# RETENTION POND, DITCHES 6 AND 7 AND TRUCK SCALE SUMP DISCHARGE POINT INVESTIGATION REPORT

**Sierra Pacific Industries**
**Arcata Division Sawmill**
**2593 New Navy Base Road**
**Arcata, California**

**October 21, 2003**


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consulting
scientists and
engineers

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***Prepared For:***

**SIERRA PACIFIC INDUSTRIES**

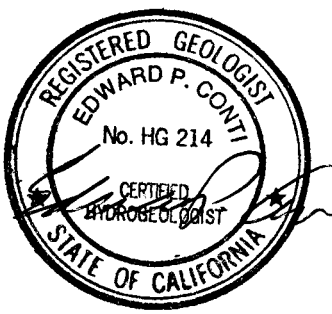
***Prepared By:***

**MFG, INC.**
875 Crescent Way
Arcata, California 95521
(707) 826-8430

MFG Project No. 030229.4

## PROFESSIONAL CERTIFICATION

This report was prepared by MFG, Inc. under the professional supervision of Edward P. Conti. The findings, recommendations, specifications and/or professional opinions presented in this report were prepared in accordance with generally accepted professional hydrogeologic practice, and within the scope of the project. There is no other warranty, either express or implied.




October 21, 2003

Edward P. Conti
C.HG. No. HG 214
Senior Consulting Geologist

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# 1.0 INTRODUCTION

MFG, Inc. has prepared this report on behalf of Sierra Pacific Industries (SPI) to document soil and groundwater sampling activities at the retention pond (Area E), ditches 6 and 7 (Area F) and the truck scale sump discharge point (Area G) of SPI's Arcata Division Sawmill. This work was performed to satisfy the requirements of Sections 12.A.5 and 12.C of the Consent Decree between Ecological Rights Foundation and Sierra Pacific Industries, Inc. et al (case number C-01-0520-MEJ) (Consent Decree). The Arcata Division Sawmill is located at 2593 New Navy Base Road in Arcata, California (hereinafter "the Site"). The Site location is shown in Figure 1. A Site plan of the Arcata Division Sawmill, including Areas E, F and G as defined in the Consent Decree, is presented in Figure 2. An enlargement of a portion of the Site showing the features of the retention pond (Area E), ditches 6 and 7 (Area F) and the truck scale sump discharge point (Area G) is presented in Figure 3.

This work was performed in accordance with the scope of work presented in MFG's *Retention Pond, Ditches 6 and 7 and Truck Scale Sump Discharge Point Investigation* work plan (Work Plan), dated May 28, 2003. The Work Plan was approved by the California Regional Water Quality Control Board, North Coast Region, on June 13, 2003. Investigation activities consisted of collecting and chemically analyzing soil and groundwater samples from two locations in the retention pond, every 20 feet along ditches 6 and 7, and one location at the truck scale sump discharge point. Although not a requirement of the Consent Decree and not included in the Work Plan, a surface water sample was collected from the retention pond. This report summarizes the methods and results of the sampling and analysis activities.

This report is organized as described below. Background information is provided in Section 2.0. The geology and hydrogeology of the Site is discussed in Section 3.0. The soil sampling methods and chemical analysis methods and results are presented in Section 4.0. The groundwater sampling methods and chemical analysis methods and results are presented in Section 5.0. The surface water sampling methods and chemical analysis methods and results are presented in Section 6.0. Disposal of investigation-derived waste is discussed in Section 7.0. References cited in this report are listed in Section 8.0.

# 2.0 BACKGROUND

## 2.1 Site Description

The Site is located on the Samoa Peninsula in Arcata, Humboldt County, California (Figure 1). A Site plan showing features of the Arcata Division Sawmill is included in Figure 2. The Site features in the area of the retention pond (Area E), ditches 6 and 7 (Area F) and the truck scale sump discharge point (Area G) are included in Figure 3.

The Site was originally undeveloped land, consisting of sand dunes and mud flats, until approximately 1950 when SPI converted the land into a lumber mill. During conversion, SPI filled portions of the Site. SPI began operations at this facility before the area was completely filled in. The mill has been active from 1950 to the present day.

## 2.2 Retention Pond, Ditches 6 and 7 and the Truck Scale Sump Discharge Point

The retention pond, ditches 6 and 7, and the truck scale sump discharge point are located in the southwestern portion of the property (Figure 2). The retention pond is a densely vegetated, swampy area located near the southwestern-most portion of the property. The retention pond receives runoff from ditch 7 and the surrounding area. Ditch 6 is approximately 460 feet in length and runs in a northeast to southwest direction along New Navy Base Road. Ditch 6 receives runoff from the pavement in the vicinity of the truck shop as well as New Navy Base Road. Ditch 7 is approximately 320 feet in length and also runs in a northeast to southwest direction toward the northern portion of the retention pond (Figure 3). Ditch 7 receives runoff from the pavement in the vicinity of the truck shop and from the surrounding area. The truck scale sump discharge point is located between the southeast corner of the truck scale and ditch 6. In the past, this has periodically been the discharge point for the sump pump installed in the former truck scale sump. A new, completely above-ground, truck scale was installed at the Site earlier in 2003.

## 3.0 SITE GEOLOGY AND HYDROGEOLOGY

The subsurface lithology and hydrogeology at the Site was previously investigated and described by Environet Consulting (Environet, 2003). The subsurface lithology consists primarily of fine- to medium-grained sand of apparent sand dune origin to a depth of approximately 22 feet below ground level (bgl), the maximum depth explored during previous drilling activities at the Site. The sand is sporadically interbedded with thin lenses of "Bay Mud," consisting of a mixture of sand and silt.

In the eastern portion of the Site, groundwater has been measured in existing monitoring wells at depths ranging from approximately 1 to 5 feet bgl and the groundwater flow direction is generally to the east, toward the Mad River Slough (Figure 2) (Environet, 2003). Groundwater was measured at a depth of approximately 2 feet bgl in a temporary monitoring well that was installed in April 2003 in the vicinity of the truck shop, which is located in the general vicinity of the retention pond, ditches 6 and 7, and the truck scale sump discharge point. During this investigation, groundwater was encountered at depths ranging from the ground surface (in portions of the ditches and in the retention pond) to approximately 3 feet bgl. Based on the proximity of this portion of the site to Humboldt Bay, the groundwater flow direction in this area is likely to the south-southeast, toward Humboldt Bay.

## 4.0 SOIL SAMPLING METHODS AND RESULTS

### 4.1 Field Methods

Prior to sampling activities, MFG obtained a boring permit from the Humboldt County Division of Environmental Health (HCDEH) (Appendix A). A standard encroachment permit for performing work within the right-of-way of New Navy Base Road (Highway 255) was also obtained from the California Department of Transportation (Caltrans) for sampling activities along ditch 6 (Appendix B). Underground Service Alert (USA) was contacted to mark the area for underground utilities and knowledgeable SPI personnel were consulted about the presence of underground utilities in the vicinity of the sampling locations.

On July 8, 9 and 10, 2003, soil borings were advanced using a hand auger at two locations in the retention pond, 17 locations in ditch 7 and one location at the truck scale sump discharge point. The two borings in the retention pond (borings RP-1 and RP-2) were located approximately 55 feet south-southeast and 15 feet east, respectively, of the locations presented in MFG's Work Plan because of the presence of surface water in the pond and very dense vegetation, which limited access. Upon receipt of the encroachment permit from Caltrans, soil borings were advanced using a hand auger on July 22, 23, and 24, 2003 at 24 locations in ditch 6. The sampling locations are shown in Figure 3.

In accordance with the Work Plan, soil samples were collected at the ground surface (0.0 to 0.5 feet bgl) and at 6-inch intervals to a depth of 2.5 feet bgl from borings RP-1 and RP-2 located in the retention pond. Soil samples were collected at the ground surface (0.0 to 0.5 feet bgl) in ditches 6 and 7. Soil samples were collected at the ground surface (0.0 to 0.5 feet bgl) and from the depth interval of 2.0 to 2.5 feet bgl in boring SDP-1, located at the track scale sump discharge point.

The soil samples were collected from the desired sample interval in a 6-inch brass liner inserted into a stainless steel drive sampler that was manually driven into the subsurface using a slide hammer, in advance of the hand auger. After sample collection, the brass liner was removed from the drive sampler, the ends were covered with Teflon® sheets, capped with polyethylene lids, then sealed with duct tape. The liners were labeled and immediately placed in an ice-cooled, insulated chest for transport to the laboratory. Chain-of-custody records were completed for the samples and accompanied the samples until receipt by the laboratory.

The soil was described in the field for lithologic classification, color and moisture content in accordance with the American Society of Testing and Materials (ASTM) Standard Practice for Description and Identification of Soils (Visual-Manual Procedure) D 2488. Indications of contamination, including observations regarding odor or staining, if any, were noted on a boring log for each sampling location. The boring logs are included as Appendix C. Headspace measurements of soil from each sample interval were made in the field using a Thermo-Environmental Instruments Model 580B portable photoionization detector (PID). The PID was calibrated using a 96 parts per million by volume (ppmv) isobutylene gas standard. The response factor of the PID was set such that the instrument would read in ppmv as isobutylene. To prepare the soil for headspace measurements, the soil was placed in a sealable plastic bag, the bag was sealed, and then the soil was broken up and agitated. The bag was allowed to stand for approximately 10 minutes, agitated again, and then the PID probe was inserted into the bag. The highest PID reading was recorded for each sample and noted on the boring log opposite the respective sample interval (Appendix C).

At the conclusion of soil sampling activities, the borings were hand augered to depths ranging from 1.5 to 4.0 feet bgl for the collection of grab groundwater samples (Section 5.0).

Sampling equipment was decontaminated before and after use at each sampling location by washing it in a solution of Liquinox® detergent and distilled water and double or triple rinsing with distilled water.

Soil cuttings and equipment wash water generated during sampling activities were placed in separate steel, 55-gallon, Department of Transportation (DOT)-approved drums that were sealed and labeled and are being temporarily stored in a secure location at the Site pending disposal (Section 7.0).

### 4.2 Stratigraphy and Field Observations

The soil encountered during sampling activities consisted of sandy silts to a depth of approximately one foot bgl and silty sands or sands to a depth of 4 feet bgl, the maximum depth explored. Gravel was present near the surface in some borings. The depth of saturated soil encountered in the borings ranged from ground surface to approximately 3 feet bgl (Appendix C). The PID readings from headspace measurements of the soil samples ranged from 0.0 to 4.5 ppmv (Appendix C). A slight

petroleum-like odor was noted in the soil from borings D7-3 and D7-12 at a depth of approximately 0.5 feet bgl in both borings.

### 4.3 Chemical Analysis Methods

The soil samples were submitted for chemical analysis to Alpha Analytical Laboratories Inc. (Alpha) of Ukiah, California. The samples were analyzed for the following constituents:

- Total oil and grease using EPA Method 9071B;
- Chlorinated phenols using the Canadian Pulp Method;
- Wear metals (cadmium, chromium, lead, nickel, and zinc) using EPA Method 6010B; and
- pH using EPA Method 9045.

Analysis of soil samples for total oil and grease was a requirement of the Consent Decree. Soil samples were analyzed for total oil and grease using EPA Method 9071B. During sample collection, field personnel did not observe visible petroleum hydrocarbons in the soil samples; however, total oil and grease was detected in the samples. Since the total oil and grease method detects some non-petroleum organic compounds as well as petroleum hydrocarbons, the still-available[1] sample extracts were subjected to the EPA Method 9071B method-specific silica gel cleanup procedure and then re-analyzed. The silica gel cleanup procedure is intended to remove polar organic constituents that could interfere with the quantitation of petroleum hydrocarbons.

Oil and grease was detected in the samples following the silica gel cleanup, although at lower concentrations than detected prior to silica gel cleanup in most samples. Visible evidence of petroleum hydrocarbons was not noted in the field during sample collection, although a petroleum odor was noted in two samples (Section 4.2). A common limitation associated with silica gel cleanup is the potential for incomplete cleanup due to the limited volume of silica gel used. In addition, the presence of organic

[1] For most samples, the extracts were analyzed first, then subjected to the silica gel cleanup, and then re-analyzed. However, for some of the samples, the original extracts had already been disposed by the laboratory and therefore the sample had to be re-extracted, subjected to the silica gel cleanup, and then analyzed. For these latter samples, the pre- and post-silica gel cleanup analyses were performed on extracts prepared from different aliquots of the soil sample. Due to inherent soil heterogeneities, these data are not easily compared.

compounds that are not removed by silica gel can interfere with the quantitation of petroleum hydrocarbons. The chemical analysis results for the soil samples are summarized in Table 1. Copies of the laboratory reports and chain-of-custody records are included in Appendix D.

### 4.4 Chemical Analysis Results

#### 4.4.1 Retention Pond (Area E)

Total oil and grease was detected at concentrations ranging from 6,200 to 40,000 milligrams per kilogram (mg/kg) in the five soil samples from boring RP-1 and 120 to 1,400 mg/kg in the five soil samples from boring RP-2. Oil and grease (silica gel cleanup) was detected at concentrations ranging from 5,000 to 25,000 mg/kg in the five soil samples from boring RP-1 and 50 to 160 mg/kg in the five soil samples from boring RP-2.

Chlorinated phenols were not detected at or above the laboratory reporting limit of 1.0 mg/kg in any of the soil samples from borings RP-1 and RP-2.

Of the five soil samples collected from boring RP-1, cadmium was detected in two samples at concentrations of 1.3 and 1.2 mg/kg, chromium was detected in five samples at concentrations ranging from 43 to 110 mg/kg, lead was detected in all of the samples at concentrations ranging from 14 to 27 mg/kg, nickel was detected in all of the samples at concentrations ranging from 58 to 210 mg/kg, and zinc was detected in all of the samples at concentrations ranging from 63 to 150 mg/kg.

Of the five soil samples collected from boring RP-2, chromium was detected in four samples at concentrations ranging from 18 to 25 mg/kg, lead was detected in three samples at concentrations ranging from 8.8 to 28 mg/kg, nickel was detected in four samples at concentrations ranging from 16 to 22 mg/kg and zinc was detected in all of the samples at concentrations ranging from 18 to 61 mg/kg. Cadmium was not detected in any of the samples at or above the laboratory reporting limit of 1.0 mg/kg.

The pH of the soil samples from boring RP-1 ranged from 5.1 to 5.8 and the pH of the soil samples from boring RP-2 ranged from 5.2 to 6.1.

### 4.4.2 Ditches 6 and 7 (Area F)

Total oil and grease was detected in all 24 surface soil samples from ditch 6 at concentrations ranging from 140 to 12,000 mg/kg and all 17 surface soil samples from ditch 7 at concentrations ranging from 130 to 26,000 mg/kg. Oil and grease (silica gel cleanup) was detected in 23 surface soil samples from ditch 6 at concentrations ranged from 110 to 6,000 mg/kg and all 17 surface soil samples from ditch 7 at concentrations ranging from 100 to 11,000 mg/kg.

Chlorinated phenols were not detected at or above the laboratory reporting limit of 1.0 mg/kg in any of the surface soil samples from ditches 6 and 7.

Of the 24 surface soil samples collected from ditch 6, chromium was detected in all of the samples at concentrations ranging from 17 to 51 mg/kg, lead was detected in 21 samples at concentrations ranging from 5.2 to 59 mg/kg, nickel was detected in 23 samples at concentrations ranging from 10 to 63 mg/kg and zinc was detected in all of the samples at concentrations ranging from 14 to 280 mg/kg. Cadmium was not detected in any of the samples at or above the laboratory reporting limit of 1.0 mg/kg.

Of the 17 surface soil samples collected from ditch 7, cadmium was detected in one sample at a concentration of 5.1 mg/kg, chromium was detected in all of the samples at concentrations ranging from 10 to 46 mg/kg, lead was detected in 15 samples at concentrations ranging from 5.8 to 35 mg/kg, nickel was detected in all of the samples at concentrations ranging from 11 to 46 mg/kg, and zinc was detected in all of the samples at concentrations ranging from 23 to 460 mg/kg.

The pH of the surface soil samples from ditch 6 ranged from 5.0 to 6.7 and the pH of the surface soil samples from ditch 7 ranged from 5.1 to 6.3.

### 4.4.3 Truck Scale Sump Discharge Point (Area G)

Total oil and grease was detected at a concentration of 8,100 mg/kg in the surface soil sample from boring SDP-1 and 460 mg/kg in the soil sample collected from the depth interval of 2.0 to 2.5 feet bgl in boring SDP-1. Oil and grease (silica gel cleanup) was detected at a concentration of 3,600 mg/kg in the

surface soil sample from boring SDP-1 and 150 mg/kg in the soil sample collected from the depth interval of 2.0 to 2.5 feet bgl in boring SDP-1.

Chlorinated phenols were not detected at or above the laboratory reporting limit of 1.0 mg/kg in the two soil samples from boring SDP-1.

In the surface soil sample collected from boring SDP-1, chromium was detected at a concentration of 44 mg/kg, lead was detected at a concentration of 31 mg/kg, nickel was detected at a concentration of 61 mg/kg and zinc was detected at a concentration of 160 mg/kg. Cadmium was not detected at or above the laboratory reporting limit of 1.0 mg/kg.

In the soil sample collected from the depth interval of 2.0 to 2.5 feet bgl in boring SDP-1, chromium was detected at a concentration of 21 mg/kg, nickel was detected at a concentration of 49 mg/kg and zinc was detected at a concentration of 37 mg/kg. Cadmium was not detected at or above the laboratory reporting limit of 1.0 mg/kg and lead was not detected at or above the laboratory reporting limit of 5.0 mg/kg.

The pH of the surface soil sample from boring SDP-1 was 6.7 and the pH of the soil sample collected from the depth interval of 2.0 to 2.5 feet bgl in boring SDP-1 was 6.0.

## 5.0 GROUNDWATER SAMPLING METHODS AND RESULTS

### 5.1 Field Methods

On July 8, 9 and 10, 2003, groundwater samples were collected for chemical analysis from 2 borings at the retention pond, 17 borings along ditch 7 and 1 boring at the truck scale sump discharge point. On July 22, 23 and 24, 2003, groundwater samples were collected for chemical analysis from 24 borings along ditch 6. The sampling locations are shown in Figure 3.

Groundwater was purged and sampled from each boring using a peristaltic pump and dedicated polyethylene tubing. Prior to sampling, groundwater was purged from each boring until relatively free of sediment. During sampling, groundwater from each boring was placed into two glass, 1-liter amber containers sealed with Teflon®-lined screw caps. One of the amber containers was preserved with nitric acid added by the laboratory. Prior to filling the preserved container, groundwater was filtered in the field using a 0.45-micron filter.

The sample containers were labeled and immediately placed in an ice-cooled, insulated chest for transport to the laboratory. Chain-of-custody records were completed for the samples and accompanied the samples until receipt by the laboratory.

After completion of sampling activities on June 8, 9 and 10, 2003, the borings at the retention pond, ditch 7 and the truck scale sump discharge point were grouted to approximately six inches below grade with cement grout. The top six inches of the borings were backfilled with native material. After completion of the sampling activities on June 22, 23 and 24, 2003, the saturated zone in the borings along ditch 6 were grouted with bentonite chips and the unsaturated zone was backfilled with 3/4-inch gravel in accordance with Caltrans requirements.

All equipment used to collect groundwater samples was dedicated to each boring; therefore, no wash water was generated for disposal.

Purge water generated during groundwater sampling activities was placed in the steel, 55-gallon, DOT-approved drum containing soil sampling equipment wash water (Section 4.1). The drum was sealed and labeled and is being temporarily stored in a secure location at the Site pending disposal (Section 7.0).

## 5.2 Chemical Analysis Methods

The groundwater samples were submitted for chemical analysis to Alpha of Ukiah, California. The samples were analyzed for the following constituents:

- Total extractable petroleum hydrocarbons (TEPH) as diesel and motor oil using EPA Method 8015M with silica gel cleanup; and
- Dissolved wear metals (cadmium, chromium, lead, nickel and zinc) using EPA Method 6010B.

The chemical analysis results are summarized in Table 2. Copies of the laboratory reports, including chromatograms, and chain-of-custody records are included in Appendix E.

## 5.3 Chemical Analysis Results

### 5.3.1 Retention Pond (Area E)

TEPH as diesel was detected at a concentration of 170 micrograms per liter (µg/L) in the groundwater sample from boring RP-1. However, the laboratory indicated that the diesel range detection was primarily due to overlap from a heavier oil range (higher carbon number) compound. TEPH as motor oil was detected at a concentration of 1,100 µg/L in the groundwater sample from boring RP-1. TEPH as diesel and motor oil were not detected at or above the laboratory reporting limits of 50 and 100 µg/L, respectively, in the groundwater sample from boring RP-2.

Dissolved wear metals (cadmium, chromium, lead, nickel and zinc) were not detected at or above their respective laboratory reporting limits in the groundwater samples from borings RP-1 and RP-2 (Table 2).

### 5.3.2 Ditches 6 and 7 (Area F)

TEPH as diesel was detected in 18 of the 24 water samples collected from ditch 6 at concentrations ranging from 59 to 1,000 µg/L. However, the laboratory indicated that the detections in the

diesel range were primarily due to overlap from a heavier oil range (higher carbon number) compound. TEPH as motor oil was detected in 19 of the 24 water samples collected from ditch 6 at concentrations ranging from 170 to 4,400 µg/L. TEPH as diesel and motor oil were not detected at or above their respective laboratory reporting limits in the remaining water samples (Table 2).

TEPH as diesel was detected in 14 of the 17 water samples collected from ditch 7 at concentrations ranging from 67 to 880 µg/L. However, the laboratory indicated that the detections in the diesel range were primarily due to overlap from a heavier oil range (higher carbon number) compound. TEPH as motor oil was detected in 15 of the 17 water samples collected from ditch 7 at concentrations ranging from 170 to 4,400 µg/L. TEPH as diesel and motor oil were not detected at or above their respective laboratory reporting limits in the remaining water samples (Table 2).

Dissolved wear metals (cadmium, chromium, lead, nickel and zinc) were not detected at or above their respective laboratory reporting limits in the water samples collected from ditch 6 (Table 2). The only wear metal detected in samples from ditch 7 was dissolved zinc at a concentration of 200 µg/L in sample D7-10-GW. The other wear metals were not detected at or above their respective laboratory reporting limits in sample D7-10-GW, and dissolved wear metals were not detected at or above their respective laboratory reporting limits in the remaining water samples from ditch 7 (Table 2).

### 5.3.3 Truck Scale Sump Discharge Point (Area G)

TEPH as diesel was detected at a concentration of 300 µg/L in the groundwater sample from boring SDP-1. However, the laboratory indicated that the diesel range detection was primarily due to overlap from a heavier oil range (higher carbon number) compound. TEPH as motor oil was detected at a concentration of 890 µg/L in the groundwater sample from boring SDP-1.

Dissolved wear metals (cadmium, chromium, lead, nickel and zinc) were not detected at or above their respective laboratory reporting limits in the groundwater sample from boring SDP-1 (Table 2).

## 6.0 SURFACE WATER SAMPLING METHODS AND RESULTS

### 6.1 Field Methods

On July 24, 2003, a surface water sample was collected for chemical analysis from the retention pond. The approximate sampling location is shown in Figure 3. The surface water sample (RP-3-SW) was collected using the "Direct Method" where two unpreserved, glass, 1-liter amber containers were inverted, submerged, turned upright and allowed to fill, then removed from the water. One of the containers was immediately sealed with a Teflon®-lined screw cap. The second container was used to pump the sample through a 0.45-micron filter and into a nitric acid-preserved, glass, 1-liter amber container using a peristaltic pump and polyethylene tubing. The preserved container was then sealed with a Teflon®-lined screw cap.

All equipment used to collect the surface water sample was dedicated; therefore, no wash water was generated for disposal.

### 6.2 Chemical Analysis Methods

The surface water sample was submitted for chemical analysis to Alpha of Ukiah, California. The sample was analyzed for the following constituents:

- Total extractable petroleum hydrocarbons (TEPH) as diesel and motor oil using EPA Method 8015M with silica gel cleanup; and
- Dissolved wear metals (cadmium, chromium, lead, nickel and zinc) using EPA Method 6010B.

The chemical analysis results are summarized in Table 3. Copies of the laboratory report, including chromatograms, and the chain-of-custody record are included in Appendix E.

### 6.3 Chemical Analysis Results

TEPH as diesel was detected at a concentration of 60 µg/L. However, the laboratory indicated that the chromatogram pattern for the sample did not resemble the pattern of the diesel standard used by the laboratory. TEPH as motor oil was detected at a concentration of 120 µg/L.

Dissolved wear metals (cadmium, chromium, lead, nickel and zinc) were not detected at or above their respective laboratory reporting limits (Table 3).

## 7.0 DISPOSAL OF INVESTIGATION-DERIVED WASTE

Soil cuttings and equipment wash water are being stored temporarily at the Site in steel, 55-gallon drums (Section 4.1 and 5.1). The investigation-derived waste from this investigation will be disposed of in accordance with applicable regulations by SPI.

## 8.0 REFERENCES

Environet Consulting (Environet), 2003, *Results of the Remedial Investigation for Sierra Pacific Industries - Arcata Division Sawmills, Arcata, California*: January 30.

**TABLES**

**TABLE 1**
**SUMMARY OF CHEMICAL ANALYSIS RESULTS OF SOIL SAMPLES FOR OIL AND GREASE, CHLORINATED PHENOLS, WEAR METALS AND pH**

Sierra Pacific Industries
Arcata Division Sawmill
Arcata, California

| | | | | | | CHLORINATED PHENOLS | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | DATE SAMPLED | SAMPLE LOCATION | SAMPLE DEPTH (ft bgl) | TOTAL OIL AND GREASE (mg/kg) | OIL AND GREASE (mg/kg) | 2,3,4,5-TETRA-CHLORO-PHENOL (mg/kg) | 2,3,4,6-TETRA-CHLORO-PHENOL (mg/kg) | 2,3,5,6-TETRA-CHLORO-PHENOL (mg/kg) | 2,4,6-TRI-CHLORO-PHENOL (mg/kg) | PENTA-CHLORO-PHENOL (mg/kg) | CADMIUM (mg/kg) | CHROMIUM (mg/kg) | LEAD (mg/kg) | NICKEL (mg/kg) | ZINC (mg/kg) | pH (Std. Units) |
| RP-1-0.0-0.5* | 08-Jul-03 | Retention Pond | 0.0-0.5 | 12,000 | 6,400 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | 1.3 | 48 | 17 | 58 | 150 | 5.1 |
| RP-1-0.5-1.0* | 08-Jul-03 | Retention Pond | 0.5-1.0 | 16,000 | 13,000 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | 110 | 17 | 210 | 140 | 5.2 |
| RP-1-1.0-1.5* | 08-Jul-03 | Retention Pond | 1.0-1.5 | 40,000 | 25,000 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | 1.2 | 49 | 22 | 86 | 140 | 5.1 |
| RP-1-1.5-2.0* | 08-Jul-03 | Retention Pond | 1.5-2.0 | 11,000 | 5,000 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | 50 | 27 | 72 | 100 | 5.1 |
| RP-1-2.0-2.5* | 08-Jul-03 | Retention Pond | 2.0-2.5 | 6,200 | 7,100 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | 43 | 14 | 68 | 63 | 5.8 |
| RP-2-0.0-0.5* | 08-Jul-03 | Retention Pond | 0.0-0.5 | 1,400 | 75 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <5.0 | 28 | <10 | 61 | 5.2 |
| RP-2-0.5-1.0* | 08-Jul-03 | Retention Pond | 0.5-1.0 | 120 | 130 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | 25 | 8.8 | 22 | 55 | 5.7 |
| RP-2-1.0-1.5* | 08-Jul-03 | Retention Pond | 1.0-1.5 | 300 | 160 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | 18 | 12 | 18 | 53 | 6.1 |
| RP-2-1.5-2.0* | 08-Jul-03 | Retention Pond | 1.5-2.0 | 260 | 50 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | 19 | <5.0 | 16 | 18 | 6.0 |
| RP-2-2.0-2.5* | 08-Jul-03 | Retention Pond | 2.0-2.5 | 260 | 70 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | 18 | <5.0 | 16 | 19 | 5.8 |
| D6-1-0.0-0.5 | 22-Jul-03 | Ditch 6 | 0.0-0.5 | 3,700 | 1,600 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | 42 | 31 | 56 | 110 | 6.2 |
| D6-2-0.0-0.5 | 22-Jul-03 | Ditch 6 | 0.0-0.5 | 12,000 | 6,000 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | 48 | 59 | 63 | 190 | 6.4 |
| D6-3-0.0-0.5 | 22-Jul-03 | Ditch 6 | 0.0-0.5 | 10,000 | 4,000 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | 44 | 37 | 58 | 280 | 6.4 |
| D6-4-0.0-0.5 | 22-Jul-03 | Ditch 6 | 0.0-0.5 | 5,800 | 1,600 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | 40 | 29 | 49 | 160 | 6.4 |
| D6-5-0.0-0.5 | 22-Jul-03 | Ditch 6 | 0.0-0.5 | 3,800 | 1,900 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | 37 | 24 | 44 | 76 | 6.6 |
| D6-6-0.0-0.5 | 22-Jul-03 | Ditch 6 | 0.0-0.5 | 3,700 | 1,500 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | 34 | 23 | 41 | 120 | 6.4 |
| D6-7-0.0-0.5 | 22-Jul-03 | Ditch 6 | 0.0-0.5 | 1,200 | 540 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | 25 | 8.6 | 30 | 39 | 6.5 |
| D6-8-0.0-0.5 | 23-Jul-03 | Ditch 6 | 0.0-0.5 | 1,200 | 580 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | 23 | 18 | 31 | 58 | 6.4 |
| D6-9-0.0-0.5 | 23-Jul-03 | Ditch 6 | 0.0-0.5 | 660 | 180 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | 22 | 7.9 | 22 | 46 | 6.4 |
| D6-10-0.0-0.5 | 23-Jul-03 | Ditch 6 | 0.0-0.5 | 1,100 | 340 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | 33 | 13 | 35 | 51 | 6.6 |
| D6-11-0.0-0.5 | 23-Jul-03 | Ditch 6 | 0.0-0.5 | 2,400 | 1,000 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | 51 | 12 | 61 | 56 | 5.4 |
| D6-12-0.0-0.5 | 23-Jul-03 | Ditch 6 | 0.0-0.5 | 9,800 | 4,300 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | 37 | 31 | 42 | 240 | 5.0 |
| D6-13-0.0-0.5 | 23-Jul-03 | Ditch 6 | 0.0-0.5 | 1,500 | 650 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | 29 | 15 | 32 | 58 | 5.8 |

**TABLE 1**
**SUMMARY OF CHEMICAL ANALYSIS RESULTS OF SOIL SAMPLES FOR OIL AND GREASE, CHLORINATED PHENOLS, WEAR METALS AND pH**

Sierra Pacific Industries
Arcata Division Sawmill
Arcata, California

| | | | | | | CHLORINATED PHENOLS | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | DATE SAMPLED | SAMPLE LOCATION | SAMPLE DEPTH (ft bgl) | TOTAL OIL AND GREASE (mg/kg) | OIL AND GREASE (mg/kg) | 2,3,4,5-TETRA-CHLORO-PHENOL (mg/kg) | 2,3,4,6-TETRA-CHLORO-PHENOL (mg/kg) | 2,3,5,6-TETRA-CHLORO-PHENOL (mg/kg) | 2,4,6-TRI-CHLORO-PHENOL (mg/kg) | PENTA-CHLORO-PHENOL (mg/kg) | CADMIUM (mg/kg) | CHROMIUM (mg/kg) | LEAD (mg/kg) | NICKEL (mg/kg) | ZINC (mg/kg) | pH (Std. Units) |
| D6-14-0.0-0.5 | 23-Jul-03 | Ditch 6 | 0.0-0.5 | 4,800 | 1,800 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | 22 | 18 | 22 | 110 | 6.2 |
| D6-15-0.0-0.5 | 23-Jul-03 | Ditch 6 | 0.0-0.5 | 4,300 | 2,000 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | 17 | 11 | 18 | 110 | 5.8 |
| D6-16-0.0-0.5 | 23-Jul-03 | Ditch 6 | 0.0-0.5 | 4,900 | 2,400 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | 20 | 9.5 | 24 | 78 | 6.0 |
| D6-17-0.0-0.5 | 23-Jul-03 | Ditch 6 | 0.0-0.5 | 1,200 | 320 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | 34 | 12 | 23 | 19 | 5.9 |
| D6-18-0.0-0.5 | 24-Jul-03 | Ditch 6 | 0.0-0.5 | 1,400 | 130 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | 25 | 5.2 | <10 | 30 | 6.2 |
| D6-19-0.0-0.5 | 24-Jul-03 | Ditch 6 | 0.0-0.5 | 2,600 | 1,400 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | 19 | 8.1 | 17 | 49 | 6.7 |
| D6-20-0.0-0.5 | 24-Jul-03 | Ditch 6 | 0.0-0.5 | 2,100 | 890 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | 28 | 9.8 | 27 | 37 | 6.1 |
| D6-21-0.0-0.5 | 24-Jul-03 | Ditch 6 | 0.0-0.5 | 530 | 180 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | 29 | <5.0 | 10 | 14 | 5.3 |
| D6-22-0.0-0.5 | 24-Jul-03 | Ditch 6 | 0.0-0.5 | 380 | <50 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | 31 | <5.0 | 28 | 21 | 6.3 |
| D6-23-0.0-0.5 | 24-Jul-03 | Ditch 6 | 0.0-0.5 | 280 | 170 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | 32 | <5.0 | 29 | 17 | 5.3 |
| D6-24-0.0-0.5 | 24-Jul-03 | Ditch 6 | 0.0-0.5 | 140 | 110 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | 35 | 8.8 | 25 | 48 | 5.2 |
| D7-1-0.0-0.5* | 09-Jul-03 | Ditch 7 | 0.0-0.5 | 1,900 | 400 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | 18 | 12 | 23 | 170 | 6.3 |
| D7-2-0.0-0.5* | 09-Jul-03 | Ditch 7 | 0.0-0.5 | 3,100 | 780 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | 44 | 18 | 42 | 140 | 6.1 |
| D7-3-0.0-0.5* | 09-Jul-03 | Ditch 7 | 0.0-0.5 | 1,900 | 1,100 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | 16 | 13 | 21 | 60 | 6.2 |
| D7-4-0.0-0.5* | 09-Jul-03 | Ditch 7 | 0.0-0.5 | 4,100 | 1,500 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | 13 | 14 | 18 | 150 | 6.3 |
| D7-5-0.0-0.5* | 09-Jul-03 | Ditch 7 | 0.0-0.5 | 8,800 | 3,200 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | 11 | 12 | 11 | 39 | 5.1 |
| D7-6-0.0-0.5* | 09-Jul-03 | Ditch 7 | 0.0-0.5 | 160 | 100 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | 44 | <5.0 | 35 | 23 | 5.2 |
| D7-7-0.0-0.5* | 09-Jul-03 | Ditch 7 | 0.0-0.5 | 130 | 160 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | 46 | <5.0 | 35 | 27 | 5.4 |
| D7-8-0.0-0.5* | 09-Jul-03 | Ditch 7 | 0.0-0.5 | 1,800 | 1,200 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | 36 | 5.8 | 29 | 34 | 5.7 |
| D7-9-0.0-0.5* | 10-Jul-03 | Ditch 7 | 0.0-0.5 | 2,300 | 320 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | 40 | 20 | 41 | 140 | 6.0 |
| D7-10-0.0-0.5* | 10-Jul-03 | Ditch 7 | 0.0-0.5 | 1,400 | 630 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | 20 | 23 | 46 | 370 | 6.0 |
| D7-11-0.0-0.5* | 10-Jul-03 | Ditch 7 | 0.0-0.5 | 17,000 | 6,100 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | 38 | 35 | 38 | 120 | 5.9 |
| D7-12-0.0-0.5* | 10-Jul-03 | Ditch 7 | 0.0-0.5 | 1,100 | 120 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | 44 | 13 | 38 | 75 | 6.0 |

**TABLE 1**
**SUMMARY OF CHEMICAL ANALYSIS RESULTS OF SOIL SAMPLES FOR OIL AND GREASE, CHLORINATED PHENOLS, WEAR METALS AND pH**

Sierra Pacific Industries
Arcata Division Sawmill
Arcata, California

| | | | | | | CHLORINATED PHENOLS | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | DATE SAMPLED | SAMPLE LOCATION | SAMPLE DEPTH (ft bgl) | TOTAL OIL AND GREASE (mg/kg) | OIL AND GREASE (mg/kg) | 2,3,4,5-TETRA-CHLORO-PHENOL (mg/kg) | 2,3,4,6-TETRA-CHLORO-PHENOL (mg/kg) | 2,3,5,6-TETRA-CHLORO-PHENOL (mg/kg) | 2,4,6-TRI-CHLORO-PHENOL (mg/kg) | PENTA-CHLORO-PHENOL (mg/kg) | CADMIUM (mg/kg) | CHROMIUM (mg/kg) | LEAD (mg/kg) | NICKEL (mg/kg) | ZINC (mg/kg) | pH (Std. Units) |
| D7-13-0.0-0.5* | 10-Jul-03 | Ditch 7 | 0.0-0.5 | 4,100 | 960 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | 10 | 6.2 | 17 | 70 | 6.1 |
| D7-14-0.0-0.5* | 10-Jul-03 | Ditch 7 | 0.0-0.5 | 2,800 | 840 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | 16 | 7.6 | 24 | 110 | 5.7 |
| D7-15-0.0-0.5* | 10-Jul-03 | Ditch 7 | 0.0-0.5 | 3,100 | 1,100 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | 27 | 12 | 36 | 100 | 6.0 |
| D7-16-0.0-0.5* | 10-Jul-03 | Ditch 7 | 0.0-0.5 | 8,000 | 7,200 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | 32 | 25 | 39 | 210 | 6.3 |
| D7-17-0.0-0.5* | 10-Jul-03 | Ditch 7 | 0.0-0.5 | 26,000 | 11,000 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | 5.1 | 31 | 27 | 35 | 460 | 5.6 |
| SDP-1-0.0-0.5* | 09-Jul-03 | Sump Discharge Point | 0.0-0.5 | 8,100 | 3,600 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | 44 | 31 | 61 | 160 | 6.7 |
| SDP-1-2.0-2.5* | 09-Jul-03 | Sump Discharge Point | 2.0-2.5 | 460 | 150 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | 21 | <5.0 | 49 | 37 | 6.0 |

NOTES:

ft bgl Feet below ground level.

mg/kg Milligrams per kilogram.

< Target analyte was not detected at or above the laboratory reporting limit shown.

* Indicates that the Total Oil and Grease analysis and the Oil and Grease analysis (silica gel cleanup) were performed on extracts prepared from different aliquots of this soil sample, because the original extract (used for the Total Oil and Grease analysis) had already been disposed by the laboratory.

Total oil and grease analyzed by EPA Method 9071B.

Oil and grease analyzed by EPA Method 9071B with silica gel cleanup.

Chlorinated phenols analyzed by the Canadian Pulp Method.

Metals analyzed by EPA Method 6010.

pH analyzed by EPA Method 9045B.

**TABLE 2**
**SUMMARY OF CHEMICAL ANALYSIS RESULTS**
**OF GROUNDWATER SAMPLES FOR TEPH AND DISSOLVED WEAR METALS**

Sierra Pacific Industries
Arcata Division Sawmill
Arcata, California

| SAMPLE ID | SAMPLE LOCATION | DATE SAMPLED | TEPH AS DIESEL (ug/L) | TEPH AS MOTOR OIL (ug/L) | CADMIUM (ug/L) | CHROMIUM (ug/L) | LEAD (ug/L) | NICKEL (ug/L) | ZINC (ug/L) |
|---|---|---|---|---|---|---|---|---|---|
| RP-1-GW | Retention Pond | 08-Jul-03 | 170 * | 1,100 | <10 | <50 | <50 | <100 | <100 |
| RP-2-GW | Retention Pond | 08-Jul-03 | <50 | <100 | <10 | <50 | <50 | <100 | <100 |
| D6-1-GW | Ditch 6 | 22-Jul-03 | 190 * | 1,000 | <10 | <50 | <50 | <100 | <100 |
| D6-2-GW | Ditch 6 | 22-Jul-03 | 440 * | 2,000 | <10 | <50 | <50 | <100 | <100 |
| D6-3-GW | Ditch 6 | 22-Jul-03 | 250 * | 930 | <10 | <50 | <50 | <100 | <100 |
| D6-4-GW | Ditch 6 | 22-Jul-03 | 670 * | 2,500 | <10 | <50 | <50 | <100 | <100 |
| D6-5-GW | Ditch 6 | 22-Jul-03 | <71 | 380 | <10 | <50 | <50 | <100 | <100 |
| D6-6-GW | Ditch 6 | 22-Jul-03 | 380 * | 1,400 | <10 | <50 | <50 | <100 | <100 |
| D6-7-GW | Ditch 6 | 22-Jul-03 | 290 * | 1,200 | <10 | <50 | <50 | <100 | <100 |
| D6-8-GW | Ditch 6 | 23-Jul-03 | 220 * | 830 | <10 | <50 | <50 | <100 | <100 |
| D6-9-GW | Ditch 6 | 23-Jul-03 | 59 * | 250 | <10 | <50 | <50 | <100 | <100 |
| D6-10-GW | Ditch 6 | 23-Jul-03 | <61 | <120 | <10 | <50 | <50 | <100 | <100 |
| D6-11-GW | Ditch 6 | 23-Jul-03 | <55 | <110 | <10 | <50 | <50 | <100 | <100 |
| D6-12-GW | Ditch 6 | 23-Jul-03 | 74 * | 170 | <10 | <50 | <50 | <100 | <100 |
| D6-13-GW | Ditch 6 | 23-Jul-03 | 58 * | 170 | <10 | <50 | <50 | <100 | <100 |
| D6-14-GW | Ditch 6 | 23-Jul-03 | 500 * | 2,500 | <10 | <50 | <50 | <100 | <100 |
| D6-15-GW | Ditch 6 | 23-Jul-03 | 1,000 * | 4,400 | <10 | <50 | <50 | <100 | <100 |
| D6-16-GW | Ditch 6 | 23-Jul-03 | 440 * | 2,100 | <10 | <50 | <50 | <100 | <100 |
| D6-17-GW | Ditch 6 | 23-Jul-03 | 310 * | 1,300 | <10 | <50 | <50 | <100 | <100 |
| D6-18-GW | Ditch 6 | 24-Jul-03 | 320 * | 1,300 | <10 | <50 | <50 | <100 | <100 |
| D6-19-GW | Ditch 6 | 24-Jul-03 | 80 * | 320 | <10 | <50 | <50 | <100 | <100 |
| D6-20-GW | Ditch 6 | 24-Jul-03 | 63 * | 190 | <10 | <50 | <50 | <100 | <100 |
| D6-21-GW | Ditch 6 | 24-Jul-03 | 130 * | 430 | <10 | <50 | <50 | <100 | <100 |
| D6-22-GW | Ditch 6 | 24-Jul-03 | <56 | <110 | <10 | <50 | <50 | <100 | <100 |
| D6-23-GW | Ditch 6 | 24-Jul-03 | <58 | <120 | <10 | <50 | <50 | <100 | <100 |

**TABLE 2**
**SUMMARY OF CHEMICAL ANALYSIS RESULTS**
**OF GROUNDWATER SAMPLES FOR TEPH AND DISSOLVED WEAR METALS**

Sierra Pacific Industries
Arcata Division Sawmill
Arcata, California

| SAMPLE ID | SAMPLE LOCATION | DATE SAMPLED | TEPH AS DIESEL (ug/L) | TEPH AS MOTOR OIL (ug/L) | CADMIUM (ug/L) | CHROMIUM (ug/L) | LEAD (ug/L) | NICKEL (ug/L) | ZINC (ug/L) |
|---|---|---|---|---|---|---|---|---|---|
| D6-24-GW | Ditch 6 | 24-Jul-03 | <55 | <110 | <10 | <50 | <50 | <100 | <100 |
| D7-1-GW | Ditch 7 | 09-Jul-03 | <54 | 170 | <10 | <50 | <50 | <100 | <100 |
| D7-2-GW | Ditch 7 | 09-Jul-03 | 85 * | 240 | <10 | <50 | <50 | <100 | <100 |
| D7-3-GW | Ditch 7 | 09-Jul-03 | <50 | <100 | <10 | <50 | <50 | <100 | <100 |
| D7-4-GW | Ditch 7 | 09-Jul-03 | 67 * | 280 | <10 | <50 | <50 | <100 | <100 |
| D7-5-GW | Ditch 7 | 09-Jul-03 | 560 * | 4,100 | <10 | <50 | <50 | <100 | <100 |
| D7-6-GW | Ditch 7 | 09-Jul-03 | 70 * | 380 | <10 | <50 | <50 | <100 | <100 |
| D7-7-GW | Ditch 7 | 09-Jul-03 | <56 | <110 | <10 | <50 | <50 | <100 | <100 |
| D7-8-GW | Ditch 7 | 09-Jul-03 | 240 * | 1,500 | <10 | <50 | <50 | <100 | <100 |
| D7-9-GW | Ditch 7 | 10-Jul-03 | 300 * | 1,600 | <10 | <50 | <50 | <100 | <100 |
| D7-10-GW | Ditch 7 | 10-Jul-03 | 220 * | 1,500 | <10 | <50 | <50 | <100 | 200 |
| D7-11-GW | Ditch 7 | 10-Jul-03 | 190 * | 1,500 | <10 | <50 | <50 | <100 | <100 |
| D7-12-GW | Ditch 7 | 10-Jul-03 | 140 * | 810 | <10 | <50 | <50 | <100 | <100 |
| D7-13-GW | Ditch 7 | 10-Jul-03 | 310 * | 1,700 | <10 | <50 | <50 | <100 | <100 |
| D7-14-GW | Ditch 7 | 10-Jul-03 | 180 * | 1,300 | <10 | <50 | <50 | <100 | <100 |
| D7-15-GW | Ditch 7 | 10-Jul-03 | 310 * | 2,600 | <10 | <50 | <50 | <100 | <100 |
| D7-16-GW | Ditch 7 | 10-Jul-03 | 880 * | 4,400 | <10 | <50 | <50 | <100 | <100 |
| D7-17-GW | Ditch 7 | 10-Jul-03 | 380 * | 2,100 | <10 | <50 | <50 | <100 | <100 |
| SDP-1-GW | Sump Discharge Point | 09-Jul-03 | 300 * | 890 | <10 | <50 | <50 | <100 | <100 |

NOTES:

TEPH Total extractable petroleum hydrocarbons analyzed by EPA Method 8015 with silica gel cleanup and quantified against diesel and motor oil standards.

ug/L Micrograms per liter.

< Target analyte was not detected at or above the laboratory reporting limit shown.

* Laboratory indicated that the diesel range result is primarily due to overlap from a heavier oil range compound (i.e., higher carbon number).

Dissolved metals analyzed by EPA Method 6010.

**TABLE 3**
**SUMMARY OF CHEMICAL ANALYSIS RESULTS OF THE SURFACE WATER SAMPLE COLLECTED FROM THE RETENTION POND FOR TEPH AND DISSOLVED WEAR METALS**

Sierra Pacific Industries
Arcata Division Sawmill
Arcata, California

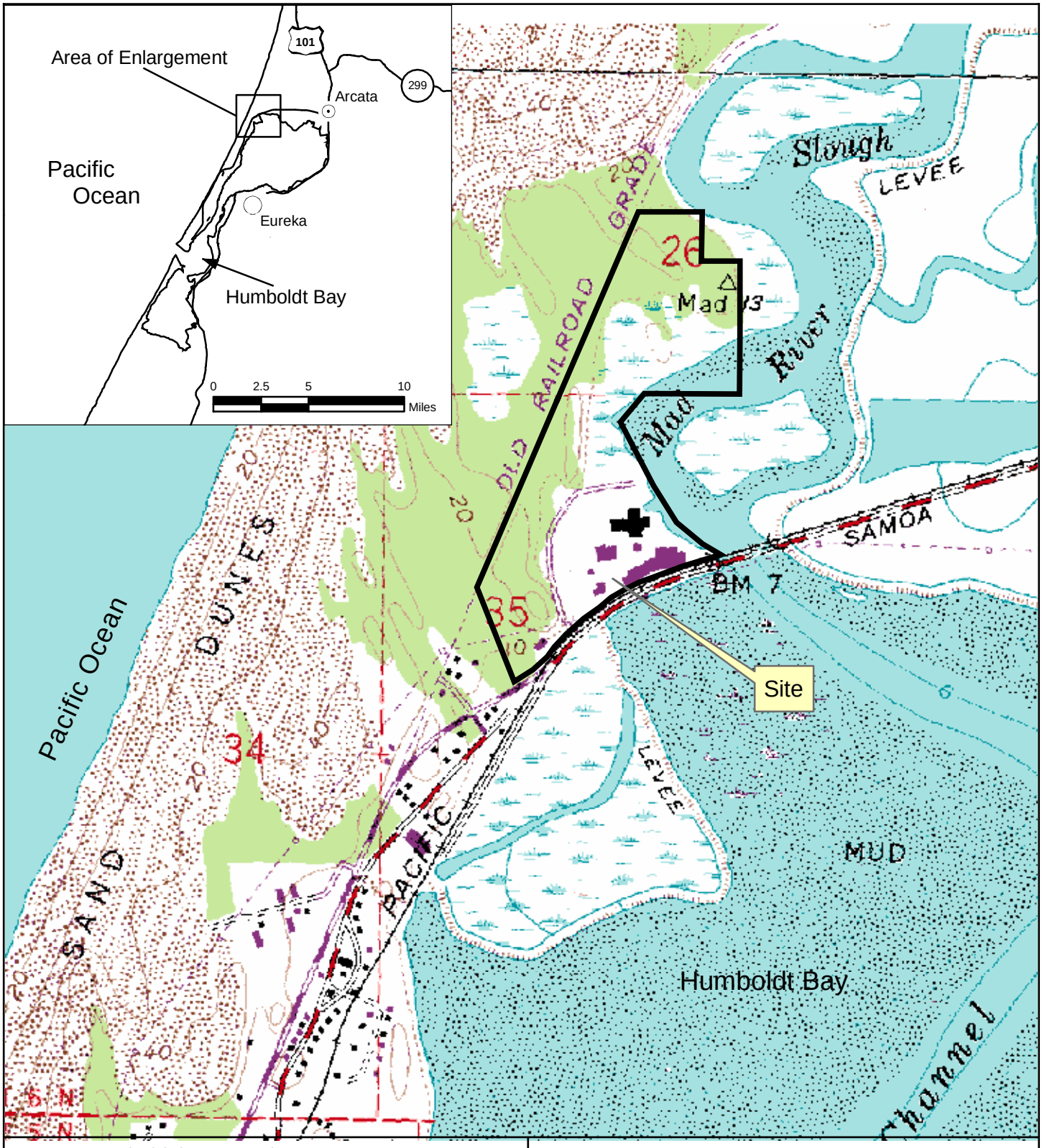
| SAMPLE ID | DATE SAMPLED | TEPH AS DIESEL (ug/L) | TEPH AS MOTOR OIL (ug/L) | CADMIUM (ug/L) | CHROMIUM (ug/L) | LEAD (ug/L) | NICKEL (ug/L) | ZINC (ug/L) |
|---|---|---|---|---|---|---|---|---|
| RP-3-SW | 24-Jul-03 | 60 * | 120 | <10 | <50 | <50 | <100 | <100 |

NOTES:

| | |
|---|---|
| TEPH | Total extractable petroleum hydrocarbons analyzed by EPA Method 8015 with silica gel cleanup and quantified against diesel and motor oil standards. |
| ug/L | Micrograms per liter. |
| < | Target analyte was not detected at or above the laboratory reporting limit shown. |
| * | Laboratory indicated that the chromatogram pattern did not resemble the pattern of the diesel standard used. |
| | Dissolved metals analyzed by EPA Method 6010. |

**FIGURES**

H:\Projects\030229-SPI\fig1_arcata




Source: USGS 24k Digital Raster Graph,
Eureka Quadrangle, Year - 1972

Site Boundary

0 500 1,000 2,000
Feet
Approximate Scale

N

**LOCATION MAP**

Sierra Pacific Industries
Arcata Division Sawmill
Arcata, California

| | | |
|---|---|---|
| Project No. 030229 | By: I.Pryor | **Figure 1** |
| Date: 6/6/03 | Checked: O.Plocher | |

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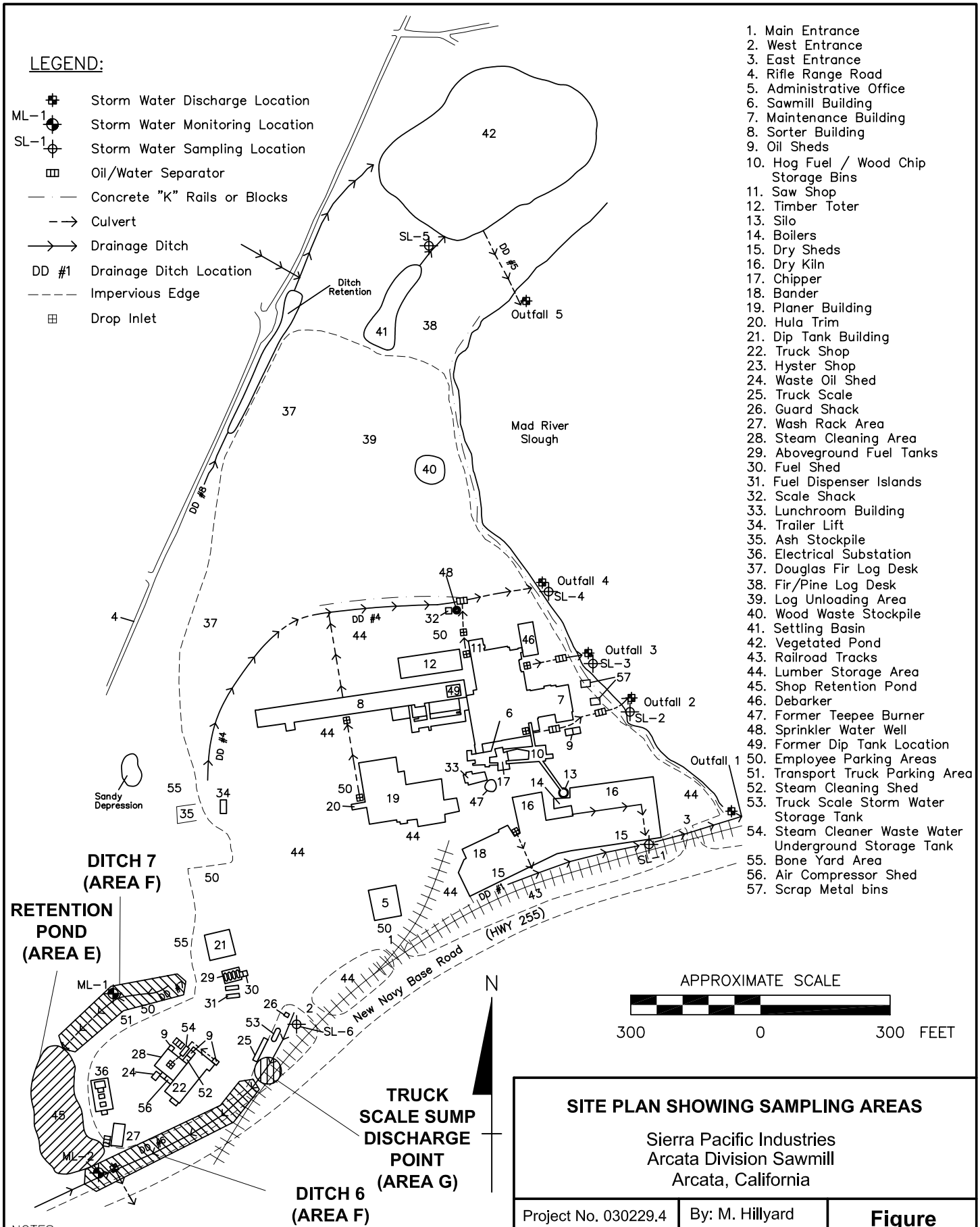
consulting scientists and engineers

H:\Projects\030229-SPI\Task 4\Report\site plan.dwg PLOT SCALE 1:1




NOTES:
Site plan modified from Plate 2B in *Results of the Remedial Investigation for Sierra Pacific Industries - Arcata Division Sawmills, Arcata, California*, dated January 30, 2003, prepared by Environet Consulting.
Building dimensions and locations are approximate.

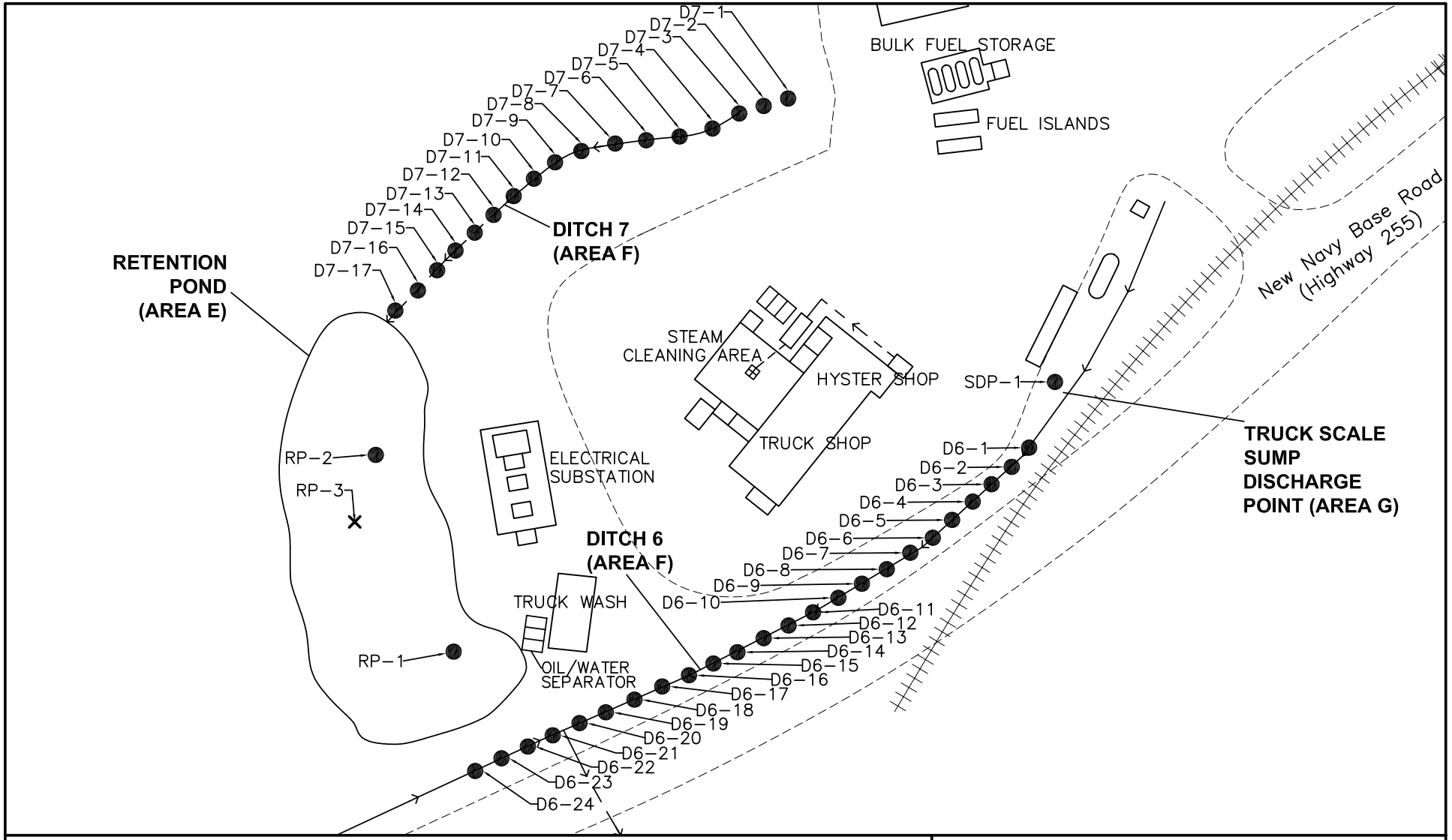
**SITE PLAN SHOWING SAMPLING AREAS**

Sierra Pacific Industries
Arcata Division Sawmill
Arcata, California

| | | |
|---|---|---|
| Project No. 030229.4 | By: M. Hillyard | **Figure 2** |
| Date: Sept. 30, 2003 | Checked: CGS | |

**MFG, Inc.**
consulting scientists and engineers

H:\Projects\030229-SPI\Task 4\Report\sample locations.dwg PLOT SCALE 1:1




**LEGEND**

- D7-1 — APPROXIMATE LOCATION AND DESIGNATION OF SOIL AND GROUNDWATER SAMPLES
- RP-3 — APPROXIMATE LOCATION AND DESIGNATION OF SURFACE WATER SAMPLE
- IMPERVIOUS EDGE (PAVEMENT)
- DRAINAGE DITCH AND FLOW DIRECTION

NOTE:
Site plan modified from *Results of the Remedial Investigation for Sierra Pacific Industries - Arcata Division Sawmills, Arcata, California*, dated January 30, 2003, prepared by Environet Consulting.

N

0 50 100

APPROXIMATE SCALE

**SAMPLING LOCATIONS**

Sierra Pacific Industries
Arcata Division Sawmill
Arcata, California

| | | |
|---|---|---|
| Project No. 030229.4 | By: M. Hillyard | **Figure 3** |
| Date: Oct 3, 2003 | Checked: CGS | |

**MFG, Inc.**
consulting scientists and engineers

**APPENDIX A**

**Humboldt County Division of Environmental Health**
**Boring Permit**

HUMBOLDT COUNTY DIVISION of ENVIRONMENTAL HEALTH - HAZARDOUS MATERIALS UNIT
WELL and BORING PERMIT APPLICATION



**Facility ID #** 1 NHU 526 **Permit #** 27-G

**Facility Name:** Sierra Pacific Industries, Arcata Sawmill Division

**Site Address:** 2293 Samoa Road, Arcata, CA

**Site Owner:** Sierra Pacific Industries **Telephone:** 530-378-8000

**Address:** PO Box 496028 Redding, CA 96049-6028 **AP#:**

**RP Name:** Sierra Pacific Industries **Telephone:** 530-378-8000

**Address:** PO Box 496028 Redding, CA 96049-6028

**Consultant:** MFG, Inc. - Orrin Pfocher **Telephone:** 707-826-8430

**Address:** 1165 G. Street, Suite E Arcata, CA 95521 **Reg.#/Type:**

**Driller:** NA **Telephone:**

**Address:** **C-57 Lic.#:**

| # On-site | | | # Off-site | | |
|---|---|---|---|---|---|
| Wells | [redacted] | Borings 44 | Wells | | Borings |

**Activity:** ☑ Construct ☐ Destroy ☐ Repair/Modify **Electrode Type:**

**Well Type:** ☐ Monitoring Well ☐ Injection Well ☐ Vapor Extraction ☒ Geologic Boring
☐ Extraction Well ☐ Piezometer ☐ Vapor Point ☐ Soil Gas Survey
☐ Vadose Well ☐ Cathodic Protection ☐ Direct Push Boring ☐ Temporary Well Point

**Investigation Type:** ☑ Site Assessment ☐ Disposal Practice ☐ UST ☐ Other*
☐ Surface Contamination ☐ Surface Impoundment ☐ AST
*Specify:

**Investigation Phase:** ☐ Initial ☑ Subsequent ☐ Remediation ☐ Closure

**Suspected Contaminants:** Petroleum compounds, chlorinated phenols, pH

**Disposal/Containment for Soil Cuttings:** Ashberry / DOT -55 gallon Drum

**Disposal/Containment for Rinsate:** Ashberry / DOT -55 gallon Drum s

**Disposal/Containment for Development Water:** Ashberry / DOT - 55- gallon Drums

**Permits will not be processed with out the following information:**

- ☑ Scaled Construction Detail
- ☑ Detailed Site Plan
- ☑ Lead Agency Approval Letter
- ☐ Off Site Well Requirements:
  - ☐ Legal Right of Entry
  - ☐ Off Site Address/Location
  - ☐ Encroachment Permit
  - ☐ Coastal Zone Permit
- ☑ Appropriate Fees
- ☑ Copy of Workplan (if not on file at HCDEH)

**Proposed Work Date:** 7/7/03 - 7/11/03

HUMBOLDT COUNTY DIVISION of ENVIRONMENTAL HEALTH - HAZARDOUS MATERIALS UNIT
WELL and BORING PERMIT APPLICATION

**Facility ID #** 1 NHU526 **Permit #** 27-G

*I hereby agree to comply with all laws, ordinances and regulations of the county of Humboldt and State of California pertaining to water well construction. I will contact the Humboldt County Hazardous Materials Unit at (707) 445-6215 five (5) working days prior to commencing this work. I will furnish to the County of Humboldt, Division of Environmental Health, and the owner a legible copy of the State Water Well Completion Report (form DWR 188) within fifteen (15) days after completion of work to obtain final approval of the well(s). I acknowledge that the application will become a permit ONLY after site approval by the Local Implementing Agency (HCDEH, NCRWQCB, DTSC, EPA). I understand this permit is not transferable and expires one hundred twenty (120) days from the date of issuance.*

**Certificates of Insurance:**

☐ A currently effective General Liability Certificate of Insurance is on file with this office, endorsed to include the Humboldt County Division of Environmental Health as additional named insured.

☐ A currently effective Worker's Compensation Certificate of Insurance is on file with this office, endorsed to include the Humboldt County Division of Environmental Health as additional named insured.

