Group	Client Project ID:	Maersk Terminal Oakland,909 Ferry St.	Sampled: Sep18-19,1995
1575 Treat Blvd., Ste. 201	Sample Matrix:	Water	Received: Sep 21, 1995
Walnut Creek, CA 94598	Analysis Method:	EPA 5030/8015 Mod./8020	Reported: Sep 29, 1995
Attention: Brady Nagle	First Sample #:	509-1498	

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit µg/L	Sample I.D. 509-1498 SB-2 Deep 16-19	Sample I.D. 509-1499 SB-2 Deep 27-28.5	Sample I.D. 509-1500 SB-2 Deep 32.5-34	Sample I.D. 509-1501 SB-2 Deep 37.5-39.0	Sample I.D. 509-1502 SB-2 Deep 41.5-43	Sample I.D. 509-1503 SB-2 Deep 46.5-48
QC Batch Number:		GC092695 802009A	GC092795 802004A	GC092695 802009A	GC092795 802004A	GC092795 802004A	GC092695 802009A
Purgeable Hydrocarbons	50	70,000	33,000	50,000	13,000	6,200	12,000
Benzene	0.50	8,500	3,800	4,500	1,300	480	1,200
Toluene	0.50	8,000	3,400	4,200	1,100	420	1,100
Ethyl Benzene	0.50	1,500	840	1,100	330	130	340
Total Xylenes	0.50	8,700	3,400	6,000	1,900	740	1,900
Chromatogram Pattern:		Gasoline	Gasoline	Gasoline	Gasoline	Gasoline	Gasoline

Quality Control Data

Report Limit Multiplication Factor:	500	200	1,000	100	20	200
Date Analyzed:	9/26/95	9/27/95	9/26/95	9/27/95	9/27/95	9/26/95
Instrument Identification:	HP-9	HP-4	HP-9	HP-4	HP-4	HP-9
Surrogate Recovery, %: (QC Limits = 70-130%)	85	93	82	101	102	94

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alisto Engineering Group	Client Project ID:	Maersk Terminal Oakland,909 Ferry St.	Sampled: Sep18-19,1995
1575 Treat Blvd., Ste. 201	Sample Matrix:	Water	Received: Sep 21, 1995
Walnut Creek, CA 94598	Analysis Method:	EPA 5030/8015 Mod./8020	Reported: Sep 29, 1995
Attention: Brady Nagle	First Sample #:	509-1504	

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit µg/L	Sample I.D. 509-1504 SB-2 Deep 51.5-53	Sample I.D. 509-1505 SB-2 Deep 56-57.5	Sample I.D. 509-1506 SB-2 Deep 66.5-68
QC Batch Number:		GC092795 802004A	GC092695 802005A	GC092695 802005A
Purgeable Hydrocarbons	50	4,900	5,500	650
Benzene	0.50	400	460	40
Toluene	0.50	350	400	40
Ethyl Benzene	0.50	99	140	15
Total Xylenes	0.50	610	600	62
Chromatogram Pattern:		Gasoline	Gasoline	Gasoline

Quality Control Data

Report Limit Multiplication Factor:	20	40	4.0
Date Analyzed:	9/27/95	9/26/95	9/26/95
Instrument Identification:	HP-4	HP-5	HP-5
Surrogate Recovery, %: (QC Limits = 70-130%)	99	89	84

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Kisto Engineering Group	Client Project ID:	Maersk Terminal Oakland,909 Ferry St.	Sampled:	Sep 18-19,1995
1575 Treat Blvd., Ste. 201	Sample Descript:	Water	Received:	Sep 21, 1995
Walnut Creek, CA 94598	Analysis for:	Total Dissolved Solids	Extracted:	Sep 26, 1995
Attention: Brady Nagle	First Sample #:	509-1499	Analyzed:	Sep 26, 1995
			Reported:	Sep 29, 1995

LABORATORY ANALYSIS FOR: Total Dissolved Solids

Sample Number	Sample Description	Detection Limit mg/L	Sample Result mg/L	QC Batch Number	Instrument ID
509-1499	SB-2 Deep 27-28.5	1.0	3,800	IN092695160100B	Manual
509-1500	SB-2 Deep 32.5-34	1.0	3,900	IN092695160100B	Manual
509-1502	SB-2 Deep 41.5-43	1.0	5,700	IN092695160100B	Manual
509-1503	SB-2 Deep 46.5-48	1.0	5,200	IN092695160100B	Manual
509-1504	SB-2 Deep 51.5-53	1.0	3,400	IN092695160100B	Manual
509-1505	SB-2 Deep 56-57.5	1.0	4,800	IN092695160100B	Manual
509-1506	SB-2 Deep 66.5-68	1.0	720	IN092695160100B	Manual

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Kleinfelder Engineering Group
1575 Treat Blvd., Ste. 201
Walnut Creek, CA 94598
Attention: Brady Nagle

Client Project ID: Maersk Terminal Oakland,909 Ferry St.
Matrix: Liquid

QC Sample Group: 5091491-506

Reported: Sep 29, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC092695	GC092695	GC092695	GC092695
	802005A	802005A	802005A	802005A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	K. Nill	K. Nill	K. Nill	K. Nill
MS/MSD #:	5091486	5091486	5091486	5091486
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	9/26/95	9/26/95	9/26/95	9/26/95
Analyzed Date:	9/26/95	9/26/95	9/26/95	9/26/95
Instrument I.D.#:	HP-5	HP-5	HP-5	HP-5
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
Result:	19	18	18	57
MS % Recovery:	95	90	90	95
Dup. Result:	18	18	18	55
MSD % Recov.:	90	90	90	92
RPD:	5.4	0.0	0.0	3.6
RPD Limit:	0-20	0-20	0-20	0-20

LCS #:	3LCS092695	3LCS092695	3LCS092695	3LCS092695
Prepared Date:	9/26/95	9/26/95	9/26/95	9/26/95
Analyzed Date:	9/26/95	9/26/95	9/26/95	9/26/95
Instrument I.D.#:	HP-5	HP-5	HP-5	HP-5
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
LCS Result:	21	20	20	62
LCS % Recov.:	104	102	101	103

MS/MSD LCS Control Limits	71-133	72-128	72-130	71-120

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS=Matrix Spike, MSD=MS Duplicate, RPD=Relative % Difference

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alisto Engineering Group
1575 Treat Blvd., Ste. 201
Walnut Creek, CA 94598
Attention: Brady Nagle

Client Project ID: Maersk Terminal Oakland,909 Ferry St.
Matrix: Liquid

QC Sample Group: 5091491-506

Reported: Sep 29, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC092695 802009A	GC092695 802009A	GC092695 802009A	GC092695 802009A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	K. Nill	K. Nill	K. Nill	K. Nill
MS/MSD #:	5091488	5091488	5091488	5091488
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	9/26/95	9/26/95	9/26/95	9/26/95
Analyzed Date:	9/26/95	9/26/95	9/26/95	9/26/95
Instrument I.D.#:	HP-9	HP-9	HP-9	HP-9
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
Result:	21	22	23	74
MS % Recovery:	105	110	115	123
Dup. Result:	21	22	22	71
MSD % Recov.:	105	110	110	118
RPD:	0.0	0.0	4.4	1.7
RPD Limit:	0-20	0-20	0-20	0-20

LCS #:	4LCS092695	4LCS092695	4LCS092695	4LCS092695
Prepared Date:	9/26/95	9/26/95	9/26/95	9/26/95
Analyzed Date:	9/26/95	9/26/95	9/26/95	9/26/95
Instrument I.D.#:	HP-9	HP-9	HP-9	HP-9
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
LCS Result:	19	19	19	61
LCS % Recov.:	93	96	94	102

MS/MSD LCS Control Limits	71-133	72-128	72-130	71-120

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alisto Engineering Group
1575 Treat Blvd., Ste. 201
Walnut Creek, CA 94598
Attention: Brady Nagle

Client Project ID: Maersk Terminal Oakland,909 Ferry St.
Matrix: Liquid

QC Sample Group: 5091491-506

Reported: Sep 29, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC092795	GC092795	GC092795	GC092795
	802004A	802004A	802004A	802004A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	K. Nill	K. Nill	K. Nill	K. Nill
MS/MSD #:	5090829	5090829	5090829	5090829
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	9/27/95	9/27/95	9/27/95	9/27/95
Analyzed Date:	9/27/95	9/27/95	9/27/95	9/27/95
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
Result:	16	17	18	53
MS % Recovery:	80	85	90	88
Dup. Result:	19	20	20	59
MSD % Recov.:	95	100	100	98
RPD:	17	16	11	11
RPD Limit:	0-20	0-20	0-20	0-20

LCS #:	2LCS092795	2LCS092795	2LCS092795	2LCS092795
Prepared Date:	9/27/95	9/27/95	9/27/95	9/27/95
Analyzed Date:	9/27/95	9/27/95	9/27/95	9/27/95
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
LCS Result:	20	21	21	64
LCS % Recov.:	100	105	107	107

MS/MSD LCS Control Limits	71-133	72-128	72-130	71-120

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS=Matrix Spike, MSD=MS Duplicate, RPD=Relative % Difference

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alisto Engineering Group
1575 Treat Blvd., Ste. 201
Walnut Creek, CA 94598
Attention: Brady Nagle

Client Project ID: Maersk Terminal Oakland,909 Ferry St.
Matrix: Liquid
QC Sample Group: 5091491-506
Reported: Sep 29, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Total Dissolved Solids
QC Batch#:	IN092695 160100B
Analy. Method:	EPA 160.1
Prep. Method:	EPA 160.1
Analyst:	K.Anderson
MS/MSD #:	5091663
Sample Conc.:	1100 mg/L
Prepared Date:	9/26/95
Analyzed Date:	9/26/95
Instrument I.D.#:	Manual
Conc. Spiked:	1000 mg/L
Result:	2100
MS % Recovery:	100
Dup. Result:	2100
MSD % Recov.:	100
RPD:	0.0
RPD Limit:	0-20

LCS #:	160.1RS09D-3
Prepared Date:	9/26/95
Analyzed Date:	9/26/95
Instrument I.D.#:	Manual
Conc. Spiked:	500 mg/L
LCS Result:	510
LCS % Recov.:	102

MS/MSD LCS Control Limits	70-130

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alisto Engineering Group	Client Project ID:	Mobil, Port of Oakland	Sampled:	Jul 12, 1995
1575 Treat Blvd., Ste. 201	Sample Matrix:	Water	Received:	Jul 14, 1995
Walnut Creek, CA 94598	Analysis Method:	EPA 5030/8015 Mod./8020	Reported:	Jul 21, 1995
Attention: Brady Nagle	First Sample #:	507-0611		

QC Batch Number: GC071595
802002A

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit µg/L	Sample I.D. 507-0611 SB-2-Deep 14.5 - 16.5
Purgeable Hydrocarbons	50	46,000
Benzene	0.50	14,000
Toluene	0.50	1,800
Ethyl Benzene	0.50	500
Total Xylenes	0.50	2,300
Chromatogram Pattern:		Gasoline

Quality Control Data

Report Limit Multiplication Factor:	400
Date Analyzed:	7/15/95
Instrument Identification:	HP-2
Surrogate Recovery, %: (QC Limits = 70-130%)	106

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

RECEIVED
JUL 24 1995

5070611.ALS <1>

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

sto Engineering Group	Client Project ID:	Mobil, Port of Oakland	Sampled:	Jul 12, 1995
1575 Treat Blvd., Ste. 201	Sample Descript:	Water	Received:	Jul 14, 1995
Walnut Creek, CA 94598	Analysis for:	Total Dissolved Solids		
Attention: Brady Nagle	First Sample #:	507-0611	Analyzed:	Jul 20, 1995
			Reported:	Jul 21, 1995

QC Batch Number: IN072095160100A

Instrument ID: Manual

LABORATORY ANALYSIS FOR: Total Dissolved Solids

Sample Number	Sample Description	Detection Limit mg/L	Sample Result mg/L
507-0611	SB-2-Deep 14.5-16.5	1.0	2000

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alisto Engineering Group
1575 Treat Blvd., Ste. 201
Walnut Creek, CA 94598
Attention: Brady Nagle

Client Project ID: Mobil, Port of Oakland
Matrix: Liquid

QC Sample Group: 5070611

Reported: Jul 21, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Total Dissolved Solids
QC Batch#:	GC071595	GC071595	GC071595	GC071595	IN072095
	802002A	802002A	802002A	802002A	160100A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 160.1
Prep. Method:	-	-	-	-	EPA 160.1
Analyst:	J. Fontecha	J. Fontecha	J. Fontecha	J. Fontecha	R. Salinas
MS/MSD #:	5070639	5070639	5070639	5070639	5070611
Sample Conc.:	N.D.	1.3 µg/L	N.D.	2.9 µg/L	2000 mg/L
Prepared Date:	7/15/95	7/15/95	7/15/95	7/15/95	7/20/95
Analyzed Date:	7/15/95	7/15/95	7/15/95	7/15/95	7/20/95
Instrument I.D.#:	HP-2	HP-2	HP-2	HP-2	Manual
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L	1000 mg/L
Result:	23	23	25	73	3200
MS % Recovery:	115	115	125	122	120
Dup. Result:	24	24	26	76	3100
MSD % Recov.:	120	120	130	127	110
RPD:	4.3	4.3	3.9	4.0	8.7
RPD Limit:	0-20	0-20	0-20	0-20	0-20

LCS #:	1LCS071595	1LCS071595	1LCS071595	1LCS071595	160.1RS07D-1
Prepared Date:	7/15/95	7/15/95	7/15/95	7/15/95	7/20/95
Analyzed Date:	7/15/95	7/15/95	7/15/95	7/15/95	7/20/95
Instrument I.D.#:	HP-2	HP-2	HP-2	HP-2	Manual
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L	500 mg/L
LCS Result:	20	21	21	64	460
LCS % Recov.:	99	103	107	107	92

MS/MSD LCS Control Limits	71-133	72-128	72-130	71-120	70-130

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS = Matrix Spike, MSD = MS Duplicate, IS = Instrument Spike, ISD = IS Duplicate, RPD = Relative % Difference

SEQUOIA ANALYTICAL
CHAIN OF CUSTODY

☐ 680 Chesapeake Drive • Redwood City, CA 94063 • (415) 364-9600 FAX (415) 364-9233
☐ 819 Striker Ave., Suite 8 • Sacramento, CA 95834 • (916) 921-9600 FAX (916) 921-0100
☐ 404 N. Wiget Lane • Walnut Creek, CA 94598 • (510) 988-9600 FAX (510) 988-9673

Company Name: Alisto Engineering Group	Project Name: Port of Oakland
Address: 1575 Treat Blvd. (200)	Billing Address (if different): Mobil Oil
City: Walnut Creek State: CA Zip Code: 94598	(Steve Pao)
Telephone: (510) 295-1650 FAX #:	P.O. #:
Report To: Sampler:	QC Data: ☐ Level D (Standard) ☐ Level C ☐ Level B ☐ Level A

Turnaround Time: ☐ 10 Working Days ☐ 3 Working Days ☐ 2 - 8 Hours ☐ 7 Working Days ☐ 2 Working Days ☐ 5 Working Days ☐ 24 Hours

☐ Drinking Water ☐ Waste Water ☐ Other

Analyses Requested: TPH G/BTEX (8015/8020) | TPS

	Client Sample I.D.	Date/Time Sampled	Matrix Desc.	# of Cont.	Cont. Type	Sequoia's Sample #	TPH G/BTEX	TPS							Comments
1.	SB-2-Deep-14.5-16.5	7/12/95 16:50	Water	3 / 1	VOA* / L	5070611	✓	✓							*Unpreserved / Short holding time
2.															
3.															
4.															
5.															
6.															
7.															
8.															
9.															
10.															

Relinquished By: Ted Morse	Date: 7-14	Time: 8:30	Received By: Sey Lee	Date: 7-14	Time: 8:30
Relinquished By: Sey Lee	Date: 7-14	Time: 1105	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By Lab: Olivia Ward	Date: 7-14-95	Time: 11:05

Were Samples Received in Good Condition? ☐ Yes ☐ No Samples on Ice? ☐ Yes ☐ No Method of Shipment _____

Pink - Client
Yellow - Sequoia
White - Sequoia

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alisto Engineering Group	Client Project ID:	Maersk, 909 Ferry St.,Oakland CA	Sampled: Sep 25-26,1995
1575 Treat Blvd., Ste. 201	Sample Matrix:	Water	Received: Sep 27, 1995
Walnut Creek, CA 94598	Analysis Method:	EPA 5030/8015 Mod./8020	Reported: Oct 12, 1995
Attention: Brady Nagle	First Sample #:	509-2043	

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit µg/L	Sample I.D. 509-2043 SB-1 Deep 27.5-29.0	Sample I.D. 509-2044 SB-1 Deep 32.5-34.0	Sample I.D. 509-2045 SB-1 Deep 37.5-39.0	Sample I.D. 509-2046 SB-1 Deep 42.5-44	Sample I.D. 509-2047 SB-1 Deep 47.5-49	Sample I.D. 509-2048 SB-1 Deep 52.5-54
Purgeable Hydrocarbons	50	460	480	320	400	270	380
Benzene	0.50	N.D.	5.2	3.5	4.5	2.5	7.8
Toluene	0.50	1.3	1.4	N.D.	1.2	1.1	1.4
Ethyl Benzene	0.50	3.9	2.2	1.6	3.5	1.8	1.9
Total Xylenes	0.50	5.1	5.4	2.2	5.2	2.0	3.0
Chromatogram Pattern:		Gasoline	Gasoline	Gasoline	Gasoline	Gasoline	Gasoline

Quality Control Data

Report Limit Multiplication Factor:	1.0	2.0	2.0	2.0	2.0	2.0
Date Analyzed:	10/3/95	10/2/95	10/2/95	10/2/95	10/2/95	10/2/95
Instrument Identification:	HP-3	HP-2	HP-2	HP-2	HP-2	HP-2
Surrogate Recovery, %: (QC Limits = 70-130%)	119	100	83	95	95	100

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

RECEIVED
OCT 17 1995

SEQUOIA ANALYTICAL, #1894

Kevin Van Slambrook
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alisto Engineering Group	Client Project ID:	Maersk, 909 Ferry St.,Oakland CA	Sampled: Sep 26, 1995
1575 Treat Blvd., Ste. 201	Sample Matrix:	Water	Received: Sep 27, 1995
Walnut Creek, CA 94598	Analysis Method:	EPA 5030/8015 Mod./8020	Reported: Oct 12, 1995
Attention: Brady Nagle	First Sample #:	509-2049	

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit µg/L	Sample I.D. 509-2049 SB-1 Deep 56-57.5	Sample I.D. 509-2050 SB-1 Deep 61.5-63	Sample I.D. 509-2051 SB-1A Deep 12.5-14
Purgeable Hydrocarbons	50	1,100	3,100	1,100
Benzene	0.50	8.2	5.9	3.3
Toluene	0.50	N.D.	9.1	5.6
Ethyl Benzene	0.50	4.9	19	8.7
Total Xylenes	0.50	14	86	16
Chromatogram Pattern:		Gasoline	Gasoline	Gasoline

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	1.0
Date Analyzed:	10/2/95	10/2/95	10/2/95
Instrument Identification:	HP-2	HP-2	HP-2
Surrogate Recovery, %: (QC Limits = 70-130%)	111	105	117

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL, #1894

Kevin Van Slambrook
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

[redacted]to Engineering Group	Client Project ID:	Maersk, 909 Ferry St.,Oakland CA	Sampled: Sep 25-26,1995
[redacted]75 Treat Blvd., Ste. 201	Sample Descript:	Water	Received: Sep 27, 1995
Walnut Creek, CA 94598	Analysis for:	Total Dissolved Solids	Extracted: Oct 3, 1995
Attention: Brady Nagle	First Sample #:	509-2043	Analyzed: Oct 3, 1995
			Reported: Oct 12, 1995

LABORATORY ANALYSIS FOR: Total Dissolved Solids

Sample Number	Sample Description	Detection Limit mg/L	Sample Result mg/L	QC Batch Number	Instrument ID
509-2043	SB-1 Deep 27.5-29.0	1.0	13,000	IN100395160100A	Manual
509-2044	SB-1 Deep 32.5-34.0	1.0	16,000	IN100395160100A	Manual
509-2045	SB-1 Deep 37.5-39.0	1.0	15,000	IN100395160100A	Manual
509-2046	SB-1 Deep 42.5-44	1.0	19,000	IN100395160100A	Manual
509-2047	SB-1 Deep 47.5-49	1.0	20,000	IN100395160100A	Manual
509-2048	SB-1 Deep 52.5-54	1.0	15,000	IN100395160100A	Manual
509-2049	SB-1 Deep 56-57.5	1.0	15,000	IN100395160100A	Manual
509-2050	SB-1 Deep 61.5-63	1.0	18,000	IN100395160100A	Manual
509-2051	SB-1A Deep 12.5-14	1.0	3,000	IN100395160100A	Manual

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Kleinfelder Engineering Group
1575 Treat Blvd., Ste. 201
Walnut Creek, CA 94598
Attention: Brady Nagle

Client Project ID: Maersk, 909 Ferry St.,Oakland CA
Matrix: Liquid

QC Sample Group: 5092043-55

Reported: Oct 12, 1995

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	Z.T.	Z.T.	Z.T.	Z.T.
MS/MSD Batch#:	5090964	5090964	5090964	5090964
Date Prepared:	10/2/95	10/2/95	10/2/95	10/2/95
Date Analyzed:	10/2/95	10/2/95	10/2/95	10/2/95
Instrument I.D.#:	HP-2	HP-2	HP-2	HP-2
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Matrix Spike % Recovery:	133	108	112	125
Matrix Spike Duplicate % Recovery:	115	99	96	107
Relative % Difference:	14	8.7	13	15
LCS Batch#:	LCS100295	LCS100295	LCS100295	LCS100295
Date Prepared:	10/2/95	10/2/95	10/2/95	10/2/95
Date Analyzed:	10/2/95	10/2/95	10/2/95	10/2/95
Instrument I.D.#:	HP-2	HP-2	HP-2	HP-2
LCS % Recovery:	109	104	107	120
% Recovery Control Limits:	80-120	80-120	80-120	80-120

SEQUOIA ANALYTICAL, #1894

Kevin Van Slambrook
Project Manager

Please Note:
The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alisto Engineering Group
1575 Treat Blvd., Ste. 201
Walnut Creek, CA 94598
Attention: Brady Nagle

Client Project ID: Maersk, 909 Ferry St.,Oakland CA
Matrix: Liquid

QC Sample Group: 5092043-55

Reported: Oct 12, 1995

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	Z.T.	Z.T.	Z.T.	Z.T.
MS/MSD Batch#:	5100001	5100001	5100001	5100001
Date Prepared:	10/3/95	10/3/95	10/3/95	10/3/95
Date Analyzed:	10/3/95	10/3/95	10/3/95	10/3/95
Instrument I.D.#:	HP-3	HP-3	HP-3	HP-3
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Matrix Spike % Recovery:	118	117	119	137
Matrix Spike Duplicate % Recovery:	92	92	90	97
Relative % Difference:	25	24	28	34
LCS Batch#:	LCS100395	LCS100395	LCS100395	LCS100395
Date Prepared:	10/3/95	10/3/95	10/3/95	10/3/95
Date Analyzed:	10/3/95	10/3/95	10/3/95	10/3/95
Instrument I.D.#:	HP-3	HP-3	HP-3	HP-3
LCS % Recovery:	100	90	99	105
% Recovery Control Limits:	80-120	80-120	80-120	80-120

SEQUOIA ANALYTICAL, #1894

Kevin Van Slambrook
Project Manager

Please Note:
The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alisto Engineering Group
1575 Treat Blvd., Ste. 201
Walnut Creek, CA 94598
Attention: Brady Nagle

Client Project ID: Maersk, 909 Ferry St.,Oakland CA
Matrix: Liquid
QC Sample Group: 5092043-55
Reported: Oct 12, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Total Dissolved Solids
QC Batch#:	IN100395 160100A
Analy. Method:	EPA 160.1
Prep. Method:	EPA 160.1
Analyst:	R. Salinas
MS/MSD #:	5091681
Sample Conc.:	8.0 mg/L
Prepared Date:	10/3/95
Analyzed Date:	10/3/95
Instrument I.D.#:	Manual
Conc. Spiked:	1000 mg/L
Result:	1000
MS % Recovery:	99
Dup. Result:	960
MSD % Recov.:	95
RPD:	4.1
RPD Limit:	0-20

LCS #:	160.1RS10-D
Prepared Date:	10/3/95
Analyzed Date:	10/3/95
Instrument I.D.#:	Manual
Conc. Spiked:	500 mg/L
LCS Result:	510
LCS % Recov.:	102

MS/MSD LCS Control Limits	70-130

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alisto Engineering Group
1575 Treat Blvd., Ste. 201
Walnut Creek, CA 94598
Attention: Brady Nagle

Client Project ID: Maersk, 909 Ferry St.,Oakland CA
Matrix: Liquid

QC Sample Group: 5092043-55

Reported: Oct 12, 1995

QUALITY CONTROL DATA REPORT

ANALYTE	Bulk Density
QC Batch #:	IN10049521300A
Method:	SM 213F
Analyst:	K. Anderson

Date Analyzed:	10/4/95
Instrument I.D.#:	Manual
Sample #:	5092055
Sample Concentration:	2.00
Sample Duplicate Concentration:	1.91
RPD:	4.6
RPD Control Limits:	0-30

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

5092043.ALS <9>

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alisto Engineering Group	Client Project ID:	Mobil, Port of Oakland	Sampled: Jul 10-11,1995
1575 Treat Blvd., Ste. 201	Sample Matrix:	Water	Received: Jul 11, 1995
Walnut Creek, CA 94598	Analysis Method:	EPA 5030/8015 Mod./8020	Reported: Jul 18, 1995
Attention: Brady Nagle	First Sample #:	507-0406	

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit µg/L	Sample I.D. 507-0406 SB-3-DEEP 7-10	Sample I.D. 507-0407 SB-3-DEEP 12-15	Sample I.D. 507-0408 SB-3-DEEP 22-25	Sample I.D. 506-0411 SB-3-DEEP 42-45	Sample I.D. 506-0412 SB-3-DEEP 52-55
QC Batch Number:		GC071295 802009B	GC071295 802009B	GC071295 802009B	GC071295 802009B	GC071295 802009B
Purgeable Hydrocarbons	50	N.D.	N.D.	N.D.	N.D.	N.D.
Benzene	0.50	N.D.	N.D.	N.D.	N.D.	N.D.
Toluene	0.50	N.D.	N.D.	N.D.	N.D.	0.70
Ethyl Benzene	0.50	N.D.	N.D.	N.D.	N.D.	0.50
Total Xylenes	0.50	1.3	1.2	N.D.	N.D.	3.6
Chromatogram Pattern:		--	--	--	--	--

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	1.0	1.0	1.0
Date Analyzed:	7/12/95	7/12/95	7/12/95	7/12/95	7/12/95
Instrument Identification:	HP-9	HP-9	HP-9	HP-9	HP-9
Surrogate Recovery, %: (QC Limits = 70-130%)	89	105	89	89	93

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

RECEIVED
JUL 20 1995

5070406.ALS <1>

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Uisto Engineering Group	Client Project ID:	Mobil, Port of Oakland	Sampled: Jul 10-11,1995
1575 Treat Blvd., Ste. 201	Sample Descript:	~~Soil~~ water - BTEX	Received: Jul 11, 1995
Walnut Creek, CA 94598	Analysis for:	Total Dissolved Solids	Extracted: Jul 11, 1995
Attention: Brady Nagle	First Sample #:	507-0406	Analyzed: Jul 12, 1995
			Reported: Jul 18, 1995

QC Batch Number: IN071295160100A

Instrument ID: Manual

LABORATORY ANALYSIS FOR: Total Dissolved Solids

Sample Number	Sample Description	Detection Limit mg/kg	Sample Result mg/kg
507-0406	SB-3-DEEP-7-10	1.0	1,300
507-0407	SB-3-DEEP-12-15	1.0	3,200
507-0408	SB-3-DEEP-22-25	1.0	19,000
507-0411	SB-3-DEEP-42-45	1.0	26,000
507-0412	SB-3-DEEP-52-55	1.0	22,000

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alisto Engineering Group
1575 Treat Blvd., Ste. 201
Walnut Creek, CA 94598
Attention: Brady Nagle

Client Project ID: Mobil, Port of Oakland
Matrix: Liquid

QC Sample Group 5070406-12

Reported: Jul 18, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Total Dissolved Solids
QC Batch#:	GC071295	GC071295	GC071295	GC071295	IN071295
	802009B	802009B	802009B	802009B	160100A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 160.1
Prep. Method:	-	-	-	-	EPA 160.1
Analyst:	J. Fontecha	J. Fontecha	J. Fontecha	J. Fontecha	R. Salinas
MS/MSD #:	5070287	5070287	5070287	5070287	5070102
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	240 mg/L
Prepared Date:	7/12/95	7/12/95	7/12/95	7/12/95	7/12/95
Analyzed Date:	7/12/95	7/12/95	7/12/95	7/12/95	7/12/95
Instrument I.D.#:	HP-9	HP-9	HP-9	HP-9	Manual
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L	1000 mg/L
Result:	22	22	22	72	1100
MS % Recovery:	110	110	110	120	86
Dup. Result:	22	23	23	75	1100
MSD % Recov.:	110	115	115	125	86
RPD:	0.0	4.4	4.4	4.1	0.0
RPD Limit:	0-20	0-20	0-20	0-20	0-20
LCS #:	4LCS071295	4LCS071295	4LCS071295	4LCS071295	160.1RS07D
Prepared Date:	7/12/95	7/12/95	7/12/95	7/12/95	7/12/95
Analyzed Date:	7/12/95	7/12/95	7/12/95	7/12/95	7/12/95
Instrument I.D.#:	HP-9	HP-9	HP-9	HP-9	Manual
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L	500 mg/L
LCS Result:	19	20	20	63	510
LCS % Recov.:	95	98	98	105	102
MS/MSD LCS Control Limits	71-133	72-128	72-130	71-120	70-130

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS = Matrix Spike, MSD = MS Duplicate, IS = Instrument Spike, ISD = IS Duplicate, RPD = Relative % Difference

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alisto Engineering Group	Client Project ID:	Former Mobil Oil Bulk Terminal	Sampled: Sep 13, 1995
1575 Treat Blvd., Ste. 201	Sample Matrix:	Water	Received: Sep 15, 1995
Walnut Creek, CA 94598	Analysis Method:	EPA 5030/8015 Mod./8020	Reported: Sep 22, 1995
Attention: Brady Nagle	First Sample #:	509-0981	

QC Batch Number: GC091995
802005A

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit µg/L	Sample I.D. 509-0981 SB-1-DEEP 10-12 Feet
Purgeable Hydrocarbons	50	130,000
Benzene	0.50	900
Toluene	0.50	N.D.
Ethyl Benzene	0.50	420
Total Xylenes	0.50	1,200
Chromatogram Pattern:		Gasoline

Quality Control Data

Report Limit Multiplication Factor:	500
Date Analyzed:	9/19/95
Instrument Identification:	HP-5
Surrogate Recovery, %: (QC Limits = 70-130%)	72

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

RECEIVED
SEP 26 1995

5090981.ALS <1>

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

sto Engineering Group	Client Project ID:	Former Mobil Oil Bulk Terminal	Sampled:	Sep 13, 1995
575 Treat Blvd., Ste. 201	Sample Descript:	Water	Received:	Sep 15, 1995
Walnut Creek, CA 94598	Analysis for:	Total Dissolved Solids	Extracted:	Sep 21, 1995
Attention: Brady Nagle	First Sample #:	509-0981	Analyzed:	Sep 21, 1995
			Reported:	Sep 22, 1995

LABORATORY ANALYSIS FOR: Total Dissolved Solids

Sample Number	Sample Description	Detection Limit mg/L	Sample Result mg/L	QC Batch Number	Instrument ID
509-0981	SB-1 Deep 10-12 Feet	1.0	2,100	IN092195160100A	Manual

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Client: [illegible]sto Engineering Group
1575 Treat Blvd., Ste. 201
Walnut Creek, CA 94598
Attention: Brady Nagle

Client Project ID: Former Mobil Oil Bulk Terminal
Matrix: Liquid

QC Sample Group: 5090981

Reported: Sep 22, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Total Dissolved Solids
QC Batch#:	GC091995	GC091995	GC091995	GC091995	IN092195
	802005A	802005A	802005A	802005A	160100A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 160.1
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	EPA 160.1
Analyst:	K. Nill	K. Nill	K. Nill	K. Nill	K. Anderson
MS/MSD #:	5091096	5091096	5091096	5091096	5090981
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	2100 mg/L
Prepared Date:	9/19/95	9/19/95	9/19/95	9/19/95	9/21/95
Analyzed Date:	9/19/95	9/19/95	9/19/95	9/19/95	9/21/95
Instrument I.D.#:	HP-5	HP-5	HP-5	HP-5	Manual
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L	1000 mg/L
Result:	18	18	18	55	3100
MS % Recovery:	90	90	90	92	100
Dup. Result:	19	19	18	55	3100
MSD % Recov.:	95	95	90	92	100
RPD:	5.4	5.4	0.0	0.0	0.0
RPD Limit:	0-20	0-20	0-20	0-20	0-20

LCS #:	3LCS091995	3LCS091995	3LCS091995	3LCS091995	160.1RS09D-2
Prepared Date:	9/19/95	9/19/95	9/19/95	9/19/95	9/21/95
Analyzed Date:	9/19/95	9/19/95	9/19/95	9/19/95	9/21/95
Instrument I.D.#:	HP-5	HP-5	HP-5	HP-5	Manual
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L	500 mg/L
LCS Result:	16	17	17	52	530
LCS % Recov.:	80	83	84	87	106

MS/MSD LCS Control Limits	71-133	72-128	72-130	71-120	70-130

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

SEQUOIA ANALYTICAL
CHAIN OF CUSTODY

☐ 680 C[illegible]peake Drive • Redwood City, CA 94063 • (415) 364-9600 FAX ([illegible]) 364-9233
☐ 819 Striker Ave., Suite 8 • Sacramento, CA 95834 • (916) 921-9600 FAX (916) 921-0100
☑ 1900 Bates Ave., Suite LM • Concord, CA 94520 • (510) 686-9600 FAX (510) 686-9689

Mobil Oil Consulting Firm: Stolo
Address: 1575 Treat Blvd. (200)
City: Walnut Creek State: CA Zip: 94598
Tel: (510) 295-1650 Fax: (510) 295-1823

Station No./Site Address: Port of Oakland
Project Contact: Brady Nagle
Mobil Oil Engineer: Steve Pao
Sampler(s) (signature): Tad Moran

Sample I.D.	Matrix	Date Sampled	Time	Preservation	Number of Containers	Type of Containers	BTEX - EPA 602/8020	BTEX - TPH EPA M602/8015/8020 (3AS)	TPH EPA Modified 8015 Gas ☐ Diesel ☐	Oil & Grease - EPA 413.2	TPH - EPA 418.1	EPA 601/8010	EPA 624/8240	EPA 625/8270	Title 22 Metals EPA 6010/7000 TTLC ☐ STLC ☐	Lead Org./DHS ☐ Lead Total ☐	EDB/DBCP - EPA 504	pH	Bioassay - Title 22 Haz. Waste	Bioassay - Effluent	TDS
SB-3-Dep-7-10	H_2O	7/11/95	10:15	HCl	3	VOA		✓									5070406		A-D		✓
				N/A	1	L															
SB-3-Dep-12-15			10:45	HCl	3	VOA		✓									5070407		↓		✓
				N/A	1	L															
SB-3-Dep-22-25			12:00	N/A	2	VOA		✓									5070408		A-C		✓
				N/A	1	L															
SB-3-Dep-27-30			3:30	N/A	1	L											5070409		N/A		HOLD
SB-3-Dep-32-35			4:15	N/A	3	VOA											5070410		A-D		HOLD
				N/A	1	L															
SB-3-Dep-42-45		7/11/95	5:15	HCl	3	VOA		✓									5070411		↓		✓
				N/A	1	L															
SB-3-Dep-52-55	↓	7/11/95	10:20	HCl	3	VOA		✓									5070412		↓		✓
				N/A	1	L															

HOLD (ported 07/12/95 10:20 a.m.)

CODING (check one)

- Code 1 ☐ Emergency Response
- Code 2 ☐ Site Assessment
- Code 3 ☑ Remediation (Plan Devlpmt.)
- Code 4 ☐ Active Remed. (Install./Start-up)
- Code 5 ☐ Active Remed. (O & M)
- Code 6 ☐ Passive Remed. Monitoring
- Code 7 ☐ Closure
- Code 8 ☐ Construction
- Code 9 ☐ Litigation/Claims Fines

Relinquished by: Tad Moran 7/11/95 Date/Time: 4:00
Relinquished by: [signature] 7/11 Date/Time: 5:20
Relinquished by: Date/Time:

Relinquished by: [signature] Date/Time: 12/11/95 4:00
Relinquished by: Date/Time:
Relinquished in Lab by: [signature] Date/Time: 7/11/95 17:20

Turnaround Time: (check one): Normal ✓ Same day ___ 1 day ___ 2 day ___ 5 day ___

Sample Integrity: Intact ___ On Ice ___

Remarks: Please fax a copy of COC & Analytical Results to [illegible]

SEQUOIA ANALYTICAL
CHAIN OF CUSTODY

☐ 680 Chesa[illegible]e Drive • Redwood City, CA 94063 • (415) 364-9600 FAX (415) [illegible]9233
☐ 819 Striker Ave., Suite 8 • Sacramento, CA 95834 • (916) 921-9600 FAX (916) [illegible]21-0100
☐ 1900 Bates Ave., Suite LM • Concord, CA 94520 • (510) 686-9600 FAX (510) 686-9689

Mobil Oil Consulting Firm: Alisto Engineering
Address: 1575 Treat Blvd #281
City: Walnut Creek State: CA Zip: 94598
Tel: (510) 295 1650 Fax.: 295-1823

Station No./Site Address: Former Mobil Oil Bulk Terminal
Project Contact: Brady Nagle
Mobil Oil Engineer: Steve Pao
Sampler(s) (signature): Ted Morse

Sample I.D.	Matrix	Date Sampled	Time	Preservation	Number of Containers	Type of Containers	BTEX - EPA 602/8020	BTEX -TPH EPA M602/8015/8020 (GAS)	TPH EPA Modified 8015 Gas ☐ Diesel ☐	Oil & Grease - EPA 413.2	TPH - EPA 418.1	EPA 601/8010	EPA 624/8240	EPA 625/8270	Title 22 Metals EPA 6010/7000 TTLC ☐ STLC ☐	Lead Org./DHS ☐ Lead Total ☐	EDB/DBCD - EPA 504	pH	Bioassay - Title 22 Haz. Waste	Bioassay - Effluent	Total Dissolved Solids
SB-1-Deep 10-12 feet	W	9/13/95		None	4	3 VOA 1 L		X								5090981			A		X

CODING (check one)

- Code 1 ☐ Emergency Response
- Code 2 ☒ Site Assessment
- Code 3 ☐ Remediation (Plan Devlpmt.)
- Code 4 ☐ Active Remed. (Install./Start-up)
- Code 5 ☐ Active Remed. (O & M)
- Code 6 ☐ Passive Remed/ Monitoring
- Code 7 ☐ Closure
- Code 8 ☐ Construction
- Code 9 ☐ Litigation/Claims Fines

Relinquished by:	Date/Time:	Relinquished by:	Date/Time:
Ted Morse	9/15/95 6:33		
Relinquished by:	Date/Time:	Relinquished by:	Date/Time:
Relinquished by:	Date/Time:	Relinquished in Lab by:	Date/Time:
		[illegible]	9/15/95 18:32

Turnaround Time: (check one)
Normal X Same day ____
1 day ____ 2 day ____
5 day ____

Sample Integrity:
Intact ____ On Ice ____

Remarks: X VOA unpreserved - G/BTEX holding time concern. X

APPENDIX E

Analytical Results of Soil Samples From Deep Soil Borings

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

[illegible]sto Engineering Group	Client Project ID:	Maersk, 909 Ferry St.,Oakland CA	Sampled: Sep 25-26,1995
[illegible]575 Treat Blvd., Ste. 201	Sample Descript:	Soil	Received: Sep 27, 1995
Walnut Creek, CA 94598	Analysis for:	Bulk Density	Extracted: Oct 4, 1995
Attention: Brady Nagle	First Sample #:	509-2052	Analyzed: Oct 4, 1995
			Reported: Oct 12, 1995

LABORATORY ANALYSIS FOR: Bulk Density

Sample Number	Sample Description	Detection Limit	Sample Result g/cm³	QC Batch Number	Instrument ID
509-2052	SB-1 Deep 23-23.5	N/A	2.28	IN10049521300A	Manual
509-2053	SB-1 Deep 30.5-31	N/A	2.18	IN10049521300A	Manual
509-2054	SB-1 Deep 35.5-36	N/A	1.72	IN10049521300A	Manual
509-2055	SB-1 Deep 55.5-56	N/A	2.00	IN10049521300A	Manual

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

listo Engineering Group	Client Project ID:	Maersk, 909 Ferry St.,Oakland CA	Sampled: Sep 25-26,1995
575 Treat Blvd., Ste. 201	Sample Descript:	Soil	Received: Sep 27, 1995
Walnut Creek, CA 94598	Analysis for:	Total Organic Carbon	Extracted: Oct 4, 1995
Attention: Brady Nagle	First Sample #:	509-2052	Analyzed: Oct 4, 1995
			Reported: Oct 12, 1995

LABORATORY ANALYSIS FOR: Total Organic Carbon

Sample Number	Sample Description	Detection Limit mg/kg	Sample Result mg/kg
509-2052	SB-1 Deep 23-23.5	50	71
509-2053	SB-1 Deep 30.5-31	50	150
509-2054	SB-1 Deep 35.5-36	50	52
509-2055	SB-1 Deep 55.5-56	50	340

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1267

Kevin Van Slambrook
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

[redacted]sto Engineering Group	Client Project ID: Maersk, 909 Ferry St.,Oakland CA	Analyst:	R. Wood
1575 Treat Blvd., Ste. 201	Sample Matrix: Soil		J. Wright
Walnut Creek, CA 94598	Units: mg/kg		
Attention: Brady Nagle	QC Sample Group: 5092043-55	Reported:	Oct 12, 1995

QUALITY CONTROL DATA REPORT

ANALYTE	Total Organic Carbon

Method: 9050 Modified
Date Analyzed: 10/4/95

ACCURACY ASSESSMENT

LCS Spike Conc. Added: 2,500

LCS Spike Result: 2,500

LCS Spike % Recovery: 100

[redacted]pper Control Limit: 113

Lower Control Limit: 88

PRECISION ASSESSMENT

Sample #: B509427-03

Original: 390

Duplicate: 410

Relative % Difference: 5.0

Maximum RPD: 32

SEQUOIA ANALYTICAL, #1267

[redacted] Van Slambrook

Kevin Van Slambrook
Project Manager

SEQUOIA ANALYTICAL
CHAIN OF CUSTODY

☐ 680 Chesapeake Drive • Redwood City, CA 94063 • (415) 364-9600 FAX (415) 364-9233
☐ 819 Striker Ave., Suite 8 • Sacramento, CA 95834 • (916) 921-9600 FAX (916) 921-0100
☐ 1900 Bates Ave., Suite LM • Concord, CA 94520 • (510) 686-9600 FAX (510) 686-9689

5091354

Mobil Oil Consulting Firm: ALISTO ENGINEERING
Address: 1575 Treat Blvd # 201
City: Walnut Creek State: CA Zip: 94598
Tel: 510 295 1650 Fax.: 510 295 1823

Station No./Site Address: 909 Ferry St Maersk Terminal Oakland CA
Project Contact: Brady Nagle
Mobil Oil Engineer: Steve Pao
Sampler(s) (signature):

Sample I.D.	Matrix	Date Sampled	Time	Preservation	Number of Containers	Type of Containers	BTEX - EPA 602/8020	BTEX -TPH EPA M602/8015/8020 (GAS)	TPH EPA Modified 8015 Gas ☐ Diesel ☐	Oil & Grease - EPA 413.2	TOC	Bulk Density	EPA 624/8240	EPA 625/8270	Title 22 Metals EPA 6010/7000 TTLC ☐ STLC ☐	Lead Org./DHS ☐ Lead Total ☐	EDB/DBCD - EPA 504	PAHs	Bioassay - Title 22 Haz. Waste	Bioassay - Effluent		HOLD
SB-1 Deep 16-16.5	Soil	9/13/95		Ice	1						X				5091491							
SB-2 Deep 15-15.5	↓	9/12/95		↓	1																	X
SB-2 Deep 20-20.5	↓	9/13/95		↓	1						X				5091492							
[illegible]	← CHP	9/12																				
SB-2 Deep 26-26.5		9/18/95			1																	X
SB-2 Deep 31-31.5		9/18/95			1																	X
SB-2 Deep 35.5-36		9/18/95			1																	X
SB-2 Deep 40.5-41		9/18/95			1						X	X			5091493							
SB-2 Deep 55		9/19/95		↓	1						X	X			5091494							

CODING (check one)

- Code 1 ☐ Emergency Response
- Code 2 ☒ Site Assessment
- Code 3 ☐ Remediation (Plan Devlpmt.)
- Code 4 ☐ Active Remed. (Install./Start-up)
- Code 5 ☐ Active Remed. (O & M)
- Code 6 ☐ Passive Remed/ Monitoring
- Code 7 ☐ Closure
- Code 8 ☐ Construction
- Code 9 ☐ Litigation/Claims Fines

Relinquished by:	Date/Time: 9/21/95 5:55	Relinquished by:	Date/Time:
Relinquished by:	Date/Time:	Relinquished by:	Date/Time:
Relinquished by:	Date/Time:	Relinquished in Lab by:	Date/Time: 9/21/95 17:23

Turnaround Time: (check one):
Normal X Same day ____
1 day ____ 2 day ____
5 day ____

Sample Integrity:
Intact ____ On Ice ____

Remarks:

9509354

EQUOIA ANALYTICAL
CHAIN OF CUSTODY

680 Chesapeake Drive • Redwood City, CA 94063 • (415) 364-9600 FAX (415) 364-9233
819 Striker Ave., Suite 8 • Sacramento, CA 95834 • (916) 921-9600 FAX (916) 921-0100
1900 Bates Ave., Suite LM • Concord, CA 94520 • (510) 686-9600 FAX (510) 686-9689

Mobil Oil Consulting Firm: AGUSTO ENGINEERING
Address: 1575 Treat Blvd # 201
City: Walnut Creek State: CA Zip: 94598
Tel: 510 295 1650 Fax.: 510 295 1823

Station No./Site Address: 909 Ferry St Maersk Terminal Oakland
Project Contact: Brady Nagle
Mobil Oil Engineer: Steve Pao
Sampler(s) (signature):

Sample I.D.	Matrix	Date Sampled	Time	Preservation	Number of Containers	Type of Containers	BTEX - EPA 602/8020	BTEX -TPH EPA M602/8015/8020 (GAS)	TPH EPA Modified 8015 Gas ☐ Diesel ☐	Oil & Grease - EPA 413.2	TOC	Bulk Density	EPA 624/8240	EPA 625/8270	Title 22 Metals EPA 6010/7000 TTLC ☐ STLC ☐	Lead Org./DHS ☐ Lead Total ☐	EDB/DBCD - EPA 504	TDS	Bioassay - Title 22 Haz. Waste	Bioassay - Effluent	Moisture Content	HOLD
SB-2 Deep 7.5	SOIL	9/18/95		Ice	1							X										X
SB-F5/3.0		9/20/95			1						X	X			5091495						X	
SB-F5/3.5		9/20/95			1			X							5091496							
SB-F5/5.0		9/20/95			1																	X
SB-F5/5.5		9/20/95			1			X							5091497							
SB-2 Deep 16-19	WATER	9/18/95	1:45	no	2	VOA		X							5091498			AB				
SB-2 Deep 27-28.5			1:40		1L 2 VOA			X							5091499			AC				
SB-2 Deep 32.5-34			2:40		1L 2 VOA			X							5091500			AC				
SB-2 Deep 37.5-39.0		9/18/95	3:40		2	VOA		X							5091501			AD				

Relinquished by: Date/Time: 9/21/95 5:55
Relinquished by: Date/Time:
Relinquished by: Date/Time:
Remarks: VOA's unpreserved, Liters unpreserved

Relinquished by: Date/Time:
Relinquished by: Date/Time:
Relinquished in Lab by: Date/Time: 9/21/95 17:23

CODING (check one)
Code 1 ☐ Emergency Response
Code 2 ☒ Site Assessment
Code 3 ☐ Remediation (Plan Devlpmt.)
Code 4 ☐ Active Remed. (Install./Start-up)
Code 5 ☐ Active Remed. (O & M)
Code 6 ☐ Passive Remed/ Monitoring
Code 7 ☐ Closure
Code 8 ☐ Construction
Code 9 ☐ Litigation/Claims Fines

Turnaround Time: (check one)
Normal ☒ Same day ____
1 day ____ 2 day ____
5 day ____

Sample Integrity:
Intact ____ On Ice ____

SEQUOIA ANALYTICAL
CHAIN OF CUSTODY

☐ 680 Chesapeake Drive • Redwood City, CA 94063 • (415) 364-9600 FAX (415) 364-9233
☐ 819 Striker Ave., Suite 8 • Sacramento, CA 95834 • (916) 921-9600 FAX (916) 921-0100
☐ 1900 Bates Ave., Suite LM • Concord, CA 94520 • (510) 686-9600 FAX (510) 686-9689

Mobil Oil Consulting Firm: ACSTO ENGINEERING
Station No./Site Address: 909 Ferry St Maersk Terminal Oakland CA
Address: 1575 Treat Blvd #201
Project Contact: Brady Nagle
City: Walnut Creek State: CA Zip: 94598
Mobil Oil Engineer: Steve Bao
Tel: 510 295 1650 Fax.: 510 295 1823
Sampler(s) (signature):

Sample I.D.	Matrix	Date Sampled	Time	Preservation	Number of Containers	Type of Containers	BTEX - EPA 602/8020	BTEX -TPH EPA M602/8015/8020 (GAS)	TPH EPA Modified 8015 Gas ☐ Diesel ☐	Oil & Grease - EPA 413.2	TDC	Bulk Density	EPA 624/8240	EPA 625/8270	Title 22 Metals EPA 6010/7000 TTLC ☐ STLC ☐	Lead Org./DHS ☐ Lead Total ☐	EDB/DBCD - EPA 504	SPLP	Bioassay - Title 22 Haz. Waste	Bioassay - Effluent		HOLD
SB-2 Deep 41.5-43	WATER	9/19/95	8:30	see below	4	3 VOA 1 L		X							5091502			X				
SB-2 Deep 46.5-48		9/19/95	10:40		4			X							5091503			X				
SB-2 Deep 51.5-53		9/19/95	12:15		4			X							5091504			X				
SB-2 Deep 56-57.5		9/19/95	1:37		4			X							5091505			X				
SB-2 Deep 66.5-68		9/19/95	3:45		4			X							5091506			X				

CODING (check one)

- Code 1 ☐ Emergency Response
- Code 2 ☒ Site Assessment
- Code 3 ☐ Remediation (Plan Devlpmt.)
- Code 4 ☐ Active Remed. (Install./Start-up)
- Code 5 ☐ Active Remed. (O & M)
- Code 6 ☐ Passive Remed/ Monitoring
- Code 7 ☐ Closure
- Code 8 ☐ Construction
- Code 9 ☐ Litigation/Claims Fines

Relinquished by: Date/Time: 9/21/95 5:53
Relinquished by: Date/Time:
Relinquished by: Date/Time:
Relinquished by: Date/Time:
Relinquished by: Date/Time:
Relinquished by: Date/Time:
Relinquished in Lab by: Date/Time: 9/21/95 17:23

Turnaround Time: (check one):
Normal ☒ Same day ☐
1 day ☐ 2 day ☐
5 day ☐

Sample Integrity:
Intact ☐ On Ice ☐

Remarks: VOA's unpreserved, Liters unpreserved

SEQUOIA ANALYTICAL
CHAIN OF CUSTODY

☐ 680 Chesapeake Drive • Redwood City, CA 94063 • (415) 364-9600 FAX (415) [illegible]-9233
☐ 819 Striker Ave., Suite 8 • Sacramento, CA 95834 • (916) 921-9600 FAX (916) 921-0100
☐ 1900 Bates Ave., Suite LM • Concord, CA 94520 • (510) 686-9600 FAX (510) 686-9689

Mobil Oil Consulting Firm: ALISTO ENGINEERING
Station No./Site Address: Maersk 909 Ferry St. Oakland CA
Address: 1575 Treat Blvd #201
Project Contact: Brady Nagle
City: Walnut Creek State: CA Zip: 94598
Mobil Oil Engineer: Steve Rao
Tel: 510 295 1650 Fax.: 510 295 1823
Sampler(s) (signature):

Sample I.D.	Matrix	Date Sampled	Time	Preservation	Number of Containers	Type of Containers	BTEX - EPA 602/8020	BTEX - TPH EPA M602/8015/8020 (GAS)	TPH EPA Modified 8015 ☐ Gas ☐ Diesel	Oil & Grease - EPA 413.2	TPH - EPA 418.1	EPA 601/8010	EPA 624/8240	EPA 625/8270	Title 22 Metals EPA 6010/7000 ☐ TTLC ☐ STLC	Lead Org./DHS ☐ Lead Total	EDB/DBCD - EPA 504	pH	Bioassay - Title 22 Haz. Waste	Bioassay - Effluent	SVOA	
SB-1 Deep 27.5-29.0	WATER	9/26/95	1:00P	ICE/NO	4	3VOA 1L		X									5092043		40			X
SB-1 Deep 32.5-34.0			2:00P					X									5092044					X
SB-1 Deep 37.5-39.0			3:00P					X									5092045					X
SB-1 Deep 42.5-44			3:45P					X									5092046					X
SB-1 Deep 47.5-49		9/25/95	4:40P					X									5092047					X
SB-1 Deep 52.5-54		9/26/95	9:20A					X									5092048					X
SB-1 Deep 56-57.5			10:10A					X									5092049					X
SB-1 Deep 61.5-63			11:20A					X									5092050					X
SB-1A Deep 12.5-14			4:55P					X									5092051					X

CODING (check one)

- Code 1 ☐ Emergency Response
- Code 2 ☒ Site Assessment
- Code 3 ☐ Remediation (Plan Devlpmt.)
- Code 4 ☐ Active Remed. (Install./Start-up)
- Code 5 ☐ Active Remed. (O & M)
- Code 6 ☐ Passive Remed/ Monitoring
- Code 7 ☐ Closure
- Code 8 ☐ Construction
- Code 9 ☐ Litigation/Claims Fines

Relinquished by: Date/Time: 9/27/95 16:30
Relinquished by: Date/Time:
Relinquished by: Date/Time:
Relinquished by: Date/Time:
Relinquished by: Date/Time:
Relinquished in Lab by: Date/Time: 9/27/95 16:30

Turnaround Time: (check one):
Normal ☒ Same day ☐
1 day ☐ 2 day ☐
5 day ☐

Sample Integrity:
Intact ☐ On Ice ☐

Remarks:

SEQUOIA ANALYTICAL
CHAIN OF CUSTODY

680 Chesapeake Drive • Redwood City, CA 94063 • (415) 364-9600 FAX (415) 364-9233
819 Striker Ave., Suite 8 • Sacramento, CA 95834 • (916) 921-9600 FAX (916) 921-0100
1900 Bates Ave., Suite LM • Concord, CA 94520 • (510) 686-9600 FAX (510) 686-9689

Mobil Oil Consulting Firm: ALISTO ENGINEERING
Address: 1575 Treat Blvd # 201
City: Walnut Creek State: CA Zip: 94598
Tel: 510 295 1650 Fax.: 510 295 1823

Station No./Site Address: MAERSK 909 Ferry St Oakland CA
Project Contact: Brady Nagle
Mobil Oil Engineer: Steve Pao
Sampler(s) (signature):

Sample I.D.	Matrix	Date Sampled	Time	Preservation	Number of Containers	Type of Containers	BTEX - EPA 602/8020	BTEX -TPH EPA M602/8015/8020 (GAS)	TPH EPA Modified 8015 ☐ Gas ☐ Diesel	Oil & Grease - EPA 413.2	TPH - EPA 418.1	EPA 601/8010	EPA 624/8240	EPA 625/8270	Title 22 Metals EPA 6010/7000 ☐ TTLC ☐ STLC	Lead Org./DHS ☐ Lead Total	EDB/DBCD - EPA 504	TOC	Bioassay - Title 22 Haz. Waste	Bioassay - Effluent	BULK DENSITY	HOLD
SB-1 Deep 23-23.5													5092052					X			X	
SB-1 Deep 26-26.5	CEK	9/27																				
SB-1 Deep 30.5-31														5092053				X			X	
SB-1 Deep 35.5-36														5092054				X			X	
SB-1 Deep 40.5-41.0																						X
SB-1 Deep 45.5-46																						X
SB-1 Deep 50.5-51																						X
SB-1 Deep 55.5-56														5092055				X			X	
SB-1 Deep 60.5-61																						X

CODING (check one)

- Code 1 ☐ Emergency Response
- Code 2 ☒ Site Assessment
- Code 3 ☐ Remediation (Plan Devlpmt.)
- Code 4 ☐ Active Remed. (Install./Start-up)
- Code 5 ☐ Active Remed. (O & M)
- Code 6 ☐ Passive Remed/ Monitoring
- Code 7 ☐ Closure
- Code 8 ☐ Construction
- Code 9 ☐ Litigation/Claims Fines

Relinquished by:	Date/Time: 9/27/95 16:30
Relinquished by:	Date/Time:
Relinquished by:	Date/Time:
Remarks:	

Relinquished by:	Date/Time:
Relinquished by:	Date/Time:
Relinquished in Lab by:	Date/Time: 9/27/95 16:30

Turnaround Time: (check one):
Normal ☒ Same day ☐
1 day ☐ 2 day ☐
5 day ☐

Sample Integrity:
Intact ☐ On Ice ☐

SEQUOIA ANALYTICAL
CHAIN OF CUSTODY

☐ 680 Chesapeake Drive • Redwood City, CA 94063 • (415) 364-9600 FAX (415) 364-9233
☐ 819 Striker Ave., Suite 8 • Sacramento, CA 95834 • (916) 921-9600 FAX (916) 921-0100
☐ 1900 Bates Ave., Suite LM • Concord, CA 94520 • (510) 686-9600 FAX (510) 686-9689

Mobil Oil Consulting Firm: ALISTO ENGINEERING
Address: 1575 Treat Blvd #201
City: Walnut Creek State: CA Zip: 94598
Tel: 510 295 1650 Fax.: 510 295 1823

Station No./Site Address: MAERSK 909 Ferry St Oakland CA
Project Contact: Brady Nagle
Mobil Oil Engineer: Steve Rao
Sampler(s) (signature):

Sample I.D.	Matrix	Date Sampled	Time	Preservation	Number of Containers	Type of Containers	BTEX - EPA 602/8020	BTEX -TPH EPA M602/8015/8020 (GAS)	TPH EPA Modified 8015 Gas ☐ Diesel ☐	Oil & Grease - EPA 413.2	TPH - EPA 418.1	EPA 601/8010	EPA 624/8240	EPA 625/8270	Title 22 Metals EPA 6010/7000 TTLC ☐ STLC ☐	Lead Org./DHS ☐ Lead Total ☐	EDB/DBCD - EPA 504	pH	Bioassay - Title 22 Haz. Waste	Bioassay - Effluent		HOLD
SB-1 Deep 74-74.5	Soil	9/27/95		Ice	1	1/2x6																X
SB-1A Deep 10.0-10.5	↓	↓		↓	1	↓																X
SB-1A Deep	↓	↓		↓	↓	↓	CER 9/27															

CODING (check one)

- Code 1 ☐ Emergency Response
- Code 2 ☒ Site Assessment
- Code 3 ☐ Remediation (Plan Devlpmt.)
- Code 4 ☐ Active Remed. (Install./Start-up)
- Code 5 ☐ Active Remed. (O & M)
- Code 6 ☐ Passive Remed/ Monitoring
- Code 7 ☐ Closure
- Code 8 ☐ Construction
- Code 9 ☐ Litigation/Claims Fines

Relinquished by: Date/Time: 9/27/95 16:30
Relinquished by: Date/Time:
Relinquished by: Date/Time:
Relinquished by: Date/Time:
Relinquished by: Date/Time:
Relinquished in Lab by: Date/Time: 9/27/95 16:30

Turnaround Time: (check one):
Normal ☒ Same day ☐
1 day ☐ 2 day ☐
5 day ☐

Sample Integrity:
Intact ☐ On Ice ☐

Remarks:

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

[illegible]isto Engineering Group	Client Project ID:	Port of Oakland, 909 Ferry St.	Sampled:	Jul 10-12, 1995
[illegible]75 Treat Blvd., Ste. 201	Sample Descript:	Soil	Received:	Aug 3, 1995
Walnut Creek, CA 94598	Analysis for:	Percent Moisture	Extracted:	Aug 9, 1995
Attention: Brady Nagle	First Sample #:	508-0196	Analyzed:	Aug 9, 1995
			Reported:	Aug 9, 1995

LABORATORY ANALYSIS FOR: Percent Moisture

Sample Number	Sample Description	Detection Limit %	Sample Result %	QC Batch Number	Instrument ID
508-0196	SB-3-Deep-11'	N/A	16	IN080995160300A	Manual
508-0198	SB-3-Deep-61'	N/A	14	IN080995160300A	Manual
508-0199	SB-2-Deep-12.5'	N/A	15	IN080995160300A	Manual

Analytes reported as N.D. were not present above the stated limit of detection.

RECEIVED
AUG 14 1995

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

5080196.ALS <1>

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Kleinfelder Engineering Group	Client Project ID:	Port of Oakland, 909 Ferry St.	Sampled:	Jul 10-12, 1995
1375 Treat Blvd., Ste. 201	Sample Descript:	Soil	Received:	Aug 3, 1995
Walnut Creek, CA 94598	Analysis for:	Specific Gravity	Extracted:	Aug 9, 1995
Attention: Brady Nagle	First Sample #:	508-0196	Analyzed:	Aug 9, 1995
			Reported:	Aug 9, 1995

LABORATORY ANALYSIS FOR: Specific Gravity

Sample Number	Sample Description	Detection Limit	Sample Result g/cm³	QC Batch Number	Instrument ID
508-0196	SB-3-Deep-11'	N/A	1.4	IN080995213F00A	Manual
508-0198	SB-3-Deep-61'	N/A	1.5	IN080995213F00A	Manual
508-0199	SB-2-Deep-12.5'	N/A	1.6	IN080995213F00A	Manual

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Uisto Engineering Group	Client Project ID:	Port of Oakland, 909 Ferry St.	Sampled:	Jul 10-12,1995
1575 Treat Blvd., Ste. 201	Sample Descript:	Soil	Received:	Aug 3, 1995
Walnut Creek, CA 94598	Analysis for:	TOC	Analyzed:	Aug 8, 1995
Attention: Brady Nagle	First Sample #:	508-0196	Reported:	Aug 9, 1995

TOTAL ORGANIC CARBON

Sample Number	Sample Description	Detection Limit mg/kg	Sample Result mg/kg
508-0196	SB-3-Deep-11'	50	240 *
508-0197	SB-3-Deep-17'	50	2900 *
508-0198	SB-3-Deep-61'	50	55
508-0199	SB-2-Deep-12.5'	50	54

SEQUOIA ANALYTICAL #1267

Kevin Van Slambrook
Project Manager

Please Note:
* These samples were one day outside of the method recommended hold time.

