CDIM

Camp Dresser & McKee

Second Semi-Annual 1999 Groundwater Monitoring Report

Union Pacific Railroad Trailer-On-Flat-Car Site 1717 Middle Harbor Road Oakland, California

March 2000

PREPARED FOR:

Port of Oakland 530 Water Street Oakland, California 94607

PREPARED BY:

CDM/FEJ Joint Association 1440 Broadway, Suite 400 Oakland, CA 94612

CDM Project No. 10605-25291-GW.UPTOFC

Report

CDM Camp Dresser & McKee Inc.

consulting engineering construction

One Walnut Creek Center 100 Pringle Avenue, Suite 300 Walnut Creek, California 94596 Tel: 925 933-2900 Fax: 925 933-4174

March 20, 2000

Mr. John Prall Port of Oakland FORT OF OAKLAND LITVIRONMENTAL DIVISION

Environmental Health and Safety Compliance Department 530 Water Street Oakland, CA 94607

Subject:

Second Semi-Annual 1999 Groundwater Monitoring Report

Trailer-On-Flat-Car Railyard

Union Pacific Railroad

1717 Middle Harbor Road, Oakland, California CDM Project No. 10605-25291-GW.UPTOFC

Dear Mr. Prall:

The Camp Dresser & McKee Inc./F.E. Jordan Joint Association (CDM/FEJ) is pleased present the enclosed Second Semi-Annual 1999 Groundwater Monitoring Report for the Union Pacific Railroad Trailer-on-Flat-Car (TOFC) Railyard located at 1717 Middle Harbor Road in Oakland, California. As required by written directive #502-51231 from the East Bay Municipal Utility Department (EBMUD) and the Alameda County Department of Environmental Health (ACDEH), this report presents the operation, maintenance and monitoring (OM&M) records of the hydrocarbon recovery and groundwater treatment system (treatment system) and the results of the August 1999 groundwater monitoring event.

Please contact the undersign at (925) 933-2900 if you have any questions or comments regarding the report.

Very truly yours,

CAMP DRESSER & McKEE INC.

Hoa Voscott Task Manager

Enclosure

Michael G. Gray, C.E.G.

Senior Project Manager

(721) 296 4450

W00/Reports/Portoakl/Second1999Report/coverletter doc

Second Semi-Annual 1999 Groundwater Monitoring Report

Union Pacific Railroad Trailer-On-Flat-Car Site 1717 Middle Harbor Road Oakland, California

March 2000

PREPARED FOR:

Port of Oakland 530 Water Street Oakland, California 94607

PREPARED BY:

CDM/FEJ Joint Association 1440 Broadway, Suite 400 Oakland, CA 94612

CDM Project No. 10605-25291-GW.UPTOFC

Report

Contents

| Executive Su | ımmary | ES-1 |
|--------------|---|--------------|
| Section 1 | Introduction | 1-1 |
| | 1.1 Background | 1-2 |
| | 1.2 Report Organization | 1-2 |
| Section 2 | Completed Activities | 2-1 |
| | 2.1 OM&M of Treatment System | |
| | 2.1.1 System Operation | 2-1 |
| | 2.1.2 System Maintenance | |
| | 2.1.3 System Monitoring | |
| | 2.1.4 System Monitoring Results | |
| | 2.1.5 System Activated Carbon Usage | 2-3 |
| | 2.2 Groundwater Monitoring | |
| | 2.2.1 Field Activities | 2-3 |
| | 2.2.2 Results of Fluid Level Measurements | |
| | 2.2.3 Results of Groundwater Analytical Testing | 2 - 5 |
| | 2.2.4 Results of Field and Laboratory QA/QC | |
| Section 3 | Summary and Conclusions | 3-1 |
| Section 4 | References | 4-1 |

Appendices

Appendix A OM&M Checklists

Appendix B Monitoring Well Purge and Sampling Forms

Appendix C Analytical Laboratory Reports and Chain of Custody Records

List of Figures

| Figure | | Follows Section |
|--------|--|-----------------|
| 1-1 | Site Location Map | 4 |
| 1-2 | Site Vicinity Map | 4 |
| 2-1 | Groundwater Potentiometric Surface Map – August 12, 1999 | 4 |
| 2-2 | Groundwater Potentiometric Surface Map – November 11, 1999 | 4 |
| 2-3 | Hydrocarbon Concentration in Groundwater-August 13, 1999 | 4 |

List of Tables

| Table | Follows Section |
|-------|---|
| 2-1 | Cumulative Summary of Granular Activated Carbon Usage4 |
| 2-2 | Cumulative Summary of Diesel Recovery4 |
| 2-3 | Cumulative Summary of Analytical Data Influent Samples 4 |
| 2-4 | Cumulative Summary of Analytical Data – Effluent Samples |
| 2-5 | Cumulative Summary of Analytical Data – Midfluent Samples 4 |
| 2-6 | Cumulative Summary of Fluid Level Measurement Data (TOFC)4 |
| 2-7 | Cumulative Summary of Fluid Level Measurement Data (UPMF)4 |
| 2-8 | Cumulative Summary of Analytical Data4 |

Executive Summary

This second semi-annual 1999 groundwater monitoring report presents the findings of the August and November 1999 sampling events conducted at the Union Pacific Railroad Trailer-on-Flat-Car (TOFC) railyard located at 1717 Middle Harbor Road in Oakland, California. This report was prepared by the Camp Dresser & McKee Inc./F.E. Jordan Joint Association (CDM/FEJ) on behalf of the Port of Oakland (Port) in accordance with the East Bay Municipal Utility District (EBMUD) permit number 502-51231. In addition, the report fulfills the requirements cited in the September 21, 1994 letter prepared by the Alameda County Department of Environmental Health (ACDEH). The objectives of the monitoring program are to evaluate changes in the distribution of petroleum hydrocarbons in groundwater and to document the operation, maintenance, and monitoring of the hydrocarbon recovery system.

On December 24, 1998, the Port assumed responsibility for the groundwater monitoring at the Union Pacific Motor Freight (UPMF) and TOFC railyards. On behalf of the Port, CDM/FEJ has performed the groundwater monitoring at the two railyards since February 1999. Work performed at the railyards was previously performed by Environmental Decision Group, Inc. (formerly Laidlaw Consulting Services) and their subcontractor, Burns & McDonnell, on behalf of Union Pacific Railroad (UPRR). Groundwater monitoring results for the UPMF railyard is presented in a separate semi-annual report.

In May 1992, UPRR began operation of the treatment system to recover light non-aqueous phase liquid (LNAPL) petroleum hydrocarbons (diesel) identified during previous investigations. In March 21, 1997, ACDEH approved the Additional Remediation Work Plan to expand the recovery system from three to five pumping wells. In addition, the ACDEH letter approved the semi-annual groundwater monitoring schedule on an annual basis in February and August. Presently, 17 groundwater wells are sampled at the TOFC railyard and are used to interpret the lateral extent of petroleum hydrocarbons in the groundwater.

On August 12, 1999, groundwater samples were collected from six of seven semi-annually monitored wells. Well OMW-2 was not sampled due to train cars that blocked access to the well. The remaining 10 monitoring well either contained product or are used as recovery wells. The groundwater samples were analyzed for total petroleum hydrocarbons as diesel (TPH-D) and for purgeable aromatic hydrocarbons. In addition, methyl tertiary-butyl ether (MTBE) was analyzed during the August 1999 sampling event.

Concentrations of petroleum hydrocarbons and purgeable aromatics in the groundwater samples collected from the monitoring wells were comparable to those obtained from previous sampling events. In most of the wells, TPH-D concentrations continue to be an order of magnitude less from samples collected during and before 1998. MTBE concentrations, analyzed during the August 1999 sampling event, were detected in groundwater and trip blank samples above laboratory detection limits.

Per CDM/FEJ's request, samples OMW-10, OMW-6 and the trip blank were analyzed by mass spectroscopy to confirm the MTBE results obtained by gas chromatography. Although the additional analyses were performed past the sample holding time, the mass spectroscopy data did not confirm the presence of MTBE in these samples. Future analysis of the groundwater samples (in February 2000) for MTBE will verify this detection.

Groundwater flow beneath the TOFC and UPMF sites is southeast toward Oakland Inner Harbor and is consistent with historical groundwater flow direction interpretations.

Section 1 Introduction

This report presents the results of the semi-annual monitoring program conducted at the Union Pacific Railroad trailer-on-flat-car (TOFC) railyard located at 1717 Middle Harbor Road in Oakland, California (Figure 1-1). This report presents the monitoring program results for the period from July 1, 1999 through November 30, 1999 and documents operation, maintenance and monitoring (OM&M) of the hydrocarbon recovery and groundwater treatment system (treatment system) and the August and November 1999 groundwater monitoring event. The objectives of the monitoring program are to evaluate changes in the distribution of petroleum hydrocarbons in groundwater, if any, and to document the OM&M of the treatment system.

This report was prepared by the Camp Dresser & McKee Inc./F.E. Jordan Joint Association (CDM/FEJ) on behalf of the Port of Oakland (Port) in accordance with the East Bay Municipal Utility District (EBMUD) permit number 502-51231 and in fulfillment of the requirements cited in the September 21, 1994 letter prepared by the Alameda County Department of Environmental Health (ACDEH).

In May 1992, Union Pacific Railroad (UPRR) began operation of the treatment system to recover light non-aqueous phase liquid (LNAPL) petroleum hydrocarbons (diesel) identified during previous investigations (Laidlaw, 1991a). The treatment system design was presented in The Preliminary Design Report and the as-built information was later presented in The Hydrocarbon Recovery Systems, As-Built Construction Report (Laidlaw, 1991b and Laidlaw, 1992a, respectively). On March 21, 1997, ACDEH approved the Additional Remediation Work Plan to expand the recovery of the treatment system from three pumping wells (ORW-1 through ORW-3) to five pumping wells (addition of OMW-9 and OP-4). In addition, the ACDEH letter approved the semi-annual groundwater monitoring schedule of February and August.

On December 24, 1998, the Port assumed responsibility for the groundwater monitoring at the UPRR Motor Freight (UPMF) and TOFC railyards and for OM&M of the two groundwater treatment systems at the railyards. On behalf of the Port, CDM/FEJ has performed the groundwater monitoring at the TOFC and UPMF railyards since February 1999. Work performed at the UPMF and TOFC railyards was previously performed by Environmental Decision Group, Inc. (formerly Laidlaw Consulting Services) and their subcontractor, Burns & McDonnell, on behalf of UPRR. Groundwater monitoring results for the UPMF railyard was presented in a separate report, dated December 1999 (CDM/FEJ, 1999).

The semi-annual monitoring program consists of the results of fluid-level measurements, analytical results for groundwater samples collected by CDM/FEJ in February 1999 and the OM&M activities for the treatment system from July 1, 1999 to November 30, 1999. The purpose of the groundwater monitoring program is to monitor the hydraulic flow direction and the changes in the concentration of

dissolved petroleum hydrocarbons at the TOFC railyard while the OM&M program documents the volume of treated groundwater and recovered product. This report includes a discussion of the background information about the railyard, field and analytical results for the semi-annual period, and summary of findings.

1.1 Background

The TOFC railyard is located on the northeastern portion of UPRR, which is adjacent to the Oakland Inner Harbor or Oakland Estuary (Figures 1-1 and 1-2). The area surrounding the TOFC railyard is used for light to heavy commerce. Residential areas are located approximately one-half mile north of the railyard and across the Oakland Estuary one-half mile south of the railyard.

Previous investigations indicated the presence of LNAPL petroleum hydrocarbons (diesel) floating on groundwater near the fueling area. In May 1992, the treatment system was installed to remove the free phase diesel from extracted groundwater.

Downgradient and approximately 700 feet southeast of the TOFC railyard is the UPMF railyard. Previous investigations have defined the extent of petroleum hydrocarbons in the soil and groundwater (Laidlaw, 1993). Groundwater monitoring has been performed at UPMF railyard since 1993. On the basis of these investigations and subsequent monitoring, petroleum hydrocarbons from the TOFC railyard do not appear to have migrated to the UPMF railyard. The ACDEH treats the UPMF railyard as a separate project and the UPMF railyard's monitoring program results were discussed in a separate report (CDM/FEJ, 1999). However, the water level data collected from the UPMF railyard in conjunction with the TOFC railyard are used to contour the local groundwater elevations.

1.2 Report Organization

This report consists of four sections. This Section 1, Introduction, provides the regulatory framework for the activities at the TOFC railyard and background information. Section 2, Completed Activities, documents the OM&M activities, results of fluid level measurements, and summarizes the groundwater flow direction and quality at the site. Section 3, Summary of Findings, presents the results of the most recent monitoring event. Section 4, References, lists the references cited in this report. Following Section 4, are the Figures, Tables, and Appendices A through C. Appendix A presents the OM&M checklist, Appendix B presents the monitoring well purge and sampling forms, and Appendix C presents the analytical laboratory reports and chain of custody records.

Section 2 Completed Activities

The major activities completed at the TOFC railyard during this reporting period were OM&M of the treatment system, and groundwater elevation measurement and sampling. Work performed during the monitoring events followed the standard operating procedures previously approved by the ACDEH (Laidlaw, 1994). The scope of work performed during this semi-annual monitoring period and consisted of the following:

- Perform operation, maintenance, and monitoring of the hydrocarbon recovery and groundwater treatment system on a weekly basis;
- Measure fluid-levels in all of the TOFC groundwater monitoring wells on a quarterly basis in August and November 1999;
- Purge and sample six groundwater monitoring wells on a semi-annual basis where product was not observed in August 1999;
- Analyze groundwater samples for total petroleum hydrocarbons and volatile aromatic constituents semi-annually and for methyl tertiary-butyl ether (MTBE) in August 1999; and
- Determine the local groundwater flow direction and hydraulic gradient based on the calculated potentiometric surface elevations.

2.1 OM&M of Treatment System

The treatment system at TOFC railyard consist of five recovery wells (ORW-1, ORW-2, ORW-3, OMW-9, and OP-4), a diesel/water separator, a recovered diesel storage tank, air compressor, and an activated carbon treatment system. The recovery of diesel fuel is accomplished by depressing the groundwater table using total-fluid pumps to recover diesel and groundwater, creating a cone of depression surrounding each recovery well. The recovered groundwater is treated via the diesel/water separator and then through the activated carbon treatment system before discharge to the EBMUD sanitary sewer under the permit number 502-51231. The locations of the five recovery wells (ORW-1, ORW-2, ORW-3, OMW-9, and OP-4) and the water treatment facility are indicated on Figure 1-2.

2.1.1 System Operation

During this reporting period, the groundwater recovery and treatment system treated approximately 226,820 gallons of groundwater. Since start-up, May 12, 1992 through November 30, 1999, the system has recovered approximately 7,348,990 gallons of water (see Table 2-1) and 11,200 gallons of diesel (see Table 2-2).

The system has operated continuously since being restarted on June 22, 1998 with minor down time due to required maintenance. It was down for approximately 12 days in July when the oil tank reached its high level, resulting system shutdown. The system was restarted following removal of the oil on July 30, 1999. In addition, the system was down eight days in August 1999 until the air compressor motor was replaced on August 14, 1999.

The combined average pumping rates for ORW-1, ORW-2, ORW-3, OMW-9, and OP-4 was approximately 1.2 gallons per minute (gpm) and is representative of the average cumulative pumping rate for the reporting period.

2.1.2 System Maintenance

System maintenance is performed on a weekly basis and consists of backwashing the carbon vessels, changing particulate filters, and checking the status of recovery pumps and chlorine feed system. In addition, operational readings (cumulative flow, hydrocarbon storage volume, and pressure drop across the particulate filters) are collected during each railyard visit. Copies of the completed treatment system OM&M checklist for each week are included in Appendix A.

2.1.3 System Monitoring

System monitoring is performed on a monthly basis during a scheduled maintenance visit. Recovered groundwater samples are collected from the sampling ports at the treatment system periodically to assess the performance of the system and to compare the concentrations of the discharge with limits established by the EBMUD.

The samples are collected from sampling ports located before (influent), between (midfluent), and after (effluent) the two granular activated carbon vessels at the following frequencies.

- On a monthly basis, water samples are collected from the midfluent stream. These samples are analyzed for benzene, toluene, ethylbenzene, and xylenes (BTEX) using EPA Method 8020.
- Influent and effluent water samples are collected on a quarterly basis (January, April, July, and October). These samples are analyzed for BTEX using EPA Method 8020 and total petroleum hydrocarbons as diesel (TPH-D) using EPA Method 8015 modified with silica gel cleanup.

2.1.4 System Monitoring Results

Influent and effluent samples are collected quarterly and were obtained on July 7, 1999 and October 8, 1999. For the influent samples, TPH-D, benzene, ethylbenzene, and total xylenes were identified above laboratory detection limits (see Table 2-3). Toluene was not detected above laboratory detection limit. For the effluent samples, no compounds were detected above laboratory detection limits and the EBMUD discharge limits (see Table 2-4).

Midfluent samples are collected monthly and were obtained on July 7, 1999, August 24, 1999, September 3, 1999, October 8, 1999, and November 12, 1999. During this semi-annual period, no compounds were detected above laboratory detection limits (see Table 2-5).

2.1.5 System Activated Carbon Usage

Two 2,000-pound granular activated carbon vessels are connected in series to remove organic compounds dissolved in the recovered groundwater. The second vessel is inplace to reduce a potential discharge to the sewer system in the event of breakthrough of the first carbon vessel.

Table 2-1 presents the estimated amount of spent carbon (adsorption sites loaded with contaminants) and the expected life of the first carbon vessel. The methodologies for performing calculations were originally presented in the Hydrocarbon Recovery System Quarterly Monitoring Report, Second Quarter, 1992 (Laidlaw, 1992b). Based on the calculations, there is approximately 314 days left and the projected breakthrough date is in October 2000. CDM/FEJ will evaluate the need to replace the first carbon vessel in June 2000. The second carbon vessel was replaced on August 28, 1998.

2.2 Groundwater Monitoring

2.2.1 Field Activities

August 1999 Monitoring Event

On August 12, 1999, CDM/FEJ measured fluid levels (combined water and diesel) in all 17 monitoring wells at the TOFC railyard. In addition, fluid levels were measured from eight of the ten wells located at the UPMF railyard. CDM/FEJ's fluid level measurements for the TOFC and UPMF railyards are presented in Tables 2-6 and 2-7, respectively.

On August 13, 1999, CDM/FEJ purged and collected groundwater samples from six of the 17 monitoring wells at the TOFC railyard. Well OMW-2 was not sampled due to train cars that blocked access to the well. In addition, a blind duplicate sample was collected from well OMW-10. This duplicate sample was labeled as OMW-11. Copies of CDM/FEJ's monitoring well purge and sampling forms for the six wells are presented in Appendix B.

Prior to sampling, CDM/FEJ purged a minimum of three well volumes from each well using a new, polypropylene disposable bailer. Groundwater samples were collected with the same disposable bailer following the removal of three well volumes of water. Samples were then decanted into the appropriate laboratory supplied bottles. Specifically, samples were contained in three 40-milliliter glass vials preserved with hydrochloric acid (with no headspace) and one 1-liter amber glass bottle. All samples were transported in a cooler chilled with ice and submitted under chain-of-custody protocol to Curtis & Tompkins, Ltd. (Port designated laboratory), a state-certified analytical laboratory, in Berkeley, California.

Groundwater samples were analyzed for the following:

- TPH-D by EPA Method 8015 Modified with silica gel cleanup;
- BTEX by EPA Method 8020; and
- MTBE by EPA Method 8020.

In accordance with the ACEHS letter to the Port, dated May 28, 1999, MTBE testing was performed during the August 1999 sampling event. According to ACEHS, the State Water Resources Control Board will not allow closure for a petroleum underground storage tank site unless the site has been tested for MTBE".

November 1999 Monitoring Event

On November 11, 1999, CDM/FEJ measured fluid levels in all 17 monitoring wells at the railyard. In addition, fluid levels were measured from the 10 wells located at the UPMF railyard. CDM/FEJ's fluid level measurements for the TOFC and UPMF railyards are presented in Tables 2-6 and 2-7. As it was not required by the ACDEH, no groundwater samples were collected at the TOFC railyard.

2.2.2 Results of Fluid Level Measurements

During the August and November 1999 monitoring events, fluid levels were measured from the wells at the TOFC and UPMF railyards and were used in calculating groundwater elevations for each monitoring event. Fluid elevations were calculated by substrating the depth to fluid/groundwater from the elevation of the top of casing at each location. Groundwater elevations in monitoring wells containing product were corrected by multiplying the specific gravity of (0.84) of diesel by the product thickness and adding this value to the water elevation measurement in the well. The cumulative summaries of fluid level measurement data, including free product thickness, for the TOFC and UPMF railyards are presented in Tables 2-6 and 2-7, respectively.

August 1999 Pontentiometric Surface

A groundwater potentiometric surface map, created with measurements collected from groundwater monitoring wells at the TOFC railyard and from the adjacent UPMF railyard on August 12, 1999, is presented as Figure 2-1. In the region of the TOFC railyard, groundwater flow is generally to the southeast. Pumping activity was discontinued on the TOFC railyard (due to system shutdown) during the fluid level measurements, flattening the water table (compare Figure 2-1 to Figure 2-2). Hydraulic gradient slopes uniformly across the site but steepens notably as groundwater approaches the shoreline near well APL/UP-W2.

November 1999 Pontentiometric Surface

A potentiometric surface map, created with measurements collected from groundwater monitoring wells at the TOFC railyard and from the adjacent UPMF on November 11, 1999, is presented as Figure 2-2. In the region of the TOFC railyard, groundwater flow is generally to the southeast. Pumping activity was active at the

TOFC during the fluid level measurements, creating cones of depression around the recovery wells (compare Figure 2-1 to Figure 2-2). Consistent with the August observations, the groundwater gradient varies across the railyards but generally slopes toward well APL/UP-W2.

2.2.3 Results of Groundwater Analytical Testing

August 1999 Monitoring Event

Dissolved TPH-D was detected in groundwater samples collected from four of the six monitoring wells sampled during the August 1999 monitoring event. TPH-D concentrations ranged from below 50 microgram/liter (μ g/l) in wells OMW-1 and OMW-8, up to 1,600 μ g/l in well OMW-10. TPH-D concentrations were less or comparable from the previous monitoring event (February 1999).

For the six wells sampled, benzene concentrations ranged from less than 0.5 μ g/l in most wells to 16 μ g/l in well OMW-10. For toluene, concentrations ranged from less than 0.5 μ g/l in most wells to 77 μ g/l in well OMW-1. Ethylbenzene concentrations ranged from below 0.5 μ g/l in most wells to 1.49 μ g/l in well OMW-10. For total xylenes, concentrations ranged from below 0.5 μ g/l in most wells to 2.32 μ g/l in well OMW-1. The concentrations are also consistent with previous monitoring events.

MTBE concentrations were detected in all of the groundwater samples submitted to Curtis & Tompkins, Ltd. In addition, MTBE was detected in the trip blank sample, which originated from the laboratory. MTBE concentrations ranged from 2.5 μ g/l in well OMW-1 to 14 μ g/l in duplicate sample from well OMW-10. Per CDM/FEJ's request, samples OMW-10, OMW-6 and the trip blank were analyzed by mass spectroscopy to confirm the MTBE results obtained by gas chromatography. Although the additional analyses were performed past the sample holding time, the mass spectroscopy data did not confirm the presence of MTBE in these samples. Future analysis of the groundwater samples (in February 2000) for MTBE will verify this detection.

Well OMW-10 contained the highest measured dissolved concentrations of TPH-D, benzene, and ethylbenzene. Well OMW-1 had the highest measured toluene and total xylenes concentrations. TPH-D and BTEX concentrations measured during the August 1999 monitoring events are presented as Figure 2-3. Cumulative summary of the analytical data for the TOFC railyard is presented in Table 2-8. Analytical reports and chain of custody forms are included in Appendix C.

2.2.4 Results of Field and Laboratory QA/QC

A duplicate groundwater sample (OMW-11) was collected at well OMW-10 and analyzed for BTEX and MTBE to measure groundwater data reproductively. The duplicate sample showed good correlation with its partner sample, particularly for BTEX. In addition, a trip blank sample was collected during the day of field activities and analyzed for BTEX and MTBE. Laboratory results for the trip blank sample were all below laboratory detection limits for BTEX but had a detection of 3.8 µg/l for

MTBE. Following additional analysis with mass spectroscopy, MTBE in the trip blank sample was below laboratory detection limit.

The maximum holding time for TPH-D, BTEX, and MTBE in water is 14 days from the time of sample collection to time of analysis. According to the analytical reports, all samples were analyzed with gas chromatography within the analytes' respective holding times. However, three samples were analyzed for MTBE confirmation with mass spectroscopy after the holding time. Based on the analytical reports' case narratives, no other analytical problems were encountered during laboratory Quality Assurance/Quality Control (QA/QC) procedures.

Section 3 Summary and Conclusions

Based upon the results of the most recent monitoring events in August and November 1999, presented below are the summary of findings and CDM/FEJ's conclusions:

- The treatment system operated continuously during this semi-annual period with two minor down time events. System sampling indicated that all midfluent and effluent samples were below laboratory detection and EBMUD discharge limits.
- The groundwater flow direction was to the south to southeast during the two monitoring events. This flow direction is consistent with previous groundwater monitoring events. Groundwater flow and gradient are clearly influenced by groundwater pumping activities of the remedial system on the TOFC railyard, except during the August 1999 sampling event when the system was non-operational.
- The dissolved BTEX and TPH concentrations in all wells were consistent with historic concentration ranges. TPH-D concentrations continue to be an order of magnitude less than from samples collected in and before 1998.
- MTBE concentrations were detected in groundwater samples from the monitoring wells and trip blank sample from the laboratory. Future MTBE analysis in February 2000 will either confirm or dispute these detections.
- Historic monitoring results show that residual petroleum contamination in the source area has decreased over time, which suggests that a continued source of contamination is not present.

Section 4 References

CDM/FEJ, 1999. First Semi-Annual 1999 Groundwater Monitoring Report. Camp Dresser & McKee Inc./F.E. Jordan Joint Association (CDM/FEJ), August 2, 1999.

Laidlaw, 1991a. Hydrocarbon Investigation and Remediation Design. Laidlaw Environmental Services, June 10, 1991.

Laidlaw, 1991b. The Preliminary Design Report. Laidlaw Environmental Services, 1991.

Laidlaw, 1992a. The Hydrocarbon Recovery Systems, As-Builts Construction Report. Laidlaw Environmental Services, 1992.

Laidlaw, 1992b. Hydrocarbon Recovery System Quarterly Report. Laidlaw Environmental Services, 1992.

Laidlaw, 1993. Phase II Site Assessment Report. Laidlaw Environmental Services, October 1993.

Laidlaw, 1994. Fourth Quarter 1993 Monitoring Event. Laidlaw Environmental Services, October 1993.

Figures

Figure 1-1

Site Location Map

Second Semi-Annual 1999 Groundwater Monitoring Report - TOFC Port of Oakland, California

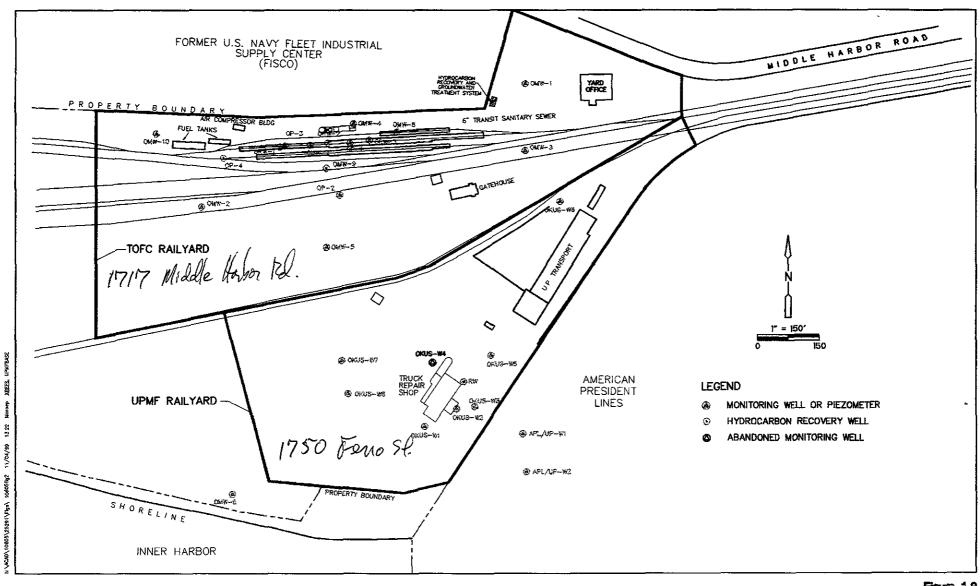


Figure 1-2

Site Map

Second Semi-Annual 1999 Groundwater Monitoring Report - TOFC Port of Oakland, California

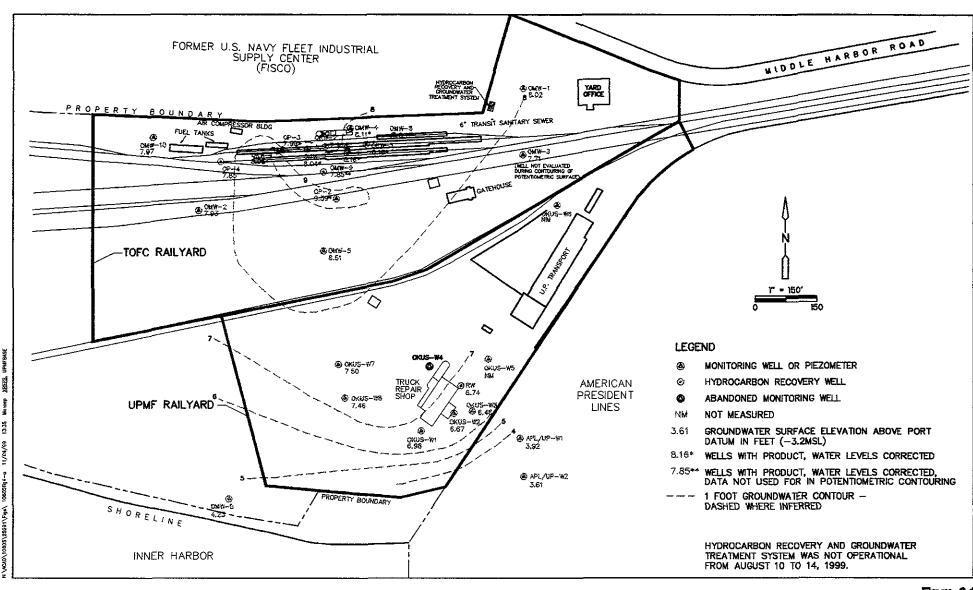
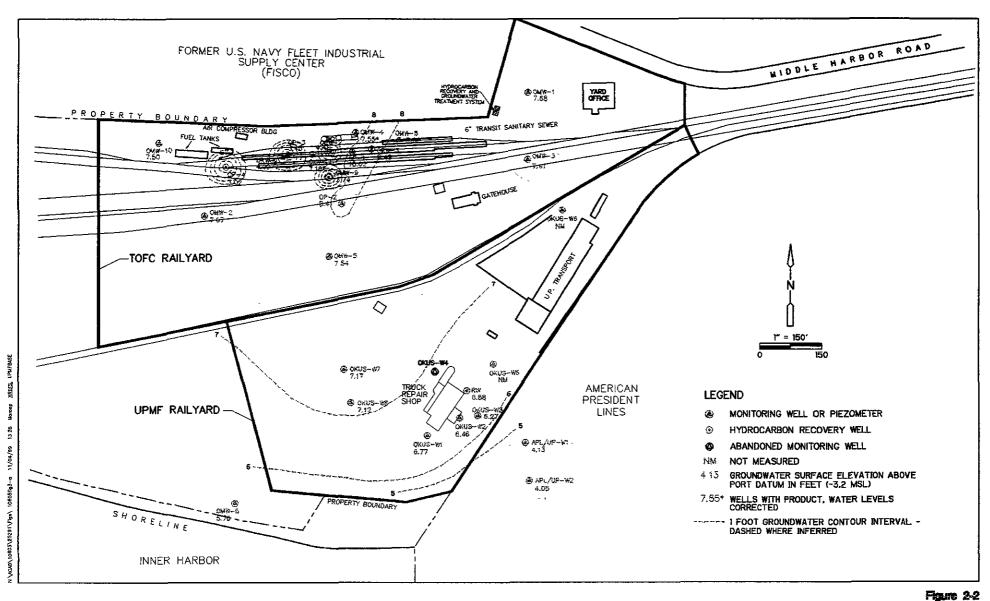
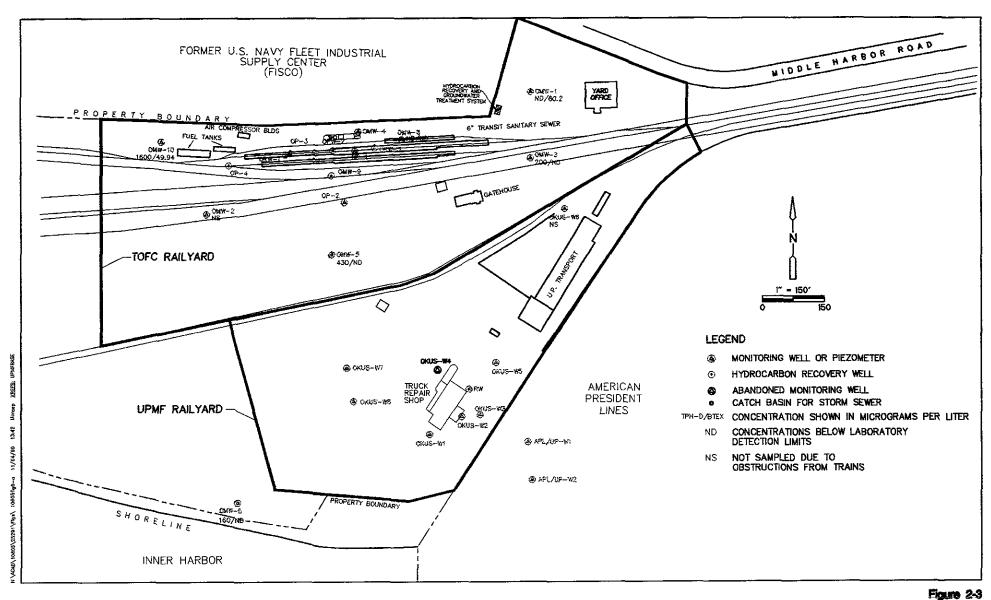


Figure 2-1





Tables

TABLE 2-1 CUMMULATIVE SUMMARY OF GRANULAR ACTIVATED CARBON USAGE PORT OF OAKLAND TRAILER-ON-FLAT-CAR (TOFC) RAILYARD

| | | | Observed | Average | Infi Conc | Carbon | Spent | Remaining | Remaining | Projected |
|-----------------------|-------------------------|---------------------------|---|--------------|------------|------------|------------|-------------------|------------|------------------|
| _ | | | | Flowrate | | | Carbon | Pumpable | Pumpable | Breakthru |
| Date | Time | Volume | Flowrate | | TPHd | Used | | · | | ł |
| | | (gallons) | (gpm) | (gpm) | (mg/l) | (pounds) | (pounds) | (gallons) | (days) | Date |
| 05/07/92 | 11:35 PM | 2020 | 1.74 | 1.74 | 45 ° | 8 | 8 | 531663 | 213 | Dec-92 |
| 05/12/92 | ✓ 08:30 AM | - 등학 12980 | 1.74 | 1.74 | 45 | 41 | 49 | 520703 | 208 | Dec-92 |
| 05/19/92 | 01:30 PM | 24990 | 1.16 | 1.55 | 59 | 50 | 98 | 387036 | 174 | Nov-92 |
| 05/27/92 | 10:50 AM | ÷ 145350 | 1.79 | 1,61 | 61 | 89 | 187 | 356823 | 154 | Oct-92 |
| 06/02/92 | 03:00 PM | 73150 | 3.13 | 1.91 | 100 | 144 | 331 | 200426 | 73 | Aug-92 |
| 07/07/92 | | ि (166500 | | 1.90 | 200 | 661 | 992 | 60539 | 22 | Jul-92 |
| 08/11/92 | 11:56 AM | 232370 | 1.32 | 1.32 | 6.1 | 0 + | 0 | 1771651 | 935 | Mar-95 |
| 09/25/92 | *\`09:55 AM | ⊴ €388390 | 2.41 | 1.86 | 17 | 333 | 333 | 529708 | 197 | Apr-93 |
| 11/16/92 | 09:55 AM | 484380 | 1.28 | 1.67 | 100 | 729 | 1062 | 50663 | 21 | Dec-92 |
| 12/04/92 | 09:55 AM | 518160 | | 4.58 | 8.7 | 206 | 1268 | 454991 | 200 | Jun-93 |
| 02/02/93 | 02:30 PM | 673180 | 1.79 | 1.62 | 6.9 | 796 | 2064 | -50298 | -22 | Jan-93 |
| 03/10/93 | € 03:00 PM | 741070 | 31,31 | 1.31 | 30 * | 0 + | 0 | 400262 | 212 | Oct-93 |
| 03/30/93 | 09:00 AM | 743950 | 0.10 | 1.61 | 44 | 18 | 18 | 270484 | 117 | Jul-93 |
| 04/30/93 | 04:00 PM | ☆ 755900 | 0.27 | 1.51 | 14 | 58 | 76 | 825055 | 379 | May-94 |
| 05/27/93 | 01:40 PM | 854610 | 2.55 | 1.58 | 120 | 855 | 931 | 53482 | 23 | Jun-93 |
| 06/30/93 | ∴ 07:30 AM | 1007200 | 3,14 | 1,68 | 1.2 4 6 | 1063 | 1994 | 27899 | 12 | Jul-93 |
| 07/21/93 | 07:30 AM | 1094630 | 2.89 | 2.89 | 2.2 * | 0 + | _0 | 2183247 | 524 | Dec-94 |
| 07/28/93 | 08:30 AM | 1125630 | 3.06 | 2.97 | 2.2 | 28 | 28 | 2152247 | 503 | Dec-94 |
| 08/31/93 | 01:55 PM | 1256910 | 2.66 | 2.87 | 3.2 | 138 | 167 | 1375740 | 333 | Jul-94 |
| 09/30/93 | ₹ 04:00 PM | ∴ें 1333050 ` | 1,76 | 2.59 | 20 | 219 | 386 | 193850 | 52 | Nov-93 |
| 10/28/93 | 05:50 PM | 1411050 | 1.93 | 2.46 | 61 | 219 | 605 | 549390 | 155 | Apr-94 |
| 11/30/93 | *. 08:00 PM | ≥<1475300 | % 1,35 Å | 2.27 | 31 | 288 | 898 | 85757 | 26 | Dec-93 |
| 12/28/93 | 12:00 PM | 1526880 | 1.29 | 2.13 | 10 | 229 | 1122 | 210802 | 69 | Mar-94 |
| 01/31/94 | 3:00 PM | 1584340 | ₹ <u>₹</u> 1.17 | 2.01 | 3.3 | 233 | 1356 | 469026 | 162 | Jul-94 |
| 02/07/94 | 12:00 PM | 1595300 | 1.11 | 1.11 | 8.0 * | 0 + | 0 | 1500982 | 942 | Sep-96 |
| 02/25/94 | ₩ 04;00 PM | 4 8 1658010 | | 1,75 | 9.3 | 90 | 90 | 1232840 | 489 | Jun-95 |
| 03/30/94 | 11:00 AM | 1785000 | 2.69 | 2.06 | 2.7 | 141 | 231 | 3932895 | 1323 53 | Nov-97 |
| 05/03/94 | ≫ 05:00 PM: | ** 1841190 | | 1.83 | 67 | 204 | 435 639 | 140249 2333885 | 904 | Jun-94 Nov-96 |
| 06/01/94 | 04:00 PM | 1909040 | 1.63 | 1.79 1.73 | 3.5 1.4 | 205 306 | 946 | 4522185 | 1813 | Jul-99 |
| 07/29/94 | | 2113920 | | 1.74 | 2.1 | 190 | 1135 | 2471828 | 986 | May-97 |
| 08/31/94 | 07:00 PM 3€ 11:00 AM | 2175320 | 1.79 1.60 | 1.72 | 5.9 | 128 | 1263 | 749848 | 302 | Jul-95 |
| 09/27/94: 40/00/04 | | 2254600 | 1.77 | 1.73 | 5.5 | 155 | 1418 | 635573 | 255 | Jul-95 |
| 10/28/94 | 12:00 PM | | | 1.73 | | | | 84163 | | |
| 11/23/94 | 11:00 AM | 2276880 | | 0.77 | 16 * | 0 + | 0 | 750491 | 681 | Oct-96 |
| 01/25/95 | | 77.00 | 2,11 | 1.44 | 35 ** | 812 | 812 | 203706 | 99 | May-95 |
| 04/12/95 | 10:50 AM | 2549270 | | 1.20 | 3.7 | 246 | 1059 | 1527342 | 883 | Sep-97 |
| 05/29/95 | 03:30 PM | 2732640 | 44.9.2.4900.30.22 | 1.58 | 0.7 | 418 | 1476 | 1527342 | 673 | Apr-97 |
| 06/30/95 | 02:00 PM | 2830380 | 2.13 | 1.69 | 25 | 259 | 1736 | 63424 | 26 | Jul-95 |
| 07/19/95 | ○ 02:30 PM | 2882550 | 22 1 1 1 1 2 2 1 12 1 2 2 | 1.72 | 13 | 134 | 1870 | 59968 | 24 | Aug-95 |
| 07/21/95 | 11:00 AM | 2890500 | 2.98 | 2.98 | 12 * | 0 + | 0 | 1000655 | 233 | Mar-96 |
| 07/21/95 | 04:00 PM | \$\frac{2986700}{2986700} | 100000000000000000000000000000000000000 | 3.32 | 11 | 184 | 184 | 991051 | 207 | Mar-96 |
| 09/08/95 | 02:00 PM | 3108110 | 2.73 | 3.12 | 11 | 229 | 413 | 865962 | 192 | Mar-96 |
| 10/13/95 | 10:30 AM | 3206500 | | 2.83 | 66 | 410 | 823 | 107058 | 26 | Nov-95 |
| 11/22/95 | 03:30 PM | 3318600 | | 2.65 | 38 | 515 | 1338 | 104523 | 27 | Dec-95 |
| 12/15/95 | \$ 08:00 AM. | 3369800 | 2 - A - A - A - A - A - A - A - A - A - | 2.47 | 19 | 223 | 1562 | 138533 | 39 | Jan-96 |
| 01/08/96 | 11:45 AM | 3554790 | 5.32 | 2.88 | 0.05 | 691 | 2253 | 255074 | 62 | Mar-96 |
| 01/08/96 | 08:00 AM | 3714500 | | 2.00 | 56 | 708 | 2961 | 4150 | 1 | Feb-96 |
| | 11:00 AM | 3814170 | | 2.86 | 42 | 470 | 3432 | 2610 | 1 | Mar-96 |
| 03/12/96 | 11:00 AM | 3014170 | <u>د.٥٥</u> | 2.00 | 1 | 4/0 | 3432 | 2010 | <u> </u> | I war-90 |

CUMMULATIVE SUMMARY OF GRANULAR ACTIVATED CARBON USAGE PORT OF OAKLAND TRAILER-ON-FLAT-CAR (TOFC) RAILYARD

| | | | Observed | Average | Infl Conc | Carbon | Spent | Remaining | Remaining | P | rojected |
|------------------------|-----------------------|------------------------|----------------------|----------|-----------|----------|----------|-----------|-----------|---|----------|
| Date | Time | Volume | Flowrate | Flowrate | TPHd | Used | Carbon | Pumpable | Pumpable | В | reakthru |
| | | (gallons) | (gpm) | (gpm) | (mg/l) | (pounds) | (pounds) | (gallons) | (days) | | Date |
| 04/10/96 | , MA 00:80 | 3927670 | 2.73 | 2.84 | 36 | 550 | 3982 | 3011 | 1 | | Apr-96 |
| 05/06/96 | 08:00 AM | 4035290 | 2.87 | 2.87 | 25 * | 0 + | 0 | 480314 | 116 | | Aug-96 |
| 05/13/96 | MA 00:80 📆 | 4055530 | 2.69 | 2,78 | 14. | 66 | 66 | 829513 | 207 | | Dec-96 |
| 06/13/96 | 07:00 AM | 4172140 | 2.62 | 2.73 | 18 | 369 | 435 | 522088 | 133 | | Oct-96 |
| 07/17/96 | 707:50 AM | 4343300 | 3.49 | 2.92 | 9.7 | 475 | 910 | 674587 | 161 | | Dec-96 |
| 08/19/96 | 08:00 AM | 4478300 | 2.84 | 2.90 | 14 | 363 | 1273 | 311757 | 75 | | Nov-96 |
| 09/16/96 | ∰ 10:00 AM | 4556200 | 1.93 | 2.74 | 14 | 205 | 1478 | 223934 | 57 | | Nov-96 |
| 10/17/96 | 02:55 PM | 4645700 | 1.99 | 2.63 | 11 | 225 | 1703 | 162148 | 43 | | Nov-96 |
| 11/25/96 | 10:25 AM | ≥ ₹4781 7 00 | 2.43 | 2.61 | 13 | 336 | 2039 | -18021 | -5 | | Nov-96 |
| 12/13/96 | 09:35 AM | 4829600 | 1.85 | 2.52 | 14 | 118 | 2157 | -67181 | -18 | | Nov-96 |
| 12/19/96 ° | 09:40 AM | ॐ [≈] 4840900 | 1,31 | 1.31 | 17 * | 0 + | 0 | 706345 | 375 | | Dec-97 |
| 01/14/97 | 01:00 PM | 4914200 | 1.95 | 1.63 | 22 | 238 | 238 | 480841 | 205 | | Aug-97 |
| 02/11/07 | [∞] 02:30 PM | 5072700 | 3.92 | 2.39 | 13 | 462 | 700 | 600366 | 174 | | Aug-97 |
| 03/10/97 | 10:00 AM | 5186800 | 2.96 | 2.53 | 16 | 276 | 976 | 384394 | 105 | | Jun-97 |
| 04/04/97 | ∰ 11:00 AM | 5288500 | 2.82 | 2,59 | 8.7 | 209 | 1185 | 562565 | 151 | | Sep-97 |
| 05/15/97 | 07:30 AM | 5435800 | 2.50 | 2.58 | 8.5 | 211 | 1396 | 426769 | 115 | | Sep-97 |
| 06/30/97 | 11:25 AM | 5484800 | 0.74 | 2.31 | 8.5 * | 69 | 1465 | 377769 | 113 | | Oct-97 |
| 07/18/97 | 01:00 PM | 5580700 | 3.69 | 2.48 | 18 | 212 | 1677 | 107798 | 30 | | Aug-97 |
| 08/08/97 | 09:00 AM | 5666400 | \$ 2.86 | 2.86 | 18 * | 0 + | - 0 - 0 | 667103 | 162 | | Jan-98 |
| 08/15/97 | 11:00 AM | 5679200 | 1.25 | 2.06 | 12 | 32 | 32 | 984655 | 333 | | Jul-98 |
| 09/05/97 | 11:00 AM | ¹ ⊋ 5790000 | 3,66 | 2.59 | 14 | 240 | 272 | 741104 | 199 | | Mar-98 |
| 6/30/1998*** | Not Recorded | 5925800 | 10.48 | 4.56 | 26.5 | 480 | 751 | 282887 | 43 | | Aug-98 |
| 07/29/98 | [≥] 09:30 AM | ™.6083000 | 12.13 | 6.08 | 27.5 | 581 | 1333 | 145697 | 17 | | Aug-98 |
| 08/28/98 | 09:00 AM | 6166900 | 1.94 | 1.94 | 26 | 0 + | 0 | 461841 | 165 | | Feb-99 |
| [™] 09/28/98' | .^ 10:30 AM | ->6267800 | 2.26 | 2.10 | 12 | 355 | 955 | 823146 | 272 | | Jun-99 |
| 10/31/98 | 10:00 AM | 6400200 | 2.79 | 2,33 | 19 | 380 | 735 | 399870 | 119 | | Feb-99 |
| 11/23/98 | 汽 10:00 AM. | 6477700 | 2,34 | 2.33 | 1 | 140 | 874 | 13515883 | 4025 | | Nov-09 |
| 12/29/98 | 12:00 AM | 6638500 | 3.10 | 2.49 | 6 * | 97 | 971 | 1029546 | 288 | | Oct-99 |
| 01/29/99 | . 12:00 AM | 6777500 | \$ # 3 .11\$9 | 3.11 | ± 12 € | 232 | 1203 | 398940 | 89 | | Apr-99 |
| 02/26/99 | 10:00 AM | 6859255 | 2.03 | 2.57 | 9 * | 159 | 1362 | 425941 | 115 | | Jun-99 |
| 03/28/99 | > 10:00 AM | 6953415 | 2.18 | 2.44 | 6 * | 131 | 1492 | 508133 | 145 | | Aug-99 |
| 04/28/99 | 10:00 AM | 7025380 | 1.61 | 2.23 | 2 | 53 | 1545 | 1364478 | 424 | | Jun-00 |
| 05/28/99 | . 10;00 AM | 7072500 | e0, f | 2.00 | 6.* | 35 | 1580 | 419922 | 145 | | Oct-99 |
| 06/30/99 | 10:00 AM | 7122172 | 1.05 | 1.84 | 9 * | 69 | 1649 | 233956 | 88 | | Sep-99 |
| 07/30/99 | MA 08:80 AM | 7144115 | 0.85 | 1.70 | 2 | 22 | 1672 | 985752 | 402 | | Sep-00 |
| 08/26/99 | 15:00 AM | 7178400 | 1.25 | 1.65 | 2 * | 13 | 1684 | 947657 | 400 | | Sep-00 |
| 09/22/99 | ≫ 08:15 AM | 7238770 | 1.55 | 1.64 | 4 * | 34 | 1718 | 423520 | 180 | | Mar-00 |
| 10/29/99 | 08:30 AM | 7287050 | 0.91 | 1.56 | 2 | 27 | 1745 | 766574 | 341 | | Oct-00 |
| 11/30/99 | 10:00 AM | 7348990 | 1.34 | 1.54 | 1 2 2 | 23 | 1768 | 697752 | 314 | | Oct-00 |

^{* -} Concentration estimate

Signet meter battery changed on 9/1/95 - last reading 3,089,890 gallons.

Carbon ludge factor:

0.05

gpm - gallons per minute

^{** -} Concentration represents the average estimated value from January to the next sampling event.