Hand Auger (mFG)
Signature of Well Driller - no proxies - original signature only in blue ink

Date

- **Well identification number and type must be affixed to exterior surface of security structure.**
- **The applicant is responsible for notifying Underground Services Alert at least 48 hours prior to the scheduled work date.**
- **A State of California Department of Water resources Well Completion Report (Form DWR 1-88) must be filed within 15 days of completion of work for all well completions and destructions.**
- **A licensed California C-57 Well Driller is required for all wells and direct push work.**

---

**FOR OFFICE USE ONLY**

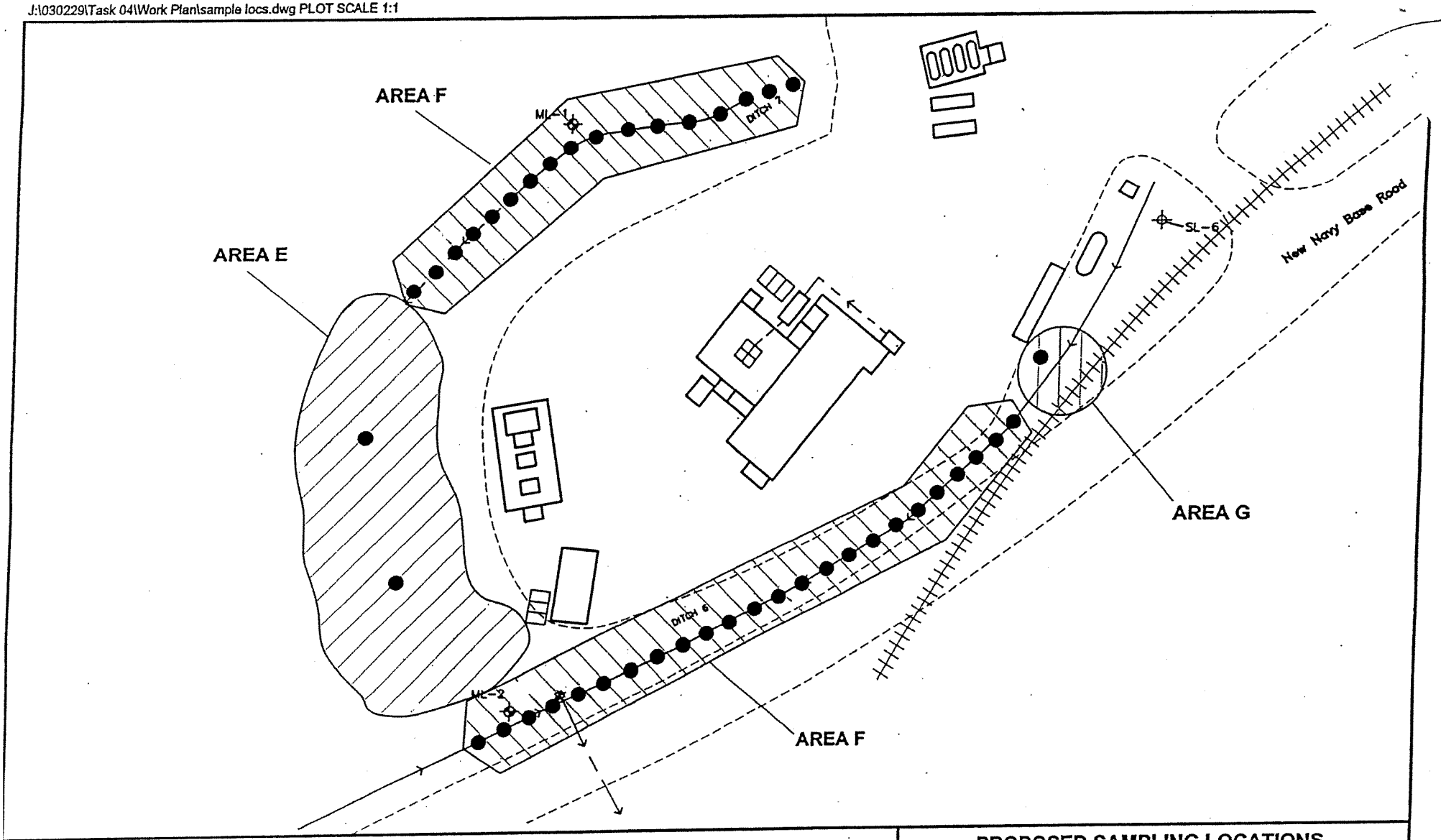
**Permit Approval:** Norman Crawford **Date:** 6/30/2003

**Fee:** $395.00 **Date:** 6/30/2003 **Receipt:** 219512

**Initial Inspection:** _____ **Date:** _____

**Final Inspection:** _____ **Date:** _____

J:\030229\Task 04\Work Plan\sample locs.dwg PLOT SCALE 1:1




**LEGEND**

● PROPOSED APPROXIMATE SAMPLING LOCATION

N

0 50 100

APPROXIMATE SCALE

**PROPOSED SAMPLING LOCATIONS AT AREAS E, F AND G**

Sierra Pacific Industries
Arcata Division Sawmill
Arcata, California

| | | |
|---|---|---|
| Project No. 030229.4 | By: C. Spill | **Figure 2** |
| Date: 5/28/03 | Checked: GPC | |

**MFG, Inc.**
consulting scientists and engineers

NOTE:
Site plan modified from *Results of the Remedial Investigation for Sierra Pacific Industries - Arcata Division Sawmills, Arcata, California*, dated January 30, 2003, prepared by EnviroNet.

## onti, Ed -- MFG, Inc.

**From:** Dean Prat [PratD@rb1.swrcb.ca.gov]
**Sent:** Friday, June 13, 2003 3:38 PM
**To:** Ed.Conti@mfgenv.com
**Cc:** Tuck Vath; bellery@spi-ind.com
**Subject:** Retention Pond, Ditches 6 and 7 and Truck Scale Sump Discharge Point Investigation

Dear Mr. Conti,
I have reviewed the Retention Pond, Ditches 6 and 7 , and Truck Scale Sump Discharge Point Investigation (workplan) for the Sierra-Pacific Industries-Arcata Division Sawmill dated May 28, 2003. I concur with implementation of the workplan.

Sincerely,
Dean Prat
707-576-2801

**APPENDIX B**

**California Department of Transportation Encroachment Permit**

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION

# ENCROACHMENT PERMIT

TR-0120 (REV. 5/92)

| | |
|---|---|
| Permit No. | 0103-6-SV-0350 |
| Dist/Co/Rte/PM | 1-HUM-255-R4.83/R4.92 |
| Date | JULY 11, 2003 |
| Fee Paid | $ |
| Deposit | $ 320.00 |
| Performance Bond Amount (1) | $ |
| Performance Bond Amount (2) | $ |
| Bond Company | |
| Bond Number (1) | |
| Bond Number (2) | |

In compliance with (Check one):

☒ Your application of **JUNE 18, 2003**

☐ Utility Notice No. of

☐ Agreement No. of

☐ R/W Contract No. of

**PERMIT EXPIRES**
**JANUARY 31, 2004**

**TO:**

MFG, INC.
1165 "G" STREET, SUITE E
ARCATA, CA, 95521

ATTN: Matt Hillyard, EIT
PHONE: (707) 826-8430

**, PERMITTEE**

And subject to the following, PERMISSION IS HEREBY GRANTED to:

Enter the State highway right of way at Post Mile R4.83 and R4.92 of State Route 1-HUM-255 (New Navy Base Road) to perform soil and ground water sampling of borings as outlined in the attached Permittee-submitted sketch (Figures 1 & 2) received by the Caltrans Encroachment Permits Office on January 18, 2003.

**VERNON J. CALLAHAN, ASSISTANT PERMIT ENGINEER AT EUREKA (TELEPHONE 707-445-6679) SHALL BE NOTIFIED 5 DAYS BEFORE WORK IS STARTED.**

**THE CALTRANS ELECTRICAL SUPERVISOR, RICK MCDANIEL AT SAMOA, (707)-441-2039 SHALL BE NOTIFIED 3 WORKING DAYS BEFORE WORK IS TO BEGIN SO ANY CALTRANS ELECTRICAL FACILITIES MAY BE LOCATED.**

**USA-N (Underground Service Alert - North) shall be notified at 1-800-642-2444 2 working days before work begins.**

In addition to the attached Encroachment General Provisions, Form TR-0045 (Rev. 6/2000) the following special provisions are also applicable:

| The following attachments are also included as part of this permit (Check applicable): | | | In addition to fee, the permittee will be billed actual costs for: | | |
|---|---|---|---|---|---|
| ☒ Yes | | General Provisions | ☒ Yes | ☐ No | Review |
| ☐ Yes | ☒ No | Utility Maintenance Provisions | ☒ Yes | ☐ No | Inspection |
| ☐ Yes | ☒ No | Special Provisions . | ☒ Yes | ☐ No | Field Work |
| ☒ Yes * | ☐ No | A Cal-OSHA permit required prior to beginning work; | | | |
| | | * If work is done in trenches deeper than 1.52m (5') | *(If any Caltrans effort expended)* | | |
| ☐ Yes | ☒ No | The information in the environmental documentation has been reviewed and is considered prior to approval of this permit. | | | |

This permit is void unless the work is complete before **JANUARY 31, 2004**

This permit is to be strictly construed and no other work other than specifically mentioned is hereby authorized.
No project work shall be commenced until all other necessary permits and environmental clearances have been obtained.

SP WOODMAN
VJ CALLAHAN
TL LIBOLT
ANN JONES

RBM
FILE

Permit Writer: James A. Pena

APPROVED:

RICK KNAPP, District Director

BY:

FOR ROYAL B. McCARTHY, P.E., District Permit Engineer

FM 91 1436

## I. TEST BORING PERFORMANCE & ABANDONMENT

1. Vernon J. Callahan, Assistant Permit Engineer at Eureka, shall approve the actual location of the test borings in advance of the work.

2. The Permittee shall provide and maintain through the work area at all times a safe walk way for pedestrians and bicycles which shall be a minimum of 1.2 m (4') wide. At no time shall pedestrians be diverted onto a portion of the street used for vehicular traffic. If adjacent alternate walkways cannot be provided, appropriate signs and barricades shall be installed at the limits of the work area and in advance of the closure at the nearest cross walk or intersection to divert pedestrians across the street. All signs must be orange or white with black lettering at least 100 mm (4") tall. The signs, barricades detour plan shall be approved by Vernon Callahan, Assistant Permit Engineer at Eureka, (707- 445-6679) before work begins.

3. The Permittee shall take whatever measures necessary to protect the existing highway storm drainage system from sediment and debris infiltration during the work.

4. All water generated by work operations shall be contained, filtered, or removed to a proper disposal site. Slurry from saw cutting or drilling operations shall be vacuumed immediately behind the saw cutting operation or prior to drying on drilling operations. Saw-cutting slurry shall be disposed of at a legal disposal site. Only clean water shall be allowed to enter drainage inlets or waterways. All soil exposed by work operations shall be protected from erosion and sediment migration.

5. Excavations shall be backfilled prior to the end of the shift, protected by signs and flaggers.

6. When monitoring is completed the wells shall be abandoned by back filling with a suitable material approved by Vernon J. Callhan, Assistant Permits Engineer, at Eureka and by removing the top portion of the existing wells, no less than 0.3 m (1') below finished grade. The top 200 mm (8") shall consist of topsoil that shall support plant growth and shall be seeded to match the surrounding area.

7. All drill cuttings shall be removed from the work site for disposal appropriate to lab test results.

8. **JON HEDLUND OF THE CALTRANS NORTH REGION HAZARDOUS WASTE OFFICE AT (707) 445-6325 SHALL BE PROVIDED WITH A COPY OF THE SITE INVESTIGATION REPORT.** The report shall be mailed to the following address:

   Caltrans North Region Hazardous Waste Office
   ATTN: Jon D. Headland
   1656 Union Street
   Eureka, CA 95501

9. All personnel performing work under this permit shall wear personal protective equipment, including hard hats, orange vests, gloves, and safety glasses while on State highway right of way.

## II. TRAFFIC CONTROL

1. By Noon Monday, the Permittee/Contractor shall fax to Adolpho Gonzales, Caltrans Traffic Operations (fax #707 441-3914) and to Vernon J. Callahan, Assistant Permit Engineer (fax #707 445-6317) a written schedule of planned closures for the following week period, defined as Friday Noon through the following Friday Noon. The term closure, as used herein, is defined as the closure of a traffic lane or lanes, including ramp or connector lanes, within a single traffic control system. The Closure Schedule shall take the form of the attached ***District 1 Lane Closure Request Form*** furnished by the Engineer and shall show the locations and times when the proposed closures are to be in effect. Closure Request Forms submitted to the Engineer and Traffic Operations with incomplete, unintelligible or inaccurate information will be returned for correction and resubmittal. The Contractor/Permittee will be notified of disapproved closures or closures that require coordination with other parties as a condition of approval. Restrictions on hours and days that a lane can be closed are found on the attached ***Traffic Control Restrictions.***

2. All traffic control shall conform to the State of California, Department of Transportation; "**MANUAL OF TRAFFIC CONTROLS FOR CONSTRUCTION & MAINTENANCE WORK ZONES-REVISION 2"** dated 1996 (Chapter 5 of the current **Caltrans Traffic Manual) EXCEPT FOR THE FOLLOWING MODIFICATIONS:**

a.) Except for installing, maintaining and removing traffic control devices, whenever work is performed or equipment is operated in the following work areas the Permittee shall close the adjacent traffic lane only after approval by Vernon J. Callahan, Assistant Permit Engineer at Eureka:

| Approach speed of public traffic (Posted Limit) (Miles per Hour) | Work Area |
|---|---|
| Over 45 | Within 1.8 m (6') of a traffic lane but not on a traffic lane. |
| 35 to 45 | Within 0.6 m (3') of a traffic lane but not on a traffic lane. |

b.) Traffic control, which requires a lane closure, shall be in accordance with the attached, **Caltrans Standard Plan T-13, "TRAFFIC CONTROL SYSTEM FOR LANE CLOSURE ON TWO-LANE CONVENTIONAL HIGHWAYS". Advance & Backup flaggers in each direction shall be required.**

c.) Lane closures are prohibited weekdays from 0700-0900 hours and from 1500 -1800 hours.

d.) For work performed outside the distances described in 2(a) above the shoulder shall be closed in accordance with the attached **Caltrans Standard Plan T-10, "**SHOULDER CLOSURE" illustration.

e.) When flaggers are not present trucks shall not back on to /off the highway.

f.) When flaggers are present the full complement of signs as required by the "**MANUAL OF TRAFFIC CONTROLS FOR CONSTRUCTION AND MAINTENANCE WORK ZONES-REVISION 1" DATED 1996** shall be in place.

g.) All work that requires flaggers shall be completed in one workday.

h.) All flaggers shall be provided the opportunity to read the attached Caltrans; **" Flagging Instruction Handbook"** dated April 1999. Additional copies are available through the Caltrans Publications Distribution Unit, 1900 Royal Oaks Drive, Sacramento, CA 95815-Telephone (916) 445-3520 Fax # (916) 324-8997.

i.) When the work area encroaches upon a sidewalk, walkway or crosswalk area, special consideration must be given to pedestrian safety. Protective barricades, fencing, handrails and bridges, together with warning and guidance devices and signs must be utilized so that the passageway for pedestrians, especially blind and other physically handicapped, is safe and well defined. **A PLAN SHOWING HOW PEDESTRIANS WILL BE HANDLED SHALL BE SUBMITTED TO AND APPROVED BY VERNON CALLAHAN PRIOR TO BEGINNING WORK.**

j.) Bicyles shall be accommodated through the work zone.

k.) Project work shall not restrict commerce or access to businesses. If it becomes necessary to restrict access to any local businesses to accomplish work the work shall scheduled to occur outside of normal business hours.

l.) The Permittee shall provide signing to notify the public of any planned parking prohibition at least one-week prior to any planned work.

m.) A minimum of one paved lane not less than 3.6 m (12') and an associated 1.2 m (4') shoulder in each direction of travel shall remain available at all times.

n.) Any emergency service agency whose ability to respond to incidents may be hampered by a lane closure caused by the construction shall be notified prior to that closure.

o.) A minimum of one PCMS in advance of either end of the construction site (2 PCMS per location) shall be required in order to notify the public of the closures related to this project.

p.) Access to side roads and residences shall be maintained at all times. When work or traffic queues extend through an intersection additional traffic control shall be required at the intersection.

q.) If congestion or delays exceed original estimates due to unforeseen events such as work zone collisions, higher than predicted traffic demand, or closures of extended duration, the Permittee shall utilize all appropriate resources to restore or minimize effects on public traffic. These resources shall contain (but are not limited to) the following contingencies:

1) Calling for CHP or other emergency personnel in the event of a work-zone collision.

2) Removal of the lane closure as soon as it is safe to do so to mitigate significant delay.

3) Assigning personnel to work end-of-queue protection.

## III. EROSION CONTROL

1. In accordance with Caltrans Standard Specifications Section 7-1-01G – " Water Pollution". The Permittee's Contractor shall submit a "Water Pollution Control Program" (WPCP) to Vernon Callahan, Assistant Permit Engineer at Eureka prior to the start of work. Caltrans must approve the "Water Pollution Control Program" prior to the start of work within the Caltrans right of way. A template WPCP may be found at the Caltrans Website at the following location **http://www.dot.ca.gov/hq/construc/.**

2. All disturbed original ground shall be treated with a seed, fertilizer and mulch erosion control mixture approved by Vernon J. Callahan, Assistant Permit Engineer at Eureka. The Permittee may also be required to provide silt fences, straw waddles, or other siltation barriers as directed by Vernon J. Callahan, Assistant Permit Engineer at Eureka to prevent siltation in ditches and waterways.

3. The Permittee shall be responsible for obtaining all permits in accordance with section IV (2) below. This includes but is not limited to the requirements of the Regional Water Control Board ( Region 1) which shall be contacted by the Permittee at the following location :

5550 Skylane Blvd. Suite A
Santa Rosa, CA 95403
Phone 707-576-2220
Fax 707-523-0135

http://www.swrcb.ca.gov/rwqcb1/index.html

## IV. GENERAL

1. The work area, including drainage ditches, shall be restored to a neat, clean condition and all debris shall be removed from the State Highway Right-of-way.

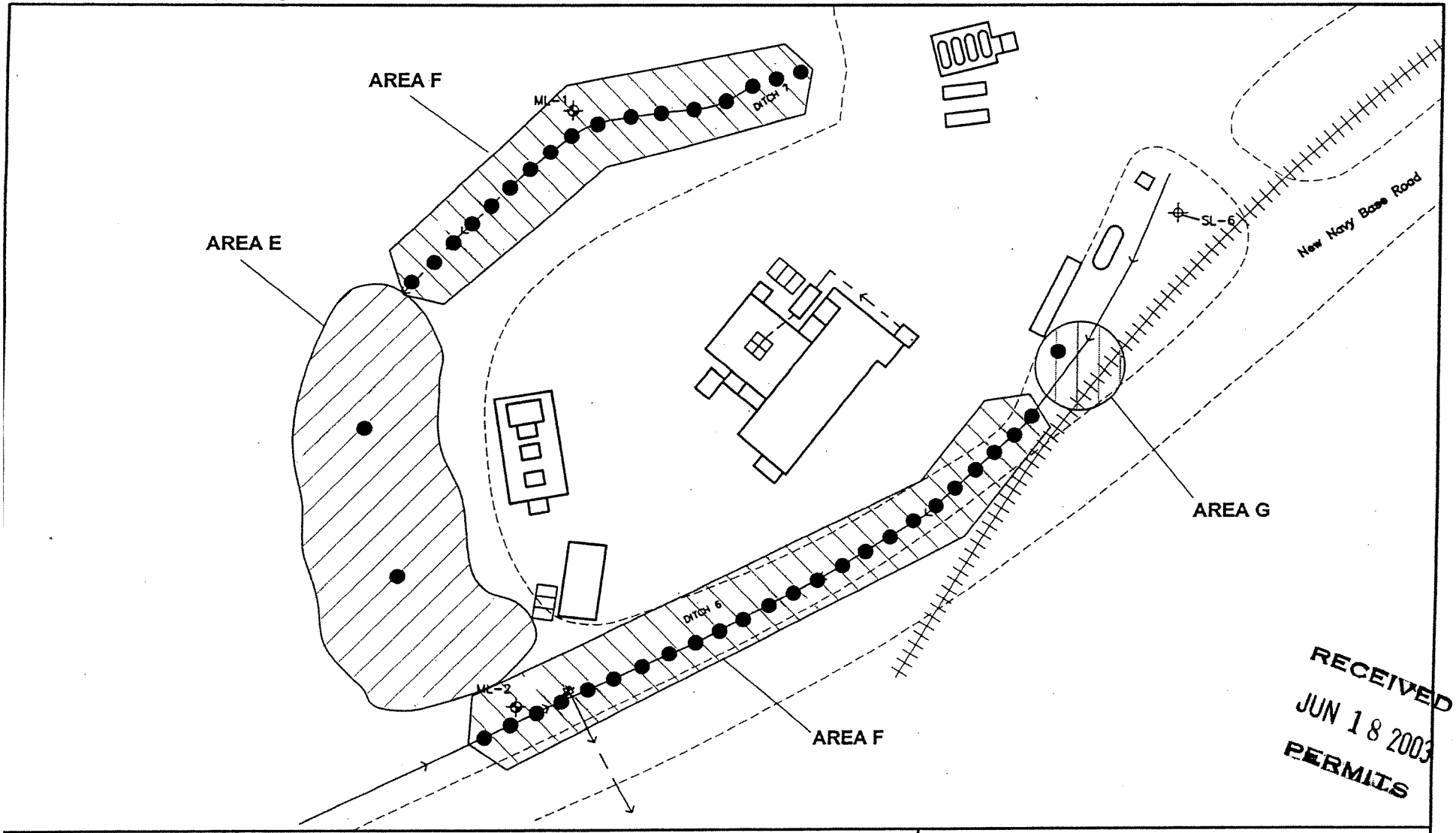
2. The Permittee's attention is directed to Section 12, **"PERMITS FROM OTHER AGENCIES"** and Section 26 **"ARCHAEOLOGICAL/HISTORICAL:"** of the Encroachment Permit General Provisions. The State's Representative for Archaeological Resource discoveries in the Caltrans right of way is Sara Atchley at (707) 441-3983.

3. **FEES FOR THIS PERMIT ARE BASED ON ACTUAL REVIEW HOURS AND ACTUAL INSPECTION HOURS. AS OF THE ISSUE DATE OF THIS PERMIT AN ESTIMATED FEE DEPOSIT OF $320.00 HAS BEEN COLLECTED. THE ACTUAL REVIEW FEE ACCRUED AT THIS TIME IS $160.00 (2.0 HOURS TIMES THE STANDARD HOURLY RATE OF $80.00 PER HOUR). THE ACTUAL INSPECTION FEE WILL BE CALCULATED UPON EXPIRATION OF THIS ENCROACHMENT PERMIT WORK AND WILL BE CALCULATED USING THE ACTUAL INSPECTION HOURS TIMES THE STANDARD HOURLY RATE IN EFFECT AT THAT TIME. THE ACTUAL REVIEW AND INSPECTION CHARGES WILL BE TOTALED AND ANY REMAINING BALANCE DUE THAT EXCEEDS THE INITIAL $320.00 DEPOSIT WILL BE BILLED AND ANY UNUSED SURPLUS WILL BE REFUNDED.**

4. **UPON COMPLETION OF THE WORK, PLEASE FILL IN THE ATTACHED POST CARD AND MAIL AT ONCE.**

**NOTE:** IF THE WORK COVERED BY THIS PERMIT IS NOT COMPLETED BY THE COMPLETION DATE SHOWN, AN ENCROACHMENT PERMIT RIDER FEE WILL BE REQUIRED FOR A TIME EXTENSION. THE FEE WILL BE CHARGED AT THE CURRENT HOURLY RATE.

J:\030229\Task 04\Work Plan\sample locs.dwg PLOT SCALE 1:1




RECEIVED
JUN 18 2003
PERMITS

**LEGEND**

● PROPOSED APPROXIMATE SAMPLING LOCATION

N

0 50 100

APPROXIMATE SCALE

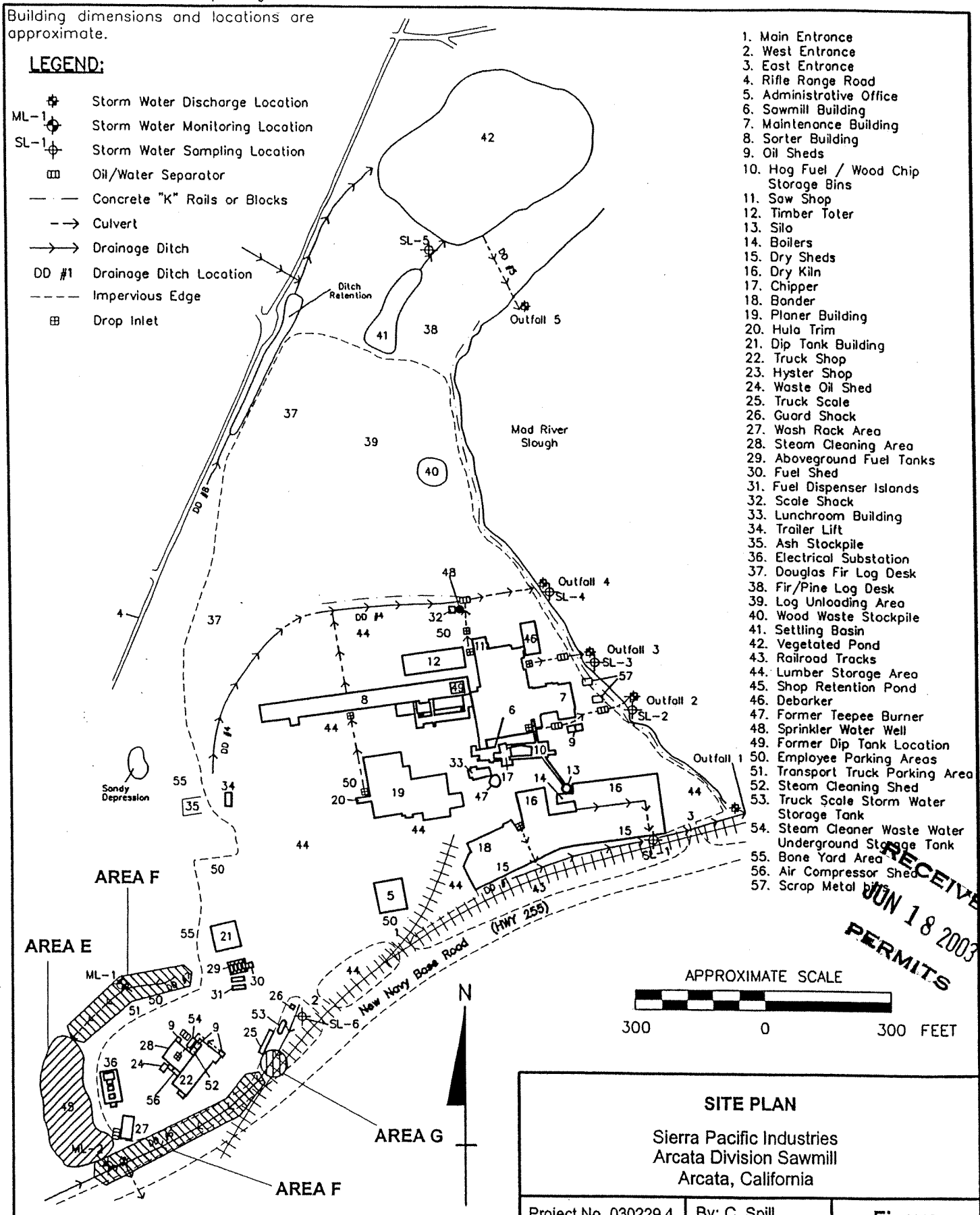
NOTE:
Site plan modified from *Results of the Remedial Investigation for Sierra Pacific Industries - Arcata Division Sawmills, Arcata, California*, dated January 30, 2003, prepared by EnviroNet.

**PROPOSED SAMPLING LOCATIONS AT AREAS E, F AND G**
Sierra Pacific Industries
Arcata Division Sawmill
Arcata, California

| | | |
|---|---|---|
| Project No. 030229.4 | By: C. Spill | **Figure 2** |
| Date: 5/28/03 | Checked: GPC | |

**MFG, Inc.**
consulting scientists and engineers

J:\030229\Task 04\Work Plan\site plan.dwg PLOT SCALE 1:1




RECEIVED
JUN 18 2003
PERMITS

NOTE:
Site plan modified from Plate 2B in *Results of the Remedial Investigation for Sierra Pacific Industries - Arcata Division Sawmills, Arcata, California*, dated January 30, 2003, prepared by EnviroNet.

**SITE PLAN**

Sierra Pacific Industries
Arcata Division Sawmill
Arcata, California

| | | |
|---|---|---|
| Project No. 030229.4 | By: C. Spill | Figure 1 |
| Date: May 27, 2003 | Checked: | |

**MFG, Inc.**
consulting scientists and engineers

STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION
ENCROACHMENT PERMIT GENERAL PROVISIONS
TR-0045 (REV. 6/2000)

1. **AUTHORITY:** The Department's authority to issue encroachment permits is provided under, Div. 1, Chpt. 3, Art. 1, Sect. 660 to 734 of the Streets and Highways Code.

2. **REVOCATION:** Encroachment permits are revocable on five days notice unless otherwise stated on the permit and except as provided by law for public corporations, franchise holders, and utilities. These General Provisions and the Encroachment Permit Utility Provisions are subject to modification or abrogation at any time. Permittees' joint use agreements, franchise rights, reserved rights or any other agreements for operating purposes in State highway right of way are exceptions to this revocation.

3. **DENIAL FOR NONPAYMENT OF FEES:** Failure to pay permit fees when due can result in rejection of future applications and denial of permits.

4. **ASSIGNMENT:** No party other than the permittee or permittee's authorized agent is allowed to work under this permit.

5. **ACCEPTANCE OF PROVISIONS:** Permittee understands and agrees to accept these General Provisions and all attachments to this permit, for any work to be performed under this permit.

6. **BEGINNING OF WORK:** When traffic is not impacted (see Number 35), the permittee shall notify the Department's representative, two (2) days before the intent to start permitted work. Permittee shall notify the Department's Representative if the work is to be interrupted for a period of five (5) days or more, unless otherwise agreed upon. All work shall be performed on weekdays during regular work hours, excluding holidays, unless otherwise specified in this permit.

7. **STANDARDS OF CONSTRUCTION:** All work performed within highway right of way shall conform to recognized construction standards and current Department Standard Specifications, Department Standard Plans High and Low Risk Facility Specifications, and Utility Special Provisions. Where reference is made to "Contractor and Engineer," these are amended to be read as "Permittee and Department representative."

8. **PLAN CHANGES:** Changes to plans, specifications, and permit provisions are not allowed without prior approval from the State representative.

9. **INSPECTION AND APPROVAL:** All work is subject to monitoring and inspection. Upon completion of work, permittee shall request a final inspection for acceptance and approval by the Department. The local agency permittee shall not give final construction approval to its contractor until final acceptance and approval by the Department is obtained.

10. **PERMIT AT WORKSITE:** Permittee shall keep the permit package or a copy thereof, at the work site and show it upon request to any Department representative or law enforcement officer. If the permit package is not kept and made available at the work site, the work shall be suspended.

11. **CONFLICTING ENCROACHMENTS:** Permittee shall yield start of work to ongoing, prior authorized, work adjacent to or within the limits of the project site. When existing encroachments conflict with new work, the permittee shall bear all cost for rearrangements, (e.g., relocation, alteration, removal, etc.).

12. **PERMITS FROM OTHER AGENCIES:** This permit is invalidated if the permittee has not obtained all permits necessary and required by law, from the Public Utilities Commission of the State of California (PUC), California Occupational Safety and Health Administration (Cal-OSHA), or any other public agency having jurisdiction.

13. **PEDESTRIAN AND BICYCLIST SAFETY:** A safe minimum passageway of 4' (1.21 meter) shall be maintained through the work area at existing pedestrian or bicycle facilities. At no time shall pedestrians be diverted onto a portion of the street used for vehicular traffic. At locations where safe alternate passageways cannot be provided, appropriate signs and barricades shall be installed at the limits of construction and in advance of the limits of construction at the nearest crosswalk or intersection to detour pedestrians to facilities across the street.

14. **PUBLIC TRAFFIC CONTROL:** As required by law, the permittee shall provide traffic control protection warning signs, lights, safety devices, etc., and take all other measures necessary for traveling public's safety. Day and night time lane closures shall comply with the Manuals of Traffic Controls, Standard Plans, and Standard Specifications for traffic control systems. These General Provisions are not intended to impose upon the permittee, by third parties, any duty or standard of care, greater than or different from, as required by law.

15. **MINIMUM INTERFERENCE WITH TRAFFIC:** Permittee shall plan and conduct work so as to create the least possible inconvenience to the traveling public; traffic shall not be unreasonably delayed. On conventional highways, permittee shall place properly attired flagger(s) to stop or warn the traveling public in compliance with the Manual of Traffic Controls and Instructions to Flaggers Pamphlet.

16. **STORAGE OF EQUIPMENT AND MATERIALS:** Equipment and material storage in State right of way shall comply with Standard Specifications, Standard Plans, and Special Provisions. Whenever the permittee places an obstacle within 12' (3.63 m) of the traveled way, the permittee shall place temporary railing (Type K).

17. **CARE OF DRAINAGE:** Permittee shall provide alternate drainage for any work interfering with an existing drainage facility in compliance with the Standard Specifications, Standard Plans and/or as directed by the Department's representative.

18. **RESTORATION AND REPAIRS IN RIGHT OF WAY:** Permittee is responsible for restoration and repair of State highway right of way resulting from permitted work (State Streets and Highways Code, Sections 670 et. seq.).

19. **RIGHT OF WAY CLEAN UP:** Upon completion of work, permittee shall remove and dispose of all scraps, brush, timber, materials, etc. off the right of way. The aesthetics of the highway shall be as it was before work started.

20. **COST OF WORK:** Unless stated in the permit, or a separate written agreement, the permittee shall bear all costs incurred for work within the State right of way and waives all claims for indemnification or contribution from the State.

21. **ACTUAL COST BILLING:** When specified in the permit, the Department will bill the permittee actual costs at the currently set hourly rate for encroachment permits.

22 **AS-BUILT PLANS:** When required, permittee shall submit one (1) set of as-built plans within thirty (30) days after completion and approval of work in compliance with requirements listed as follows:

1. Upon completion of the work provided herein, the permittee shall send one vellum or paper set of As-Built plans, to the State representative. Mylar or paper sepia plans are not acceptable.
2. All changes in the work will be shown on the plans, as issued with the permit, including changes approved by Encroachment Permit Rider.
3. The plans are to be stamped or otherwise noted AS-BUILT by the permittee's representative who was responsible for overseeing the work. Any original plan that was approved with a State stamp, or Caltrans representative signature, shall be used for producing the As-Built plans.
4. If As-Built plans include signing or striping, the dates of signing or striping removal, relocation, or installation shall be shown on the plans when required as a condition of the permit. When the construction plans show signing and striping for staged construction on separate sheets, the sheet for each stage shall show the removal, relocation or installation dates of the appropriate staged striping and signing.
5. As-Built plans shall contain the Permit Number, County, Route, Post Mile, and Kilometer Position on each sheet.
6. Disclaimer statement of any kind that differ from the obligations and protections provided by Sections 6735 through 6735.6 of the California Business and Professions Code, shall not be included on the As-Built plans. Such statements constitute non-compliance with Encroachment Permit requirements, and may result in the Department of Transportation retaining Performance Bonds or deposits until proper plans are submitted. Failure to comply may also result in denial of future permits, or a provision requiring a public agency to supply additional bonding.

23. **PERMITS FOR RECORD PURPOSES ONLY:** When work in the right of way is within an area under a Joint Use Agreement (JUA) or a Consent to Common Use Agreement (CCUA), a fee exempt permit is issued to the permittee for the purpose of providing a notice and record of work. The Permittee's prior rights shall be preserved without the intention of creating new or different rights or obligations. "Notice and Record Purposes Only" shall be stamped across the face of the permit.

24. **BONDING:** The permittee shall file bond(s), in advance, in the amount set by the Department. Failure to maintain bond(s) in full force and effect will result in the Department stopping of all work and revoking permit(s). Bonds are not required of public corporations or privately owned utilities, unless permittee failed to comply with the provision and conditions under a prior permit. The surety company is responsible for any latent defects as provided in California Code of Civil Procedures, Section 337.15. Local agency permittee shall comply with requirements established as follows: In recognition that project construction work done on State property will not be directly funded and paid by State, for the purpose of protecting stop notice claimants and the interests of State relative to successful project completion, the local agency permittee agrees to require the construction contractor furnish both a payment and performance bond in the local agency's name with both bonds complying with the requirements set forth in Section 3-1.02 of State's current Standard Specifications before performing any project construction work. The local agency permittee shall defend, indemnify, and hold harmless the State, its officers and employees from all project construction related claims by contractors and all stop notice or mechanic's lien claimants. The local agency also agrees to remedy, in a timely manner and to State's satisfaction, any latent defects occurring as a result of the project construction work.

25. **FUTURE MOVING OF INSTALLATIONS:** Permittee understands and agrees to rearrange a permitted installation upon request by the Department, for State construction, reconstruction, or maintenance work on the highway. The permittee at his sole expense, unless under a prior agreement, JUA, or a CCUA, shall comply with said request.

26. **ARCHAEOLOGICAL/HISTORICAL:** If any archaeological or historical resources are revealed in the work vicinity, the permittee shall immediately stop work, notify the Department's representative, retain a qualified archaeologist who shall evaluate the site, and make recommendations to the Department representative regarding the continuance of work.

27. **PREVAILING WAGES:** Work performed by or under a permit may require permittee's contractors and subcontractors to pay appropriate prevailing wages as set by the Department of Industrial Relations. Inquiries or requests for interpretations relative to enforcement of prevailing wage requirements are directed to State of California Department of Industrial Relations, 525 Golden Gate Avenue, San Francisco, California 94102.

28. **RESPONSIBILITY FOR DAMAGE:** The State of California and all officers and employees thereof, including but not limited to the Director of Transportation and the Deputy Director, shall not be answerable or accountable in any manner for injury to or death of any person, including but not limited to the permittee, persons employed by the permittee, persons acting in behalf of the permittee, or for damage to property from any cause. The permittee shall be responsible for any liability imposed by law and for injuries to or death of any person, including but not limited to the permittee, persons employed by the permittee, persons acting in behalf of the permittee, or for damage to property arising out of work, or other activity permitted and done by the permittee under a permit, or arising out of the failure on the permittee's part to perform his obligations under any permit in respect to maintenance or any other obligations, or resulting from defects or obstructions, or from any cause whatsoever during the progress of the work, or other activity or at any subsequent time, work or other activity is being performed under the obligations provided by and contemplated by the permit.

The permittee shall indemnify and save harmless the State of California, all officers, employees, and State's contractors, thereof, including but not limited to the Director of Transportation and the Deputy Director, from all claims, suits or actions of every name, kind and description brought for or on account of injuries to or death of any person, including but not limited to the permittee, persons employed by the permittee, persons acting in behalf of the permittee and the public, or damage to property resulting from the performance of work or other activity under the permit, or arising out of the failure on the permittee's part to perform his obligations under any permit in respect to maintenance or any other obligations, or resulting from defects or obstructions, or from any cause whatsoever during the progress of the work, or other activity or at any subsequent time, work or other activity is being performed under the obligations provided by and contemplated by the permit, except as otherwise provided by statute.

The duty of the permittee to indemnify and save harmless includes the duties to defend as set forth in Section 2778 of the Civil Code. The permittee waives any and all rights to any type of expressed or implied indemnity against the State, its officers, employees, and

State contractors. It is the intent of the parties that the permittee will indemnify and hold harmless the State, its officers, employees, and State's contractors, from any and all claims, suits or actions as set forth above regardless of the existence or degree of fault or negligence, whether active or passive, primary or secondary, on the part of the State, the permittee, persons employed by the permittee, or acting on behalf of the permittee.

For the purpose of this section, "State's contractors" shall include contractors and their subcontractors under contract to the State of California performing work within the limits of this permit.

29. **NO PRECEDENT ESTABLISHED:** This permit is issued with the understanding that it does not establish a precedent.

30. **FEDERAL CIVIL RIGHTS REQUIREMENTS FOR PUBLIC ACCOMMODATION:**
A. The permittee, for himself, his personal representative, successors in interest, and assigns as part of the consideration hereof, does hereby covenant and agree that:
1. No person on the grounds of race, color, or national origin shall be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination in the use of said facilities.
2. That in connection with the construction of any improvements on said lands and the furnishings of services thereon, no discrimination shall be practiced in the selection and retention of first-tier subcontractors in the selection of second-tier subcontractors.
3. That such discrimination shall not be practiced against the public in their access to and use of the facilities and services provided for public accommodations (such as eating, sleeping, rest, recreation), and operation on, over, or under the space of the right of way.
4. That the permittee shall use the premises in compliance with all other requirements imposed pursuant to Title 15, Code of Federal Regulations, Commerce and Foreign Trade, Subtitle A. Office of the Secretary of Commerce, Part 8 (15 C.F.R. Part 8) and as said Regulations may be amended.
5.That in the event of breach of any of the above nondiscrimination covenants, the State shall have the right to terminate the permit and to re-enter and repossess said land and the land and the facilities thereon, and hold the same as if said permit had never been made or issued.

31. **MAINTENANCE OF HIGHWAYS:** The permittee agrees, by acceptance of a permit, to properly maintain any encroachment. This assurance requires the permittee to provide inspection and repair any damage, at permittee's expense, to State facilities resulting from the encroachment.

32. **SPECIAL EVENTS:** In accordance with subdivision (a) of Streets and Highways Code Section 682.5, the Department of Transportation shall not be responsible for the conduct or operation of the permitted activity, and the applicant agrees to defend, indemnify, and hold harmless the State and the city or county against any and all claims arising out of any activity for which the permit is issued.

Permittee understands and agrees that it will comply with the obligations of Titles II and III of the Americans with Disabilities Act of 1990 in the conduct of the event, and further agrees to indemnify and save harmless the State of California, all officers and employees thereof, including but not limited to the Director of Transportation, from any claims or liability arising out of or by virtue of said Act.

33. **PRIVATE USE OF RIGHT OF WAY:** Highway right of way shall not be used for private purposes without compensation to the State. The gifting of public property use and therefore public funds is prohibited under the California Constitution, Article 16.

34. **FIELD WORK REIMBURSEMENT:** Permittee shall reimburse State for field work performed on permittee's behalf to correct or remedy hazards or damaged facilities, or clear debris not attended to by the permittee.

35. **NOTIFICATION OF DEPARTMENT AND TMC:** The permittee shall notify the Department's representative and the Transportation Management Center (TMC) at least 7 days before initiating a lane closure or conducting an activity that may cause a traffic impact. A confirmation notification should occur 3 days before closure or other potential traffic impacts. In emergency situations when the corrective work or the emergency itself may affect traffic, TMC and the Department's representative shall be notified as soon as possible.

36. **SUSPENSION OF TRAFFIC CONTROL OPERATION:** The permittee, upon notification by the Department's representative, shall immediately suspend all lane closure operations and any operation that impedes the flow of traffic. All costs associated with this suspension shall be borne by the permittee.

37. **UNDERGROUND SERVICE ALERT (USA) NOTIFICATION:** Any excavation requires compliance with the provisions of Government Code Section 4216 et. seq., including , but not limited to notice to a regional notification center, such as Underground Service Alert (USA). The permittee shall provide notification at least 48 hours before performing any excavation work within the right of way.

Fax to: 1) Adolpho Gonzales @ 707-441-3914
2) for Humboldt and Del Norte Counties; Vernon Callahan @ 707-445-6317
3) for Mendocino and Lak Counties; Jerry Sheldon @ 707-463-4736

Caltrans
District 1

Today's Date _____ Time _____
Permittee _____
Phone # _____

# Lane Closure Request Form

**Location & Date of Closure:** For the week of _____
Reporting Week begins on Friday

| | County | Route | PM | KP | Descriptive Location | Time |
|---|---|---|---|---|---|---|
| From: | | | | | | |
| To: | | | | | | |

Day(s): ☐ Friday ☐ Saturday ☐ Sunday ☐ Monday ☐ Tuesday ☐ Wednesday ☐ Thursday

Direction: # Existing Lanes: # Lanes Closed: Which Lane(s):

**Types of Closure, Closure Characteristics** (check all of the following that apply)

☐ One-way
☐ Detour info available
☐ Closure conforms with Established Traffic Control
☐ Complete Closure
☐ No Detour Available
☐ 24-hour/ 7-day closure
☐ Ramp Closures
☐ COZEEP/ MAZEEP

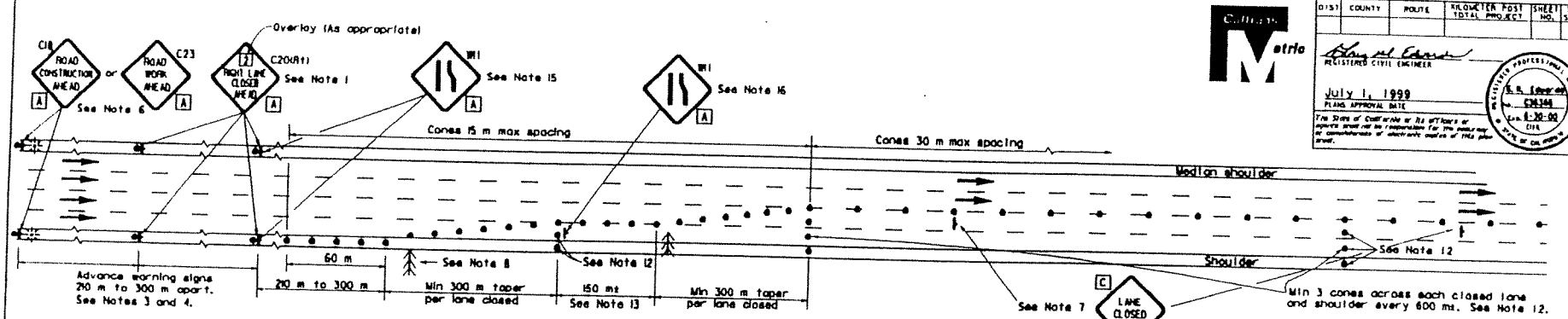
Estimated Delay _____ Minutes

**Reason for Restriction:** _____

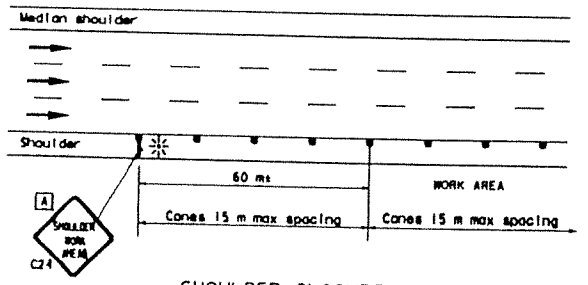
**Encroachment Permit #:** _____

**Permittee**
Field Contact _____
Cell _____
Office _____
Pager _____
FAX _____

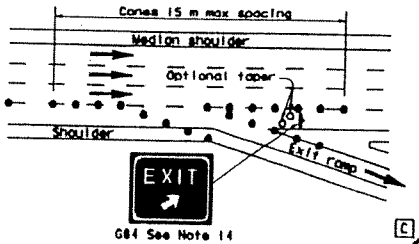
**Details** (Detour Information, CHP Break, Flaggers, Temporary Signals, Estimated re-open date, TMS Equipment, etc.)




LANE CLOSURE

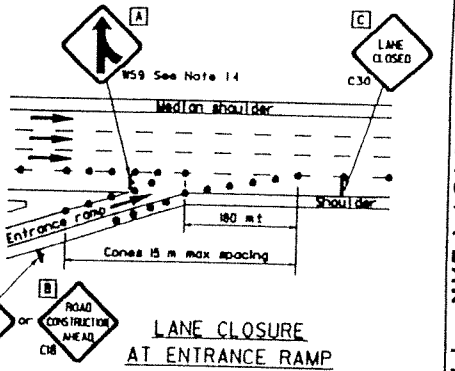



SHOULDER CLOSURE




G84 See Note 14

LANE CLOSURE AT EXIT RAMP




LANE CLOSURE AT ENTRANCE RAMP

## NOTES

1. Median lane closures shall conform to the details for outside lane closures except that C20 (L) signs shall be used.
2. Not less than one person shall be assigned to full time maintenance of traffic control devices on all night lane closures or day-time closures exceeding 1.6 km in length, including taper.
3. Duplicate sign installations are not required:
   a) On opposite shoulder if at least one-half of the available lanes remain open to traffic.
   b) In the median if the width of the median shoulder is less than 2.4 m and the outside lanes are to be closed.
4. All advance warning sign installations shall be equipped with flags for daytime closures. Flashing beacons shall be placed at the locations indicated during night lane closure.
5. A C13 "END CONSTRUCTION" or C14 "END ROAD WORK" sign, as appropriate, shall be placed at the end of the lane closure unless the end of work area is obvious or ends within a larger project's limits.
6. If the C18 (or C23) sign would follow within 600 m of a stationary C18, C23 or C11 "STATE HIGHWAY CONSTRUCTION NEXT ____ MILES", use a C20 sign for the first advance warning sign.
7. Place a C30 sign every 600 m throughout length of lane closure.
8. One flashing arrow sign for each lane closed. The first flashing arrow sign shall be Type I. All others may be either Type I or Type II.
9. A minimum 450 m of sight distance shall be provided where possible for vehicles approaching the first flashing arrow sign. Lane closures shall not begin at top of crest vertical curve or on a horizontal curve.
10. All cones used for night lane closures shall be fitted with reflective sleeves as specified in the specifications.
11. Portable delineators, placed at one-half the spacing indicated for traffic cones may be used in lieu of cones for daytime closures only.
12. Unless otherwise specified in the special provisions, a minimum of 3 cones shall be placed transversely across each closed lane and shoulder at each location where a taper across a traffic lane ends and every 600 m as shown on the "Lane Closure" detail. Two Type II barricades may be used instead of the 3 cones. The transverse alignment of the cones or barricades on the closed shoulder may be shifted from the transverse alignment to provide access to the work.
13. Unless otherwise specified in the special provisions, the 150 m section of the lane closure shown along lanelines shall be used between the 300 m lane closure tapers when two or more adjacent traffic lanes are to be closed.
14. Unless otherwise specified in the special provisions, the G84 and W59 signs shall be used as shown.
15. Where specified in the special provisions, a W1 "LANE REDUCTION SYMBOL" sign is to be used in place of the C20 "RIGHT LANE CLOSED AHEAD" sign.
16. The W1 "LANE REDUCTION SYMBOL" sign shown at this location is to be used where the W1 sign is used as advance warning as described in Note 15.

### SIGN PANEL SIZE (Min)

| | |
|---|---|
| A | 1219 mm x 1219 mm |
| B | 914 mm x 914 mm |
| C | 762 mm x 762 mm |

### LEGEND

- Traffic Cone
- Traffic Cone (optional taper)
- Portable Sign
- Flashing Arrow Sign
- Direction of Travel
- Portable Flashing Beacon

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

# TRAFFIC CONTROL SYSTEM FOR LANE CLOSURE ON FREEWAYS AND EXPRESSWAYS

NO SCALE

T10

| DIST | COUNTY | ROUTE | KILOMETER POST TOTAL PROJECT | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| | | | | | |

Edward Edwards
REGISTERED CIVIL ENGINEER

July 1, 1999
PLANS APPROVAL DATE

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

R. E. Edwards
CH344
Exp. 6-30-00
CIVIL

1999 STD. PLAN T10

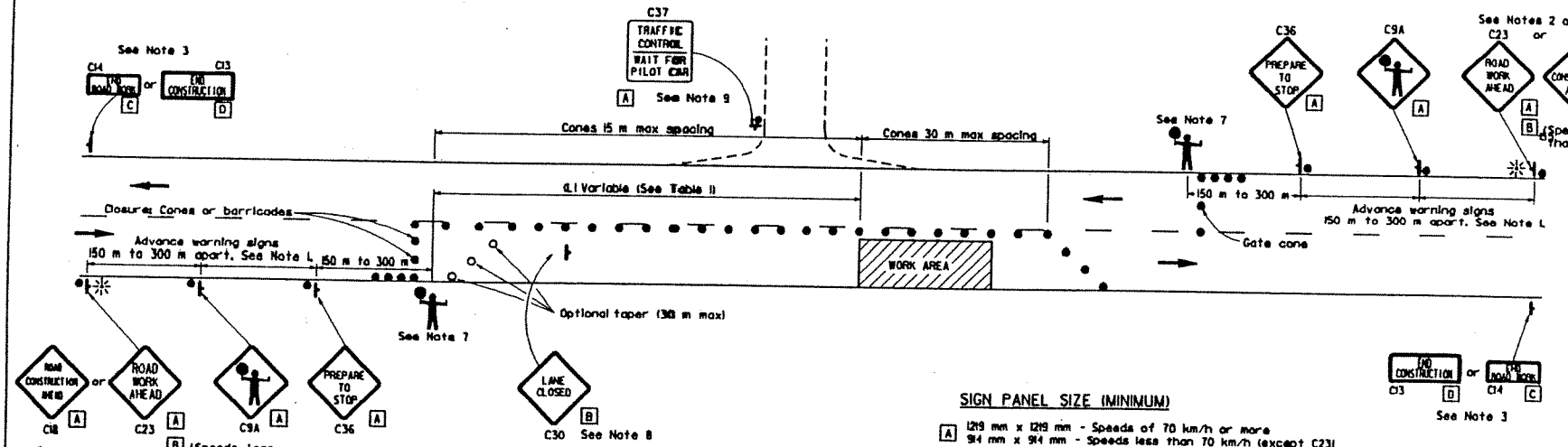
| DIST | COUNTY | ROUTE | KILOMETER POST TOTAL PROJECT | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| | | | | | |

REGISTERED CIVIL ENGINEER

July 1, 1999
PLANS APPROVAL DATE

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

# TYPICAL LANE CLOSURE WITH REVERSIBLE CONTROL




## SIGN PANEL SIZE (MINIMUM)

- A 1219 mm x 1219 mm - Speeds of 70 km/h or more
  914 mm x 914 mm - Speeds less than 70 km/h (except C23)
- B 762 mm x 762 mm
- C 914 mm x 457 mm
- D 1219 mm x 457 mm

## TABLE I

| Approach Speed (km/h) | * L (m) ± |
|---|---|
| 0-50 | 60 |
| 50-70 | 90 |
| over 70 | 150 |

* Increase by 20 percent on sustained downgrades steeper than 3 percent and longer than 1.6 km.

## LEGEND

- Traffic Cone
- Traffic Cone (optional taper)
- Portable Sign
- Direction of Travel
- Portable Flashing Beacon
- Flagger

## NOTES

1. Where approach speeds are low, signs may be placed at 90 m spacing, and in urban areas, closer.
2. All advance warning sign installations shall be equipped with flags for daytime closures. Flashing beacons shall be placed at the locations indicated during night lane closures.
3. A C13 "END CONSTRUCTION" or C14 "END ROAD WORK" sign, as appropriate, shall be placed at the end of the lane control unless the end of work area is obvious, or ends within a larger project's limits.
4. If the C18 (or C23) sign would follow within 600 m of a stationary C18, C23, or C1 "STATE HIGHWAY CONSTRUCTION NEXT _____ MILES", use a C9A sign for the first advance warning sign.
5. All cones used for night lane closures shall be fitted with reflective sleeves as specified in the specifications.
6. Portable delineators, placed at one-half the spacing indicated for traffic cones, may be used in lieu of cones for daytime closures only.
7. Additional advance flaggers may be required. Flagger should stand in a conspicuous place, be visible to approaching traffic as well as approaching vehicles after the first vehicle has stopped. Nighttime flagger station shall be illuminated as provided in the current edition of the "Manual of Traffic Controls" published by the State of California, Department of Transportation. Place a minimum of four cones at 15 m intervals in advance of flagger station as shown.
8. Place C30 "LANE CLOSED" sign at 150 to 300 m intervals throughout extended work areas. They are optional if the work area is visible from the flagger station.
9. When a pilot car is used, place a C37 "TRAFFIC CONTROL-WAIT FOR PILOT CAR" sign at all intersections within traffic control area. Signs shall be clean and visible at all times.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

# TRAFFIC CONTROL SYSTEM FOR LANE CLOSURE ON TWO LANE CONVENTIONAL HIGHWAYS

NO SCALE

T13

# APPENDIX C

## Boring Logs

## ABBREVIATIONS / SYMBOLS USED IN BORING LOGS

### GENERAL

PID - Photoionization Detector
OVM - Organic Vapor Meter
ppm - parts per million in air
sfc csg - surface casing
USCS - Unitied Soil Classification System
NGVD - National Geodetic Vertical Datum of 1929
NAVD - North American Vertical Datum of 1988
NA - Not Analyzed
slt - slight or slightly
bgl - below ground level
DTW - depth to water

### COLORS

v - very
lt - light
dk - dark
yel - yellow/yellowish
brn - brown/brownish
red-brn - reddish brown
a.a. - as above
(10YR 4/6) - Munsell notation (hue value/chroma)

### SAND GRAIN SIZE

VF - Very Fine
F - Fine
Med - Medium
Crs - Coarse

### DENSITY / STIFFNESS

Med - Medium
V - Very

### GEOLOGICAL CONTACTS

———— - Observed Contact
– – – – – - Inferred Contact

### GEOTECHNICAL

L.L. - Liquid Limit in percent
P.I. - Plasticity Index in percent
K - Vertical Hydraulic Conductivity (permeability) in cm/sec

### MOISTURE CONTENT

▼ - Observed top of saturated soil interval

NOTE:
Field soil logging procedures were performed in accordance with ASTM D-2488-93 (Visual-Manual Procedure).

**EXPLANATION FOR BORING LOGS**

**MFG, Inc.**
consulting scientists and engineers

# MFG, Inc.

consulting scientists and engineers

# LOG OF BORING RP-1



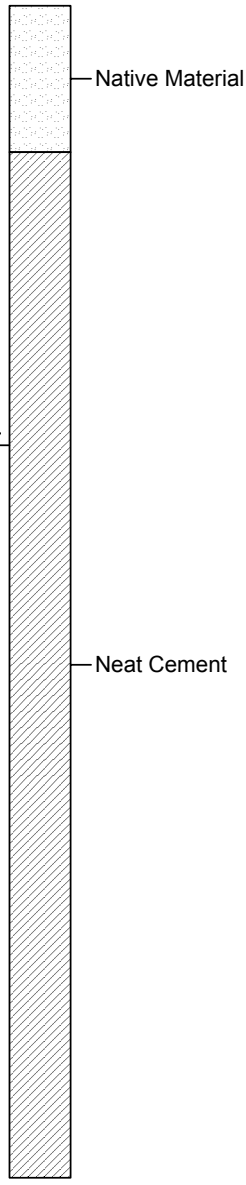
Sierra Pacific Industries
Arcata Division Sawmill
Arcata, California

MFG Project No. 030229.4

| | | | |
|---|---|---|---|
| Drilling Agency | : MFG, Inc. | Logged By | : Julie Mills |
| Drilling Method | : Stainless steel hand auger | Reviewed By | : Christopher Spill, R.G. |
| Sampler Type | : Stainless Steel Drive Sampler and Slide Hammer | | |
| Sampling Method | : Brass Liners | | |
| Ground Elevation | : Not Surveyed | | |

Date Started: July 8, 2003
Date Finished: July 8, 2003

| Depth in Feet | DESCRIPTION | USCS | Samples | Recovery (inches) | REMARKS |
|---|---|---|---|---|---|
| 0 | SILT: v dk grey: (10YR 3/1); some clay, few organics and rootlets, moist. | ML | 1 | 6 | PID = 0 ppmv (0.0 - 0.5 feet bgl). Collected soil sample RP-1-0.0-0.5' at 0.0 to 0.5 ft bgl. |
| | - black (10YR 2/1) | | 2 | 6 | PID = 0 ppmv (0.5 - 1.0 feet bgl). Collected soil sample RP-1-0.5-1.0' at 0.5 to 1.0 ft bgl. |
| 1 | | | 3 | 6 | PID = 2.2 ppmv (1.0 - 1.5 feet bgl). Collected soil sample RP-1-1.0-1.5' at 1.0 to 1.5 ft bgl. |
| | - wet | | 4 | 6 | PID = 2.2 ppmv (1.5 - 2.0 feet bgl). Collected soil sample RP-1-1.5-2.0' at 1.5 to 2.0 ft bgl. |
| 2 | CLAYEY SAND: black (10YR 2/1); F sand, some clay, few organics and rootlets. | SC | 5 | 6 | PID =3.4 ppmv (2.0 - 2.5 feet bgl). Collected soil sample RP-1-2.0-2.5' at 2.0 to 2.5 ft bgl. |
| 3 | | | | | |
| 4 | | | | | |




NOTES:
1. PID calibrated using 96 ppmv isobutylene. Background ambient air=0.0 to 0.6 ppmv.
2. Boring augered to a depth of 4.0 ft bgl.
3. Collected groundwater sample RP-1-GW using a peristaltic pump and polyethylene tubing.
4. Boring was backfilled with neat cement.

10-23-2003 H:\Projects\030229-SPI\Task 4\Report\borelogs\RP-1.bor

# MFG, Inc.

consulting scientists and engineers

# LOG OF BORING RP-2



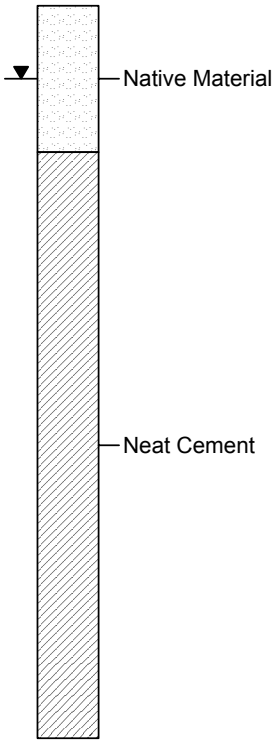
Sierra Pacific Industries
Arcata Division Sawmill
Arcata, California

MFG Project No. 030229.4

| | | | |
|---|---|---|---|
| Drilling Agency | : MFG, Inc. | Logged By | : Julie Mills |
| Drilling Method | : Stainless steel hand auger | Reviewed By | : Christopher Spill, R.G. |
| Sampler Type | : Stainless Steel Drive Sampler and Slide Hammer | | |
| Sampling Method | : Brass Liners | | |
| Ground Elevation | : Not Surveyed | | |

Date Started: July 8, 2003
Date Finished: July 8, 2003

| Depth in Feet | DESCRIPTION | USCS | Samples | Recovery (inches) | REMARKS |
|---|---|---|---|---|---|
| 0 | SAND WITH SILT: v dk greyish brn (10YR 3/2); F sand, few organics and rootlets, moist<br>- wet | SP-SM | 1 | 6 | PID = 1.1 ppmv (0.0 - 0.5 feet bgl). Collected soil sample RP-1-0.0-0.5' at 0.0 to 0.5 ft bgl. |
| | | | 2 | 6 | PID = 1.1 ppmv (0.5 - 1.0 feet bgl). Collected soil sample RP-2-0.5-1.0' at 0.5 to 1.0 ft bgl. |
| 1 | | | 3 | 6 | PID = 1.1 ppmv (1.0 - 1.5 feet bgl). Collected soil sample RP-2-1.0-1.5' at 1.0 to 1.5 ft bgl. |
| | | | 4 | 6 | PID = 1.1 ppmv (1.5 - 2.0 feet bgl). Collected soil sample RP-2-1.5-2.0' at 1.5 to 2.0 ft bgl. |
| 2 | | | 5 | 6 | PID = 1.1 ppmv (2.0 - 2.5 feet bgl). Collected soil sample RP-2-2.0-2.5' at 2.0 to 2.5 ft bgl. |
| 3 | | | | | |
| 4 | | | | | |




NOTES:
1. PID calibrated using 96 ppmv isobutylene. Background ambient air=0.0-0.6 ppmv.
2. Boring augered to a depth of 2.5 ft bgl.
3. Collected groundwater sample RP-2-GW using a peristaltic pump and polyethylene tubing.
4. Boring was backfilled with neat cement.

10-24-2003 H:\Projects\030229-SPI\Task 4\Report\borelogs\RP-2.bor

# MFG, Inc.

consulting scientists and engineers

# LOG OF BORING D6-1



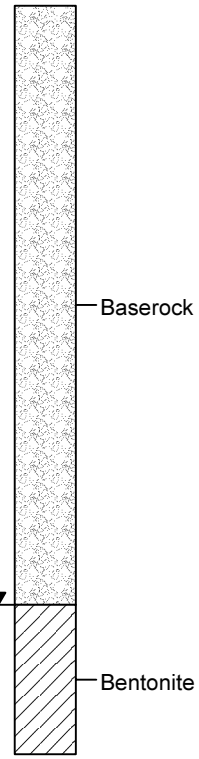
Sierra Pacific Industries
Arcata Division Sawmill
Arcata, California

MFG Project No. 030229.4

| | | | |
|---|---|---|---|
| Drilling Agency | : MFG, Inc. | Logged By | : Julie Mills |
| Drilling Method | : Stainless steel hand auger | Reviewed By | : Christopher Spill, R.G. |
| Sampler Type | : Stainless Steel Drive Sampler and Slide Hammer | | |
| Sampling Method | : Brass Liners | | |
| Ground Elevation | : Not Surveyed | | |

Date Started: July 22, 2003
Date Finished: July 22, 2003

| Depth in Feet | DESCRIPTION | USCS | Samples | Recovery (inches) | REMARKS |
|---|---|---|---|---|---|
| 0 | SILTY SAND: v dk grey (10YR 3/1); F sand, little F gravel, some organics, moist. | SM | 1 | 6 | PID = 0 ppmv (0.0 - 0.5 feet bgl). Collected soil sample D6-1-0.0-0.5' at 0.0 to 0.5 ft bgl. |
| 2 | SANDY SILT: dk grey (10YR 4/1); some F sand, wet. | ML | | | |




NOTES:
1. PID calibrated using 96 ppmv isobutylene. Background ambient air = 0.0 ppmv.
2. Boring augered to a depth of 2.5 ft bgl.
3. Collected groundwater sample D6-1-GW using a peristaltic pump and polyethylene tubing.
4. Boring was backfilled with bentonite chips and 3/4-inch baserock.

MFG, Inc.
consulting scientists and engineers

# LOG OF BORING D6-2



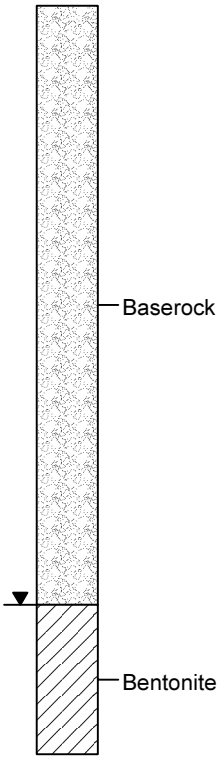
Sierra Pacific Industries
Arcata Division Sawmill
Arcata, California

MFG Project No. 030229.4

| | | | |
|---|---|---|---|
| Drilling Agency | : MFG, Inc. | Logged By | : Julie Mills |
| Drilling Method | : Stainless steel hand auger | Reviewed By | : Christopher Spill, R.G. |
| Sampler Type | : Stainless Steel Drive Sampler and Slide Hammer | | |
| Sampling Method | : Brass Liners | | |
| Ground Elevation | : Not Surveyed | | |

Date Started: July 22, 2003
Date Finished: July 22, 2003

| Depth in Feet | DESCRIPTION | USCS | Samples | Recovery (inches) | REMARKS |
|---|---|---|---|---|---|
| 0 | SANDY SILT: v dk grey (10YR 3/1); F sand, some organics, moist. | ML | 1 | 6 | PID = 0 ppmv (0.0 - 0.5 feet bgl). Collected soil sample D6-2-0.0-0.5' at 0.0 to 0.5 ft bgl. |
| 2 | SILTY SAND: dk grey (10YR 4/1); F sand, some silt, wet. | SM | | | |




NOTES:
1. PID calibrated using 96 ppmv isobutylene. Background ambient air = 0.0 ppmv.
2. Boring augered to a depth of 2.5 ft bgl.
3. Collected groundwater sample D6-2-GW using a peristaltic pump and polyethylene tubing.
4. Boring was backfilled with bentonite chips and 3/4-inch baserock.