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Kasto Engineering Group
1575 Treat Blvd., Ste. 201
Walnut Creek, CA 94598
Attention: Brady Nagle

Client Project ID: Port of Oakland, 909 Ferry St.
Matrix: Solid
QC Sample Group: 5080196-99
Reported: Aug 9, 1995

QUALITY CONTROL DATA REPORT

ANALYTE	Specific Gravity	Percent Moisture
QC Batch #:	IN080995	IN080995
	213F00A	160300A
Method:	EPA 213F	EPA 160.3
Analyst:	R. Salinas	R. Salinas
Date Analyzed:	8/9/95	8/9/95
Instrument I.D.#:	Manual	Manual
Sample #:	5080204	5080204
Sample Concentration:	1.6 g/cm³	15%
Sample Duplicate Concentration:	1.6 g/cm³	14%
RPD:	0.0	3.4
RPD Control Limits:	0-30	0-30

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Kisto Engineering Group	Client Project ID: Port of Oakland, 909 Ferry St.	Analyst:	R. Wood
1575 Treat Blvd., Ste. 201	Sample Matrix: Solid		J. Wright
Walnut Creek, CA 94598	Units: mg/L (ppm)		
Attention: Brady Nagle	QC Sample Group: 5080196-99	Reported:	Aug 9, 1995

QUALITY CONTROL DATA REPORT

ANALYTE	Total Organic Carbon

Method:	EPA 415.1
Date Analyzed:	8/8/95

ACCURACY ASSESSMENT

LCS Spike Conc. Added:	2,500
LCS Spike Result:	2500
LCS Spike % Recovery:	100
Upper Control Limit:	113
Lower Control Limit:	88

PRECISION ASSESSMENT

Sample #:	B508116-01
Original:	240
Duplicate:	250
Relative % Difference:	RPD values are not reported at sample concentration levels <5 X the Reporting Limit.
Maximum RPD:	32

SEQUOIA ANALYTICAL, #1267

Kevin Van Slambrook
Project Manager

SEQUOIA ANALYTICAL
CHAIN OF CUSTODY

❑ 680 Chesapeake Drive • Redwood City, CA 94063 • (415) 364-9600 FAX (415) 364-9233
❑ 819 Striker Ave., Suite 8 • Sacramento, CA 95834 • (916) 921-9600 FAX (916) 921-0100
❑ 404 N. Wiget Lane • Walnut Creek, CA 94598 • (510) 988-9600 FAX (510) 988-9673

Company Name: Alisto Engineering Group	Project Name: Port of Oakland 999 Ferry St.
Address: 1575 Treat Blvd. #201	Billing Address (if different): Mobil Oil
City: Walnut Creek State: CA Zip Code: 94598	Steve Pao
Telephone: (510) 295-1650 FAX #: (510) 295-1823	P.O. #:
Report To: Brady Nagle Sampler: Ted Muise	QC Data: ❑ Level D (Standard) ❑ Level C ❑ Level B ❑ Level A

Turnaround Time: ❑ 10 Working Days ❑ 7 Working Days ❑ 5 Working Days ❑ 3 Working Days ❑ 2 Working Days ❑ 24 Hours ❑ 2 - 8 Hours

❑ Drinking Water ❑ Waste Water ❑ Other

Analyses Requested

Client Sample I.D.	Date/Time Sampled	Matrix Desc.	# of Cont.	Cont. Type	Sequoia's Sample #	Bulk Density	Total Organic Carbon	% Moisture						Comments
1. SB-3-Deep-11'	7/10/95 10:45	Soil	1	Tube	5080196	✓	✓	✓						
2. SB-3-Deep-17'	7/10/95 11:45		1		5080197		✓							
3. SB-3-Deep-21'	7/10/95 11:50		1											Hold
4. SB-3-Deep-41'	7/11/95 5:30		1											Hold
5. SB-3-Deep-61'	7/11/95 11:15		1		5080198	✓	✓	✓						
6. SB-3-Deep-12.5'	7/12/95 4:45		1		5080199	✓	✓	✓						
7.														
8.														
9.														
10.														

Relinquished By: Ted Muise	Date: 8/3/95	Time: 2:41	Received By:	Date: 8/3/95	Time: 2:41
Relinquished By:	Date: 8/3/95	Time: 3:00	Received By:	Date: 8/3/95	Time: 1500
Relinquished By:	Date:	Time:	Received By Lab:	Date:	Time:

Were Samples Received in Good Condition? ❑ Yes ❑ No Samples on Ice? ❑ Yes ❑ No Method of Shipment_____

Pink - Client
Yellow - Sequoia
White - Sequoia

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alisto Engineering Group	Client Project ID:	Maersk Terminal Oakland,909 Ferry St.	Sampled:	Sep 18-20,1995
575 Treat Blvd., Ste. 201	Sample Descript:	Soil	Received:	Sep 21, 1995
Walnut Creek, CA 94598	Analysis for:	Bulk Density	Extracted:	Sep 27, 1995
Attention: Brady Nagle	First Sample #:	509-1493	Analyzed:	Sep 27, 1995
			Reported:	Sep 29, 1995

LABORATORY ANALYSIS FOR: Bulk Density

Sample Number	Sample Description	Sample Result g/cm³	QC Batch Number	Instrument ID
509-1493	SB 2 Deep 40.5-41'	2.41	IN09279521300A	Manual
509-1494	SB-2 Deep 55	1.61	IN09279521300A	Manual
509-1495	SB-F-5-3.0'	2.38	IN09279521300A	Manual

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alisto Engineering Group	Client Project ID:	Maersk Terminal Oakland,909 Ferry St.	Sampled:	Sep 20, 1995
1575 Treat Blvd., Ste. 201	Sample Descript:	Soil	Received:	Sep 21, 1995
Walnut Creek, CA 94598	Analysis for:	Percent Moisture	Extracted:	Sep 27, 1995
Attention: Brady Nagle	First Sample #:	509-1495	Analyzed:	Sep 27, 1995
			Reported:	Sep 29, 1995

LABORATORY ANALYSIS FOR: Percent Moisture

Sample Number	Sample Description	Detection Limit %	Sample Result %	QC Batch Number	Instrument ID
509-1495	SB-F-5-3.0'	0.00010	4.6	IN092795160300A	Manual

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alisto Engineering Group	Client Project ID:	Maersk Terminal Oakland,909 Ferry St.	Sampled: Sep 13-20,1995
1575 Treat Blvd., Ste. 201	Sample Descript:	Soil	Received: Sep 21, 1995
Walnut Creek, CA 94598	Analysis for:	TOC	Analyzed: Sep 27, 1995
Attention: Brady Nagle	First Sample #:	509-1491	Reported: Sep 29, 1995

TOTAL ORGANIC CARBON

Sample Number	Sample Description	Detection Limit mg/kg	Sample Result mg/kg
509-1491	SB-1 Deep 16-16.5'	50	2,100
509-1492	SB-2 Deep 20-20.5'	50	1,800
509-1493	SB-2 Deep 40.5-41'	50	82
509-1494	SB-2 Deep 55	50	250
509-1495	SB-F-5-3.0'	50	1,700

SEQUOIA ANALYTICAL #1267

Kevin Van Slambrook
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Ilisto Engineering Group
1575 Treat Blvd., Ste. 201
Walnut Creek, CA 94598
Attention: Brady Nagle

Client Project ID: Maersk Terminal Oakland,909 Ferry St.
Matrix: Solid
QC Sample Group:
Reported: Sep 29, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	SP092695	SP092695	SP092695	SP092695
	8020EXA	8020EXA	8020EXA	8020EXA
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	K. Nill	K. Nill	K. Nill	K. Nill
MS/MSD #:	5091736	5091736	5091736	5091736
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	9/26/95	9/26/95	9/26/95	9/26/95
Analyzed Date:	9/26/95	9/26/95	9/26/95	9/26/95
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4
Conc. Spiked:	0.40 mg/kg	0.40 mg/kg	0.40 mg/kg	1.2 mg/kg
Result:	0.30	0.32	0.33	1.0
MS % Recovery:	75	107	83	85
Dup. Result:	0.30	0.32	0.34	1.0
MSD % Recov.:	75	107	85	86
RPD:	0.0	0.0	3.0	1.2
RPD Limit:	0-20	0-20	0-20	0-20

LCS #:	2LCS092695	2LCS092695	2LCS092695	2LCS092695
Prepared Date:	9/26/95	9/26/95	9/26/95	9/26/95
Analyzed Date:	9/26/95	9/26/95	9/26/95	9/26/95
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
LCS Result:	16	17	17	52
LCS % Recov.:	81	85	87	87

MS/MSD LCS Control Limits	55-145	47-149	47-155	56-140

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Kisto Engineering Group
1575 Treat Blvd., Ste. 201
Walnut Creek, CA 94598
Attention: Brady Nagle

Client Project ID: Maersk Terminal Oakland,909 Ferry St.
Matrix: Solid
QC Sample Group: 5091491-506
Reported: Sep 29, 1995

QUALITY CONTROL DATA REPORT

ANALYTE	Percent Moisture	Bulk Density
QC Batch #:	IN092795	IN092795
	160300A	21300A
Method:	EPA 160.3	SM 213F
Analyst:	K. Anderson	K. Anderson
Date Analyzed:	9/27/95	9/27/95
Instrument I.D.#:	Manual	Manual
Sample #:	5091495	5091495
Sample Concentration:	4.6 %	2.36 g/cm³
Sample Duplicate Concentration:	4.3 %	2.40 g/cm³
RPD:	6.7	0.84
RPD Control Limits:	0-30	0-30

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

[redacted]isto Engineering Group	Client Project ID: Maersk Terminal Oakland,909 Ferry	Analyst:	R. Wood
1575 Treat Blvd., Ste. 201	Sample Matrix: Solid		J. Wright
Walnut Creek, CA 94598	Units: mg/kg (ppm)		
Attention: Brady Nagle	QC Sample Group: 5091491-506	Reported:	Sep 29, 1995

QUALITY CONTROL DATA REPORT

ANALYTE	Total Organic Carbon

Method: 9060 Modified
Date Analyzed: 9/27/95

ACCURACY ASSESSMENT

LCS Spike Conc. Added:	2,500
LCS Spike Result:	2,400
LCS Spike % Recovery:	96
[redacted]Upper Control Limit:	113
Lower Control Limit:	88

PRECISION ASSESSMENT

Sample #:	B509431-01
Original:	3,600
Duplicate:	3,800
Relative % Difference:	5.4
Maximum RPD:	32

SEQUOIA ANALYTICAL, #1267

[redacted]Kevin Van Slambrook
Project Manager

SEQUOIA ANALYTICAL
CHAIN OF CUSTODY

680 Chesapeake Drive • Redwood City, CA 94063 • (415) 364-9600 FAX (415) 364-9233
819 Striker Ave., Suite 8 • Sacramento, CA 95834 • (916) 921-9600 FAX (916) 921-0100
1900 Bates Ave., Suite LM • Concord, CA 94520 • (510) 686-9600 FAX (510) 686-9689

SENT BY:SEQUOIA ANALYTICAL ;10-12-95 ; 15:21 ; WALNUT CREEK→ 510 295 1823:#14

Mobil Oil Consulting Firm: AGUSTO ENGINEERING
Address: 1575 Treat Blvd #201
City: Walnut Creek State: CA Zip: 94598
Tel: 510 295 1650 Fax.: 510 295 1823

Station No./Site Address: MAERSK 909 Fay St Oakland CA
Project Contact: Brady Nagle
Mobil Oil Engineer: Steve Rao
Sampler(s) (signature):

Sample I.D.	Matrix	Date Sampled	Time	Preservation	Number of Containers	Type of Containers	BTEX - EPA 602/8020	BTEX - TPH EPA M602/8015/8020 (GAS)	TPH EPA Modified 8015 Gas ☐ Diesel ☐	Oil & Grease - EPA 413.2	TPH - EPA 418.1	EPA 601/8010	EPA 624/8240	EPA 625/8270	Title 22 Metals EPA 6010/7000 ☐ TTLC ☐ STLC	Lead Org./DHS ☐ Lead Total ☐	EDB/DBCD - EPA 504	pH	Bioassay - Title 22 Haz. Waste	Bioassay - Effluent		HOLD
SS-1 Deep 74-74.5	Soil	9/26/95		Ice	1	4"x6"																X
SS-1A Deep 10.0-10.5	↓	↓		↓	1	↓																X
SS-1A Deep [illegible]	↓	↓		↓	1	↓		CER 9/27														

CODING (check one)

- Code 1 ☐ Emergency Response
- Code 2 ☒ Site Assessment
- Code 3 ☐ Remediation (Plan Devlpmt.)
- Code 4 ☐ Active Remed. (Install/Start-up)
- Code 5 ☐ Active Remed. (O & M)
- Code 6 ☐ Passive Remed. Monitoring
- Code 7 ☐ Closure
- Code 8 ☐ Construction
- Code 9 ☐ Litigation/Claims Fines

Relinquished by:	Date/Time:	Relinquished by:	Date/Time:
[signature]	9/27/95 16:30		
Relinquished by:	Date/Time:	Relinquished by:	Date/Time:
Relinquished by:	Date/Time:	Relinquished in Lab by: [signature]	Date/Time: 9/27/95 16:30

Remarks:

Turnaround Time: (check one):
Normal X Same day ___
1 day ___ 2 day ___
5 day ___

Sample Integrity:
Intact ___ On Ice ___

SEQUOIA ANALYTICAL
CHAIN OF CUSTODY

680 Chesapeake Drive • Redwood City, CA 94063 • (415) 364-9600 FAX (415) 364-9233
819 Striker Ave., Suite 8 • Sacramento, CA 95834 • (916) 921-9600 FAX (916) 921-0100
1900 Bates Ave., Suite LM • Concord, CA 94520 • (510) 686-9600 FAX (510) 686-9689

SENT BY:SEQUOIA ANALYTICAL ;10-12-95 ; 15:20 ; WALNUT CREEK→ 510 295 1823;#13

Mobil Oil Consulting Firm: ALISTO ENGINEERING
Station No./Site Address: MAERSK 909 Ferry St Oakland CA

Address: 1575 Treat Blvd # 201
Project Contact: Brady Nagle

City: Walnut Creek State: CA Zip: 94598
Mobil Oil Engineer: Steve Pao

Tel: 510 295 1650 Fax: 510 295 1823
Sampler(s) (signature):

Sample I.D.	Matrix	Date Sampled	Time	Preservation	Number of Containers	Type of Containers	BTEX - EPA 602/8020	BTEX -TPH EPA M602/8015/8020 (GAS)	TPH EPA Modified 8015 ☐ Gas ☐ Diesel	Oil & Grease - EPA 413.2	TPH - EPA 418.1	EPA 601/8010	EPA 624/8240	EPA 625/8270	Title 22 Metals EPA 6010/7000 ☐ TTLC ☐ STLC	Lead Org./DHS ☐ Lead Total	EDB/DBCD - EPA 504	TOC	Biossay - Title 22 Haz. Waste	Biossay - Effluent	Bulk Density	HOLD
SB-1 Deep 23-23.5														5092052				X			X	
SB-1 Deep 25.5-26	CEER #1																					
SB-1 Deep 30.5-31														5092053				X			X	
SB-1 Deep 35.5-36														5092054				X			X	
SB-1 Deep 40.5-41.0																						X
SB-1 Deep 45.5-46																						X
SB-1 Deep 50.5-51																						X
SB-1 Deep 55.5-56														5092055				X			X	
SB-1 Deep 60.5-61																						X

Relinquished by: Date/Time: 9/27/95 16:30
Relinquished by: Date/Time:
Relinquished by: Date/Time:
Relinquished by: Date/Time:
Relinquished by Lab: Date/Time: 9/27/95 16:30
Remarks:

CODING (check one)

- Code 1 ☐ Emergency Response
- Code 2 ☒ Site Assessment
- Code 3 ☐ Remediation (Plan Devlpmt.)
- Code 4 ☐ Active Remed. (Install./Start-up)
- Code 5 ☐ Active Remed. (O & M)
- Code 6 ☐ Passive Remed Monitoring
- Code 7 ☐ Closure
- Code 8 ☐ Construction
- Code 9 ☐ Litigation/Claims Fines

Turnaround Time: (check one):
Normal X Same day ___
1 day ___ 2 day ___
5 day ___

Sample Integrity:
Intact ___ On Ice ___

SENT BY:SEQUOIA ANALYTICAL ; 9-29-95 ; 15:17 ; WALNUT CREEK→ 510 295 1823;#16

SEQUOIA ANALYTICAL CHAIN OF CUSTODY

9509354

680 Chesapeake Drive • Redwood City, CA 94063 • (415) 364-9600 FAX (415) 364-9233
819 Striker Ave., Suite 8 • Sacramento, CA 95834 • (916) 921-9600 FAX (916) 921-0100
1900 Bates Ave., Suite LM • Concord, CA 94520 • (510) 686-9600 FAX (510) 686-9689

Mobil Oil Consulting Firm: ALISTO ENGINEERING
Station No./Site Address: 90 Ferry Pt Maersk Terminal Oakland
Address: 1575 Treat Blvd # 201
Project Contact: Brady Nagle
City: Walnut Creek State: CA Zip: 94598
Mobil Oil Engineer: Steve Pap
Tel: 510 295 1650 Fax.: 510 295 1823
Sampler(s) (signature): Jeff Morse

Sample I.D.	Matrix	Date Sampled	Time	Preservation	Number of Containers	Type of Containers	BTEX - EPA 602/8020	BTEX + TPH EPA M602/8015/8020 (GAS)	TPH EPA Modified 8015 Gas ☐ Diesel ☐	Oil & Grease - EPA 413.2	TOC	Bulk Density	EPA 624/8240	EPA 625/8270	Title 22 Metals EPA 6010/7000 TTLC ☐ STLC ☐	Lead Org./DHS ☐ Lead Total ☐	EDB/DBCD - EPA 504	PAHs	Bioassay - Title 22 Haz. Waste	Bioassay - Effluent		HOLD
SB-1 Deep 16-16.5	SOIL	9/13/95		Ice	1						X				5091491							
SB-2 Deep 15-15.5		9/13/95			1																	X
SB-2 Deep 20-20.5		9/13/95			1						X				5091492							
[illegible] CEP		9/13/95			[illegible]																	
SB-2 Deep 26-26.5		9/18/95			1																	X
SB-2 Deep 31-31.5		9/18/95			1																	X
SB-2 Deep 35.5-36		9/18/95			1																	X
SB-2 Deep 40.5-41		9/18/95			1						X	X			5091493							
SB-2 Deep 55		9/19/95			1						X	X			5091494							

CODING (check one)

- Code 1 ☐ Emergency Response
- Code 2 ☒ Site Assessment
- Code 3 ☐ Remediation (Plan Devlpmt.)
- Code 4 ☐ Active Remed. (Install./Start-up)
- Code 5 ☐ Active Remed. (O & M)
- Code 6 ☐ Passive Remed/ Monitoring
- Code 7 ☐ Closure
- Code 8 ☐ Construction
- Code 9 ☐ Litigation/Claims Fines

Relinquished by: Date/Time: 9/21/95 5:55
Relinquished by: Date/Time:
Relinquished by: Date/Time:
Relinquished by: Date/Time:
Relinquished in Lab by: Date/Time: 9/21/95 7:23
Relinquished by: Date/Time:

Turnaround Time: (check one): Normal X Same day ___ 1 day ___ 2 day ___ 5 day ___

Sample Integrity: Intact ___ On Ice ___

Remarks:

SEQUOIA ANALYTICAL
CHAIN OF CUSTODY

680 Chesapeake Drive • Redwood City, CA 94063 • (415) 364-9600 FAX (415) 364-9233
819 Striker Ave., Suite 8 • Sacramento, CA 95834 • (916) 921-9600 FAX (916) 921-0100
1900 Bates Ave., Suite LM • Concord, CA 94520 • (510) 686-9600 FAX (510) 686-9689

091354

510 295 1823:#17

WALNUT CREEK→

Mobil Oil Consulting Firm: AGUSTO ENGINEERING
Address: 1575 Treat Blvd # 201
City: Walnut Creek State: CA Zip: 94598
Tel: 510 295 1650 Fax.: 510 295 1823

Station No./Site Address: 569 Ferry St Maritime Landing Oakland
Project Contact: Brady Nagle
Mobil Oil Engineer: Steve Pao
Sampler(s) (signature):

Sample I.D.	Matrix	Date Sampled	Time	Preservation	Number of Containers	Type of Containers	BTEX - EPA 602/8020	BTEX -TPH EPA M602/8015/8020 (GAS)	TPH EPA Modified 8015 Gas / Diesel	Oil & Grease - EPA 413.2	TOC	Bulk Density	EPA 624/8240	EPA 625/8270	Title 22 Metals EPA 6010/7000 TTLC / STLC	Lead Org./DHS / Lead Total	EDB/DBCD - EPA 504	TDS	Bioassay - Title 22 Haz. Waste	Bioassay - Effluent	Moisture Content	HOLD
SB-2 Deep 7.5	SOIL	9/14/95		Ice	1																	
SB-F5/3.0		9/14/95			1						X	X			5091495						X	
SB-F5/3.5		9/14/95			1			X							5091496							
SB-F5/5.0		9/14/95			1																	
SB-F5/5.5		9/14/95			1			X							5091497							X
SB-2 Deep 16-19	WATER	9/14/95		no	2	VOA		X							5091498 AB							
SB-2 Deep 27-28.5			1140		1L 2VOA			X							5091499 AC		X					
SB-2 Deep 32.5-34			2140		1L 2VOA			X							5091500 AC		X					
SB-2 Deep 37.5-39		9/14/95	3140		2	VOA		X							5091501 AD							

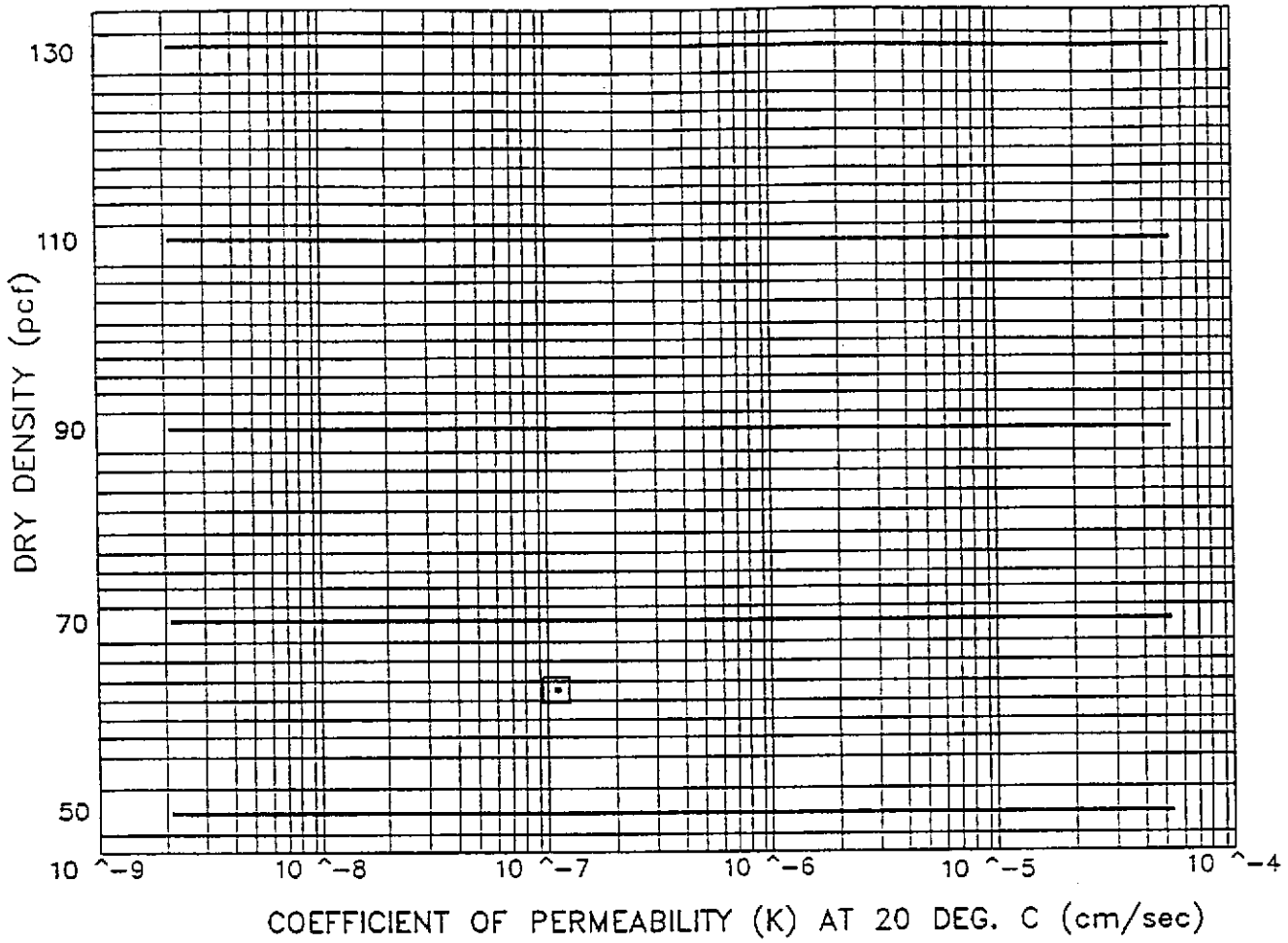
Relinquished by: Date/Time: 9/14/95 5:55
Relinquished by: Date/Time:
Relinquished by: Date/Time:
Relinquished by: Date/Time:
Relinquished by: Date/Time:
Relinquished in Lab by: Date/Time: 9/14/95 17:23

Remarks: VOA's unpreserved, Liters unpreserved

CODING (check one)
- Code 1 ☐ Emergency Response
- Code 2 ☒ Site Assessment
- Code 3 ☐ Remediation (Plan Dev/pmt.)
- Code 4 ☐ Active Remed. (Install./Start-up)
- Code 5 ☐ Active Remed. (O & M)
- Code 6 ☐ Passive Remed/ Monitoring
- Code 7 ☐ Closure
- Code 8 ☐ Construction
- Code 9 ☐ Litigation/Claims Fines

Turnaround Time: (check one):
Normal ☒ Same day ____
1 day ____ 2 day ____
5 day ____

Sample Integrity:
Intact ____ On Ice ____



PHYSICAL CONDITIONS		TEST NO. A ⊡	B △	C •
INITIAL	DIAMETER (in)	2.416		
	HEIGHT (in)	1.93		
	WATER CONTENT (%)	59.73		
	DRY DENSITY (pcf)	63.27		
	VOID RATIO	1.65		
	SATURATION (%)	100		
FINAL	CONSOLIDATION PRESSURE (psf)	288		
	WATER CONTENT (%)	55.78		
	DRY DENSITY (pcf)	67.30		
	VOID RATIO	1.49		
	SATURATION (%)	100		
PERMEABILITY AT 20 DEG. C (cm/sec)		1.04×10^{-7}		
SAMPLE SOURCE:		ALISTO ENGINEERING, S8-3, 17'		
CLASSIFICATION:		SILT		

TEST TYPE: FALLING HEAD

ROGERS/PACIFIC
GEOLOGICAL AND GEOTECHNICAL ENGINEERING

ALISTO ENGINEERING GROUP

PERMEABILITY TEST REPORT

PROJ NO.: LT1866T	DATE: AUGUST 1995	FIGURE:

CAD FILE: LT1866-7. DWG

ALISTO ENGINEERING GROUP

CHAIN OF CUSTODY

Page 1 of 1

Consultant's Name: Alisto Engineering Group

Address: 1575 Treat Blvd 201 Walnut Creek CA

Consultant Project #: 10-098-08

Phone #: (510) 295-1650 Fax #: (510) 295-1823

Project Contact: Ted Moise

Sampler's Signature: Ted Moise

Sampled by (print): Ted Moise

Site Location: Port of Oakland 909 Ferry St

Site Location #:

Shipment Method:

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

ANALYSIS REQUIRED

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

Sample Description	Collection Date/Time	Matrix Soil/Water	Prsv	# of Cont	Sample #	TPH/GAS/BTEX EPA 8015/8020	TPH/Diesel EPA 8015	Oil & Grease SM 5520	HVOC 8010	ASTM D5084-90							
SB-3-1 dep-17.5	7/13/95 11:40	Soil		1						✓							

COMMENTS

Falling Head

Relinquished by/Affiliation	Date	Time	Accepted by/Affiliation	Date	Time
Ted Moise	8/3/95	3:02	Gay Tanaseseca	8-3-95	3:02
Gay Tanaseseca	9-14-95			9/14/95	1249

Additional Comments:

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alisto Engineering Group	Client Project ID:	Mobil, Maersk Terminal	Sampled: Jul 12, 1995
1575 Treat Blvd., Ste. 201	Sample Matrix:	Soil	Received: Jul 17, 1995
Walnut Creek, CA 94598	Analysis Method:	EPA 5030/8015 Mod./8020	Reported: Jul 25, 1995
Attention: Brady Nagle	First Sample #:	507-0753	

QC Batch Number:	SP072195	SP071995	SP071995	SP072095	SP072095	SP071995
	8020EXA	8020EXA	8020EXA	8020EXA	8020EXA	8020EXA

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit mg/kg	Sample I.D. 507-0753 SB-A4 @ 3.0	Sample I.D. 507-0754 SB-A4 @ 6.0	Sample I.D. 507-0755 SB-C4 @ 3.0	Sample I.D. 507-0756 SB-C4 @ 6.0	Sample I.D. 507-0757 SB-D4 @ 3.0	Sample I.D. 507-0758 SB-D4 @ 6.0
Purgeable Hydrocarbons	1.0	68	300	580	910	1,100	280
Benzene	0.0050	0.18	0.55	13	12	8.0	1.5
Toluene	0.0050	0.32	1.2	4.0	16	49	10
Ethyl Benzene	0.0050	1.8	3.9	12	22	19	6.4
Total Xylenes	0.0050	0.40	8.6	23	73	100	38
Chromatogram Pattern:		Gasoline	Gasoline	Gasoline	Gasoline	Gasoline	Gasoline

Quality Control Data

Report Limit Multiplication Factor:	5.0	25	50	50	100	50
Date Analyzed:	7/21/95	7/19/95	7/19/95	7/20/95	7/20/95	7/20/95
Instrument Identification:	HP-4	HP-4	HP-4	HP-4	HP-4	HP-2
Surrogate Recovery, %: (QC Limits = 70-130%)	100	100	124	125	105	116

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

RECEIVED
JUL 28 1995

5070753.ALS <1>

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alisto Engineering Group	Client Project ID:	Mobil, Maersk Terminal	Sampled: Jul 12, 1995
1575 Treat Blvd., Ste. 201	Sample Matrix:	Soil	Received: Jul 17, 1995
Walnut Creek, CA 94598	Analysis Method:	EPA 5030/8015 Mod./8020	Reported: Jul 25, 1995
Attention: Brady Nagle	First Sample #:	507-0759	

QC Batch Number:	SP071995 8020EXA	SP071995 8020EXA	SP071995 8020EXA	SP071995 8020EXA	SP071995 8020EXA	SP071995 8020EXA

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit mg/kg	Sample I.D. 507-0759 SB-E4 @ 3.0	Sample I.D. 507-0760 SB-E4 @ 6.0	Sample I.D. 507-0761 SB-E5 @ 3.0	Sample I.D. 507-0762 SB-E5 @ 6.0	Sample I.D. 507-0763 SB-G5 @ 3.0	Sample I.D. 507-0764 SB-~~G4~~ @ 6.0 SB-G5 CEE 10/19
Purgeable Hydrocarbons	1.0	290	170	N.D.	N.D.	N.D.	8.7
Benzene	0.0050	1.6	1.3	N.D.	N.D.	N.D.	N.D.
Toluene	0.0050	2.0	1.3	N.D.	N.D.	N.D.	N.D.
Ethyl Benzene	0.0050	13	6.8	N.D.	N.D.	N.D.	0.075
Total Xylenes	0.0050	2.7	1.3	N.D.	N.D.	N.D.	0.12
Chromatogram Pattern:		Gasoline	Gasoline	--	--	--	Unidentifed Hydrocarbons >C9

Quality Control Data

Report Limit Multiplication Factor:	50	50	1.0	1.0	1.0	1.0
Date Analyzed:	7/19/95	7/19/95	7/19/95	7/19/95	7/20/95	7/20/95
Instrument Identification:	HP-4	HP-4	HP-2	HP-4	HP-2	HP-2
Surrogate Recovery, %: (QC Limits = 70-130%)	96	101	103	103	111	114

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alisto Engineering Group	Client Project ID:	Mobil, Maersk Terminal	Sampled: Jul 12-13, 1995
1575 Treat Blvd., Ste. 201	Sample Matrix:	Soil	Received: Jul 17, 1995
Walnut Creek, CA 94598	Analysis Method:	EPA 5030/8015 Mod./8020	Reported: Jul 25, 1995
Attention: Brady Nagle	First Sample #:	507-0765	

QC Batch Number:	SP071995	SP071995	SP071995	SP071995	SP071995	SP072095
	8020EXA	8020EXA	8020EXA	8020EXA	8020EXA	8020EXA

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit mg/kg	Sample I.D. 507-0765 SB-A1 @ 3.0	Sample I.D. 507-0766 SB-A1 @ 6.0	Sample I.D. 507-0767 SB-D3 @ 3.0	Sample I.D. 507-0768 SB-D3 @ 6.0	Sample I.D. 507-0769 SB-F8 @ 3.0	Sample I.D. 507-0770 SB-F8 @ 6.0
Purgeable Hydrocarbons	1.0	N.D.	N.D.	890	220	7.4	1.5
Benzene	0.0050	N.D.	N.D.	21	5.6	0.052	0.011
Toluene	0.0050	N.D.	N.D.	6.1	0.84	0.0062	N.D.
Ethyl Benzene	0.0050	N.D.	N.D.	17	5.6	0.018	N.D.
Total Xylenes	0.0050	N.D.	N.D.	36	12	0.087	0.095
Chromatogram Pattern:		--	--	Gasoline	Gasoline	Gasoline Unidentifed Hydrocarbons >C9	Unidentifed Hydrocarbons >C9

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	50	50	2.5	1.0
Date Analyzed:	7/19/95	7/19/95	7/19/95	7/19/95	7/20/95	7/20/95
Instrument Identification:	HP-4	HP-4	HP-4	HP-2	HP-2	HP-5
Surrogate Recovery, %: (QC Limits = 70-130%)	103	102	133	137	117	96

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alisto Engineering Group	Client Project ID:	Mobil, Maersk Terminal	Sampled: Jul 13, 1995
1575 Treat Blvd., Ste. 201	Sample Matrix:	Soil	Received: Jul 17, 1995
Walnut Creek, CA 94598	Analysis Method:	EPA 5030/8015 Mod./8020	Reported: Jul 25, 1995
Attention: Brady Nagle	First Sample #:	507-0771	

QC Batch Number:	SP072195	SP072095	SP072195	SP072095	SP072095	SP071995
	8020EXA	8020EXA	8020EXA	8020EXA	8020EXA	8020EXA

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit mg/kg	Sample I.D. 507-0771 SB-G8 @ 3.0	Sample I.D. 507-0772 SB-G8 @ 6.0	Sample I.D. 507-0773 SB-C6 @ 3.0	Sample I.D. 507-0774 SB-C6 @ 6.0	Sample I.D. 507-0775 SB-D6 @ 3.0	Sample I.D. 507-0776 SB-D6 @ 6.0
Purgeable Hydrocarbons	1.0	N.D.	N.D.	1.6	N.D.	590	540
Benzene	0.0050	N.D.	N.D.	0.0072	N.D.	2.0	0.29
Toluene	0.0050	N.D.	N.D.	N.D.	N.D.	2.0	0.66
Ethyl Benzene	0.0050	N.D.	N.D.	N.D.	N.D.	1.7	0.25
Total Xylenes	0.0050	N.D.	0.0091	0.013	N.D.	13	2.1
Chromatogram Pattern:		--	--	Unidentified Hydrocarbons >C9	--	Gasoline & Unidentified Hydrocarbons >C9	Gasoline & Unidentified Hydrocarbons >C8

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	1.0	1.0	250	100
Date Analyzed:	7/21/95	7/20/95	7/21/95	7/20/95	7/20/95	7/20/95
Instrument Identification:	HP-2	HP-5	HP-4	HP-5	HP-5	HP-9
Surrogate Recovery, %: (QC Limits = 70-130%)	113	99	103	97	98	138

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alisto Engineering Group	Client Project ID:	Mobil, Maersk Terminal	Sampled: Jul 13, 1995
1575 Treat Blvd., Ste. 201	Sample Matrix:	Soil	Received: Jul 17, 1995
Walnut Creek, CA 94598	Analysis Method:	EPA 5030/8015 Mod./8020	Reported: Jul 25, 1995
Attention: Brady Nagle	First Sample #:	507-0777	

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit mg/kg	Sample I.D. 507-0777 SB-E6 @ 3.0	Sample I.D. 507-0778 SB-E6 @ 6.0	Sample I.D. 507-0779 SB-F6 @ 3.0	Sample I.D. 507-0780 SB-F6 @ 6.0	Sample I.D. 507-0781 SB-G6 @ 3.0	Sample I.D. 507-0782 SB-G6 @ 6.0
QC Batch Number:		SP072095 8020EXA	SP072095 8020EXA	SP071995 8020EXA	SP071995 8020EXA	SP072195 8020EXA	SP072195 8020EXA
Purgeable Hydrocarbons	1.0	2.0	N.D.	17	370	N.D.	N.D.
Benzene	0.0050	0.0085	N.D.	N.D.	0.22	N.D.	N.D.
Toluene	0.0050	N.D.	N.D.	0.13	1.2	N.D.	N.D.
Ethyl Benzene	0.0050	N.D.	N.D.	0.17	N.D.	N.D.	N.D.
Total Xylenes	0.0050	0.046	N.D.	0.50	5.9	N.D.	N.D.
Chromatogram Pattern:		Gasoline & Unidentifed Hydrocarbons >C9	--	Gasoline & Unidentifed Hydrocarbons >C9	Gasoline	--	--

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	5.0	50	1.0	1.0
Date Analyzed:	7/20/95	7/20/95	7/20/95	7/19/95	7/21/95	7/21/95
Instrument Identification:	HP-5	HP-4	HP-2	HP-5	HP-4	HP-4
Surrogate Recovery, %: (QC Limits = 70-130%)	96	101	108	86	105	106

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alisto Engineering Group	Client Project ID:	Mobil, Maersk Terminal	Sampled: Jul 13, 1995
1575 Treat Blvd., Ste. 201	Sample Matrix:	Soil	Received: Jul 17, 1995
Walnut Creek, CA 94598	Analysis Method:	EPA 5030/8015 Mod./8020	Reported: Jul 25, 1995
Attention: Brady Nagle	First Sample #:	507-0783	

QC Batch Number: SP072095 | SP072195 | SP072195 | SP071995 | SP072195 | SP072095

8020EXA | 8020EXA | 8020EXA | 8020EXA | 8020EXA | 8020EXA

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit mg/kg	Sample I.D. 507-0783 SB-F7 @ 3.0	Sample I.D. 507-0784 SB-F7 @ 6.0	Sample I.D. 507-0785 SB-G7 @ 3.0	Sample I.D. 507-0786 SB-G7 @ 6.0	Sample I.D. 507-0787 SB-E7 @ 3.0	Sample I.D. 507-0788 SB-E7 @ 6.0
Purgeable Hydrocarbons	1.0	180	18	N.D.	1.9	4.3	N.D.
Benzene	0.0050	0.092	N.D.	N.D.	N.D.	0.0086	N.D.
Toluene	0.0050	0.11	0.0071	N.D.	N.D.	0.011	N.D.
Ethyl Benzene	0.0050	0.079	0.14	N.D.	0.0055	0.021	N.D.
Total Xylenes	0.0050	1.3	0.15	N.D.	0.033	0.059	0.012
Chromatogram Pattern:		Gasoline	Gasoline & Unidentified Hydrocarbons >C8	--	Unidentified Hydrocarbons >C9	Unidentified Hydrocarbons >C9	--

Quality Control Data

Report Limit Multiplication Factor:	10	1.0	1.0	1.0	1.0	1.0
Date Analyzed:	7/20/95	7/21/95	7/21/95	7/20/95	7/21/95	7/20/95
Instrument Identification:	HP-9	HP-4	HP-2	HP-2	HP-2	HP-4
Surrogate Recovery, %: (QC Limits = 70-130%)	103	91	121	119	121	103

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alisto Engineering Group	Client Project ID:	Mobil, Maersk Terminal	Sampled: Jul 12, 1995
1575 Treat Blvd., Ste. 201	Sample Matrix:	Soil	Received: Jul 17, 1995
Walnut Creek, CA 94598	Analysis Method:	EPA 5030/8015 Mod./8020	Reported: Jul 25, 1995
Attention: Brady Nagle	First Sample #:	507-0789	

QC Batch Number: SP72095 8020EXA | SP072195 8020EXA

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit mg/kg	Sample I.D. 507-0789 SB-F4 @ 3.0	Sample I.D. 507-0790 SB-F4 @ 6.0
Purgeable Hydrocarbons	1.0	140	N.D.
Benzene	0.0050	N.D.	N.D.
Toluene	0.0050	N.D.	N.D.
Ethyl Benzene	0.0050	N.D.	N.D.
Total Xylenes	0.0050	N.D.	N.D.
Chromatogram Pattern:		Unidentified Hydrocarbons >C9	--

Quality Control Data

Report Limit Multiplication Factor:	50	1.0
Date Analyzed:	7/20/95	7/21/95
Instrument Identification:	HP-4	HP-5
Surrogate Recovery, %: (QC Limits = 70-130%)	99	96

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alisto Engineering Group
1575 Treat Blvd., Ste. 201
Walnut Creek, CA 94598
Attention: Brady Nagle

Client Project ID: Mobil, Maersk Terminal
Matrix: Solid
QC Sample Group: 5070753-90
Reported: Jul 25, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	SP072195	SP072195	SP072195	SP072195
	8020EXA	8020EXA	8020EXA	8020EXA
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	A. Tuzon	A. Tuzon	A. Tuzon	A. Tuzon
MS/MSD #:	5071246	5071246	5071246	5071246
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	7/21/95	7/21/95	7/21/95	7/21/95
Analyzed Date:	7/21/95	7/21/95	7/21/95	7/21/95
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4
Conc. Spiked:	0.40 mg/kg	0.40 mg/kg	0.40 mg/kg	1.2 mg/kg
Result:	0.38	0.40	0.41	1.2
MS % Recovery:	95	100	103	103
Dup. Result:	0.35	0.37	0.38	1.1
MSD % Recov.:	88	93	95	95
RPD:	7.7	7.3	8.1	8.1
RPD Limit:	0-20	0-20	0-20	0-20

LCS #:	2LCS072195	2LCS072195	2LCS072195	2LCS072195
Prepared Date:	7/21/95	7/21/95	7/21/95	7/21/95
Analyzed Date:	7/21/95	7/21/95	7/21/95	7/21/95
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
LCS Result:	20	21	21	64
LCS % Recov.:	101	104	106	106

MS/MSD LCS Control Limits	55-145	47-149	47-155	56-140

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS = Matrix Spike, MSD = MS Duplicate, IS = Instrument Spike, ISD = IS Duplicate, RPD = Relative % Difference

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alisto Engineering Group
1575 Treat Blvd., Ste. 201
Walnut Creek, CA 94598
Attention: Brady Nagle

Client Project ID: Mobil, Maersk Terminal
Matrix: Solid
QC Sample Group: 5070753-90
Reported: Jul 25, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	SP071995	SP071995	SP071995	SP071995
	8020EXA	8020EXA	8020EXA	8020EXA
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	A. Tuzon	A. Tuzon	A. Tuzon	A. Tuzon
MS/MSD #:	5070761	5070761	5070761	5070761
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	7/19/95	7/19/95	7/19/95	7/19/95
Analyzed Date:	7/19/95	7/19/95	7/19/95	7/19/95
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4
Conc. Spiked:	0.40 mg/kg	0.40 mg/kg	0.40 mg/kg	1.2 mg/kg
Result:	0.41	0.43	0.44	1.3
MS % Recovery:	103	108	110	108
Dup. Result:	0.40	0.42	0.44	1.2
MSD % Recov.:	100	105	110	100
RPD:	3.0	2.8	0.0	7.7
RPD Limit:	0-20	0-20	0-20	0-20

LCS #:	2LCS071995	2LCS071995	2LCS071995	2LCS071995
Prepared Date:	7/19/95	7/19/95	7/19/95	7/19/95
Analyzed Date:	7/19/95	7/19/95	7/19/95	7/19/95
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
LCS Result:	16	21	23	68
LCS % Recov.:	79	105	113	114

MS/MSD LCS Control Limits	55-145	47-149	47-155	56-140

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS = Matrix Spike, MSD = MS Duplicate, IS = Instrument Spike, ISD = IS Duplicate, RPD = Relative % Difference

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alisto Engineering Group
1575 Treat Blvd., Ste. 201
Walnut Creek, CA 94598
Attention: Brady Nagle

Client Project ID: Mobil, Maersk Terminal
Matrix: Solid
QC Sample Group: 5070753-90
Reported: Jul 25, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	SP072095	SP072095	SP072095	SP072095
	8020EXA	8020EXA	8020EXA	8020EXA
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	A. Tuzon	A. Tuzon	A. Tuzon	A. Tuzon
MS/MSD #:	5071123	5071123	5071123	5071123
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	7/20/95	7/20/95	7/20/95	7/20/95
Analyzed Date:	7/20/95	7/20/95	7/20/95	7/20/95
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4
Conc. Spiked:	0.40 mg/kg	0.40 mg/kg	0.40 mg/kg	1.2 mg/kg
Result:	0.38	0.41	0.42	1.3
MS % Recovery:	95	103	105	104
Dup. Result:	0.39	0.41	0.42	1.3
MSD % Recov.:	98	103	105	105
RPD:	2.6	0.0	0.0	0.80
RPD Limit:	0-20	0-20	0-20	0-20

LCS #:	2LCS072095	2LCS072095	2LCS072095	2LCS072095
Prepared Date:	7/20/95	7/20/95	7/20/95	7/20/95
Analyzed Date:	7/20/95	7/20/95	7/20/95	7/20/95
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
LCS Result:	21	22	22	66
LCS % Recov.:	105	109	111	110

MS/MSD LCS Control Limits	55-145	47-149	47-155	56-140

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS = Matrix Spike, MSD = MS Duplicate, IS = Instrument Spike, ISD = IS Duplicate, RPD = Relative % Difference

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alisto Engineering Group
1575 Treat Blvd., Ste. 201
Walnut Creek, CA 94598
Attention: Brady Nagle

Client Project ID: Mobil, Maersk Terminal
Matrix: Solid
QC Sample Group: 5070753-90
Reported: Jul 25, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	SP071995	SP071995	SP071995	SP071995
	8020EXA	8020EXA	8020EXA	8020EXA
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	A. Tuzon	A. Tuzon	A. Tuzon	A. Tuzon
MS/MSD #:	5070761	5070761	5070761	5070761
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	7/19/95	7/19/95	7/19/95	7/19/95
Analyzed Date:	7/19/95	7/19/95	7/19/95	7/19/95
Instrument I.D.#:	HP-2	HP-2	HP-2	HP-2
Conc. Spiked:	0.40 mg/kg	0.40 mg/kg	0.40 mg/kg	1.2 mg/kg
Result:	0.47	0.47	0.48	1.4
MS % Recovery:	118	118	120	119
Dup. Result:	0.42	0.41	0.42	1.3
MSD % Recov.:	105	103	105	106
RPD:	12	14	13	12
RPD Limit:	0-20	0-20	0-20	0-20

LCS #:	1LCS072095	1LCS072095	1LCS072095	1LCS072095
Prepared Date:	7/20/95	7/20/95	7/20/95	7/20/95
Analyzed Date:	7/20/95	7/20/95	7/20/95	7/20/95
Instrument I.D.#:	HP-2	HP-2	HP-2	HP-2
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
LCS Result:	23	23	24	72
LCS % Recov.:	117	114	119	120

MS/MSD LCS Control Limits	55-145	47-149	47-155	56-140

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS = Matrix Spike, MSD = MS Duplicate, IS = Instrument Spike, ISD = IS Duplicate, RPD = Relative % Difference

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alisto Engineering Group
1575 Treat Blvd., Ste. 201
Walnut Creek, CA 94598
Attention: Brady Nagle

Client Project ID: Mobil, Maersk Terminal
Matrix: Solid
QC Sample Group: 5070753-90
Reported: Jul 25, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	SP072095	SP072095	SP072095	SP072095
	8020EXA	8020EXA	8020EXA	8020EXA
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	M. Creusere	M. Creusere	M. Creusere	M. Creusere
MS/MSD #:	5070778	5070778	5070778	5070778
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	7/20/95	7/20/95	7/20/95	7/20/95
Analyzed Date:	7/20/95	7/20/95	7/20/95	7/20/95
Instrument I.D.#:	HP-5	HP-5	HP-5	HP-5
Conc. Spiked:	0.40 mg/kg	0.40 mg/kg	0.40 mg/kg	1.2 mg/kg
Result:	0.36	0.35	0.35	1.1
MS % Recovery:	90	88	88	92
Dup. Result:	0.34	0.34	0.33	1.0
MSD % Recov.:	85	85	83	83
RPD:	5.7	2.9	5.8	9.5
RPD Limit:	0-20	0-20	0-20	0-20

LCS #:	3LCS072095	3LCS072095	3LCS072095	3LCS072095
Prepared Date:	7/20/95	7/20/95	7/20/95	7/20/95
Analyzed Date:	7/20/95	7/20/95	7/20/95	7/20/95
Instrument I.D.#:	HP-5	HP-5	HP-5	HP-5
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
LCS Result:	19	19	19	57
LCS % Recov.:	97	95	93	96

MS/MSD LCS Control Limits	55-145	47-149	47-155	56-140

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS = Matrix Spike, MSD = MS Duplicate, IS = Instrument Spike, ISD = IS Duplicate, RPD = Relative % Difference

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alisto Engineering Group
1575 Treat Blvd., Ste. 201
Walnut Creek, CA 94598
Attention: Brady Nagle

Client Project ID: Mobil, Maersk Terminal
Matrix: Solid
QC Sample Group: 5070753-90
Reported: Jul 25, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	SP072195	SP072195	SP072195	SP072195
Analy. Method:	8020EXA EPA 8020	8020EXA EPA 8020	8020EXA EPA 8020	8020EXA EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	A. Tuzon	A. Tuzon	A. Tuzon	A. Tuzon
MS/MSD #:	5071246	5071246	5071246	5071246
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	7/21/95	7/21/95	7/21/95	7/21/95
Analyzed Date:	7/21/95	7/21/95	7/21/95	7/21/95
Instrument I.D.#:	HP-2	HP-2	HP-2	HP-2
Conc. Spiked:	0.40 mg/kg	0.40 mg/kg	0.40 mg/kg	1.2 mg/kg
Result:	0.38	0.38	0.4	1.2
MS % Recovery:	95	95	100	101
Dup. Result:	0.42	0.42	0.44	1.3
MSD % Recov.:	105	105	110	109
RPD:	10	10	9.5	7.9
RPD Limit:	0-20	0-20	0-20	0-20

LCS #:	1LCS072195	1LCS072195	1LCS072195	1LCS072195
Prepared Date:	7/21/95	7/21/95	7/21/95	7/21/95
Analyzed Date:	7/21/95	7/21/95	7/21/95	7/21/95
Instrument I.D.#:	HP-2	HP-2	HP-2	HP-2
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
LCS Result:	24	23	24	72
LCS % Recov.:	118	115	120	120

MS/MSD LCS Control Limits	55-145	47-149	47-155	56-140

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS = Matrix Spike, MSD = MS Duplicate, IS = Instrument Spike, ISD = IS Duplicate, RPD = Relative % Difference

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alisto Engineering Group
1575 Treat Blvd., Ste. 201
Walnut Creek, CA 94598
Attention: Brady Nagle

Client Project ID: Mobil, Maersk Terminal
Matrix: Solid
QC Sample Group: 5070753-90
Reported: Jul 25, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	SP072095	SP072095	SP072095	SP072095
	8020EXA	8020EXA	8020EXA	8020EXA
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	A. Tuzon	A. Tuzon	A. Tuzon	A. Tuzon
MS/MSD #:	5070778	5070778	5070778	5070778
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	7/20/95	7/20/95	7/20/95	7/20/95
Analyzed Date:	7/20/95	7/20/95	7/20/95	7/20/95
Instrument I.D.#:	HP-9	HP-9	HP-9	HP-9
Conc. Spiked:	0.40 mg/kg	0.40 mg/kg	0.40 mg/kg	1.2 mg/kg
Result:	0.48	0.50	0.50	1.6
MS % Recovery:	120	125	125	133
Dup. Result:	0.48	0.49	0.49	1.6
MSD % Recov.:	120	123	123	133
RPD:	0.0	2.0	2.0	0.0
RPD Limit:	0-20	0-20	0-20	0-20

LCS #:	4LCS072095	4LCS072095	4LCS072095	4LCS072095
Prepared Date:	7/20/95	7/20/95	7/20/95	7/20/95
Analyzed Date:	7/20/95	7/20/95	7/20/95	7/20/95
Instrument I.D.#:	HP-9	HP-9	HP-9	HP-9
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
LCS Result:	20	20	20	67
LCS % Recov.:	99	101	100	112

MS/MSD LCS Control Limits	55-145	47-149	47-155	56-140

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS = Matrix Spike, MSD = MS Duplicate, IS = Instrument Spike, ISD = IS Duplicate, RPD = Relative % Difference

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alisto Engineering Group
1575 Treat Blvd., Ste. 201
Walnut Creek, CA 94598
Attention: Brady Nagle

Client Project ID: Mobil, Maersk Terminal
Matrix: Solid

QC Sample Group: 5070753-90

Reported: Jul 25, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	SP071995	SP071995	SP071995	SP071995
	8020EXA	8020EXA	8020EXA	8020EXA
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	A. Tuzon	A. Tuzon	A. Tuzon	A. Tuzon
MS/MSD #:	5070761	5070761	5070761	5070761
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	7/19/95	7/19/95	7/19/95	7/19/95
Analyzed Date:	7/19/95	7/19/95	7/19/95	7/19/95
Instrument I.D.#:	HP-5	HP-5	HP-5	HP-5
Conc. Spiked:	0.40 mg/kg	0.40 mg/kg	0.40 mg/kg	1.2 mg/kg
Result:	0.40	0.40	0.40	1.2
MS % Recovery:	100	100	100	102
Dup. Result:	0.36	0.36	0.35	1.1
MSD % Recov.:	90	90	88	91
RPD:	11	11	13	11
RPD Limit:	0-20	0-20	0-20	0-20

LCS #:	3LCS071995	3LCS071995	3LCS071995	3LCS071995
Prepared Date:	7/19/95	7/19/95	7/19/95	7/19/95
Analyzed Date:	7/19/95	7/19/95	7/19/95	7/19/95
Instrument I.D.#:	HP-5	HP-5	HP-5	HP-5
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
LCS Result:	15	19	20	63
LCS % Recov.:	76	96	101	104

MS/MSD LCS Control Limits	55-145	47-149	47-155	56-140

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS = Matrix Spike, MSD = MS Duplicate, IS = Instrument Spike, ISD = IS Duplicate, RPD = Relative % Difference

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alisto Engineering Group
1575 Treat Blvd., Ste. 201
Walnut Creek, CA 94598
Attention: Brady Nagle

Client Project ID: Mobil, Maersk Terminal
Matrix: Solid

QC Sample Group: 5070753-90

Reported: Jul 25, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	SP072195	SP072195	SP072195	SP072195
	8020EXA	8020EXA	8020EXA	8020EXA
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	M. Creusere	M. Creusere	M. Creusere	M. Creusere
MS/MSD #:	5071246	5071246	5071246	5071246
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	7/21/95	7/21/95	7/21/95	7/21/95
Analyzed Date:	7/21/95	7/21/95	7/21/95	7/21/95
Instrument I.D.#:	HP-5	HP-5	HP-5	HP-5
Conc. Spiked:	0.40 mg/kg	0.40 mg/kg	0.40 mg/kg	1.2 mg/kg
Result:	0.32	0.37	0.32	0.98
MS % Recovery:	80	80	80	82
Dup. Result:	0.35	0.35	0.35	1.1
MSD % Recov.:	88	88	88	89
RPD:	9.0	9.5	9.5	8.2
RPD Limit:	0-20	0-20	0-20	0-20

LCS #:	3LCS072195	3LCS072195	3LCS072195	3LCS072195
Prepared Date:	7/21/95	7/21/95	7/21/95	7/21/95
Analyzed Date:	7/21/95	7/21/95	7/21/95	7/21/95
Instrument I.D.#:	HP-5	HP-5	HP-5	HP-5
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
LCS Result:	19	19	19	58
LCS % Recov.:	96	95	94	97

MS/MSD LCS Control Limits	55-145	47-149	47-155	56-140

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS=Matrix Spike, MSD=MS Duplicate, IS=Instrument Spike, ISD=IS Duplicate, RPD=Relative % Difference

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

SEQUOIA ANALYTICAL
CHAIN OF CUSTODY

☐ 680 Chesapeake Drive • Redwood City, CA 94063 • (415) 364-9600 FAX (415) 364-9233
☐ 819 Striker Ave., Suite 8 • Sacramento, CA 95834 • (916) 921-9600 FAX (916) 921-0100
☐ 1900 Bates Ave., Suite LM • Concord, CA 94520 • (510) 686-9600 FAX (510) 686-9689

Mobil Oil Consulting Firm: ALISTO ENGINEERING
Station No./Site Address: ~~Atlantic~~ Mobil Terminal/Former Bulk 909 Ferry St. Oakland CA
Address: 1575 Treat Blvd #201
Project Contact: Brady Naffe
City: Walnut Creek State: CA Zip: 94598
Mobil Oil Engineer: Steve Pao
Tel: 510 295 1650 Fax.: 510 295 0823
Sampler(s) (signature):

Sample I.D.	Matrix	Date Sampled	Time	Preservation	Number of Containers	Type of Containers	BTEX - EPA 602/8020	BTEX - TPH EPA M602/8015/8020 (GAS)	TPH EPA Modified 8015 Gas ☐ Diesel ☐	Oil & Grease - EPA 413.2	TPH - EPA 418.1	EPA 601/8010	EPA 624/8240	EPA 625/8270	Title 22 Metals EPA 6010/7000 TTLC ☐ STLC ☐	Lead Org./DHS ☐ Lead Total ☐	EDB/DBCD - EPA 504	pH	Bioassay - Title 22 Haz. Waste	Bioassay - Effluent		
SB-A4@3.0	Soil	7/12/95		ICE	1			X		5070753												
SB-A4@6.0					1					5070754												
SB-C4@3.0					1					5070755												
SB-C4@6.0					1					5070756												
SB-D4@3.0					1					5070757												
SB-D4@6.0					1					5070758												
SB-E4@3.0					1					5070759												
SB-E4@6.0					1					5070760												
SB-E5@3.0		7/12/95			1			X		5070761												

CODING (check one)

- Code 1 ☐ Emergency Response
- Code 2 ☐ Site Assessment
- Code 3 ☐ Remediation (Plan Devlpmt.)
- Code 4 ☐ Active Remed. (Install./Start-up)
- Code 5 ☐ Active Remed. (O & M)
- Code 6 ☐ Passive Remed/ Monitoring
- Code 7 ☐ Closure
- Code 8 ☐ Construction
- Code 9 ☐ Litigation/Claims Fines

Relinquished by: Date/Time: 7-14-95 11:00a
Relinquished by: Date/Time: 7-17 4:15
Relinquished by: Date/Time: 7-17 4:30
Relinquished by: Date/Time:
Relinquished by: Date/Time:
Relinquished in Lab by: Date/Time: 7-17-95 4:30

Turnaround Time: (check one):
Normal X Same day ____
1 day ____ 2 day ____
5 day ____

Sample Integrity:
Intact ____ On Ice ____

Remarks: Please fax copy of C.O.C & results to Gail Jones (Somo)

Page 1 of 1(5)

SEQUOIA ANALYTICAL
CHAIN OF CUSTODY

680 Chesapeake Drive • Redwood City, CA 94063 • (415) 364-9600 FAX (415) 364-9233
819 Striker Ave., Suite 8 • Sacramento, CA 95834 • (916) 921-9600 FAX (916) 921-0100
1900 Bates Ave., Suite LM • Concord, CA 94520 • (510) 686-9600 FAX (510) 686-9689

Mobil Oil Consulting Firm: ALISTO ENGINEERING
Address: 1575 Treat Blvd #201
City: Walnut Creek State: CA Zip: 94598
Tel: 510 295 1650 Fax.: 510 295 1823

Station No./Site Address: ~~Maersk/ATE~~ 909 First St Oakland, Berth 23 & 24
Project Contact: Brady Nagle
Mobil Oil Engineer: Steve Pao
Sampler(s) (signature):

Sample I.D.	Matrix	Date Sampled	Time	Preservation	Number of Containers	Type of Containers	BTEX - EPA 602/8020	BTEX -TPH EPA M602/8015/8020 (GAS)	TPH EPA Modified 8015 Gas ☐ Diesel ☐	Oil & Grease - EPA 413.2	TPH - EPA 418.1	EPA 601/8010	EPA 624/8240	EPA 625/8270	Title 22 Metals EPA 6010/7000 TTLC ☐ STLC ☐	Lead Org./DHS ☐ Lead Total ☐	EDB/DBCD - EPA 504	pH	Bioassay - Title 22 Haz. Waste	Bioassay - Effluent		
SB-E5 @6.0	Soil	7.12.95		Ice	1	1½x6"		X		5070762												
SB-G5 @3.0					1					5070763												
SB-G5@6.0					1					5070764												
SB-A1@3.0					1					5070765												
SB-A1@6.0					1					5070766												
SB-D3@3.0					1					5070767												
SB-D3@6.0		7.12.95			1	1½x6"				5070768												
SB-F8@3.0		7/13/95			1	2"x6"				5070769												
SB-F8@6.0		7/13/95			1			X		5070770												

CODING (check one)