^{*** -} Recovery system was inoperable from Sept. 22, 1997 to June 22, 1998. Readings reflect the first 7 days after the system was restarted.

^{+ -} Changed carbon vessel on this date.

TABLE 2-2 CUMULATIVE SUMMARY OF DIESEL RECOVERY PORT OF OAKLAND TRAILER-ON-FLAT-CAR (TOFC) RAILYARD

| | Total Volume | Recovery | |
|----------------------------|----------------------------|----------------------|-----------------------------|
| Date | Recovered | Rate | Notes |
| | (Gallons) | (Gallons/Day) | |
| ⊕03/02/93 -à | 1500 | santan na na ara- | VOLUME ESTIMATED FROM GAUGE |
| 05/11/93 | 1700 | 2.9 | TANK EMPTIED |
| √ 06/10/93 | ্.ি _. ্. 1900 ভ | Allento 6.7 carriers | VOLUME ESTIMATED FROM GAUGE |
| 09/03/93 | 2700 | 9.4 | TANK EMPTIED |
| À 11/30/93 🕸 | 3400 | 8.0 | VOLUME ESTIMATED FROM GAUGE |
| 02/25/94 | 4200 | 9.2 | VOLUME ESTIMATED FROM GAUGE |
| 06/01/94 | 4800 | 6.3 | VOLUME ESTIMATED FROM GAUGE |
| 06/27/94 | 4900 | 3.8 | TANK EMPTIED |
| 09/23/94 | 5500 | 6.8 | TANK EMPTIED |
| 12/27/94 | 6000 | 5.3 | TANK EMPTIED |
| i 03/17/95 | 6300 | 9.8 | TANK EMPTIED |
| 07/14/95 | 6900 | 5.0 | TANK EMPTIED |
| 10/18/95 | 7500 | 6.3 | TANK EMPTIED |
| 01/30/96 | 8200 | 6.7 | TANK EMPTIED |
| <i>3</i> 7/08/96 ↔ | 9000 | 5.0 | TANK EMPTIED |
| 01/02/97 | 9800 | 4.5 | TANK EMPTIED |
| 08/05/97 ∵ | . 10500 | 1,3 | TANK EMPTIED |
| 06/30/98* | 10600 | 7.6 | VOLUME ESTIMATED FROM GAUGE |
| 3: 09/28/98 ¹ 3 | 10800 | 5.6 | VOLUME ESTIMATED FROM GAUGE |
| 11/23/98 | 10900 | 0.4 | VOLUME ESTIMATED FROM GAUGE |
| > 06/30/99° | 11000 ⁰⁰⁰ 治线数 | 0.5 | VOLUME ESTIMATED FROM GAUGE |
| 11/30/99 | 11200 | 1.3 | TANK EMPTIED |

^{*} Recovery system was inoperable from Sept. 22, 1997 to June 22, 1998. Readings reflect the first 7 days after the system was restarted.

CUMULATIVE SUMMARY OF ANALYTICAL DATA INFLUENT SAMPLES PORT OF OAKLAND TRAILER-ON-FLAT-CAR (TOFC) RAILYARD

| | | | | I | | |
|----------------------|--------------------------------|------------------------|---------------------|--------------|------------------|------------------------------|
| | | | | | Total Petroleur | |
| Date | Benzene | Toluene | Ethylbenzene | Xylenes | Hydrocarbons as | Diesel |
| Collected | (ug/L) | (ug/L) | (ug/L) | (ug/L) | (ug/L) | |
| 05/12/92 | 23 👫 | 22 | 29 | 200 | 7,000 | |
| 05/19/92 | <2 | 7 | 3 | 64 | 59,000 | |
| SE 05/27/92 | ```,≪ <5 ₹`\\ | <5 | 6 | 59 | 61,000 | |
| 06/02/92 | <5 | <5 | <5 | 25 | 100,000 | |
| 07/07/92 | ₹ 5 % | <5 ₁ | 5 | 26 | 200,000 | |
| 08/11/92 | 9.1 | <3 | 13 | 51 | 6,100 | |
| 09/25/92 | . 8.5 | | 5.5 | 24 | 17,000 | |
| 11/16/92 | <50 | <50 | <50 | <50 | 100,000 | Server Laborator A. A. A. A. |
| 12/04/92 | 4.2 | . 2 i 3 i 2 iii | <1 | 9 | 8,700 | |
| 02/02/93 | 8.3 | <1 | <1 | 1.2 | 6,900 | |
| 03/30/93 | 9.5 | 1.5 | 8.7 | 30 | 44,000 | a salas is sa |
| 04/30/93 | 0.7 | 1.2 | 1 | 6.9 | 14,000 | marce as before a second |
| 05/27/93 | 5.4 | 19 4 | 9.2 | 40 | 120,000 | and an a |
| 06/30/93 | <0.3 | <0.3 | <0.3 | <0.9 | 1,200 | a.w |
| 07/28/93 | さ、ご14 で変す | 0.6 | 5.4 | 25 | 2,200 | ipu-ji-niliyedi |
| 08/31/93 | 12 | 0.7 | 4.1 | 23 | 3,200 | Kalan and Kille |
| 09/30/93 | 5% F1F6% E | 0.7 | 13 at 13 au | 35 | 20,000 | la fortist |
| 10/28/93 | 10 | 0.6 | 9.8 | 26 | 6,100 | AT. 56.0.40.88 |
| <u>111/30/93% </u> | * * 9.2 (*); s | <0.5 | | 13 | 31,000 | e ser a se |
| 12/28/93 | 11 | <0.5 | 4.1 | 16 | 10,000 | eth: Liorniyod |
| - 01/31/94 | ≥0.5 ∌ ≥ | <0.5 | | <0.5 | 3,300 | grafikali eg |
| 02/25/94 | 13 | 1.3 | 7.7 | 21 | 9,300 | |
| <u> </u> | 12 👬 | <0.5 € | 2.7 | 18 | 2,700 | Net et al. 1 |
| 05/03/94 | 4.4 | 1.8 | 9.7 | 28 | 67,000 | |
| 06/01/94 | , , , 0.0 ; 5%; 5, 5, 5 | 15/0.5 Table | jni ;≥sh<0.5pm jniệ | 9.4 | 3,500 | |
| 07/29/94 | 9.1 | <0.5 | 4.3 | 17 | 1,400 | |
| 08/31/94 | NA S | NA | NA NA | NA | 2,100 | jak Juli |
| 09/27/94 | NA 11 | NA | NA | NA 44 | 5,900 | |
| 10/27/94 | | 3.1 | 9.5 | 18 | 5,500 | |
| 11/16/94 | NA NA | NA NA | NA NA | NA NA | 39,000 | |
| 01/05/95 | 7 77 77 77 77 77 | NA NA | NA -30 | NA <30 | 140,000 | |
| 01/25/95 | <30 | <30 <0:3 | <30 <0.8 | <30 2.3 | 550,000 3,700 | |
| | NA | | NA | Z.3 NA | 3,700 <20* | |
| 05/29/95 06/30/95 | NA NA | NA NA | NA NA LE LEUR | NA NA | 25,000 | |
| 07/19/95 | | 0.6 | 5 | 15 | 25,000 13,000 | |
| 08/08/95 : ・ | 11 NA | NA | NA Bassa | NA NA | 11,000 | |
| | NA | | | NA NA | 11,000 | |
| 09/08/95 | NA ∴ે. 9 : % કે હૈ | NA 0.6 | NA 10 | 20 | 66,000 | |
| 11/22/95 | NA | NA | NA | ZU NA | 38,000 | |
| 12/15/95 | NA 、 ANA 含物質 | NA NA | NA NA | NA NA | 19,000 | |
| 12/10/90 | A THAT SWA | ANA SAME | IAW | AND SAME THE | I A'COO | |

CUMULATIVE SUMMARY OF ANALYTICAL DATA INFLUENT SAMPLES PORT OF OAKLAND TRAILER-ON-FLAT-CAR (TOFC) RAILYARD

| | | | | | Total Petroleum |
|------------------------------|--------------|---------|--------------|--------------------|------------------------|
| Date | Benzene | Toluene | Ethylbenzene | Xylenes | Hydrocarbons as Diesel |
| Collected | (ug/L) | (ug/L) | (ug/L) | (ug/L) | (ug/L) |
| 01/08/96 | 13 | <0.5 | 10 | 21 | <50 |
| 02/12/96 | NA. | NA . | NA NA | NA NA | 56,000 |
| 03/12/96 | NA | NA | NA | NA | 42,000 |
| 04/10/96 | 9.7 | ₹0.5 | 6.7 | 10 | 36,000 |
| 05/13/96 | NA | NA | NA | NA | 14,000 |
| 06/13/96 | NA NA | NA NA | NA NA | NA | 18,000 |
| 07/17/96 | <0.5 | <0.5 | <0.5 | <2 | 9,700 |
| 08/19/96 | NA NA | NA | NA | NA NA | 14,000 |
| 09/16/96 | NA NA | NA | NA | NA | 14,000 |
| 10/17/96 | <0.5 | <0.5 | <0.5 | 500 Feb. 1000 Feb. | 11,000 |
| 11/25/96 | NA | NA | NA | NA | 13,000 |
| 12/13/96 | NA PROPERTY. | NA | NA | NA NA | 14,000 |
| 01/14/97 | 6.1 | <0.5 | <0.5 | 3.9 | 22,000 |
| 02/11/97 | NA 🥍 | NA 4 4 | NA NA | NA | 13,000 |
| 03/10/97 | NA | NA | NA | NA NA | 16,000 |
| 04/04/97 | 3.2 | <0.5 | <0,5 | 186418 | 8,700 |
| 05/15/97 | NA | NA | NA | NA | 8,500 |
| ै. [©] े.07/18/97 ं | 2.4 | <0.5 | <0.5 | 31.1.a 5.5 | 18,000 |
| 08/15/97 | NA | NA | NA | NA | 12,000 |
| in 09/05/97 ≥ 100 | NA 🔊 | NA NA | NA NA | NA NA | 14,000 |
| 06/25/98 | 4.6_ | <0.5 | 5.3 | 10.5 | 26,500 |
| ≝./`{07/09/98} | 1.5 | <0.5 | <0.5 | 1.54 | 20,000 |
| 08/14/98 | NA | NA | NA NA | NA | 26,000 |
| 09/11/98 | NA | NA | NA | NA NA | 12,000 |
| 10/02/98 | 0.54 | <0.5 | <0.5 | <0.5 | 19,000 |
| 11/06/98 | NA NA | NA | NA | NA | <50 |
| 12/16/98 | NA | NA | NA | NA | 22,000 |
| 01/10/99 | 2.9 | <0.5 | <0.5 | 2.01 | 12,000 |
| 04/21/99 | 0.75 | <0.5 | <0.5 | <1 | 2,400 |
| 07/07/99 | 2.4 | <0.5 | 1.2 | 0.85 | 1,900 |
| 10/08/99 | <0.5 | <0.5 | <0.5 | <0.5 | 1,300 |

TPH/D - Total Petroleum Hydrocarbons as Diesel anaylzed using EPA Method 8015 Mod. with Silicia Gel Cleanup (since 4/99). BTEX -Benzene, toluene, ethylbenzene, and xylenes analyzed using EPA Method 8020.

Samples were analyzed at Curtis & Tompkins Ltd., a state certified analytical laboratory in Berkeley, California (since 4/99).

ug/L. - microgram per liter

NA - Not Analyzed

*Unknown hydrocarbon in the Diesel range reported concentration of 14,000 ug/L

CUMULATIVE SUMMARY OF ANALYTICAL DATA EFFLUENT SAMPLES PORT OF OAKLAND TRAILER-ON-FLAT-CAR (TOFC) RAILYARD

| | | | | | Total Petroleum | |
|------------------|-----------------|---------|--------------|-----------------------|--------------------|----------------|
| Date | Benzene | Toluene | Ethylbenzene | Xylenes | Hydrocarbons as Di | } |
| 1 | | | (ug/L) | (ug/L) | (ug/L) | 700. |
| Collected | (ug/L) | (ug/L) | (ug/L) | (ug/L) | (ug/L) | + |
| EBMUD | | _ | _ | _ | | |
| Discharge Limit* | 5 | 5 | 5 | 5 | N/A | |
| 05/12/92 | <0.5 | <0,5 | <0.5 | <0.5 | <50 | |
| 05/19/92 | <0.5 | <0.5 | <0.5 | <0.5 | <u></u> <50 | JOHNSON SUCCES |
| 05/27/92 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | |
| 06/02/92 | <0.5 | <0.5 | <0.5 | <0.5 | 120 | |
| 07/07/92 | <0.5 | <0.5 | <0.5 | 1.1 | 18,000 | 16.45 |
| 08/11/92 | <0.5 | <0.5 | <0.5 | <0.5 | 1,300 | |
| 09/25/92 | া বে | | . <1 | 1.4 | 9,700 | |
| 11/16/92 | <0.5 | <0.5 | <0.5 | <0.5 | 530 | |
| 12/04/92 | <0.5 | <0.5 | <0.5 | <0.5 | 240 | Ad h |
| 02/02/93 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | |
| 03/30/93 | <0.5 | <0.5 | <0.5 | <0.5 | 18 19 19 74 1 Sub- | |
| 04/30/93 | <0.3 | <0.3 | <0.3 | <0.9 | <50 | ! [|
| 05/27/93 | ` ⊘\$0.3 | <0.3 | <0.3 | <0.9 | <50 | in eva |
| 06/30/93 | <0.3 | <0.3 | <0.3 | <0.9 | <50 | |
| 07/28/93 | ં્રે <0.3 | <0.3 | <0,3 | <0.9 | <100 | |
| 08/31/93 | <0.3 | <0.3 | · <0.3 | <0.9 | <50 | |
| 09/30/93 | ∂ <0.3 | €0,3 | <0.3 | <0.9 | <50 | |
| 10/28/93 | <0.3 | <0.3 | <0.3 | <0.9 | <50 | |
| 11/30/93 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | |
| 12/28/93 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | |
| 01/31/94 | <0.5. | <0.5 | <0.5 | <0.5 | <50 < | |
| 02/25/94 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | <u> </u> |
| 03/30/94 | <0.5 | <0,5 | <0.5 | <0.5 | <50 | |
| 05/03/94 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | |
| 06/01/94 | <0.5 ∴ | <0.5 | <0.5 | <0.5 | < 50 | |
| 07/29/94 | <0.5 | <0.5 | <0.5 | 0.7 | <50 | |
| 10/27/94 | <0.5 | <0.5 | <0.5 | 0.6 | ≼ 50 | |
| 01/25/95 | <30 | <30 | <30 | <30 | 470,000 | |
| 04/12/95 | ~~~~~ | <0.3 | <0.3 | <0.3 | <50 | |
| 07/19/95 | <0.5 | <0.5 | <0.5 | <2 | 15,000 | |
| 10/13/95√ 🔆 | . .<0.5 | <0.5 | <0.5 | <2 | <50 | |
| 01/08/96 | <0.5 | <0.5 | <0.5 | <2 | 36,000 | |
| 04/10/96 | √ √ ₹0.5 | <0.5 | <0.5 | 11 11 22 11 Co | 1,800 | |
| 07/17/96 | <0.5 | <0.5 | <0.5 | <2 | 120 | |
| 10/17/96 | <0.5 | <0.5 | <0.5 | <1 | <50 | |
| 01/11/97 | <0.5 | <0.5 | <0.5 | <1 | <50 | |
| 04/04/97 | ₹0.5 | <0.5 | <0.5 | 4 | <50 | 1 |
| 07/18/97 | <0.5 | <0.5 | <0.5 | <1 | 96 | |

CUMULATIVE SUMMARY OF ANALYTICAL DATA EFFLUENT SAMPLES PORT OF OAKLAND TRAILER-ON-FLAT-CAR (TOFC) RAILYARD

| | | | | | Total Petroleum | |
|------------------|--------------|---------|--------------|--------------|----------------------|-----|
| Date | Benzene | Toluene | Ethylbenzene | Xylenes | Hydrocarbons as Dies | sel |
| Collected | (ug/L) | (ug/L) | (ug/L) | (ug/L) | (ug/L) | |
| EBMUD | | | | | | |
| Discharge Limit* | 5 | 5 | 5 | 5 | N/A | |
| 06/25/98 | <0.5 | <0.5 | <0.5 | <1 | <0.1 | |
| 07/09/98 | <0.5 | <0.5 | <0.5 | <1 | 66 | |
| 07/28/98** | INASS | N/A | N/A | N/A | 50 | |
| 10/02/98 | <0.5 | <0.5 | <0.5 | <1 | <50 | |
| 01/10/99 | ∛ <0.5 | <0.5 | <0.5 | 7 | <47 | |
| 04/21/99 | <0.5 | <0.5 | <0.5 | <1 | <50 | |
| 07/07/99 | <0.5 | <0.5 | <0.5 | ₹ | <50 | |
| 10/08/99 | <0.5 | <0.5 | <0.5 | <1 | <50 | |

^{* -} Discharge limits updated on July 1, 1996.

TPH/D - Total Petroleum Hydrocarbons as Diesel anaylzed using EPA Method 8015 Mod. with Silicia Gel Cleanup (since 4/99). BTEX -Benzene, toluene, ethylbenzene, and xylenes analyzed using EPA Method 8020.

Samples were analyzed at Curtis & Tompkins Ltd., a state certified analytical laboratory in Berkeley, California (since 4/99). ug/L - microgram per liter

^{** -} Resampled to verifyy breakthrough

CUMULATIVE SUMMARY OF ANALYTICAL DATA MIDFLUENT SAMPLES PORT OF OAKLAND TRAILER-ON-FLAT-CAR (TOFC) RAILYARD

| Date | Benzene | Toluene | Ethylbenzene | Xylenes |
|--|--|------------------|-----------------|---------|
| Collected | (ug/L) | (ug/L) | (ug/L) | (ug/L) |
| 08/11/92 | | <0.5 | <0,5 | <0.5 |
| 09/14/92 | <3 | <3 | <3 | <3 |
| 11/06/92 | <0.5 | <0.5 | 0.5 V | <0.5 |
| 12/04/92 | <3 | <3 | <3 | <3 |
| 12/18/92 | <0,5 | ₹0. 5 | < 0.5 | <0.5 |
| 01/20/93 | 1.2 | 0.5 | <0.5 | 1.5 |
| 02/02/93 | 0.77 | <0.5 | <0.5 | <0.5 |
| 02/16/93 | 4.3 | <0.5 | 1.2 | 3.8 |
| 03/30/93 | <0.5 | <0.5 | <0.5 | <0.5 |
| 04/22/93 | <0.5 | <0.5 | <0.5 | <0.5 |
| 04/30/93 | <0.5 | <0.5 | <0.3 | <0.9 |
| 05/27/93 | <0.5 | <0.5 | <0.3 | <0.9 |
| 06/14/93 | 0.4 | 0.4 | 0.4 | 2,3 |
| 06/30/93 | <0.3 | <0.3 | <0.3 | <0.9 |
| 07/13/93 | 20.7。 金属 | 0.4 | <0.3 | <0.9 |
| 07/28/93 | <0.3 | <0.3 | <0.3 | <0.9 |
| 08/31/93 | <0.3 | <0.3 | <0.3 | <0.9 |
| 09/30/93 | <0.3 | <0.3 | <0.3 | <0.9 |
| 10/28/93 » | <0.3 | <0.3 | <0.3 | <0.9 |
| 11/30/93 | 0.6 | <0.5 | <0.5 | <0.5 |
| ∮\$\$\\ 12/28/93\\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ | ""。《17 《 | <0.5 | <0.5 | 0.7 |
| 01/31/94 | 0.1 | <0.5 | <0.5 | 0.5 |
| 02/25/94 | ₹0.5 | <0.5 | <0.5 | <0.5 |
| 03/30/94 | <0.5 | <0.5 | <0.5 | <0.5 |
| ************************************** | <0.5 | <0.5 | 1,3 | 3.3 |
| 06/01/94 | <0.5 | <0.5 | <0.5 | <0.5 |
| 07/29/94 | 0.8 | <0.5 | <0.5 | 0.6 |
| 08/31/94 | 1.7 | <0.5 | <0.5 | <0.5 |
| a 9/27/94 | 3-1-2-2010-2010-2010-2010-2010-2010-2010 | 0.5 mm ≤0.5 mm s | <0.5 | <0.5 |
| 10/27/94 | 1.2 | 0.5 | <0.5 | 0.9 |
| 11/16/94 | ₹0.5 | <0.5 | <0.5 | <0.5 |
| 01/05/95 | 4.8 | 3.5 | <3 | 15 |
| 01/25/95 | <0.03 | <0.03 | <0.03 | <0.03 |
| 04/12/95 | 1.3 | <0.3 | <0.3 | <0.3 |
| 05/29/95 | 3.2 | <0.5 | <0.5 | <2 |
| 06/30/95 | 2 | <0.5 | <0.5 | <2 |
| 07/19/95 | Y 2 | <0.5 | <0.5 | <2 |
| 08/08/95 | <0.5 | <0.5 | <0.5 | <2 |
| 09/08/95 | ×0.5 | <0.5 | <0.5 | ₹2 |
| 11/22/95 | <0.5 | <0.5 | <0.5 | <2 |
| 注意 12/15/95 4会 か | <0.5 | <0.5 | <0.5 | <2 |

12/23/99 1 of 2

CUMULATIVE SUMMARY OF ANALYTICAL DATA MIDFLUENT SAMPLES PORT OF OAKLAND TRAILER-ON-FLAT-CAR (TOFC) RAILYARD

| Date | Benzene | Toluene | Ethylbenzene | Xylenes |
|---|----------------------|---------|--------------|--|
| Collected | (ug/L) | (ug/L) | (ug/L) | (ug/L) |
| 01/08/96 | 0.8 | <0.5 | <0.5 | <2 |
| ia i i i i i i i i i i i i i i i i i i | 1.2 | 0.5 | <0.5 | <2 |
| 03/12/96 | <0.5 | <0.5 | <0.5 | <2 |
| 04/10/96 |) : . (2.1.8) | <0.5 | 0.5 | <2 |
| 05/13/96 | <0.5 | <0.5 | <0.5 | <2 |
| | ₹0.5 | <0.5 | <0.5 | <2 |
| 07/17/96 | <0.5 | <0.5 | <0.5 | <2 |
| 1 5 08/19/96 11 11 11 11 11 11 11 11 11 11 11 11 | <0.5 | <0.5 | <0.5 | <1 |
| 09/16/96 | <0.5 | <0.5 | <0.5 | <1 |
| 7. 10/17/96 · · · · · · · · · · · · · · · · · · · | √ | <0.5 | √ 0.5 | 46.61 |
| 11/25/96 | 23 | 3.7 | <0.5 | 31 |
| ింకి 12/13/96 🕟 🧦 | <0.5 ₹ | | <0.5 | 最高的 21 000000000000000000000000000000000000 |
| 01/14/97 | <0.5 | <0.5 | <0.5 | <1 |
| ः १८५ -१०2/11/97 ि । | <0.5 | <0.5 | 0,5 ±416 € | |
| 03/10/97 | <0.5 | <0.5 | <0.5 | <1 |
| 04/04/97 | <0.5 | <0.5 | <0.5 | # # # \$1 m # # # # # # # # # # # # # # # # # # |
| 05/15/97 | <0.5_ | <0.5 | <0.5 | <1 |
| 전 출일 07/18/97 <u></u> 호텔 | <0.5 | <0.5 | <0.5 | |
| 08/15/97 | <0.5 | <0.5 | <0.5 | <1 |
| 09/05/97 | <0.5 | <0.5 | <0.5 | <1 <1 · |
| 06/25/98 | <0.5 | <0.5 | <0.5 | . <1 |
| 表示。07/09/98 🔧 🤭 | <0.5 | <0.5 | <0.5 | <1 |
| 08/14/98 | <0.5 | <0.5 | <0.5 | <1 |
| - 1.09/1.1/98° ≥ 3.4° | <0.5 | <0.5 | <0.5 | <1 |
| 10/02/98 | <0.5 | <0.5 | <0.5 | <1 |
| 11/06/98 | <0.5 | <0.5 | <0.5 | (1) (1) |
| 12/16/98 | <0.5 | <0.5 | <0.5 | <1 |
| 01/10/99 | <0.5 | <0.5 | <0.5 | <1 |
| 02/23/99 | <0.5 | <0.5 | <0.5 | <1<1 |
| · 10/99 · 14 6人 | <0.5 | <0.5 | <0.5 | \$150 F 5<1 F 556 |
| 04/21/99 | <0.5 | <0.5 | <0.5 | <1 |
| 167 - O5/04/99 1 1 5 3 | <0.5 | <0.5 | <0.5 | <1 |
| 06/09/99 | <0.5 | <0.5 | <0.5 | <1 |
| 07/07/99 | <0.5 | <0.5 | <0.5 | |
| 08/24/99 | <0.5 | <0.5 | <0.5 | <1 |
| कॅर्निके . 09/03/99 े प्रकारी | . <0.5 | <0.5 | <0.5 | 40.5 |
| 10/08/99 | <0.5 | <0.5 | <0.5 | <1<1 |
| 計畫11/12/99 宣傳管 | <0.5 | <0.5 | <0.5 | 1<1 |

BTEX -Benzene, toluene, ethylbenzene, and xylenes analyzed using EPA Method 8020.

Samples were analyzed at Curtis & Tompkins Ltd., a state certified analytical laboratory in Berkeley, California (since 2/99). ug/L - microgram per liter

2 of 2

CUMULATIVE SUMMARY OF FLUID LEVEL MEASUREMENT DATA (TOFC) PORT OF OAKLAND TRAILER-ON-FLAT-CAR (TOFC) RAILYARD

| | | Well Casing | Depth to | Depth to | Water Level | Product | Corrected Water Level |
|---|------------------------|------------------|--|---|--------------|------------------|------------------------|
| Well No. | Date | Elevation * | Product | Water | Elevation | Thickness | Elevation ** |
| | | (Feet) | (Feet) | (Feet) | (Feet) | (Feet) | (Feet) |
| OMW-1 | 01/25/95 | 8.79 | | 2.52 | 6.27 | | 6.27 |
| 经收益的现在分 值 | 05/09/95 | 8.79 | Straightfullen. | 5.55 | 3.24 | | 3.24 |
| | 05/17/95 | 8.79 | | 4.43 | 4.36 | | 4.36 |
| | %07/31/95 | 8.79 | | 6.43 | 2.36 | | 2.36 |
| | 09/07/95 | 8.79 | | 6.86 | 1.93 | | 1.93 1.10 |
| -760 鲁曼斯克尔 | 11/30/95 | 8.79 | | 7.69 6.48 | 1.10 2.31 | 4 rue a en en en | 2.31 |
| S. S. SHARISH SA Sacric | 01/10/96 03/25/96 | 8.79 8.79 | | 5.00 | 3.79 | | 3.79 |
| 0.63 <u>0.7</u> 86 0.7 750 | 05/17/96 | 8.79 | | 2,98 | 5.81 | | 5.81 |
| | 3/17/96 3/07/25/96 | 8.79 | | 6.29 | 2.50 | | 2.50 |
| *************************************** | 09/16/96 | 8.79 | 70-74-8 77-20-20-20-20-20-20-20-20-20-20-20-20-20- | 7.05 | 1.74 | | 1.74 |
| 35 (187) (012,000,406) | 11/12/96 | 8:79 | | 7.51 | 1.28 | | 1,28 |
| | 01/20/97 | 8.79 | X | 4.26 | 4.53 | | 4.53 |
| 4-2109406735737.35 | € 03/06/97 | 8.79 | 1. 化电流电池电池 | 4.65 | 4.14 | hales a second | 4.14 |
| | 05/20/97 | 8.79 | | 6.11 | 2.68 | | 2.68 |
| | 07/15/97 | 8.79 | | 6.66 | 2.13 | | 2.13 |
| | 08/28/97 | 8.79 | | 6.58 | 2.21 | | 2.21 |
| | 09/15/97 ₂ | 8,79 | - TOP ROSE BOOK TRANSPORT | 7.16 | 1.63 | | 1,63 |
| _ 0 | 11/18/97 | 8.79 | | 6.58 1.78 | 2.21 7.01 | | 2.21 7.01 |
| | 02/04/98 | 8.79 8.79 | | 5.43 | 3.36 | | 3.36 |
| | 05/21/98 & 07/30/98 | 8.79 8.79 | | 6.41 | 2.38 | | 2.38 |
| | 08/12/98 | 8.79 | C. (1. C.) (2. C.) (2. C.) (2. C.) (2. C.) | 6.54 | 2,25 | | 2.25 |
| | 09/28/98 | 8,79 | | 7.11 | 1.68 | | 1.68 |
| ************ | 11/04/98 | 8.79 | | 7.32 | 1.47 | | 1.47 |
| MISSENTENS | ₹ 11/30/98 ↔ | 14.88 | a a region sections | 7,40 | 7.48 | | 7,48 |
| | 01/27/99 | 14.88 | | 5.15 | 9.73 | | 9.73 |
| | 02/16/99 | 14.88 | A STREET, STRE | 4.63 | 10.25 | | 10.25 |
| er essensualer i ime well | 05/04/99 | 14.88 | more a production of the PROPERTY and property | 4.88 | 10.00 | | 10.00 |
| Walkida | 08/12/99 | 14.88 | e canadas as de sono | 6.86 | 8,02 | | 8.02 |
| | 11/11/99 | 14.88 | | 7.20 | 7.68 | <u> </u> | 7.68 |
| OLAW 2 | 01/25/95 | 5.88 | | 3.35 | 2.53 | | 2.53 |
| OMW-2 | 05/09/95 | 5.88 | NOT GAUGED | 0.00 | 2.00 | | Ξ.00 |
| <u> 0. v 14. ja jaga 14. jag</u> | 05/17/95 | 5.88 | - 00 - 00 - 00 - 00 - 00 - 00 - 00 - 0 | 2.44 | 3.44 | | 3.44 |
| \$15.000 \$105.765.7 | 07/31/95 | 5.88 | NOT GAUGED | a francis | | | Section of the Section |
| <u> </u> | 09/07/95 | 5.88 | | 4.35 | 1.53 | | 1.53 |
| | 11/30/95 | 5.88 | A company of the fact | 5.12 | 0.76 | | 0.76 |
| | 01/10/96 | 5.88 | | 2.60 | 3.28 | | 3.28 |
| 15 10 12 10 12 10 12 | 03/25/96 | 5.88 | | 2.35 | 3.53 | | 3.53 |
| | 05/17/96 | 5.88 | | 1.73 | 4.15 | | 4.15 |
| | 07/25/96 | 5.88 | | 4.07 | 1.81 | | 1.81 |
| ************************************** | 09/16/96 | 5.88 | | 4.60 | 1.28 | | 1.28 0.95 |
| | 11/12/96 | 5.88 | | 4,93 2,44 | 0,95 3,44 | | 3.44 |
| | 01/20/97 03/06/97 | 5.88 5.88 | and the second | 4.26 | 1.62 | | 1.62 |
| CONTRACTOR | 05/20/97 | 5.88 | | 4.65 | 1.23 | | 1.23 |
| | 03/20/97 | 5.88 | | 4.64 | 1.24 | | 1.24 |
| | 08/28/97 | 5.88 | | 4.58 | 1.30 | | 1.30 |
| | 09/15/97 | 5.88 is 5.5 | A. (1845) 4-3 (1944) | 4.90 | 0,98 | | 0.98 |
| 377 of 277 of 277 of 277 of 277 | 11/18/97 | 5.88 | | 2.11 | 3.77 | (-1/- | 3.77 |
| 1200 BARAL 1100 | 02/04/98 | 5.88 | | 1.72 | 4,16 | | 4.16 |
| | " OT ON OO | " (2.17.11) | TO THE PROPERTY OF THE PROPERT | TO SECRETARY PROPERTY AND ASSESSMENT OF THE PARTY OF THE | | | |

CUMULATIVE SUMMARY OF FLUID LEVEL MEASUREMENT DATA (TOFC) PORT OF OAKLAND TRAILER-ON-FLAT-CAR (TOFC) RAILYARD

| | | Well Casing | Depth to | Depth to | Water Level | Product | Corrected Water Level |
|--|---------------------------------|-------------------------|--|--------------|--------------------|--|-----------------------|
| Well No. | Date | Elevation * | Product | Water | Elevation | Thickness | Elevation ** |
| | | (Feet) | (Feet) | (Feet) | (Feet) | (Feet) | (Feet) |
| OMW-2 cont. | 🦟 07/30/98 🗠 | 5.88 | | 4.11 | 1.77 | | 1.77 |
| -/ | 08/12/98 | 5.88 | THE POST OF A PROCESS AS A STATE OF THE PROCESS OF THE POST OF THE | 4.30 | 1.58 | | 1.58 |
| | 09/28/98 | 5.88 | 7 - 7 - 1 - 2 - 2 - 1 - 1 - 1 - 1 - 1 - 1 - 1 | 4,64 | 1.24 0.85 | | 0.85 |
| | 11/04/98 11/30/98 | 5.88 32.07 | | 5.03 4.82 | 7.25 | | 7.25 |
| | 01/27/99 | 12.07 | • | 2.13 | 9.94 | | 9.94 |
| | 02/16/99 | 12.07 | | 1,38 | 10,69 | | 10.69 |
| | 05/04/99 | 12.07 | | 2.49 | 9.58 | | 9.58 |
| | 08/12/99 | 12.07 | | 4.14 | 7.93 | j stoletje de sie | 7.93 |
| | 11/11/99 | 12.07 | | 4.40 | 7.67 | | 7.67 |
| OMW-3 | 01/25/95 | 7.16 | | NOT GAL | JGED - WELL UN | DER WATER | |
| A A Serial Control of the | © 05/09/95 S | 7:16 | e en en en en en en en | 4.37 | 2.79 | | 2.79 |
| | 05/17/95 | 7.16 | 1// (1// 1// 1// 1// 1// 1// 1// 1// 1// | 4.46 | 2.70 | | 2.70 |
| | 07/31/95 | 7.16 A | | 5,22 | 1.94 | | 1.94 1.52 |
| (4.55) | 09/07/95 | 7.16 | | 5.64 6.36 | 1.52 0.80 | | 0.80 |
| 10 min 10 | 01/10/96 | 7.16 | | 5,13 | 2,03 | | 2.03 |
| | 03/25/96 | 7.16 | | 4.08 | 3.08 | | 3.08 |
| | 05/17/96 | 7.16 | | 2.61 | 4.55 | | 4.55 |
| a i display i i | 07/25/96 | 7.16 | Company speaking | 5.26 | 1.90 | A PLANTAGE OF THE | 1,90 |
| | 09/16/96 | 7.16 7.16 | | 5.90 6.22 | 1.26 0.94 | | 1.26 0.94 |
| | 11/12/96 01/20/97 | 7.16 公院。 7.16 | | 3.79 | 3.37 | | 3.37 |
| | ~ 03/06/97 ··· | 7.16 | | 4.02 | 3.14 | NATION S | 3.14 |
| | 05/20/97 | 7.16 | | 5.34 | 1.82 | | 1.82 |
| | 07/15/97 | 7.16 | | 5.64 | 1.52 | | 1.52 |
| | 08/28/97 | 7.16 | | 5.79 5.95 | 1.37 | | 1.37 |
| and the second second | <i>浸</i> 09/15/97 △ 11/18/97 | 7.16 7.16 | | 5.27 | 1.89 | | 1.89 |
| | 02/04/98 | 7.16 | | 0.94 | 6.22 | | 6.22 |
| 34 | 05/21/98 | 7.16 | 7 14 14 Average 1/4 1 Towns 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 4.12 | 3.04 | | 3.04 |
| | 07/30/98 | Well Not Gauged | PVC Damaged | | affective security | | LEAR NEEDS |
| | 08/12/98 | Well Not Gauged | PVC Damaged | | | | |
| | 09/28/98 11/04/98 | Well Not Gauged 7.16 | PVC Damaged | 5.90 | 1.26 | | 1.26 |
| | 11/30/98 | :Well Not Gauged | 7.746.00.00.00.00.00.00 | 3.50 | 4075710 | | who is been there |
| | 01/27/99 | 12.99 | | 4.70 | 8.29 | 201 marketin 201 201 201 201 201 201 201 201 201 201 | 8.29 |
| Krapersk | 02/16/99 | 12.99 | | . 3.61 | 9,38 | | 9,38 |
| energy strong rank | 05/04/99 | 12.99 | · · | 4.04 | 8.95 | | 8.95 |
| | 08/12/99 11/11/99 | 12.99 12.99 | | 5.28 5.58 | 7.71 7.41 | | 7.71 7.41 |
| | 11/11/99 | 12.55 | | 0,00 | , | | |
| OMW-4 | 01/25/95 | 7.41 | 6.23 | 7.12 | 0.29 | 0.89 | 1.04 |
| | 05/09/95 | 7.41 | 4.99 | 6.38 | 1.03 | 1.39 | 2.20 |
| -W-48882-W-11-1-W-11 | 05/17/95 | 7.41 | 5.19 | 6.58 | 0.83 | 1.39 | 2.00 |
| | 207/31/95 · | 7.41 | 5.78 | 6.99 | 0.42 | 1.21 0.91 | 1.44 1.25 |
| | 09/07/95 11/30/95 | 7.41 | 6.01 6.60 | 6.92 7.06 | 0.49 | 0.91 | 0.74 |
| 400,000,000,000,000,000,000,000,000,000 | 01/10/96 | 7.41 | 5.73 | 6.48 | 0.93 | 0.75 | 1.56 |
| | 03/25/96 | 7.41 | 5.22 | 6,19 | 1.22 | 0.97 | 2.03 |
| | 05/17/96 | 7.41 | 5.23 | 6.26 | 1.15 | 1.03 | 2.02 |
| | 07/25/96 | 7.41 | TRACE | 5.82 | 1.59 | | 1.59 |

CUMULATIVE SUMMARY OF FLUID LEVEL MEASUREMENT DATA (TOFC) PORT OF OAKLAND TRAILER-ON-FLAT-CAR (TOFC) RAILYARD

| | | | | | | | |
|---|--|---|--|--------------|---------------|--|-----------------------|
| | | Well Casing | Depth to | Depth to | Water Level | Product | Corrected Water Level |
| Well No. | Date | Elevation * | Product | Water | Elevation | Thickness | Elevation ** |
| | | (Feet) | (Feet) | (Feet) | (Feet) | (Feet) | (Feet) |
| OMW-4 cont. | 09/16/96 | 7.41 | 6.11 | 7.55 | -0.14 | 1.44 | 1.07 |
| | 11/12/96 | 7.41 | 6.58 | 8.12 | -0.71 | 1.54 | 0.58 |
| \$3.5000 (\$1.500 <u>188</u> .5000), / 1 | 01/20/97 | 7.41 | 4.75 | 6.45 | 0.96 | 1.70 | 2.39 |
| . 5. 678 N. P. C | 03/06/97 | 7.41 | 5.25 | 6.24 | 1.17 | 0.99 | 2.00 |
| | 05/20/97 | 7.41 | 5.83 | 6.35 | 1.06 | 0.52 | 1.50 |
| 经工作的 的方式 | 07/15/97 | 7.41 | 6.24 | 6.75 | 0.66 | 0.51 | 1.09 |
| | 08/28/97 | 7.41 | 6.46 | 7.05 | 0.36 | 0.59 | 0.86 |
| 5. 网络红色 | 🕖 09/15/97 📉 | 7.41 | 6.40 | 7.11 | 0.30 | 0.71 | 0,90 |
| | 11/18/97 | 7.41 | 4.76 | 5.43 | 1.98 | 0.67 | 2.54 |
| 4. 学、图 5.77 | 03/31/98 | 7.41 | 3,07 | 4.00 | 3.41 | 0.93 | 4,19 3.91 |
| | 05/22/98 | 7.41 | 3.52 | 3.41 | 4.00 | -0.11 0.55 | 0.87 |
| 19.5484:135 | ○ 07/30/98 ○ | (1.4.1.2.7.41 (2.1.4.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1. | 6.45 | 7,00 | 0.41 | 1.34 | 1.52 |
| Na vassijai ilai abi ka | 08/12/98 | 7.41 7.41 | 5.68 6.02 | 7.02 7.55 | 0.39 -0.14 | 1,53 | 1,15 |
| | <i>③</i> 09/28/98 <i>∴</i> ≙ 11/04/98 | 7.41 7.41 | 6.17 | 7.65 | -0.14 | 1.48 | 1.00 |
| | 11/04/98 11/30/98 | 7.41 | 6:31 | 6.31 | 7.07 | 0.00 | 7.07 |
| : Grazzan Corra | 01/27/99 | 13.38 | 5.15 | 6.75 | 6.63 | 1.60 | 7.97 |
| | | 13.38 | 3,59 | 4.75 | 8.63 | 1.16 | 9,60 |
| 772 - 314 (3 797, 12 m) | 05/04/99 | 13.38 | 4.10 | 5.62 | 7.76 | 1.52 | 9.04 |
| | 08/12/99 | 13,38 | 5.00 | 6.68 | 6,70 | 1,68 | 8,11 |
| : | 11/11/99 | 13.38 | 5.55 | 7.31 | _6.07 | 1.76 | 7.55 |
| | | | | | | | |
| OMW-5 | 01/25/95 | 7.62 | NOT GAUGED | | | | |
| | § 05/09/95 💸 | 7.62 | NOT GAUGED | | | and the owners | |
| , | 05/18/95 | 7.62 | | 4.84 | 2.78 | | 2.78 |
| | 07/31/95 | 7.62 | NOT GAUGED | - 42 | 4 | | 4 77 |
| 7 7 00 20 cm 65 _ 2 7 00 cm | 09/07/95 | 7.62 | | 5.85 | 1.77 | | 1.77 |
| | 11/30/95 | 7.62 | | 6,55 5,46 | 1.07 2.16 | | 2.16 |
| | 01/10/96 3 03/25/96 | 7.62 7.62 | | 4,63 | 2.99 | | 2.99 |
| 1. A 1. HAR PA 1. 177 . 5 | 05/17/96 | 7.62 | | 4.83 | 2.79 | | 2.79 |
| Oranga Barah na Frins | 07/25/96 | 7.62 | | 5.66 | 1.96 | | 1,96 |
| <u> </u> | 09/16/96 | 7.62 | | 6.17 | 1.45 | | 1.45 |
| | 11/12/96 | 7.62 | TRACE | 6,59 | 1.03 | | 1,03 |
| 2 11/22 41 11 2 11/20 | 01/20/97 | 7.62 | | 3.73 | 3.89 | | 3.89 |
| #44 STA | 03/06/97 | 7.62 | Analysis Southern Carp | 5.34 | 2,28 | | 2.28 |
| | 05/20/97 | 7.62 | | 5.59 | 2.03 | | 2.03 |
| And the year of the | 07/15/97 | 7.62 | | 6.15 | 1.47 | | 1.47 |
| | 08/28/97 | 7.62 | | 6.36 | 1.26 | | 1.26 |
| 对外数学 发生 | 09/15/97 | 7.62 | | 6.58. | 1.04 | | 1,04 |
| ত্ত প্ৰভাৱন কৰিছে কৰেছে জন্ম কৰিছে কৰেছে কৰিছে কৰিছ | 11/18/97 | 7.62 | | 5.33 | 2.29 | | 2.29 4.57 |
| | 02/04/98 | 7.62 | 76 30 0 1995 UH WILL | 3.05 | 4.57 | | 4.06 |
| 20 20 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 | 05/21/98 | 7.62 | | 3.56 4.79 | 4.06 2.83 | | 2.83 |
| | 07/30/98 | 7.62 | | 5.00 | 2,63 | | 2.62 |
| | 08/12/98 a 09/08/98 | 7.62 7.62 | | 5.73 | 1.89 | | 1.89 |
| <u> </u> | 11/04/98 | 7.62 | architectural companies from | 6.14 | 1.48 | | 1.48 |
| | 11/30/98 | 13.76 | Jan 25 22 20 00 00 00 00 00 00 00 00 00 00 00 | 6.01 | 7.75 | | 7.75 |
| | 01/27/99 | 13.76 | ALVOS VIELZ HARRONIAN | 5.00 | 8.76 | 29-14-16-15-16-16-16-16-16-16-16-16-16-16-16-16-16- | 8.76 |
| | 02/18/99 | 13.76 | | 4.57 | 9.19 | | 9.19 |
| | 05/04/99 | 13.76 | Ser, marries, federal manages | 2.79 | 10.97 | The second secon | 10.97 |
| STREET, AT | 8/121999 | 13.76 | CONTRACTOR AND AND AND | 5.25 | 8,51 | | 8.51 |
| ************************************** | 11/11/99 | 13.76 | Section 1994 and common common prince 1994 5 Wild Security of common | 6.22 | 7.54 | 1 | 7.54 |
| | | · | | | | | |

| | | Well Casing | Depth to | Depth to | Water Level | Product | Corrected Water Level |
|--|-------------------------|----------------------|--|--------------|----------------|------------------|-----------------------|
| Well No. | Date | Elevation * | Product | Water | Elevation | Thickness | Elevation ** |
| | | (Feet) | (Feet) | (Feet) | (Feet) | (Feet) | (Feet) |
| | | | | | | | |
| OMW-6 | 01/25/95 | 5.78 | | 6.91 7,19 | -1.13 | | -1.13 -1,41 |
| | 05/09/95 📐 05/17/95 | 5.78 5.78 5.78 | The state of the second section of the section of the second section of the s | 6.84 | -1.41 -1.06 | | -1.06 |
| | 03/17/95 | 5.78 | i Sistemania | 5.65 | 0.13 | e de de de de de | 0.13 |
| 12.7 | 09/07/95 | 5.78 | | 5.51 | 0.27 | | 0.27 |
| | 11/30/95 | 5.78 | | 6.71 | -0.93 | | -0.93 |
| 3 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 | 01/10/96 | 5.78 | | 6.72 | -0.94 | | -0.94 |
| 多种类型模型 一位为1 | 03/25/96 | > 5.78 () () | | 6.73 6.50 | *0.95 -0.72 | | 40.95 -0.72 |
| | 05/17/96 | 5.78 5.78 | | 6.62 | -0.72 | | +0.84 |
| 555 4003180 81 ² 1254 | 09/16/96 | 5.78 | | 6.44 | -0.66 | | -0.66 |
| 建筑物。67 6 | 11/12/96 | 5.78 | | 5.65 | 0.13 | | 0.13 |
| | 01/20/97 | 5.78 | | 5.52 | 0.26 | | 0.26 |
| SKAARESSEE | 03/06/97 | 5.78 | | 7.17 | -1.39 | Bridge (Bridge) | -1,39 -0.61 |
| | 05/20/97 07/15/97 | 5.78 5.78 | | 6.39 6.77 | -0.61 -0.99 | | †0.61 ∤0.99 |
| | 08/28/97 | 5.78 | | 6.59 | -0.81 | | -0.81 |
| | 09/15/97 | 5.78 | | 6.02 | -0.24 | | -0.24 |
| | 11/18/97 | 5.78 | | 4.89 | 0.89 | | 0.89 |
| | 02/04/98 | 5.78 | 1949 16 6 6 1 1 1 1 1 1 1 1 | 5.85 | -0.07 | | -0.07 |
| | 05/21/98 | 5.78 | | 6.13 6.76 | -0.35 -0.98 | | -0.35 -0.98 |
| \$1224 P (211 6 | ○ 07/30/98 08/12/98 | <u>ે</u> 5.78 | 1534 da 3 5 da 3 3 da 3 da 3 da 3 da 3 da 3 | 6.88 | -1.10 | | 1.10 |
| THE THE CALCULA | 00/12/98 | 5.78 | | 6.63 | -0.85 | | -0.85 |
| *************************************** | 11/04/98 | 5.78 | | 5.42 | 0.36 | | 0.36 |
| 4.95 BY6-3 | § 11/30/98 | 11.67 | | 6.22 | 5,45 | | 5.45 |
| in a listical factors are serious | 01/27/99 | 11.67 | | 6.65 | 5.02 | | 5.02 5.82 |
| | \$ 02/18/99 05/04/00 | 11.67 | | 5.85 6.74 | 5,82 4.93 | | 5.82 4.93 |
| | 05/04/99 | 11.67 11.67 | | 7,44 | 4.23 | | 4.23 |
| | 11/11/99 | 11.67 | | 5.91 | 5.76 | | 5.76 |
| | | | | | | | |
| OMW-7 | 01/25/95 | 7.03 | 3.31 | 9.53 | -2.50 | 6.22 | 2.72 |
| 11-12-12-12-12-12-12-12-12-12-12-12-12-1 | 05/09/95 | | 5.22 | 9.25 | +2.22 | 4.03 | 1.17 |
| | 05/17/95 07/31/95 | 7.03 7.03 | 5.41 5.61 | 8.38 8.83 | -1.35 +1.80 | 2.97 3.22 | 0.90 |
| | 09/07/95 | 7.03 | 5.80 | 7.97 | -0.94 | 2.17 | 0.88 |
| 3、對應權多數公司 | ½ 11/30/95 | 7.03 | 6.49 | 7.54 | -0.51 | 1.05 | 0.87 |
| | 01/10/96 | 7.03 | 5.40 | 8.33 | -1.30 | 2.93 | 1.16 |
| | 03/25/96 | 7,03 | 5.46 | 9.60 | -2.57 | 4.14 | 0.91 |
| | 05/17/96 | 7.03 | 5.40 5.92 | 8.79 9.32 | -1.76 -2.29 | 3.39 3.40 | 1.09 0.67 |
| | 07/25/96 09/16/96 | 7.03 7.03 | 6.18 | 8.86 | -1.83 | 2.68 | 0.42 |
| | ÷:11/12/96 :- | 7.03 | 6.50 | 8.79 | -1.76 | 2,29 | 0.16 |
| | 01/20/97 | 7.03 | 4.95 | 10.76 | -3.73 | 5.81 | 1.15 |
| FAREVELS. | 03/06/97 | 5 ₹7.03 ∰06.3 | 5.26 | 7.70 | -0.67 | 2,44 | 1,38 |
| | 05/20/97 | 7.03 | 5.71 | 8.26 | -1,23 | 2.55 | 0.91 |
| | 6 07/15/97 | 7.03 | 6.21 | 9,67 | -2.64 | 3,46 2.71 | 0:27 0.21 |
| | 08/28/97 09/15/97 | 7.03 7.03 | 6.39 6.51 | 9.10 8.03 | -2.07 -1.00 | 1.52 | 0.21 |
| | 11/18/97 | 7.03 | 4.58 | 5.54 | 1.49 | 0.96 | 2.30 |
| | S 03/31/98 | 7.03 | THE RESERVE THE PROPERTY OF TH | 6.75 | 0.28 | 3.60 | 3.30 |