MFG, Inc.
consulting scientists and engineers

# LOG OF BORING D6-3



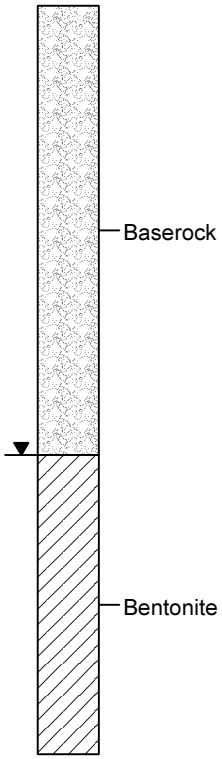
Sierra Pacific Industries
Arcata Division Sawmill
Arcata, California

MFG Project No. 030229.4

| | | | |
|---|---|---|---|
| Drilling Agency | : MFG, Inc. | Logged By | : Julie Mills |
| Drilling Method | : Stainless steel hand auger | Reviewed By | : Christopher Spill, R.G. |
| Sampler Type | : Stainless Steel Drive Sampler and Slide Hammer | | |
| Sampling Method | : Brass Liners | | |
| Ground Elevation | : Not Surveyed | | |

Date Started: July 22, 2003
Date Finished: July 22, 2003

| Depth in Feet | DESCRIPTION | USCS | Samples | Recovery (inches) | REMARKS |
|---|---|---|---|---|---|
| 0 | SANDY SILT: v dk grey (10YR 3/1); F sand, some organics, moist. | ML | 1 | 6 | PID = 0 ppmv (0.0 - 0.5 feet bgl). Collected soil sample D6-3-0.0-0.5' at 0.0 to 0.5 ft bgl. |
| 1 | SILTY SAND: dk grey (10YR 4/1); F sand, some silt, wet. | SM | | | |
| 2 | SAND: dk grey (10YR 4/1); F sand. | SP | | | |
| 3 | | | | | |
| 4 | | | | | |




NOTES:
1. PID calibrated using 96 ppmv isobutylene. Background ambient air = 0.0 ppmv.
2. Boring augered to a depth of 2.5 ft bgl.
3. Collected groundwater sample D6-3-GW using a peristaltic pump and polyethylene tubing.
4. Boring was backfilled with bentonite chips and 3/4-inch baserock.

MFG, Inc.
consulting scientists and engineers

# LOG OF BORING D6-4



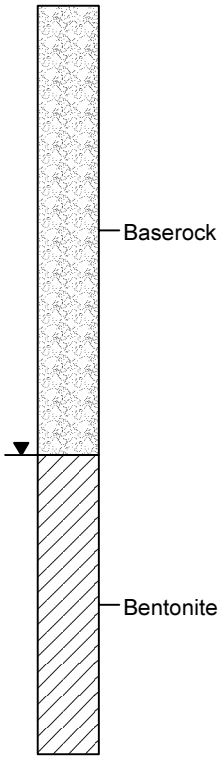
Sierra Pacific Industries
Arcata Division Sawmill
Arcata, California

MFG Project No. 030229.4

| | | | |
|---|---|---|---|
| Drilling Agency | : MFG, Inc. | Logged By | : Julie Mills |
| Drilling Method | : Stainless steel hand auger | Reviewed By | : Christopher Spill, R.G. |
| Sampler Type | : Stainless Steel Drive Sampler and Slide Hammer | | |
| Sampling Method | : Brass Liners | | |
| Ground Elevation | : Not Surveyed | | |

Date Started: July 22, 2003
Date Finished: July 22, 2003

| Depth in Feet | DESCRIPTION | USCS | Samples | Recovery (inches) | REMARKS |
|---|---|---|---|---|---|
| 0 | SANDY SILT: v dk grey (10YR 3/1); F sand, some organics, moist. | ML | 1 | 6 | PID = 0 ppmv (0.0 - 0.5 feet bgl). Collected soil sample D6-4-0.0-0.5' at 0.0 to 0.5 ft bgl. |
| 1 | SILTY SAND: dk grey (10YR 4/1); F sand, some silt, wet. | SM | | | |
| 2 | SAND: dk grey (10YR 4/1); F sand. | SP | | | |
| 3 | | | | | |
| 4 | | | | | |




NOTES:
1. PID calibrated using 96 ppmv isobutylene. Background ambient air = 0.0 ppmv.
2. Boring augered to a depth of 2.5 ft bgl.
3. Collected groundwater sample D6-4-GW using a peristaltic pump and polyethylene tubing.
4. Boring was backfilled with bentonite chips and 3/4-inch baserock.

# MFG, Inc.

consulting scientists and engineers

# LOG OF BORING D6-5



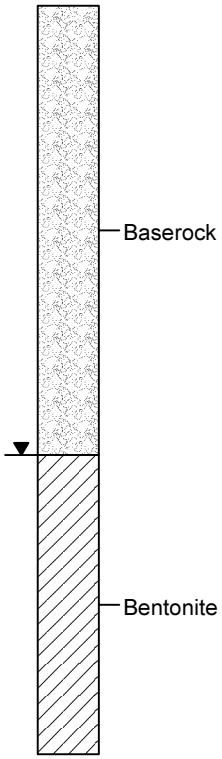
Sierra Pacific Industries
Arcata Division Sawmill
Arcata, California

MFG Project No. 030229.4

| | | | |
|---|---|---|---|
| Drilling Agency | : MFG, Inc. | Logged By | : Julie Mills |
| Drilling Method | : Stainless steel hand auger | Reviewed By | : Christopher Spill, R.G. |
| Sampler Type | : Stainless Steel Drive Sampler and Slide Hammer | | |
| Sampling Method | : Brass Liners | | |
| Ground Elevation | : Not Surveyed | | |

Date Started: July 22, 2003
Date Finished: July 22, 2003

| Depth in Feet | DESCRIPTION | USCS | Samples | Recovery (inches) | REMARKS |
|---|---|---|---|---|---|
| 0 | SILT: v dk grey (10YR 3/1); some organics, moist. | ML | 1 | 6 | PID = 0 ppmv (0.0 - 0.5 feet bgl). Collected soil sample D6-5-0.0-0.5' at 0.0 to 0.5 ft bgl. |
| | SILTY SAND: v dk grey (10YR 3/1); F sand, some silt, moist. | SM | | | |
| 1 | SANDY SILT: v dk grey (10YR 3/1); F sand, some organics, moist. | ML | | | |
| | SILTY SAND: dk grey (10YR 4/1); F sand, some silt, wet. | SM | | | |
| 2 | SAND: dk grey (10YR 4/1); F sand. | SP | | | |
| 3 | | | | | |
| 4 | | | | | |




NOTES:
1. PID calibrated using 96 ppmv isobutylene. Background ambient air = 0.0 ppmv.
2. Boring augered to a depth of 2.5 ft bgl.
3. Collected groundwater sample D6-5-GW using a peristaltic pump and polyethylene tubing.
4. Boring was backfilled with bentonite chips and 3/4-inch baserock.

# MFG, Inc.

consulting scientists and engineers

# LOG OF BORING D6-6



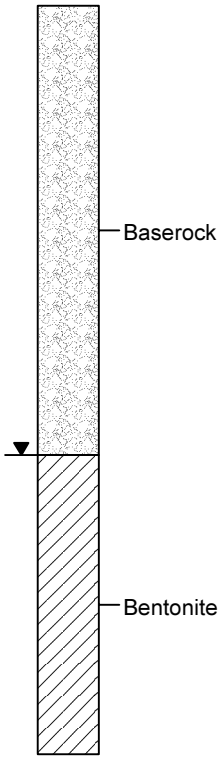
Sierra Pacific Industries
Arcata Division Sawmill
Arcata, California

MFG Project No. 030229.4

| | | | |
|---|---|---|---|
| Drilling Agency | : MFG, Inc. | Logged By | : Julie Mills |
| Drilling Method | : Stainless steel hand auger | Reviewed By | : Christopher Spill, R.G. |
| Sampler Type | : Stainless Steel Drive Sampler and Slide Hammer | | |
| Sampling Method | : Brass Liners | | |
| Ground Elevation | : Not Surveyed | | |

Date Started: July 22, 2003
Date Finished: July 22, 2003

| Depth in Feet | DESCRIPTION | USCS | Samples | Recovery (inches) | REMARKS |
|---|---|---|---|---|---|
| 0 | SILT: v dk grey (10YR 3/1); some organics, moist. | ML | 1 | 6 | PID = 0 ppmv (0.0 - 0.5 feet bgl). Collected soil sample D6-6-0.0-0.5' at 0.0 to 0.5 ft bgl. |
| | SILTY SAND: v dk grey (10YR 3/1); F sand, some silt, moist. | SM | | | |
| 1 | SANDY SILT: v dk grey (10YR 3/1); F sand, some organics, moist. | ML | | | |
| | SILTY SAND: dk grey (10YR 4/1); F sand, some silt, wet. | SM | | | |
| 2 | SAND: dk grey (10YR 4/1); F sand. | SP | | | |
| 3 | | | | | |
| 4 | | | | | |




NOTES:
1. PID calibrated using 96 ppmv isobutylene. Background ambient air = 0.0 ppmv.
2. Boring augered to a depth of 2.5 ft bgl.
3. Collected groundwater sample D6-6-GW using a peristaltic pump and polyethylene tubing.
4. Boring was backfilled with bentonite chips and 3/4-inch baserock.

# MFG, Inc.

consulting scientists and engineers

# LOG OF BORING D6-7



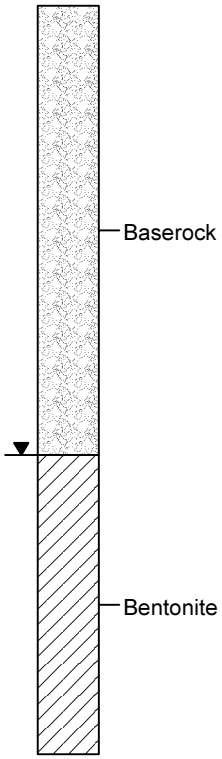
Sierra Pacific Industries
Arcata Division Sawmill
Arcata, California

MFG Project No. 030229.4

| | | | |
|---|---|---|---|
| Drilling Agency | : MFG, Inc. | Logged By | : Julie Mills |
| Drilling Method | : Stainless steel hand auger | Reviewed By | : Christopher Spill, R.G. |
| Sampler Type | : Stainless Steel Drive Sampler and Slide Hammer | | |
| Sampling Method | : Brass Liners | | |
| Ground Elevation | : Not Surveyed | | |

Date Started: July 22, 2003
Date Finished: July 22, 2003

| Depth in Feet | DESCRIPTION | USCS | Samples | Recovery (inches) | REMARKS |
|---|---|---|---|---|---|
| 0 | SILT: v dk grey (10YR 3/1); some organics, moist. | ML | 1 | 6 | PID = 0 ppmv (0.0 - 0.5 feet bgl). Collected soil sample D6-7-0.0-0.5' at 0.0 to 0.5 ft bgl. |
| | SILTY SAND: v dk grey (10YR 3/1); F sand, some silt, moist. | SM | | | |
| 1 | SANDY SILT: v dk grey (10YR 3/1); F sand, some organics, moist. | ML | | | |
| | SILTY SAND: dk grey (10YR 4/1); F sand, some silt, wet. | SM | | | |
| 2 | SAND: dk grey (10YR 4/1); F sand. | SP | | | |
| 3 | | | | | |
| 4 | | | | | |




NOTES:
1. PID calibrated using 96 ppmv isobutylene. Background ambient air = 0.0 ppmv.
2. Boring augered to a depth of 2.5 ft bgl.
3. Collected groundwater sample D6-7-GW using a peristaltic pump and polyethylene tubing.
4. Boring was backfilled with bentonite chips and 3/4-inch baserock.

# MFG, Inc.

consulting scientists and engineers

# LOG OF BORING D6-8



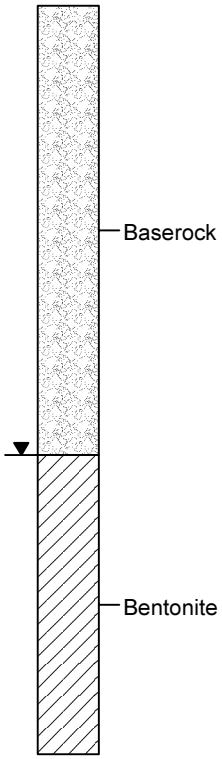
Sierra Pacific Industries
Arcata Division Sawmill
Arcata, California

MFG Project No. 030229.4

| | | | |
|---|---|---|---|
| Drilling Agency | : MFG, Inc. | Logged By | : Julie Mills |
| Drilling Method | : Stainless steel hand auger | Reviewed By | : Christopher Spill, R.G. |
| Sampler Type | : Stainless Steel Drive Sampler and Slide Hammer | | |
| Sampling Method | : Brass Liners | | |
| Ground Elevation | : Not Surveyed | | |

Date Started: July 23, 2003
Date Finished: July 23, 2003

| Depth in Feet | DESCRIPTION | USCS | Samples | Recovery (inches) | REMARKS |
|---|---|---|---|---|---|
| 0 | SILT: v dk grey (10YR 3/1); some organics, moist. | ML | 1 | 6 | PID = 0 ppmv (0.0 - 0.5 feet bgl). Collected soil sample D6-8-0.0-0.5' at 0.0 to 0.5 ft bgl. |
| | SILTY SAND: v dk grey (10YR 3/1); F sand, some silt, moist. | SM | | | |
| 1 | SANDY SILT: v dk grey (10YR 3/1); F sand, some organics, moist. | ML | | | |
| | SILTY SAND: dk grey (10YR 4/1); F sand, some silt, wet. | SM | | | |
| 2 | SAND: dk grey (10YR 4/1); F sand. | SP | | | |
| 3 | | | | | |
| 4 | | | | | |




NOTES:
1. PID calibrated using 96 ppmv isobutylene. Background ambient air = 0.0 ppmv.
2. Boring augered to a depth of 2.5 ft bgl.
3. Collected groundwater sample D6-8-GW using a peristaltic pump and polyethylene tubing.
4. Boring was backfilled with bentonite chips and 3/4-inch baserock.

MFG, Inc.
consulting scientists and engineers

# LOG OF BORING D6-9



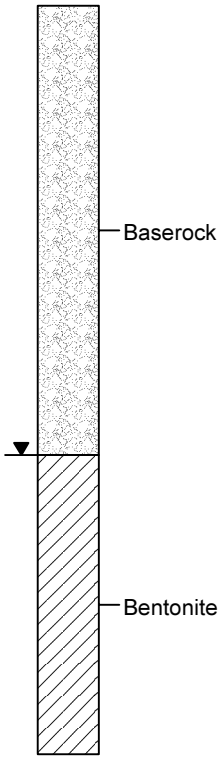
Sierra Pacific Industries
Arcata Division Sawmill
Arcata, California

MFG Project No. 030229.4

| | | | |
|---|---|---|---|
| Drilling Agency | : MFG, Inc. | Logged By | : Julie Mills |
| Drilling Method | : Stainless steel hand auger | Reviewed By | : Christopher Spill, R.G. |
| Sampler Type | : Stainless Steel Drive Sampler and Slide Hammer | | |
| Sampling Method | : Brass Liners | | |
| Ground Elevation | : Not Surveyed | | |

Date Started: July 23, 2003
Date Finished: July 23, 2003

| Depth in Feet | DESCRIPTION | USCS | Samples | Recovery (inches) | REMARKS |
|---|---|---|---|---|---|
| 0 | SILT: v dk grey (10YR 3/1); some organics, moist. | ML | 1 | 6 | PID = 0 ppmv (0.0 - 0.5 feet bgl). Collected soil sample D6-9-0.0-0.5' at 0.0 to 0.5 ft bgl. |
| | SILTY SAND: v dk grey (10YR 3/1); F sand, some silt, moist. | SM | | | |
| 1 | SANDY SILT: v dk grey (10YR 3/1); F sand, some organics, moist. | ML | | | |
| | SILTY SAND: dk grey (10YR 4/1); F sand, some silt, wet. | SM | | | |
| 2 | SAND: dk grey (10YR 4/1); F sand. | SP | | | |
| 3 | | | | | |
| 4 | | | | | |




NOTES:
1. PID calibrated using 96 ppmv isobutylene. Background ambient air = 0.0 ppmv.
2. Boring augered to a depth of 2.5 ft bgl.
3. Collected groundwater sample D6-9-GW using a peristaltic pump and polyethylene tubing.
4. Boring was backfilled with bentonite chips and 3/4-inch baserock.

# MFG, Inc.

consulting scientists and engineers

# LOG OF BORING D6-10



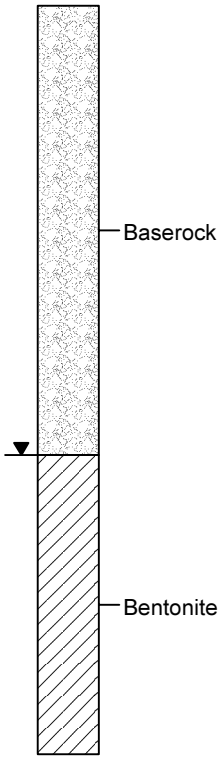
Sierra Pacific Industries
Arcata Division Sawmill
Arcata, California

MFG Project No. 030229.4

| | | | |
|---|---|---|---|
| Drilling Agency | : MFG, Inc. | Logged By | : Julie Mills |
| Drilling Method | : Stainless steel hand auger | Reviewed By | : Christopher Spill, R.G. |
| Sampler Type | : Stainless Steel Drive Sampler and Slide Hammer | | |
| Sampling Method | : Brass Liners | | |
| Ground Elevation | : Not Surveyed | | |

Date Started: July 23, 2003
Date Finished: July 23, 2003

| Depth in Feet | DESCRIPTION | USCS | Samples | Recovery (inches) | REMARKS |
|---|---|---|---|---|---|
| 0 | SILT: v dk grey (10YR 3/1); few F sand, some organics, moist. | ML | 1 | 6 | PID = 0 ppmv (0.0 - 0.5 feet bgl). Collected soil sample D6-10-0.0-0.5' at 0.0 to 0.5 ft bgl. |
| 1 | | | | | |
| 2 | SAND W/ SILT: dk grey (10YR 4/1); F sand, few silt, wet. | SP-SM | | | |
| | SAND: dk grey (10YR 4/1); F sand. | SP | | | |
| 3 | | | | | |
| 4 | | | | | |




NOTES:
1. PID calibrated using 96 ppmv isobutylene. Background ambient air = 0.0 ppmv.
2. Boring augered to a depth of 2.5 ft bgl.
3. Collected groundwater sample D6-10-GW using a peristaltic pump and polyethylene tubing.
4. Boring was backfilled with bentonite chips and 3/4-inch baserock.

# MFG, Inc.

consulting scientists and engineers

## LOG OF BORING D6-11



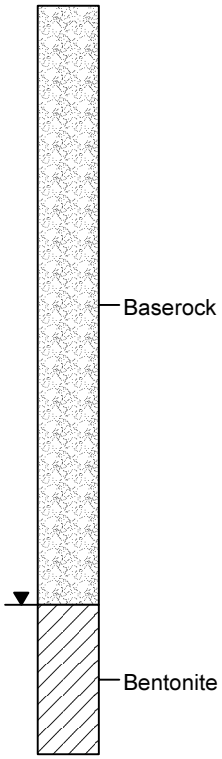
Sierra Pacific Industries
Arcata Division Sawmill
Arcata, California

MFG Project No. 030229.4

| | | | |
|---|---|---|---|
| Drilling Agency | : MFG, Inc. | Logged By | : Julie Mills |
| Drilling Method | : Stainless steel hand auger | Reviewed By | : Christopher Spill, R.G. |
| Sampler Type | : Stainless Steel Drive Sampler and Slide Hammer | | |
| Sampling Method | : Brass Liners | | |
| Ground Elevation | : Not Surveyed | | |

Date Started: July 23, 2003
Date Finished: July 23, 2003

| Depth in Feet | DESCRIPTION | USCS | Samples | Recovery (inches) | REMARKS |
|---|---|---|---|---|---|
| 0 | SANDY SILT: v dk grey (10YR 3/1); F sand, some organics, moist. | | 1 | 6 | PID = 0 ppmv (0.0 - 0.5 feet bgl). Collected soil sample D6-11-0.0-0.5' at 0.0 to 0.5 ft bgl. |
| 1 | - v dk grey (5Y 3/1). | ML | | | |
| | - black (10YR 2/1), rootlets. | | | | |
| 2 | SILTY SAND: dk grey (10YR 4/1); F sand, wet. | SM | | | |
| 3 | | | | | |
| 4 | | | | | |




NOTES:
1. PID calibrated using 96 ppmv isobutylene. Background ambient air = 0.0 ppmv.
2. Boring augered to a depth of 2.5 ft bgl.
3. Collected groundwater sample D6-11-GW using a peristaltic pump and polyethylene tubing.
4. Boring was backfilled with bentonite chips and 3/4-inch baserock.

# MFG, Inc.

consulting scientists and engineers

# LOG OF BORING D6-12



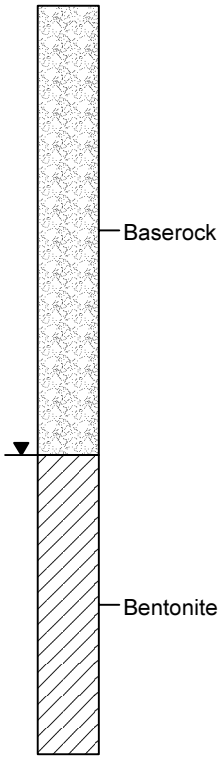
Sierra Pacific Industries
Arcata Division Sawmill
Arcata, California

MFG Project No. 030229.4

| | | | |
|---|---|---|---|
| Drilling Agency | : MFG, Inc. | Logged By | : Julie Mills |
| Drilling Method | : Stainless steel hand auger | Reviewed By | : Christopher Spill, R.G. |
| Sampler Type | : Stainless Steel Drive Sampler and Slide Hammer | | |
| Sampling Method | : Brass Liners | | |
| Ground Elevation | : Not Surveyed | | |

Date Started: July 23, 2003
Date Finished: July 23, 2003

| Depth in Feet | DESCRIPTION | USCS | Samples | Recovery (inches) | REMARKS |
|---|---|---|---|---|---|
| 0 | SILT: v dk grey (10YR 3/1); some organics, moist. | ML | 1 | 6 | PID = 0.7 ppmv (0.0 - 0.5 feet bgl). Collected soil sample D6-12-0.0-0.5' at 0.0 to 0.5 ft bgl. |
| | SILTY SAND: v dk grey (10YR 3/1); F sand, some silt, moist. | SM | | | |
| 1 | SANDY SILT: v dk grey (10YR 3/1); F sand, some organics, moist. | ML | | | |
| | SILTY SAND: dk grey (10YR 4/1); F sand, some silt, wet. | SM | | | |
| 2 | SAND: dk grey (10YR 4/1); F sand. | SP | | | |
| 3 | | | | | |
| 4 | | | | | |




NOTES:
1. PID calibrated using 96 ppmv isobutylene. Background ambient air = 0.0 ppmv.
2. Boring augered to a depth of 2.5 ft bgl.
3. Collected groundwater sample D6-12-GW using a peristaltic pump and polyethylene tubing.
4. Boring was backfilled with bentonite chips and 3/4-inch baserock.

10-20-2003 J:\030229\Task 04\Report\Boring Logs\D6-12.BOR

# MFG, Inc.

consulting scientists and engineers

# LOG OF BORING D6-13



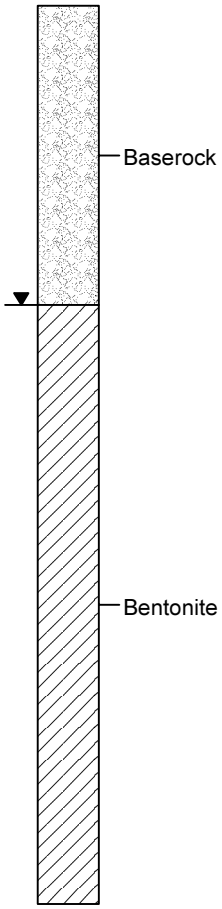
Sierra Pacific Industries
Arcata Division Sawmill
Arcata, California

MFG Project No. 030229.4

| | | | |
|---|---|---|---|
| Drilling Agency | : MFG, Inc. | Logged By | : Julie Mills |
| Drilling Method | : Stainless steel hand auger | Reviewed By | : Christopher Spill, R.G. |
| Sampler Type | : Stainless Steel Drive Sampler and Slide Hammer | | |
| Sampling Method | : Brass Liners | | |
| Ground Elevation | : Not Surveyed | | |

Date Started: July 23, 2003
Date Finished: July 23, 2003

| Depth in Feet | DESCRIPTION | USCS | Samples | Recovery (inches) | REMARKS |
|---|---|---|---|---|---|
| 0 | SANDY SILT: v dk grey (10YR 3/1); F sand, moist. | ML | 1 | 6 | PID = 1.1 ppmv (0.0 - 0.5 feet bgl). Collected soil sample D6-13-0.0-0.5' at 0.0 to 0.5 ft bgl. |
| | SILTY SAND: v dk grey (10YR 3/1); F sand, some silt, rootlets, moist. | SM | | | |
| 1 | SAND: dk grey (10YR 4/1); F sand, wet. | SP | | | |
| 2 | | | | | |
| 3 | | | | | |
| 4 | | | | | |




NOTES:
1. PID calibrated using 96 ppmv isobutylene. Background ambient air = 0.0 ppmv.
2. Boring augered to a depth of 3.0 ft bgl.
3. Collected groundwater sample D6-13-GW using a peristaltic pump and polyethylene tubing.
4. Boring was backfilled with bentonite chips and 3/4-inch baserock.

# MFG, Inc.

consulting scientists and engineers

# LOG OF BORING D6-14



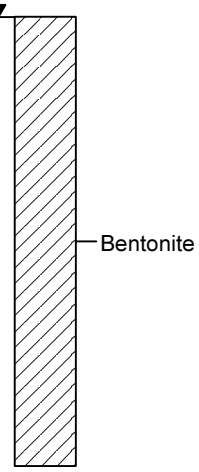
Sierra Pacific Industries
Arcata Division Sawmill
Arcata, California

MFG Project No. 030229.4

| | | | |
|---|---|---|---|
| Drilling Agency | : MFG, Inc. | Logged By | : Julie Mills |
| Drilling Method | : Stainless steel hand auger | Reviewed By | : Christopher Spill, R.G. |
| Sampler Type | : Stainless Steel Drive Sampler and Slide Hammer | | |
| Sampling Method | : Brass Liners | | |
| Ground Elevation | : Not Surveyed | | |

Date Started: July 23, 2003
Date Finished: July 23, 2003

| Depth in Feet | DESCRIPTION | USCS | Samples | Recovery (inches) | REMARKS |
|---|---|---|---|---|---|
| 0 | SILTY SAND: v dk grey (10YR 3/1); F sand, some silt, few rootlets, wet. | SM | 1 | 6 | PID = 0 ppmv (0.0 - 0.5 feet bgl). Collected soil sample D6-14-0.0-0.5' at 0.0 to 0.5 ft bgl. |
| 1 | | | | | |
| 2 | | | | | |
| 3 | | | | | |
| 4 | | | | | |




NOTES:
1. PID calibrated using 96 ppmv isobutylene. Background ambient air = 0.0 ppmv.
2. Boring augered to a depth of 1.5 ft bgl.
3. Collected groundwater sample D6-14-GW using a peristaltic pump and polyethylene tubing.
4. Boring was backfilled with bentonite chips.

# MFG, Inc.

consulting scientists and engineers

# LOG OF BORING D6-15



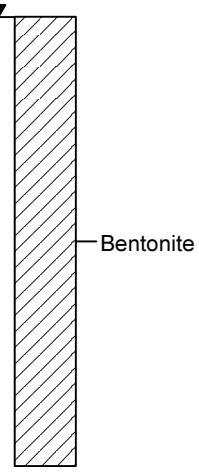
Sierra Pacific Industries
Arcata Division Sawmill
Arcata, California

MFG Project No. 030229.4

| | | | |
|---|---|---|---|
| Drilling Agency | : MFG, Inc. | Logged By | : Julie Mills |
| Drilling Method | : Stainless steel hand auger | Reviewed By | : Christopher Spill, R.G. |
| Sampler Type | : Stainless Steel Drive Sampler and Slide Hammer | | |
| Sampling Method | : Brass Liners | | |
| Ground Elevation | : Not Surveyed | | |

Date Started: July 23, 2003
Date Finished: July 23, 2003

| Depth in Feet | DESCRIPTION | USCS | Samples | Recovery (inches) | REMARKS |
|---|---|---|---|---|---|
| 0 | SILTY SAND: v dk grey (10YR 3/1); F sand, some silt, few rootlets, wet. | SM | 1 | 6 | PID = 1.1 ppmv (0.0 - 0.5 feet bgl). Collected soil sample D6-15-0.0-0.5' at 0.0 to 0.5 ft bgl. |
| 1 | | | | | |
| 2 | | | | | |
| 3 | | | | | |
| 4 | | | | | |




NOTES:
1. PID calibrated using 96 ppmv isobutylene. Background ambient air = 0.0 ppmv.
2. Boring augered to a depth of 1.5 ft bgl.
3. Collected groundwater sample D6-15-GW using a peristaltic pump and polyethylene tubing.
4. Boring was backfilled with bentonite chips.

# MFG, Inc.

consulting scientists and engineers

# LOG OF BORING D6-16



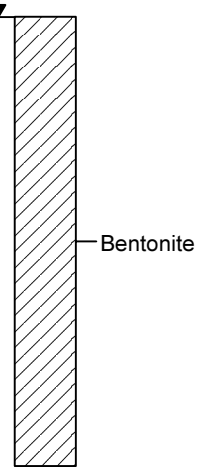
Sierra Pacific Industries
Arcata Division Sawmill
Arcata, California

MFG Project No. 030229.4

| | | | |
|---|---|---|---|
| Drilling Agency | : MFG, Inc. | Logged By | : Julie Mills |
| Drilling Method | : Stainless steel hand auger | Reviewed By | : Christopher Spill, R.G. |
| Sampler Type | : Stainless Steel Drive Sampler and Slide Hammer | | |
| Sampling Method | : Brass Liners | | |
| Ground Elevation | : Not Surveyed | | |

Date Started: July 23, 2003
Date Finished: July 23, 2003

| Depth in Feet | DESCRIPTION | USCS | Samples | Recovery (inches) | REMARKS |
|---|---|---|---|---|---|
| 0 | SILTY SAND: v dk grey (10YR 3/1); F sand, some silt, few rootlets, wet. | SM | 1 | 6 | PID = 0.2 ppmv (0.0 - 0.5 feet bgl). Collected soil sample D6-16-0.0-0.5' at 0.0 to 0.5 ft bgl. |
| 1 | | | | | |
| 2 | | | | | |
| 3 | | | | | |
| 4 | | | | | |




NOTES:
1. PID calibrated using 96 ppmv isobutylene. Background ambient air = 0.0 ppmv.
2. Boring augered to a depth of 1.5 ft bgl.
3. Collected groundwater sample D6-16-GW using a peristaltic pump and polyethylene tubing.
4. Boring was backfilled with bentonite chips.

# MFG, Inc.

consulting scientists and engineers

# LOG OF BORING D6-17



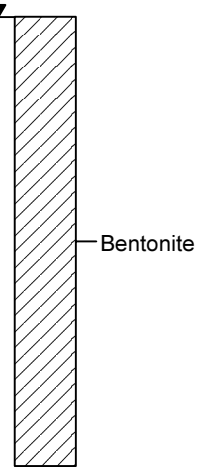
Sierra Pacific Industries
Arcata Division Sawmill
Arcata, California

MFG Project No. 030229.4

| | | | |
|---|---|---|---|
| Drilling Agency | : MFG, Inc. | Logged By | : Julie Mills |
| Drilling Method | : Stainless steel hand auger | Reviewed By | : Christopher Spill, R.G. |
| Sampler Type | : Stainless Steel Drive Sampler and Slide Hammer | | |
| Sampling Method | : Brass Liners | | |
| Ground Elevation | : Not Surveyed | | |

Date Started: July 23, 2003
Date Finished: July 23, 2003

| Depth in Feet | DESCRIPTION | USCS | Samples | Recovery (inches) | REMARKS |
|---|---|---|---|---|---|
| 0 | SILTY SAND: v dk grey (10YR 3/1); F sand, some silt, few rootlets, wet. | SM | 1 | 6 | PID = 0.2 ppmv (0.0 - 0.5 feet bgl). Collected soil sample D6-17-0.0-0.5' at 0.0 to 0.5 ft bgl. |
| 1 | | | | | |
| 2 | | | | | |
| 3 | | | | | |
| 4 | | | | | |




NOTES:
1. PID calibrated using 96 ppmv isobutylene. Background ambient air = 0.0 ppmv.
2. Boring augered to a depth of 1.5 ft bgl.
3. Collected groundwater sample D6-17-GW using a peristaltic pump and polyethylene tubing.
4. Boring was backfilled with bentonite chips.

# MFG, Inc.

consulting scientists and engineers

# LOG OF BORING D6-18



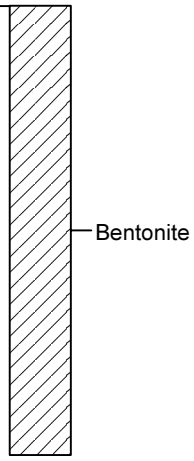
Sierra Pacific Industries
Arcata Division Sawmill
Arcata, California

MFG Project No. 030229.4

| | | | |
|---|---|---|---|
| Drilling Agency | : MFG, Inc. | Logged By | : Julie Mills |
| Drilling Method | : Stainless steel hand auger | Reviewed By | : Christopher Spill, R.G. |
| Sampler Type | : Stainless Steel Drive Sampler and Slide Hammer | | |
| Sampling Method | : Brass Liners | | |
| Ground Elevation | : Not Surveyed | | |

Date Started: July 24, 2003
Date Finished: July 24, 2003

| Depth in Feet | DESCRIPTION | USCS | Samples | Recovery (inches) | REMARKS |
|---|---|---|---|---|---|
| 0 | SILTY SAND: v dk grey (10YR 3/1); F sand, some silt, few rootlets, wet. | SM | 1 | 6 | PID = 0 ppmv (0.0 - 0.5 feet bgl). Collected soil sample D6-18-0.0-0.5' at 0.0 to 0.5 ft bgl. |
| 1 | | | | | |
| 2 | | | | | |
| 3 | | | | | |
| 4 | | | | | |




NOTES:
1. PID calibrated using 96 ppmv isobutylene. Background ambient air = 0.0 ppmv.
2. Boring augered to a depth of 1.5 ft bgl.
3. Collected groundwater sample D6-18-GW using a peristaltic pump and polyethylene tubing.
4. Boring was backfilled with bentonite chips.

# MFG, Inc.

consulting scientists and engineers

# LOG OF BORING D6-19



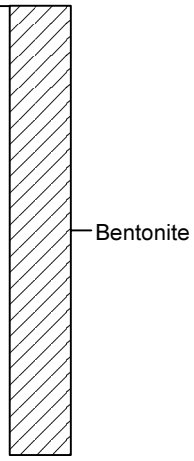
Sierra Pacific Industries
Arcata Division Sawmill
Arcata, California

MFG Project No. 030229.4

| | | | |
|---|---|---|---|
| Drilling Agency | : MFG, Inc. | Logged By | : Julie Mills |
| Drilling Method | : Stainless steel hand auger | Reviewed By | : Christopher Spill, R.G. |
| Sampler Type | : Stainless Steel Drive Sampler and Slide Hammer | | |
| Sampling Method | : Brass Liners | | |
| Ground Elevation | : Not Surveyed | | |

Date Started: July 24, 2003
Date Finished: July 24, 2003

| Depth in Feet | DESCRIPTION | USCS | Samples | Recovery (inches) | REMARKS |
|---|---|---|---|---|---|
| 0 | SILTY SAND: v dk grey (10YR 3/1); F sand, some silt, few rootlets, wet. | SM | 1 | 6 | PID = 0 ppmv (0.0 - 0.5 feet bgl). Collected soil sample D6-19-0.0-0.5' at 0.0 to 0.5 ft bgl. |
| 1 | | | | | |
| 2 | | | | | |
| 3 | | | | | |
| 4 | | | | | |




NOTES:
1. PID calibrated using 96 ppmv isobutylene. Background ambient air = 0.0 ppmv.
2. Boring augered to a depth of 1.5 ft bgl.
3. Collected groundwater sample D6-19-GW using a peristaltic pump and polyethylene tubing.
4. Boring was backfilled with bentonite chips.

# MFG, Inc.

consulting scientists and engineers

# LOG OF BORING D6-20



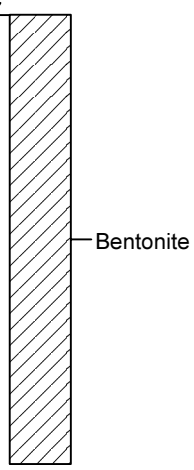
Sierra Pacific Industries
Arcata Division Sawmill
Arcata, California

MFG Project No. 030229.4

| | | | |
|---|---|---|---|
| Drilling Agency | : MFG, Inc. | Logged By | : Julie Mills |
| Drilling Method | : Stainless steel hand auger | Reviewed By | : Christopher Spill, R.G. |
| Sampler Type | : Stainless Steel Drive Sampler and Slide Hammer | | |
| Sampling Method | : Brass Liners | | |
| Ground Elevation | : Not Surveyed | | |

Date Started: July 24, 2003
Date Finished: July 24, 2003

| Depth in Feet | DESCRIPTION | USCS | Samples | Recovery (inches) | REMARKS |
|---|---|---|---|---|---|
| 0 | SILTY SAND: v dk grey (10YR 3/1); F sand, some silt, few rootlets, wet. | SM | 1 | 6 | PID = 0 ppmv (0.0 - 0.5 feet bgl). Collected soil sample D6-20-0.0-0.5' at 0.0 to 0.5 ft bgl. |
| 1 | | | | | |
| 2 | | | | | |
| 3 | | | | | |
| 4 | | | | | |




NOTES:
1. PID calibrated using 96 ppmv isobutylene. Background ambient air = 0.0 ppmv.
2. Boring augered to a depth of 1.5 ft bgl.
3. Collected groundwater sample D6-20-GW using a peristaltic pump and polyethylene tubing.
4. Boring was backfilled with bentonite chips.

# MFG, Inc.

consulting scientists and engineers

## LOG OF BORING D6-21



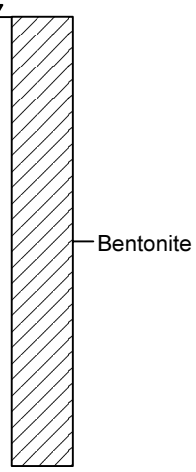
Sierra Pacific Industries
Arcata Division Sawmill
Arcata, California

MFG Project No. 030229.4

| | | | |
|---|---|---|---|
| Drilling Agency | : MFG, Inc. | Logged By | : Julie Mills |
| Drilling Method | : Stainless steel hand auger | Reviewed By | : Christopher Spill, R.G. |
| Sampler Type | : Stainless Steel Drive Sampler and Slide Hammer | | |
| Sampling Method | : Brass Liners | | |
| Ground Elevation | : Not Surveyed | | |

Date Started: July 24, 2003
Date Finished: July 24, 2003

| Depth in Feet | DESCRIPTION | USCS | Samples | Recovery (inches) | REMARKS |
|---|---|---|---|---|---|
| 0 | SILTY SAND: v dk grey (10YR 3/1); F sand, some silt, few rootlets, wet. | SM | 1 | 6 | PID = 0 ppmv (0.0 - 0.5 feet bgl). Collected soil sample D6-21-0.0-0.5' at 0.0 to 0.5 ft bgl. |
| 1 | | | | | |
| 2 | | | | | |
| 3 | | | | | |
| 4 | | | | | |




NOTES:
1. PID calibrated using 96 ppmv isobutylene. Background ambient air = 0.0 ppmv.
2. Boring augered to a depth of 1.5 ft bgl.
3. Collected groundwater sample D6-21-GW using a peristaltic pump and polyethylene tubing.
4. Boring was backfilled with bentonite chips.

# MFG, Inc.

consulting scientists and engineers

# LOG OF BORING D6-22



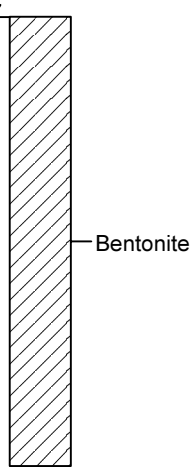
Sierra Pacific Industries
Arcata Division Sawmill
Arcata, California

MFG Project No. 030229.4

| | | | |
|---|---|---|---|
| Drilling Agency | : MFG, Inc. | Logged By | : Julie Mills |
| Drilling Method | : Stainless steel hand auger | Reviewed By | : Christopher Spill, R.G. |
| Sampler Type | : Stainless Steel Drive Sampler and Slide Hammer | | |
| Sampling Method | : Brass Liners | | |
| Ground Elevation | : Not Surveyed | | |

Date Started: July 24, 2003
Date Finished: July 24, 2003

| Depth in Feet | DESCRIPTION | USCS | Samples | Recovery (inches) | REMARKS |
|---|---|---|---|---|---|
| 0 | SILTY SAND: v dk grey (10YR 3/1); F sand, some silt, few rootlets, wet. | SM | 1 | 6 | PID = 0 ppmv (0.0 - 0.5 feet bgl). Collected soil sample D6-22-0.0-0.5' at 0.0 to 0.5 ft bgl. |
| 1 | | | | | |
| 2 | | | | | |
| 3 | | | | | |
| 4 | | | | | |




NOTES:
1. PID calibrated using 96 ppmv isobutylene. Background ambient air = 0.0 ppmv.
2. Boring augered to a depth of 1.5 ft bgl.
3. Collected groundwater sample D6-22-GW using a peristaltic pump and polyethylene tubing.
4. Boring was backfilled with bentonite chips.

# MFG, Inc.

consulting scientists and engineers

# LOG OF BORING D6-23



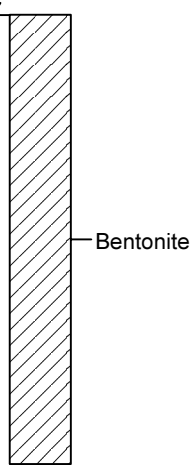
Sierra Pacific Industries
Arcata Division Sawmill
Arcata, California

MFG Project No. 030229.4

| | | | |
|---|---|---|---|
| Drilling Agency | : MFG, Inc. | Logged By | : Julie Mills |
| Drilling Method | : Stainless steel hand auger | Reviewed By | : Christopher Spill, R.G. |
| Sampler Type | : Stainless Steel Drive Sampler and Slide Hammer | | |
| Sampling Method | : Brass Liners | | |
| Ground Elevation | : Not Surveyed | | |

Date Started: July 24, 2003
Date Finished: July 24, 2003

| Depth in Feet | DESCRIPTION | USCS | Samples | Recovery (inches) | REMARKS |
|---|---|---|---|---|---|
| 0 | SILTY SAND: v dk grey (10YR 3/1); F sand, some silt, few rootlets, wet. | SM | 1 | 6 | PID = 0 ppmv (0.0 - 0.5 feet bgl). Collected soil sample D6-23-0.0-0.5' at 0.0 to 0.5 ft bgl. |
| 1 | | | | | |
| 2 | | | | | |
| 3 | | | | | |
| 4 | | | | | |




NOTES:
1. PID calibrated using 96 ppmv isobutylene. Background ambient air = 0.0 ppmv.
2. Boring augered to a depth of 1.5 ft bgl.
3. Collected groundwater sample D6-23-GW using a peristaltic pump and polyethylene tubing.
4. Boring was backfilled with bentonite chips.

# MFG, Inc.

consulting scientists and engineers

# LOG OF BORING D6-24



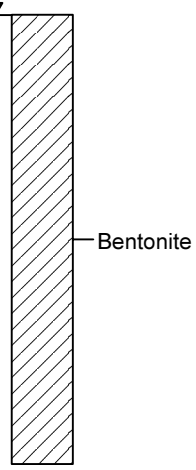
Sierra Pacific Industries
Arcata Division Sawmill
Arcata, California

MFG Project No. 030229.4

| | | | |
|---|---|---|---|
| Drilling Agency | : MFG, Inc. | Logged By | : Julie Mills |
| Drilling Method | : Stainless steel hand auger | Reviewed By | : Christopher Spill, R.G. |
| Sampler Type | : Stainless Steel Drive Sampler and Slide Hammer | | |
| Sampling Method | : Brass Liners | | |
| Ground Elevation | : Not Surveyed | | |

Date Started: July 24, 2003
Date Finished: July 24, 2003

| Depth in Feet | DESCRIPTION | USCS | Samples | Recovery (inches) | REMARKS |
|---|---|---|---|---|---|
| 0 | SILTY SAND: v dk grey (10YR 3/1); F sand, some silt, few rootlets, wet. | SM | 1 | 6 | PID = 0 ppmv (0.0 - 0.5 feet bgl). Collected soil sample D6-24-0.0-0.5' at 0.0 to 0.5 ft bgl. |
| 1 | | | | | |
| 2 | | | | | |
| 3 | | | | | |
| 4 | | | | | |




NOTES:
1. PID calibrated using 96 ppmv isobutylene. Background ambient air = 0.0 ppmv.
2. Boring augered to a depth of 1.5 ft bgl.
3. Collected groundwater sample D6-24-GW using a peristaltic pump and polyethylene tubing.
4. Boring was backfilled with bentonite chips.

# MFG, Inc.

consulting scientists and engineers

# LOG OF BORING D7-1



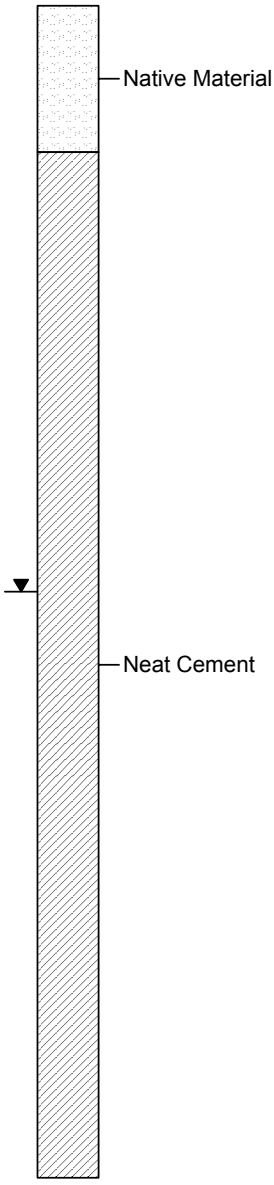
Sierra Pacific Industries
Arcata Division Sawmill
Arcata, California

MFG Project No. 030229.4

| | | | |
|---|---|---|---|
| Drilling Agency | : MFG, Inc. | Logged By | : Julie Mills |
| Drilling Method | : Stainless steel hand auger | Reviewed By | : Christopher Spill, R.G. |
| Sampler Type | : Stainless Steel Drive Sampler and Slide Hammer | | |
| Sampling Method | : Brass Liners | | |
| Ground Elevation | : Not Surveyed | | |

Date Started: July 9, 2003
Date Finished: July 9, 2003

| Depth in Feet | DESCRIPTION | USCS | Samples | Recovery (inches) | REMARKS |
|---|---|---|---|---|---|
| 0 | SAND: v dk greyish brn (10YR 3/2); mottled with dk greyish brn (10YR 4/2); Med sand, dry. | | 1 | 6 | PID = 2.6 ppmv (0.0 - 0.5 feet bgl). Collected soil sample D7-1-0.0-0.5' at 0.0 to 0.5 ft bgl. |
| 1 | - dk grey (10YR 4/1); Med sand, moist | | | | |
| 2 | - wet | SP | | | |
| 3 | | | | | |
| 4 | | | | | |




NOTES:
1. PID calibrated using 96 ppmv isobutylene. Background ambient air=0.0 ppmv.
2. Boring augered to a depth of 4.0 ft bgl.
3. Collected groundwater sample D7-1-GW using a peristaltic pump and polyethylene tubing.
4. Boring was backfilled with neat cement.

MFG, Inc.
consulting scientists and engineers

# LOG OF BORING D7-2



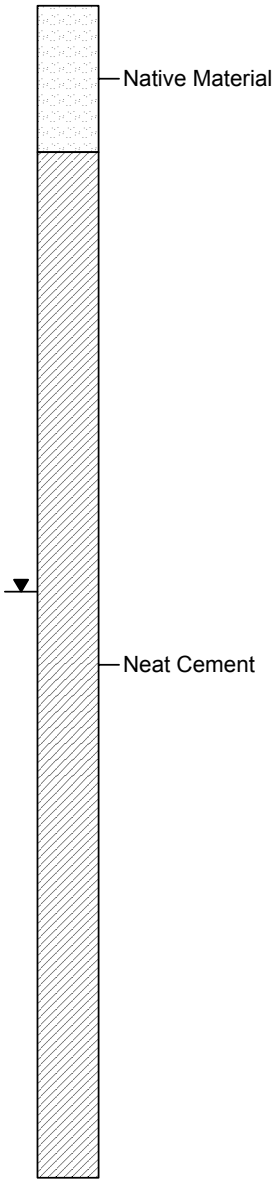
Sierra Pacific Industries
Arcata Division Sawmill
Arcata, California

MFG Project No. 030229.4

| | | | |
|---|---|---|---|
| Drilling Agency | : MFG, Inc. | Logged By | : Julie Mills |
| Drilling Method | : Stainless steel hand auger | Reviewed By | : Christopher Spill, R.G. |
| Sampler Type | : Stainless Steel Drive Sampler and Slide Hammer | | |
| Sampling Method | : Brass Liners | | |
| Ground Elevation | : Not Surveyed | | |

Date Started: July 9, 2003
Date Finished: July 9, 2003

| Depth in Feet | DESCRIPTION | USCS | Samples | Recovery (inches) | REMARKS |
|---|---|---|---|---|---|
| 0 | SAND: v dk greyish brn (10YR 3/2); mottled with dk greyish brn (10YR 4/2); Med sand, dry. | | 1 | 6 | PID = 2.6 ppmv (0.0 - 0.5 feet bgl). Collected soil sample D7-2-0.0-0.5' at 0.0 to 0.5 ft bgl. |
| 1 | - dk grey (10YR 4/1); Med sand, moist | | | | |
| 2 | - wet | SP | | | |
| 3 | | | | | |
| 4 | | | | | |




NOTES:
1. PID calibrated using 96 ppmv isobutylene. Background ambient air=0.0 ppmv.
2. Boring augered to a depth of 4.0 ft bgl.
3. Collected groundwater sample D7-2-GW using a peristaltic pump and polyethylene tubing.
4. Boring was backfilled with neat cement.

# MFG, Inc.

consulting scientists and engineers

## LOG OF BORING D7-3



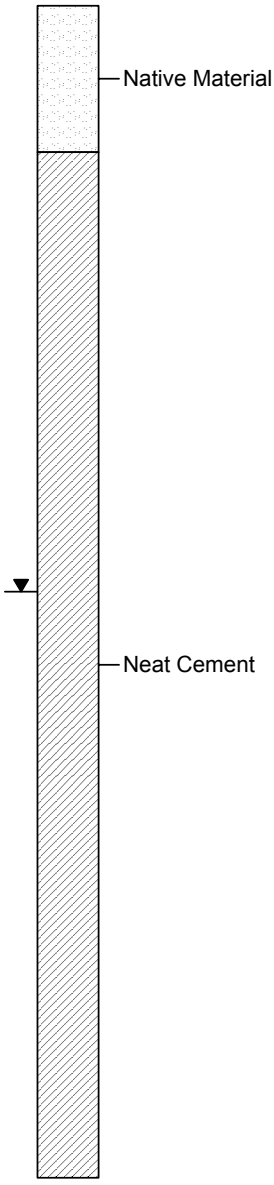
Sierra Pacific Industries
Arcata Division Sawmill
Arcata, California

MFG Project No. 030229.4

| | | | |
|---|---|---|---|
| Drilling Agency | : MFG, Inc. | Logged By | : Julie Mills |
| Drilling Method | : Stainless steel hand auger | Reviewed By | : Christopher Spill, R.G. |
| Sampler Type | : Stainless Steel Drive Sampler and Slide Hammer | | |
| Sampling Method | : Brass Liners | | |
| Ground Elevation | : Not Surveyed | | |

Date Started: July 9, 2003
Date Finished: July 9, 2003

| Depth in Feet | DESCRIPTION | USCS | Samples | Recovery (inches) | REMARKS |
|---|---|---|---|---|---|
| 0 | SAND: v dk greyish brn (10YR 3/2); mottled with dk greyish brn (10YR 4/2), F sand, few F gravel, dry | | 1 | 6 | PID = 0.4 ppmv (0.0 - 0.5 feet bgl). Collected soil sample D7-3-0.0-0.5' at 0.0 to 0.5 ft bgl. |
| 1 | - dk grey (10YR 4/1); Med sand, few F gravel, moist. | | | | slight petroleum-like odor |
| 2 | - wet | SP | | | |
| 3 | | | | | |
| 4 | | | | | |




NOTES:
1. PID calibrated using 96 ppmv isobutylene. Background ambient air=0.0 ppmv.
2. Boring augered to a depth of 4.0 ft bgl.
3. Collected groundwater sample D7-3-GW using a peristaltic pump and polyethylene tubing.
4. Boring was backfilled with neat cement.

# MFG, Inc.

consulting scientists and engineers

## LOG OF BORING D7-4



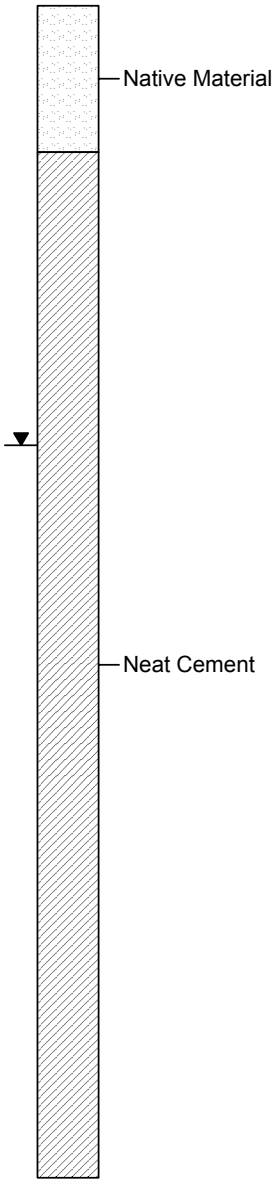
Sierra Pacific Industries
Arcata Division Sawmill
Arcata, California

MFG Project No. 030229.4

| | | | |
|---|---|---|---|
| Drilling Agency | : MFG, Inc. | Logged By | : Julie Mills |
| Drilling Method | : Stainless steel hand auger | Reviewed By | : Christopher Spill, R.G. |
| Sampler Type | : Stainless Steel Drive Sampler and Slide Hammer | | |
| Sampling Method | : Brass Liners | | |
| Ground Elevation | : Not Surveyed | | |

Date Started: July 9, 2003
Date Finished: July 9, 2003

| Depth in Feet | DESCRIPTION | USCS | Samples | Recovery (inches) | REMARKS |
|---|---|---|---|---|---|
| 0 | SAND: v dk grey (10YR 3/1); F sand, few organics and rootlets, little subrounded to rounded F gravel, moist. | SP | 1 | 6 | PID = 1.3 ppmv (0.0 - 0.5 feet bgl). Collected soil sample D7-4-0.0-0.5' at 0.0 to 0.5 ft bgl. |
| 1 | - wet | | | | |
| 2 | | | | | |
| 3 | | | | | |
| 4 | | | | | |




NOTES:
1. PID calibrated using 96 ppmv isobutylene. Background ambient air=0.0 ppmv.
2. Boring augered to a depth of 4.0 ft bgl.
3. Collected groundwater sample D7-4-GW using a peristaltic pump and polyethylene tubing.
4. Boring was backfilled with neat cement.

# MFG, Inc.

consulting scientists and engineers

# LOG OF BORING D7-5



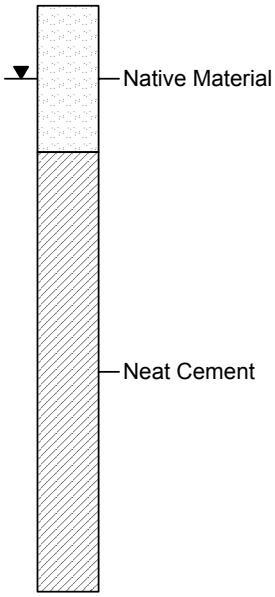
Sierra Pacific Industries
Arcata Division Sawmill
Arcata, California

MFG Project No. 030229.4

| | | | |
|---|---|---|---|
| Drilling Agency | : MFG, Inc. | Logged By | : Julie Mills |
| Drilling Method | : Stainless steel hand auger | Reviewed By | : Christopher Spill, R.G. |
| Sampler Type | : Stainless Steel Drive Sampler and Slide Hammer | | |
| Sampling Method | : Brass Liners | | |
| Ground Elevation | : Not Surveyed | | |

Date Started: July 9, 2003
Date Finished: July 9, 2003

| Depth in Feet | DESCRIPTION | USCS | Samples | Recovery (inches) | REMARKS |
|---|---|---|---|---|---|
| 0 | SAND: v dk grey (10YR 3/1); F sand, few rootlets, moist<br>- wet | SP | 1 | 6 | PID = 1.1 ppmv (0.0 - 0.5 feet bgl). Collected soil sample D7-5-0.0-0.5' at 0.0 to 0.5 ft bgl. |
| 1 | | | | | |
| 2 | | | | | |
| 3 | | | | | |
| 4 | | | | | |




NOTES:
1. PID calibrated using 96 ppmv isobutylene. Background ambient air=0.0 ppmv.
2. Boring augered to a depth of 2.0 ft bgl.
3. Collected groundwater sample D7-5-GW using a peristaltic pump and polyethylene tubing.
4. Boring was backfilled with neat cement.

# MFG, Inc.

consulting scientists and engineers

# LOG OF BORING D7-6



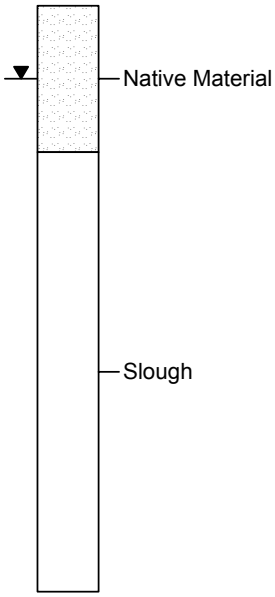
Sierra Pacific Industries
Arcata Division Sawmill
Arcata, California

MFG Project No. 030229.4

| | | | |
|---|---|---|---|
| Drilling Agency | : MFG, Inc. | Logged By | : Julie Mills |
| Drilling Method | : Stainless steel hand auger | Reviewed By | : Christopher Spill, R.G. |
| Sampler Type | : Stainless Steel Drive Sampler and Slide Hammer | | |
| Sampling Method | : Brass Liners | | |
| Ground Elevation | : Not Surveyed | | |

Date Started: July 9, 2003
Date Finished: July 9, 2003

| Depth in Feet | DESCRIPTION | USCS | Samples | Recovery (inches) | REMARKS |
|---|---|---|---|---|---|
| 0 | SAND: v dk grey (10YR 3/1); some rootlets, wet | SP | 1 | 6 | PID = 0 ppmv (0.0 - 0.5 feet bgl). Collected soil sample D7-6-0.0-0.5' at 0.0 to 0.5 ft bgl. |
| 1 | | | | | |
| 2 | | | | | |
| 3 | | | | | |
| 4 | | | | | |




NOTES:
1. PID calibrated using 96 ppmv isobutylene. Background ambient air=0.0 ppmv.
2. Boring augered to a depth of 2.0 ft bgl.
3. Collected groundwater sample D7-6-GW using a peristaltic pump and polyethylene tubing.
4. Boring was backfilled with native material.

10-23-2003 H:\Projects\030229-SPI\Task 4\Report\borelogs\D7-6.bor

# MFG, Inc.

consulting scientists and engineers

## LOG OF BORING D7-7



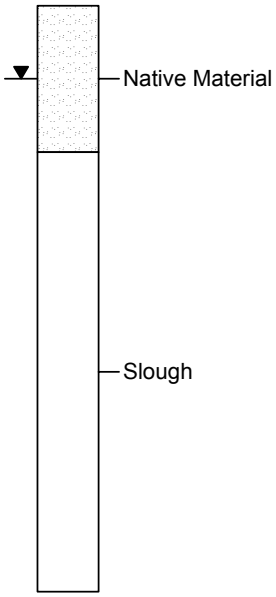
Sierra Pacific Industries
Arcata Division Sawmill
Arcata, California

MFG Project No. 030229.4

| | | | |
|---|---|---|---|
| Drilling Agency | : MFG, Inc. | Logged By | : Julie Mills |
| Drilling Method | : Stainless steel hand auger | Reviewed By | : Christopher Spill, R.G. |
| Sampler Type | : Stainless Steel Drive Sampler and Slide Hammer | | |
| Sampling Method | : Brass Liners | | |
| Ground Elevation | : Not Surveyed | | |

Date Started: July 9, 2003
Date Finished: July 9, 2003

| Depth in Feet | DESCRIPTION | USCS | Samples | Recovery (inches) | REMARKS |
|---|---|---|---|---|---|
| 0 | SAND: v dk grey (10YR 3/1); F sand, few rootlets, wet | SP | 1 | 6 | PID = 0.4 ppmv (0.0 - 0.5 feet bgl). Collected soil sample D7-7-0.0-0.5' at 0.0 to 0.5 ft bgl. |
| 1 | | | | | |
| 2 | | | | | |
| 3 | | | | | |
| 4 | | | | | |




NOTES:
1. PID calibrated using 96 ppmv isobutylene. Background ambient air=0.0 ppmv.
2. Boring augered to a depth of 2.0 ft bgl.
3. Collected groundwater sample D7-7-GW using a peristaltic pump and polyethylene tubing.
4. Boring was backfilled with native material.

MFG, Inc.
consulting scientists and engineers

# LOG OF BORING D7-8



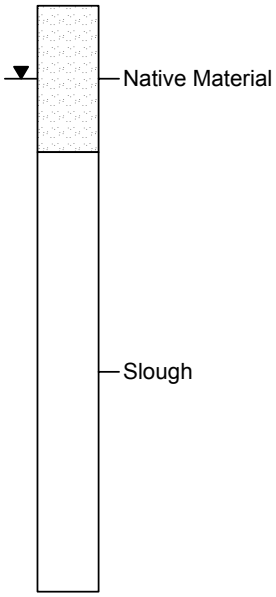
Sierra Pacific Industries
Arcata Division Sawmill
Arcata, California

MFG Project No. 030229.4

| | | | |
|---|---|---|---|
| Drilling Agency | : MFG, Inc. | Logged By | : Julie Mills |
| Drilling Method | : Stainless steel hand auger | Reviewed By | : Christopher Spill, R.G. |
| Sampler Type | : Stainless Steel Drive Sampler and Slide Hammer | | |
| Sampling Method | : Brass Liners | | |
| Ground Elevation | : Not Surveyed | | |

Date Started: July 9, 2003
Date Finished: July 9, 2003

| Depth in Feet | DESCRIPTION | USCS | Samples | Recovery (inches) | REMARKS |
|---|---|---|---|---|---|
| 0 | SAND: v dk grey (10YR 3/1); F sand, few rootlets, wet | SP | 1 | 6 | PID =1.1 ppmv (0.0 - 0.5 feet bgl). Collected soil sample D7-8-0.0-0.5' at 0.0 to 0.5 ft bgl. |
| 1 | | | | | |
| 2 | | | | | |
| 3 | | | | | |
| 4 | | | | | |




NOTES:
1. PID calibrated using 96 ppmv isobutylene. Background ambient air=0.0 ppmv.
2. Boring augered to a depth of 2.0 ft bgl.
3. Collected groundwater sample D7-8-GW using a peristaltic pump and polyethylene tubing.
4. Boring was backfilled with native material.

# MFG, Inc.

consulting scientists and engineers

# LOG OF BORING D7-9



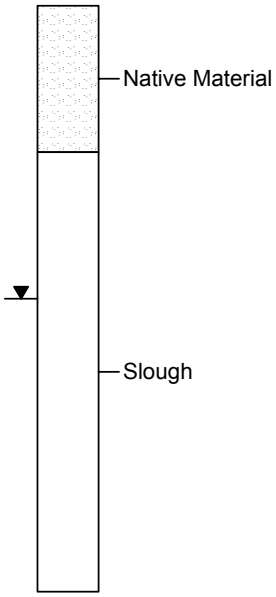
Sierra Pacific Industries
Arcata Division Sawmill
Arcata, California

MFG Project No. 030229.4

| | | | |
|---|---|---|---|
| Drilling Agency | : MFG, Inc. | Logged By | : Julie Mills |
| Drilling Method | : Stainless steel hand auger | Reviewed By | : Christopher Spill, R.G. |
| Sampler Type | : Stainless Steel Drive Sampler and Slide Hammer | | |
| Sampling Method | : Brass Liners | | |
| Ground Elevation | : Not Surveyed | | |

Date Started: July 10, 2003
Date Finished: July 10, 2003

| Depth in Feet | DESCRIPTION | USCS | Samples | Recovery (inches) | REMARKS |
|---|---|---|---|---|---|
| 0 | SAND: v dk grey (10YR 3/1); F sand, few rootlets. | SP | 1 | 6 | PID = 0 ppmv (0.0 - 0.5 feet bgl). Collected soil sample D7-9-0.0-0.5' at 0.0 to 0.5 ft bgl. |
| 1 | - wet | | | | |
| 2 | | | | | |
| 3 | | | | | |
| 4 | | | | | |




NOTES:
1. PID calibrated using 96 ppmv isobutylene. Background ambient air=0.0 ppmv.
2. Boring augered to a depth of 2.0 ft bgl.
3. Collected groundwater sample D7-9-GW using a peristaltic pump and polyethylene tubing.
4. Boring was backfilled with native material.