- Code 1 ☐ Emergency Response
- Code 2 ☐ Site Assessment
- Code 3 ☐ Remediation (Plan Devlpmt.)
- Code 4 ☐ Active Remed. (Install./Start-up)
- Code 5 ☐ Active Remed. (O & M)
- Code 6 ☐ Passive Remed/ Monitoring
- Code 7 ☐ Closure
- Code 8 ☐ Construction
- Code 9 ☐ Litigation/Claims Fines

Relinquished by: Date/Time: 7-14-95 1:00P
Relinquished by: Date/Time: 7.17 4:15
Relinquished by: Date/Time: 7.17 4:30
Relinquished by: Date/Time:
Relinquished in Lab by: Date/Time: 7-17-95 4:36

Turnaround Time: (check one)
Normal X Same day ____
1 day ____ 2 day ____
5 day ____

Sample Integrity:
Intact ____ On Ice ____

Remarks: Please fax copy of C.O.C & results to Gail Jones (Soma)

SEQUOIA ANALYTICAL
CHAIN OF CUSTODY

☐ 680 Chesapeake Drive • Redwood City, CA 94063 • (415) 364-9600 FAX (415) 364-9233
☐ 819 Striker Ave., Suite 8 • Sacramento, CA 95834 • (916) 921-9600 FAX (916) 921-0100
☐ 1900 Bates Ave., Suite LM • Concord, CA 94520 • (510) 686-9600 FAX (510) 686-9689

Mobil Oil Consulting Firm: ALISTO ENGINEERING	Station No./Site Address: ~~Former Bulk~~ Plant Yuse Terminal Berth 23, Oakland
Address: 1575 Treat Blvd #201	Project Contact: Brady Nugle
City: Walnut Creek State: CA Zip: 94598	Mobil Oil Engineer: Steve Pao
Tel: 510 295 1650 Fax.: 510 295 1823	Sampler(s) (signature):

Sample I.D.	Matrix	Date Sampled	Time	Preservation	Number of Containers	Type of Containers	BTEX - EPA 602/8020	BTEX -TPH EPA M602/8015/8020 (GAS)	TPH EPA Modified 8015 ☐ Gas ☐ Diesel	Oil & Grease - EPA 413.2	TPH - EPA 418.1	EPA 601/8010	EPA 624/8240	EPA 625/8270	Title 22 Metals EPA 6010/7000 ☐ TTLC ☐ STLC	Lead Org./DHS ☐ Lead Total	EDB/DBCD - EPA 504	pH	Bioassay - Title 22 Haz. Waste	Bioassay - Effluent	
SB-G8 @3.0	Soil	7/13/95		Ice	2x6"			X		5070771											
SB-G8 @6.0										5070772											
SB-G6 @3.0										5070773											
SB-G6 @6.0										5070774											
SB-D6 @3.0										5070775											
SB-D6 @6.0										5070776											
SB-E6 @3.0										5070777											
SB-E6 @6.0					"	"		"		5070778											
SB-F6 @3.0		7/13/95			2x6"			X		5070779											

CODING (check one)

- Code 1 ☐ Emergency Response
- Code 2 ☐ Site Assessment
- Code 3 ☐ Remediation (Plan Devlpmt.)
- Code 4 ☐ Active Remed. (Install./Start-up)
- Code 5 ☐ Active Remed. (O & M)
- Code 6 ☐ Passive Remed/ Monitoring
- Code 7 ☐ Closure
- Code 8 ☐ Construction
- Code 9 ☐ Litigation/Claims Fines

Relinquished by:	Date/Time: 7-14-
Relinquished by:	Date/Time:
Relinquished by:	Date/Time:
Relinquished by:	Date/Time: 7-17 4:15
Relinquished by:	Date/Time: 7-17 4:30
Relinquished in Lab by:	Date/Time: 7-17-95 4:30

Turnaround Time: (check one)
Normal X Same day ____
1 day ____ 2 day ____
5 day ____

Sample Integrity:
Intact ____ On Ice ____

Remarks: Please fax copy of C.O.C & results to Gail Jones (sons)

SEQUOIA ANALYTICAL
CHAIN OF CUSTODY

☐ 680 Chesapeake Drive • Redwood City, CA 94063 • (415) 364-9600 FAX (415) 364-9233
☐ 819 Striker Ave., Suite 8 • Sacramento, CA 95834 • (916) 921-9600 FAX (916) 921-0100
☐ 1900 Bates Ave., Suite LM • Concord, CA 94520 • (510) 686-9600 FAX (510) 686-9689

Mobil Oil Consulting Firm: ALISTO ENGINEERING
Station No./Site Address: ~~Oakland~~ Former Oakland TOSCO Terminal, Berth 23, Oakland
Address: 1575 Treat Blvd #201
Project Contact: Brady Nagle
City: Walnut Creek State: CA Zip: 94598
Mobil Oil Engineer: Steve Pao
Tel: 510 295 1650 Fax.: 510 295 1823
Sampler(s) (signature):

Sample I.D.	Matrix	Date Sampled	Time	Preservation	Number of Containers	Type of Containers	BTEX - EPA 602/8020	BTEX - TPH EPA M602/8015/8020 (GAS)	TPH EPA Modified 8015 Gas ☐ Diesel ☐	Oil & Grease - EPA 413.2	TPH - EPA 418.1	EPA 601/8010	EPA 624/8240	EPA 625/8270	Title 22 Metals EPA 6010/7000 TTLC ☐ STLC ☐	Lead Org./DHS ☐ Lead Total ☐	EDB/DBCD - EPA 504	pH	Bioassay - Title 22 Haz. Waste	Bioassay - Effluent		
SB-F6 @ 6.0	Soil	7/13/95		ICE	1	2"x6"		X		5070780												
SB-G6 @ 3.0					1					5070781												
SB-G6 @ 6.0					1					5070782												
SB-F7 @ 3.0					1					5070783												
SB-F7 @ 6.0					1					5070784												
SB-G7 @ 7.0					1					5070785												
SB-G7 @ 6.0					1					5070786												
SB-E7 @ 3.0		↓			1			↓		5070787												
SB-E7 @ 6.0	↓	7/17/95		↓	1	↓		X		5070788												

CODING (check one)

- Code 1 ☐ Emergency Response
- Code 2 ☐ Site Assessment
- Code 3 ☐ Remediation (Plan Devlpmt.)
- Code 4 ☐ Active Remed. (Install./Start-up)
- Code 5 ☐ Active Remed. (O & M)
- Code 6 ☐ Passive Remed/ Monitoring
- Code 7 ☐ Closure
- Code 8 ☐ Construction
- Code 9 ☐ Litigation/Claims Fines

Relinquished by:	Date/Time: 7-14-95 1:00P	Relinquished by:	Date/Time: 7-17 4:15
Relinquished by:	Date/Time: 7-17 4:30	Relinquished by:	Date/Time:
Relinquished by:	Date/Time:	Relinquished in Lab by:	Date/Time: 7-17-95 4:30

Turnaround Time: (check one): Normal X Same day ___ 1 day ___ 2 day ___ 5 day ___

Sample Integrity: Intact ___ On Ice ___

Remarks: Please fax copy of C.O.C. & results to Gail Jones (510)

SEQUOIA ANALYTICAL
CHAIN OF CUSTODY

☐ 680 Chesapeake Drive • Redwood City, CA 94063 • (415) 364-9600 FAX (415) 364-9233
☐ 819 Striker Ave., Suite 8 • Sacramento, CA 95834 • (916) 921-9600 FAX (916) 921-0100
☐ 1900 Bates Ave., Suite LM • Concord, CA 94520 • (510) 686-9600 FAX (510) 686-9689

Mobil Oil Consulting Firm: ALISTO ENGINEERING	Station No./Site Address: Matson Terminal, Foppert Bldg 909 Ferry St. Oakland CA
Address: 1575 Tice Blvd #201	Project Contact: Brady Nagle
City: Walnut Creek State: CA Zip: 94598	Mobil Oil Engineer: Steve Pao
Tel: 510 295 1650 Fax.:	Sampler(s) (signature):

Sample I.D.	Matrix	Date Sampled	Time	Preservation	Number of Containers	Type of Containers	BTEX - EPA 602/8020	BTEX - TPH EPA M602/8015/8020 (GAS)	TPH EPA Modified 8015 Gas ☐ Diesel ☐	Oil & Grease - EPA 413.2	TPH - EPA 418.1	EPA 601/8010	EPA 624/8240	EPA 625/8270	Title 22 Metals EPA 6010/7000 TTLC ☐ STLC ☐	Lead Org./DHS ☐ Lead Total ☐	EDB/DBCD - EPA 504	pH	Bioassay - Title 22 Haz. Waste	Bioassay - Effluent		
SB-F4@3.0	Soil	7/12/95			1	1½x6		✓		5070789												
SB-F4@6.0	Soil	7/12/95			1	1½x6		✓		5070790												

CODING (check one)

- Code 1 ☐ Emergency Response
- Code 2 ☐ Site Assessment
- Code 3 ☐ Remediation (Plan Devlpmt.)
- Code 4 ☐ Active Remed. (Install./Start-up)
- Code 5 ☐ Active Remed. (O & M)
- Code 6 ☐ Passive Remed/ Monitoring
- Code 7 ☐ Closure
- Code 8 ☐ Construction
- Code 9 ☐ Litigation/Claims Fines

Relinquished by:	Date/Time: 7-14-95 1:30P	Relinquished by:	Date/Time: 7.17 4:15
Relinquished by:	Date/Time: 7.14 4:30	Relinquished by:	Date/Time:
Relinquished by:	Date/Time:	Relinquished to Lab by:	Date/Time: 7-17-95 4:30

Turnaround Time: (check one)
Normal X Same day ___
1 day ___ 2 day ___
5 day ___

Sample Integrity:
Intact ___ On Ice ___

Remarks: Please fax copy of C.O.C results to Gail Jones (SOMA)

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alisto Engineering Group	Client Project ID:	Mobil #Maersk, 909 Ferry St. Oakland	Sampled: Jul 11, 1995
1575 Treat Blvd., Ste. 201	Sample Matrix:	Soil	Received: Jul 11, 1995
Walnut Creek, CA 94598	Analysis Method:	EPA 5030/8015 Mod./8020	Reported: Jul 18, 1995
Attention: Brady Nagle	First Sample #:	507-0386	

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit mg/kg	Sample I.D. 507-0386 SB-A2@3.0	Sample I.D. 507-0387 SB-A2@6.0	Sample I.D. 507-0388 SB-B2@3.0	Sample I.D. 507-0389 SB-B2@6.0	Sample I.D. 507-0390 SB-A3@3.0	Sample I.D. 507-0391 SB-A3@6.0
QC Batch Number:		SP071395 8020EXA	SP071395 8020EXA	SP071395 8020EXA	SP071395 8020EXA	SP071395 8020EXA	SP071395 8020EXA
Purgeable Hydrocarbons	1.0	14	N.D.	N.D.	N.D.	6.2	6.6
Benzene	0.0050	0.020	N.D.	N.D.	N.D.	0.043	N.D.
Toluene	0.0050	0.037	N.D.	N.D.	N.D.	0.074	0.0084
Ethyl Benzene	0.0050	0.065	N.D.	N.D.	N.D.	0.14	0.066
Total Xylenes	0.0050	0.074	N.D.	N.D.	N.D.	0.41	0.051
Chromatogram Pattern:		Gasoline	--	--	--	Gasoline	Gasoline

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	1.0	1.0	1.0	1.0
Date Analyzed:	7/13/95	7/13/95	7/13/95	7/13/95	7/13/95	7/13/95
Instrument Identification:	HP-4	HP-4	HP-4	HP-4	HP-2	HP-4
Surrogate Recovery, %: (QC Limits = 70-130%)	97	100	100	99	140	87

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

RECEIVED
JUL 20 1995

5070386.ALS <1>

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alisto Engineering Group	Client Project ID:	Mobil #Maersk, 909 Ferry St. Oakland	Sampled: Jul 11, 1995
1575 Treat Blvd., Ste. 201	Sample Matrix:	Soil	Received: Jul 11, 1995
Walnut Creek, CA 94598	Analysis Method:	EPA 5030/8015 Mod./8020	Reported: Jul 18, 1995
Attention: Brady Nagle	First Sample #:	507-0392	

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit mg/kg	Sample I.D. 507-0392 SB-C2@3.0	Sample I.D. 507-0393 SB-C2@6.0	Sample I.D. 507-0394 SB-C3@3.0	Sample I.D. 507-0395 SB-C3@6.0	Sample I.D. 507-0396 SB-A5@3.0	Sample I.D. 507-0397 SB-A5@6.0
QC Batch Number:		SP071395 8020EXA	SP071395 8020EXA	SP071395 8020EXA	SP071395 8020EXA	SP071395 8020EXA	SP071395 8020EXA
Purgeable Hydrocarbons	1.0	N.D.	N.D.	1.3	6.8	N.D.	N.D.
Benzene	0.0050	0.050	0.058	0.10	0.58	N.D.	N.D.
Toluene	0.0050	N.D.	N.D.	0.0058	0.27	N.D.	N.D.
Ethyl Benzene	0.0050	0.019	0.025	0.028	0.14	N.D.	N.D.
Total Xylenes	0.0050	0.033	0.041	0.055	0.59	N.D.	N.D.
Chromatogram Pattern:		--	--	Gasoline	Gasoline	--	--

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	1.0	1.0	1.0	1.0
Date Analyzed:	7/13/95	7/13/95	7/13/95	7/13/95	7/13/95	7/13/95
Instrument Identification:	HP-4	HP-2	HP-2	HP-4	HP-4	HP-4
Surrogate Recovery, %: (QC Limits = 70-130%)	98	94	104	108	98	99

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alisto Engineering Group	Client Project ID:	Mobil #Maersk, 909 Ferry St, Oakland	Sampled: Jul 11, 1995
1575 Treat Blvd., Ste. 201	Sample Matrix:	Soil	Received: Jul 11, 1995
Walnut Creek, CA 94598	Analysis Method:	EPA 5030/8015 Mod./8020	Reported: Jul 18, 1995
Attention: Brady Nagle	First Sample #:	507-0398	

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit mg/kg	Sample I.D. 507-0398 SB-B5@3.0	Sample I.D. 507-0399 SB-B5@6.0	Sample I.D. 507-0400 SB-C5@3.0	Sample I.D. 507-0401 SB-C5@6.0	Sample I.D. 507-0402 SB-D5@3.0	Sample I.D. 507-0403 SB-D5@6.0
QC Batch Number:		SP071395 8020EXA	SP071395 8020EXA	SP071395 8020EXA	SP071395 8020EXA	SP071495 8020EXA	SP071495 8020EXA
Purgeable Hydrocarbons	1.0	12	N.D.	160	320	480	880
Benzene	0.0050	0.086	N.D.	4.3	8.9	1.2	1.6
Toluene	0.0050	0.16	N.D.	0.37	0.67	4.0	3.6
Ethyl Benzene	0.0050	0.099	N.D.	2.6	6.0	4.6	5.7
Total Xylenes	0.0050	0.32	N.D.	5.7	14	4.9	6.6
Chromatogram Pattern:		Gasoline	--	Gasoline	Gasoline	Gasoline	Gasoline

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	50	100	100	100
Date Analyzed:	7/13/95	7/13/95	7/13/95	7/13/95	7/14/95	7/14/95
Instrument Identification:	HP-2	HP-2	HP-2	HP-2	HP-5	HP-5
Surrogate Recovery, %: (QC Limits = 70-130%)	180	106	132	130	72	74

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alisto Engineering Group	Client Project ID:	Mobil #Maersk, 909 Ferry St. Oakland	Sampled:	Jul 11, 1995
1575 Treat Blvd., Ste. 201	Sample Matrix:	Soil	Received:	Jul 11, 1995
Walnut Creek, CA 94598	Analysis Method:	EPA 5030/8015 Mod./8020	Reported:	Jul 18, 1995
Attention: Brady Nagle	First Sample #:	507-0404		

QC Batch Number: SP071395 SP071395

8020EXA 8020EXA

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit mg/kg	Sample I.D. 507-0404 SB-B3@3.0	Sample I.D. 507-0405 SB-B3@6.0
Purgeable Hydrocarbons	1.0	N.D.	N.D.
Benzene	0.0050	N.D.	N.D.
Toluene	0.0050	N.D.	N.D.
Ethyl Benzene	0.0050	N.D.	N.D.
Total Xylenes	0.0050	N.D.	N.D.
Chromatogram Pattern:		--	--

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0
Date Analyzed:	7/13/95	7/13/95
Instrument Identification:	HP-2	HP-2
Surrogate Recovery, %: (QC Limits = 70-130%)	106	106

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alisto Engineering Group
1575 Treat Blvd., Ste. 201
Walnut Creek, CA 94598
Attention: Brady Nagle

Client Project ID: Mobil #Maersk, 909 Ferry St. Oakland
Matrix: Solid

QC Sample Group: 5070386-405

Reported: Jul 18, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	SP071395	SP071395	SP071395	SP071395
	8020EXA	8020EXA	8020EXA	8020EXA
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	J. Fontecha	J. Fontecha	J. Fontecha	J. Fontecha
MS/MSD #:	5070502	5070502	5070502	5070502
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	7/12/95	7/12/95	7/12/95	7/12/95
Analyzed Date:	7/13/95	7/13/95	7/13/95	7/13/95
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4
Conc. Spiked:	0.40 mg/kg	0.40 mg/kg	0.40 mg/kg	1.2 mg/kg
Result:	0.40	0.43	0.43	1.3
MS % Recovery:	100	108	108	107
Dup. Result:	0.40	0.43	0.43	1.3
MSD % Recov.:	100	108	108	108
RPD:	0.0	0.0	0.0	0.0093
RPD Limit:	0-20	0-20	0-20	0-20

LCS #:	2LCS071395	2LCS071395	2LCS071395	2LCS071395
Prepared Date:	7/13/95	7/13/95	7/13/95	7/13/95
Analyzed Date:	7/13/95	7/13/95	7/13/95	7/13/95
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4
Conc. Spiked:	0.40 mg/kg	0.40 mg/kg	0.40 mg/kg	1.2 mg/kg
LCS Result:	19	20	21	62
LCS % Recov.:	94	100	103	103

MS/MSD LCS Control Limits	55-145	47-149	47-155	56-140

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS = Matrix Spike, MSD = MS Duplicate, IS = Instrument Spike, ISD = IS Duplicate, RPD = Relative % Difference

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alisto Engineering Group
1575 Treat Blvd., Ste. 201
Walnut Creek, CA 94598
Attention: Brady Nagle

Client Project ID: Mobil #Maersk, 909 Ferry St. Oakland
Matrix: Solid
QC Sample Group: 5070386-405
Reported: Jul 18, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	SP071395	SP071395	SP071395	SP071395
	8020EXA	8020EXA	8020EXA	8020EXA
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	J. Fontecha	J. Fontecha	J. Fontecha	J. Fontecha
MS/MSD #:	5070502	5070502	5070502	5070502
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	7/13/95	7/13/95	7/13/95	7/13/95
Analyzed Date:	7/13/95	7/13/95	7/13/95	7/13/95
Instrument I.D.#:	HP-2	HP-2	HP-2	HP-2
Conc. Spiked:	0.40 mg/kg	0.40 mg/kg	0.40 mg/kg	1.2 mg/kg
Result:	0.45	0.45	0.47	1.4
MS % Recovery:	113	113	118	118
Dup. Result:	0.40	0.40	0.42	1.3
MSD % Recov.:	100	100	105	104
RPD:	12	12	12	13
RPD Limit:	0-20	0-20	0-20	0-20

LCS #:	1 LCS071395	1 LCS071395	1 LCS071395	1 LCS071395
Prepared Date:	7/13/95	7/13/95	7/13/95	7/13/95
Analyzed Date:	7/13/95	7/13/95	7/13/95	7/13/95
Instrument I.D.#:	HP-2	HP-2	HP-2	HP-2
Conc. Spiked:	0.40 mg/kg	0.40 mg/kg	0.40 mg/kg	1.2 mg/kg
LCS Result:	20	21	22	67
LCS % Recov.:	98	103	109	111

MS/MSD LCS Control Limits	55-145	47-149	47-155	56-140

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS = Matrix Spike, MSD = MS Duplicate, IS = Instrument Spike, ISD = IS Duplicate, RPD = Relative % Difference

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alisto Engineering Group
1575 Treat Blvd., Ste. 201
Walnut Creek, CA 94598
Attention: Brady Nagle

Client Project ID: Mobil #Maersk, 909 Ferry St. Oakland, CA
Matrix: Solid

QC Sample Group: 5070386-405

Reported: Jul 18, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	SP071495	SP071495	SP071495	SP071495
Analy. Method:	8020EXA EPA 8020	8020EXA EPA 8020	8020EXA EPA 8020	8020EXA EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	A. Tuzon	A. Tuzon	A. Tuzon	A. Tuzon
MS/MSD #:	5070502	5070502	5070502	5070502
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	7/14/95	7/14/95	7/14/95	7/14/95
Analyzed Date:	7/14/95	7/14/95	7/14/95	7/14/95
Instrument I.D.#:	HP-5	HP-5	HP-5	HP-5
Conc. Spiked:	0.40 mg/kg	0.40 mg/kg	0.40 mg/kg	1.2 mg/kg
Result:	0.33	0.34	0.34	1.1
MS % Recovery:	83	85	85	88
Dup. Result:	0.34	0.34	0.34	1.1
MSD % Recov.:	85	85	85	88
RPD:	2.4	0.0	0.0	0.0
RPD Limit:	0-20	0-20	0-20	0-20

LCS #:	3LCS071495	3LCS071495	3LCS071495	3LCS071495
Prepared Date:	7/14/95	7/14/95	7/14/95	7/14/95
Analyzed Date:	7/14/95	7/14/95	7/14/95	7/14/95
Instrument I.D.#:	HP-5	HP-5	HP-5	HP-5
Conc. Spiked:	0.40 mg/kg	0.40 mg/kg	0.40 mg/kg	1.2 mg/kg
LCS Result:	18	18	18	56
LCS % Recov.:	91	92	91	93

MS/MSD LCS Control Limits	55-145	47-149	47-155	56-140

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS = Matrix Spike, MSD = MS Duplicate, IS = Instrument Spike, ISD = IS Duplicate, RPD = Relative % Difference

SEQUOIA ANALYTICAL
CHAIN OF CUSTODY

☐ 680 Chesapeake Drive • Redwood City, CA 94063 • (415) 364-9600 FAX (415) 364-9233
☐ 819 Striker Ave., Suite 8 • Sacramento, CA 95834 • (916) 921-9600 FAX (916) 921-0100
☐ 1900 Bates Ave., Suite LM • Concord, CA 94520 • (510) 686-9600 FAX (510) 686-9689

Mobil Oil Consulting Firm: ALISTO ENGINEERING
Station No./Site Address: Maersk 907 Ferry St Oakland CA
Address: 1575 Treat Blvd #201
Project Contact: Brady Nagle
City: Walnut Creek State: CA Zip: 94598
Mobil Oil Engineer: Steve Pao
Tel: 510 295 1650 Fax.: 510 295 1823
Sampler(s) (signature):

Sample I.D.	Matrix	Date Sampled	Time	Preservation	Number of Containers	Type of Containers	BTEX - EPA 602/8020	BTEX - TPH EPA M602/8015/8020 (GAS)	TPH EPA Modified 8015 Gas ☐ Diesel ☐	Oil & Grease - EPA 413.2	TPH - EPA 418.1	EPA 601/8010	EPA 624/8240	EPA 625/8270	Title 22 Metals EPA 6010/7000 TTLC ☐ STLC ☐	Lead Org./DHS ☐ Lead Total ☐	EDB/DBCD - EPA 504	pH	Bioassay - Title 22 Haz. Waste	Bioassay - Effluent		
SB-A2@3.0	Soil	7-11-95		Ice	1	1¼x6		X					5070386									
SB-A2@6.0	"	"		"	1	"		"					5070387									
SB-B2@3.0	"	"		"	1	"		"					5070388									
SB-B2@6.0	"	"		"	1	"		"					5070389									
SB-A3@3.0	"	"		"	1	"		"					5070390									
SB-A3@6.0	"	"		"	1	"		"					5070391									
SB-C2@3.0	"	"		"	1	"		"					5070392									
SB-C2@6.0	"	"		"	1	"		"					5070393									
SB-C3@3.0	"	"		"	1	"		X					5070394									

CODING (check one)

- Code 1 ☐ Emergency Response
- Code 2 ☐ Site Assessment
- Code 3 ☒ Remediation (Plan Devlpmt.)
- Code 4 ☐ Active Remed. (Install./Start-up)
- Code 5 ☐ Active Remed. (O & M)
- Code 6 ☐ Passive Remed/ Monitoring
- Code 7 ☐ Closure
- Code 8 ☐ Construction
- Code 9 ☐ Litigation/Claims Fines

Relinquished by: Date/Time: 7-11-95 4:03P
Relinquished by: Date/Time: 7-11 5:20
Relinquished by: Date/Time:

Relinquished by: Date/Time: 7-11-95 4:03
Relinquished by: Date/Time:
Relinquished in Lab by: Date/Time: 7-11-95 17:20

Turnaround Time: (check one):
Normal X Same day ____
1 day ____ 2 day ____
5 day ____

Sample Integrity:
Intact ____ On Ice ____

Remarks: Please fax copy of C.O.C & Results to Gail Jones (SOMA 510 244 6601

SEQUOIA ANALYTICAL
CHAIN OF CUSTODY

☐ 680 Chesapeake Drive • Redwood City, CA 94063 • (415) 364-9600 FAX (415) 364-9233
☐ 819 Striker Ave., Suite 8 • Sacramento, CA 95834 • (916) 921-9600 FAX (916) 921-0100
☐ 1900 Bates Ave., Suite LM • Concord, CA 94520 • (510) 686-9600 FAX (510) 686-9689

Mobil Oil Consulting Firm: ALISTO ENGINEERING
Station No./Site Address: Marsh 909 Ferry St Oakland CA
Address: 1575 Treat Blvd #201
Project Contact: Brady Neagle
City: Walnut Creek State: CA Zip: 94598
Mobil Oil Engineer: Steve Pao
Tel: 510 295 1650 Fax: 510 295 1823
Sampler(s) (signature):

Sample I.D.	Matrix	Date Sampled	Time	Preservation	Number of Containers	Type of Containers	BTEX - EPA 602/8020	BTEX -TPH EPA M602/8015/8020 (GAS)	TPH EPA Modified 8015 Gas ☐ Diesel ☐	Oil & Grease - EPA 413.2	TPH - EPA 418.1	EPA 601/8010	EPA 624/8240	EPA 625/8270	Title 22 Metals EPA 6010/7000 TTLC ☐ STLC ☐	Lead Org./DHS ☐ Lead Total ☐	EDB/DBCD - EPA 504	pH	Bioassay - Title 22 Haz. Waste	Bioassay - Effluent		
SB-C3 @6.0	soil	7/11/95		Ice	1	1½x6		X					5070395									
SB-A5 @3.0					1								5070396									
SB-A5 @6.0					1								5070397									
SB-B5 @3.0					1								5070398									
SB-B5 @6.0					1								5070399									
SB-C5 @3.0					1								5070400									
SB-C5 @6.0					1								5070401									
SB-D5 @3.0					1								5070402									
SB-D5 @6.0					1			X					5070403									

CODING (check one)

- Code 1 ☐ Emergency Response
- Code 2 ☐ Site Assessment
- Code 3 ☒ Remediation (Plan Devlpmt.)
- Code 4 ☐ Active Remed. (Install./Start-up)
- Code 5 ☐ Active Remed. (O & M)
- Code 6 ☐ Passive Remed/ Monitoring
- Code 7 ☐ Closure
- Code 8 ☐ Construction
- Code 9 ☐ Litigation/Claims Fines

Relinquished by: Date/Time: 7-11-95 4:06
Relinquished by: Date/Time: 7.11.95 4:06
Relinquished by: Date/Time: 7.11 5:20
Relinquished by: Date/Time:
Relinquished In Lab by: Date/Time: 7/12/95 17:25

Turnaround Time: (check one)
Normal ___ Same day ___
1 day ___ 2 day ___
5 day ___

Sample Integrity:
Intact ___ On Ice ___

Remarks: Please fax copy of C.O.C results to Gail Jones SOMA

SEQUOIA ANALYTICAL
CHAIN OF CUSTODY

☐ 680 Chesapeake Drive • Redwood City, CA 94063 • (415) 364-9600 FAX (415) 364-9233
☐ 819 Striker Ave., Suite 8 • Sacramento, CA 95834 • (916) 921-9600 FAX (916) 921-0100
☐ 1900 Bates Ave., Suite LM • Concord, CA 94520 • (510) 686-9600 FAX (510) 686-9689

Mobil Oil Consulting Firm: ALISTO ENGINEERING	Station No./Site Address: Marek 909 Ferry St Oakland CA
Address: 1575 Treat Blvd #201	Project Contact: Brady Nagle
City: Walnut Creek State: CA Zip: 94598	Mobil Oil Engineer: Steve Pao
Tel: 510 295 1650 Fax.: 510 295 1827	Sampler(s) (signature):

Sample I.D.	Matrix	Date Sampled	Time	Preservation	Number of Containers	Type of Containers	BTEX - EPA 602/8020	BTEX - TPH EPA M602/8015/8020 (GAS)	TPH EPA Modified 8015 ☐ Gas ☐ Diesel	Oil & Grease - EPA 413.2	TPH - EPA 418.1	EPA 601/8010	EPA 624/8240	EPA 625/8270	Title 22 Metals EPA 6010/7000 ☐ TTLC ☐ STLC	Lead Org./DHS ☐ Lead Total	EDB/DBCD - EPA 504	pH	Bioassay - Title 22 Haz. Waste	Bioassay - Effluent		
SB-B3@3.0	soil	7/11/95		Ice	1	1/2 x 6		X					5070404									
SB-B3@6.0	Soil	↓		↓	1	↓		X					5070405									

CODING (check one)

- Code 1 ☐ Emergency Response
- Code 2 ☐ Site Assessment
- Code 3 ☒ Remediation (Plan Devlpmt.)
- Code 4 ☐ Active Remed. (Install./Start-up)
- Code 5 ☐ Active Remed. (O & M)
- Code 6 ☐ Passive Remed/ Monitoring
- Code 7 ☐ Closure
- Code 8 ☐ Construction
- Code 9 ☐ Litigation/Claims Fines

Relinquished by:	Date/Time: 7-11-95 4:12
Relinquished by:	Date/Time: 7-11 5:20
Relinquished by:	Date/Time:
Relinquished by:	Date/Time: 7-11-95 4:18
Relinquished by:	Date/Time:
Relinquished in Lab by:	Date/Time: 7-11-95 17:20

Turnaround Time: (check one)
Normal ___ Same day ___
1 day ___ 2 day ___
5 day ___

Sample Integrity:
Intact ___ On Ice ___

Remarks:
Please fax COC + analytical results to Gail Jones (SOMA) 510 244-6600

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alisto Engineering Group	Client Project ID:	Former Mobil, Maersk Terminal	Sampled:	Jul 11-13, 1995
1575 Treat Blvd., Ste. 201	Sample Descript:	Soil	Received:	Aug 3, 1995
Walnut Creek, CA 94598	Analysis for:	Percent Moisture	Extracted:	Aug 9, 1995
Attention: Brady Nagle	First Sample #:	508-0200	Analyzed:	Aug 9, 1995
			Reported:	Aug 9, 1995

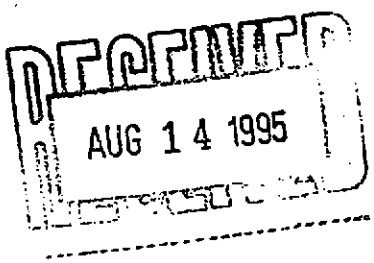
LABORATORY ANALYSIS FOR: Percent Moisture

Sample Number	Sample Description	Detection Limit %	Sample Result %	QC Batch Number	Instrument ID
508-0200	SB-E7@6'	N/A	4.0	IN080995160300A	Manual
508-0201	SB-G7@6'	N/A	12	IN080995160300A	Manual
508-0202	SB-C2@6'	N/A	13	IN080995160300A	Manual
508-0203	SB-E5@6'	N/A	4.0	IN080995160300A	Manual
508-0204	SB-A4@10'	N/A	15	IN080995160300A	Manual

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager



Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

sto Engineering Group	Client Project ID:	Former Mobil, Maersk Terminal	Sampled:	Jul 11-13, 1995
1575 Treat Blvd., Ste. 201	Sample Descript:	Soil	Received:	Aug 3, 1995
Walnut Creek, CA 94598	Analysis for:	Specific Gravity	Extracted:	Aug 9, 1995
Attention: Brady Nagle	First Sample #:	508-0200	Analyzed:	Aug 9, 1995
			Reported:	Aug 9, 1995

LABORATORY ANALYSIS FOR: Specific Gravity

Sample Number	Sample Description	Detection Limit	Sample Result g/cm³	QC Batch Number	Instrument ID
508-0200	SB-E7@6'	N/A	2.0	IN080995213F00A	Manual
508-0201	SB-G7@6'	N/A	1.4	IN080995213F00A	Manual
508-0202	SB-C2@6'	N/A	1.9	IN080995213F00A	Manual
508-0203	SB-E5@6'	N/A	1.2	IN080995213F00A	Manual
508-0204	SB-A4@10'	N/A	1.6	IN080995213F00A	Manual

Analytes reported as N.D. were not present above the stated limit of detection.

EQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alisto Engineering Group	Client Project ID:	Former Mobil, Maersk Terminal	Sampled:	Jul 11-13,1995
1575 Treat Blvd., Ste. 201	Sample Descript:	Soil	Received:	Aug 3, 1995
Walnut Creek, CA 94598	Analysis for:	TOC	Analyzed:	Aug 8, 1995
Attention: Brady Nagle	First Sample #:	508-0200	Reported:	Aug 9, 1995

TOTAL ORGANIC CARBON

Sample Number	Sample Description	Detection Limit mg/kg	Sample Result mg/kg
508-0200	SB-E7@6'	50	110
508-0201	SB-G7@6'	50	1,000
508-0202	SB-C2@6'	50	190
508-0203	SB-E5@6'	50	190
508-0204	SB-A4@10'	50	680

SEQUOIA ANALYTICAL, #1267

Kevin Van Slambrook
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alisto Engineering Group
1575 Treat Blvd., Ste. 201
Walnut Creek, CA 94598
Attention: Brady Nagle

Client Project ID: Former Mobil, Maersk Terminal
Matrix: Solid
QC Sample Group: 5080200-04

Reported: Aug 9, 1995

QUALITY CONTROL DATA REPORT

ANALYTE	Specific Gravity	Percent Moisture
QC Batch #:	IN080995	IN080995
	213F00A	160300A
Method:	EPA 213F	EPA 160.3
Analyst:	R. Salinas	R. Salinas
Date Analyzed:	8/9/95	8/9/95
Instrument I.D.#:	Manual	Manual
Sample #:	5080204	5080204
Sample Concentration:	1.6 g/cm³	15%
Sample Duplicate Concentration:	1.6 g/cm³	14%
RPD:	0.0	3.4
RPD Control Limits:	0-30	0-30

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alisto Engineering Group	Client Project ID: Former Mobil, Maersk Terminal	Analyst:	R. Wood
1575 Treat Blvd., Ste. 201	Sample Matrix: Solid		J. Wright
Walnut Creek, CA 94598	Units: mg/L (ppm)		
Attention: Brady Nagle	QC Sample Group: 5080200-04	Reported:	Aug 9, 1995

QUALITY CONTROL DATA REPORT

ANALYTE	Total Organic Carbon

Method: EPA 415.1
Date Analyzed: 8/8/95

ACCURACY ASSESSMENT

LCS Spike Conc. Added: 2,500

LCS Spike Result: 2500

LCS Spike % Recovery: 100

Upper Control Limit: 113

Lower Control Limit: 88

PRECISION ASSESSMENT

Sample #: B508116-01

Original: 240

Duplicate: 250

Relative % Difference: RPD values are not reported at sample concentration levels <5 X the Reporting Limit.

Maximum RPD: 32

SEQUOIA ANALYTICAL, #1267

Kevin Van Slambrook
Project Manager

ALISTO ENGINEERING GROUP

9508056

CHAIN OF CUSTODY

Consultant's Name: ALISTO ENGINEERING GROUP — Page 1 of 1

Address: 1575 Treat Blvd #201, Walnut Creek, CA 94598

Project Contact: Brady Nagle — Consultant Project #: 10-098-08 — Phone #: 510 295 1450 — Fax #: 510 295 1823

Sampled by (print): Chris Reinheimer — Sampler's Signature:

Shipment Method: — Site Location #: Former Mobil — Site Location: Maersk/APL Berth 23 & 24 Port of Oakland

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

ANALYSIS REQUIRED

Sample Condition as Receive
Temperature ° C: ____
Cooler #: ____
Inbound Seal Yes No
Outbound Seal Yes No

Sample Description	Collection Date/Time	Matrix Soil/Water	Preserv	# of Cont	Sample #	TPH/GAS/BTEX EPA 8015/8020	TPH/Diesel EPA 8015	Oil & Grease SM 5520	HVOC 8010	Bulk Density	Total Organic Carbon	% Moisture	COMMENTS
SB-E7@6'	7/13/95	Soil		1	5080200					↓	↓	↓	
SB-G7@6'	7/13/95			1	5080201								
SB-C2@6'	7/11/95			1	5080202								
SB-E5@6'	7/12/95			1	5080203								
SB-A4@10'	7/12/95	↓		1	5080204					↓	↓	↓	

Relinquished by/Affiliation	Date	Time	Accepted by/Affiliation	Date	Time
ALISTO	7/14/95	3:00		7/14/95	3:00
	8/3/95	2:41		8/3/95	2:41
	8/3/95	3:00		8/3/95	1500

Additional Comments:

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alisto Engineering Group	Client Project ID:	Maersk Terminal Oakland,909 Ferry St.	Sampled: Sep 20, 1995
1575 Treat Blvd., Ste. 201	Sample Matrix:	Soil	Received: Sep 21, 1995
Walnut Creek, CA 94598	Analysis Method:	EPA 5030/8015 Mod./8020	Reported: Sep 29, 1995
Attention: Brady Nagle	First Sample #:	509-1496	

QC Batch Number: SP092695 SP092695

8020EXA 8020EXA

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit mg/kg	Sample I.D. 509-1496 SB-F5/3.5'	Sample I.D. 509-1497 SB-F5/5.5'
Purgeable Hydrocarbons	1.0	590	2,400
Benzene	0.0050	N.D.	N.D.
Toluene	0.0050	0.86	N.D.
Ethyl Benzene	0.0050	1.7	N.D.
Total Xylenes	0.0050	22	20
Chromatogram Pattern:		Gasoline	Gasoline

Quality Control Data

Report Limit Multiplication Factor:	50	500
Date Analyzed:	9/26/95	9/26/95
Instrument Identification:	HP-4	HP-4
Surrogate Recovery, %: (QC Limits = 70-130%)	80	83

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

RECEIVED
OCT 02 1995

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

9509354

SEQUOIA ANALYTICAL CHAIN OF CUSTODY

☐ 680 Chesapeake Drive • Redwood City, CA 94063 • (415) 364-9600 FAX (415) 364-9233
☐ 819 Striker Ave., Suite 8 • Sacramento, CA 95834 • (916) 921-9600 FAX (916) 921-0100
☐ 1900 Bates Ave., Suite LM • Concord, CA 94520 • (510) 686-9600 FAX (510) 686-9689

Mobil Oil Consulting Firm: AGUSTO ENGINEERING
Station No./Site Address: 509 Ferry St Maersk Terminal Oakland
Address: 1575 Treat Blvd # 201
Project Contact: Brady Nagle
City: Walnut Creek State: CA Zip: 94598
Mobil Oil Engineer: Steve Pao
Tel: 510 295 1650 Fax.: 510 295 1823
Sampler(s) (signature):

Sample I.D.	Matrix	Date Sampled	Time	Preservation	Number of Containers	Type of Containers	BTEX - EPA 602/8020	BTEX - TPH EPA M602/8015/8020 (GAS)	TPH EPA Modified 8015 ☐ Gas ☐ Diesel	Oil & Grease - EPA 413.2	TOC	Bulk Density	EPA 624/8240	EPA 625/8270	Title 22 Metals EPA 6010/7000 ☐ TTLC ☐ STLC	Lead Org./DHS ☐ Lead Total ☐	EDB/DBCD - EPA 504	TDS	Bioassay - Title 22 Haz. Waste	Bioassay - Effluent	Moisture Content	HOLD
SB-2 Deep 7.5	SOIL	7/18/95		Ice	1																	X
SB-F-5/3.0		7/20/95			1						X	X			5091495						X	
SB-F-5/3.5		7/20/95			1			X							5091496							
SB-F-5/5.0		7/20/95			1																	X
SB-F-5/5.5		7/20/95			1			X							5091497							
SB-2 Deep 16-19	WATER	7/18/95	3:PB	no	2	VOA		X							5091498			AB				
SB-2 Deep 27-28.5			1:40		1L 2VOA			X							5091499			X				
SB-2 Deep 32.5-34			2:40		1L 2VOA			X							5091500			X				
SB-2 Deep 37.5-38		7/19/95	3:40		2	VOA		X							5091501							

CODING (check one)

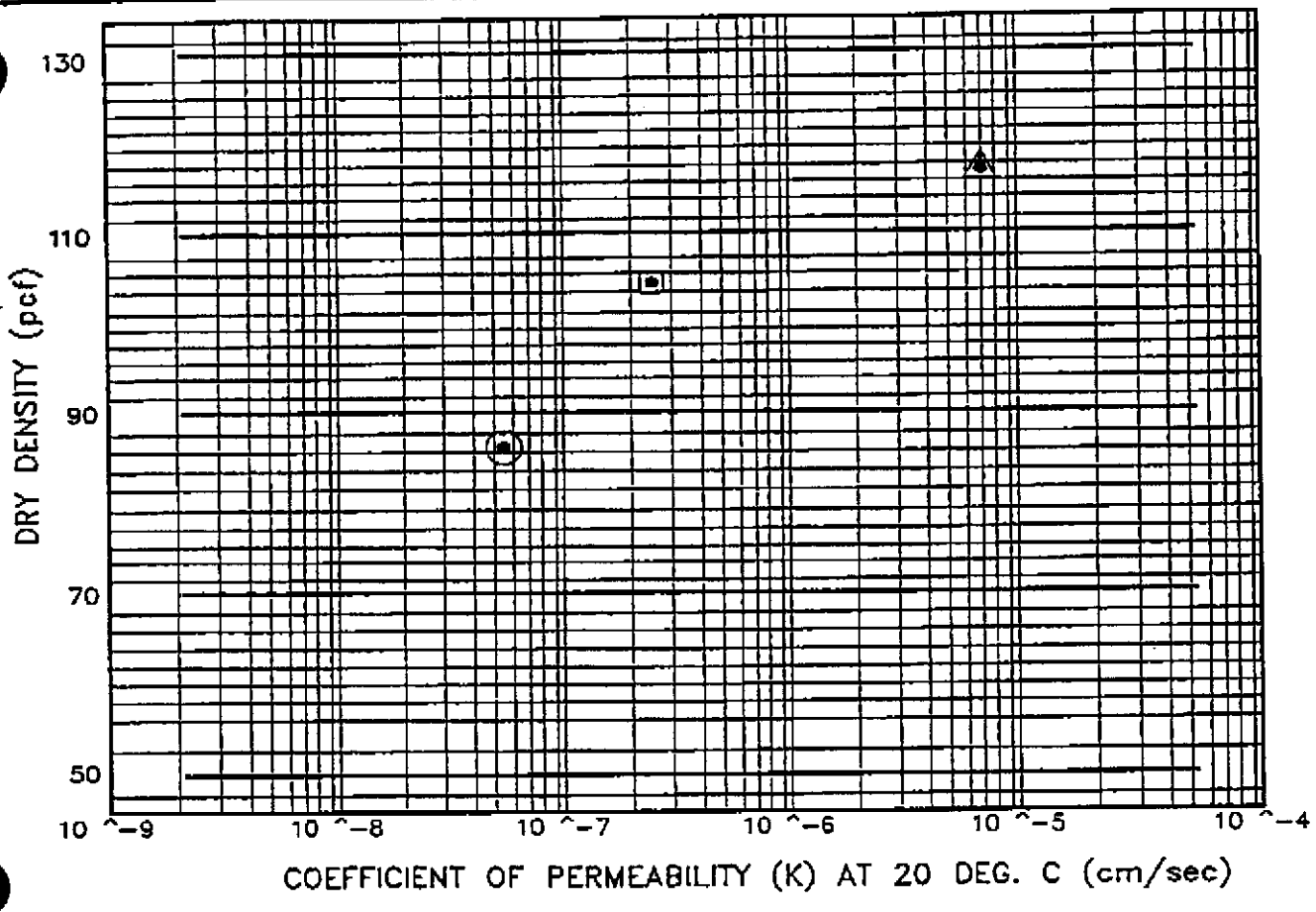
- Code 1 ☐ Emergency Response
- Code 2 ☒ Site Assessment
- Code 3 ☐ Remediation (Plan Devlpmt.)
- Code 4 ☐ Active Remed. (Install./Start-up)
- Code 5 ☐ Active Remed. (O & M)
- Code 6 ☐ Passive Remed/ Monitoring
- Code 7 ☐ Closure
- Code 8 ☐ Construction
- Code 9 ☐ Litigation/Claims Fines

Relinquished by: Date/Time: 7/21/95 5:55
Relinquished by: Date/Time:
Relinquished by: Date/Time:
Relinquished by: Date/Time:
Relinquished by: Date/Time:
Relinquished in Lab by: Date/Time: 9/14/95 17:23

Turnaround Time: (check one): Normal X Same day ___ 1 day ___ 2 day ___ 5 day ___

Sample Integrity: Intact ___ On Ice ___

Remarks: VOA's unpreserved, Liters unpreserved



PHYSICAL CONDITIONS		TEST NO. A ⊡	TEST NO. B △	TEST NO. C ⊙
INITIAL	DIAMETER (in)	2.43	2.43	2.40
	HEIGHT (in)	1.50	1.62	1.63
	WATER CONTENT (%)	25.8	20.8	40.0
	DRY DENSITY (pcf)	102.0	110.1	84.4
	VOID RATIO	0.651	0.530	0.996
	SATURATION (%) *	100.0	100.0	100.0
FINAL	CONSOLIDATION PRESSURE (psf)	2	2	2
	WATER CONTENT (%)	22.8	19.2	37.1
	DRY DENSITY (pcf)	105.5	117.6	86.1
	VOID RATIO	0.597	0.433	0.957
	SATURATION (%) *	100.0	100.0	100.0
PERMEABILITY AT 20 DEG. C (cm/sec)		2.5×10^{-7}	7.1×10^{-6}	5.8×10^{-8}
SAMPLE SOURCE: SUPPLIED BY CLIENT; A: SB-1, 15-15.5; B: SB-1, 25.5-26; C: SB-2, 20.5-21				
CLASSIFICATION: A: SILT (ORGANIC); B: SILTY SAND; C: PEAT ? (ORGANIC)				

TEST TYPE: FLEXIBLE WALL PERMEAMETER

SATURATION METHOD: BACK PRESSURE SATURATED

* DOES NOT INCLUDE EXCESS FREE WATER ON SAMPLE

ROGERS/PACIFIC
GEOLOGICAL AND GEOTECHNICAL ENGINEERING

ALISTO ENGINEERING

PERMEABILITY TEST REPORT

PROJ NO.: LT1866T | DATE: OCT 1995 | FIGURE: 1

CAD FILE:1866-1.DWG

ALISTO ENGINEERING GROUP
CHAIN OF CUSTODY

Page 1 of 1

Consultant's Name: ALISTO ENGINEERING

Address: 1575 Treat Blvd #201 Walnut Creek CA 94598

Project Contact: (Sonat) GAIL JONES 244 6600 / (ALISTO) Brady Poole 295 1850

Consultant Project #: 10-058-08

Phone #: 244 6600 Fax #: 295 1823

Sampled by (print): Chris Reinheimer

Sampler's Signature:

Site Location #: Former Mobil Bulk

Site Location: 909 Ferry St Maersk Terminal Oakland CA

Shipment Methods:

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

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

ANALYSIS REQUIRED

Sample Description	Collection Date/Time	Matrix Soil/Water	Preservative	# of Cont	Sample #	TPH/GAS/BTEX EPA 8015/8020	TPH/Diesel EPA 8015	Oil & Grease SM 5520	HVOC 8010	Falling Head Permeameter	Saturated Hydraulic Conductivity Saturated Falling Head	Saturated Hydraulic Conductivity Saturated Falling Head	COMMENTS
SB-1 Deep 15-15.5	9/26/95	Soil	ICE	1						X			Preserve remaining sample
SB-1 Deep 25.5-26	9/26/95	Soil	↓	1							N/A	X	↓
SB-2 Deep 20.5-21	9/10/95	Soil	↓	1						X			

Relinquished by/Affiliation	Date	Time	Accepted by/Affiliation	Date	Time
ALISTO	10/4/95	1:11 PM		10-4-95	1:11
Randy Tanner	10/13/95	1504		10/13/95	1504

Additional Comments: Preserve remaining Sample for Total Organic Carbon analysis ALISTO will pick up.

JAN. -19' 96(FRI) 11:21 ALISTO ENGINEERING TEL:510 295 1823 P.006

APPENDIX F

Piezometer and Monitoring Well Lithological Logs,
Completion Diagrams, and Development Forms

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

FORMER MOBIL OIL BULK TERMINAL
909 FERRY STREET
OAKLAND, CALIFORNIA

PROJECT NO. 10-098

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA

10287J--.DWG 9-5-95 MAP 1=1

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA

LOG OF BORING MW-33

SEE SITE PLAN

ALISTO PROJECT NO: *10-098-05* DATE DRILLED: *12/05/95*

CLIENT: *Mobil Oil Corporation*

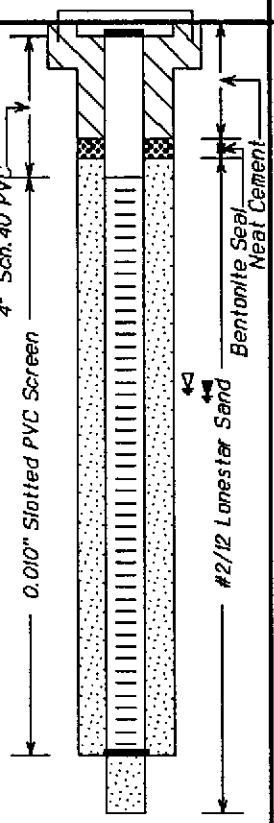
LOCATION: *Port of Oakland, California*

DRILLING METHOD: *Hollow-Stem Auger (10 3/4")*

DRILLING COMPANY: *Soils Exploration Srv.* CASING ELEVATION: *11.07 ' MSL*

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

BLOWS/6 IN.	PID VALUES	WELL DIAGRAM	DEPTH feet	SAMPLES	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION
						GC	2.5" asphalt GRAVEL with clayey-sand matrix (fill): wood, glass, brick, slag fragments.
			5			SC	clayey SAND: moderate yellowish tan, damp.
	0.6					SM	
8,12,12	280						silty SAND: medium gray green, damp, medium dense; fine-grained sand; clay blebs to 10%.
6,8,10	NM		10				Same: wet.
5,7,5	NM						Same
4,7,11	NM		15				Same: color change to mottled gray green and greenish tan; clay blebs and rip ups to 10%; shell fragments to 5%.
3,6,8	NM						
3,4,4	NM		20			CL	CLAY: dark gray black, moist to wet, firm; shell fragments to 10%; sand partings.
			25				Boring terminated at 20.5 feet. Stabilized groundwater level measured on December 20, 1995.
			30				



ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA

LOG OF BORING MW-34

SEE SITE PLAN

ALISTO PROJECT NO: *10-098-05* DATE DRILLED: *12/05/95*

CLIENT: *Mobil Oil Corporation*

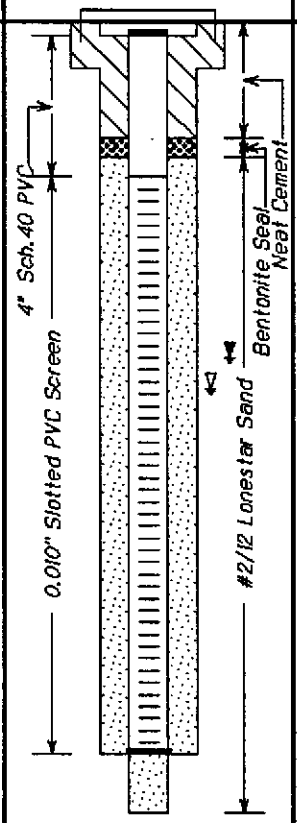
LOCATION: *Port of Oakland, California*

DRILLING METHOD: *Hollow-Stem Auger (10 3/4")*

DRILLING COMPANY: *Soils Exploration Srv.* CASING ELEVATION: *11.07 ' MSL*

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

BLOWS/6 IN.	PID VALUES	WELL DIAGRAM	DEPTH feet	SAMPLES	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION
						GC	GRAVEL with clayey-sand matrix (fill): wood, brick, slag fragments; gravels up to approximately 2" (+)-diameter.
12,20,22	84		5			SP	SAND: medium gray green, damp, dense; fine- to medium-grained sand; moderately well graded; shell fragments to 2%.
10,12,16	NM		10				Same: at 9 feet, medium dense.
4,6,11	NM		15				Same: at 14 feet, clay blebs ups to 15%.
8,11,12	NM		20				Same: at 19 feet, shells to 5%.
							Boring terminated at 20.5 feet.
							Stabilized groundwater level measured on December 19, 1995.
			25				
			30				



APPENDIX G

Monitoring Well Rehabilitation Development 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 Re Development

Date: 11/20/95 Project No. 10-098-8-7
Day: Mon Station No. Farmer Mobil Bulk
Weather: clear Address 909 Ferry St, Oakland CA
SAMPLER: CReinheimer

Well ID	Initial TD	Final DEPTH	Well ID	Initial TD	Final DEPTH	Well ID		DEPTH
MW-8A	11.5 remove blockage	21.0						
MW-6A	19.8	19.8						
MW-7A	19.5	19.5						
MW-5A	20.1	20.1						

MW-8A

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Thickness	Gal.	Time		
MW-8A	10.27	4"	OK	0	0	10	8:40	slight turbidity	
						20	9:00	pump while jetting	
						30	9:18	clear, faint iridescence	
						40		pump while jetting	
						60	9:34	slightly silty, iridescence	

Total Depth - Water Level= x Well Vol. Factor= x#vol. to Purge= PurgeVol.
21.0 − 10.27 = 10.73 X 0.65 = 6.97 x 10 = 69

Purge Method: ⊗Surface Pump ODisp.Tube OWinch ODisp. Baller(s)___ OSys Port

Comments: Swab well ~10minutes, jet well ~ 1/4 minutes

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

MW-6A

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Thickness	Gal.	Time		
MW-6A	10.31	4"	OK	0	0	15	10:09	turbid dark gray	
						25	clearing	pump while jetting	
						35	10:19	clearing	
						45	10:28	clear	

Total Depth - Water Level= x Well Vol. Factor= x#vol. to Purge= PurgeVol.
19.8 − 10.31 = 9.49 X 0.65 = 6.16 X 10 = 61

Purge Method: ⊗Surface Pump ODisp.Tube OWinch ODisp. Baller(s)___ OSys Port

Comments: Swab well ~15min, jet well while pumping

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

MW-7A

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Thickness	Gal.	Time		
MW-7A	10.08	4"	OK	0	0	10	10:45	slight turbidity	
						20	10:50	clear	
						30	11:00	clear	

Total Depth - Water Level= x Well Vol. Factor= x#vol. to Purge= PurgeVol.
19.5 − 10.08 = 9.42 X 0.65 = 6.12 X 10 = 61

Purge Method: ⊗Surface Pump ODisp.Tube OWinch ODisp. Baller(s)___ OSys Port

Comments: Swab well ~15min, jet well while pumping

○ EPA 601___
○ TPH-G/BTEX___
○ TPH Diesel___
○ TOG 5520___
Time Sampled: NO

MW-5A

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Thickness	Gal.	Time		
MW-5A	9.28	4"	OK	0	0	10	11:55	clear	
						20			
						30	12:12	↓	

Total Depth - Water Level= x Well Vol. Factor= x#vol. to Purge= PurgeVol.
20.1 − 9.28 = 10.82 X 0.65 = 7.03 x 10 = 70

Purge Method: ⊗Surface Pump ODisp.Tube OWinch ODisp. Baller(s)___ OSys Port

Comments: Swab well ~15min, jet well while pumping

○ EPA 601___
○ TPH-G/BTEX___
○ TPH Diesel___
○ TOG 5520___
Time Sampled: NO

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 Re Development

Date: 11/20/95 Project No. 10-098-8-17
Day: Mon Station No. Tosco Mobil Bulk
Weather: clear Address 909 Ferry St. Oakland CA
SAMPLER: C Reinheimer

Well ID	Initial TD	Final DEPTH	Well ID	DEPTH	Well ID	SAMPLE	WATER DEPTH
MW-23	19.0	19.1					
MW-9	19.06	19.06					

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Thickness	Gal.	Time					
MW-23	9.78	4"	OK	0	0	10	12:45	Purge	silty	dark	gray	
Total Depth - Water Level=	x Well Vol. Factor=	x#vol. to Purge=	PurgeVol.			30		moderately	silty			
19.0 - 9.78 = 9.22 x 0.65 = 5.99 x 10 = 59						40	1:05	clearing				
Purge Method: ☒Surface Pump ODisp.Tube OWinch ODisp. Baller(s)___ OSys Port						60	1:18	clear				
Comments: Swab well ~15min, jet well while pumping												

- ○ 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					
MW-9	9.72	4"	replace	0	0	20	1:55	Slight	turbidity			
Total Depth - Water Level=	x Well Vol. Factor=	x#vol. to Purge=	PurgeVol.			40		clear				
19.06 - 9.72 = 9.34 x 0.65 = 6.07 x 10 = 60						50	2:10	↓				
Purge Method: ☒Surface Pump ODisp.Tube OWinch ODisp. Baller(s)___ OSys Port												
Comments: swab well ~5min, jet well while pumping												

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

- ○ EPA 601____
- ○ TPH-G/BTEX___
- ○ TPH Diesel____
- ○ TOG 5520 ___

Time Sampled:

Well ID	Depth to Water	Diam	Cap/Lock	Product Depth	Thickness	Gal.	Time					
Total Depth - Water Level=	x Well Vol. Factor=	x#vol. to Purge=	PurgeVol.									
Purge Method: OSurface Pump ODisp.Tube OWinch ODisp. Baller(s)___ OSys Port												
Comments:												

- ○ EPA 601____
- ○ TPH-G/BTEX___
- ○ TPH Diesel____
- ○ TOG 5520 ___

Time Sampled:

APPENDIX H

Aquifer Test Data and Analyses

MW-1 Step Drawdown Test

Date	Time	Elapsed Time (minute)	Drawdown and Residual Drawdown	Feet of water above transducer	Comments
10/23/95	15:57:57	0.00	0.00	3.3351	
10/23/95	15:58:57	1.01	0.01	3.3242	
10/23/95	15:59:57	2.00	0.97	2.3605	
10/23/95	16:00:57	3.01	0.78	2.5554	
10/23/95	16:01:57	4.00	1.16	2.1765	
10/23/95	16:02:57	5.01	1.66	1.6784	
10/23/95	16:03:57	6.00	1.65	1.6892	
10/23/95	16:04:57	7.01	1.62	1.7108	
10/23/95	16:05:57	8.00	2.13	1.2019	
10/23/95	16:06:57	9.01	2.41	0.92039	
10/23/95	16:07:57	10.01	2.64	0.693	Q=1 gpm
10/23/95	16:08:57	11.00	2.46	0.87708	
10/23/95	16:09:57	12.01	2.24	1.0936	
10/23/95	16:10:57	13.00	2.08	1.2561	
10/23/95	16:11:57	14.01	1.99	1.3427	
10/23/95	16:12:57	15.00	1.95	1.386	
10/23/95	16:13:57	16.01	1.91	1.4293	
10/23/95	16:14:57	17.00	1.88	1.451	
10/23/95	16:15:57	18.01	1.87	1.4618	
10/23/95	16:16:57	19.01	1.87	1.4618	
10/23/95	16:17:57	20.00	1.91	1.4293	
10/23/95	16:18:57	21.01	1.87	1.4618	
10/23/95	16:19:57	22.00	1.87	1.4618	
10/23/95	16:20:57	23.01	1.88	1.451	
10/23/95	16:21:57	24.00	1.88	1.451	
10/23/95	16:22:57	25.01	1.90	1.4401	
10/23/95	16:23:57	26.00	1.92	1.4185	
10/23/95	16:24:57	27.01	1.91	1.4293	
10/23/95	16:25:57	28.01	1.87	1.4618	
10/23/95	16:26:57	29.00	1.94	1.3968	
10/23/95	16:27:57	30.01	1.92	1.4185	
10/23/95	16:28:57	31.00	2.25	1.0828	
10/23/95	16:29:57	32.01	2.53	0.80128	
10/23/95	16:30:57	33.00	2.63	0.70383	
10/23/95	16:31:57	34.01	2.73	0.60638	
10/23/95	16:32:57	35.00	2.83	0.50892	
10/23/95	16:33:57	36.01	2.91	0.4223	
10/23/95	16:34:57	37.01	2.93	0.40064	
10/23/95	16:35:57	38.00	3.01	0.32484	