| | | <u></u> | | | | <u></u> | · |
|--|--|----------------------------------|--|--------------|--------------|--|-------------------------|
| | | Well Casing | Depth to | Depth to | Water Level | Product | Corrected Water Level |
| Well No. | Date | Elevation * | Product | Water | Elevation | Thickness | Elevation ** |
| | | (Feet) | (Feet) | (Feet) | (Feet) | (Feet) | (Feet) |
| OMW-7 cont. | 05/21/98 | 7.03 | 3.68 | 7.15 | -0.12 | 3.47 | 2.79 |
| \$1 (1998) 100 K | 07/30/98 | 7.03 | 5,83 | 8.70 | -1.67 | 3.37 | 1.16 |
| | 08/12/98 | 7.03 | 5.42 | 8.03 | -1.00 | 2.61 | 1.19 |
| e i desire di di | 09/28/98 | 7.03 | 6.11 | 8.51 | -1.48 | 2.40 | 0.54 |
| named accommodistant of the mask | 11/04/98 | 7.03 | 6.22 | 8.22 | -1.19 | 2.00 | 0.49 |
| | 11/30/98 | 13.17 | 8.76 | 8.76 | 4:41 | 0.00 | 4.41 |
| | 01/27/99 | 13.17 | 5.15 | 8.75 | 4.42 | 3.60 | 7.44 |
| | 02/16/99 | 13,17 | 3.06 | 7:40 | 5,77 | 4.34 | 9.42 |
| | 05/04/99 | 13.17 | 3.81 | 8.43 7.41 | 4.74 5.76 | 4.62 2.71 | 8.62 8.04 |
| | 08/12/99 | 19.17 13.17 | 4.70 5.58 | 8.24 | 4.93 | 2.71 2.66 | 7.16 |
| | 11/11/99 | 13.17 | | 0.24 | 4.30 | 2.00 | 7.10 |
| OMW-8 | 9-01/25/95 | 7,52 | TRACE | 3,55 | 3.97 | | 3.97 |
| Olviting: 6: 52,153, | 05/09/95 | 7.52 | | 5.00 | 2.52 | | 2.52 |
| 18 a.c. 19 | 05/17/95 | 7.52 | | 5.16 | 2.36 | | 2:36 |
| <u> </u> | 07/31/95 | 7.52 | The second secon | 5.70 | 1.82 | | 1.82 |
| (三)阿爾爾伊森林 | 09/07/95 | 7.52 | | 5.99 | 1,53 | Chapter 1 | 1.53 |
| | 11/30/95 | 7.52 | | 6.53 | 0.99 | | 0.99 |
| | 01/10/96 | 7.52 | | 5.87 | 1.65 | | 1.65 |
| | 03/25/96 | 7.52 | | 5.01 | 2.51 | | 2.51 |
| Actor Property | ¹ / ₂ 05/17/96 ∕ | 7.52 | | 5,18 | 2.34 | | 2,84 |
| | 07/25/96 | 7.52 | | 5.77 | 1.75 | | 1.75 |
| <u> (43 féaglion a 18</u> | 09/16/96 | × 7.52 | Cutodist Control (Control | 6.21 | 1,31 | II da graa aug | 1.31 |
| | 11/12/96 | 7.52 | 0.00 | 6.69 4.84 | 0.83 2.68 | | 0.83 |
| | © 01/20/97 03/06/97 | 7.52 7.52 | | 5.15 | 2,37 | | 2.37 |
| | 05/00/97 05/20/97 | 7.52 | | 5.81 | 1.71 | | 1.71 |
| | 07/15/97 | 7.52 | | 6.12 | 1.40 | | 1.40 |
| e special and special | 08/28/97 | :'9?''` × 7.52 | | 6.29 | 1,23 | | 1.23 |
| | 09/15/97 | 7.52 | | 6.40 | 1.12 | | 1.12 |
| Suggested to the | 11/18/97 | 7.52 | | 5.27 | 2.25 | | 2.25 |
| | 02/04/98 | 7.52 | | 1.67 | 5.85 | | 5.85 |
| er i de de la companya de la company | 05/21/98 | 7.52 | a. Table is a market man | 3.97 | 3.55 | 1000000 | 3.55 |
| | 07/30/98 | 7.52 | VIII A | 5.52 | 2.00 | | 2.00 |
| 60% 高级交换 | 08/12/98 | 7.52 | | 5.73 | | | 1.79 |
| THE RESERVE THE PROPERTY. | 09/28/98 | 7.52 | | 6.17 | 1.35 | | 1.35 |
| | 11/04/98 | 7.52 | | 6,40 6,29 | 1,12 7.33 | | 7.33 |
| 702 ESE 57 CAST | 11/30/98 01/27/99 | 13.62 13.62 | | 5.47 | 8.15 | | 8.15 |
| | 02/16/99 | 13.62 | * | 4.05 | 9.57 | | 9.57 |
| Y SEPTEMBER OF CORRE | 05/04/99 | Luciaco Mare a Maria de Ambiento | AND ASSESSMENT COM | 4.63 | 8,99 | | 8,99 |
| A AURIO MONTA MAINTA | 08/12/99 | 13.62 | | 5.50 | 8.12 | TOTAL STATE OF THE | 8.12 |
| Service Control | 11/11/99 | 13.62 | A Contract Market Contract | 6.04 | 7.58 | | 7.58 |
| make water of the | Markedu may | 56%には優勝等 | | | 医动脉 化压力 | | REPORT OF THE PROPERTY. |
| OMW-9 | 01/25/95 | 6.64 | 3.83 | 6.25 | 0.39 | 2.42 | 2.42 |
| Saw Zola Sola | 05/09/95 | 6.64 | 4.94 | 9.02 | -2,38 | 4.08 | 1.05 |
| | 05/17/95 | 6.64 | 4.18 | 8.95 | -2.31 | 4.77 | 1.70 |
| | 07/31/95 | 6,64 | 6.07 | 8:46 | -1.82 | 2.39 | 0.19 |
| | 09/07/95 | 6.64 | 5.23 | 6.89 | -0.25 | 1.66 | 1.14 |
| 1 (1) (1) (1) (1) (1) (1) (1) (1) (1) (1 | 11/30/95 | 6.64 | 5.76 | 7.25 | -0.61 | 1.49 | 0.64 |
| | 01/10/96 | 6.64 | 4.45 | 9.00 | -2.36 | 4.55 | 1.46 |
| The second state of the second | 03/25/96 | 6.64 | 4.19 | 8.96 | 2.32 | 4.77 | 1.69 |
| L | 05/17/96 | 6.64 | 5.41 | 7.40 | -0.76 | 1.99 | 0.91 |

| <u></u> | | W 11 0 1 | Dth-t- | Do-N-A- | Mataulaud | Dundunt | Competed Minter Lough |
|---|--------------------------|----------------------------------|--|--------------|--|--|---|
| | | Well Casing | Depth to | Depth to | Water Level | Product | Corrected Water Level |
| Well No. | Date | Elevation * | Product | Water | Elevation | Thickness | Elevation ** |
| | | (Feet) | (Feet) | (Feet) | (Feet) | (Feet) | (Feet) |
| OMW-9 cont. | 07/25/96 | 6.64 | 5,16 | 8.41 | -1.77 | 3.25 | 0.96 |
| 2 | 09/16/96 | 6.64 | 5.75 | 6.19 | 0.45 | 0.44 | 0.82 |
| | 11/12/96 | 6.64 | 5.84 | 8,37 | -1.73 | 2.53 | 0.40 |
| | 01/20/97 | 6.64 | 4.10 | 9,42 | -2.78 | 5.32 | 1.69 |
| 注:"如果的会员 | <i>[</i> 203/06/97↔ | 6.64 | 4.55 | 7.95 | +1.31 | 3.40 | 1.65 |
| Chromatory Belling to North | 05/20/97 | 6.64 | 5.09 | 7.11 | -0.47 6.64 | 2.02 | 1.23 -2.16 |
| pychiathau y | 07/15/97 08/28/97 | 6.64 6.64 | | * 8.8 | 6.64 | | -2.16 -2.16 |
| | ©09/15/97 | 6.64 | | 7.80 | -1.16 | | -1,16 |
| Sec. (302, 20, 20, 20, 20, 20, 20, 20, 20, 20, | 11/18/97 | 6.64 | Market Company of the | NA NA | 6.64 | <u> </u> | NA NA |
| | 02/04/98 | 6.64 | and the second | NA | 6.64 | | NA NA |
| | 05/21/98 | 6.64 | | NA | 6.64 | | NA |
| | 07/30/98 | 6.64 | 8.40 | *8.5 | 6.64 | 0.10 | -1.78 |
| | 08/12/98 | 6.64 | | NA NA | 6.64 | | NA |
| | 09/28/98 | 6.64 | | 8,50 | -1,86 | | -1.86 |
| | 11/04/98 | 6.64 | TRACE | 6.50 | 0.14 | | 0.14 |
| | ₹:01/27/99° | 12.31 | 5.90 | 7.80 | 4.51 | 1.90 | 6.11 |
| | 11/30/98 | 12.31 | 8.76 | 8.76 | 3.55 | 0.00 | 3.55 |
| | 02/16/99 | 12.31 | NOT GAUGED | | | 2.07 | |
| e vine megaligação () y s | 05/04/99 | 12.31 | 4.13 | 7.00 | 5.31 | 2.87 | 7.72 |
| and when i | 08/12/99 | 12.31 | 4.43 | 4.59 | 7.72 | 0.16 | 7,85 |
| | 11/11/99 | 12.31 | | 8.57 | 3.74 | | 3.74 |
| OMW-10 | 01/25/95 | 7.56 | | NOT G | AUGED - WELL | COVERED | |
| | 05/09/95 | 7.56 | " CANCEL SE REPORTER | | AUGED - WELL | | |
| W. CO. BONES D. C. S. 11. C. | 05/17/95 | 7.56 | TRACE | 4.64 | 2.92 | | 2.92 |
| · · · · · · · · · · · · · · · · · · · | ¹ 07/31/95 1€ | 7.56 | | NOT G | AUGED - WELL | COVERED | Legisland State (1984) |
| | 09/07/95 | 7.56 | | 6.02 | 1.54 | | 1.54 |
| | 11/30/95 | 7.56 | TRACE | 7.78 | -0.22 | | -0.22 |
| | 01/10/96 | 7.56 | TRACE | 4.68 | 2.88 | | 2.88 |
| 2018年4月20日 | 2 03/25/96 | * * 5 7.56 SEE | | 4.58 | 2.98 | | 2.98 |
| | 05/17/96 | 7.56 | | 4.75 | 2.81 | | 2.81 |
| | 07/25/96 | 7.56 | | 5.79 | 1.77 | | 1.77 |
| V-d Austral Auss | 09/16/96 | 7.56 | TOAGE | 6.33 6.50 | 1.23 1.06 | | 1.23 1.06 |
| V-6 (\$42.738.4945) | 11/12/96 01/20/97 | 7.56 | TRACE | 4.33 | 3.23 | | 3.23 |
| ************************************** | 01/20/97 03/06/97 | 7.56 7.56 | 100 | 5.05 | 2.51 | | 2,51 |
| <u> 76 7 19 (A P1 02 33) </u> | 05/20/97 | 7.56 | | 5.69 | 1.87 | | 1.87 |
| 26. ava 3. 6 | % 07/15/97≳ 3 | 7.56 | of Tolking and Leading | 6.71 | 0.85 | | 0.85 |
| 050 178.0820830225 | 08/28/97 | 7.56 | *************************************** | 6.11 | 1.45 | SHEEN | 1.45 |
| | 09/15/97 | 7.56 | | 6.75 | 0.81 | SHEEN | 0.81 |
| - Annual | 11/18/97 | 7.56 | | 4.63 | 2.93 | | 2.93 |
| | © 02/04/98 | 7.56 | district General | 3.00 | 4.56 | | 4.56 |
| palar a transmissible of displaying displaying and an analysis and the second | 05/21/98 | 7.56 | | 4.13 | 3.43 | | 3.43 |
| | 07/30/98 | 7.56 | | 5.81 | 1.75 | | 1,75 |
| | 08/12/98 | 7.56 | /************************************* | 4.94 | 2.62 | | 2.62 |
| | 09/28/98 | <u>, ↑ (7:56, 400)</u> | - 5 REPS TO 12 REPS | 6.32 | 1.24 | | 1.24 |
| 1 | 11/04/98 | 7.56 | | 6.53 | 1.03 | | 1.03 |
| | 11/30/98 S | 13.71 | NOT CAUGED | 6,48 | 7.23 | | 7,23 |
| | 01/27/99 | 13.71 ਜੋਹ ਵਿੱਚ ਆਜ਼ੇਤਿਹੀਂ ਸਭੇ | NOT GAUGED | 3.37 | 10.34 | | 10:34 |
| | 02/17/99 05/04/99 | 13.71 13.71 13.71 | | 4.82 | 8.89 | | 8.89 |
| 13.450.43 | 05/04/99 | 13.71 | 22.22.22.22.22.22.22.22.22.22.22.22.22. | 4.82 5.74 | 7.97 | | 7.97 |
| | osz umilzimm * (| K // 13.1136 200 | Compared to the control of the compared to the co | 4.1 | ************************************** | recommendation of the contract | reconstruction and the second |

| | | | | | | | |
|--|-------------------------|------------------|--|----------------|----------------|--------------|-----------------------|
| | | Well Casing | Depth to | Depth to | Water Level | Product | Corrected Water Level |
| Well No. | Date | Elevation * | Product | Water | Elevation | Thickness | Elevation ** |
| | | (Feet) | (Feet) | (Feet) | (Feet) | (Feet) | (Feet) |
| OMW-10 cont. | 11/11/99 | 13.71 | | 6.21 | 7.50 | | 7.50 |
| | | | | | | | |
| ORW-1 | 01/25/95 | 6.59 | NOT GAUGED | | | | |
| 24/2013 (1/4/2 ₀) | 05/09/95 | 6.59 | NOT GAUGED 8.77 | 9.76 | -3.17 | 0.99 | -2.34 |
| | 05/18/95 207/31/95 | 6.59 6.59 | 8.35 | 10.55 | -3.96 | 2,20 | -2.11 |
| 3.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1 | 09/07/95 | 6.59 | 8.55 | 11.03 | -4.44 | 2.48 | 2.36 |
| SALHERING ST | 11/30/95 | 6.59 | 5.92 | 5.98 | 0.61 | 0.06 | 0,66 |
| | 01/10/96 | 6.59 | TRACE | 11.20 | -4.61 | | -4.61 |
| | ് 03/25/96: | <i>े</i> 6.59 ∴ | | 11.20 | -4.61 | | 4.61 |
| 2 / 9/0 | 05/17/96 | 6.59 | | 11.40 | -4.81 | | -4.81 |
| | 07/25/96 | 6.59 | TRACE | 10.90 | -4.31 -3.01 | | 4,31 -3,01 |
| | 09/16/96 〔11/12/96〕。 | 6.59 6.59 | | 9,60 9,60 | -3.01 -3.01 | | -3.01 |
| ************************************** | 01/20/97 | 6.59 | NOT GAUGED | 3.00 | 0.01 | | 5.01 |
| inchesenmikar e | Ø 03/06/97 | 6.59 | 9.55 | 9.75 | -3.16 | 0.20 | 2.99 |
| | 05/20/97 | 6.59 | 9.75 | 9.86 | -3.27 | 0.11 | -3.18 |
| , Ang Salatan d | ଛ 07/15/9 7 ≘ | 6.59 | | 7,98 | -1:39 | SHEEN | -1:39 |
| | 08/28/97 | 6.59 | NOT GAUGED | | | | |
| 6年度4月9日在 | 09/15/97 | 6.59 | NOT GAUGED | | 0.00 | 0.00 | 0.05 |
| -1, -2, -1, -1, -1, -1, -1, -1, -1, -1, -1, -1 | 11/18/97 | 6.59 6.59 | 3.94 2.25 | 3.96 2.88 | 2.63 3.71 | 0.02 0.63 | 2.65 4.24 |
| | 03/31/98 05/21/98 | 6.59 | 2.66 | 3,65 | 2,94 | 0.99 | 3.77 |
| | 307/30/98 | 6.59 | 2.00 | 8.90 | -2.31 | 0.00 | 2,31 |
| <u> </u> | 08/12/98 | 6.59 | | 10.01 | -3.42 | | -3.42 |
| turiyak dili. | 09/28/98 | - 6.59 · · | 8 9 16 16 16 16 16 16 16 16 16 16 16 16 16 | 9.72 | -3:13 | | -3.18 |
| | 11/04/98 | 6.59 | TRACE | 9.45 | -2.86 | | -2.86_ |
| | ্ট ়11/30/98 ্র | 13.29 | 10.03 | 10.03 | 3.26 | 0.00 | 3.26 |
| | 01/27/99 | 13.29 | 9.50 | 10.00 NM | 3.29 | 0.50 | 3.71 |
| | 02/16/99 05/04/99 | 13.29 5 6 | NOT GAUGED 4.97 | 5.63 | 7.66 | 0.66 | 8.21 |
| | 03/04/99 208/12/99 | 13.29 | 4:33 | 4.41 | 8.88 | 0.08 | 8,95 |
| | 11/11/99 | 13.29 | M | 4.41 | 8.88 | | 8.88_ |
| | | | | | | | |
| ORW-2 | 01/25/95 | 6.79 | NOT GAUGED | | , | | |
| X 45 Z L | 05/09/95 | 6.79 | NOT GAUGED | | | | 0.70 |
| | 05/18/95 | 6.79 | 9.55 | 9.56 | -2.77 | 0.01 | -2.76 -2.53 |
| | 07/31/95 | 6.79 | 9,30 9,45 | 9.45 9.50 | -2.66 -2.71 | 0.15 0.05 | -2.67 |
| | 09/07/95 11/30/95 | 6.79 6.79 | 9.45 | 9.68 | -2.89 | 0.02 | -2.87 |
| | 01/10/96 | 6.79 | 9.55 | 9.60 | -2.81 | 0.05 | -2.77 |
| | 03/25/96 | 6.79 | 10.75 | 11.85 | -5.06 | 1.10 | -4:14 |
| | 05/17/96 | 6.79 | 10.60 | 11.60 | -4.81 | 1.00 | -3.97 |
| | ∮ 07/25/96 ∴ | ⊘6.79 → | 11.70 | 12.30 | -5.51 | 0.60 | -5,01 |
| | 09/16/96 | 6.79 | 10.95 | 12.30 | -5.51 | 1.35 | -4.38 |
| | 11/12/96 | 6.79 | 9.63 | 10.87 | -4.08 -4.21 | 1.24 1.39 | -3:04 -3:04 |
| | 01/20/97 7 03/06/97 | 6.79 6.79 | 9.61 10.05 | 11.00 11.09 | -4.21 -4.30 | 1.04 | -3.43 |
| 216373886 B 50-0,75 | 05/20/97 | 6.79 | 10.70 | 11.46 | -4.67 | 0.76 | -4.03 |
| | 03/26/37 | 6.79 | 11.68 | 12.01 | -5.22 | 0.33 | -4.94 |
| 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 08/28/97 | 6.79 | 11.60 | 11.87 | -5.08 | 0.27 | -4.85 |
| | 09/15/97 | 6.79 | 11,90 | 12.08 | -5.29 | 0.18 | -5.14 |
| | 11/18/97 | 6.79 | 4.09 | 5.62 | 1.17 | 1,53 | 2.46 |

| | | | | | | | | |
|---|----------------------|-----------------------|---------------------|----------------|----------------|--------------|--|---------------|
| | | Well Casing | Depth to | Depth to | Water Level | Product | Correcte | d Water Level |
| Well No. | Date | Elevation * | Product | Water | Elevation | Thickness | Ele | vation ** |
| | | (Feet) | (Feet) | (Feet) | (Feet) | (Feet) | | Feet) |
| ORW-2 cont. | 03/31/98 | 6,79 | 2.27 | 4.05 | 2.74 | 1.78 | | 4.24 |
| | 05/21/98 | 6.79 | 2.77 | 4.53 | 2.26 | 1.76 | | 3.74 |
| | 07/30/98 | 6.79 | 11.26 | 11.36 | -4.57 | 0,10 | din 1 | 4.49 |
| | 08/12/98 | 6.79 | | 12.31 | -5.52 | | | 5.52 |
| er atteit in Englis | 09/28/98 🔆 | 6.79 | 11.88 | 12.00 | -5.21 | 0.12 | 100 | 5,11 |
| | 11/04/98 | 6.79 | 11.50 | 11.85 | -5.06 | 0.35 | | 4.77 |
| | 11/30/98 | 12,92 | 12.52 | 12.52 | 0.40 | 0.00 | A PROPERTY OF STREET STREET, S | 0.40 |
| | 01/27/99 | 12.92 | 12.01 | 12.10 | 0.82 | 0.09 | ena, asta perico roma | 0.90 |
| preparation of the | 02/16/99 | 12.92 | -NOT GAUGED | | | | | Bearing Co. |
| | 05/04/99 | 12.92 | 3.77 | 5.28 | 7.64 | 1.51 | re the body and arrest recorded ABSA 2 | 8.91 |
| | 08/12/99 | 12.92 | 4.33 | 8.51 | 4.41 | 4.18 | Hibita and statement or units | 7,92 |
| | 11/11/99 | 12.92 | | 8.51 | 4.41 | | | <u>4.41</u> |
| | · | | | | | | | - |
| ORW-3 | 01/25/95 | 6.30 | NOT GAUGED | | | | | |
| | 05/09/95 | 6.30 | NOT GAUGED | 6 15 | | | | 0.45 |
| | 05/18/95 | 6.30 | 9.45 | 9.48 | -3.18 | 0.03 | L | 3.15 |
| 为。 对新的 的对象。 | 07/31/95 | 6.30 | TRACE | 9.68 | -3.38 | | | 3.38 |
| | 09/07/95 | 6.30 | 9.57 | 9.60 | -3.30 | 0.03 | | 3.27 |
| X-25-109-12 | 11/30/95 | 6.30 | TRACE | 9.67 | -3.37 | | | 3.37 |
| S - 9 38 U.A | 01/10/96 | 6.30 | TRACE | 9.55 | -3.25 | S # C | | 3.25 |
| FOR PARTY OF SAME | 03/25/96 | 3.30 € 6.30 | 11.55 | 12.05 | -5.75 | 0.50 | | 5,33 -5.38 |
| | 05/17/96 | 6.30 | 11.60 | 12.10 | -5.80 | 0.50 | | 5.30 |
| | 07/25/96 | 6.30 | 44.40 | 11.60 | -5.30 | 0.50 | *************************************** | ·5.18 |
| ~. 59. so that 1. c = 1070 | 09/16/96 | 6.30 | 11.40 | 11.90 11.87 | -5.60 -5.57 | 0.50 0.24 | | 5.37 |
| 4.46类数。4.4次 | 11/12/96 | 6.30 | 11.63 NOT GAUGED | 11.07 | 6.30 | 0.00 | ************************************** | 6.30 |
| | 01/20/97 | 6.30 | 11.20 | 11.50 | -5.20 | 0.30 | | 4.95 |
| 71: 200 - 7 14 E | 03/06/97 | 6.30 | 8.60 | 11.49 | -5.19 | 2.89 | The second secon | -2.76 |
| ¥ 78842567854 | 05/20/97 | 6.30 | 6.00 | 11.46 | -5.16 | SHEEN | | 5.16 |
| 1,150,000 | 07/15/97 08/28/97 | 6.30 | | 11.55 | -5.25 | GIICCIE | | ·5.25 |
| | 00/20/97 | 6.30 | 11,40 | 11.47 | -5.17 | 0.07 | | 5.11 |
| | 11/18/97 | 6.30 | 3.36 | 3.52 | 2.78 | 0.16 | The same of the sa | 2.91 |
| | 03/31/98 | /⊹ 6.30 6 .30 | 2.20 | 2.69 | 3.61 | 0.49 | | 4.02 |
| | 05/21/98 | 6.30 | 2.31 | 2.70 | 3.60 | 0.39 | | 3.93 |
| | 07/30/98 | 6.30 | 11,45 | 11.48 | -5.18 | 0.03 | | 5.15 |
| 240,250,200,200 | 08/12/98 | 6.30 | 11.61 | 11.72 | -5.42 | 0.11 | | -5.33 |
| 77.00.798.75.45.38 | 09/28/98 | 6.30 | Contract to | 11.61 | -5.31 | | | 5.31 |
| A. 344-19-41-18-2-18-2-18-2-18-2-18-2-18-2-18-2-1 | 11/04/98 | 6.30 | 11.36 | 11.38 | -5.08 | 0.02 | 15300 | -5.06 |
| | 11/30/.98 | 12.46 | 11.87 | 11.87 | 0.59 | 0.00 | | 0.59 |
| - Per Bernamistra can sunt | 01/27/99 | 12.46 | 11.30 | 11.34 | 1.12 | 0.04 | | 1.15 |
| 43.75 (18.25) | 02/16/99 | 12.46 | NOT GAUGED | | | | | |
| 1000 ACT DESCRIPTION AND AND AND AND AND AND AND AND AND AN | 05/04/99 | 12.46 | 6.52 | 6.52 | 5.94 | 0.00 | | 5.94 |
| w Salada Jalah Ka | 08/12/99 | 12.46 | 4.25 | 4.30 | 8,16 | 0.00 | | 8.16 |
| CA - S. ANSTRONOM COST S. S. C. S. A. A. C. | 11/11/99 | 12.46 | 3. <u>9</u> 5 | 4.05 | 8.41 | 0.10 | | 8.49 |
| | | | | | | | | |
| OP-1 | , 05/18/95 | 6.71 | 3.84 | 5.05 | 1.66 | 1.21 | | 2.68 |
| | 07/31/95 | 6,71 | 5.23 | 5.35 | 1.36 | 0.12 | | 1.46 |
| | 09/07/95 | 6.71 | 5.55 | 6.13 | 0,58 | 0.58 | | 1,07 |
| | 11/30/95 | 6.71 | 5.81 | 9.36 | -2.65 | 3.55 | | 0.33 |
| | 01/10/96 | 320 6.71 25 36 | TRACE | 4.41 | 2.30 | | | 2.30 |
| | 03/25/96 | 6.71 | | 3.78 | 2.93 | | | 2.93 |
| 18504453445 | 5 05/17/96 | 6.71 | | 2,18 | 4.53 | | | 4.53 |
| | 07/25/96 | 6.71 | | 3.71 | 3.00 | l | 1 | 3.00 |

| | | | | | | · - | | |
|--|----------------------------|-------------------|--------------------------|--------------|--|--|--|---------------|
| | | Well Casing | Depth to | Depth to | Water Level | Product | Correcte | d Water Level |
| Well No. | Date | Elevation * | Product | Water | Elevation | Thickness | Ele | vation ** |
| | | (Feet) | (Feet) | (Feet) | (Feet) | (Feet) | | (Feet) |
| OP-1 cont. | 09/16/96 🥖 | 6.712 | | 3.15 | 3.56 | | | 3.56 |
| | 11/12/96 | 6.71 | TRACE | 2.90 | 3.81 | | | 3.81 |
| 物理學學學 | 01/20/97 | √ ≤ 6.71 ± 🔭 | TRACE | 3.90 | 2.81 | | | 2.81 |
| | 03/06/97 | 6.71 | TRACE | 4.19 | 2.52 | ni i i i i i i i i i i i i i i i i i i | nulerOAllia ma | 2.52 |
| Antiger Barrier | 05/20/97 | 6.71 | 4.87 | 4.94 | 1.77 | 0.07 | | 1.83 |
| | 07/15/97 | 6.71 | 4.91 | 5.18 | 1.53 | 0.27 | | 1.76 |
| A CONTRACTOR OF STREET | 08/28/97 | 6.71 | 4:55 | 4,64 | 2.07 | 0.09 | ************ | 2.15 |
| | 09/15/97 | 6.71 | 4.89 | 5.03 | 1.68 | 0.14 | AND DESCRIPTION OF THE PERSON | 1.80 |
| 4 (30 May 25 / 14 | 11/18/97 | 6.71 | 3.33 | 3.38 | 3,33 | 0.05 | | 3.37 |
| | 03/31/98 | 6.71 | SHEEN | 3.83 3.82 | 2.88 2.89 | | AND DESCRIPTION OF THE PARTY OF | 2.88 2.89 |
| | 05/21/98 | 6.71% 6.71 | 200 | 12.03 | -5.32 | 8,23 | | 2.69 1.59 |
| | 07/30/98 08/12/98 | 6.71 | 3.80 3.90 | 12.51 | -5.80 | 8.61 | | 1.43 |
| | 09/28/98 | 6.71 | 4.81 | 8.77 | -2.06 | 3.96 | SECTION OF THE | 1.27 |
| 4,50,000,000,000,000 | 311/04/98 ° ₹ | 6:71 | 4.75 | 6.25 | 0.46 | 1.50 | | 1.72 |
| | 11/30/98 | 12.87 | 8.99 | 6,01 | 6.86 | -2.98 | | 4.36 |
| 4.75***** | © 01/27/99 | 12.87 | 4.70 | 6.01 | 6.86 | 1.31 | | 7.96 |
| Para Salah Bara Palasa Para Para Para Para Para Para Para Par | 02/17/99 | 12.87 | SHEEN | 4.79 | 8.08 | | ALS ALL | 8.08 |
| 15 24 4 2 3 10 3 | 05/04/99 | 12.87 | SHEEN | 3.91 | 8.96 | | lossanasaa amaand | 8.96 |
| | 08/12/99 | 12.87 | 3.60 | 10.55 | 2.32 | 6.95 | | 8.16 |
| | ≨31/11/99 [©] | 12.87 | 2.50 | 4.70 | 8.17 | 2.20 | Lucias sedicas a secuciones | 10.02 |
| 新作品数据记行证 的 | 1.6. OF The | HRAGIA NG KISANG | | | | | | |
| OP-2 | 905/18/95 A | 7.80 | 5.15 | 6.97 | 0.83 | 1,82 | | 2.36 |
| | 07/31/95 | 7.80 | NOT GAUGED | | | | | |
| | 09/07/95 | 7,80 | 6,04 | 7.85 | -0.05 | 1.81 | | 1.47 |
| | 11/30/95 | 7.80 | 6.85 | 7.26 | 0.54 | 0.41 | | 0.88 |
| AND SERVICE | ÿ 01/10/96 → | . v. 7.80∲∯ | 5.70 | 6.25 | 1.55 | 0.55 | *************************************** | 2.01 |
| | 03/25/96 | 7.80 | 5.00 | 6.67 | 1.13 1.35 | 1.67 1.15 | | 2.53 2.32 |
| | ୍ତ 05/17/96ି.୍ 07/25/96 | 7.80 7.80 | 5,30 5.97 | 6.45 6.62 | 1.18 | 0.65 | 7000000 | 2.02 1.73 |
| | 07/25/96 09/16/96 | 7.80 | 6.25 | 8,15 | -0.35 | 1.90 | | 1.25 |
| | 11/12/96 | 7.80 | 6.66 | 8.79 | -0.99 | 2.13 | | 0.80 |
| | 01/20/97 | 7.80 | 4.74 | 6.35 | 1.45 | 1.61 | | 2.80 |
| 8.00 | 03/06/97 | 7.80 | 5.38 | 6.40 | 1.40 | 1.02 | The second of the latest and the second of t | 2.26 |
| t propagation of | 05/20/97 | 7.80 | 5.92 | 7.26 | | 1.34 | | 1.67 |
| | 07/15/97 | 7.80 | 6.34 | 8.37 | -0.57 | 2.03 | | 1.14 |
| | 08/28/97 | 7.80 | 6.55 | 8.45 | -0.65 | 1,90 | | 0.95 |
| | 09/15/97 | 7.80 | 6.62 | 8.59 | -0.79 | 1.97 | de la companya de la | 0.86 |
| | % 11/18/97 🐇 | 7.80 | 5.55 | 5,87 | 1.93 | 0.32 | | 2.20 |
| | 03/31/98 | 7.80 | 3.28 | 6.18 | 1.62 | 2.90 | 1 | 4.06 |
| 5 Marie 2 7 Ki | 3 05/21/98 | 7.80 | NOT GAUGED | | | | | |
| | 07/30/98 | 7.80 | 5.79 | 7.64 | 0.16 | 1.85 | | 1.71 |
| | 08/12/98 | 7.80 | 5.92 | 8.92 | -1.12 | 3.00 | | 1.40 |
| | 09/28/98 | 7.80 | 6.27 | 9.05 | -1.25 -1.02 | 2.78 2.40 | | 1.09 1.00 |
| erenyijeri. | 11/04/98 11/30/98 | 7.80 13.95 | 6.42 9.20 | 8.82 9.20 | 4.75 | 0.00 | 122-201-201-201-201-201-201-201-201-201- | 4.75 |
| | 01/27/99 ° | 13.95 | 9.20 5.63 | 6.20 | 7.75 | 0.57 | L | 4.73 8.23 |
| | 02/18/99 | 13.95 | 3.87 | 5.57 | 8.38 | 1.70 | ************************************** | 9.81 |
| | 02/16/99 | 13.95 | 4,54 | 6.57 | 7.38 | 2.03 | AND THE PROPERTY AND ADDRESS OF THE PARTY AND | 9.09 |
| mastalis A Mis | 08/12/99 | 13.95 | 4.13 | 5.54 | 8.41 | 1.41 | Trans vom my X de My and de | 9.59 |
| | \$ 11/11/99 | 4.000 Table 13.95 | | 5.54 | 8,41 | | E E L | 8.41 |
| | | NETTER STREET | 0.4890 do 100-englistica | | | | 100 | |
| OP-3 | 05/18/95 | 6.48 | 4.88 | 9.86 | -3,38 | 4.98 | | 0.80 |
| | | | | | The second secon | | 4.00 | |

| | | | | T | | ı | |
|---|------------------------------|-----------------------|--|--------------|----------------|--------------|-----------------------|
| | | Well Casing | Depth to | Depth to | Water Level | Product | Corrected Water Level |
| Well No. | Date | Elevation * | Product | Water | Elevation | Thickness | Elevation ** |
| | | (Feet) | (Feet) | (Feet) | (Feet) | (Feet) | (Feet) |
| OP-3 cont. | 07/31/95 | 6.48 | 5.32 | 8.46 | -1.98 | ·3.14 | 0.66 |
| Section Code Section | 09/07/95 | 6.48 | 5.16 | 8.22 | -1.74 | 3.06 | 0.83 |
| | 11/30/95 | 6.48 | 5.75 | 6.52 | -0.04 | 0.77 | 0.61 |
| | 01/10/96 | 6.48 | 4.84 | 10.20 | -3.72 | 5:36 | 0.78 |
| S. P. S. Valley A. W. C. William | 03/25/96 | 6.48 | 5.12 | 9.84 | -3.36 | 4.72 | 0.60 |
| | 05/17/96 | 6.48 | 5,03 | 10.29 | -3.81 | 5.26 | 0.61 |
| | 07/25/96 | 6.48 | TRACE | 5.61 | 0.87 | 3.54 | 0.87 |
| | 09/16/96 11/12/96 | 6.48 6.48 | 5. 75 6.14 | 9,29 8,89 | -2.81 -2.41 | 2.75 | 0.16 -0.10 |
| | 01/20/97 | 6.48 | 4.96 | 8.20 | -1.72 | 3.24 | 1.00 |
| | 03/06/97 | 6.48 | 4.75 | 8.42 | -1.94 | 3.67 | 1.14 |
| No good society | 05/20/97 | 6.48 | 6.38 | 6.95 | -0.47 | 0.57 | 0.01 |
| | 07/15/97 | 6.48 | 5.87 | 7.64 | -1.16 | 1.77 | 0.33 |
| | 08/28/97 | 6.48 | 6.89 | 8,65 | -2.17 | 1.76 | -0.69 |
| | 09/15/97 | 6.48 | 6.03 | 8.03 | -1.55 | 2.00 | 0.13 |
| 医心体的 化合金 | 🖟 11/18/97 👀 | 6.48 | 3.89 | 5.61 | 0.87 | 1.72 | 2.31 |
| | 03/31/98 | 6.48 | 2.70 | 6.00 | 0.48 | 3.30 | 3.25 |
| | 05/21/98 | 6.48 | 3.80 | 6,77 | -0.29 | 2.97 | 2.20 |
| 8.5 _2855496.*No ZE | 07/30/98 | 6.48 | 5.79 | 7.64 | -1.16 | 1.85 | 0.39 |
| | <u>08/12/98</u> | 6.48 | 5.20 | 8.40 | -1.92 | 3.20 | 0.77 |
| | 09/28/98 | 6.48 | 5.74 5.86 | 7.49 7.65 | -1.01 -1.17 | 1.75 1.79 | 0.46 |
| | 11/04/98 11/30/98 | 6.48 12.61 | 7.59 | 7.59 | 5.02 | 0.00 | 5.02 |
| ACHEROSUS | ੀ //30/98 ਉ 01/27/99 | 12.61 | 5,28 | 6.60 | 6.01 | 1.32 | 7.12 |
| | 02/17/99 | 12.61 | 2.75 | 3.55 | 9.06 | 0.80 | 9.73 |
| 4444333 | ్ల 05/04/99 | 12.61 | 3.65 | 8.71 | 3.90 | 5.06 | 8.15 |
| NATIONAL PROPERTY AND A NATIONAL PROPERTY AND A PARTY | 08/12/99 | 12.61 | 3.99 | 7.94 | 4.67 ′ | 3.95 | 7.99 |
| | 11/11/99 (P) | 12.61 | | 9.16 | 3.45 | 15 2 5 5 5 | 3.45 |
| Constitution of | Not shared in | 7496 E SAME | rasine de la compa | | a harena | | |
| OP-4 | 05/18/95 ~: | 6.32 | 3.28 | 7.15 | -0.83 | 3.87 | 2.42 |
| | 07/31/95 | 6.32 | NOT GAUGED | | | | |
| | <i>_</i> 09/07/95 | 6.32 | 4.64 | 6.17 | 0.15 | 1.53 | 1.44 |
| No Control with Section 2017 | 11/30/95 | 6.32 | 5.56 | 5.75 | 0.57 | 0.19 | 0.73 |
| | 01/10/96 | 6.32 | 3.43 | 6.45 | -0.13 | 3.02 | 2.41 |
| | 03/25/96 05/1 7/96 | 6.32 6.32 | 3.11 3.30 | 6.89 6.43 | -0.57 -0.11 | 3.78 3.13 | 2.61 2.52 |
| s compatible de la compa | 07/25/96 | 6.32 | 4.30 | 7.58 | -1.26 | 3.28 | 1.50 |
| 5 5 7 5 9 9 5 5 7 8 9 3 3 | 09/16/96 | 6.32 | 4.71 | 8.09 | -1.77 | 3,38 | 1.07 |
| | 11/12/96 | 6.32 | 5.10 | 8.56 | -2.24 | 3.46 | 0.67 |
| 1.116.45.474 | © 01/20/97 | 6.32 | 3.30 | 6.49 | -0.17 | 3.19 | 2.51 |
| 311113 A 800 A 300 A 70 A 70 A 70 | 03/06/97 | 6.32 | 3.80 | 4.99 | 1.33 | 1.19 | 2.33 |
| | 05/20/97 | 6.32 | 4.59 | 5.28 | 1.04 | 0.69 | 1,62 |
| | 07/15/97 | 6.32 | | * 6.32 | -1.68 | | -1.68 |
| 444444 | <u>े</u> 08/28/97 ु | 6.32 | | * 6.32 | -1.68 | | -1,68 |
| ्र रुद्धाः अक्षास्त्र | 09/15/97 | 6.32 | | 9.90 | -3.58 | | -3.58 |
| | 11/18/97 | 6.32 | | NA NA | NA | | NA NA |
| <u> </u> | 02/04/98 | 6.32 | | NA NA | NA NA | | NA NA |
| | ैं 05/22/98 ः ०७/३०/०९ | . 6.32 (1.5%) 6.32 | | NA NA | NA -0.53 | | NA 0.53 |
| | 07/30/98 08/12/98 | 6.32 | | 6.85 NA | -0.53 NA | | -0.53 NA |
| 22336453 | 09/28/98 | 6.32 | THE SECTION OF THE PROPERTY OF | 10.51 | -4.19 | | -4.19 |
| | 2 11/04/98 | 6.32 | | 9.59 | -3.27 | | +3.27 |
| | 11/30/98 | 12.22 | N 200 DO Z AGAS (SEE SEE SEE SEE SEE SEE SEE SEE SEE S | 10.77 | 1.45 | | 1.45 |
| | ,00,00 | f lotte (s | | 1 10.77 | 1810 | | 1.70 |

CUMULATIVE SUMMARY OF FLUID LEVEL MEASUREMENT DATA (TOFC) PORT OF OAKLAND TRAILER-ON-FLAT-CAR (TOFC) RAILYARD

| | D-4- | Well Casing Elevation * | Depth to | Depth to Water | Water Level | Product Thickness | Corrected Water Level |
|------------|-----------------------|-------------------------|----------------------------------|-------------------|-------------|----------------------|-----------------------|
| Well No. | Date | | | | | | |
| | | (Feet) | (Feet)_ | (Feet) | (Feet) | (Feet) | (Feet) |
| OP-4 cont. | 01/27/99 | 12.22 | 5 A 6 - 47 - 12 G - 61 - 61 - 61 | 9.50 | 2.72 | | 2.72 |
| | 02/16/99 | 12.22 | NOT GAUGED | | | | |
| | ₂ 05/04/99 | 12.22 | | 8.60 | 3.62 | | 3.62 |
| | 08/12/99 | 12.22 | | 4.37 | 7.85 | | 7.85 |
| | 11/11/99 | 12.22 | | 9.20 | 3.02 | | 3.02 |

^{*} Elevation of top of casing, all well casings and groundwater elevations measured to City of Oakland Datum (2.998 Mean Sea Level) from May 1996 through August 1998. In February 1999, the well casings were resurveyed to Port Datum (-3.202 Mean sea Level) by PLS Survey Inc.

Water and product levels below pump housing - reported value is depth to pump.

NA = Not Applicable. Wells are not gauged due to pump components blocking casing.

^{**} The groundwater elevations in the monitoring wells with product are corrected by multiplying the specific gravity (0.84) of diesel by the diesel thickness and adding this value to the water elevation measurement from the well.

| WELL NO. | ELEV. TOC * | DATE | DEPTH TO PRODUCT | PRODUCT THICKNESS | DEPTH TO WATER | GROUNDWATER ELEV. * |
|--|-------------------------------|---|---------------------|----------------------|-------------------|------------------------|
| | OCT (VENE | A CONTRACTOR OF THE PERSON OF | | | | |
| OKUS-W1 | 9,17 | 05/29/96 S | N/A | NP ND | 7.80 | 1,37 0,83 |
| SAMERINGEN FOR V. DE FREE VELTE : | 9.17 | 08/27/96 S | N/A | NP NO | 8.34 8.71 | |
| Andrews and the second | Jeff in Quantities As PASSING | 11/13/96 S | N/A N/A | NP NP | 7.58 | 0.46 1.59 |
| | 9.17 | 02/17/97 S | N/A | NP. | 7.56 8.24 | 0.93 |
| | 9.17 9.17 | 05/21/97 S 08/27/97 S | N/A N/A | NP | 8.37 | 0.80 |
| eggwamst was gover | - ANDRON BOTTONES | 11/19/97 S | N/A | NP NP | 8.28 | 0.89 |
| | 9.17 | 02/04/98 S | N/A | NP | 6.95 | 2,22 |
| | 9.17 9.17 | 05/21/98 S | N/A | NP | 7.48 | 1.69 |
| | ્રક્કા <i>ર હ</i> ુ | 03/21/98 S | N/A | NP | 7.95 | 1.22 |
| | 9.17 15.24 | 11/30/98 S | N/A | NP | 7.95 8.00 | 7/24 |
| retretra reporte | 15.24 15.24 | 02/16/99 C | N/A | NP | 7.73 | 7.51 |
| | | 05/04/99 C | N/A | NP NP | 7.72 | 7 52 |
| A A GRANDEN A CONTRACTOR | 15.24 | 08/12/99 C | N/A | NP | 8.26 | 6.98 |
| | 10.2.7 | 03/12/00 3 | 1473 | 141 | J.m. | |
| OKÜS-W2 | 9.71 | 05/29/96 S | N/A | NP | 8,72 | 0.99 |
| The state of the second | 9.71 | 07/25/96 B | N/A | NP | 9.03 | 0.68 |
| | 9.71 | 08/27/96 S | N/A | NP . | 9,24 | 0.47 |
| and if we have a second of | 9.71 | 09/16/96 B | N/A | NP | 9.35 | 0.36 |
| | 9.71° | 11/13/96 S | N/A | NP | 9,62 | 0.09 |
| | 9.71 | 11/25/96 B | N/A | NP | 9.36 | 0.35 |
| | 39.71 % | 01/20/97 B | N/A | NP | 8.48 | 1.23 |
| | 9.71 | 02/17/97 S | N/A | NP | 8.41 | 1.30 |
| | 9.71 | 03/6/97 S | N/A | NP | 8.67 | 1 04 |
| the state of the s | 9.71 | 05/21/97 S | N/A | NP | 9.13 | 0.58 |
| | 9.71 | 05/27/97 S | N/A | NP | 9.10 | 0.61 |
| | 9.71 | 07/15/97 B | N/A | NP | 9.24 | 0 47 |
| | 9.71 | 08/27/97 S | . N/A | NP | 9.29 | 0.42 |
| | 9.71 | 09/15/97 B | N/A | NP | 9.42 | 0.29 |
| | 9.71 | 11/19/97 S | N/A | NP NP | 9.21 | 0.50 |
| | 9.71 | 02/04/98 S | N/A | NP | 7.50 | 2 21 |
| | 9.71 9 | 05/21/98 S | N/A | NP NP | 8.33 | 1,38 |
| | 9.71 | 08/12/98 S | N/A | NP | 8.80 | 0 91 |
| | . 20 . 18 | 11/30/98 S | N/A | NP NP | 8.97 | 6 76 |
| | | 01/27/99 B | N/A | NP | 8.97 | 6.76 |
| | 15.73 | 02/16/99 C | N/A | NP | 8.52 | 7 21 |
| | 15.73 | 05/04/99 C | N/A | NP | 8.58 | 7.15 |
| | 15.73 | 08/12/99 C | NA | NP NP | 9.06 | 6.67 |
| () 1/3/0 | | entropy of the second continuous control | | | | |
| OKUS-W3 | 9.80 | 05/29/96 S | N/A | NP NP | 8,94 | 0.86 |
| | 9.80 | 07/25/96 B | N/A | NP | 9.32 | 0.48 |
| | 101/10/10 | 08/27/96 S | N/A | NP . | 9.52 | 0.28 |
| | 9.80 | 09/16/96 B | N/A_ | NP | 9.63 | 0 17 |

| NO. TOC * PRODUCT THICKNESS WATER OKUS-W3 conti. 9.80 11/13/96 S N/A NP 9.90 9.80 11/25/96 B N/A NP 9.65 9.80 01/20/97 B N/A NP 8.74 9.80 02/17/97 S N/A NP 8.67 9.80 03/6/97 B N/A NP 8.92 9.80 05/21/97 S N/A NP 9.44 9.80 05/27/97 B N/A NP 9.40 9.80 07/15/97 B N/A NP 9.53 | -0.10 0.15 1.06 1.13 |
|--|--|
| 9.80 11/25/96 B N/A NP 9.65 9.80 01/20/97 B N/A NP 8.74 9.80 02/17/97 S N/A NP 8.67 9.80 03/6/97/B N/A NP 8.92 9.80 05/21/97 S N/A NP 9.44 9.80 05/27/97 B N/A NP 9.40 | 0,15 1,06 1,13 |
| 9,80 01/20/97 B N/A NP 8.74 9,80 02/17/97 S N/A NP 8.67 9,80 03/6/97 B N/A NP 8,92 9,80 05/21/97 S N/A NP 9.44 9,80 05/27/97 B N/A NP 9.40 | 1.06 1.13 |
| 9.80 02/17/97 S N/A NP 8.67 9.80 03/6/97 B N/A NP 8.92 9.80 05/21/97 S N/A NP 9.44 9.80 05/27/97 B N/A NP 9.40 | 1.13 |
| 9.80 03/6/97 B N/A NP 8.92 9.80 05/21/97 S N/A NP 9.44 9.80 05/27/97 B N/A NP 9.40 | Control Control Control of Contro |
| 9.80 05/21/97 S N/A NP 9.44 9.80 05/27/97 B N/A NP 9.40 | |
| 9.80 05/27/97 B N/A NP 9.40 | 0.36 |
| AND THE STATE OF T | 0,40 |
| | 0.40 |
| | CCESSABLE |
| 9.80 11/19/97 S N/A NP 9.45 | 0.35 |
| 9.80 02/5/98 B N/A NP 7.65 | 2.15 |
| 9.80 05/21/98 S N/A NP 8.63 | 1.17 |
| 9.80 08/12/98 S N/A NP 9.13 | 0.67 |
| 15.85 11/30/98 S N/A NP 9.22 | 6.63 |
| 15.85 01/27/99 B N/A NP 9.25 | 6,60 |
| 15.85 02/16/99 C N/A NP 8.02 | 7.83 |
| 15.85 05/04/99.C N/A NP 8.91 | 6.94 |
| 15.85 08/12/99 C N/A NP 9.39 | 6.46 |
| OKUS-W4 7.35 08/9/95 B N/A NP 6.10 | 1.25 m |
| The second secon | 0,65 |
| 7.35 11/29/95 B N/A NP 6.70 05/13/97 B WELL DECOMMISSIONE | AND RESIDENCE OF THE PROPERTY |
| CO/(O/a) D 34 Street Bright Bright A CERT CONTINUOUS DATE | |
| OKUS-W5 9.25 05/29/96 S 9.06 P | ere <u>L</u> egener |
| 9.25 06/13/96 B 9.11 P | |
| 9.25 07/25/96 B 9.11 P | |
| 9.25 8/9/96 B 9.22 P | 4.5 |
| 9.25 08/27/96 S 9.44 P | a di a di a |
| 9.25 09/16/96 B N/A | |
| 9.25 10/17/96 B 9.65 P | e Super- |
| 9.25 11/13/96 S 9.87 P | |
| 9.25 12/16/96 B N/A | ** |
| 9.25 01/20/97 B N/A | |
| 9.25 02/17/97 S 9:09 P | |
| 9.25 05/21/97 S 9.29 P 9.25 08/27/97 S 9.42 P | |
| 9.25 08/27/97 S 9.42 P 9.25 11/19/97 S 9.87 P | |
| | |
| 9.25 02/5/98 B 7.13 P 9.25 05/22/98 S 8.65 P | ************************************** |
| 9.25 08/13/98 S 9.03 P | |
| 15.32 11/30/99 S 9.27 P | |
| 15.32 02/16/99 C 8.00 0.33 | |
| 15.32 05/04/99 C N/A P | |