10-23-2003 H:\Projects\030229-SPI\Task 4\Report\borelogs\D7-9.bor

# MFG, Inc.

consulting scientists and engineers

# LOG OF BORING D7-10



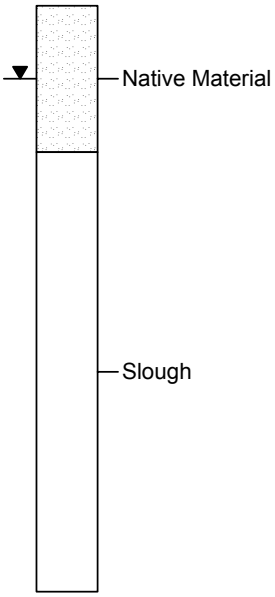
Sierra Pacific Industries
Arcata Division Sawmill
Arcata, California

MFG Project No. 030229.4

| | | | |
|---|---|---|---|
| Drilling Agency | : MFG, Inc. | Logged By | : Julie Mills |
| Drilling Method | : Stainless steel hand auger | Reviewed By | : Christopher Spill, R.G. |
| Sampler Type | : Stainless Steel Drive Sampler and Slide Hammer | | |
| Sampling Method | : Brass Liners | | |
| Ground Elevation | : Not Surveyed | | |

Date Started: July 10, 2003
Date Finished: July 10, 2003

| Depth in Feet | DESCRIPTION | USCS | Samples | Recovery (inches) | REMARKS |
|---|---|---|---|---|---|
| 0 | SAND: dk grey (10YR 3/1); F sand, few rootlets, wet | SP | 1 | 6 | PID = 0 ppmv (0.0 - 0.5 feet bgl). Collected soil sample D7-10-0.0-0.5' at 0.0 to 0.5 ft bgl. |
| 1 | | | | | |
| 2 | | | | | |
| 3 | | | | | |
| 4 | | | | | |




NOTES:
1. PID calibrated using 96 ppmv isobutylene. Background ambient air=0.0 ppmv.
2. Boring augered to a depth of 2.0 ft bgl.
3. Collected groundwater sample D7-10-GW using a peristaltic pump and polyethylene tubing.
4. Boring was backfilled with native material.

10-23-2003 H:\Projects\030229-SPI\Task 4\Report\borelogs\D7-10.bor

# MFG, Inc.

consulting scientists and engineers

# LOG OF BORING D7-11



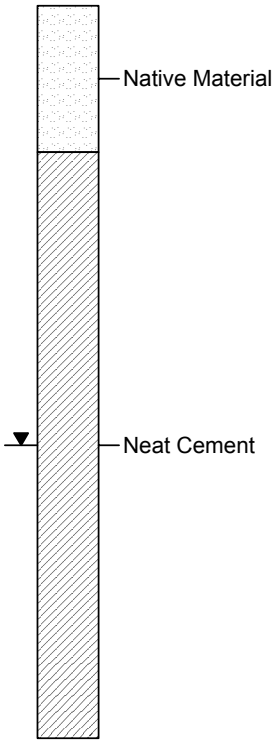
Sierra Pacific Industries
Arcata Division Sawmill
Arcata, California

MFG Project No. 030229.4

| | | | |
|---|---|---|---|
| Drilling Agency | : MFG, Inc. | Logged By | : Julie Mills |
| Drilling Method | : Stainless steel hand auger | Reviewed By | : Christopher Spill, R.G. |
| Sampler Type | : Stainless Steel Drive Sampler and Slide Hammer | | |
| Sampling Method | : Brass Liners | | |
| Ground Elevation | : Not Surveyed | | |

Date Started: July 10, 2003
Date Finished: July 10, 2003

| Depth in Feet | DESCRIPTION | USCS | Samples | Recovery (inches) | REMARKS |
|---|---|---|---|---|---|
| 0 | SAND: v dk grey (10YR 3/1); F sand, some rootlets, trace silt, moist | SP | 1 | 6 | PID = 2.0 ppmv (0.0 - 0.5 feet bgl). Collected soil sample D7-11-0.0-0.5' at 0.0 to 0.5 ft bgl. |
| 1 | - wet | | | | |
| 2 | | | | | |
| 3 | | | | | |
| 4 | | | | | |




NOTES:
1. PID calibrated using 96 ppmv isobutylene. Background ambient air=0.0 ppmv.
2. Boring augered to a depth of 2.5 ft bgl.
3. Collected groundwater sample D7-11-GW using a peristaltic pump and polyethylene tubing.
4. Boring was backfilled with neat cement.

# MFG, Inc.

consulting scientists and engineers

# LOG OF BORING D7-12



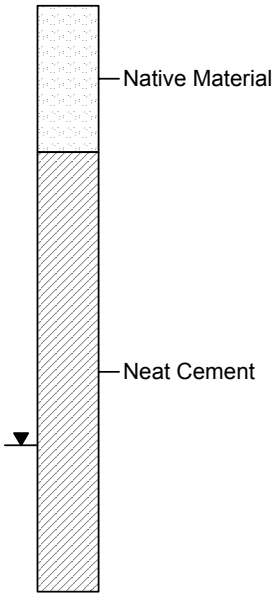
Sierra Pacific Industries
Arcata Division Sawmill
Arcata, California

MFG Project No. 030229.4

| | | | |
|---|---|---|---|
| Drilling Agency | : MFG, Inc. | Logged By | : Julie Mills |
| Drilling Method | : Stainless steel hand auger | Reviewed By | : Christopher Spill, R.G. |
| Sampler Type | : Stainless Steel Drive Sampler and Slide Hammer | | |
| Sampling Method | : Brass Liners | | |
| Ground Elevation | : Not Surveyed | | |

Date Started: July 10, 2003
Date Finished: July 10, 2003

| Depth in Feet | DESCRIPTION | USCS | Samples | Recovery (inches) | REMARKS |
|---|---|---|---|---|---|
| 0 | SAND: dk grey (10YR 3/1); F sand, some rootlets, trace silt, moist | SP | 1 | 6 | PID = 1.5 ppmv (0.0 - 0.5 feet bgl). Collected soil sample D7-12-0.0-0.5' at 0.0 to 0.5 ft bgl.<br><br>slight petroleum-like odor. |
| 1 | - wet | | | | |
| 2 | | | | | |
| 3 | | | | | |
| 4 | | | | | |




NOTES:
1. PID calibrated using 96 ppmv isobutylene. Background ambient air=0.0 ppmv.
2. Boring augered to a depth of 2.0 ft bgl.
3. Collected groundwater sample D7-12-GW using a peristaltic pump and polyethylene tubing.
4. Boring was backfilled with neat cement.

# MFG, Inc.

consulting scientists and engineers

# LOG OF BORING D7-13



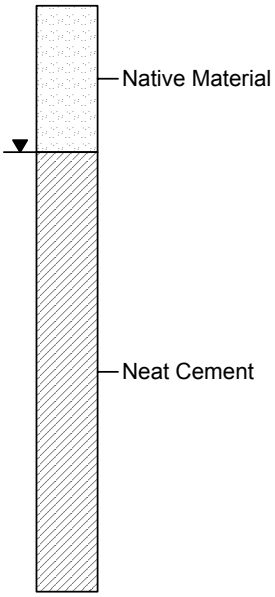
Sierra Pacific Industries
Arcata Division Sawmill
Arcata, California

MFG Project No. 030229.4

| | | | |
|---|---|---|---|
| Drilling Agency | : MFG, Inc. | Logged By | : Julie Mills |
| Drilling Method | : Stainless steel hand auger | Reviewed By | : Christopher Spill, R.G. |
| Sampler Type | : Stainless Steel Drive Sampler and Slide Hammer | | |
| Sampling Method | : Brass Liners | | |
| Ground Elevation | : Not Surveyed | | |

Date Started: July 10, 2003
Date Finished: July 10, 2003

| Depth in Feet | DESCRIPTION | USCS | Samples | Recovery (inches) | REMARKS |
|---|---|---|---|---|---|
| 0 | SAND: v dk grey (10YR 3/1); F sand, few rootlets, moist | SP | 1 | 6 | PID = 1.5 ppmv (0.0 - 0.5 feet bgl). Collected soil sample D7-13-0.0-0.5' at 0.0 to 0.5 ft bgl. |
| 1 | - wet | | | | |
| 2 | | | | | |
| 3 | | | | | |
| 4 | | | | | |




NOTES:
1. PID calibrated using 96 ppmv isobutylene. Background ambient air=0.0 ppmv.
2. Boring augered to a depth of 2.0 ft bgl.
3. Collected groundwater sample D7-13-GW using a peristaltic pump and polyethylene tubing.
4. Boring was backfilled with neat cement.

# MFG, Inc.

consulting scientists and engineers

## LOG OF BORING D7-14



Sierra Pacific Industries
Arcata Division Sawmill
Arcata, California

MFG Project No. 030229.4

| | | | |
|---|---|---|---|
| Drilling Agency | : MFG, Inc. | Logged By | : Julie Mills |
| Drilling Method | : Stainless steel hand auger | Reviewed By | : Christopher Spill, R.G. |
| Sampler Type | : Stainless Steel Drive Sampler and Slide Hammer | | |
| Sampling Method | : Brass Liners | | |
| Ground Elevation | : Not Surveyed | | |

Date Started: July 10, 2003
Date Finished: July 10, 2003

| Depth in Feet | DESCRIPTION | USCS | Samples | Recovery (inches) | REMARKS |
|---|---|---|---|---|---|
| 0 | SAND: v dk grey (10YR 3/1); F sand, few rootlets, wet. | SP | 1 | 6 | PID = 1.0 ppmv (0.0 - 0.5 feet bgl). Collected soil sample D7-14-0.0-0.5' at 0.0 to 0.5 ft bgl. |
| 1 | | | | | |
| 2 | | | | | |
| 3 | | | | | |
| 4 | | | | | |

▼ Slough

NOTES:
1. PID calibrated using 96 ppmv isobutylene. Background ambient air=0.0 ppmv.
2. Boring augered to a depth of 2.0 ft bgl.
3. Collected groundwater sample D7-14-GW using a peristaltic pump and polyethylene tubing.

# MFG, Inc.

consulting scientists and engineers

## LOG OF BORING D7-15



Sierra Pacific Industries
Arcata Division Sawmill
Arcata, California

MFG Project No. 030229.4

| | | | |
|---|---|---|---|
| Drilling Agency | : MFG, Inc. | Logged By | : Julie Mills |
| Drilling Method | : Stainless steel hand auger | Reviewed By | : Christopher Spill, R.G. |
| Sampler Type | : Stainless Steel Drive Sampler and Slide Hammer | | |
| Sampling Method | : Brass Liners | | |
| Ground Elevation | : Not Surveyed | | |

Date Started: July 10, 2003
Date Finished: July 10, 2003

| Depth in Feet | DESCRIPTION | USCS | Samples | Recovery (inches) | REMARKS |
|---|---|---|---|---|---|
| 0 | SAND: v dk grey (10YR 3/1); F sand, few rootlets, wet. | SP | 1 | 6 | PID = 1.5 ppmv (0.0 - 0.5 feet bgl). Collected soil sample D7-15-0.0-0.5' at 0.0 to 0.5 ft bgl. |
| 1 | | | | | |
| 2 | | | | | |
| 3 | | | | | |
| 4 | | | | | |

Slough

NOTES:
1. PID calibrated using 96 ppmv isobutylene. Background ambient air=0.0 ppmv.
2. Boring augered to a depth of 2.0 ft bgl.
3. Collected groundwater sample D7-15-GW using a peristaltic pump and polyethylene tubing.

# MFG, Inc.

consulting scientists and engineers

# LOG OF BORING D7-16



Sierra Pacific Industries
Arcata Division Sawmill
Arcata, California

MFG Project No. 030229.4

| | | | |
|---|---|---|---|
| Drilling Agency | : MFG, Inc. | Logged By | : Julie Mills |
| Drilling Method | : Stainless steel hand auger | Reviewed By | : Christopher Spill, R.G. |
| Sampler Type | : Stainless Steel Drive Sampler and Slide Hammer | | |
| Sampling Method | : Brass Liners | | |
| Ground Elevation | : Not Surveyed | | |

Date Started: July 10, 2003
Date Finished: July 10, 2003

| Depth in Feet | DESCRIPTION | USCS | Samples | Recovery (inches) | REMARKS |
|---|---|---|---|---|---|
| 0 | SAND: v dk grey (10YR 3/1); F sand, few rootlets, wet | SP | 1 | 6 | PID = 3.5 ppmv (0.0 - 0.5 feet bgl). Collected soil sample D7-16-0.0-0.5' at 0.0 to 0.5 ft bgl. |
| 1 | | | | | |
| 2 | | | | | |
| 3 | | | | | |
| 4 | | | | | |

Slough

NOTES:
1. PID calibrated using 96 ppmv isobutylene. Background ambient air=0.0 ppmv.
2. Boring augered to a depth of 2.0 ft bgl.
3. Collected groundwater sample D7-16-GW using a peristaltic pump and polyethylene tubing.

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# MFG, Inc.

consulting scientists and engineers

## LOG OF BORING D7-17



Sierra Pacific Industries
Arcata Division Sawmill
Arcata, California

MFG Project No. 030229.4

| | | | |
|---|---|---|---|
| Drilling Agency | : MFG, Inc. | Logged By | : Julie Mills |
| Drilling Method | : Stainless steel hand auger | Reviewed By | : Christopher Spill, R.G. |
| Sampler Type | : Stainless Steel Drive Sampler and Slide Hammer | | |
| Sampling Method | : Brass Liners | | |
| Ground Elevation | : Not Surveyed | | |

Date Started: July 10, 2003
Date Finished: July 10, 2003

| Depth in Feet | DESCRIPTION | USCS | Samples | Recovery (inches) | REMARKS |
|---|---|---|---|---|---|
| 0 | SILT: v dk grey (10YR 3/1); some F sand, few rootlets, wet | ML | 1 | 6 | PID = 4.5 ppmv (0.0 - 0.5 feet bgl). Collected soil sample D7-17-0.0-0.5' at 0.0 to 0.5 ft bgl. |
| 1 | | | | | |
| 2 | | | | | |
| 3 | | | | | |
| 4 | | | | | |

Slough

NOTES:
1. PID calibrated using 96 ppmv isobutylene. Background ambient air=0.0 ppmv.
2. Boring augered to a depth of 2.0 ft bgl.
3. Collected groundwater sample D7-17-GW using a peristaltic pump and polyethylene tubing.

# MFG, Inc.

consulting scientists and engineers

# LOG OF BORING SDP-1



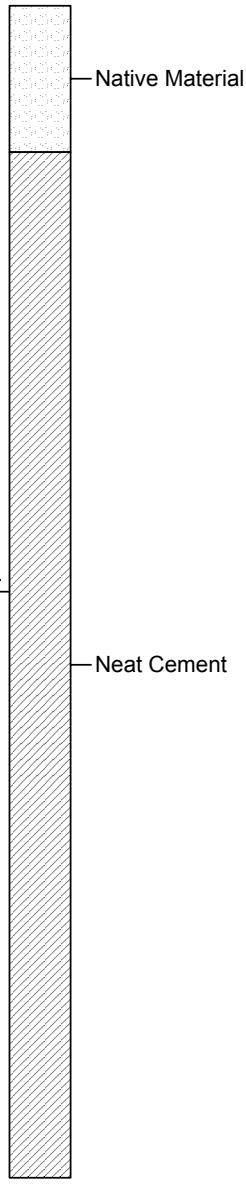
Sierra Pacific Industries
Arcata Division Sawmill
Arcata, California

MFG Project No. 030229.4

| | | | |
|---|---|---|---|
| Drilling Agency | : MFG, Inc. | Logged By | : Julie Mills |
| Drilling Method | : Stainless steel hand auger | Reviewed By | : Christopher Spill, R.G. |
| Sampler Type | : Stainless Steel Drive Sampler and Slide Hammer | | |
| Sampling Method | : Brass Liners | | |
| Ground Elevation | : Not Surveyed | | |

Date Started: July 9, 2003
Date Finished: July 9, 2003

| Depth in Feet | DESCRIPTION | USCS | Samples | Recovery (inches) | REMARKS |
|---|---|---|---|---|---|
| 0 | SILT: v dk greyish brn (10YR 3/2); mottled with dk greyish brn (10YR 4/2), some clay, trace F sand, dry. | ML | 1 | 6 | PID = 0.4 ppmv (0.0 - 0.5 feet bgl). Collected soil sample SDP-1-0.0-0.5' at 0.0 to 0.5 ft bgl. |
| 1 | - black (10YR 2/1); moist. | | | | |
| 2 | SAND: dk grey (10YR 4/1); Med sand, wet. | SP | 2 | 6 | PID = 0.4 ppmv (2.0 - 2.5 feet bgl). Collected soil sample SDP-1-2.0-2.5' at 2.0 to 2.5 ft bgl. |
| 3 | | | | | |
| 4 | | | | | |




NOTES:
1. PID calibrated using 96 ppmv isobutylene. Background ambient air=0.0-0.6 ppmv.
2. Boring augered to a depth of 4.0 ft bgl.
3. Collected groundwater sample SDP-1-GW using a peristaltic pump and polyethylene tubing.
4. Boring was backfilled with neat cement.

# APPENDIX D

## Laboratory Reports and Chain-of-Custody Records for Soil Samples

Alpha Analytical Laboratories Inc.
208 Mason St. Ukiah, California 95482
e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

26 July 2003

Ed Conti
MFG, Inc
180 Howard St. Suite 200
San Francisco, CA 94105-2941

RE: SPI-Arcata/Task #4

Enclosed are the results of analyses for samples received by the laboratory on 07/10/03 17:45. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Nena M. Burgess For Sheri L. Speaks
Project Manager

Alpha Analytical Laboratories Inc.
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e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

| | | |
|---|---|---|
| MFG, Inc | Project: SPI-Arcata/Task #4 | |
| 180 Howard St. Suite 200 | Project Number: 030229.4 | **Reported:** |
| San Francisco CA, 94105-2941 | Project Manager: Ed Conti | 07/26/03 09:17 |

## ANALYTICAL REPORT FOR SAMPLES

| Sample ID | Laboratory ID | Matrix | Date Sampled | Date Received |
|---|---|---|---|---|
| RP-1-0.0-0.5 | A307292-01 | Soil | 07/08/03 12:16 | 07/10/03 17:45 |
| RP-1-0.5-1.0 | A307292-02 | Soil | 07/08/03 12:22 | 07/10/03 17:45 |
| RP-1-1.0-1.5 | A307292-03 | Soil | 07/08/03 12:27 | 07/10/03 17:45 |
| RP-1-1.5-2.0 | A307292-04 | Soil | 07/08/03 12:31 | 07/10/03 17:45 |
| RP-1-2.0-2.5 | A307292-05 | Soil | 07/08/03 12:37 | 07/10/03 17:45 |
| RP-2-0.0-0.5 | A307292-06 | Soil | 07/08/03 15:23 | 07/10/03 17:45 |
| RP-2-0.5-1.0 | A307292-07 | Soil | 07/08/03 15:26 | 07/10/03 17:45 |
| RP-2-1.0-1.5 | A307292-08 | Soil | 07/08/03 15:31 | 07/10/03 17:45 |
| RP-2-1.5-2.0 | A307292-09 | Soil | 07/08/03 15:36 | 07/10/03 17:45 |
| RP-2-2.0-2.5 | A307292-10 | Soil | 07/08/03 15:41 | 07/10/03 17:45 |
| D7-1-0.0-0.5 | A307292-11 | Soil | 07/09/03 10:20 | 07/10/03 17:45 |
| D7-2-0.0-0.5 | A307292-12 | Soil | 07/09/03 10:52 | 07/10/03 17:45 |
| D7-3-0.0-0.5 | A307292-13 | Soil | 07/09/03 11:40 | 07/10/03 17:45 |
| D7-4-0.0-0.5 | A307292-14 | Soil | 07/09/03 12:30 | 07/10/03 17:45 |
| D7-5-0.0-0.5 | A307292-15 | Soil | 07/09/03 00:00 | 07/10/03 17:45 |
| D7-6-0.0-0.5 | A307292-16 | Soil | 07/09/03 15:37 | 07/10/03 17:45 |
| D7-7-0.0-0.5 | A307292-17 | Soil | 07/09/03 16:25 | 07/10/03 17:45 |
| D7-8-0.0-0.5 | A307292-18 | Soil | 07/09/03 17:20 | 07/10/03 17:45 |
| D7-9-0.0-0.5 | A307292-19 | Soil | 07/10/03 08:40 | 07/10/03 17:45 |
| D7-10-0.0-0.5 | A307292-20 | Soil | 07/10/03 09:10 | 07/10/03 17:45 |
| D7-11-0.0-0.5 | A307292-21 | Soil | 07/10/03 09:36 | 07/10/03 17:45 |
| D7-12-0.0-0.5 | A307292-22 | Soil | 07/10/03 10:00 | 07/10/03 17:45 |
| D7-13-0.0-0.5 | A307292-23 | Soil | 07/10/03 10:15 | 07/10/03 17:45 |
| D7-14-0.0-0.5 | A307292-24 | Soil | 07/10/03 10:45 | 07/10/03 17:45 |
| D7-15-0.0-0.5 | A307292-25 | Soil | 07/10/03 11:05 | 07/10/03 17:45 |
| D7-16-0.0-0.5 | A307292-26 | Soil | 07/10/03 11:25 | 07/10/03 17:45 |

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| 180 Howard St. Suite 200 | Project Number: 030229.4 | **Reported:** |
| San Francisco CA, 94105-2941 | Project Manager: Ed Conti | 07/26/03 09:17 |

## ANALYTICAL REPORT FOR SAMPLES

| Sample ID | Laboratory ID | Matrix | Date Sampled | Date Received |
|---|---|---|---|---|
| D7-17-0.0-0.5 | A307292-27 | Soil | 07/10/03 11:45 | 07/10/03 17:45 |
| SDP-1-0.0-05 | A307292-28 | Soil | 07/09/03 09:12 | 07/10/03 17:45 |
| SDP-1-2.0-2.5 | A307292-29 | Soil | 07/09/03 09:25 | 07/10/03 17:45 |

Alpha Analytical Laboratories, Inc.

Nena M. Burgess For Sheri L. Speaks, Project Manager

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| 180 Howard St. Suite 200 | Project Number: 030229.4 | **Reported:** |
| San Francisco CA, 94105-2941 | Project Manager: Ed Conti | 07/26/03 09:17 |

## Metals by EPA 6000/7000 Series Methods

## Alpha Analytical Laboratories, Inc.

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|---|---|---|---|---|---|---|---|---|
| **RP-1-0.0-0.5 (A307292-01) Soil Sampled: 07/08/03 12:16 Received: 07/10/03 17:45** | | | | | | | | | |
| **Cadmium** | **1.3** | 1.0 | mg/kg | 1 | AG31004 | 07/15/03 | 07/16/03 | EPA 6010 | |
| **Chromium** | **48** | 5.0 | " | " | " | " | " | " | |
| **Nickel** | **58** | 10 | " | " | " | " | " | " | |
| **Lead** | **17** | 5.0 | " | " | " | " | " | " | |
| **Zinc** | **150** | 10 | " | " | " | " | " | " | |
| **RP-1-0.5-1.0 (A307292-02) Soil Sampled: 07/08/03 12:22 Received: 07/10/03 17:45** | | | | | | | | | |
| Cadmium | ND | 1.0 | mg/kg | 1 | AG31004 | 07/15/03 | 07/16/03 | EPA 6010 | |
| **Chromium** | **110** | 5.0 | " | " | " | " | " | " | |
| **Nickel** | **210** | 10 | " | " | " | " | " | " | |
| **Lead** | **17** | 5.0 | " | " | " | " | " | " | |
| **Zinc** | **140** | 10 | " | " | " | " | " | " | |
| **RP-1-1.0-1.5 (A307292-03) Soil Sampled: 07/08/03 12:27 Received: 07/10/03 17:45** | | | | | | | | | |
| **Cadmium** | **1.2** | 1.0 | mg/kg | 1 | AG31004 | 07/15/03 | 07/16/03 | EPA 6010 | |
| **Chromium** | **49** | 5.0 | " | " | " | " | " | " | |
| **Nickel** | **86** | 10 | " | " | " | " | " | " | |
| **Lead** | **22** | 5.0 | " | " | " | " | " | " | |
| **Zinc** | **140** | 10 | " | " | " | " | " | " | |
| **RP-1-1.5-2.0 (A307292-04) Soil Sampled: 07/08/03 12:31 Received: 07/10/03 17:45** | | | | | | | | | |
| Cadmium | ND | 1.0 | mg/kg | 1 | AG31004 | 07/15/03 | 07/16/03 | EPA 6010 | |
| **Chromium** | **50** | 5.0 | " | " | " | " | " | " | |
| **Nickel** | **72** | 10 | " | " | " | " | " | " | |
| **Lead** | **27** | 5.0 | " | " | " | " | " | " | |
| **Zinc** | **100** | 10 | " | " | " | " | " | " | |

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| 180 Howard St. Suite 200 | Project Number: 030229.4 | **Reported:** |
| San Francisco CA, 94105-2941 | Project Manager: Ed Conti | 07/26/03 09:17 |

## Metals by EPA 6000/7000 Series Methods

## Alpha Analytical Laboratories, Inc.

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|---|---|---|---|---|---|---|---|---|
| **RP-1-2.0-2.5 (A307292-05) Soil Sampled: 07/08/03 12:37 Received: 07/10/03 17:45** | | | | | | | | | |
| Cadmium | ND | 1.0 | mg/kg | 1 | AG31004 | 07/15/03 | 07/16/03 | EPA 6010 | |
| **Chromium** | **43** | 5.0 | " | " | " | " | " | " | |
| **Nickel** | **68** | 10 | " | " | " | " | " | " | |
| **Lead** | **14** | 5.0 | " | " | " | " | " | " | |
| **Zinc** | **63** | 10 | " | " | " | " | " | " | |
| **RP-2-0.0-0.5 (A307292-06) Soil Sampled: 07/08/03 15:23 Received: 07/10/03 17:45** | | | | | | | | | |
| Cadmium | ND | 1.0 | mg/kg | 1 | AG31004 | 07/15/03 | 07/16/03 | EPA 6010 | |
| Chromium | ND | 5.0 | " | " | " | " | " | " | |
| Nickel | ND | 10 | " | " | " | " | " | " | |
| **Lead** | **28** | 5.0 | " | " | " | " | " | " | |
| **Zinc** | **61** | 10 | " | " | " | " | " | " | |
| **RP-2-0.5-1.0 (A307292-07) Soil Sampled: 07/08/03 15:26 Received: 07/10/03 17:45** | | | | | | | | | |
| Cadmium | ND | 1.0 | mg/kg | 1 | AG31004 | 07/15/03 | 07/18/03 | EPA 6010 | |
| **Chromium** | **25** | 5.0 | " | " | " | " | " | " | |
| **Nickel** | **22** | 10 | " | " | " | " | " | " | |
| **Lead** | **8.8** | 5.0 | " | " | " | " | " | " | |
| **Zinc** | **55** | 10 | " | " | " | " | " | " | |
| **RP-2-1.0-1.5 (A307292-08) Soil Sampled: 07/08/03 15:31 Received: 07/10/03 17:45** | | | | | | | | | |
| Cadmium | ND | 1.0 | mg/kg | 1 | AG31004 | 07/15/03 | 07/18/03 | EPA 6010 | |
| **Chromium** | **18** | 5.0 | " | " | " | " | " | " | |
| **Nickel** | **18** | 10 | " | " | " | " | " | " | |
| **Lead** | **12** | 5.0 | " | " | " | " | " | " | |
| **Zinc** | **53** | 10 | " | " | " | " | " | " | |

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| 180 Howard St. Suite 200 | Project Number: 030229.4 | **Reported:** |
| San Francisco CA, 94105-2941 | Project Manager: Ed Conti | 07/26/03 09:17 |

## Metals by EPA 6000/7000 Series Methods

## Alpha Analytical Laboratories, Inc.

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|---|---|---|---|---|---|---|---|---|
| **RP-2-1.5-2.0 (A307292-09) Soil** | **Sampled: 07/08/03 15:36** | **Received: 07/10/03 17:45** | | | | | | | |
| Cadmium | ND | 1.0 | mg/kg | 1 | AG31004 | 07/15/03 | 07/18/03 | EPA 6010 | |
| **Chromium** | **19** | 5.0 | " | " | " | " | " | " | |
| **Nickel** | **16** | 10 | " | " | " | " | " | " | |
| Lead | ND | 5.0 | " | " | " | " | " | " | |
| **Zinc** | **18** | 10 | " | " | " | " | " | " | |
| **RP-2-2.0-2.5 (A307292-10) Soil** | **Sampled: 07/08/03 15:41** | **Received: 07/10/03 17:45** | | | | | | | |
| Cadmium | ND | 1.0 | mg/kg | 1 | AG31004 | 07/15/03 | 07/18/03 | EPA 6010 | |
| **Chromium** | **18** | 5.0 | " | " | " | " | " | " | |
| **Nickel** | **16** | 10 | " | " | " | " | " | " | |
| Lead | ND | 5.0 | " | " | " | " | " | " | |
| **Zinc** | **19** | 10 | " | " | " | " | " | " | |
| **D7-1-0.0-0.5 (A307292-11) Soil** | **Sampled: 07/09/03 10:20** | **Received: 07/10/03 17:45** | | | | | | | |
| Cadmium | ND | 1.0 | mg/kg | 1 | AG31004 | 07/15/03 | 07/18/03 | EPA 6010 | |
| **Chromium** | **18** | 5.0 | " | " | " | " | " | " | |
| **Nickel** | **23** | 10 | " | " | " | " | " | " | |
| **Lead** | **12** | 5.0 | " | " | " | " | " | " | |
| **Zinc** | **170** | 10 | " | " | " | " | " | " | |
| **D7-2-0.0-0.5 (A307292-12) Soil** | **Sampled: 07/09/03 10:52** | **Received: 07/10/03 17:45** | | | | | | | |
| Cadmium | ND | 1.0 | mg/kg | 1 | AG31502 | 07/15/03 | 07/22/03 | EPA 6010 | |
| **Chromium** | **44** | 5.0 | " | " | " | " | " | " | |
| **Nickel** | **42** | 10 | " | " | " | " | " | " | |
| **Lead** | **18** | 5.0 | " | " | " | " | " | " | |
| **Zinc** | **140** | 10 | " | " | " | " | " | " | |

Alpha Analytical Laboratories, Inc.

Nena M. Burgess For Sheri L. Speaks, Project Manager

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| 180 Howard St. Suite 200 | Project Number: 030229.4 | **Reported:** |
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## Metals by EPA 6000/7000 Series Methods

## Alpha Analytical Laboratories, Inc.

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|---|---|---|---|---|---|---|---|---|
| **D7-3-0.0-0.5 (A307292-13) Soil** | **Sampled: 07/09/03 11:40** | **Received: 07/10/03 17:45** | | | | | | | |
| Cadmium | ND | 1.0 | mg/kg | 1 | AG31502 | 07/15/03 | 07/22/03 | EPA 6010 | |
| **Chromium** | **16** | 5.0 | " | " | " | " | " | " | |
| **Nickel** | **21** | 10 | " | " | " | " | " | " | |
| **Lead** | **13** | 5.0 | " | " | " | " | " | " | |
| **Zinc** | **60** | 10 | " | " | " | " | " | " | |
| **D7-4-0.0-0.5 (A307292-14) Soil** | **Sampled: 07/09/03 12:30** | **Received: 07/10/03 17:45** | | | | | | | |
| Cadmium | ND | 1.0 | mg/kg | 1 | AG31502 | 07/15/03 | 07/22/03 | EPA 6010 | |
| **Chromium** | **13** | 5.0 | " | " | " | " | " | " | |
| **Nickel** | **18** | 10 | " | " | " | " | " | " | |
| **Lead** | **14** | 5.0 | " | " | " | " | " | " | |
| **Zinc** | **150** | 10 | " | " | " | " | " | " | |
| **D7-5-0.0-0.5 (A307292-15) Soil** | **Sampled: 07/09/03 00:00** | **Received: 07/10/03 17:45** | | | | | | | |
| Cadmium | ND | 1.0 | mg/kg | 1 | AG31502 | 07/15/03 | 07/22/03 | EPA 6010 | |
| **Chromium** | **11** | 5.0 | " | " | " | " | " | " | |
| **Nickel** | **11** | 10 | " | " | " | " | " | " | |
| **Lead** | **12** | 5.0 | " | " | " | " | " | " | |
| **Zinc** | **39** | 10 | " | " | " | " | " | " | |
| **D7-6-0.0-0.5 (A307292-16) Soil** | **Sampled: 07/09/03 15:37** | **Received: 07/10/03 17:45** | | | | | | | |
| Cadmium | ND | 1.0 | mg/kg | 1 | AG31502 | 07/15/03 | 07/22/03 | EPA 6010 | |
| **Chromium** | **44** | 5.0 | " | " | " | " | " | " | |
| **Nickel** | **35** | 10 | " | " | " | " | " | " | |
| Lead | ND | 5.0 | " | " | " | " | " | " | |
| **Zinc** | **23** | 10 | " | " | " | " | " | " | |

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Nena M. Burgess For Sheri L. Speaks, Project Manager

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## Metals by EPA 6000/7000 Series Methods

## Alpha Analytical Laboratories, Inc.

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|---|---|---|---|---|---|---|---|---|
| **D7-7-0.0-0.5 (A307292-17) Soil Sampled: 07/09/03 16:25 Received: 07/10/03 17:45** | | | | | | | | | |
| Cadmium | ND | 1.0 | mg/kg | 1 | AG31502 | 07/15/03 | 07/22/03 | EPA 6010 | |
| **Chromium** | **46** | 5.0 | " | " | " | " | " | " | |
| **Nickel** | **35** | 10 | " | " | " | " | " | " | |
| Lead | ND | 5.0 | " | " | " | " | " | " | |
| **Zinc** | **27** | 10 | " | " | " | " | " | " | |
| **D7-8-0.0-0.5 (A307292-18) Soil Sampled: 07/09/03 17:20 Received: 07/10/03 17:45** | | | | | | | | | |
| Cadmium | ND | 1.0 | mg/kg | 1 | AG31502 | 07/15/03 | 07/22/03 | EPA 6010 | |
| **Chromium** | **36** | 5.0 | " | " | " | " | " | " | |
| **Nickel** | **29** | 10 | " | " | " | " | " | " | |
| **Lead** | **5.8** | 5.0 | " | " | " | " | " | " | |
| **Zinc** | **34** | 10 | " | " | " | " | " | " | |
| **D7-9-0.0-0.5 (A307292-19) Soil Sampled: 07/10/03 08:40 Received: 07/10/03 17:45** | | | | | | | | | |
| Cadmium | ND | 1.0 | mg/kg | 1 | AG31502 | 07/15/03 | 07/23/03 | EPA 6010 | |
| **Chromium** | **40** | 5.0 | " | " | " | " | " | " | |
| **Nickel** | **41** | 10 | " | " | " | " | " | " | |
| **Lead** | **20** | 5.0 | " | " | " | " | " | " | |
| **Zinc** | **140** | 10 | " | " | " | " | " | " | |
| **D7-10-0.0-0.5 (A307292-20) Soil Sampled: 07/10/03 09:10 Received: 07/10/03 17:45** | | | | | | | | | |
| Cadmium | ND | 1.0 | mg/kg | 1 | AG31502 | 07/15/03 | 07/23/03 | EPA 6010 | |
| **Chromium** | **20** | 5.0 | " | " | " | " | " | " | |
| **Nickel** | **46** | 10 | " | " | " | " | " | " | |
| **Lead** | **23** | 5.0 | " | " | " | " | " | " | |
| **Zinc** | **370** | 10 | " | " | " | " | " | " | |

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## Metals by EPA 6000/7000 Series Methods

## Alpha Analytical Laboratories, Inc.

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|---|---|---|---|---|---|---|---|---|
| **D7-11-0.0-0.5 (A307292-21) Soil** | **Sampled: 07/10/03 09:36** | **Received: 07/10/03 17:45** | | | | | | | |
| Cadmium | ND | 1.0 | mg/kg | 1 | AG31502 | 07/15/03 | 07/23/03 | EPA 6010 | |
| **Chromium** | **38** | 5.0 | " | " | " | " | " | " | |
| **Nickel** | **38** | 10 | " | " | " | " | " | " | |
| **Lead** | **35** | 5.0 | " | " | " | " | " | " | |
| **Zinc** | **120** | 10 | " | " | " | " | " | " | |
| **D7-12-0.0-0.5 (A307292-22) Soil** | **Sampled: 07/10/03 10:00** | **Received: 07/10/03 17:45** | | | | | | | |
| Cadmium | ND | 1.0 | mg/kg | 1 | AG31502 | 07/15/03 | 07/23/03 | EPA 6010 | |
| **Chromium** | **44** | 5.0 | " | " | " | " | " | " | |
| **Nickel** | **38** | 10 | " | " | " | " | " | " | |
| **Lead** | **13** | 5.0 | " | " | " | " | " | " | |
| **Zinc** | **75** | 10 | " | " | " | " | " | " | |
| **D7-13-0.0-0.5 (A307292-23) Soil** | **Sampled: 07/10/03 10:15** | **Received: 07/10/03 17:45** | | | | | | | |
| Cadmium | ND | 1.0 | mg/kg | 1 | AG31502 | 07/15/03 | 07/23/03 | EPA 6010 | |
| **Chromium** | **10** | 5.0 | " | " | " | " | " | " | |
| **Nickel** | **17** | 10 | " | " | " | " | " | " | |
| **Lead** | **6.2** | 5.0 | " | " | " | " | " | " | |
| **Zinc** | **70** | 10 | " | " | " | " | " | " | |
| **D7-14-0.0-0.5 (A307292-24) Soil** | **Sampled: 07/10/03 10:45** | **Received: 07/10/03 17:45** | | | | | | | |
| Cadmium | ND | 1.0 | mg/kg | 1 | AG31502 | 07/15/03 | 07/23/03 | EPA 6010 | |
| **Chromium** | **16** | 5.0 | " | " | " | " | " | " | |
| **Nickel** | **24** | 10 | " | " | " | " | " | " | |
| **Lead** | **7.6** | 5.0 | " | " | " | " | " | " | |
| **Zinc** | **110** | 10 | " | " | " | " | " | " | |

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Nena M. Burgess For Sheri L. Speaks, Project Manager

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| | | |
|---|---|---|
| MFG, Inc | Project: SPI-Arcata/Task #4 | |
| 180 Howard St. Suite 200 | Project Number: 030229.4 | **Reported:** |
| San Francisco CA, 94105-2941 | Project Manager: Ed Conti | 07/26/03 09:17 |

## Metals by EPA 6000/7000 Series Methods

## Alpha Analytical Laboratories, Inc.

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|---|---|---|---|---|---|---|---|---|
| **D7-15-0.0-0.5 (A307292-25) Soil** | **Sampled: 07/10/03 11:05** | **Received: 07/10/03 17:45** | | | | | | | |
| Cadmium | ND | 1.0 | mg/kg | 1 | AG31502 | 07/15/03 | 07/23/03 | EPA 6010 | |
| **Chromium** | **27** | 5.0 | " | " | " | " | " | " | |
| **Nickel** | **36** | 10 | " | " | " | " | " | " | |
| **Lead** | **12** | 5.0 | " | " | " | " | " | " | |
| **Zinc** | **100** | 10 | " | " | " | " | " | " | |
| **D7-16-0.0-0.5 (A307292-26) Soil** | **Sampled: 07/10/03 11:25** | **Received: 07/10/03 17:45** | | | | | | | |
| Cadmium | ND | 1.0 | mg/kg | 1 | AG31502 | 07/15/03 | 07/23/03 | EPA 6010 | |
| **Chromium** | **32** | 5.0 | " | " | " | " | " | " | |
| **Nickel** | **39** | 10 | " | " | " | " | " | " | |
| **Lead** | **25** | 5.0 | " | " | " | " | " | " | |
| **Zinc** | **210** | 10 | " | " | " | " | " | " | |
| **D7-17-0.0-0.5 (A307292-27) Soil** | **Sampled: 07/10/03 11:45** | **Received: 07/10/03 17:45** | | | | | | | |
| **Cadmium** | **5.1** | 1.0 | mg/kg | 1 | AG31502 | 07/15/03 | 07/23/03 | EPA 6010 | |
| **Chromium** | **31** | 5.0 | " | " | " | " | " | " | |
| **Nickel** | **35** | 10 | " | " | " | " | " | " | |
| **Lead** | **27** | 5.0 | " | " | " | " | " | " | |
| **Zinc** | **460** | 10 | " | " | " | " | " | " | |
| **SDP-1-0.0-05 (A307292-28) Soil** | **Sampled: 07/09/03 09:12** | **Received: 07/10/03 17:45** | | | | | | | |
| Cadmium | ND | 1.0 | mg/kg | 1 | AG31502 | 07/15/03 | 07/23/03 | EPA 6010 | |
| **Chromium** | **44** | 5.0 | " | " | " | " | " | " | |
| **Nickel** | **61** | 10 | " | " | " | " | " | " | |
| **Lead** | **31** | 5.0 | " | " | " | " | " | " | |
| **Zinc** | **160** | 10 | " | " | " | " | " | " | |

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Nena M. Burgess For Sheri L. Speaks, Project Manager

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208 Mason St. Ukiah, California 95482
e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

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|---|---|---|
| MFG, Inc | Project: SPI-Arcata/Task #4 | |
| 180 Howard St. Suite 200 | Project Number: 030229.4 | **Reported:** |
| San Francisco CA, 94105-2941 | Project Manager: Ed Conti | 07/26/03 09:17 |

## Metals by EPA 6000/7000 Series Methods

## Alpha Analytical Laboratories, Inc.

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|---|---|---|---|---|---|---|---|---|
| **SDP-1-2.0-2.5 (A307292-29) Soil** | **Sampled: 07/09/03 09:25** | **Received: 07/10/03 17:45** | | | | | | | |
| Cadmium | ND | 1.0 | mg/kg | 1 | AG31502 | 07/15/03 | 07/23/03 | EPA 6010 | |
| **Chromium** | **21** | 5.0 | " | " | " | " | " | " | |
| **Nickel** | **49** | 10 | " | " | " | " | " | " | |
| Lead | ND | 5.0 | " | " | " | " | " | " | |
| **Zinc** | **37** | 10 | " | " | " | " | " | " | |

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Nena M. Burgess For Sheri L. Speaks, Project Manager

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|---|---|---|
| MFG, Inc | Project: SPI-Arcata/Task #4 | |
| 180 Howard St. Suite 200 | Project Number: 030229.4 | **Reported:** |
| San Francisco CA, 94105-2941 | Project Manager: Ed Conti | 07/26/03 09:17 |

## Chlorinated Phenols by Canadian Pulp Method

## Alpha Analytical Laboratories, Inc.

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|---|---|---|---|---|---|---|---|---|
| **RP-1-0.0-0.5 (A307292-01) Soil Sampled: 07/08/03 12:16 Received: 07/10/03 17:45** | | | | | | | | | |
| 2,4,6-Trichlorophenol | ND | 1.0 | mg/kg | 1 | AG32117 | 07/16/03 | 07/18/03 | EnvCan | |
| 2,3,5,6-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| 2,3,4,6-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| 2,3,4,5-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| Pentachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| *Surrogate: Tribromophenol* | | *33.1 %* | *23-140* | | " | " | " | " | |
| **RP-1-0.5-1.0 (A307292-02) Soil Sampled: 07/08/03 12:22 Received: 07/10/03 17:45** | | | | | | | | | |
| 2,4,6-Trichlorophenol | ND | 1.0 | mg/kg | 1 | AG32117 | 07/16/03 | 07/18/03 | EnvCan | |
| 2,3,5,6-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| 2,3,4,6-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| 2,3,4,5-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| Pentachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| *Surrogate: Tribromophenol* | | *49.2 %* | *23-140* | | " | " | " | " | |
| **RP-1-1.0-1.5 (A307292-03) Soil Sampled: 07/08/03 12:27 Received: 07/10/03 17:45** | | | | | | | | | |
| 2,4,6-Trichlorophenol | ND | 1.0 | mg/kg | 1 | AG32117 | 07/16/03 | 07/18/03 | EnvCan | |
| 2,3,5,6-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| 2,3,4,6-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| 2,3,4,5-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| Pentachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| *Surrogate: Tribromophenol* | | *29.0 %* | *23-140* | | " | " | " | " | |
| **RP-1-1.5-2.0 (A307292-04) Soil Sampled: 07/08/03 12:31 Received: 07/10/03 17:45** | | | | | | | | | |
| 2,4,6-Trichlorophenol | ND | 1.0 | mg/kg | 1 | AG32117 | 07/16/03 | 07/18/03 | EnvCan | |
| 2,3,5,6-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| 2,3,4,6-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| 2,3,4,5-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| Pentachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| *Surrogate: Tribromophenol* | | *44.4 %* | *23-140* | | " | " | " | " | |

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Nena M. Burgess For Sheri L. Speaks, Project Manager

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e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

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|---|---|---|
| MFG, Inc | Project: SPI-Arcata/Task #4 | |
| 180 Howard St. Suite 200 | Project Number: 030229.4 | **Reported:** |
| San Francisco CA, 94105-2941 | Project Manager: Ed Conti | 07/26/03 09:17 |

## Chlorinated Phenols by Canadian Pulp Method

## Alpha Analytical Laboratories, Inc.

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|---|---|---|---|---|---|---|---|---|
| **RP-1-2.0-2.5 (A307292-05) Soil Sampled: 07/08/03 12:37 Received: 07/10/03 17:45** | | | | | | | | | |
| 2,4,6-Trichlorophenol | ND | 1.0 | mg/kg | 1 | AG32119 | 07/17/03 | 07/19/03 | EnvCan | |
| 2,3,5,6-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| 2,3,4,6-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| 2,3,4,5-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| Pentachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| *Surrogate: Tribromophenol* | | *35.5 %* | | *23-140* | " | " | " | " | |
| **RP-2-0.0-0.5 (A307292-06) Soil Sampled: 07/08/03 15:23 Received: 07/10/03 17:45** | | | | | | | | | |
| 2,4,6-Trichlorophenol | ND | 1.0 | mg/kg | 1 | AG32119 | 07/17/03 | 07/19/03 | EnvCan | |
| 2,3,5,6-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| 2,3,4,6-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| 2,3,4,5-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| Pentachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| *Surrogate: Tribromophenol* | | *48.4 %* | | *23-140* | " | " | " | " | |
| **RP-2-0.5-1.0 (A307292-07) Soil Sampled: 07/08/03 15:26 Received: 07/10/03 17:45** | | | | | | | | | |
| 2,4,6-Trichlorophenol | ND | 1.0 | mg/kg | 1 | AG32119 | 07/17/03 | 07/19/03 | EnvCan | |
| 2,3,5,6-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| 2,3,4,6-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| 2,3,4,5-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| Pentachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| *Surrogate: Tribromophenol* | | *76.6 %* | | *23-140* | " | " | " | " | |
| **RP-2-1.0-1.5 (A307292-08) Soil Sampled: 07/08/03 15:31 Received: 07/10/03 17:45** | | | | | | | | | |
| 2,4,6-Trichlorophenol | ND | 1.0 | mg/kg | 1 | AG32119 | 07/17/03 | 07/19/03 | EnvCan | |
| 2,3,5,6-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| 2,3,4,6-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| 2,3,4,5-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| Pentachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| *Surrogate: Tribromophenol* | | *78.2 %* | | *23-140* | " | " | " | " | |

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|---|---|---|
| MFG, Inc | Project: SPI-Arcata/Task #4 | |
| 180 Howard St. Suite 200 | Project Number: 030229.4 | **Reported:** |
| San Francisco CA, 94105-2941 | Project Manager: Ed Conti | 07/26/03 09:17 |

## Chlorinated Phenols by Canadian Pulp Method

## Alpha Analytical Laboratories, Inc.

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|---|---|---|---|---|---|---|---|---|
| **RP-2-1.5-2.0 (A307292-09) Soil** | **Sampled: 07/08/03 15:36** | **Received: 07/10/03 17:45** | | | | | | | |
| 2,4,6-Trichlorophenol | ND | 1.0 | mg/kg | 1 | AG32119 | 07/17/03 | 07/19/03 | EnvCan | |
| 2,3,5,6-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| 2,3,4,6-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| 2,3,4,5-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| Pentachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| *Surrogate: Tribromophenol* | | *71.0 %* | *23-140* | | " | " | " | " | |
| **RP-2-2.0-2.5 (A307292-10) Soil** | **Sampled: 07/08/03 15:41** | **Received: 07/10/03 17:45** | | | | | | | |
| 2,4,6-Trichlorophenol | ND | 1.0 | mg/kg | 1 | AG32119 | 07/17/03 | 07/19/03 | EnvCan | |
| 2,3,5,6-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| 2,3,4,6-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| 2,3,4,5-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| Pentachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| *Surrogate: Tribromophenol* | | *82.3 %* | *23-140* | | " | " | " | " | |
| **D7-1-0.0-0.5 (A307292-11) Soil** | **Sampled: 07/09/03 10:20** | **Received: 07/10/03 17:45** | | | | | | | |
| 2,4,6-Trichlorophenol | ND | 1.0 | mg/kg | 1 | AG32119 | 07/17/03 | 07/19/03 | EnvCan | |
| 2,3,5,6-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| 2,3,4,6-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| 2,3,4,5-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| Pentachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| *Surrogate: Tribromophenol* | | *79.0 %* | *23-140* | | " | " | " | " | |
| **D7-2-0.0-0.5 (A307292-12) Soil** | **Sampled: 07/09/03 10:52** | **Received: 07/10/03 17:45** | | | | | | | |
| 2,4,6-Trichlorophenol | ND | 1.0 | mg/kg | 1 | AG32119 | 07/17/03 | 07/19/03 | EnvCan | |
| 2,3,5,6-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| 2,3,4,6-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| 2,3,4,5-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| Pentachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| *Surrogate: Tribromophenol* | | *68.5 %* | *23-140* | | " | " | " | " | |

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| 180 Howard St. Suite 200 | Project Number: 030229.4 | **Reported:** |
| San Francisco CA, 94105-2941 | Project Manager: Ed Conti | 07/26/03 09:17 |

## Chlorinated Phenols by Canadian Pulp Method

## Alpha Analytical Laboratories, Inc.

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|---|---|---|---|---|---|---|---|---|
| **D7-3-0.0-0.5 (A307292-13) Soil Sampled: 07/09/03 11:40 Received: 07/10/03 17:45** | | | | | | | | | |
| 2,4,6-Trichlorophenol | ND | 1.0 | mg/kg | 1 | AG32119 | 07/17/03 | 07/19/03 | EnvCan | |
| 2,3,5,6-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| 2,3,4,6-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| 2,3,4,5-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| Pentachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| *Surrogate: Tribromophenol* | | *66.1 %* | *23-140* | | " | " | " | " | |
| **D7-4-0.0-0.5 (A307292-14) Soil Sampled: 07/09/03 12:30 Received: 07/10/03 17:45** | | | | | | | | | |
| 2,4,6-Trichlorophenol | ND | 1.0 | mg/kg | 1 | AG32119 | 07/17/03 | 07/19/03 | EnvCan | |
| 2,3,5,6-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| 2,3,4,6-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| 2,3,4,5-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| Pentachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| *Surrogate: Tribromophenol* | | *65.3 %* | *23-140* | | " | " | " | " | |
| **D7-5-0.0-0.5 (A307292-15) Soil Sampled: 07/09/03 00:00 Received: 07/10/03 17:45** | | | | | | | | | |
| 2,4,6-Trichlorophenol | ND | 1.0 | mg/kg | 1 | AG32119 | 07/17/03 | 07/19/03 | EnvCan | |
| 2,3,5,6-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| 2,3,4,6-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| 2,3,4,5-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| Pentachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| *Surrogate: Tribromophenol* | | *56.5 %* | *23-140* | | " | " | " | " | |
| **D7-6-0.0-0.5 (A307292-16) Soil Sampled: 07/09/03 15:37 Received: 07/10/03 17:45** | | | | | | | | | |
| 2,4,6-Trichlorophenol | ND | 1.0 | mg/kg | 1 | AG32119 | 07/17/03 | 07/19/03 | EnvCan | |
| 2,3,5,6-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| 2,3,4,6-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| 2,3,4,5-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| Pentachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| *Surrogate: Tribromophenol* | | *85.5 %* | *23-140* | | " | " | " | " | |

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| 180 Howard St. Suite 200 | Project Number: 030229.4 | **Reported:** |
| San Francisco CA, 94105-2941 | Project Manager: Ed Conti | 07/26/03 09:17 |

## Chlorinated Phenols by Canadian Pulp Method

## Alpha Analytical Laboratories, Inc.

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|---|---|---|---|---|---|---|---|---|
| **D7-7-0.0-0.5 (A307292-17) Soil Sampled: 07/09/03 16:25 Received: 07/10/03 17:45** | | | | | | | | | |
| 2,4,6-Trichlorophenol | ND | 1.0 | mg/kg | 1 | AG32121 | 07/18/03 | 07/22/03 | EnvCan | |
| 2,3,5,6-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| 2,3,4,6-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| 2,3,4,5-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| Pentachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| *Surrogate: Tribromophenol* | | *67.7 %* | *23-140* | | " | " | " | " | |
| **D7-8-0.0-0.5 (A307292-18) Soil Sampled: 07/09/03 17:20 Received: 07/10/03 17:45** | | | | | | | | | |
| 2,4,6-Trichlorophenol | ND | 1.0 | mg/kg | 1 | AG32121 | 07/18/03 | 07/22/03 | EnvCan | |
| 2,3,5,6-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| 2,3,4,6-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| 2,3,4,5-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| Pentachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| *Surrogate: Tribromophenol* | | *86.3 %* | *23-140* | | " | " | " | " | |
| **D7-9-0.0-0.5 (A307292-19) Soil Sampled: 07/10/03 08:40 Received: 07/10/03 17:45** | | | | | | | | | |
| 2,4,6-Trichlorophenol | ND | 1.0 | mg/kg | 1 | AG32121 | 07/18/03 | 07/22/03 | EnvCan | |
| 2,3,5,6-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| 2,3,4,6-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| 2,3,4,5-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| Pentachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| *Surrogate: Tribromophenol* | | *82.3 %* | *23-140* | | " | " | " | " | |
| **D7-10-0.0-0.5 (A307292-20) Soil Sampled: 07/10/03 09:10 Received: 07/10/03 17:45** | | | | | | | | | |
| 2,4,6-Trichlorophenol | ND | 1.0 | mg/kg | 1 | AG32121 | 07/18/03 | 07/22/03 | EnvCan | |
| 2,3,5,6-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| 2,3,4,6-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| 2,3,4,5-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| Pentachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| *Surrogate: Tribromophenol* | | *44.4 %* | *23-140* | | " | " | " | " | |

Alpha Analytical Laboratories, Inc.

Nena M. Burgess For Sheri L. Speaks, Project Manager

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|---|---|---|
| MFG, Inc | Project: SPI-Arcata/Task #4 | |
| 180 Howard St. Suite 200 | Project Number: 030229.4 | **Reported:** |
| San Francisco CA, 94105-2941 | Project Manager: Ed Conti | 07/26/03 09:17 |

## Chlorinated Phenols by Canadian Pulp Method
## Alpha Analytical Laboratories, Inc.

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|---|---|---|---|---|---|---|---|---|
| **D7-11-0.0-0.5 (A307292-21) Soil Sampled: 07/10/03 09:36 Received: 07/10/03 17:45** | | | | | | | | | |
| 2,4,6-Trichlorophenol | ND | 1.0 | mg/kg | 1 | AG32121 | 07/18/03 | 07/22/03 | EnvCan | |
| 2,3,5,6-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| 2,3,4,6-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| 2,3,4,5-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| Pentachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| *Surrogate: Tribromophenol* | | *41.1 %* | | *23-140* | " | " | " | " | |
| **D7-12-0.0-0.5 (A307292-22) Soil Sampled: 07/10/03 10:00 Received: 07/10/03 17:45** | | | | | | | | | |
| 2,4,6-Trichlorophenol | ND | 1.0 | mg/kg | 1 | AG32121 | 07/18/03 | 07/22/03 | EnvCan | |
| 2,3,5,6-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| 2,3,4,6-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| 2,3,4,5-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| Pentachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| *Surrogate: Tribromophenol* | | *67.7 %* | | *23-140* | " | " | " | " | |
| **D7-13-0.0-0.5 (A307292-23) Soil Sampled: 07/10/03 10:15 Received: 07/10/03 17:45** | | | | | | | | | |
| 2,4,6-Trichlorophenol | ND | 1.0 | mg/kg | 1 | AG32121 | 07/18/03 | 07/22/03 | EnvCan | |
| 2,3,5,6-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| 2,3,4,6-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| 2,3,4,5-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| Pentachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| *Surrogate: Tribromophenol* | | *65.3 %* | | *23-140* | " | " | " | " | |
| **D7-14-0.0-0.5 (A307292-24) Soil Sampled: 07/10/03 10:45 Received: 07/10/03 17:45** | | | | | | | | | |
| 2,4,6-Trichlorophenol | ND | 1.0 | mg/kg | 1 | AG32121 | 07/18/03 | 07/22/03 | EnvCan | |
| 2,3,5,6-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| 2,3,4,6-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| 2,3,4,5-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| Pentachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| *Surrogate: Tribromophenol* | | *60.5 %* | | *23-140* | " | " | " | " | |

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Nena M. Burgess For Sheri L. Speaks, Project Manager

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| MFG, Inc | Project: SPI-Arcata/Task #4 | |
| 180 Howard St. Suite 200 | Project Number: 030229.4 | **Reported:** |
| San Francisco CA, 94105-2941 | Project Manager: Ed Conti | 07/26/03 09:17 |

## Chlorinated Phenols by Canadian Pulp Method

## Alpha Analytical Laboratories, Inc.

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|---|---|---|---|---|---|---|---|---|
| **D7-15-0.0-0.5 (A307292-25) Soil Sampled: 07/10/03 11:05 Received: 07/10/03 17:45** | | | | | | | | | |
| 2,4,6-Trichlorophenol | ND | 1.0 | mg/kg | 1 | AG32121 | 07/18/03 | 07/22/03 | EnvCan | |
| 2,3,5,6-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| 2,3,4,6-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| 2,3,4,5-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| Pentachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| *Surrogate: Tribromophenol* | | *72.6 %* | | *23-140* | " | " | " | " | |
| **D7-16-0.0-0.5 (A307292-26) Soil Sampled: 07/10/03 11:25 Received: 07/10/03 17:45** | | | | | | | | | |
| 2,4,6-Trichlorophenol | ND | 1.0 | mg/kg | 1 | AG32307 | 07/20/03 | 07/22/03 | EnvCan | |
| 2,3,5,6-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| 2,3,4,6-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| 2,3,4,5-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| Pentachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| *Surrogate: Tribromophenol* | | *75.8 %* | | *23-140* | " | " | " | " | |
| **D7-17-0.0-0.5 (A307292-27) Soil Sampled: 07/10/03 11:45 Received: 07/10/03 17:45** | | | | | | | | | |
| 2,4,6-Trichlorophenol | ND | 1.0 | mg/kg | 1 | AG32307 | 07/20/03 | 07/22/03 | EnvCan | |
| 2,3,5,6-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| 2,3,4,6-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| 2,3,4,5-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| Pentachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| *Surrogate: Tribromophenol* | | *53.2 %* | | *23-140* | " | " | " | " | |
| **SDP-1-0.0-05 (A307292-28) Soil Sampled: 07/09/03 09:12 Received: 07/10/03 17:45** | | | | | | | | | |
| 2,4,6-Trichlorophenol | ND | 1.0 | mg/kg | 1 | AG32307 | 07/20/03 | 07/22/03 | EnvCan | |
| 2,3,5,6-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| 2,3,4,6-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| 2,3,4,5-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| Pentachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| *Surrogate: Tribromophenol* | | *69.4 %* | | *23-140* | " | " | " | " | |

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208 Mason St. Ukiah, California 95482
e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

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| MFG, Inc | Project: SPI-Arcata/Task #4 | |
| 180 Howard St. Suite 200 | Project Number: 030229.4 | **Reported:** |
| San Francisco CA, 94105-2941 | Project Manager: Ed Conti | 07/26/03 09:17 |

## Chlorinated Phenols by Canadian Pulp Method

## Alpha Analytical Laboratories, Inc.

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|---|---|---|---|---|---|---|---|---|
| **SDP-1-2.0-2.5 (A307292-29) Soil** | **Sampled: 07/09/03 09:25** | **Received: 07/10/03 17:45** | | | | | | | |
| 2,4,6-Trichlorophenol | ND | 1.0 | mg/kg | 1 | AG32307 | 07/20/03 | 07/22/03 | EnvCan | |
| 2,3,5,6-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| 2,3,4,6-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| 2,3,4,5-Tetrachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| Pentachlorophenol | ND | 1.0 | " | " | " | " | " | " | |
| *Surrogate: Tribromophenol* | | *65.3 %* | | *23-140* | " | " | " | " | |

Alpha Analytical Laboratories, Inc.