MW-1 Step Drawdown Test

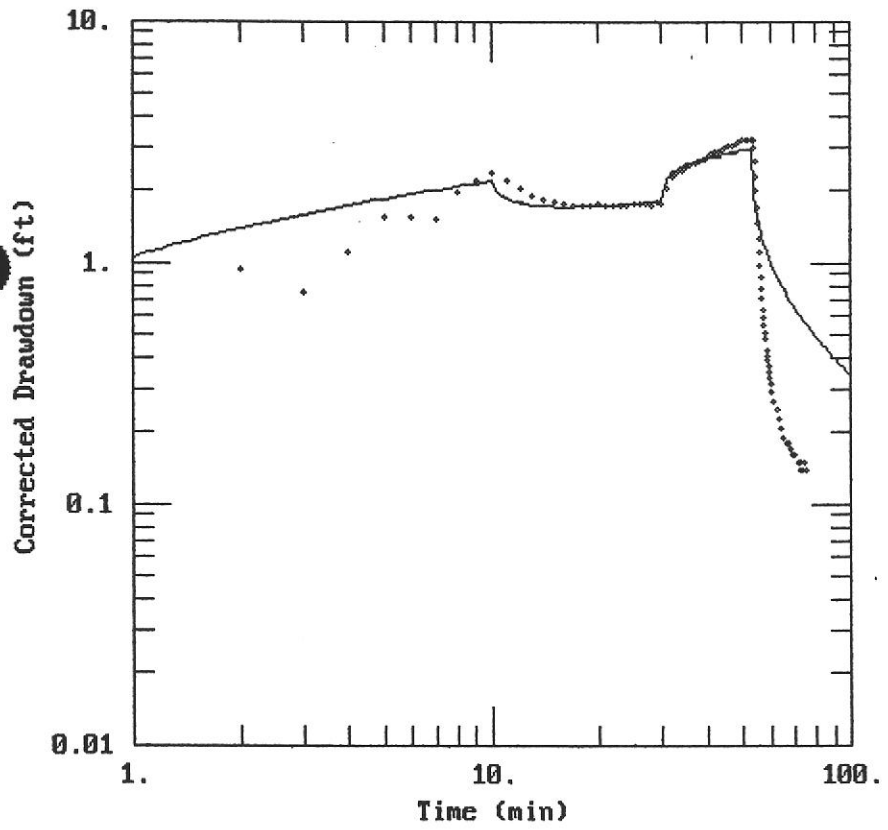
Date	Time	Elapsed Time (minute)	Drawdown and Residual Drawdown	Feet of water above transducer	Comments
10/23/95	16:41:57	44.00	3.44	-0.10828	
10/23/95	16:42:57	45.01	3.52	-0.18408	
10/23/95	16:43:57	46.01	3.55	-0.21656	
10/23/95	16:44:57	47.00	3.61	-0.2707	
10/23/95	16:45:57	48.01	3.68	-0.3465	Q=1.3 gpm
10/23/95	16:46:57	49.00	3.75	-0.41147	
10/23/95	16:47:57	50.01	3.81	-0.47644	
10/23/95	16:48:57	51.00	3.87	-0.53058	
10/23/95	16:49:57	52.01	3.84	-0.50892	
10/23/95	16:51:12	53.25	3.84	-0.50892	
10/23/95	16:51:27	53.50	3.84	-0.50892	
10/23/95	16:51:42	53.76	3.84	-0.50892	pump off
10/23/95	16:51:57	54.01	3.54	-0.20573	
10/23/95	16:52:12	54.25	2.99	0.3465	
10/23/95	16:52:27	54.51	2.56	0.77963	
10/23/95	16:52:42	54.75	2.19	1.1478	
10/23/95	16:52:57	55.01	1.84	1.4943	
10/23/95	16:53:12	55.26	1.56	1.7758	
10/23/95	16:53:27	55.50	1.33	2.0032	
10/23/95	16:53:42	55.76	1.16	2.1765	
10/23/95	16:53:57	56.00	1.02	2.3172	
10/23/95	16:54:12	56.26	0.90	2.4363	
10/23/95	16:54:27	56.51	0.80	2.5338	
10/23/95	16:54:42	56.75	0.73	2.6096	
10/23/95	16:54:57	57.01	0.66	2.6745	
10/23/95	16:55:12	57.25	0.61	2.7287	
10/23/95	16:55:27	57.50	0.56	2.772	
10/23/95	16:55:42	57.76	0.52	2.8153	
10/23/95	16:55:57	58.00	0.49	2.8478	
10/23/95	16:56:12	58.26	0.44	2.8911	
10/23/95	16:56:27	58.51	0.42	2.9128	
10/23/95	16:56:42	58.75	0.40	2.9344	
10/23/95	16:56:57	59.01	0.38	2.9561	
10/23/95	16:57:12	59.25	0.36	2.9777	
10/23/95	16:57:27	59.51	0.34	2.9994	
10/23/95	16:57:42	59.76	0.32	3.0102	
10/23/95	16:57:57	60.00	0.30	3.0319	
10/23/95	16:58:57	61.01	0.27	3.0644	
10/23/95	16:59:57	62.00	0.25	3.086	
10/23/95	17:00:57	63.01	0.23	3.1077	

MW-1 Step Drawdown Test

Date	Time	Elapsed Time (minute)	Drawdown and Residual Drawdown	Feet of water above transducer	Comments
10/23/95	17:06:57	69.00	0.16	3.1726	
10/23/95	17:07:57	70.01	0.16	3.1726	
10/23/95	17:08:57	71.00	0.15	3.1835	
10/23/95	17:09:57	72.01	0.15	3.1835	
10/23/95	17:10:12	72.25	0.14	3.1943	
10/23/95	17:10:27	72.51	0.15	3.1835	
10/23/95	17:10:42	72.75	0.14	3.1943	
10/23/95	17:10:57	73.01	0.14	3.1943	
10/23/95	17:11:57	74.00	0.15	3.1835	
10/23/95	17:12:27	74.51	0.14	3.1943	

Date Tuesday October 31, 1995 6:55 PM
PlotFile A:\MW-1ST01.PRN
DataFile A:\MW-1STEP
MW-1step
Time of First Log in Specified Window
10/23/95 0.665243

Number of Logs 139
Type of Data Memory Memory Board
Logs/Timestamp 1
Power was OK During Data Collection Period



DATA SET:
MW1.DAT
01/21/96

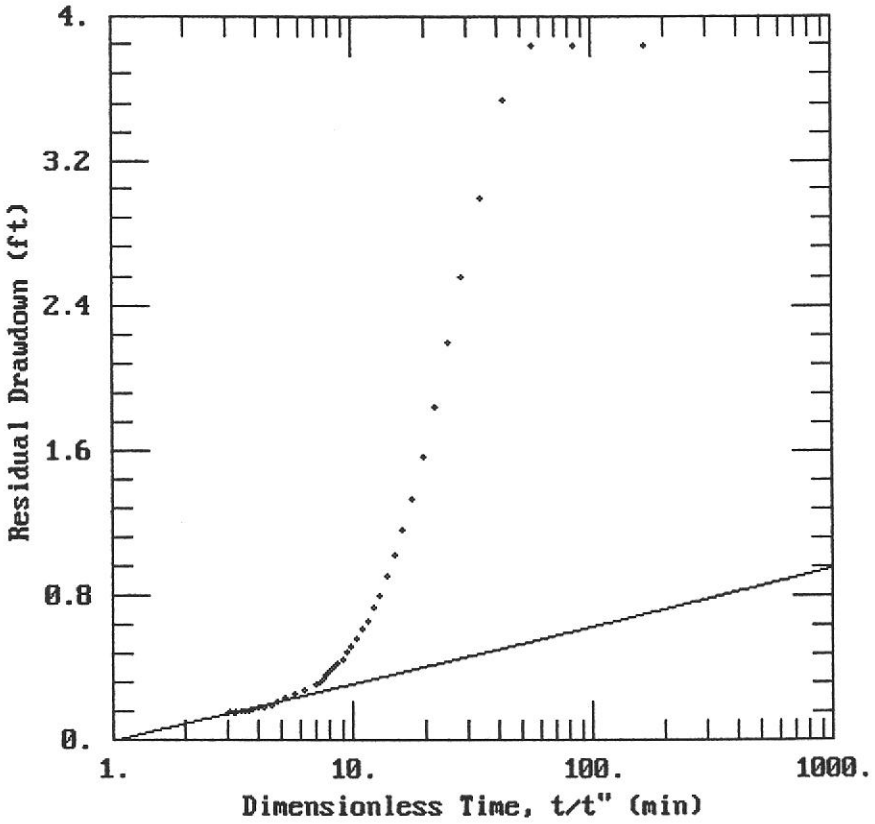
AQUIFER MODEL:
Unconfined

SOLUTION METHOD:
Theis

PROJECT DATA:
test date: October 23, 1995
test well: MW-1
obs. well: MW-1

TEST DATA:
Q = 0.17 ft^3/min
r = 0.42 ft
r_c = 0.17 ft
r_w = 0.42 ft
b = 12. ft

PARAMETER ESTIMATES:
T = 0.02678 ft^2/min
S = 0.04575



DATA SET:
MW1.DAT
01/21/96

AQUIFER MODEL:
Confined

SOLUTION METHOD:
Theis Recovery

PROJECT DATA:
test date: October 23, 1995
test well: MW-1
obs. well: MW-1

TEST DATA:
Q = 0.17 ft^3/min
r = 0.42 ft
r_c = 0.17 ft
r_w = 0.42 ft
b = 12. ft

PARAMETER ESTIMATES:
T = 0.1004 ft^2/min
S' = 1.052

MW-7A Step Drawdown Test

Date	Time	Elapsed TIme (minutes)	Drawdown & Residual Drawdown	WLAP	Comments
11/27/95	15:40:36			8.0128	Q = 0.7 gpm
11/27/95	15:40:50			8.0128	
11/27/95	15:41:05			8.0128	
11/27/95	15:41:20			8.002	
11/27/95	15:41:35			6.3236	Q = 0.7 gpm
11/27/95	15:41:50			5.5223	
11/27/95	15:42:05			5.5873	
11/27/95	15:42:20			4.9485	
11/27/95	15:42:35			4.1688	
11/27/95	15:42:50			3.53	
11/27/95	15:43:05			2.8911	
11/27/95	15:43:20			2.2523	
11/27/95	15:43:35			1.6459	
11/27/95	15:43:50			1.0287	
11/27/95	15:44:05			0.4223	
11/27/95	15:44:20			0.036	
11/27/95	15:44:35			0.034	
11/27/95	15:44:50			0.032	
11/27/95	15:45:05			0.026	
11/27/95	15:45:20			0.028	
11/27/95	15:45:35	0.00	7.97	0.04	Pump off
11/27/95	15:46:05	0.50	7.94	0.075797	
11/27/95	15:46:20	0.75	7.61	0.40064	
11/27/95	15:46:35	1.00	7.32	0.693	
11/27/95	15:46:50	1.25	7.06	0.95288	
11/27/95	15:47:05	1.50	6.84	1.1694	
11/27/95	15:47:20	1.75	6.65	1.3643	
11/27/95	15:47:35	2.00	6.49	1.5268	
11/27/95	15:47:50	2.25	6.35	1.6675	
11/27/95	15:48:05	2.50	6.18	1.83	
11/27/95	15:48:20	2.75	6.02	1.9924	
11/27/95	15:48:35	3.00	5.89	2.1223	
11/27/95	15:48:50	3.25	5.77	2.2414	
11/27/95	15:49:05	3.50	5.66	2.3497	
11/27/95	15:49:20	3.75	5.57	2.4472	
11/27/95	15:49:35	4.00	5.48	2.5338	
11/27/95	15:49:50	4.25	5.39	2.6204	
11/27/95	15:50:05	4.50	5.32	2.6962	
11/27/95	15:50:20	4.75	5.25	2.7612	

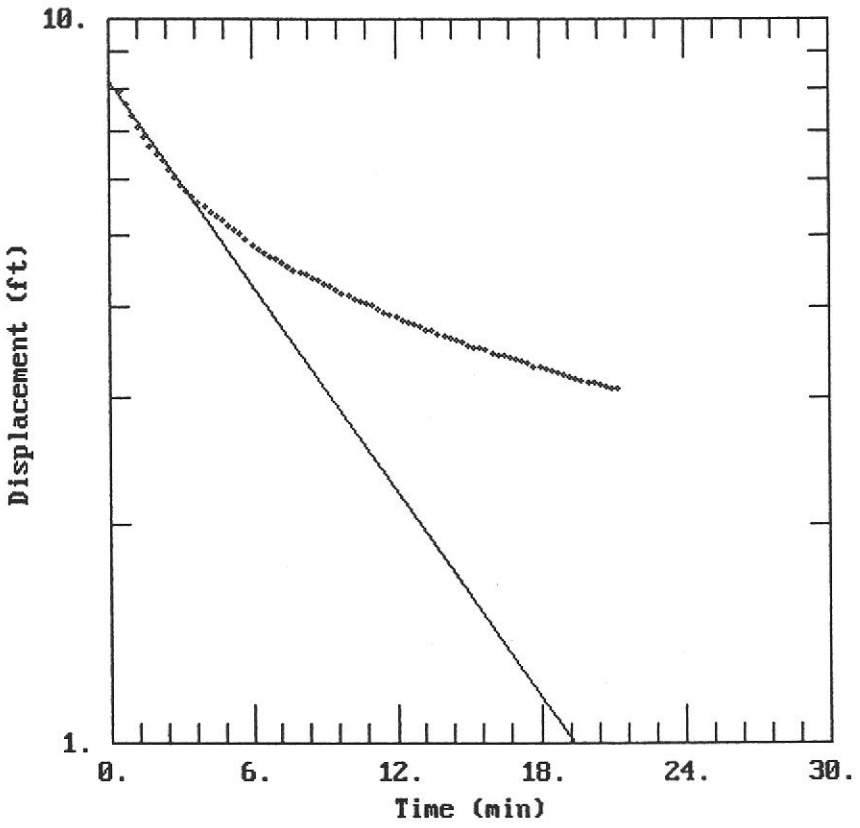
MW-7A Step Drawdown Test

Date	Time	Elapsed TIme (minutes)	Drawdown & Residual Drawdown	WLAP	Comments
11/27/95	15:51:50	6.25	4.80	3.216	
11/27/95	15:52:05	6.50	4.74	3.2701	
11/27/95	15:52:20	6.75	4.69	3.3242	
11/27/95	15:52:35	7.00	4.65	3.3675	
11/27/95	15:52:50	7.25	4.59	3.4217	
11/27/95	15:53:05	7.50	4.54	3.4758	
11/27/95	15:53:20	7.75	4.50	3.5083	
11/27/95	15:53:35	8.00	4.46	3.5516	
11/27/95	15:53:50	8.25	4.42	3.5949	
11/27/95	15:54:05	8.50	4.39	3.6274	
11/27/95	15:54:20	8.75	4.34	3.6707	
11/27/95	15:54:35	9.00	4.30	3.714	
11/27/95	15:54:50	9.25	4.26	3.7574	
11/27/95	15:55:05	9.50	4.21	3.8007	
11/27/95	15:55:20	9.75	4.18	3.8332	
11/27/95	15:55:35	10.00	4.15	3.8656	
11/27/95	15:55:50	10.25	4.10	3.909	
11/27/95	15:56:05	10.50	4.07	3.9414	
11/27/95	15:56:20	10.75	4.04	3.9739	
11/27/95	15:56:35	11.00	4.01	4.0064	
11/27/95	15:56:50	11.25	3.96	4.0497	
11/27/95	15:57:05	11.50	3.93	4.0822	
11/27/95	15:57:20	11.75	3.90	4.1147	
11/27/95	15:57:35	12.00	3.87	4.1472	
11/27/95	15:57:50	12.25	3.83	4.1797	
11/27/95	15:58:05	12.50	3.80	4.2121	
11/27/95	15:58:20	12.75	3.77	4.2446	
11/27/95	15:58:35	13.00	3.75	4.2663	
11/27/95	15:58:50	13.25	3.72	4.2879	
11/27/95	15:59:05	13.50	3.70	4.3096	
11/27/95	15:59:20	13.75	3.67	4.3421	
11/27/95	15:59:35	14.00	3.65	4.3637	
11/27/95	15:59:50	14.25	3.63	4.3854	
11/27/95	16:00:05	14.50	3.59	4.4179	
11/27/95	16:00:20	14.75	3.57	4.4395	
11/27/95	16:00:35	15.00	3.54	4.472	
11/27/95	16:00:50	15.25	3.52	4.4937	
11/27/95	16:01:05	15.50	3.50	4.5153	
11/27/95	16:01:20	15.75	3.48	4.537	
11/27/95	16:01:35	16.00	3.45	4.5586	

MW-7A Step Drawdown Test

Date	Time	Elapsed TIme (minutes)	Drawdown & Residual Drawdown	WLAP	Comments
11/27/95	16:03:05	17.50	3.34	4.6778	
11/27/95	16:03:20	17.75	3.31	4.6994	
11/27/95	16:03:35	18.00	3.30	4.7102	
11/27/95	16:03:50	18.25	3.29	4.7211	
11/27/95	16:04:05	18.50	3.26	4.7535	
11/27/95	16:04:20	18.75	3.24	4.7752	
11/27/95	16:04:35	19.00	3.23	4.786	
11/27/95	16:04:50	19.25	3.21	4.8077	
11/27/95	16:05:05	19.50	3.18	4.8293	
11/27/95	16:05:20	19.75	3.16	4.851	
11/27/95	16:05:35	20.00	3.15	4.8618	
11/27/95	16:05:50	20.25	3.14	4.8727	
11/27/95	16:06:05	20.50	3.12	4.8943	
11/27/95	16:06:20	20.75	3.10	4.916	
11/27/95	16:06:35	21.00	3.09	4.9268	
11/27/95	16:06:50	21.25	3.08	4.9376	

Date November 27, 1995 11:13 PM
PlotFile A:\MW-7AS01.PRN
DataFile A:\MW-7ASTEP
MW-7A
Time of First Log in Specified Window
35029.653 0.6531898
Time Header Block Loaded 1995/11/26 15:40:35.80
Time Data File Dumped 1995/11/26 16:08:31.10
Remaining Memory 64354
Number of Logs 106
Type of Data Memory Memory Board
Logs/Timestamp 1
Power was OK During Data Collection Period



DATA SET:
MW7A.DAT
01/20/96

AQUIFER MODEL:
Unconfined

SOLUTION METHOD:
Bouwer-Rice

PROJECT DATA:
test date: November 27, 1995
test well: MW-7A
obs. well: MW-7A

TEST DATA:
H0= 8. ft
r_c= 0.17 ft
r_w= 0.42 ft
L = 12. ft
b = 12. ft
H = 12. ft

PARAMETER ESTIMATES:
K = 0.0008341 ft/min
y0 = 8.19 ft

MW-8A Step Drawdown Test

Date	Time	Elapsed Time (minutes)	Drawdown & Residual Drawdown	WLAP	Comments
11/28/95	14:34:41			6.6701	
11/28/95	14:34:56			6.6701	
11/28/95	14:35:11			6.681	
11/28/95	14:35:26			6.681	
11/28/95	14:35:41			6.681	
11/28/95	14:35:56			6.6918	
11/28/95	14:36:11			6.681	Q = 0.7 gpm
11/28/95	14:36:26			6.681	
11/28/95	14:36:41			6.6918	
11/28/95	14:36:56			6.6918	
11/28/95	14:37:11			6.6268	
11/28/95	14:37:26			6.6268	
11/28/95	14:37:41			6.5402	
11/28/95	14:37:56			6.0204	
11/28/95	14:38:11			5.5115	
11/28/95	14:38:26			5.0567	
11/28/95	14:38:41			4.6453	
11/28/95	14:38:56			4.2338	
11/28/95	14:39:11			3.8765	Q = 0.7 gpm
11/28/95	14:39:26			3.5191	
11/28/95	14:39:41			3.1618	
11/28/95	14:39:56			2.7828	
11/28/95	14:40:11			2.3822	
11/28/95	14:40:26			1.9599	
11/28/95	14:40:41			1.5268	
11/28/95	14:40:56			1.1045	
11/28/95	14:41:11			0.68217	
11/28/95	14:41:26			0.25988	
11/28/95	14:41:41			-0.16242	
11/28/95	14:41:56			-0.48727	Pump off
11/28/95	14:42:11			-0.23822	
11/28/95	14:42:26	0.00	6.67	0	
11/28/95	14:42:41	0.25	6.46	0.20573	
11/28/95	14:42:56	0.50	6.28	0.38981	
11/28/95	14:43:11	0.75	6.14	0.53058	
11/28/95	14:43:26	1.00	6.02	0.64969	
11/28/95	14:43:41	1.25	5.90	0.7688	
11/28/95	14:43:56	1.50	5.83	0.84459	
11/28/95	14:44:11	1.75	5.74	0.93122	
11/28/95	14:44:26	2.00	5.68	0.98536	

MW-8A Step Drawdown Test

Date	Time	Elapsed Time (minutes)	Drawdown & Residual Drawdown	WLAP	Comments
11/28/95	14:45:56	3.50	5.48	1.1911	
11/28/95	14:46:11	3.75	5.44	1.2344	
11/28/95	14:46:26	4.00	5.41	1.2561	
11/28/95	14:46:41	4.25	5.38	1.2885	
11/28/95	14:46:56	4.50	5.37	1.2994	
11/28/95	14:47:11	4.75	5.34	1.3319	
11/28/95	14:47:26	5.00	5.31	1.3643	
11/28/95	14:47:41	5.25	5.31	1.3643	
11/28/95	14:47:56	5.50	5.28	1.386	
11/28/95	14:48:11	5.75	5.26	1.4077	
11/28/95	14:48:26	6.00	5.32	1.3535	
11/28/95	14:48:41	6.25	5.29	1.3752	
11/28/95	14:48:56	6.50	5.26	1.4077	
11/28/95	14:49:11	6.75	5.26	1.4077	
11/28/95	14:49:26	7.00	5.23	1.4401	
11/28/95	14:49:41	7.25	5.23	1.4401	
11/28/95	14:49:56	7.50	5.20	1.4726	
11/28/95	14:50:11	7.75	5.19	1.4835	
11/28/95	14:50:26	8.00	5.18	1.4943	
11/28/95	14:50:41	8.25	5.14	1.5268	
11/28/95	14:50:56	8.50	5.13	1.5376	
11/28/95	14:51:11	8.75	5.12	1.5484	
11/28/95	14:51:26	9.00	5.12	1.5484	
11/28/95	14:51:41	9.25	5.10	1.5701	
11/28/95	14:51:56	9.50	5.09	1.5809	
11/28/95	14:52:11	9.75	5.07	1.6026	
11/28/95	14:52:26	10.00	5.06	1.6134	
11/28/95	14:52:41	10.25	5.05	1.6242	
11/28/95	14:52:56	10.50	5.04	1.635	
11/28/95	14:53:11	10.75	5.02	1.6459	
11/28/95	14:53:26	11.00	5.01	1.6567	
11/28/95	14:53:41	11.25	5.00	1.6675	
11/28/95	14:53:56	11.50	4.99	1.6784	
11/28/95	14:54:11	11.75	4.97	1.7	
11/28/95	14:54:26	12.00	4.97	1.7	
11/28/95	14:54:41	12.25	4.95	1.7217	
11/28/95	14:54:56	12.50	4.95	1.7217	
11/28/95	14:55:11	12.75	4.93	1.7433	
11/28/95	14:55:26	13.00	4.92	1.7542	
11/28/95	14:55:41	13.25	4.91	1.765	
11/28/95	14:55:56	13.50	4.89	1.7758	

MW-8A Step Drawdown Test

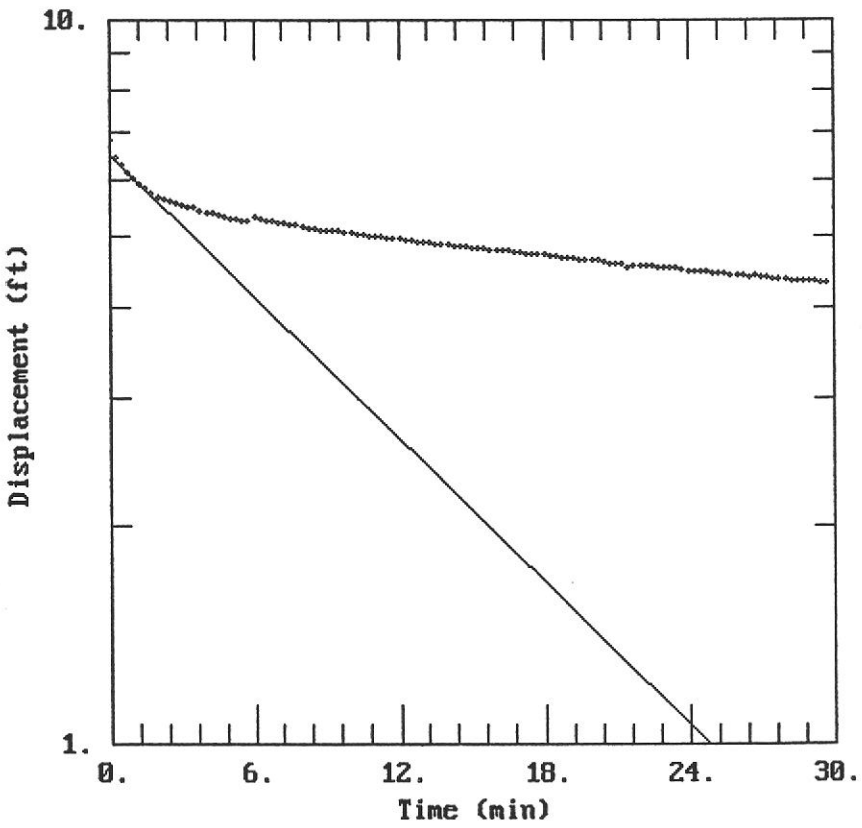
Date	Time	Elapsed Time (minutes)	Drawdown & Residual Drawdown	WLAP	Comments
11/28/95	14:57:26	15.00	4.84	1.83	
11/28/95	14:57:41	15.25	4.83	1.8408	
11/28/95	14:57:56	15.50	4.82	1.8516	
11/28/95	14:58:11	15.75	4.81	1.8624	
11/28/95	14:58:26	16.00	4.81	1.8624	
11/28/95	14:58:41	16.25	4.80	1.8733	
11/28/95	14:58:56	16.50	4.79	1.8841	
11/28/95	14:59:11	16.75	4.78	1.8949	
11/28/95	14:59:26	17.00	4.76	1.9058	
11/28/95	14:59:41	17.25	4.75	1.9166	
11/28/95	14:59:56	17.50	4.74	1.9274	
11/28/95	15:00:11	17.75	4.73	1.9382	
11/28/95	15:00:26	18.00	4.73	1.9382	
11/28/95	15:00:41	18.25	4.71	1.9599	
11/28/95	15:00:56	18.50	4.71	1.9599	
11/28/95	15:01:11	18.75	4.69	1.9815	
11/28/95	15:01:26	19.00	4.69	1.9815	
11/28/95	15:01:41	19.25	4.68	1.9924	
11/28/95	15:01:56	19.50	4.67	2.0032	
11/28/95	15:02:11	19.75	4.66	2.014	
11/28/95	15:02:26	20.00	4.65	2.0249	
11/28/95	15:02:41	20.25	4.65	2.0249	
11/28/95	15:02:56	20.50	4.63	2.0357	
11/28/95	15:03:11	20.75	4.61	2.0573	
11/28/95	15:03:26	21.00	4.61	2.0573	
11/28/95	15:03:41	21.25	4.60	2.0682	
11/28/95	15:03:56	21.50	4.55	2.1223	
11/28/95	15:04:11	21.75	4.58	2.0898	
11/28/95	15:04:26	22.00	4.58	2.0898	
11/28/95	15:04:41	22.25	4.57	2.1007	
11/28/95	15:04:56	22.50	4.56	2.1115	
11/28/95	15:05:11	22.75	4.55	2.1223	
11/28/95	15:05:26	23.00	4.55	2.1223	
11/28/95	15:05:41	23.25	4.53	2.144	
11/28/95	15:05:56	23.50	4.53	2.144	
11/28/95	15:06:11	23.75	4.52	2.1548	
11/28/95	15:06:26	24.00	4.49	2.1765	
11/28/95	15:06:41	24.25	4.49	2.1765	
11/28/95	15:06:56	24.50	4.48	2.1873	
11/28/95	15:07:11	24.75	4.48	2.1873	
11/28/95	15:07:26	25.00	4.47	2.1981	

MW-8A Step Drawdown Test

Date	Time	Elapsed Time (minutes)	Drawdown & Residual Drawdown	WLAP	Comments
11/28/95	15:08:56	26.50	4.41	2.2631	
11/28/95	15:09:11	26.75	4.42	2.2523	
11/28/95	15:09:26	27.00	4.41	2.2631	
11/28/95	15:09:41	27.25	4.40	2.2739	
11/28/95	15:09:56	27.50	4.39	2.2847	
11/28/95	15:10:11	27.75	4.39	2.2847	
11/28/95	15:10:26	28.00	4.37	2.2956	
11/28/95	15:10:41	28.25	4.36	2.3064	
11/28/95	15:10:56	28.50	4.35	2.3172	
11/28/95	15:11:11	28.75	4.34	2.328	
11/28/95	15:11:26	29.00	4.34	2.328	
11/28/95	15:11:41	29.25	4.34	2.328	
11/28/95	15:11:56	29.50	4.33	2.3389	
11/28/95	15:12:11	29.75	4.32	2.3497	

Date November 28, 1995 10:44 PM
PlotFile A:\MW-8AS01.PRN
DataFile A:\MW-8ASTEP
MW-8A
Time of First Log in Specified Window
35031.607 0.6074224537

Time Data File Dumped 1995/11/28 15:13:17.70
Remaining Memory 63904
Number of Logs 151
Type of Data Memory Memory Board
Logs/Timestamp 1
Power was OK During Data Collection Period



DATA SET:
MW8A.DAT
01/20/96

AQUIFER MODEL:
Unconfined

SOLUTION METHOD:
Bouwer-Rice

PROJECT DATA:
test date: November 28, 1995
test well: MW-8A
obs. well: MW-8A

TEST DATA:
H0= 6.8 ft
r_c= 0.17 ft
r_w= 0.42 ft
L = 10. ft
b = 10. ft
H = 10. ft

PARAMETER ESTIMATES:
K = 0.0006958 ft/min
y0 = 6.488 ft

MW-9 Step Drawdown Test

Date	Time	Elapsd Time (minutes)	Drawdown & Residual Drawdown	Feet of water above transdu	Comments
10/24/95	09:50:28			5.8472	
10/24/95	09:51:28			5.8472	
10/24/95	09:53:06	0.00	0.00	5.8472	
10/24/95	09:54:06	1.00	0.05	5.793	
10/24/95	09:55:06	2.00	1.06	4.786	
10/24/95	09:56:06	3.00	1.29	4.5586	
10/24/95	09:57:06	4.00	1.62	4.223	
10/24/95	09:58:06	5.00	1.69	4.158	
10/24/95	09:59:06	6.00	1.70	4.1472	
10/24/95	10:00:06	7.00	1.71	4.1363	Q = 1.5 gpm
10/24/95	10:01:06	8.00	1.70	4.1472	
10/24/95	10:02:06	9.00	1.70	4.1472	
10/24/95	10:03:06	10.00	1.71	4.1363	
10/24/95	10:06:06	13.00	1.72	4.1255	
10/24/95	10:08:06	15.00	1.74	4.1039	
10/24/95	10:13:06	20.00	1.74	4.1039	
10/24/95	10:15:06	22.00	1.75	4.093	Q = 2.7 gpm
10/24/95	10:16:06	23.00	1.76	4.0822	
10/24/95	10:17:06	24.00	2.21	3.6383	
10/24/95	10:18:06	25.00	2.40	3.4433	
10/24/95	10:19:06	26.00	2.48	3.3675	
10/24/95	10:20:06	27.00	2.52	3.3242	
10/24/95	10:21:06	28.00	2.54	3.3026	
10/24/95	10:22:06	29.00	2.54	3.3026	
10/24/95	10:23:06	30.00	2.57	3.2809	
10/24/95	10:28:06	35.00	2.59	3.2593	
10/24/95	10:31:06	38.00	2.57	3.2809	
10/24/95	10:32:06	39.00	2.59	3.2593	
10/24/95	10:33:06	40.00	2.60	3.2484	
10/24/95	10:34:06	41.00	2.60	3.2484	
10/24/95	10:35:06	42.00	2.60	3.2484	Q = 3.4 gpm
10/24/95	10:36:06	43.00	2.93	2.9128	
10/24/95	10:37:06	44.00	3.19	2.6529	
10/24/95	10:38:06	45.00	3.30	2.5446	
10/24/95	10:39:06	46.00	3.37	2.4796	
10/24/95	10:40:06	47.00	3.38	2.4688	
10/24/95	10:41:06	48.00	3.41	2.4363	
10/24/95	10:42:06	49.00	3.41	2.4363	
10/24/95	10:43:06	50.00	3.42	2.4255	
10/24/95	10:45:06	52.00	3.43	2.4147	
10/24/95	10:46:06	53.00	3.44	2.4038	

MW-9 Step Drawdown Test

Date	Time	Elapsd Time (minutes)	Drawdown & Residual Drawdown	Feet of water above transdu	Comments
10/24/95	10:54:06	61.00	3.47	2.3822	
10/24/95	10:56:12	63.10	3.47	2.3822	Pump off
10/24/95	10:56:27	63.35	3.47	2.3822	
10/24/95	10:56:42	63.60	2.95	2.9019	
10/24/95	10:56:57	63.85	2.32	3.53	
10/24/95	10:57:12	64.10	1.84	4.0064	
10/24/95	10:57:27	64.35	1.49	4.3529	
10/24/95	10:57:42	64.60	1.23	4.6128	
10/24/95	10:57:57	64.85	1.04	4.8077	
10/24/95	10:58:12	65.10	0.89	4.9593	
10/24/95	10:58:27	65.35	0.77	5.0784	
10/24/95	10:58:42	65.60	0.67	5.1758	
10/24/95	10:58:57	65.85	0.60	5.2516	
10/24/95	10:59:12	66.10	0.53	5.3166	
10/24/95	10:59:27	66.35	0.49	5.3599	
10/24/95	10:59:42	66.60	0.44	5.4032	
10/24/95	10:59:57	66.85	0.41	5.4357	
10/24/95	11:00:12	67.10	0.38	5.4682	
10/24/95	11:00:27	67.35	0.36	5.4899	
10/24/95	11:00:42	67.60	0.34	5.5115	
10/24/95	11:00:57	67.85	0.31	5.5332	
10/24/95	11:01:12	68.10	0.30	5.544	
10/24/95	11:01:27	68.35	0.28	5.5657	
10/24/95	11:01:42	68.60	0.26	5.5873	
10/24/95	11:01:57	68.85	0.25	5.5981	
10/24/95	11:02:12	69.10	0.27	5.5765	
10/24/95	11:02:27	69.35	0.26	5.5873	
10/24/95	11:02:42	69.60	0.25	5.5981	
10/24/95	11:02:57	69.85	0.24	5.609	
10/24/95	11:03:12	70.10	0.24	5.609	
10/24/95	11:03:27	70.35	0.23	5.6198	
10/24/95	11:03:57	70.85	0.22	5.6306	
10/24/95	11:04:12	71.10	0.21	5.6415	
10/24/95	11:05:12	72.10	0.19	5.6523	
10/24/95	11:05:57	72.85	0.17	5.6739	
10/24/95	11:07:12	74.10	0.17	5.6739	
10/24/95	11:07:27	74.35	0.19	5.6523	
10/24/95	11:07:42	74.60	0.18	5.6631	
10/24/95	11:07:57	74.85	0.17	5.6739	
10/24/95	11:08:12	75.10	0.17	5.6739	
10/24/95	11:08:42	75.60	0.17	5.6739	

MW-9 Step Drawdown Test

Date	Time	Elapsd Time (minutes)	Drawdown & Residual Drawdown	Feet of water above transdu	Comments
10/24/95	11:10:57	77.85	0.15	5.6956	
10/24/95	11:11:12	78.10	0.15	5.6956	
10/24/95	11:11:27	78.35	0.15	5.6956	
10/24/95	11:11:42	78.60	0.15	5.6956	
10/24/95	11:11:57	78.85	0.15	5.6956	
10/24/95	11:12:57	79.85	0.14	5.7064	
10/24/95	11:14:42	81.60	0.13	5.7173	
10/24/95	11:18:12	85.10	0.12	5.7281	
10/24/95	11:18:27	85.35	0.12	5.7281	

Date Tuesday October 31, 1995 7:01 PM
PlotFile A:\MW-9ST01.PRN
DataFile A:\MW-9STEP
MW-9step
Time of First Log in Specified Window
10/24/95 09:50:28

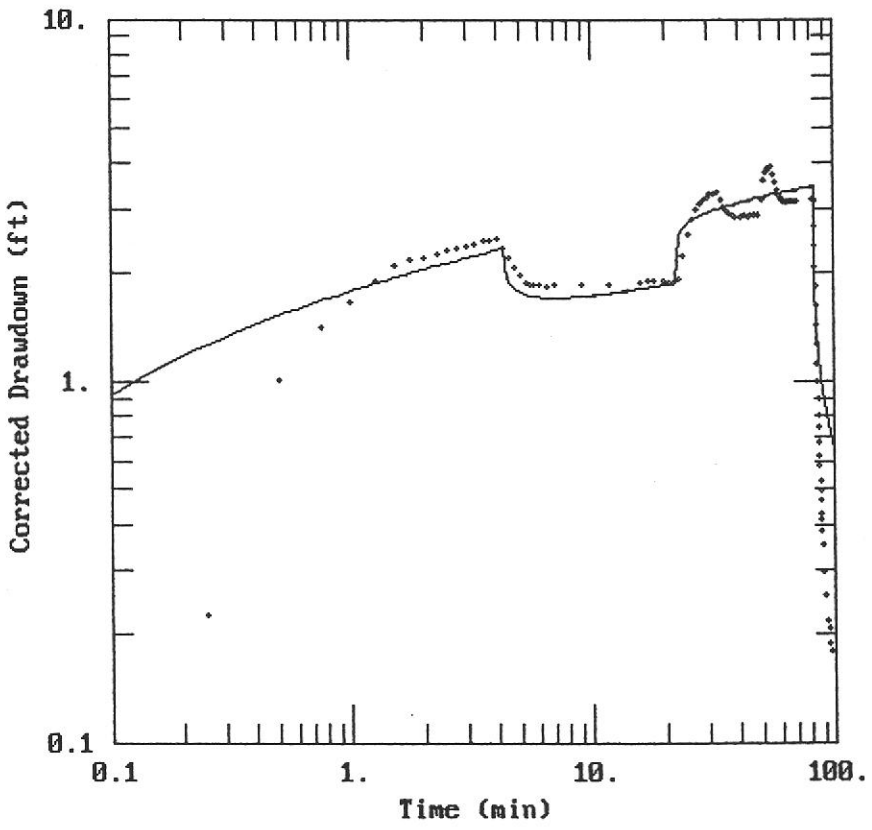
Remaining Memory 63747
Number of Logs 166
Type of Data Memory Memory Board
Logs/Timestamp 1
Power was OK During Data Collection Period

MW- 9 Step Drawdown Test

Date	Time	Elapsed Time (minutes)	Drawdown & Residual Drawdown	WLAP	Comments
11/28/95	11:05:31			6.2911	
11/28/95	11:05:46	0.00	0.00	6.2911	
11/28/95	11:06:01	0.25	0.23	6.0638	
11/28/95	11:06:16	0.50	1.07	5.2192	Q = 1.8 gpm
11/28/95	11:06:31	0.75	1.52	4.7752	
11/28/95	11:06:46	1.00	1.82	4.472	
11/28/95	11:07:01	1.25	2.12	4.1688	
11/28/95	11:07:16	1.50	2.38	3.909	
11/28/95	11:07:31	1.75	2.46	3.8332	
11/28/95	11:07:46	2.00	2.52	3.7682	
11/28/95	11:08:01	2.25	2.59	3.7032	
11/28/95	11:08:16	2.50	2.64	3.6491	
11/28/95	11:08:31	2.75	2.70	3.5949	
11/28/95	11:08:46	3.00	2.74	3.5516	
11/28/95	11:09:01	3.25	2.79	3.4975	
11/28/95	11:09:16	3.50	2.84	3.4542	
11/28/95	11:09:31	3.75	2.87	3.4217	
11/28/95	11:09:46	4.00	2.89	3.4	
11/28/95	11:10:01	4.25	2.70	3.5949	
11/28/95	11:10:16	4.50	2.51	3.779	Q = 3.77 gpm
11/28/95	11:10:31	4.75	2.34	3.9523	
11/28/95	11:10:46	5.00	2.22	4.0714	
11/28/95	11:11:01	5.25	2.10	4.1905	
11/28/95	11:11:16	5.50	2.07	4.223	
11/28/95	11:11:31	5.75	2.07	4.223	
11/28/95	11:11:46	6.00	2.06	4.2338	
11/28/95	11:12:16	6.50	2.04	4.2555	
11/28/95	11:12:46	7.00	2.05	4.2446	
11/28/95	11:14:46	9.00	2.05	4.2446	
11/28/95	11:17:31	11.75	2.07	4.223	
11/28/95	11:21:31	15.75	2.10	4.1905	
11/28/95	11:22:31	16.75	2.11	4.1797	
11/28/95	11:23:31	17.75	2.12	4.1688	Q = 1.4 gpm
11/28/95	11:25:31	19.75	2.12	4.1688	
11/28/95	11:26:31	20.75	2.10	4.1905	
11/28/95	11:27:31	21.75	2.13	4.158	
11/28/95	11:28:31	22.75	2.14	4.1472	Q = 2.6 gpm
11/28/95	11:29:31	23.75	2.56	3.7357	
11/28/95	11:30:31	24.75	3.00	3.2918	
11/28/95	11:31:31	25.75	3.38	2.9128	
11/28/95	11:32:31	26.75	3.65	2.6421	Q = 2.6 gpm

MW- 9 Step Drawdown Test

Date	Time	Elapsed Time (minutes)	Drawdown & Residual Drawdown	WLAP	Comments
11/28/95	11:38:31	32.75	4.23	2.0573	
11/28/95	11:39:31	33.75	3.94	2.3497	Q = 2.3 gpm
11/28/95	11:40:31	34.75	3.70	2.5879	
11/28/95	11:41:31	35.75	3.58	2.707	
11/28/95	11:42:31	36.75	3.51	2.7828	
11/28/95	11:43:31	37.75	3.49	2.8045	
11/28/95	11:44:31	38.75	3.45	2.837	
11/28/95	11:46:31	40.75	3.44	2.8478	
11/28/95	11:48:31	42.75	3.47	2.8261	
11/28/95	11:49:31	43.75	3.45	2.837	
11/28/95	11:50:31	44.75	3.47	2.8261	
11/28/95	11:52:31	46.75	3.48	2.8153	
11/28/95	11:54:31	48.75	3.50	2.7937	
11/28/95	11:55:31	49.75	3.96	2.328	
11/28/95	11:56:31	50.75	4.68	1.6134	
11/28/95	11:57:31	51.75	5.05	1.2452	
11/28/95	11:58:31	52.75	5.20	1.0936	
11/28/95	11:59:31	53.75	5.25	1.0395	
11/28/95	12:00:31	54.75	5.31	0.98536	
11/28/95	12:01:31	55.75	4.92	1.3752	Q = 3.0 gpm
11/28/95	12:02:31	56.75	4.62	1.6675	
11/28/95	12:03:31	57.75	4.32	1.9707	
11/28/95	12:04:31	58.75	4.11	2.1765	Q = 3.0 gpm
11/28/95	12:05:31	59.75	4.02	2.2739	
11/28/95	12:06:31	60.75	3.95	2.3389	
11/28/95	12:07:31	61.75	3.92	2.3714	
11/28/95	12:08:31	62.75	3.90	2.393	
11/28/95	12:09:31	63.75	3.89	2.4038	
11/28/95	12:10:31	64.75	3.89	2.4038	
11/28/95	12:11:31	65.75	3.88	2.4147	Q = 3.0 gpm
11/28/95	12:12:31	66.75	3.89	2.4038	
11/28/95	12:13:31	67.75	3.89	2.4038	
11/28/95	12:14:31	68.75	3.91	2.3822	
11/28/95	12:15:31	69.75	3.89	2.4038	Q = 3.0 gpm
11/28/95	12:26:08	80.37	3.95	2.3389	
11/28/95	12:26:35	80.81	3.95	2.3389	
11/28/95	12:27:27	81.67	3.95	2.3389	
11/28/95	12:27:41	81.92	3.94	2.3497	
11/28/95	12:27:56	82.17	3.95	2.3389	
11/28/95	12:28:11	82.42	3.89	2.4038	Pump off
11/28/95	12:28:26	82.67	3.19	3.0968	



DATA SET:
MW9A.DAT
01/20/96

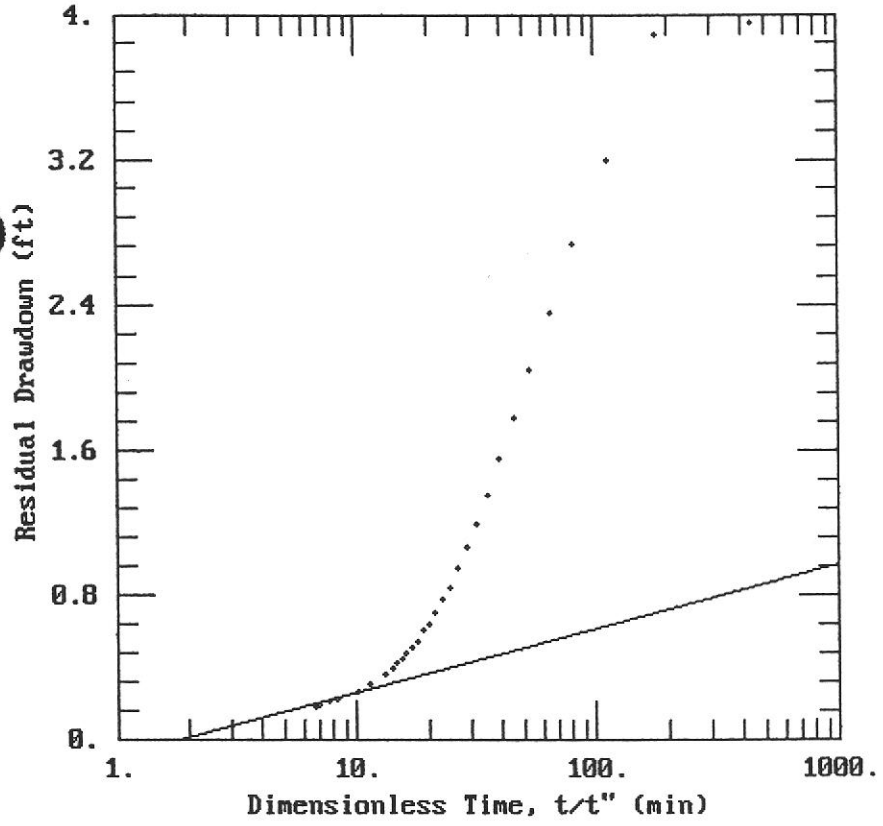
AQUIFER MODEL:
Unconfined

SOLUTION METHOD:
Theis

PROJECT DATA:
test date: November 28, 1995
test well: MW-9
obs. well: MW-9

TEST DATA:
Q = 0.344 ft^3/min
r = 0.42 ft
r_c = 0.17 ft
r_w = 0.42 ft
b = 10. ft

PARAMETER ESTIMATES:
T = 0.07208 ft^2/min
S = 0.008502



DATA SET:
MW9A.DAT
01/20/96

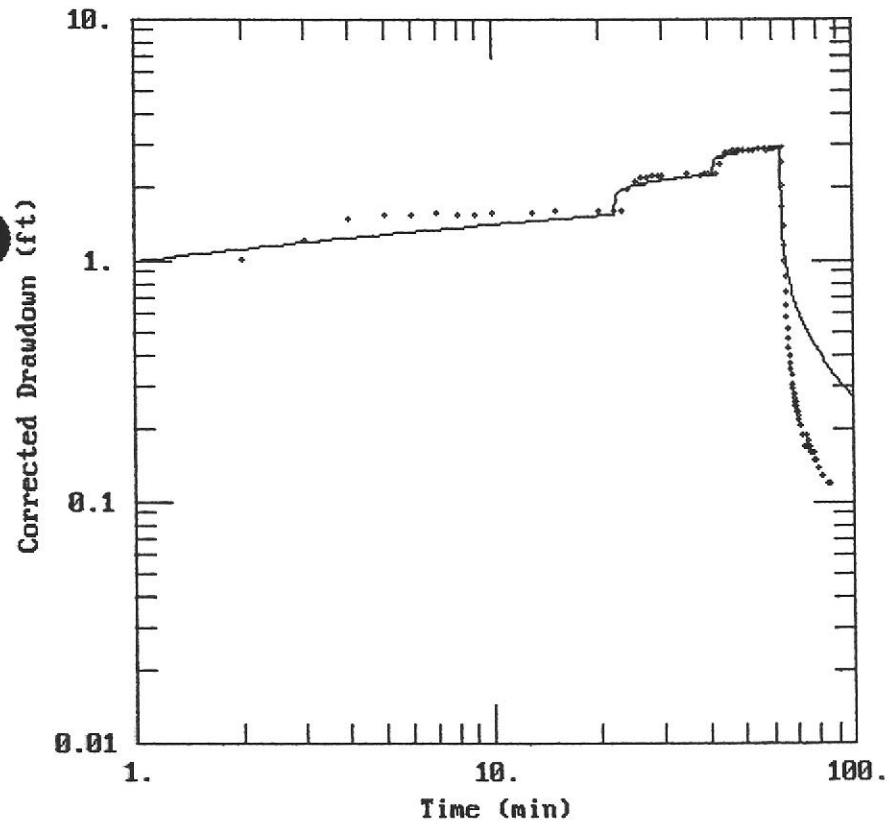
AQUIFER MODEL:
Confined

SOLUTION METHOD:
Theis Recovery

PROJECT DATA:
test date: November 28, 1995
test well: MW-9
obs. well: MW-9

TEST DATA:
Q = 0.344 ft^3/min
r = 0.42 ft
r_c = 0.17 ft
r_w = 0.42 ft
b = 10. ft

PARAMETER ESTIMATES:
T = 0.1813 ft^2/min
S' = 1.832



DATA SET:
MW9.DAT
01/23/96

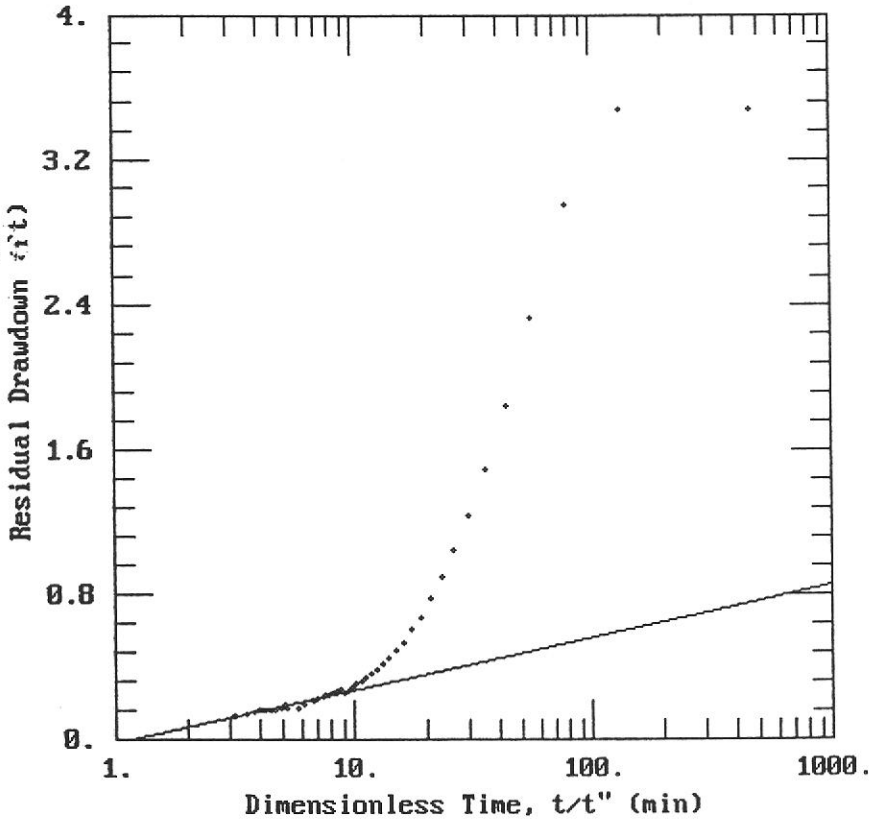
AQUIFER MODEL:
Unconfined

SOLUTION METHOD:
Theis

PROJECT DATA:
test date: October 24, 1995
test well: MW-9
obs. well: MW-9

TEST DATA:
Q = 0.26 ft^3/min
r = 0.42 ft
r_c = 0.17 ft
r_w = 0.42 ft
b = 10. ft

PARAMETER ESTIMATES:
T = 0.1142 ft^2/min
S = 0.00618



DATA SET:
MW9.DAT
01/23/96

AQUIFER MODEL:
Confined

SOLUTION METHOD:
Theis Recovery

PROJECT DATA:
test date: October 24, 1995
test well: MW-9
obs. well: MW-9

TEST DATA:
Q = 0.26 ft^3/min
r = 0.42 ft
r_c = 0.17 ft
r_w = 0.42 ft
b = 10. ft

PARAMETER ESTIMATES:
T = 0.288 ft^2/min
S' = 1.162

MW-23 Step Drawdown Test

Date	Time	dT (min)	dS (ft)	Feet of water above transducer	Comments
10/23/95	11:46:10	0.00	0.00	7.0275	
10/23/95	11:47:10	1.01	0.36	6.6701	
10/23/95	11:48:10	2.01	1.72	5.3058	
10/23/95	11:49:10	3.01	2.18	4.851	
10/23/95	11:50:10	4.01	2.28	4.7427	
10/23/95	11:51:10	5.01	2.35	4.6778	
10/23/95	11:52:10	6.01	2.35	4.6778	
10/23/95	11:53:10	7.01	2.41	4.6128	
10/23/95	11:54:10	8.01	2.43	4.602	
10/23/95	11:55:10	9.01	2.40	4.6236	Q = 1.7 gpm
10/23/95	11:56:10	10.01	2.44	4.5911	
10/23/95	11:57:10	11.01	2.43	4.602	
10/23/95	11:58:10	12.01	2.47	4.5586	
10/23/95	11:59:10	13.01	2.46	4.5695	
10/23/95	12:00:10	14.01	2.46	4.5695	
10/23/95	12:01:10	15.01	2.47	4.5586	
10/23/95	12:02:10	16.01	2.46	4.5695	
10/23/95	12:03:10	17.01	2.48	4.5478	
10/23/95	12:04:10	18.01	2.48	4.5478	
10/23/95	12:05:10	19.01	2.50	4.5262	
10/23/95	12:06:10	20.01	2.50	4.5262	
10/23/95	12:07:10	21.01	2.49	4.537	
10/23/95	12:08:10	22.01	2.49	4.537	
10/23/95	12:09:10	23.01	3.58	3.4433	Q = 3.6 gpm
10/23/95	12:10:10	24.01	4.17	2.8586	
10/23/95	12:11:10	25.01	4.48	2.5446	
10/23/95	12:12:10	26.01	4.73	2.2956	
10/23/95	12:13:10	27.01	4.85	2.1765	
10/23/95	12:14:10	28.01	4.96	2.0682	Q = 3.6 gpm
10/23/95	12:15:10	29.01	5.04	1.9924	
10/23/95	12:16:10	30.01	5.12	1.9058	
10/23/95	12:17:10	31.01	5.14	1.8841	
10/23/95	12:18:10	32.01	5.19	1.8408	
10/23/95	12:19:10	33.01	5.27	1.7542	
10/23/95	12:20:10	34.01	5.27	1.7542	
10/23/95	12:21:10	35.01	5.33	1.7	
10/23/95	12:22:10	36.01	5.36	1.6675	
10/23/95	12:23:10	37.01	5.36	1.6675	
10/23/95	12:24:10	38.01	5.42	1.6026	

MW-23 Step Drawdown Test

Date	Time	dT (min)	dS (ft)	Feet of water above transducer	Comments
10/23/95	12:30:10	44.01	3.14	3.8873	Q = 2 gpm
10/23/95	12:31:10	45.01	3.05	3.9739	
10/23/95	12:32:10	46.01	3.01	4.0172	
10/23/95	12:33:10	47.01	2.99	4.0389	
10/23/95	12:34:10	48.01	2.99	4.0389	
10/23/95	12:35:10	49.01	2.99	4.0389	
10/23/95	12:36:10	50.01	2.99	4.0389	
10/23/95	12:37:10	51.01	2.99	4.0389	
10/23/95	12:38:10	52.01	2.99	4.0389	
10/23/95	12:39:10	53.01	3.00	4.0281	
10/23/95	12:40:10	54.01	2.99	4.0389	
10/23/95	12:41:10	55.01	3.00	4.0281	Q = 2.3 gpm
10/23/95	12:42:10	56.01	3.00	4.0281	
10/23/95	12:43:10	57.01	3.00	4.0281	
10/23/95	12:44:10	58.01	2.99	4.0389	
10/23/95	12:45:10	59.01	3.02	4.0064	
10/23/95	12:46:10	60.01	3.01	4.0172	
10/23/95	12:47:10	61.01	3.01	4.0172	
10/23/95	12:48:14	62.08	3.01	4.0172	
10/23/95	12:48:29	62.32	3.01	4.0172	
10/23/95	12:48:44	62.58	3.02	4.0064	Pump off
10/23/95	12:48:59	62.83	2.69	4.3421	
10/23/95	12:49:14	63.07	1.88	5.1434	
10/23/95	12:49:29	63.33	1.42	5.609	
10/23/95	12:49:44	63.58	1.15	5.8797	
10/23/95	12:49:59	63.83	0.96	6.0638	
10/23/95	12:50:14	64.08	0.83	6.1937	
10/23/95	12:50:29	64.32	0.74	6.2911	
10/23/95	12:50:44	64.58	0.65	6.3778	
10/23/95	12:50:59	64.83	0.58	6.4427	
10/23/95	12:51:14	65.08	0.54	6.486	
10/23/95	12:51:29	65.33	0.51	6.5185	
10/23/95	12:51:44	65.57	0.47	6.5618	
10/23/95	12:51:59	65.83	0.43	6.5943	
10/23/95	12:52:14	66.08	0.41	6.616	
10/23/95	12:52:29	66.32	0.38	6.6485	
10/23/95	12:52:44	66.58	0.35	6.681	
10/23/95	12:52:59	66.82	0.35	6.681	
10/23/95	12:53:14	67.08	0.32	6.7026	

MW-23 Step Drawdown Test

Date	Time	dT (min)	dS (ft)	Feet of water above transducer	Comments
10/23/95	12:54:44	68.58	0.26	6.7676	
10/23/95	12:54:59	68.82	0.27	6.7568	
10/23/95	12:55:14	69.08	0.27	6.7568	
10/23/95	12:55:29	69.33	0.25	6.7784	
10/23/95	12:55:44	69.58	0.25	6.7784	
10/23/95	12:55:59	69.83	0.25	6.7784	
10/23/95	12:56:14	70.07	0.25	6.7784	
10/23/95	12:56:29	70.33	0.25	6.7784	
10/23/95	12:56:44	70.58	0.24	6.7892	
10/23/95	12:56:59	70.82	0.25	6.7784	
10/23/95	12:57:14	71.08	0.24	6.7892	
10/23/95	12:57:29	71.32	0.24	6.7892	
10/23/95	12:57:44	71.58	0.24	6.7892	
10/23/95	12:57:59	71.83	0.24	6.7892	
10/23/95	12:58:14	72.07	0.23	6.8001	
10/23/95	12:58:29	72.33	0.23	6.8001	
10/23/95	12:58:44	72.58	0.23	6.8001	
10/23/95	12:58:59	72.83	0.23	6.8001	
10/23/95	12:59:14	73.08	0.24	6.7892	
10/23/95	12:59:29	73.32	0.24	6.7892	
10/23/95	12:59:44	73.58	0.23	6.8001	
10/23/95	12:59:59	73.83	0.22	6.8109	
10/23/95	13:00:14	74.08	0.23	6.8001	
10/23/95	13:00:29	74.33	0.22	6.8109	
10/23/95	13:00:44	74.57	0.22	6.8109	
10/23/95	13:00:59	74.83	0.22	6.8109	
10/23/95	13:01:14	75.08	0.22	6.8109	
10/23/95	13:01:29	75.32	0.21	6.8217	
10/23/95	13:01:44	75.58	0.21	6.8217	
10/23/95	13:01:59	75.82	0.21	6.8217	
10/23/95	13:02:14	76.08	0.20	6.8325	
10/23/95	13:02:29	76.33	0.21	6.8217	
10/23/95	13:02:44	76.57	0.21	6.8217	
10/23/95	13:02:59	76.83	0.21	6.8217	
10/23/95	13:03:14	77.08	0.20	6.8325	
10/23/95	13:03:29	77.33	0.20	6.8325	
10/23/95	13:03:44	77.58	0.20	6.8325	
10/23/95	13:03:59	77.82	0.20	6.8325	
10/23/95	13:04:14	78.08	0.20	6.8325	

MW-23 Step Drawdown Test

Date	Time	dT (min)	dS (ft)	Feet of water above transducer	Comments
10/23/95	13:05:44	79.58	0.18	6.8434	
10/23/95	13:05:59	79.82	0.20	6.8325	
10/23/95	13:06:14	80.08	0.20	6.8325	
10/23/95	13:06:29	80.32	0.18	6.8434	
10/23/95	13:06:44	80.58	0.18	6.8434	
10/23/95	13:06:59	80.83	0.20	6.8325	
10/23/95	13:07:14	81.07	0.18	6.8434	
10/23/95	13:07:29	81.33	0.18	6.8434	
10/23/95	13:07:44	81.58	0.20	6.8325	
10/23/95	13:07:59	81.83	0.18	6.8434	
10/23/95	13:08:14	82.08	0.18	6.8434	
10/23/95	13:08:29	82.32	0.18	6.8434	
10/23/95	13:08:44	82.58	0.18	6.8434	
10/23/95	13:08:59	82.83	0.18	6.8434	
10/23/95	13:09:14	83.08	0.18	6.8434	
10/23/95	13:09:29	83.33	0.18	6.8434	
10/23/95	13:09:44	83.57	0.17	6.8542	
10/23/95	13:09:59	83.83	0.18	6.8434	
10/23/95	13:10:14	84.08	0.18	6.8434	
10/23/95	13:10:29	84.32	0.17	6.8542	
10/23/95	13:10:44	84.58	0.18	6.8434	
10/23/95	13:10:59	84.82	0.18	6.8434	
10/23/95	13:11:14	85.08	0.17	6.8542	
10/23/95	13:11:29	85.33	0.17	6.8542	
10/23/95	13:11:44	85.57	0.17	6.8542	
10/23/95	13:11:59	85.83	0.17	6.8542	
10/23/95	13:12:14	86.08	0.17	6.8542	
10/23/95	13:12:29	86.33	0.17	6.8542	
10/23/95	13:12:44	86.58	0.17	6.8542	
10/23/95	13:12:59	86.82	0.17	6.8542	
10/23/95	13:13:14	87.08	0.17	6.8542	
10/23/95	13:13:29	87.33	0.17	6.8542	
10/23/95	13:13:44	87.58	0.16	6.865	
10/23/95	13:13:59	87.83	0.17	6.8542	
10/23/95	13:14:14	88.07	0.16	6.865	
10/23/95	13:14:29	88.33	0.17	6.8542	
10/23/95	13:14:44	88.58	0.17	6.8542	
10/23/95	13:14:59	88.82	0.16	6.865	
10/23/95	13:15:14	89.08	0.16	6.865	