| WELL NO. | ELEV. TOC * | DATE | DEPTH TO PRODUCT | PRODUCT THICKNESS | DEPTH TO WATER | GROUNDWATER ELEV. * |
|--|-------------------|---|---------------------|---|--|--|
| OKUS-W5 cont | 15.32 | 08/12/99 C | N/A | Part Part III | i andrews | Ball Berger (200) is start |
| | | | | | | |
| OKUS-W6 🖟 🧎 | 7.02 | 08/9/95 B | 5.65 | P | | |
| and the state of t | 7.02 | 09/7/95 B | 5.98 | Р | | |
| | <mark>7.02</mark> | 10/18/95 B | 6,38 | P | a stania ET temana | |
| lection supplies to the State of | 7.02 | 11/10/95 B | 6.52 | Р | | |
| | 7.02 | 12/15/95 B | 5.47 | Р Р | | ed a com T alence : |
| | 7.02 | 01/10/96 B | 5.58 4.70 | P. | | |
| | 7.02 7.02 | 02/16/96 B 03/25/96 B | 4.70 4.72 | P | | |
| | 7.02 7.02 | 05/29/96 S | 5:02 | dredeli Prombie | er er er er | |
| | 7,02 | 06/13/96 B | 4.99 | Р | | |
| | 7.02 7.02 | 07/25/96 B | 5.23 | Angligh Balls hill | in the state of the | ome at L abe sec |
| | 7.02 | 08/9/96 B | 5.66 | P | | |
| | 7.02 | 08/27/96 S | 5.82 | P | 10 120 | |
| A STATE OF THE STA | 7.02 | 09/16/96 B | N/A | XF0%:-xhdik:::::::::::::::::::::::::::::::::::: | 0-114/4/2006 Carraneouscenscopers. 6-4-4-40. | |
| | 7.02 | 10/17/96 B | 6.50 | Р | 1969 <u>10</u> 19 17 | |
| | 7.02 | 11/13/96 S | 6.27 | P | | |
| | 7.02 | 12/16/96 B | N/A | | | |
| ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | 7.02 | 01/20/97 C | N/A | | ••• | |
| | 7.02 | 02/17/97 S | 4.71 | P | | |
| | 7.02 | 05/21/97 S | 6.03 | P | | |
| | 7.02 | 08/27/97 S | 6.00 | Pale | | and the state of t |
| ar a garage com si ales sistes si | 7.02 | 11/19/97 S | 5.54 | Р | Nasanakan marana an 20-20 | |
| | 5,7.02 | 02/5/98 B | 3.30 | talih Para | | are participated and the second second |
| | 7.02 | 05/22/98 S | 4.48 | Р | | •• |
| | • * 4.9 3 | 08/13/98 \$ | 5.81 | e Harat P arada P | | |
| 35,544590 \ 350.07 | 13.10 | 11/30/98 S | 5.96 6.00 | P | 11111111111111111111111111111111111 | |
| | L April Lord Br | 02/16/99 C | 0,00 N/A | P | | |
| | | 05/04/99 C | N/A | P | | |
| | ~ \$J.3.10. | ₹. 00/12/33 O | | particular de la companion de | | |
| OKUS-W7 | 6.91 | 05/29/96 S | N/A | NP | 5.08 | 1.83 |
| oilda ii vata | 6.91 | 08/27/96 S | N/A | NP | 5.68 | 1.23 |
| | 6.91 | 11/13/96 S | N/A | NP | 6.00 | 0.91 |
| | 6.91 | 02/17/97 S | N/A | NP | 4.85 | 2.06 |
| | | 05/21/97 S | N/A | NP | 5,53 | 1.38 |
| The distance of the second of | 6.91 | 08/27/97 S | N/A | · NP | 5.76 | 1.15 |
| | 6.91 | State Adaptive many may be a first from | N/A | NP - | 5.65 | 1.26 |
| A-95'VA 37' 15 | 6.91 | 02/04/98 S | N/A | NP | 4.45 | 2.46 |
| | 6.91 | 05/21/98 S | N/A | NP | 4.69 | 2,22 |
| \$ 24 | 6.91 | 08/12/98 S | N/A | NP | 5.28 | 1.63 |
| | 12.98 | 11/30/98 S | N/A | NP | 5.47 | 7.51 |

| WELL | ELEV. | DATE | DEPTH TO | PRODUCT | DEPTH TO | GROUNDWATER |
|--|------------------------|---|------------------------|--|--|--|
| NO. | TOC * | | PRODUCT | THICKNESS | WATER | ELEV. * |
| OKUS-W7 cont. | 12.98 | 02/19/99 C | N/A | NP | 5.11 | 7.87 |
| OKUS-W/cont. | 12.98 | As progressors and conserve resources to the progressors and a second | N/A | NP NP | 5.11 4.92 | THE RESERVE THE PROPERTY OF TH |
| da Greek varrida | NOTES STORY CONTRACTOR | 05/04/99 C | | Natural Company of the Company of th | Access to the control of the control | 8.06 |
| | 12.98 | 08/12/99 C | N/A | <u>NP</u> | 5.48 | 7,50 |
| | | | | | | |
| OKUS-W8 | 6.75 | 05/29/96 S | N/A | NP | 4.93 | 1,82 |
| | 6.75 | 08/27/96 S | N/A | NP | 5.52 | 1.23 |
| A CONTRACT OF THE CONTRACT OF | 6.75 | 11/13/96 S | N/A | NP | 5,90 | 0.85 |
| Widness French 1994/1997 P | 6.75 | 02/17/97 S | N/A | NP | 4.69 | 2.06 |
| | 6.75 | 05/21/97 S | N/A | NP | 5.36 | 1.39 |
| an an anna markana and mar martain | 6.75 | 08/27/97 S | N/A | NP | 5.59 | 1.16 |
| | 6.75 | 11/19/97 S | N/A | NP. | 5.45 | 1,30 |
| December 25 of the Second Seco | 6.75 | 02/04/98 S | N/A | NP | 4.36 | 2.39 |
| | 6.75 | " TYCK ARREST SECTIONS AND AND ASSESSED. | N/A | NP | 4,45 | 2.30 |
| State Survivation States, against the transfer of the | 6.75 | 08/12/98 S | N/A | NP | 5.05 | 1.70 |
| | 15 YEAR 15 YOU | 11/30/98 S | N/A | NP | 5.20 | 7.60 |
| *** | 12.80 | 02/16/99 C | N/A | NP | 5.00 | 7.80 |
| | 12.80 | 05/04/99 C | N/A | NP | 4.81 | 7.99 |
| | 12.80 | 08/12/99 C | N/A | NP | 5.34 | 7.46 |
| | | | | | | |
| APL/UP-W1 | 8.12 | 05/29/96 S | N/A | NP | WELLINACCE | ESSABLE TO THE |
| | 8.12 | 08/27/96 S | N/A | NP | WELL INACCE | ESSABLE |
| | 8.12 | 11/12/96 B | N/A | NP | WELL INACCE | SSABLE |
| | 8.12 | 02/17/97 S | N/A | NP | 10.02 | -1.90 |
| | .8.12 | 05/21/97 S | N/A | NP | 10.14 | +2.02 |
| | 8.12 | 08/27/97 S | N/A | NP | 9.91 | -1 79 |
| | 8.12 | 11/18/97 B | N/A | NP | 9.32 | -1.20 |
| | 8.12 | 02/04/98 S | N/A | NP | 9.80 | -1.68 |
| | 8.12 | 05/21/98 S | N/A | NP' | 10.21 | -2,09 |
| | 8.12 | 08/12/98 S | N/A | NP | 9.76 | -1.64 |
| | 14.19 | 11/30/98 S | N/A | NP | 9.77 | 4.42 |
| | 14.19 | 02/18/99 C | N/A | NP | 10.19 | 4.00 |
| | 14.19 | 05/04/99 C | N/A | NP | 10.39 | 3.80 |
| - var est seen sin sid seeming | 14.19 | 08/12/99 C | N/A | NP | 10.27 | 3.92 |
| | | | | | | |
| APL/UP-W2 | 7.31 | 05/29/96 S | N/A | NP | 9.68 | -2.37 |
| ■ wo si win win with with with with with with with with | 7.31 | 08/27/96 S | N/A | NP | 9.53 | -2,22 |
| | 7.31 | 11/13/96 5 | N/A | NP | 9,57 | -2.26 |
| | 7.31 | 02/17/97 S | N/A | NP | 9.07 | -1,76 |
| | ື 7.31 ິ | CONTRACTOR AND | N/A | NP | 9.42 | -2.11 |
| | 7.31 | 08/27/97 S | N/A | NP | 9.17 | -1,86 |
| | 7.31 | 11/18/97 B | N/A | NP. | 8.59 | -1.28 |
| FITALINGSERS - PORTS | 7.31 | 02/04/98 S | N/A | NP | 8.80 | -1.49 |
| | | | N/A | NP NP | 9.58 | -1.49 |
| · 医液体腺素 医内侧肠炎。 | | しいたいかりい | SALESHEE! W/O RESIDENT | | J.00 | 4/4/ |

| | 7.31 3.19 3.19 3.19 | 08/12/98 S 11/30/98 S | N/A | NP | | |
|--|-------------------------------------|-----------------------------|---|---|--------------|--|
| PROTEST STATE OF STAT | 3.19 | 11/30/98 S | | INF | 8.99 | -1.68 |
| 1: | Complete a compression | | N/A | NP | 8.76 | 4.43 |
| | 2.40 | 02/18/99 C | N/A | NP | 9.55 | 3.64 |
| | 2:11 A | 05/04/99 C | N/A | NP | 9.76 | 3.43 |
| 1 | 3.19 | 08/12/99 C | N/A | NP | 9.58 | 3,61 |
| ************************************** | RILETING KG | | | | | |
| RW. | | 05/29/96 S | N/A | NP NP | 8,68 | enales es established |
| ender choose the about the property of the state of the s | 85 40 //52 | 06/13/96 B | N/A | NP | 8.68 | |
| | | 07/25/96 B | WA 1 | NP | 9.09 | |
| en stables and a second second | | 08/9/96 B | N/A | NP | 9.16 | |
| | 10 20 Sec. 1 | 08/27/96 S | N/A | NP NP | 9.18 | 4. |
| e erus din ali annae malak es | % %/18/4/ | 09/16/96 B | N/A | NP | 9.33 | |
| | | 10/17/97 B | N/A | NP | 9.50 | and the state of t |
| and the second second | %^0 | 11/12/96 B | N/A | SHEEN | 9.59 | |
| | | 11/25/96 B | 9.43 | 0.02 | 9.45 | arindario da CZ de Tractal |
| and the second of the second o | : .y * ^^ | 12/16/96 B | 9.12 | 0.10 | 9.22 | |
| | | 01/20/97 B | N/A | SHEEN | 8.50 | |
| | | 02/11/97 B | N/A | NP | 8.33 | |
| | | 02/17/97 S | 8.39 | 0.01 | 8,40 | |
| entantia (n. 1882). H | , <u></u> | 03/6/97 B | N/A | NP OUTEN | 8.70 | |
| | 5 | 04/29/97 B | N/A | SHEEN | 9.03 | |
| # TOVER *: | | 05/21/97 S | 9.10 | 0.02 | 9.12 9.12 | |
| | , | 05/27/97 B | 9.09 | 0.03 NP | 9.12 9.22 | |
| | u += u _n (corr | 07/15/97 B | N/A | NP NP | 9.22 9.17 | |
| | *> * | 08/15/97 B | N/A | COLORD MANAGEMENT AND COLORD FOR THE PARTY. | 9.17 9.29 | |
| | W 1 14 | 08/27/97 S | N/A N/A | SHEEN SHEEN | 9.29 | |
| | , | 11/19/97 S | I IV/A I N/A | SHEEN | 7.24 | |
| | · · · · · · | 02/6/98 B | Experience of the base of the second | SHEEN | 7.24 8.21 | |
| | ` | 05/22/98 S | N/A 8.74 | 0.08 | 8.82 | |
| | Ëò}∗ | 08/13/98 S 11/30/98 S | 8.74 N/A | SHEEN | 8.92 | 6,92 |
| 14 (1) (1) (1) (1) (1) (1) (1) (1) | 5.84 ∖ 5.84 | . 1,1/30/96 S 01/27/99 B | 8.95 | 0.05 | 9.00 | 6.84 |
| | 5.84 5.84 | 01/27/99 B 02/16/99 C | 8.95 N/A | 0.05 SHEEN | 9.00 8.41 | 7,43 |
| 18 AU A | 5.84 | 05/04/99 C | 8.33 | 0.08 | 8.41 | 7.43 |
| | | 05/04/99 C 08/12/99 C | 8,95 | 0.15 | 9.10 | 4.43 6.74 |

⁻⁻ Depth to water was not measured due to the presence of product in well.

N/A Non Applicable

NP - No Product

P - Product (bunker C) was encountered but the oil/water interface could not be found.

^{*} Elevation of top of casing, all well casings and groundwater elevations measured to City of Oakland Datum (2.998 Mean Sea Level) from May 1996 through August 1998. In February 1999, the well casings were resurveyed to Port Datum (-3.202 Mean sea Level) by PLS Survey Inc.

| WELL | ELEV. | DATE | DEPTH TO | PRODUCT | DEPTH TO | GROUNDWATER |
|------|-------|------|----------|-----------|----------|-------------|
| NO. | TOC * | | PRODUCT | THICKNESS | WATER | ELEV. * |

S = Measurement collected by Safety-Kleen personnel during quarterly sampling.

B = Measurements collected by Burns & McDonnell Waste Consultant personnel.

C = Measurements collected by Camp Dresser & McKee Inc. personnel during quarterly sampling.

CUMULATIVE SUMMARY OF ANALYTICAL DATA PORT OF OAKLAND TRAILER-ON-FLAT-CAR (TOFC) RAILYARD

| Well | Date | Total Petroleum | | | | | |
|---|----------------------|---------------------|--------------|--|-------------------|--------------|--|
| Number | Sampled | Hydrocarbons-Diesel | Benzene | Toluene | Ethylbenzene | Xylenes | мтве |
| 110051 | Jul., 1,000 | • | (ug/L) | (ug/L) | (ug/L) | (ug/L) | (ug/L) |
| | | ug/L | (ug/L) | (ug/L) | (ug/L) | (ug/L) | (ug/L) |
| OMW-1 | 05/11/92 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | |
| | 08/11/92 | 60 | <0.5 | <0.5 | <0.5 | <0.5 | |
| · 1000000000000000000000000000000000000 | > 11/13/92 | 67 | <0.5 | 0.61 | <0.5 | <0.5 | B186 (1995) (19 |
| ····· | 05/14/93 | <50 | <0.3 | <0.3 | <0.3 | <0.9 | |
| | 11/10/93 | <50 | <0.3 | <0.3 | <0.3 | <0.9 | |
| 3 92.33 | 05/02/94 | <50 | <0.5 | <0.5 ≼0.5 | <0.5 | <0.5 | |
| | 11/10/94 | // <50 // (1) | <0.5 <0.5 | <0.5 | <0.5 <0.5 | <0.5 | |
| | 05/17/95 11/30/95 | , 240 C | <0.5 | <0.5 | <0.5 | <0.5 | |
| 341 55 8 8 | 05/29/96 | 56 | <0.5 | <0.5 | <0.5 | <0.5 | |
| Si Karata | 11/12/96 | . <50 · `∷∷ેક્કેફે | <0.5 | <0.5 | √ ×0.5 W W | <0.5 | |
| | 08/28/97 | 130 | <0.5 | <0.5 | <0.5 | <0.5 | <u> </u> |
| | 02/05/98 | < 50 | <0.5 | <0.5 | <0.5 | <0,5 | |
| ``` | 08/13/98 | 170 | <0.5 | <0.5 | <0.5 | <0.5 | |
| | 02/17/99 | <50 | 1.9 | <0.5 | <0.5 | <0.5 | |
| | 08/13/99 | <50 | <0.5 | 77 | 0.88 | 2.32 | 2.5 |
| OMW-2 | 05/11/92 | 4,500 | <0.5 | <0.5 | <0.5 | <0.5 | PERMIT |
| OWN E | 08/11/92 | 2,700 | <0.5 | <0.5 | <0.5 | <0.5 | |
| | 11/13/92 | 3,400 COS | <0.5 | 0.57 | 6 F to 1.1 See E. | 3,3 | |
| | 05/14/93 | <50 | <0.3 | <0.3 | <0.3 | <0.9 | |
| | 11/10/93 | <50 · ````;```;``` | <0.3 | <0.3 | <0.3 | <0.9 | |
| | 05/02/94 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | |
| , q² | 11/16/94 | 260- ఆ కేష్ట్రాహ్ | <0.5 | ≮ 0.5 | <0.5 | <0.5 | |
| | 05/17/95 | 82 | <0.5 | <0.5 | <0.5 | <0.5 | |
| | 11/30/95 | 4,000 | <0.5 | <0.5 | <0.5 | <0.5 | Balantania ing m |
| | 05/29/96 | 580 | <0.5 | <0.5 | <0.5 | <0.5 | |
| 5/ | 11/12/96 | 3,400 ````×?][| <0.5 | <0.5 | <0.5 | <0.5 | |
| , | 08/28/97 | 720 | <0.5 | <0.5 | <0.5 2.3 | <0.5 <0.5 | 1 42 40 40 50 50 50 |
| | 02/05/98 | 1,800 (1995) | <0.5 <0.5 | <0.5 <0.5 | <0.5 | <0.5 | |
| | 08/13/98 02/18/99 | 2,000 <50 | <0.5 | <0.5 | 7.9 T.9 | <0.5 | |
| | | | 1 | | | 1 | S INCOME AND ARTHUR STATE OF |
| OMW-3 | 05/11/92 | 2,300 | 0.3 ປ 🚉 | 1.3 | - 0.3 J | 3.4 | Parametrical Collection |
| | 08/11/92 | 5,800 | <0.5 | 0.71 | <0.5 | 1.7 | |
| ° ° ° , | 11/13/92 | 110,000 ্ প্রতি | T | The state of the s | 1.5 | 2.7 | e chasilosto e elod |
| * ****** | 05/14/93 | 180 1,800 | <0.3 <0.3 | 36 0.5 | <0.3 <0.3 | <0.9 | 140000000000000000000000000000000000000 |
| | 11/10/93 05/02/94 | 1,800 1,800 | <0.5 | 2.3 | <0.5 | 0.89 | |
| 3, | 11/15/94 | 1,200 - 1,200 | <0.5 | 2.5 <0.5 | <0.5 | <0.5 | |
| <u></u> | 05/17/95 | 460 | <0.5 | 1.3 | <0.5 | <0.5 | 11 - 11 - 11 - 11 - 11 - 11 - 11 - 11 |
| | 11/30/95 | 2,400 | <0.5 | <0.5 | <0.5 | <0.5 | |
| | 05/29/96 | 2,300 | <0.5 | <0.5 | <0.5 | <0.5 | - Commence of the Commence of |
| 0) | 11/12/96 | 3,100 PA | ₹0.5 | <0.5 | <0,5 | <0.5 | |
| | 08/28/97 | 1,400 | <0.5 | <0.5 | <0.5 | <0.5 | |
| | 02/05/98 | 1,300 | <0.5 | <0.5 | <0.5 | <0.5 | |
| | 08/13/98 | 3,200 | <0.5 | <0.5 | <0.5 | <0.5 | A STATE OF THE PARTY OF THE PAR |
| | 02/17/99 | 250 YH | <0.5 | <0.5 | <0.5 | <0.5 | |
| | 08/13/99 | 200 | <0.5 | <0.5 | <0.5 | <0.5 | 3.3 |
| OMW-5 | 05/11/92 | 2,100 | <0.5 | .4 J | <0.5 | 0.3 | |
| | 08/11/92 | 2,100 | <0.5 | <0.5 | <0.5 | <0.5 | PARTER PROPERTY OF THE PROPERT |
| · | 11/13/92 | 4,400 (C) | <0.5 | 0.78 | <0.5 | <0.5 | 5 com com 15 com 15 com |

CUMULATIVE SUMMARY OF ANALYTICAL DATA PORT OF OAKLAND TRAILER-ON-FLAT-CAR (TOFC) RAILYARD

| Well | Date | Total Petroleum | | | | | |
|--|----------------------|---|----------------|------------------|--|---------------------|---|
| Number | Sampled | Hydrocarbons-Diesel | Benzene | Toluene | Ethylbenzene | Xylenes | мтве |
| 110111001 | Jampio | ug/L | (ug/L) | (ug/L) | (ug/L) | (ug/L) | (ug/L) |
| | | | | l | | <0.9 | |
| OMW-5 cont. | 05/14/93 11/10/93 | 11,000 <50 | <0.3 <0.3 | 1.8 0.6 | <0.3 <0.3 | <0.9 <0.9 | Grander (2000) |
| , | 05/02/94 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 100 Maria |
| STANDARD P | 11/16/94 | 520 | <0.5 | 1.2 | 4.6 6 1.4 | 3.00 pg 7.74 append | |
| 30, 2, 3 343, 8 | 05/18/95 | 2,400 | <0.5 | <0.5 | <0.5 | 1.7 | |
| | 11/30/95 | 13,000 | <0.5 | <0.5 | <0.5 | <0.5 | |
| | 05/29/96 | 5,800 | <0.5 | <0.5 | <0.5 | <0.5 | |
| | 11/12/96 | | "" NOT SAMP | LED - Well Conte | ained Product/Shee | n***** | erandaning in the |
| | 08/28/97 | 1,700 | <0.5 | <0.5 | <0.5 | <0.5 | |
| | 02/05/98 | 2,200 | <0.5 | <0.5 | ∠ 0,5 | <0,5 | NG-00 (3-48 (0 0) |
| -, | 08/13/98 | 3,700 | <0.5 | <0.5 | <0.5 | <0.5 | |
| * ` | 02/18/99 | <u>・ 370 きを続き</u> | <0.5 | <0.5 | <0.5 | <0.5 <0.5 | 0.0051 |
| 1 5 5 5 7 7 CM | 08/13/99 | 430 YH | <0.5 | <0.5 | <0.5 | | 0.0001 |
| OMW-6 | 05/11/92 | 520 | <0.5 | <0,5 | <0.5 | 0,0016 | |
| | 08/11/92 | 550 | <0.5 | <0.5 | <0.5 | <0.5 | |
| | 11/13/92 | 6,000 | <0.5 <0.3 | 0.77 * <0,3 | <0.5 <0.3 | <0.5 <0.9 | |
| , | 05/14/93 11/10/93 | 180 <50 | <0.3 | <0.3 | <0.3 | <0.9 | |
| | 05/02/94 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | |
| | 11/16/94 | 460 (See See See See See See See See See Se | <0.5 | <0.5 | <0.5 | <0.5 | 4064600000 |
| | 05/17/95 | 1,100 | <0.5 | <0,5 | <0.5 | <0.5 | |
| 122791 | 11/30/95 | 2,500 · Paris | <0.5 | <0.5 | <0.5 | <0.5 | ALE \$ 52 - 9 |
| | 05/29/96 | 2,300 | <0.5 | <0.5 | <0.5 | <0.5 | (di.zmn8.5) |
| , , , | 11/12/96 | <u> 1,900 ' ',양하</u> | <0.5 | <0.5 | <0.5 | <0.5 | |
| | 08/28/97 | 990 | <0.5 | <0.5 | <0.5 | <0.5 | |
| | 02/05/98 | 1,500 | <0.5 <0.5 | <0.5 <0.5 | (0.5 € € 0.5 € € € € € € € € € € € € € € € € € € € | <0.5 | |
| | 08/13/98 02/18/99 | 1,500 550 Y | <0.5 | <0.5 <0.5 | <0.5 | <0.5 | Parama Penya |
| | 08/13/99 | 160 | <0.5 | <0.5 | <0.5 | <0.5 | 4.6 |
| OMW-8 | 05/11/92 | 240 | ₹0.5 | ₹0.5 | <0.5 | ₹0.5 | |
| Oldina-9 | 08/11/92 | 220 | <0.5 | <0.5 | <0.5 | <0.5 | 1.45.35.23.73.95 20.055 |
| 3 | 11/13/92 | 260 (S.) | <0.5 | 0.58 | ∰ 2 € <0.5 | <0.5 | Resident Care |
| | 05/14/93 | <50 | <0.3 | <0.3 | <0.3 | <0.9 | |
| ^^ , | 11/10/93 | <50 | <0.3 | <0.3 | <0.3 | | |
| | 05/02/94 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | |
| | 11/15/94 | 260 | : i | <0.5 | <0.5 | <0.5 <0.5 | |
| again pain security of Wilgay, any particular security for the sec | 05/17/95 | 260 1,700 | <0.5 <0.5 | <0.5 <0.5 | <0.5 <0.5 | <0.5 | |
| | 11/30/95 05/29/96 | 1,300 | <0.5 | <0.5 | <0.5 | <0.5 | |
| , , , , | 11/12/96 | 1,300 | <0.5 | <0.5 | <0,5 | <0.5 | |
| | 08/28/97 | 1,300 | <0.5 | <0.5 | <0.5 | <0.5 | |
| ** | 02/05/98 | 1,900 | <0.5 | <0.5 | <0.5 | <0.5 | Andrea Sugar |
| | 08/13/98 | 1,600 | <0.5 | <0.5 | <0.5 | <0.5 | S Service & State of the |
| | 02/17/99 | 52 YH 📝 🖓 | . <0.5 | <0.5 | <0,5 | <0.5 | |
| | 08/13/99 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 6.5 |
| OMW-10 | 05/11/92 | 2,100 | 33 | <0.5 | <0.5 | 2.7 | |
| | 08/11/92 | 1,300 | 9.6 | <0.5 | <0.5 | 0.62 | 3 |
| | 11/13/92 | 2,800 | 6.6 | 0.84 | <0.5 | 0.62 | |
| | 05/14/93 | ** | | | tained Product/Shee | | STEASON IN VALUE |
| | 11/10/93 | 2,600 | 4.3 | 11. | | 0.12 | |
| | 05/02/94 | 2,600 | 0.52 2 of 3 | <0.5 | <0.5 | <0.5 | <u> </u> |

CUMULATIVE SUMMARY OF ANALYTICAL DATA PORT OF OAKLAND TRAILER-ON-FLAT-CAR (TOFC) RAILYARD

| Well Number | Date Sampled | Total Petroleum Hydrocarbons-Diesel ug/L | Benzene (ug/L) | Toluene (ug/L) | Ethylbenzene (ug/L) | Xylenes (ug/L) | MTBE (ug/L) |
|---|-----------------|---|---------------------------------------|-------------------|------------------------|---|----------------|
| OMW-10 conta | 11/16/94 | | | | ained Product/Sheer | ~ · · · · · · · · · · · · · · · · · · · | |
| | 05/17/95 | ** | | | ained Product/Sheer | | |
| | .∴/ | | | | ained Product/Sheer | | |
| | 05/29/96 | ****** NOT SAMPLED - Well Contained Product/Sheen****** | | | | | |
| (3) 45 galaxi | 11/12/96 | | "" NOT SAMP | LED - Well Conta | ained Product/Sheer | | |
| | 08/28/97 | **1 | **** NOT SAMPI | LED - Well Conta | ained Product/Sheer | 1***** | |
| 400000000000000000000000000000000000000 | 02/05/98 | 9,100 | 18000 | <0.5 | <0.5 | <0.5 | |
| | 08/13/98 | 4,500 | 210 | 0.5 | <0.5 | <0.5 | |
| | 02/17/99 | 15,000 | 1.9 | <0.5 | <0,5 | <0.5 | es innestre de |
| (duplicate) | 02/17/99 | 19,000 | 1.9 | <0.5 | <0.5 | <0.5 | |
| | 08/13/99 | 1,600 🖟 🚉 📆 | 16 | 31 | 1,49 | 1.45 | 11 C |
| (duplicate) | 08/13/99 | NA NA | 16 | 34 | 0.59 | 1.65 | 14 |
| TRIP BLANK | 08/13/99 | NA SECTION AND AND AND AND AND AND AND AND AND AN | ○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○ | ₩ <0.5 | <0.5 | 母 馬 ☆<0.5 ● ## | 3.8 H |

- J Estimated value below reporting limit.
- 0.62 ug/L was detected in the trip blank.

ug/L - micrograms per liter

TPH/D - Total Petroleum Hydrocarbons as Diesel anaylzed using EPA Method 8015 Mod. with Silicia Gel Cleanup (since 2/99).

BTEX -Benzene, toluene, ethylbenzene, and xylenes analyzed using EPA Method 8020.

Samples were analyzed at Curtis & Tompkins Ltd., a state certified analytical laboratory in Berkeley, California (since 2/99).

- Y Sample exhibits diesel fuel pattern which does not resemble standard, per Curtis & Tompkins, Ltd.
- H Heavier hydrocarbons than indicated standard, per Curtis & Tompkins, Ltd.
- L Lighter hydrocarbons than indicated standard, per Curtis & Tompkins, Ltd.
- C Presence of this compound confirmed by second column, however, the confirmation concentration differed from the reported results by more than a factor of two, per Curtis & Tompkins, Ltd.

Due to the presence of product, recovery wells ORW-1, ORW-2, ORW-3, OP-1, OP-2, OP-3, and OP-4 and monitoring wells OMW-4, OMW-7, and OMW-9 were not sampled.

Appendix A

OM&M Checklist

| iii | | | | | | |
|--|----------------------------------|--|--|--|--|--|
| Inspection Date: 7799 | | | | | | |
| Inspector's Name: \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\ | Company: CAU | | | | | |
| Time Inspector On-site: S∞ | Offsite: 950 | | | | | |
| UPRR Person Notified: Tom | Time: 810 | | | | | |
| Reason for Visit: O'Main | | | | | | |
| Weather Conditions: Sunny 605 | | | | | | |
| Weather Containers. | | | | | | |
| Record status as found and a | ny repairs/adjustments performed | | | | | |
| Treatment System General Inspection/Readings: | | | | | | |
| System Operating? (| Yes | | | | | |
| System Readings: | | | | | | |
| | <u> </u> | | | | | |
| Signet Volume (gallons): | 134-2780 | | | | | |
| Neptune Volume (gallons): | 7133640 | | | | | |
| Flow Rate thru Carbon (gallons/minute): | 12.4 | | | | | |
| Filter Pressure - Inlet (psig): | 10 @ 940 | | | | | |
| Filter Pressure - Outlet (psig): | 10 @ 9ko | | | | | |
| Oil Level in Tank (inches): | 58 12" | | | | | |
| OP-4 meter reading (gallons): | 0 | | | | | |
| OMW-9 meter reading (gallons): | -112589 @ | | | | | |
| Change Filters: | Yes | | | | | |
| Procedures: | , | | | | | |
| ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | | | | | | |
| Observations: | | | | | | |
| | | | | | | |
| Backwash Primary Carbon Canisters: | Yes No | | | | | |
| Is holding tank half empty? | 10, | | | | | |
| Duration of backwashing: | 830-910 | | | | | |
| Observation of Effluent: | dear oftenwards | | | | | |
| Inspection and Cleaning of Pumps: Requires | V | | | | | |
| Wells Operating? Cleaning? Comme | ents | | | | | |
| ORW-1 ye) | | | | | | |
| ORW-2 (Jb) | | | | | | |
| ORW-3 (ko | | | | | | |
| OMW-9 : 1 | | | | | | |
| OP-4 NO / bulstyling | | | | | | |

Union Pacific Railroad - Oakland Trailer-on-flat-car (TOFC) railyard 1717 Middle Harbor Road, Oakland, California

| olume of S | odium Hypochlorite | Remaining: | 54 | Sullows | |
|--------------|--------------------|--|----------|--------------------------|----|
| eriod of Fe | ed System Operati | on: | cond | West (CASIS) | |
| Air Compre | ssor: | | | | |
| Check Oil Le | evel: | | V | | |
| Change Oil i | n Compressor eve | ry 3 months: | | | |
| Sampling: | | | | | |
| Sample | Sampling | | EPA | Sampling | |
| Location | Frequency | Analytes | Method | Method | _ |
| Midpoint | Monthly | BTEX | 8020 | 3 - 40 ml vials with HCl | |
| | | | | 4 degree Celcius | _ |
| Influent | Quarterly | BTEX | 8020 | 3 - 40 ml vials with HCl | |
| Effluent | January, April, | TPH-D | 8015M | 1 - 1 liter amber glass | |
| | July, October | | <u> </u> | 4 degree Celcius | |
| Performed d | uring this visit? | | | Yes | No |
| u | | | | | |
| V. Comme | ents | | | | |
| | | | | | |
| | | | | | |
| | | ······································ | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

Before departing site, please call Hoa Voscott at CDM (925-296-8071) If no answer, dial "0" for operator and request a page.

| 5 14 00 | |
|---|---------------------------------|
| Inspection Date: 7-13-99 | Campania C Mar 4 |
| Inspector's Name: Voscott | Company: Clau |
| Time Inspector On-site: 8 ^{to} | Offsite: 940 |
| UPRR Person Notified: Tow | Time: 815 |
| Reason for Visit: OWo W | |
| Weather Conditions: Sunny 1601 | |
| | |
| Record status as found and any | y repairs/adjustments performed |
| | |
| Treatment System General Inspection/Readings: | : |
| , | |
| System Operating? | Yes No |
| ' | |
| System Readings: | |
| | |
| Signet Volume (gallons): | 13450 |
| Neptune Volume (gallons): | 7 387 60 |
| Flow Rate thru Carbon (gallons/minute): | 18.0 |
| Filter Pressure - Inlet (psig): | /2 @ |
| Filter Pressure - Outlet (psig): | 9 @ |
| Oil Level in Tank (inches): | 42" |
| OP-4 meter reading (gallons): | 138707 |
| OMW-9 meter reading (gallons): | \$0(1,6%) @ |
| | Yes No |
| Change Filters: | Yes No |
| | |
| Procedures: | |
| | |
| Observations: | |
| | |
| Backwash Primary Carbon Canisters: | Yes No |
| Backwash Filmary Carbon Camsters. | () () |
| Is holding tank half empty? | 0. |
| Duration of backwashing: | 930 - 910 |
| | clear |
| Observation of Emdorte | |
| Inspection and Cleaning of Pumps: | |
| Requires | |
| Wells Operating? Cleaning? Commer | nts |
| ORW-1 No | |
| ORW-2 | |
| ORW-3 | \ |
| OMW-9 , | |
| OP-4 | |
| | |

Union Pacific Railroad - Oakland Trailer-on-flat-car (TOFC) railyard 1717 Middle Harbor Road, Oakland, California

| Chlorine Feed System: | | | | | | | |
|--|--------------------------------------|--------------|--------|--|----------|--|--|
| Volume of Sodium Hypochlorite Remaining: 1/2 dum | | | | | | | |
| | ed System Operat | | contr | uns | | | |
| Air Compressor: | | | | | | | |
| Check Oil Level: | | | | | | | |
| Change Oil i | n Compressor eve | ry 3 months: | · | | | | |
| Sampling: | | | | | | | |
| Sample | Sampling | | EPA | Sampling | 7 | | |
| Location | Frequency | Analytes | Method | Method | | | |
| Midpoint | Monthly | BTEX | 8020 | 3 - 40 ml vials with HCl 4 degree Celcius | | | |
| Influent | Quarterly | BTEX | 8020 | 3 - 40 ml vials with HCl | 7 | | |
| Effluent | January, April, | TPH-D | 8015M | 1 - 1 liter amber glass | | | |
| | July, October | | | 4 degree Celcius | | | |
| | uring this visit? | | | Yes | No | | |
| IV. Comm | ents | | | | | | |
| | | Λ | | | | | |
| | Call Pex to fix system pumps - an | | | | | | |
| | compressor seems fine brut no ali is | | | | | | |
| | getting to | - funt | •• | | | | |
| | | | | | | | |
| | 424 Q | oil Janle | al | | | | |
| | Call to | order m | al v | sodium hypocherus | 4 | | |
| <u> </u> | | | | | | | |

Before departing site, please call Hoa Voscott at CDM (925-296-8071) If no answer, dial "0" for operator and request a page.

Union Pacific Railroad - Oakland Trailer-on-flat-car (TOFC) railyard
1717 Middle Harbor Road, Oakland, California

| Inspection Date: 7 21 99 | | |
|--|---|---|
| Inspector's Name: (050077 | Company: ABW | |
| Time Inspector On-site: 110 85 | Offsite: 1,00 | |
| UPRR Person Notified: Gary | Time: 900 | |
| | il / Restart system if fossible | |
| | | |
| Weather Conditions: (m.l., Urud | 7 303 | |
|) Record status as | s found and any repairs/adjustments performed | 1 |
| Treatment System General Inspection | on/Readings: | 1 |
| , , , , , , , , , , , , , , , , , , , | | I |
| System Operating? | Yes No |) |
| Cyclem Operating. | High ail Constain | , |
| System Readings: | Type al Condition | 1 |
| System neadings. | • | 1 |
| Signet Volume (gallons): | 1345170 | 1 |
| Neptune Volume (gallons): | 71.701.70 | |
| Flow Rate thru Carbon (gallons/minute): | 1\386 | |
| Filter Pressure - Inlet (psig): | -C) @ | |
| Filter Pressure - Outlet (psig): | @ | |
| Oil Level in Tank (inches): | 1.1// | |
| | 42 | ! |
| OP-4 meter reading (gallons): | @ | |
| | | |
| OMW-9 meter reading (gallons): | | |
| | | |
| Change Filters: | Yes | |
| Change Filters: | | |
| | | |
| Change Filters: Procedures: | | |
| Change Filters: | | |
| Change Filters: Procedures: | | |
| Change Filters: Procedures: Observations: | Yes |) |
| Change Filters: Procedures: | |) |
| Change Filters: Procedures: Observations: Backwash Primary Carbon Canisters: | Yes |) |
| Change Filters: Procedures: Observations: Backwash Primary Carbon Canisters: Is holding tank half empty? | Yes |) |
| Change Filters: Procedures: Observations: Backwash Primary Carbon Canisters: Is holding tank half empty? Duration of backwashing: | Yes | |
| Change Filters: Procedures: Observations: Backwash Primary Carbon Canisters: Is holding tank half empty? | Yes |) |
| Change Filters: Procedures: Observations: Backwash Primary Carbon Canisters: Is holding tank half empty? Duration of backwashing: Observation of Effluent: | Yes | |
| Change Filters: Procedures: Observations: Backwash Primary Carbon Canisters: Is holding tank half empty? Duration of backwashing: Observation of Effluent: Inspection and Cleaning of Pumps: | Yes | |
| Change Filters: Procedures: Observations: Backwash Primary Carbon Canisters: Is holding tank half empty? Duration of backwashing: Observation of Effluent: Inspection and Cleaning of Pumps: Requires | Yes No | |
| Change Filters: Procedures: Observations: Backwash Primary Carbon Canisters: Is holding tank half empty? Duration of backwashing: Observation of Effluent: Inspection and Cleaning of Pumps: Requires Wells Operating? Cleaning? | Yes No | |
| Change Filters: Procedures: Observations: Backwash Primary Carbon Canisters: Is holding tank half empty? Duration of backwashing: Observation of Effluent: Inspection and Cleaning of Pumps: Requires Wells Operating? Cleaning? ORW-1 | Yes No | |
| Change Filters: Procedures: Observations: Backwash Primary Carbon Canisters: Is holding tank half empty? Duration of backwashing: Observation of Effluent: Inspection and Cleaning of Pumps: Requires Wells Operating? Cleaning? ORW-1 ORW-2 | Yes No | |
| Change Filters: Procedures: Observations: Backwash Primary Carbon Canisters: Is holding tank half empty? Duration of backwashing: Observation of Effluent: Inspection and Cleaning of Pumps: Requires Wells Operating? Cleaning? ORW-1 ORW-2 ORW-3 | Yes No | |
| Change Filters: Procedures: Observations: Backwash Primary Carbon Canisters: Is holding tank half empty? Duration of backwashing: Observation of Effluent: Inspection and Cleaning of Pumps: Requires Wells Operating? Cleaning? ORW-1 ORW-2 | Yes No | |

OPERATION, MAINTENANCE & MONITORING CHECKLIST Union Pacific Railroad - Oakland Trailer-on-flat-car (TOFC) railyard

1717 Middle Harbor Road, Oakland, California

| Chlorine Feed System: | | | | | | |
|--|----------------------------------|--------------|--------|---|---------|--|
| Volume of Sodium Hypochlorite Remaining: 3 drums degreed telay | | | | | | |
| Period of Feed System Operation: | | | | | | |
| Air Compressor: | | | | | | |
| Check Oil Level: | | | | | | |
| Change Oil i | n Compressor eve | ry 3 months: | | | | |
| Sampling: | | | | | | |
| Sample | Sampling | | EPA | Sampling | | |
| Location | Frequency | Analytes | Method | Method | | |
| Midpoint | Monthly | BTEX | 8020 | 3 - 40 ml vials with HCl | | |
| | | | | 4 degree Celcius | | |
| Influent | Quarterly | BTEX | 8020 | 3 - 40 ml vials with HCl | | |
| Effluent | January, April, July, October | TPH-D | 8015M | 1 - 1 liter amber glass 4 degree Celcius | | |
| | July, October | | | 14 degree coloido | | |
| Performed d | uring this visit? | | | Yes | No) | |
| | | | | | | |
| IV. Comme | ents | | | | | |
| - | System | û Anim | te de | high ail I | 0 (440) | |
| | T. COOR | - CO Inde | . Ayu | | | |
| Tico-go tante, Appennator 870 gallous in stante. | | | | | | |
| to the now of bowing reador remove I despose | | | | | | |
| the oil! | | | | | | |
| 1 | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

Before departing site, please call Hoa Voscott at CDM (925-296-8071)

If no answer, dial "0" for operator and request a page.

| Inspection Date: 7/3-// | |
|--|-------------------------------------|
| Inspector's Name: o Scott | Company: CAM |
| Time Inspector On-site: | Offsite: 900 |
| UPRR Person Notified: Cary | Time: 935 |
| Reason for Visit: DULENG | |
| Weather Conditions: Louis Si | |
| | |
| Record status as found an | d any repairs/adjustments performed |
| Treatment System General Inspection/Read | ngs: |
| System Operating? | Yes No |
| System Readings: | |
| Signet Volume (gallons): | 350210 |
| Neptune Volume (gallons): | 1144115 |
| Flow Rate thru Carbon (gallons/minute): | 20.1 |
| Filter Pressure - Inlet (psig): | + → 11 @ |
| Filter Pressure - Outlet (psig): | +s 9 @ |
| Oil Level in Tank (inches): | <u> </u> |
| OP-4 meter reading (gallons): | @ |
| OMW-9 meter reading (gallons): | |
| Change Filters: | Yes |
| Procedures: | |
| | |
| Observations: | |
| | |
| Backwash Primary Carbon Canisters: | Yes |
| Is holding tank half empty? | |
| Duration of backwashing: | |
| Observation of Effluent: | |
| Inspection and Cleaning of Pumps: Requires | |
| Wells Operating? Cleaning? Com | nments |
| ORW-1 | |
| ORW-2 | |
| ORW-3 | |
| OMW-9 | |
| OP-4 | |
| | |

Union Pacific Railroad - Oakland Trailer-on-flat-car (TOFC) railyard 1717 Middle Harbor Road, Oakland, California

| Chlorine Feed System: | | | | | | | | | | |
|-----------------------|--|---------------------------------------|-------------|---|------|--|--|--|--|--|
| Volume of So | Volume of Sodium Hypochlorite Remaining: 3 duems | | | | | | | | | |
| Period of Fee | ed System Operati | on: | <u>u</u> | Inturves | | | | | | |
| Air Compres | ssor: | | | | | | | | | |
| Check Oil Le | Check Oil Level: | | | | | | | | | |
| Change Oil i | n Compressor eve | ry 3 months: | | | | | | | | |
| Sampling: | | | | | | | | | | |
| Sample | Sampling | | EPA | Sampling | 7 | | | | | |
| Location | Frequency | Analytes | Method | Method | | | | | | |
| Midpoint | Monthly | BTEX | 8020 | 3 - 40 ml vials with HCl | | | | | | |
| | | | 2022 | 4 degree Celcius | - | | | | | |
| Influent | Quarterly | BTEX | 8020 | 3 - 40 ml vials with HCl | | | | | | |
| Effluent | January, April, | TPH-D | 8015M | 1 - 1 liter amber glass 4 degree Celcius | | | | | | |
| | July, October | · · · · · · · · · · · · · · · · · · · | <u> </u> | 4 degree Ociolas | | | | | | |
| Performed d | uring this visit? | | | Yes | No) | | | | | |
| | | | | | | | | | | |
| IV. Commo | ents | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | ···- | | | | | | | | |
| | | | | | | | | | | |

Before departing site, please call Hoa Voscott at CDM (925-296-8071) If no answer, dial "0" for operator and request a page.

| Inspection Date: 6-3-49 | | | | | | | | |
|---|----------------------------------|--|--|--|--|--|--|--|
| | Company: (1) 1/1 | | | | | | | |
| Inspector's Name: Victor H | Offsite: 1940 | | | | | | | |
| | Time: | | | | | | | |
| UPRR Person Notified: | inne. | | | | | | | |
| Reason for Visit: ONLA | | | | | | | | |
| Weather Conditions: Survey (20 1515. | | | | | | | | |
| Record status as found and a | ny repairs/adjustments performed | | | | | | | |
| Treatment System General Inspection/Readings: | | | | | | | | |
| System Operating? | Yes No | | | | | | | |
| System Readings: | 1255530 2 | | | | | | | |
| Signet Volume (gallons): | ブトラじく シぞ. | | | | | | | |
| Neptune Volume (gallons): | 10.5 | | | | | | | |
| Flow Rate thru Carbon (gallons/minute): | | | | | | | | |
| Filter Pressure - Inlet (psig): | í(· @ | | | | | | | |
| Filter Pressure - Outlet (psig): | ic. @ | | | | | | | |
| Oil Level in Tank (inches): | (17 h | | | | | | | |
| OP-4 meter reading (gallons): | | | | | | | | |
| OMW-9 meter reading (gallons): | @ | | | | | | | |
| Change Filters: | Yes No | | | | | | | |
| Procedures: | | | | | | | | |
| Procedures. | | | | | | | | |
| Observations: | | | | | | | | |
| Observations. | | | | | | | | |
| Backwash Primary Carbon Canisters: | Yes No | | | | | | | |
| Is holding tank half empty? | | | | | | | | |
| Duration of backwashing: | | | | | | | | |
| Observation of Effluent: | | | | | | | | |
| Inspection and Cleaning of Pumps: Requires | | | | | | | | |
| Wells Operating? Cleaning? Comme | ents | | | | | | | |
| ORW-1 1/k 1 | | | | | | | | |
| ORW-2 | | | | | | | | |
| ORW-3 jus | | | | | | | | |
| OMW-9 | | | | | | | | |
| OP-4 (| | | | | | | | |
| | | | | | | | | |

Union Pacific Railroad - Oakland Trailer-on-flat-car (TOFC) railyard 1717 Middle Harbor Road, Oakland, California

| Chlorine Fee | ed System: | | | | | | |
|---------------------------------------|--------------------|--------------|----------|--------------------------|--|--|--|
| Volume of So | odium Hypochlorite | e Remaining: | | | | | |
| | ed System Operati | | | | | | |
| Air Compres | ssor: | | | | | | |
| Check Oil Le | vel: | | | | | | |
| Change Oil i | n Compressor eve | ry 3 months: | | | | | |
| Sampling: | | | | | | | |
| Sample | Sampling | | EPA | Sampling | | | |
| Location | Frequency | Analytes | Method | Method | | | |
| Midpoint | Monthly | BTEX | 8020 | 3 - 40 ml vials with HCl | | | |
| · | | | | 4 degree Celcius | | | |
| Influent | Quarterly | BTEX | 8020 | 3 - 40 ml vials with HCl | | | |
| Effluent | January, April, | TPH-D | 8015M | 1 - 1 liter amber glass | | | |
| | July, October | | <u> </u> | 4 degree Celcius | | | |
| Performed during this visit? Yes No | | | | | | | |
| IV. Comme | ents | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | <u> </u> | | | | |
| | | | · | | | | |
| | | | | | | | |

Before departing site, please call Hoa Voscott at CDM (925-296-8071) If no answer, dial "0" for operator and request a page.