Nena M. Burgess For Sheri L. Speaks, Project Manager

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| 180 Howard St. Suite 200 | Project Number: 030229.4 | **Reported:** |
| San Francisco CA, 94105-2941 | Project Manager: Ed Conti | 07/26/03 09:17 |

## Conventional Chemistry Parameters by APHA/EPA Methods

## Alpha Analytical Laboratories, Inc.

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|---|---|---|---|---|---|---|---|---|
| **RP-1-0.0-0.5 (A307292-01) Soil** | **Sampled: 07/08/03 12:16** | **Received: 07/10/03 17:45** | | | | | | | |
| **Oil & Grease (HEM)** | **12000** | 50 | mg/kg | 1 | AG31708 | 07/15/03 | 07/18/03 | EPA 9071B | |
| **pH** | **5.1** | 1.0 | pH Units | " | AG31806 | 07/17/03 | 07/17/03 | EPA 9045B | |
| **RP-1-0.5-1.0 (A307292-02) Soil** | **Sampled: 07/08/03 12:22** | **Received: 07/10/03 17:45** | | | | | | | |
| **Oil & Grease (HEM)** | **16000** | 50 | mg/kg | 1 | AG31708 | 07/15/03 | 07/18/03 | EPA 9071B | |
| **pH** | **5.2** | 1.0 | pH Units | " | AG31806 | 07/17/03 | 07/17/03 | EPA 9045B | |
| **RP-1-1.0-1.5 (A307292-03) Soil** | **Sampled: 07/08/03 12:27** | **Received: 07/10/03 17:45** | | | | | | | |
| **Oil & Grease (HEM)** | **40000** | 50 | mg/kg | 1 | AG31708 | 07/15/03 | 07/18/03 | EPA 9071B | |
| **pH** | **5.1** | 1.0 | pH Units | " | AG31806 | 07/17/03 | 07/17/03 | EPA 9045B | |
| **RP-1-1.5-2.0 (A307292-04) Soil** | **Sampled: 07/08/03 12:31** | **Received: 07/10/03 17:45** | | | | | | | |
| **Oil & Grease (HEM)** | **11000** | 50 | mg/kg | 1 | AG31708 | 07/15/03 | 07/18/03 | EPA 9071B | |
| **pH** | **5.1** | 1.0 | pH Units | " | AG31806 | 07/17/03 | 07/17/03 | EPA 9045B | |
| **RP-1-2.0-2.5 (A307292-05) Soil** | **Sampled: 07/08/03 12:37** | **Received: 07/10/03 17:45** | | | | | | | |
| **Oil & Grease (HEM)** | **6200** | 50 | mg/kg | 1 | AG31708 | 07/15/03 | 07/18/03 | EPA 9071B | |
| **pH** | **5.8** | 1.0 | pH Units | " | AG31806 | 07/17/03 | 07/17/03 | EPA 9045B | |
| **RP-2-0.0-0.5 (A307292-06) Soil** | **Sampled: 07/08/03 15:23** | **Received: 07/10/03 17:45** | | | | | | | |
| **Oil & Grease (HEM)** | **1400** | 50 | mg/kg | 1 | AG31708 | 07/16/03 | 07/18/03 | EPA 9071B | |
| **pH** | **5.2** | 1.0 | pH Units | " | AG31806 | 07/17/03 | 07/17/03 | EPA 9045B | |
| **RP-2-0.5-1.0 (A307292-07) Soil** | **Sampled: 07/08/03 15:26** | **Received: 07/10/03 17:45** | | | | | | | |
| **Oil & Grease (HEM)** | **120** | 50 | mg/kg | 1 | AG31708 | 07/16/03 | 07/18/03 | EPA 9071B | |
| **pH** | **5.7** | 1.0 | pH Units | " | AG31806 | 07/17/03 | 07/17/03 | EPA 9045B | |

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208 Mason St. Ukiah, California 95482
e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

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|---|---|---|
| MFG, Inc | Project: SPI-Arcata/Task #4 | |
| 180 Howard St. Suite 200 | Project Number: 030229.4 | **Reported:** |
| San Francisco CA, 94105-2941 | Project Manager: Ed Conti | 07/26/03 09:17 |

## Conventional Chemistry Parameters by APHA/EPA Methods
## Alpha Analytical Laboratories, Inc.

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|---|---|---|---|---|---|---|---|---|
| **RP-2-1.0-1.5 (A307292-08) Soil** | **Sampled: 07/08/03 15:31** | **Received: 07/10/03 17:45** | | | | | | | |
| **Oil & Grease (HEM)** | **300** | 50 | mg/kg | 1 | AG31708 | 07/16/03 | 07/18/03 | EPA 9071B | |
| **pH** | **6.1** | 1.0 | pH Units | " | AG31806 | 07/17/03 | 07/17/03 | EPA 9045B | |
| **RP-2-1.5-2.0 (A307292-09) Soil** | **Sampled: 07/08/03 15:36** | **Received: 07/10/03 17:45** | | | | | | | |
| **Oil & Grease (HEM)** | **260** | 50 | mg/kg | 1 | AG31708 | 07/16/03 | 07/18/03 | EPA 9071B | |
| **pH** | **6.0** | 1.0 | pH Units | " | AG31806 | 07/17/03 | 07/17/03 | EPA 9045B | |
| **RP-2-2.0-2.5 (A307292-10) Soil** | **Sampled: 07/08/03 15:41** | **Received: 07/10/03 17:45** | | | | | | | |
| **Oil & Grease (HEM)** | **260** | 50 | mg/kg | 1 | AG31708 | 07/16/03 | 07/18/03 | EPA 9071B | |
| **pH** | **5.8** | 1.0 | pH Units | " | AG31806 | 07/17/03 | 07/17/03 | EPA 9045B | |
| **D7-1-0.0-0.5 (A307292-11) Soil** | **Sampled: 07/09/03 10:20** | **Received: 07/10/03 17:45** | | | | | | | |
| **Oil & Grease (HEM)** | **1900** | 50 | mg/kg | 1 | AG31708 | 07/16/03 | 07/18/03 | EPA 9071B | |
| **pH** | **6.3** | 1.0 | pH Units | " | AG31806 | 07/17/03 | 07/17/03 | EPA 9045B | |
| **D7-2-0.0-0.5 (A307292-12) Soil** | **Sampled: 07/09/03 10:52** | **Received: 07/10/03 17:45** | | | | | | | |
| **Oil & Grease (HEM)** | **3100** | 50 | mg/kg | 1 | AG31708 | 07/16/03 | 07/18/03 | EPA 9071B | |
| **pH** | **6.1** | 1.0 | pH Units | " | AG31806 | 07/18/03 | 07/18/03 | EPA 9045B | |
| **D7-3-0.0-0.5 (A307292-13) Soil** | **Sampled: 07/09/03 11:40** | **Received: 07/10/03 17:45** | | | | | | | |
| **Oil & Grease (HEM)** | **1900** | 50 | mg/kg | 1 | AG31708 | 07/16/03 | 07/18/03 | EPA 9071B | |
| **pH** | **6.2** | 1.0 | pH Units | " | AG31806 | 07/18/03 | 07/18/03 | EPA 9045B | |
| **D7-4-0.0-0.5 (A307292-14) Soil** | **Sampled: 07/09/03 12:30** | **Received: 07/10/03 17:45** | | | | | | | |
| **Oil & Grease (HEM)** | **4100** | 50 | mg/kg | 1 | AG31708 | 07/16/03 | 07/18/03 | EPA 9071B | |
| **pH** | **6.3** | 1.0 | pH Units | " | AG31806 | 07/18/03 | 07/18/03 | EPA 9045B | |

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Alpha Analytical Laboratories Inc.
208 Mason St. Ukiah, California 95482
e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

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| MFG, Inc | Project: SPI-Arcata/Task #4 | |
| 180 Howard St. Suite 200 | Project Number: 030229.4 | **Reported:** |
| San Francisco CA, 94105-2941 | Project Manager: Ed Conti | 07/26/03 09:17 |

## Conventional Chemistry Parameters by APHA/EPA Methods
## Alpha Analytical Laboratories, Inc.

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|---|---|---|---|---|---|---|---|---|
| **D7-5-0.0-0.5 (A307292-15) Soil** | **Sampled: 07/09/03 00:00** | **Received: 07/10/03 17:45** | | | | | | | |
| **Oil & Grease (HEM)** | **8800** | 50 | mg/kg | 1 | AG31708 | 07/16/03 | 07/18/03 | EPA 9071B | |
| **pH** | **5.1** | 1.0 | pH Units | " | AG31806 | 07/18/03 | 07/18/03 | EPA 9045B | |
| **D7-6-0.0-0.5 (A307292-16) Soil** | **Sampled: 07/09/03 15:37** | **Received: 07/10/03 17:45** | | | | | | | |
| **Oil & Grease (HEM)** | **160** | 50 | mg/kg | 1 | AG31708 | 07/16/03 | 07/18/03 | EPA 9071B | |
| **pH** | **5.2** | 1.0 | pH Units | " | AG31806 | 07/18/03 | 07/18/03 | EPA 9045B | |
| **D7-7-0.0-0.5 (A307292-17) Soil** | **Sampled: 07/09/03 16:25** | **Received: 07/10/03 17:45** | | | | | | | |
| **Oil & Grease (HEM)** | **130** | 50 | mg/kg | 1 | AG31708 | 07/16/03 | 07/18/03 | EPA 9071B | |
| **pH** | **5.4** | 1.0 | pH Units | " | AG31806 | 07/18/03 | 07/18/03 | EPA 9045B | |
| **D7-8-0.0-0.5 (A307292-18) Soil** | **Sampled: 07/09/03 17:20** | **Received: 07/10/03 17:45** | | | | | | | |
| **Oil & Grease (HEM)** | **1800** | 50 | mg/kg | 1 | AG31708 | 07/16/03 | 07/18/03 | EPA 9071B | |
| **pH** | **5.7** | 1.0 | pH Units | " | AG31806 | 07/18/03 | 07/18/03 | EPA 9045B | |
| **D7-9-0.0-0.5 (A307292-19) Soil** | **Sampled: 07/10/03 08:40** | **Received: 07/10/03 17:45** | | | | | | | |
| **Oil & Grease (HEM)** | **2300** | 50 | mg/kg | 1 | AG32506 | 07/22/03 | 07/24/03 | EPA 9071B | |
| **pH** | **6.0** | 1.0 | pH Units | " | AG31806 | 07/18/03 | 07/18/03 | EPA 9045B | |
| **D7-10-0.0-0.5 (A307292-20) Soil** | **Sampled: 07/10/03 09:10** | **Received: 07/10/03 17:45** | | | | | | | |
| **Oil & Grease (HEM)** | **1400** | 50 | mg/kg | 1 | AG32506 | 07/22/03 | 07/24/03 | EPA 9071B | |
| **pH** | **6.0** | 1.0 | pH Units | " | AG31806 | 07/18/03 | 07/18/03 | EPA 9045B | |
| **D7-11-0.0-0.5 (A307292-21) Soil** | **Sampled: 07/10/03 09:36** | **Received: 07/10/03 17:45** | | | | | | | |
| **Oil & Grease (HEM)** | **17000** | 50 | mg/kg | 1 | AG32506 | 07/22/03 | 07/24/03 | EPA 9071B | |
| **pH** | **5.9** | 1.0 | pH Units | " | AG31806 | 07/18/03 | 07/18/03 | EPA 9045B | |

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|---|---|---|
| MFG, Inc | Project: SPI-Arcata/Task #4 | |
| 180 Howard St. Suite 200 | Project Number: 030229.4 | **Reported:** |
| San Francisco CA, 94105-2941 | Project Manager: Ed Conti | 07/26/03 09:17 |

## Conventional Chemistry Parameters by APHA/EPA Methods

## Alpha Analytical Laboratories, Inc.

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|---|---|---|---|---|---|---|---|---|
| **D7-12-0.0-0.5 (A307292-22) Soil** | **Sampled: 07/10/03 10:00** | **Received: 07/10/03 17:45** | | | | | | | |
| **Oil & Grease (HEM)** | **1100** | 50 | mg/kg | 1 | AG32506 | 07/22/03 | 07/24/03 | EPA 9071B | |
| **pH** | **6.0** | 1.0 | pH Units | " | AG31806 | 07/18/03 | 07/18/03 | EPA 9045B | |
| **D7-13-0.0-0.5 (A307292-23) Soil** | **Sampled: 07/10/03 10:15** | **Received: 07/10/03 17:45** | | | | | | | |
| **Oil & Grease (HEM)** | **4100** | 50 | mg/kg | 1 | AG32506 | 07/22/03 | 07/24/03 | EPA 9071B | |
| **pH** | **6.1** | 1.0 | pH Units | " | AG31806 | 07/18/03 | 07/18/03 | EPA 9045B | |
| **D7-14-0.0-0.5 (A307292-24) Soil** | **Sampled: 07/10/03 10:45** | **Received: 07/10/03 17:45** | | | | | | | |
| **Oil & Grease (HEM)** | **2800** | 50 | mg/kg | 1 | AG32506 | 07/22/03 | 07/24/03 | EPA 9071B | |
| **pH** | **5.7** | 1.0 | pH Units | " | AG31806 | 07/18/03 | 07/18/03 | EPA 9045B | |
| **D7-15-0.0-0.5 (A307292-25) Soil** | **Sampled: 07/10/03 11:05** | **Received: 07/10/03 17:45** | | | | | | | |
| **Oil & Grease (HEM)** | **3100** | 50 | mg/kg | 1 | AG32506 | 07/22/03 | 07/24/03 | EPA 9071B | |
| **pH** | **6.0** | 1.0 | pH Units | " | AG31806 | 07/18/03 | 07/18/03 | EPA 9045B | |
| **D7-16-0.0-0.5 (A307292-26) Soil** | **Sampled: 07/10/03 11:25** | **Received: 07/10/03 17:45** | | | | | | | |
| **Oil & Grease (HEM)** | **8000** | 50 | mg/kg | 1 | AG32506 | 07/22/03 | 07/24/03 | EPA 9071B | |
| **pH** | **6.3** | 1.0 | pH Units | " | AG31806 | 07/18/03 | 07/18/03 | EPA 9045B | |
| **D7-17-0.0-0.5 (A307292-27) Soil** | **Sampled: 07/10/03 11:45** | **Received: 07/10/03 17:45** | | | | | | | |
| **Oil & Grease (HEM)** | **26000** | 50 | mg/kg | 1 | AG32506 | 07/22/03 | 07/24/03 | EPA 9071B | |
| **pH** | **5.6** | 1.0 | pH Units | " | AG31806 | 07/18/03 | 07/18/03 | EPA 9045B | |
| **SDP-1-0.0-05 (A307292-28) Soil** | **Sampled: 07/09/03 09:12** | **Received: 07/10/03 17:45** | | | | | | | |
| **Oil & Grease (HEM)** | **8100** | 50 | mg/kg | 1 | AG32506 | 07/22/03 | 07/24/03 | EPA 9071B | |
| **pH** | **6.7** | 1.0 | pH Units | " | AG31806 | 07/18/03 | 07/18/03 | EPA 9045B | |

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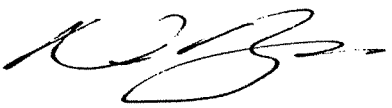

Nena M. Burgess For Sheri L. Speaks, Project Manager

Alpha Analytical Laboratories Inc.
208 Mason St. Ukiah, California 95482
e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

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|---|---|---|
| MFG, Inc | Project: SPI-Arcata/Task #4 | |
| 180 Howard St. Suite 200 | Project Number: 030229.4 | **Reported:** |
| San Francisco CA, 94105-2941 | Project Manager: Ed Conti | 07/26/03 09:17 |

## Conventional Chemistry Parameters by APHA/EPA Methods

## Alpha Analytical Laboratories, Inc.

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|---|---|---|---|---|---|---|---|---|
| **SDP-1-2.0-2.5 (A307292-29) Soil** | **Sampled: 07/09/03 09:25** | **Received: 07/10/03 17:45** | | | | | | | |
| **Oil & Grease (HEM)** | **460** | 50 | mg/kg | 1 | AG32506 | 07/22/03 | 07/24/03 | EPA 9071B | |
| **pH** | **6.0** | 1.0 | pH Units | " | AG31806 | 07/18/03 | 07/18/03 | EPA 9045B | |

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Nena M. Burgess For Sheri L. Speaks, Project Manager

Alpha Analytical Laboratories Inc.
208 Mason St. Ukiah, California 95482
e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

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| 180 Howard St. Suite 200 | Project Number: 030229.4 | **Reported:** |
| San Francisco CA, 94105-2941 | Project Manager: Ed Conti | 07/26/03 09:17 |

## Metals by EPA 6000/7000 Series Methods - Quality Control
## Alpha Analytical Laboratories, Inc.

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AG31004 - EPA 3051 Microwave** | | | | | | | | | | |
| **Blank (AG31004-BLK1)** | | | | Prepared & Analyzed: 07/10/03 | | | | | | |
| Cadmium | ND | 1.0 | mg/kg | | | | | | | |
| Chromium | ND | 5.0 | " | | | | | | | |
| Lead | ND | 5.0 | " | | | | | | | |
| Nickel | ND | 10 | " | | | | | | | |
| Zinc | ND | 10 | " | | | | | | | |
| **LCS (AG31004-BS1)** | | | | Prepared & Analyzed: 07/10/03 | | | | | | |
| Cadmium | 20.7 | 1.0 | mg/kg | 20.0 | | 104 | 85-115 | | | |
| Chromium | 21.2 | 5.0 | " | 20.0 | | 106 | 85-115 | | | |
| Lead | 20.1 | 5.0 | " | 20.0 | | 100 | 85-115 | | | |
| Nickel | 21.2 | 10 | " | 20.0 | | 106 | 85-115 | | | |
| Zinc | 22.0 | 10 | " | 20.0 | | 110 | 87.1-126 | | | |
| **LCS Dup (AG31004-BSD1)** | | | | Prepared & Analyzed: 07/10/03 | | | | | | |
| Cadmium | 21.3 | 1.0 | mg/kg | 20.0 | | 106 | 85-115 | 2.86 | 20 | |
| Chromium | 21.6 | 5.0 | " | 20.0 | | 108 | 85-115 | 1.87 | 20 | |
| Lead | 20.7 | 5.0 | " | 20.0 | | 104 | 85-115 | 2.94 | 20 | |
| Nickel | 21.5 | 10 | " | 20.0 | | 108 | 85-115 | 1.41 | 20 | |
| Zinc | 22.1 | 10 | " | 20.0 | | 110 | 87.1-126 | 0.454 | 20 | |
| **Duplicate (AG31004-DUP1)** | | **Source: A307197-01** | | Prepared & Analyzed: 07/10/03 | | | | | | |
| Cadmium | ND | 1.0 | mg/kg | | ND | | | | 20 | |
| Chromium | 33.7 | 5.0 | " | | 46 | | | 30.9 | 20 | QM-04 |
| Lead | 8.90 | 5.0 | " | | 11 | | | 21.1 | 20 | QM-04 |
| Nickel | 43.2 | 10 | " | | 53 | | | 20.4 | 20 | QM-04 |
| Zinc | 31.5 | 10 | " | | 33 | | | 4.65 | 20 | |
| **Matrix Spike (AG31004-MS1)** | | **Source: A307197-01** | | Prepared & Analyzed: 07/10/03 | | | | | | |
| Cadmium | 19.0 | 1.0 | mg/kg | 20.0 | ND | 95.0 | 70-130 | | | |
| Chromium | 54.8 | 5.0 | " | 20.0 | 46 | 44.0 | 70-130 | | | QM-04 |
| Lead | 28.2 | 5.0 | " | 20.0 | 11 | 86.0 | 70-130 | | | |
| Nickel | 64.2 | 10 | " | 20.0 | 53 | 56.0 | 70-130 | | | QM-04 |
| Zinc | 53.7 | 10 | " | 20.0 | 33 | 104 | 70-130 | | | |

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Nena M. Burgess For Sheri L. Speaks, Project Manager

Alpha Analytical Laboratories Inc.
208 Mason St. Ukiah, California 95482
e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

| | | |
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## Metals by EPA 6000/7000 Series Methods - Quality Control
## Alpha Analytical Laboratories, Inc.

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AG31004 - EPA 3051 Microwave** | | | | | | | | | | |
| **Matrix Spike Dup (AG31004-MSD1)** | **Source: A307197-01** | | | Prepared & Analyzed: 07/10/03 | | | | | | |
| Cadmium | 18.2 | 1.0 | mg/kg | 20.0 | ND | 91.0 | 70-130 | 4.30 | 20 | |
| Chromium | 59.5 | 5.0 | " | 20.0 | 46 | 67.5 | 70-130 | 8.22 | 20 | QM-04 |
| Lead | 29.2 | 5.0 | " | 20.0 | 11 | 91.0 | 70-130 | 3.48 | 20 | |
| Nickel | 68.3 | 10 | " | 20.0 | 53 | 76.5 | 70-130 | 6.19 | 20 | QM-04 |
| Zinc | 54.9 | 10 | " | 20.0 | 33 | 110 | 70-130 | 2.21 | 20 | |
| **Batch AG31502 - EPA 3051 Microwave** | | | | | | | | | | |
| **Blank (AG31502-BLK1)** | | | | Prepared: 07/15/03 Analyzed: 07/22/03 | | | | | | |
| Cadmium | ND | 1.0 | mg/kg | | | | | | | |
| Chromium | ND | 5.0 | " | | | | | | | |
| Lead | ND | 5.0 | " | | | | | | | |
| Nickel | ND | 10 | " | | | | | | | |
| Zinc | ND | 10 | " | | | | | | | |
| **LCS (AG31502-BS1)** | | | | Prepared: 07/15/03 Analyzed: 07/22/03 | | | | | | |
| Cadmium | 19.9 | 1.0 | mg/kg | 20.0 | | 99.5 | 85-115 | | | |
| Chromium | 19.6 | 5.0 | " | 20.0 | | 98.0 | 85-115 | | | |
| Lead | 20.1 | 5.0 | " | 20.0 | | 100 | 85-115 | | | |
| Nickel | 20.0 | 10 | " | 20.0 | | 100 | 85-115 | | | |
| Zinc | 21.3 | 10 | " | 20.0 | | 106 | 87.1-126 | | | |
| **LCS Dup (AG31502-BSD1)** | | | | Prepared: 07/15/03 Analyzed: 07/22/03 | | | | | | |
| Cadmium | 20.6 | 1.0 | mg/kg | 20.0 | | 103 | 85-115 | 3.46 | 20 | |
| Chromium | 20.4 | 5.0 | " | 20.0 | | 102 | 85-115 | 4.00 | 20 | |
| Lead | 20.8 | 5.0 | " | 20.0 | | 104 | 85-115 | 3.42 | 20 | |
| Nickel | 20.5 | 10 | " | 20.0 | | 102 | 85-115 | 2.47 | 20 | |
| Zinc | 22.4 | 10 | " | 20.0 | | 112 | 87.1-126 | 5.03 | 20 | |

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Alpha Analytical Laboratories Inc.
208 Mason St. Ukiah, California 95482
e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

| | | |
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| MFG, Inc | Project: SPI-Arcata/Task #4 | |
| 180 Howard St. Suite 200 | Project Number: 030229.4 | **Reported:** |
| San Francisco CA, 94105-2941 | Project Manager: Ed Conti | 07/26/03 09:17 |

## Metals by EPA 6000/7000 Series Methods - Quality Control
## Alpha Analytical Laboratories, Inc.

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AG31502 - EPA 3051 Microwave** | | | | | | | | | | |
| **Duplicate (AG31502-DUP1)** | **Source: A307292-12** | | | Prepared: 07/15/03 Analyzed: 07/22/03 | | | | | | |
| Cadmium | ND | 1.0 | mg/kg | | ND | | | | 20 | |
| Chromium | 49.7 | 5.0 | " | | 44 | | | 12.2 | 20 | |
| Lead | 13.9 | 5.0 | " | | 18 | | | 25.7 | 20 | QM-04 |
| Nickel | 41.1 | 10 | " | | 42 | | | 2.17 | 20 | |
| Zinc | 130 | 10 | " | | 140 | | | 7.41 | 20 | |
| **Matrix Spike (AG31502-MS1)** | **Source: A307292-12** | | | Prepared: 07/15/03 Analyzed: 07/22/03 | | | | | | |
| Cadmium | 17.8 | 1.0 | mg/kg | 20.0 | ND | 89.0 | 70-130 | | | |
| Chromium | 76.2 | 5.0 | " | 20.0 | 44 | 161 | 70-130 | | | QM-04 |
| Lead | 38.4 | 5.0 | " | 20.0 | 18 | 102 | 70-130 | | | |
| Nickel | 59.8 | 10 | " | 20.0 | 42 | 89.0 | 70-130 | | | |
| Zinc | 164 | 10 | " | 20.0 | 140 | 120 | 70-130 | | | |
| **Matrix Spike Dup (AG31502-MSD1)** | **Source: A307292-12** | | | Prepared: 07/15/03 Analyzed: 07/22/03 | | | | | | |
| Cadmium | 16.2 | 1.0 | mg/kg | 20.0 | ND | 81.0 | 70-130 | 9.41 | 20 | |
| Chromium | 50.6 | 5.0 | " | 20.0 | 44 | 33.0 | 70-130 | 40.4 | 20 | QM-04 |
| Lead | 30.8 | 5.0 | " | 20.0 | 18 | 64.0 | 70-130 | 22.0 | 20 | QM-04 |
| Nickel | 54.8 | 10 | " | 20.0 | 42 | 64.0 | 70-130 | 8.73 | 20 | QM-04 |
| Zinc | 137 | 10 | " | 20.0 | 140 | NR | 70-130 | 17.9 | 20 | QM-4X |

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Alpha Analytical Laboratories Inc.
208 Mason St. Ukiah, California 95482
e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

| | | |
|---|---|---|
| MFG, Inc | Project: SPI-Arcata/Task #4 | |
| 180 Howard St. Suite 200 | Project Number: 030229.4 | **Reported:** |
| San Francisco CA, 94105-2941 | Project Manager: Ed Conti | 07/26/03 09:17 |

## Chlorinated Phenols by Canadian Pulp Method - Quality Control
## Alpha Analytical Laboratories, Inc.

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AG32117 - Solvent Extraction** | | | | | | | | | | |
| **Blank (AG32117-BLK1)** | | | | Prepared: 07/16/03 Analyzed: 07/18/03 | | | | | | |
| 2,4,6-Trichlorophenol | ND | 1.0 | mg/kg | | | | | | | |
| 2,3,5,6-Tetrachlorophenol | ND | 1.0 | " | | | | | | | |
| 2,3,4,6-Tetrachlorophenol | ND | 1.0 | " | | | | | | | |
| 2,3,4,5-Tetrachlorophenol | ND | 1.0 | " | | | | | | | |
| Pentachlorophenol | ND | 1.0 | " | | | | | | | |
| *Surrogate: Tribromophenol* | *0.111* | | " | *0.124* | | *89.5* | *23-140* | | | |
| **LCS (AG32117-BS1)** | | | | Prepared: 07/16/03 Analyzed: 07/18/03 | | | | | | |
| 2,4,6-Trichlorophenol | 0.0186 | 1.0 | mg/kg | 0.0250 | | 74.4 | 32-116 | | | |
| 2,3,5,6-Tetrachlorophenol | 0.0139 | 1.0 | " | 0.0250 | | 55.6 | 18-80 | | | |
| 2,3,4,6-Tetrachlorophenol | 0.0170 | 1.0 | " | 0.0250 | | 68.0 | 28-89 | | | |
| 2,3,4,5-Tetrachlorophenol | 0.0182 | 1.0 | " | 0.0250 | | 72.8 | 54-85 | | | |
| Pentachlorophenol | 0.0159 | 1.0 | " | 0.0250 | | 63.6 | 17-85 | | | |
| *Surrogate: Tribromophenol* | *0.115* | | " | *0.124* | | *92.7* | *23-140* | | | |
| **LCS Dup (AG32117-BSD1)** | | | | Prepared: 07/16/03 Analyzed: 07/18/03 | | | | | | |
| 2,4,6-Trichlorophenol | 0.0224 | 1.0 | mg/kg | 0.0250 | | 89.6 | 32-116 | 18.5 | 50 | |
| 2,3,5,6-Tetrachlorophenol | 0.0115 | 1.0 | " | 0.0250 | | 46.0 | 18-80 | 18.9 | 50 | |
| 2,3,4,6-Tetrachlorophenol | 0.0182 | 1.0 | " | 0.0250 | | 72.8 | 28-89 | 6.82 | 50 | |
| 2,3,4,5-Tetrachlorophenol | 0.0173 | 1.0 | " | 0.0250 | | 69.2 | 54-85 | 5.07 | 50 | |
| Pentachlorophenol | 0.0154 | 1.0 | " | 0.0250 | | 61.6 | 17-85 | 3.19 | 50 | |
| *Surrogate: Tribromophenol* | *0.112* | | " | *0.124* | | *90.3* | *23-140* | | | |
| **Batch AG32119 - Solvent Extraction** | | | | | | | | | | |
| **Blank (AG32119-BLK1)** | | | | Prepared: 07/17/03 Analyzed: 07/19/03 | | | | | | |
| 2,4,6-Trichlorophenol | ND | 1.0 | mg/kg | | | | | | | |
| 2,3,5,6-Tetrachlorophenol | ND | 1.0 | " | | | | | | | |
| 2,3,4,6-Tetrachlorophenol | ND | 1.0 | " | | | | | | | |
| 2,3,4,5-Tetrachlorophenol | ND | 1.0 | " | | | | | | | |
| Pentachlorophenol | ND | 1.0 | " | | | | | | | |
| *Surrogate: Tribromophenol* | *0.0760* | | " | *0.124* | | *61.3* | *23-140* | | | |

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Alpha Analytical Laboratories Inc.
208 Mason St. Ukiah, California 95482
e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

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|---|---|---|
| MFG, Inc | Project: SPI-Arcata/Task #4 | |
| 180 Howard St. Suite 200 | Project Number: 030229.4 | **Reported:** |
| San Francisco CA, 94105-2941 | Project Manager: Ed Conti | 07/26/03 09:17 |

## Chlorinated Phenols by Canadian Pulp Method - Quality Control
## Alpha Analytical Laboratories, Inc.

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AG32119 - Solvent Extraction** | | | | | | | | | | |
| **LCS (AG32119-BS1)** | | | | Prepared: 07/17/03 Analyzed: 07/19/03 | | | | | | |
| 2,4,6-Trichlorophenol | 0.0157 | 1.0 | mg/kg | 0.0250 | | 62.8 | 32-116 | | | |
| 2,3,5,6-Tetrachlorophenol | 0.0112 | 1.0 | " | 0.0250 | | 44.8 | 18-80 | | | |
| 2,3,4,6-Tetrachlorophenol | 0.0131 | 1.0 | " | 0.0250 | | 52.4 | 28-89 | | | |
| 2,3,4,5-Tetrachlorophenol | 0.0144 | 1.0 | " | 0.0250 | | 57.6 | 54-85 | | | |
| Pentachlorophenol | 0.0123 | 1.0 | " | 0.0250 | | 49.2 | 17-85 | | | |
| *Surrogate: Tribromophenol* | *0.0660* | | " | *0.124* | | *53.2* | *23-140* | | | |
| **LCS Dup (AG32119-BSD1)** | | | | Prepared: 07/17/03 Analyzed: 07/19/03 | | | | | | |
| 2,4,6-Trichlorophenol | 0.0158 | 1.0 | mg/kg | 0.0250 | | 63.2 | 32-116 | 0.635 | 50 | |
| 2,3,5,6-Tetrachlorophenol | 0.0114 | 1.0 | " | 0.0250 | | 45.6 | 18-80 | 1.77 | 50 | |
| 2,3,4,6-Tetrachlorophenol | 0.0139 | 1.0 | " | 0.0250 | | 55.6 | 28-89 | 5.93 | 50 | |
| 2,3,4,5-Tetrachlorophenol | 0.0141 | 1.0 | " | 0.0250 | | 56.4 | 54-85 | 2.11 | 50 | |
| Pentachlorophenol | 0.0123 | 1.0 | " | 0.0250 | | 49.2 | 17-85 | 0.00 | 50 | |
| *Surrogate: Tribromophenol* | *0.0610* | | " | *0.124* | | *49.2* | *23-140* | | | |
| **Batch AG32121 - Solvent Extraction** | | | | | | | | | | |
| **Blank (AG32121-BLK1)** | | | | Prepared: 07/18/03 Analyzed: 07/21/03 | | | | | | |
| 2,4,6-Trichlorophenol | ND | 1.0 | mg/kg | | | | | | | |
| 2,3,5,6-Tetrachlorophenol | ND | 1.0 | " | | | | | | | |
| 2,3,4,6-Tetrachlorophenol | ND | 1.0 | " | | | | | | | |
| 2,3,4,5-Tetrachlorophenol | ND | 1.0 | " | | | | | | | |
| Pentachlorophenol | ND | 1.0 | " | | | | | | | |
| *Surrogate: Tribromophenol* | *0.0990* | | " | *0.124* | | *79.8* | *23-140* | | | |
| **LCS (AG32121-BS1)** | | | | Prepared: 07/18/03 Analyzed: 07/21/03 | | | | | | |
| 2,4,6-Trichlorophenol | 0.0164 | 1.0 | mg/kg | 0.0250 | | 65.6 | 32-116 | | | |
| 2,3,5,6-Tetrachlorophenol | 0.00870 | 1.0 | " | 0.0250 | | 34.8 | 18-80 | | | |
| 2,3,4,6-Tetrachlorophenol | 0.0151 | 1.0 | " | 0.0250 | | 60.4 | 28-89 | | | |
| 2,3,4,5-Tetrachlorophenol | 0.0144 | 1.0 | " | 0.0250 | | 57.6 | 54-85 | | | |
| Pentachlorophenol | 0.0103 | 1.0 | " | 0.0250 | | 41.2 | 17-85 | | | |
| *Surrogate: Tribromophenol* | *0.0770* | | " | *0.124* | | *62.1* | *23-140* | | | |

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Alpha Analytical Laboratories Inc.
208 Mason St. Ukiah, California 95482
e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

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| 180 Howard St. Suite 200 | Project Number: 030229.4 | **Reported:** |
| San Francisco CA, 94105-2941 | Project Manager: Ed Conti | 07/26/03 09:17 |

## Chlorinated Phenols by Canadian Pulp Method - Quality Control
## Alpha Analytical Laboratories, Inc.

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AG32121 - Solvent Extraction** | | | | | | | | | | |
| **LCS Dup (AG32121-BSD1)** | | | | Prepared: 07/18/03 Analyzed: 07/21/03 | | | | | | |
| 2,4,6-Trichlorophenol | 0.0180 | 1.0 | mg/kg | 0.0250 | | 72.0 | 32-116 | 9.30 | 50 | |
| 2,3,5,6-Tetrachlorophenol | 0.0113 | 1.0 | " | 0.0250 | | 45.2 | 18-80 | 26.0 | 50 | |
| 2,3,4,6-Tetrachlorophenol | 0.0155 | 1.0 | " | 0.0250 | | 62.0 | 28-89 | 2.61 | 50 | |
| 2,3,4,5-Tetrachlorophenol | 0.0153 | 1.0 | " | 0.0250 | | 61.2 | 54-85 | 6.06 | 50 | |
| Pentachlorophenol | 0.0107 | 1.0 | " | 0.0250 | | 42.8 | 17-85 | 3.81 | 50 | |
| *Surrogate: Tribromophenol* | *0.0870* | | *"* | *0.124* | | *70.2* | *23-140* | | | |
| **Batch AG32307 - Solvent Extraction** | | | | | | | | | | |
| **Blank (AG32307-BLK1)** | | | | Prepared: 07/20/03 Analyzed: 07/22/03 | | | | | | |
| 2,4,6-Trichlorophenol | ND | 1.0 | mg/kg | | | | | | | |
| 2,3,5,6-Tetrachlorophenol | ND | 1.0 | " | | | | | | | |
| 2,3,4,6-Tetrachlorophenol | ND | 1.0 | " | | | | | | | |
| 2,3,4,5-Tetrachlorophenol | ND | 1.0 | " | | | | | | | |
| Pentachlorophenol | ND | 1.0 | " | | | | | | | |
| *Surrogate: Tribromophenol* | *0.0990* | | *"* | *0.124* | | *79.8* | *23-140* | | | |
| **LCS (AG32307-BS1)** | | | | Prepared: 07/20/03 Analyzed: 07/22/03 | | | | | | |
| 2,4,6-Trichlorophenol | 0.0231 | 1.0 | mg/kg | 0.0250 | | 92.4 | 32-116 | | | |
| 2,3,5,6-Tetrachlorophenol | 0.0136 | 1.0 | " | 0.0250 | | 54.4 | 18-80 | | | |
| 2,3,4,6-Tetrachlorophenol | 0.0187 | 1.0 | " | 0.0250 | | 74.8 | 28-89 | | | |
| 2,3,4,5-Tetrachlorophenol | 0.0183 | 1.0 | " | 0.0250 | | 73.2 | 54-85 | | | |
| Pentachlorophenol | 0.0137 | 1.0 | " | 0.0250 | | 54.8 | 17-85 | | | |
| *Surrogate: Tribromophenol* | *0.0940* | | *"* | *0.124* | | *75.8* | *23-140* | | | |
| **LCS Dup (AG32307-BSD1)** | | | | Prepared: 07/20/03 Analyzed: 07/22/03 | | | | | | |
| 2,4,6-Trichlorophenol | 0.0291 | 1.0 | mg/kg | 0.0250 | | 116 | 32-116 | 23.0 | 50 | |
| 2,3,5,6-Tetrachlorophenol | 0.0109 | 1.0 | " | 0.0250 | | 43.6 | 18-80 | 22.0 | 50 | |
| 2,3,4,6-Tetrachlorophenol | 0.0169 | 1.0 | " | 0.0250 | | 67.6 | 28-89 | 10.1 | 50 | |
| 2,3,4,5-Tetrachlorophenol | 0.0152 | 1.0 | " | 0.0250 | | 60.8 | 54-85 | 18.5 | 50 | |
| Pentachlorophenol | 0.0110 | 1.0 | " | 0.0250 | | 44.0 | 17-85 | 21.9 | 50 | |
| *Surrogate: Tribromophenol* | *0.0750* | | *"* | *0.124* | | *60.5* | *23-140* | | | |

Alpha Analytical Laboratories, Inc.

Nena M. Burgess For Sheri L. Speaks, Project Manager

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Alpha Analytical Laboratories Inc.
208 Mason St. Ukiah, California 95482
e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

| | | |
|---|---|---|
| MFG, Inc | Project: SPI-Arcata/Task #4 | |
| 180 Howard St. Suite 200 | Project Number: 030229.4 | **Reported:** |
| San Francisco CA, 94105-2941 | Project Manager: Ed Conti | 07/26/03 09:17 |

## Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control
## Alpha Analytical Laboratories, Inc.

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AG31708 - General Preparation** | | | | | | | | | | |
| **Blank (AG31708-BLK1)** | | | | Prepared: 07/15/03 Analyzed: 07/18/03 | | | | | | |
| Oil & Grease (HEM) | ND | 50 | mg/kg | | | | | | | |
| **LCS (AG31708-BS1)** | | | | Prepared: 07/15/03 Analyzed: 07/18/03 | | | | | | |
| Oil & Grease (HEM) | 3490 | 50 | mg/kg | 3500 | | 99.7 | 80-120 | | | |
| **LCS Dup (AG31708-BSD1)** | | | | Prepared: 07/15/03 Analyzed: 07/18/03 | | | | | | |
| Oil & Grease (HEM) | 3490 | 50 | mg/kg | 3500 | | 99.7 | 80-120 | 0.00 | 20 | |
| **Duplicate (AG31708-DUP1)** | | **Source: A307292-05** | | Prepared: 07/15/03 Analyzed: 07/18/03 | | | | | | |
| Oil & Grease (HEM) | 5840 | 50 | mg/kg | | 6200 | | | 5.98 | 200 | |
| **Matrix Spike (AG31708-MS1)** | | **Source: A307292-05** | | Prepared: 07/15/03 Analyzed: 07/18/03 | | | | | | |
| Oil & Grease (HEM) | 9020 | 50 | mg/kg | 3000 | 6200 | 94.0 | 80-120 | | | |
| **Matrix Spike Dup (AG31708-MSD1)** | | **Source: A307292-05** | | Prepared: 07/15/03 Analyzed: 07/18/03 | | | | | | |
| Oil & Grease (HEM) | 9500 | 50 | mg/kg | 3000 | 6200 | 110 | 80-120 | 5.18 | 20 | |
| **Batch AG32506 - General Preparation** | | | | | | | | | | |
| **Blank (AG32506-BLK1)** | | | | Prepared: 07/23/03 Analyzed: 07/24/03 | | | | | | |
| Oil & Grease (HEM) | ND | 50 | mg/kg | | | | | | | |
| **LCS (AG32506-BS1)** | | | | Prepared: 07/23/03 Analyzed: 07/24/03 | | | | | | |
| Oil & Grease (HEM) | 3490 | 50 | mg/kg | 3500 | | 99.7 | 80-120 | | | |
| **LCS Dup (AG32506-BSD1)** | | | | Prepared: 07/23/03 Analyzed: 07/24/03 | | | | | | |
| Oil & Grease (HEM) | 3500 | 50 | mg/kg | 3500 | | 100 | 80-120 | 0.286 | 20 | |

Alpha Analytical Laboratories, Inc.

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

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Nena M. Burgess For Sheri L. Speaks, Project Manager

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208 Mason St. Ukiah, California 95482
e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

| | | |
|---|---|---|
| MFG, Inc | Project: SPI-Arcata/Task #4 | |
| 180 Howard St. Suite 200 | Project Number: 030229.4 | **Reported:** |
| San Francisco CA, 94105-2941 | Project Manager: Ed Conti | 07/26/03 09:17 |

## Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control
## Alpha Analytical Laboratories, Inc.

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AG32506 - General Preparation** | | | | | | | | | | |
| **Duplicate (AG32506-DUP1)** | | **Source: A307292-19** | | Prepared: 07/23/03 | Analyzed: 07/24/03 | | | | | |
| Oil & Grease (HEM) | 3340 | 50 | mg/kg | | 2300 | | | 36.9 | 200 | |
| **Matrix Spike (AG32506-MS1)** | | **Source: A307292-19** | | Prepared: 07/23/03 | Analyzed: 07/24/03 | | | | | |
| Oil & Grease (HEM) | 4420 | 50 | mg/kg | 2500 | 2300 | 84.8 | 80-120 | | | |
| **Matrix Spike Dup (AG32506-MSD1)** | | **Source: A307292-19** | | Prepared: 07/23/03 | Analyzed: 07/24/03 | | | | | |
| Oil & Grease (HEM) | 3720 | 50 | mg/kg | 2500 | 2300 | 56.8 | 80-120 | 17.2 | 20 | QM-05 |

Alpha Analytical Laboratories, Inc.

Nena M. Burgess For Sheri L. Speaks, Project Manager

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| | | |
|---|---|---|
| MFG, Inc | Project: SPI-Arcata/Task #4 | |
| 180 Howard St. Suite 200 | Project Number: 030229.4 | **Reported:** |
| San Francisco CA, 94105-2941 | Project Manager: Ed Conti | 07/26/03 09:17 |

## Notes and Definitions

| | |
|---|---|
| QM-04 | High RPD and/or poor percent recovery may reflect sample non-homogeneity. |
| QM-05 | The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable. |
| QM-4X | The spike recovery was outside of QC acceptance limits for the MS and/or MSD due to analyte concentration at 4 times or greater the spike concentration. The QC batch was accepted based on LCS and/or LCSD recoveries within the acceptance limits. |
| DET | Analyte DETECTED |
| ND | Analyte NOT DETECTED at or above the reporting limit |
| NR | Not Reported |
| dry | Sample results reported on a dry weight basis |
| RPD | Relative Percent Difference |

Alpha Analytical Laboratories, Inc.

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

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MFG, Inc.

Nena M. Burgess For Sheri L. Speaks, Project Manager

# MFG, INC.

## CHAIN-OF-CUSTODY RECORD AND REQUEST FOR ANALYSIS

COC No. 43263


☐ Arcata Office
1165 G Street, Suite E
Arcata, CA 95521-5817
Tel: (707) 826-8430
Fax: (707) 826-8437

☐ Boulder Office
4900 Pearl East Circle
Suite 300W
Boulder, CO 80301-6118
Tel: (303) 447-1823
Fax: (303) 447-1836

☐ Irvine Office
17770 Cartwright Road
Suite 500
Irvine, CA 92614-5850
Tel: (949) 253-2951
Fax: (949) 253-2954

☐ Osburn Office
P.O. Box 30
Wallace, ID
83873-0030
Tel: (208) 556-6811
Fax: (208) 556-7271

☒ San Francisco Office
180 Howard Street, Suite 200
San Francisco, CA 94105-1617
Phone (415) 495-7110 – Fax (415) 495-7107

☐ Seattle Office
19203 36th Avenue W.
Suite 101
Lynnwood, WA 98036-5707
Tel: (425) 921-4000
Fax: (425) 921-4040


PROJECT NO: 030229.4 PROJECT NAME: Sierra Pacific PAGE: 1 OF: 3

SAMPLER (Signature): PROJECT MANAGER: Ed Conti DATE: 7/10/03

METHOD OF SHIPMENT: courrier CARRIER/WAYBILL NO: NA DESTINATION: Alpha

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MFG, Inc.

| SAMPLES | | | | | | | | | | | | | | ANALYSIS REQUEST | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Sample | | | Preservation | | | | | Containers | | | | Constituents/Method | | | | Handling | | | Remarks |
| Field Sample Identification | DATE | TIME | Matrix* | HCl | $HNO_3$ | $H_2SO_4$ | COLD | FILTRATION* | VOLUME (ml/oz) | TYPE* | NO. | Weak Metals | pH | Total oil & grease | chlor. phenols | HOLD | RUSH | STANDARD | |
| RP-1 - 0.0 - 0.5 | 7/8/03 | 12:16 | SO | | | | X | U | 6"sl | B | 1 | X | X | X | X | | | X | 7/21/03 - 11:00 per Chris Spill - Re-run O&G with SG Cleanup. 1 thru 18 |
| RP-1 - 0.5 - 1.0 | | 12:22 | | | | | X | U | 6"sl | B | 1 | X | X | X | X | | | X | A307292-1 |
| RP-1 - 1.0 - 1.5 | | 12:27 | | | | | X | U | 6"sl | B | 1 | X | X | X | X | | | X | -2 |
| RP-1 - 1.5. 2.0 | | 12:31 | | | | | X | U | 6"sl | B | 1 | X | X | X | X | | | X | -3 |
| RP-1 - 2.0 - 2.5 | ↓ | 12:37 | ↓ | | | | X | U | 6"sl | B | 1 | X | X | X | X | | | X | -4 |
| RP-2 - 0.0 - 0.5 | 7/8/03 | 15:23 | SO | | | | X | U | 6"sl | B | 1 | X | X | X | X | | | X | -5 |
| RP-2 - 0.5 - 1.0 | | 15:26 | | | | | X | U | 6"sl | B | 1 | X | X | X | X | | | X | -6 |
| RP-2 - 1.0 - 1.5 | | 15:31 | | | | | X | U | 6"sl | B | 1 | X | X | X | X | | | X | -7 |
| RP-2 - 1.5 - 2.0 | | 15:36 | | | | | X | U | 6"sl | B | 1 | X | X | X | X | | | X | -8 |
| RP-2 - 2.0 - 2.5 | ↓ | 15:41 | ↓ | | | | X | U | 6"sl | B | 1 | X | X | X | X | | | X | -9 |
| | | | | | | | | | | | | | | | | | | | 10 |

TOTAL NUMBER OF CONTAINERS (29)

LABORATORY COMMENTS/CONDITION OF SAMPLES

Cooler Temp:

| RELINQUISHED BY: | | | | | RECIEVED BY: | | |
|---|---|---|---|---|---|---|---|
| SIGNATURE | PRINTED NAME | COMPANY | DATE | TIME | SIGNATURE | PRINTED NAME | COMPANY |
| | Christopher Spill | MFG-SF | 7/10/03 | 1:25 | J. Matthews | J. Matthews | |
| J. Matthews | J. Matthews | To Alpha | 7/10/03 | ~~18:45~~ | S. Speaks | S. Speaks | Alpha LABORATORY |
| | | | | 17:45 ss | | | |

*KEY Matrix: AQ - aqueous NA - nonaqueous SO - soil SL - sludge P - petroleum A - air OT - other Containers: P - plastic G - glass T - teflon B - brass OT - other Filtration: F - filtered U - unfiltered

DISTRIBUTION: PINK: Field Copy YELLOW: Laboratory Copy WHITE: Return to Originator

# MFG, INC.

## CHAIN-OF-CUSTODY RECORD AND REQUEST FOR ANALYSIS

COC No. 43131


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Fax: (707) 826-8437

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Suite 300W
Boulder, CO 80301-6118
Tel: (303) 447-1823
Fax: (303) 447-1836

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Suite 500
Irvine, CA 92614-5850
Tel: (949) 253-2951
Fax: (949) 253-2954

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San Francisco, CA 94105-1617
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19203 36th Avenue W.
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Lynnwood, WA 98036-5707
Tel: (425) 921-4000
Fax: (425) 921-4040

☐ _____


PROJECT NO: 030229.4 PROJECT NAME: Sierra Pacific PAGE: 3 OF: 3

SAMPLER (Signature): _____ PROJECT MANAGER: Ed Conti DATE: 7/10/03

METHOD OF SHIPMENT: Courier CARRIER/WAYBILL NO: NA DESTINATION: Alpha

| SAMPLES | | | | | | | | | | | | | ANALYSIS REQUEST | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Sample | | | Preservation | | | | | | Containers | | | Constituents/Method | | | | Handling | | | Remarks |
| Field Sample Identification | DATE | TIME | Matrix* | HCl | $HNO_3$ | $H_2SO_4$ | COLD | | FILTRATION* | VOLUME (ml/oz) | TYPE* | NO. | Vet Metals | pH | Total O&G | Chlor. Phenols | HOLD | RUSH | STANDARD | |
| D7-11-0.0-0.5 | 7/10/03 | 9:36 | SO | | | | X | | U | 6"s1 | B | 1 | X | X | X | X | | | X | A307292-21 |
| D7-12-0.0-0.5 | | 10:00 | | | | | X | | U | 6"s1 | B | 1 | X | X | X | X | | | X | 22 |
| D7-13-0.0-0.5 | | 10:15 | | | | | X | | U | 6"s1 | B | 1 | X | X | X | X | | | X | 23 |
| D7-14-0.0-0.5 | | 10:45 | | | | | X | | U | 6"s1 | B | 1 | X | X | X | X | | | X | 24 |
| D7-15-0.0-0.5 | | 11:05 | | | | | X | | U | 6"s1 | B | 1 | X | X | X | X | | | X | 25 |
| D7-16-0.0-0.5 | | 11:25 | | | | | X | | U | 6"s1 | B | 1 | X | X | X | X | | | X | 26 |
| D7-17-0.0-0.5 | ↓ | 11:45 | ↓ | | | | X | | U | 6"s1 | B | 1 | X | X | X | X | | | X | 27 |
| SDP-1-0.0-0.5 | 7/9/03 | 9:12 | SO | | | | X | | U | 6"s1 | B | 1 | X | X | X | X | | | X | 28 |
| SDP-1-2.0-2.5 | ↓ | 9:25 | ↓ | | | | X | | U | 6"s1 | B | 1 | X | X | X | X | | | X | 29 |
| | | | | | | | | | | | | | | | | | | | | |

TOTAL NUMBER OF CONTAINERS 29

LABORATORY COMMENTS/CONDITION OF SAMPLES

Cooler Temp:

| RELINQUISHED BY: | | | | | RECIEVED BY: | | |
|---|---|---|---|---|---|---|---|
| SIGNATURE | PRINTED NAME | COMPANY | DATE | TIME | SIGNATURE | PRINTED NAME | COMPANY |
| | Christopher Spill | MFG-SF | 7/10/03 | 1:25 | J. Matthews | | |
| | J. Matthews | Alpha | 7/10/03 | ~~15:45~~ | B. Speaks | S. Speaks | |
| | | | | 17:45 | | | LABORATORY |

*KEY Matrix: AQ - aqueous NA - nonaqueous SO - soil SL - sludge P - petroleum A - air OT - other Containers: P - plastic G - glass T - teflon B - brass OT - other Filtration: F - filtered U - unfiltered

DISTRIBUTION: PINK: Field Copy YELLOW: Laboratory Copy WHITE: Return to Originator

# MFG, INC.

## CHAIN-OF-CUSTODY RECORD AND REQUEST FOR ANALYSIS

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Fax: (707) 826-8437

☐ Boulder Office
4900 Pearl East Circle
Suite 300W
Boulder, CO 80301-6118
Tel: (303) 447-1823
Fax: (303) 447-1836

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17770 Cartwright Road
Suite 500
Irvine, CA 92614-5850
Tel: (949) 253-2951
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☐ Seattle Office
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Lynnwood, WA 98036-5707
Tel: (425) 921-4000
Fax: (425) 921-4040

☐


PROJECT NO: 030229.4 PROJECT NAME: Sierra Pacific PAGE: 2 OF: 3

SAMPLER (Signature): [signature] PROJECT MANAGER: Ed Conti DATE: 7/10/03

METHOD OF SHIPMENT: Courier CARRIER/WAYBILL NO: NA DESTINATION: Alpha

### SAMPLES

### ANALYSIS REQUEST

| Field Sample Identification | Sample DATE | Sample TIME | Matrix* | Preservation HCl | Preservation $HNO_3$ | Preservation $H_2SO_4$ | Preservation COLD | Preservation | FILTRATION* | Containers VOLUME (ml/oz) | Containers TYPE* | Containers NO. | Constituents/Method Metal Metals | Constituents/Method pH | Constituents/Method Total O&G | Constituents/Method Chlor. Phenols | Handling HOLD | Handling RUSH | Handling STANDARD | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| D7-1-0.0-0.5 | 7/9/03 | 10:20 | SO | | | | X | | U | 6"s1 | B | 1 | X | X | X | X | | | X | A307292-11 |
| D7-2-0.0-0.5 | | 10:52 | | | | | X | | U | 6"s1 | B | 1 | X | X | X | X | | | X | 12 |
| D7-3-0.0-0.5 | | 11:40 | | | | | X | | U | 6"s1 | B | 1 | X | X | X | X | | | X | 13 |
| D7-4-0.0-0.5 | | 12:30 | | | | | X | | U | 6"s1 | B | 1 | X | X | X | X | | | X | 14 |
| D7-5-0.0-0.5 | | | | | | | X | | U | 6"s1 | B | 1 | X | X | X | X | | | X | 15 |
| D7-6-0.0-0.5 | | 15:37 | | | | | X | | U | 6"s1 | B | 1 | X | X | X | X | | | X | 16 |
| D7-7-0.0-0.5 | | 16:25 | | | | | X | | U | 6"s1 | B | 1 | X | X | X | X | | | X | 17 |
| D7-8-0.0-0.5 | | 17:20 | | | | | X | | U | 6"s1 | B | 1 | X | X | X | X | | | X | 18 |
| D7-9-0.0-0.5 | 7/10/03 | 8:40 | SO | | | | X | | U | 6"s1 | B | 1 | X | X | X | X | | | X | 19 |
| D7-10-0.0-0.5 | | 9:10 | | | | | X | | U | 6"s1 | B | 1 | X | X | X | X | | | X | 20 |

Remarks: 7/29/03 -0930 Spill per Chris Spill Re-run O&G with SG Cleanup. 19 thru 29

TOTAL NUMBER OF CONTAINERS 29

LABORATORY COMMENTS/CONDITION OF SAMPLES

Cooler Temp:

### RELINQUISHED BY:

| SIGNATURE | PRINTED NAME | COMPANY | DATE | TIME |
|---|---|---|---|---|
| [signature] | Christopher Spill | MFG-SF | 7/10/03 | 1:25 |
| [signature] | J. Matthews | Alpha | 7/10/03 | ~~15:45~~ |
| | | | | 17.45 SS |

### RECIEVED BY:

| SIGNATURE | PRINTED NAME | COMPANY |
|---|---|---|
| J. Matthews | | |
| S. Speaks | S. Speaks | Alpha LABORATORY |
| | | |

*KEY Matrix: AQ - aqueous NA - nonaqueous SO - soil SL - sludge P - petroleum A - air OT - other Containers: P - plastic G - glass T - teflon B - brass OT - other Filtration: F - filtered U - unfiltered

DISTRIBUTION: PINK: Field Copy · YELLOW: Laboratory Copy WHITE: Return to Originator

Alpha Analytical Laboratories Inc.
208 Mason St. Ukiah, California 95482
e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

07 August 2003

MFG, Inc
Attn: Ed Conti
180 Howard St. Suite 200
San Francisco, CA 94105-2941
RE: SPI-Arcata/Task #4
Work Order: A307477

Enclosed are the results of analyses for samples received by the laboratory on 07/21/03 11:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Cheryl Watson For Karen A. Daly
Project Manager

Alpha Analytical Laboratories Inc.
208 Mason St. Ukiah, California 95482
e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

# CHEMICAL EXAMINATION REPORT



MFG, Inc
180 Howard St. Suite 200
San Francisco, CA 94105-2941
Attn: Ed Conti

Report Date: 08/07/03 10:21
Project No: 030229.4
Project ID: SPI-Arcata/Task #4

| Order Number | Receipt Date/Time | Client Code | Client PO/Reference |
|---|---|---|---|
| A307477 | 07/21/2003 11:00 | MFGINC | |

## ANALYTICAL REPORT FOR SAMPLES

| Sample ID | Laboratory ID | Matrix | Date Sampled | Date Received |
|---|---|---|---|---|
| RP-1 - 0.0-0.5 (ref. A307292-1) | A307477-01 | Soil | 07/08/03 12:16 | 07/21/03 11:00 |
| RP-1 - 0.5-1.0 (ref. A307292-02) | A307477-02 | Soil | 07/08/03 12:22 | 07/21/03 11:00 |
| RP-1 - 1.0-1.5 (ref. A307292-03) | A307477-03 | Soil | 07/08/03 12:27 | 07/21/03 11:00 |
| RP-1 - 1.5-2.0 (ref. A307292-04) | A307477-04 | Soil | 07/08/03 12:31 | 07/21/03 11:00 |
| RP-1 - 2.0-2.5 (ref. A307292-05) | A307477-05 | Soil | 07/08/03 12:37 | 07/21/03 11:00 |
| RP-2 - 0.0-0.5 (ref. A307292-06) | A307477-06 | Soil | 07/08/03 15:23 | 07/21/03 11:00 |
| RP-2 - 0.5-1.0 (ref. A307292-07) | A307477-07 | Soil | 07/08/03 15:26 | 07/21/03 11:00 |
| RP-2 - 1.0-1.5 (ref. A307292-08) | A307477-08 | Soil | 07/08/03 15:31 | 07/21/03 11:00 |
| RP-2 - 1.5-2.0 (ref. A307292-09) | A307477-09 | Soil | 07/08/03 15:36 | 07/21/03 11:00 |
| RP-2 - 2.0-2.5 (ref. A307292-10) | A307477-10 | Soil | 07/08/03 15:41 | 07/21/03 11:00 |
| D7-1 - 0.0-0.5 (ref. A307292-11) | A307477-11 | Soil | 07/09/03 10:20 | 07/21/03 11:00 |
| D7-2 - 0.0-0.5 (ref. A307292-12) | A307477-12 | Soil | 07/09/03 10:52 | 07/21/03 11:00 |
| D7-3 - 0.0-0.5 (ref. A307292-13) | A307477-13 | Soil | 07/09/03 11:40 | 07/21/03 11:00 |
| D7-4 - 0.0-0.5 (ref. A307292-14) | A307477-14 | Soil | 07/09/03 12:30 | 07/21/03 11:00 |
| D7-5 - 0.0-0.5 (ref. A307292-15) | A307477-15 | Soil | 07/09/03 00:00 | 07/21/03 11:00 |
| D7-6 - 0.0-0.5 (ref. A307292-16) | A307477-16 | Soil | 07/09/03 15:37 | 07/21/03 11:00 |
| D7-7 - 0.0-0.5 (ref. A307292-17) | A307477-17 | Soil | 07/09/03 16:25 | 07/21/03 11:00 |
| D7-8 - 0.0-0.5 (ref. A307292-18) | A307477-18 | Soil | 07/09/03 17:20 | 07/21/03 11:00 |
| D7-9 - 0.0-0.5 (ref. A307292-19) | A307477-19 | Soil | 07/10/03 08:40 | 07/21/03 11:00 |
| D7-10 - 0.0-0.5 (ref. A307292-20) | A307477-20 | Soil | 07/10/03 09:10 | 07/21/03 11:00 |
| D7-11 - 0.0-0.5 (ref. A307292-21) | A307477-21 | Soil | 07/10/03 09:36 | 07/21/03 11:00 |
| D7-12 - 0.0-0.5 (ref. A307292-22) | A307477-22 | Soil | 07/10/03 10:00 | 07/21/03 11:00 |
| D7-13 - 0.0-0.5 (ref. A307292-23) | A307477-23 | Soil | 07/10/03 10:15 | 07/21/03 11:00 |
| D7-14 - 0.0-0.5 (ref. A307292-24) | A307477-24 | Soil | 07/10/03 10:45 | 07/21/03 11:00 |

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Cheryl Watson For Karen A. Daly
Project Manager

8/7/03

Alpha Analytical Laboratories Inc.
208 Mason St. Ukiah, California 95482
e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267



## CHEMICAL EXAMINATION REPORT



MFG, Inc
180 Howard St. Suite 200
San Francisco, CA 94105-2941
Attn: Ed Conti

Report Date: 08/07/03 10:21
Project No: 030229.4
Project ID: SPI-Arcata/Task #4

| Order Number | Receipt Date/Time | Client Code | Client PO/Reference |
|---|---|---|---|
| A307477 | 07/21/2003 11:00 | MFGINC | |

| | | | | |
|---|---|---|---|---|
| D7-15 - 0.0-0.5 (ref. A307292-25) | A307477-25 | Soil | 07/10/03 11:05 | 07/21/03 11:00 |
| D7-16 - 0.0-0.5 (ref. A307292-26) | A307477-26 | Soil | 07/10/03 11:25 | 07/21/03 11:00 |
| D7-17 - 0.0-0.5 (ref. A307292-27) | A307477-27 | Soil | 07/10/03 11:45 | 07/21/03 11:00 |
| SDP-1 - 0.0-0.5 (ref. A307292-28) | A307477-28 | Soil | 07/09/03 09:12 | 07/21/03 11:00 |
| SDP-1 - 2.0-2.5 (ref. A307292-29) | A307477-29 | Soil | 07/09/03 09:25 | 07/21/03 11:00 |

Receive date indicates date additional analysis requested. Actual receive date was 7/10/03 17:45.

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Cheryl Watson For Karen A. Daly
Project Manager

8/7/03

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### Alpha Analytical Laboratories, Inc.

| | METHOD | BATCH | PREPARED | ANALYZED | DILUTION | RESULT | PQL | NOTE |
|---|---|---|---|---|---|---|---|---|
| **RP-1 - 0.0-0.5 (ref. A307292-1) (A307477-01)** | | | **Sample Type: Soil** | | | **Sampled: 07/08/03 12:16** | | |
| **Conventional Chemistry Parameters by APHA/EPA Methods** | | | | | | | | |
| **Oil & Grease (HEM-SG)** | EPA 9071B | AH30412 | 07/25/03 | 07/30/03 | 1 | **6400 mg/kg** | **50** | |
| **RP-1 - 0.5-1.0 (ref. A307292-02) (A307477-02)** | | | **Sample Type: Soil** | | | **Sampled: 07/08/03 12:22** | | |
| **Conventional Chemistry Parameters by APHA/EPA Methods** | | | | | | | | |
| **Oil & Grease (HEM-SG)** | EPA 9071B | AH30412 | 07/25/03 | 07/30/03 | 1 | **13000 mg/kg** | **50** | |
| **RP-1 - 1.0-1.5 (ref. A307292-03) (A307477-03)** | | | **Sample Type: Soil** | | | **Sampled: 07/08/03 12:27** | | |
| **Conventional Chemistry Parameters by APHA/EPA Methods** | | | | | | | | |
| **Oil & Grease (HEM-SG)** | EPA 9071B | AH30412 | 07/25/03 | 07/30/03 | 1 | **25000 mg/kg** | **50** | |
| **RP-1 - 1.5-2.0 (ref. A307292-04) (A307477-04)** | | | **Sample Type: Soil** | | | **Sampled: 07/08/03 12:31** | | |
| **Conventional Chemistry Parameters by APHA/EPA Methods** | | | | | | | | |
| **Oil & Grease (HEM-SG)** | EPA 9071B | AH30412 | 07/25/03 | 07/30/03 | 1 | **5000 mg/kg** | **50** | |
| **RP-1 - 2.0-2.5 (ref. A307292-05) (A307477-05)** | | | **Sample Type: Soil** | | | **Sampled: 07/08/03 12:37** | | |
| **Conventional Chemistry Parameters by APHA/EPA Methods** | | | | | | | | |
| **Oil & Grease (HEM-SG)** | EPA 9071B | AH30412 | 07/25/03 | 07/30/03 | 1 | **7100 mg/kg** | **50** | |
| **RP-2 - 0.0-0.5 (ref. A307292-06) (A307477-06)** | | | **Sample Type: Soil** | | | **Sampled: 07/08/03 15:23** | | |
| **Conventional Chemistry Parameters by APHA/EPA Methods** | | | | | | | | |
| **Oil & Grease (HEM-SG)** | EPA 9071B | AH30412 | 07/25/03 | 07/30/03 | 1 | **75 mg/kg** | **50** | |
| **RP-2 - 0.5-1.0 (ref. A307292-07) (A307477-07)** | | | **Sample Type: Soil** | | | **Sampled: 07/08/03 15:26** | | |
| **Conventional Chemistry Parameters by APHA/EPA Methods** | | | | | | | | |
| **Oil & Grease (HEM-SG)** | EPA 9071B | AH30412 | 07/25/03 | 07/30/03 | 1 | **130 mg/kg** | **50** | |
| **RP-2 - 1.0-1.5 (ref. A307292-08) (A307477-08)** | | | **Sample Type: Soil** | | | **Sampled: 07/08/03 15:31** | | |
| **Conventional Chemistry Parameters by APHA/EPA Methods** | | | | | | | | |
| **Oil & Grease (HEM-SG)** | EPA 9071B | AH30412 | 07/25/03 | 07/30/03 | 1 | **160 mg/kg** | **50** | |
| **RP-2 - 1.5-2.0 (ref. A307292-09) (A307477-09)** | | | **Sample Type: Soil** | | | **Sampled: 07/08/03 15:36** | | |

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Cheryl Watson For Karen A. Daly
Project Manager

8/7/03

Alpha Analytical Laboratories Inc.
208 Mason St. Ukiah, California 95482
e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

## CHEMICAL EXAMINATION REPORT



MFG, Inc
180 Howard St. Suite 200
San Francisco, CA 94105-2941
Attn: Ed Conti

Report Date: 08/07/03 10:21
Project No: 030229.4
Project ID: SPI-Arcata/Task #4

| Order Number | Receipt Date/Time | Client Code | Client PO/Reference |
|---|---|---|---|
| A307477 | 07/21/2003 11:00 | MFGINC | |

### Alpha Analytical Laboratories, Inc.

| | METHOD | BATCH | PREPARED | ANALYZED | DILUTION | RESULT | PQL | NOTE |
|---|---|---|---|---|---|---|---|---|
| **RP-2 - 1.5-2.0 (ref. A307292-09) (A307477-09)** | | | **Sample Type: Soil** | | | **Sampled: 07/08/03 15:36** | | |
| **Conventional Chemistry Parameters by APHA/EPA Methods** | | | | | | | | |
| **Oil & Grease (HEM-SG)** | EPA 9071B | AH30412 | 07/25/03 | 07/30/03 | 1 | **50 mg/kg** | **50** | |
| **RP-2 - 2.0-2.5 (ref. A307292-10) (A307477-10)** | | | **Sample Type: Soil** | | | **Sampled: 07/08/03 15:41** | | |
| **Conventional Chemistry Parameters by APHA/EPA Methods** | | | | | | | | |
| **Oil & Grease (HEM-SG)** | EPA 9071B | AH30412 | 07/25/03 | 07/30/03 | 1 | **70 mg/kg** | **50** | |
| **D7-1 - 0.0-0.5 (ref. A307292-11) (A307477-11)** | | | **Sample Type: Soil** | | | **Sampled: 07/09/03 10:20** | | |
| **Conventional Chemistry Parameters by APHA/EPA Methods** | | | | | | | | |
| **Oil & Grease (HEM-SG)** | EPA 9071B | AH30412 | 07/25/03 | 07/30/03 | 1 | **400 mg/kg** | **50** | |
| **D7-2 - 0.0-0.5 (ref. A307292-12) (A307477-12)** | | | **Sample Type: Soil** | | | **Sampled: 07/09/03 10:52** | | |
| **Conventional Chemistry Parameters by APHA/EPA Methods** | | | | | | | | |
| **Oil & Grease (HEM-SG)** | EPA 9071B | AH30412 | 07/25/03 | 07/30/03 | 1 | **780 mg/kg** | **50** | |
| **D7-3 - 0.0-0.5 (ref. A307292-13) (A307477-13)** | | | **Sample Type: Soil** | | | **Sampled: 07/09/03 11:40** | | |
| **Conventional Chemistry Parameters by APHA/EPA Methods** | | | | | | | | |
| **Oil & Grease (HEM-SG)** | EPA 9071B | AH30412 | 07/29/03 | 07/30/03 | 1 | **1100 mg/kg** | **50** | |
| **D7-4 - 0.0-0.5 (ref. A307292-14) (A307477-14)** | | | **Sample Type: Soil** | | | **Sampled: 07/09/03 12:30** | | |
| **Conventional Chemistry Parameters by APHA/EPA Methods** | | | | | | | | |
| **Oil & Grease (HEM-SG)** | EPA 9071B | AH30412 | 07/29/03 | 07/30/03 | 1 | **1500 mg/kg** | **50** | |
| **D7-5 - 0.0-0.5 (ref. A307292-15) (A307477-15)** | | | **Sample Type: Soil** | | | **Sampled: 07/09/03 00:00** | | |
| **Conventional Chemistry Parameters by APHA/EPA Methods** | | | | | | | | |
| **Oil & Grease (HEM-SG)** | EPA 9071B | AH30412 | 07/29/03 | 07/30/03 | 1 | **3200 mg/kg** | **50** | |
| **D7-6 - 0.0-0.5 (ref. A307292-16) (A307477-16)** | | | **Sample Type: Soil** | | | **Sampled: 07/09/03 15:37** | | |
| **Conventional Chemistry Parameters by APHA/EPA Methods** | | | | | | | | |
| **Oil & Grease (HEM-SG)** | EPA 9071B | AH30412 | 07/29/03 | 07/30/03 | 1 | **100 mg/kg** | **50** | |
| **D7-7 - 0.0-0.5 (ref. A307292-17) (A307477-17)** | | | **Sample Type: Soil** | | | **Sampled: 07/09/03 16:25** | | |

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Cheryl Watson For Karen A. Daly
Project Manager

8/7/03

Alpha Analytical Laboratories Inc.
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e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267



## CHEMICAL EXAMINATION REPORT



MFG, Inc
180 Howard St. Suite 200
San Francisco, CA 94105-2941
Attn: Ed Conti

Report Date: 08/07/03 10:21
Project No: 030229.4
Project ID: SPI-Arcata/Task #4

| Order Number | Receipt Date/Time | Client Code | Client PO/Reference |
|---|---|---|---|
| A307477 | 07/21/2003 11:00 | MFGINC | |

### Alpha Analytical Laboratories, Inc.

| | METHOD | BATCH | PREPARED | ANALYZED | DILUTION | RESULT | PQL | NOTE |
|---|---|---|---|---|---|---|---|---|
| **D7-7 - 0.0-0.5 (ref. A307292-17) (A307477-17)** | | | **Sample Type: Soil** | | | **Sampled: 07/09/03 16:25** | | |
| **Conventional Chemistry Parameters by APHA/EPA Methods** | | | | | | | | |
| **Oil & Grease (HEM-SG)** | EPA 9071B | AH30412 | 07/29/03 | 07/30/03 | 1 | **160 mg/kg** | **50** | |
| **D7-8 - 0.0-0.5 (ref. A307292-18) (A307477-18)** | | | **Sample Type: Soil** | | | **Sampled: 07/09/03 17:20** | | |
| **Conventional Chemistry Parameters by APHA/EPA Methods** | | | | | | | | |
| **Oil & Grease (HEM-SG)** | EPA 9071B | AH30412 | 07/29/03 | 07/30/03 | 1 | **1200 mg/kg** | **50** | |
| **D7-9 - 0.0-0.5 (ref. A307292-19) (A307477-19)** | | | **Sample Type: Soil** | | | **Sampled: 07/10/03 08:40** | | |
| **Conventional Chemistry Parameters by APHA/EPA Methods** | | | | | | | | |
| **Oil & Grease (HEM-SG)** | EPA 9071B | AH30412 | 07/29/03 | 07/30/03 | 1 | **320 mg/kg** | **50** | |
| **D7-10 - 0.0-0.5 (ref. A307292-20) (A307477-20)** | | | **Sample Type: Soil** | | | **Sampled: 07/10/03 09:10** | | |
| **Conventional Chemistry Parameters by APHA/EPA Methods** | | | | | | | | |
| **Oil & Grease (HEM-SG)** | EPA 9071B | AH30606 | 07/31/03 | 08/01/03 | 1 | **630 mg/kg** | **50** | |
| **D7-11 - 0.0-0.5 (ref. A307292-21) (A307477-21)** | | | **Sample Type: Soil** | | | **Sampled: 07/10/03 09:36** | | |
| **Conventional Chemistry Parameters by APHA/EPA Methods** | | | | | | | | |
| **Oil & Grease (HEM-SG)** | EPA 9071B | AH30606 | 07/31/03 | 08/01/03 | 1 | **6100 mg/kg** | **50** | |
| **D7-12 - 0.0-0.5 (ref. A307292-22) (A307477-22)** | | | **Sample Type: Soil** | | | **Sampled: 07/10/03 10:00** | | |
| **Conventional Chemistry Parameters by APHA/EPA Methods** | | | | | | | | |
| **Oil & Grease (HEM-SG)** | EPA 9071B | AH30606 | 07/31/03 | 08/01/03 | 1 | **120 mg/kg** | **50** | |
| **D7-13 - 0.0-0.5 (ref. A307292-23) (A307477-23)** | | | **Sample Type: Soil** | | | **Sampled: 07/10/03 10:15** | | |
| **Conventional Chemistry Parameters by APHA/EPA Methods** | | | | | | | | |
| **Oil & Grease (HEM-SG)** | EPA 9071B | AH30606 | 07/31/03 | 08/01/03 | 1 | **960 mg/kg** | **50** | |
| **D7-14 - 0.0-0.5 (ref. A307292-24) (A307477-24)** | | | **Sample Type: Soil** | | | **Sampled: 07/10/03 10:45** | | |
| **Conventional Chemistry Parameters by APHA/EPA Methods** | | | | | | | | |
| **Oil & Grease (HEM-SG)** | EPA 9071B | AH30606 | 07/31/03 | 08/01/03 | 1 | **840 mg/kg** | **50** | |
| **D7-15 - 0.0-0.5 (ref. A307292-25) (A307477-25)** | | | **Sample Type: Soil** | | | **Sampled: 07/10/03 11:05** | | |