MW-23 Step Drawdown Test

Date	Time	dT (min)	dS (ft)	Feet of water above transducer	Comments
10/23/95	13:16:44	90.58	0.16	6.865	
10/23/95	13:16:59	90.83	0.16	6.865	
10/23/95	13:17:14	91.08	0.16	6.865	
10/23/95	13:17:29	91.32	0.16	6.865	
10/23/95	13:17:44	91.58	0.15	6.8759	
10/23/95	13:17:59	91.83	0.15	6.8759	
10/23/95	13:18:14	92.08	0.16	6.865	
10/23/95	13:18:29	92.33	0.16	6.865	
10/23/95	13:18:44	92.57	0.16	6.865	
10/23/95	13:18:59	92.83	0.16	6.865	
10/23/95	13:19:14	93.08	0.15	6.8759	
10/23/95	13:19:29	93.32	0.15	6.8759	
10/23/95	13:19:44	93.58	0.15	6.8759	
10/23/95	13:19:59	93.82	0.15	6.8759	
10/23/95	13:20:14	94.08	0.16	6.865	
10/23/95	13:20:29	94.33	0.16	6.865	
10/23/95	13:20:44	94.57	0.15	6.8759	
10/23/95	13:20:59	94.83	0.16	6.865	
10/23/95	13:21:14	95.08	0.15	6.8759	
10/23/95	13:21:29	95.33	0.15	6.8759	
10/23/95	13:21:44	95.58	0.15	6.8759	
10/23/95	13:21:59	95.82	0.15	6.8759	
10/23/95	13:22:14	96.08	0.15	6.8759	
10/23/95	13:22:29	96.33	0.15	6.8759	
10/23/95	13:22:44	96.58	0.14	6.8867	
10/23/95	13:22:59	96.83	0.15	6.8759	
10/23/95	13:23:14	97.07	0.14	6.8867	
10/23/95	13:23:29	97.33	0.15	6.8759	
10/23/95	13:23:44	97.58	0.15	6.8759	
10/23/95	13:23:59	97.82	0.14	6.8867	
10/23/95	13:24:14	98.08	0.14	6.8867	
10/23/95	13:24:29	98.32	0.15	6.8759	
10/23/95	13:24:44	98.58	0.15	6.8759	
10/23/95	13:24:59	98.83	0.15	6.8759	
10/23/95	13:25:14	99.07	0.15	6.8759	
10/23/95	13:25:29	99.33	0.14	6.8867	
10/23/95	13:25:44	99.58	0.14	6.8867	
10/23/95	13:25:59	99.83	0.15	6.8759	
10/23/95	13:26:14	100.08	0.14	6.8867	

MW-23 Step Drawdown Test

Date	Time	dT (min)	dS (ft)	Feet of water above transducer	Comments
10/23/95	13:27:44	101.57	0.15	6.8759	
10/23/95	13:27:59	101.83	0.15	6.8759	
10/23/95	13:28:14	102.08	0.14	6.8867	
10/23/95	13:28:29	102.32	0.14	6.8867	
10/23/95	13:28:44	102.58	0.15	6.8759	
10/23/95	13:28:59	102.82	0.14	6.8867	
10/23/95	13:29:14	103.08	0.14	6.8867	
10/23/95	13:29:29	103.33	0.14	6.8867	
10/23/95	13:29:44	103.57	0.14	6.8867	
10/23/95	13:29:59	103.83	0.14	6.8867	
10/23/95	13:30:14	104.08	0.14	6.8867	
10/23/95	13:30:29	104.33	0.14	6.8867	
10/23/95	13:30:44	104.58	0.14	6.8867	
10/23/95	13:30:59	104.82	0.14	6.8867	
10/23/95	13:31:14	105.08	0.13	6.8975	
10/23/95	13:31:29	105.33	0.13	6.8975	
10/23/95	13:31:44	105.58	0.13	6.8975	
10/23/95	13:31:59	105.83	0.13	6.8975	
10/23/95	13:32:14	106.07	0.13	6.8975	
10/23/95	13:32:29	106.33	0.13	6.8975	
10/23/95	13:32:44	106.58	0.12	6.9083	
10/23/95	13:32:59	106.82	0.13	6.8975	
10/23/95	13:33:14	107.08	0.12	6.9083	
10/23/95	13:33:29	107.32	0.13	6.8975	
10/23/95	13:33:44	107.58	0.13	6.8975	
10/23/95	13:33:59	107.83	0.13	6.8975	
10/23/95	13:34:14	108.07	0.13	6.8975	
10/23/95	13:34:29	108.33	0.13	6.8975	
10/23/95	13:34:44	108.58	0.12	6.9083	
10/23/95	13:34:59	108.83	0.13	6.8975	
10/23/95	13:35:14	109.08	0.13	6.8975	
10/23/95	13:35:29	109.32	0.13	6.8975	
10/23/95	13:35:44	109.58	0.13	6.8975	
10/23/95	13:35:59	109.83	0.13	6.8975	
10/23/95	13:36:14	110.08	0.13	6.8975	
10/23/95	13:36:29	110.33	0.13	6.8975	
10/23/95	13:36:44	110.57	0.13	6.8975	
10/23/95	13:36:59	110.83	0.13	6.8975	
10/23/95	13:37:14	111.08	0.13	6.8975	

MW-23 Step Drawdown Test

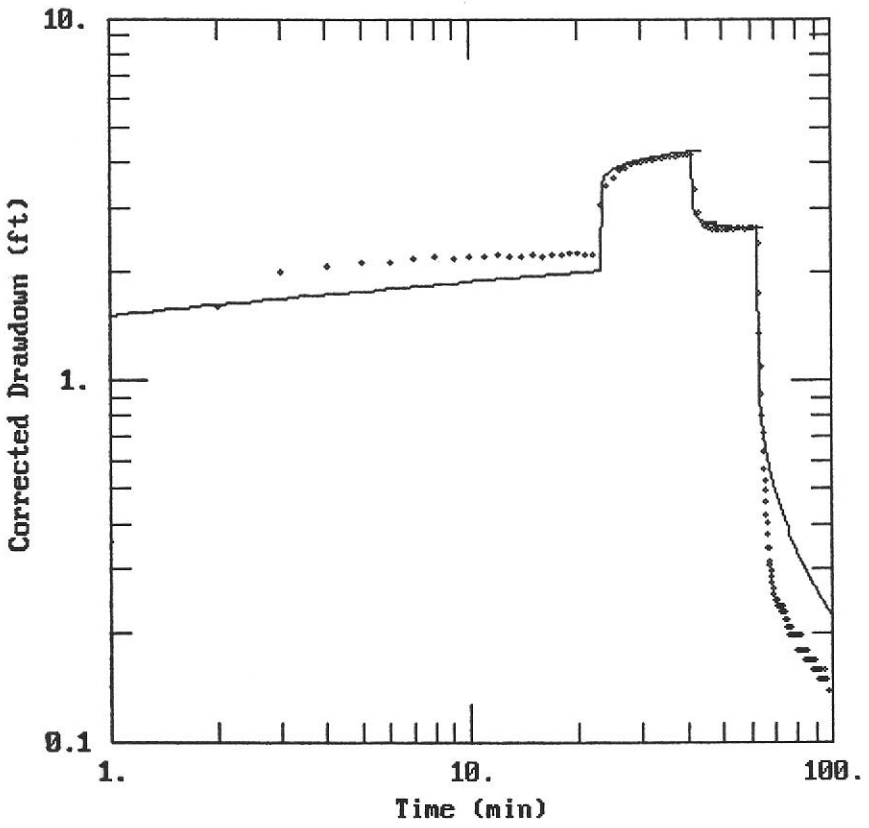
Date	Time	dT (min)	dS (ft)	Feet of water above transducer	Comments
10/23/95	13:38:44	112.57	0.12	6.9083	
10/23/95	13:38:59	112.83	0.13	6.8975	
10/23/95	13:39:14	113.08	0.13	6.8975	
10/23/95	13:39:29	113.33	0.13	6.8975	
10/23/95	13:39:44	113.58	0.13	6.8975	
10/23/95	13:39:59	113.82	0.12	6.9083	
10/23/95	13:40:14	114.08	0.12	6.9083	
10/23/95	13:40:29	114.33	0.12	6.9083	
10/23/95	13:40:44	114.58	0.13	6.8975	
10/23/95	13:40:59	114.83	0.13	6.8975	
10/23/95	13:41:14	115.07	0.12	6.9083	
10/23/95	13:41:29	115.33	0.13	6.8975	
10/23/95	13:41:56	115.78	0.13	6.8975	
10/23/95	13:42:11	116.03	0.13	6.8975	
10/23/95	13:42:26	116.28	0.11	6.9192	
10/23/95	13:42:41	116.52	0.13	6.8975	
10/23/95	13:42:56	116.78	0.13	6.8975	

Date Tuesday October 31, 1995 6:19 PM
PlotFile A:\MW-23S01.PRN
DataFile A:\MW-23STE
MW-23step
Time of First Log in Specified Window
34995.49 0.4903912037039

Power was OK During Data Collection Period

Terra8 Data Collection Report

Firmware Version 4.2/91
Number of Bytes in Data Dump 2939
User Supplied Comment MW-23step
Time Header Block Loaded 1995/10/23 11:46:10.00
Time Data File Dumped 1995/10/23 13:45:00.60
Remaining Memory 62597
Number of Logs 281



DATA SET:
MW23_1.DAT
01/23/96

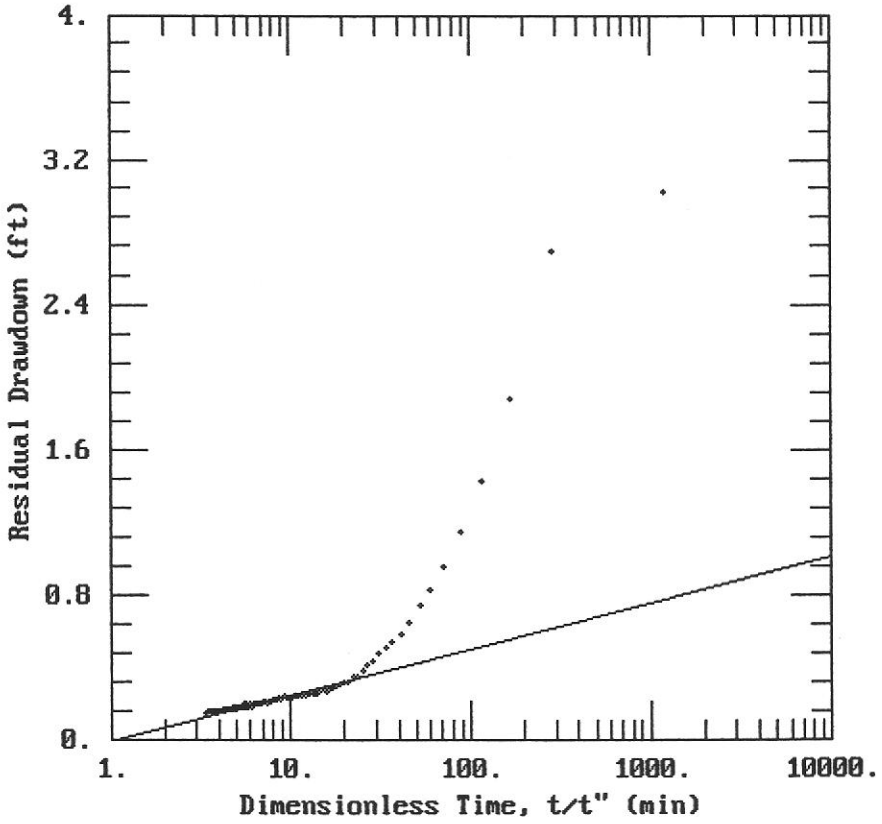
AQUIFER MODEL:
Unconfined

SOLUTION METHOD:
Theis

PROJECT DATA:
test date: October 23, 1995
test well: MW-23
obs. well: MW-23

TEST DATA:
Q = 0.227 ft^3/min
r = 0.42 ft
r_c = 0.17 ft
r_w = 0.42 ft
b = 12. ft

PARAMETER ESTIMATES:
T = 0.112 ft^2/min
S = 0.0001274



DATA SET:
MW23_1.DAT
01/23/96

AQUIFER MODEL:
Confined

SOLUTION METHOD:
Theis Recovery

PROJECT DATA:
test date: October 23, 1995
test well: MW-23
obs. well: MW-23

TEST DATA:
Q = 0.227 ft^3/min
r = 0.42 ft
r_c = 0.17 ft
r_w = 0.42 ft
b = 12. ft

PARAMETER ESTIMATES:
T = 0.1927 ft^2/min
S' = 1.08

MW-23 Step Drawdown Test

Date	Time	dT (min)	dS (ft)	WLAP (ft)	Comments
11/27/95	13:39:40			7.5255	
11/27/95	13:41:05			7.5147	
11/27/95	13:41:20	0.00	0.00	7.5147	
11/27/95	13:41:35	0.25	1.96	5.5548	
11/27/95	13:41:50	0.50	2.24	5.2733	
11/27/95	13:42:20	1.00	2.49	5.0243	
11/27/95	13:42:50	1.50	2.78	4.7319	
11/27/95	13:43:20	2.00	2.75	4.7644	
11/27/95	13:43:50	2.50	2.71	4.8077	
11/27/95	13:44:20	3.00	2.70	4.8185	Q = 1.8 gpm
11/27/95	13:44:50	3.50	2.71	4.8077	
11/27/95	13:45:20	4.00	2.57	4.9485	
11/27/95	13:45:50	4.50	2.48	5.0351	
11/27/95	13:46:20	5.00	2.46	5.0567	
11/27/95	13:46:35	5.25	2.43	5.0892	Q = 1.5 gpm
11/27/95	13:46:50	5.50	2.41	5.1	
11/27/95	13:47:20	6.00	2.41	5.1	
11/27/95	13:47:50	6.50	2.40	5.1109	
11/27/95	13:48:20	7.00	2.40	5.1109	
11/27/95	13:48:50	7.50	2.41	5.1	
11/27/95	13:49:20	8.00	2.44	5.0784	
11/27/95	13:49:50	8.50	2.44	5.0784	
11/27/95	13:50:20	9.00	2.44	5.0784	
11/27/95	13:50:50	9.50	2.46	5.0567	
11/27/95	13:52:05	10.75	2.47	5.0459	Q = 1.5 gpm
11/27/95	13:54:05	12.75	2.50	5.0134	
11/27/95	13:56:05	14.75	2.51	5.0026	
11/27/95	13:57:05	15.75	2.53	4.9809	
11/27/95	13:59:05	17.75	2.53	4.9809	
11/27/95	14:00:05	18.75	2.56	4.9593	
11/27/95	14:02:05	20.75	2.58	4.9376	
11/27/95	14:04:05	22.75	2.59	4.9268	
11/27/95	14:05:05	23.75	2.61	4.9051	
11/27/95	14:06:05	24.75	2.62	4.8943	Q = 2.6 gpm
11/27/95	14:07:05	25.75	3.16	4.3529	
11/27/95	14:08:05	26.75	3.69	3.8223	
11/27/95	14:09:05	27.75	4.01	3.5083	
11/27/95	14:10:05	28.75	4.26	3.2593	
11/27/95	14:11:05	29.75	4.31	3.2051	
11/27/95	14:12:05	30.75	4.01	3.5083	Q = 2.3 gpm

MW-23 Step Drawdown Test

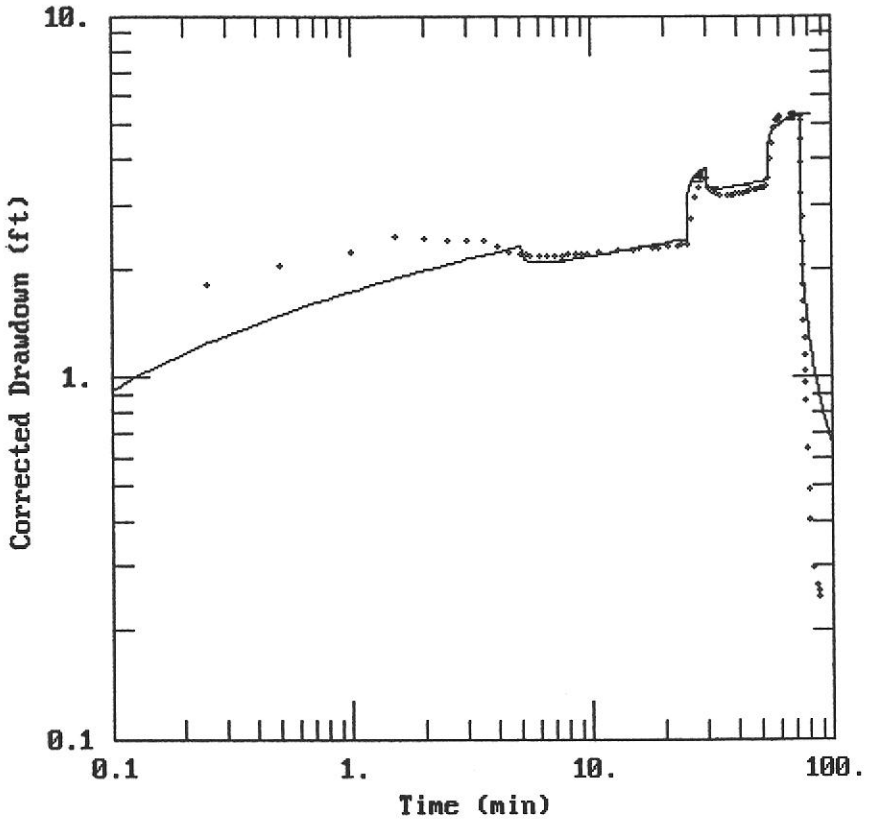
Date	Time	dT (min)	dS (ft)	WLAP (ft)	Comments
11/27/95	14:20:05	38.75	3.79	3.7249	
11/27/95	14:21:05	39.75	3.80	3.714	
11/27/95	14:22:05	40.75	3.83	3.6816	
11/27/95	14:24:05	42.75	3.84	3.6707	Q = 2.3 gpm
11/27/95	14:25:05	43.75	3.85	3.6599	
11/27/95	14:26:05	44.75	3.89	3.6274	
11/27/95	14:27:05	45.75	3.91	3.6058	
11/27/95	14:29:05	47.75	3.94	3.5733	
11/27/95	14:30:05	48.75	3.95	3.5625	
11/27/95	14:31:05	49.75	3.97	3.5408	
11/27/95	14:32:05	50.75	3.98	3.53	
11/27/95	14:33:05	51.75	4.01	3.5083	
11/27/95	14:34:05	52.75	4.03	3.4867	
11/27/95	14:35:05	53.75	4.35	3.1618	Q = 2.9 gpm
11/27/95	14:36:05	54.75	5.12	2.393	Q = 2.9 gpm
11/27/95	14:37:05	55.75	5.81	1.7	
11/27/95	14:38:05	56.75	6.87	0.64969	
11/27/95	14:39:05	57.75	7.41	0.10828	
11/27/95	14:40:05	58.75	7.33	0.18408	
11/27/95	14:41:05	59.75	7.56	-0.043313	
11/27/95	14:42:05	60.75	7.80	-0.28153	Q = 3.0 gpm
11/27/95	14:48:05	66.75	8.00	-0.48727	Q = 3.0 gpm
11/27/95	14:49:05	67.75	8.00	-0.48727	
11/27/95	14:50:05	68.75	8.00	-0.48727	Q = 3.0 gpm
11/27/95	14:51:05	69.75	8.01	-0.49809	
11/27/95	14:54:36	73.27	7.82	-0.30319	
11/27/95	14:54:51	73.52	7.37	0.14077	Pump off
11/27/95	14:55:06	73.77	6.11	1.4077	
11/27/95	14:55:21	74.02	4.88	2.6312	
11/27/95	14:55:36	74.27	3.84	3.6707	
11/27/95	14:55:51	74.52	3.19	4.3204	
11/27/95	14:56:06	74.77	2.66	4.851	
11/27/95	14:56:21	75.02	2.26	5.2516	
11/27/95	14:56:36	75.27	1.97	5.544	
11/27/95	14:56:51	75.52	1.74	5.7714	
11/27/95	14:57:06	75.77	1.53	5.988	
11/27/95	14:57:21	76.02	1.35	6.1612	
11/27/95	14:57:36	76.27	1.21	6.302	
11/27/95	14:57:51	76.52	1.09	6.4211	
11/27/95	14:58:06	76.77	1.00	6.5185	

MW-23 Step Drawdown Test

Date	Time	dT (min)	dS (ft)	WLAP (ft)	Comments
11/27/95	15:06:21	85.02	0.27	7.244	
11/27/95	15:07:51	86.52	0.25	7.2657	
11/27/95	15:08:06	86.77	0.26	7.2548	

PlotFile A:\MW-23S01.PRN
DataFile A:\MW-23STEP
MW-23STEP
Time of First Log in Specified Window
35029.5692 0.569211805556

Logs/Timestamp 1
Power was OK During Data Collection Period



DATA SET:
MW23_2.DAT
01/20/96

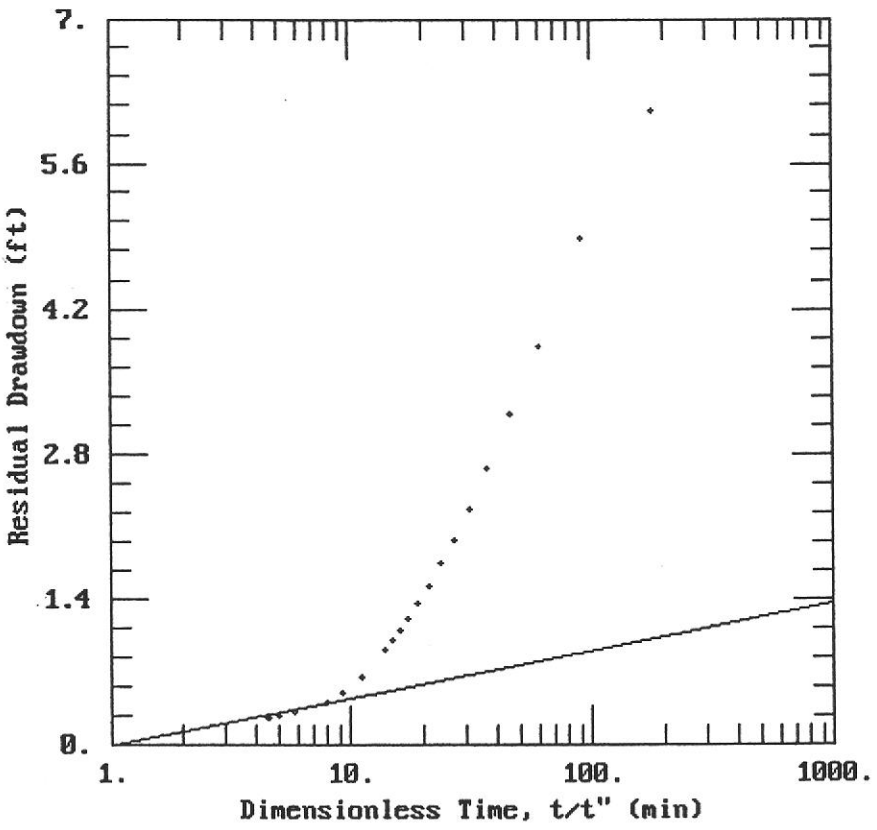
AQUIFER MODEL:
Unconfined

SOLUTION METHOD:
Theis

PROJECT DATA:
test date: November 27, 1995
test well: MW-23 Test #2
obs. well: MW-23

TEST DATA:
Q = 0.241 ft^3/min
r = 0.42 ft
r_c = 0.17 ft
r_w = 0.42 ft
b = 12. ft

PARAMETER ESTIMATES:
T = 0.0535 ft^2/min
S = 0.005493



DATA SET:
MW23_2.DAT
01/20/96

AQUIFER MODEL:
Confined

SOLUTION METHOD:
Theis Recovery

PROJECT DATA:
test date: November 27, 1995
test well: MW-23 Test #2
obs. well: MW-23

TEST DATA:
Q = 0.241 ft^3/min
r = 0.42 ft
r_c = 0.17 ft
r_w = 0.42 ft
b = 12. ft

PARAMETER ESTIMATES:
T = 0.168 ft^2/min
S' = 1.044

MW-23 Step Drawdown Test

Date	Time	dT (min)	dS (ft)	WLAP (ft)	dT (min)	dS (ft)	WLAP (ft)	Comments
12/19/95	09:06:01			7.5039			10.063	
12/19/95	09:06:31			7.4931			10.063	
12/19/95	09:08:31			7.5147			10.067	
12/19/95	09:08:46			7.5039			10.07	
12/19/95	09:09:01			7.4498			10.067	
12/19/95	09:09:16			7.5039			10.07	
12/19/95	09:09:31			7.5039			10.07	
12/19/95	09:09:46	0.00	0.00	7.5147	0.00	0.00	10.07	
12/19/95	09:10:01	0.25	1.05	6.4644	0.25	0.00	10.067	
12/19/95	09:10:16	0.50	1.17	6.3453	0.50	0.01	10.056	
12/19/95	09:10:31	0.75	1.70	5.8147	0.75	0.03	10.045	
12/19/95	09:10:46	1.00	2.45	5.0676	1.00	0.04	10.027	
12/19/95	09:11:01	1.25	3.09	4.4287	1.25	0.06	10.012	
12/19/95	09:11:16	1.50	3.43	4.0822	1.50	0.08	9.9908	
12/19/95	09:11:31	1.75	3.80	3.714	1.75	0.09	9.9763	
12/19/95	09:11:46	2.00	4.27	3.2484	2.00	0.11	9.9583	
12/19/95	09:12:01	2.25	4.71	2.8045	2.25	0.13	9.9402	
12/19/95	09:12:16	2.50	5.07	2.4472	2.50	0.14	9.9258	
12/19/95	09:12:31	2.75	5.22	2.2956	2.75	0.16	9.9113	
12/19/95	09:12:46	3.00	5.40	2.1115	3.00	0.17	9.9005	
12/19/95	09:13:01	3.25	5.46	2.0573	3.25	0.18	9.8861	
12/19/95	09:13:16	3.50	5.27	2.2414	3.50	0.20	9.8716	
12/19/95	09:13:31	3.75	5.10	2.4147	3.75	0.21	9.8608	
12/19/95	09:13:46	4.00	4.95	2.5663	4.00	0.22	9.85	
12/19/95	09:14:01	4.25	4.81	2.707	4.25	0.23	9.8392	
12/19/95	09:14:16	4.50	4.71	2.8045	4.50	0.23	9.8355	
12/19/95	09:14:31	4.75	4.63	2.8803	4.75	0.24	9.8319	
12/19/95	09:14:46	5.00	4.55	2.9669	5.00	0.25	9.8211	Q = 2.8 gp
12/19/95	09:15:16	5.50	4.44	3.0752	5.50	0.26	9.8103	
12/19/95	09:15:46	6.00	4.33	3.1835	6.00	0.26	9.8067	
12/19/95	09:16:16	6.50	4.16	3.3567	6.50	0.28	9.7922	
12/19/95	09:16:46	7.00	4.06	3.4542	7.00	0.29	9.785	
12/19/95	09:17:16	7.50	3.97	3.5408	7.50	0.29	9.7814	Q = 3.0 gp
12/19/95	09:17:46	8.00	3.94	3.5733	8.00	0.29	9.7778	
12/19/95	09:18:46	9.00	3.89	3.6274	9.00	0.30	9.767	
12/19/95	09:19:46	10.00	3.89	3.6274	10.00	0.31	9.7561	
12/19/95	09:22:16	12.50	3.92	3.5949	12.50	0.32	9.7453	
12/19/95	09:24:46	15.00	3.96	3.5516	15.00	0.34	9.7345	
12/19/95	09:27:16	17.50	4.01	3.5083	17.50	0.35	9.7237	
12/19/95	09:29:46	20.00	4.07	3.4433	20.00	0.35	9.7164	

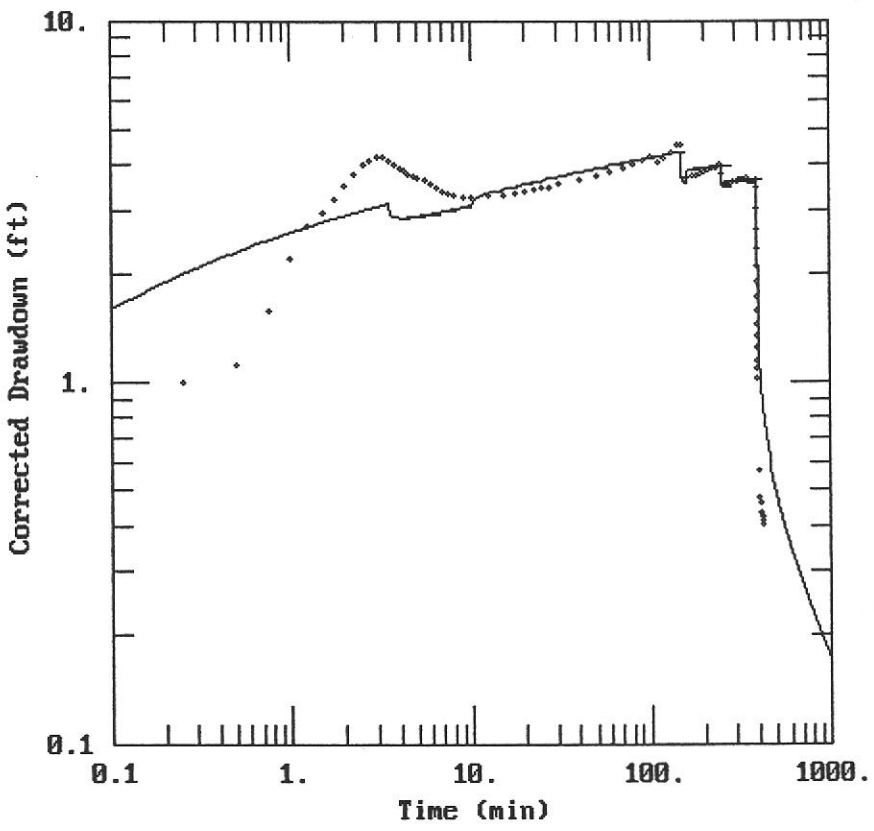
MW-23 Step Drawdown Test

Date	Time	dT (min)	dS (ft)	WLAP (ft)	dT (min)	dS (ft)	WLAP (ft)	Comments
12/19/95	10:00:31	50.75	4.61	2.9019	50.75	0.44	9.6334	
12/19/95	10:10:31	60.75	4.78	2.7395	60.75	0.46	9.6082	
12/19/95	10:20:31	70.75	4.92	2.5988	70.75	0.48	9.5901	
12/19/95	10:30:31	80.75	5.07	2.4472	80.75	0.49	9.5829	Q = 2.9 gp
12/19/95	10:40:31	90.75	5.27	2.2414	90.75	0.51	9.5648	
12/19/95	10:50:31	100.75	5.44	2.079	100.75	0.51	9.5576	
12/19/95	11:00:31	110.75	5.19	2.328	110.75	0.52	9.5504	
12/19/95	11:10:31	120.75	5.35	2.1656	120.75	0.52	9.5468	
12/19/95	11:20:31	130.75	5.59	1.9274	130.75	0.53	9.536	Q = 3.0 gp
12/19/95	11:30:31	140.75	6.10	1.4185	140.75	0.54	9.5288	
12/19/95	11:40:31	150.75	6.03	1.4835	150.75	0.55	9.5215	
12/19/95	11:50:31	160.75	4.56	2.9561	160.75	0.54	9.5288	
12/19/95	12:00:31	170.75	4.57	2.9453	170.75	0.55	9.5179	
12/19/95	12:10:31	180.75	4.62	2.8911	180.75	0.55	9.5179	
12/19/95	12:20:31	190.75	4.68	2.837	190.75	0.56	9.5143	
12/19/95	12:30:31	200.75	4.75	2.7612	200.75	0.56	9.5143	
12/19/95	12:40:31	210.75	4.81	2.707	210.75	0.56	9.5071	
12/19/95	12:50:31	220.75	4.89	2.6204	220.75	0.57	9.4999	
12/19/95	13:00:31	230.75	4.95	2.5663	230.75	0.58	9.4927	
12/19/95	13:10:31	240.75	5.09	2.4255	240.75	0.58	9.489	
12/19/95	13:20:31	250.75	4.66	2.8586	250.75	0.59	9.4818	Q = 2.5 gp
12/19/95	13:30:31	260.75	4.32	3.1943	260.75	0.57	9.4999	
12/19/95	13:40:31	270.75	4.33	3.1835	270.75	0.57	9.4963	
12/19/95	13:50:31	280.75	4.34	3.1726	280.75	0.57	9.4963	
12/19/95	14:00:31	290.75	4.37	3.1402	290.75	0.58	9.4927	
12/19/95	14:10:31	300.75	4.42	3.0968	300.75	0.58	9.489	
12/19/95	14:20:31	310.75	4.44	3.0752	310.75	0.58	9.4854	
12/19/95	14:30:31	320.75	4.47	3.0427	320.75	0.59	9.4818	
12/19/95	14:40:31	330.75	4.47	3.0427	330.75	0.58	9.4854	
12/19/95	14:50:31	340.75	4.52	2.9994	340.75	0.59	9.4782	
12/19/95	15:00:31	350.75	4.37	3.1402	350.75	0.59	9.4818	
12/19/95	15:10:31	360.75	4.40	3.1185	360.75	0.59	9.4782	
12/19/95	15:20:31	370.75	4.40	3.1185	370.75	0.60	9.4746	
12/19/95	15:30:31	380.75	4.42	3.0968	380.75	0.60	9.471	
12/19/95	15:35:47	386.02	4.44	3.0752	386.02	0.60	9.471	
12/19/95	15:35:52	386.10	4.46	3.0535	386.10	0.60	9.471	
12/19/95	15:36:07	386.35	4.44	3.0752	386.35	0.60	9.471	
12/19/95	15:36:22	386.60	4.43	3.086	386.60	0.60	9.471	
12/19/95	15:36:37	386.85	4.20	3.3134	386.85	0.60	9.471	Pump off
12/19/95	15:36:52	387.10	3.53	3.9848	387.10	0.60	9.471	

MW-23 Step Drawdown Test

Date	Time	dT (min)	dS (ft)	WLAP (ft)	dT (min)	dS (ft)	WLAP (ft)	Comments
12/19/95	15:38:22	388.60	1.70	5.8147	388.60	0.56	9.5143	
12/19/95	15:38:37	388.85	1.55	5.9663	388.85	0.55	9.5215	
12/19/95	15:38:52	389.10	1.43	6.0854	389.10	0.54	9.5288	
12/19/95	15:39:07	389.35	1.32	6.1937	389.35	0.53	9.5432	
12/19/95	15:39:22	389.60	1.21	6.302	389.60	0.52	9.5468	
12/19/95	15:39:37	389.85	1.14	6.3778	389.85	0.52	9.554	
12/19/95	15:39:52	390.10	1.07	6.4427	390.10	0.51	9.5576	
12/19/95	15:44:52	395.10	0.58	6.93	395.10	0.43	9.637	
12/19/95	15:49:52	400.10	0.49	7.0275	400.10	0.40	9.6695	
12/19/95	15:54:52	405.10	0.47	7.0491	405.10	0.38	9.6876	
12/19/95	15:59:52	410.10	0.44	7.0708	410.10	0.36	9.7092	
12/19/95	16:04:52	415.10	0.43	7.0816	415.10	0.35	9.7237	
12/19/95	16:05:07	415.35	0.42	7.0924	415.35	0.35	9.7237	
12/19/95	16:07:07	417.35	0.41	7.1033	417.35	0.34	9.7309	

a:
PlotFile A:\MW-23T01.PRN
DataFile A:\MW-23TEST
MW-23test
Time of First Log in Specified Window
35052.379 0.3791736
Time Header Block Loaded 1995/12/19 09:06:00.90
Time Data File Dumped 1995/12/20 09:19:32.00
Remaining Memory 60292
Number of Logs 423
Type of Data Memory Memory Board
Logs/Timestamp 1
Power was OK During Data Collection Period



DATA SET:
MW23_3.DAT
01/23/96

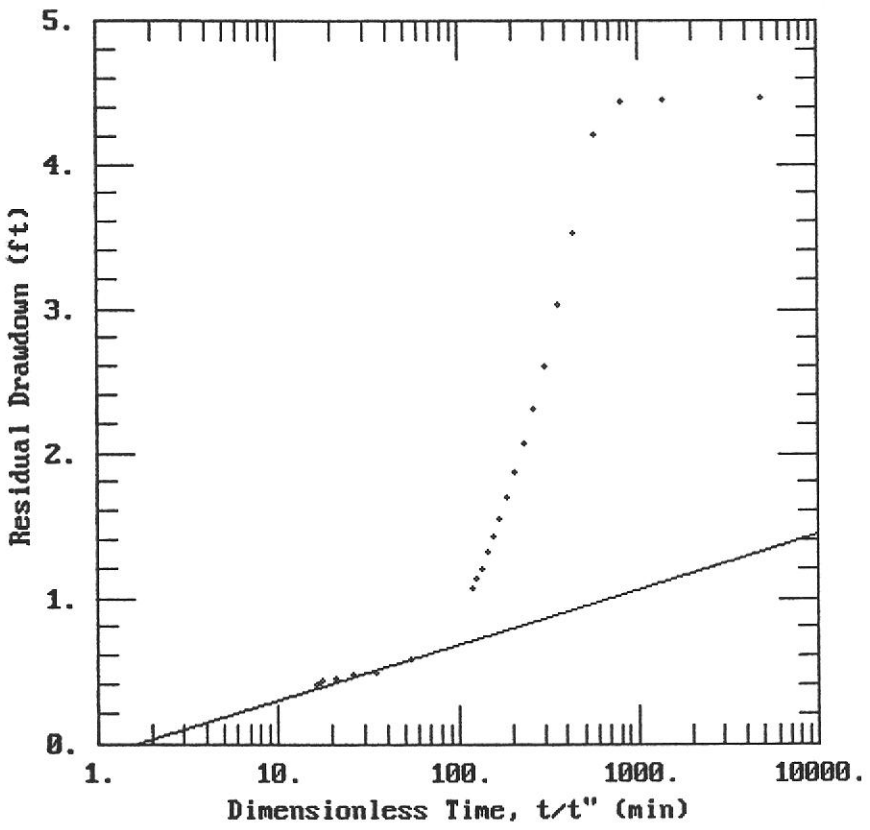
AQUIFER MODEL:
Unconfined

SOLUTION METHOD:
Theis

PROJECT DATA:
test date: December 19, 1995
test well: MW-23 Test #3
obs. well: MW-23

TEST DATA:
Q = 0.41 ft^3/min
r = 0.42 ft
r_c = 0.17 ft
r_w = 0.42 ft
b = 12. ft

PARAMETER ESTIMATES:
T = 0.074 ft^2/min
S = 0.0026



DATA SET:
MW23_3.DAT
01/23/96

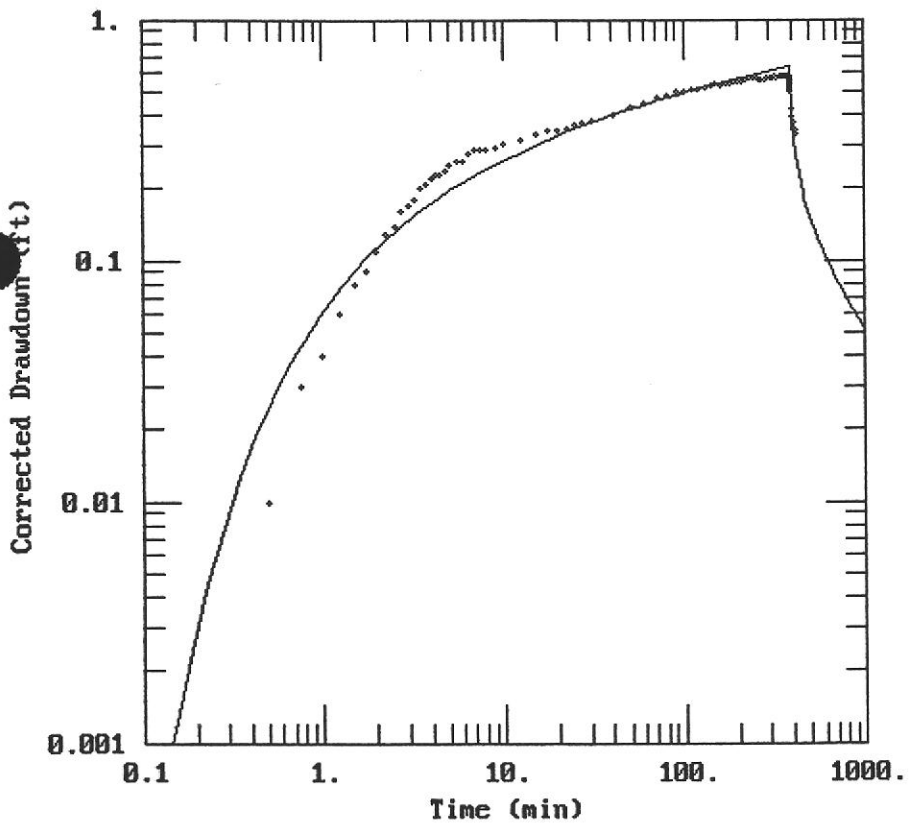
AQUIFER MODEL:
Confined

SOLUTION METHOD:
Theis Recovery

PROJECT DATA:
test date: December 19, 1995
test well: MW-23 Test #3
obs. well: MW-23

TEST DATA:
Q = 0.41 ft^3/min
r = 0.42 ft
r_c = 0.17 ft
r_w = 0.42 ft
b = 12. ft

PARAMETER ESTIMATES:
T = 0.1346 ft^2/min
S' = 1.631



DATA SET:
MW34.DAT
01/20/96

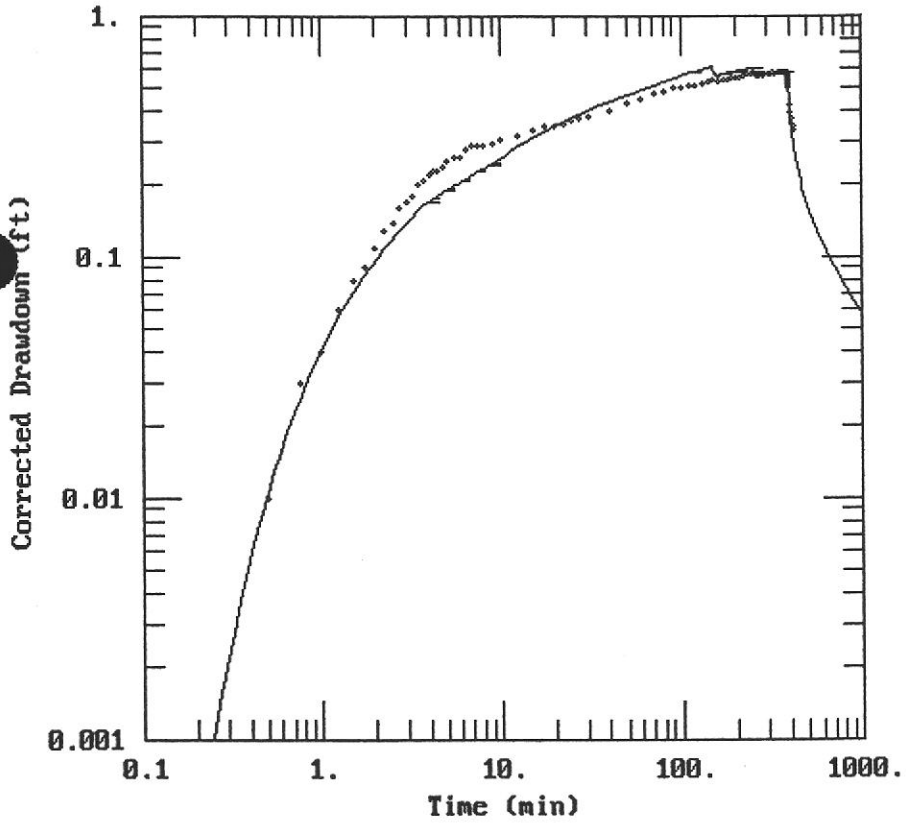
AQUIFER MODEL:
Unconfined

SOLUTION METHOD:
Theis

PROJECT DATA:
test date: December 19, 1995
test well: MW-23 Test #3
obs. well: MW-34

TEST DATA:
Q = 0.4 ft^3/min
r = 10. ft
r_c = 0.17 ft
r_w = 0.42 ft
b = 12. ft

PARAMETER ESTIMATES:
T = 0.3071 ft^2/min
S = 0.005831



DATA SET:
MW34_3.DAT
01/20/96

AQUIFER MODEL:
Unconfined

SOLUTION METHOD:
Theis

PROJECT DATA:
test date: December 1995
test well: MW-23 Test #3
obs. well: MW-34

TEST DATA:
Q = 0.41 ft^3/min
r = 10. ft
r_c = 0.17 ft
r_w = 0.42 ft
b = 12. ft

PARAMETER ESTIMATES:
T = 0.2201 ft^2/min
S = 0.007603

MW-33 Step Drawdown Test

Date	Time	Elapsed Time (minutes)	Drawdown & Residual Drawdown	WLAP	WLAP	Comments
12/20/95	09:34:46			6.9192	10.673	Q = < 0.05 gpm
12/20/95	09:35:44			6.9083	10.684	
12/20/95	09:36:20			6.9192	10.684	
12/20/95	09:36:45			6.9083	10.687	
12/20/95	09:37:06			6.9192	10.691	
12/20/95	09:37:08			6.9083	10.687	
12/20/95	09:37:10			6.9083	10.687	
12/20/95	09:37:48			6.8975	10.687	
12/20/95	09:38:03			6.9192	10.691	
12/20/95	09:44:24			6.9192	10.723	
12/20/95	09:44:39			6.9192	10.727	
12/20/95	09:49:01			6.9083	10.745	
12/20/95	09:49:03			6.9192	10.742	
12/20/95	09:49:05			6.9083	10.749	
12/20/95	09:49:08			6.9083	10.745	
12/20/95	09:49:10			6.93	10.742	
12/20/95	09:49:12			6.9192	10.742	
12/20/95	09:49:14			6.9083	10.745	
12/20/95	09:49:16			6.9083	10.749	
12/20/95	09:49:18			6.9192	10.745	
12/20/95	09:49:21			6.9192	10.749	
12/20/95	09:49:23			6.9083	10.745	
12/20/95	09:49:25			6.9192	10.749	
12/20/95	09:49:27			6.9192	10.745	
12/20/95	09:49:29			6.9192	10.745	
12/20/95	09:49:32			6.9192	10.745	
12/20/95	09:49:34			6.9192	10.749	
12/20/95	09:49:36			6.9192	10.745	
12/20/95	09:49:38			6.93	10.749	
12/20/95	09:49:40			6.9192	10.745	
12/20/95	09:49:42			6.9192	10.749	
12/20/95	09:50:41			6.9192	10.756	
12/20/95	09:50:55			6.9083	10.752	
12/20/95	09:51:10			6.9083	10.756	
12/20/95	09:51:25			6.9408	10.76	
12/20/95	09:51:40			6.9408	10.756	
12/20/95	09:51:55	0.00	0.00	6.9408	10.76	
12/20/95	09:52:25	0.50	0.04	6.8975	10.763	
12/20/95	09:52:55	1.00	0.16	6.7784	10.767	
12/20/95	09:53:10	1.25	0.26	6.681	10.763	
12/20/95	09:53:25	1.50	0.35	6.5943	10.767	

MW-33 Step Drawdown Test

Date	Time	Elapsed Time (minutes)	Drawdown & Residual Drawdown	WLAP	WLAP	Comments
12/20/95	09:55:55	4.00	1.56	5.3816	10.778	
12/20/95	09:56:25	4.50	1.67	5.2733	10.781	
12/20/95	09:56:55	5.00	1.73	5.2083	10.781	
12/20/95	09:57:25	5.50	1.78	5.165	10.785	
12/20/95	09:57:55	6.00	1.83	5.1109	10.785	
12/20/95	09:58:25	6.50	1.87	5.0676	10.788	
12/20/95	09:58:55	7.00	1.92	5.0243	10.792	
12/20/95	09:59:25	7.50	1.98	4.9593	10.792	
12/20/95	09:59:55	8.00	2.09	4.851	10.796	
12/20/95	10:00:25	8.50	2.15	4.786	10.796	
12/20/95	10:00:55	9.00	2.24	4.6994	10.799	
12/20/95	10:01:25	9.50	2.31	4.6344	10.799	
12/20/95	10:01:55	10.00	2.37	4.5695	10.799	
12/20/95	10:02:55	11.00	2.47	4.472	10.806	
12/20/95	10:03:55	12.00	2.52	4.4179	10.81	
12/20/95	10:04:55	13.00	2.61	4.3313	10.814	
12/20/95	10:05:55	14.00	2.67	4.2663	10.821	
12/20/95	10:06:55	15.00	2.72	4.223	10.825	
12/20/95	10:07:55	16.00	2.75	4.1905	10.825	
12/20/95	10:08:55	17.00	2.79	4.1472	10.832	
12/20/95	10:09:55	18.00	2.83	4.1147	10.835	
12/20/95	10:10:55	19.00	2.84	4.1039	10.839	
12/20/95	10:11:55	20.00	2.84	4.1039	10.843	
12/20/95	10:14:25	22.50	2.87	4.0714	10.853	
12/20/95	10:16:55	25.00	2.91	4.0281	10.864	
12/20/95	10:22:40	30.75	2.92	4.0172	10.886	
12/20/95	10:32:40	40.75	2.91	4.0281	10.926	
12/20/95	10:38:40	46.75	2.93	4.0064	10.947	
12/20/95	10:39:40	47.75	3.14	3.8007	10.958	
12/20/95	10:40:40	48.75	3.35	3.5949	10.958	Q = 0.3 gpm
12/20/95	10:41:40	49.75	3.53	3.4109	10.965	
12/20/95	10:42:40	50.75	3.70	3.2376	10.965	
12/20/95	10:43:40	51.75	3.83	3.1077	10.973	
12/20/95	10:44:40	52.75	3.93	3.0102	10.98	
12/20/95	10:45:40	53.75	4.03	2.9128	10.983	
12/20/95	10:46:40	54.75	4.09	2.8478	10.983	Q = 0.5 gpm
12/20/95	10:47:40	55.75	4.17	2.772	10.991	
12/20/95	10:48:40	56.75	4.23	2.707	10.994	
12/20/95	10:49:40	57.75	4.29	2.6529	10.994	
12/20/95	10:52:40	60.75	4.35	2.5879	11.005	
12/20/95	10:57:40	65.75	4.45	2.4905	11.027	

MW-33 Step Drawdown Test

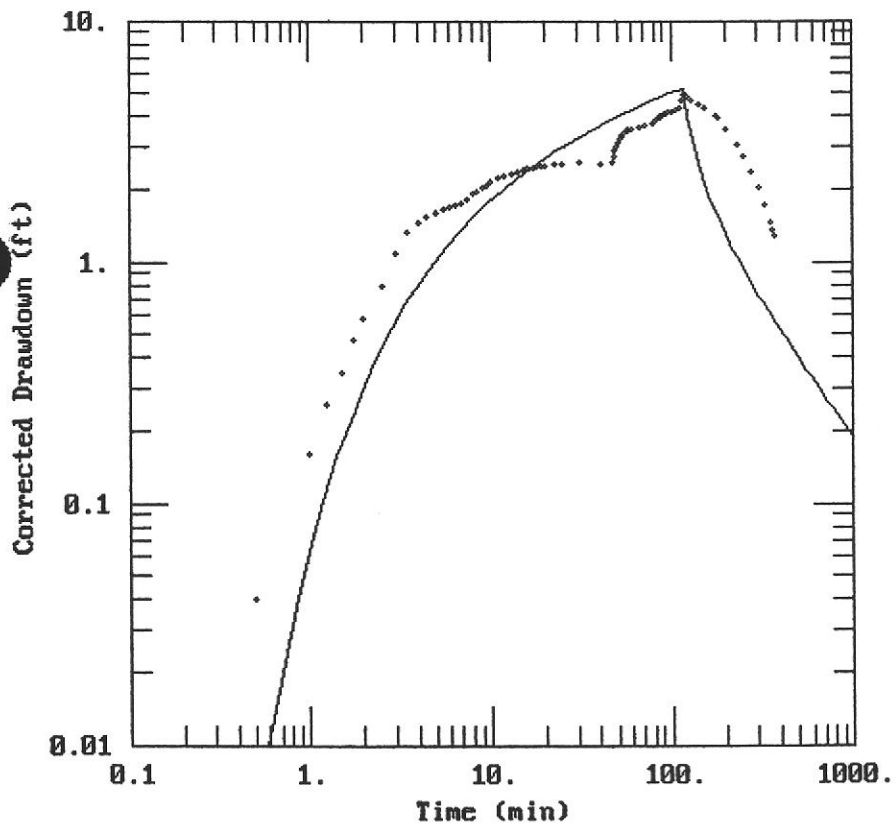
Date	Time	Elapsed Time (minutes)	Drawdown & Residual Drawdown	WLAP	WLAP	Comments
12/20/95	11:12:21	80.43	4.72	2.2198	11.077	
12/20/95	11:12:36	80.68	4.73	2.2089	11.081	
12/20/95	11:12:51	80.93	4.75	2.1873	11.084	
12/20/95	11:13:06	81.18	4.76	2.1765	11.081	
12/20/95	11:13:36	81.68	4.80	2.144	11.084	
12/20/95	11:14:06	82.18	4.82	2.1223	11.088	
12/20/95	11:15:06	83.18	4.86	2.079	11.088	Q = 0.1 gpm
12/20/95	11:16:06	84.18	4.92	2.0249	11.092	
12/20/95	11:17:06	85.18	4.95	1.9924	11.099	
12/20/95	11:18:06	86.18	5.01	1.9274	11.099	
12/20/95	11:19:06	87.18	5.07	1.8733	11.106	
12/20/95	11:20:06	88.18	5.10	1.8408	11.11	
12/20/95	11:21:06	89.18	5.15	1.7866	11.113	
12/20/95	11:22:06	90.18	5.19	1.7542	11.113	
12/20/95	11:24:36	92.68	5.25	1.6892	11.124	
12/20/95	11:27:06	95.18	5.33	1.6134	11.131	
12/20/95	11:32:06	100.18	5.40	1.5376	11.142	
12/20/95	11:37:06	105.18	5.47	1.4726	11.167	
12/20/95	11:42:06	110.18	5.60	1.3427	11.175	
12/20/95	11:44:21	112.43	6.38	0.56306	11.182	
12/20/95	11:47:06	115.18	6.90	0.04	11.185	
12/20/95	11:47:21	115.43	6.90	0.04	11.182	
12/20/95	11:47:36	115.68	6.90	0.04	11.185	
12/20/95	11:48:36	116.68	6.92	0.02	11.189	
12/20/95	11:48:51	116.93	6.92	0.02	11.185	pump off
12/20/95	11:49:21	117.43	6.92	0.021656	11.189	
12/20/95	11:49:36	117.68	6.92	0.021656	11.189	
12/20/95	11:49:51	117.93	6.93	0.010828	11.185	
12/20/95	11:50:06	118.18	6.92	0.021656	11.189	
12/20/95	11:50:36	118.68	6.90	0.043313	11.193	
12/20/95	11:50:51	118.93	6.89	0.054141	11.189	
12/20/95	11:51:06	119.18	6.88	0.064969	11.189	
12/20/95	11:52:06	120.18	6.82	0.11911	11.193	
12/20/95	11:57:06	125.18	6.58	0.35733	11.204	
12/20/95	12:02:06	130.18	6.40	0.54141	11.214	
12/20/95	12:14:19	142.40	6.00	0.94205	11.222	
12/20/95	12:24:19	152.40	5.71	1.2344	11.229	
12/20/95	12:49:19	177.40	5.09	1.8516	11.232	
12/20/95	12:54:19	182.40	4.95	1.9924	11.225	
12/20/95	13:14:19	202.40	4.27	2.6745	11.193	
12/20/95	13:44:19	232.40	3.57	3.3675	11.102	

MW-33 Step Drawdown Test

Date	Time	Elapsed Time (minutes)	Drawdown & Residual Drawdown	WLAP	WLAP	Comments
12/20/95	15:54:19	362.40	1.43	5.5115	10.68	
12/20/95	15:59:19	367.40	1.35	5.5873	10.658	

Date December 21, 1995
PlotFile A:\MW-33S01.PRN
DataFile A:\MW-33STEP
MW-33test
Time of First Log in Specified Window
35053.399 0.3991389

Time Header Block Loaded 1995/12/20 09:34:45.90
Time Data File Dumped 1995/12/27 09:23:25.90
Remaining Memory 59858
Number of Logs 458
Type of Data Memory Memory Board
Logs/Timestamp 1
Power was OK During Data Collection Period



DATA SET:
MW33.DAT
01/21/96

AQUIFER MODEL:
Unconfined

SOLUTION METHOD:
Theis

PROJECT DATA:
test date: December 20, 1996
test well: MW-33
obs. well: MW-33

TEST DATA:
Q = 0.04 ft^3/min
r = 0.42 ft
r_c = 0.17 ft
r_w = 0.42 ft
b = 12. ft

PARAMETER ESTIMATES:
T = 0.00211 ft^2/min
S = 0.1

APPENDIX I

Tidal Survey Data

TIDAL DATA

Date Tuesday November 8, 1994 5:40 PM
PlotFile B:\MW1901.PRN
DataFile B:\MW19.PRN
PlotFile e:\10-098\0\MW1901.wq2
Time of First Log in Specified Window
34603.58 0.582911

Elevation (TOC) = 8.87
DTW = 6.87

Date	Time	Analog#01 5psi..... feet.....	Elevation
09/26/94	13:59	7.4028	2
09/26/94	14:14	7.3703	1.9675
09/26/94	14:29	7:3776	1.9748
09/26/94	14:44	7.3776	1.9748
09/26/94	14:59	7.3776	1.9748
09/26/94	15:14	7.3703	1.9675
09/26/94	15:29	7.3812	1.9784
09/26/94	15:44	7.3884	1.9856
09/26/94	15:59	7.374	1.9712
09/26/94	16:14	7.3848	1.982
09/26/94	16:29	7.3703	1.9675
09/26/94	16:44	7.374	1.9712
09/26/94	16:59	7.3703	1.9675
09/26/94	17:14	7.3703	1.9675
09/26/94	17:29	7.3703	1.9675
09/26/94	17:44	7.3703	1.9675
09/26/94	17:59	7.374	1.9712
09/26/94	18:14	7.374	1.9712
09/26/94	18:29	7.3667	1.9639
09/26/94	18:44	7.3703	1.9675
09/26/94	18:59	7.3667	1.9639
09/26/94	19:14	7.3703	1.9675
09/26/94	19:29	7.3667	1.9639
09/26/94	19:44	7.3703	1.9675
09/26/94	19:59	7.3667	1.9639
09/26/94	20:14	7.3703	1.9675
09/26/94	20:29	7.3703	1.9675
09/26/94	20:44	7.3667	1.9639
09/26/94	20:59	7.374	1.9712
09/26/94	21:14	7.374	1.9712
09/26/94	21:29	7.374	1.9712
09/26/94	21:44	7.374	1.9712
09/26/94	21:59	7.374	1.9712
09/26/94	22:14	7.374	1.9712
09/26/94	22:29	7.374	1.9712
09/26/94	22:44	7.374	1.9712
09/26/94	22:59	7.374	1.9712
09/26/94	23:14	7.374	1.9712
09/26/94	23:29	7.374	1.9712
09/26/94	23:44	7.3776	1.9748
09/26/94	23:59	7.3776	1.9748
09/27/94	00:14	7.374	1.9712
09/27/94	00:29	7.3776	1.9748

Date Tuesday November 8, 1994 2:36 PM s
PlotFile E:\QPRO4\CHRIS\MW-3001.PRN
DataFile E:\QPRO4\CHRIS\MW-30
Qprofile E:\0\10-098\MW-3001.wq2
Time of First Log in Specified Window
34603.53 0.534666
Elevation (TOC) = 11.20
DTW = 9.66

Date	Time	Analog#01 5psi..... feet.....	Elevation
09/26/94	12:49	6.8362	1.54
09/26/94	13:04	6.8109	1.5147
09/26/94	13:19	6.8145	1.5183
09/26/94	13:34	6.8109	1.5147
09/26/94	13:49	6.8145	1.5183
09/26/94	14:04	6.8145	1.5183
09/26/94	14:19	6.8037	1.5075
09/26/94	14:34	6.8145	1.5183
09/26/94	14:49	6.8181	1.5219
09/26/94	15:04	6.8145	1.5183
09/26/94	15:19	6.8181	1.5219
09/26/94	15:34	6.8181	1.5219
09/26/94	15:49	6.8181	1.5219
09/26/94	16:04	6.8181	1.5219
09/26/94	16:19	6.8181	1.5219
09/26/94	16:34	6.8253	1.5291
09/26/94	16:49	6.8217	1.5255
09/26/94	17:04	6.8181	1.5219
09/26/94	17:19	6.8181	1.5219
09/26/94	17:34	6.8181	1.5219
09/26/94	17:49	6.8181	1.5219
09/26/94	18:04	6.8253	1.5291
09/26/94	18:19	6.8217	1.5255
09/26/94	18:34	6.8181	1.5219
09/26/94	18:49	6.8145	1.5183
09/26/94	19:04	6.8181	1.5219
09/26/94	19:19	6.8181	1.5219
09/26/94	19:34	6.8145	1.5183
09/26/94	19:49	6.8181	1.5219
09/26/94	20:04	6.8145	1.5183
09/26/94	20:19	6.8181	1.5219
09/26/94	20:34	6.8145	1.5183
09/26/94	20:49	6.8145	1.5183
09/26/94	21:04	6.8181	1.5219
09/26/94	21:19	6.8145	1.5183
09/26/94	21:34	6.8145	1.5183
09/26/94	21:49	6.8145	1.5183
09/26/94	22:04	6.8145	1.5183
09/26/94	22:19	6.8145	1.5183
09/26/94	22:34	6.8109	1.5147
09/26/94	22:49	6.8109	1.5147
09/26/94	23:04	6.8109	1.5147
09/26/94	23:19	6.8109	1.5147

Date Tuesday November 8, 1994 2:55 PM
PlotFile E:\QPRO4\CHRIS\MW7A01.PRN
DataFile E:\QPRO4\CHRIS\MW-7A
qpro4file E:\0\10-098\MW7A01.wq2
Time of First Log in Specified Window
34603.6 0.597579
Elevation (TOC) = 11.05
DTW = 9.99