Union Pacific Railroad - Oakland Trailer-on-flat-car (TOFC) railyard 1717 Middle Harbor Road, Oakland, California

| | · · · · · · · · · · · · · · · · · · · |
|--|---|
| Inspection Date: 8-6-99 | |
| Inspector's Name: | Company: Com |
| Time Inspector On-site: 845 | Offsite: |
| UPRR Person Notified: Tom | Time: 900 |
| | 11110. |
| Reason for Visit: 6M 6M Weather Conditions: 600 505 | |
| Weather Conditions: Cod / 505 | |
| Record status as found and any | y repairs/adjustments performed |
| Treatment System General Inspection/Readings: | • |
| System Operating? (| Yes |
| System Readings: | |
| Signet Volume (gallons): | 1358810 |
| Neptune Volume (gallons): | 11534 70 |
| Flow Rate thru Carbon (gallons/minute): | 23 |
| Filter Pressure - Inlet (psig): | 10 @ 1020 |
| Filter Pressure - Outlet (psig): | 9 @ 1026 |
| Oil Level in Tank (inches): | <12" |
| OP-4 meter reading (gallons): | @ 930 |
| OMW-9 meter reading (gallons): \\\ \frac{17}{17} = \frac{1}{17} \\ | @ 930 |
| ONIVES Ineter reading (gameno). | A |
| Change Filters: | Yes No |
| Procedures: | |
| 1 locedures. | |
| Observations: | |
| CBSG Vallorio, | |
| Backwash Primary Carbon Canisters: | Yes No |
| Is holding tank half empty? | , |
| Duration of backwashing: | 35 - 1010 |
| Observation of Effluent: | lean |
| Inspection and Cleaning of Pumps: Requires | |
| Wells Operating? Cleaning? Commen | ts |
| ORW-1 Yes yes | |
| ORW-2 | |
| OBW-3 | |
| OMW-9 yes OP-4 yes | |
| OP-4 year | - |
| | |

Union Pacific Railroad - Oakland Trailer-on-flat-car (TOFC) railyard 1717 Middle Harbor Road, Oakland, California

| Chlorine Fe | ed System: | | | | | | | |
|---|---|---------------|---------------|---|----|--|--|--|
| | odium Hypochlorite ed System Operati | | 2°(. | 2 dues | | | | |
| Air Compres | ssor: | | | | | | | |
| Check Oil Level: Change Oil in Compressor every 3 months: | | | | | | | | |
| Sampling: | | | | | | | | |
| Sample Location | Sampling Frequency | Analytes | EPA Method | Sampling Method | | | | |
| Midpoint | Monthly | BTEX | 8020 | 3 - 40 ml vials with HCl 4 degree Celcius | | | | |
| Influent Effluent | Quarterly January, April, July, October | BTEX TPH-D | 8020 8015M | 3 - 40 ml vials with HCl 1 - 1 liter amber glass 4 degree Celcius | | | | |
| Performed d | uring this visit? | | | Yes | No | | | |
| IV. Comme | ents | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

Before departing site, please call Hoa Voscott at CDM (925-296-8071) If no answer, dial "0" for operator and request a page.

| Inspection Date: 8/16/99 | Company: Clivi |
|---|-----------------------------------|
| Inspector's Name: / /OSCO++- | |
| Time Inspector On-site: 6:40 | C and |
| UPRR Person Notified: Jow | Time: 850 |
| Reason for Visit: Dlug.W | |
| Weather Conditions: Sunny 605 | |
| | toward. |
| Record status as found and | any repairs/adjustments performed |
| Treatment System General Inspection/Reading | igs: |
| | No |
| System Operating? | Yes |
| | |
| System Readings: | |
| | 1365870 |
| Signet Volume (gallons): | 7161510 |
| Neptune Volume (gallons): | 10 |
| Flow Rate thru Carbon (gallons/minute): | () @ |
| Filter Pressure - Inlet (psig): | 9 @ |
| Filter Pressure - Outlet (psig): | . 212" |
| Oil Level in Tank (inches): | - @ |
| OP-4 meter reading (gallons): | _ @ |
| OMW-9 meter reading (gallons): | |
| Change Filters: | Yes |
| | |
| Procedures: | |
| | |
| Observations: | |
| | Yes No |
| Backwash Primary Carbon Canisters: | Yes |
| Is holding tank half empty? | |
| Duration of backwashing: | n -1000 |
| Observation of Effluent: | lean |
| | |
| Inspection and Cleaning of Pumps: | ! |
| Requires | |
| Wells Operating? Cleaning? Com | ments |
| ORW-1 Usez | |
| ORW-2 Vec | |
| ORW-3 au | |
| OMW-9 Up. | |
| OP-4 Ye | |
| . (1 | |

| Chlorine Fee | ed System: | | | | |
|----------------------|----------------------|-----------------|-------------|---|----------|
| Volume of So | odium Hypochlorite | Remaining: | | 31/2 dues | |
| Period of Fed | ed System Operati | on: | | configures | |
| Air Compres | ssor: | | | | |
| Check Oil Le | | | | ok | |
| Change Oil i | n Compressor eve | ry 3 months: | | | |
| Sampling: | | | | | |
| Sample | Sampling | | EPA | Sampling | |
| Location | Frequency | Analytes | Method | Method | 1 |
| Midpoint | Monthly | BTEX | 8020 | 3 - 40 ml vials with HCl | |
| India and | Quarterly | BTEX | 8020 | 4 degree Celcius 3 - 40 ml vials with HCl | - |
| Influent Effluent | January, April, | TPH-D | 8015M | 1 - 1 liter amber glass | |
| Lindent | July, October | | | 4 degree Celcius | |
| Performed d | uring this visit? | | | Yes | No |
| IV. Commo | ents | | | | |
| | The s | wstern wa | o Danin | clue to | |
| | | 1 | | mens | · |
| | mite | | Tuerla | 8/10- truba | 8/12. |
| | | | (| 1 0/2 | <u> </u> |
| | The | nuta was | s so the | ed on 8/13. | |
| | | | | | |
| | | | | ` | |
| | | | | | |
| | | | | | |
| | | | | | |
| Before dep | arting site, please | e call Hoa Vos | cott at CDN | M (925-296-8071) | |
| If no answe | er, dial "0" for ope | erator and requ | uest a page | 9. | |

| • | | | | | | | <u> </u> | |
|---------------------------|--------------------------------|---------------------------------------|-------------------------------|--------------|-----------|-------------------|-------------|----------|
| pection Date: | 8-20 | -99 | | | : | 1 7 - | | |
| spector's Name: | | 0 35 | | npany: | CALC | on Sys | TEMS | |
| ime Inspector On-site: | 0700 | | Offs | site: | 0000 | / (| | |
| PRR Person Notified: | V (- V | | Tim | e/Date: | ; | | · | |
| leason for Visit: | MAINT. | | | | | | | |
| | NICE | | | | | | | |
| Veather Conditions: | | | *** | - | | | , | • |
| , | Record status a | s found a | and any repa | airs/adju | siments į | performed | | |
| reatment System G | eneral Inspecti | on/Rea | dings: | _ | | | 1 | |
| ystem Operating? | | | Yes | s) | | No | : | |
| System Readings: | | | | | ; | | · | |
| Signet Volume (gallons) | • | | 1370 | | - | | | |
| Neptune Volume (gallon | is): | <u>:</u> | 0716 | 6718 | 0 | | | |
| low Rate thru Carbon (| gallons/minute): | ;, | 12 | · | | | 1 | |
| ilter Pressure - Inlet (p | síg): | <u></u> : | | | | | | |
| ilter Pressure - Outlet (| (psig): | | 9 | 1 11 | | | | |
| Oil Level in Tank (inche | s): | LESS | THRN | 12" | | · | | |
| 'W-4 meter reading (| gallons): | | 155 | | | | | |
| วท์W-9 meter reading (| | 50 | 7182 | | | | | |
| Change Filters: | | | Ye | s | | No | | |
| Procedures: | | , 1 | | | | | .! | |
| 10000000 | | , | | | | | | |
| Observations: | | | | | | | · | |
| | | · · · · · · · · · · · · · · · · · · · | | | | | | |
| Backwash Primary Ca | rbon Canisters: | ; | Ye | s | | No | | |
| is holding tank half emp | | | | | | · · · · | | |
| Duration of backwashin | | | | | | | | |
| Observation of Effluent | | | | | | ! | | |
| Inspection and Clean | ing of Pumps: | | | | | ļ. | | |
| Wells Operating | ? Clean? | C | omments | | | | | |
| ORW-1 45 | YES_ | | | | | | | |
| | 'V = 0 | i | | | | | | <u> </u> |
| ORW-2 YES | YE S | | | , Carlotte 1 | . 7 | | | |
| ORW-2 YES | | | 0/5 - | FAU | LTY | CONTRUL | NIECH? | 12/15/10 |
| ORW-2 YES | \(\frac{7ES}{\cdot\) | | 0/s - ('S7Us') ('S7Us') | s b " | LTY | CONTRUL SARTED | Punk |) |

If no answer, dial "0" for operator and request a page.

TO

OPERATION, MAINTENANCE & MONITORING CHECKLIST Union Pacific Railroad - Oakland Trailer-on-flat-car (TOFC) railyard 1717 Middle Harbor Road, Oakland, California

8-20-99

| Inlorine Feed System: | | | | | 0.00 | , |
|--|---------------------------------------|---------------|-------------|--|------|--|
| Volume of Sodium Hypochlorite Remaining: | | | | | BBL | |
| Period of Fe | ed System Operati | on: | | CONTINUOUS | | |
| Air Compres | | | | · | • | |
| Check Oil Le | wel· | , | OK | · | | |
| Change Oil i | n Compressor eve | ry 3 months: | | | , | |
| Sampling: | | : | | | | |
| Sample | Sampling | | EPA | Sampling | | |
| Location | Frequency | Analytes | Method | Method | | |
| Midpoint | Monthly | BTEX | 8020 | 3 - 40 ml vials with HCl 4 degree Celcius | | |
| Influent | Quarterly | BTEX | 8020 | 3 - 40 ml vials with HCl | | |
| Effluent | January, April, | TPH-D | 8015M | 1 - 1 liter amber glass | | |
| | July, October | | | 4 degree Celcius | | |
| Performed d | uring this visit? | | : | Yes C | No | |
| | | | | | | |
| | | | ! | | | |
| | | | <u></u> | | | |
| | | | <u>;</u> | | | |
| | | | | | | |
| · | | | · | | | elle authorities all la Colonia de la Coloni |
| | | | 1 | | - | |
| | | | | | | |
| | | | 1 | ; | | |
| | · · · · · · · · · · · · · · · · · · · | | ! | | | |
| Refore den | arting site please | call Hoa Vosi | cott at CDA | A (925-296-8071) | | |

| Inspection Date: 8-24-97 | |
|---|--|
| Inspector's Name: Uxscott | Company: COM |
| Time Inspector On-site: 610 | Offsite: $/0^{\infty}$ |
| UPRR Person Notified: | Time: 830 |
| Bancon for Visite Silla 41 | |
| Reason for Visit: blu * M Weather Conditions: | overcart 50s |
| Weather Conditions: | Die carn |
| Record status as foun | nd and any repairs/adjustments performed |
| Treatment System General Inspection/Re | eadings: |
| System Operating? | Yes |
| System Readings: | |
| Cimat Valuma (callana): | 1380850 |
| Signet Volume (gallons): Neptune Volume (gallons): | 7178120 |
| Flow Rate thru Carbon (gallons/minute): | 17.5 |
| Filter Pressure - Inlet (psig): | 10 @ 950 |
| Filter Pressure - Outlet (psig): | C1 @ 450 |
| Oil Level in Tank (inches): | (22' |
| OP-4 meter reading (gallons): | 7+07-20 @ 6220100 @ |
| OMW-9 meter reading (gallons): | 6220100 @ |
| Change Filters: | Yes |
| | |
| Procedures: | * · |
| | |
| Observations: | |
| | Yes No |
| Backwash Primary Carbon Canisters: | Tes |
| Is holding tank half empty? | ho |
| Duration of backwashing: | G00 - 935 |
| Observation of Effluent: | Cla |
| Inspection and Cleaning of Pumps: | |
| Requires | <u> </u> |
| Wells Operating? Cleaning? | Comments |
| | |
| ORW-1 Uh Uh | |
| ORW-3 | |
| 010110 | |
| | |
| OP-4 (() (1) | |

| Union Pacific | Railroad | - Oakla | nd Trai | iler-on-fla | t-car (| TOFC) | railyar |
|---------------|-----------|---------|---------|-------------|---------|-------|---------|
| 17 | 17 Middle | Harbor | Road, | Oakland, | Califo | rnia | |

| Chlorine Fee | ed System: | | | | |
|---------------|--|------------------------------------|----------------------------|--------------------------|----|
| Volume of So | odium Hypochlorite | Remaining: | 2 | dans | |
| Period of Fe | ed System Operati | on: | C | onfuncio . | |
| Air Compres | ssor: | | | | |
| Check Oil Le | | | _61 | | A |
| Change Oil i | n Compressor eve | ry 3 months: | | | |
| Sampling: | | | | | _ |
| Sample | Sampling | | EPA | Sampling | |
| Location | Frequency | Analytes | Method | Method | _ |
| Midpoint | Monthly | BTEX | 8020 | 3 - 40 ml vials with HCl | |
| | | | | 4 degree Celcius | 4 |
| Influent | Quarterly | BTEX | 8020 | 3 - 40 ml vials with HCl | |
| Effluent | January, April, | TPH-D | 8015M | 1 - 1 liter amber glass | |
| | July, October | | | 4 degree Celcius | _ |
| Performed d | uring this visit? | | | Yes | No |
| IV. Commo | ents | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| Before depart | arting site, pleaser, dial "0" for ope | e call Hoa Vose erator and requ | cott at CDN uest a page | Л (925-296-8071) e. | |

| Inspection Date: 8-24-49 | Company (AXII |
|--|----------------------------------|
| Inspector's Name: Voscott | Offsite: 1600 |
| Time Inspector On-site: 1500 | |
| UPRR Person Notified: - | Time: |
| Beason for Visit: 67/1914 | |
| Weather Conditions: Surviv. (2) | |
| | to the disease and a northermod |
| Record status as found and a | ny repairs/adjustments performed |
| Treatment System General Inspection/Reading | s: |
| Treatment System deneral inspection inspection | |
| System Operating? | Yes Mo |
| Cycloni Operaning | Very track- |
| L System Readings: | the first of the second |
| | |
| Signet Volume (gallons): | 77 6 400 |
| Nentune Volume (gallons): | 717 60 42 10 |
| Flow Rate thru Carbon (gallons/minute): | 12,5 |
| Filter Pressure - Inlet (psig): | 10 @ 1600 |
| Filter Pressure - Outlet (psig): | <u> </u> |
| Oil Level in Tank (inches): | @ |
| OP-4 meter reading (gallons): | <u>@</u> |
| OMW-9 meter reading (gallons): | |
| | Yes No |
| Change Filters: | |
| D | |
| Procedures: | |
| Observations: | |
| Observations. | |
| | |
| Backwash Primary Carbon Canisters: | Yes No |
| | |
| Is holding tank half empty? | |
| Duration of backwashing: | |
| Observation of Effluent: | |
| | |
| Inspection and Cleaning of Pumps: | • |
| Requires | |
| Wells Operating? Cleaning? Comm | IEIIIS |
| ORW-1 | |
| ORW-2 | |
| ORW-3 U/L | |
| OMW-9 6/6 | 1 |
| OP-4 | |
| | |

| Chlorine Fee | ed System: | | | | |
|---------------|--------------------|--------------|--------|--------------------------|----------------|
| Volume of So | odium Hypochlorite | e Remaining: | | | |
| Period of Fee | ed System Operati | ion: | | | |
| Air Compres | | | | | |
| Check Oil Le | | | | | |
| Change Oil is | n Compressor eve | ry 3 months: | | | |
| Sampling: | | | | | |
| Sample | Sampling | | EPA | Sampling | 7 |
| Location | Frequency | Analytes | Method | Method | _ |
| Midpoint | Monthly | BTEX | 8020 | 3 - 40 ml vials with HCl | |
| | | | | 4 degree Celcius | 4 |
| influent | Quarterly | BTEX | 8020 | 3 - 40 ml vials with HCl | |
| Effluent | January, April, | TPH-D | 8015M | 1 - 1 liter amber glass | |
| | July, October | | | 4 degree Celcius | _ . |
| Performed d | uring this visit? | | | Yes | No |
| IV. Comme | ents | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| • | | <u></u> | | | |
| | | | | | |
| | | | | | |

Before departing site, please call Hoa Voscott at CDM (925-296-8071) If no answer, dial "0" for operator and request a page.

| Inspection Date: 8-1-99 | Company: CAU |
|--|--|
| Inspector's Name: Voscott | Offsite: 945 |
| Time Inspector On-site: 800 | |
| UPRR Person Notified: | Time: — |
| Reason for Visit: OMed | |
| Weather Conditions: Sunay LOS | |
| | nd and any repairs/adjustments performed |
| | ' |
| Treatment System General Inspection/R | eadings: |
| System Operating? | Yes |
| , System Readings: | |
| Signet Volume (gallons): | 1393630 |
| Neptune Volume (gallons): | 7192180 |
| Flow Rate thru Carbon (gallons/minute): | 12.4 |
| Filter Pressure - Inlet (psig): | // @ 930 () @ 930 |
| Filter Pressure - Outlet (psig): | |
| Oil Level in Tank (inches): | 412' |
| OP-4 meter reading (gallons): | oll_ @ |
| OMW-9 meter reading (gallons): | ok @ |
| Change Filters: | Yes |
| Procedures: | Same ao unas |
| Procedures. | |
| Observations: | |
| | |
| Backwash Primary Carbon Canisters: | Yes No |
| Is holding tank half empty? | Nue 22 |
| Duration of backwashing: | 900-930 |
| Observation of Effluent: | clear often 30 mins. |
| Inspection and Cleaning of Pumps: Requires | ! |
| Wells Operating? Cleaning? | Comments |
| ORW-1 yer yer | |
| ORW-2 Sez | |
| ORW-3 | |
| OMW-9 yer. | |
| OP-4 GR | |
| | |

| Chlorine Fee | ed System: | | | | |
|---------------|--------------------|--------------|---------------------------------------|--|----|
| Volume of So | odium Hypochlorite | e Remaining: | 1 | 1/2 dun | |
| Period of Fee | ed System Operati | on: | Con | humis- | |
| Air Compres | | | | | |
| Check Oil Le | سما• | | | on | |
| | n Compressor eve | rv 3 months: | | | |
| Sampling: | | | | | |
| Sample | Sampling | | EPA | Sampling | |
| Location | Frequency | Analytes | Method | Method | |
| Midpoint | Monthly | BTEX | 8020 | 3 - 40 ml vials with HO | UI |
| | | | 2000 | 4 degree Celcius 3 - 40 ml vials with H0 | |
| Influent | Quarterly | BTEX | 8020 | | |
| Effluent | January, April, | TPH-D | 8015M | 1 - 1 liter amber glass | 5 |
| | July, October | | | 4 degree Celcius | |
| Performed d | uring this visit? | | | Yes | No |
| IV. Comme | ents | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | <u>.</u> | · · · · · · · · · · · · · · · · · · · | | |
| | | | | | |
| | | | | | |

Page 2 of 2

Before departing site, please call Hoa Voscott at CDM (925-296-8071)

If no answer, dial "0" for operator and request a page.

| Inspection Date: 4-3-99 | |
|---|---|
| Inspector's Name: Vusco H | Company: CAM |
| Time Inspector On-site: 830 | Offsite: 930 |
| UPRR Person Notified: | Time: |
| Reason for Visit: OMLW | |
| Weather Conditions: (40), 505 | |
| | |
| Record status as found | d and any repairs/adjustments performed |
| Treatment System General Inspection/Re | eadings: |
| System Operating? | Yes |
| System Readings: | |
| | , |
| Signet Volume (gallons): | 1398700 |
| Neptune Volume (gallons): | 1197785 |
| Flow Rate thru Carbon (gallons/minute): | 20 |
| Filter Pressure - Inlet (psig): | 10 @ 9°° 9 @ 9°° |
| Filter Pressure - Outlet (psig): | <u> </u> |
| Oil Level in Tank (inches): | |
| OP-4 meter reading (gallons): | ~ @ ~ |
| OMW-9 meter reading (gallons): | @ - |
| Change Filters: | Yes |
| Procedures: | |
| 11000da1001 | |
| Observations: | |
| | |
| Backwash Primary Carbon Canisters: | Yes |
| Is holding tank half empty? | |
| Duration of backwashing: | 1 |
| Observation of Effluent: | |
| Inspection and Cleaning of Pumps: | 1 |
| Reguires | ; ; |
| | Comments |
| ORW-1 yes | |
| ORW-2 for | |
| ORW-3 | |
| OMW-9 Aea | 1 |
| OP-4 Yer | |
| () | |

| Chlorine Fee | ed System: | | | | |
|---------------|--|-----------------|---------------------------------------|--------------------------|------|
| Volume of So | odium Hypochlorite | e Remaining: | | 11/2 du | |
| Period of Fee | ed System Operati | on: | | Conhuis | |
| Air Compres | ssor: | | | | |
| Check Oil Le | vel: | | , | ي در | |
| Change Oil is | n Compressor eve | ry 3 months: | | - DK- | |
| Sampling: | | | | | |
| Sample | Sampling | | EPA | Sampling |] '' |
| Location | Frequency | Analytes . | Method | Method | |
| Midpoint | Monthly | RIEX. | 8020 | 3 - 40 ml vials with HCl | |
| | | | | 4 degree Celcius | |
| Influent | Quarterly | BTEX | 8020 | 3 - 40 ml vials with HCl | |
| Effluent | January, April, | TPH-D | 8015M | 1 - 1 liter amber glass | |
| <u> </u> | July, October | | · · · · · · · · · · · · · · · · · · · | 4 degree Celcius | _ |
| Performed d | uring this visit? | | (| Yes | No |
| IV. Comme | ents | | | | |
| | | | | | |
| | | | | | |
| | | | -, | | |
| | | | | | |
| | | | | | |
| | ··· | | | | |
| | | | | | |
| Dofous dess | audina alta piasas | s anii Han Vana | att at CDE | I (025-206-8071) | |
| | arting site, please r, dial "0" for ope | | | | |

| Inspection Date: 9-7-99 | | |
|---|-----------------------------------|--------|
| Inspector's Name: //o)cott | Company: Cou(| |
| Time Inspector On-site: \$50 | Offsite: 100 | 4 |
| UPRR Person Notified: | Time: | |
| Reason for Visit: Dille ill | | i |
| Weather Conditions: Overcast 50s | | |
| | | , |
| Record status as found | d and any repairs/adjustments pen | formed |
| Treatment System General Inspection/Re | adings: | i e |
| System Operating? | Yes | No : |
| 3 | | |
| System Readings: | | 1 |
| Signet Volume (gallons): | 11408780 | |
| Neptune Volume (gallons): | 7208880 | |
| Flow Rate thru Carbon (gallons/minute): | 20 | |
| Filter Pressure - Inlet (psig): | | @ 1000 |
| Filter Pressure - Outlet (psig): | 10 | @ 1000 |
| Oil Level in Tank (inches): | 412 | |
| OP-4 meter reading (gallons): | -45696 | @ |
| OMW-9 meter reading (gallons): | 290415 | @ |
| , our o motor roading (gainerio). | 301.0 | |
| Change Filters: | Yes | No |
| • | | ; |
| Procedures: | Semi- | |
| | | |
| Observations: | clotted of 5 1/2 | |
| , | 0) (| |
| | | |
| Backwash Primary Carbon Canisters: | Yes | No |
| Is holding tank half empty? | M | 1 |
| Duration of backwashing: | 920 - 955 | |
| Observation of Effluent: | nuid-clean | |
| | | |
| Inspection and Cleaning of Pumps: | , | |
| Requires | | |
| | Comments | |
| ORW-1 Van | | |
| ORW-2 | | |
| ORW-3 10. | | 1 |
| OMW-9 | | |
| OP-4 | | |
| | | T. |

| Chlorine Fe | ed System: | | | | |
|--------------|---------------------|---|-------------|--------------------------|----|
| Volume of S | odium Hypochlorite | Remaining: | | dun | |
| | ed System Operati | | | ntuis. | |
| Air Compre | ssor: | | | | |
| Check Oil Le | evel: | | di | | |
| | n Compressor eve | ry 3 months: | coll | | |
| Sampling: | | | | | _ |
| Sample | Sampling | | EPA | Sampling | |
| Location | Frequency | Analytes | Method | Method | _ |
| Midpoint | Monthly | BTEX | 8020 | 3 - 40 ml vials with HCl | Ļ |
| | | <u>, , , , , , , , , , , , , , , , , , , </u> | | 4 degree Celcius | |
| Influent | Quarterly | BTEX | 8020 | 3 - 40 ml vials with HCl | |
| Effluent | January, April, | TPH-D | 8015M | 1 - 1 liter amber glass | |
| | July, October | | | 4 degree Celcius | |
| Performed d | uring this visit? | | | Yes | No |
| IV. Comm | ents | | | | |
| | | | | | |
| | | | | | |
| | | - | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| Before dep | arting site, please | call Hoa Vos | cott at CDN | /I (925-296-8071) | |

If no answer, dial "0" for operator and request a page.

| Inspection Date: 4-1 | 10-99 | | | <u>'</u> |
|---|------------------|--------------------------|--|---------------------------------------|
| | osuff | Company: | asu | 1 |
| | 210 | Offsite: | 910 | |
| UPRR Person Notified: | 0 | Time: | | |
| | MøU | | | |
| Weather Conditions: | Overcent | cool 50s | | |
| VVCddior Conditions. | CARSONO | <u> </u> | | |
| Rec | ord status as fo | und and any repairs/adju | ıstments performe | ď |
| Treatment System Gener | al Inspection/ | Readings: | | |
| System Operating? | | Yes | No | ı |
| System Readings: | | | | • |
| | | 1111 11 22 2 | | |
| Signet Volume (gallons): | | 1414830 | | |
| Neptune Volume (gallons): Flow Rate thru Carbon (gallon | ne/minute): | 12,15 496 | <u> </u> | |
| Filter Pressure - Inlet (psig): | ns/minute). | | @ | gw |
| Filter Pressure - Outlet (psig). | | <u> </u> | | 900 |
| Oil Level in Tank (inches): | | /10 | | |
| OP-4 meter reading (gallons) | | | @ | |
| OMW-9 meter reading (gallor | | <u> </u> | @ | |
| CIVITY O MOTOL TOWARING (Semior | | | ······································ | |
| Change Filters: | | Yes`) | No | r |
| Dropoduros | | | <u> </u> | |
| Procedures: | | | | |
| Observations: | | <u> </u> | | |
| Object Valieties | | | | |
| | | | | |
| Backwash Primary Carbon | Canisters: | Yes | (No |) . |
| Is holding tank half empty? | | | · | |
| Duration of backwashing: | | | | |
| Observation of Effluent: | | | | 1 |
| 00001144.011-01-0114-0114 | | | | |
| Inspection and Cleaning of | | | | |
| | Requires | | | |
| Wells Operating? | Cleaning? | Comments | | |
| ORW-1 | | | | · · · · · · · · · · · · · · · · · · · |
| ORW-2 | | | | · · · · · · · · · · · · · · · · · · · |
| ORW-3 | | | | |
| OMW-9 | | | | · · · · · · · · · · · · · · · · · · · |
| OP-4 V | | | | |
| | | | | |

| Chlorine Fe | ed System: | | | | |
|-------------------------------------|--|--------------|--------|--------------------------|---------|
| Volume of So | odium Hypochlorite | e Remaining: | ، ۱ | lun | |
| | ed System Operat | | Con | Funicio | |
| Air Compres | ssor: | | | | |
| Check Oil Le | evel: | | OK | | |
| | n Compressor eve | ry 3 months: | ci | | |
| Sampling: | | | | _ | |
| Sample | Sampling | | EPA | Sampling | |
| Location | Frequency | Analytes | Method | Method | |
| Midpoint | Monthly | BTEX | 8020 | 3 - 40 ml vials with HCl | ļ |
| | | <u> </u> | | 4 degree Celcius | _ |
| Influent | Quarterly | BTEX | 8020 | 3 - 40 ml vials with HCl | |
| Effluent | January, April, | TPH-D | 8015M | 1 - 1 liter amber glass | ļ |
| | July, October | | | 4 degree Celcius | <u></u> |
| Performed d | uring this visit? | | | Yes | No |
| IV. Comme | ents | | | · | |
| | | | | | |
| | | | | | |
| | | | | | |
| | ., | | | | |
| | | | | | |
| *** *** *** *** *** *** *** *** *** | | | | | |
| | | | | | 1 |
| | arting site, please r, dial "0" for ope | | | • | |

| Inspection Date: 9-15-99 | |
|---|-------------------------------|
| Inspector's Name: Vuscoff | Company: Clory |
| Time Inspector On-site: 800 — | Offsite: 400 |
| UPRR Person Notified: | Time: — |
| Reason for Visit: OWLY | 1 |
| Weather Conditions: (ool, claudy 5 | . د٥ |
| | |
| Record status as found and any | repairs/adjustments performed |
| Treatment System General Inspection/Readings: | |
| System Operating? | Yes |
| System Readings: | |
| | 1 |
| Signet Volume (gallons): | 142335() |
| Neptune Volume (gallons): | 722/18/10 |
| Flow Rate thru Carbon (gallons/minute): | 19:01 |
| Filter Pressure - Inlet (psig): | <u> </u> |
| Filter Pressure - Outlet (psig): | @ |
| Oil Level in Tank (inches): | |
| OP-4 meter reading (gallons): | @ |
| OMW-9 meter reading (gallons): | @ |
| Change Filters: | Yes No |
| Procedures: | |
| | |
| Observations: | |
| | |
| Backwash Primary Carbon Canisters: | Yes |
| Is holding tank half empty? | |
| Duration of backwashing: | |
| Observation of Effluent: | |
| Inspection and Cleaning of Pumps: Requires | , |
| Wells Operating? Cleaning? Comment | S |
| ORW-1 | |
| ORW-2 | |
| ORW-3 | ! |
| OMW-9 | |
| OP-4 | |
| | |

| | ed System: odium Hypochlorite | Remaining | | | |
|--------------|----------------------------------|---------------|---------------|--------------------------|----|
| | ed System Operati | | , | | |
| Air Compre | | | | | |
| Check Oil Le | evel: | | | | |
| Change Oil i | n Compressor eve | ry 3 months: | | | |
| Sampling: | | | | | |
| Sample | Sampling | | EPA | Sampling | 7 |
| Location | Frequency | Analytes | Method | Method | |
| Midpoint | Monthly | BTEX | 8020 | 3 - 40 ml vials with HCl | |
| | | | | 4 degree Celcius | _ |
| Influent | Quarterly | BTEX | 8020 | 3 - 40 ml vials with HCl | j |
| Effluent | January, April, | TPH-D | 8015M | 1 - 1 liter amber glass | |
| | July, October | | <u></u> | 4 degree Celcius | _} |
| erformed d | uring this visit? | | | Yes | No |
| V. Comm | ents | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | <u> </u> | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| 3efore depa | arting site, please | call Hoa Vose | cott at CDM | /i (925-296-8071) | |
| | r, dial "0" for ope | | | | |

| Inspection Date: 9-17-99 | |
|--|-----------------------------------|
| Inspector's Name: //oScott- | Company: CAU |
| Time Inspector On-site: | Offsite: 945 |
| UPRR Person Notified: | Time: |
| Reason for Visit: | i |
| Weather Conditions: Over So | 1 |
| Weather Conditions. | <u> </u> |
| Record status as found and | any repairs/adjustments performed |
| Treatment System General Inspection/Readin | gs: |
| System Operating? | Yes No |
| System Readings: | |
| Signet Volume (gallons): 14カフラのC |) |
| Neptune Volume (gallons): | 1395 |
| Flow Rate thru Carbon (gallons/minute): | |
| Filter Pressure - Inlet (psig): | @ |
| Filter Pressure - Outlet (psig): | @ |
| Oil Level in Tank (inches): | |
| OP-4 meter reading (gallons): | @ |
| OMW-9 meter reading (gallons): | @ |
| Change Filters: | Yes No |
| Procedures: | |
| | |
| Observations: | |
| | i |
| Backwash Primary Carbon Canisters: | Yes No |
| Is holding tank half empty? | |
| Duration of backwashing: | l . |
| Observation of Effluent: | i . |
| Inspection and Cleaning of Pumps: Requires | · |
| Wells Operating? Cleaning? Comm | ients |
| ORW-1 | |
| ORW-2 | |
| ORW-3 | |
| OMW-9 | |
| OP-4 | |
| | |

| Chlorine Fe | • | . D lei | | | |
|--|---|--------------|-------------|--------------------------|----|
| | odium Hypochlorite ed System Operati | | | | |
| Air Compre | | | | | |
| Check Oil Le | evel: | | | | |
| Change Oil i | n Compressor eve | ry 3 months: | | | |
| Sampling: | | | | | |
| Sample | Sampling | | EPA | Sampling | 7 |
| Location | Frequency | Analytes | Method | Method | |
| Midpoint | Monthly | BTEX | 8020 | 3 - 40 ml vials with HCl | |
| | | | | 4 degree Celcius | _ |
| Influent | Quarterly | BTEX | 8020 | 3 - 40 ml vials with HCl | |
| Effluent | January, April, | TPH-D | 8015M | 1 - 1 liter amber glass | |
| | July, October | | <u> </u> | 4 degree Celcius | _ |
| Performed d | luring this visit? | | | Yes | No |
| IV. Comm | ents | | | | |
| | | | | • | |
| | | | <u> </u> | | |
| · | | | | <u> </u> | |
| | | | | | |
| ······································ | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| Refore den | arting site, please | call Hoa Vos | cott at CDM | 1 (925-296-8071) | |
| | er, dial "0" for ope | | | | |

| • | |
|---|-------------------------------|
| Inspection Date: 9/22/99 | |
| Inspector's Name: Vascott | Company: CAW |
| Time Inspector On-site: 8/5 | Offsite: 945 |
| UPRR Person Notified: | Time: |
| Reason for Visit: DM4 W | |
| Weather Conditions: Overcart 605 | |
| Trodition Containers. | |
| Record status as found and any | repairs/adjustments performed |
| Treatment System General Inspection/Readings: | |
| System Operating? | Yes |
| System Readings: | |
| | 1/ |
| Signet Volume (gallons): | 1435860 |
| Neptune Volume (gallons): | 7238770 |
| Flow Rate thru Carbon (gallons/minute): | 10 @ 930 |
| Filter Pressure - Inlet (psig): | 10 @ 930 |
| Filter Pressure - Outlet (psig): | <12" |
| Oil Level in Tank (inches): | |
| OP-4 meter reading (gallons): | ·· @ |
| OMW-9 meter reading (gallons): | @ |
| Change Filters: | Yes No |
| Procedures: | |
| | |
| Observations: | |
| | • |
| Backwash Primary Carbon Canisters: | Yes No |
| Is holding tank half empty? | KO |
| Duration of backwashing: | 12 hour |
| | lear |
| Inspection and Cleaning of Pumps: Requires | |
| Wells Operating? Cleaning? Comment | S |
| OFINAL LAG | |
| ORW-1 | |
| ORW-3 | |
| OMW-9 (MX) | ! |
| OP-4 | |
| | |

| Chlorine Fee | ed System: | | | | | | |
|---------------|--|--------------|-----------------|--------------------------|--|--|--|
| Volume of So | odium Hypochlorite | e Remaining: | | | | | |
| Period of Fee | ed System Operati | on: | Ces | utums | | | |
| Air Compres | ssor: | | | | | | |
| Check Oil Le | | | O | <u>u</u> | and the second s | | |
| Change Oil is | n Compressor eve | ry 3 months: | | | | | |
| Sampling: | | | | | _ | | |
| Sample | Sampling | | EPA | Sampling | | | |
| Location | Frequency | Analytes | Method | Method | _ | | |
| Midpoint | / Monthly | BTEX | 8020 | 3 - 40 ml vials with HCl | | | |
| · | | | | 4 degree Celcius | _ | | |
| Influent | Quarterly | BTEX | 8020 | 3 - 40 ml vials with HCl | | | |
| Effluent | January, April, | TPH-D | 8015M | 1 - 1 liter amber glass | | | |
| | July, October | | | 4 degree Celcius | | | |
| Performed d | Performed during this visit? No | | | | | | |
| IV. Comme | ents | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | According to the state of the s | | · - | | | | |
| | | | | | | | |
| | · · · · · · · · · · · · · · · · · · · | | | | | | |
| | | | | | | | |
| | | | | | | | |

Before departing site, please call Hoa Voscott at CDM (925-296-8071) If no answer, dial "0" for operator and request a page.

| Inspection Date: 10 -1 -99 | |
|---|--|
| Inspector's Name: Voscott | Company: CBW |
| Time Inspector On-site: | Offsite: 940 |
| UPRR Person Notified: | Time: |
| Reason for Visit: OM6M | |
| Weather Conditions: Sunay 605 | |
| J | |
| Record status as foun | nd and any repairs/adjustments performed |
| Treatment System General Inspection/R | eadings: |
| System Operating? | Yes |
| System Readings: | |
| | |
| Signet Volume (gallons): | 1450810 |
| Neptune Volume (gallons): | 7254866 |
| Flow Rate thru Carbon (gallons/minute): | 10.2 |
| Filter Pressure - Inlet (psig): | (Q Q 20) (Q Q 20) (Q Q 20) |
| Filter Pressure - Outlet (psig): | |
| Oil Level in Tank (inches): | <12 ^{(''} |
| OP-4 meter reading (gallons): | |
| OMW-9 meter reading (gallons): | <u>@</u> |
| Change Filters: | Yes No |
| Procedures: | |
| Observations: | |
| | |
| Backwash Primary Carbon Canisters: | Yes No |
| Is holding tank half empty? | |
| Duration of backwashing: | |
| Observation of Effluent: | |
| Inspection and Cleaning of Pumps: Requires | |
| Wells Operating? Cleaning? | Comments |
| ORW-1 | |
| ORW-2 | |
| ORW-3 | |
| OMW-9 | |
| OP-4 | |
| | |

| Chlorine Fe | ed System: | | | | |
|-----------------|----------------------|----------------|-------------|--------------------------|----|
| Volume of So | odium Hypochlorite | Remaining: | | See | |
| Period of Fed | ed System Operati | on: | | Continuous | |
| Air Compre: | ssor: | | | | |
| Check Oil Le | | | ou | | |
| Change Oil i | n Compressor eve | ry 3 months: | OK | | |
| Sampling: | | | | | |
| Sample | Sampling | | EPA | Sampling | |
| Location | Frequency | Analytes | Method | Method | |
| Midpoint | Monthly | BTEX | 8020 | 3 - 40 ml vials with HCl | |
| | | | | 4 degree Celcius | 1 |
| Influent | Quarterly | BTEX | 8020 | 3 - 40 ml vials with HCl | |
| Effluent | January, April, | TPH-D | 8015M | 1 - 1 liter amber glass | } |
| | July, October | | <u> </u> | 4 degree Celcius |] |
| Performed d | uring this visit? | | | Yes | No |
| IV. Commo | ents | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| - 12 | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| Before dena | arting site, please | e call Hoa Vos | cott at CDN | / (925-296-8071) | |
| If no answe | er, dial "0" for ope | rator and requ | uest a page | ,), | |

| Inspection Date: 16-5-99 | |
|--|-------------------------------|
| Inspector's Name: | Company: |
| Time Inspector On-site: | Offsite: /242 |
| UPRR Person Notified: | Time: |
| | Tillio. |
| | |
| Weather Conditions: Summy Gong | |
| Record status as found and an | repairs/adjustments performed |
| Treatment System General Inspection/Readings | |
| System Operating? | Yes No |
| System Readings: | |
| Signet Volume (gallons): 145(6) | 10 |
| Neptune Volume (gallons): | 60780 |
| Flow Rate thru Carbon (gallons/minute): | 7.5 |
| Filter Pressure - Inlet (psig): | @ /03) |
| Filter Pressure - Outlet (psig): | @ //) 31 |
| Oil Level in Tank (inches): | 2 |
| OP-4 meter reading (gallons): | @ |
| OMW-9 meter reading (gallons): | . @ |
| Change Filters: | Yes No |
| Procedures: | |
| Observations: | |
| | |
| Backwash Primary Carbon Canisters: | Yes |
| Is holding tank half empty? | |
| Duration of backwashing: | |
| Observation of Effluent: | |
| Inspection and Cleaning of Pumps: Requires | |
| Wells Operating? Cleaning? Commen | S |
| ORW-1 | |
| ORW-Z GCZ | |
| ORW-3 Wo | l . |
| OMW-9 Up | |
| OP-4 Yex | |

| Volume of So | ed System: odium Hypochlorite | e Remaining: | | | |
|---------------|----------------------------------|--------------|-------------|--------------------------|----|
| | ed System Operati | | | | |
| Air Compres | | | | | |
| Check Oil Lev | | | | | |
| Change Oil in | n Compressor eve | ry 3 months: | | | |
| Sampling: | | | | | |
| Sample | Sampling | | EPA | Sampling | 7 |
| Location | Frequency | Analytes | Method | Method | |
| Midpoint | Monthly | BTEX | 8020 | 3 - 40 ml vials with HCl | |
| | | | | 4 degree Celcius | , |
| Influent | Quarterly | BTEX | 8020 | 3 - 40 ml vials with HCl | |
| Effluent | January, April, | TPH-D | 8015M | 1 - 1 liter amber glass | |
| | July, October | | | 4 degree Celcius | |
| Performed du | uring this visit? | | | Yes | No |
| IV. Comme | ents | | | | |
| | | | | | |
| | | | | | |
| | | | , | | |
| | | | | , | |
| | | | | | |
| | | | | | |
| | | | | | |
| <u> </u> | | | | | |

| | · · · · · · · · · · · · · · · · · · · | |
|---|---------------------------------------|----------|
| Inspection Date: 10-8-99 | | |
| Inspector's Name: 110300 77 | Company: Au | |
| Time Inspector On-site: 800 | Offsite: /v | |
| UPRR Person Notified: | Time: — | |
| Reason for Visit: Dalad | | |
| Weather Conditions: Sum 60, | | |
| | | |
| Record status as found and any | repairs/adjustments perfo | ormed |
| | | |
| Treatment System General Inspection/Readings: | | |
| | | N. |
| System Operating? | Yes | No |
| Cyctom Poodings | | |
| System Readings: | | ' . ! |
| Signet Volume (gallons): | ,2670 | |
| | 167420 | : |
| Flow Rate thru Carbon (gallons/minute): | 19.2 | : |
| Filter Pressure - Inlet (psig): | JU . | @ 940 |
| Filter Pressure - Outlet (psig): | 9 | @ 940 |
| Oil Level in Tank (inches): | (12 | |
| OP-4 meter reading (gallons): | <u> </u> | @ |
| OMW-9 meter reading (gallons): | | @ |
| Oh an un Filhama | 100 | No |
| Change Filters: | Yes | NO |
| Procedures: | | |
| 1 Toocdures. | | |
| Observations: | | |
| | | |
| | | |
| Backwash Primary Carbon Canisters: | Yes | No |
| | | |
| Is holding tank half empty? Duration of backwashing: (900-930) | | |
| Duration of backwashing: () 900 - 930 Observation of Effluent: clear | | |
| Observation of Linderit. | | |
| Inspection and Cleaning of Pumps: | | |
| Requires | | |
| Wells Operating? Cleaning? Comments | 3 | |
| ORW-1 ils yes ok | | |
| ORW-2 // | | |
| ORW-3 | | I . |
| OMW-9 | | |
| OP-4 // | | |

| Chlorine Fe | ed System: | | | | | |
|---------------|---------------------|-----------------|------------|--------------------------|-----------------|--|
| Volume of So | odium Hypochlorit | e Remaining: | | 2 Seen | | |
| Period of Fed | ed System Operat | ion: | | continuous | | |
| Air Compres | ssor: | | | | | |
| Check Oil Le | vel: | | or | | | |
| Change Oil i | n Compressor eve | ery 3 months: | (| | | |
| Sampling: | | | | | | |
| Sample | Sampling | | EPA | Sampling | 7 | |
| Location | Frequency | Analytes | Method | Method | | |
| Midpoint | Monthly | BTEX | 8020 | 3 - 40 ml vials with HCi | | |
| | | | | 4 degree Celcius | | |
| Influent | Quarterly | BTEX | 8020 | 3 - 40 ml vials with HCl | | |
| Effluent | January, April, | TPH-D | 8015M | 1 - 1 liter amber glass | • | |
| | July October | <u> </u> | | 4 degree Celcius | | |
| Performed d | uring this visit? | | (| Yes | No | |
| IV. Comme | ents | sleving caf | 6-0 | luns of Sod | win Hy ochlowit | |
| | | 01 | | <i>_</i> | | |
| | | | | | | |
| | | | | | | |
| | | | | <u> </u> | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | . (222 222 222) | | |
| Before depa | arting site, please | e call Hoa Vosc | ott at CDM | (925-296-8071) | | |
| It no answe | r, dial "0" for ope | erator and requ | est a page | • | | |

| • | | |
|----------------------------------|--------------------------------------|---------------------------------------|
| Inspection Date: 10/11/66 | | |
| Inspector's Name: 10500 | Company: | CASU |
| Time Inspector On-site: 82 | | |
| UPRR Person Notified: | Time: | |
| Reason for Visit: | | -500 |
| | | .600) |
| Weather Conditions: Sunne | 605 | |
| Record | status as found and any repairs/adju | stments performed |
| Treatment System General Ir | spection/Readings: | |
| System Operating? | Yes | No |
| System Readings: | | |
| Signet Volume (gallons): | 1465660 | |
| Neptune Volume (gallons): | 7271220 | 1 |
| Flow Rate thru Carbon (gallons/m | inute): 200 | |
| Filter Pressure - Inlet (psig): | 11 | @ 945 |
| Filter Pressure - Outlet (psig): | (0 | @ 945 |
| Oil Level in Tank (inches): | | <12- |
| OP-4 meter reading (gallons): | | <u> </u> |
| OMW-9 meter reading (gallons): | | <u> </u> |
| Change Filters: | Yes | No |
| Procedures: | | |
| Observations: | | ! |
| | | · · · · · · · · · · · · · · · · · · · |
| Backwash Primary Carbon Can | isters: Yes | No |
| Is holding tank half empty? | | |
| Duration of backwashing: | | |
| Observation of Effluent: | | |
| Inspection and Cleaning of Pur | nps: | , |
| Wells Operating? CI | eaning? Comments | |
| ORW-1 Uy | | |
| ORW-2 | | |
| ORW-3 | | ı |
| OMW-9 | | |
| OP-4 | | |

| Chlorine Fee | ed System: | | | | | | |
|---|---------------------|--|--|--------------------------|------|--|--|
| Volume of Sodium Hypochlorite Remaining: 6 ducing | | | | | | | |
| Period of Fee | ed System Operat | ion: | صًــــــــــــــــــــــــــــــــــــ | ntuur- | | | |
| Air Compres | ssor: | | | | | | |
| Check Oil Le | vel: | | O ^L | | | | |
| Change Oil is | n Compressor eve | ry 3 months: | 0 | | | | |
| Sampling: | | | | | _ | | |
| Sample | Sampling | | EPA | Sampling | | | |
| Location | Frequency | Analytes | Method | Method | | | |
| Midpoint | Monthly | BTEX | 8020 | 3 - 40 ml vials with HCl | | | |
| | | | | 4 degree Celcius | 4 | | |
| Influent | Quarterly | BTEX | 8020 | 3 - 40 ml vials with HCl | | | |
| Effluent | January, April, | TPH-D | 8015M | 1 - 1 liter amber glass | | | |
| | July, October | | <u> </u> | 4 degree Celcius | _ | | |
| Performed de | uring this visit? | | | Yes | No | | |
| IV. Comme | ents | | | | | | |
| | 1 | Delliveir 1 | <u>d</u> 6. | dume of so | deur | | |
| | | hyperada | uf . | U | | | |
| | | 7 | <u> </u> | | | | |
| | | · · · · · · · · · · · · · · · · · · · | | | | | |
| | | | | MARKET 15-1-8 | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | * 14 * * * * * * * * * * * * * * * * * | · · · · · · · · · · · · · · · · · · · | | | | |
| | | <u> </u> | | | | | |
| | arting site, please | | | | | | |
| If no answe | r, dial "0" for ope | rator and requ | iest a page | · | | | |

| Inspection Date: 10/14/99 | |
|--|-----------------------------------|
| Inspector's Name: Voscott | Company: CAM |
| Time Inspector On-site: 800 | Offsite: 915 |
| UPRR Person Notified: | Time: |
| Reason for Visit: CM6M | |
| Weather Conditions: Sunny 605 | |
| Yvalier conditions. Service cos | |
| Record status as found and | any repairs/adjustments performed |
| | |
| Treatment System General Inspection/Readin | gs: |
| | |
| System Operating? | Yes No |
| | |
| System Readings: | |
| | 1 22 / 62 6 |
| | 67486 |
| Neptune Volume (gallons): 72 | 73390 |
| Flow Rate thru Carbon (gallons/minute): | 19 |
| Filter Pressure - Inlet (psig): Filter Pressure - Outlet (psig): | 9 @ 9 cc |
| Oil Level in Tank (inches): | <120 |
| OP-4 meter reading (gallons): | (ندل @ |
| OMW-9 meter reading (gallons): | U1_@ |
| Civita a motor roading (ganorio). | |
| Change Filters: | Yes |
| • | |
| Procedures: | |
| | |
| Observations: | - Dear - |
| | |
| | |
| Backwash Primary Carbon Canisters: | Yes |
| | |
| Is holding tank half empty? | |
| Duration of backwashing: Observation of Effluent: | |
| Observation of Endent. | |
| Inspection and Cleaning of Pumps: | |
| Requires | |
| Wells Operating? Cleaning? Comm | nents |
| ODW 1 | 1 |
| ORW-2 Ger | , |
| ORW-3 | |
| OMW-9 Cyes | |
| OP-4 | |

| Volume of Sodium Hypochlorite Remaining: Period of Feed System Operation: | | | Continuous | | | |
|--|---|------------------|----------------|---|----|--|
| Air Compre | ssor: | | | | | |
| Check Oil Le | evel: n Compressor eve | rv 3 months: | | OK | | |
| Sampling: | ,, comp, coco. c <u>.c</u> | | | | | |
| Sample | Sampling | | EPA | Sampling | 1 | |
| Location Midpoint | Frequency Monthly | Analytes BTEX | Method 8020 | Method 3 - 40 ml vials with HCl 4 degree Celcius | | |
| Influent Effluent | Quarterly January, April, July, October | BTEX TPH-D | 8020 8015M | 3 - 40 ml vials with HCl 1 - 1 liter amber glass 4 degree Celcius | | |
| Performed d | luring this visit? | | | Yes (| No | |
| | | | ч | | | |
| V. Comm | ents | | | • | | |
| V. Comm | ents | | | | | |
| V. Comm | ents | | | • | | |
| V. Comm | ents | | | • | | |
| V. Comm | ents | | | • | | |
| V. Comm | ents | | | | | |

| Inspection Date: 10/18/99 | |
|--|-------------------------------|
| Inspector's Name: Vos cott | Company: Company: |
| Time Inspector On-site: 930 | Offsite: 130 |
| UPRR Person Notified: | Time: |
| Reason for Visit: OMEM - Sample | he preduct |
| | gue puncos |
| Weather Conditions: Summy 601 | |
| Record status as found and any | repairs/adjustments performed |
| Treatment System General Inspection/Readings: | |
| • | |
| System Operating? | Yes |
| System Readings: | |
| | |
| Signet Volume (gallons): | 70570 |
| Neptune Volume (gallons): 72 | 7660 |
| Flow Rate thru Carbon (gallons/minute): | 12 @ // 02 |
| Filter Pressure - Inlet (psig): | |
| Filter Pressure - Outlet (psig): | |
| Oil Level in Tank (inches): | C12 |
| OP-4 meter reading (gallons): | 0 |
| OMW-9 meter reading (gallons): | |
| Change Eilters: | Yes |
| Change Filters: | 163 |
| Procedures: | |
| 1 Tocedures. | |
| Observations: | |
| Observatione. | |
| MARKET AND THE PARTY OF THE PAR | |
| Backwash Primary Carbon Canisters: | Yes No |
| Is holding tank half empty? | ho |
| | (a) - 1035 |
| | lear |
| Observation of Endone. | , |
| Inspection and Cleaning of Pumps: | |
| Requires | |
| Wells Operating? Cleaning? Comment | s |
| ORW-1 UL YLL | |
| ORW-2 (2) | |
| ORW-3 | 1 |
| OMW-9 CACE | |
| OP-4 () | |
| <u> </u> | |

| Chlorine Fe | ed System: | | | | |
|---|------------------------------|-----------------|------------|---|--------------------|
| Volume of So | odium Hypochlorite | e Remaining: | Z | 5/2 duens | • • |
| Volume of Sodium Hypochlorite Remaining: 512 duess Period of Feed System Operation: Kontinuous | | | | | |
| Air Compres | ssor: | | | | |
| Check Oil Le | vel: | | 6 | u- | |
| Change Oil i | n Compressor eve | ry 3 months: | | | |
| Sampling: | | | | | _ |
| Sample | Sampling | | EPA | Sampling | |
| Location | Frequency | Analytes | Method | Method | _ |
| Midpoint | Monthly | BTEX | 8020 | 3 - 40 ml vials with HCl | ļ |
| influent | Ougetorly | BTEX | 8020 | 4 degree Celcius 3 - 40 ml vials with HCl | |
| Effluent | Quarterly January, April, | TPH-D | 8015M | 1 - 1 liter amber glass | |
| Lindon | July, October | ,,,,, | | 4 degree Celcius | |
| Performed d | uring this visit? | | | Yes (| No |
| | | collected | Lee | | |
| | | Sam | net fr | okus-we. | 1 Op3 |
| | | Sarye | er u | ere submitted | to Centis (Toughus |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | arting site, please | | | | |
| If no answe | r, dial "0" for ope | erator and requ | est a page | • | |

| Inspection Date: 10/25/99 | |
|--|----------------------------------|
| Inspector's Name: No scott | Company: Www |
| Time Inspector On-site: 840 | Offsite: 1020 |
| UPRR Person Notified: | Time: |
| Reason for Visit: Owlky | |
| Weather Conditions: Sun 570; | |
| | |
| Record status as found and a | ny repairs/adjustments performed |
| | |
| Treatment System General Inspection/Reading | S: |
| | No. |
| System Operating? | (Yes) No |
| | |
| System Readings: | |
| Cincat Values (callens): | 11170000 |
| Signet Volume (gallons): Neptune Volume (gallons): | 7:2 0105 |
| Flow Rate thru Carbon (gallons/minute): | 128/10 |
| Filter Pressure - Inlet (psig): | 9 @ /000 |
| Filter Pressure - Outlet (psig): | @ 1000 |
| Oil Level in Tank (inches): | 417_ |
| OP-4 meter reading (gallons): | <i>∟</i> @ |
| OMW-9 meter reading (gallons): | ン@ |
| | |
| Change Filters: | Yes No |
| | |
| Procedures: | |
| | |
| Observations: | |
| | 00 |
| Backwash Primary Carbon Canisters: | Yes No |
| buokhuon (inimi) our ben our ben buokh | |
| Is holding tank half empty? | |
| Duration of backwashing: 930 -100 | |
| Observation of Effluent: dear | |
| | |
| Inspection and Cleaning of Pumps: | • |
| Requires | I I |
| Wells Operating? Cleaning? Comme | ints |
| ORW-1 No No | |
| ORW-2 | |
| ORW-3 | |
| OMW-9 | |
| OP-4 (W2 V | |