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Cheryl Watson For Karen A. Daly
Project Manager

8/7/03

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## CHEMICAL EXAMINATION REPORT



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San Francisco, CA 94105-2941
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|---|---|---|---|
| A307477 | 07/21/2003 11:00 | MFGINC | |

### Alpha Analytical Laboratories, Inc.

| | METHOD | BATCH | PREPARED | ANALYZED | DILUTION | RESULT | PQL | NOTE |
|---|---|---|---|---|---|---|---|---|
| **D7-15 - 0.0-0.5 (ref. A307292-25) (A307477-25)** | | | **Sample Type: Soil** | | | **Sampled: 07/10/03 11:05** | | |
| **Conventional Chemistry Parameters by APHA/EPA Methods** | | | | | | | | |
| **Oil & Grease (HEM-SG)** | EPA 9071B | AH30606 | 07/31/03 | 08/01/03 | 1 | **1100 mg/kg** | **50** | |
| **D7-16 - 0.0-0.5 (ref. A307292-26) (A307477-26)** | | | **Sample Type: Soil** | | | **Sampled: 07/10/03 11:25** | | |
| **Conventional Chemistry Parameters by APHA/EPA Methods** | | | | | | | | |
| **Oil & Grease (HEM-SG)** | EPA 9071B | AH30606 | 07/31/03 | 08/01/03 | 1 | **7200 mg/kg** | **50** | |
| **D7-17 - 0.0-0.5 (ref. A307292-27) (A307477-27)** | | | **Sample Type: Soil** | | | **Sampled: 07/10/03 11:45** | | |
| **Conventional Chemistry Parameters by APHA/EPA Methods** | | | | | | | | |
| **Oil & Grease (HEM-SG)** | EPA 9071B | AH30606 | 07/31/03 | 08/01/03 | 1 | **11000 mg/kg** | **50** | |
| **SDP-1 - 0.0-0.5 (ref. A307292-28) (A307477-28)** | | | **Sample Type: Soil** | | | **Sampled: 07/09/03 09:12** | | |
| **Conventional Chemistry Parameters by APHA/EPA Methods** | | | | | | | | |
| **Oil & Grease (HEM-SG)** | EPA 9071B | AH30606 | 07/31/03 | 08/01/03 | 1 | **3600 mg/kg** | **50** | |
| **SDP-1 - 2.0-2.5 (ref. A307292-29) (A307477-29)** | | | **Sample Type: Soil** | | | **Sampled: 07/09/03 09:25** | | |
| **Conventional Chemistry Parameters by APHA/EPA Methods** | | | | | | | | |
| **Oil & Grease (HEM-SG)** | EPA 9071B | AH30606 | 07/31/03 | 08/01/03 | 1 | **150 mg/kg** | **50** | |



Cheryl Watson For Karen A. Daly
Project Manager

8/7/03

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## CHEMICAL EXAMINATION REPORT



MFG, Inc
180 Howard St. Suite 200
San Francisco, CA 94105-2941
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Report Date: 08/07/03 10:21
Project No: 030229.4
Project ID: SPI-Arcata/Task #4

| Order Number | Receipt Date/Time | Client Code | Client PO/Reference |
|---|---|---|---|
| A307477 | 07/21/2003 11:00 | MFGINC | |

SourceResult

### Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

| Analyte(s) | Result | PQL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Flag |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AH30412 - General Preparation** | | | | | | | | | | |
| **Blank (AH30412-BLK1)** | | | | Prepared: 07/25/03 Analyzed: 07/30/03 | | | | | | |
| Oil & Grease (HEM-SG) | ND | 50 | mg/kg | | | | | | | |
| **LCS (AH30412-BS1)** | | | | Prepared: 07/25/03 Analyzed: 07/30/03 | | | | | | |
| Oil & Grease (HEM-SG) | 2940 | 50 | mg/kg | 3000 | | 98.0 | 80-120 | | | |
| **LCS Dup (AH30412-BSD1)** | | | | Prepared: 07/29/03 Analyzed: 07/30/03 | | | | | | |
| Oil & Grease (HEM-SG) | 2920 | 50 | mg/kg | 3000 | | 97.3 | 80-120 | 0.683 | 20 | |
| **Matrix Spike (AH30412-MS1)** | | **Source: A307477-17** | | Prepared: 07/25/03 Analyzed: 07/30/03 | | | | | | |
| Oil & Grease (HEM-SG) | 1550 | 50 | mg/kg | 1500 | 160 | 92.7 | 70-130 | | | |
| **Matrix Spike Dup (AH30412-MSD1)** | | **Source: A307477-17** | | Prepared: 07/25/03 Analyzed: 07/30/03 | | | | | | |
| Oil & Grease (HEM-SG) | 1560 | 50 | mg/kg | 1500 | 160 | 93.3 | 70-130 | 0.643 | 20 | |
| **Batch AH30606 - General Preparation** | | | | | | | | | | |
| **Blank (AH30606-BLK1)** | | | | Prepared: 08/04/03 Analyzed: 08/05/03 | | | | | | |
| Oil & Grease (HEM-SG) | ND | 50 | mg/kg | | | | | | | |
| **LCS (AH30606-BS1)** | | | | Prepared: 08/04/03 Analyzed: 08/05/03 | | | | | | |
| Oil & Grease (HEM-SG) | 2720 | 50 | mg/kg | 3000 | | 90.7 | 80-120 | | | |
| **LCS Dup (AH30606-BSD1)** | | | | Prepared: 08/04/03 Analyzed: 08/05/03 | | | | | | |
| Oil & Grease (HEM-SG) | 2900 | 50 | mg/kg | 3000 | | 96.7 | 80-120 | 6.41 | 20 | |
| **Duplicate (AH30606-DUP1)** | | **Source: A307477-21** | | Prepared: 08/04/03 Analyzed: 08/05/03 | | | | | | |
| Oil & Grease (HEM-SG) | 7880 | 50 | mg/kg | | 6100 | | | 25.5 | 200 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Cheryl Watson For Karen A. Daly
Project Manager

8/7/03

Alpha Analytical Laboratories Inc.
208 Mason St. Ukiah, California 95482
e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

## CHEMICAL EXAMINATION REPORT



MFG, Inc
180 Howard St. Suite 200
San Francisco, CA 94105-2941
Attn: Ed Conti

Report Date: 08/07/03 10:21
Project No: 030229.4
Project ID: SPI-Arcata/Task #4

| Order Number | Receipt Date/Time | Client Code | Client PO/Reference |
|---|---|---|---|
| A307477 | 07/21/2003 11:00 | MFGINC | |

### Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

| Analyte(s) | Result | PQL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Flag |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AH30606 - General Preparation** | | | | | | | | | | |
| **Duplicate (AH30606-DUP2)** | **Source: A307477-29** | | | Prepared: 08/04/03 | | Analyzed: 08/05/03 | | | | |
| Oil & Grease (HEM-SG) | 130 | 50 | mg/kg | | 150 | | | 14.3 | 200 | |
| **Matrix Spike (AH30606-MS1)** | **Source: A307477-29** | | | Prepared: 08/04/03 | | Analyzed: 08/05/03 | | | | |
| Oil & Grease (HEM-SG) | 1560 | 50 | mg/kg | 1500 | 150 | 94.0 | 70-120 | | | |
| **Matrix Spike Dup (AH30606-MSD1)** | **Source: A307477-29** | | | Prepared: 08/04/03 | | Analyzed: 08/05/03 | | | | |
| Oil & Grease (HEM-SG) | 1610 | 50 | mg/kg | 1500 | 150 | 97.3 | 70-120 | 3.15 | 20 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Cheryl Watson For Karen A. Daly
Project Manager

8/7/03

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## CHEMICAL EXAMINATION REPORT



MFG, Inc
180 Howard St. Suite 200
San Francisco, CA 94105-2941
Attn: Ed Conti

Report Date: 08/07/03 10:21
Project No: 030229.4
Project ID: SPI-Arcata/Task #4

| Order Number | Receipt Date/Time | Client Code | Client PO/Reference |
|---|---|---|---|
| A307477 | 07/21/2003 11:00 | MFGINC | |

**Notes and Definitions**

| | |
|---|---|
| DET | Analyte DETECTED |
| ND | Analyte NOT DETECTED at or above the reporting limit |
| NR | Not Reported |
| dry | Sample results reported on a dry weight basis |
| RPD | Relative Percent Difference |
| PQL | Practical Quantitation Limit |

# MFG, INC.

## CHAIN-OF-CUSTODY RECORD AND REQUEST FOR ANALYSIS

COC No. 43263


☐ Arcata Office
1165 G Street, Suite E
Arcata, CA 95521-5817
Tel: (707) 826-8430
Fax: (707) 826-8437

☐ Boulder Office
4900 Pearl East Circle
Suite 300W
Boulder, CO 80301-6118
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Irvine, CA 92614-5850
Tel: (949) 253-2951
Fax: (949) 253-2954

☐ Osburn Office
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83873-0030
Tel: (208) 556-6811
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180 Howard Street, Suite 200
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Phone (415) 495-7110 – Fax (415) 495-7107

☐ Seattle Office
19203 36th Avenue W.
Suite 101
Lynnwood, WA 98036-5707
Tel: (425) 921-4000
Fax: (425) 921-4040

☐


PROJECT NO: 030229.4 PROJECT NAME: Sierra Pacific PAGE: 1 OF: 3

SAMPLER (Signature): PROJECT MANAGER: Ed Conti DATE: 7/10/03

METHOD OF SHIPMENT: courrier CARRIER/WAYBILL NO: NA DESTINATION: Alpha

**SAMPLES** — **ANALYSIS REQUEST** A307477

| Field Sample Identification | Sample DATE | Sample TIME | Matrix* | Preservation HCl | $HNO_3$ | $H_2SO_4$ | COLD | FILTRATION* | Containers VOLUME (ml/oz) | Containers TYPE* | Containers NO. | Constituents/Method: Metals | pH | Total Oil & Grease | Chlor. phenols | Handling: HOLD | RUSH | STANDARD | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RP-1 - 0.0 - 0.5 | 7/8/03 | 12:16 | SO | | | | X | U | 6"sl | B | 1 | X | X | X | X | | | X | A307292-1 |
| RP-1 - 0.5 - 1.0 | | 12:22 | | | | | X | U | 6"sl | B | 1 | X | X | X | X | | | X | -2 |
| RP-1 - 1.0 - 1.5 | | 12:27 | | | | | X | U | 6"sl | B | 1 | X | X | X | X | | | X | -3 |
| RP-1 - 1.5. 2.0 | | 12:31 | | | | | X | U | 6"sl | B | 1 | X | X | X | X | | | X | -4 |
| RP-1 - 2.0 - 2.5 | ↓ | 12:37 | ↓ | | | | X | U | 6"sl | B | 1 | X | X | X | X | | | X | -5 |
| RP-2 - 0.0 - 0.5 | 7/8/03 | 15:23 | SO | | | | X | U | 6"sl | B | 1 | X | X | X | X | | | X | -6 |
| RP-2 - 0.5 - 1.0 | | 15:26 | | | | | X | U | 6"sl | B | 1 | X | X | X | X | | | X | -7 |
| RP-2 - 1.0 - 1.5 | | 15:31 | | | | | X | U | 6"sl | B | 1 | X | X | X | X | | | X | -8 |
| RP-2 - 1.5 - 2.0 | | 15:36 | | | | | X | U | 6"sl | B | 1 | X | X | X | X | | | X | -9 |
| RP-2 - 2.0 - 2.5 | ↓ | 15:41 | ↓ | | | | X | U | 6"sl | B | 1 | X | X | X | X | | | X | 10 |

TOTAL NUMBER OF CONTAINERS (29)

LABORATORY COMMENTS/CONDITION OF SAMPLES

Cooler Temp:

7/21/03 - 11 00 per Chris Spill - Re-run O&G with SG Cleanup. 18

RECEIVED AUG 11 2003 MFG Inc.

| RELINQUISHED BY: SIGNATURE | PRINTED NAME | COMPANY | DATE | TIME | RECIEVED BY: SIGNATURE | PRINTED NAME | COMPANY |
|---|---|---|---|---|---|---|---|
| | Christopher Spill | MFG-SF | 7/10/03 | 1:25 | J. Matthews | J. Matthews | |
| J. Matthews | J. Matthews | Alpha | 7/10/03 | ~~18:45~~ 17:45 | S. Speaks | S. Speaks | Alpha LABORATORY |

*KEY Matrix: AQ - aqueous NA - nonaqueous SO - soil SL - sludge P - petroleum A - air OT - other Containers: P - plastic G - glass T - teflon B - brass OT - other Filtration: F - filtered U - unfiltered

DISTRIBUTION: PINK: Field Copy YELLOW: Laboratory Copy WHITE: Return to Originator

# MFG, INC.

## CHAIN-OF-CUSTODY RECORD AND REQUEST FOR ANALYSIS

COC No. 43130


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Arcata, CA 95521-5817
Tel: (707) 826-8430
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☐ Boulder Office
4900 Pearl East Circle
Suite 300W
Boulder, CO 80301-6118
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17770 Cartwright Road
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☐ Osburn Office
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Wallace, ID
83873-0030
Tel: (208) 556-6811
Fax: (208) 556-7271

☒ San Francisco Office
180 Howard Street, Suite 200
San Francisco, CA 94105-1617
Phone (415) 495-7110 – Fax (415) 495-7107

☐ Seattle Office
19203 36th Avenue W.
Suite 101
Lynnwood, WA 98036-5707
Tel: (425) 921-4000
Fax: (425) 921-4040


PROJECT NO: 030229.4 PROJECT NAME: Sierra Pacific PAGE: 2 OF: 3

SAMPLER (Signature): [signature] PROJECT MANAGER: Ed Conti DATE: 7/10/03

METHOD OF SHIPMENT: Courier CARRIER/WAYBILL NO: NA DESTINATION: Alpha

### SAMPLES

| Field Sample Identification | Sample DATE | Sample TIME | Matrix* | Preservation HCl | $HNO_3$ | $H_2SO_4$ | COLD | FILTRATION* | Containers VOLUME (ml/oz) | TYPE* | NO. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| D7-1-0.0-0.5 | 7/9/03 | 10:20 | SO | | | | X | U | 6"s | B | 1 |
| D7-2-0.0-0.5 | | 10:52 | | | | | X | U | 6"s | B | 1 |
| D7-3-0.0-0.5 | | 11:40 | | | | | X | U | 6"s | B | 1 |
| D7-4-0.0-0.5 | | 12:30 | | | | | X | U | 6"s | B | 1 |
| D7-5-0.0-0.5 | | | | | | | X | U | 6"s | B | 1 |
| D7-6-0.0-0.5 | | 15:37 | | | | | X | U | 6"s | B | 1 |
| D7-7-0.0-0.5 | | 16:25 | | | | | X | U | 6"s | B | 1 |
| D7-8-0.0-0.5 | | 17:20 | | | | | X | U | 6"s | B | 1 |
| D7-9-0.0-0.5 | 7/10/03 | 8:40 | SO | | | | X | U | 6"s | B | 1 |
| D7-10-0.0-0.5 | | 9:10 | | | | | X | U | 6"s | B | 1 |

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TOTAL NUMBER OF CONTAINERS 29

### ANALYSIS REQUEST

| Constituents/Method: Wear Metals | pH | Total O&G | Chlor. Phenols | Handling: HOLD | RUSH | STANDARD | Remarks |
|---|---|---|---|---|---|---|---|
| X | X | X | X | | | X | A307477- |
| X | X | X | X | | | X | A307292-11 |
| X | X | X | X | | | X | 12 |
| X | X | X | X | | | X | 13 |
| X | X | X | X | | | X | 14 |
| X | X | X | X | | | X | 15 |
| X | X | X | X | | | X | 16 |
| X | X | X | X | | | X | 17 |
| X | X | X | X | | | X | 18 |
| X | X | X | X | | | X | 19 |
| X | X | X | X | | | X | 20 |

Return to Alpha 7/11/03 2:17:03

LABORATORY COMMENTS/CONDITION OF SAMPLES

Cooler Temp:

### RELINQUISHED BY:

| SIGNATURE | PRINTED NAME | COMPANY | DATE | TIME |
|---|---|---|---|---|
| [signature] | Christopher Spill | MFG-SF | 7/10/03 | 1:25 |
| [signature] | J. Matthews | Alpha | 7/10/03 | ~~15:45~~ 17:45 |
| | | | | |

### RECIEVED BY:

| SIGNATURE | PRINTED NAME | COMPANY |
|---|---|---|
| J. Matthews | | |
| S. Speaks | S. Speaks | Alpha |
| | | LABORATORY |

*KEY Matrix: AQ - aqueous NA - nonaqueous SO - soil SL - sludge P - petroleum A - air OT - other Containers: P - plastic G - glass T - teflon B - brass OT - other Filtration: F - filtered U - unfiltered

DISTRIBUTION: PINK: Field Copy YELLOW: Laboratory Copy WHITE: Return to Originator

# MFG, INC.

## CHAIN-OF-CUSTODY RECORD AND REQUEST FOR ANALYSIS

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Boulder, CO 80301-6118
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☐ Seattle Office
19203 36th Avenue W.
Suite 101
Lynnwood, WA 98036-5707
Tel: (425) 921-4000
Fax: (425) 921-4040

☐


PROJECT NO: 030229.4 PROJECT NAME: Sierra Pacific PAGE: 3 OF: 3

SAMPLER (Signature): PROJECT MANAGER: Ed Conti DATE: 7/10/03

METHOD OF SHIPMENT: Courier CARRIER/WAYBILL NO: NA DESTINATION: Alpha

### SAMPLES

### ANALYSIS REQUEST

| Field Sample Identification | Sample DATE | Sample TIME | Sample Matrix* | Preservation HCl | Preservation $HNO_3$ | Preservation $H_2SO_4$ | Preservation COLD | Preservation | FILTRATION* | Containers VOLUME (ml/oz) | Containers TYPE* | Containers NO. | Constituents/Method Vol. Metals | Constituents/Method pH | Constituents/Method Total O&G | Constituents/Method Chlor. Phenols | Handling HOLD | Handling RUSH | Handling STANDARD | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | | | | | | A 307477- |
| D7-11-0.0-0.5 | 7/10/03 | 9:36 | SO | | | | X | | U | 6"s/l | B | 1 | X | X | X | X | | | X | A307292-21 |
| D7-12-0.0-0.5 | | 10:00 | | | | | X | | U | 6"s/l | B | 1 | X | X | X | X | | | X | 22 |
| D7-13-0.0-0.5 | | 10:15 | | | | | X | | U | 6"s/l | B | 1 | X | X | X | X | | | X | 23 |
| D7-14-0.0-0.5 | | 10:45 | | | | | X | | U | 6"s/l | B | 1 | X | X | X | X | | | X | 24 |
| D7-15-0.0-0.5 | | 11:05 | | | | | X | | U | 6"s/l | B | 1 | X | X | X | X | | | X | 25 |
| D7-16-0.0-0.5 | | 11:25 | | | | | X | | U | 6"s/l | B | 1 | X | X | X | X | | | X | 26 |
| D7-17-0.0-0.5 | ↓ | 11:45 | ↓ | | | | X | | U | 6"s/l | B | 1 | X | X | X | X | | | X | 27 |
| SDP-1-0.0-0.5 | 7/9/03 | 9:12 | SO | | | | X | | U | 6"s/l | B | 1 | X | X | X | X | | | X | 28 |
| SDP-1-2.0-2.5 | ↓ | 9:25 | ↓ | | | | X | | U | 6"s/l | B | 1 | X | X | X | X | | | X | 29 |
| | | | | | | | | | | | | | | | | | | | | |

RECEIVED
AUG 11 2003
MFG, Inc.

TOTAL NUMBER OF CONTAINERS 29

LABORATORY COMMENTS/CONDITION OF SAMPLES

Cooler Temp:

### RELINQUISHED BY:

| SIGNATURE | PRINTED NAME | COMPANY | DATE | TIME |
|---|---|---|---|---|
| | Christopher Spill | MFG-SF | 7/10/03 | 1:25 |
| | J. Matthews | Alpha | 7/10/03 | ~~15:45~~ |
| | | | | 17:45 |

### RECIEVED BY:

| SIGNATURE | PRINTED NAME | COMPANY |
|---|---|---|
| J. Matthews | | |
| S. Speaks | S. Speaks | |
| | | LABORATORY |

*KEY Matrix: AQ - aqueous NA - nonaqueous SO - soil SL - sludge P - petroleum A - air OT - other Containers: P - plastic G - glass T - teflon B - brass OT - other Filtration: F - filtered U - unfiltered

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Alpha Analytical Laboratories Inc.
208 Mason St. Ukiah, California 95482
e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

11 August 2003

MFG, Inc
Attn: Ed Conti
180 Howard St. Suite 200
San Francisco, CA 94105-2941
RE: SPI-Arcata/Task #4
Work Order: A307606

Enclosed are the results of analyses for samples received by the laboratory on 07/25/03 15:40. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Sheri Speaks

Sheri L. Speaks
Project Manager

Alpha Analytical Laboratories Inc.
208 Mason St. Ukiah, California 95482
e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

# CHEMICAL EXAMINATION REPORT



MFG, Inc
180 Howard St. Suite 200
San Francisco, CA 94105-2941
Attn: Ed Conti

Report Date: 08/11/03 07:56
Project No: 030229.4
Project ID: SPI-Arcata/Task #4

| Order Number | Receipt Date/Time | Client Code | Client PO/Reference |
|---|---|---|---|
| A307606 | 07/25/2003 15:40 | MFGINC | |

## ANALYTICAL REPORT FOR SAMPLES

| Sample ID | Laboratory ID | Matrix | Date Sampled | Date Received |
|---|---|---|---|---|
| D6-1-0.0-0.5 | A307606-01 | Soil | 07/22/03 09:35 | 07/25/03 15:40 |
| D6-2-0.0-0.5 | A307606-02 | Soil | 07/22/03 10:25 | 07/25/03 15:40 |
| D6-3-0.0-0.5 | A307606-03 | Soil | 07/22/03 11:10 | 07/25/03 15:40 |
| D6-4-0.0-0.5 | A307606-04 | Soil | 07/22/03 11:45 | 07/25/03 15:40 |
| D6-5-0.0-0.5 | A307606-05 | Soil | 07/22/03 15:00 | 07/25/03 15:40 |
| D6-6-0.0-0.5 | A307606-06 | Soil | 07/22/03 15:30 | 07/25/03 15:40 |
| D6-7-0.0-0.5 | A307606-07 | Soil | 07/22/03 16:05 | 07/25/03 15:40 |
| D6-8-0.0-0.5 | A307606-08 | Soil | 07/23/03 09:00 | 07/25/03 15:40 |
| D6-9-0.0-0.5 | A307606-09 | Soil | 07/23/03 09:50 | 07/25/03 15:40 |
| D6-10-0.0-0.5 | A307606-10 | Soil | 07/23/03 10:20 | 07/25/03 15:40 |
| D6-11-0.0-0.5 | A307606-11 | Soil | 07/23/03 10:50 | 07/25/03 15:40 |
| D6-12-0.0-0.5 | A307606-12 | Soil | 07/23/03 11:10 | 07/25/03 15:40 |
| D6-13-0.0-0.5 | A307606-13 | Soil | 07/23/03 13:50 | 07/25/03 15:40 |
| D6-14-0.0-0.5 | A307606-14 | Soil | 07/23/03 14:30 | 07/25/03 15:40 |
| D6-15-0.0-0.5 | A307606-15 | Soil | 07/23/03 15:00 | 07/25/03 15:40 |
| D6-16-0.0-0.5 | A307606-16 | Soil | 07/23/03 15:30 | 07/25/03 15:40 |
| D6-17-0.0-0.5 | A307606-17 | Soil | 07/23/03 16:10 | 07/25/03 15:40 |
| D6-18-0.0-0.5 | A307606-18 | Soil | 07/24/03 09:15 | 07/25/03 15:40 |
| D6-19-0.0-0.5 | A307606-19 | Soil | 07/24/03 09:35 | 07/25/03 15:40 |
| D6-20-0.0-0.5 | A307606-20 | Soil | 07/24/03 09:40 | 07/25/03 15:40 |
| D6-21-0.0-0.5 | A307606-21 | Soil | 07/24/03 10:00 | 07/25/03 15:40 |
| D6-22-0.0-0.5 | A307606-22 | Soil | 07/24/03 10:20 | 07/25/03 15:40 |
| D6-23-0.0-0.5 | A307606-23 | Soil | 07/24/03 10:35 | 07/25/03 15:40 |
| D6-24-0.0-0.5 | A307606-24 | Soil | 07/24/03 10:50 | 07/25/03 15:40 |



Sheri Speaks

Sheri L. Speaks
Project Manager

8/11/03

Alpha Analytical Laboratories Inc.
208 Mason St. Ukiah, California 95482
e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

## CHEMICAL EXAMINATION REPORT



MFG, Inc
180 Howard St. Suite 200
San Francisco, CA 94105-2941
Attn: Ed Conti

Report Date: 08/11/03 07:56
Project No: 030229.4
Project ID: SPI-Arcata/Task #4

| Order Number | Receipt Date/Time | Client Code | Client PO/Reference |
|---|---|---|---|
| A307606 | 07/25/2003 15:40 | MFGINC | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Sheri Speaks

Sheri L. Speaks
Project Manager

8/11/03

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208 Mason St. Ukiah, California 95482
e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

# CHEMICAL EXAMINATION REPORT



MFG, Inc
180 Howard St. Suite 200
San Francisco, CA 94105-2941
Attn: Ed Conti

Report Date: 08/11/03 07:56
Project No: 030229.4
Project ID: SPI-Arcata/Task #4

| Order Number | Receipt Date/Time | Client Code | Client PO/Reference |
|---|---|---|---|
| A307606 | 07/25/2003 15:40 | MFGINC | |

## Alpha Analytical Laboratories, Inc.

| | METHOD | BATCH | PREPARED | ANALYZED | DILUTION | RESULT | PQL | NOTE |
|---|---|---|---|---|---|---|---|---|
| **D6-1-0.0-0.5 (A307606-01)** | | | **Sample Type: Soil** | | | **Sampled: 07/22/03 09:35** | | |
| **Metals by EPA 6000/7000 Series Methods** | | | | | | | | |
| Cadmium | EPA 6010 | AG33003 | 07/30/03 | 08/01/03 | 1 | ND mg/kg | 1.0 | |
| **Chromium** | " | " | " | " | " | **42 "** | **5.0** | |
| **Nickel** | " | " | " | " | " | **56 "** | **10** | |
| **Lead** | " | " | " | " | " | **31 "** | **5.0** | |
| **Zinc** | " | " | " | " | " | **110 "** | **10** | |
| **Chlorinated Phenols by Canadian Pulp Method** | | | | | | | | |
| 2,4,6-Trichlorophenol | EnvCan | AG33102 | 07/28/03 | 07/29/03 | 1 | ND mg/kg | 1.0 | |
| 2,3,5,6-Tetrachlorophenol | " | " | " | " | " | ND " | 1.0 | |
| 2,3,4,6-Tetrachlorophenol | " | " | " | " | " | ND " | 1.0 | |
| 2,3,4,5-Tetrachlorophenol | " | " | " | " | " | ND " | 1.0 | |
| Pentachlorophenol | " | " | " | " | " | ND " | 1.0 | |
| *Surrogate: Tribromophenol* | " | " | " | " | | *66.1 %* *23-140* | | |
| **Conventional Chemistry Parameters by APHA/EPA Methods** | | | | | | | | |
| **Oil & Grease (HEM-SG)** | EPA 9071B | AH30822 | 08/05/03 | 08/08/03 | 1 | **1600 mg/kg** | **50** | |
| **Oil & Grease (HEM)** | " | AH30717 | 08/05/03 | 08/07/03 | " | **3700 "** | **50** | |
| **pH** | EPA 9045B | AH30614 | 07/28/03 | 07/28/03 | " | **6.2 pH Units** | **1.0** | |
| **D6-2-0.0-0.5 (A307606-02)** | | | **Sample Type: Soil** | | | **Sampled: 07/22/03 10:25** | | |
| **Metals by EPA 6000/7000 Series Methods** | | | | | | | | |
| Cadmium | EPA 6010 | AG33003 | 07/30/03 | 08/01/03 | 1 | ND mg/kg | 1.0 | |
| **Chromium** | " | " | " | " | " | **48 "** | **5.0** | |
| **Nickel** | " | " | " | " | " | **63 "** | **10** | |
| **Lead** | " | " | " | " | " | **59 "** | **5.0** | |
| **Zinc** | " | " | " | " | " | **190 "** | **10** | |

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Sheri Speaks

Sheri L. Speaks
Project Manager

8/11/03

Alpha Analytical Laboratories Inc.
208 Mason St. Ukiah, California 95482
e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267



## CHEMICAL EXAMINATION REPORT



MFG, Inc
180 Howard St. Suite 200
San Francisco, CA 94105-2941
Attn: Ed Conti

Report Date: 08/11/03 07:56
Project No: 030229.4
Project ID: SPI-Arcata/Task #4

| Order Number | Receipt Date/Time | Client Code | Client PO/Reference |
|---|---|---|---|
| A307606 | 07/25/2003 15:40 | MFGINC | |

### Alpha Analytical Laboratories, Inc.

| | METHOD | BATCH | PREPARED | ANALYZED | DILUTION | RESULT | | PQL | NOTE |
|---|---|---|---|---|---|---|---|---|---|
| **D6-2-0.0-0.5 (A307606-02)** | | | **Sample Type: Soil** | | | **Sampled: 07/22/03 10:25** | | | |
| **Chlorinated Phenols by Canadian Pulp Method** | | | | | | | | | |
| 2,4,6-Trichlorophenol | EnvCan | AG33102 | 07/28/03 | 07/29/03 | 1 | ND mg/kg | | 1.0 | |
| 2,3,5,6-Tetrachlorophenol | " | " | " | " | " | ND " | | 1.0 | |
| 2,3,4,6-Tetrachlorophenol | " | " | " | " | " | ND " | | 1.0 | |
| 2,3,4,5-Tetrachlorophenol | " | " | " | " | " | ND " | | 1.0 | |
| Pentachlorophenol | " | " | " | " | " | ND " | | 1.0 | |
| *Surrogate: Tribromophenol* | " | " | " | " | | *75.0 %* | *23-140* | | |
| **Conventional Chemistry Parameters by APHA/EPA Methods** | | | | | | | | | |
| **Oil & Grease (HEM-SG)** | EPA 9071B | AH30822 | 08/05/03 | 08/08/03 | 1 | **6000 mg/kg** | | **50** | |
| **Oil & Grease (HEM)** | " | AH30717 | 08/05/03 | 08/07/03 | " | **12000 "** | | **50** | |
| **pH** | EPA 9045B | AH30614 | 07/28/03 | 07/28/03 | " | **6.4 pH Units** | | **1.0** | |
| **D6-3-0.0-0.5 (A307606-03)** | | | **Sample Type: Soil** | | | **Sampled: 07/22/03 11:10** | | | |
| **Metals by EPA 6000/7000 Series Methods** | | | | | | | | | |
| Cadmium | EPA 6010 | AG33003 | 07/30/03 | 08/01/03 | 1 | ND mg/kg | | 1.0 | |
| **Chromium** | " | " | " | " | " | **44 "** | | **5.0** | |
| **Nickel** | " | " | " | " | " | **58 "** | | **10** | |
| **Lead** | " | " | " | " | " | **37 "** | | **5.0** | |
| **Zinc** | " | " | " | " | " | **280 "** | | **10** | |
| **Chlorinated Phenols by Canadian Pulp Method** | | | | | | | | | |
| 2,4,6-Trichlorophenol | EnvCan | AG33102 | 07/28/03 | 07/29/03 | 1 | ND mg/kg | | 1.0 | |
| 2,3,5,6-Tetrachlorophenol | " | " | " | " | " | ND " | | 1.0 | |
| 2,3,4,6-Tetrachlorophenol | " | " | " | " | " | ND " | | 1.0 | |
| 2,3,4,5-Tetrachlorophenol | " | " | " | " | " | ND " | | 1.0 | |
| Pentachlorophenol | " | " | " | " | " | ND " | | 1.0 | |
| *Surrogate: Tribromophenol* | " | " | " | " | | *64.5 %* | *23-140* | | |

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Sheri Speaks

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Project Manager

8/11/03

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208 Mason St. Ukiah, California 95482
e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

## CHEMICAL EXAMINATION REPORT



MFG, Inc
180 Howard St. Suite 200
San Francisco, CA 94105-2941
Attn: Ed Conti

Report Date: 08/11/03 07:56
Project No: 030229.4
Project ID: SPI-Arcata/Task #4

| Order Number | Receipt Date/Time | Client Code | Client PO/Reference |
|---|---|---|---|
| A307606 | 07/25/2003 15:40 | MFGINC | |

### Alpha Analytical Laboratories, Inc.

| | METHOD | BATCH | PREPARED | ANALYZED | DILUTION | RESULT | PQL | NOTE |
|---|---|---|---|---|---|---|---|---|
| **D6-3-0.0-0.5 (A307606-03)** | | | **Sample Type: Soil** | | | **Sampled: 07/22/03 11:10** | | |
| **Conventional Chemistry Parameters by APHA/EPA Methods** | | | | | | | | |
| **Oil & Grease (HEM-SG)** | EPA 9071B | AH30822 | 08/05/03 | 08/08/03 | 1 | **4000 mg/kg** | **50** | |
| **Oil & Grease (HEM)** | " | AH30717 | 08/05/03 | 08/07/03 | " | **10000 "** | **50** | |
| **pH** | EPA 9045B | AH30614 | 07/28/03 | 07/28/03 | " | **6.4 pH Units** | **1.0** | |
| **D6-4-0.0-0.5 (A307606-04)** | | | **Sample Type: Soil** | | | **Sampled: 07/22/03 11:45** | | |
| **Metals by EPA 6000/7000 Series Methods** | | | | | | | | |
| Cadmium | EPA 6010 | AG33003 | 07/30/03 | 08/01/03 | 1 | ND mg/kg | 1.0 | |
| **Chromium** | " | " | " | " | " | **40 "** | **5.0** | |
| **Nickel** | " | " | " | " | " | **49 "** | **10** | |
| **Lead** | " | " | " | " | " | **29 "** | **5.0** | |
| **Zinc** | " | " | " | " | " | **160 "** | **10** | |
| **Chlorinated Phenols by Canadian Pulp Method** | | | | | | | | |
| 2,4,6-Trichlorophenol | EnvCan | AG33102 | 07/28/03 | 07/29/03 | 1 | ND mg/kg | 1.0 | |
| 2,3,5,6-Tetrachlorophenol | " | " | " | " | " | ND " | 1.0 | |
| 2,3,4,6-Tetrachlorophenol | " | " | " | " | " | ND " | 1.0 | |
| 2,3,4,5-Tetrachlorophenol | " | " | " | " | " | ND " | 1.0 | |
| Pentachlorophenol | " | " | " | " | " | ND " | 1.0 | |
| *Surrogate: Tribromophenol* | " | " | " | " | | *64.5 %* *23-140* | | |
| **Conventional Chemistry Parameters by APHA/EPA Methods** | | | | | | | | |
| **Oil & Grease (HEM-SG)** | EPA 9071B | AH30822 | 08/05/03 | 08/08/03 | 1 | **1600 mg/kg** | **50** | |
| **Oil & Grease (HEM)** | " | AH30717 | 08/05/03 | 08/07/03 | " | **5800 "** | **50** | |
| **pH** | EPA 9045B | AH30614 | 07/28/03 | 07/28/03 | " | **6.4 pH Units** | **1.0** | |
| **D6-5-0.0-0.5 (A307606-05)** | | | **Sample Type: Soil** | | | **Sampled: 07/22/03 15:00** | | |
| **Metals by EPA 6000/7000 Series Methods** | | | | | | | | |
| Cadmium | EPA 6010 | AG33003 | 07/30/03 | 08/01/03 | 1 | ND mg/kg | 1.0 | |
| **Chromium** | " | " | " | " | " | **37 "** | **5.0** | |
| **Nickel** | " | " | " | " | " | **44 "** | **10** | |

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Sheri Speaks

Sheri L. Speaks
Project Manager

8/11/03

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208 Mason St. Ukiah, California 95482
e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

## CHEMICAL EXAMINATION REPORT



MFG, Inc
180 Howard St. Suite 200
San Francisco, CA 94105-2941
Attn: Ed Conti

Report Date: 08/11/03 07:56
Project No: 030229.4
Project ID: SPI-Arcata/Task #4

| Order Number | Receipt Date/Time | Client Code | Client PO/Reference |
|---|---|---|---|
| A307606 | 07/25/2003 15:40 | MFGINC | |

### Alpha Analytical Laboratories, Inc.

| | METHOD | BATCH | PREPARED | ANALYZED | DILUTION | RESULT | PQL | NOTE |
|---|---|---|---|---|---|---|---|---|
| **D6-5-0.0-0.5 (A307606-05)** | | | **Sample Type: Soil** | | | **Sampled: 07/22/03 15:00** | | |
| **Metals by EPA 6000/7000 Series Methods (cont'd)** | | | | | | | | |
| **Lead** | EPA 6010 | " | " | 08/01/03 | " | **24 "** | **5.0** | |
| **Zinc** | " | " | " | " | " | **76 "** | **10** | |
| **Chlorinated Phenols by Canadian Pulp Method** | | | | | | | | |
| 2,4,6-Trichlorophenol | EnvCan | AG33102 | 07/28/03 | 07/29/03 | 1 | ND mg/kg | 1.0 | |
| 2,3,5,6-Tetrachlorophenol | " | " | " | " | " | ND " | 1.0 | |
| 2,3,4,6-Tetrachlorophenol | " | " | " | " | " | ND " | 1.0 | |
| 2,3,4,5-Tetrachlorophenol | " | " | " | " | " | ND " | 1.0 | |
| Pentachlorophenol | " | " | " | " | " | ND " | 1.0 | |
| *Surrogate: Tribromophenol* | " | " | " | " | | *81.5 %* *23-140* | | |
| **Conventional Chemistry Parameters by APHA/EPA Methods** | | | | | | | | |
| **Oil & Grease (HEM-SG)** | EPA 9071B | AH30822 | 08/05/03 | 08/08/03 | 1 | **1900 mg/kg** | **50** | |
| **Oil & Grease (HEM)** | " | AH30717 | 08/05/03 | 08/07/03 | " | **3800 "** | **50** | |
| **pH** | EPA 9045B | AH30614 | 07/28/03 | 07/28/03 | " | **6.6 pH Units** | **1.0** | |
| **D6-6-0.0-0.5 (A307606-06)** | | | **Sample Type: Soil** | | | **Sampled: 07/22/03 15:30** | | |
| **Metals by EPA 6000/7000 Series Methods** | | | | | | | | |
| Cadmium | EPA 6010 | AG33003 | 07/30/03 | 08/01/03 | 1 | ND mg/kg | 1.0 | |
| **Chromium** | " | " | " | " | " | **34 "** | **5.0** | |
| **Nickel** | " | " | " | " | " | **41 "** | **10** | |
| **Lead** | " | " | " | " | " | **23 "** | **5.0** | |
| **Zinc** | " | " | " | " | " | **120 "** | **10** | |

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Sheri Speaks

Sheri L. Speaks
Project Manager

8/11/03

Alpha Analytical Laboratories Inc.
208 Mason St. Ukiah, California 95482
e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

## CHEMICAL EXAMINATION REPORT



MFG, Inc
180 Howard St. Suite 200
San Francisco, CA 94105-2941
Attn: Ed Conti

Report Date: 08/11/03 07:56
Project No: 030229.4
Project ID: SPI-Arcata/Task #4

| Order Number | Receipt Date/Time | Client Code | Client PO/Reference |
|---|---|---|---|
| A307606 | 07/25/2003 15:40 | MFGINC | |

### Alpha Analytical Laboratories, Inc.

| | METHOD | BATCH | PREPARED | ANALYZED | DILUTION | RESULT | | PQL | NOTE |
|---|---|---|---|---|---|---|---|---|---|
| **D6-6-0.0-0.5 (A307606-06)** | | | **Sample Type: Soil** | | | **Sampled: 07/22/03 15:30** | | | |
| **Chlorinated Phenols by Canadian Pulp Method** | | | | | | | | | |
| 2,4,6-Trichlorophenol | EnvCan | AG33102 | 07/28/03 | 07/29/03 | 1 | ND mg/kg | | 1.0 | |
| 2,3,5,6-Tetrachlorophenol | " | " | " | " | " | ND " | | 1.0 | |
| 2,3,4,6-Tetrachlorophenol | " | " | " | " | " | ND " | | 1.0 | |
| 2,3,4,5-Tetrachlorophenol | " | " | " | " | " | ND " | | 1.0 | |
| Pentachlorophenol | " | " | " | " | " | ND " | | 1.0 | |
| *Surrogate: Tribromophenol* | " | " | " | " | | *71.0 %* | *23-140* | | |
| **Conventional Chemistry Parameters by APHA/EPA Methods** | | | | | | | | | |
| **Oil & Grease (HEM-SG)** | EPA 9071B | AH30822 | 08/05/03 | 08/08/03 | 1 | **1500 mg/kg** | | **50** | |
| **Oil & Grease (HEM)** | " | AH30717 | 08/05/03 | 08/07/03 | " | **3700 "** | | **50** | |
| **pH** | EPA 9045B | AH30614 | 07/28/03 | 07/28/03 | " | **6.4 pH Units** | | **1.0** | |
| **D6-7-0.0-0.5 (A307606-07)** | | | **Sample Type: Soil** | | | **Sampled: 07/22/03 16:05** | | | |
| **Metals by EPA 6000/7000 Series Methods** | | | | | | | | | |
| Cadmium | EPA 6010 | AG33003 | 07/30/03 | 08/01/03 | 1 | ND mg/kg | | 1.0 | |
| **Chromium** | " | " | " | " | " | **25 "** | | **5.0** | |
| **Nickel** | " | " | " | " | " | **30 "** | | **10** | |
| **Lead** | " | " | " | " | " | **8.6 "** | | **5.0** | |
| **Zinc** | " | " | " | " | " | **39 "** | | **10** | |
| **Chlorinated Phenols by Canadian Pulp Method** | | | | | | | | | |
| 2,4,6-Trichlorophenol | EnvCan | AG33102 | 07/28/03 | 07/29/03 | 1 | ND mg/kg | | 1.0 | |
| 2,3,5,6-Tetrachlorophenol | " | " | " | " | " | ND " | | 1.0 | |
| 2,3,4,6-Tetrachlorophenol | " | " | " | " | " | ND " | | 1.0 | |
| 2,3,4,5-Tetrachlorophenol | " | " | " | " | " | ND " | | 1.0 | |
| Pentachlorophenol | " | " | " | " | " | ND " | | 1.0 | |
| *Surrogate: Tribromophenol* | " | " | " | " | | *50.8 %* | *23-140* | | |

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Sheri Speaks

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Project Manager

8/11/03

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208 Mason St. Ukiah, California 95482
e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267



## CHEMICAL EXAMINATION REPORT



MFG, Inc
180 Howard St. Suite 200
San Francisco, CA 94105-2941
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Report Date: 08/11/03 07:56
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| Order Number | Receipt Date/Time | Client Code | Client PO/Reference |
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| A307606 | 07/25/2003 15:40 | MFGINC | |

### Alpha Analytical Laboratories, Inc.

| | METHOD | BATCH | PREPARED | ANALYZED | DILUTION | RESULT | PQL | NOTE |
|---|---|---|---|---|---|---|---|---|
| **D6-7-0.0-0.5 (A307606-07)** | | | **Sample Type: Soil** | | | **Sampled: 07/22/03 16:05** | | |
| **Conventional Chemistry Parameters by APHA/EPA Methods** | | | | | | | | |
| **Oil & Grease (HEM-SG)** | EPA 9071B | AH30822 | 08/05/03 | 08/08/03 | 1 | **540 mg/kg** | **50** | |
| **Oil & Grease (HEM)** | " | AH30717 | 08/05/03 | 08/07/03 | " | **1200 "** | **50** | |
| **pH** | EPA 9045B | AH30614 | 08/05/03 | 08/05/03 | " | **6.5 pH Units** | **1.0** | |
| **D6-8-0.0-0.5 (A307606-08)** | | | **Sample Type: Soil** | | | **Sampled: 07/23/03 09:00** | | |
| **Metals by EPA 6000/7000 Series Methods** | | | | | | | | |
| Cadmium | EPA 6010 | AG33003 | 07/30/03 | 08/01/03 | 1 | ND mg/kg | 1.0 | |
| **Chromium** | " | " | " | " | " | **23 "** | **5.0** | |
| **Nickel** | " | " | " | " | " | **31 "** | **10** | |
| **Lead** | " | " | " | " | " | **18 "** | **5.0** | |
| **Zinc** | " | " | " | " | " | **58 "** | **10** | |
| **Chlorinated Phenols by Canadian Pulp Method** | | | | | | | | |
| 2,4,6-Trichlorophenol | EnvCan | AG33102 | 07/28/03 | 07/29/03 | 1 | ND mg/kg | 1.0 | |
| 2,3,5,6-Tetrachlorophenol | " | " | " | " | " | ND " | 1.0 | |
| 2,3,4,6-Tetrachlorophenol | " | " | " | " | " | ND " | 1.0 | |
| 2,3,4,5-Tetrachlorophenol | " | " | " | " | " | ND " | 1.0 | |
| Pentachlorophenol | " | " | " | " | " | ND " | 1.0 | |
| *Surrogate: Tribromophenol* | " | " | " | " | | *86.3 %* | *23-140* | |
| **Conventional Chemistry Parameters by APHA/EPA Methods** | | | | | | | | |
| **Oil & Grease (HEM-SG)** | EPA 9071B | AH30822 | 08/06/03 | 08/08/03 | 1 | **580 mg/kg** | **50** | |
| **Oil & Grease (HEM)** | " | AH30717 | 08/05/03 | 08/07/03 | " | **1200 "** | **50** | |
| **pH** | EPA 9045B | AH30614 | 08/05/03 | 08/05/03 | " | **6.4 pH Units** | **1.0** | |
| **D6-9-0.0-0.5 (A307606-09)** | | | **Sample Type: Soil** | | | **Sampled: 07/23/03 09:50** | | |
| **Metals by EPA 6000/7000 Series Methods** | | | | | | | | |
| Cadmium | EPA 6010 | AG33003 | 07/30/03 | 08/01/03 | 1 | ND mg/kg | 1.0 | |
| **Chromium** | " | " | " | " | " | **22 "** | **5.0** | |
| **Nickel** | " | " | " | " | " | **22 "** | **10** | |

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Project Manager

8/11/03

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e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267



## CHEMICAL EXAMINATION REPORT



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| A307606 | 07/25/2003 15:40 | MFGINC | |

### Alpha Analytical Laboratories, Inc.

| | METHOD | BATCH | PREPARED | ANALYZED | DILUTION | RESULT | PQL | NOTE |
|---|---|---|---|---|---|---|---|---|
| **D6-9-0.0-0.5 (A307606-09)** | | | **Sample Type: Soil** | | | **Sampled: 07/23/03 09:50** | | |
| **Metals by EPA 6000/7000 Series Methods (cont'd)** | | | | | | | | |
| **Lead** | EPA 6010 | " | " | 08/01/03 | " | **7.9 "** | **5.0** | |
| **Zinc** | " | " | " | " | " | **46 "** | **10** | |
| **Chlorinated Phenols by Canadian Pulp Method** | | | | | | | | |
| 2,4,6-Trichlorophenol | EnvCan | AG33102 | 07/28/03 | 07/29/03 | 1 | ND mg/kg | 1.0 | |
| 2,3,5,6-Tetrachlorophenol | " | " | " | " | " | ND " | 1.0 | |
| 2,3,4,6-Tetrachlorophenol | " | " | " | " | " | ND " | 1.0 | |
| 2,3,4,5-Tetrachlorophenol | " | " | " | " | " | ND " | 1.0 | |
| Pentachlorophenol | " | " | " | " | " | ND " | 1.0 | |
| *Surrogate: Tribromophenol* | " | " | " | " | | *75.0 %* | *23-140* | |
| **Conventional Chemistry Parameters by APHA/EPA Methods** | | | | | | | | |
| **Oil & Grease (HEM-SG)** | EPA 9071B | AH30822 | 08/06/03 | 08/08/03 | 1 | **180 mg/kg** | **50** | |
| **Oil & Grease (HEM)** | " | AH30717 | 08/05/03 | 08/07/03 | " | **660 "** | **50** | |
| **pH** | EPA 9045B | AH30614 | 08/05/03 | 08/05/03 | " | **6.4 pH Units** | **1.0** | |
| **D6-10-0.0-0.5 (A307606-10)** | | | **Sample Type: Soil** | | | **Sampled: 07/23/03 10:20** | | |
| **Metals by EPA 6000/7000 Series Methods** | | | | | | | | |
| Cadmium | EPA 6010 | AG33003 | 07/30/03 | 08/01/03 | 1 | ND mg/kg | 1.0 | |
| **Chromium** | " | " | " | " | " | **33 "** | **5.0** | |
| **Nickel** | " | " | " | " | " | **35 "** | **10** | |
| **Lead** | " | " | " | " | " | **13 "** | **5.0** | |
| **Zinc** | " | " | " | " | " | **51 "** | **10** | |

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Sheri Speaks

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Project Manager

8/11/03

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| A307606 | 07/25/2003 15:40 | MFGINC | |

### Alpha Analytical Laboratories, Inc.

| | METHOD | BATCH | PREPARED | ANALYZED | DILUTION | RESULT | | PQL | NOTE |
|---|---|---|---|---|---|---|---|---|---|
| **D6-10-0.0-0.5 (A307606-10)** | | | **Sample Type: Soil** | | | **Sampled: 07/23/03 10:20** | | | |
| **Chlorinated Phenols by Canadian Pulp Method** | | | | | | | | | |
| 2,4,6-Trichlorophenol | EnvCan | AG33102 | 07/28/03 | 07/29/03 | 1 | ND mg/kg | | 1.0 | |
| 2,3,5,6-Tetrachlorophenol | " | " | " | " | " | ND " | | 1.0 | |
| 2,3,4,6-Tetrachlorophenol | " | " | " | " | " | ND " | | 1.0 | |
| 2,3,4,5-Tetrachlorophenol | " | " | " | " | " | ND " | | 1.0 | |
| Pentachlorophenol | " | " | " | " | " | ND " | | 1.0 | |
| *Surrogate: Tribromophenol* | " | " | " | " | | *87.9 %* | *23-140* | | |
| **Conventional Chemistry Parameters by APHA/EPA Methods** | | | | | | | | | |
| **Oil & Grease (HEM-SG)** | EPA 9071B | AH30822 | 08/06/03 | 08/08/03 | 1 | **340 mg/kg** | | **50** | |
| **Oil & Grease (HEM)** | " | AH30717 | 08/05/03 | 08/07/03 | " | **1100 "** | | **50** | |
| **pH** | EPA 9045B | AH30614 | 08/05/03 | 08/05/03 | " | **6.6 pH Units** | | **1.0** | |
| **D6-11-0.0-0.5 (A307606-11)** | | | **Sample Type: Soil** | | | **Sampled: 07/23/03 10:50** | | | |
| **Metals by EPA 6000/7000 Series Methods** | | | | | | | | | |
| Cadmium | EPA 6010 | AG33004 | 07/30/03 | 07/31/03 | 1 | ND mg/kg | | 1.0 | |
| **Chromium** | " | " | " | " | " | **51 "** | | **5.0** | |
| **Nickel** | " | " | " | " | " | **61 "** | | **10** | |
| **Lead** | " | " | " | " | " | **12 "** | | **5.0** | |
| **Zinc** | " | " | " | " | " | **56 "** | | **10** | |
| **Chlorinated Phenols by Canadian Pulp Method** | | | | | | | | | |
| 2,4,6-Trichlorophenol | EnvCan | AG33102 | 07/28/03 | 07/29/03 | 1 | ND mg/kg | | 1.0 | |
| 2,3,5,6-Tetrachlorophenol | " | " | " | " | " | ND " | | 1.0 | |
| 2,3,4,6-Tetrachlorophenol | " | " | " | " | " | ND " | | 1.0 | |
| 2,3,4,5-Tetrachlorophenol | " | " | " | " | " | ND " | | 1.0 | |
| Pentachlorophenol | " | " | " | " | " | ND " | | 1.0 | |
| *Surrogate: Tribromophenol* | " | " | " | " | | *53.2 %* | *23-140* | | |

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Sheri Speaks

Sheri L. Speaks
Project Manager

8/11/03

Alpha Analytical Laboratories Inc.
208 Mason St. Ukiah, California 95482
e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

## CHEMICAL EXAMINATION REPORT



MFG, Inc
180 Howard St. Suite 200
San Francisco, CA 94105-2941
Attn: Ed Conti

Report Date: 08/11/03 07:56
Project No: 030229.4
Project ID: SPI-Arcata/Task #4

| Order Number | Receipt Date/Time | Client Code | Client PO/Reference |
|---|---|---|---|
| A307606 | 07/25/2003 15:40 | MFGINC | |

### Alpha Analytical Laboratories, Inc.

| | METHOD | BATCH | PREPARED | ANALYZED | DILUTION | RESULT | PQL | NOTE |
|---|---|---|---|---|---|---|---|---|
| **D6-11-0.0-0.5 (A307606-11)** | | | **Sample Type: Soil** | | | **Sampled: 07/23/03 10:50** | | |
| **Conventional Chemistry Parameters by APHA/EPA Methods** | | | | | | | | |
| **Oil & Grease (HEM-SG)** | EPA 9071B | AH30822 | 08/06/03 | 08/08/03 | 1 | **1000 mg/kg** | **50** | |
| **Oil & Grease (HEM)** | " | AH30717 | 08/05/03 | 08/07/03 | " | **2400 "** | **50** | |
| **pH** | EPA 9045B | AH30614 | 08/05/03 | 08/05/03 | " | **5.4 pH Units** | **1.0** | |
| **D6-12-0.0-0.5 (A307606-12)** | | | **Sample Type: Soil** | | | **Sampled: 07/23/03 11:10** | | |
| **Metals by EPA 6000/7000 Series Methods** | | | | | | | | |
| Cadmium | EPA 6010 | AG33004 | 07/30/03 | 07/31/03 | 1 | ND mg/kg | 1.0 | |
| **Chromium** | " | " | " | " | " | **37 "** | **5.0** | |
| **Nickel** | " | " | " | " | " | **42 "** | **10** | |
| **Lead** | " | " | " | " | " | **31 "** | **5.0** | |
| **Zinc** | " | " | " | " | " | **240 "** | **10** | |
| **Chlorinated Phenols by Canadian Pulp Method** | | | | | | | | |
| 2,4,6-Trichlorophenol | EnvCan | AG33102 | 07/28/03 | 07/29/03 | 1 | ND mg/kg | 1.0 | |
| 2,3,5,6-Tetrachlorophenol | " | " | " | " | " | ND " | 1.0 | |
| 2,3,4,6-Tetrachlorophenol | " | " | " | " | " | ND " | 1.0 | |
| 2,3,4,5-Tetrachlorophenol | " | " | " | " | " | ND " | 1.0 | |
| Pentachlorophenol | " | " | " | " | " | ND " | 1.0 | |
| *Surrogate: Tribromophenol* | " | " | " | " | | *37.9 %* *23-140* | | |
| **Conventional Chemistry Parameters by APHA/EPA Methods** | | | | | | | | |
| **Oil & Grease (HEM-SG)** | EPA 9071B | AH30822 | 08/06/03 | 08/08/03 | 1 | **4300 mg/kg** | **50** | |
| **Oil & Grease (HEM)** | " | AH30717 | 08/05/03 | 08/07/03 | " | **9800 "** | **50** | |
| **pH** | EPA 9045B | AH30614 | 08/05/03 | 08/05/03 | " | **5.0 pH Units** | **1.0** | |
| **D6-13-0.0-0.5 (A307606-13)** | | | **Sample Type: Soil** | | | **Sampled: 07/23/03 13:50** | | |
| **Metals by EPA 6000/7000 Series Methods** | | | | | | | | |
| Cadmium | EPA 6010 | AG33004 | 07/30/03 | 07/31/03 | 1 | ND mg/kg | 1.0 | |
| **Chromium** | " | " | " | " | " | **29 "** | **5.0** | |
| **Nickel** | " | " | " | " | " | **32 "** | **10** | |

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Sheri Speaks

Sheri L. Speaks
Project Manager

8/11/03

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e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

## CHEMICAL EXAMINATION REPORT



MFG, Inc
180 Howard St. Suite 200
San Francisco, CA 94105-2941
Attn: Ed Conti

Report Date: 08/11/03 07:56
Project No: 030229.4
Project ID: SPI-Arcata/Task #4

| Order Number | Receipt Date/Time | Client Code | Client PO/Reference |
|---|---|---|---|
| A307606 | 07/25/2003 15:40 | MFGINC | |

### Alpha Analytical Laboratories, Inc.

| | METHOD | BATCH | PREPARED | ANALYZED | DILUTION | RESULT | PQL | NOTE |
|---|---|---|---|---|---|---|---|---|
| **D6-13-0.0-0.5 (A307606-13)** | | | **Sample Type: Soil** | | | **Sampled: 07/23/03 13:50** | | |
| **Metals by EPA 6000/7000 Series Methods (cont'd)** | | | | | | | | |
| **Lead** | EPA 6010 | " | " | 07/31/03 | " | **15 "** | **5.0** | |
| **Zinc** | " | " | " | " | " | **58 "** | **10** | |
| **Chlorinated Phenols by Canadian Pulp Method** | | | | | | | | |
| 2,4,6-Trichlorophenol | EnvCan | AH30513 | 07/29/03 | 07/31/03 | 1 | ND mg/kg | 1.0 | |
| 2,3,5,6-Tetrachlorophenol | " | " | " | " | " | ND " | 1.0 | |
| 2,3,4,6-Tetrachlorophenol | " | " | " | " | " | ND " | 1.0 | |
| 2,3,4,5-Tetrachlorophenol | " | " | " | " | " | ND " | 1.0 | |
| Pentachlorophenol | " | " | " | " | " | ND " | 1.0 | |
| *Surrogate: Tribromophenol* | " | " | " | " | | *75.8 %* *23-140* | | |
| **Conventional Chemistry Parameters by APHA/EPA Methods** | | | | | | | | |
| **Oil & Grease (HEM-SG)** | EPA 9071B | AH30822 | 08/06/03 | 08/08/03 | 1 | **650 mg/kg** | **50** | |
| **Oil & Grease (HEM)** | " | AH30717 | 08/05/03 | 08/07/03 | " | **1500 "** | **50** | |
| **pH** | EPA 9045B | AH30614 | 08/05/03 | 08/05/03 | " | **5.8 pH Units** | **1.0** | |
| **D6-14-0.0-0.5 (A307606-14)** | | | **Sample Type: Soil** | | | **Sampled: 07/23/03 14:30** | | |
| **Metals by EPA 6000/7000 Series Methods** | | | | | | | | |
| Cadmium | EPA 6010 | AG33004 | 07/30/03 | 07/31/03 | 1 | ND mg/kg | 1.0 | |
| **Chromium** | " | " | " | " | " | **22 "** | **5.0** | |
| **Nickel** | " | " | " | " | " | **22 "** | **10** | |
| **Lead** | " | " | " | " | " | **18 "** | **5.0** | |
| **Zinc** | " | " | " | " | " | **110 "** | **10** | |

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Sheri Speaks

Sheri L. Speaks
Project Manager

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e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

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180 Howard St. Suite 200
San Francisco, CA 94105-2941
Attn: Ed Conti

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| A307606 | 07/25/2003 15:40 | MFGINC | |

### Alpha Analytical Laboratories, Inc.

| | METHOD | BATCH | PREPARED | ANALYZED | DILUTION | RESULT | | PQL | NOTE |
|---|---|---|---|---|---|---|---|---|---|
| **D6-14-0.0-0.5 (A307606-14)** | | | **Sample Type: Soil** | | | **Sampled: 07/23/03 14:30** | | | |
| **Chlorinated Phenols by Canadian Pulp Method** | | | | | | | | | |
| 2,4,6-Trichlorophenol | EnvCan | AH30513 | 07/29/03 | 07/31/03 | 1 | ND mg/kg | | 1.0 | |
| 2,3,5,6-Tetrachlorophenol | " | " | " | " | " | ND " | | 1.0 | |
| 2,3,4,6-Tetrachlorophenol | " | " | " | " | " | ND " | | 1.0 | |
| 2,3,4,5-Tetrachlorophenol | " | " | " | " | " | ND " | | 1.0 | |
| Pentachlorophenol | " | " | " | " | " | ND " | | 1.0 | |
| *Surrogate: Tribromophenol* | " | " | " | " | | *70.2 %* | *23-140* | | |
| **Conventional Chemistry Parameters by APHA/EPA Methods** | | | | | | | | | |
| **Oil & Grease (HEM-SG)** | EPA 9071B | AH30822 | 08/06/03 | 08/08/03 | 1 | **1800 mg/kg** | | **50** | |
| **Oil & Grease (HEM)** | " | AH30717 | 08/05/03 | 08/07/03 | " | **4800 "** | | **50** | |
| **pH** | EPA 9045B | AH30614 | 08/05/03 | 08/05/03 | " | **6.2 pH Units** | | **1.0** | |
| **D6-15-0.0-0.5 (A307606-15)** | | | **Sample Type: Soil** | | | **Sampled: 07/23/03 15:00** | | | |
| **Metals by EPA 6000/7000 Series Methods** | | | | | | | | | |
| Cadmium | EPA 6010 | AG33004 | 07/30/03 | 07/31/03 | 1 | ND mg/kg | | 1.0 | |
| **Chromium** | " | " | " | " | " | **17 "** | | **5.0** | |
| **Nickel** | " | " | " | " | " | **18 "** | | **10** | |
| **Lead** | " | " | " | " | " | **11 "** | | **5.0** | |
| **Zinc** | " | " | " | " | " | **110 "** | | **10** | |
| **Chlorinated Phenols by Canadian Pulp Method** | | | | | | | | | |
| 2,4,6-Trichlorophenol | EnvCan | AH30513 | 07/29/03 | 07/31/03 | 1 | ND mg/kg | | 1.0 | |
| 2,3,5,6-Tetrachlorophenol | " | " | " | " | " | ND " | | 1.0 | |
| 2,3,4,6-Tetrachlorophenol | " | " | " | " | " | ND " | | 1.0 | |
| 2,3,4,5-Tetrachlorophenol | " | " | " | " | " | ND " | | 1.0 | |
| Pentachlorophenol | " | " | " | " | " | ND " | | 1.0 | |
| *Surrogate: Tribromophenol* | " | " | " | " | | *69.4 %* | *23-140* | | |

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Sheri Speaks

Sheri L. Speaks
Project Manager

8/11/03

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e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

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### Alpha Analytical Laboratories, Inc.

| | METHOD | BATCH | PREPARED | ANALYZED | DILUTION | RESULT | PQL | NOTE |
|---|---|---|---|---|---|---|---|---|
| **D6-15-0.0-0.5 (A307606-15)** | | | **Sample Type: Soil** | | | **Sampled: 07/23/03 15:00** | | |
| **Conventional Chemistry Parameters by APHA/EPA Methods** | | | | | | | | |
| **Oil & Grease (HEM-SG)** | EPA 9071B | AH30822 | 08/06/03 | 08/08/03 | 1 | **2000 mg/kg** | **50** | |
| **Oil & Grease (HEM)** | " | AH30717 | 08/05/03 | 08/07/03 | " | **4300 "** | **50** | |
| **pH** | EPA 9045B | AH30614 | 08/05/03 | 08/05/03 | " | **5.8 pH Units** | **1.0** | |
| **D6-16-0.0-0.5 (A307606-16)** | | | **Sample Type: Soil** | | | **Sampled: 07/23/03 15:30** | | |
| **Metals by EPA 6000/7000 Series Methods** | | | | | | | | |
| Cadmium | EPA 6010 | AG33004 | 07/30/03 | 07/31/03 | 1 | ND mg/kg | 1.0 | |
| **Chromium** | " | " | " | " | " | **20 "** | **5.0** | |
| **Nickel** | " | " | " | " | " | **24 "** | **10** | |
| **Lead** | " | " | " | " | " | **9.5 "** | **5.0** | |
| **Zinc** | " | " | " | " | " | **78 "** | **10** | |
| **Chlorinated Phenols by Canadian Pulp Method** | | | | | | | | |
| 2,4,6-Trichlorophenol | EnvCan | AH30513 | 07/29/03 | 07/31/03 | 1 | ND mg/kg | 1.0 | |
| 2,3,5,6-Tetrachlorophenol | " | " | " | " | " | ND " | 1.0 | |
| 2,3,4,6-Tetrachlorophenol | " | " | " | " | " | ND " | 1.0 | |
| 2,3,4,5-Tetrachlorophenol | " | " | " | " | " | ND " | 1.0 | |
| Pentachlorophenol | " | " | " | " | " | ND " | 1.0 | |
| *Surrogate: Tribromophenol* | " | " | " | " | | *61.3 %* *23-140* | | |
| **Conventional Chemistry Parameters by APHA/EPA Methods** | | | | | | | | |
| **Oil & Grease (HEM-SG)** | EPA 9071B | AH30822 | 08/06/03 | 08/08/03 | 1 | **2400 mg/kg** | **50** | |
| **Oil & Grease (HEM)** | " | AH30717 | 08/05/03 | 08/07/03 | " | **4900 "** | **50** | |
| **pH** | EPA 9045B | AH30614 | 08/05/03 | 08/05/03 | " | **6.0 pH Units** | **1.0** | |
| **D6-17-0.0-0.5 (A307606-17)** | | | **Sample Type: Soil** | | | **Sampled: 07/23/03 16:10** | | |
| **Metals by EPA 6000/7000 Series Methods** | | | | | | | | |
| Cadmium | EPA 6010 | AG33004 | 07/30/03 | 07/31/03 | 1 | ND mg/kg | 1.0 | |
| **Chromium** | " | " | " | " | " | **34 "** | **5.0** | |
| **Nickel** | " | " | " | " | " | **23 "** | **10** | |