Date	Time	Analog#01 5psi..... feet.....	Elevation
09/26/94	14:20	5.9194	1.06
09/26/94	14:35	5.9374	1.078
09/26/94	14:50	5.9627	1.1033
09/26/94	15:05	5.9771	1.1177
09/26/94	15:20	6.006	1.1466
09/26/94	15:35	6.0349	1.1755
09/26/94	15:50	6.0854	1.226
09/26/94	16:05	6.1251	1.2657
09/26/94	16:20	6.1612	1.3018
09/26/94	16:35	6.2009	1.3415
09/26/94	16:50	6.2406	1.3812
09/26/94	17:05	6.2803	1.4209
09/26/94	17:20	6.32	1.4606
09/26/94	17:35	6.3561	1.4967
09/26/94	17:50	6.3922	1.5328
09/26/94	18:05	6.4247	1.5653
09/26/94	18:20	6.45	1.5906
09/26/94	18:35	6.468	1.6086
09/26/94	18:50	6.4788	1.6194
09/26/94	19:05	6.4824	1.623
09/26/94	19:20	6.4824	1.623
09/26/94	19:35	6.4716	1.6122
09/26/94	19:50	6.4536	1.5942
09/26/94	20:05	6.4247	1.5653
09/26/94	20:20	6.3994	1.54
09/26/94	20:35	6.3669	1.5075
09/26/94	20:50	6.3308	1.4714
09/26/94	21:05	6.2911	1.4317
09/26/94	21:20	6.255	1.3956
09/26/94	21:35	6.219	1.3596
09/26/94	21:50	6.1756	1.3162
09/26/94	22:05	6.1359	1.2765
09/26/94	22:20	6.0926	1.2332
09/26/94	22:35	6.0493	1.1899
09/26/94	22:50	6.0096	1.1502
09/26/94	23:05	5.9663	1.1069
09/26/94	23:20	5.923	1.0636
09/26/94	23:35	5.8725	1.0131
09/26/94	23:50	5.8291	0.9697
09/27/94	00:05	5.7894	0.93
09/27/94	00:20	5.7425	0.8831
09/27/94	00:35	5.7028	0.8434
09/27/94	00:50	5.6631	0.8037

E:/0/10-098/tidal

TIDAL DATA

Date Tuesday November 8, 1994 5:40 PM
PlotFile B:\MW1901.PRN
DataFile B:\MW19.PRN
PlotFile e:\10-098\0\MW1901.wq2
Time of First Log in Specified Window
34603.58 0.582911

Elevation (TOC) = 8.87
DTW = 6.87

Date	Time	Analog#01 5psi..... feet.....	Elevation
09/27/94	00:44	7.3776	1.9748
09/27/94	00:59	7.3776	1.9748
09/27/94	01:14	7.3776	1.9748
09/27/94	01:29	7.3776	1.9748
09/27/94	01:44	7.3776	1.9748
09/27/94	01:59	7.3776	1.9748
09/27/94	02:14	7.3776	1.9748
09/27/94	02:29	7.374	1.9712
09/27/94	02:44	7.3776	1.9748
09/27/94	02:59	7.3776	1.9748
09/27/94	03:14	7.3812	1.9784
09/27/94	03:29	7.3776	1.9748
09/27/94	03:44	7.3812	1.9784
09/27/94	03:59	7.3812	1.9784
09/27/94	04:14	7.3812	1.9784
09/27/94	04:29	7.3776	1.9748
09/27/94	04:44	7.374	1.9712
09/27/94	04:59	7.3776	1.9748
09/27/94	05:14	7.3776	1.9748
09/27/94	05:29	7.3812	1.9784
09/27/94	05:44	7.3812	1.9784
09/27/94	05:59	7.3776	1.9748
09/27/94	06:14	7.374	1.9712
09/27/94	06:29	7.3667	1.9639
09/27/94	06:44	7.3776	1.9748
09/27/94	06:59	7.3776	1.9748
09/27/94	07:14	7.3667	1.9639
09/27/94	07:29	7.3776	1.9748
09/27/94	07:44	7.3703	1.9675
09/27/94	07:59	7.374	1.9712
09/27/94	08:14	7.3776	1.9748
09/27/94	08:29	7.374	1.9712
09/27/94	08:44	7.3703	1.9675
09/27/94	08:59	7.3703	1.9675
09/27/94	09:14	7.3667	1.9639
09/27/94	09:29	7.3776	1.9748
09/27/94	09:44	7.3631	1.9603
09/27/94	09:59	8.7997	1.9603
09/27/94	10:14	8.8213	1.9819
09/27/94	10:29	8.796	1.9566
09/27/94	10:44	8.8069	1.9675
09/27/94	10:59	8.7997	1.9603
09/27/94	11:14	8.8069	1.9675

Date Tuesday November 8, 1994 2:36 PM s
PlotFile E:\QPRO4\CHRIS\MW-3001.PRN
DataFile E:\QPRO4\CHRIS\MW-30
Qprofile E:\0\10-098\MW-3001.wq2
Time of First Log in Specified Window
34603.53 0.534666
Elevation (TOC) = 11.20
DTW = 9.66

Date	Time	Analog#01 5psi..... feet.....	Elevation
09/26/94	23:34	6.8109	1.5147
09/26/94	23:49	6.8109	1.5147
09/27/94	00:04	6.8109	1.5147
09/27/94	00:19	6.8073	1.5111
09/27/94	00:34	6.8109	1.5147
09/27/94	00:49	6.8145	1.5183
09/27/94	01:04	6.8145	1.5183
09/27/94	01:19	6.8145	1.5183
09/27/94	01:34	6.8073	1.5111
09/27/94	01:49	6.8109	1.5147
09/27/94	02:04	6.8109	1.5147
09/27/94	02:19	6.8073	1.5111
09/27/94	02:34	6.8109	1.5147
09/27/94	02:49	6.8073	1.5111
09/27/94	03:04	6.8109	1.5147
09/27/94	03:19	6.8109	1.5147
09/27/94	03:34	6.8145	1.5183
09/27/94	03:49	6.8109	1.5147
09/27/94	04:04	6.8145	1.5183
09/27/94	04:19	6.8145	1.5183
09/27/94	04:34	6.8109	1.5147
09/27/94	04:49	6.8109	1.5147
09/27/94	05:04	6.8109	1.5147
09/27/94	05:19	6.8181	1.5219
09/27/94	05:34	6.8181	1.5219
09/27/94	05:49	6.8181	1.5219
09/27/94	06:04	6.8109	1.5147
09/27/94	06:19	6.8073	1.5111
09/27/94	06:34	6.8109	1.5147
09/27/94	06:49	6.8217	1.5255
09/27/94	07:04	6.8037	1.5075
09/27/94	07:19	6.8109	1.5147
09/27/94	07:34	6.8109	1.5147
09/27/94	07:49	6.8073	1.5111
09/27/94	08:04	6.8109	1.5147
09/27/94	08:19	6.8145	1.5183
09/27/94	08:34	6.8073	1.5111
09/27/94	08:49	6.8181	1.5219
09/27/94	09:04	6.8109	1.5147
09/27/94	09:19	6.8109	1.5147
09/27/94	09:34	6.8073	1.5111
09/27/94	09:49	6.8037	1.5075
09/27/94	10:04	6.8109	1.5147

Date Tuesday November 8, 1994 2:55 PM
PlotFile E:\QPRO4\CHRIS\MW7A01.PRN
DataFile E:\QPRO4\CHRIS\MW-7A
qpro4file E:\0\10-098\MW7A01.wq2
Time of First Log in Specified Window
34603.6 0.597579
Elevation (TOC) = 11.05
DTW = 9.99

Date	Time	Analog#01 5psi..... feet.....	Elevation
09/27/94	01:05	5.6234	0.764
09/27/94	01:20	5.5873	0.7279
09/27/94	01:35	5.5476	0.6882
09/27/94	01:50	5.5115	0.6521
09/27/94	02:05	5.4826	0.6232
09/27/94	02:20	5.4538	0.5944
09/27/94	02:35	5.4249	0.5655
09/27/94	02:50	5.4032	0.5438
09/27/94	03:05	5.3816	0.5222
09/27/94	03:20	5.3708	0.5114
09/27/94	03:35	5.3563	0.4969
09/27/94	03:50	5.3527	0.4933
09/27/94	04:05	5.3527	0.4933
09/27/94	04:20	5.3527	0.4933
09/27/94	04:35	5.3563	0.4969
09/27/94	04:50	5.3671	0.5077
09/27/94	05:05	5.3852	0.5258
09/27/94	05:20	5.4032	0.5438
09/27/94	05:35	5.4249	0.5655
09/27/94	05:50	5.4465	0.5871
09/27/94	06:05	5.4718	0.6124
09/27/94	06:20	5.4971	0.6377
09/27/94	06:35	5.5223	0.6629
09/27/94	06:50	5.5476	0.6882
09/27/94	07:05	5.5729	0.7135
09/27/94	07:20	5.5981	0.7387
09/27/94	07:35	5.627	0.7676
09/27/94	07:50	5.6595	0.8001
09/27/94	08:05	5.6884	0.829
09/27/94	08:20	5.7136	0.8542
09/27/94	08:35	5.7461	0.8867
09/27/94	08:50	5.7714	0.912
09/27/94	09:05	5.8039	0.9445
09/27/94	09:20	5.8255	0.9661
09/27/94	09:35	5.8436	0.9842
09/27/94	09:50	5.8652	1.0058
09/27/94	10:05	5.8833	1.0239
09/27/94	10:20	5.8905	1.0311
09/27/94	10:35	5.8941	1.0347
09/27/94	10:50	5.8255	0.9661
09/27/94	11:05	5.8328	0.9734
09/27/94	11:20	5.8544	0.995
09/27/94	11:35	5.9302	1.0708

TIDAL DATA

Date Tuesday November 8, 1994 5:40 PM
PlotFile B:\MW1901.PRN
DataFile B:\MW19.PRN
PlotFile e:\10-098\0\MW1901.wq2
Time of First Log in Specified Window
34603.58 0.582911

Elevation (TOC) = 8.87
DTW = 6.87

Date	Time	Analog#01 5psi..... feet.....	Elevation
09/27/94	11:29	8.8069	1.9675
09/27/94	11:44	8.8105	1.9711
09/27/94	11:59	8.8141	1.9747
09/27/94	12:14	8.8033	1.9639
09/27/94	12:29	8.8105	1.9711
09/27/94	12:44	8.8141	1.9747
09/27/94	12:59	8.8105	1.9711
09/27/94	13:14	8.8105	1.9711
09/27/94	13:29	8.8177	1.9783
09/27/94	13:44	8.8249	1.9855
09/27/94	13:59	8.8069	1.9675
09/27/94	14:14	8.8177	1.9783
09/27/94	14:29	8.8213	1.9819
09/27/94	14:44	8.8177	1.9783
09/27/94	14:59	8.8213	1.9819
09/27/94	15:14	8.8213	1.9819
09/27/94	15:29	8.8249	1.9855
09/27/94	15:44	8.8213	1.9819
09/27/94	15:59	8.8069	1.9675
09/27/94	16:14	8.8249	1.9855
09/27/94	16:29	8.8249	1.9855
09/27/94	16:44	8.8249	1.9855
09/27/94	16:59	8.8069	1.9675
09/27/94	17:14	8.8105	1.9711
09/27/94	17:29	8.8141	1.9747
09/27/94	17:44	8.8141	1.9747
09/27/94	17:59	8.8141	1.9747
09/27/94	18:14	8.8141	1.9747
09/27/94	18:29	8.8141	1.9747
09/27/94	18:44	8.8105	1.9711
09/27/94	18:59	8.8105	1.9711
09/27/94	19:14	8.8105	1.9711
09/27/94	19:29	8.8105	1.9711
09/27/94	19:44	8.8069	1.9675
09/27/94	19:59	8.8069	1.9675
09/27/94	20:14	8.8033	1.9639
09/27/94	20:29	8.8069	1.9675
09/27/94	20:44	8.8033	1.9639
09/27/94	20:59	8.8033	1.9639
09/27/94	21:14	8.7997	1.9603
09/27/94	21:29	8.8033	1.9639
09/27/94	21:44	8.8033	1.9639
09/27/94	21:59	8.8069	1.9675

Date Tuesday November 8, 1994 2:36 PM s
PlotFile E:\QPRO4\CHRIS\MW-3001.PRN
DataFile E:\QPRO4\CHRIS\MW-30
Qprofile E:\0\10-098\MW-3001.wq2
Time of First Log in Specified Window
34603.53 0.534666
Elevation (TOC) = 11.20
DTW = 9.66

Date	Time	Analog#01 5psi..... feet.....	Elevation
09/27/94	10:19	6.8073	1.5111
09/27/94	10:34	6.8073	1.5111
09/27/94	10:49	6.8181	1.5219
09/27/94	11:04	6.8145	1.5183
09/27/94	11:19	6.8181	1.5219
09/27/94	11:34	6.8145	1.5183
09/27/94	11:49	6.8181	1.5219
09/27/94	12:04	6.8181	1.5219
09/27/94	12:19	6.8037	1.5075
09/27/94	12:34	6.8181	1.5219
09/27/94	12:49	6.8217	1.5255
09/27/94	13:04	6.8181	1.5219
09/27/94	13:19	6.8145	1.5183
09/27/94	13:34	6.8109	1.5147
09/27/94	13:49	6.8181	1.5219
09/27/94	14:04	6.8217	1.5255
09/27/94	14:19	6.8217	1.5255
09/27/94	14:34	6.8217	1.5255
09/27/94	14:49	6.8217	1.5255
09/27/94	15:04	6.8217	1.5255
09/27/94	15:19	6.8253	1.5291
09/27/94	15:34	6.8217	1.5255
09/27/94	15:49	6.8217	1.5255
09/27/94	16:04	6.8253	1.5291
09/27/94	16:19	6.8253	1.5291
09/27/94	16:34	6.8325	1.5363
09/27/94	16:49	6.8289	1.5327
09/27/94	17:04	6.8289	1.5327
09/27/94	17:19	6.8325	1.5363
09/27/94	17:34	6.8325	1.5363
09/27/94	17:49	6.8325	1.5363
09/27/94	18:04	6.8325	1.5363
09/27/94	18:19	6.8325	1.5363
09/27/94	18:34	6.8325	1.5363
09/27/94	18:49	6.8325	1.5363
09/27/94	19:04	6.8325	1.5363
09/27/94	19:19	6.8325	1.5363
09/27/94	19:34	6.8325	1.5363
09/27/94	19:49	6.8253	1.5291
09/27/94	20:04	6.8253	1.5291
09/27/94	20:19	6.8253	1.5291
09/27/94	20:34	6.8253	1.5291
09/27/94	20:49	6.8217	1.5255

Date Tuesday November 8, 1994 2:55 PM
PlotFile E:\QPRO4\CHRIS\MW7A01.PRN
DataFile E:\QPRO4\CHRIS\MW-7A
qpro4file E:\0\10-098\MW7A01.wq2
Time of First Log in Specified Window
34603.6 0.597579
Elevation (TOC) = 11.05
DTW = 9.99

Date	Time	Analog#01 5psi..... feet.....	Elevation
09/27/94	11:50	5.9374	1.078
09/27/94	12:05	5.941	1.0816
09/27/94	12:20	5.9194	1.06
09/27/94	12:35	5.9085	1.0491
09/27/94	12:50	5.9013	1.0419
09/27/94	13:05	5.8977	1.0383
09/27/94	13:20	5.9049	1.0455
09/27/94	13:35	5.9194	1.06
09/27/94	13:50	5.9483	1.0889
09/27/94	14:05	5.9807	1.1213
09/27/94	14:20	6.0385	1.1791
09/27/94	14:35	6.154	1.2946
09/27/94	14:50	6.172	1.3126
09/27/94	15:05	6.1973	1.3379
09/27/94	15:20	6.2153	1.3559
09/27/94	15:35	6.237	1.3776
09/27/94	15:50	6.2659	1.4065
09/27/94	16:05	6.2948	1.4354
09/27/94	16:20	6.3272	1.4678
09/27/94	16:35	6.3561	1.4967
09/27/94	16:50	6.3922	1.5328
09/27/94	17:05	6.4247	1.5653
09/27/94	17:20	6.4608	1.6014
09/27/94	17:35	6.4933	1.6339
09/27/94	17:50	6.5294	1.67
09/27/94	18:05	6.5691	1.7097
09/27/94	18:20	6.6052	1.7458
09/27/94	18:35	6.6413	1.7819
09/27/94	18:50	6.6737	1.8143
09/27/94	19:05	6.699	1.8396
09/27/94	19:20	6.7243	1.8649
09/27/94	19:35	6.7423	1.8829
09/27/94	19:50	6.7495	1.8901
09/27/94	20:05	6.7568	1.8974
09/27/94	20:20	6.7531	1.8937
09/27/94	20:35	6.7387	1.8793
09/27/94	20:50	6.7243	1.8649
09/27/94	21:05	6.6954	1.836
09/27/94	21:20	6.6665	1.8071
09/27/94	21:35	6.6376	1.7782
09/27/94	21:50	6.6015	1.7421
09/27/94	22:05	6.5691	1.7097
09/27/94	22:20	6.533	1.6736

E:/0/10-098/tidal

TIDAL DATA

Date Tuesday November 8, 1994 5:40 PM
PlotFile B:\MW1901.PRN
DataFile B:\MW19.PRN
PlotFile e:\10-098\0\MW1901.wq2
Time of First Log in Specified Window
34603.58 0.582911

Elevation (TOC) = 8.87
DTW = 6.87

Date	Time	Analog#01 5psi..... feet.....	Elevation
09/27/94	22:14	8.8069	1.9675
09/27/94	22:29	8.8069	1.9675
09/27/94	22:44	8.8069	1.9675
09/27/94	22:59	8.8105	1.9711
09/27/94	23:14	8.8069	1.9675
09/27/94	23:29	8.8069	1.9675
09/27/94	23:44	8.8105	1.9711
09/27/94	23:59	8.8069	1.9675
09/28/94	00:14	8.8069	1.9675
09/28/94	00:29	8.8069	1.9675
09/28/94	00:44	8.8069	1.9675
09/28/94	00:59	8.8069	1.9675
09/28/94	01:14	8.8069	1.9675
09/28/94	01:29	8.8069	1.9675
09/28/94	01:44	8.8069	1.9675
09/28/94	01:59	8.8069	1.9675
09/28/94	02:14	8.8069	1.9675
09/28/94	02:29	8.8069	1.9675
09/28/94	02:44	8.8069	1.9675
09/28/94	02:59	8.8069	1.9675
09/28/94	03:14	8.8105	1.9711
09/28/94	03:29	8.8105	1.9711
09/28/94	03:44	8.8069	1.9675
09/28/94	03:59	8.8105	1.9711
09/28/94	04:14	8.8069	1.9675
09/28/94	04:29	8.8105	1.9711
09/28/94	04:44	8.8069	1.9675
09/28/94	04:59	8.8105	1.9711
09/28/94	05:14	8.8033	1.9639
09/28/94	05:29	8.8105	1.9711
09/28/94	05:44	8.8105	1.9711
09/28/94	05:59	8.8105	1.9711
09/28/94	06:14	8.8105	1.9711
09/28/94	06:29	8.8033	1.9639
09/28/94	06:44	8.8069	1.9675
09/28/94	06:59	8.8069	1.9675
09/28/94	07:14	8.8033	1.9639
09/28/94	07:29	8.8033	1.9639
09/28/94	07:44	8.7997	1.9603
09/28/94	07:59	8.796	1.9566
09/28/94	08:14	8.7997	1.9603
09/28/94	08:29	8.8141	1.9747
09/28/94	08:44	8.8177	1.9783

Date Tuesday November 8, 1994 2:36 PM s
PlotFile E:\QPRO4\CHRIS\MW-3001.PRN
DataFile E:\QPRO4\CHRIS\MW-30
Qprofile E:\0\10-098\MW-3001.wq2
Time of First Log in Specified Window
34603.53 0.534666
Elevation (TOC) = 11.20
DTW = 9.66

Date	Time	Analog#01 5psi..... feet.....	Elevation
09/27/94	21:04	6.8181	1.5219
09/27/94	21:19	6.8181	1.5219
09/27/94	21:34	6.8217	1.5255
09/27/94	21:49	6.8217	1.5255
09/27/94	22:04	6.8181	1.5219
09/27/94	22:19	6.8217	1.5255
09/27/94	22:34	6.8181	1.5219
09/27/94	22:49	6.8253	1.5291
09/27/94	23:04	6.8217	1.5255
09/27/94	23:19	6.8181	1.5219
09/27/94	23:34	6.8181	1.5219
09/27/94	23:49	6.8181	1.5219
09/28/94	00:04	6.8181	1.5219
09/28/94	00:19	6.8181	1.5219
09/28/94	00:34	6.8145	1.5183
09/28/94	00:49	6.8145	1.5183
09/28/94	01:04	6.8145	1.5183
09/28/94	01:19	6.8109	1.5147
09/28/94	01:34	6.8145	1.5183
09/28/94	01:49	6.8145	1.5183
09/28/94	02:04	6.8109	1.5147
09/28/94	02:19	6.8109	1.5147
09/28/94	02:34	6.8073	1.5111
09/28/94	02:49	6.8109	1.5147
09/28/94	03:04	6.8145	1.5183
09/28/94	03:19	6.8145	1.5183
09/28/94	03:34	6.8145	1.5183
09/28/94	03:49	6.8109	1.5147
09/28/94	04:04	6.8073	1.5111
09/28/94	04:19	6.8145	1.5183
09/28/94	04:34	6.8109	1.5147
09/28/94	04:49	6.8109	1.5147
09/28/94	05:04	6.8145	1.5183
09/28/94	05:19	6.8037	1.5075
09/28/94	05:34	6.8109	1.5147
09/28/94	05:49	6.8181	1.5219
09/28/94	06:04	6.8109	1.5147
09/28/94	06:19	6.8109	1.5147
09/28/94	06:34	6.8145	1.5183
09/28/94	06:49	6.8145	1.5183
09/28/94	07:04	6.8145	1.5183
09/28/94	07:19	6.8073	1.5111
09/28/94	07:34	6.8109	1.5147

Date Tuesday November 8, 1994 2:55 PM
PlotFile E:\QPRO4\CHRIS\MW7A01.PRN
DataFile E:\QPRO4\CHRIS\MW-7A
qpro4file E:\0\10-098\MW7A01.wq2
Time of First Log in Specified Window
34603.6 0.597579
Elevation (TOC) = 11.05
DTW = 9.99

Date	Time	Analog#01 5psi..... feet.....	Elevation
09/27/94	22:35	6.4933	1.6339
09/27/94	22:50	6.4536	1.5942
09/27/94	23:05	6.4139	1.5545
09/27/94	23:20	6.3742	1.5148
09/27/94	23:35	6.3381	1.4787
09/27/94	23:50	6.2911	1.4317
09/28/94	00:05	6.2514	1.392
09/28/94	00:20	6.2009	1.3415
09/28/94	00:35	6.1576	1.2982
09/28/94	00:50	6.1179	1.2585
09/28/94	01:05	6.0782	1.2188
09/28/94	01:20	6.0313	1.1719
09/28/94	01:35	5.9952	1.1358
09/28/94	01:50	5.9519	1.0925
09/28/94	02:05	5.9122	1.0528
09/28/94	02:20	5.8761	1.0167
09/28/94	02:35	5.84	0.9806
09/28/94	02:50	5.8039	0.9445
09/28/94	03:05	5.7714	0.912
09/28/94	03:20	5.7461	0.8867
09/28/94	03:35	5.7173	0.8579
09/28/94	03:50	5.6956	0.8362
09/28/94	04:05	5.6739	0.8145
09/28/94	04:20	5.6595	0.8001
09/28/94	04:35	5.6487	0.7893
09/28/94	04:50	5.6415	0.7821
09/28/94	05:05	5.6415	0.7821
09/28/94	05:20	5.6378	0.7784
09/28/94	05:35	5.6415	0.7821
09/28/94	05:50	5.6559	0.7965
09/28/94	06:05	5.6631	0.8037
09/28/94	06:20	5.6812	0.8218
09/28/94	06:35	5.7028	0.8434
09/28/94	06:50	5.7245	0.8651
09/28/94	07:05	5.7497	0.8903
09/28/94	07:20	5.7714	0.912
09/28/94	07:35	5.7967	0.9373
09/28/94	07:50	5.8219	0.9625
09/28/94	08:05	5.8725	1.0131
09/28/94	08:20	5.9085	1.0491
09/28/94	08:35	5.9771	1.1177
09/28/94	08:50	6.0168	1.1574
09/28/94	09:05	6.2406	1.3812

E:/0/10-098/tidal

TIDAL DATA

Date Tuesday November 8, 1994 5:40 PM
PlotFile B:\MW1901.PRN
DataFile B:\MW19.PRN
PlotFile e:\10-098\0MW1901.wq2
Time of First Log in Specified Window
34603.58 0.582911

Elevation (TOC) = 8.87
DTW = 6.87

Date	Time	Analog#01 5psi..... feet.....	Elevation
09/28/94	08:59	8.8105	1.9711
09/28/94	09:14	8.8105	1.9711
09/28/94	09:29	8.8069	1.9675
09/28/94	09:44	8.7997	1.9603
09/28/94	09:59	8.796	1.9566
09/28/94	10:14	8.796	1.9566
09/28/94	10:29	8.796	1.9566
09/28/94	10:44	8.7924	1.953
09/28/94	10:59	8.7997	1.9603
09/28/94	11:14	8.7924	1.953
09/28/94	11:29	8.796	1.9566
09/28/94	11:44	8.796	1.9566
09/28/94	11:59	8.796	1.9566
09/28/94	12:14	8.7997	1.9603
09/28/94	12:29	8.8033	1.9639
09/28/94	12:44	8.7997	1.9603
09/28/94	12:59	8.8033	1.9639
09/28/94	13:14	8.8069	1.9675
09/28/94	13:29	8.8069	1.9675
09/28/94	13:44	8.8141	1.9747
09/28/94	13:59	8.8105	1.9711
09/28/94	14:14	8.8033	1.9639
09/28/94	14:29	8.8033	1.9639
09/28/94	14:44	8.8033	1.9639
09/28/94	14:59	8.8033	1.9639
09/28/94	15:14	8.8069	1.9675
09/28/94	15:29	8.8069	1.9675
09/28/94	15:44	8.8069	1.9675
09/28/94	15:59	8.8105	1.9711
09/28/94	16:14	8.8105	1.9711
09/28/94	16:29	8.8105	1.9711
09/28/94	16:44	8.8105	1.9711
09/28/94	16:59	8.8105	1.9711
09/28/94	17:14	8.8105	1.9711
09/28/94	17:29	8.8105	1.9711
09/28/94	17:44	8.8105	1.9711
09/28/94	17:59	8.8069	1.9675
09/28/94	18:14	8.8069	1.9675
09/28/94	18:29	8.8069	1.9675
09/28/94	18:44	8.8033	1.9639
09/28/94	18:59	8.8033	1.9639
09/28/94	19:14	8.8033	1.9639
09/28/94	19:29	8.8033	1.9639

Date Tuesday November 8, 1994 2:36 PM s
PlotFile E:\QPRO4\CHRIS\MW-3001.PRN
DataFile E:\QPRO4\CHRIS\MW-30
Qprofile E:\0\10-098\MW-3001.wq2
Time of First Log in Specified Window
34603.53 0.534666
Elevation (TOC) = 11.20
DTW = 9.66

Date	Time	Analog#01 5psi..... feet.....	Elevation
09/28/94	07:49	6.8037	1.5075
09/28/94	08:04	6.8145	1.5183
09/28/94	08:19	6.8073	1.5111
09/28/94	08:34	6.8145	1.5183
09/28/94	08:49	6.8181	1.5219
09/28/94	09:04	6.8181	1.5219
09/28/94	09:19	6.8145	1.5183
09/28/94	09:34	6.8109	1.5147
09/28/94	09:49	6.8109	1.5147
09/28/94	10:04	6.8109	1.5147
09/28/94	10:19	6.8109	1.5147
09/28/94	10:34	6.8109	1.5147
09/28/94	10:49	6.8109	1.5147
09/28/94	11:04	6.8145	1.5183
09/28/94	11:19	6.8109	1.5147
09/28/94	11:34	6.8181	1.5219
09/28/94	11:49	6.8145	1.5183
09/28/94	12:04	6.8037	1.5075
09/28/94	12:19	6.8145	1.5183
09/28/94	12:34	6.8181	1.5219
09/28/94	12:49	6.8181	1.5219
09/28/94	13:04	6.8217	1.5255
09/28/94	13:19	6.8289	1.5327
09/28/94	13:34	6.8181	1.5219
09/28/94	13:49	6.8289	1.5327
09/28/94	14:04	6.8217	1.5255
09/28/94	14:19	6.8181	1.5219
09/28/94	14:34	6.8181	1.5219
09/28/94	14:49	6.8145	1.5183
09/28/94	15:04	6.8217	1.5255
09/28/94	15:19	6.8217	1.5255
09/28/94	15:34	6.8253	1.5291
09/28/94	15:49	6.8253	1.5291
09/28/94	16:04	6.8253	1.5291
09/28/94	16:19	6.8289	1.5327
09/28/94	16:34	6.8289	1.5327
09/28/94	16:49	6.8325	1.5363
09/28/94	17:04	6.8289	1.5327
09/28/94	17:19	6.8289	1.5327
09/28/94	17:34	6.8289	1.5327
09/28/94	17:49	6.8289	1.5327
09/28/94	18:04	6.8289	1.5327
09/28/94	18:19	6.8289	1.5327

Date Tuesday November 8, 1994 2:55 PM
PlotFile E:\QPRO4\CHRIS\MW7A01.PRN
DataFile E:\QPRO4\CHRIS\MW-7A
qpro4file E:\0\10-098\MW7A01.wq2
Time of First Log in Specified Window
34603.6 0.597579
Elevation (TOC) = 11.05
DTW = 9.99

Date	Time	Analog#01 5psi..... feet.....	Elevation
09/28/94	09:20	6.3381	1.4787
09/28/94	09:35	6.403	1.5436
09/28/94	09:50	6.4139	1.5545
09/28/94	10:05	6.4716	1.6122
09/28/94	10:20	6.4536	1.5942
09/28/94	10:35	6.4824	1.623
09/28/94	10:50	6.5655	1.7061
09/28/94	11:05	6.5871	1.7277
09/28/94	11:20	6.5943	1.7349
09/28/94	11:35	6.616	1.7566
09/28/94	11:50	6.6304	1.771
09/28/94	12:05	6.6304	1.771
09/28/94	12:20	6.634	1.7746
09/28/94	12:35	6.634	1.7746
09/28/94	12:50	6.6268	1.7674
09/28/94	13:05	6.6232	1.7638
09/28/94	13:20	6.9047	1.7953
09/28/94	13:35	8.7563	1.7638
09/28/94	13:50	8.76	1.7675
09/28/94	14:05	8.7419	1.7494
09/28/94	14:20	8.7383	1.7458
09/28/94	14:35	8.7419	1.7494
09/28/94	14:50	8.7708	1.7783
09/28/94	15:05	8.7563	1.7638
09/28/94	15:20	8.7527	1.7602
09/28/94	15:35	8.7636	1.7711
09/28/94	15:50	8.7816	1.7891
09/28/94	16:05	8.861	1.8685
09/28/94	16:20	8.8827	1.8902
09/28/94	16:35	8.8899	1.8974
09/28/94	16:50	8.9043	1.9118
09/28/94	17:05	8.9152	1.9227
09/28/94	17:20	8.9332	1.9407
09/28/94	17:35	8.9549	1.9624
09/28/94	17:50	8.9693	1.9768
09/28/94	18:05	8.991	1.9985
09/28/94	18:20	9.0162	2.0237
09/28/94	18:35	9.0487	2.0562
09/28/94	18:50	9.0776	2.0851
09/28/94	19:05	9.1065	2.114
09/28/94	19:20	9.1462	2.1537
09/28/94	19:35	9.1786	2.1861
09/28/94	19:50	9.2075	2.215

E:/0/10-098/tidal

TIDAL DATA

Date Tuesday November 8, 1994 5:40 PM
PlotFile B:\MW1901.PRN
DataFile B:\MW19.PRN
PlotFile e:\10-098\0\MW1901.wq2
Time of First Log in Specified Window
34603.58 0.582911

Elevation (TOC) = 8.87
DTW = 6.87

Date	Time	Analog#01 5psi..... feet.....	Elevation
09/28/94	19:44	8.8033	1.9639
09/28/94	19:59	8.7997	1.9603
09/28/94	20:14	8.7997	1.9603
09/28/94	20:29	8.7997	1.9603
09/28/94	20:44	8.796	1.9566
09/28/94	20:59	8.796	1.9566
09/28/94	21:14	8.7997	1.9603
09/28/94	21:29	8.7997	1.9603
09/28/94	21:44	8.7997	1.9603
09/28/94	21:59	8.7997	1.9603
09/28/94	22:14	8.7997	1.9603
09/28/94	22:29	8.7997	1.9603
09/28/94	22:44	8.7997	1.9603
09/28/94	22:59	8.7997	1.9603
09/28/94	23:14	8.7997	1.9603
09/28/94	23:29	8.7997	1.9603
09/28/94	23:44	8.7997	1.9603
09/28/94	23:59	8.7997	1.9603
09/29/94	00:14	8.8033	1.9639
09/29/94	00:29	8.8033	1.9639
09/29/94	00:44	8.7997	1.9603
09/29/94	00:59	8.7997	1.9603
09/29/94	01:14	8.7997	1.9603
09/29/94	01:29	8.8033	1.9639
09/29/94	01:44	8.8033	1.9639
09/29/94	01:59	8.8033	1.9639
09/29/94	02:14	8.8069	1.9675
09/29/94	02:29	8.8069	1.9675
09/29/94	02:44	8.8033	1.9639
09/29/94	02:59	8.8033	1.9639
09/29/94	03:14	8.8033	1.9639
09/29/94	03:29	8.8033	1.9639
09/29/94	03:44	8.7997	1.9603
09/29/94	03:59	8.8033	1.9639
09/29/94	04:14	8.8033	1.9639
09/29/94	04:29	8.8033	1.9639
09/29/94	04:44	8.8033	1.9639
09/29/94	04:59	8.8033	1.9639
09/29/94	05:14	8.8033	1.9639
09/29/94	05:29	8.8033	1.9639
09/29/94	05:44	8.8033	1.9639
09/29/94	05:59	8.8033	1.9639
09/29/94	06:14	8.8033	1.9639

Date Tuesday November 8, 1994 2:36 PM s
PlotFile E:\QPRO4\CHRIS\MW-3001.PRN
DataFile E:\QPRO4\CHRIS\MW-30
Qprofile E:\0\10-098\MW-3001.wq2
Time of First Log in Specified Window
34603.53 0.534666

Elevation (TOC) = 11.20
DTW = 9.66

Date	Time	Analog#01 5psi..... feet.....	Elevation
09/28/94	18:34	6.8289	1.5327
09/28/94	18:49	6.8289	1.5327
09/28/94	19:04	6.8289	1.5327
09/28/94	19:19	6.8289	1.5327
09/28/94	19:34	6.8289	1.5327
09/28/94	19:49	6.8253	1.5291
09/28/94	20:04	6.8253	1.5291
09/28/94	20:19	6.8289	1.5327
09/28/94	20:34	6.8253	1.5291
09/28/94	20:49	6.8253	1.5291
09/28/94	21:04	6.8253	1.5291
09/28/94	21:19	6.8253	1.5291
09/28/94	21:34	6.8253	1.5291
09/28/94	21:49	6.8253	1.5291
09/28/94	22:04	6.8217	1.5255
09/28/94	22:19	6.8217	1.5255
09/28/94	22:34	6.8217	1.5255
09/28/94	22:49	6.8217	1.5255
09/28/94	23:04	6.8181	1.5219
09/28/94	23:19	6.8181	1.5219
09/28/94	23:34	6.8181	1.5219
09/28/94	23:49	6.8181	1.5219
09/29/94	00:04	6.8181	1.5219
09/29/94	00:19	6.8181	1.5219
09/29/94	00:34	6.8181	1.5219
09/29/94	00:49	6.8145	1.5183
09/29/94	01:04	6.8145	1.5183
09/29/94	01:19	6.8145	1.5183
09/29/94	01:34	6.8145	1.5183
09/29/94	01:49	6.8145	1.5183
09/29/94	02:04	6.8145	1.5183
09/29/94	02:19	6.8145	1.5183
09/29/94	02:34	6.8145	1.5183
09/29/94	02:49	6.8145	1.5183
09/29/94	03:04	6.8145	1.5183
09/29/94	03:19	6.8109	1.5147
09/29/94	03:34	6.8145	1.5183
09/29/94	03:49	6.8145	1.5183
09/29/94	04:04	6.8109	1.5147
09/29/94	04:19	6.8109	1.5147
09/29/94	04:34	6.8109	1.5147
09/29/94	04:49	6.8109	1.5147
09/29/94	05:04	6.8109	1.5147

Date Tuesday November 8, 1994 2:55 PM
PlotFile E:\QPRO4\CHRIS\MW7A01.PRN
DataFile E:\QPRO4\CHRIS\MW-7A
qpro4file E:\0\10-098\MW7A01.wq2
Time of First Log in Specified Window
34603.6 0.597579

Elevation (TOC) = 11.05
DTW = 9.99

Date	Time	Analog#01 5psi..... feet.....	Elevation
09/28/94	20:05	9.2328	2.2403
09/28/94	20:20	9.258	2.2655
09/28/94	20:35	9.2797	2.2872
09/28/94	20:50	9.2941	2.3016
09/28/94	21:05	9.3014	2.3089
09/28/94	21:20	9.3086	2.3161
09/28/94	21:35	9.3014	2.3089
09/28/94	21:50	9.2869	2.2944
09/28/94	22:05	9.2689	2.2764
09/28/94	22:20	9.2436	2.2511
09/28/94	22:35	9.2147	2.2222
09/28/94	22:50	9.1823	2.1898
09/28/94	23:05	9.1425	2.15
09/28/94	23:20	9.1101	2.1176
09/28/94	23:35	9.0704	2.0779
09/28/94	23:50	9.0343	2.0418
09/29/94	00:05	8.9982	2.0057
09/29/94	00:20	8.9621	1.9696
09/29/94	00:35	8.9224	1.9299
09/29/94	00:50	8.8755	1.883
09/29/94	01:05	8.8285	1.836
09/29/94	01:20	8.7888	1.7963
09/29/94	01:35	8.7455	1.753
09/29/94	01:50	8.7022	1.7097
09/29/94	02:05	8.6589	1.6664
09/29/94	02:20	8.6192	1.6267
09/29/94	02:35	8.5759	1.5834
09/29/94	02:50	8.4965	1.504
09/29/94	03:05	8.4423	1.4498
09/29/94	03:20	8.4135	1.421
09/29/94	03:35	8.381	1.3885
09/29/94	03:50	8.3557	1.3632
09/29/94	04:05	8.3268	1.3343
09/29/94	04:20	8.3052	1.3127
09/29/94	04:35	8.2799	1.2874
09/29/94	04:50	8.2583	1.2658
09/29/94	05:05	8.2438	1.2513
09/29/94	05:20	8.2294	1.2369
09/29/94	05:35	8.2222	1.2297
09/29/94	05:50	8.2185	1.226
09/29/94	06:05	8.2185	1.226
09/29/94	06:20	8.2185	1.226
09/29/94	06:35	8.2294	1.2369

E:/0/10-098/tidal

TIDAL DATA

Date Tuesday November 8, 1994 5:40 PM
PlotFile B:\MW1901.PRN
DataFile B:\MW19.PRN
PlotFile e:\10-098\0\MW1901.wq2
Time of First Log in Specified Window
34603.58 0.582911

Elevation (TOC) = 8.87
DTW = 6.87

Date	Time	Analog#01 5psi..... feet.....	Elevation
09/29/94	06:29	8.7997	1.9603
09/29/94	06:44	8.8033	1.9639
09/29/94	06:59	8.7997	1.9603
09/29/94	07:14	8.8033	1.9639
09/29/94	07:29	8.796	1.9566
09/29/94	07:44	8.796	1.9566
09/29/94	07:59	8.796	1.9566
09/29/94	08:14	8.7997	1.9603
09/29/94	08:29	8.796	1.9566
09/29/94	08:44	8.796	1.9566
09/29/94	08:59	8.8033	1.9639
09/29/94	09:14	8.7997	1.9603
09/29/94	09:29	8.7997	1.9603
09/29/94	09:44	8.8033	1.9639
09/29/94	09:59	8.8069	1.9675
09/29/94	10:14	8.7997	1.9603
09/29/94	10:29	8.8069	1.9675
09/29/94	10:44	8.7997	1.9603
09/29/94	10:59	8.7997	1.9603
09/29/94	11:14	8.8033	1.9639
09/29/94	11:29	8.8033	1.9639
09/29/94	11:44	8.8033	1.9639
09/29/94	11:59	8.8033	1.9639
09/29/94	12:14	8.8033	1.9639
09/29/94	12:29	8.8033	1.9639
09/29/94	12:44	8.8069	1.9675
09/29/94	12:59	8.8105	1.9711
09/29/94	13:14	8.8213	1.9819
09/29/94	13:29	8.8177	1.9783
09/29/94	13:44	8.7997	1.9603
09/29/94	13:59	8.7997	1.9603
09/29/94	14:14	8.7997	1.9603
09/29/94	14:29	8.8105	1.9711
09/29/94	14:44	8.8213	1.9819
09/29/94	14:59	8.8141	1.9747
09/29/94	15:14	8.8141	1.9747
09/29/94	15:29	8.8213	1.9819
09/29/94	15:44	8.8105	1.9711
09/29/94	15:59	8.8105	1.9711
09/29/94	16:14	8.8105	1.9711
09/29/94	16:29	8.8105	1.9711
09/29/94	16:44	8.8105	1.9711
09/29/94	16:59	8.8105	1.9711

Date Tuesday November 8, 1994 2:36 PM s
PlotFile E:\QPRO4\CHRIS\MW-3001.PRN
DataFile E:\QPRO4\CHRIS\MW-30
Qprofile E:\0\10-098\MW-3001.wq2
Time of First Log in Specified Window
34603.53 0.534666
Elevation (TOC) = 11.20
DTW = 9.66

Date	Time	Analog#01 5psi..... feet.....	Elevation
09/29/94	05:19	6.8073	1.5111
09/29/94	05:34	6.8109	1.5147
09/29/94	05:49	6.8145	1.5183
09/29/94	06:04	6.8145	1.5183
09/29/94	06:19	6.8109	1.5147
09/29/94	06:34	6.8109	1.5147
09/29/94	06:49	6.8109	1.5147
09/29/94	07:04	6.8145	1.5183
09/29/94	07:19	6.8109	1.5147
09/29/94	07:34	6.8109	1.5147
09/29/94	07:49	6.8109	1.5147
09/29/94	08:04	6.8109	1.5147
09/29/94	08:19	6.8181	1.5219
09/29/94	08:34	6.8362	1.54
09/29/94	08:49	6.8145	1.5183
09/29/94	09:04	6.8145	1.5183
09/29/94	09:19	6.8181	1.5219
09/29/94	09:34	6.8217	1.5255
09/29/94	09:49	6.8181	1.5219
09/29/94	10:04	6.8217	1.5255
09/29/94	10:19	6.8398	1.5436
09/29/94	10:34	6.8181	1.5219
09/29/94	10:49	6.8253	1.5291
09/29/94	11:04	6.8253	1.5291
09/29/94	11:19	6.8289	1.5327
09/29/94	11:34	6.8325	1.5363
09/29/94	11:49	6.8253	1.5291
09/29/94	12:04	6.8253	1.5291
09/29/94	12:19	6.8289	1.5327
09/29/94	12:34	6.8289	1.5327
09/29/94	12:49	6.8289	1.5327
09/29/94	13:04	6.8289	1.5327
09/29/94	13:19	6.8325	1.5363
09/29/94	13:34	6.8289	1.5327
09/29/94	13:49	6.8289	1.5327
09/29/94	14:04	6.8325	1.5363
09/29/94	14:19	6.8289	1.5327
09/29/94	14:34	6.8289	1.5327
09/29/94	14:49	6.8289	1.5327
09/29/94	15:04	6.8289	1.5327
09/29/94	15:19	6.8289	1.5327
09/29/94	15:34	6.8289	1.5327
09/29/94	15:49	6.8289	1.5327

Date Tuesday November 8, 1994 2:55 PM
PlotFile E:\QPRO4\CHRIS\MW7A01.PRN
DataFile E:\QPRO4\CHRIS\MW-7A
qpro4file E:\0\10-098\MW7A01.wq2
Time of First Log in Specified Window
34603.6 0.597579
Elevation (TOC) = 11.05
DTW = 9.99

Date	Time	Analog#01 5psi..... feet.....	Elevation
09/29/94	06:50	8.2402	1.2477
09/29/94	07:05	8.2583	1.2658
09/29/94	07:20	8.1933	1.2008
09/29/94	07:35	8.2149	1.2224
09/29/94	07:50	8.2546	1.2621
09/29/94	08:05	8.2907	1.2982
09/29/94	08:20	8.3304	1.3379
09/29/94	08:35	8.3629	1.3704
09/29/94	08:50	8.399	1.4065
09/29/94	09:05	8.4351	1.4426
09/29/94	09:20	8.5037	1.5112
09/29/94	09:35	8.5073	1.5148
09/29/94	09:50	8.5506	1.5581
09/29/94	10:05	8.5903	1.5978
09/29/94	10:20	8.6264	1.6339
09/29/94	10:35	8.6661	1.6736
09/29/94	10:50	8.7094	1.7169
09/29/94	11:05	8.7347	1.7422
09/29/94	11:20	8.8033	1.8108
09/29/94	11:35	8.8358	1.8433
09/29/94	11:50	8.8538	1.8613
09/29/94	12:05	8.8755	1.883
09/29/94	12:20	8.8791	1.8866
09/29/94	12:35	8.8863	1.8938
09/29/94	12:50	8.8827	1.8902
09/29/94	13:05	8.8827	1.8902
09/29/94	13:20	8.8755	1.883
09/29/94	13:35	8.9188	1.9263
09/29/94	13:50	8.9043	1.9118
09/29/94	14:05	8.843	1.8505
09/29/94	14:20	8.8069	1.8144
09/29/94	14:35	8.8033	1.8108
09/29/94	14:50	8.796	1.8035
09/29/94	15:05	8.7924	1.7999
09/29/94	15:20	8.7419	1.7494
09/29/94	15:35	8.7239	1.7314
09/29/94	15:50	8.7311	1.7386
09/29/94	16:05	8.7311	1.7386
09/29/94	16:20	8.7311	1.7386
09/29/94	16:35	8.7419	1.7494
09/29/94	16:50	8.7563	1.7638
09/29/94	17:05	8.8033	1.8108
09/29/94	17:20	8.7924	1.7999

TIDAL DATA

Date Tuesday November 8, 1994 5:40 PM
PlotFile B:\MW1901.PRN
DataFile B:\MW19.PRN
PlotFile e:\10-098\0\MW1901.wq2
Time of First Log in Specified Window
34603.58 0.582911

Elevation (TOC) = 8.87
DTW = 6.87

Date	Time	Analog#01 5psi..... feet.....	Elevation
09/29/94	17:14	8.8141	1.9747
09/29/94	17:29	8.8105	1.9711
09/29/94	17:44	8.8105	1.9711
09/29/94	17:59	8.8105	1.9711
09/29/94	18:14	8.8105	1.9711
09/29/94	18:29	8.8105	1.9711
09/29/94	18:44	8.8105	1.9711
09/29/94	18:59	8.8069	1.9675
09/29/94	19:14	8.8069	1.9675
09/29/94	19:29	8.8069	1.9675
09/29/94	19:44	8.8069	1.9675
09/29/94	19:59	8.8033	1.9639
09/29/94	20:14	8.8069	1.9675
09/29/94	20:29	8.8069	1.9675
09/29/94	20:44	8.8033	1.9639
09/29/94	20:59	8.8069	1.9675
09/29/94	21:14	8.8069	1.9675
09/29/94	21:29	8.8069	1.9675
09/29/94	21:44	8.8069	1.9675
09/29/94	21:59	8.8069	1.9675
09/29/94	22:14	8.8033	1.9639
09/29/94	22:29	8.8069	1.9675
09/29/94	22:44	8.8033	1.9639
09/29/94	22:59	8.8033	1.9639
09/29/94	23:14	8.8033	1.9639
09/29/94	23:29	8.8033	1.9639
09/29/94	23:44	8.8033	1.9639
09/29/94	23:59	8.8033	1.9639
09/30/94	00:14	8.8033	1.9639
09/30/94	00:29	8.8069	1.9675
09/30/94	00:44	8.8033	1.9639
09/30/94	00:59	8.8033	1.9639
09/30/94	01:14	8.8033	1.9639
09/30/94	01:29	8.8033	1.9639
09/30/94	01:44	8.8033	1.9639
09/30/94	01:59	8.8033	1.9639
09/30/94	02:14	8.8033	1.9639
09/30/94	02:29	8.8033	1.9639
09/30/94	02:44	8.8033	1.9639
09/30/94	02:59	8.8033	1.9639
09/30/94	03:14	8.8033	1.9639
09/30/94	03:29	8.8033	1.9639
09/30/94	03:44	8.8033	1.9639

Date Tuesday November 8, 1994 2:36 PM s
PlotFile E:\QPRO4\CHRIS\MW-3001.PRN
DataFile E:\QPRO4\CHRIS\MW-30
Qprofile E:\0\10-098\MW-3001.wq2
Time of First Log in Specified Window
34603.53 0.534666
Elevation (TOC) = 11.20
DTW = 9.66

Date	Time	Analog#01 5psi..... feet.....	Elevation
09/29/94	16:04	6.8325	1.5363
09/29/94	16:19	6.8325	1.5363
09/29/94	16:34	6.8325	1.5363
09/29/94	16:49	6.8362	1.54
09/29/94	17:04	6.8362	1.54
09/29/94	17:19	6.8362	1.54
09/29/94	17:34	6.8362	1.54
09/29/94	17:49	6.8362	1.54
09/29/94	18:04	6.8362	1.54
09/29/94	18:19	6.8325	1.5363
09/29/94	18:34	6.8362	1.54
09/29/94	18:49	6.8325	1.5363
09/29/94	19:04	6.8325	1.5363
09/29/94	19:19	6.8362	1.54
09/29/94	19:34	6.8325	1.5363
09/29/94	19:49	6.8325	1.5363
09/29/94	20:04	6.8362	1.54
09/29/94	20:19	6.8362	1.54
09/29/94	20:34	6.8325	1.5363
09/29/94	20:49	6.8362	1.54
09/29/94	21:04	6.8362	1.54
09/29/94	21:19	6.8398	1.5436
09/29/94	21:34	6.8362	1.54
09/29/94	21:49	6.8362	1.54
09/29/94	22:04	6.8362	1.54
09/29/94	22:19	6.8362	1.54
09/29/94	22:34	6.8362	1.54
09/29/94	22:49	6.8362	1.54
09/29/94	23:04	6.8362	1.54
09/29/94	23:19	6.8362	1.54
09/29/94	23:34	6.8362	1.54
09/29/94	23:49	6.8362	1.54
09/30/94	00:04	6.8325	1.5363
09/30/94	00:19	6.8325	1.5363
09/30/94	00:34	6.8325	1.5363
09/30/94	00:49	6.8325	1.5363
09/30/94	01:04	6.8325	1.5363
09/30/94	01:19	6.8325	1.5363
09/30/94	01:34	6.8289	1.5327
09/30/94	01:49	6.8325	1.5363
09/30/94	02:04	6.8289	1.5327
09/30/94	02:19	6.8289	1.5327
09/30/94	02:34	6.8289	1.5327

Date Tuesday November 8, 1994 2:55 PM
PlotFile E:\QPRO4\CHRIS\MW7A01.PRN
DataFile E:\QPRO4\CHRIS\MW-7A
qpro4file E:\0\10-098\MW7A01.wq2
Time of First Log in Specified Window
34603.6 0.597579
Elevation (TOC) = 11.05
DTW = 9.99

Date	Time	Analog#01 5psi..... feet.....	Elevation
09/29/94	17:35	8.8466	1.8541
09/29/94	17:50	8.8249	1.8324
09/29/94	18:05	8.8502	1.8577
09/29/94	18:20	8.8791	1.8866
09/29/94	18:35	8.9079	1.9154
09/29/94	18:50	8.9368	1.9443
09/29/94	19:05	8.9657	1.9732
09/29/94	19:20	8.9946	2.0021
09/29/94	19:35	9.0234	2.0309
09/29/94	19:50	9.0559	2.0634
09/29/94	20:05	9.0884	2.0959
09/29/94	20:20	9.1209	2.1284
09/29/94	20:35	9.1534	2.1609
09/29/94	20:50	9.1859	2.1934
09/29/94	21:05	9.222	2.2295
09/29/94	21:20	9.2508	2.2583
09/29/94	21:35	9.2797	2.2872
09/29/94	21:50	9.305	2.3125
09/29/94	22:05	9.323	2.3305
09/29/94	22:20	9.3302	2.3377
09/29/94	22:35	9.3375	2.345
09/29/94	22:50	9.3338	2.3413
09/29/94	23:05	9.3194	2.3269
09/29/94	23:20	9.2978	2.3053
09/29/94	23:35	9.2761	2.2836
09/29/94	23:50	9.2472	2.2547
09/30/94	00:05	9.2147	2.2222
09/30/94	00:20	9.175	2.1825
09/30/94	00:35	9.1425	2.15
09/30/94	00:50	9.1101	2.1176
09/30/94	01:05	9.0704	2.0779
09/30/94	01:20	9.0343	2.0418
09/30/94	01:35	8.991	1.9985
09/30/94	01:50	8.9476	1.9551
09/30/94	02:05	8.9043	1.9118
09/30/94	02:20	8.8646	1.8721
09/30/94	02:35	8.8213	1.8288
09/30/94	02:50	8.7816	1.7891
09/30/94	03:05	8.7383	1.7458
09/30/94	03:20	8.7022	1.7097
09/30/94	03:35	8.6625	1.67
09/30/94	03:50	8.6228	1.6303
09/30/94	04:05	8.5831	1.5906

E:/0/10-098/tidal

TIDAL DATA

Date Tuesday November 8, 1994 5:40 PM
PlotFile B:\MW1901.PRN
DataFile B:\MW19.PRN
PlotFile e:\10-098\0\MW1901.wq2
Time of First Log in Specified Window
34603.58 0.582911

Elevation (TOC) = 8.87
DTW = 6.87

Date	Time	Analog#01 5psi..... feet.....	Elevation
09/30/94	03:59	8.8033	1.9639
09/30/94	04:14	8.8033	1.9639
09/30/94	04:29	8.7997	1.9603
09/30/94	04:44	8.7997	1.9603
09/30/94	04:59	8.8033	1.9639
09/30/94	05:14	8.8033	1.9639
09/30/94	05:29	8.7997	1.9603
09/30/94	05:44	8.8033	1.9639
09/30/94	05:59	8.7997	1.9603
09/30/94	06:14	8.7997	1.9603
09/30/94	06:29	8.7997	1.9603
09/30/94	06:44	8.7997	1.9603
09/30/94	06:59	8.7997	1.9603
09/30/94	07:14	8.7997	1.9603
09/30/94	07:29	8.7997	1.9603
09/30/94	07:44	8.7997	1.9603
09/30/94	07:59	8.796	1.9566
09/30/94	08:14	8.796	1.9566
09/30/94	08:29	8.796	1.9566
09/30/94	08:44	8.796	1.9566
09/30/94	08:59	8.796	1.9566
09/30/94	09:14	8.7997	1.9603
09/30/94	09:29	8.8069	1.9675
09/30/94	09:44	8.8033	1.9639
09/30/94	09:59	8.8033	1.9639
09/30/94	10:14	8.7997	1.9603
09/30/94	10:29	8.8033	1.9639
09/30/94	10:44	8.7997	1.9603
09/30/94	10:59	8.8033	1.9639
09/30/94	11:14	8.7997	1.9603
09/30/94	11:29	8.8033	1.9639
09/30/94	11:44	8.8033	1.9639
09/30/94	11:59	8.8069	1.9675
09/30/94	12:14	8.8069	1.9675
09/30/94	12:29	8.8069	1.9675
09/30/94	12:44	8.8105	1.9711
09/30/94	12:59	8.8105	1.9711
09/30/94	13:14	8.8249	1.9855
09/30/94	13:29	8.8069	1.9675
09/30/94	13:44	8.8105	1.9711
09/30/94	13:59	8.8213	1.9819
09/30/94	14:14	8.8177	1.9783
09/30/94	14:29	8.8141	1.9747

Date Tuesday November 8, 1994 2:36 PM s
PlotFile E:\QPRO4\CHRIS\MW-3001.PRN
DataFile E:\QPRO4\CHRIS\MW-30
Qprofile E:\0\10-098\MW-3001.wq2
Time of First Log in Specified Window
34603.53 0.534666
Elevation (TOC) = 11.20
DTW = 9.66

Date	Time	Analog#01 5psi..... feet.....	Elevation
09/30/94	02:49	6.8289	1.5327
09/30/94	03:04	6.8289	1.5327
09/30/94	03:19	6.8289	1.5327
09/30/94	03:34	6.8289	1.5327
09/30/94	03:49	6.8253	1.5291
09/30/94	04:04	6.8289	1.5327
09/30/94	04:19	6.8289	1.5327
09/30/94	04:34	6.8253	1.5291
09/30/94	04:49	6.8253	1.5291
09/30/94	05:04	6.8253	1.5291
09/30/94	05:19	6.8253	1.5291
09/30/94	05:34	6.8253	1.5291
09/30/94	05:49	6.8289	1.5327
09/30/94	06:04	6.8253	1.5291
09/30/94	06:19	6.8253	1.5291
09/30/94	06:34	6.8253	1.5291
09/30/94	06:49	6.8253	1.5291
09/30/94	07:04	6.8253	1.5291
09/30/94	07:19	6.8289	1.5327
09/30/94	07:34	6.8253	1.5291
09/30/94	07:49	6.8289	1.5327
09/30/94	08:04	6.8289	1.5327
09/30/94	08:19	6.8289	1.5327
09/30/94	08:34	6.8289	1.5327
09/30/94	08:49	6.8289	1.5327
09/30/94	09:04	6.8289	1.5327
09/30/94	09:19	6.8325	1.5363
09/30/94	09:34	6.8325	1.5363
09/30/94	09:49	6.8325	1.5363
09/30/94	10:04	6.8325	1.5363
09/30/94	10:19	6.8325	1.5363
09/30/94	10:34	6.8362	1.54
09/30/94	10:49	6.8362	1.54
09/30/94	11:04	6.8362	1.54
09/30/94	11:19	6.8362	1.54
09/30/94	11:34	6.8398	1.5436
09/30/94	11:49	6.8362	1.54
09/30/94	12:04	6.8398	1.5436
09/30/94	12:19	6.8398	1.5436
09/30/94	12:34	6.8434	1.5472
09/30/94	12:49	6.8434	1.5472
09/30/94	13:04	6.8434	1.5472
09/30/94	13:19	6.8434	1.5472

Date Tuesday November 8, 1994 2:55 PM
PlotFile E:\QPRO4\CHRIS\MW7A01.PRN
DataFile E:\QPRO4\CHRIS\MW-7A
qpro4file E:\0\10-098\MW7A01.wq2
Time of First Log in Specified Window
34603.6 0.597579
Elevation (TOC) = 11.05
DTW = 9.99

Date	Time	Analog#01 5psi..... feet.....	Elevation
09/30/94	04:20	8.547	1.5545
09/30/94	04:35	8.5145	1.522
09/30/94	04:50	8.482	1.4895
09/30/94	05:05	8.4495	1.457
09/30/94	05:20	8.4243	1.4318
09/30/94	05:35	8.399	1.4065
09/30/94	05:50	8.381	1.3885
09/30/94	06:05	8.3629	1.3704
09/30/94	06:20	8.3521	1.3596
09/30/94	06:35	8.3413	1.3488
09/30/94	06:50	8.3377	1.3452
09/30/94	07:05	8.3377	1.3452
09/30/94	07:20	8.3485	1.356
09/30/94	07:35	8.3629	1.3704
09/30/94	07:50	8.4568	1.4643
09/30/94	08:05	8.5217	1.5292
09/30/94	08:20	8.4965	1.504
09/30/94	08:35	8.5145	1.522
09/30/94	08:50	8.5398	1.5473
09/30/94	09:05	8.5687	1.5762
09/30/94	09:20	8.612	1.6195
09/30/94	09:35	8.6408	1.6483
09/30/94	09:50	8.6986	1.7061
09/30/94	10:05	8.7311	1.7386
09/30/94	10:20	8.7311	1.7386
09/30/94	10:35	8.7708	1.7783
09/30/94	10:50	8.8213	1.8288
09/30/94	11:05	8.8574	1.8649
09/30/94	11:20	8.9007	1.9082
09/30/94	11:35	8.926	1.9335
09/30/94	11:50	8.9765	1.984
09/30/94	12:05	9.0054	2.0129
09/30/94	12:20	9.027	2.0345
09/30/94	12:35	9.0487	2.0562
09/30/94	12:50	9.0631	2.0706
09/30/94	13:05	9.0704	2.0779
09/30/94	13:20	9.0776	2.0851
09/30/94	13:35	9.092	2.0995
09/30/94	13:50	9.0812	2.0887
09/30/94	14:05	9.0704	2.0779
09/30/94	14:20	9.0559	2.0634
09/30/94	14:35	9.0559	2.0634
09/30/94	14:50	9.0343	2.0418

E:/0/10-098/tidal

TIDAL DATA

Date Tuesday November 8, 1994 5:40 PM
PlotFile B:\MW1901.PRN
DataFile B:\MW19.PRN
PlotFile e:\10-098\0MW1901.wq2
Time of First Log in Specified Window
34603.58 0.582911

Elevation (TOC) = 8.87
DTW = 6.87

Date	Time	Analog#01 5psi..... feet.....	Elevation
09/30/94	14:44	8.8394	2
09/30/94	14:59	8.7997	1.9603
09/30/94	15:14	8.8069	1.9675
09/30/94	15:29	8.8105	1.9711
09/30/94	15:44	8.8249	1.9855
09/30/94	15:59	8.8249	1.9855
09/30/94	16:14	8.8249	1.9855
09/30/94	16:29	8.8213	1.9819
09/30/94	16:44	8.8249	1.9855
09/30/94	16:59	8.8321	1.9927
09/30/94	17:14	8.8249	1.9855
09/30/94	17:29	8.8249	1.9855
09/30/94	17:44	8.8249	1.9855
09/30/94	17:59	8.8249	1.9855
09/30/94	18:14	8.8249	1.9855
09/30/94	18:29	8.8249	1.9855
09/30/94	18:44	8.8249	1.9855
09/30/94	18:59	8.8213	1.9819
09/30/94	19:14	8.8141	1.9747
09/30/94	19:29	8.8213	1.9819
09/30/94	19:44	8.8213	1.9819
09/30/94	19:59	8.8177	1.9783
09/30/94	20:14	8.8213	1.9819
09/30/94	20:29	8.8213	1.9819
09/30/94	20:44	8.8285	1.9891
09/30/94	20:59	8.8285	1.9891
09/30/94	21:14	8.8285	1.9891
09/30/94	21:29	8.843	2.0036
09/30/94	21:44	8.8249	1.9855
09/30/94	21:59	8.8249	1.9855
09/30/94	22:14	8.8249	1.9855
09/30/94	22:29	8.8213	1.9819
09/30/94	22:44	8.8213	1.9819
09/30/94	22:59	8.8213	1.9819
09/30/94	23:14	8.8213	1.9819
09/30/94	23:29	8.8249	1.9855
09/30/94	23:44	8.8249	1.9855
09/30/94	23:59	8.8249	1.9855
10/01/94	00:14	8.8249	1.9855
10/01/94	00:29	8.8285	1.9891
10/01/94	00:44	8.8213	1.9819
10/01/94	00:59	8.8249	1.9855
10/01/94	01:14	8.8249	1.9855