OPERATION, MAINTENANCE & MONITORING CHECKLIST

Union Pacific Railroad - Oakland Trailer-on-flat-car (TOFC) railyard 1717 Middle Harbor Road, Oakland, California

| Chlorine Fee | ed System: | | | | |
|---------------|--|--------------|--------|--------------------------|----|
| Volume of So | odium Hypochlorite | e Remaining: | 6 | duns_ | |
| Period of Fee | ed System Operati | ion: | | mt-un- | |
| Air Compres | ssor: | | | | |
| Check Oil Le | | | | | |
| Change Oil is | n Compressor eve | ry 3 months: | | ··· | |
| Sampling: | | | | | _ |
| Sample | Sampling | | EPA | Sampling |] |
| Location | Frequency | Analytes | Method | Method | _ |
| Midpoint | Monthly | BTEX | 8020 | 3 - 40 ml vials with HCl | |
| | | | | 4 degree Celcius | |
| Influent | Quarterly | BTEX | 8020 | 3 - 40 ml vials with HCl | |
| Effluent | January, April, | TPH-D | 8015M | 1 - 1 liter amber glass | |
| | July, October | | | 4 degree Celcius | _i |
| Performed d | uring this visit? | | | Yes | No |
| IV. Comme | ents | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | arting site, please r, dial "0" for ope | | | | |

| Inspection Date: 10/29/99 | |
|--|---------------------------------|
| Inspector's Name: Voscett | Company: Cau |
| Time Inspector On-site: どシ | Offsite: 915 |
| UPRR Person Notified: | Time: — |
| Reason for Visit: OH LM | , |
| Weather Conditions: Cewl 505 | |
| | |
| Record status as found and an | y repairs/adjustments performed |
| Treatment System General Inspection/Readings | |
| System Operating? | Yes No |
| System Readings: | |
| | 11.0 564 |
| Signet Volume (gallons): | 1480040 |
| Neptune Volume (gallons): | 7287050 |
| Flow Rate thru Carbon (gallons/minute): | 19 0 Ga |
| Filter Pressure - Inlet (psig): | 10 @ (100) . |
| Filter Pressure - Outlet (psig): | <12" |
| Oil Level in Tank (inches): | |
| OP-4 meter reading (gallons): | |
| OMW-9 meter reading (gallons): | |
| Change Filters: | Yes No |
| Procedures: | |
| 1 Toocdarco. | |
| Observations: | |
| 0000,744,00,10 | |
| Backwash Primary Carbon Canisters: | Yes No |
| Is holding tank half empty? | |
| Duration of backwashing: | ı |
| Observation of Effluent: | |
| Observation of Emoority | |
| Inspection and Cleaning of Pumps: Requires | , |
| Wells Operating? Cleaning? Commer | nts |
| ORW-1 yrs- | · |
| ORW-2 GRE | ! |
| ORW-3 & | |
| OMW-9 Yes | |
| OP-4 | |
| () | |

| Chlorine Fe | ed System: | | | | |
|---------------|--|-----------------|--|---------------------------|--|
| Volume of So | odium Hypochlorite | e Remaining: | 51 | 2 diems | , , , , , , , , , , , , , , , , , , , |
| Period of Fee | ed System Operati | on: | جير | ntrums | |
| Air Compres | ssor: | | | | |
| Check Oil Le | | | | | |
| Change Oil i | n Compressor eve | ry 3 months: | | | The state of the s |
| Sampling: | | | | | |
| Sample | Sampling | | EPA | Sampling | |
| Location | Frequency | <u>Analytes</u> | Method | Method | |
| Midpoint | Monthly | BTEX | 8020 | 3 - 40 ml vials with HCl | |
| | | | | 4 degree Celcius | _ |
| Influent | Quarterly | BTEX | 8020 | 3 - 40 ml vials with HCl | |
| Effluent | January, April, | TPH-D | 8015M | 1 - 1 liter amber glass | |
| | July, October | | <u> </u> | 4 degree Celcius | _ |
| Performed d | uring this visit? | | | Yes | No |
| IV. Comme | ents | | | | |
| | | | | , | |
| | | | | | |
| | | | | | |
| | | , | | | |
| | | | | | |
| | | | . | | |
| | | | | | |
| | | | | | |
| | | | | | |
| Refore dens | arting site, please | call Hoa Vosc | cott at CDN | 1 (925-296-8071) | |
| If no answe | r. dial "0" for one | rator and regu | iest a page | . (==========) | |
| If no answe | arting site, please r, dial "0" for ope | rator and requ | iest a page | . (323-230-00 <i>1</i> 1) | |

| Inspection Date: (13 aq | Compony: CA |
|--|---|
| Inspector's Name: 'Voscott | Company: Coul |
| Time Inspector On-site: 800 | Offsite: 930 |
| UPRR Person Notified: — | Time: |
| Reason for Visit: | |
| Weather Conditions: رجاك المحالية | |
| | |
| Record status as found and an | y repairs/adjustments performed |
| | |
| Treatment System General Inspection/Readings | |
| | |
| System Operating? | Yes |
| · | |
| System Readings: | I |
| | - Pour a |
| Signet Volume (gallons): | §750C |
| Neptune Volume (gallons): | 95-390 |
| Flow Rate thru Carbon (gallons/minute): | 20 |
| Filter Pressure - Inlet (psig): | 10 @ 915 |
| Filter Pressure - Outlet (psig): | 9 @ 915 |
| Oil Level in Tank (inches): | <u> </u> |
| OP-4 meter reading (gallons): | © (i) (i) (ii) (ii) (ii) (ii) (iii) |
| OMW-9 meter reading (gallons): | - dl- e |
| | |
| | Vos |
| Change Filters: | Yes No |
| | Yes No |
| Change Filters: (Procedures: | Yes No |
| Procedures: | Yes No |
| | Yes No |
| Procedures: | Yes No |
| Procedures: Observations: | |
| Procedures: | Yes No |
| Procedures: Observations: Backwash Primary Carbon Canisters: | |
| Procedures: Observations: Backwash Primary Carbon Canisters: Is holding tank half empty? | |
| Procedures: Observations: Backwash Primary Carbon Canisters: Is holding tank half empty? Duration of backwashing: | |
| Procedures: Observations: Backwash Primary Carbon Canisters: Is holding tank half empty? | |
| Procedures: Observations: Backwash Primary Carbon Canisters: Is holding tank half empty? Duration of backwashing: Observation of Effluent: | |
| Procedures: Observations: Backwash Primary Carbon Canisters: Is holding tank half empty? Duration of backwashing: Observation of Effluent: Inspection and Cleaning of Pumps: | |
| Procedures: Observations: Backwash Primary Carbon Canisters: Is holding tank half empty? Duration of backwashing: Observation of Effluent: Inspection and Cleaning of Pumps: Requires | Yes |
| Procedures: Observations: Backwash Primary Carbon Canisters: Is holding tank half empty? Duration of backwashing: Observation of Effluent: Inspection and Cleaning of Pumps: Requires Wells Operating? Cleaning? Commer | Yes |
| Procedures: Observations: Backwash Primary Carbon Canisters: Is holding tank half empty? Duration of backwashing: Observation of Effluent: Inspection and Cleaning of Pumps: Requires Wells Operating? Cleaning? Commer ORW-1 | Yes |
| Procedures: Observations: Backwash Primary Carbon Canisters: Is holding tank half empty? Duration of backwashing: Observation of Effluent: Inspection and Cleaning of Pumps: Requires Wells Operating? Cleaning? Commer ORW-1 ORW-2 | Yes |
| Procedures: Observations: Backwash Primary Carbon Canisters: Is holding tank half empty? Duration of backwashing: Observation of Effluent: Inspection and Cleaning of Pumps: Requires Wells Operating? Cleaning? Commer ORW-1 ORW-2 ORW-3 | Yes |
| Procedures: Observations: Backwash Primary Carbon Canisters: Is holding tank half empty? Duration of backwashing: Observation of Effluent: Inspection and Cleaning of Pumps: Requires Wells Operating? Cleaning? Commer ORW-1 ORW-2 | Yes |

| Chlorine Fe | ed System: | | | | |
|--------------|---------------------|---------------|-------------|--|----|
| | odium Hypochlorite | | | 1/2 drems | |
| Period of Fe | ed System Operat | ion: | Cs | 1/2 decus | |
| Air Compre | ssor: | | | | |
| Check Oil Le | | | | 6K | |
| Change Oil i | n Compressor eve | ry 3 months: | | 04 | |
| Sampling: | | | | | |
| Sample | Sampling | | EPA | Sampling | 7 |
| Location | Frequency | Analytes_ | Method | Method | _ |
| Midpoint | Monthly | BTEX | 8020 | 3 - 40 ml vials with HCl 4 degree Celcius | |
| Influent | Quarterly | BTEX | 8020 | 3 - 40 ml vials with HCl | |
| Effluent | January, April, | TPH-D | 8015M | 1 - 1 liter amber glass | |
| | July, October | | | 4 degree Celcius | |
| Performed d | uring this visit? | | | Yes | No |
| IV. Comme | ents | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| Dafara dana | arting site, please | oall Hoo Voor | nott at CDM | 1 (025-296-2071) | |
| | arting site, please | | | | |

| Inspection Date: 1:112/66 | |
|---|---------------------------------|
| Inspector's Name: VSC H | Company: Cyul |
| Time Inspector On-site: | Offsite: Q45 |
| | Time: |
| UPRR Person Notified: | THIO. |
| Reason for Visit: | |
| Weather Conditions: Suning 63 | |
| Record status as found and an | y repairs/adjustments performed |
| Treatment System General Inspection/Readings: | : |
| System Operating? | Yes |
| System Readings: | |
| Signet Volume (gallons): | ichum |
| Neptune Volume (gallons): | 7313690 |
| Flow Rate thru Carbon (gallons/minute): | 17 |
| Filter Pressure - Inlet (psig): | 1. @ 936 |
| Filter Pressure - Outlet (psig): | @ (3b |
| Oil Level in Tank (inches): | 417 |
| OP-4 meter reading (gallons): | @ |
| OMW-9 meter reading (gallons): | <i>L</i> @ |
| Change Filters: | Yes No |
| Procedures: | The same of |
| | |
| Observations: | |
| | |
| Backwash Primary Carbon Canisters: | Yes |
| Is holding tank half empty? | |
| Duration of backwashing: | |
| Observation of Effluent: | |
| | , |
| Inspection and Cleaning of Pumps: Requires | |
| Wells Operating? Cleaning? Commen | its |
| OPW 1 | |
| ORW-2 | |
| ORW-3 Jav | |
| OMW-9 72 | |
| OP-4 | |
| | |

| Chlorine Fe | ed System: | | | | | | |
|--------------|----------------------------------|--------------|--------|--------------------------------|---------|-------------|---------------------------------------|
| | odium Hypochlorite | | 51 | sima | | <u> </u> | |
| Period of Fe | ed System Operati | ion: | | hims_ | <u></u> | | |
| Air Compres | ssor: | | O.v. | | | | |
| Check Oil Le | | | ok | <u> </u> | 4 | | |
| Change Oil i | n Compressor eve | ry 3 months: | | Jen 11 | 12/55 | | |
| Sampling: | | | · | Ŋ `` | 1 1.1 | | |
| Sample | Sampling | | EPA | Sampli | ing | | |
| Location | Frequency | Analytes | Method | Metho | | | |
| Midpoint | Monthly | BTEX | / / / | 3 - 40 ml vials | | | |
| | O ve ste ste : | BTEX | | degree Celci L- 40 ml vials | | - | |
| Influent | Quarterly | TPH-D | 1 | - 1 liter ambe | | | |
| Effluent | January, April, July, October | I F Π÷D | 1 | degree Celci | _ | ļ | |
| Performed d | uring this visit? | | | (es | | No | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | · · · · · · · · · · · · · · · · · · · |
| | | | | | | | |
| | | | | | | | |
| | <u> </u> | | | | | | |
| | | | | | | | |
| | | | | | | | |

Before departing site, please call Hoa Voscott at CDM (925-296-8071) If no answer, dial "0" for operator and request a page.

| 1/1/4 06 | |
|---|---------------------------------|
| Inspection Date: 1/-19-99 | Company: Oul |
| Inspector's Name: | |
| Time Inspector On-site: \$15 | Offsite: 930 |
| UPRR Person Notified: | Time: |
| Reason for Visit: PMEM | |
| Weather Conditions: Orl nainer 505 | |
| Record status as found and any | y repairs/adjustments performed |
| Treatment System General Inspection/Readings: | |
| System Operating? | Yes |
| System Readings: | |
| Signet Volume (gallons): 15/0/500 | |
| Neptune Volume (gallons): 0732.4 | 170 |
| Flow Rate thru Carbon (gallons/minute): | 170 |
| Filter Pressure - Inlet (psig): | @ |
| Filter Pressure - Outlet (psig): | @ |
| Oil Level in Tank (inches): 4/2. | |
| OP-4 meter reading (gallons): | @ . |
| OMW-9 meter reading (gallons): | @ |
| Change Filters: | Yes No |
| Procedures: | |
| 1,000000000 | |
| Observations: | |
| | |
| Backwash Primary Carbon Canisters: | Yes |
| Is holding tank half empty? | |
| Duration of backwashing: | |
| Observation of Effluent: | |
| | , |
| Inspection and Cleaning of Pumps: Requires | |
| Wells Operating? Cleaning? Commen | ts |
| ORW-1 | |
| ORW-2 | |
| ORW-3 | |
| OMW-9 | |
| OP-4 | |
| | |

| Chlorine Fee | ed System: | | | | |
|---------------|--------------------|---------------|----------|--------------------------|----|
| Volume of So | odium Hypochlorite | e Remaining: | | | |
| Period of Fee | ed System Operat | ion: | | | |
| Air Compres | ssor: | | | | |
| Check Oil Le | | | | | |
| Change Oil is | n Compressor eve | ery 3 months: | | | |
| Sampling: | | | | | |
| Sample | Sampling | 1 | EPA | Sampling | 7 |
| Location | Frequency | Analytes | Method | Method | |
| Midpoint | Monthly | BTEX | 8020 | 3 - 40 ml vials with HCl | |
| | | | | 4 degree Celcius | _ |
| Influent | Quarterly | BTEX | 8020 | 3 - 40 ml vials with HCl | 1 |
| Effluent | January, April, | TPH-D | 8015M | 1 - 1 liter amber glass | |
| | July, October | | <u> </u> | 4 degree Celcius | |
| Performed de | uring this visit? | | | Yes | No |
| IV. Comme | ents | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | <u> </u> | | |
| | | | , | | |
| | | | | | |
| | | | | | |
| | . . | | | | |

Before departing site, please call Hoa Voscott at CDM (925-296-8071) If no answer, dial "0" for operator and request a page.

| Inspection Date: ///24/49 | |
|--|-----------------------------------|
| Inspector's Name: | Company: Cbuj |
| Time Inspector On-site: 83 | Offsite: /045 |
| UPRR Person Notified: | Time: |
| Reason for Visit: ONU | <u> </u> |
| Weather Conditions: Seemy 505 | |
| Record status as found and | any repairs/adjustments performed |
| Treatment System General Inspection/Readin | gs: |
| System Operating? | (Yes No |
| System Readings: | |
| Signet Volume (gallons): | 1524190 |
| Neptune Volume (gallons): | 7 2: -190 |
| Flow Rate thru Carbon (gallons/minute): | |
| Filter Pressure - Inlet (psig): | 19 10 @ 1030 |
| | 9 @ 1030 |
| Filter Pressure - Outlet (psig): | |
| Oil Level in Tank (inches): | <u> </u> |
| OP-4 meter reading (gallons): | |
| OMW-9 meter reading (gallons): | |
| Change Filters: | Yes No |
| Procedures: | |
| | |
| Observations: | |
| | |
| Backwash Primary Carbon Canisters: | Yes No |
| Is holding tank half empty? | <u> pa</u> |
| Duration of backwashing: | 20 mins |
| Observation of Effluent: | Clear |
| Inspection and Cleaning of Pumps: Requires | |
| Wells Operating? Cleaning? Comn | nents |
| ORW-1 UKI (M) | |
| ORW-2 (16) | |
| ORW-3 | |
| OMW-9 | |
| OP-4 Mes | |
| | |

OPERATION, MAINTENANCE & MONITORING CHECKLIST

Union Pacific Railroad - Oakland Trailer-on-flat-car (TOFC) railyard 1717 Middle Harbor Road, Oakland, California

| Check Oil Level: Change Oil in Compressor every 3 months: Sampling: Sample Sampling Frequency Analytes Method Method Midpoint Monthly BTEX 8020 3 - 40 ml vials with HCl 4 degree Celcius Influent Quarterly BTEX 8020 3 - 40 ml vials with HCl Effluent January, April, TPH-D 8015M 1 - 1 liter amber glass 4 degree Celcius Performed during this visit? Yes | |
|--|-------------|
| Check Oil Level: Change Oil in Compressor every 3 months: Sampling: Sample Sampling Prequency Analytes Method Me | |
| Check Oil Level: Change Oil in Compressor every 3 months: Sampling: Sample Sampling Frequency Analytes Method Method Midpoint Monthly BTEX 8020 3 - 40 ml vials with HCl 4 degree Celcius Influent January, April, TPH-D 8015M 1 - 1 liter amber glass 4 degree Celcius Performed during this visit? Yes | |
| Sampling: Sample Sampling EPA Sampling Location Frequency Analytes Method Method Midpoint Monthly BTEX 8020 3 - 40 ml vials with HCl 4 degree Celcius Influent Quarterly BTEX 8020 3 - 40 ml vials with HCl Effluent January, April, TPH-D 8015M 1 - 1 liter amber glass July, October Yes | |
| Sampling: Sample Sampling EPA Sampling Location Frequency Analytes Method Method Midpoint Monthly BTEX 8020 3 - 40 ml vials with HCl 4 degree Celcius Influent Quarterly BTEX 8020 3 - 40 ml vials with HCl Effluent January, April, TPH-D 8015M 1 - 1 liter amber glass July, October Yes | |
| Sample Sampling Location Frequency Analytes Method Method Midpoint Monthly BTEX 8020 3 - 40 ml vials with HCl 4 degree Celcius Influent Quarterly BTEX 8020 3 - 40 ml vials with HCl Effluent January, April, July, October TPH-D 8015M 1 - 1 liter amber glass 4 degree Celcius Performed during this visit? Yes | |
| Location Frequency Analytes Method Method Midpoint Monthly BTEX 8020 3 - 40 ml vials with HCl 4 degree Celcius Influent Quarterly BTEX 8020 3 - 40 ml vials with HCl Effluent January, April, TPH-D 8015M 1 - 1 liter amber glass July, October 4 degree Celcius Performed during this visit? Yes | |
| Location Frequency Analytes Method Method Midpoint Monthly BTEX 8020 3 - 40 ml vials with HCl 4 degree Celcius Influent Quarterly BTEX 8020 3 - 40 ml vials with HCl Effluent January, April, July, October TPH-D 8015M 1 - 1 liter amber glass 4 degree Celcius Performed during this visit? Yes | |
| Influent Quarterly BTEX 8020 3 - 40 ml vials with HCl Effluent January, April, TPH-D 8015M 1 - 1 liter amber glass 4 degree Celcius Performed during this visit? Yes | |
| Influent Quarterly BTEX 8020 3 - 40 ml vials with HCl Effluent January, April, TPH-D 8015M 1 - 1 liter amber glass July, October 4 degree Celcius | |
| Effluent January, April, July, October TPH-D 8015M 1 - 1 liter amber glass 4 degree Celcius Performed during this visit? Yes | |
| July, October 4 degree Celcius Performed during this visit? Yes | |
| Performed during this visit? Yes | |
| | |
| | |
| IV. Comments | |
| | |
| | |
| | • |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |

If no answer, dial "0" for operator and request a page.

| Inspection Date: 11 33/49 | |
|---|---------------------------------|
| Inspector's Name: 135 wt | Company: Cou |
| —————————————————————————————————————— | |
| THIS WISDOCKT STOCKET | |
| UPRR Person Notified: | Time: |
| Reason for Visit: | |
| Weather Conditions: Cook 505 | |
| Record status as found and any | y repairs/adjustments performed |
| Treatment System General Inspection/Readings: | |
| System Operating? | Yes No |
| System Readings: | • |
| | |
| Signet Volume (gallons): (5364 | (80 |
| Neptune Volume (gallons): 7349 | 8990 |
| Flow Rate thru Carbon (gallons/minute): | |
| Filter Pressure - Inlet (psig): | .11 @ 1515 |
| Filter Pressure - Outlet (psig): | 10 @ 1575 |
| Oil Level in Tank (inches): | 4) |
| OP-4 meter reading (gallons): | |
| OMW-9 meter reading (gallons): | <u></u> |
| Change Filters: | Yes |
| Procedures: | |
| Observations: | |
| Backwash Primary Carbon Canisters: | Yes No |
| Is holding tank half empty? | |
| Duration of backwashing: | |
| Observation of Effluent: | |
| VI | |
| Inspection and Cleaning of Pumps: Requires | |
| Wells Operating? Cleaning? Comments | 3 |
| ORW-1 | |
| ORW-2 | |
| ORW-3 | |
| OMW-9 | |
| OP-4 | |

| Chlorine Fe | ed System: | | | | |
|-------------------|-----------------------|--------------|--------------|--------------------------|----|
| Volume of Si | odium Hypochlorite | e Remaining: | 4 | 4 drums | |
| Period of Fe | ed System Operati | ion: | | ortuers | |
| | | | | | |
| Air Compres | ssor: | | | | |
| | | | | | |
| Check Oil Le | | m. O months. | | | |
| Change Oil ii | n Compressor eve | ry 3 months: | | | |
| Sampling: | | | | | |
| Camping. | | | | | |
| Sample | Sampling | | EPA | Sampling | |
| Location | Frequency | Analytes | Method | Method | |
| Midpoint | Monthly | BTEX | 8020 | 3 - 40 ml vials with HCl | |
| | <u> </u> | · | | 4 degree Celcius | _ |
| Influent | Quarterly | BTEX | 8020 | 3 - 40 ml vials with HCl | |
| Effluent | January, April, | TPH-D | 8015M | 1 - 1 liter amber glass | |
| | July, October | | <u> </u> | 4 degree Celcius | |
| Davis was a state | المعاملين ساملا سساسي | | | Yes | No |
| Performed a | uring this visit? | | | 163 | |
| IV. Commo | ante | | | | |
| iv. Commi | Citto | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| *** | | | | | |
| | | | | | |

Before departing site, please call Hoa Voscott at CDM (925-296-8071) If no answer, dial "0" for operator and request a page.

Appendix B

Monitoring Well Fluid Level Logs and Purge Forms

| Well | Time | DTP | DTW | Comments | Sample Well | DTB | Ar | nalsyis |
|-----------|-------------|-------------|-------|--------------------|-------------|----------|---------|-----------|
| | | | | | | | | |
| OMW-1 | 83\ | | 6.86 | | у | | TPH-D_ | BTEX/MTBE |
| OMW-2 | 900 | | 4.14 | | У | 9.92 | TPH-D | BTEX/MTBE |
| OMW-3 | 836 | | 5.78 | | у | 10.69 | TPH-D | BTEX/MTBE |
| OMW-4 | 1002 | 510 | 6.68 | | | | | |
| OMW-5 | 850 | | 5,25 | | у | 17.46 | TPH-D | BTEX/MTBE |
| OMW-6 | 1020 | | 7.44 | | у | 11.8 | TPH-D | BTEX/MTBE |
| OMW-7 | 925 | 4.70 | 7,41 | | | | | |
| OMW-8 | 955 | | 5,50 | | у | 17.46 | TPH-D | BTEX/MTBE |
| OMW-9 | 937 | 4,43 | 4,54 | | | | | |
| OMW-10 | 910 | | 5.74 | | у | 15.35 | TPH-D | BTEX/MTBE |
| ORW-1 | 918 | 4,33 | 4,41 | | | | | |
| ORW-2 | 930 | 4,53 | 8,51 | | | <u>,</u> | 1 | |
| ORW-3 | 100% | 4,24 | 4,30 | | | | | |
| OP-1 | 942 | 3,60 | 10.55 | | | | | |
| OP-2 | 852 | 413 | 5.54 | | | | | |
| OP-3 | 920 | 3,99 | 7.94 | | | ··· | | |
| OP-4 | 915 | | 4,37 | | | | | <u></u> |
| | | | | | | | | |
| OKUS-W1 | 1,4, | | 820 | | у | 18.8 | TPH-G/D | BTEX/MTBE |
| OKUS-W2 | 1032 | | 9.06 | | у | | | BTEX/MTBE |
| OKUS-W3 | 10319 | | 9 25 | | у | 22.09 | TPH-G/D | BTEX/MTBE |
| OKUS-W5 | | | | prolunt product | y - 1994 | | TPH-G/D | BTEX/MTBE |
| OKUS-W6 | | | | product | y - 1993 | | | BTEX/MTBE |
| OKUS-W7 | 1028 | | 5 48 | 1 | у | | | BTÉX/MTBE |
| OKUS-W8 | 1025 | 5 | 5.34 | | у | 14.8 | TPH-G/D | BTEX/MTBE |
| APL/UP-W1 | 1215 | | 10-27 | | у | 21.85 | TPH-G/D | BTEX/MTBE |
| APL/UP-W2 | 1218 | | 9.58 | | у | 16.98 | TPH-G/D | BTEX/MTBE |
| RW | 1045 | 275 | 21.1 | | у | | TPH-G/D | BTEX/MTBE |
| | | | | <u> </u> | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | ļ | |
| | | | | | | | | |

| Well No.: | <u>0MW-1</u> | | Sire: 170 | rtot Oak | iand (| TOPC | <u>)</u> [Do | te: 8/13/0 | 19 |
|---|--|------------------|-----------------------|---|--------------------------|------------------|---------------------------|------------------------------------|---------------------------------|
| Clients | Portof | | ud_ | Project I | No.: (C | 605 - | 2529 | 1 - GW. | UPTOFC |
| Well Casing | Diameter: | 2" 4" | 6" | Other: | Well Casin | g Matericl: | PVC | SS Othe | rı . |
| Well Heads | | ID (ppm): | | | | FID (ppm): | | | |
| Sampler: | 12. SN | arma | | | | | | | |
| Depth to W | n of Well (fe ater (feet): mn Height (fe | <u>ط</u> بر . | .07 .86 5.21 (x | 2" - 0.16 | Point: | | E (X) | Datum: _ | Minimum P Volume (Gallons |
| PURGE ME | THOD: | | | | | | | PVC [| - |
| Submersible | | Bladder Pi | _ | Hand Pump | | , | | Teflon [SS [Disposable [| |
| Pump Make | /Model: | | | opump 2 | | | Purge Equ | ipment Decon'd? | Y L N |
| Depth of P | ump Intake (i | feet): <u>5.</u> | 5 - 6.5 > 12' | Purge/Decc Contai | on Water Y (nerized? | ⊠ и□ | Container V | Type/ 55 olume? dr | um um |
| Time | Gallons | Temp. | рН | Conductivity (µ mhos/ cm) | Turbidity (NTUs) | DO (ppm) | Eh (mV) | Observation | ns/Comments |
| 850 | | | | | | | | murky, d | ull yellow |
| | 0.5 | 22.6 | 8.25 | 1.10 | 7 | 1.30 | 146 | fine sedin | |
| | 1.0 | 22.6 | 8.20 | 1.05 | 5 | 1.02 | 117 | | |
| | 1.5 | 22.b | 8.14 | 1.09 | 6 | 1.02 | -80 | | |
| | 2.0 | 22.6 | 8.11 | 1.06 | 11 | 0.51 | -24 | increase in | n sedimer |
| | 2.5 | 22.\ | 8.03 | 1.10 | 40 | 1.99 | -10 | | |
| 130 | 2.6 | 22.\ | B.04 | 1.11 | 41 | 80.1 | 8 | stop nunge rechange Sampling | batore |
| | | | | | | | | | |
| | | | | | | | | | |
| SAM | LE COLLEC | TION METHOD |) <u>i</u> | Metho | id: T | | ANALYSES: ntolner Type | | Preservativ |
| Pump: | Flow rat | te: | | 8015 | | 1-L A | | | |
| Baller: _ Other: _ | Type: Desc.: | | | 8020 | | 3 40- | ML VOI | <u> </u> | HCI |
| Sample ID: Dup. ID (If Sample Tim | appl.): | MW-1 | 00 | | | | | | |
| F | | | | | | | | | |

MONITORING WELL PURGE AND SAMPLING FORM

| Well No.: | OMW. | | | Profe | | - | Da | | |
|----------------------------------|---|--------------|--------------|----------------------------|-------------------------|---------------|----------------------|-----------------------------------|-------------------------------|
| Client: | Port | | iklan | L Project i | No.: 106 | 05-2 | 5291. | -6W. (| PLACE |
| Well Casing | J Dlameter: | 2" 4" | 6″ | Other: | | g Material: | PVC | SS Othe | |
| Well Heads | pace: P | ID (ppm): | | | | FID (ppm): | | | |
| Sampler: | Vos | cott | | | | | | | |
| Depth to W | n of Well (fe dater (feet): mn Height (fe | 41/n | 1.46 550, | 2" - 0.16 | Point: | = 1.9 | <u> </u> | Datum: | Minimum F Yolum (Gallon |
| HDGE ME. | TUOD | | | " - <u></u> | | | | | |
| PURGE ME Submersible | | Bladder Pu | mp 🔲 | Hand Pump |] Peristal | tle Pump [|] Bailer: | PVC Teflon SS Disposable | |
| Pump Make | /Model: | | <u></u> | | | | Purge Equi | pment Decon'd | ы П Х [†] S |
| Depth of P | ump intake (| feet): | | Purge/Deco Contair | n Water Y [nerized? | | Container V | Type/ olume? | : |
| Time | Gallons | C F) | рН | Conductivity (µmhos/cm) | Turbidity (NTUs) | DO (ppm) | Eh (mV) | Observatio | ns/Comments |
| 8 50 | Ö | | | | | | | | |
| 857 | 2 | 209 | 8.1 | 2.61 | 90 | 1, 1 | -132 | | ı |
| 907 | 4 | 20,7 | 7.9 | 2.67 | 21 | 1.2 | -140 | | |
| 916 | 6 | 20.6 | 8.0 | 2.68 | 169 | 1.8 | -141 | | ' |
| _' | ¥ | | | | | | | | |
| | | · | · | | | | | | |
| | | | | | | | | | |
| | | | | · | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | <u> </u> | | | | | | | | |
| | | | | | | | | | |
| SAMP | LE COLLEC | TION METHOD: | | | | | ANALYSES: | (Val | |
| ump: | Flow rat | te: | | Method Sol5 | | | ntainer Type Autean | | Preservati |
| aller: | Type: | Dis | | 8020 | | | 0 mL | | HCI |
| ther. | -1 P03646 | | | - | | | <u> </u> | | : |
| - | M 4 | I(A) = O | | | | | | | |
| ther: ample ID: up. ID (If | and t | 1W÷B | | | | | | | |

| Well No.: (| DMW -2 | 3 | Site: | TOFC | | | Do | ite: 8 | 3/13/99 |
|---------------------------------|-------------------------------|----------------|--------------|----------------------------|---------------------|-------------|--------------------------|--------------------------|------------------------|
| Cllent: | Port | of c | rate lan | Project i | No.: 106 | 05-2 | 5291- | | UPTOPS |
| Well Casing | Diameter: | 2" 4" | 6″ | Other: | Well Casin | g Material: | PVC | SS | Other: |
| Well Heads | pace: F | ID (ppm): | | | | FID (opm): | | | |
| Sampler: | Sha | v ma | | | | | | | |
| | n of Well (fe ater (feet): | | 0.69 5.2B | Reference | Point: | | | | atum:Minimum P |
| Water Colu | nn Height (f | eet); <u> </u> | <u> इ.स</u> | () 4" - 0.65 6" - 1.47 | Gal/feet | <u> 0.8</u> | 7 (x) 3 | = | 2.6 Volume (Gallons |
| PURGE ME | THOD: | | | | - | | | PVC | X |
| Submersible | Pump 🔲 | Bladder P | ump 🗌 | Hand Pump [| Peristal | ltic Pump |] Bailer: | Teflon SS Disposal | ble |
| Pump Make | /Model: | ·· | | · | | | Purge Equ | ilpment D | econ'd? Y N |
| Depth of P | ump Intake (| feet): | | Purge/Dec Contai | on Water Y | × N□ | Containe \ | r Type/ /olume? | 55-gallon drum |
| Time | Gallons | Jemp. F) | рН | Conductivity (umbos/cm) | Turbidity (NTUs) | DO (ppm) | Eh (mV) | | ervations/Comments |
| 935 | | | | | | | | SM | all |
| | 0.5 | 20.2 | 8.35 | 1.91 | 28 | 2.47 | -128 | leaf | fragments, |
| | 1.0 | 20.2 | 8.10 | 2.28 | 48 | 2.72 | -89 | fine: | ed ment |
| 0950 | 1.5 | 20.3 | 8.12 | 2.31 | 100 | 2.70 | -93 | 1 | chaide and zan |
| | | | | | | | | | |
| | | | | | | | | | |
| | <u> </u> | ļ | | | | | <u> </u> | | |
| | | | | | | | <u> </u> | ļ | |
| | | | | | | | <u></u> | | |
| | | | | | l. <u> </u> | | <u> </u> | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | 1 | 1 | | | | CA 401 E | ANAL VEES | | |
| SAM | PLE COLLEC | TION METHO | <u>D:</u> | Metho | od: | | ANALYSES ontainer Typ | | Preservotiv |
| Pump: [Baller: 5 | ☐ Flow ro ☑ Type: | ıte: | | 8015 | | | Amber | | |
| 723 | Desc.: | | | 8020 | | 3 4 | onl JOA | <u> </u> | HCI |
| Other: [| | 4W-3 | | | | | | | |
| _ | 01 | <u> </u> | | | | | | | 1 |
| Other: L Sample ID: Dup. ID (If | | 1010 | | | | | | | |

| | <u>omw</u> | | | rt of Oa | | | | te: 8 13 | |
|-----------------------------|---------------------------------------|-------------------|----------------------|-------------------------------------|---------------------------------------|---------------------------------------|-------------------|-----------------------------------|-----------------------------|
| • | ort of | | doud. | | [| | | GW. UP | |
| Well Casing | · · · · · · · · · · · · · · · · · · · | (2") 4" | 6" | Other: | Well Casin | g Material: | (Pvc) | SS Othe |)T: |
| Well Heads | | ID (ppm): | | | | FID (ppm): | | | |
| Sampler: Y |). Sharn | 44 | | | | · · · · · · · · · · · · · · · · · · · | | | |
| Total Depth Depth to W | of Well (fegter (feet): | | 5.3 <u>5</u> 5.74 | | Point: | | | Datum: | |
| Water Colyn | nn Height (f | . (eet): | 7.61 o | 2" - 0.16 4" - 0.65 6" - 1.47 | Gal/feet | <u> 1.5</u> | <u>2</u> (x) 3 | <u> 4.b</u> | Minimum Volum (Gallor |
| PURGE MET | | Bladder P | ump 🔲 | " | Perista | ltic Pump 🔀 | Bailer: | PVC Teflon SS Disposable | |
| Pump Make | /Model: | _ beste | in bec | pump 2 | | | Purge Equ | pment Decon'd | у Г Пи |
| Depth of Pu | imp Intake (| feet): <u>b'-</u> | • | Purge/Deco Contai | on Water Y) nerized? | X N | Container V | Type/ 55 folume? 3 | -gallon run |
| Time | Gallons | C F) | pН | Conductivity (#mhos/cm) | Turbidity (aUTM) | DO (ppm) | Eh (mV) | Observatio | ns/Comment |
| 1020 | - | - | | - - | _ | | _ | char, sligh | + yellow + |
| | 0.5 | 21.6 | 8.14 | 1.97 | 0 | 0.35 | -164 | | 7 |
| · | ۱. ۵ | 21.6 | 8.05 | 1.48 | 0 | 0.19 | -118 | | |
| | 1.5 | 21.7 | 7.99 | 2.11 | 0 | 0.13 | -172 | | |
| · | 2.0 | 21.5 | 7.96 | 2.13 | O | 0.45 | - 177 | # bean o | age with |
| | 3.5 | | | | <u> </u> | 2.05 | -165 | # begin p | Sallon |
| | 4.0 | 21.8 | 7.95 | 2.14 | D | 1.27 | -155 | sheen on | aroundwy |
| | 4.5 | 21.6 | 7.95 | 2.14 | 0 | 0.81 | -159 | | V |
| 1055 | 6.0 | 21.6 | 7.46 | 2.10 | 8 | 0.34 | -166 | | |
| | | | | | | | | | |
| | | | | | · | | | | |
| SAMP | LE COLLEC | TION METHOD |) <u>i</u> | | · · · · · · · · · · · · · · · · · · · | | ANALYSES: | | 1,2 |
| ^ր սութ։ <u>[</u> | Flow ra | te: | | Metho BOLS | d: | | ntainer Type Amk | | Preservat |
| Saller: [Other: [| Type: Desc.: | | - | 8020 | | | ton L | | HCI |
| iample ID: | - | IW-10 | | | | | | | |
| omple io: Jup. ID (If o | ibhrit | | (1120) | | | | | | - |
| Sample Time | | | | | | | | | <u></u> |
| DW | | W - (2 | | RINSATE W PURGE ONITORINC | - PERIS WELL F | THATIC (PURGE A | pump/s ND SAN | ILIAN TO | JBM6 DRM |

| Well No.: (| -wme | 5" | Site: L | PTOFC | | | Da | ite: 8- | 13-99 |
|-----------------------------|----------------------------|-------------|---------------|-----------------------|-----------------------|--------------|-----------------------------|-----------------------------------|-----------------------------------|
| Client: Pa | ort o | f Oak | land | Project N | 10: 106 | 05-29 | 5291- | 6w. c |)PTOFC |
| Well Casing | Diameter: | 2" 4" | 6" | Other: | ł. | ng Material: | PVC | | other: |
| Well Headsp | qce: P | ID (ppm): | _ | • | | FiD (ppm): | - | | |
| Sampler: | Sha | who | | | | | | | |
| Total Depth Depth to Wa | iter (feet): | . 15 | 7.46 5.25, | 2" - 0.16 | > | <u> 1.95</u> | | | Minimum Po Yolume (Gatlons) |
| PURGE MET | HUD | | | | | | | | [] |
| Submersible | | Bladder Pi | nwb 🔲 | Hand Pump |] Peristo | iltic Pump 🗌 |] Baller: | PVC Teflon SS Disposable | |
| Pump Make/ | 'Model: | | | , | | | Purge Equ | ipment Deco | n'd? Y □ N □ |
| Depth of Pu | mp Intake (| feet): | | Purge/Deco Contair | n Water Y nerized? | □ n □ | Container V | Type/ olume? | |
| Time | Gallons | Temp. | pН | Conductivity | Turbidity (NTUs) | DO (ppm) | Eh (mV) | Observo | atlons/Comments |
| 1115 | - | | | | | | | <u></u> | |
| 1125 | 2. | 19.9 | 8.17 | 3.24 | 431 | 2.28 | -110 | walde | 4 let rechus |
| 1215 | 3 | \9.9 | 6.73 | 3.50 | \77 | 1.5) | -98 | | |
| | | | | | | | | | |
| | | | | | · | | | | |
| | | | | | · | | | <u> </u> | |
| | | | | | | | | | |
| SAMPI | LE COLLEC | TION METHOD | <u>);</u> | | | | ANALYSES: | | |
| Pump: Baller: L | Flow ra Type: Desc.: | te: | sp | Method SOLO | 5 | | ntainer Type Awher V6 | | Preservative |
| Sample ID: Dup. ID (If a | ıppl.); | N·5" .15 | | | | | | | |
| DM | | | MC | NITORING | WELL I | PURGE A | ND SAN | 1PLING | FORM |

| Well No.: | omw- | Ь | Sites | UPTOFC | - | | Da | ter 8-0 | 3-98 |
|-----------------------|-------------------------------|------------------|--------------|-------------------------------------|--------------------------|--------------------|----------------|----------------------------|-----------------------------------|
| Client: 1 | Pont | of oc | لصمحلعل | Project 1 | No.: 106 | 505 ~ 2 | 25291 | -6w. | OP TOFC |
| Well Cosing | Diameter: | 2") 4" | 6" | Other: | 1 | g Material: | PVC | SS Othe | 1 |
| Well Heads | pace: P | ID (ppm): | | - | | FID (ppm): | | | |
| Sampler: | P. 51 | varma. | | | | | | | ! |
| • | n of Well (fe ater (feet): | ~ · · · · | 1.80 7.44 | | Point: | | | Datum: . | |
| Water Colu | mn Height (f | eet): | 4.3b o | 2" - 0.16 4" - 0.65 6" - 1.47 |) Gal/feet | = 0.7 | E (X) O | _ 2.1 | Minimum Pu Volume (Gailons) |
| PURGE ME | THOD: | | | | | | | PVC | _ |
| Submersible | | Bladder P | 'ump 🔲 | Hand Pump |] Peristal | tic Pump |] Bailer: | Teflon SS Disposable | |
| Pump Make | /Model: | | | | | | Purge Equi | pment Decon'd | Y 🔲 N 🗀 |
| Depth of P | ump Intake (| feet): | | Purge/Deco Contai | on Water Y (nerized? | Пи | Container V | Type/otume? | |
| Time | Gallons | Temp. (C / F) | рH | Conductivity (£mhos/cm) | Turbidity (NTUs) | DO (ppm) | Eh (mV) | Observatio | ns//Comments |
| 1135 | | | | - | | | | | |
| | 0.5 | 19.3 | 6.75 | 4.00 | 54 | 1.12 | -188 | | |
| | 1.5 | 18.9 | 6.70 | 3.70 | 401 | 1.47 | -164 | | |
| 1155 | 2.5 | 18.8 | 6.66 | 3.63 | <u>''</u> 342 | 0.95 | -162 | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | - | | | | | | |
| | | | | | | | | | |
| | | · | | | | | | | |
| | | | <u> </u> | | | | | | |
| | | | <u> </u> | | | | | | ···· |
| CANA | N E 601 L E0 | TION METHO | . | | | SAMPI F | ANALYSES: | | |
| _ | _ | TION METHOI | Zi. | Metho | | | ntainer Type | /Vol. | Preservativ |
| Pump: [Baller: [] | _} Flow ra Z Type: | te: | | 8019 | | <u> </u> | _ Amb | | |
| Other: | Desc.: | | | 802 | 2 | 3-6 | tomb | VOAS | HCI |
| Sample ID: | 01 | 1W-P | | ļ | | | | | |
| Dup. ID (If | ١. | 155 | | <u> </u> | | | | | - |
| Sample Tim | ie: | | | L | | | <u> </u> | | |

| Well | Time | DTP | DTW | Comments | Sample Well | DTB | An | alsyis |
|-------------|------|------|-------|----------|-------------|---------|---------|-----------|
| | | | | | | | | |
| OMW-1 | 817 | | 7.20 | | | | | |
| OMW-2 | 903 | | 4.40 | | | | | |
| OMW-3 | 820 | | 5.58 | | | | | |
| OMW-4 | 1012 | 5.55 | 7.31 | | | | | |
| OMW-5 | 908 | | 6.22 | | | | | |
| OMW-6 | 1263 | | 5-91 | | | | | |
| OMW-7 | 1019 | 5.58 | 8.24 | | | | | - |
| OMW-8 | 827 | | 6.04 | | | | | |
| OMW-9 | 945 | | 8.57 | | | | | |
| OMW-10 | 835 | | 6.21 | | | | | |
| ORW-1 | 842 | | 5.20 | | | | | |
| ORW-2 | 9.50 | | 9.55 | | | | | |
| ORW-3 | 1008 | 3.95 | 4.05 | | | | | |
| OP-1 | 1000 | 2.50 | 4.70 | | | | | |
| OP-2 | 912 | | 6.22 | | | | | |
| OP-3 | 84B | | 9.16 | | | | | |
| OP-4 | 854 | | 9.20 | | | | | |
| | | | | | | | | |
| OKUS-W1 | 1222 | | 8.47 | | | | | |
| OKUS-W2 | 1217 | | 9.27 | | у | 22.33 | TPH-G/D | BTEX/MTBE |
| OKUS-W3 | 1220 | | 9.58 | | у | 22.09 | TPH-G/D | BTEX/MTBE |
| OKUS-W5 | | | | | | | | |
| OKUS-W6 | | | | | | | | |
| OKUS-W7 | 925 | | 5.8(| | | | | |
| OKUS-W8 | 922 | | 5.68 | | | | | |
| APL/UP-W1 | 1320 | | 10.06 | | у | 21.85 | TPH-G/D | BTEX/MTBE |
| APL/UP-W2 | 1 | | 9.14 | | У | 16.98 | TPH-G/D | BTEX/MTBE |
| RW | 1445 | W | 9.26 | | | | , | |
| | | | | | | | | |
| | | | | | | | | |
| Va. 1920, , | | | | | | | | |
| | | | | | | | | |
| | | . | | | | | , | |

N:\TEMP\

environmental engineers, scientists, planners, & management consultants

MONITORING WELL PURGE AND SAMPLING FORM

N:/TEMP/

Appendix C

Analytical Laboratory Reports and Chain of Custody Records



Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900, Fax (510) 486-0532

Laboratory Number 140345

Camp, Dresser & McKee 1 Walnut Creek Center 100 Pringle Ave, Suite 300 Walnut Creek, CA 94596

Project#: 10605

Location: Port Of Oakland

Lab ID Sample ID 140345-001 INFLUENT EFFLUENT 140345-002 140345-003 MIDPOINT

I certify that this data package has been reviewed for technical correctness and completeness. Please see attached narrative for a discussion of any analytical problems related to this sample Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures.

The case narrative is an integral and inseparable part of this report.

Signature:

Title: Operation

Signature:



Lab#: Client: 140345

Camp, Dresser & McKee

Project#: 10605

Location: Port of Oakland

Receipt Date: 07/07/99

CASE NARRATIVE

This report contains sample results and batch QC for three water samples which were received, cold and intact, from the above referenced project on July 7, 1999.

BTXE: No analytical problems were encountered.

TPH/Extractables: These extracts were treated with silica gel prior to analysis, to remove potential biogenic interferences. The hydraulic fluid range was quantitated using a single-point calibration, the diesel and motor oil ranges were quantitated using a five-point calibration.

The blank spike and blank spike duplicate were inadvertently not spiked with the surrogate. The diesel spike recoveries and sample surrogate recoveries are within acceptance limits, so the quality of the data should not be affected.

No other analytical problems were encountered.