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Sheri Speaks

Sheri L. Speaks
Project Manager

8/11/03

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e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

## CHEMICAL EXAMINATION REPORT



MFG, Inc
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| A307606 | 07/25/2003 15:40 | MFGINC | |

### Alpha Analytical Laboratories, Inc.

| | METHOD | BATCH | PREPARED | ANALYZED | DILUTION | RESULT | PQL | NOTE |
|---|---|---|---|---|---|---|---|---|
| **D6-17-0.0-0.5 (A307606-17)** | | | **Sample Type: Soil** | | | **Sampled: 07/23/03 16:10** | | |
| **Metals by EPA 6000/7000 Series Methods (cont'd)** | | | | | | | | |
| **Lead** | EPA 6010 | " | " | 07/31/03 | " | **12 "** | **5.0** | |
| **Zinc** | " | " | " | " | " | **19 "** | **10** | |
| **Chlorinated Phenols by Canadian Pulp Method** | | | | | | | | |
| 2,4,6-Trichlorophenol | EnvCan | AH30513 | 07/29/03 | 07/31/03 | 1 | ND mg/kg | 1.0 | |
| 2,3,5,6-Tetrachlorophenol | " | " | " | " | " | ND " | 1.0 | |
| 2,3,4,6-Tetrachlorophenol | " | " | " | " | " | ND " | 1.0 | |
| 2,3,4,5-Tetrachlorophenol | " | " | " | " | " | ND " | 1.0 | |
| Pentachlorophenol | " | " | " | " | " | ND " | 1.0 | |
| *Surrogate: Tribromophenol* | " | " | " | " | | *72.6 %* *23-140* | | |
| **Conventional Chemistry Parameters by APHA/EPA Methods** | | | | | | | | |
| **Oil & Grease (HEM-SG)** | EPA 9071B | AH30822 | 08/06/03 | 08/08/03 | 1 | **320 mg/kg** | **50** | |
| **Oil & Grease (HEM)** | " | AH30717 | 08/05/03 | 08/07/03 | " | **1200 "** | **50** | |
| **pH** | EPA 9045B | AH30614 | 08/05/03 | 08/05/03 | " | **5.9 pH Units** | **1.0** | |
| **D6-18-0.0-0.5 (A307606-18)** | | | **Sample Type: Soil** | | | **Sampled: 07/24/03 09:15** | | |
| **Metals by EPA 6000/7000 Series Methods** | | | | | | | | |
| Cadmium | EPA 6010 | AG33004 | 07/30/03 | 07/31/03 | 1 | ND mg/kg | 1.0 | |
| **Chromium** | " | " | " | " | " | **25 "** | **5.0** | |
| Nickel | " | " | " | " | " | ND " | 10 | |
| **Lead** | " | " | " | " | " | **5.2 "** | **5.0** | |
| **Zinc** | " | " | " | " | " | **30 "** | **10** | |

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Sheri Speaks

Sheri L. Speaks
Project Manager

8/11/03

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180 Howard St. Suite 200
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|---|---|---|---|
| A307606 | 07/25/2003 15:40 | MFGINC | |

### Alpha Analytical Laboratories, Inc.

| | METHOD | BATCH | PREPARED | ANALYZED | DILUTION | RESULT | | PQL | NOTE |
|---|---|---|---|---|---|---|---|---|---|
| **D6-18-0.0-0.5 (A307606-18)** | | | **Sample Type: Soil** | | | **Sampled: 07/24/03 09:15** | | | |
| **Chlorinated Phenols by Canadian Pulp Method** | | | | | | | | | |
| 2,4,6-Trichlorophenol | EnvCan | AH30513 | 07/29/03 | 07/31/03 | 1 | ND mg/kg | | 1.0 | |
| 2,3,5,6-Tetrachlorophenol | " | " | " | " | " | ND " | | 1.0 | |
| 2,3,4,6-Tetrachlorophenol | " | " | " | " | " | ND " | | 1.0 | |
| 2,3,4,5-Tetrachlorophenol | " | " | " | " | " | ND " | | 1.0 | |
| Pentachlorophenol | " | " | " | " | " | ND " | | 1.0 | |
| *Surrogate: Tribromophenol* | " | " | " | " | | *78.2 %* | *23-140* | | |
| **Conventional Chemistry Parameters by APHA/EPA Methods** | | | | | | | | | |
| **Oil & Grease (HEM-SG)** | EPA 9071B | AH30822 | 08/06/03 | 08/08/03 | 1 | **130 mg/kg** | | **50** | |
| **Oil & Grease (HEM)** | " | AH30717 | 08/05/03 | 08/07/03 | " | **1400 "** | | **50** | |
| **pH** | EPA 9045B | AH30614 | 08/05/03 | 08/05/03 | " | **6.2 pH Units** | | **1.0** | |
| **D6-19-0.0-0.5 (A307606-19)** | | | **Sample Type: Soil** | | | **Sampled: 07/24/03 09:35** | | | |
| **Metals by EPA 6000/7000 Series Methods** | | | | | | | | | |
| Cadmium | EPA 6010 | AG33004 | 07/30/03 | 07/31/03 | 1 | ND mg/kg | | 1.0 | |
| **Chromium** | " | " | " | " | " | **19 "** | | **5.0** | |
| **Nickel** | " | " | " | " | " | **17 "** | | **10** | |
| **Lead** | " | " | " | " | " | **8.1 "** | | **5.0** | |
| **Zinc** | " | " | " | " | " | **49 "** | | **10** | |
| **Chlorinated Phenols by Canadian Pulp Method** | | | | | | | | | |
| 2,4,6-Trichlorophenol | EnvCan | AH30513 | 07/29/03 | 07/31/03 | 1 | ND mg/kg | | 1.0 | |
| 2,3,5,6-Tetrachlorophenol | " | " | " | " | " | ND " | | 1.0 | |
| 2,3,4,6-Tetrachlorophenol | " | " | " | " | " | ND " | | 1.0 | |
| 2,3,4,5-Tetrachlorophenol | " | " | " | " | " | ND " | | 1.0 | |
| Pentachlorophenol | " | " | " | " | " | ND " | | 1.0 | |
| *Surrogate: Tribromophenol* | " | " | " | " | | *71.0 %* | *23-140* | | |

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| Order Number | Receipt Date/Time | Client Code | Client PO/Reference |
|---|---|---|---|
| A307606 | 07/25/2003 15:40 | MFGINC | |

### Alpha Analytical Laboratories, Inc.

| | METHOD | BATCH | PREPARED | ANALYZED | DILUTION | RESULT | PQL | NOTE |
|---|---|---|---|---|---|---|---|---|
| **D6-19-0.0-0.5 (A307606-19)** | | | **Sample Type: Soil** | | | **Sampled: 07/24/03 09:35** | | |
| **Conventional Chemistry Parameters by APHA/EPA Methods** | | | | | | | | |
| **Oil & Grease (HEM-SG)** | EPA 9071B | AH30823 | 08/06/03 | 08/08/03 | 1 | **1400 mg/kg** | **50** | |
| **Oil & Grease (HEM)** | " | AH30718 | 08/06/03 | 08/07/03 | " | **2600 "** | **50** | |
| **pH** | EPA 9045B | AH30614 | 08/06/03 | 08/06/03 | " | **6.7 pH Units** | **1.0** | |
| **D6-20-0.0-0.5 (A307606-20)** | | | **Sample Type: Soil** | | | **Sampled: 07/24/03 09:40** | | |
| **Metals by EPA 6000/7000 Series Methods** | | | | | | | | |
| Cadmium | EPA 6010 | AG33004 | 07/30/03 | 07/31/03 | 1 | ND mg/kg | 1.0 | |
| **Chromium** | " | " | " | " | " | **28 "** | **5.0** | |
| **Nickel** | " | " | " | " | " | **27 "** | **10** | |
| **Lead** | " | " | " | " | " | **9.8 "** | **5.0** | |
| **Zinc** | " | " | " | " | " | **37 "** | **10** | |
| **Chlorinated Phenols by Canadian Pulp Method** | | | | | | | | |
| 2,4,6-Trichlorophenol | EnvCan | AH30513 | 07/29/03 | 07/31/03 | 1 | ND mg/kg | 1.0 | |
| 2,3,5,6-Tetrachlorophenol | " | " | " | " | " | ND " | 1.0 | |
| 2,3,4,6-Tetrachlorophenol | " | " | " | " | " | ND " | 1.0 | |
| 2,3,4,5-Tetrachlorophenol | " | " | " | " | " | ND " | 1.0 | |
| Pentachlorophenol | " | " | " | " | " | ND " | 1.0 | |
| *Surrogate: Tribromophenol* | " | " | " | " | | *76.6 %* *23-140* | | |
| **Conventional Chemistry Parameters by APHA/EPA Methods** | | | | | | | | |
| **Oil & Grease (HEM-SG)** | EPA 9071B | AH30823 | 08/06/03 | 08/08/03 | 1 | **890 mg/kg** | **50** | |
| **Oil & Grease (HEM)** | " | AH30718 | 08/06/03 | 08/07/03 | " | **2100 "** | **50** | |
| **pH** | EPA 9045B | AH30614 | 08/06/03 | 08/06/03 | " | **6.1 pH Units** | **1.0** | |
| **D6-21-0.0-0.5 (A307606-21)** | | | **Sample Type: Soil** | | | **Sampled: 07/24/03 10:00** | | |
| **Metals by EPA 6000/7000 Series Methods** | | | | | | | | |
| Cadmium | EPA 6010 | AG33004 | 07/30/03 | 07/31/03 | 1 | ND mg/kg | 1.0 | |
| **Chromium** | " | " | " | " | " | **29 "** | **5.0** | |
| **Nickel** | " | " | " | " | " | **10 "** | **10** | |

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Sheri Speaks

Sheri L. Speaks
Project Manager

8/11/03

Alpha Analytical Laboratories Inc.
208 Mason St. Ukiah, California 95482
e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

## CHEMICAL EXAMINATION REPORT



MFG, Inc
180 Howard St. Suite 200
San Francisco, CA 94105-2941
Attn: Ed Conti

Report Date: 08/11/03 07:56
Project No: 030229.4
Project ID: SPI-Arcata/Task #4

| Order Number | Receipt Date/Time | Client Code | Client PO/Reference |
|---|---|---|---|
| A307606 | 07/25/2003 15:40 | MFGINC | |

### Alpha Analytical Laboratories, Inc.

| | METHOD | BATCH | PREPARED | ANALYZED | DILUTION | RESULT | PQL | NOTE |
|---|---|---|---|---|---|---|---|---|
| **D6-21-0.0-0.5 (A307606-21)** | | | **Sample Type: Soil** | | | **Sampled: 07/24/03 10:00** | | |
| **Metals by EPA 6000/7000 Series Methods (cont'd)** | | | | | | | | |
| Lead | EPA 6010 | " | " | 07/31/03 | " | ND " | 5.0 | |
| **Zinc** | " | " | " | " | " | **14 "** | **10** | |
| **Chlorinated Phenols by Canadian Pulp Method** | | | | | | | | |
| 2,4,6-Trichlorophenol | EnvCan | AH30513 | 07/29/03 | 07/31/03 | 1 | ND mg/kg | 1.0 | |
| 2,3,5,6-Tetrachlorophenol | " | " | " | " | " | ND " | 1.0 | |
| 2,3,4,6-Tetrachlorophenol | " | " | " | " | " | ND " | 1.0 | |
| 2,3,4,5-Tetrachlorophenol | " | " | " | " | " | ND " | 1.0 | |
| Pentachlorophenol | " | " | " | " | " | ND " | 1.0 | |
| *Surrogate: Tribromophenol* | " | " | " | " | | *67.7 %* *23-140* | | |
| **Conventional Chemistry Parameters by APHA/EPA Methods** | | | | | | | | |
| **Oil & Grease (HEM-SG)** | EPA 9071B | AH30823 | 08/06/03 | 08/08/03 | 1 | **180 mg/kg** | **50** | |
| **Oil & Grease (HEM)** | " | AH30718 | 08/06/03 | 08/07/03 | " | **530 "** | **50** | |
| **pH** | EPA 9045B | AH30614 | 08/06/03 | 08/06/03 | " | **5.3 pH Units** | **1.0** | |
| **D6-22-0.0-0.5 (A307606-22)** | | | **Sample Type: Soil** | | | **Sampled: 07/24/03 10:20** | | |
| **Metals by EPA 6000/7000 Series Methods** | | | | | | | | |
| Cadmium | EPA 6010 | AG33004 | 07/30/03 | 07/31/03 | 1 | ND mg/kg | 1.0 | |
| **Chromium** | " | " | " | " | " | **31 "** | **5.0** | |
| **Nickel** | " | " | " | " | " | **28 "** | **10** | |
| Lead | " | " | " | " | " | ND " | 5.0 | |
| **Zinc** | " | " | " | " | " | **21 "** | **10** | |

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Sheri Speaks

Sheri L. Speaks
Project Manager

8/11/03

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e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

## CHEMICAL EXAMINATION REPORT



MFG, Inc
180 Howard St. Suite 200
San Francisco, CA 94105-2941
Attn: Ed Conti

Report Date: 08/11/03 07:56
Project No: 030229.4
Project ID: SPI-Arcata/Task #4

| Order Number | Receipt Date/Time | Client Code | Client PO/Reference |
|---|---|---|---|
| A307606 | 07/25/2003 15:40 | MFGINC | |

### Alpha Analytical Laboratories, Inc.

| | METHOD | BATCH | PREPARED | ANALYZED | DILUTION | RESULT | | PQL | NOTE |
|---|---|---|---|---|---|---|---|---|---|
| **D6-22-0.0-0.5 (A307606-22)** | | | **Sample Type: Soil** | | | **Sampled: 07/24/03 10:20** | | | |
| **Chlorinated Phenols by Canadian Pulp Method** | | | | | | | | | |
| 2,4,6-Trichlorophenol | EnvCan | AH30513 | 07/29/03 | 07/31/03 | 1 | ND mg/kg | | 1.0 | |
| 2,3,5,6-Tetrachlorophenol | " | " | " | " | " | ND " | | 1.0 | |
| 2,3,4,6-Tetrachlorophenol | " | " | " | " | " | ND " | | 1.0 | |
| 2,3,4,5-Tetrachlorophenol | " | " | " | " | " | ND " | | 1.0 | |
| Pentachlorophenol | " | " | " | " | " | ND " | | 1.0 | |
| *Surrogate: Tribromophenol* | " | " | " | " | | *72.6 %* | *23-140* | | |
| **Conventional Chemistry Parameters by APHA/EPA Methods** | | | | | | | | | |
| Oil & Grease (HEM-SG) | EPA 9071B | AH30823 | 08/06/03 | 08/08/03 | 1 | ND mg/kg | | 50 | |
| **Oil & Grease (HEM)** | " | AH30718 | 08/06/03 | 08/07/03 | " | **380 "** | | **50** | |
| **pH** | EPA 9045B | AH30614 | 08/06/03 | 08/06/03 | " | **6.3 pH Units** | | **1.0** | |
| **D6-23-0.0-0.5 (A307606-23)** | | | **Sample Type: Soil** | | | **Sampled: 07/24/03 10:35** | | | |
| **Metals by EPA 6000/7000 Series Methods** | | | | | | | | | |
| Cadmium | EPA 6010 | AG33004 | 07/30/03 | 07/31/03 | 1 | ND mg/kg | | 1.0 | |
| **Chromium** | " | " | " | " | " | **32 "** | | **5.0** | |
| **Nickel** | " | " | " | " | " | **29 "** | | **10** | |
| Lead | " | " | " | " | " | ND " | | 5.0 | |
| **Zinc** | " | " | " | " | " | **17 "** | | **10** | |
| **Chlorinated Phenols by Canadian Pulp Method** | | | | | | | | | |
| 2,4,6-Trichlorophenol | EnvCan | AH30513 | 07/29/03 | 07/31/03 | 1 | ND mg/kg | | 1.0 | |
| 2,3,5,6-Tetrachlorophenol | " | " | " | " | " | ND " | | 1.0 | |
| 2,3,4,6-Tetrachlorophenol | " | " | " | " | " | ND " | | 1.0 | |
| 2,3,4,5-Tetrachlorophenol | " | " | " | " | " | ND " | | 1.0 | |
| Pentachlorophenol | " | " | " | " | " | ND " | | 1.0 | |
| *Surrogate: Tribromophenol* | " | " | " | " | | *55.6 %* | *23-140* | | |

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Project Manager

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e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

## CHEMICAL EXAMINATION REPORT



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180 Howard St. Suite 200
San Francisco, CA 94105-2941
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Report Date: 08/11/03 07:56
Project No: 030229.4
Project ID: SPI-Arcata/Task #4

| Order Number | Receipt Date/Time | Client Code | Client PO/Reference |
|---|---|---|---|
| A307606 | 07/25/2003 15:40 | MFGINC | |

### Alpha Analytical Laboratories, Inc.

| | METHOD | BATCH | PREPARED | ANALYZED | DILUTION | RESULT | PQL | NOTE |
|---|---|---|---|---|---|---|---|---|
| **D6-23-0.0-0.5 (A307606-23)** | | | **Sample Type: Soil** | | | **Sampled: 07/24/03 10:35** | | |
| **Conventional Chemistry Parameters by APHA/EPA Methods** | | | | | | | | |
| **Oil & Grease (HEM-SG)** | EPA 9071B | AH30823 | 08/06/03 | 08/08/03 | 1 | **170 mg/kg** | **50** | |
| **Oil & Grease (HEM)** | " | AH30718 | 08/06/03 | 08/07/03 | " | **280 "** | **50** | |
| **pH** | EPA 9045B | AH30614 | 08/06/03 | 08/06/03 | " | **5.3 pH Units** | **1.0** | |
| **D6-24-0.0-0.5 (A307606-24)** | | | **Sample Type: Soil** | | | **Sampled: 07/24/03 10:50** | | |
| **Metals by EPA 6000/7000 Series Methods** | | | | | | | | |
| Cadmium | EPA 6010 | AG33004 | 07/30/03 | 07/31/03 | 1 | ND mg/kg | 1.0 | |
| **Chromium** | " | " | " | " | " | **35 "** | **5.0** | |
| **Nickel** | " | " | " | " | " | **25 "** | **10** | |
| **Lead** | " | " | " | " | " | **8.8 "** | **5.0** | |
| **Zinc** | " | " | " | " | " | **48 "** | **10** | |
| **Chlorinated Phenols by Canadian Pulp Method** | | | | | | | | |
| 2,4,6-Trichlorophenol | EnvCan | AH30513 | 07/29/03 | 07/31/03 | 1 | ND mg/kg | 1.0 | |
| 2,3,5,6-Tetrachlorophenol | " | " | " | " | " | ND " | 1.0 | |
| 2,3,4,6-Tetrachlorophenol | " | " | " | " | " | ND " | 1.0 | |
| 2,3,4,5-Tetrachlorophenol | " | " | " | " | " | ND " | 1.0 | |
| Pentachlorophenol | " | " | " | " | " | ND " | 1.0 | |
| *Surrogate: Tribromophenol* | " | " | " | " | | *48.4 %* | *23-140* | |
| **Conventional Chemistry Parameters by APHA/EPA Methods** | | | | | | | | |
| **Oil & Grease (HEM-SG)** | EPA 9071B | AH30823 | 08/06/03 | 08/08/03 | 1 | **110 mg/kg** | **50** | |
| **Oil & Grease (HEM)** | " | AH30718 | 08/06/03 | 08/07/03 | " | **140 "** | **50** | |
| **pH** | EPA 9045B | AH30614 | 08/06/03 | 08/06/03 | " | **5.2 pH Units** | **1.0** | |

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|---|---|---|---|
| A307606 | 07/25/2003 15:40 | MFGINC | |

SourceResult

### Metals by EPA 6000/7000 Series Methods - Quality Control

| Analyte(s) | Result | PQL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Flag |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AG33003 - EPA 3051 Microwave** | | | | | | | | | | |
| **Blank (AG33003-BLK1)** | | | | Prepared: 07/30/03 Analyzed: 08/01/03 | | | | | | |
| Cadmium | ND | 1.0 | mg/kg | | | | | | | |
| Chromium | ND | 5.0 | " | | | | | | | |
| Lead | ND | 5.0 | " | | | | | | | |
| Nickel | ND | 10 | " | | | | | | | |
| Zinc | ND | 10 | " | | | | | | | |
| **LCS (AG33003-BS1)** | | | | Prepared: 07/30/03 Analyzed: 07/31/03 | | | | | | |
| Cadmium | 19.7 | 1.0 | mg/kg | 20.0 | | 98.5 | 85-115 | | | |
| Chromium | 19.8 | 5.0 | " | 20.0 | | 99.0 | 85-115 | | | |
| Lead | 20.6 | 5.0 | " | 20.0 | | 103 | 85-115 | | | |
| Nickel | 19.5 | 10 | " | 20.0 | | 97.5 | 85-115 | | | |
| Zinc | 20.8 | 10 | " | 20.0 | | 104 | 87.1-126 | | | |
| **LCS Dup (AG33003-BSD1)** | | | | Prepared: 07/30/03 Analyzed: 07/31/03 | | | | | | |
| Cadmium | 20.0 | 1.0 | mg/kg | 20.0 | | 100 | 85-115 | 1.51 | 20 | |
| Chromium | 20.2 | 5.0 | " | 20.0 | | 101 | 85-115 | 2.00 | 20 | |
| Lead | 19.8 | 5.0 | " | 20.0 | | 99.0 | 85-115 | 3.96 | 20 | |
| Nickel | 19.9 | 10 | " | 20.0 | | 99.5 | 85-115 | 2.03 | 20 | |
| Zinc | 21.1 | 10 | " | 20.0 | | 106 | 87.1-126 | 1.43 | 20 | |
| **Duplicate (AG33003-DUP1)** | | | | **Source: A307601-17** Prepared: 07/30/03 Analyzed: 08/01/03 | | | | | | |
| Cadmium | ND | 1.0 | mg/kg | | ND | | | | 20 | |
| Chromium | 52.4 | 5.0 | " | | 53 | | | 1.14 | 20 | |
| Lead | ND | 5.0 | " | | ND | | | | 20 | |
| Nickel | 40.1 | 10 | " | | 38 | | | 5.38 | 20 | |
| Zinc | 26.0 | 10 | " | | 24 | | | 8.00 | 20 | |
| **Matrix Spike (AG33003-MS1)** | | | | **Source: A307601-17** Prepared: 07/30/03 Analyzed: 08/01/03 | | | | | | |

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Project Manager

8/11/03

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e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267



## CHEMICAL EXAMINATION REPORT



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180 Howard St. Suite 200
San Francisco, CA 94105-2941
Attn: Ed Conti

Report Date: 08/11/03 07:56
Project No: 030229.4
Project ID: SPI-Arcata/Task #4

| Order Number | Receipt Date/Time | Client Code | Client PO/Reference |
|---|---|---|---|
| A307606 | 07/25/2003 15:40 | MFGINC | |

### Metals by EPA 6000/7000 Series Methods - Quality Control

| Analyte(s) | Result | PQL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Flag |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AG33003 - EPA 3051 Microwave** | | | | | | | | | | |
| **Matrix Spike (AG33003-MS1)** | **Source: A307601-17** | | | Prepared: 07/30/03 | | Analyzed: 08/01/03 | | | | |
| Cadmium | 18.9 | 1.0 | mg/kg | 20.0 | ND | 94.5 | 70-130 | | | |
| Chromium | 73.7 | 5.0 | " | 20.0 | 53 | 104 | 70-130 | | | |
| Lead | 24.3 | 5.0 | " | 20.0 | ND | 100 | 70-130 | | | |
| Nickel | 60.5 | 10 | " | 20.0 | 38 | 112 | 70-130 | | | |
| Zinc | 47.7 | 10 | " | 20.0 | 24 | 118 | 70-130 | | | |
| **Matrix Spike Dup (AG33003-MSD1)** | **Source: A307601-17** | | | Prepared: 07/30/03 | | Analyzed: 08/01/03 | | | | |
| Cadmium | 18.6 | 1.0 | mg/kg | 20.0 | ND | 93.0 | 70-130 | 1.60 | 20 | |
| Chromium | 65.8 | 5.0 | " | 20.0 | 53 | 64.0 | 70-130 | 11.3 | 20 | QM-04 |
| Lead | 24.1 | 5.0 | " | 20.0 | ND | 99.5 | 70-130 | 0.826 | 20 | |
| Nickel | 58.8 | 10 | " | 20.0 | 38 | 104 | 70-130 | 2.85 | 20 | |
| Zinc | 44.6 | 10 | " | 20.0 | 24 | 103 | 70-130 | 6.72 | 20 | |
| **Batch AG33004 - EPA 3051 Microwave** | | | | | | | | | | |
| **Blank (AG33004-BLK1)** | | | | Prepared: 07/30/03 | | Analyzed: 07/31/03 | | | | |
| Cadmium | ND | 1.0 | mg/kg | | | | | | | |
| Chromium | ND | 5.0 | " | | | | | | | |
| Lead | ND | 5.0 | " | | | | | | | |
| Nickel | ND | 10 | " | | | | | | | |
| Zinc | ND | 10 | " | | | | | | | |
| **LCS (AG33004-BS1)** | | | | Prepared: 07/30/03 | | Analyzed: 07/31/03 | | | | |
| Cadmium | 19.6 | 1.0 | mg/kg | 20.0 | | 98.0 | 85-115 | | | |
| Chromium | 19.6 | 5.0 | " | 20.0 | | 98.0 | 85-115 | | | |
| Lead | 19.7 | 5.0 | " | 20.0 | | 98.5 | 85-115 | | | |
| Nickel | 19.8 | 10 | " | 20.0 | | 99.0 | 85-115 | | | |
| Zinc | 21.3 | 10 | " | 20.0 | | 106 | 87.1-126 | | | |

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## CHEMICAL EXAMINATION REPORT



MFG, Inc
180 Howard St. Suite 200
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Report Date: 08/11/03 07:56
Project No: 030229.4
Project ID: SPI-Arcata/Task #4

| Order Number | Receipt Date/Time | Client Code | Client PO/Reference |
|---|---|---|---|
| A307606 | 07/25/2003 15:40 | MFGINC | |

### Metals by EPA 6000/7000 Series Methods - Quality Control

| Analyte(s) | Result | PQL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Flag |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AG33004 - EPA 3051 Microwave** | | | | | | | | | | |
| **LCS Dup (AG33004-BSD1)** | | | | Prepared: 07/30/03 Analyzed: 07/31/03 | | | | | | |
| Cadmium | 19.8 | 1.0 | mg/kg | 20.0 | | 99.0 | 85-115 | 1.02 | 20 | |
| Chromium | 20.0 | 5.0 | " | 20.0 | | 100 | 85-115 | 2.02 | 20 | |
| Lead | 19.9 | 5.0 | " | 20.0 | | 99.5 | 85-115 | 1.01 | 20 | |
| Nickel | 20.2 | 10 | " | 20.0 | | 101 | 85-115 | 2.00 | 20 | |
| Zinc | 21.6 | 10 | " | 20.0 | | 108 | 87.1-126 | 1.40 | 20 | |
| **Duplicate (AG33004-DUP1)** | | **Source: A307674-01** | | Prepared: 07/30/03 Analyzed: 07/31/03 | | | | | | |
| Cadmium | ND | 1.0 | mg/kg | | ND | | | | 20 | |
| Chromium | ND | 5.0 | " | | ND | | | | 20 | |
| Lead | ND | 5.0 | " | | ND | | | | 20 | |
| Nickel | ND | 10 | " | | ND | | | | 20 | |
| Zinc | ND | 10 | " | | ND | | | | 20 | |
| **Matrix Spike (AG33004-MS1)** | | **Source: A307674-01** | | Prepared: 07/30/03 Analyzed: 07/31/03 | | | | | | |
| Cadmium | 20.6 | 1.0 | mg/kg | 20.0 | ND | 103 | 70-130 | | | |
| Chromium | 21.1 | 5.0 | " | 20.0 | ND | 100 | 70-130 | | | |
| Lead | 22.2 | 5.0 | " | 20.0 | ND | 107 | 70-130 | | | |
| Nickel | 21.3 | 10 | " | 20.0 | ND | 104 | 70-130 | | | |
| Zinc | 26.1 | 10 | " | 20.0 | ND | 103 | 70-130 | | | |
| **Matrix Spike Dup (AG33004-MSD1)** | | **Source: A307674-01** | | Prepared: 07/30/03 Analyzed: 07/31/03 | | | | | | |
| Cadmium | 19.8 | 1.0 | mg/kg | 20.0 | ND | 99.0 | 70-130 | 3.96 | 20 | |
| Chromium | 20.1 | 5.0 | " | 20.0 | ND | 95.0 | 70-130 | 4.85 | 20 | |
| Lead | 21.0 | 5.0 | " | 20.0 | ND | 101 | 70-130 | 5.56 | 20 | |
| Nickel | 20.6 | 10 | " | 20.0 | ND | 100 | 70-130 | 3.34 | 20 | |
| Zinc | 28.3 | 10 | " | 20.0 | ND | 114 | 70-130 | 8.09 | 20 | |

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Attn: Ed Conti

Report Date: 08/11/03 07:56
Project No: 030229.4
Project ID: SPI-Arcata/Task #4

| Order Number | Receipt Date/Time | Client Code | Client PO/Reference |
|---|---|---|---|
| A307606 | 07/25/2003 15:40 | MFGINC | |

## Chlorinated Phenols by Canadian Pulp Method - Quality Control

| Analyte(s) | Result | PQL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Flag |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AG33102 - Solvent Extraction** | | | | | | | | | | |
| **Blank (AG33102-BLK1)** | | | | Prepared: 07/28/03 Analyzed: 07/29/03 | | | | | | |
| 2,4,6-Trichlorophenol | ND | 1.0 | mg/kg | | | | | | | |
| 2,3,5,6-Tetrachlorophenol | ND | 1.0 | " | | | | | | | |
| 2,3,4,6-Tetrachlorophenol | ND | 1.0 | " | | | | | | | |
| 2,3,4,5-Tetrachlorophenol | ND | 1.0 | " | | | | | | | |
| Pentachlorophenol | ND | 1.0 | " | | | | | | | |
| *Surrogate: Tribromophenol* | *0.0870* | | " | *0.124* | | *70.2* | *23-140* | | | |
| **LCS (AG33102-BS1)** | | | | Prepared: 07/28/03 Analyzed: 07/29/03 | | | | | | |
| 2,4,6-Trichlorophenol | 0.0183 | 1.0 | mg/kg | 0.0250 | | 73.2 | 32-116 | | | |
| 2,3,5,6-Tetrachlorophenol | 0.0153 | 1.0 | " | 0.0250 | | 61.2 | 18-80 | | | |
| 2,3,4,6-Tetrachlorophenol | 0.0162 | 1.0 | " | 0.0250 | | 64.8 | 28-89 | | | |
| 2,3,4,5-Tetrachlorophenol | 0.0174 | 1.0 | " | 0.0250 | | 69.6 | 54-85 | | | |
| Pentachlorophenol | 0.0179 | 1.0 | " | 0.0250 | | 71.6 | 17-85 | | | |
| *Surrogate: Tribromophenol* | *0.0940* | | " | *0.124* | | *75.8* | *23-140* | | | |
| **LCS Dup (AG33102-BSD1)** | | | | Prepared: 07/28/03 Analyzed: 07/29/03 | | | | | | |
| 2,4,6-Trichlorophenol | 0.0198 | 1.0 | mg/kg | 0.0250 | | 79.2 | 32-116 | 7.87 | 50 | |
| 2,3,5,6-Tetrachlorophenol | 0.0140 | 1.0 | " | 0.0250 | | 56.0 | 18-80 | 8.87 | 50 | |
| 2,3,4,6-Tetrachlorophenol | 0.0162 | 1.0 | " | 0.0250 | | 64.8 | 28-89 | 0.00 | 50 | |
| 2,3,4,5-Tetrachlorophenol | 0.0184 | 1.0 | " | 0.0250 | | 73.6 | 54-85 | 5.59 | 50 | |
| Pentachlorophenol | 0.0180 | 1.0 | " | 0.0250 | | 72.0 | 17-85 | 0.557 | 50 | |
| *Surrogate: Tribromophenol* | *0.104* | | " | *0.124* | | *83.9* | *23-140* | | | |
| **Batch AH30513 - Solvent Extraction** | | | | | | | | | | |
| **Blank (AH30513-BLK1)** | | | | Prepared: 07/29/03 Analyzed: 07/31/03 | | | | | | |
| 2,4,6-Trichlorophenol | ND | 1.0 | mg/kg | | | | | | | |
| 2,3,5,6-Tetrachlorophenol | ND | 1.0 | " | | | | | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Sheri Speaks

Sheri L. Speaks
Project Manager

8/11/03

Alpha Analytical Laboratories Inc.
208 Mason St. Ukiah, California 95482
e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267



## CHEMICAL EXAMINATION REPORT



MFG, Inc
180 Howard St. Suite 200
San Francisco, CA 94105-2941
Attn: Ed Conti

Report Date: 08/11/03 07:56
Project No: 030229.4
Project ID: SPI-Arcata/Task #4

| Order Number | Receipt Date/Time | Client Code | Client PO/Reference |
|---|---|---|---|
| A307606 | 07/25/2003 15:40 | MFGINC | |

### Chlorinated Phenols by Canadian Pulp Method - Quality Control

| Analyte(s) | Result | PQL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Flag |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AH30513 - Solvent Extraction** | | | | | | | | | | |
| **Blank (AH30513-BLK1)** | | | | Prepared: 07/29/03 Analyzed: 07/31/03 | | | | | | |
| 2,3,4,6-Tetrachlorophenol | ND | 1.0 | " | | | | | | | |
| 2,3,4,5-Tetrachlorophenol | ND | 1.0 | " | | | | | | | |
| Pentachlorophenol | ND | 1.0 | " | | | | | | | |
| *Surrogate: Tribromophenol* | *0.0870* | | " | *0.124* | | *70.2* | *23-140* | | | |
| **LCS (AH30513-BS1)** | | | | Prepared: 08/01/03 Analyzed: 08/05/03 | | | | | | |
| 2,4,6-Trichlorophenol | 0.0164 | 1.0 | mg/kg | 0.0250 | | 65.6 | 32-116 | | | |
| 2,3,5,6-Tetrachlorophenol | 0.0141 | 1.0 | " | 0.0250 | | 56.4 | 18-80 | | | |
| 2,3,4,6-Tetrachlorophenol | 0.0161 | 1.0 | " | 0.0250 | | 64.4 | 28-89 | | | |
| 2,3,4,5-Tetrachlorophenol | 0.0151 | 1.0 | " | 0.0250 | | 60.4 | 54-85 | | | |
| Pentachlorophenol | 0.0137 | 1.0 | " | 0.0250 | | 54.8 | 17-85 | | | |
| *Surrogate: Tribromophenol* | *0.0710* | | " | *0.124* | | *57.3* | *23-140* | | | |
| **LCS Dup (AH30513-BSD1)** | | | | Prepared: 08/01/03 Analyzed: 08/05/03 | | | | | | |
| 2,4,6-Trichlorophenol | 0.0137 | 1.0 | mg/kg | 0.0250 | | 54.8 | 32-116 | 17.9 | 50 | |
| 2,3,5,6-Tetrachlorophenol | 0.0121 | 1.0 | " | 0.0250 | | 48.4 | 18-80 | 15.3 | 50 | |
| 2,3,4,6-Tetrachlorophenol | 0.0160 | 1.0 | " | 0.0250 | | 64.0 | 28-89 | 0.623 | 50 | |
| 2,3,4,5-Tetrachlorophenol | 0.0153 | 1.0 | " | 0.0250 | | 61.2 | 54-85 | 1.32 | 50 | |
| Pentachlorophenol | 0.0139 | 1.0 | " | 0.0250 | | 55.6 | 17-85 | 1.45 | 50 | |
| *Surrogate: Tribromophenol* | *0.0730* | | " | *0.124* | | *58.9* | *23-140* | | | |

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Sheri Speaks

Sheri L. Speaks
Project Manager

8/11/03

Alpha Analytical Laboratories Inc.
208 Mason St. Ukiah, California 95482
e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267



## CHEMICAL EXAMINATION REPORT



MFG, Inc
180 Howard St. Suite 200
San Francisco, CA 94105-2941
Attn: Ed Conti

Report Date: 08/11/03 07:56
Project No: 030229.4
Project ID: SPI-Arcata/Task #4

| Order Number | Receipt Date/Time | Client Code | Client PO/Reference |
|---|---|---|---|
| A307606 | 07/25/2003 15:40 | MFGINC | |

### Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

| Analyte(s) | Result | PQL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Flag |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AH30717 - General Preparation** | | | | | | | | | | |
| **Blank (AH30717-BLK1)** | | | | Prepared: 08/05/03 Analyzed: 08/07/03 | | | | | | |
| Oil & Grease (HEM) | ND | 50 | mg/kg | | | | | | | |
| **LCS (AH30717-BS1)** | | | | Prepared: 08/05/03 Analyzed: 08/07/03 | | | | | | |
| Oil & Grease (HEM) | 3970 | 50 | mg/kg | 4000 | | 99.2 | 80-120 | | | |
| **LCS Dup (AH30717-BSD1)** | | | | Prepared: 08/05/03 Analyzed: 08/07/03 | | | | | | |
| Oil & Grease (HEM) | 3700 | 50 | mg/kg | 4000 | | 92.5 | 80-120 | 7.04 | 20 | |
| **Duplicate (AH30717-DUP1)** | | Source: A307606-04 | | Prepared: 08/05/03 Analyzed: 08/07/03 | | | | | | |
| Oil & Grease (HEM) | 4670 | 50 | mg/kg | | 5800 | | | 21.6 | 200 | |
| **Matrix Spike (AH30717-MS1)** | | Source: A307606-04 | | Prepared: 08/05/03 Analyzed: 08/07/03 | | | | | | |
| Oil & Grease (HEM) | 7820 | 50 | mg/kg | 2000 | 5800 | 101 | 80-120 | | | |
| **Matrix Spike Dup (AH30717-MSD1)** | | Source: A307606-04 | | Prepared: 08/05/03 Analyzed: 08/07/03 | | | | | | |
| Oil & Grease (HEM) | 7660 | 50 | mg/kg | 2000 | 5800 | 93.0 | 80-120 | 2.07 | 20 | |
| **Batch AH30718 - General Preparation** | | | | | | | | | | |
| **Blank (AH30718-BLK1)** | | | | Prepared: 08/06/03 Analyzed: 08/07/03 | | | | | | |
| Oil & Grease (HEM) | ND | 50 | mg/kg | | | | | | | |
| **LCS (AH30718-BS1)** | | | | Prepared: 08/06/03 Analyzed: 08/07/03 | | | | | | |
| Oil & Grease (HEM) | 3560 | 50 | mg/kg | 4000 | | 89.0 | 80-120 | | | |
| **LCS Dup (AH30718-BSD1)** | | | | Prepared: 08/06/03 Analyzed: 08/07/03 | | | | | | |
| Oil & Grease (HEM) | 3440 | 50 | mg/kg | 4000 | | 86.0 | 80-120 | 3.43 | 20 | |

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Sheri Speaks

Sheri L. Speaks
Project Manager

8/11/03

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208 Mason St. Ukiah, California 95482
e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267



## CHEMICAL EXAMINATION REPORT



MFG, Inc
180 Howard St. Suite 200
San Francisco, CA 94105-2941
Attn: Ed Conti

Report Date: 08/11/03 07:56
Project No: 030229.4
Project ID: SPI-Arcata/Task #4

| Order Number | Receipt Date/Time | Client Code | Client PO/Reference |
|---|---|---|---|
| A307606 | 07/25/2003 15:40 | MFGINC | |

### Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

| Analyte(s) | Result | PQL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Flag |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AH30718 - General Preparation** | | | | | | | | | | |
| **Duplicate (AH30718-DUP1)** | **Source: A307606-21** | | | Prepared: 08/06/03 | Analyzed: 08/07/03 | | | | | |
| Oil & Grease (HEM) | 455 | 50 | mg/kg | | 530 | | | 15.2 | 200 | |
| **Matrix Spike (AH30718-MS1)** | **Source: A307606-21** | | | Prepared: 08/06/03 | Analyzed: 08/07/03 | | | | | |
| Oil & Grease (HEM) | 3020 | 50 | mg/kg | 2500 | 530 | 99.6 | 80-120 | | | |
| **Matrix Spike Dup (AH30718-MSD1)** | **Source: A307606-21** | | | Prepared: 08/06/03 | Analyzed: 08/07/03 | | | | | |
| Oil & Grease (HEM) | 3180 | 50 | mg/kg | 2500 | 530 | 106 | 80-120 | 5.16 | 20 | |
| **Batch AH30822 - General Preparation** | | | | | | | | | | |
| **Blank (AH30822-BLK1)** | | | | Prepared: 08/05/03 | Analyzed: 08/08/03 | | | | | |
| Oil & Grease (HEM-SG) | ND | 50 | mg/kg | | | | | | | |
| **LCS (AH30822-BS1)** | | | | Prepared: 08/05/03 | Analyzed: 08/08/03 | | | | | |
| Oil & Grease (HEM-SG) | 3520 | 50 | mg/kg | 4000 | | 88.0 | 80-120 | | | |
| **LCS Dup (AH30822-BSD1)** | | | | Prepared: 08/06/03 | Analyzed: 08/08/03 | | | | | |
| Oil & Grease (HEM-SG) | 3840 | 50 | mg/kg | 4000 | | 96.0 | 80-120 | 8.70 | 20 | |
| **Duplicate (AH30822-DUP1)** | **Source: A307606-04** | | | Prepared: 08/05/03 | Analyzed: 08/08/03 | | | | | |
| Oil & Grease (HEM-SG) | 1920 | 50 | mg/kg | | 1600 | | | 18.2 | 200 | |
| **Matrix Spike (AH30822-MS1)** | **Source: A307606-04** | | | Prepared: 08/05/03 | Analyzed: 08/08/03 | | | | | |
| Oil & Grease (HEM-SG) | 3590 | 50 | mg/kg | 2000 | 1600 | 99.5 | 80-120 | | | |
| **Matrix Spike Dup (AH30822-MSD1)** | **Source: A307606-04** | | | Prepared: 08/05/03 | Analyzed: 08/08/03 | | | | | |
| Oil & Grease (HEM-SG) | 3500 | 50 | mg/kg | 2000 | 1600 | 95.0 | 80-120 | 2.54 | 20 | |



Sheri Speaks

Sheri L. Speaks
Project Manager

8/11/03

Alpha Analytical Laboratories Inc.
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e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267



## CHEMICAL EXAMINATION REPORT



MFG, Inc
180 Howard St. Suite 200
San Francisco, CA 94105-2941
Attn: Ed Conti

Report Date: 08/11/03 07:56
Project No: 030229.4
Project ID: SPI-Arcata/Task #4

| Order Number | Receipt Date/Time | Client Code | Client PO/Reference |
|---|---|---|---|
| A307606 | 07/25/2003 15:40 | MFGINC | |

### Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

| Analyte(s) | Result | PQL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Flag |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AH30823 - General Preparation** | | | | | | | | | | |
| **Blank (AH30823-BLK1)** | | | | Prepared: 08/06/03 Analyzed: 08/08/03 | | | | | | |
| Oil & Grease (HEM-SG) | ND | 50 | mg/kg | | | | | | | |
| **LCS (AH30823-BS1)** | | | | Prepared: 08/06/03 Analyzed: 08/08/03 | | | | | | |
| Oil & Grease (HEM-SG) | 1800 | 50 | mg/kg | 2000 | | 90.0 | 80-120 | | | |
| **LCS Dup (AH30823-BSD1)** | | | | Prepared: 08/06/03 Analyzed: 08/08/03 | | | | | | |
| Oil & Grease (HEM-SG) | 1700 | 50 | mg/kg | 2000 | | 85.0 | 80-120 | 5.71 | 20 | |
| **Duplicate (AH30823-DUP1)** | | **Source: A307606-21** | | Prepared: 08/06/03 Analyzed: 08/08/03 | | | | | | |
| Oil & Grease (HEM-SG) | 185 | 50 | mg/kg | | 180 | | | 2.74 | 200 | |
| **Matrix Spike (AH30823-MS1)** | | **Source: A307606-21** | | Prepared: 08/06/03 Analyzed: 08/08/03 | | | | | | |
| Oil & Grease (HEM-SG) | 1540 | 50 | mg/kg | 1500 | 180 | 90.7 | 80-120 | | | |
| **Matrix Spike Dup (AH30823-MSD1)** | | **Source: A307606-21** | | Prepared: 08/06/03 Analyzed: 08/08/03 | | | | | | |
| Oil & Grease (HEM-SG) | 1600 | 50 | mg/kg | 1500 | 180 | 94.7 | 80-120 | 3.82 | 20 | |

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Sheri Speaks

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Project Manager

8/11/03

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208 Mason St. Ukiah, California 95482
e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

## CHEMICAL EXAMINATION REPORT



MFG, Inc
180 Howard St. Suite 200
San Francisco, CA 94105-2941
Attn: Ed Conti

Report Date: 08/11/03 07:56
Project No: 030229.4
Project ID: SPI-Arcata/Task #4

| Order Number | Receipt Date/Time | Client Code | Client PO/Reference |
|---|---|---|---|
| A307606 | 07/25/2003 15:40 | MFGINC | |

**Notes and Definitions**

| | |
|---|---|
| QM-04 | High RPD and/or poor percent recovery may reflect sample non-homogeneity. |
| DET | Analyte DETECTED |
| ND | Analyte NOT DETECTED at or above the reporting limit |
| NR | Not Reported |
| dry | Sample results reported on a dry weight basis |
| RPD | Relative Percent Difference |
| PQL | Practical Quantitation Limit |

# MFG, INC.

## CHAIN-OF-CUSTODY RECORD AND REQUEST FOR ANALYSIS

COC No. 42860


☐ Arcata Office
1165 G Street, Suite E
Arcata, CA 95521-5817
Tel: (707) 826-8430
Fax: (707) 826-8437

☐ Boulder Office
4900 Pearl East Circle
Suite 300W
Boulder, CO 80301-6118
Tel: (303) 447-1823
Fax: (303) 447-1836

☐ Irvine Office
17770 Cartwright Road
Suite 500
Irvine, CA 92614-5850
Tel: (949) 253-2951
Fax: (949) 253-2954

☐ Osburn Office
P.O. Box 30
Wallace, ID
83873-0030
Tel: (208) 556-6811
Fax: (208) 556-7271

☒ San Francisco Office
180 Howard Street, Suite 200
San Francisco, CA 94105-1617
Phone (415) 495-7110- FAX (415) 495-7107

☐ Seattle Office
19203 36th Avenue W.
Suite 101
Lynnwood, WA 98036-5707
Tel: (425) 921-4000
Fax: (425) 921-4040

☐ _____


PROJECT NO: 030229.4 PROJECT NAME: Sierra Pacific ~~Ind~~ PAGE: 1 OF: 3

SAMPLER (Signature): Julie Mills PROJECT MANAGER: Ed Conti DATE: 7/25/03

METHOD OF SHIPMENT: courier CARRIER/WAYBILL NO: NA DESTINATION: Alpha

### SAMPLES

| Field Sample Identification | Sample DATE | Sample TIME | Matrix* | Preservation HCl | Preservation $HNO_3$ | Preservation $H_2SO_4$ | Preservation COLD | Preservation | FILTRATION* | Containers VOLUME (ml/oz) | Containers TYPE* | Containers NO. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| D6-1-0.0-0.5 | 7/22 | 0935 | So | | | | X | | U | 6"SL | ~~B~~ | 1 |
| D6-2-0.0-0.5 | | 1025 | So | | | | X | | U | 6"SL | B | 1 |
| D6-3-0.0-0.5 | | 1110 | So | | | | X | | U | 6"SL | B | 1 |
| D6-4-0.0-0.5 * | | 1145 | So | | | | X | | U | 6"SL | B | 1 |
| D6-5-0.0-0.5 | | 1500 | So | | | | X | | U | 6"SL | B | 1 |
| D6-6-0.0-0.5 | | 1530 | So | | | | X | | U | 6"SL | B | 1 |
| D6-7-0.0-0.5 | ↓ | 1605 | So | | | | X | | U | 6"SL | B | 1 |
| D6-8-0.0-0.5 | 7/23 | 0900 | So | | | | X | | U | 6"SL | B | 1 |
| D6-9-0.0-0.5 | | 0950 | So | | | | X | | U | 6"SL | B | 1 |
| D6-10-0.0-0.5 | ↓ | 1020 | So | | | | X | | U | 6"SL | B | 1 |

TOTAL NUMBER OF CONTAINERS (24)

### ANALYSIS REQUEST

| Constituents/Method: Wear Metals | pH | Total O&G | Chlor. Phenols | Handling: HOLD | RUSH | STANDARD | Remarks |
|---|---|---|---|---|---|---|---|
| X | X | X | X | | | X | Add SGT-HEM (O&G) to all samples per Chris JW 7.30.03 5PM |
| X | X | X | X | | | X | A3076006-1 |
| X | X | X | X | | | X | -2 |
| X | X | X | X | | | X | -3 |
| X | X | X | X | | | X | -4 |
| X | X | X | X | | | X | -5 |
| X | X | X | X | | | X | -6 |
| X | X | X | X | | | X | -7 |
| X | X | X | X | | | X | -8 |
| X | X | X | X | | | X | -9 |
| X | X | X | X | | | X | -10 |

RECEIVED AUG 13 2003 MFG, Inc.

LABORATORY COMMENTS/CONDITION OF SAMPLES Cooler Temp:

| RELINQUISHED BY: SIGNATURE | PRINTED NAME | COMPANY | DATE | TIME | RECIEVED BY: SIGNATURE | PRINTED NAME | COMPANY |
|---|---|---|---|---|---|---|---|
| Julie Mills | ~~Julie~~ Julie Mills | MFG | 7/25/03 | 1130 | | | |
| | | | 7/25/03 | 1:35 | J. Matthews | J. Matthews | Alpha LABORATORY |
| J. Matthews | Jack Matthews | Alpha | 7/25/03 | 15:40 | S. Spooks | S. Spooks | |

*KEY Matrix: AQ - aqueous NA - nonaqueous SO - soil SL - sludge P - petroleum A - air OT - other Containers: P - plastic G - glass T - teflon B - brass OT - other Filtration: F - filtered U - unfiltered

DISTRIBUTION: PINK: Field Copy YELLOW: Laboratory Copy WHITE: Return to Originator 6"SL = 6" Steel Liner

* Label said D6-3-0.0-0.5 went by time.

# MFG, INC.

## CHAIN-OF-CUSTODY RECORD AND REQUEST FOR ANALYSIS

COC No. 42861


☐ Arcata Office
1165 G Street, Suite E
Arcata, CA 95521-5817
Tel: (707) 826-8430
Fax: (707) 826-8437

☐ Boulder Office
4900 Pearl East Circle
Suite 300W
Boulder, CO 80301-6118
Tel: (303) 447-1823
Fax: (303) 447-1836

☐ Irvine Office
17770 Cartwright Road
Suite 500
Irvine, CA 92614-5850
Tel: (949) 253-2951
Fax: (949) 253-2954

☐ Osburn Office
P.O. Box 30
Wallace, ID
83873-0030
Tel: (208) 556-6811
Fax: (208) 556-7271

☑ San Francisco Office
[illegible] Howard Street, Suite 200
San Francisco, CA 94105-1617
Phone (415) 495-7110- FAX (415) 495-7107

☐ Seattle Office
19203 36th Avenue W.
Suite 101
Lynnwood, WA 98036-5707
Tel: (425) 921-4000
Fax: (425) 921-4040


PROJECT NO: 030229.4 PROJECT NAME: Sierra Pacific PAGE: 2 OF: 3

SAMPLER (Signature): John Mills PROJECT MANAGER: Ed Conti DATE: 7/25/03

METHOD OF SHIPMENT: courier CARRIER/WAYBILL NO: NA DESTINATION: Alpha

### SAMPLES

| Field Sample Identification | Sample DATE | Sample TIME | Matrix* | Preservation HCl | $HNO_3$ | $H_2SO_4$ | COLD | | FILTRATION* | Containers VOLUME (ml/oz) | TYPE* | NO. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| D6-11-0.0-0.5 | 7/23 | 1050 | SO | | | | X | | U | 6"sl | B | 1 |
| D6-12-0.0-0.5 | | 1110 | SO | | | | X | | U | 6"sl | B | 1 |
| D6-13-0.0-0.5 | | 1350 | SO | | | | X | | U | 6"sl | B | 1 |
| D6-14-0.0-0.5 | | 1430 | SO | | | | X | | U | 6"sl | B | 1 |
| D6-15-0.0-0.5 | | 1500 | SO | | | | X | | U | 6"sl | B | 1 |
| D6-16-0.0-0.5 | | 1530 | SO | | | | X | | U | 6"sl | B | 1 |
| D6-17-0.0-0.5 | | 1610 | SO | | | | X | | U | 6"sl | B | 1 |
| D6-18-0.0-0.5 | 7/24 | 0915 | SO | | | | X | | U | 6"sl | B | 1 |
| D6-19-0.0-0.5 | | 0935 | SO | | | | X | | U | 6"sl | B | 1 |
| D6-20-0.0-0.5 | | 0940 | SO | | | | X | | U | 6"sl | B | 1 |

TOTAL NUMBER OF CONTAINERS 24

### ANALYSIS REQUEST

| Constituents/Method | | | | Handling | | | Remarks |
|---|---|---|---|---|---|---|---|
| Wear Metals | pH | Total O&G | Chlor. Phenols | HOLD | RUSH | STANDARD | |
| X | X | X | X | | | X | A3076066-11 |
| X | X | X | X | | | X | 12 |
| X | X | X | X | | | X | 13 |
| X | X | X | X | | | X | 14 |
| X | X | X | X | | | X | 15 |
| X | X | X | X | | | X | 16 |
| X | X | X | X | | | X | 17 |
| X | X | X | X | | | X | 18 |
| X | X | X | X | | | X | 19 |
| X | X | X | X | | | X | 20 |

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LABORATORY COMMENTS/CONDITION OF SAMPLES

Cooler Temp:

| RELINQUISHED BY: SIGNATURE | PRINTED NAME | COMPANY | DATE | TIME | RECIEVED BY: SIGNATURE | PRINTED NAME | COMPANY |
|---|---|---|---|---|---|---|---|
| John Mills | John Mills | MFG | 7/25/03 | 1130 | | | |
| | | | 7/25/03 | 11:35 | J. Mathews | J. Mathews | Alpha LABORATORY |
| Jack Mathews | Jack Mathews | Alpha | 7/25/03 | 15:40 | S. Speaks | S. Speaks | |

*KEY Matrix: AQ - aqueous NA - nonaqueous SO - soil SL - sludge P - petroleum A - air OT - other Containers: P - plastic G - glass T - teflon B - brass OT - other Filtration: F - filtered U - unfiltered

DISTRIBUTION: PINK: Field Copy YELLOW: Laboratory Copy WHITE: Return to Originator

# MFG, INC.

## CHAIN-OF-CUSTODY RECORD AND REQUEST FOR ANALYSIS

COC No. 42862


☐ Arcata Office
1165 G Street, Suite E
Arcata, CA 95521-5817
Tel: (707) 826-8430
Fax: (707) 826-8437

☐ Boulder Office
4900 Pearl East Circle
Suite 300W
Boulder, CO 80301-6118
Tel: (303) 447-1823
Fax: (303) 447-1836

☐ Irvine Office
17770 Cartwright Road
Suite 500
Irvine, CA 92614-5850
Tel: (949) 253-2951
Fax: (949) 253-2954

☐ Osburn Office
P.O. Box 30
Wallace, ID
83873-0030
Tel: (208) 556-6811
Fax: (208) 556-7271

☑ San Francisco Office
180 Howard Street, Suite 200
San Francisco, CA 94105-1617
Phone (415) 495-7110- FAX (415) 495-7107

☐ Seattle Office
19203 36th Avenue W.
Suite 101
Lynnwood, WA 98036-5707
Tel: (425) 921-4000
Fax: (425) 921-4040


PROJECT NO: 030229.4 PROJECT NAME: Sierra Pacific PAGE: 3 OF: 3

SAMPLER (Signature): Julie Mills PROJECT MANAGER: Ed Conti DATE: 7/25/03

METHOD OF SHIPMENT: courier CARRIER/WAYBILL NO: NA DESTINATION: Alpha

### SAMPLES

| Field Sample Identification | Sample DATE | Sample TIME | Matrix* | Preservation HCl | Preservation $HNO_3$ | Preservation $H_2SO_4$ | Preservation COLD | Preservation | FILTRATION* | Containers VOLUME (ml/oz) | Containers TYPE* | Containers NO. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| D6-21-0.0-0.5 | 7/24 | 1000 | So | | | | X | | U | 6"sl | B | 1 |
| D6-22-0.0-0.5 | ↓ | 1020 | So | | | | X | | U | 6"sl | B | 1 |
| D6-23-0.0-0.5 | | 1035 | So | | | | X | | U | 6"sl | B | 1 |
| D6-24-0.0-0.5 | ↓ | 1050 | So | | | | X | | U | 6"sl | B | 1 |
| | | | | | | | | | | | | |
| Temp Blank A | | | | | | | | | | | | |
| Temp Blank B | | | | | | | | | | | | |
| Temp Blank C | | | | | | | | | | | | |
| Temp Blank D | | | | | | | | | | | | |
| | | | | | | | | | | | | |

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TOTAL NUMBER OF CONTAINERS (24)

### ANALYSIS REQUEST

| Constituents/Method: Wet Metals | pH | Total Cr6 | Chlor Phenols | Handling: HOLD | RUSH | STANDARD | Remarks |
|---|---|---|---|---|---|---|---|
| X | X | X | X | | | X | A3071606-21 |
| X | X | X | X | | | X | 22 |
| X | X | X | X | | | X | 23 |
| X | X | X | X | | | X | 24 |
| | | | | | | | please record cooler temps ↓ |
| | | | | | | | 1.2 |
| | | | | | | | 2.2 |
| | | | | | | | 1.6 |
| | | | | | | | 3.3 |

LABORATORY COMMENTS/CONDITION OF SAMPLES Cooler Temp:

### RELINQUISHED BY:

| SIGNATURE | PRINTED NAME | COMPANY | DATE | TIME |
|---|---|---|---|---|
| Julie Mills | Julie Mills | MFG | 7/25/03 | 1130 |
| | | | 7/25/03 | 11:35 |
| Jack Matthews | Jack Matthews | Alpha | 7/25/03 | 15:40 |

### RECIEVED BY:

| SIGNATURE | PRINTED NAME | COMPANY |
|---|---|---|
| | | |
| J. Matthews | J. Matthews | MFG LABORATORY |
| S. Speaks | S. Speaks | |

*KEY Matrix: AQ - aqueous NA - nonaqueous SO - soil SL - sludge P - petroleum A - air OT - other Containers: P - plastic G - glass T - teflon B - brass OT - other Filtration: F - filtered U - unfiltered

DISTRIBUTION: PINK: Field Copy YELLOW: Laboratory Copy WHITE: Return to Originator

**APPENDIX E**

**Laboratory Reports, including Chromatograms, and Chain of Custody Records for Groundwater Samples and the Surface Water Sample from the Retention Pond**

Alpha Analytical Laboratories Inc.
208 Mason St. Ukiah, California 95482
e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267



15 October 2003

MFG, Inc
Attn: Ed Conti
180 Howard St. Suite 200
San Francisco, CA 94105-2941
RE: SPI-Arcata/Task #4
Work Order: A307306

Enclosed are the results of analyses for samples received by the laboratory on 07/10/03 17:45. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Sheri Speaks

Sheri L. Speaks
Project Manager

This represents an amended copy of the original report

Alpha Analytical Laboratories Inc.
208 Mason St. Ukiah, California 95482
e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

# CHEMICAL EXAMINATION REPORT



MFG, Inc
180 Howard St. Suite 200
San Francisco, CA 94105-2941
Attn: Ed Conti

Report Date: 10/15/03 07:58
Project No: 030229.4
Project ID: SPI-Arcata/Task #4

| Order Number | Receipt Date/Time | Client Code | Client PO/Reference |
|---|---|---|---|
| A307306 | 07/10/2003 17:45 | MFGINC | |

## ANALYTICAL REPORT FOR SAMPLES

| Sample ID | Laboratory ID | Matrix | Date Sampled | Date Received |
|---|---|---|---|---|
| RP-1-GW | A307306-01 | Water | 07/08/03 13:15 | 07/10/03 17:45 |
| RP-2-GW | A307306-02 | Water | 07/08/03 16:13 | 07/10/03 17:45 |
| SDP-1-GW | A307306-03 | Water | 07/09/03 09:45 | 07/10/03 17:45 |
| D7-1-GW | A307306-04 | Water | 07/09/03 10:50 | 07/10/03 17:45 |
| D7-2-GW | A307306-05 | Water | 07/09/03 11:15 | 07/10/03 17:45 |
| D7-3-GW | A307306-06 | Water | 07/09/03 13:00 | 07/10/03 17:45 |
| D7-4-GW | A307306-07 | Water | 07/09/03 15:00 | 07/10/03 17:45 |
| D7-5-GW | A307306-08 | Water | 07/09/03 15:25 | 07/10/03 17:45 |
| D7-6-GW | A307306-09 | Water | 07/09/03 15:50 | 07/10/03 17:45 |
| D7-7-GW | A307306-10 | Water | 07/09/03 17:00 | 07/10/03 17:45 |
| D7-8-GW | A307306-11 | Water | 07/09/03 17:45 | 07/10/03 17:45 |
| D7-9-GW | A307306-12 | Water | 07/10/03 08:55 | 07/10/03 17:45 |
| D7-10-GW | A307306-13 | Water | 07/10/03 09:25 | 07/10/03 17:45 |
| D7-11-GW | A307306-14 | Water | 07/10/03 09:45 | 07/10/03 17:45 |
| D7-12-GW | A307306-15 | Water | 07/10/03 10:10 | 07/10/03 17:45 |
| D7-13-GW | A307306-16 | Water | 07/10/03 10:25 | 07/10/03 17:45 |
| D7-14-GW | A307306-17 | Water | 07/10/03 11:00 | 07/10/03 17:45 |
| D7-15-GW | A307306-18 | Water | 07/10/03 11:20 | 07/10/03 17:45 |
| D7-16-GW | A307306-19 | Water | 07/10/03 11:45 | 07/10/03 17:45 |
| D7-17-GW | A307306-20 | Water | 07/10/03 12:00 | 07/10/03 17:45 |



Sheri Speaks

Sheri L. Speaks
Project Manager

10/15/03

Alpha Analytical Laboratories Inc.
208 Mason St. Ukiah, California 95482
e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

## CHEMICAL EXAMINATION REPORT



MFG, Inc
180 Howard St. Suite 200
San Francisco, CA 94105-2941
Attn: Ed Conti

Report Date: 10/15/03 07:58
Project No: 030229.4
Project ID: SPI-Arcata/Task #4

| Order Number | Receipt Date/Time | Client Code | Client PO/Reference |
|---|---|---|---|
| A307306 | 07/10/2003 17:45 | MFGINC | |



Sheri Speaks

Sheri L. Speaks
Project Manager

10/15/03

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e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

## CHEMICAL EXAMINATION REPORT



MFG, Inc
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San Francisco, CA 94105-2941
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Project ID: SPI-Arcata/Task #4

| Order Number | Receipt Date/Time | Client Code | Client PO/Reference |
|---|---|---|---|
| A307306 | 07/10/2003 17:45 | MFGINC | |

### Alpha Analytical Laboratories, Inc.

| | METHOD | BATCH | PREPARED | ANALYZED | DILUTION | RESULT | | PQL | NOTE |
|---|---|---|---|---|---|---|---|---|---|
| **RP-1-GW (A307306-01)** | | | **Sample Type: Water** | | | **Sampled: 07/08/03 13:15** | | | |
| **Metals (Dissolved) by EPA 6000/7000 Series Methods** | | | | | | | | | |
| Cadmium, dissolved | EPA 6010 | AG31513 | 07/15/03 | 07/23/03 | 1 | ND mg/l | | 0.010 | |
| Chromium, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Nickel, dissolved | " | " | " | " | " | ND " | | 0.10 | |
| Lead, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Zinc, dissolved | " | " | " | " | " | ND " | | 0.10 | |
| **TPH as Diesel and Motor Oil by EPA Method 8015 Modified** | | | | | | | | | |
| **TPH as Diesel** | 8015DRO | AG31619 | 07/16/03 | 07/17/03 | 1.0417 | **170 ug/l** | | **52** | D-09 |
| **TPH as Motor Oil** | " | " | " | " | " | **1100 "** | | **100** | |
| *Surrogate: 1,4-Bromofluorobenzene* | " | " | " | " | | *60.0 %* | *14-116* | | |
| **RP-2-GW (A307306-02)** | | | **Sample Type: Water** | | | **Sampled: 07/08/03 16:13** | | | |
| **Metals (Dissolved) by EPA 6000/7000 Series Methods** | | | | | | | | | |
| Cadmium, dissolved | EPA 6010 | AG31513 | 07/15/03 | 07/23/03 | 1 | ND mg/l | | 0.010 | |
| Chromium, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Nickel, dissolved | " | " | " | " | " | ND " | | 0.10 | |
| Lead, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Zinc, dissolved | " | " | " | " | " | ND " | | 0.10 | |
| **TPH as Diesel and Motor Oil by EPA Method 8015 Modified** | | | | | | | | | |
| TPH as Diesel | 8015DRO | AG31619 | 07/16/03 | 07/17/03 | 1 | ND ug/l | | 50 | |
| TPH as Motor Oil | " | " | " | " | " | ND " | | 100 | |
| *Surrogate: 1,4-Bromofluorobenzene* | " | " | " | " | | *46.6 %* | *14-116* | | |
| **SDP-1-GW (A307306-03)** | | | **Sample Type: Water** | | | **Sampled: 07/09/03 09:45** | | | |
| **Metals (Dissolved) by EPA 6000/7000 Series Methods** | | | | | | | | | |
| Cadmium, dissolved | EPA 6010 | AG31513 | 07/15/03 | 07/23/03 | 1 | ND mg/l | | 0.010 | |
| Chromium, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Nickel, dissolved | " | " | " | " | " | ND " | | 0.10 | |
| Lead, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Zinc, dissolved | " | " | " | " | " | ND " | | 0.10 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Sheri Speaks

Sheri L. Speaks
Project Manager

10/15/03

Alpha Analytical Laboratories Inc.
208 Mason St. Ukiah, California 95482
e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267