Date Tuesday November 8, 1994 2:36 PM s
PlotFile E:\QPRO4\CHRIS\MW-3001.PRN
DataFile E:\QPRO4\CHRIS\MW-30
Qprofile E:\0\10-098\MW-3001.wq2
Time of First Log in Specified Window
34603.53 0.534666
Elevation (TOC) = 11.20
DTW = 9.66

Date	Time	Analog#01 5psi..... feet.....	Elevation
09/30/94	13:34	6.8434	1.5472
09/30/94	13:49	6.8434	1.5472
09/30/94	14:04	6.8434	1.5472
09/30/94	14:19	6.8434	1.5472
09/30/94	14:34	6.8434	1.5472
09/30/94	14:49	6.8434	1.5472
09/30/94	15:04	6.8434	1.5472
09/30/94	15:19	6.8398	1.5436
09/30/94	15:34	6.8434	1.5472
09/30/94	15:49	6.8434	1.5472
09/30/94	16:04	6.847	1.5508
09/30/94	16:19	6.847	1.5508
09/30/94	16:34	6.847	1.5508
09/30/94	16:49	6.847	1.5508
09/30/94	17:04	6.847	1.5508
09/30/94	17:19	6.8434	1.5472
09/30/94	17:34	6.847	1.5508
09/30/94	17:49	6.847	1.5508
09/30/94	18:04	6.847	1.5508
09/30/94	18:19	6.847	1.5508
09/30/94	18:34	6.8506	1.5544
09/30/94	18:49	6.8506	1.5544
09/30/94	19:04	6.847	1.5508
09/30/94	19:19	6.847	1.5508
09/30/94	19:34	6.8542	1.558
09/30/94	19:49	6.8434	1.5472
09/30/94	20:04	6.847	1.5508
09/30/94	20:19	6.847	1.5508
09/30/94	20:34	6.8434	1.5472
09/30/94	20:49	6.8506	1.5544
09/30/94	21:04	6.8506	1.5544
09/30/94	21:19	6.8506	1.5544
09/30/94	21:34	6.8506	1.5544
09/30/94	21:49	6.847	1.5508
09/30/94	22:04	6.8506	1.5544
09/30/94	22:19	6.847	1.5508
09/30/94	22:34	6.847	1.5508
09/30/94	22:49	6.8506	1.5544
09/30/94	23:04	6.8506	1.5544
09/30/94	23:19	6.8506	1.5544
09/30/94	23:34	6.8542	1.558
09/30/94	23:49	6.8542	1.558
10/01/94	00:04	6.8542	1.558

Date Tuesday November 8, 1994 2:55 PM
PlotFile E:\QPRO4\CHRIS\MW7A01.PRN
DataFile E:\QPRO4\CHRIS\MW-7A
qpro4file E:\0\10-098\MW7A01.wq2
Time of First Log in Specified Window
34603.6 0.597579
Elevation (TOC) = 11.05
DTW = 9.99

Date	Time	Analog#01 5psi..... feet.....	Elevation
09/30/94	15:05	9.027	2.0345
09/30/94	15:20	8.9982	2.0057
09/30/94	15:35	8.9873	1.9948
09/30/94	15:50	8.9729	1.9804
09/30/94	16:05	8.9657	1.9732
09/30/94	16:20	8.9549	1.9624
09/30/94	16:35	8.9043	1.9118
09/30/94	16:50	8.944	1.9515
09/30/94	17:05	8.9476	1.9551
09/30/94	17:20	8.9404	1.9479
09/30/94	17:35	8.9332	1.9407
09/30/94	17:50	8.8827	1.8902
09/30/94	18:05	8.8755	1.883
09/30/94	18:20	8.8971	1.9046
09/30/94	18:35	8.926	1.9335
09/30/94	18:50	8.9513	1.9588
09/30/94	19:05	9.0018	2.0093
09/30/94	19:20	9.027	2.0345
09/30/94	19:35	9.0595	2.067
09/30/94	19:50	9.092	2.0995
09/30/94	20:05	9.1353	2.1428
09/30/94	20:20	9.1859	2.1934
09/30/94	20:35	9.2147	2.2222
09/30/94	20:50	9.258	2.2655
09/30/94	21:05	9.3014	2.3089
09/30/94	21:20	9.3519	2.3594
09/30/94	21:35	9.4096	2.4171
09/30/94	21:50	9.4566	2.4641
09/30/94	22:05	9.489	2.4965
09/30/94	22:20	9.5251	2.5326
09/30/94	22:35	9.5576	2.5651
09/30/94	22:50	9.5829	2.5904
09/30/94	23:05	9.6045	2.612
09/30/94	23:20	9.6154	2.6229
09/30/94	23:35	9.619	2.6265
09/30/94	23:50	9.6118	2.6193
10/01/94	00:05	9.6009	2.6084
10/01/94	00:20	9.5757	2.5832
10/01/94	00:35	9.5504	2.5579
10/01/94	00:50	9.5179	2.5254
10/01/94	01:05	9.4854	2.4929
10/01/94	01:20	9.4457	2.4532
10/01/94	01:35	9.4096	2.4171

E:/0/10-098/tidal

TIDAL DATA

Date Tuesday November 8, 1994 5:40 PM
PlotFile B:\MW1901.PRN
DataFile B:\MW19.PRN
PlotFile e:\10-098\0MW1901.wq2
Time of First Log in Specified Window
34603.58 0.582911

Elevation (TOC) = 8.87
DTW = 6.87

Date	Time	Analog#01 5psi..... feet.....	Elevation
10/01/94	01:29	8.8249	1.9855
10/01/94	01:44	8.8249	1.9855
10/01/94	01:59	8.8213	1.9819
10/01/94	02:14	8.8213	1.9819
10/01/94	02:29	8.8249	1.9855
10/01/94	02:44	8.8249	1.9855
10/01/94	02:59	8.8213	1.9819
10/01/94	03:14	8.8249	1.9855
10/01/94	03:29	8.8249	1.9855
10/01/94	03:44	8.8285	1.9891
10/01/94	03:59	8.8285	1.9891
10/01/94	04:14	8.8249	1.9855
10/01/94	04:29	8.8249	1.9855
10/01/94	04:44	8.8249	1.9855
10/01/94	04:59	8.8213	1.9819
10/01/94	05:14	8.8213	1.9819
10/01/94	05:29	8.8249	1.9855
10/01/94	05:44	8.8249	1.9855
10/01/94	05:59	8.8213	1.9819
10/01/94	06:14	8.8249	1.9855
10/01/94	06:29	8.8249	1.9855
10/01/94	06:44	8.8249	1.9855
10/01/94	06:59	8.8213	1.9819
10/01/94	07:14	8.8213	1.9819
10/01/94	07:29	8.8213	1.9819
10/01/94	07:44	8.8213	1.9819
10/01/94	07:59	8.8213	1.9819
10/01/94	08:14	8.8249	1.9855
10/01/94	08:29	8.8213	1.9819
10/01/94	08:44	8.8213	1.9819
10/01/94	08:59	8.8213	1.9819
10/01/94	09:14	8.8249	1.9855
10/01/94	09:29	8.8249	1.9855
10/01/94	09:44	8.8213	1.9819
10/01/94	09:59	8.8394	2
10/01/94	10:14	8.8249	1.9855
10/01/94	10:29	8.8249	1.9855
10/01/94	10:44	8.8249	1.9855
10/01/94	10:59	8.8285	1.9891
10/01/94	11:14	8.8285	1.9891
10/01/94	11:29	8.8466	2.0072
10/01/94	11:44	8.8394	2
10/01/94	11:59	8.8358	1.9964

Date Tuesday November 8, 1994 2:36 PM s
PlotFile E:\QPRO4\CHRIS\MW-3001.PRN
DataFile E:\QPRO4\CHRIS\MW-30
Qprofile E:\0\10-098\MW-3001.wq2
Time of First Log in Specified Window
34603.53 0.534666
Elevation (TOC) = 11.20
DTW = 9.66

Date	Time	Analog#01 5psi..... feet.....	Elevation
10/01/94	00:19	6.8542	1.558
10/01/94	00:34	6.8542	1.558
10/01/94	00:49	6.8542	1.558
10/01/94	01:04	6.8542	1.558
10/01/94	01:19	6.8506	1.5544
10/01/94	01:34	6.8542	1.558
10/01/94	01:49	6.8506	1.5544
10/01/94	02:04	6.847	1.5508
10/01/94	02:19	6.847	1.5508
10/01/94	02:34	6.847	1.5508
10/01/94	02:49	6.8434	1.5472
10/01/94	03:04	6.847	1.5508
10/01/94	03:19	6.847	1.5508
10/01/94	03:34	6.847	1.5508
10/01/94	03:49	6.847	1.5508
10/01/94	04:04	6.847	1.5508
10/01/94	04:19	6.847	1.5508
10/01/94	04:34	6.8434	1.5472
10/01/94	04:49	6.8398	1.5436
10/01/94	05:04	6.8398	1.5436
10/01/94	05:19	6.8398	1.5436
10/01/94	05:34	6.8398	1.5436
10/01/94	05:49	6.8398	1.5436
10/01/94	06:04	6.8398	1.5436
10/01/94	06:19	6.8434	1.5472
10/01/94	06:34	6.8434	1.5472
10/01/94	06:49	6.8434	1.5472
10/01/94	07:04	6.8434	1.5472
10/01/94	07:19	6.8398	1.5436
10/01/94	07:34	6.8398	1.5436
10/01/94	07:49	6.8398	1.5436
10/01/94	08:04	6.8434	1.5472
10/01/94	08:19	6.847	1.5508
10/01/94	08:34	6.847	1.5508
10/01/94	08:49	6.8434	1.5472
10/01/94	09:04	6.847	1.5508
10/01/94	09:19	6.847	1.5508
10/01/94	09:34	6.847	1.5508
10/01/94	09:49	6.847	1.5508
10/01/94	10:04	6.8506	1.5544
10/01/94	10:19	6.847	1.5508
10/01/94	10:34	6.8506	1.5544
10/01/94	10:49	6.8506	1.5544

Date Tuesday November 8, 1994 2:55 PM
PlotFile E:\QPRO4\CHRIS\MW7A01.PRN
DataFile E:\QPRO4\CHRIS\MW-7A
qpro4file E:\0\10-098\MW7A01.wq2
Time of First Log in Specified Window
34603.6 0.597579
Elevation (TOC) = 11.05
DTW = 9.99

Date	Time	Analog#01 5psi..... feet.....	Elevation
10/01/94	01:50	9.3699	2.3774
10/01/94	02:05	9.3302	2.3377
10/01/94	02:20	9.2978	2.3053
10/01/94	02:35	9.2544	2.2619
10/01/94	02:50	9.2111	2.2186
10/01/94	03:05	9.1642	2.1717
10/01/94	03:20	9.1209	2.1284
10/01/94	03:35	9.0812	2.0887
10/01/94	03:50	9.0379	2.0454
10/01/94	04:05	8.9982	2.0057
10/01/94	04:20	8.9549	1.9624
10/01/94	04:35	8.9152	1.9227
10/01/94	04:50	8.8791	1.8866
10/01/94	05:05	8.8394	1.8469
10/01/94	05:20	8.8033	1.8108
10/01/94	05:35	8.7672	1.7747
10/01/94	05:50	8.7347	1.7422
10/01/94	06:05	8.7094	1.7169
10/01/94	06:20	8.6805	1.688
10/01/94	06:35	8.6625	1.67
10/01/94	06:50	8.6481	1.6556
10/01/94	07:05	8.6372	1.6447
10/01/94	07:20	8.63	1.6375
10/01/94	07:35	8.63	1.6375
10/01/94	07:50	8.6372	1.6447
10/01/94	08:05	8.6481	1.6556
10/01/94	08:20	8.6697	1.6772
10/01/94	08:35	8.6914	1.6989
10/01/94	08:50	8.7166	1.7241
10/01/94	09:05	8.7491	1.7566
10/01/94	09:20	8.778	1.7855
10/01/94	09:35	8.8177	1.8252
10/01/94	09:50	8.7852	1.7927
10/01/94	10:05	8.8755	1.883
10/01/94	10:20	8.944	1.9515
10/01/94	10:35	8.9513	1.9588
10/01/94	10:50	8.9873	1.9948
10/01/94	11:05	9.0559	2.0634
10/01/94	11:20	9.0992	2.1067
10/01/94	11:35	9.1462	2.1537
10/01/94	11:50	9.1967	2.2042
10/01/94	12:05	9.2544	2.2619
10/01/94	12:20	9.2905	2.298

E:/0/10-098/tidal

TIDAL DATA

Date Tuesday November 8, 1994 5:40 PM
PlotFile B:\MW1901.PRN
DataFile B:\MW19.PRN
PlotFile e:\10-098\0\MW1901.wq2
Time of First Log in Specified Window
34603.58 0.582911

Elevation (TOC) = 8.87
DTW = 6.87

Date	Time	Analog#01 5psi..... feet.....	Elevation
10/01/94	22:59	8.8213	1.9819
10/01/94	23:14	8.8249	1.9855
10/01/94	23:29	8.8249	1.9855
10/01/94	23:44	8.8285	1.9891
10/01/94	23:59	8.8249	1.9855
10/02/94	00:14	8.8285	1.9891
10/02/94	00:29	8.8285	1.9891
10/02/94	00:44	8.8285	1.9891
10/02/94	00:59	8.8285	1.9891
10/02/94	01:14	8.8321	1.9927
10/02/94	01:29	8.8285	1.9891
10/02/94	01:44	8.8285	1.9891
10/02/94	01:59	8.8285	1.9891
10/02/94	02:14	8.8285	1.9891
10/02/94	02:29	8.8321	1.9927
10/02/94	02:44	8.8285	1.9891
10/02/94	02:59	8.8285	1.9891
10/02/94	03:14	8.8249	1.9855
10/02/94	03:29	8.8285	1.9891
10/02/94	03:44	8.8321	1.9927
10/02/94	03:59	8.8321	1.9927
10/02/94	04:14	8.8321	1.9927
10/02/94	04:29	8.8358	1.9964
10/02/94	04:44	8.8285	1.9891
10/02/94	04:59	8.8321	1.9927
10/02/94	05:14	8.8285	1.9891
10/02/94	05:29	8.8285	1.9891
10/02/94	05:44	8.8285	1.9891
10/02/94	05:59	8.8249	1.9855
10/02/94	06:14	8.8285	1.9891
10/02/94	06:29	8.8285	1.9891
10/02/94	06:44	8.8285	1.9891
10/02/94	06:59	8.8321	1.9927
10/02/94	07:14	8.8321	1.9927
10/02/94	07:29	8.8285	1.9891
10/02/94	07:44	8.8285	1.9891
10/02/94	07:59	8.8321	1.9927
10/02/94	08:14	8.8285	1.9891
10/02/94	08:29	8.8285	1.9891
10/02/94	08:44	8.8249	1.9855
10/02/94	08:59	8.8249	1.9855
10/02/94	09:14	8.8285	1.9891
10/02/94	09:29	8.8321	1.9927

Date Tuesday November 8, 1994 2:36 PM s
PlotFile E:\QPRO4\CHRIS\MW-3001.PRN
DataFile E:\QPRO4\CHRIS\MW-30
Qprofile E:\0\10-098\MW-3001.wq2
Time of First Log in Specified Window
34603.53 0.534666
Elevation (TOC) = 11.20
DTW = 9.66

Date	Time	Analog#01 5psi..... feet.....	Elevation
10/01/94	21:49	6.8723	1.5761
10/01/94	22:04	6.8759	1.5797
10/01/94	22:19	6.8759	1.5797
10/01/94	22:34	6.8759	1.5797
10/01/94	22:49	6.8759	1.5797
10/01/94	23:04	6.8759	1.5797
10/01/94	23:19	6.8795	1.5833
10/01/94	23:34	6.8795	1.5833
10/01/94	23:49	6.8759	1.5797
10/02/94	00:04	6.8759	1.5797
10/02/94	00:19	6.8795	1.5833
10/02/94	00:34	6.8759	1.5797
10/02/94	00:49	6.8759	1.5797
10/02/94	01:04	6.8759	1.5797
10/02/94	01:19	6.8759	1.5797
10/02/94	01:34	6.8723	1.5761
10/02/94	01:49	6.8759	1.5797
10/02/94	02:04	6.8759	1.5797
10/02/94	02:19	6.8759	1.5797
10/02/94	02:34	6.8723	1.5761
10/02/94	02:49	6.8723	1.5761
10/02/94	03:04	6.8686	1.5724
10/02/94	03:19	6.8686	1.5724
10/02/94	03:34	6.8723	1.5761
10/02/94	03:49	6.8723	1.5761
10/02/94	04:04	6.8759	1.5797
10/02/94	04:19	6.8723	1.5761
10/02/94	04:34	6.8723	1.5761
10/02/94	04:49	6.8723	1.5761
10/02/94	05:04	6.8723	1.5761
10/02/94	05:19	6.8686	1.5724
10/02/94	05:34	6.8686	1.5724
10/02/94	05:49	6.865	1.5688
10/02/94	06:04	6.8686	1.5724
10/02/94	06:19	6.8686	1.5724
10/02/94	06:34	6.865	1.5688
10/02/94	06:49	6.8686	1.5724
10/02/94	07:04	6.8686	1.5724
10/02/94	07:19	6.8686	1.5724
10/02/94	07:34	6.8686	1.5724
10/02/94	07:49	6.8686	1.5724
10/02/94	08:04	6.8723	1.5761
10/02/94	08:19	6.8686	1.5724

Date Tuesday November 8, 1994 2:55 PM
PlotFile E:\QPRO4\CHRIS\MW7A01.PRN
DataFile E:\QPRO4\CHRIS\MW-7A
qpro4file E:\0\10-098\MW7A01.wq2
Time of First Log in Specified Window
34603.6 0.597579
Elevation (TOC) = 11.05
DTW = 9.99

Date	Time	Analog#01 5psi..... feet.....	Elevation
10/01/94	23:20	9.6406	2.6481
10/01/94	23:35	9.684	2.6915
10/01/94	23:50	9.767	2.7745
10/02/94	00:05	9.7958	2.8033
10/02/94	00:20	9.7958	2.8033
10/02/94	00:35	9.7886	2.7961
10/02/94	00:50	9.7706	2.7781
10/02/94	01:05	9.7417	2.7492
10/02/94	01:20	9.7128	2.7203
10/02/94	01:35	9.6767	2.6842
10/02/94	01:50	9.6406	2.6481
10/02/94	02:05	9.6045	2.612
10/02/94	02:20	9.5648	2.5723
10/02/94	02:35	9.5215	2.529
10/02/94	02:50	9.4782	2.4857
10/02/94	03:05	9.4385	2.446
10/02/94	03:20	9.3952	2.4027
10/02/94	03:35	9.3519	2.3594
10/02/94	03:50	9.3014	2.3089
10/02/94	04:05	9.258	2.2655
10/02/94	04:20	9.2147	2.2222
10/02/94	04:35	9.1714	2.1789
10/02/94	04:50	9.1281	2.1356
10/02/94	05:05	9.0848	2.0923
10/02/94	05:20	9.0451	2.0526
10/02/94	05:35	9.0018	2.0093
10/02/94	05:50	8.9657	1.9732
10/02/94	06:05	8.926	1.9335
10/02/94	06:20	8.8899	1.8974
10/02/94	06:35	8.861	1.8685
10/02/94	06:50	8.8321	1.8396
10/02/94	07:05	8.8105	1.818
10/02/94	07:20	8.7924	1.7999
10/02/94	07:35	8.7744	1.7819
10/02/94	07:50	8.7672	1.7747
10/02/94	08:05	8.7672	1.7747
10/02/94	08:20	8.7744	1.7819
10/02/94	08:35	8.7888	1.7963
10/02/94	08:50	8.8069	1.8144
10/02/94	09:05	8.8321	1.8396
10/02/94	09:20	8.8682	1.8757
10/02/94	09:35	8.9007	1.9082
10/02/94	09:50	8.9368	1.9443

E:/0/10-098/tidal

TIDAL DATA

Date Tuesday November 8, 1994 5:40 PM
PlotFile B:\MW1901.PRN
DataFile B:\MW19.PRN
PlotFile e:\10-098\0MW1901.wq2
Time of First Log in Specified Window
34603.58 0.582911

Elevation (TOC) = 8.87
DTW = 6.87

Date	Time	Analog#01 5psi..... feet.....	Elevation
10/02/94	09:44	8.8321	1.9927
10/02/94	09:59	8.8285	1.9891
10/02/94	10:14	8.8285	1.9891
10/02/94	10:29	8.8285	1.9891
10/02/94	10:44	8.8285	1.9891
10/02/94	10:59	8.8321	1.9927
10/02/94	11:14	8.8321	1.9927
10/02/94	11:29	8.8321	1.9927
10/02/94	11:44	8.8321	1.9927
10/02/94	11:59	8.8321	1.9927
10/02/94	12:14	8.8321	1.9927
10/02/94	12:29	8.8358	1.9964
10/02/94	12:44	8.8358	1.9964
10/02/94	12:59	8.8394	2
10/02/94	13:14	8.8394	2
10/02/94	13:29	8.8394	2
10/02/94	13:44	8.843	2.0036
10/02/94	13:59	8.843	2.0036
10/02/94	14:14	8.843	2.0036
10/02/94	14:29	8.8394	2
10/02/94	14:44	8.8394	2
10/02/94	14:59	8.843	2.0036
10/02/94	15:14	8.8466	2.0072
10/02/94	15:29	8.843	2.0036
10/02/94	15:44	8.8394	2
10/02/94	15:59	8.843	2.0036
10/02/94	16:14	8.843	2.0036
10/02/94	16:29	8.8394	2
10/02/94	16:44	8.843	2.0036
10/02/94	16:59	8.843	2.0036
10/02/94	17:14	8.843	2.0036
10/02/94	17:29	8.8466	2.0072
10/02/94	17:44	8.843	2.0036
10/02/94	17:59	8.843	2.0036
10/02/94	18:14	8.843	2.0036
10/02/94	18:29	8.8394	2
10/02/94	18:44	8.8394	2
10/02/94	18:59	8.843	2.0036
10/02/94	19:14	8.843	2.0036
10/02/94	19:29	8.8394	2
10/02/94	19:44	8.8394	2
10/02/94	19:59	8.8394	2
10/02/94	20:14	8.8394	2

Date Tuesday November 8, 1994 2:36 PM s
PlotFile E:\QPRO4\CHRIS\MW-3001.PRN
DataFile E:\QPRO4\CHRIS\MW-30
Qprofile E:\0\10-098\MW-3001.wq2
Time of First Log in Specified Window
34603.53 0.534666
Elevation (TOC) = 11.20
DTW = 9.66

Date	Time	Analog#01 5psi..... feet.....	Elevation
10/02/94	08:34	6.8723	1.5761
10/02/94	08:49	6.8686	1.5724
10/02/94	09:04	6.8686	1.5724
10/02/94	09:19	6.8759	1.5797
10/02/94	09:34	6.8759	1.5797
10/02/94	09:49	6.8759	1.5797
10/02/94	10:04	6.8759	1.5797
10/02/94	10:19	6.8795	1.5833
10/02/94	10:34	6.8759	1.5797
10/02/94	10:49	6.8867	1.5905
10/02/94	11:04	6.8867	1.5905
10/02/94	11:19	6.8867	1.5905
10/02/94	11:34	6.8867	1.5905
10/02/94	11:49	6.8867	1.5905
10/02/94	12:04	6.8867	1.5905
10/02/94	12:19	6.8903	1.5941
10/02/94	12:34	6.8939	1.5977
10/02/94	12:49	6.8903	1.5941
10/02/94	13:04	6.8939	1.5977
10/02/94	13:19	6.8939	1.5977
10/02/94	13:34	6.8939	1.5977
10/02/94	13:49	6.8975	1.6013
10/02/94	14:04	6.8975	1.6013
10/02/94	14:19	6.8975	1.6013
10/02/94	14:34	6.8975	1.6013
10/02/94	14:49	6.8975	1.6013
10/02/94	15:04	6.9011	1.6049
10/02/94	15:19	6.9047	1.6085
10/02/94	15:34	6.8975	1.6013
10/02/94	15:49	6.9047	1.6085
10/02/94	16:04	6.9011	1.6049
10/02/94	16:19	6.9047	1.6085
10/02/94	16:34	6.9047	1.6085
10/02/94	16:49	6.9083	1.6121
10/02/94	17:04	6.9083	1.6121
10/02/94	17:19	6.912	1.6158
10/02/94	17:34	6.9192	1.623
10/02/94	17:49	6.9228	1.6266
10/02/94	18:04	6.9264	1.6302
10/02/94	18:19	6.9408	1.6446
10/02/94	18:34	6.9986	1.6524
10/02/94	18:49	7.0599	1.6527
10/02/94	19:04	7.0635	1.6563

Date Tuesday November 8, 1994 2:55 PM
PlotFile E:\QPRO4\CHRIS\MW7A01.PRN
DataFile E:\QPRO4\CHRIS\MW-7A
qpro4file E:\0\10-098\MW7A01.wq2
Time of First Log in Specified Window
34603.6 0.597579
Elevation (TOC) = 11.05
DTW = 9.99

Date	Time	Analog#01 5psi..... feet.....	Elevation
10/02/94	10:05	8.9729	1.9804
10/02/94	10:20	9.009	2.0165
10/02/94	10:35	9.0523	2.0598
10/02/94	10:50	9.0956	2.1031
10/02/94	11:05	9.1425	2.15
10/02/94	11:20	9.1967	2.2042
10/02/94	11:35	9.2472	2.2547
10/02/94	11:50	9.3014	2.3089
10/02/94	12:05	9.3519	2.3594
10/02/94	12:20	9.4024	2.4099
10/02/94	12:35	9.453	2.4605
10/02/94	12:50	9.4927	2.5002
10/02/94	13:05	9.5324	2.5399
10/02/94	13:20	9.5648	2.5723
10/02/94	13:35	9.5865	2.594
10/02/94	13:50	9.5973	2.6048
10/02/94	14:05	9.6009	2.6084
10/02/94	14:20	9.5901	2.5976
10/02/94	14:35	9.5721	2.5796
10/02/94	14:50	9.5432	2.5507
10/02/94	15:05	9.5107	2.5182
10/02/94	15:20	9.4782	2.4857
10/02/94	15:35	9.4457	2.4532
10/02/94	15:50	9.4096	2.4171
10/02/94	16:05	9.3772	2.3847
10/02/94	16:20	9.3447	2.3522
10/02/94	16:35	9.3086	2.3161
10/02/94	16:50	9.2689	2.2764
10/02/94	17:05	9.2328	2.2403
10/02/94	17:20	9.1967	2.2042
10/02/94	17:35	9.1606	2.1681
10/02/94	17:50	9.1245	2.132
10/02/94	18:05	9.092	2.0995
10/02/94	18:20	9.0631	2.0706
10/02/94	18:35	9.0343	2.0418
10/02/94	18:50	9.009	2.0165
10/02/94	19:05	8.991	1.9985
10/02/94	19:20	8.9729	1.9804
10/02/94	19:35	8.9657	1.9732
10/02/94	19:50	8.9657	1.9732
10/02/94	20:05	8.9729	1.9804
10/02/94	20:20	8.9873	1.9948
10/02/94	20:35	9.009	2.0165

E:/0/10-098/tidal

TIDAL DATA

Date Tuesday November 8, 1994 5:40 PM
PlotFile B:\MW1901.PRN
DataFile B:\MW19.PRN
PlotFile e:\10-098\0\MW1901.wq2
Time of First Log in Specified Window
34603.58 0.582911

Elevation (TOC) = 8.87
DTW = 6.87

Date	Time	Analog#01 5psi..... feet.....	Elevation
10/02/94	20:29	8.8358	1.9964
10/02/94	20:44	8.8321	1.9927
10/02/94	20:59	8.8358	1.9964
10/02/94	21:14	8.8358	1.9964
10/02/94	21:29	8.8394	2
10/02/94	21:44	8.8394	2
10/02/94	21:59	8.8358	1.9964
10/02/94	22:14	8.8394	2
10/02/94	22:29	8.8394	2
10/02/94	22:44	8.8394	2
10/02/94	22:59	8.8394	2
10/02/94	23:14	8.8394	2
10/02/94	23:29	8.8358	1.9964
10/02/94	23:44	8.8321	1.9927
10/02/94	23:59	8.8358	1.9964
10/03/94	00:14	8.8358	1.9964
10/03/94	00:29	8.8358	1.9964
10/03/94	00:44	8.8358	1.9964
10/03/94	00:59	8.8394	2
10/03/94	01:14	8.8394	2
10/03/94	01:29	8.843	2.0036
10/03/94	01:44	8.8466	2.0072
10/03/94	01:59	8.8394	2
10/03/94	02:14	8.8394	2
10/03/94	02:29	8.8394	2
10/03/94	02:44	8.8358	1.9964
10/03/94	02:59	8.8394	2
10/03/94	03:14	8.843	2.0036
10/03/94	03:29	8.843	2.0036
10/03/94	03:44	8.8466	2.0072
10/03/94	03:59	8.843	2.0036
10/03/94	04:14	8.843	2.0036
10/03/94	04:29	8.843	2.0036
10/03/94	04:44	8.8358	1.9964
10/03/94	04:59	8.8321	1.9927
10/03/94	05:14	8.8394	2
10/03/94	05:29	8.8466	2.0072
10/03/94	05:44	8.8502	2.0108
10/03/94	05:59	8.8502	2.0108
10/03/94	06:14	8.8502	2.0108
10/03/94	06:29	8.8466	2.0072
10/03/94	06:44	8.8502	2.0108
10/03/94	06:59	8.8466	2.0072

Date Tuesday November 8, 1994 2:36 PM s
PlotFile E:\QPRO4\CHRIS\MW-3001.PRN
DataFile E:\QPRO4\CHRIS\MW-30
Qprofile E:\0\10-098\MW-3001.wq2
Time of First Log in Specified Window
34603.53 0.534666
Elevation (TOC) = 11.20
DTW = 9.66

Date	Time	Analog#01 5psi..... feet.....	Elevation
10/02/94	19:19	7.0672	1.66
10/02/94	19:34	7.0708	1.6636
10/02/94	19:49	7.0744	1.6672
10/02/94	20:04	7.0744	1.6672
10/02/94	20:19	7.078	1.6708
10/02/94	20:34	7.0744	1.6672
10/02/94	20:49	7.0744	1.6672
10/02/94	21:04	7.078	1.6708
10/02/94	21:19	7.0744	1.6672
10/02/94	21:34	7.078	1.6708
10/02/94	21:49	7.0816	1.6744
10/02/94	22:04	7.0852	1.678
10/02/94	22:19	7.0852	1.678
10/02/94	22:34	7.0924	1.6852
10/02/94	22:49	7.0924	1.6852
10/02/94	23:04	7.0996	1.6924
10/02/94	23:19	7.1033	1.6961
10/02/94	23:34	7.3956	1.6994
10/02/94	23:49	7.4173	1.6991
10/03/94	00:04	7.4389	1.6427
10/03/94	00:19	7.4534	1.6572
10/03/94	00:34	7.4931	1.6969
10/03/94	00:49	7.5328	1.6866
10/03/94	01:04	7.5977	1.6765
10/03/94	01:19	7.605	1.6588
10/03/94	01:34	7.6952	1.649
10/03/94	01:49	7.7638	1.6676
10/03/94	02:04	7.7602	1.664
10/03/94	02:19	7.7565	1.6603
10/03/94	02:34	7.7565	1.6603
10/03/94	02:49	7.7529	1.6567
10/03/94	03:04	7.7602	1.664
10/03/94	03:19	7.7602	1.664
10/03/94	03:34	7.7565	1.6603
10/03/94	03:49	7.7565	1.6603
10/03/94	04:04	7.7529	1.6567
10/03/94	04:19	7.7529	1.6567
10/03/94	04:34	7.7493	1.6531
10/03/94	04:49	7.7457	1.6495
10/03/94	05:04	7.7421	1.6459
10/03/94	05:19	7.7493	1.6531
10/03/94	05:34	7.7565	1.6603
10/03/94	05:49	7.7565	1.6603

Date Tuesday November 8, 1994 2:55 PM
PlotFile E:\QPRO4\CHRIS\MW7A01.PRN
DataFile E:\QPRO4\CHRIS\MW-7A
qpro4file E:\0\10-098\MW7A01.wq2
Time of First Log in Specified Window
34603.6 0.597579
Elevation (TOC) = 11.05
DTW = 9.99

Date	Time	Analog#01 5psi..... feet.....	Elevation
10/02/94	20:50	9.0343	2.0418
10/02/94	21:05	9.0668	2.0743
10/02/94	21:20	9.0992	2.1067
10/02/94	21:35	9.1353	2.1428
10/02/94	21:50	9.1714	2.1789
10/02/94	22:05	9.2147	2.2222
10/02/94	22:20	9.258	2.2655
10/02/94	22:35	9.3086	2.3161
10/02/94	22:50	9.3591	2.3666
10/02/94	23:05	9.4133	2.4208
10/02/94	23:20	9.4674	2.4749
10/02/94	23:35	9.5215	2.529
10/02/94	23:50	9.5757	2.5832
10/03/94	00:05	9.6334	2.6409
10/03/94	00:20	9.684	2.6915
10/03/94	00:35	9.7309	2.7384
10/03/94	00:50	9.7634	2.7709
10/03/94	01:05	9.7922	2.7997
10/03/94	01:20	9.8067	2.8142
10/03/94	01:35	9.8103	2.8178
10/03/94	01:50	9.8031	2.8106
10/03/94	02:05	9.785	2.7925
10/03/94	02:20	9.7561	2.7636
10/03/94	02:35	9.7273	2.7348
10/03/94	02:50	9.6876	2.6951
10/03/94	03:05	9.6479	2.6554
10/03/94	03:20	9.6082	2.6157
10/03/94	03:35	9.5685	2.576
10/03/94	03:50	9.5215	2.529
10/03/94	04:05	9.4818	2.4893
10/03/94	04:20	9.4385	2.446
10/03/94	04:35	9.3952	2.4027
10/03/94	04:50	9.3519	2.3594
10/03/94	05:05	9.3014	2.3089
10/03/94	05:20	9.2617	2.2692
10/03/94	05:35	9.2147	2.2222
10/03/94	05:50	9.175	2.1825
10/03/94	06:05	9.1353	2.1428
10/03/94	06:20	9.0956	2.1031
10/03/94	06:35	9.0595	2.067
10/03/94	06:50	9.0234	2.0309
10/03/94	07:05	8.9873	1.9948
10/03/94	07:20	8.9585	1.966

TIDAL DATA

Date Tuesday November 8, 1994 5:40 PM
PlotFile B:\MW1901.PRN
DataFile B:\MW19.PRN
PlotFile e:\10-098\0\MW1901.wq2
Time of First Log in Specified Window
34603.58 0.582911

Elevation (TOC) = 8.87
DTW = 6.87

Date	Time	Analog#01 5psi..... feet.....	Elevation
10/03/94	07:14	8.843	2.0036
10/03/94	07:29	8.843	2.0036
10/03/94	07:44	8.8466	2.0072
10/03/94	07:59	8.8394	2
10/03/94	08:14	8.8466	2.0072
10/03/94	08:29	8.843	2.0036
10/03/94	08:44	8.8466	2.0072
10/03/94	08:59	8.8502	2.0108
10/03/94	09:14	8.8502	2.0108
10/03/94	09:29	8.8466	2.0072
10/03/94	09:44	8.8502	2.0108
10/03/94	09:59	8.8466	2.0072
10/03/94	10:14	8.8502	2.0108
10/03/94	10:29	8.8502	2.0108
10/03/94	10:44	8.8538	2.0144
10/03/94	10:59	8.8502	2.0108
10/03/94	11:04	8.8682	2.0288
10/03/94	11:19	8.8502	2.0108
10/03/94	11:34	8.8502	2.0108
10/03/94	11:49	8.8538	2.0144
10/03/94	12:04	8.8574	2.018
10/03/94	12:19	8.8538	2.0144
10/03/94	12:34	8.8538	2.0144
10/03/94	12:49	8.8538	2.0144
10/03/94	13:04	8.8538	2.0144
10/03/94	13:19	8.861	2.0216
10/03/94	13:34	8.8574	2.018
10/03/94	13:49	8.8574	2.018
10/03/94	14:04	8.861	2.0216
10/03/94	14:19	8.861	2.0216
10/03/94	14:34	8.8646	2.0252
10/03/94	14:49	8.8538	2.0144
10/03/94	15:04	8.861	2.0216
10/03/94	15:19	8.861	2.0216
10/03/94	15:34	8.8646	2.0252
10/03/94	15:49	8.861	2.0216
10/03/94	16:04	8.8646	2.0252
10/03/94	16:19	8.8646	2.0252
10/03/94	16:34	8.8646	2.0252
10/03/94	16:49	8.8646	2.0252
10/03/94	17:04	8.8646	2.0252
10/03/94	17:19	8.8646	2.0252
10/03/94	17:34	8.8574	2.018

Date Tuesday November 8, 1994 2:36 PM s
PlotFile E:\QPRO4\CHRIS\MW-3001.PRN
DataFile E:\QPRO4\CHRIS\MW-30
Qprofile E:\0\10-098\MW-3001.wq2
Time of First Log in Specified Window
34603.53 0.534666
Elevation (TOC) = 11.20
DTW = 9.66

Date	Time	Analog#01 5psi..... feet.....	Elevation
10/03/94	06:04	7.7493	1.6531
10/03/94	06:19	7.7529	1.6567
10/03/94	06:34	7.7529	1.6567
10/03/94	06:49	7.7457	1.6495
10/03/94	07:04	7.7457	1.6495
10/03/94	07:19	7.7421	1.6459
10/03/94	07:34	7.7457	1.6495
10/03/94	07:49	7.7457	1.6495
10/03/94	08:04	7.7493	1.6531
10/03/94	08:19	7.7493	1.6531
10/03/94	08:34	7.7457	1.6495
10/03/94	08:49	7.7529	1.6567
10/03/94	09:04	7.7493	1.6531
10/03/94	09:19	7.7529	1.6567
10/03/94	09:34	7.7493	1.6531
10/03/94	09:49	7.7493	1.6531
10/03/94	10:04	7.7493	1.6531
10/03/94	10:19	7.7529	1.6567
10/03/94	10:34	7.7565	1.6603
10/03/94	10:49	7.7529	1.6567
10/03/94	11:04	7.7565	1.6603
10/03/94	11:19	7.7565	1.6603
10/03/94	11:34	7.7565	1.6603
10/03/94	11:49	7.7638	1.6676
10/03/94	12:04	7.7638	1.6676
10/03/94	12:19	7.7638	1.6676
10/03/94	12:34	7.7638	1.6676
10/03/94	12:49	7.7674	1.6712
10/03/94	13:04	7.7638	1.6676
10/03/94	13:19	7.7638	1.6676
10/03/94	13:34	7.7638	1.6676
10/03/94	13:49	7.7674	1.6712
10/03/94	14:04	7.7674	1.6712
10/03/94	14:19	7.7674	1.6712
10/03/94	14:34	7.7674	1.6712
10/03/94	14:49	7.771	1.6748
10/03/94	15:04	7.7674	1.6712
10/03/94	15:19	7.7674	1.6712
10/03/94	15:34	7.7674	1.6712
10/03/94	15:49	7.7638	1.6676
10/03/94	16:04	7.7638	1.6676
10/03/94	16:19	7.7638	1.6676
10/03/94	16:34	7.7602	1.664

Date Tuesday November 8, 1994 2:55 PM
PlotFile E:\QPRO4\CHRIS\MW7A01.PRN
DataFile E:\QPRO4\CHRIS\MW-7A
qpro4file E:\0\10-098\MW7A01.wq2
Time of First Log in Specified Window
34603.6 0.597579
Elevation (TOC) = 11.05
DTW = 9.99

Date	Time	Analog#01 5psi..... feet.....	Elevation
10/03/94	07:35	8.9368	1.9443
10/03/94	07:50	8.9224	1.9299
10/03/94	08:05	8.9079	1.9154
10/03/94	08:20	8.9043	1.9118
10/03/94	08:35	8.9079	1.9154
10/03/94	08:50	8.926	1.9335
10/03/94	09:05	8.9549	1.9624
10/03/94	09:20	8.9837	1.9912
10/03/94	09:35	9.0198	2.0273
10/03/94	09:50	9.0523	2.0598
10/03/94	10:05	9.0956	2.1031
10/03/94	10:20	9.1389	2.1464
10/03/94	10:35	9.1823	2.1898
10/03/94	10:50	9.2364	2.2439
10/03/94	11:05	9.2941	2.3016
10/03/94	11:20	9.3555	2.363
10/03/94	11:35	9.4169	2.4244
10/03/94	11:50	9.4818	2.4893
10/03/94	12:05	9.5504	2.5579
10/03/94	12:20	9.6226	2.6301
10/03/94	12:35	9.6948	2.7023
10/03/94	12:50	9.7598	2.7673
10/03/94	13:05	9.8211	2.8286
10/03/94	13:20	9.868	2.8755
10/03/94	13:35	9.9041	2.9116
10/03/94	13:50	9.9258	2.9333
10/03/94	14:05	9.9402	2.9477
10/03/94	14:20	9.9438	2.9513
10/03/94	14:35	9.9294	2.9369
10/03/94	14:50	9.915	2.9225
10/03/94	15:05	9.8933	2.9008
10/03/94	15:20	9.8572	2.8647
10/03/94	15:35	9.8175	2.825
10/03/94	15:50	9.7814	2.7889
10/03/94	16:05	9.7381	2.7456
10/03/94	16:20	9.7056	2.7131
10/03/94	16:35	9.6551	2.6626
10/03/94	16:50	9.6045	2.612
10/03/94	17:05	9.5612	2.5687
10/03/94	17:20	9.5179	2.5254
10/03/94	17:35	9.4746	2.4821
10/03/94	17:50	9.4349	2.4424
10/03/94	18:05	9.388	2.3955

TIDAL DATA

Date Tuesday November 8, 1994 5:40 PM
PlotFile B:\MW1901.PRN
DataFile B:\MW19.PRN
PlotFile e:\10-098\0\MW1901.wq2
Time of First Log in Specified Window
34603.58 0.582911

Elevation (TOC) = 8.87
DTW = 6.87

Date	Time	Analog#01 5psi..... feet.....	Elevation
10/03/94	17:49	8.8574	2.018
10/03/94	18:04	8.861	2.0216
10/03/94	18:19	8.861	2.0216
10/03/94	18:34	8.861	2.0216
10/03/94	18:49	8.8574	2.018
10/03/94	19:04	8.861	2.0216
10/03/94	19:19	8.8574	2.018
10/03/94	19:34	8.8538	2.0144
10/03/94	19:49	8.8574	2.018
10/03/94	20:04	8.8574	2.018
10/03/94	20:19	8.8574	2.018
10/03/94	20:34	8.8574	2.018
10/03/94	20:49	8.861	2.0216
10/03/94	21:04	8.8574	2.018
10/03/94	21:19	8.861	2.0216
10/03/94	21:34	8.8574	2.018
10/03/94	21:49	8.8574	2.018
10/03/94	22:04	8.861	2.0216
10/03/94	22:19	8.8574	2.018
10/03/94	22:34	8.861	2.0216
10/03/94	22:49	8.861	2.0216
10/03/94	23:04	8.8574	2.018
10/03/94	23:19	8.861	2.0216
10/03/94	23:34	8.861	2.0216
10/03/94	23:49	8.861	2.0216
10/04/94	00:04	8.8574	2.018
10/04/94	00:19	8.8574	2.018
10/04/94	00:34	8.8574	2.018
10/04/94	00:49	8.8538	2.0144
10/04/94	01:04	8.8574	2.018
10/04/94	01:19	8.861	2.0216
10/04/94	01:34	8.8574	2.018
10/04/94	01:49	8.8538	2.0144
10/04/94	02:04	8.8538	2.0144
10/04/94	02:19	8.8574	2.018
10/04/94	02:34	8.8574	2.018
10/04/94	02:49	8.861	2.0216
10/04/94	03:04	8.8646	2.0252
10/04/94	03:19	8.8646	2.0252
10/04/94	03:34	8.861	2.0216
10/04/94	03:49	8.861	2.0216
10/04/94	04:04	8.861	2.0216
10/04/94	04:19	8.861	2.0216

Date Tuesday November 8, 1994 2:36 PM s
PlotFile E:\QPRO4\CHRIS\MW-3001.PRN
DataFile E:\QPRO4\CHRIS\MW-30
Qprofile E:\0\10-098\MW-3001.wq2
Time of First Log in Specified Window
34603.53 0.534666
Elevation (TOC) = 11.20
DTW = 9.66

Date	Time	Analog#01 5psi..... feet.....	Elevation
10/03/94	16:49	7.7565	1.6603
10/03/94	17:04	7.7565	1.6603
10/03/94	17:19	7.7565	1.6603
10/03/94	17:34	7.7565	1.6603
10/03/94	17:49	7.7529	1.6567
10/03/94	18:04	7.7529	1.6567
10/03/94	18:19	7.7565	1.6603
10/03/94	18:34	7.7529	1.6567
10/03/94	18:49	7.7493	1.6531
10/03/94	19:04	7.7493	1.6531
10/03/94	19:19	7.7493	1.6531
10/03/94	19:34	7.7457	1.6495
10/03/94	19:49	7.7493	1.6531
10/03/94	20:04	7.7493	1.6531
10/03/94	20:19	7.7493	1.6531
10/03/94	20:34	7.7529	1.6567
10/03/94	20:49	7.7529	1.6567
10/03/94	21:04	7.7529	1.6567
10/03/94	21:19	7.7529	1.6567
10/03/94	21:34	7.7565	1.6603
10/03/94	21:49	7.7529	1.6567
10/03/94	22:04	7.7565	1.6603
10/03/94	22:19	7.7565	1.6603
10/03/94	22:34	7.7565	1.6603
10/03/94	22:49	7.7602	1.664
10/03/94	23:04	7.7565	1.6603
10/03/94	23:19	7.7565	1.6603
10/03/94	23:34	7.7602	1.664
10/03/94	23:49	7.7602	1.664
10/04/94	00:04	7.7565	1.6603
10/04/94	00:19	7.7602	1.664
10/04/94	00:34	7.7602	1.664
10/04/94	00:49	7.7565	1.6603
10/04/94	01:04	7.7602	1.664
10/04/94	01:19	7.7638	1.6676
10/04/94	01:34	7.7565	1.6603
10/04/94	01:49	7.7602	1.664
10/04/94	02:04	7.7602	1.664
10/04/94	02:19	7.7602	1.664
10/04/94	02:34	7.7602	1.664
10/04/94	02:49	7.7638	1.6676
10/04/94	03:04	7.7674	1.6712
10/04/94	03:19	7.7674	1.6712

Date Tuesday November 8, 1994 2:55 PM
PlotFile E:\QPRO4\CHRIS\MW7A01.PRN
DataFile E:\QPRO4\CHRIS\MW-7A
qpro4file E:\0\10-098\MW7A01.wq2
Time of First Log in Specified Window
34603.6 0.597579
Elevation (TOC) = 11.05
DTW = 9.99

Date	Time	Analog#01 5psi..... feet.....	Elevation
10/03/94	18:20	9.3447	2.3522
10/03/94	18:35	9.3086	2.3161
10/03/94	18:50	9.2689	2.2764
10/03/94	19:05	9.2292	2.2367
10/03/94	19:20	9.1967	2.2042
10/03/94	19:35	9.1642	2.1717
10/03/94	19:50	9.092	2.0995
10/03/94	20:05	9.0704	2.0779
10/03/94	20:20	9.0631	2.0706
10/03/94	20:35	9.0631	2.0706
10/03/94	20:50	9.074	2.0815
10/03/94	21:05	9.092	2.0995
10/03/94	21:20	9.1173	2.1248
10/03/94	21:35	9.1498	2.1573
10/03/94	21:50	9.1859	2.1934
10/03/94	22:05	9.2256	2.2331
10/03/94	22:20	9.2653	2.2728
10/03/94	22:35	9.3086	2.3161
10/03/94	22:50	9.3555	2.363
10/03/94	23:05	9.4096	2.4171
10/03/94	23:20	9.4674	2.4749
10/03/94	23:35	9.5288	2.5363
10/03/94	23:50	9.5937	2.6012
10/04/94	00:05	9.6623	2.6698
10/04/94	00:20	9.7381	2.7456
10/04/94	00:35	9.8067	2.8142
10/04/94	00:50	9.868	2.8755
10/04/94	01:05	9.9258	2.9333
10/04/94	01:20	9.9655	2.973
10/04/94	01:35	9.998	3.0055
10/04/94	01:50	10.02	3.0275
10/04/94	02:05	10.034	3.0415
10/04/94	02:20	10.038	3.0455
10/04/94	02:35	10.034	3.0415
10/04/94	02:50	10.02	3.0275
10/04/94	03:05	9.9944	3.0019
10/04/94	03:20	9.9619	2.9694
10/04/94	03:35	9.9222	2.9297
10/04/94	03:50	9.8753	2.8828
10/04/94	04:05	9.8247	2.8322
10/04/94	04:20	9.7778	2.7853
10/04/94	04:35	9.7345	2.742
10/04/94	04:50	9.6912	2.6987

E:/0/10-098/tidal

TIDAL DATA

Date Tuesday November 8, 1994 5:40 PM
PlotFile B:\MW1901.PRN
DataFile B:\MW19.PRN
PlotFile e:\10-098\0\MW1901.wq2
Time of First Log in Specified Window
34603.58 0.582911

Elevation (TOC) = 8.87
DTW = 6.87

Date	Time	Analog#01 5psi..... feet.....	Elevation
10/04/94	04:34	8.8646	2.0252
10/04/94	04:49	8.861	2.0216
10/04/94	05:04	8.861	2.0216
10/04/94	05:19	8.861	2.0216
10/04/94	05:34	8.8574	2.018
10/04/94	05:49	8.861	2.0216
10/04/94	06:04	8.861	2.0216
10/04/94	06:19	8.8574	2.018
10/04/94	06:34	8.8574	2.018
10/04/94	06:49	8.8574	2.018
10/04/94	07:04	8.861	2.0216
10/04/94	07:19	8.861	2.0216
10/04/94	07:34	8.861	2.0216
10/04/94	07:49	8.8646	2.0252
10/04/94	08:04	8.861	2.0216
10/04/94	08:19	8.861	2.0216
10/04/94	08:34	8.8574	2.018
10/04/94	08:49	8.8574	2.018
10/04/94	09:04	8.8538	2.0144
10/04/94	09:19	8.8574	2.018
10/04/94	09:34	8.8574	2.018
10/04/94	09:49	8.8574	2.018
10/04/94	10:04	8.8574	2.018
10/04/94	10:19	8.8646	2.0252
10/04/94	10:34	8.8682	2.0288
10/04/94	10:49	8.8574	2.018
10/04/94	11:04	8.8574	2.018
10/04/94	11:19	8.8574	2.018
10/04/94	11:34	8.8574	2.018
10/04/94	11:49	8.8574	2.018
10/04/94	12:04	8.861	2.0216
10/04/94	12:19	8.8646	2.0252
10/04/94	12:34	8.8646	2.0252
10/04/94	12:49	8.8646	2.0252
10/04/94	13:04	8.8682	2.0288
10/04/94	13:19	8.8718	2.0324
10/04/94	13:34	8.8718	2.0324
10/04/94	13:49	8.8755	2.0361
10/04/94	14:04	8.8682	2.0288
10/04/94	14:19	8.8682	2.0288
10/04/94	14:34	8.8682	2.0288
10/04/94	14:49	8.8863	2.0469
10/04/94	15:04	8.8791	2.0397

Date Tuesday November 8, 1994 2:36 PM s
PlotFile E:\QPRO4\CHRIS\MW-3001.PRN
DataFile E:\QPRO4\CHRIS\MW-30
Qprofile E:\0\10-098\MW-3001.wq2
Time of First Log in Specified Window
34603.53 0.534666
Elevation (TOC) = 11.20
DTW = 9.66

Date	Time	Analog#01 5psi..... feet.....	Elevation
10/04/94	03:34	7.7638	1.6676
10/04/94	03:49	7.7602	1.664
10/04/94	04:04	7.7565	1.6603
10/04/94	04:19	7.7602	1.664
10/04/94	04:34	7.7638	1.6676
10/04/94	04:49	7.7565	1.6603
10/04/94	05:04	7.7565	1.6603
10/04/94	05:19	7.7565	1.6603
10/04/94	05:34	7.7529	1.6567
10/04/94	05:49	7.7529	1.6567
10/04/94	06:04	7.7529	1.6567
10/04/94	06:19	7.7493	1.6531
10/04/94	06:34	7.7493	1.6531
10/04/94	06:49	7.7529	1.6567
10/04/94	07:04	7.7529	1.6567
10/04/94	07:19	7.7565	1.6603
10/04/94	07:34	7.7529	1.6567
10/04/94	07:49	7.7565	1.6603
10/04/94	08:04	7.7529	1.6567
10/04/94	08:19	7.7493	1.6531
10/04/94	08:34	7.7529	1.6567
10/04/94	08:49	7.7493	1.6531
10/04/94	09:04	7.7493	1.6531
10/04/94	09:19	7.7565	1.6603
10/04/94	09:34	7.7529	1.6567
10/04/94	09:49	7.7529	1.6567
10/04/94	10:04	7.7565	1.6603
10/04/94	10:19	7.7602	1.664
10/04/94	10:34	7.7602	1.664
10/04/94	10:49	7.7638	1.6676
10/04/94	11:04	7.7638	1.6676
10/04/94	11:19	7.7565	1.6603
10/04/94	11:34	7.7638	1.6676
10/04/94	11:49	7.7638	1.6676
10/04/94	12:04	7.7638	1.6676
10/04/94	12:19	7.7674	1.6712
10/04/94	12:34	7.7674	1.6712
10/04/94	12:49	7.7674	1.6712
10/04/94	13:04	7.771	1.6748
10/04/94	13:19	7.7746	1.6784
10/04/94	13:34	7.771	1.6748
10/04/94	13:49	7.7782	1.682
10/04/94	14:04	7.771	1.6748

Date Tuesday November 8, 1994 2:55 PM
PlotFile E:\QPRO4\CHRIS\MW7A01.PRN
DataFile E:\QPRO4\CHRIS\MW-7A
qpro4file E:\0\10-098\MW7A01.wq2
Time of First Log in Specified Window
34603.6 0.597579
Elevation (TOC) = 11.05
DTW = 9.99

Date	Time	Analog#01 5psi..... feet.....	Elevation
10/04/94	05:05	9.6443	2.6518
10/04/94	05:20	9.6009	2.6084
10/04/94	05:35	9.5504	2.5579
10/04/94	05:50	9.5468	2.5543
10/04/94	06:05	9.5143	2.5218
10/04/94	06:20	9.4674	2.4749
10/04/94	06:35	9.4205	2.428
10/04/94	06:50	9.3699	2.3774
10/04/94	07:05	9.3266	2.3341
10/04/94	07:20	9.2869	2.2944
10/04/94	07:35	9.2508	2.2583
10/04/94	07:50	9.222	2.2295
10/04/94	08:05	9.1967	2.2042
10/04/94	08:20	9.175	2.1825
10/04/94	08:35	9.1678	2.1753
10/04/94	08:50	9.1642	2.1717
10/04/94	09:05	9.175	2.1825
10/04/94	09:20	9.1967	2.2042
10/04/94	09:35	9.2256	2.2331
10/04/94	09:50	9.2653	2.2728
10/04/94	10:05	9.3086	2.3161
10/04/94	10:20	9.3483	2.3558
10/04/94	10:35	9.3988	2.4063
10/04/94	10:50	9.4566	2.4641
10/04/94	11:05	9.5251	2.5326
10/04/94	11:20	9.5901	2.5976
10/04/94	11:35	9.6587	2.6662
10/04/94	11:50	9.7453	2.7528
10/04/94	12:05	9.8283	2.8358
10/04/94	12:20	9.9077	2.9152
10/04/94	12:35	9.9835	2.991
10/04/94	12:50	10.045	3.0525
10/04/94	13:05	10.095	3.1025
10/04/94	13:20	10.146	3.1535
10/04/94	13:35	10.189	3.1965
10/04/94	13:50	10.222	3.2295
10/04/94	14:05	10.254	3.2615
10/04/94	14:20	10.269	3.2765
10/04/94	14:35	10.276	3.2835
10/04/94	14:50	10.272	3.2795
10/04/94	15:05	10.265	3.2725
10/04/94	15:20	10.243	3.2505
10/04/94	15:35	10.215	3.2225

E:/0/10-098/tidal

TIDAL DATA

Date Tuesday November 8, 1994 5:40 PM
PlotFile B:\MW1901.PRN
DataFile B:\MW19.PRN
PlotFile e:\10-098\0MW1901.wq2
Time of First Log in Specified Window
34603.58 0.582911

Elevation (TOC) = 8.87
DTW = 6.87

Date	Time	Analog#01 5psi..... feet.....	Elevation
10/04/94	15:19	8.8682	2.0288
10/04/94	15:34	8.8718	2.0324
10/04/94	15:49	8.8718	2.0324
10/04/94	16:04	8.8718	2.0324
10/04/94	16:19	8.8755	2.0361
10/04/94	16:34	8.8791	2.0397
10/04/94	16:49	8.8755	2.0361
10/04/94	17:04	8.8755	2.0361
10/04/94	17:19	8.8718	2.0324
10/04/94	17:34	8.8755	2.0361
10/04/94	17:49	8.8682	2.0288
10/04/94	18:04	8.8755	2.0361
10/04/94	18:19	8.8718	2.0324
10/04/94	18:34	8.8718	2.0324
10/04/94	18:49	8.8755	2.0361
10/04/94	19:04	8.8899	2.0505
10/04/94	19:19	8.8791	2.0397
10/04/94	19:34	8.8791	2.0397
10/04/94	19:49	8.8755	2.0361
10/04/94	20:04	8.8827	2.0433
10/04/94	20:19	8.8791	2.0397
10/04/94	20:34	8.8718	2.0324
10/04/94	20:49	8.8682	2.0288
10/04/94	21:04	8.8935	2.0541
10/04/94	21:19	8.8899	2.0505
10/04/94	21:34	8.8899	2.0505
10/04/94	21:49	8.8899	2.0505
10/04/94	22:04	8.8935	2.0541
10/04/94	22:19	8.8899	2.0505
10/04/94	22:34	8.8899	2.0505
10/04/94	22:49	8.8863	2.0469
10/04/94	23:04	8.8899	2.0505
10/04/94	23:19	8.8863	2.0469
10/04/94	23:34	8.8899	2.0505
10/04/94	23:49	8.8827	2.0433
10/05/94	00:04	8.8827	2.0433
10/05/94	00:19	8.8827	2.0433
10/05/94	00:34	8.8899	2.0505
10/05/94	00:49	8.8863	2.0469
10/05/94	01:04	8.8863	2.0469
10/05/94	01:19	8.8863	2.0469
10/05/94	01:34	8.8863	2.0469
10/05/94	01:49	8.8899	2.0505

Date Tuesday November 8, 1994 2:36 PM s
PlotFile E:\QPRO4\CHRIS\MW-3001.PRN
DataFile E:\QPRO4\CHRIS\MW-30
Qprofile E:\0\10-098\MW-3001.wq2
Time of First Log in Specified Window
34603.53 0.534666
Elevation (TOC) = 11.20
DTW = 9.66

Date	Time	Analog#01 5psi..... feet.....	Elevation
10/04/94	14:19	7.7565	1.6603
10/04/94	14:34	7.7096	1.6134
10/04/94	14:49	7.623	1.5268
10/04/94	15:04	7.7096	1.6134
10/04/94	15:19	7.6086	1.5124
10/04/94	15:34	7.5905	1.4943
10/04/94	15:49	7.5761	1.4799
10/04/94	16:04	7.5689	1.4727
10/04/94	16:19	7.5616	1.4654
10/04/94	16:34	7.5616	1.4654
10/04/94	16:49	7.5616	1.4654
10/04/94	17:04	7.5544	1.4582
10/04/94	17:19	7.5544	1.4582
10/04/94	17:34	7.5508	1.4546
10/04/94	17:49	7.54	1.4438
10/04/94	18:04	7.54	1.4438
10/04/94	18:19	7.5364	1.4402
10/04/94	18:34	7.5364	1.4402
10/04/94	18:49	7.5364	1.4402
10/04/94	19:04	7.5364	1.4402
10/04/94	19:19	7.5328	1.4366
10/04/94	19:34	7.5328	1.4366
10/04/94	19:49	7.5255	1.4293
10/04/94	20:04	7.5255	1.4293
10/04/94	20:19	7.5255	1.4293
10/04/94	20:34	7.5147	1.4185
10/04/94	20:49	7.5111	1.4149
10/04/94	21:04	7.5183	1.4221
10/04/94	21:19	7.5219	1.4257
10/04/94	21:34	7.5219	1.4257
10/04/94	21:49	7.5219	1.4257
10/04/94	22:04	7.5219	1.4257
10/04/94	22:19	7.5219	1.4257
10/04/94	22:34	7.5183	1.4221
10/04/94	22:49	7.5147	1.4185
10/04/94	23:04	7.5147	1.4185
10/04/94	23:19	7.5111	1.4149
10/04/94	23:34	7.5111	1.4149
10/04/94	23:49	7.5039	1.4077
10/05/94	00:04	7.5075	1.4113
10/05/94	00:19	7.5075	1.4113
10/05/94	00:34	7.5075	1.4113
10/05/94	00:49	7.5039	1.4077

Date Tuesday November 8, 1994 2:55 PM
PlotFile E:\QPRO4\CHRIS\MW7A01.PRN
DataFile E:\QPRO4\CHRIS\MW-7A
qpro4file E:\0\10-098\MW7A01.wq2
Time of First Log in Specified Window
34603.6 0.597579
Elevation (TOC) = 11.05
DTW = 9.99