CHAIN OF CUSTODY FORM

Page ___of ___

DATE/TIME

DATE/TIME

| | | | /! | | 711 | | | | | | | 001.011 | | | | - | | | | | | |
|----------------------|---|--------------------------|------|----------------|---------------------|--------------------|-----|-------------------|----------|----------|--------------|-----------------------|--------------|----------|-------------|-----------|----------|--------------|-------------------------|---------------|-------------|---------|
| | & Tomp | y Since 1878 | | | | | | | | | | C&T 46345 | | _ | | | Ana | lyse | es | | | i Co |
| - | 2323 Fifth S Berkeley, C (510)486-09 (510)486-09 | A 94710 000 Phone | | Ī | 5 | Sampler: | | Vc | م ک | ot | | | | cleaun | | | | - Appendix | - | | | 0.0 |
| Project No: | 10605 | | | _ | F | Report To: | | 1/c | محد | 4 ه | <u></u> | | | 1 | , | | | | | | | · · |
| | ne: BrL | | | | | Company : | | | Du | | | | | Silick | | | | | | | | |
| | .: TSO. | | | | | Telephone: | | 9 | 25 | - (| 291 | 6-8100 | 4 | | | | | | | | | |
| Turnaround | d Time: S | Fandour | | | | Fax: | | | | | _ | 3-4174 | ا بر | 3 | | | | | | | | 1 |
| | | | + | latri | X | | - | res | erv | ativ | е | | - <u> </u> | .3 | 1 | | | | | ļ | ĺ | |
| Laboratory Number | Sample ID. | Sampling Date Time | Soil | Water Waste | | # of Containers | HCL | H ₂ SO | HNO3 | ICE | | Field Notes | Brex | Diest | | | | | | | | |
| | INFLUENT | 7/7 930 | | 년 | | 3 | 7 | | | | | | 1 | 1 | | _ _ | - | | \vdash | \dashv | | - |
| | BPFWANT | - 937 | | | Ш | 3 | 4 | | | | | | 1 | 1 | | _ - | - - | ┼- | ┼┼ | | +- | - |
| >3_ | MIDTOINT | 1 940 | 11 | V. | $\sqcup \downarrow$ | 2. | - | | | | <u> </u> | | 1 |] | - | + | - | +- | ╁ | + | +- | - |
| | | | + | - | - | | | - | | | - | | ╫ | - | - | \dashv | + | + | ++ | \dashv | + | - |
| 0 | | 1 | + | + | ++ | | | | - | | | | | - | \dashv | _ | + | +- | + | \dashv | + | † |
| S a o | <u> </u> | | ╁┤ | _ | \forall | | _ | | - | | | | +- | | | 1 | | † | | \top | 1 | 1 |
| T | | | + | \vdash | $\dagger \dagger$ | | | ╁ | | - | | | + | - | | | | | | \Box | | |
| 0 | | | | \top | †† | | | 1 | | | | | | | | | | | | | | _ |
| Ω | | | | | | | | | | | | | | | L | \perp | _ | ╀ | $\downarrow \downarrow$ | | ┿ | 4 |
| Ø | | | | | | | | | | | | | | _ | | - | | _ | + | - | - | - |
| | | ļ <u>.</u> | | | \sqcup | | _ | _ | | | <u> </u> | | - | - | - | - | - - | ╫ | ++ | + | _ | |
| N | | <u>l</u> | _L_ | | | * | - | <u> </u> | <u> </u> | <u> </u> | Ļ | | ╁ | <u> </u> | i | DEC | EIV | | DV. | | | -} |
| Notes: | | | | | | | L | | | | | ELINQUISHED BY: | <u>-</u> - | _ | | 7 | /EIV | יש | <u> </u> | -/ | -/- | 1 19 |
| | TSO | -19 | | | | (| | \leq | H | 341 | b | 7/7 @ 955 DATE/TIM | E 1 | n | 1/ | <u>/~</u> | ar | J-C | <u>-041</u> | ETIN | HE HE | 209 |
| | | | | | | | | | | | | DATE/TIM | E | | | | <u> </u> | | | re/TIN | | |

Signature



BTXE

Client: Camp, Dresser & McKee

Project#: 10605

Location: Port Of Oakland

Analysis Method: EPA 8021B

Prep Method: EPA 5030

| Sample # Client ID | Batch # | Sampled | Extracted | Analyzed | Moisture |
|---------------------|---------|----------|-----------|----------|----------|
| 140345-001 INFLUENT | 49235 | 07/07/99 | 07/10/99 | 07/10/99 | |
| 140345-002 EFFLUENT | 49235 | 07/07/99 | 07/10/99 | 07/10/99 | |
| 140345-003 MIDPOINT | 49235 | 07/07/99 | 07/10/99 | 07/10/99 | |

Matrix: Water

| Analyte Diln Fac: | Units | 140345-001 1 | 140345-002 1 | 140345-003 1 | |
|----------------------|-------|-----------------|-----------------|-----------------|-------------|
| Benzene | ug/L | 2.4 | <0.5 | <0.5 | |
| Toluene | ug/L | <0.5 | <0.5 | <0.5 | |
| Ethylbenzene | ug/L | 1.2 | <0.5 | <0.5 | |
| m,p-Xylenes | ug/L | 0.82 | <0.5 | <0.5 | |
| o-Xylene | ug/L | <0.5 | <0.5 | <0.5 | |
| Surrogate | | | | | |
| Trifluorotoluene | %REC | 92 | 94 | 95 | |
| Bromofluorobenzene | %REC | 101 | 101 | 101 | |

Lab #: 140345

BATCH QC REPORT



BTXE

Client: Camp, Dresser & McKee

Project#: 10605

Location: Port Of Oakland

Analysis Method: EPA 8021B

Prep Method: EPA 5030

METHOD BLANK

Matrix: Water Batch#: 49235 Units: ug/L

Diln Fac: 1

Prep Date: 07/09/99 Analysis Date: 07/09/99

MB Lab ID: QC02337

| Analyte | Result | |
|--------------------|--------|-----------------|
| Benzene | <0.5 | |
| Toluene | <0.5 | |
| Ethylbenzene | <0.5 | |
| m,p-Xylenes | <0.5 | |
| o-Xylene | <0.5 | |
| Surrogate | %Rec . | Recovery Limits |
| Trifluorotoluene | 90 | 51-143 |
| Bromofluorobenzene | 93 | 37-146 |

1414



BTXE

Camp, Dresser & McKee Client:

Analysis Method: EPA 8021B

Project#: 10605

Prep Method:

EPA 5030

Location: Port Of Oakland

BLANK SPIKE/BLANK SPIKE DUPLICATE

07/10/99

Matrix: Batch#: Water 49235 Prep Date: Analysis Date:

07/10/99

Units:

ug/L

Diln Fac: 1

BS Lab ID: QC02341

| Analyte | Spike Added | BS | %Rec # | Limits |
|--------------------|-------------|--------|--------|--------|
| Benzene | 20 | 18.92 | 95 | 65-111 |
| Toluene | 20 | 18.4 | 92 | 76-117 |
| Ethylbenzene | 20 | 19.63 | 98 | 71-121 |
| m,p-Xylenes | 40 | 40.14 | 100 | 80-123 |
| o-Xylene | 20 | 20.42 | 102 | 75-127 |
| Surrogate | %Rec | Limits | | |
| Trifluorotoluene | 96 | 51-143 | | |
| Bromofluorobenzene | 101 | 37-146 | | |

BSD Lab ID: QC02342

| Analyte | Spike Added | BSD | %Rec # | Limits | RPD # | Limit |
|--------------------|-------------|-------|--------|--------|-------|-------|
| Benzene | 20 | 18.88 | 94 | 65-111 | 0 | 10 |
| Toluene | 20 | 18.13 | 91 | 76-117 | 1 | 10 |
| Ethylbenzene | 20 | 19 | 95 | 71-121 | 3 | 11 |
| m,p-Xylenes | 40 | 39.01 | 98 | 80-123 | 3 | 10 |
| o-Xylene | 20 | 19.76 | 99 | 75-127 | 3 | 1.1 |
| Surrogate | %Rec | Limit | s | | | |
| Trifluorotoluene | 95 | 51-14 | 3 | | | |
| Bromofluorobenzene | 100 | 37-14 | 6 | | | |

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 5 outside limits

Spike Recovery: 0 out of 10 outside limits



TEH-Tot Ext Hydrocarbons

Client: Camp, Dresser & McKee

Project#: 10605

Location: Port Of Oakland

Analysis Method: EPA 8015M

Prep Method: EPA 3520

| Sample # Client ID | Batch # | Sampled | Extracted | Analyzed Moisture |
|---------------------|---------|---------|-----------|-------------------|
| 140345-001 INFLUENT | 49238 | | 07/09/99 | 07/13/99 |
| 140345-002 EFFLUENT | 49238 | | 07/09/99 | 07/13/99 |

Matrix: Water

| Analyte U | Jnits | 140345- 1 | 001 | 140345-002 1 | |
|---|----------------------|----------------------|-----|---------------------|--|
| Diesel C10-C24 Motor Oil C24-C36 Hydraulic Fluid,C22-50 | ug/L ug/L ug/L | 1900 <300 <300 | L | <50 <300 <300 | |
| Surrogate | | | | | |
| Hexacosane | %REC | 61 | | 61 | |

L: Lighter hydrocarbons than indicated standard

Sample Name: 140345-001sg,49238 : G:\GC13\CHB\193B009.RAW

FileName : BTEH151.MTH

Method Start Time : 0.01 min Scale Factor: 0.0

End Time : 31.91 min

Plot Offset: -23 mV

Sample #: 49238

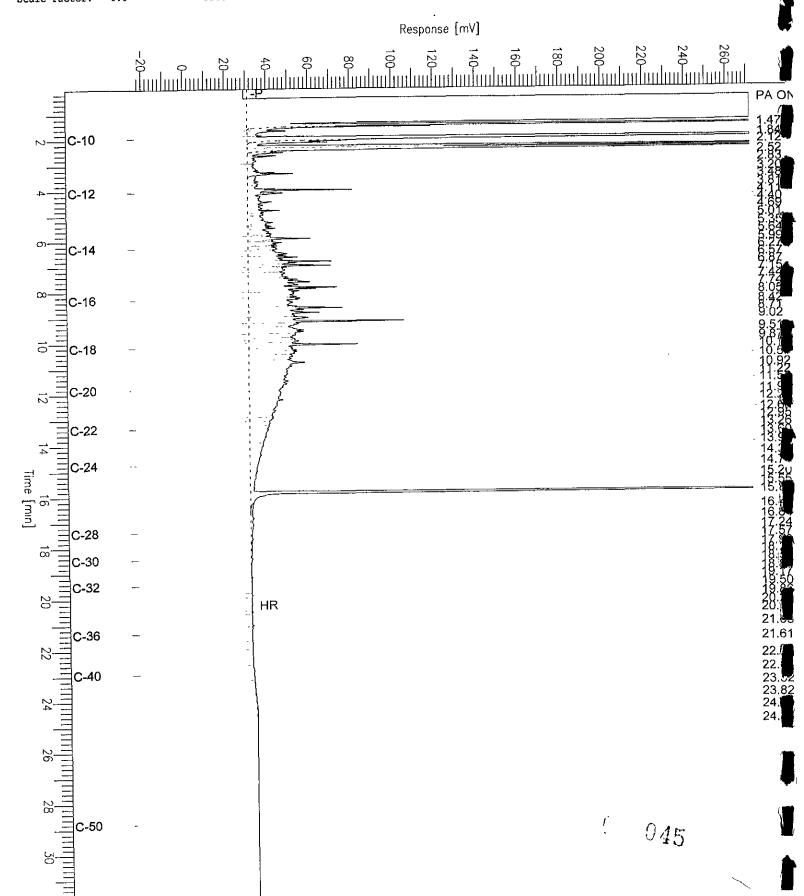
Date: 7/13/99 09:40 AM

Time of Injection: 7/13/99 12:16 AM

High Point : 271.67 mV

Page 1 of 1

Low Point: -23.02 mV Plot Scale: 294.7 mV



Page 1 of 1 Sample #: 500mg/l Date : 7/12/99 11:37 AM Sample Name : ccv,99ws7711,dsl : G:\GC13\CHB\193B002.RAW FileName Time of Injection: 7/12/99 10:40 AM : BTEH151.MTH High Point: 328,87 mV Method Low Point : 13.63 mV End Time : 31.91 min Start Time : 0.01 min Plot Scale: 315.2 mV Plot Offset: 14 mV Scale Factor: 0.0 diesel standard

Response [mV] PA ON C-10 C-12 C-14 C-16 C-18 C-20 C-22 C-24 -16.46 16.85 17.62 C-28 -18.48 C-30 - 19.18 19.87 C-32 20.52 21.14 -21.73C-36 --22.83 -23.34 C-40 23.83 24.31 24.85 25.48

046

C-50

Sample Name : ccv, 99ws7712, mo

: G:\GC13\CHB\193B003.RAW FileName

: BTEH151.MTH Method

Start Time : 0.01 min Scale Factor:

End Time : 31.91 min

Plot Offset: -3 mV

Sample #: 500mg/l

Date: 7/12/99 11:37 AM

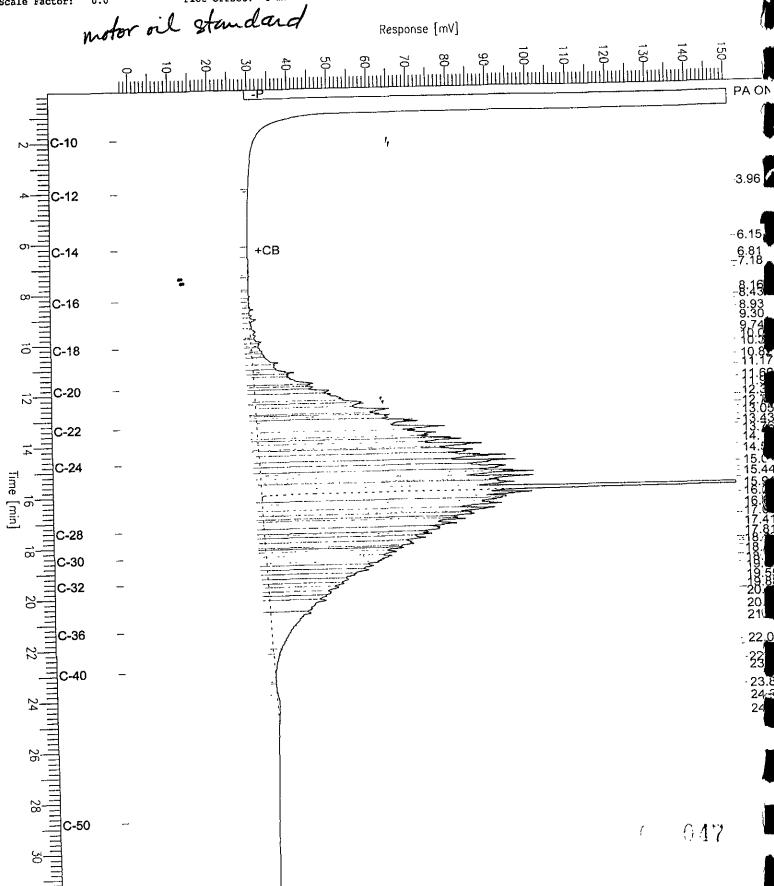
Time of Injection: 7/12/99 11:21 AM

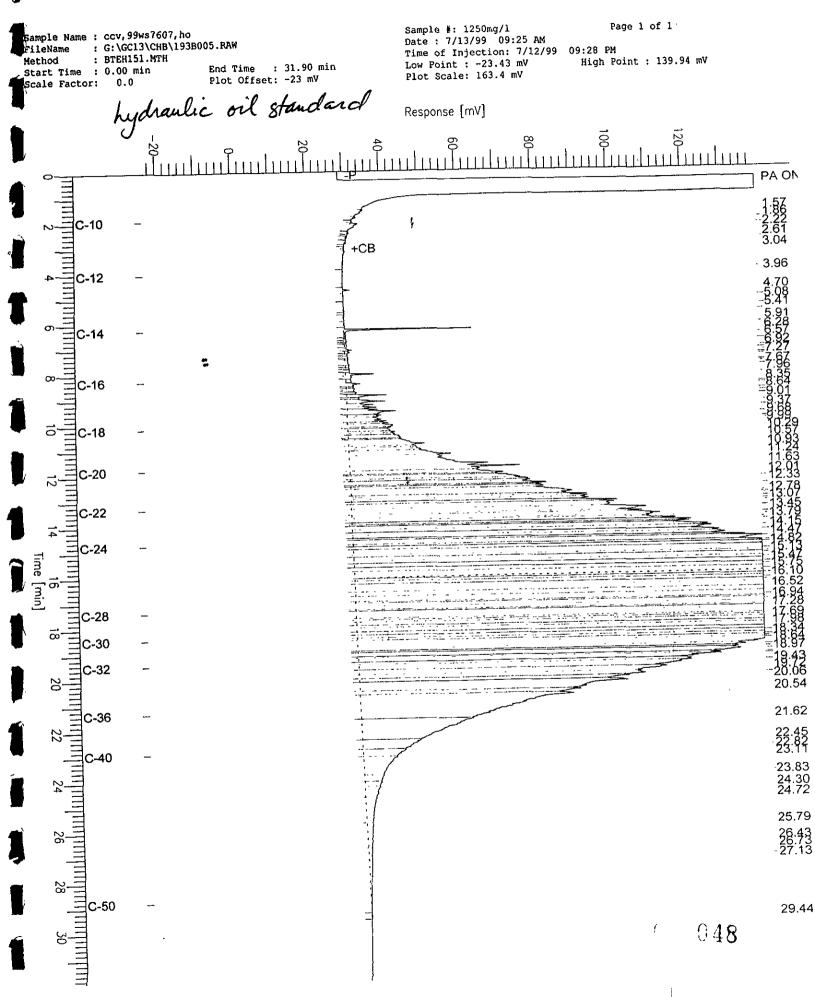
Low Point : -2.75 mV

High Point : 150.88 mV

Page 1 of 1

Plot Scale: 153.6 mV





BATCH QC REPORT

Lab #: 140345

Curtis & Tompkins, Ltd. Page 1 of 1

TEH-Tot Ext Hydrocarbons

Client: Camp, Dresser & McKee

Prep Method:

Analysis Method: EPA 8015M EPA 3520

Project#: 10605

Location: Port Of Oakland

METHOD BLANK

07/09/99

Matrix: Water Batch#: 49238 Prep Date: Analysis Date:

07/12/99

Units: ug/L Diln Fac: 1

MB Lab ID: QC02353

| Analyte | Result | |
|-------------------------|--------|-----------------|
| Diesel C10-C24 | <50 | |
| Motor Oil C24-C36 | <300 | |
| Hydraulic Fluid, C22-50 | <300 | |
| Surrogate | %Rec | Recovery Limits |
| Hexacosane | 82 . | 58-128 |



Lab #: 140345

BATCH QC REPORT

TEH-Tot Ext Hydrocarbons

Camp, Dresser & McKee Client:

Project#: 10605

Location: Port Of Oakland

Analysis Method: EPA 8015M

Prep Method:

EPA 3520

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix: Water Batch#: 49238 ug/L Units:

Diln Fac: 1

Prep Date: Analysis Date: 07/09/99

07/20/99

BS Lab ID: QC02354

| Analyte | Spike Adde | ed BS | %Rec # | Limits |
|----------------|------------|--------|--------|--------|
| Diesel C10-C24 | 2475 | 1457 | 59 | 50-114 |
| Surrogate | %Rec | Limits | | |
| Hexacosane | 0* | 58-128 | | |

BSD Lab ID: QC02355

| Analyte | Spike Added | BSD | %Rec # | Limits | RPD # | Limit |
|----------------|-------------|--------|--------|--------|---------------|-------|
| Diesel C10-C24 | 2475 | 1842 | 74 | 50-114 | 23 | 25 |
| Surrogate | %Rec | Limits | | | | |
| Hexacosane | 0* | 58-128 | 3 | | · <u>_</u> | |

[#] Column to be used to flag recovery and RPD values with an asterisk

RPD: 0 out of 1 outside limits

Spike Recovery: 0 out of 2 outside limits

^{*} Values outside of QC limits



Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900, Fax (510) 486-0532

ANALYTICAL REPORT

Prepared for:

Camp, Dresser & McKee 1 Walnut Creek Center 100 Pringle Ave, Suite 300 Walnut Creek, CA 94596

Date: 31-AUG-99

Lab Job Number: 141092 Project ID: 10605

Location: Port Of Oakland

Reviewed by:

Reviewed by:

This package may be reproduced only in its entirety.

CHAIN OF CUSTODY FORM

Page ____of ___(

| | | • | kins, Ltd | | 7 | | | | | | | | 007 | | | | | An | naly | ses | > | | |
|-------------------|---|--------------------|--------------------------|-----------------|----------|----------|--------------------|----------|-------------------|----------|----------|-----------|---------------------------|----------|---|-----------------|-----------|---------------------|---------------|-----------------|-------------|------|-----------------|
| Analy | 2323 l Berke | Fifth S ley, -C | CA- 94710 | 3 | - | | | | | | | | C&T 14/1092 | | | | | | | | | | |
| | | | 900 Phone 532 Fax | | | ; | Sampler: | | <u> </u> | 10- | su | <u>υτ</u> | | | | | | | ļ | | | | |
| Project N | o: | OPE |) <u>5</u> | | | | Report To: | | V | ،عر | 207 | 7 | | | | | | | | | | | |
| Project N | ame: | Port | - of Oahl | out | <u> </u> | - | Company : | | | 13 | щ | | | 3 | | | | | | İ | | | |
| Project P | | 1 50 | • | | | | Telephone: | | | | | | 296-807 | 30% | | | | ,] | | | | | |
| Turnarou | nd Time | : | Standard | | | | Fax: | | | | | | 937-4474 | | | | Ì | | Ì | | | | |
| | | | <u></u> | М | atri | x | | P | res | erv | ativ | e | | X | | | | | | | | | |
| Laborato Numbe | ry Samp | le ID. | Sampling Date Time | Soil | Waste | | # of Containers | HCL | H ₂ SO | HNO3 | BOI | | Field Notes | 13TEX | | | · | | | | | | |
| | MIDE | COG | - 8/24 | | 4 | | 3 | 1 | | | | | | <u>~</u> | | | | $\vdash \downarrow$ | 4 | 4 | _ | 1_ | \square |
| | | | 950 | Ц | | | <u> </u> | <u> </u> | | | | | | | | | | | \dashv | ᆜ- | + | - | 4 |
| | | | | \sqcup | | | | _ | | | ļ | | | | | | | | \dashv | + | + | - - | |
| <u> </u> | | | | Ц. | _ | | | <u> </u> | <u> </u> | | _ | | | _ | | | | \vdash | | | + | _ | + |
| 0 | | | | \sqcup | | \sqcup | | <u> </u> | | | <u> </u> | | | - | | | ,— | \vdash | \dashv | - - | + | + | + |
| <u>_</u> + - | | ····- | ļ | $\vdash \vdash$ | + | ┦╌┤ | | _ | <u> </u> | | _ | | | | | | | | \dashv | - | | - | + |
| т - - | <u>" </u> | | | - - | - - | ╂╌╂ | | | _ | | - | | | - | | \vdash | | \vdash | + | + | _ | ╁╴ | ┿ |
| 0 | | - | | ╁┼ | - - | ╂ | | - | | - | | ├─ | | - | | | \neg | | \dashv | 十 | \neg | +- | +-1 |
| pq | | · | | ╁┼ | ╅ | ╀ | | | | ├─ | | | | | | | | | 十 | 十 | 十 | 十 | $\dashv \dashv$ |
| a | | | | \vdash | ┪ | ┼╌╏ | | | | | | ├ | | | | | | | | 十 | | + | |
| | | | | | ╅ | H | | | <u> </u> | <u> </u> | | | | | | | | | | | \top | | |
| | | | | | \top | \Box | | | | | | | | | | | | | | \square | \prod | | |
| Notes: | • | | <u> </u> | · - 1- | | 1 | | | | | | RE | LINQUISHED BY: | | | | RE | CE | IVE | ים כ | /: , | | |
| | | TSO | -19 | | | | | < | _= | >> | H. | | aut 8/24/202 DATE/TIME | X | 1 | <u>۔</u> کے۔ | 25 | te | | E. | 4/9 ATE | 7 M | 1002 E |
| | | | | | | | | | | | | | DATE/TIME | | | | | | | | DATE | /TIM | E |
| • | | | | | | | | | | | | | DATE/TIME | | | | | | | Ε | DATE | /TIM | E |

Signature



BTXE

Client: Camp, Dresser & McKee

Project#: 10605

Location: Port Of Oakland

Analysis Method: EPA 8021B

Prep Method: EPA 5030

| Sample # Client ID | Batch # | Sampled | Extracted | Analyzed | Moisture |
|----------------------|---------|----------|-----------|----------|----------|
| 141092-001 MIDFLUENT | 50123 | 08/24/99 | 08/24/99 | 08/24/99 | |

Matrix: Water

| Analyte Diln Fac: | Units | 141092-001 | |
|----------------------|-------|------------|-------------|
| Benzene | ug/L | <0.5 | |
| Toluene | ug/L | <0.5 | |
| Ethylbenzene | ug/L | <0.5 | |
| m,p-Xylenes | ug/L | <0.5 | |
| o-Xylene | ug/L | <0.5 | |
| Surrogate | | | |
| Trifluorotoluene | *REC | 65 | |
| Bromofluorobenzene | %REC | 68 | |

BATCH QC REPORT



BTXE

Client: Camp, Dresser & McKee

Project#: 10605

Location: Port Of Oakland

Analysis Method: EPA 8021B

Prep Method: EPA 5030

METHOD BLANK Matrix: Water

Batch#: 50123

Units: ug/L Diln Fac: 1

Prep Date: 08/24/99 Analysis Date: 08/24/99

MB Lab ID: QC05752

| Analyte | Result | |
|--------------------|--------|-----------------|
| Benzene | <0.5 | |
| Toluene | <0.5 | |
| Ethylbenzene | <0.5 | |
| m,p-Xylenes | <0.5 | 1 |
| o-Xylene | <0.5 | |
| Surrogate | %Rec . | Recovery Limits |
| Trifluorotoluene | 99 | 51-143 |
| Bromofluorobenzene | 101 | 37-146 |

BATCH QC REPORT



BTXE

Client: Camp, Dresser & McKee

Project#: 10605

Matrix:

Location: Port Of Oakland

Water

50123

Analysis Method: EPA 8021B

EPA 5030 Prep Method:

BLANK SPIKE/BLANK SPIKE DUPLICATE

08/24/99 Prep Date:

08/24/99 Analysis Date:

Batch#: Units: ug/L Diln Fac: 1

BS Lab ID: QC05753

| Analyte | Spike Added | BS | %Rec # | Limits |
|-------------------------|-------------|--------|--------|--------|
| | 20 | 18.19 | 91 | 65-111 |
| Benzene | 20 | 18.75 | 94 | 76-117 |
| Toluene | 20 | 18.98 | 95 | 71-121 |
| Ethylbenzene | 40 | 40.48 | 101 | 80-123 |
| m,p-Xylenes o-Xylene | . 20 | 19.81 | 99 | 75-127 |
| Surrogate | %Rec | Limits | | |
| Trifluorotoluene | 103 | 51-143 | | |
| Bromofluorobenzene | 106 | 37-146 | | |

BSD Lab ID: QC05754

| Analyte | Spike Added | BSD | %Rec # | Limits | RPD # | Limit |
|-------------------------|-------------|-------|--------|--------|-------|-------|
| | 20 | 18.36 | 92 | 65-111 | 1 | 10 |
| Benzene | 20 | 19.17 | 96 | 76-117 | 2 | 10 |
| Toluene | 20 | 19.3 | 97 | 71-121 | 2 | 11 |
| Ethylbenzene | 40 | 41,17 | 103 | 80-123 | 2 | 1.0 |
| m,p-Xylenes o-Xylene | 20 | 20.06 | 100 | 75-127 | 1. | 11. |
| Surrogate | %Rec | Limit | :s | | | |
| Trifluorotoluene | 104 | 51-14 | 13 | | | |
| Bromofluorobenzene | 106 | 37-14 | 16 | | | |

[#] Column to be used to flag recovery and RPD values with an asterisk

RPD: 0 out of 5 outside limits

Spike Recovery: 0 out of 10 outside limits

^{*} Values outside of QC limits



Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900, Fax (510) 486-0532

ANALYTICAL REPORT

Prepared for:

Camp, Dresser & McKee 1 Walnut Creek Center 100 Pringle Ave, Suite 300 Walnut Creek, CA 94596

Date: 10-SEP-99

Lab Job Number: 141283 Project ID: 10605

Location: Port Of Oakland

Reviewed by:

Reviewed by:

This package may be reproduced only in its entirety.

CHAIN OF CUSTODY FORM

Page ___of ___

Analyses

Curtis & Tompkins, Ltd.

Analytical Laboratory Since 1878 2323 Fifth Street Berkeley, CA 94710 (510)486-0900 Phone (510)486-0532 Fax

| (0) | 0)400 0302 I ax | <u></u> |
|-------------|-----------------|------------|
| Project No: | 1000 | Report To: |

Project Name: Port of Oxidard
Project P.O.: TSO 19

Project P.O.: TSO 19
Turnaround Time: Standard

| C&T | 1 | 1283 |
|--------|---|------|
| LOGIN# | | |

Sampler: Voscoth

4264

Company: CAM

Telephone: (925) 296-3071

| Fax: | (925) | 433 | ~ | 4074 | |
|------|-------|-----|---|------|--|
| | | | | | |

| | | | ļļ | Ma | trix | . | I P | res | erv | ativ | re | | 一四 | Ų | , , | | | | į | ļ | ļ | |
|----------------------|------------|--------------------------|------|-------|--------|--------------------|-----|------|------|------|----|-----------------|--------------|---|----------|------------|----------|-----|--------|-----|----------|---|
| Laboratory Number | Sample ID. | Sampling Date Time | Soil | Water | Waste | # of Containers | 건 | H2SO | HNO3 | ICE | | Field Notes | 18.T. | | / | | | | | | | |
| | ころうちょうい | 4/3 930 | 1 | l | 7 | 3 | 1 | | | | | | M | | | | | | | | \dashv | |
| | | | Т | Т | П | | Ī | | | | | | | | | L | | | | _ | | - |
| У | | | | | П | | | | | [| | | $oxed{oxed}$ | | | <u> </u> | | | | | \dashv | |
| - | | | T | Τ | П | | T | 1 | Π | Ī | | | | | | <u> </u> | | | | | \dashv | |
| 0 | | | T | T | П | | | Ī | | Ī | | | | | <u> </u> | | | | | | \dashv | _ |
| 7 + O | | | T | | П | | | | Γ | | | | | | | | _ | | | _ | \dashv | - |
| o a s | | | Τ | T | П | | T | П | | | | | | | <u> </u> | | | | | _ | _ | _ |
| F r U | | | T | | П | | | | | | | | | | <u> </u> | <u>L</u> _ | L | | \Box | | \dashv | |
| 0 | | | Τ | Τ | П | | П | | П | | | | | | | <u> </u> | | | | | \dashv | |
| Ω | | | T | 1 | П | | T | | П | | | | | | | L_ | | Ш | | | \dashv | |
| Ø | | | | | П | | T | | | | } | | | | <u> </u> | _ | | | | | | |
| | | | T | 十 | П | | Τ | | Τ | 1 | | | | | | | <u> </u> | | | | | |
| | | | T | T | \Box | • | | | | 1 | | | | | <u> </u> | <u>L</u> | | | | | | |
| Notes: | <u> </u> | | | | | ····· | | | | | R | ELINQUISHED BY: | | Λ | 1 | RE | CE | IVE | DE | 3Y: | | |

and built

T3619

9/3 @920 DATE/TIME

DATE/TIME

DATE/TIME

DATE/TIME

DATE/TIME



Camp, Dresser & McKee Client:

Project#: 10605

Location: Port Of Oakland

Analysis Method: EPA 8021B

Prep Method:

EPA 5030

| Sample # Client ID | Batch # | Sampled | Extracted | Analyzed | Moisture |
|---------------------|---------|----------|-----------|----------|------------|
| 141283-001 MIDPOINT | 50411 | 09/03/99 | 09/08/99 | 09/08/99 |] |

| Analyte Diln Fac: | Units | 141283-001 | |
|----------------------|-------|------------|---|
| Benzene | ug/L | <0.5 | |
| Toluene | ug/L | <0.5 | • |
| Ethylbenzene | ug/L | <0.5 | |
| m,p-Xylenes | ug/L | <0.5 | |
| o-Xylene | ug/L | <0.5 | |
| Surrogate | | | |
| Trifluorotoluene | %REC | 93 | |
| Bromofluorobenzene | %REC | 94 | |

BATCH QC REPORT



BTXE

Client: Camp, Dresser & McKee

Project#: 10605

Location: Port Of Oakland

Analysis Method: EPA 8021B

Prep Method:

EPA 5030

METHOD BLANK

Water

Matrix: Batch#:

50411

Units: ug/L Diln Fac: 1

Prep Date:

09/07/99

Analysis Date: 09/07/99

MB Lab ID: QC06942

| Analyte | Result | |
|--------------------|--------|-----------------|
| Benzene | <0.5 | |
| Toluene | <0.5 | |
| Ethylbenzene | <0.5 | |
| m,p-Xylenes | <0.5 | |
| o-Xylene | <0.5 | |
| Surrogate | %Rec | Recovery Limits |
| Trifluorotoluene | 83 | 51-143 |
| Bromofluorobenzene | 83 | 37~146 |

BATCH QC REPORT



BTXE

Camp, Dresser & McKee Client:

Project#: 10605

Location: Port Of Oakland

ug/L

Analysis Method: EPA 8021B

Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Water Matrix: 50411 Batch#:

Units:

Diln Fac: 1

Prep Date:

09/07/99

Analysis Date:

09/07/99

LCS Lab ID: QC06941

| Analyte | Result | Spike Added | %Rec # | Limits |
|--------------------|--------|-------------|--------|--------|
| Benzene | 19.45 | 20 | 97 | 65-111 |
| Toluene | 18.53 | 20 | 93 | 76-117 |
| Ethylbenzene | 19.84 | 20 | 99 | 71-121 |
| m,p-Xylenes | 39.73 | 40 | 99 | 80-123 |
| o-Xylene | 20.47 | 20 | 102 | 75-127 |
| Surrogate | %Rec | · Limits | | |
| Trifluorotoluene | 88 | 51-143 | | |
| Bromofluorobenzene | 89 | 37-146 | | |

[#] Column to be used to flag recovery and RPD values with an asterisk

^{*} Values outside of QC limits

Spike Recovery: 0 out of 5 outside limits

BATCH QC REPORT

BTXE



| Client: | Camp, Dresser & McKee | Analysis Method: | EPA 8021B |
|-----------|-----------------------|------------------|-----------|
| Project#: | | Prep Method: | EPA 5030 |

Location: Port Of Oakland

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

08/30/99 Sample Date: Field ID: ZZZZZZ 08/31/99 Received Date: Lab ID: 141256-004 09/07/99 Prep Date: Water Matrix: 09/07/99 Analysis Date: Batch#: 50411

ug/L Units: Diln Fac: 1

MS Lab ID: QC06944

| Analyte | Spike Added | Sample | MS | %Rec # | Limits |
|-------------------------|-------------|--------|-------|--------|--------|
| Benzene | 20 | 6.65 | 25.38 | 94 | 55-122 |
| Toluene | 20 | 0.53 | 18.65 | 91 | 63-139 |
| Ethylbenzene | 20 | 16.24 | 35.11 | 94 | 61-137 |
| - | 40 | 7.33 | 46.34 | 98 | 57-148 |
| m,p-Xylenes o-Xylene | 20 . | 2.87 | 23.44 | 103 | 70-141 |
| Surrogate | %Rec | Limits | | | |
| Trifluorotoluene | 93 | 51-143 | | | |
| Bromofluorobenzene | 95 | 37-146 | | | |

MSD Lab ID: QC06945

| Analyte | Spike Added | MSD | %Rec # | Limits | RPD # | Limit |
|--------------------|-------------|-------|--------|--------|-------|-------|
| Benzene | 20 | 25.37 | 94 | 55-122 | 0 | 10 |
| Toluene | 20 | 18.84 | 92 | 63-139 | 1 | 10 |
| Ethylbenzene | 20 | 35.01 | 94 | 61-137 | 0 | 1.0 |
| m,p-Xylenes | 40 | 46.15 | 97 | 57-148 | , 0 | 10 |
| o-Xylene | 20 | 23.56 | 103 | 70-141 | 1. | 1.0 |
| Surrogate | %Rec | Limit | .s | | | |
| Trifluorotoluene | 91 | 51-14 | 3 | | | |
| Bromofluorobenzene | 94 | 37-14 | .6 | | | |

[#] Column to be used to flag recovery and RPD values with an asterisk

RPD: 0 out of 5 outside limits

Spike Recovery: 0 out of 10 outside limits

^{*} Values outside of QC limits



Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900, Fax (510) 486-0532

ANALYTICAL REPORT

Prepared for:

Camp, Dresser & McKee 1 Walnut Creek Center 100 Pringle Ave, Suite 300 Walnut Creek, CA 94596

Date: 21-OCT-99

Lab Job Number: 141891 Project ID: 10605

Location: Port Of Oakland

Reviewed by:

Reviewed by:

This package may be reproduced only in its entirety.



Laboratory Number: 141891

Client: Camp, Dresser & McKee

Project#: 10605

Location: Port of Oakland

Receipt Date: 10/8/99

CASE NARRATIVE

This hardcopy data package contains sample and QC results for three water samples that were received on October 8, 1999. All samples were received cold and intact.

BTXE: No analytical problems were encountered.

Total Extractable Hydrocarbons: All extracts were treated with silica gel prior to analysis. No analytical problems were encountered.

CHAIN OF CUSTODY FORM

| Page | (of | : { |
|------|------|-----|
| raye | | |

DATE/TIME

DATE/TIME

| | | | / | 1, | 7 | | • | _ | | | • | | | | | _ | | | - | | | | |
|----------------------|--|--------------------------|-----------|-----------|--------------|--------------------|--------------------|-------------------|--|--------------------|----------|--|---------|----------|----------|----------|----------|----------|--|----------|---------------|--------------|-------------|
| Analytic | & Tomp al Laboratory 2323 Fifth S Berkeley, C | y Since 1878 treet | | | | | | | | | | C&T 14189 | C Carro | | | | An | naly | yse | s | $\overline{}$ | | |
| | (510)486-09 (510)486-05 | 000 Phone | | | | Sampler: | į | 10 | S | <u>ک</u> ۳ | 7 | • | 3 | | | | | | | | ļ | | |
| Project No: | 1760 | 5 | | | _ | Report To: | _(| <u>10</u> | 50 | ن ت | 7 | (r | ሻ | , | | | | | | | | | |
| Project Nan | ne: 750 | 1-09 | | | | Company: | 1 | Ų | sus | | | | | | | | | | | | | | |
| Project P.O | • | | | | _ | Telephone: | | | 325 | | 9 | 33 2400 | 1 | | | | | | | | | | |
| Turnaround | l Time: - | standard | <u> </u> | | | Fax: | | 9 | 25 | ~ | 9 | 33-474 | | X | | | | | | | } | | |
| | | | | Matr | ix |] | F | res | en | ativ | /e | | + | N | | | . | | | İ | ļ | | |
| Laboratory Number | Sample ID. | Sampling Date Time | Soil | Water | waste | # of Containers | 된 | H ₂ SO | HNO3 | ICE | | Field Notes | | 8 | | | | | | | | | |
| | INFLUENT | 10/8 95 | Т | 14 | | 4 | 1 | L | | | | 1 | 1 | U | <u></u> | | | | \dashv | \dashv | | | _ |
| 7 | MIDPOINT | 940 | Π | \prod | | 3 | ے | | | _ | <u> </u> | | | <u>ر</u> | | | | | | | _ | | _ |
| >3 | EFFLUOUT | 950 | 1 | М | \mathbf{I} | 4 | , | _ | <u>] </u> | ۷ | <u> </u> | <u> </u> | 4 | レ | <u> </u> | _ | | ot | | ļ | \rightarrow | | _ |
| | | | au | | | | | | <u> </u> | <u> </u> | | | | | | | | igsqcut | | _ | _ | _ | - ⁻ |
| 0 | | | | | | | <u>l</u> . | | | <u> </u> | L | | _ | | <u> </u> | | | | \vdash | _ | _ | _ | _ |
| - + O | | | $oxed{L}$ | \prod | | | | | | | | | _ | | <u> </u> | | | | | _ | _ | \dashv | _ |
| o a o | | | | П | | | | | | <u> </u> | L | | | | <u> </u> | | | | | _ | _ | _ | _ |
| T T J | | | | | | | | | | | | | | | <u> </u> | L | | | | _ | _ | _ | _ |
| 0 | | | | \coprod | | | | | | | | | _ | | <u> </u> | | | | <u> </u> | | \dashv | _ | 4 |
| Ω | | | | Ш | | | | | _ | _ | <u> </u> | | _ | | <u> </u> | <u> </u> | \perp | | | | | _ | _ |
| <u></u> | | | | Щ | \perp | | $oldsymbol{\perp}$ | _ | | $oldsymbol{\perp}$ | | | _ | | <u> </u> | | \sqcup | | $\vdash \vdash$ | | \dashv | \dashv | - |
| | <u></u> | | \perp | | ᆚ. | | ļ | <u> </u> | | <u> </u> | $oxed{}$ | | _ | | <u> </u> | _ | | | \vdash | | | _ | \dashv |
| Notes: | | | | Ц | | | _ | | <u> </u> | <u> </u> | L | ELINOLIICHED DV. | | | <u>L</u> | | ∐ :CE | IVE | D B | | | | \dashv |
| Notes: | | | | | | | - | | | / | | ELINQUISHED BY: | = | X | // | | <u> </u> | <u> </u> | | _//_ | | Tak | |
| | TSO | - 19 | | | | < | F | \geq | X | 6 | 8 | paret DATE/TIME | 7 | Ct | 7.X | بالر | IO | <u> </u> | M | DAT | ÉM | lê ki Ime | -1 |

DATE/TIME

DATE/TIME

Signature

Bill



Client: Camp, Dresser & McKee

Project#: 10605

Location: Port Of Oakland

Analysis Method: EPA 8021B

Prep Method: EPA 5030

| Sample # Client ID | Batch # | Sampled | Extracted | Analyzed | Moisture |
|---------------------|---------|----------|-----------|----------|----------|
| 141891-001 INFLUENT | 51263 | 10/08/99 | 10/14/99 | 10/14/99 | |
| 141891-002 MIDPOINT | 51263 | 10/08/99 | 10/14/99 | 10/14/99 | |
| 141891-003 EFFLUENT | 51263 | 10/08/99 | 10/14/99 | 10/14/99 | |

| Analyte Diln Fac: | Units | 141891-001 1 | 141891-002 1 | 141891-003 | |
|----------------------|-------|---------------------------------------|-----------------|------------|--|
| Benzene | ug/L | <0.5 | <0.5 | <0.5 | |
| Toluene | ug/L | <0.5 | <0.5 | <0.5 | |
| Ethylbenzene | ug/L | <0.5 | <0.5 | <0.5 | |
| m,p-Xylenes | ug/L | <0.5 | <0.5 | <0.5 | |
| o-Xylene | ug/L | <0.5 | <0.5 | <0.5 | |
| Surrogate | | · · · · · · · · · · · · · · · · · · · | | | |
| Trifluorotoluene | %REC | 83 | 80 | 80 | |
| Bromofluorobenzene | %REC | 86 | 84 | 85 | |

BATCH QC REPORT



BTXE

Camp, Dresser & McKee Client:

Project#: 10605

Location: Port Of Oakland

Analysis Method: EPA 8021B

Prep Method:

EPA 5030

METHOD BLANK

Matrix: Water Batch#: 51263

Units: ug/L Diln Fac: 1

Prep Date:

10/13/99

Analysis Date:

10/13/99

MB Lab ID: QC10200

| Analyte | Result | |
|--------------------|--------|-----------------|
| Benzene | <0.5 | |
| Toluene | <0.5 | |
| Ethylbenzene | <0.5 | |
| m,p-Xylenes | <0.5 | |
| o-Xylene | <0.5 | |
| Surrogate | %Rec · | Recovery Limits |
| Trifluorotoluene | 79 | 51-143 |
| Bromofluorobenzene | 79 | 37-146 |

BATCH QC REPORT



BTXE

Client: Camp, Dresser & McKee

Project#: 10605

Location: Port Of Oakland

Analysis Method: EPA 8021B

Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Water Batch#: 51263

Units: ug/L Diln Fac: 1

Prep Date: 10/13/99

Analysis Date: 10/13/99

LCS Lab ID: QC10199

| Analyte | Result | Spike Added | %Rec # | Limits |
|--------------------|--------|-------------|--------|--------|
| Dangere | 17.61 | 20 | 88 | 65-111 |
| Benzene Toluene | 17.71 | 20 | 89 | 76-117 |
| Ethylbenzene | 19.55 | 20 | 98 | 71-121 |
| m,p-Xylenes | 38.21 | 40 | 96 | 80-123 |
| o-Xylene | 19.4 | 20 | 97 | 75-127 |
| Surrogate | %Rec | Limits | | |
| Trifluorotoluene | 79 | 51-143 | | |
| Bromofluorobenzene | 81 | 37-146 | | |

[#] Column to be used to flag recovery and RPD values with an asterisk

^{*} Values outside of QC limits

Spike Recovery: 0 out of 5 outside limits

Lab #: 141891 .

BATCH QC REPORT



BTXE

Camp, Dresser & McKee Client:

Analysis Method: EPA 8021B

Project#: 10605

Prep Method:

EPA 5030

Location: Port Of Oakland

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ 141923-001 Lab ID: Matrix: Water

Sample Date: Received Date: 10/04/99 10/04/99

51263 Batch#:

Prep Date: Analysis Date: 10/13/99 10/13/99

ug/L Units: Diln Fac: 1

MS Lab ID: QC10203

| Analyte | Spike Added | Sample | MS | %Rec # | Limits |
|-------------------------|-------------|--------|-------|--------|--------|
| Benzene | 20 | <0.5 | 18.09 | 90 | 55-122 |
| Toluene | 20 | <0.5 | 18.28 | 91, | 63-139 |
| Ethylbenzene | 20 | <0.5 | 19.45 | 97 | 61-137 |
| - | 40 | <0.5 | 39.47 | 99 | 57-148 |
| m,p-Xylenes o-Xylene | 20 | <0.5 | 19.99 | 100 | 70-141 |
| Surrogate | %Rec | Limits | | | |
| Trifluorotoluene | 83 | 51-143 | | | |
| Bromofluorobenzene | 89 | 37-146 | | | |

MSD Lab ID: QC10204

| Analyte | Spike Added | MSD | %Rec # | Limits | RPD # | Limit |
|--------------------|-------------|-------|--------|-----------|-------|-------|
| Portono | 20 | 17.76 | 89 | 55-122 | 2 | 10 |
| Benzene Toluene | 20 | 18.06 | 90 | 63-139 | 1 | 10 |
| Ethylbenzene | 20 | 18.92 | 95 | 61-137 | 3 | 10 |
| m,p-Xylenes | 40 | 38.62 | 97 | 57-148 | 2 | 10 |
| o-Xylene | 20 | 19.66 | 98 | 70-141 | 2 | 10 |
| Surrogate | %Rec | Limit | s | | | |
| Trifluorotoluene | 81 | 51-14 | 3 | _ : - : - | | |
| Bromofluorobenzene | 87 | 37-14 | 6 | | | |

[#] Column to be used to flag recovery and RPD values with an asterisk

^{*} Values outside of QC limits

RPD: 0 out of 5 outside limits

Spike Recovery: 0 out of 10 outside limits



TEH-Tot Ext Hydrocarbons

Client: Camp, Dresser & McKee

Project#: 10605

Location: Port Of Oakland

Analysis Method: EPA 8015M

Prep Method: EPA 3520

| Sample # Client ID | Batch # | Sampled | Extracted | Analyzed | Moisture |
|---------------------|---------|----------|-----------|----------|----------|
| 141891-001 INFLUENT | 51256 | 10/08/99 | 10/12/99 | 10/14/99 | |
| 141891-003 EFFLUENT | 51256 | 10/08/99 | 10/12/99 | 10/14/99 | |

| Analyte Diln Fac: | Units | 141891-001 1 | 141891-003 | |
|--|------------------------|----------------------|---------------------|--|
| Diesel C10-C24 Motor Oil C24-C36 Hydraulic Fluid,C22-5 | ug/L ug/L 0 ug/L | 1300 <320 <320 | <50 <300 <300 | |
| Surrogate | | | | |
| Hexacosane | %REC | 90 | 89 | |

Sample Name: 141891-001sg,51256

FileName : G:\GC13\CHB\287B020.RAW

: BTEH274.MTH Method

Start Time : 0.01 min Scale Factor:

End Time : 31.91 min Plot Offset: -17 mV

Sample #: 51256

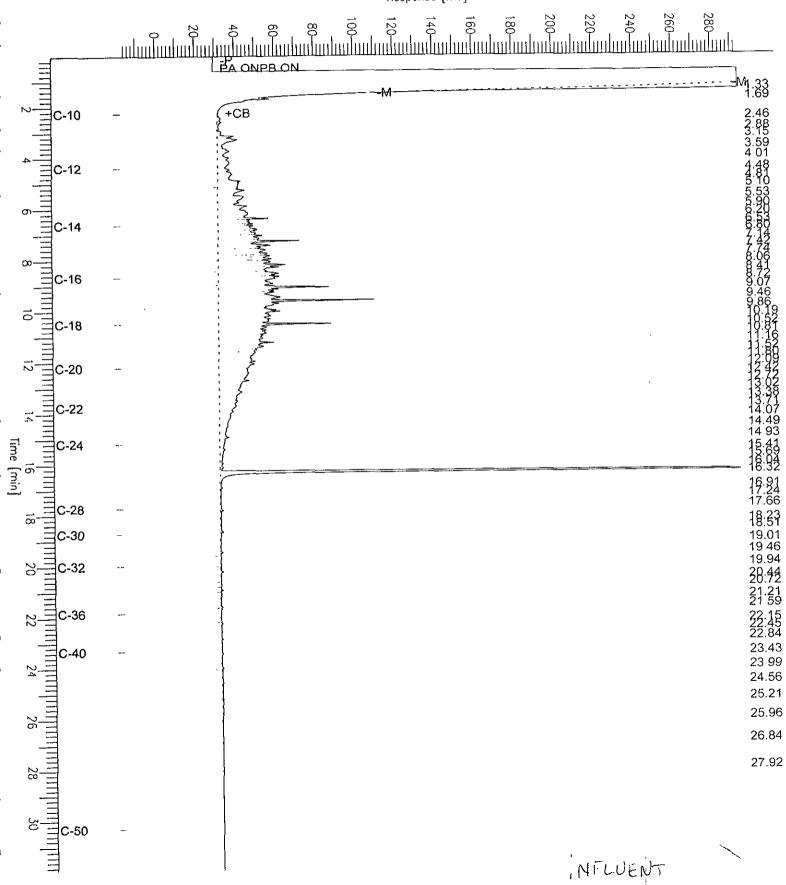
Page 1 of 1

Date: 10/15/1999 09:20 AM Time of Injection: 10/14/1999 09:24 PM

High Point : 293.90 mV

Low Point : -17.43 mV Plot Scale: 311.3 mV





Sample Name : ccv, 99ws8085, jet

: G:\GC13\CHB\287B002.RAW FileName

: BTEH274.MTH Method

Start Time : 0.01 min

Plot Offset: 13 mV

Scale Factor: 0.0

End Time : 31.91 min

Sample #: 250mg/1

Date: 10/14/1999 09:35 AM

Time of Injection: 10/14/1999 08:52 AM

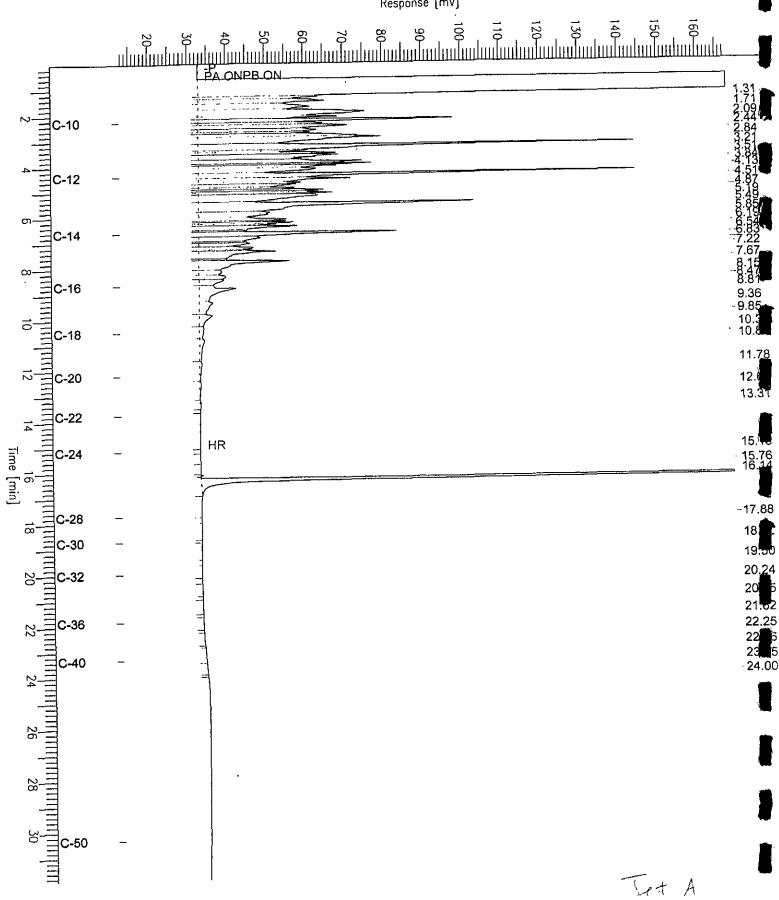
Low Point : 12.77 mV

High Point : 167.86 mV

Page 1 of 1

Plot Scale: 155.1 mV





Sample Name : x,ccv,99ws8168,ds1
FileName : G:\GC11\CHA\287A029.RAW

Method : ATEH245.MTH

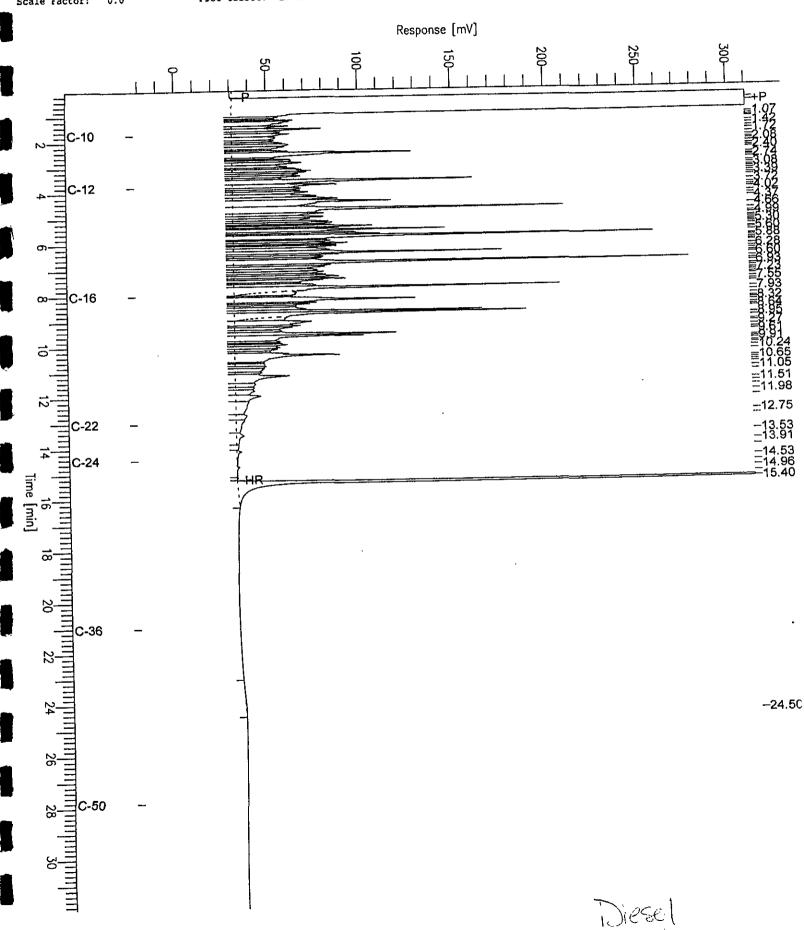
Start Time : 0.01 min Scale Factor: 0.0

End Time : 31.91 min Plot Offset: -22 mV

Sample #: 500mg/l Date: 10/15/99 01:29 PM Page 1 of 1

Time of Injection: 10/15/99 11:47 AM

High Point : 310.61 mV Low Point: -21.92 mV Plot Scale: 332.5 mV



Sample Name : ccv, 99ws8084, mo

: G:\GC13\CHB\287B011.RAW

FileName : BTEH274.MTH Method

Start Time : 0.01 min 0.0

End Time : 31.91 min

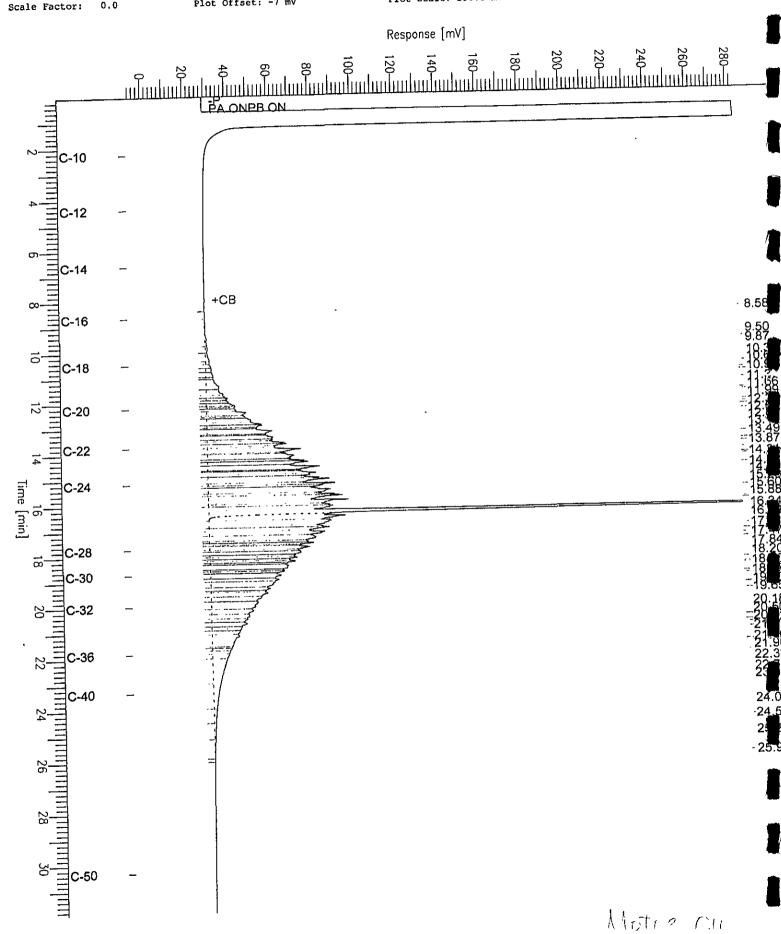
Plot Offset: -7 mV

Page 1 of 1 Sample #: 500mg/1 Date : 10/15/1999 07:26 AM

Time of Injection: 10/14/1999 03:07 PM

High Point : 283.12 mV Low Point : -6.83 mV

Plot Scale: 290.0 mV





TEH-Tot Ext Hydrocarbons

BATCH QC REPORT

Client: Camp, Dresser & McKee

Project#: 10605

Location: Port Of Oakland

Analysis Method: EPA 8015M

Prep Method: EPA 3520

METHOD BLANK

Matrix: Water Prep Date: 10/12/99
Batch#: 51256 Analysis Date: 10/14/99

Units: ug/L Diln Fac: 1

MB Lab ID: QC10175

| Analyte | Result | |
|-------------------------|--------|-----------------|
| Diesel C10-C24 | <50 | |
| Motor Oil C24-C36 | <300 | |
| Hydraulic Fluid, C22-50 | <300 | |
| Surrogate | %Rec | Recovery Limits |
| Hexacosane | 98 | 58-128 |

BATCH QC REPORT Lab #: 141891

TEH-Tot Ext Hydrocarbons

Camp, Dresser & McKee Client:

Project#: 10605

Location: Port Of Oakland

Analysis Method: EPA 8015M

Prep Method:

EPA 3520

BLANK SPIKE/BLANK SPIKE DUPLICATE

Water

Batch#: 51256 ug/L Units: Diln Fac: 1

Matrix:

Prep Date:

10/12/99

10/15/99 Analysis Date:

BS Lab ID: QC10176

| Analyte | Spike Adde | ed BS | %Rec # | Limits |
|----------------|------------|--------|--------|--------|
| Diesel C10-C24 | 2475 | 1831 | 74 | 50-114 |
| Surrogate | %Rec | Limits | | |
| Hexacosane | 92 | 58-128 | | |

BSD Lab ID: QC10177

| Analyte | Spike Added | BSD | %Rec # | Limits | RPD # | Limit |
|----------------|-------------|--------|--------|--------|-------|-------|
| Diesel C10-C24 | 2475 | 1578 | 64 | 50-114 | 15 | 25 |
| Surrogate | %Rec | Limit | 5 | | | |
| Hexacosane | 89 | 58-128 | 3 | | | · |

[#] Column to be used to flag recovery and RPD values with an asterisk

Spike Recovery: 0 out of 2 outside limits

^{*} Values outside of QC limits RPD: 0 out of 1 outside limits



Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900, Fax (510) 486-0532

ANALYTICAL REPORT

Prepared for:

Camp, Dresser & McKee 1 Walnut Creek Center 100 Pringle Ave, Suite 300 Walnut Creek, CA 94596

Date: 29-NOV-99

Lab Job Number: 142521 Project ID: 10605

Location: Port Of Oakland

Reviewed by:

Reviewed by:

This package may be reproduced only in its entirety.

CHAIN OF CUSTODY FORM

DATE/TIME

DATE/TIME

| | | | | | | _ | | | | _ | | | | | | _ | _ | | | | |
|----------------------|--|-------------------------------|------------------|-----------------|--------------------|------------|-------------------|------------------|-----------|-------------|--------------------------|----------|----------|-----|---------------|-----------|---------|--|---------------------|----------|---|
| | & Tomp | | | | | | | | | | t t | | | | F | ∖na | lys | es | | | |
| • | al Laboratory 2323 Fifth S Berkeley, C (510)486-09 (510)486-05 | treet A 94710 000 Phone | | | Sampler: | į | 10_ | sci | o T | | C&T (4)X21 | | | | | | | | | | |
| Project No: | 10605 | - | | | Report To: | | Vc | <u>، د د</u> | <u>co</u> | 77 | | | | | | | | | | | |
| Project Nan | | | | | Company: | | 0 | gu | 1_ | | | Orland | | | | | | | | | |
| Project P.O | | 0-19 | | _ | Telephone: | | (9 | 20 | <u> </u> | 29 | 6 -8071 -4174 | Ì | | | | | | | | | |
| Turnaround | l Time: | Standard | | | Fax: | | | | | _ | -4174 | IGX | | | | | | | | | |
| | | | Ma | ıtrix | | Р | res | erv | ativ | /e | | OT | - 1 | - [| - (| | | | ļ | | |
| Laboratory Number | Sample ID. | Sampling Date Time | Soil | Waste | # of Containers | <u> </u> | H ₂ SO | HNO ₃ | 1 | | Field Notes | | | | | | | | | | |
| | MIDPOINT | 11/12 930 | L | 11 | 3_ | 1 | _ | _ | 1 | 1-1 | | 4 | | -+ | \dashv | + | + | | $\vdash \downarrow$ | + | - |
| | | | + | $\dag \uparrow$ | 1 | T | ├ | \vdash | \vdash | | | | | | 一 | 十 | I | | | \Box | |
| | | | 11 | 11 | | | | | Π | $ \cdot $ | | | | | | | | | | | |
| 0 | | | \sqcap | | | | | | | | | | | | | | | ╀ | \sqcup | | _ |
| - + a | | | | | | | | | | | | | | _ | | | | ┿ | \sqcup | | _ |
| o a o | | | | | | <u> </u> | <u> </u> | <u> </u> | | | | | | | — | | + | — | \square | \dashv | _ |
| 1L - J | | | Ц. | | | <u> </u> | _ | | <u> </u> | | | | | | \rightarrow | + | + | | \vdash | -+ | - |
| 0 | | | | 11 | | <u> </u> _ | <u> </u> | <u> </u> | <u> </u> | | | | \vdash | - | _ | + | + | +- | ┼╌┤ | _ | - |
| <u> </u> | <u> </u> | | 11 | 1-1 | | - | | ▙ | | - | | | | | \dashv | \dashv | + | +- | + | \dashv | - |
| <u></u> | <u> </u> | | $\bot \bot$ | | | ├ | ┼ | <u> </u> | - | - | | ₩ | ├─┤ | | -+ | 十 | 十 | +- | \vdash | - | - |
| <u>_</u> | <u> </u> | | 1-1- | | | \vdash | ┼- | ऻ_ | ╁ | - | | ├─ | \vdash | | + | 十 | 十 | +- | \vdash | _ | - |
| Notes: | <u> </u> | | | | | \vdash | <u></u> | 1 | <u> </u> | RF | LINQUISHED BY: | \vdash | L | 1 | REC | L }EI\ | /ED | BY: | L_l | | - |
| | TSO -19 | | | | | 10 | | 7/6 | u | 7 | od (1/12 4950) DATE/TIME | | | 2 | Z | | n | II DA | TEAT | ΙΜΕ | - |
| | | | | | | | | | - | | DATE/TIME | | | | | 1 | | D# | TF/T | TMF | |

Signature



Client: Camp, Dresser & McKee

Project#: 10605

Location: Port Of Oakland

Analysis Method: EPA 8021B

Prep Method: EPA 5030

| Sample # Client ID | Batch # | Sampled | Extracted | Analyzed | Moisture |
|---------------------|---------|----------|-----------|----------|----------|
| 142521-001 MIDPOINT | 51972 | 11/12/99 | 11/13/99 | 11/13/99 | |

| Analyte Diln Fac: | Units | 142521-001 1 | | |
|----------------------|-------|-----------------|----------|------|
| MTBE | ug/L | <2 | | |
| Benzene | ug/L | <0.5 | | |
| Toluene | ug/L | <0.5 | | |
| Ethylbenzene | ug/L | <0.5 | | |
| m,p-Xylenes | ug/L | <0.5 | | |
| o-Xylene | ug/L | <0.5 | | |
| Surrogate | | | | |
| Trifluorotoluene | %REC | 100 | <u> </u> | |
| Bromofluorobenzene | %REC | 101 | | |

BATCH QC REPORT



BTXE

Client: Camp, Dresser & McKee

Project#: 10605

camp, brobber a none

Location: Port Of Oakland

Analysis Method: EPA 8021B

Prep Method: EPA 5030

METHOD BLANK

Matrix: Water Prep

Batch#: 51972

Units: ug/L Diln Fac: 1 Prep Date: 11/12/99
Analysis Date: 11/12/99

MB Lab ID: QC101066

| Analyte | Result | |
|--------------------|--------|-----------------|
| MTBE | <2.0 | |
| Benzene | <0.5 | |
| Toluene | <0.5 | |
| Ethylbenzene | <0.5 | |
| m,p-Xylenes | <0.5 | |
| o-Xylene | <0.5 | |
| Surrogate | %Rec | Recovery Limits |
| Trifluorotoluene | 102 | 51-143 |
| Bromofluorobenzene | 100 | 37-146 |

Units:

Diln Fac: 1

BATCH QC REPORT



BTXE

Camp, Dresser & McKee Client:

Project#: 10605

Location: Port Of Oakland

Analysis Method: EPA 8021B

Prep Method:

EPA 5030

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix: Water Batch#: 51972

ug/L

Prep Date:

11/12/99

Analysis Date: 11/12/99

BS Lab ID: QC101113

| Analyte | Spike Added | BS | %Rec # | Limits |
|--------------------|-------------|--------|--------|-------------|
| MTBE | 20 | 20.5 | 103 | 66-126 |
| Benzene | 20 | 21.01 | 105 | 65-111 |
| Toluene | 20 | 21.58 | 108 | 76-117 |
| Ethylbenzene | 20 | 22.15 | 111 | 71-121 |
| m,p-Xylenes | 40 | 45.96 | 115 | 80-123 |
| o-Xylene | 20 | 22.88 | 1.14 | 75-127 |
| Surrogate | %Rec | Limits | | |
| Trifluorotoluene | 102 | 51-143 | | |
| Bromofluorobenzene | 100 | 37-146 | | |

BSD Lab ID: QC101114

| Analyte | Spike Added | BSD | %Rec # | Limits | RPD # | Limit |
|--------------------|-------------|-------|--------|--------|-------|-------|
| MTBE | 20 | 19.93 | 100 | 66-126 | 3 | 12 |
| Benzene | 20 | 20.19 | 101 | 65-111 | 4 | 10 |
| Toluene | 20 | 20.58 | 103 | 76-117 | 5 | 10 |
| Ethylbenzene | 20 | 21.17 | 106 | 71-121 | 5 | 11 |
| m,p-Xylenes | 40 | 43.89 | 110 | 80-123 | 5 | 10 |
| o-Xylene | 20 | 21.91 | 110 | 75-127 | 4 | 11 |
| Surrogate | %Rec | Limit | s | | | |
| Trifluorotoluene | 101 | 51-14 | 3 | | | |
| Bromofluorobenzene | 100 | 37-14 | 6 | | | |

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 6 outside limits

Spike Recovery: 0 out of 12 outside limits



Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900, Fax (510) 486-0532

ANALYTICAL REPORT

Prepared for:

Camp, Dresser & McKee 1 Walnut Creek Center 100 Pringle Ave, Suite 300 Walnut Creek, CA 94596

Date: 14-OCT-99

Lab Job Number: 140979 Project ID: 10605

Location: Port Of Oakland

Reviewed by:

Reviewed by:

This package may be reproduced only in its entirety.



Laboratory Number: 140979 Client: Camp, Dresser & McKee

Location: Port of Oakland

Project#: 10605

Received Date: 08/13/99

CASE NARRATIVE

This hardcopy data package contains sample and QC results for nine water samples that were received on August 13, 1999. All samples were received cold and intact.

BTXE/MTBE: Samples OMW-10, OMW-6 and Trip Blank (CT#140979-004, -007 and -009) were analyzed by Mass Spectroscopy to confirm the MTBE results obtained by Gas Chromatography. The client requested this confirmation on August 25th, past the sample hold dates. The Mass Spectroscopy data does not confirm the presence of MTBE in these samples. No other analytical problems were encountered.

Total Extractable Hydrocarbons: No analytical problems were encountered.

11. -

| eason for change: | Client Req | Uest: By: HUA V. | DAL Date | e/Time:_ <u>8 26 </u> | | -/ |
|-------------------|--------------------|------------------|-------------|-----------------------|----------|-------------|
| Current Lab ID | Previous Lab ID | Client ID | Matrix | Add/Cancel | Analysis | Duedate |
| 6979-124 | | (MW-10 | Whites | field | 902015 | |
| 1 - 47 | | · OMW - li | | 1 | | |
| 1-029 | | The Plank | | 1 | <u> </u> | |
| - | | | | - | | |
| | | | | + | | |
| | | | - | + | | |
| | | | | | | |
| 1 | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | _ | <u> </u> | | ļ | |

Curtis & Tompkins, Ltd.

CHAIN OF CUSTODY FORM

Page _ 1_ of 1_

| | & Tomp al Laborator | - | | | | | | | | | C&T 140979 LOGIN# | | | | | Ar | aly | /se: | S | | | | |
|----------------------|--|--------------------------|-------------|---------------|--------------------|----------|-------------------|--------------|----------|----------|----------------------|---------------------------|----------|----------|----------|---|-----------|---------------|-----------|----------------------|-----------|-----|-----------|
| Analytic | 2323 Fifth S Berkeley, C (510)486-09 | itreet A 94710 | • | | | | | | | | | | | , | | | | | | | | | |
| | (510)486-05 | | | _ | Sampler: | | V | 05 | ·u |) T | +/SHARRIA. | 3 | 1 | <u>ځ</u> | <u> </u> | | | | | | | | |
| Project No: | 1060 | 5 | | | Report To: | | ٧ | <u>25</u> | 60 | τ. | t | 8020 | 0 | Joann | | | | | | | | | |
| Project Nan | ne: Port | of Oal | No | in | Company: | | CI | <u>>~</u> | <u>ı</u> | | | | cilira | 2 | | | | | | | | | |
| Project P.O | : TS | 019 | | | Telephone: | | | | | | 16-8071 | 36 | |] | | | | | | | | | |
| Turnaround | l Time: ぢ | tandard | , | | Fax: | | (9 | ري. ا | : 7 | 9 | 33-4174 | M-TB | 1 | 3 | | | | | | | | | |
| | · · · · · · | | | == atrix | | P | res | erv | ativ | /e | | $ label{eq:continuous} $ | L٥ | 8 | | \ | | | 1 | 1 | - | 1 | |
| Laboratory Number | Sample ID. | Sampling Date Time | Soll | Waste | # of Containers | HCL | H ₂ SO | HNO3 | ICE | | Field Notes | BTEX | TI CIL | | | | | | | | | | |
| | UMW-8 | 813 920 | ┸┈┸ | 1 | 4 | | | | V | | | V | L | 1 | | | | | | | | 4 | |
| 2. | 1-WMO | | | 11 | 4 | 1 | | <u> </u> | <u> </u> | | | 1 | <u> </u> | 1_ | Ļ | | | $\perp \perp$ | _ | 4 | | _ | |
| >₹} | 0MW-3 | 9131010 | | 1 | 4 | <u>ا</u> | | <u> </u> | 1 | | | 1 | <u> </u> | <u></u> | <u> </u> | <u> </u> | | | _ | | | 4 | |
| <u>-4</u> | OMW-10 | 8/13 1100 | | <u> </u> | 4 | 4 | <u>-</u> | <u> </u> | 4 | | | 1 | <u> </u> | 1 | <u> </u> | | | | | _ | | _ | |
| 02 | OMW-11 | 8/13/11/14 | | 41 | 4 | ٢ | Ł | <u> </u> | 1 | | | 1 | 1 | 1 | Ļ | <u> </u> | | | _ļ | | 4- | _ | |
| - +- 6a | 6MW-12 | 8/13 1115 | | 4 | 3 A 000 | L | Ł | _ | 1 | 上 | | V | 6 | 2 | <u> </u> | لماه | <u>u.</u> | m | بعد | €e/ | one | 411 | ١, |
| ० हरे | BMW-6 | 8 13 1155 | | 4 | 4_ | L | <u>L</u> | 1_ | 4 | 上 | | V | 12 | 1, | _ | 1 | | | _ | _ | 1/2 | 4 | only |
| <u>п -8</u> | 0MW -5 | 8/13 14 | 4 1 | 4 | 4 | L | 上 | | 1 | 上 | | V | 1 | 4 | <u> </u> | $oldsymbol{ol}}}}}}}}}}}}}}}}}$ | <u> </u> | | | | | ՙ | براهاد سن |
| 0 | | | | | | <u> </u> | L | $oxed{oxed}$ | | L_ | | | L | ╀- | 4 | <u> </u> | | | _ | _ | | _ | |
| 29 | Trioblack | <u> </u> | | | _1 | <u> </u> | <u> </u> | | <u> </u> | <u> </u> | 40LD 5008/16/49 | _ | <u> </u> | ┷ | 1_ | | _ | | | | | _ | |
| a | | | | $\perp \perp$ | | | | <u> </u> | | | | | _ | \bot | <u> </u> | <u> </u> | | | | | | ╛ | |
| | | | | | <u> </u> | L | L. | | 乚 | <u>L</u> | | L | L | \perp | _ | | _ | | | | | ┙. | |
| | | | | | <u> </u> | | L | <u> </u> | <u>L</u> | <u> </u> | | _ | <u> </u> | L | <u> </u> |] | <u> </u> | |] | | | _ | |
| Notes: | | | | | | 1 | | | | R | LINQUISHED BY: | | | _ | R | ECE | JVE | D B | Y: | | | } | |
| • | TS0-19H-D | q ow/sil | ica | 50 | 4 | | \supset | for | 4/ | on | 8/13/99 DATE/TIME | | X |) 1D | a. | Bo | u r | H) | 8/ DAT | <i>13/9,</i> E/TI | シロ! ME | 33 | 3. |
| | - | ' Cla | 2011 | المرد | | | | | | | DATE/TIME | | | | | | | | DAT | E/TI | ME | | |
| <u> </u> | | | | | | | | | | | DATE/TIME | | | | | | | | DAT | E/TI | ME | | |
| | | | | | Signature | | | | | | . – | | | | | | | | | | | | |



Client: Camp, Dresser & McKee

Project#: 10605

Location: Port Of Oakland

Analysis Method: EPA 8021B

Prep Method: EPA 5030

| Sample # | Client ID | Batch # | Sampled | Extracted | Analyzed | Moisture |
|--|----------------|----------------------------------|--|--|--|----------|
| 140979-001 140979-002 140979-003 140979-004 | OMW-1 OMW-3 | 50050 50050 50050 50050 | 08/13/99 08/13/99 08/13/99 08/13/99 | 08/23/99 08/23/99 08/23/99 08/23/99 | 08/23/99 08/23/99 08/23/99 08/23/99 | |

| Analyte Diln Fac: | Units | 140979-001 1 | 140979-002 1 | 140979-003 | 140979-004 |
|----------------------|-------|-----------------|-----------------|------------|------------|
| MTBE | ug/L | 6.5 | 2.5 | 3.3 | 11 C |
| Benzene | ug/L | <0.5 | <0.5 | <0.5 | 16 |
| Toluene | ug/L | <0.5 | 77 | <0.5 | 31 |
| Ethylbenzene | ug/L | <0.5 | 0.88 | <0.5 | 0.54 |
| m,p-Xylenes | ug/L | <0.5 | 1.6 | <0.5 | 0.95 |
| o-Xylene | ug/L | <0.5 | 0.72 | <0.5 | 0.5 |
| Surrogate | | | | | |
| Trifluorotoluene | %REC | 112 | 109 | 90 | 104 |
| Bromofluorobenzene | %REC | 113 | 111 | 93 | 109 |

C: Presence of this compound confirmed by second column, however, the confirmation concentration differed from the reported result by more than a factor of two



Client: Camp, Dresser & McKee

Project#: 10605

Location: Port Of Oakland

Analysis Method: EPA 8021B

Prep Method: EPA 5030

| Sample # | Client ID | Batch # | Sampled | Extracted | Analyzed | Moisture |
|------------|-----------|---------|----------|-----------|----------|----------|
| 140979-005 | OMW-11 | 50050 | 08/13/99 | 08/23/99 | 08/23/99 | |
| 140979-005 | | 50050 | 08/13/99 | 08/23/99 | 08/23/99 | |
| 140979-007 | | 50050 | 08/13/99 | 08/23/99 | 08/23/99 | |
| 140979-008 | OMW-5 | 50050 | 08/13/99 | 08/23/99 | 08/23/99 | |

| Analyte Diln Fac: | Units | 140979-005 1 | 140979-006 1 | 140979-007 1 | 140979-008 1 |
|----------------------|-------|-----------------|-----------------|-----------------|-----------------|
| MTBE | ug/L | 14 | 5.1 | 4.6 | 5.1 |
| Benzene | ug/L | 16 | <0.5 | <0.5 | <0.5 |
| Toluene | ug/L | 34 | 25 | <0.5 | <0.5 |
| Ethylbenzene | ug/L | 0.59 | <0.5 | <0.5 | <0.5 |
| m,p-Xylenes | ug/L | 1.1 | 0.77 | <0.5 | <0.5 |
| o-Xylene | ug/L | 0.55 | <0.5 | <0.5 | <0.5 |
| Surrogate | | | | - | |
| Trifluorotoluene | %REC | 105 | 105 | 117 | 110 |
| Bromofluorobenzene | %REC | 111 | 110 | 117 | 112 |



Client: Camp, Dresser & McKee

Project#: 10605

Location: Port Of Oakland

Analysis Method: EPA 8021B

Prep Method:

EPA 5030

| Sample # Client ID | Batch # | Sampled | Extracted | Analyzed | Moisture |
|-----------------------|---------|----------|-----------|----------|----------|
| 140979-009 TRIP BLANK | 50050 | 08/13/99 | 08/23/99 | 08/23/99 | |

| Analyte | Units | 140979-009 | |
|--------------------|-------|------------|------|
| Diln Fac: | | 1. | |
| MTBE | ug/L | 3.8 | |
| Benzene | ug/L | <0.5 | |
| Toluene | ug/L | <0.5 | |
| Ethylbenzene | ug/L | <0.5 | |
| m,p-Xylenes | ug/L | <0.5 | |
| o-Xylene | ug/L | <0.5 | |
| Surrogate | | | |
| Trifluorotoluene | %REC | 92 | |
| Bromofluorobenzene | %REC | 96 | |

BATCH QC REPORT



BTXE

Camp, Dresser & McKee Client:

Project#: 10605

Location: Port Of Oakland

Analysis Method: EPA 8021B

Prep Method:

EPA 5030

METHOD BLANK

Water Matrix: 50050 Batch#: Units:

Diln Fac: 1

ug/L

Prep Date:

08/23/99

Analysis Date: 08/23/99

MB Lab ID: QC05455

| Analyte | Result | |
|-------------------------|--------------|-----------------|
| MTBE | <2.0 | |
| Benzene | <0.5 <0.5 | |
| Toluene Ethylbenzene | <0.5 | |
| m,p-Xylenes | <0.5 | |
| o-Xylene | <0.5 | |
| Surrogate | %Rec | Recovery Limits |
| Trifluorotoluene | 95 | 51-143 |
| Bromofluorobenzene | 94 | 37-146 |



BATCH QC REPORT

BTXE

Analysis Method: EPA 8021B

Prep Method:

EPA 5030

Location: Port Of Oakland

Camp, Dresser & McKee

LABORATORY CONTROL SAMPLE

Prep Date: Analysis Date:

08/23/99 08/23/99

Matrix: Water Batch#: 50050 ug/L Units: Diln Fac: 1

Project#: 10605

Client:

LCS Lab ID: QC05454

| Analyte | Result | Spike Added | %Rec # | Limits |
|--------------------|--------|-------------|--------|--------|
| MTBE | 13.2 | 20 | 66 | 66-126 |
| Benzene | 18.13 | 20 | 91 | 65-111 |
| Toluene | 19.06 | 20 | 95 | 76-117 |
| Ethylbenzene | 17.69 | 20 | 88 | 71-121 |
| m,p-Xylenes | 37.11 | 40 | 93 | 80-123 |
| o-Xylene | 19.35 | 20 | 97 | 75-127 |
| Surrogate | %Rec | Limits | | |
| Trifluorotoluene | 102 | 51-143 | | |
| Bromofluorobenzene | 97 | 37-146 | | |

[#] Column to be used to flag recovery and RPD values with an asterisk

^{*} Values outside of QC limits

Spike Recovery: 0 out of 6 outside limits

BATCH QC REPORT



BTXE

Client: Camp, Dresser & McKee

Project#: 10605

Location: Port Of Oakland

Analysis Method: EPA 8021B

Prep Method:

EPA 5030

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: OMW-6

Lab ID: 140979-007

Matrix: Water Batch#: 50050

Units: ug/L Diln Fac: 1 Comple Date

Sample Date: 08/13/99

Received Date:

08/13/99

Prep Date:

08/24/99

Analysis Date:

08/24/99

MS Lab ID: QC05456

| Analyte | Spike Added | Sample | MS | %Rec # | Limits |
|--------------------|-------------|--------|-------|--------|--------|
| MTBE | 20 | 4.6 | 24.07 | 97 | 49-136 |
| Benzene | 20 | <0.5 | 19.76 | 99 | 55-122 |
| Toluene | 20 | <0.5 | 20.21 | 101 | 63-139 |
| Ethylbenzene | 20 | <0.5 | 20.19 | 101 | 61-137 |
| m,p-Xylenes | 40 | <0.5 | 42.24 | 106 | 57-148 |
| o-Xylene | 20 | <0.5 | 21.3 | 107 | 70-141 |
| Surrogate | %Rec | Limits | | | |
| Trifluorotoluene | 113 | 51-143 | | | |
| Bromofluorobenzene | 118 | 37-146 | | | |

MSD Lab ID: QC05457

| Analyte | Spike Added | MSD | %Rec # | Limits | RPD # | Limit |
|-------------------------|-------------|-------|--------|--------|-------|-------|
| MTBE | 20 | 24.65 | 100 | 49-136 | 2 | 11 |
| Benzene | 20 | 20 | 100 | 55-122 | 1 | 10 |
| Toluene | 20 | 20.44 | 102 | 63-139 | 1 | 10 |
| Ethylbenzene | 20 | 20.47 | 102 | 61-137 | 1 | 10 |
| m,p-Xylenes | 40 | 42.84 | 107 | 57-148 | 1 | 10 |
| m,p-xylenes o-Xylene | 20 | 21.59 | 108 | 70-141 | 1 | ,10 |
| Surrogate | %Rec | Limit | s | | | |
| Trifluorotoluene | 113 | 51-14 | .3 | | | |
| Bromofluorobenzene | 118 | 37-14 | 6 | | | |

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 6 outside limits

Spike Recovery: 0 out of 12 outside limits



TEH-Tot Ext Hydrocarbons

Client: Camp, Dresser & McKee

Project#: 10605

Location: Port Of Oakland

Analysis Method: EPA 8015M

Prep Method: EPA 3520

| Sample # Client ID | Batch # | Sampled | Extracted | Analyzed | Moisture |
|--------------------|---------|----------|-----------|----------|----------|
| 140979-001 OMW-8 | 49985 | 08/13/99 | 08/17/99 | 08/20/99 | |
| 140979-002 OMW-1 | 49985 | 08/13/99 | 08/17/99 | 08/20/99 | |
| 140979-003 OMW-3 | 49985 | 08/13/99 | 08/17/99 | 08/20/99 | |
| 140979-004 OMW-10 | 49985 | 08/13/99 | 08/17/99 | 08/20/99 | |

Matrix: Water

| Analyte Diln Fac: | Units | 140979-001 1 | 140979-002 1 | 140979-003 1 | 140979-004 1 |
|----------------------|-------|-----------------|-----------------|-----------------|-----------------|
| Diesel C10-C24 | ug/L | <50 | <50 | 200 | 1600 |
| Surrogate | | | | | |
| Hexacosane | %REC | 83 | 71 | 79 | 71 |



TEH-Tot Ext Hydrocarbons

Client: Camp, Dresser & McKee

Project#: 10605

Location: Port Of Oakland

Analysis Method: EPA 8015M

Prep Method: EPA 3520

| Sample # Client ID | Batch # | Sampled | Extracted | Analyzed | Moisture |
|---|----------------|----------------------|----------------------|----------------------|----------|
| 140979-005 OMW-11 140979-007 OMW-6 | 49985 49985 | 08/13/99 08/13/99 | 08/17/99 08/17/99 | 08/20/99 08/20/99 | |
| 140979-008 OMW-5 | 49985 | 08/13/99 | 08/17/99 | 08/20/99 | |

Matrix: Water

| Analyte Diln Fac: | Units | 140979-005 1 | 140979-007 1 | 140979-008 | |
|----------------------|-------|-----------------|-----------------|------------|-------------|
| Diesel C10-C24 | ug/L | 1100 | 160 | 430 YH | |
| Surrogate | | | | | |
| Hexacosane | %REC | 64 | 93 | 97 | |

Y: Sample exhibits fuel pattern which does not resemble standard

H: Heavier hydrocarbons than indicated standard

Sample Name: 140979-FileName: G:\GC11\ Method: ATEH229.t TStart Time: 0.01 min Scale Factor: 0.0 Page 1 of 1 Sample Name: 140979-003sg,49985 Date: 8/20/99 11:41 AM : G:\GC11\CHA\231A020.RAW 02:01 AM : ATEH229.MTH Time of Injection: 8/20/99 High Point: 124.35 mV : 31.91 min Low Point: -22.41 mV End Time Plot Offset: -22 mV Plot Scale: 146.8 mV Response [mV] C-10 +CB C-12 C-16 C-22 こうと、はてはるはのはないないであっていっていないないというというというないはからない C-24 C-36 25 44 26.17 1. 注: 清月法院住院住屋住屋山野海門中間地方 0MW-3

Sample Name: 140979-004sg, 49985

: G:\GC11\CHA\231A021.RAW FileName

Method : ATEH229.MTH

#Start Time : 0.01 min Scale Factor: 0.0

End Time : 31.91 min Plot Offset: -22 mV

Sample #: 49985

Date: 8/20/99 11:41 AM

Time of Injection: 8/20/99 02:41 AM

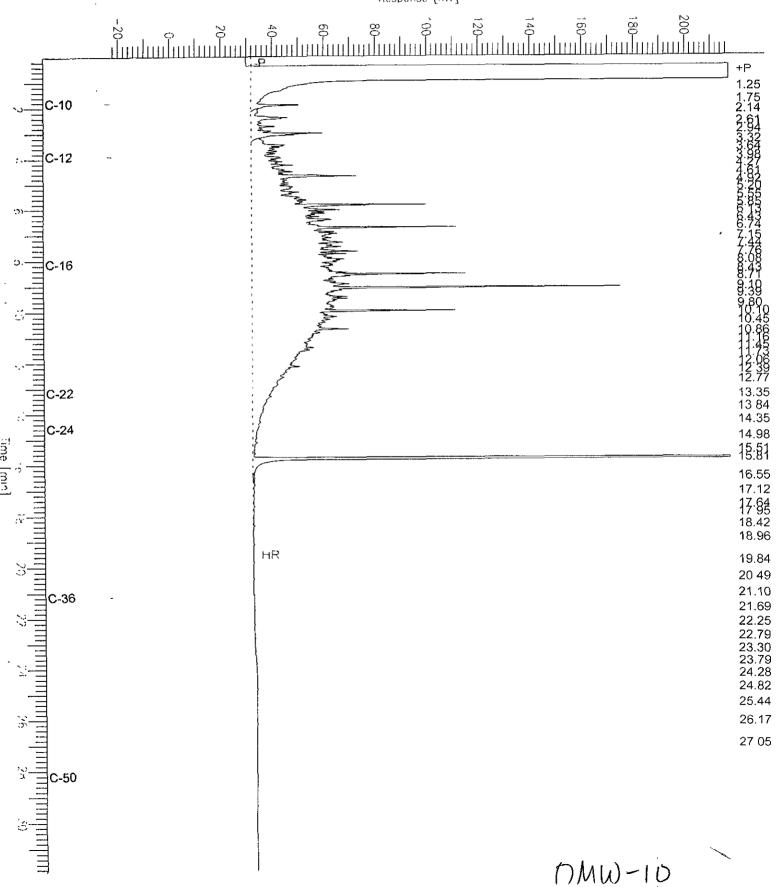
Low Point: -22.43 mV

High Point: 217.22 mV

Page 1 of 1

Plot Scale: 239.7 mV





Page 1 of 1 Sample #: 49985 Date: 8/20/99 11:43 AM Time of Injection: 8/20/99 03:22 AM Low Point : -22.64 mV Plot Scale: 195.6 mV High Point : 172.94 mV End Time : 31.91 min Plot Offset: -23 mV Response [mV] 19.14 HR 19.83 21.69 22. 22. 23.30 23.79 24. 24. 25 43 26 1 0MW-11

Page 1 of 1 Sample #: 49985 Sample Name : 140979-007sg, 49985 Date: 8/20/99 11:43 AM : G:\GC11\CHA\231A023.RAW FileName Time of Injection: 8/20/99 04:03 AM Method : ATEH229.MTH High Point : 231.74 mV End Time : 31.91 min Low Point : -22.60 mV Start Time : 0.01 min Plot Scale: 254.3 mV Plot Offset: -23 mV 0.0 Scale Factor: Response [mV] C-10 C-12 C-16 12.89 C-22 14.35 C-24 14.98 15.82 16.81 17.64 18.42 19.15 HR 19.83 20.48 21.10 C-36 21.69 22.25 22.79 23.30 23.80 24 28 24.82 25.45 26.18 27.05 C-50

OMW-6

Sample Name: 140979-008sg, 49985
FileName: G: QC11\CHA\231A024
Method: ATEH229.MTH
Start Time: 0.01 min E
Scale Factor: 0.0 p Page 1 of 1 Sample #: 49985 Date: 8/20/99 11:44 AM : G:\GC11\CHA\231A024.RAW Time of Injection: 8/20/99 Low Point: -22.63 mV 04:43 AM High Point : 202.34 mV End Time : 31.91 min Plot Scale: 225.0 mV Plot Offset: -23 mV Response [mV] C-10 古一 教徒中は 中は はくるいのころ C-12 +CB C-16 C-22 C-24 C-36 25.44 26.17 28.10 C-50 OMW-5

Sample Name : x,ccv,99ws7881,dsl : C:\GC15\CHB\235B017.RAW

: BTEH223.MTH Method

End Time : 31.91 min Start Time : 0.01 min Plot Offset: 13 mV 0.0 Scale Factor:

Page 1 of 1 Sample #: 500mg/1

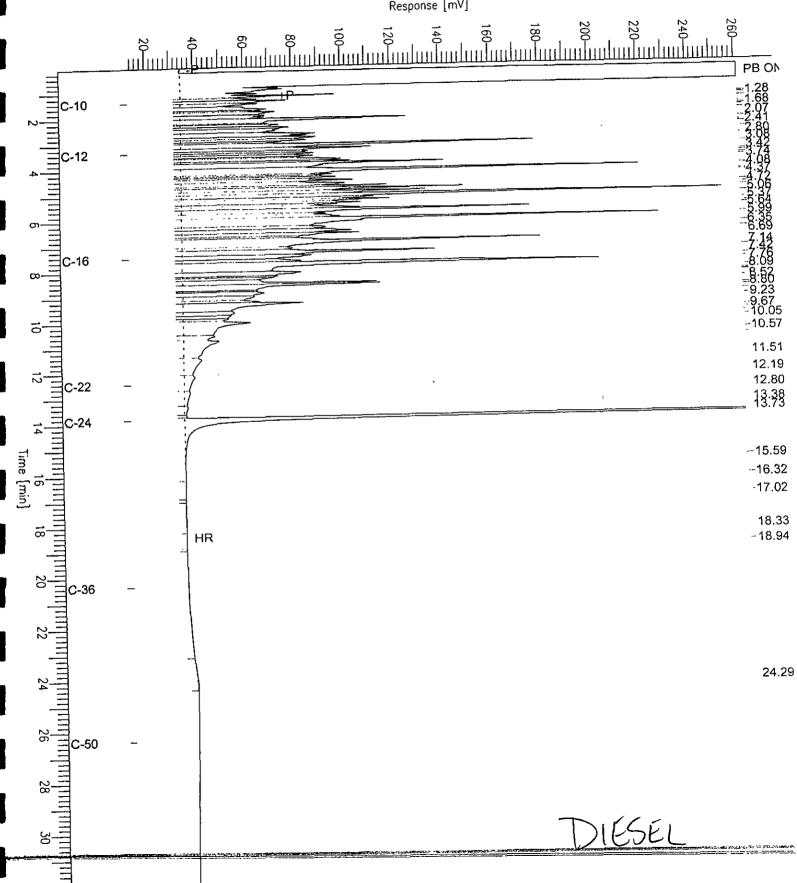
Date: 8/24/99 09:28 AM

04:13 AM Time of Injection: 8/24/99

High Point : 261.12 mV Low Point : 13.13 mV

Plot Scale: 248.0 mV





BATCH QC REPORT



TEH-Tot Ext Hydrocarbons

Camp, Dresser & McKee Client:

Analysis Method: EPA 8015M

Project#: 10605

Prep Method:

EPA 3520

Location: Port Of Oakland

METHOD BLANK

Matrix: Water

Prep Date:

08/17/99

Batch#: 49985

08/24/99

Units: ug/L Diln Fac: 1

Analysis Date:

MB Lab ID: QC05226

| Analyte | Result | |
|----------------|--------|-----------------|
| Diesel C10-C24 | <50 | |
| Surrogate | %Rec | Recovery Limits |
| Hexacosane | 79 | 58-128 |

BATCH QC REPORT



TEH-Tot Ext Hydrocarbons

Analysis Method: EPA 8015M Camp, Dresser & McKee Client: EPA 3520

Prep Method: Project#: 10605

Location: Port Of Oakland

BLANK SPIKE/BLANK SPIKE DUPLICATE

08/17/99 Prep Date: Water Matrix: 08/24/99 Analysis Date: Batch#: 49985

ug/L Units: Diln Fac: 1

BS Lab ID: QC05227

| Analyte | Spike Adde | ed BS | %Rec # | Limits |
|----------------|------------|--------|--------|--------|
| Diesel C10-C24 | 2475 | 1835 | 74 | 50-114 |
| Surrogate | %Rec | Limits | | |
| Hexacosane | 81 | 58-128 | | |

BSD Lab ID: QC05228

| Analyte | Spike Added F | BSD | %Rec # | Limits | RPD # | Limit |
|----------------|---------------|---------|--------|--------|-------|-------|
| Diesel C10-C24 | 2475 18 | 394 | 77 | 50-114 | 3 | 25 |
| Surrogate | %Rec | Limi | ts | | | |
| Hexacosane | 85 | 58-1 | 28 | | | |

[#] Column to be used to flag recovery and RPD values with an asterisk

^{*} Values outside of QC limits

RPD: 0 out of 1 outside limits

Spike Recovery: 0 out of 2 outside limits



90-109

82-118

| Aromatic Volatile Organics EPA 8020 Analyte List | | | | | | |
|---|---|-----------|---|--|--|--|
| Client: Project#: Location: | Camp, Dresser & McKee 10605 Port Of Oakland | | Analysis Method: Prep Method: | EPA 8260A EPA 5030 | | |
| Batch#: | 140979-004 Water 50169 ug/L | | Sampled: Received: Extracted: Analyzed: | 08/13/99 08/13/99 08/26/99 08/26/99 | | |
| Analyte | | Result | Repo | rting Limit | | |
| MTBE | | ND | | 0.5 | | |
| Surrogate | | %Recovery | Reco | very Limits | | |
| 1,2-Dichl | oroethane-d4 | 107 | · · · · · · · · · · · · · · · · · · · | 76-127 | | |

97

109

Toluene-d8

Bromofluorobenzene



0.5

| Aromat | ic V | olatile | Organics |
|--------|------|---------|----------|
| EPA | 8020 | Analyte | List |

Analysis Method: EPA 8260A Camp, Dresser & McKee Client: Prep Method: EPA 5030 Project#: 10605

Location: Port Of Oakland

Diln Fac: 1

08/13/99 Sampled: Field ID: OMW-6 Received: 08/13/99 Lab ID: 140979-007

Extracted: 08/26/99 Water Matrix: Analyzed: 08/26/99 Batch#: 50169 ug/L Units:

Reporting Limit Result Analyte

ND MTBE Recovery Limits %Recovery Surrogate

76-127 95 1,2-Dichloroethane-d4 90-109 92 Toluene-d8 82-118 109 Bromofluorobenzene



| | Aromatic Volatil EPA 8020 Analy | | | |
|---|------------------------------------|--|--|----------------|
| Client: Camp, Dresser & McK Project#: 10605 Location: Port Of Oakland | ee | Analysis Met Prep Method | thod: EPA 8260A : EPA 5030 | |
| Field ID: TRIP BLANK Lab ID: 140979-009 Matrix: Water Batch#: 50169 Units: ug/L Diln Fac: 1 | | Sampled: Received: Extracted: Analyzed: | 08/13/99 08/13/99 09/07/99 09/07/99 | |
| Analyte | Result | | Reporting Limit | and the second |
| MTBE | ND | | 0.5 | |
| Surrogate | %Recovery | | Recovery Limits | |
| 1,2-Dichloroethane-d4 Toluene-d8 Bromofluorobenzene | 109 96 111 | | 76-127 90-109 82-118 | |

BATCH QC REPORT



Purgeable Aromatics by GC/MS EPA 8020 Analyte List

Client: Camp, Dresser & McKee

Project#: 10605

Location: Port Of Oakland

Analysis Method: EPA 8260A

Prep Method: EPA 5030

METHOD BLANK

Matrix: Water Batch#: 50169

Units: ug/L Diln Fac: 1 Prep Date:

08/26/99

Analysis Date: 08/26/99

MB Lab ID: QC05928

| Analyte | Result | Reporting Limit |
|-----------------------|--------|-----------------|
| MTBE | ND | 0.5 |
| Surrogate | %Rec | Recovery Limits |
| 1,2-Dichloroethane-d4 | 101 | 76-127 |
| Toluene-d8 | 92 | 90-109 |
| Bromofluorobenzene | 115 | 82-118 |

BATCH QC REPORT



Purgeable Aromatics by GC/MS EPA 8020 Analyte List

Camp, Dresser & McKee Client:

Project#: 10605

Location: Port Of Oakland

Analysis Method: EPA 8260A

EPA 5030 Prep Method:

08/26/99

METHOD BLANK

Matrix: Water

Batch#: 50169 Units: ug/L

Prep Date: 08/26/99 Analysis Date:

Diln Fac: 1

MB Lab ID: QC05929

| Analyte | Result | Reporting Limit |
|---|-----------------|----------------------------|
| MTBE | ND | 0.5 |
| Surrogate | %Rec | Recovery Limits |
| 1,2-Dichloroethane-d4 Toluene-d8 Bromofluorobenzene | 99 93 111 | 76-127 90-109 82-118 |