Date	Time	Analog#01 5psi..... feet.....	Elevation
10/04/94	15:50	10.175	3.1825
10/04/94	16:05	10.128	3.1355
10/04/94	16:20	10.074	3.0815
10/04/94	16:35	10.016	3.0235
10/04/94	16:50	9.9655	2.973
10/04/94	17:05	9.9077	2.9152
10/04/94	17:20	9.8608	2.8683
10/04/94	17:35	9.8067	2.8142
10/04/94	17:50	9.7598	2.7673
10/04/94	18:05	9.72	2.7275
10/04/94	18:20	9.6659	2.6734
10/04/94	18:35	9.6154	2.6229
10/04/94	18:50	9.5648	2.5723
10/04/94	19:05	9.5179	2.5254
10/04/94	19:20	9.471	2.4785
10/04/94	19:35	9.4277	2.4352
10/04/94	19:50	9.3844	2.3919
10/04/94	20:05	9.3447	2.3522
10/04/94	20:20	9.3122	2.3197
10/04/94	20:35	9.2797	2.2872
10/04/94	20:50	9.2544	2.2619
10/04/94	21:05	9.2364	2.2439
10/04/94	21:20	9.2256	2.2331
10/04/94	21:35	9.222	2.2295
10/04/94	21:50	9.2256	2.2331
10/04/94	22:05	9.24	2.2475
10/04/94	22:20	9.258	2.2655
10/04/94	22:35	9.2941	2.3016
10/04/94	22:50	9.323	2.3305
10/04/94	23:05	9.3699	2.3774
10/04/94	23:20	9.4096	2.4171
10/04/94	23:35	9.453	2.4605
10/04/94	23:50	9.4963	2.5038
10/05/94	00:05	9.5504	2.5579
10/05/94	00:20	9.6082	2.6157
10/05/94	00:35	9.6695	2.677
10/05/94	00:50	9.7345	2.742
10/05/94	01:05	9.8067	2.8142
10/05/94	01:20	9.8789	2.8864
10/05/94	01:35	9.933	2.9405
10/05/94	01:50	9.9908	2.9983
10/05/94	02:05	10.03	3.0375
10/05/94	02:20	10.067	3.0745

E:/0/10-098/tidal

TIDAL DATA

Date Tuesday November 8, 1994 5:40 PM
PlotFile B:\MW1901.PRN
DataFile B:\MW19.PRN
PlotFile e:\10-098\0\MW1901.wq2
Time of First Log in Specified Window
34603.58 0.582911

Elevation (TOC) = 8.87
DTW = 6.87

Date	Time	Analog#01 5psi..... feet.....	Elevation
10/05/94	02:04	8.8863	2.0469
10/05/94	02:19	8.8899	2.0505
10/05/94	02:34	8.8899	2.0505
10/05/94	02:49	8.8935	2.0541
10/05/94	03:04	8.8935	2.0541
10/05/94	03:19	8.8935	2.0541
10/05/94	03:34	8.8935	2.0541
10/05/94	03:49	8.8971	2.0577
10/05/94	04:04	8.8935	2.0541
10/05/94	04:19	8.8899	2.0505
10/05/94	04:34	8.8899	2.0505
10/05/94	04:49	8.8935	2.0541
10/05/94	05:04	8.8935	2.0541
10/05/94	05:19	8.8935	2.0541
10/05/94	05:34	8.8935	2.0541
10/05/94	05:49	8.8935	2.0541
10/05/94	06:04	8.8935	2.0541
10/05/94	06:19	8.8899	2.0505
10/05/94	06:34	8.8899	2.0505
10/05/94	06:49	8.8935	2.0541
10/05/94	07:04	8.8935	2.0541
10/05/94	07:19	8.8935	2.0541
10/05/94	07:34	8.8971	2.0577
10/05/94	07:49	8.8971	2.0577
10/05/94	08:04	8.9007	2.0613
10/05/94	08:19	8.8971	2.0577
10/05/94	08:34	8.8971	2.0577
10/05/94	08:49	8.8971	2.0577
10/05/94	09:04	8.9007	2.0613
10/05/94	09:19	8.8971	2.0577
10/05/94	09:34	8.9079	2.0685
10/05/94	09:49	8.9007	2.0613
10/05/94	10:04	8.9043	2.0649
10/05/94	10:19	8.9079	2.0685
10/05/94	10:34	8.9043	2.0649
10/05/94	10:49	8.8935	2.0541
10/05/94	11:04	8.8971	2.0577
10/05/94	11:19	8.9079	2.0685
10/05/94	11:34	8.9368	2.0974
10/05/94	11:49	8.9115	2.0721
10/05/94	12:04	8.9188	2.0794
10/05/94	12:19	8.9188	2.0794
10/05/94	12:34	8.9188	2.0794

Date Tuesday November 8, 1994 2:36 PM s
PlotFile E:\QPRO4\CHRIS\MW-3001.PRN
DataFile E:\QPRO4\CHRIS\MW-30
Qprofile E:\0\10-098\MW-3001.wq2
Time of First Log in Specified Window
34603.53 0.534666
Elevation (TOC) = 11.20
DTW = 9.66

Date	Time	Analog#01 5psi..... feet.....	Elevation
10/05/94	01:04	7.5039	1.4077
10/05/94	01:19	7.5003	1.4041
10/05/94	01:34	7.5003	1.4041
10/05/94	01:49	7.4967	1.4005
10/05/94	02:04	7.4967	1.4005
10/05/94	02:19	7.4967	1.4005
10/05/94	02:34	7.4967	1.4005
10/05/94	02:49	7.5003	1.4041
10/05/94	03:04	7.5003	1.4041
10/05/94	03:19	7.5003	1.4041
10/05/94	03:34	7.4967	1.4005
10/05/94	03:49	7.5003	1.4041
10/05/94	04:04	7.4967	1.4005
10/05/94	04:19	7.4895	1.3933
10/05/94	04:34	7.4931	1.3969
10/05/94	04:49	7.4895	1.3933
10/05/94	05:04	7.4931	1.3969
10/05/94	05:19	7.4895	1.3933
10/05/94	05:34	7.4895	1.3933
10/05/94	05:49	7.4895	1.3933
10/05/94	06:04	7.4895	1.3933
10/05/94	06:19	7.4822	1.386
10/05/94	06:34	7.4822	1.386
10/05/94	06:49	7.4858	1.3896
10/05/94	07:04	7.4858	1.3896
10/05/94	07:19	7.4822	1.386
10/05/94	07:34	7.4858	1.3896
10/05/94	07:49	7.4895	1.3933
10/05/94	08:04	7.4895	1.3933
10/05/94	08:19	7.4895	1.3933
10/05/94	08:34	7.5075	1.4113
10/05/94	08:49	7.4858	1.3896
10/05/94	09:04	7.4822	1.386
10/05/94	09:19	7.4786	1.3824
10/05/94	09:34	7.4786	1.3824
10/05/94	14:46	7.4967	1.4005

Date Tuesday November 8, 1994 2:55 PM
PlotFile E:\QPRO4\CHRIS\MW7A01.PRN
DataFile E:\QPRO4\CHRIS\MW-7A
qpro4file E:\0\10-098\MW7A01.wq2
Time of First Log in Specified Window
34603.6 0.597579
Elevation (TOC) = 11.05
DTW = 9.99

Date	Time	Analog#01 5psi..... feet.....	Elevation
10/05/94	02:35	10.092	3.0995
10/05/94	02:50	10.106	3.1135
10/05/94	03:05	10.121	3.1285
10/05/94	03:20	10.121	3.1285
10/05/94	03:35	10.103	3.1105
10/05/94	03:50	10.081	3.0885
10/05/94	04:05	10.052	3.0595
10/05/94	04:20	10.009	3.0165
10/05/94	04:35	9.9619	2.9694
10/05/94	04:50	9.9113	2.9188
10/05/94	05:05	9.8608	2.8683
10/05/94	05:20	9.8139	2.8214
10/05/94	05:35	9.7742	2.7817
10/05/94	05:50	9.7309	2.7384
10/05/94	06:05	9.6876	2.6951
10/05/94	06:20	9.637	2.6445
10/05/94	06:35	9.5937	2.6012
10/05/94	06:50	9.5468	2.5543
10/05/94	07:05	9.5035	2.511
10/05/94	07:20	9.4602	2.4677
10/05/94	07:35	9.4169	2.4244
10/05/94	07:50	9.3808	2.3883
10/05/94	08:05	9.3447	2.3522
10/05/94	08:20	9.323	2.3305
10/05/94	08:35	9.2941	2.3016
10/05/94	08:50	9.2941	2.3016
10/05/94	09:05	9.2761	2.2836
10/05/94	09:20	9.2761	2.2836
10/05/94	09:35	9.2833	2.2908
10/05/94	09:50	9.2978	2.3053
10/05/94	10:05	9.3302	2.3377
10/05/94	10:20	9.3663	2.3738
10/05/94	10:35	9.406	2.4135
10/05/94	10:50	9.453	2.4605
10/05/94	11:05	9.4999	2.5074
10/05/94	11:20	9.5504	2.5579
10/05/94	11:35	9.6082	2.6157
10/05/94	11:50	9.6731	2.6806
10/05/94	12:05	9.7525	2.76
10/05/94	12:20	9.8392	2.8467
10/05/94	12:35	9.9222	2.9297
10/05/94	12:50	10.005	3.0125
10/05/94	13:05	10.074	3.0815

TIDAL DATA

Date Tuesday November 8, 1994 5:40 PM
PlotFile B:\MW1901.PRN
DataFile B:\MW19.PRN
PlotFile e:\10-098\0\MW1901.wq2
Time of First Log in Specified Window
34603.58 0.582911

Elevation (TOC) = 8.87
DTW = 6.87

Date	Time	Analog#01 5psi..... feet.....	Elevation
10/05/94	12:49	8.9224	2.083
10/05/94	13:04	8.9224	2.083
10/05/94	13:19	8.926	2.0866
10/05/94	13:34	8.9224	2.083
10/05/94	13:49	8.926	2.0866
10/05/94	14:04	8.926	2.0866
10/05/94	14:19	8.9296	2.0902
10/05/94	14:34	8.9296	2.0902
10/05/94	14:49	8.926	2.0866
10/05/94	15:04	8.9296	2.0902
10/05/94	15:19	8.9332	2.0938
10/05/94	15:34	8.9332	2.0938
10/05/94	15:49	8.9332	2.0938
10/05/94	16:04	8.9404	2.101

Date Tuesday November 8, 1994 2:36 PM s
PlotFile E:\QPRO4\CHRIS\MW-3001.PRN
DataFile E:\QPRO4\CHRIS\MW-30
Qprofile E:\0\10-098\MW-3001.wq2
Time of First Log in Specified Window
34603.53 0.534666
Elevation (TOC) = 11.20
DTW = 9.66

Date	Time	Analog#01 5psi..... feet.....	Elevation

Date Tuesday November 8, 1994 2:55 PM
PlotFile E:\QPRO4\CHRIS\MW7A01.PRN
DataFile E:\QPRO4\CHRIS\MW-7A
qpro4file E:\0\10-098\MW7A01.wq2
Time of First Log in Specified Window
34603.6 0.597579
Elevation (TOC) = 11.05
DTW = 9.99

Date	Time	Analog#01 5psi..... feet.....	Elevation
10/05/94	13:20	10.142	3.1495
10/05/94	13:35	10.193	3.2005
10/05/94	13:50	10.247	3.2545
10/05/94	14:05	10.298	3.3055
10/05/94	14:20	10.341	3.3485
10/05/94	14:35	10.363	3.3705
10/05/94	14:50	10.384	3.3915
10/05/94	15:05	10.384	3.3915
10/05/94	15:20	10.377	3.3845
10/05/94	15:35	10.363	3.3705
10/05/94	15:50	10.341	3.3485
10/05/94	16:05	10.305	3.3125
10/05/94	16:20	10.265	3.2725

TIDAL DATA

Date Tuesday November 8, 1994 3:04 PM
PlotFile E:\0\10-098\TS101.PRN
DataFile E:\QPRO4\CHRIS\TS-1
qproFile E:\0\10-098\TS101.PRN
Time of First Log in Specified Window
34603.4 0.398939
Elevation (TOC) = 11.22
DTW = 9.82

Date	Time	Analog#01 5psi..... feet.....	Elevation
09/26/94	11:51	5.2805	1.4
09/26/94	12:06	5.378	1.4975
09/26/94	12:21	5.526	1.6455
09/26/94	12:36	5.7028	1.8223
09/26/94	12:51	5.8364	1.9559
09/26/94	13:06	5.9663	2.0858
09/26/94	13:21	6.1901	2.3096
09/26/94	13:36	6.3381	2.4576
09/26/94	13:51	6.5113	2.6308
09/26/94	14:06	6.6918	2.8113
09/26/94	14:21	6.8289	2.9484
09/26/94	14:28	6.8614	2.9809
09/26/94	14:29	6.8939	3.0134
09/26/94	14:30	6.912	3.0315
09/26/94	14:45	7.013	3.1325
09/26/94	15:00	7.1574	3.2769
09/26/94	15:15	7.2332	3.3527
09/26/94	15:30	7.3559	3.4754
09/26/94	15:45	7.5472	3.6667
09/26/94	16:00	7.5039	3.6234
09/26/94	16:15	7.623	3.7425
09/26/94	16:30	7.5039	3.6234
09/26/94	16:45	7.4822	3.6017
09/26/94	17:00	7.4714	3.5909
09/26/94	17:15	7.4786	3.5981
09/26/94	17:30	7.3234	3.4429
09/26/94	17:45	7.1574	3.2769
09/26/94	18:00	7.0094	3.1289
09/26/94	18:15	6.8253	2.9448
09/26/94	18:30	6.5618	2.6813
09/26/94	18:45	6.3056	2.4251
09/26/94	19:00	6.0349	2.1544
09/26/94	19:15	5.8833	2.0028
09/26/94	19:30	5.6378	1.7573
09/26/94	19:45	5.3274	1.4469
09/26/94	20:00	4.9304	1.0499
09/26/94	20:15	4.8149	0.9344
09/26/94	20:30	4.5262	0.6457
09/26/94	20:45	4.324	0.4435
09/26/94	21:00	4.0569	0.1764
09/26/94	21:15	3.8945	0.014
09/26/94	21:30	3.613	-0.2675
09/26/94	21:45	3.548	-0.3325

E:/0/10-098/tidal

TIDAL DATA

Date Tuesday November 8, 1994 3:04 PM
PlotFile E:\0\10-098\TS101.PRN
DataFile E:\QPRO4\CHRIS\TS-1
qproFile E:\0\10-098\TS101.PRN
Time of First Log in Specified Window
34603.4 0.398939
Elevation (TOC) = 11.22
DTW = 9.82

Date	Time	Analog#01 5psi..... feet.....	Elevation
09/26/94	22:00	3.3315	-0.549
09/26/94	22:15	3.1438	-0.7367
09/26/94	22:30	3.068	-0.8125
09/26/94	22:45	2.985	-0.8955
09/26/94	23:00	2.9416	-0.9389
09/26/94	23:15	2.8911	-0.9894
09/26/94	23:30	2.8911	-0.9894
09/26/94	23:45	2.7576	-1.1229
09/27/94	00:00	2.7648	-1.1157
09/27/94	00:15	2.7503	-1.1302
09/27/94	00:30	2.8695	-1.011
09/27/94	00:45	2.985	-0.8955
09/27/94	01:00	3.0535	-0.827
09/27/94	01:15	3.2015	-0.679
09/27/94	01:30	3.3639	-0.5166
09/27/94	01:45	3.4686	-0.4119
09/27/94	02:00	3.7213	-0.1592
09/27/94	02:15	3.9306	0.0501
09/27/94	02:30	4.0569	0.1764
09/27/94	02:45	4.2771	0.3966
09/27/94	03:00	4.4504	0.5699
09/27/94	03:15	4.6778	0.7973
09/27/94	03:30	4.8005	0.92
09/27/94	03:45	5.1109	1.2304
09/27/94	04:00	5.3166	1.4361
09/27/94	04:15	5.4068	1.5263
09/27/94	04:30	5.6631	1.7826
09/27/94	04:45	5.7028	1.8223
09/27/94	05:00	5.8833	2.0028
09/27/94	05:15	5.9771	2.0966
09/27/94	05:30	6.0962	2.2157
09/27/94	05:45	6.1143	2.2338
09/27/94	06:00	6.2659	2.3854
09/27/94	06:15	6.3308	2.4503
09/27/94	06:30	6.4247	2.5442
09/27/94	06:45	6.3381	2.4576
09/27/94	07:00	6.4608	2.5803
09/27/94	07:15	6.3994	2.5189
09/27/94	07:30	6.3092	2.4287
09/27/94	07:45	6.1901	2.3096
09/27/94	08:00	6.2803	2.3998
09/27/94	08:15	6.071	2.1905
09/27/94	08:30	6.0818	2.2013

E:/0/10-098/tidal

TIDAL DATA

Date Tuesday November 8, 1994 3:04 PM
PlotFile E:\0\10-098\TS101.PRN
DataFile E:\QPRO4\CHRIS\TS-1
qproFile E:\0\10-098\TS101.PRN
Time of First Log in Specified Window
34603.4 0.398939
Elevation (TOC) = 11.22
DTW = 9.82

Date	Time	Analog#01 5psi..... feet.....	Elevation
09/27/94	08:45	5.9627	2.0822
09/27/94	09:00	5.8725	1.992
09/27/94	09:15	5.7064	1.8259
09/27/94	09:30	5.4213	1.5408
09/27/94	09:45	5.5729	1.6924
09/27/94	10:00	5.1542	1.2737
09/27/94	10:15	5.331	1.4505
09/27/94	10:30	5.1795	1.299
09/27/94	10:45	5.2228	1.3423
09/27/94	11:00	5.0351	1.1546
09/27/94	11:15	5.0206	1.1401
09/27/94	11:30	5.0784	1.1979
09/27/94	11:45	5.064	1.1835
09/27/94	12:00	5.0712	1.1907
09/27/94	12:15	5.0567	1.1762
09/27/94	12:30	5.2444	1.3639
09/27/94	12:45	5.2083	1.3278
09/27/94	13:00	5.2733	1.3928
09/27/94	13:15	5.4177	1.5372
09/27/94	13:30	5.4863	1.6058
09/27/94	13:45	5.6631	1.7826
09/27/94	14:00	5.8364	1.9559
09/27/94	14:15	6.0277	2.1472
09/27/94	14:30	6.1504	2.2699
09/27/94	14:45	6.2695	2.389
09/27/94	15:00	6.3453	2.4648
09/27/94	15:15	6.5727	2.6922
09/27/94	15:30	6.7026	2.8221
09/27/94	15:45	6.8939	3.0134
09/27/94	16:00	6.9589	3.0784
09/27/94	16:15	7.143	3.2625
09/27/94	16:30	7.1935	3.313
09/27/94	16:45	7.2657	3.3852
09/27/94	17:00	7.2982	3.4177
09/27/94	17:15	7.3703	3.4898
09/27/94	17:30	7.3126	3.4321
09/27/94	17:45	7.3776	3.4971
09/27/94	18:00	7.3595	3.479
09/27/94	18:15	7.2188	3.3383
09/27/94	18:30	7.1827	3.3022
09/27/94	18:45	7.0527	3.1722
09/27/94	19:00	6.7748	2.8943
09/27/94	19:15	6.699	2.8185

E:/0/10-098/tidal

TIDAL DATA

Date Tuesday November 8, 1994 3:04 PM
PlotFile E:\0\10-098\TS101.PRN
DataFile E:\QPRO4\CHRIS\TS-1
qproFile E:\0\10-098\TS101.PRN
Time of First Log in Specified Window
34603.4 0.398939
Elevation (TOC) = 11.22
DTW = 9.82

Date	Time	Analog#01 5psi..... feet.....	Elevation
09/27/94	19:30	6.5185	2.638
09/27/94	19:45	6.237	2.3565
09/27/94	20:00	6.024	2.1435
09/27/94	20:15	5.7497	1.8692
09/27/94	20:30	5.4249	1.5444
09/27/94	20:45	5.1867	1.3062
09/27/94	21:00	4.8943	1.0138
09/27/94	21:15	4.703	0.8225
09/27/94	21:30	4.454	0.5735
09/27/94	21:45	4.241	0.3605
09/27/94	22:00	3.9703	0.0898
09/27/94	22:15	3.714	-0.1665
09/27/94	22:30	3.5264	-0.3541
09/27/94	22:45	3.382	-0.4985
09/27/94	23:00	3.2196	-0.6609
09/27/94	23:15	3.0535	-0.827
09/27/94	23:30	3.0499	-0.8306
09/27/94	23:45	2.79	-1.0905
09/28/94	00:00	2.8803	-1.0002
09/28/94	00:15	2.7215	-1.159
09/28/94	00:30	2.6529	-1.2276
09/28/94	00:45	2.6818	-1.1987
09/28/94	01:00	2.7648	-1.1157
09/28/94	01:15	2.5554	-1.3251
09/28/94	01:30	2.79	-1.0905
09/28/94	01:45	2.8478	-1.0327
09/28/94	02:00	2.8478	-1.0327
09/28/94	02:15	3.0644	-0.8161
09/28/94	02:30	3.1907	-0.6898
09/28/94	02:45	3.3675	-0.513
09/28/94	03:00	3.5913	-0.2892
09/28/94	03:15	3.7718	-0.1087
09/28/94	03:30	3.8981	0.0176
09/28/94	03:45	4.1183	0.2378
09/28/94	04:00	4.3096	0.4291
09/28/94	04:15	4.5406	0.6601
09/28/94	04:30	4.7175	0.837
09/28/94	04:45	4.9557	1.0752
09/28/94	05:00	5.147	1.2665
09/28/94	05:15	5.295	1.4145
09/28/94	05:30	5.5584	1.6779
09/28/94	05:45	5.6342	1.7537
09/28/94	06:00	5.7642	1.8837

E:/0/10-098/tidal

TIDAL DATA

Date Tuesday November 8, 1994 3:04 PM
PlotFile E:\0\10-098\TS101.PRN
DataFile E:\QPRO4\CHRIS\TS-1
qproFile E:\0\10-098\TS101.PRN
Time of First Log in Specified Window
34603.4 0.398939
Elevation (TOC) = 11.22
DTW = 9.82

Date	Time	Analog#01 5psi..... feet.....	Elevation
09/28/94	06:15	5.9483	2.0678
09/28/94	06:30	6.0746	2.1941
09/28/94	06:45	6.1395	2.259
09/28/94	07:00	6.32	2.4395
09/28/94	07:15	6.2081	2.3276
09/28/94	07:30	6.4103	2.5298
09/28/94	07:45	6.468	2.5875
09/28/94	08:00	6.4897	2.6092
09/28/94	08:15	6.5474	2.6669
09/28/94	08:30	6.5366	2.6561
09/28/94	08:45	6.3633	2.4828
09/28/94	09:00	6.3417	2.4612
09/28/94	09:15	6.1215	2.241
09/28/94	09:30	6.1901	2.3096
09/28/94	09:45	6.0277	2.1472
09/28/94	10:00	5.8291	1.9486
09/28/94	10:15	5.8797	1.9992
09/28/94	10:30	5.6559	1.7754
09/28/94	10:45	5.4863	1.6058
09/28/94	11:00	5.3816	1.5011
09/28/94	11:15	5.2336	1.3531
09/28/94	11:30	5.1434	1.2629
09/28/94	11:45	5.1831	1.3026
09/28/94	12:00	4.9268	1.0463
09/28/94	12:15	5.0026	1.1221
09/28/94	12:30	4.8799	0.9994
09/28/94	12:45	4.869	0.9885
09/28/94	13:00	4.8871	1.0066
09/28/94	13:15	4.9196	1.0391
09/28/94	13:30	4.9521	1.0716
09/28/94	13:45	4.9773	1.0968
09/28/94	14:00	4.9918	1.1113
09/28/94	14:15	5.1795	1.299
09/28/94	14:30	5.2264	1.3459
09/28/94	14:45	5.313	1.4325
09/28/94	15:00	5.5043	1.6238
09/28/94	15:15	5.5873	1.7068
09/28/94	15:30	5.7678	1.8873
09/28/94	15:45	5.9122	2.0317
09/28/94	16:00	6.1035	2.223
09/28/94	16:15	6.3164	2.4359
09/28/94	16:30	6.4536	2.5731
09/28/94	16:45	6.5041	2.6236

E:/0/10-098/tidal

TIDAL DATA

Date Tuesday November 8, 1994 3:04 PM
PlotFile E:\0\10-098\TS101.PRN
DataFile E:\QPRO4\CHRIS\TS-1
qproFile E:\0\10-098\TS101.PRN
Time of First Log in Specified Window
34603.4 0.398939
Elevation (TOC) = 11.22
DTW = 9.82

Date	Time	Analog#01 5psi..... feet.....	Elevation
09/28/94	17:00	6.6485	2.768
09/28/94	17:15	6.8073	2.9268
09/28/94	17:30	6.995	3.1145
09/28/94	17:45	7.0563	3.1758
09/28/94	18:00	7.1538	3.2733
09/28/94	18:15	7.096	3.2155
09/28/94	18:30	7.2007	3.3202
09/28/94	18:45	7.1827	3.3022
09/28/94	19:00	7.1899	3.3094
09/28/94	19:15	7.2368	3.3563
09/28/94	19:30	7.0635	3.183
09/28/94	19:45	6.9444	3.0639
09/28/94	20:00	6.717	2.8365
09/28/94	20:15	6.5221	2.6416
09/28/94	20:30	6.3597	2.4792
09/28/94	20:45	6.2117	2.3312
09/28/94	21:00	5.9807	2.1002
09/28/94	21:15	5.8436	1.9631
09/28/94	21:30	5.4971	1.6166
09/28/94	21:45	5.1686	1.2881
09/28/94	22:00	4.9051	1.0246
09/28/94	22:15	4.5442	0.6637
09/28/94	22:30	4.3493	0.4688
09/28/94	22:45	4.1039	0.2234
09/28/94	23:00	3.9053	0.0248
09/28/94	23:15	3.678	-0.2025
09/28/94	23:30	3.3892	-0.4913
09/28/94	23:45	3.3062	-0.5743
09/29/94	00:00	3.0571	-0.8234
09/29/94	00:15	2.9561	-0.9244
09/29/94	00:30	2.7864	-1.0941
09/29/94	00:45	2.606	-1.2745
09/29/94	01:00	2.5374	-1.3431
09/29/94	01:15	2.4977	-1.3828
09/29/94	01:30	2.3858	-1.4947
09/29/94	01:45	2.4399	-1.4406
09/29/94	02:00	2.458	-1.4225
09/29/94	02:15	2.4724	-1.4081
09/29/94	02:30	2.5699	-1.3106
09/29/94	02:45	2.4291	-1.4514
09/29/94	03:00	2.6637	-1.2168
09/29/94	03:15	2.8767	-1.0038
09/29/94	03:30	2.9777	-0.9028

E:/0/10-098/tidal

TIDAL DATA

Date Tuesday November 8, 1994 3:04 PM
PlotFile E:\0\10-098\TS101.PRN
DataFile E:\QPRO4\CHRIS\TS-1
qproFile E:\0\10-098\TS101.PRN
Time of First Log in Specified Window
34603.4 0.398939
Elevation (TOC) = 11.22
DTW = 9.82

Date	Time	Analog#01 5psi..... feet.....	Elevation
09/29/94	03:45	3.2196	-0.6609
09/29/94	04:00	3.3315	-0.549
09/29/94	04:15	3.5985	-0.282
09/29/94	04:30	3.8079	-0.0726
09/29/94	04:45	4.0461	0.1656
09/29/94	05:00	4.3493	0.4688
09/29/94	05:15	4.4792	0.5987
09/29/94	05:30	4.7788	0.8983
09/29/94	05:45	5.0243	1.1438
09/29/94	06:00	5.1506	1.2701
09/29/94	06:15	5.4032	1.5227
09/29/94	06:30	5.526	1.6455
09/29/94	06:45	5.8003	1.9198
09/29/94	07:00	5.9771	2.0966
09/29/94	07:15	6.0674	2.1869
09/29/94	07:30	6.2839	2.4034
09/29/94	07:45	6.4175	2.537
09/29/94	08:00	6.3994	2.5189
09/29/94	08:15	6.4788	2.5983
09/29/94	08:30	6.5943	2.7138
09/29/94	08:45	6.5871	2.7066
09/29/94	09:00	6.681	2.8005
09/29/94	09:15	6.6015	2.721
09/29/94	09:30	6.5763	2.6958
09/29/94	09:45	6.5077	2.6272
09/29/94	10:00	6.45	2.5695
09/29/94	10:15	6.3128	2.4323
09/29/94	10:30	6.1973	2.3168
09/29/94	10:45	6.0277	2.1472
09/29/94	11:00	5.9158	2.0353
09/29/94	11:15	5.7894	1.9089
09/29/94	11:30	5.6054	1.7249
09/29/94	11:45	5.4177	1.5372
09/29/94	12:00	5.3599	1.4794
09/29/94	12:15	5.165	1.2845
09/29/94	12:30	5.0387	1.1582
09/29/94	12:45	4.8835	1.003
09/29/94	13:00	4.8149	0.9344
09/29/94	13:15	4.6778	0.7973
09/29/94	13:30	4.685	0.8045
09/29/94	13:45	4.5623	0.6818
09/29/94	14:00	4.5153	0.6348
09/29/94	14:15	4.6056	0.7251

E:/0/10-098/tidal

TIDAL DATA

Date Tuesday November 8, 1994 3:04 PM
PlotFile E:\0\10-098\TS101.PRN
DataFile E:\QPRO4\CHRIS\TS-1
qproFile E:\0\10-098\TS101.PRN
Time of First Log in Specified Window
34603.4 0.398939
Elevation (TOC) = 11.22
DTW = 9.82

Date	Time	Analog#01 5psi..... feet.....	Elevation
09/29/94	14:30	4.5947	0.7142
09/29/94	14:45	4.555	0.6745
09/29/94	15:00	4.7572	0.8767
09/29/94	15:15	4.8185	0.938
09/29/94	15:30	4.8907	1.0102
09/29/94	15:45	5.0531	1.1726
09/29/94	16:00	5.2372	1.3567
09/29/94	16:15	5.4177	1.5372
09/29/94	16:30	5.5873	1.7068
09/29/94	16:45	5.757	1.8765
09/29/94	17:00	6.0493	2.1688
09/29/94	17:15	6.1901	2.3096
09/29/94	17:30	6.2984	2.4179
09/29/94	17:45	6.4969	2.6164
09/29/94	18:00	6.6665	2.786
09/29/94	18:15	6.7459	2.8654
09/29/94	18:30	6.865	2.9845
09/29/94	18:45	7.0563	3.1758
09/29/94	19:00	7.1646	3.2841
09/29/94	19:15	7.161	3.2805
09/29/94	19:30	7.2621	3.3816
09/29/94	19:45	7.1935	3.313
09/29/94	20:00	7.2657	3.3852
09/29/94	20:15	7.1574	3.2769
09/29/94	20:30	7.1285	3.248
09/29/94	20:45	7.0058	3.1253
09/29/94	21:00	6.93	3.0495
09/29/94	21:15	6.8037	2.9232
09/29/94	21:30	6.5438	2.6633
09/29/94	21:45	6.3128	2.4323
09/29/94	22:00	6.0818	2.2013
09/29/94	22:15	5.7858	1.9053
09/29/94	22:30	5.4538	1.5733
09/29/94	22:45	5.2011	1.3206
09/29/94	23:00	4.8546	0.9741
09/29/94	23:15	4.62	0.7395
09/29/94	23:30	4.3493	0.4688
09/29/94	23:45	4.075	0.1945
09/30/94	00:00	3.9017	0.0212
09/30/94	00:15	3.5552	-0.3253
09/30/94	00:30	3.3603	-0.5202
09/30/94	00:45	3.1546	-0.7259
09/30/94	01:00	2.9019	-0.9786

E:/0/10-098/tidal

TIDAL DATA

Date Tuesday November 8, 1994 3:04 PM
PlotFile E:\0\10-098\TS101.PRN
DataFile E:\QPRO4\CHRIS\TS-1
qproFile E:\0\10-098\TS101.PRN
Time of First Log in Specified Window
34603.4 0.398939
Elevation (TOC) = 11.22
DTW = 9.82

Date	Time	Analog#01 5psi..... feet.....	Elevation
09/30/94	01:15	2.7576	-1.1229
09/30/94	01:30	2.5735	-1.307
09/30/94	01:45	2.4869	-1.3936
09/30/94	02:00	2.4111	-1.4694
09/30/94	02:15	2.3172	-1.5633
09/30/94	02:30	2.2775	-1.603
09/30/94	02:45	2.3064	-1.5741
09/30/94	03:00	2.3317	-1.5488
09/30/94	03:15	2.3569	-1.5236
09/30/94	03:30	2.4869	-1.3936
09/30/94	03:45	2.523	-1.3575
09/30/94	04:00	2.6709	-1.2096
09/30/94	04:15	2.8153	-1.0652
09/30/94	04:30	3.0716	-0.8089
09/30/94	04:45	3.299	-0.5815
09/30/94	05:00	3.4578	-0.4227
09/30/94	05:15	3.7285	-0.152
09/30/94	05:30	3.9811	0.1006
09/30/94	05:45	4.2663	0.3858
09/30/94	06:00	4.4612	0.5807
09/30/94	06:15	4.8185	0.938
09/30/94	06:30	5.0712	1.1907
09/30/94	06:45	5.3022	1.4217
09/30/94	07:00	5.544	1.6635
09/30/94	07:15	5.7714	1.8909
09/30/94	07:30	5.9735	2.093
09/30/94	07:45	6.172	2.2915
09/30/94	08:00	6.3705	2.49
09/30/94	08:15	6.486	2.6055
09/30/94	08:30	6.6701	2.7896
09/30/94	08:45	6.8073	2.9268
09/30/94	09:00	6.8362	2.9557
09/30/94	09:15	6.9625	3.082
09/30/94	09:30	6.9805	3.1
09/30/94	09:45	6.9553	3.0748
09/30/94	10:00	6.9986	3.1181
09/30/94	10:15	6.8903	3.0098
09/30/94	10:30	6.8362	2.9557
09/30/94	10:45	6.7207	2.8402
09/30/94	11:00	6.6773	2.7968
09/30/94	11:15	6.4391	2.5586
09/30/94	11:30	6.2695	2.389
09/30/94	11:45	6.089	2.2085

E:/0/10-098/tidal

TIDAL DATA

Date Tuesday November 8, 1994 3:04 PM
PlotFile E:\0\10-098\TS101.PRN
DataFile E:\QPRO4\CHRIS\TS-1
qproFile E:\0\10-098\TS101.PRN
Time of First Log in Specified Window
34603.4 0.398939
Elevation (TOC) = 11.22
DTW = 9.82

Date	Time	Analog#01 5psi..... feet.....	Elevation
09/30/94	12:00	5.8183	1.9378
09/30/94	12:15	5.5945	1.714
09/30/94	12:30	5.4465	1.566
09/30/94	12:45	5.2047	1.3242
09/30/94	13:00	5.0243	1.1438
09/30/94	13:15	4.8546	0.9741
09/30/94	13:30	4.6561	0.7756
09/30/94	13:45	4.5117	0.6312
09/30/94	14:00	4.389	0.5085
09/30/94	14:15	4.2735	0.393
09/30/94	14:30	4.2879	0.4074
09/30/94	14:45	4.2266	0.3461
09/30/94	15:00	4.2807	0.4002
09/30/94	15:15	4.1508	0.2703
09/30/94	15:30	4.3204	0.4399
09/30/94	15:45	4.3204	0.4399
09/30/94	16:00	4.4431	0.5626
09/30/94	16:15	4.5225	0.642
09/30/94	16:30	4.7499	0.8694
09/30/94	16:45	4.9412	1.0607
09/30/94	17:00	5.1506	1.2701
09/30/94	17:15	5.3816	1.5011
09/30/94	17:30	5.562	1.6815
09/30/94	17:45	5.84	1.9595
09/30/94	18:00	6.0168	2.1363
09/30/94	18:15	6.2623	2.3818
09/30/94	18:30	6.4933	2.6128
09/30/94	18:45	6.6485	2.768
09/30/94	19:00	6.8362	2.9557
09/30/94	19:15	7.013	3.1325
09/30/94	19:30	7.1141	3.2336
09/30/94	19:45	7.2296	3.3491
09/30/94	20:00	7.3379	3.4574
09/30/94	20:15	7.4281	3.5476
09/30/94	20:30	7.5544	3.6739
09/30/94	20:45	7.5941	3.7136
09/30/94	21:00	7.5508	3.6703
09/30/94	21:15	7.5869	3.7064
09/30/94	21:30	7.4425	3.562
09/30/94	21:45	7.3451	3.4646
09/30/94	22:00	7.2512	3.3707
09/30/94	22:15	7.0527	3.1722
09/30/94	22:30	6.8614	2.9809

E:/0/10-098/tidal

TIDAL DATA

Date Tuesday November 8, 1994 3:04 PM
PlotFile E:\0\10-098\TS101.PRN
DataFile E:\QPRO4\CHRIS\TS-1
qproFile E:\0\10-098\TS101.PRN
Time of First Log in Specified Window
34603.4 0.398939
Elevation (TOC) = 11.22
DTW = 9.82

Date	Time	Analog#01 5psi..... feet.....	Elevation
09/30/94	22:45	6.5366	2.6561
09/30/94	23:00	6.2911	2.4106
09/30/94	23:15	5.9374	2.0569
09/30/94	23:30	5.544	1.6635
09/30/94	23:45	5.1939	1.3134
10/01/94	00:00	4.9232	1.0427
10/01/94	00:15	4.5623	0.6818
10/01/94	00:30	4.2807	0.4002
10/01/94	00:45	4.0389	0.1584
10/01/94	01:00	3.7321	-0.1484
10/01/94	01:15	3.483	-0.3975
10/01/94	01:30	3.2918	-0.5887
10/01/94	01:45	3.0463	-0.8342
10/01/94	02:00	2.855	-1.0255
10/01/94	02:15	2.7576	-1.1229
10/01/94	02:30	2.5518	-1.3287
10/01/94	02:45	2.4075	-1.473
10/01/94	03:00	2.3064	-1.5741
10/01/94	03:15	2.2342	-1.6463
10/01/94	03:30	2.2559	-1.6246
10/01/94	03:45	2.2667	-1.6138
10/01/94	04:00	2.3533	-1.5272
10/01/94	04:15	2.4472	-1.4333
10/01/94	04:30	2.5266	-1.3539
10/01/94	04:45	2.7251	-1.1554
10/01/94	05:00	2.9344	-0.9461
10/01/94	05:15	3.0824	-0.7981
10/01/94	05:30	3.3784	-0.5021
10/01/94	05:45	3.6455	-0.235
10/01/94	06:00	3.9053	0.0248
10/01/94	06:15	4.1905	0.31
10/01/94	06:30	4.5009	0.6204
10/01/94	06:45	4.8005	0.92
10/01/94	07:00	5.1325	1.252
10/01/94	07:15	5.3202	1.4397
10/01/94	07:30	5.6559	1.7754
10/01/94	07:45	5.8761	1.9956
10/01/94	08:00	6.1287	2.2482
10/01/94	08:15	6.3742	2.4937
10/01/94	08:30	6.5727	2.6922
10/01/94	08:45	6.7892	2.9087
10/01/94	09:00	6.9083	3.0278
10/01/94	09:15	7.078	3.1975

E:/0/10-098/tidal

TIDAL DATA

Date Tuesday November 8, 1994 3:04 PM
PlotFile E:\0\10-098\TS101.PRN
DataFile E:\QPRO4\CHRIS\TS-1
qproFile E:\0\10-098\TS101.PRN
Time of First Log in Specified Window
34603.4 0.398939
Elevation (TOC) = 11.22
DTW = 9.82

Date	Time	Analog#01 5psi..... feet.....	Elevation
10/01/94	09:30	7.244	3.3635
10/01/94	09:45	7.3523	3.4718
10/01/94	10:00	7.3054	3.4249
10/01/94	10:15	7.4389	3.5584
10/01/94	10:30	7.3884	3.5079
10/01/94	10:45	7.2765	3.396
10/01/94	11:00	7.2982	3.4177
10/01/94	11:15	7.0852	3.2047
10/01/94	11:30	7.0599	3.1794
10/01/94	11:45	6.9047	3.0242
10/01/94	12:00	6.6268	2.7463
10/01/94	12:15	6.2984	2.4179
10/01/94	12:30	6.1504	2.2699
10/01/94	12:45	5.793	1.9125
10/01/94	13:00	5.5404	1.6599
10/01/94	13:15	5.1831	1.3026
10/01/94	13:30	5.0495	1.169
10/01/94	13:45	4.7391	0.8586
10/01/94	14:00	4.5731	0.6926
10/01/94	14:15	4.3168	0.4363
10/01/94	14:30	4.1833	0.3028
10/01/94	14:45	3.9559	0.0754
10/01/94	15:00	3.8584	-0.0221
10/01/94	15:15	3.8259	-0.0546
10/01/94	15:30	3.7213	-0.1592
10/01/94	15:45	3.7501	-0.1304
10/01/94	16:00	3.714	-0.1665
10/01/94	16:15	3.8151	-0.0654
10/01/94	16:30	3.8368	-0.0437
10/01/94	16:45	4.0245	0.144
10/01/94	17:00	4.0642	0.1837
10/01/94	17:15	4.3493	0.4688
10/01/94	17:30	4.4901	0.6096
10/01/94	17:45	4.7535	0.873
10/01/94	18:00	4.9232	1.0427
10/01/94	18:15	5.2047	1.3242
10/01/94	18:30	5.4538	1.5733
10/01/94	18:45	5.6595	1.779
10/01/94	19:00	6.0204	2.1399
10/01/94	19:15	6.2875	2.407
10/01/94	19:30	6.4355	2.555
10/01/94	19:45	6.7134	2.8329
10/01/94	20:00	6.93	3.0495

E:/0/10-098/tidal

TIDAL DATA

Date Tuesday November 8, 1994 3:04 PM
PlotFile E:\0\10-098\TS101.PRN
DataFile E:\QPRO4\CHRIS\TS-1
qproFile E:\0\10-098\TS101.PRN
Time of First Log in Specified Window
34603.4 0.398939
Elevation (TOC) = 11.22
DTW = 9.82

Date	Time	Analog#01 5psi..... feet.....	Elevation
10/01/94	20:15	7.078	3.1975
10/01/94	20:30	7.2657	3.3852
10/01/94	20:45	7.4245	3.544
10/01/94	21:00	7.5255	3.645
10/01/94	21:15	7.6988	3.8183
10/01/94	21:30	7.7818	3.9013
10/01/94	21:45	7.8143	3.9338
10/01/94	22:00	7.789	3.9085
10/01/94	22:15	7.7205	3.84
10/01/94	22:30	7.641	3.7605
10/01/94	22:45	7.5544	3.6739
10/01/94	23:00	7.3487	3.4682
10/01/94	23:15	7.1935	3.313
10/01/94	23:30	6.9589	3.0784
10/01/94	23:45	6.5691	2.6886
10/02/94	00:00	6.2984	2.4179
10/02/94	00:15	5.9591	2.0786
10/02/94	00:30	5.6018	1.7213
10/02/94	00:45	5.2155	1.335
10/02/94	01:00	4.8438	0.9633
10/02/94	01:15	4.5262	0.6457
10/02/94	01:30	4.2555	0.375
10/02/94	01:45	3.8873	0.0068
10/02/94	02:00	3.5805	-0.3
10/02/94	02:15	3.3459	-0.5346
10/02/94	02:30	3.0824	-0.7981
10/02/94	02:45	2.9453	-0.9352
10/02/94	03:00	2.7323	-1.1482
10/02/94	03:15	2.5663	-1.3142
10/02/94	03:30	2.4435	-1.437
10/02/94	03:45	2.292	-1.5885
10/02/94	04:00	2.245	-1.6355
10/02/94	04:15	2.2667	-1.6138
10/02/94	04:30	2.2992	-1.5813
10/02/94	04:45	2.3064	-1.5741
10/02/94	05:00	2.4905	-1.39
10/02/94	05:15	2.6601	-1.2204
10/02/94	05:30	2.7612	-1.1193
10/02/94	05:45	3.0355	-0.845
10/02/94	06:00	3.2196	-0.6609
10/02/94	06:15	3.5228	-0.3577
10/02/94	06:30	3.8512	-0.0293
10/02/94	06:45	4.1724	0.2919

E:/0/10-098/tidal

TIDAL DATA

Date Tuesday November 8, 1994 3:04 PM
PlotFile E:\0\10-098\TS101.PRN
DataFile E:\QPRO4\CHRIS\TS-1
qproFile E:\0\10-098\TS101.PRN
Time of First Log in Specified Window
34603.4 0.398939
Elevation (TOC) = 11.22
DTW = 9.82

Date	Time	Analog#01 5psi..... feet.....	Elevation
10/02/94	07:00	4.4937	0.6132
10/02/94	07:15	4.7933	0.9128
10/02/94	07:30	5.1145	1.234
10/02/94	07:45	5.3455	1.465
10/02/94	08:00	5.6523	1.7718
10/02/94	08:15	6.0096	2.1291
10/02/94	08:30	6.2911	2.4106
10/02/94	08:45	6.5474	2.6669
10/02/94	09:00	6.8145	2.934
10/02/94	09:15	6.9769	3.0964
10/02/94	09:30	7.1321	3.2516
10/02/94	09:45	7.309	3.4285
10/02/94	10:00	7.4461	3.5656
10/02/94	10:15	7.6013	3.7208
10/02/94	10:30	7.7638	3.8833
10/02/94	10:45	7.6374	3.7569
10/02/94	11:00	7.7421	3.8616
10/02/94	11:15	7.6627	3.7822
10/02/94	11:30	7.54	3.6595
10/02/94	11:45	7.4425	3.562
10/02/94	12:00	7.3379	3.4574
10/02/94	12:15	7.1105	3.23
10/02/94	12:30	6.948	3.0675
10/02/94	12:45	6.6413	2.7608
10/02/94	13:00	6.2659	2.3854
10/02/94	13:15	5.8977	2.0172
10/02/94	13:30	5.5729	1.6924
10/02/94	13:45	5.2625	1.382
10/02/94	14:00	4.9521	1.0716
10/02/94	14:15	4.5947	0.7142
10/02/94	14:30	4.3854	0.5049
10/02/94	14:45	4.1039	0.2234
10/02/94	15:00	3.8151	-0.0654
10/02/94	15:15	3.5841	-0.2964
10/02/94	15:30	3.4361	-0.4444
10/02/94	15:45	3.4073	-0.4732
10/02/94	16:00	3.2881	-0.5924
10/02/94	16:15	3.2268	-0.6537
10/02/94	16:30	3.2304	-0.6501
10/02/94	16:45	3.1185	-0.762
10/02/94	17:00	3.1835	-0.697
10/02/94	17:15	3.3639	-0.5166
10/02/94	17:30	3.4975	-0.383

E:/0/10-098/tidal

TIDAL DATA

Date Tuesday November 8, 1994 3:04 PM
PlotFile E:\0\10-098\TS101.PRN
DataFile E:\QPRO4\CHRIS\TS-1
qproFile E:\0\10-098\TS101.PRN
Time of First Log in Specified Window
34603.4 0.398939
Elevation (TOC) = 11.22
DTW = 9.82

Date	Time	Analog#01 5psi..... feet.....	Elevation
10/02/94	17:45	3.6419	-0.2386
10/02/94	18:00	3.8693	-0.0112
10/02/94	18:15	4.093	0.2125
10/02/94	18:30	4.2843	0.4038
10/02/94	18:45	4.6597	0.7792
10/02/94	19:00	4.9088	1.0283
10/02/94	19:15	5.2553	1.3748
10/02/94	19:30	5.562	1.6815
10/02/94	19:45	5.8255	1.945
10/02/94	20:00	6.1684	2.2879
10/02/94	20:15	6.3742	2.4937
10/02/94	20:30	6.6232	2.7427
10/02/94	20:45	6.8795	2.999
10/02/94	21:00	7.161	3.2805
10/02/94	21:15	7.374	3.4935
10/02/94	21:30	7.4967	3.6162
10/02/94	21:45	7.6447	3.7642
10/02/94	22:00	7.8107	3.9302
10/02/94	22:15	7.9154	4.0349
10/02/94	22:30	7.9803	4.0998
10/02/94	22:45	8.0561	4.1756
10/02/94	23:00	8.0128	4.1323
10/02/94	23:15	8.0128	4.1323
10/02/94	23:30	7.8612	3.9807
10/02/94	23:45	7.7421	3.8616
10/03/94	00:00	7.5436	3.6631
10/03/94	00:15	7.2512	3.3707
10/03/94	00:30	7.0311	3.1506
10/03/94	00:45	6.6882	2.8077
10/03/94	01:00	6.2984	2.4179
10/03/94	01:15	5.9338	2.0533
10/03/94	01:30	5.6198	1.7393
10/03/94	01:45	5.1975	1.317
10/03/94	02:00	4.8221	0.9416
10/03/94	02:15	4.555	0.6745
10/03/94	02:30	4.2771	0.3966
10/03/94	02:45	3.8512	-0.0293
10/03/94	03:00	3.613	-0.2675
10/03/94	03:15	3.4542	-0.4263
10/03/94	03:30	3.1654	-0.7151
10/03/94	03:45	2.938	-0.9425
10/03/94	04:00	2.8298	-1.0507
10/03/94	04:15	2.7323	-1.1482

E:/0/10-098/tidal

TIDAL DATA

Date Tuesday November 8, 1994 3:04 PM
PlotFile E:\0\10-098\TS101.PRN
DataFile E:\QPRO4\CHRIS\TS-1
qproFile E:\0\10-098\TS101.PRN
Time of First Log in Specified Window
34603.4 0.398939
Elevation (TOC) = 11.22
DTW = 9.82

Date	Time	Analog#01 5psi..... feet.....	Elevation
10/03/94	04:30	2.5735	-1.307
10/03/94	04:45	2.5735	-1.307
10/03/94	05:00	2.5446	-1.3359
10/03/94	05:15	2.6529	-1.2276
10/03/94	05:30	2.6529	-1.2276
10/03/94	05:45	2.8514	-1.0291
10/03/94	06:00	3.1005	-0.78
10/03/94	06:15	3.1871	-0.6934
10/03/94	06:30	3.5408	-0.3397
10/03/94	06:45	3.6635	-0.217
10/03/94	07:00	4.0822	0.2017
10/03/94	07:15	4.3926	0.5121
10/03/94	07:30	4.7535	0.873
10/03/94	07:45	5.0856	1.2051
10/03/94	08:00	5.4682	1.5877
10/03/94	08:15	5.6884	1.8079
10/03/94	08:30	6.0674	2.1869
10/03/94	08:45	6.45	2.5695
10/03/94	09:00	6.7315	2.851
10/03/94	09:15	6.9914	3.1109
10/03/94	09:30	7.3523	3.4718
10/03/94	09:45	7.5761	3.6956
10/03/94	10:00	7.6916	3.8111
10/03/94	10:15	7.919	4.0385
10/03/94	10:30	8.0489	4.1684
10/03/94	10:45	8.2546	4.3741
10/03/94	10:45	8.2583	4.3778
10/03/94	11:00	8.3052	4.4247
10/03/94	11:15	8.4315	4.551
10/03/94	11:30	8.4495	4.569
10/03/94	11:45	8.3088	4.4283
10/03/94	12:00	8.2763	4.3958
10/03/94	12:15	8.1788	4.2983
10/03/94	12:30	7.9623	4.0818
10/03/94	12:45	7.7782	3.8977
10/03/94	13:00	7.5725	3.692
10/03/94	13:15	7.1971	3.3166
10/03/94	13:30	6.7784	2.8979
10/03/94	13:45	6.4463	2.5658
10/03/94	14:00	6.0529	2.1724
10/03/94	14:15	5.6162	1.7357
10/03/94	14:30	5.2589	1.3784
10/03/94	14:45	4.9196	1.0391

E:/0/10-098/tidal

TIDAL DATA

Date Tuesday November 8, 1994 3:04 PM
PlotFile E:\0\10-098\TS101.PRN
DataFile E:\QPRO4\CHRIS\TS-1
qproFile E:\0\10-098\TS101.PRN
Time of First Log in Specified Window
34603.4 0.398939
Elevation (TOC) = 11.22
DTW = 9.82

Date	Time	Analog#01 5psi..... feet.....	Elevation
10/03/94	15:00	4.5803	0.6998
10/03/94	15:15	4.2555	0.375
10/03/94	15:30	3.8693	-0.0112
10/03/94	15:45	3.6707	-0.2098
10/03/94	16:00	3.4325	-0.448
10/03/94	16:15	3.4145	-0.466
10/03/94	16:30	3.1221	-0.7584
10/03/94	16:45	3.1077	-0.7728
10/03/94	17:00	2.9597	-0.9208
10/03/94	17:15	2.985	-0.8955
10/03/94	17:30	2.9344	-0.9461
10/03/94	17:45	3.0716	-0.8089
10/03/94	18:00	3.0608	-0.8197
10/03/94	18:15	3.2557	-0.6248
10/03/94	18:30	3.483	-0.3975
10/03/94	18:45	3.7249	-0.1556
10/03/94	19:00	3.9739	0.0934
10/03/94	19:15	4.1508	0.2703
10/03/94	19:30	4.5045	0.624
10/03/94	19:45	4.7933	0.9128
10/03/94	20:00	5.1434	1.2629
10/03/94	20:15	5.4682	1.5877
10/03/94	20:30	5.8147	1.9342
10/03/94	20:45	6.1107	2.2302
10/03/94	21:00	6.4283	2.5478
10/03/94	21:15	6.7062	2.8257
10/03/94	21:30	6.9733	3.0928
10/03/94	21:45	7.3162	3.4357
10/03/94	22:00	7.5436	3.6631
10/03/94	22:15	7.7818	3.9013
10/03/94	22:30	7.9226	4.0421
10/03/94	22:45	8.0814	4.2009
10/03/94	23:00	8.1464	4.2659
10/03/94	23:15	8.334	4.4535
10/03/94	23:30	8.3918	4.5113
10/03/94	23:45	8.4315	4.551
10/04/94	00:00	8.3954	4.5149
10/04/94	00:15	8.3413	4.4608
10/04/94	00:30	8.1536	4.2731
10/04/94	00:45	7.919	4.0385
10/04/94	01:00	7.6735	3.793
10/04/94	01:15	7.3523	3.4718
10/04/94	01:30	7.0527	3.1722

E:/0/10-098/tidal

TIDAL DATA

Date Tuesday November 8, 1994 3:04 PM
PlotFile E:\0\10-098\TS101.PRN
DataFile E:\QPRO4\CHRIS\TS-1
qproFile E:\0\10-098\TS101.PRN
Time of First Log in Specified Window
34603.4 0.398939
Elevation (TOC) = 11.22
DTW = 9.82

Date	Time	Analog#01 5psi..... feet.....	Elevation
10/04/94	01:45	6.7459	2.8654
10/04/94	02:00	6.3381	2.4576
10/04/94	02:15	5.9519	2.0714
10/04/94	02:30	5.609	1.7285
10/04/94	02:45	5.1614	1.2809
10/04/94	03:00	4.8474	0.9669
10/04/94	03:15	4.4901	0.6096
10/04/94	03:30	4.2266	0.3461
10/04/94	03:45	3.8873	0.0068
10/04/94	04:00	3.6491	-0.2314
10/04/94	04:15	3.483	-0.3975
10/04/94	04:30	3.2809	-0.5996
10/04/94	04:45	3.0896	-0.7909
10/04/94	05:00	3.0824	-0.7981
10/04/94	05:15	2.9669	-0.9136
10/04/94	05:30	2.8875	-0.993
10/04/94	05:45	2.9886	-0.8919
10/04/94	06:00	3.0283	-0.8522
10/04/94	06:15	3.1365	-0.744
10/04/94	06:30	3.3856	-0.4949
10/04/94	06:45	3.5372	-0.3433
10/04/94	07:00	3.7429	-0.1376
10/04/94	07:15	3.9992	0.1187
10/04/94	07:30	4.3204	0.4399
10/04/94	07:45	4.703	0.8225
10/04/94	08:00	4.9701	1.0896
10/04/94	08:15	5.3563	1.4758
10/04/94	08:30	5.7786	1.8981
10/04/94	08:45	6.089	2.2085
10/04/94	09:00	6.4211	2.5406
10/04/94	09:15	6.8542	2.9737
10/04/94	09:30	7.143	3.2625
10/04/94	09:45	7.4064	3.5259
10/04/94	10:00	7.6916	3.8111
10/04/94	10:15	7.8432	3.9627
10/04/94	10:30	8.168	4.2875
10/04/94	10:45	8.4712	4.5907
10/04/94	11:00	8.6661	4.7856
10/04/94	11:15	8.8033	4.9228
10/04/94	11:30	8.9549	5.0744
10/04/94	11:45	8.9079	5.0274
10/04/94	12:00	8.9657	5.0852
10/04/94	12:15	8.9007	5.0202

E:/0/10-098/tidal

TIDAL DATA

Date Tuesday November 8, 1994 3:04 PM
PlotFile E:\0\10-098\TS101.PRN
DataFile E:\QPRO4\CHRIS\TS-1
qproFile E:\0\10-098\TS101.PRN
Time of First Log in Specified Window
34603.4 0.398939
Elevation (TOC) = 11.22
DTW = 9.82

Date	Time	Analog#01 5psi..... feet.....	Elevation
10/04/94	12:30	8.8177	4.9372
10/04/94	12:45	8.7022	4.8217
10/04/94	13:00	8.4893	4.6088
10/04/94	13:15	8.2871	4.4066
10/04/94	13:30	8.0309	4.1504
10/04/94	13:45	7.6519	3.7714
10/04/94	14:00	7.3162	3.4357
10/04/94	14:15	6.8037	2.9232
10/04/94	14:30	6.3705	2.49
10/04/94	14:45	5.8977	2.0172
10/04/94	15:00	5.5223	1.6418
10/04/94	15:15	5.1073	1.2268
10/04/94	15:30	4.7535	0.873
10/04/94	15:45	4.371	0.4905
10/04/94	16:00	4.0714	0.1909
10/04/94	16:15	3.7682	-0.1123
10/04/94	16:30	3.4939	-0.3866
10/04/94	16:45	3.2773	-0.6032
10/04/94	17:00	2.7251	-1.1554
10/04/94	17:15	2.7179	-1.1626
10/04/94	17:30	2.689	-1.1915
10/04/94	17:45	2.2703	-1.6102
10/04/94	18:00	2.7756	-1.1049
10/04/94	18:15	2.4147	-1.4658
10/04/94	18:30	2.7431	-1.1374
10/04/94	18:45	2.4796	-1.4009
10/04/94	19:00	2.8911	-0.9894
10/04/94	19:15	3.1329	-0.7476
10/04/94	19:30	3.1005	-0.78
10/04/94	19:45	3.5985	-0.282
10/04/94	20:00	3.7538	-0.1267
10/04/94	20:15	4.1219	0.2414
10/04/94	20:30	4.3132	0.4327
10/04/94	20:45	4.934	1.0535
10/04/94	21:00	5.1289	1.2484
10/04/94	21:15	5.5548	1.6743
10/04/94	21:30	5.8147	1.9342
10/04/94	21:45	6.1576	2.2771
10/04/94	22:00	6.3561	2.4756
10/04/94	22:15	6.5763	2.6958
10/04/94	22:30	7.0816	3.2011
10/04/94	22:45	7.2332	3.3527
10/04/94	23:00	7.688	3.8075

E:/0/10-098/tidal

TIDAL DATA

Date Tuesday November 8, 1994 3:04 PM
PlotFile E:\0\10-098\TS101.PRN
DataFile E:\QPRO4\CHRIS\TS-1
qproFile E:\0\10-098\TS101.PRN
Time of First Log in Specified Window
34603.4 0.398939
Elevation (TOC) = 11.22
DTW = 9.82

Date	Time	Analog#01 5psi..... feet.....	Elevation
10/04/94	23:15	7.8829	4.0024
10/04/94	23:30	7.8432	3.9627
10/04/94	23:45	7.9839	4.1034
10/05/94	00:00	8.3088	4.4283
10/05/94	00:15	8.3557	4.4752
10/05/94	00:30	8.2619	4.3814
10/05/94	00:45	8.2727	4.3922
10/05/94	01:00	8.0597	4.1792
10/05/94	01:15	8.251	4.3705
10/05/94	01:30	7.8865	4.006
10/05/94	01:45	7.9045	4.024
10/05/94	02:00	7.3595	3.479
10/05/94	02:15	7.179	3.2985
10/05/94	02:30	6.6773	2.7968
10/05/94	02:45	6.4824	2.6019
10/05/94	03:00	6.154	2.2735
10/05/94	03:15	5.7894	1.9089
10/05/94	03:30	5.165	1.2845
10/05/94	03:45	5.0748	1.1943
10/05/94	04:00	4.6128	0.7323
10/05/94	04:15	4.4215	0.541
10/05/94	04:30	4.0966	0.2161
10/05/94	04:45	3.909	0.0285
10/05/94	05:00	3.7357	-0.1448
10/05/94	05:15	3.252	-0.6285
10/05/94	05:30	3.3784	-0.5021
10/05/94	05:45	3.2376	-0.6429
10/05/94	06:00	3.1474	-0.7331
10/05/94	06:15	3.0247	-0.8558
10/05/94	06:30	3.2484	-0.6321
10/05/94	06:45	3.3423	-0.5382
10/05/94	07:00	3.3351	-0.5454
10/05/94	07:15	3.6383	-0.2422
10/05/94	07:30	3.7574	-0.1231
10/05/94	07:45	4.0208	0.1403
10/05/94	08:00	4.2555	0.375
10/05/94	08:15	4.768	0.8875
10/05/94	08:30	4.7247	0.8442
10/05/94	08:45	5.4899	1.6094
10/05/94	09:00	5.5765	1.696
10/05/94	09:15	5.9771	2.0966
10/05/94	09:30	6.2875	2.407
10/05/94	09:45	6.717	2.8365

E:/0/10-098/tidal

TIDAL DATA

Date Tuesday November 8, 1994 3:04 PM
PlotFile E:\0\10-098\TS101.PRN
DataFile E:\QPRO4\CHRIS\TS-1
qproFile E:\0\10-098\TS101.PRN
Time of First Log in Specified Window
34603.4 0.398939
Elevation (TOC) = 11.22
DTW = 9.82

Date	Time	Analog#01 5psi..... feet.....	Elevation
10/05/94	10:00	6.9697	3.0892
10/05/94	10:15	7.392	3.5115
10/05/94	10:30	7.5328	3.6523
10/05/94	10:45	8.0273	4.1468
10/05/94	11:00	8.067	4.1865
10/05/94	11:15	8.3124	4.4319
10/05/94	11:30	8.5542	4.6737
10/05/94	11:45	8.6914	4.8109
10/05/94	12:00	8.9043	5.0238
10/05/94	12:15	8.8827	5.0022
10/05/94	12:30	8.9224	5.0419
10/05/94	12:45	8.9801	5.0996
10/05/94	13:00	8.9476	5.0671
10/05/94	13:15	8.6589	4.7784
10/05/94	13:30	8.5975	4.717
10/05/94	13:45	8.3196	4.4391
10/05/94	14:00	7.9839	4.1034
10/05/94	14:15	7.641	3.7605
10/05/94	14:30	7.2982	3.4177
10/05/94	14:45	6.7712	2.8907
10/05/94	15:00	6.3742	2.4937
10/05/94	15:15	5.8725	1.992
10/05/94	15:30	5.461	1.5805
10/05/94	15:45	5.0928	1.2123
10/05/94	16:00	4.5947	0.7142
10/05/94	16:15	4.2338	0.3533
10/05/94	16:30	3.7213	-0.1592
10/05/94	16:45	3.465	-0.4155

E:/0/10-098/tidal