## CHEMICAL EXAMINATION REPORT



MFG, Inc
180 Howard St. Suite 200
San Francisco, CA 94105-2941
Attn: Ed Conti

Report Date: 10/15/03 07:58
Project No: 030229.4
Project ID: SPI-Arcata/Task #4

| Order Number | Receipt Date/Time | Client Code | Client PO/Reference |
|---|---|---|---|
| A307306 | 07/10/2003 17:45 | MFGINC | |

### Alpha Analytical Laboratories, Inc.

| | METHOD | BATCH | PREPARED | ANALYZED | DILUTION | RESULT | | PQL | NOTE |
|---|---|---|---|---|---|---|---|---|---|
| **SDP-1-GW (A307306-03)** | | | **Sample Type: Water** | | | **Sampled: 07/09/03 09:45** | | | |
| **TPH as Diesel and Motor Oil by EPA Method 8015 Modified** | | | | | | | | | |
| **TPH as Diesel** | 8015DRO | AG31619 | 07/16/03 | 07/17/03 | 1.1299 | **300 ug/l** | | **56** | D-09 |
| **TPH as Motor Oil** | " | " | " | " | " | **890 "** | | **110** | |
| *Surrogate: 1,4-Bromofluorobenzene* | " | " | " | " | | *62.4 %* | *14-116* | | |
| **D7-1-GW (A307306-04)** | | | **Sample Type: Water** | | | **Sampled: 07/09/03 10:50** | | | |
| **Metals (Dissolved) by EPA 6000/7000 Series Methods** | | | | | | | | | |
| Cadmium, dissolved | EPA 6010 | AG31513 | 07/15/03 | 07/23/03 | 1 | ND mg/l | | 0.010 | |
| Chromium, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Nickel, dissolved | " | " | " | " | " | ND " | | 0.10 | |
| Lead, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Zinc, dissolved | " | " | " | " | " | ND " | | 0.10 | |
| **TPH as Diesel and Motor Oil by EPA Method 8015 Modified** | | | | | | | | | |
| TPH as Diesel | 8015DRO | AG31619 | 07/16/03 | 07/17/03 | 1.087 | ND ug/l | | 54 | |
| **TPH as Motor Oil** | " | " | " | " | " | **170 "** | | **110** | |
| *Surrogate: 1,4-Bromofluorobenzene* | " | " | " | " | | *69.8 %* | *14-116* | | |
| **D7-2-GW (A307306-05)** | | | **Sample Type: Water** | | | **Sampled: 07/09/03 11:15** | | | |
| **Metals (Dissolved) by EPA 6000/7000 Series Methods** | | | | | | | | | |
| Cadmium, dissolved | EPA 6010 | AG31513 | 07/15/03 | 07/23/03 | 1 | ND mg/l | | 0.010 | |
| Chromium, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Nickel, dissolved | " | " | " | " | " | ND " | | 0.10 | |
| Lead, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Zinc, dissolved | " | " | " | " | " | ND " | | 0.10 | |



Sheri Speaks

Sheri L. Speaks
Project Manager

10/15/03

Alpha Analytical Laboratories Inc.
208 Mason St. Ukiah, California 95482
e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

## CHEMICAL EXAMINATION REPORT



MFG, Inc
180 Howard St. Suite 200
San Francisco, CA 94105-2941
Attn: Ed Conti

Report Date: 10/15/03 07:58
Project No: 030229.4
Project ID: SPI-Arcata/Task #4

| Order Number | Receipt Date/Time | Client Code | Client PO/Reference |
|---|---|---|---|
| A307306 | 07/10/2003 17:45 | MFGINC | |

### Alpha Analytical Laboratories, Inc.

| | METHOD | BATCH | PREPARED | ANALYZED | DILUTION | RESULT | | PQL | NOTE |
|---|---|---|---|---|---|---|---|---|---|
| **D7-2-GW (A307306-05)** | | | **Sample Type: Water** | | | **Sampled: 07/09/03 11:15** | | | |
| **TPH as Diesel and Motor Oil by EPA Method 8015 Modified** | | | | | | | | | |
| **TPH as Diesel** | 8015DRO | AG31619 | 07/16/03 | 07/17/03 | 1.1299 | **85 ug/l** | | **56** | D-09 |
| **TPH as Motor Oil** | " | " | " | " | " | **240 "** | | **110** | |
| *Surrogate: 1,4-Bromofluorobenzene* | " | " | " | " | | *68.1 %* | *14-116* | | |
| **D7-3-GW (A307306-06)** | | | **Sample Type: Water** | | | **Sampled: 07/09/03 13:00** | | | |
| **Metals (Dissolved) by EPA 6000/7000 Series Methods** | | | | | | | | | |
| Cadmium, dissolved | EPA 6010 | AG31513 | 07/15/03 | 07/23/03 | 1 | ND mg/l | | 0.010 | |
| Chromium, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Nickel, dissolved | " | " | " | " | " | ND " | | 0.10 | |
| Lead, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Zinc, dissolved | " | " | " | " | " | ND " | | 0.10 | |
| **TPH as Diesel and Motor Oil by EPA Method 8015 Modified** | | | | | | | | | |
| TPH as Diesel | 8015DRO | AG31619 | 07/16/03 | 07/17/03 | 1 | ND ug/l | | 50 | |
| TPH as Motor Oil | " | " | " | " | " | ND " | | 100 | |
| *Surrogate: 1,4-Bromofluorobenzene* | " | " | " | " | | *69.2 %* | *14-116* | | |
| **D7-4-GW (A307306-07)** | | | **Sample Type: Water** | | | **Sampled: 07/09/03 15:00** | | | |
| **Metals (Dissolved) by EPA 6000/7000 Series Methods** | | | | | | | | | |
| Cadmium, dissolved | EPA 6010 | AG31513 | 07/15/03 | 07/23/03 | 1 | ND mg/l | | 0.010 | |
| Chromium, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Nickel, dissolved | " | " | " | " | " | ND " | | 0.10 | |
| Lead, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Zinc, dissolved | " | " | " | " | " | ND " | | 0.10 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Sheri Speaks

Sheri L. Speaks
Project Manager

10/15/03

Alpha Analytical Laboratories Inc.
208 Mason St. Ukiah, California 95482
e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

## CHEMICAL EXAMINATION REPORT



MFG, Inc
180 Howard St. Suite 200
San Francisco, CA 94105-2941
Attn: Ed Conti

Report Date: 10/15/03 07:58
Project No: 030229.4
Project ID: SPI-Arcata/Task #4

| Order Number | Receipt Date/Time | Client Code | Client PO/Reference |
|---|---|---|---|
| A307306 | 07/10/2003 17:45 | MFGINC | |

### Alpha Analytical Laboratories, Inc.

| | METHOD | BATCH | PREPARED | ANALYZED | DILUTION | RESULT | | PQL | NOTE |
|---|---|---|---|---|---|---|---|---|---|
| **D7-4-GW (A307306-07)** | | | **Sample Type: Water** | | | **Sampled: 07/09/03 15:00** | | | |
| **TPH as Diesel and Motor Oil by EPA Method 8015 Modified** | | | | | | | | | |
| **TPH as Diesel** | 8015DRO | AG31724 | 07/17/03 | 07/18/03 | 1.111 | **67 ug/l** | | **56** | D-09 |
| **TPH as Motor Oil** | " | " | " | " | " | **280** " | | **110** | |
| *Surrogate: 1,4-Bromofluorobenzene* | " | " | " | " | | *62.4 %* | *14-116* | | |
| **D7-5-GW (A307306-08)** | | | **Sample Type: Water** | | | **Sampled: 07/09/03 15:25** | | | |
| **Metals (Dissolved) by EPA 6000/7000 Series Methods** | | | | | | | | | |
| Cadmium, dissolved | EPA 6010 | AG31513 | 07/15/03 | 07/23/03 | 1 | ND mg/l | | 0.010 | |
| Chromium, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Nickel, dissolved | " | " | " | " | " | ND " | | 0.10 | |
| Lead, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Zinc, dissolved | " | " | " | " | " | ND " | | 0.10 | |
| **TPH as Diesel and Motor Oil by EPA Method 8015 Modified** | | | | | | | | | |
| **TPH as Diesel** | 8015DRO | AG31724 | 07/17/03 | 07/18/03 | 1.149 | **560 ug/l** | | **57** | D-09 |
| **TPH as Motor Oil** | " | " | " | " | " | **4100** " | | **110** | |
| *Surrogate: 1,4-Bromofluorobenzene* | " | " | " | " | | *60.2 %* | *14-116* | | |
| **D7-6-GW (A307306-09)** | | | **Sample Type: Water** | | | **Sampled: 07/09/03 15:50** | | | |
| **Metals (Dissolved) by EPA 6000/7000 Series Methods** | | | | | | | | | |
| Cadmium, dissolved | EPA 6010 | AG31513 | 07/15/03 | 07/23/03 | 1 | ND mg/l | | 0.010 | |
| Chromium, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Nickel, dissolved | " | " | " | " | " | ND " | | 0.10 | |
| Lead, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Zinc, dissolved | " | " | " | " | " | ND " | | 0.10 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Sheri Speaks

Sheri L. Speaks
Project Manager

10/15/03

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208 Mason St. Ukiah, California 95482
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# CHEMICAL EXAMINATION REPORT



MFG, Inc
180 Howard St. Suite 200
San Francisco, CA 94105-2941
Attn: Ed Conti

Report Date: 10/15/03 07:58
Project No: 030229.4
Project ID: SPI-Arcata/Task #4

| Order Number | Receipt Date/Time | Client Code | Client PO/Reference |
|---|---|---|---|
| A307306 | 07/10/2003 17:45 | MFGINC | |

## Alpha Analytical Laboratories, Inc.

| | METHOD | BATCH | PREPARED | ANALYZED | DILUTION | RESULT | | PQL | NOTE |
|---|---|---|---|---|---|---|---|---|---|
| **D7-6-GW (A307306-09)** | | | **Sample Type: Water** | | | **Sampled: 07/09/03 15:50** | | | |
| **TPH as Diesel and Motor Oil by EPA Method 8015 Modified** | | | | | | | | | |
| **TPH as Diesel** | 8015DRO | AG31724 | 07/17/03 | 07/18/03 | 1.0309 | **70 ug/l** | | **52** | D-09 |
| **TPH as Motor Oil** | " | " | " | " | " | **380** " | | **100** | |
| *Surrogate: 1,4-Bromofluorobenzene* | " | " | " | " | | *53.1 %* | *14-116* | | |
| **D7-7-GW (A307306-10)** | | | **Sample Type: Water** | | | **Sampled: 07/09/03 17:00** | | | |
| **Metals (Dissolved) by EPA 6000/7000 Series Methods** | | | | | | | | | |
| Cadmium, dissolved | EPA 6010 | AG31513 | 07/15/03 | 07/23/03 | 1 | ND mg/l | | 0.010 | |
| Chromium, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Nickel, dissolved | " | " | " | " | " | ND " | | 0.10 | |
| Lead, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Zinc, dissolved | " | " | " | " | " | ND " | | 0.10 | |
| **TPH as Diesel and Motor Oil by EPA Method 8015 Modified** | | | | | | | | | |
| TPH as Diesel | 8015DRO | AG31724 | 07/17/03 | 07/18/03 | 1.124 | ND ug/l | | 56 | R-02 |
| TPH as Motor Oil | " | " | " | " | " | ND " | | 110 | |
| *Surrogate: 1,4-Bromofluorobenzene* | " | " | " | " | | *75.6 %* | *14-116* | | |
| **D7-8-GW (A307306-11)** | | | **Sample Type: Water** | | | **Sampled: 07/09/03 17:45** | | | |
| **Metals (Dissolved) by EPA 6000/7000 Series Methods** | | | | | | | | | |
| Cadmium, dissolved | EPA 6010 | AG31513 | 07/15/03 | 07/23/03 | 1 | ND mg/l | | 0.010 | |
| Chromium, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Nickel, dissolved | " | " | " | " | " | ND " | | 0.10 | |
| Lead, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Zinc, dissolved | " | " | " | " | " | ND " | | 0.10 | |

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Sheri Speaks

Sheri L. Speaks
Project Manager

10/15/03

Alpha Analytical Laboratories Inc.
208 Mason St. Ukiah, California 95482
e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267



## CHEMICAL EXAMINATION REPORT



MFG, Inc
180 Howard St. Suite 200
San Francisco, CA 94105-2941
Attn: Ed Conti

Report Date: 10/15/03 07:58
Project No: 030229.4
Project ID: SPI-Arcata/Task #4

| Order Number | Receipt Date/Time | Client Code | Client PO/Reference |
|---|---|---|---|
| A307306 | 07/10/2003 17:45 | MFGINC | |

### Alpha Analytical Laboratories, Inc.

| | METHOD | BATCH | PREPARED | ANALYZED | DILUTION | RESULT | | PQL | NOTE |
|---|---|---|---|---|---|---|---|---|---|
| **D7-8-GW (A307306-11)** | | | **Sample Type: Water** | | | **Sampled: 07/09/03 17:45** | | | |
| **TPH as Diesel and Motor Oil by EPA Method 8015 Modified** | | | | | | | | | |
| **TPH as Diesel** | 8015DRO | AG31724 | 07/17/03 | 07/18/03 | 1.149 | **240 ug/l** | | **57** | D-09 |
| **TPH as Motor Oil** | " | " | " | " | " | **1500 "** | | **110** | |
| *Surrogate: 1,4-Bromofluorobenzene* | " | " | " | " | | *14.5 %* | *14-116* | | |
| **D7-9-GW (A307306-12)** | | | **Sample Type: Water** | | | **Sampled: 07/10/03 08:55** | | | |
| **Metals (Dissolved) by EPA 6000/7000 Series Methods** | | | | | | | | | |
| Cadmium, dissolved | EPA 6010 | AG31513 | 07/15/03 | 07/23/03 | 1 | ND mg/l | | 0.010 | |
| Chromium, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Nickel, dissolved | " | " | " | " | " | ND " | | 0.10 | |
| Lead, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Zinc, dissolved | " | " | " | " | " | ND " | | 0.10 | |
| **TPH as Diesel and Motor Oil by EPA Method 8015 Modified** | | | | | | | | | |
| **TPH as Diesel** | 8015DRO | AG31724 | 07/17/03 | 07/18/03 | 1.149 | **300 ug/l** | | **57** | D-09 |
| **TPH as Motor Oil** | " | " | " | " | " | **1600 "** | | **110** | |
| *Surrogate: 1,4-Bromofluorobenzene* | " | " | " | " | | *35.2 %* | *14-116* | | |
| **D7-10-GW (A307306-13)** | | | **Sample Type: Water** | | | **Sampled: 07/10/03 09:25** | | | |
| **Metals (Dissolved) by EPA 6000/7000 Series Methods** | | | | | | | | | |
| Cadmium, dissolved | EPA 6010 | AG31513 | 07/15/03 | 07/23/03 | 1 | ND mg/l | | 0.010 | |
| Chromium, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Nickel, dissolved | " | " | " | " | " | ND " | | 0.10 | |
| Lead, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| **Zinc, dissolved** | " | " | " | " | " | **0.20 "** | | **0.10** | |

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Project Manager

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208 Mason St. Ukiah, California 95482
e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267



## CHEMICAL EXAMINATION REPORT



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180 Howard St. Suite 200
San Francisco, CA 94105-2941
Attn: Ed Conti

Report Date: 10/15/03 07:58
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Project ID: SPI-Arcata/Task #4

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|---|---|---|---|
| A307306 | 07/10/2003 17:45 | MFGINC | |

### Alpha Analytical Laboratories, Inc.

| | METHOD | BATCH | PREPARED | ANALYZED | DILUTION | RESULT | | PQL | NOTE |
|---|---|---|---|---|---|---|---|---|---|
| **D7-10-GW (A307306-13)** | | | **Sample Type: Water** | | | **Sampled: 07/10/03 09:25** | | | |
| **TPH as Diesel and Motor Oil by EPA Method 8015 Modified** | | | | | | | | | |
| **TPH as Diesel** | 8015DRO | AG31808 | 07/18/03 | 07/18/03 | 1.117 | **220 ug/l** | | **56** | D-09 |
| **TPH as Motor Oil** | " | " | " | " | " | **1500 "** | | **110** | |
| *Surrogate: 1,4-Bromofluorobenzene* | " | " | " | " | | *56.9 %* | *14-116* | | |
| **D7-11-GW (A307306-14)** | | | **Sample Type: Water** | | | **Sampled: 07/10/03 09:45** | | | |
| **Metals (Dissolved) by EPA 6000/7000 Series Methods** | | | | | | | | | |
| Cadmium, dissolved | EPA 6010 | AG31513 | 07/15/03 | 07/23/03 | 1 | ND mg/l | | 0.010 | |
| Chromium, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Nickel, dissolved | " | " | " | " | " | ND " | | 0.10 | |
| Lead, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Zinc, dissolved | " | " | " | " | " | ND " | | 0.10 | |
| **TPH as Diesel and Motor Oil by EPA Method 8015 Modified** | | | | | | | | | |
| **TPH as Diesel** | 8015DRO | AG31808 | 07/18/03 | 07/18/03 | 1.111 | **190 ug/l** | | **56** | D-09 |
| **TPH as Motor Oil** | " | " | " | " | " | **1500 "** | | **110** | |
| *Surrogate: 1,4-Bromofluorobenzene* | " | " | " | " | | *57.4 %* | *14-116* | | |
| **D7-12-GW (A307306-15)** | | | **Sample Type: Water** | | | **Sampled: 07/10/03 10:10** | | | |
| **Metals (Dissolved) by EPA 6000/7000 Series Methods** | | | | | | | | | |
| Cadmium, dissolved | EPA 6010 | AG31513 | 07/15/03 | 07/24/03 | 1 | ND mg/l | | 0.010 | |
| Chromium, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Nickel, dissolved | " | " | " | " | " | ND " | | 0.10 | |
| Lead, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Zinc, dissolved | " | " | " | " | " | ND " | | 0.10 | |



Sheri Speaks

Sheri L. Speaks
Project Manager

10/15/03

Alpha Analytical Laboratories Inc.
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e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

## CHEMICAL EXAMINATION REPORT



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180 Howard St. Suite 200
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Report Date: 10/15/03 07:58
Project No: 030229.4
Project ID: SPI-Arcata/Task #4

| Order Number | Receipt Date/Time | Client Code | Client PO/Reference |
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| A307306 | 07/10/2003 17:45 | MFGINC | |

### Alpha Analytical Laboratories, Inc.

| | METHOD | BATCH | PREPARED | ANALYZED | DILUTION | RESULT | | PQL | NOTE |
|---|---|---|---|---|---|---|---|---|---|
| **D7-12-GW (A307306-15)** | | | **Sample Type: Water** | | | **Sampled: 07/10/03 10:10** | | | |
| **TPH as Diesel and Motor Oil by EPA Method 8015 Modified** | | | | | | | | | |
| **TPH as Diesel** | 8015DRO | AG31808 | 07/18/03 | 07/18/03 | 1.075 | **140 ug/l** | | **54** | D-09 |
| **TPH as Motor Oil** | " | " | " | " | " | **810** " | | **110** | |
| *Surrogate: 1,4-Bromofluorobenzene* | " | " | " | " | | *67.6 %* | *14-116* | | |
| **D7-13-GW (A307306-16)** | | | **Sample Type: Water** | | | **Sampled: 07/10/03 10:25** | | | |
| **Metals (Dissolved) by EPA 6000/7000 Series Methods** | | | | | | | | | |
| Cadmium, dissolved | EPA 6010 | AG31513 | 07/15/03 | 07/24/03 | 1 | ND mg/l | | 0.010 | |
| Chromium, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Nickel, dissolved | " | " | " | " | " | ND " | | 0.10 | |
| Lead, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Zinc, dissolved | " | " | " | " | " | ND " | | 0.10 | |
| **TPH as Diesel and Motor Oil by EPA Method 8015 Modified** | | | | | | | | | |
| **TPH as Diesel** | 8015DRO | AG31808 | 07/18/03 | 07/18/03 | 1.124 | **310 ug/l** | | **56** | D-09 |
| **TPH as Motor Oil** | " | " | " | " | " | **1700** " | | **110** | |
| *Surrogate: 1,4-Bromofluorobenzene* | " | " | " | " | | *56.9 %* | *14-116* | | |
| **D7-14-GW (A307306-17)** | | | **Sample Type: Water** | | | **Sampled: 07/10/03 11:00** | | | |
| **Metals (Dissolved) by EPA 6000/7000 Series Methods** | | | | | | | | | |
| Cadmium, dissolved | EPA 6010 | AG31513 | 07/15/03 | 07/24/03 | 1 | ND mg/l | | 0.010 | |
| Chromium, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Nickel, dissolved | " | " | " | " | " | ND " | | 0.10 | |
| Lead, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Zinc, dissolved | " | " | " | " | " | ND " | | 0.10 | |

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Sheri L. Speaks
Project Manager

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Alpha Analytical Laboratories Inc.
208 Mason St. Ukiah, California 95482
e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

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## CHEMICAL EXAMINATION REPORT



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180 Howard St. Suite 200
San Francisco, CA 94105-2941
Attn: Ed Conti

Report Date: 10/15/03 07:58
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|---|---|---|---|
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### Alpha Analytical Laboratories, Inc.

| | METHOD | BATCH | PREPARED | ANALYZED | DILUTION | RESULT | | PQL | NOTE |
|---|---|---|---|---|---|---|---|---|---|
| **D7-14-GW (A307306-17)** | | | **Sample Type: Water** | | | **Sampled: 07/10/03 11:00** | | | |
| **TPH as Diesel and Motor Oil by EPA Method 8015 Modified** | | | | | | | | | |
| **TPH as Diesel** | 8015DRO | AG31808 | 07/18/03 | 07/18/03 | 1.136 | **180 ug/l** | | **57** | D-09 |
| **TPH as Motor Oil** | " | " | " | " | " | **1300** " | | **110** | |
| *Surrogate: 1,4-Bromofluorobenzene* | " | " | " | " | | *56.0 %* | *14-116* | | |
| **D7-15-GW (A307306-18)** | | | **Sample Type: Water** | | | **Sampled: 07/10/03 11:20** | | | |
| **Metals (Dissolved) by EPA 6000/7000 Series Methods** | | | | | | | | | |
| Cadmium, dissolved | EPA 6010 | AG31513 | 07/15/03 | 07/24/03 | 1 | ND mg/l | | 0.010 | |
| Chromium, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Nickel, dissolved | " | " | " | " | " | ND " | | 0.10 | |
| Lead, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Zinc, dissolved | " | " | " | " | " | ND " | | 0.10 | |
| **TPH as Diesel and Motor Oil by EPA Method 8015 Modified** | | | | | | | | | |
| **TPH as Diesel** | 8015DRO | AG31808 | 07/18/03 | 07/19/03 | 1.124 | **310 ug/l** | | **56** | D-09 |
| **TPH as Motor Oil** | " | " | " | " | " | **2600** " | | **110** | |
| *Surrogate: 1,4-Bromofluorobenzene* | " | " | " | " | | *46.6 %* | *14-116* | | |
| **D7-16-GW (A307306-19)** | | | **Sample Type: Water** | | | **Sampled: 07/10/03 11:45** | | | |
| **Metals (Dissolved) by EPA 6000/7000 Series Methods** | | | | | | | | | |
| Cadmium, dissolved | EPA 6010 | AG31513 | 07/15/03 | 07/24/03 | 1 | ND mg/l | | 0.010 | |
| Chromium, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Nickel, dissolved | " | " | " | " | " | ND " | | 0.10 | |
| Lead, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Zinc, dissolved | " | " | " | " | " | ND " | | 0.10 | |

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e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267



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MFG, Inc
180 Howard St. Suite 200
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| A307306 | 07/10/2003 17:45 | MFGINC | |

### Alpha Analytical Laboratories, Inc.

| | METHOD | BATCH | PREPARED | ANALYZED | DILUTION | RESULT | | PQL | NOTE |
|---|---|---|---|---|---|---|---|---|---|
| **D7-16-GW (A307306-19)** | | | **Sample Type: Water** | | | **Sampled: 07/10/03 11:45** | | | |
| **TPH as Diesel and Motor Oil by EPA Method 8015 Modified** | | | | | | | | | |
| **TPH as Diesel** | 8015DRO | AG31808 | 07/18/03 | 07/19/03 | 1.149 | **880 ug/l** | | **57** | D-09 |
| **TPH as Motor Oil** | " | " | " | " | " | **4400** " | | **110** | |
| *Surrogate: 1,4-Bromofluorobenzene* | " | " | " | " | | *44.2 %* | *14-116* | | |
| **D7-17-GW (A307306-20)** | | | **Sample Type: Water** | | | **Sampled: 07/10/03 12:00** | | | |
| **Metals (Dissolved) by EPA 6000/7000 Series Methods** | | | | | | | | | |
| Cadmium, dissolved | EPA 6010 | AG31513 | 07/15/03 | 07/24/03 | 1 | ND mg/l | | 0.010 | |
| Chromium, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Nickel, dissolved | " | " | " | " | " | ND " | | 0.10 | |
| Lead, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Zinc, dissolved | " | " | " | " | " | ND " | | 0.10 | |
| **TPH as Diesel and Motor Oil by EPA Method 8015 Modified** | | | | | | | | | |
| **TPH as Diesel** | 8015DRO | AG31808 | 07/18/03 | 07/19/03 | 1.124 | **380 ug/l** | | **56** | D-09 |
| **TPH as Motor Oil** | " | " | " | " | " | **2100** " | | **110** | |
| *Surrogate: 1,4-Bromofluorobenzene* | " | " | " | " | | *46.5 %* | *14-116* | | |

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SourceResult

### Metals (Dissolved) by EPA 6000/7000 Series Methods - Quality Control

| Analyte(s) | Result | PQL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Flag |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AG31513 - EPA 200 Series** | | | | | | | | | | |
| **Blank (AG31513-BLK1)** | | | | Prepared: 07/15/03 Analyzed: 07/23/03 | | | | | | |
| Cadmium, dissolved | ND | 0.010 | mg/l | | | | | | | |
| Chromium, dissolved | ND | 0.050 | " | | | | | | | |
| Lead, dissolved | ND | 0.050 | " | | | | | | | |
| Nickel, dissolved | ND | 0.10 | " | | | | | | | |
| Zinc, dissolved | ND | 0.10 | " | | | | | | | |
| **LCS (AG31513-BS1)** | | | | Prepared: 07/15/03 Analyzed: 07/23/03 | | | | | | |
| Cadmium, dissolved | 0.222 | 0.010 | mg/l | 0.200 | | 111 | 85-115 | | | |
| Chromium, dissolved | 0.217 | 0.050 | " | 0.200 | | 108 | 85-115 | | | |
| Lead, dissolved | 0.221 | 0.050 | " | 0.200 | | 110 | 85-115 | | | |
| Nickel, dissolved | 0.219 | 0.10 | " | 0.200 | | 110 | 85-115 | | | |
| Zinc, dissolved | 0.223 | 0.10 | " | 0.200 | | 112 | 85-115 | | | |
| **LCS Dup (AG31513-BSD1)** | | | | Prepared: 07/15/03 Analyzed: 07/23/03 | | | | | | |
| Cadmium, dissolved | 0.220 | 0.010 | mg/l | 0.200 | | 110 | 85-115 | 0.905 | 20 | |
| Chromium, dissolved | 0.214 | 0.050 | " | 0.200 | | 107 | 85-115 | 1.39 | 20 | |
| Lead, dissolved | 0.223 | 0.050 | " | 0.200 | | 112 | 85-115 | 0.901 | 20 | |
| Nickel, dissolved | 0.217 | 0.10 | " | 0.200 | | 108 | 85-115 | 0.917 | 20 | |
| Zinc, dissolved | 0.224 | 0.10 | " | 0.200 | | 112 | 85-115 | 0.447 | 20 | |
| **Duplicate (AG31513-DUP1)** | **Source: A307306-01** | | | Prepared: 07/15/03 Analyzed: 07/23/03 | | | | | | |
| Cadmium, dissolved | ND | 0.010 | mg/l | | ND | | | | 20 | |
| Chromium, dissolved | ND | 0.050 | " | | ND | | | | 20 | |
| Lead, dissolved | ND | 0.050 | " | | ND | | | | 20 | |
| Nickel, dissolved | ND | 0.10 | " | | ND | | | | 20 | |
| Zinc, dissolved | ND | 0.10 | " | | ND | | | | 20 | |
| **Matrix Spike (AG31513-MS1)** | **Source: A307306-01** | | | Prepared: 07/15/03 Analyzed: 07/23/03 | | | | | | |

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| A307306 | 07/10/2003 17:45 | MFGINC | |

### Metals (Dissolved) by EPA 6000/7000 Series Methods - Quality Control

| Analyte(s) | Result | PQL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Flag |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AG31513 - EPA 200 Series** | | | | | | | | | | |
| **Matrix Spike (AG31513-MS1)** | **Source: A307306-01** | | | Prepared: 07/15/03 | | Analyzed: 07/23/03 | | | | |
| Cadmium, dissolved | 0.210 | 0.010 | mg/l | 0.200 | ND | 105 | 70-130 | | | |
| Chromium, dissolved | 0.215 | 0.050 | " | 0.200 | ND | 108 | 70-130 | | | |
| Lead, dissolved | 0.212 | 0.050 | " | 0.200 | ND | 106 | 70-130 | | | |
| Nickel, dissolved | 0.239 | 0.10 | " | 0.200 | ND | 104 | 70-130 | | | |
| Zinc, dissolved | 0.234 | 0.10 | " | 0.200 | ND | 108 | 70-130 | | | |
| **Matrix Spike Dup (AG31513-MSD1)** | **Source: A307306-01** | | | Prepared: 07/15/03 | | Analyzed: 07/23/03 | | | | |
| Cadmium, dissolved | 0.208 | 0.010 | mg/l | 0.200 | ND | 104 | 70-130 | 0.957 | 20 | |
| Chromium, dissolved | 0.215 | 0.050 | " | 0.200 | ND | 108 | 70-130 | 0.00 | 20 | |
| Lead, dissolved | 0.208 | 0.050 | " | 0.200 | ND | 104 | 70-130 | 1.90 | 20 | |
| Nickel, dissolved | 0.239 | 0.10 | " | 0.200 | ND | 104 | 70-130 | 0.00 | 20 | |
| Zinc, dissolved | 0.238 | 0.10 | " | 0.200 | ND | 110 | 70-130 | 1.69 | 20 | |

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Project No: 030229.4
Project ID: SPI-Arcata/Task #4

| Order Number | Receipt Date/Time | Client Code | Client PO/Reference |
|---|---|---|---|
| A307306 | 07/10/2003 17:45 | MFGINC | |

### TPH as Diesel and Motor Oil by EPA Method 8015 Modified - Quality Control

| Analyte(s) | Result | PQL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Flag |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AG31619 - EPA 3510B Water** | | | | | | | | | | |
| **Blank (AG31619-BLK1)** | | | | Prepared: 07/16/03 Analyzed: 07/17/03 | | | | | | |
| TPH as Diesel | ND | 50 | ug/l | | | | | | | |
| TPH as Motor Oil | ND | 100 | " | | | | | | | |
| *Surrogate: 1,4-Bromofluorobenzene* | *420* | | " | *620* | | *67.7* | *14-116* | | | |
| **LCS (AG31619-BS1)** | | | | Prepared: 07/16/03 Analyzed: 07/17/03 | | | | | | |
| TPH as Diesel | 1660 | 50 | ug/l | 2090 | | 79.4 | 57-136 | | | |
| TPH as Motor Oil | 2100 | 100 | " | 2090 | | 100 | 58-138 | | | |
| *Surrogate: 1,4-Bromofluorobenzene* | *358* | | " | *620* | | *57.7* | *14-116* | | | |
| **LCS Dup (AG31619-BSD1)** | | | | Prepared: 07/16/03 Analyzed: 07/17/03 | | | | | | |
| TPH as Diesel | 1540 | 50 | ug/l | 2090 | | 73.7 | 57-136 | 7.50 | 25 | |
| TPH as Motor Oil | 1970 | 100 | " | 2090 | | 94.3 | 58-138 | 6.39 | 25 | |
| *Surrogate: 1,4-Bromofluorobenzene* | *304* | | " | *620* | | *49.0* | *14-116* | | | |
| **Batch AG31724 - EPA 3510B Water** | | | | | | | | | | |
| **Blank (AG31724-BLK1)** | | | | Prepared & Analyzed: 07/17/03 | | | | | | |
| TPH as Diesel | ND | 50 | ug/l | | | | | | | |
| TPH as Motor Oil | ND | 100 | " | | | | | | | |
| *Surrogate: 1,4-Bromofluorobenzene* | *439* | | " | *620* | | *70.8* | *14-116* | | | |
| **LCS (AG31724-BS1)** | | | | Prepared & Analyzed: 07/17/03 | | | | | | |
| TPH as Diesel | 1890 | 50 | ug/l | 2090 | | 90.4 | 57-136 | | | |
| TPH as Motor Oil | 2080 | 100 | " | 2090 | | 99.5 | 58-138 | | | |
| *Surrogate: 1,4-Bromofluorobenzene* | *477* | | " | *620* | | *76.9* | *14-116* | | | |
| **LCS Dup (AG31724-BSD1)** | | | | Prepared & Analyzed: 07/17/03 | | | | | | |
| TPH as Diesel | 1930 | 50 | ug/l | 2090 | | 92.3 | 57-136 | 2.09 | 25 | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Sheri Speaks

Sheri L. Speaks
Project Manager

10/15/03

Alpha Analytical Laboratories Inc.
208 Mason St. Ukiah, California 95482
e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

## CHEMICAL EXAMINATION REPORT



MFG, Inc
180 Howard St. Suite 200
San Francisco, CA 94105-2941
Attn: Ed Conti

Report Date: 10/15/03 07:58
Project No: 030229.4
Project ID: SPI-Arcata/Task #4

| Order Number | Receipt Date/Time | Client Code | Client PO/Reference |
|---|---|---|---|
| A307306 | 07/10/2003 17:45 | MFGINC | |

### TPH as Diesel and Motor Oil by EPA Method 8015 Modified - Quality Control

| Analyte(s) | Result | PQL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Flag |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AG31724 - EPA 3510B Water** | | | | | | | | | | |
| **LCS Dup (AG31724-BSD1)** | | | | Prepared & Analyzed: 07/17/03 | | | | | | |
| TPH as Motor Oil | 2270 | 100 | " | 2090 | | 109 | 58-138 | 8.74 | 25 | |
| *Surrogate: 1,4-Bromofluorobenzene* | *444* | | " | *620* | | *71.6* | *14-116* | | | |
| **Batch AG31808 - EPA 3510B Water** | | | | | | | | | | |
| **Blank (AG31808-BLK1)** | | | | Prepared & Analyzed: 07/18/03 | | | | | | |
| TPH as Diesel | ND | 50 | ug/l | | | | | | | |
| TPH as Motor Oil | ND | 100 | " | | | | | | | |
| *Surrogate: 1,4-Bromofluorobenzene* | *342* | | " | *620* | | *55.2* | *14-116* | | | |
| **LCS (AG31808-BS1)** | | | | Prepared & Analyzed: 07/18/03 | | | | | | |
| TPH as Diesel | 1650 | 50 | ug/l | 2090 | | 78.9 | 57-136 | | | |
| TPH as Motor Oil | 2050 | 100 | " | 2090 | | 98.1 | 58-138 | | | |
| *Surrogate: 1,4-Bromofluorobenzene* | *398* | | " | *620* | | *64.2* | *14-116* | | | |
| **LCS Dup (AG31808-BSD1)** | | | | Prepared & Analyzed: 07/18/03 | | | | | | |
| TPH as Diesel | 1610 | 50 | ug/l | 2090 | | 77.0 | 57-136 | 2.45 | 25 | |
| TPH as Motor Oil | 1940 | 100 | " | 2090 | | 92.8 | 58-138 | 5.51 | 25 | |
| *Surrogate: 1,4-Bromofluorobenzene* | *389* | | " | *620* | | *62.7* | *14-116* | | | |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Sheri Speaks

Sheri L. Speaks
Project Manager

10/15/03

Alpha Analytical Laboratories Inc.
208 Mason St. Ukiah, California 95482
e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

## CHEMICAL EXAMINATION REPORT



MFG, Inc
180 Howard St. Suite 200
San Francisco, CA 94105-2941
Attn: Ed Conti

Report Date: 10/15/03 07:58
Project No: 030229.4
Project ID: SPI-Arcata/Task #4

| Order Number | Receipt Date/Time | Client Code | Client PO/Reference |
|---|---|---|---|
| A307306 | 07/10/2003 17:45 | MFGINC | |

**Notes and Definitions**

| | |
|---|---|
| D-09 | Results in the diesel organics range are primarily due to overlap from a heavy oil range product. |
| R-02 | Elevated Reporting Limits due to limited sample volume. |
| DET | Analyte DETECTED |
| ND | Analyte NOT DETECTED at or above the reporting limit |
| NR | Not Reported |
| dry | Sample results reported on a dry weight basis |
| RPD | Relative Percent Difference |
| PQL | Practical Quantitation Limit |

# MFG, INC.

## CHAIN-OF-CUSTODY RECORD AND REQUEST FOR ANALYSIS

COC No. 43132


☐ Arcata Office
1165 G Street, Suite E
Arcata, CA 95521-5817
Tel: (707) 826-8430
Fax: (707) 826-8437

☐ Boulder Office
4900 Pearl East Circle
Suite 300W
Boulder, CO 80301-6118
Tel: (303) 447-1823
Fax: (303) 447-1836

☐ Irvine Office
17770 Cartwright Road
Suite 500
Irvine, CA 92614-5850
Tel: (949) 253-2951
Fax: (949) 253-2954

☐ Osburn Office
P.O. Box 30
Wallace, ID
83873-0030
Tel: (208) 556-6811
Fax: (208) 556-7271

☒ San Francisco Office
180 Howard Street, Suite 200
San Francisco, CA 94105-1617
Phone (415) 495-7110 – Fax (415) 495-7107

☐ Seattle Office
19203 36th Avenue W.
Suite 101
Lynnwood, WA 98036-5707
Tel: (425) 921-4000
Fax: (425) 921-4040

☐ _____


PROJECT NO: 030229.4 PROJECT NAME: Sierra Pacific PAGE: 1 OF: 4

SAMPLER (Signature): _____ PROJECT MANAGER: Ed. Conti DATE: 7/1-/03

METHOD OF SHIPMENT: Courier CARRIER/WAYBILL NO: NA DESTINATION: Alpha

### SAMPLES

### ANALYSIS REQUEST

| Field Sample Identification | Sample DATE | Sample TIME | Matrix* | Preservation HCl | Preservation $HNO_3$ | Preservation $H_2SO_4$ | Preservation COLD | | FILTRATION* | Containers VOLUME (ml/oz) | Containers TYPE* | Containers NO. | Constituents/Method TEPH diesel+mo | Constituents/Method Dissolved Wear Metals | | | | Handling HOLD | Handling RUSH | Handling STANDARD | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RP-1-GW | 7/8/03 | 13:15 | AQ | | | | X | | U | 1L | G | 1 | X | | | | | | | X | A307306-1 |
| RP-1-GW | | 13:15 | AQ | | X | | X | | F | 1L | G | 1 | | X | | | | | | X | |
| RP-2-GW | | 16:13 | AQ | | | | X | | U | 1L | G | 1 | X | | | | | | | X | -2 |
| RP-2-GW | | 16:13 | AQ | | X | | X | | F | 1L | G | 1 | | X | | | | | | X | |
| SDP-1-GW | 7/9/03 | 9:45 | AQ | | | | X | | U | 1L | G | 1 | X | | | | | | | X | -3 |
| SDP-1-GW | | 9:45 | AQ | | X | | X | | F | 1L | G | 1 | | X | | | | | | X | |
| D7-1-GW | | 10:50 | AQ | | | | X | | U | 1L | G | 1 | X | | | | | | | X | -4 |
| D7-1-GW | | 10:50 | AQ | | X | | X | | F | 1L | G | 1 | | X | | | | | | X | |
| D7-2-GW | | 11:15 | AQ | | | | X | | U | 1L | G | 1 | X | | | | | | | X | 5 |
| D7-2-GW | | 11:15 | AQ | | X | | X | | F | 1L | G | 1 | | X | | | | | | X | |

TOTAL NUMBER OF CONTAINERS (40)

LABORATORY COMMENTS/CONDITION OF SAMPLES

Cooler Temp:

RECEIVED
JUL 30 2003
MFG, Inc.

| RELINQUISHED BY: SIGNATURE | PRINTED NAME | COMPANY | DATE | TIME | RECIEVED BY: SIGNATURE | PRINTED NAME | COMPANY |
|---|---|---|---|---|---|---|---|
| _____ | Christopher Spill | MFG-SF | 7/10/03 | 1:25 | J. Matthews | J. Matthews | |
| J. Matthews | J. Matthews | MFG | 7/10/03 | ~~15:45~~ 17.45 | S. Speaks | S. Speaks | Alpha LABORATORY |

*KEY: Matrix: AQ - aqueous NA - nonaqueous SO - soil SL - sludge P - petroleum A - air OT - other Containers: P - plastic G - glass T - teflon B - brass OT - other Filtration: F - filtered U - unfiltered

DISTRIBUTION: PINK: Field Copy YELLOW: Laboratory Copy WHITE: Return to Originator

# MFG, INC.

## CHAIN-OF-CUSTODY RECORD AND REQUEST FOR ANALYSIS

COC No. 43133


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Arcata, CA 95521-5817
Tel: (707) 826-8430
Fax: (707) 826-8437

☐ Boulder Office
4900 Pearl East Circle
Suite 300W
Boulder, CO 80301-6118
Tel: (303) 447-1823
Fax: (303) 447-1836

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Suite 500
Irvine, CA 92614-5850
Tel: (949) 253-2951
Fax: (949) 253-2954

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Wallace, ID
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Fax: (208) 556-7271

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San Francisco, CA 94105-1617
Phone (415) 495-7110 – Fax (415) 495-7107

☐ Seattle Office
19203 36th Avenue W.
Suite 101
Lynnwood, WA 98036-5707
Tel: (425) 921-4000
Fax: (425) 921-4040

☐


PROJECT NO: 030229.4 PROJECT NAME: Sierra Pacific PAGE: 2 OF: 4

SAMPLER (Signature): PROJECT MANAGER: Ed Conti DATE: 7/10/03

METHOD OF SHIPMENT: Courier CARRIER/WAYBILL NO: NA DESTINATION: Alpha

### SAMPLES

| Field Sample Identification | Sample DATE | Sample TIME | Matrix* | Preservation HCl | Preservation $HNO_3$ | Preservation $H_2SO_4$ | Preservation COLD | FILTRATION* | Containers VOLUME (ml/oz) | Containers TYPE* | Containers NO. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| D7-3-GW | 7/9/03 | 13:00 | AQ | | | | X | U | 1L | G | 1 |
| D7-3-GW | | 13:00 | AQ | | X | | X | F | 1L | G | 1 |
| D7-4-GW | | 15:00 | AQ | | | | X | U | 1L | G | 1 |
| D7-4-GW | | 15:00 | AQ | | X | | X | F | 1L | G | 1 |
| D7-5-GW | | 15:25 | AQ | | | | X | U | 1L | G | 1 |
| D7-5-GW | | 15:25 | AQ | | X | | X | F | 1L | G | 1 |
| D7-6-GW | | 15:50 | AQ | | | | X | U | 1L | G | 1 |
| D7-6-GW | | 15:50 | AQ | | X | | X | F | 1L | G | 1 |
| D7-7-GW | | 17:00 | AQ | | | | X | U | 1L | G | 1 |
| D7-7-GW | | 17:00 | AQ | | X | | X | F | 1L | G | 1 |

TOTAL NUMBER OF CONTAINERS (40)

### ANALYSIS REQUEST

| Constituents/Method: TEPH diesel + m.o. | Constituents/Method: Dissolved Wear Metals | Handling: HOLD | Handling: RUSH | Handling: STANDARD | Remarks |
|---|---|---|---|---|---|
| X | | | | X | A307306 - 6 |
| | X | | | X | |
| X | | | | X | 7 |
| | X | | | X | |
| X | | | | X | 8 |
| | X | | | X | |
| X | | | | X | 9 |
| | X | | | X | |
| X | | | | X | 10 |
| | X | | | X | |

RECEIVED JUL 30 2003 MFG, Inc.

LABORATORY COMMENTS/CONDITION OF SAMPLES

Cooler Temp:

| RELINQUISHED BY: SIGNATURE | PRINTED NAME | COMPANY | DATE | TIME | RECIEVED BY: SIGNATURE | PRINTED NAME | COMPANY |
|---|---|---|---|---|---|---|---|
| | Christopher Spill | MFG-SF | 7/10/03 | 1:25 | J. Matthews | | |
| | J. Matthews | Alpha | 7/10/03 | 15:45 | S. Speaks | S. Speaks | Alpha LABORATORY |
| | | | | 17.45 | | | |

*KEY Matrix: AQ - aqueous NA - nonaqueous SO - soil SL - sludge P - petroleum A - air OT - other Containers: P - plastic G - glass T - teflon B - brass OT - other Filtration: F - filtered U - unfiltered

DISTRIBUTION: PINK: Field Copy YELLOW: Laboratory Copy WHITE: Return to Originator

# MFG, INC.

## CHAIN-OF-CUSTODY RECORD AND REQUEST FOR ANALYSIS

COC No. 43134


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Arcata, CA 95521-5817
Tel: (707) 826-8430
Fax: (707) 826-8437

☐ Boulder Office
4900 Pearl East Circle
Suite 300W
Boulder, CO 80301-6118
Tel: (303) 447-1823
Fax: (303) 447-1836

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Suite 500
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Fax: (425) 921-4040

☐ _____


PROJECT NO: 030229.4 PROJECT NAME: Sierra Pacific PAGE: 3 OF: 4

SAMPLER (Signature): _____ PROJECT MANAGER: Ed Conti DATE: 7/10/03

METHOD OF SHIPMENT: Courier CARRIER/WAYBILL NO: NA DESTINATION: Alpha

| SAMPLES | | | | | | | | | | | | | ANALYSIS REQUEST | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Sample | | | Preservation | | | | | | Containers | | | Constituents/Method | | | | | Handling | | | Remarks | | |
| Field Sample Identification | DATE | TIME | Matrix* | HCl | $HNO_3$ | $H_2SO_4$ | COLD | | FILTRATION* | VOLUME (ml/oz) | TYPE* | NO. | TEPH diesel + mo. | Dissolved Lead/Metals | | | | HOLD | RUSH | STANDARD | | | |
| D7-8-GW | 7/9/03 | 17:45 | AQ | | | | X | | U | 1L | G | 1 | X | | | | | | | X | A3073306 - 11 | | |
| D7-8-GW | ↓ | 17:45 | AQ | | X | | X | | F | 1L | G | 1 | | X | | | | | | X | | | |
| D7-9-GW | 7/10/03 | 8:55 | AQ | | | | X | | U | 1L | G | 1 | X | | | | | | | X | | | 12 |
| D7-9-GW | | 8:55 | AQ | | X | | X | | F | 1L | G | 1 | | X | | | | | | X | | | |
| D7-10-GW | | 9:25 | AQ | | | | X | | U | 1L | G | 1 | X | | | | | | | X | | | 13 |
| D7-10-GW | | 9:25 | AQ | | X | | X | | F | 1L | G | 1 | | X | | | | | | X | | | |
| D7-11-GW | | 9:45 | AQ | | | | X | | U | 1L | G | 1 | X | | | | | | | X | | | 14 |
| D7-11-GW | | 9:45 | AQ | | X | | X | | F | 1L | G | 1 | | X | | | | | | X | | | |
| D7-12-GW | | 10:10 | AQ | | | | X | | U | 1L | G | 1 | X | | | | | | | X | | | 15 |
| D7-12-GW | ↓ | 10:10 | AQ | | X | | X | | F | 1L | G | 1 | | X | | | | | | X | | | |
| | | | | | TOTAL NUMBER OF CONTAINERS (40) | | | | | | | | | LABORATORY COMMENTS/CONDITION OF SAMPLES | | | | | | | | Cooler Temp: | | |

RECEIVED
JUL 30 2003
MFG, Inc.

| RELINQUISHED BY: | | | | | RECIEVED BY: | | |
|---|---|---|---|---|---|---|---|
| SIGNATURE | PRINTED NAME | COMPANY | DATE | TIME | SIGNATURE | PRINTED NAME | COMPANY |
| _____ | Christopher Spill | MFG-SF | 7/10/03 | 1:25 | J. Matthews | | |
| | J. Matthews | Alpha | 7/10/03 | 15:45 | B. Speaks | S. Speaks | Alpha LABORATORY |
| | | | | 17:45 | | | |

*KEY Matrix: AQ - aqueous NA - nonaqueous SO - soil SL - sludge P - petroleum A - air OT - other Containers: P - plastic G - glass T - teflon B - brass OT - other Filtration: F - filtered U - unfiltered

DISTRIBUTION: PINK: Field Copy YELLOW: Laboratory Copy WHITE: Return to Originator

# MFG, INC.

## CHAIN-OF-CUSTODY RECORD AND REQUEST FOR ANALYSIS

COC No. 43135


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Arcata, CA 95521-5817
Tel: (707) 826-8430
Fax: (707) 826-8437

☐ Boulder Office
4900 Pearl East Circle
Suite 300W
Boulder, CO 80301-6118
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Tel: (425) 921-4000
Fax: (425) 921-4040

☐ _____


PROJECT NO: 030229.4 PROJECT NAME: Sierra Pacific PAGE: 4 OF: 4

SAMPLER (Signature): [signature] PROJECT MANAGER: Ed Conti DATE: 7/10/03

METHOD OF SHIPMENT: Courier CARRIER/WAYBILL NO: NA DESTINATION: Alpha

### SAMPLES

### ANALYSIS REQUEST

| Field Sample Identification | Sample DATE | Sample TIME | Matrix* | Preservation HCl | Preservation $HNO_3$ | Preservation $H_2SO_4$ | Preservation COLD | FILTRATION* | Containers VOLUME (ml/oz) | Containers TYPE* | Containers NO. | Constituents/Method TEPH diesel w/ M.O. | Constituents/Method dissolved Heavy Metals | Handling HOLD | Handling RUSH | Handling STANDARD | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| D7-13-GW | 7/10/03 | 10:25 | AQ | | | | X | U | 1L | G | 1 | X | | | | X | A3073006-16 |
| D7-13-GW | | 10:25 | AQ | | X | | X | F | 1L | G | 1 | | X | | | X | |
| D7-14-GW | | 11:00 | AQ | | | | X | U | 1L | G | 1 | X | | | | X | 17 |
| D7-14-GW | | 11:00 | AQ | | X | | X | F | 1L | G | 1 | | X | | | X | |
| D7-15-GW | | 11:20 | AQ | | | | X | U | 1L | G | 1 | X | | | | X | 18 |
| D7-15-GW | | 11:20 | AQ | | X | | X | F | 1L | G | 1 | | X | | | X | |
| D7-16-GW | | 11:45 | AQ | | | | X | U | 1L | G | 1 | X | | | | X | 19 |
| D7-16-GW | | 11:45 | AQ | | X | | X | F | 1L | G | 1 | | X | | | X | |
| D7-17-GW | | 12:00 | AQ | | | | X | U | 1L | G | 1 | X | | | | X | 20 |
| D7-17-GW | ↓ | 12:00 | AQ | | X | | X | F | 1L | G | 1 | | X | | | X | |

TOTAL NUMBER OF CONTAINERS (40)

LABORATORY COMMENTS/CONDITION OF SAMPLES

Cooler Temp:

RECEIVED JUL 30 2003 MFG, INC.

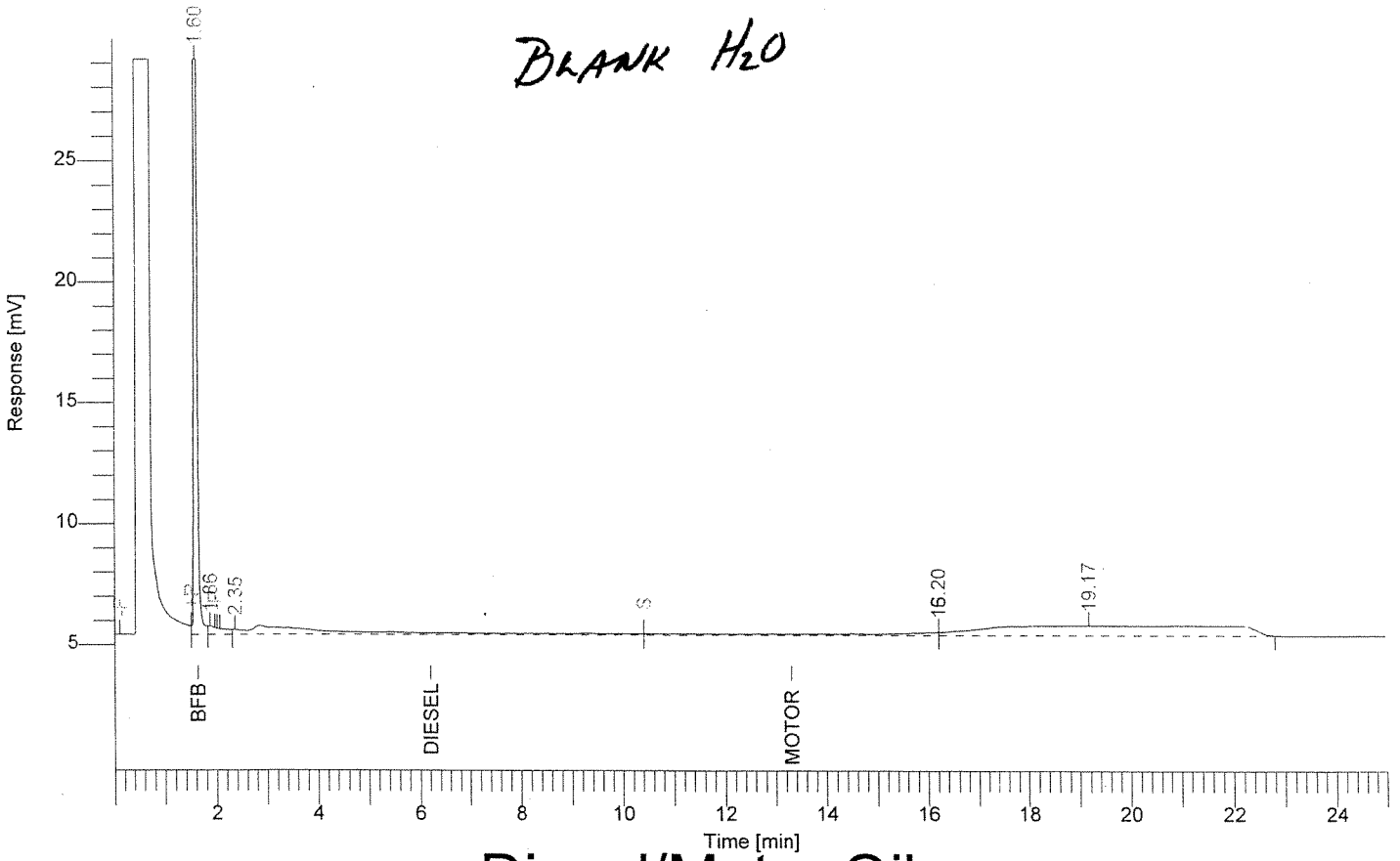
| RELINQUISHED BY: SIGNATURE | PRINTED NAME | COMPANY | DATE | TIME | RECIEVED BY: SIGNATURE | PRINTED NAME | COMPANY |
|---|---|---|---|---|---|---|---|
| [signature] | Christopher Sill | MFG-SF | 7/10/03 | 1:25 | J. Matthews | | |
| | J. Matthews | MFG | 7/10/03 | 15:45 | B. Speaks | S. Speaks | Alpha LABORATORY |
| | | | | 17:45 | | | |

*KEY Matrix: AQ - aqueous NA - nonaqueous SO - soil SL - sludge P - petroleum A - air OT - other Containers: P - plastic G - glass T - teflon B - brass OT - other Filtration: F - filtered U - unfiltered

DISTRIBUTION: PINK: Field Copy YELLOW: Laboratory Copy WHITE: Return to Originator

| | | | |
|---|---|---|---|
| Software Version | : 6.1.2.0.1:D19 | Date | : 7/18/03 7:14:11 PM |
| Sample Name | : AG31808-BLK1 | Data Acquisition Time | : 7/18/03 6:48:53 PM |
| Instrument Name | : DsMo | Channel | : A |
| Rack/Vial | : 0/0 | Operator | : marvin |
| Sample Amount | : 1.000000 | Dilution Factor | : 1.000000 |
| Cycle | : 3 | | |

Result File : C:\PenExe\TcWS\Stats\Data\ATDAT387.rst
Sequence File : C:\PenExe\TcWS\Stats\Sequences\Seq_DsMo_071803_2.seq



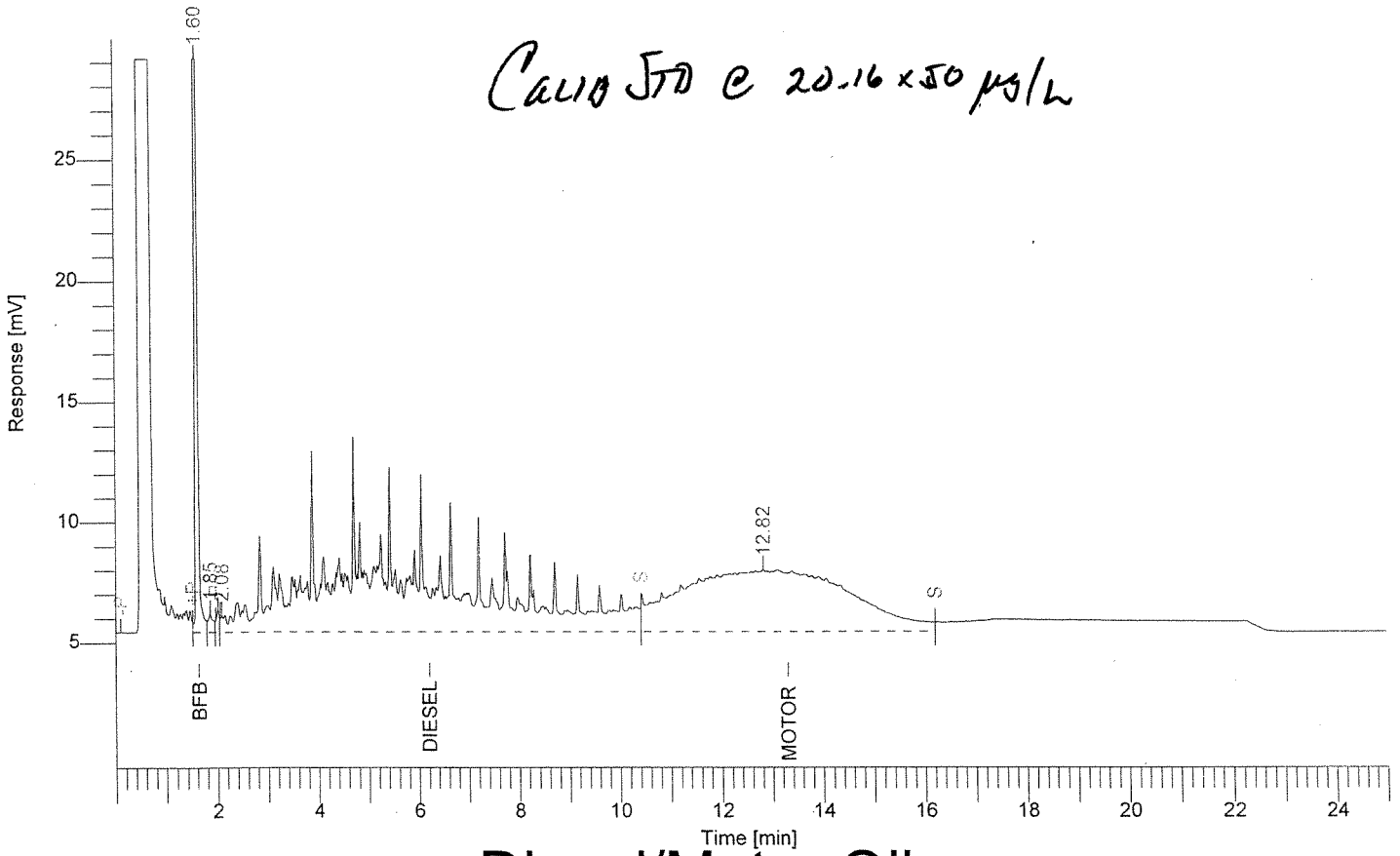

# Diesel/Motor Oil

| Peak # | Time [min] | Component Name | Raw Amount | Area [uV*sec] | Height [uV] |
|---|---|---|---|---|---|
| 1 | 1.60 | BFB | 6.849 | 152436 | 40189 |
| 2 | 1.86 | | 0.007 | 6821 | 337 |
| 3 | 2.35 | Diesel | 0.371 | 46480 | 195 |
| 4 | 16.20 | Motor Oil | -0.174 | 17765 | 116 |
| 5 | 19.17 | | 0.133 | 133287 | 399 |
| | | | 7.187 | 356788 | 41236 |

Report stored in ASCII file: C:\PenExe\TcWS\Stats\Data\ATDAT387.TX0

| | | | |
|---|---|---|---|
| Software Version | : 6.1.2.0.1:D19 | Date | : 7/18/03 6:33:41 PM |
| Sample Name | : DM 20.16 | Data Acquisition Time | : 7/18/03 6:08:22 PM |
| Instrument Name | : DsMo | Channel | : A |
| Rack/Vial | : 0/0 | Operator | : marvin |
| Sample Amount | : 1.000000 | Dilution Factor | : 1.000000 |
| Cycle | : 2 | | |

Result File : C:\PenExe\TcWS\Stats\Data\ATDAT386.rst
Sequence File : C:\PenExe\TcWS\Stats\Sequences\Seq_DsMo_071803_2.seq



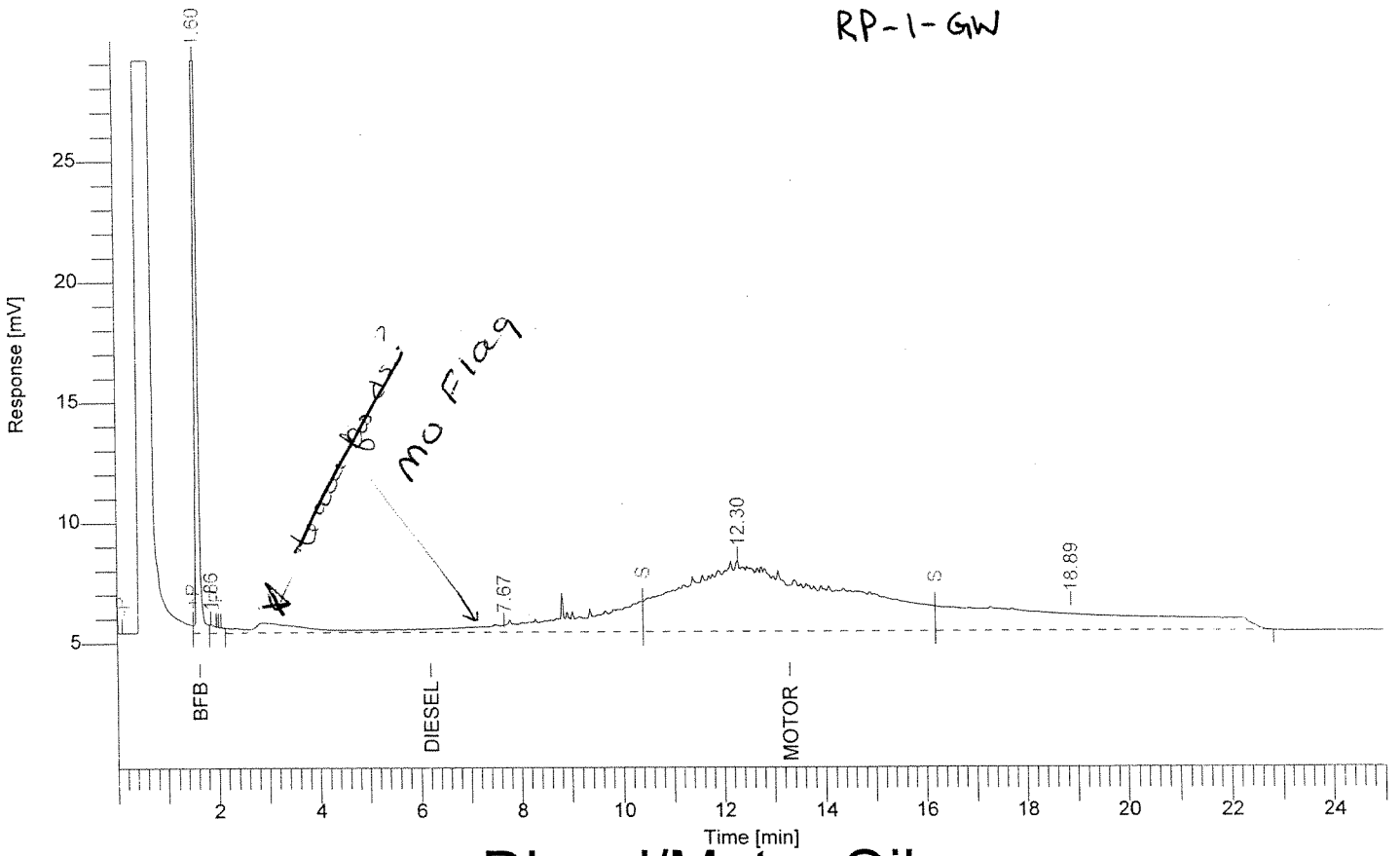

# Diesel/Motor Oil

| Peak # | Time [min] | Component Name | Raw Amount | Area [uV*sec] | Height [uV] |
|---|---|---|---|---|---|
| 1 | 1.60 | BFB | 7.308 | 162894 | 48716 |
| 2 | 1.85 | | 0.005 | 5433 | 725 |
| 3 | 2.08 | Diesel | 18.664 | 790478 | 666 |
| 4 | 12.82 | Motor Oil | 19.867 | 595110 | 2564 |
| | | | 45.844 | 1553915 | 52670 |

Report stored in ASCII file: C:\PenExe\TcWS\Stats\Data\ATDAT386.TX0

| | | | |
|---|---|---|---|
| Software Version | : 6.1.2.0.1:D19 | Date | : 7/17/03 12:10:33 PM |
| Sample Name | : A307306-01 | Data Acquisition Time | : 7/17/03 11:45:27 AM |
| Instrument Name | : DsMo | Channel | : A |
| Rack/Vial | : 0/0 | Operator | : marvin |
| Sample Amount | : 1.000000 | Dilution Factor | : 1.000000 |
| Cycle | : 6 | | |

Result File : C:\PenExe\TcWS\Stats\Data\ATDAT360.rst
Sequence File : C:\PenExe\TcWS\Stats\Sequences\Seq_DsMo_071703_2.seq




# Diesel/Motor Oil

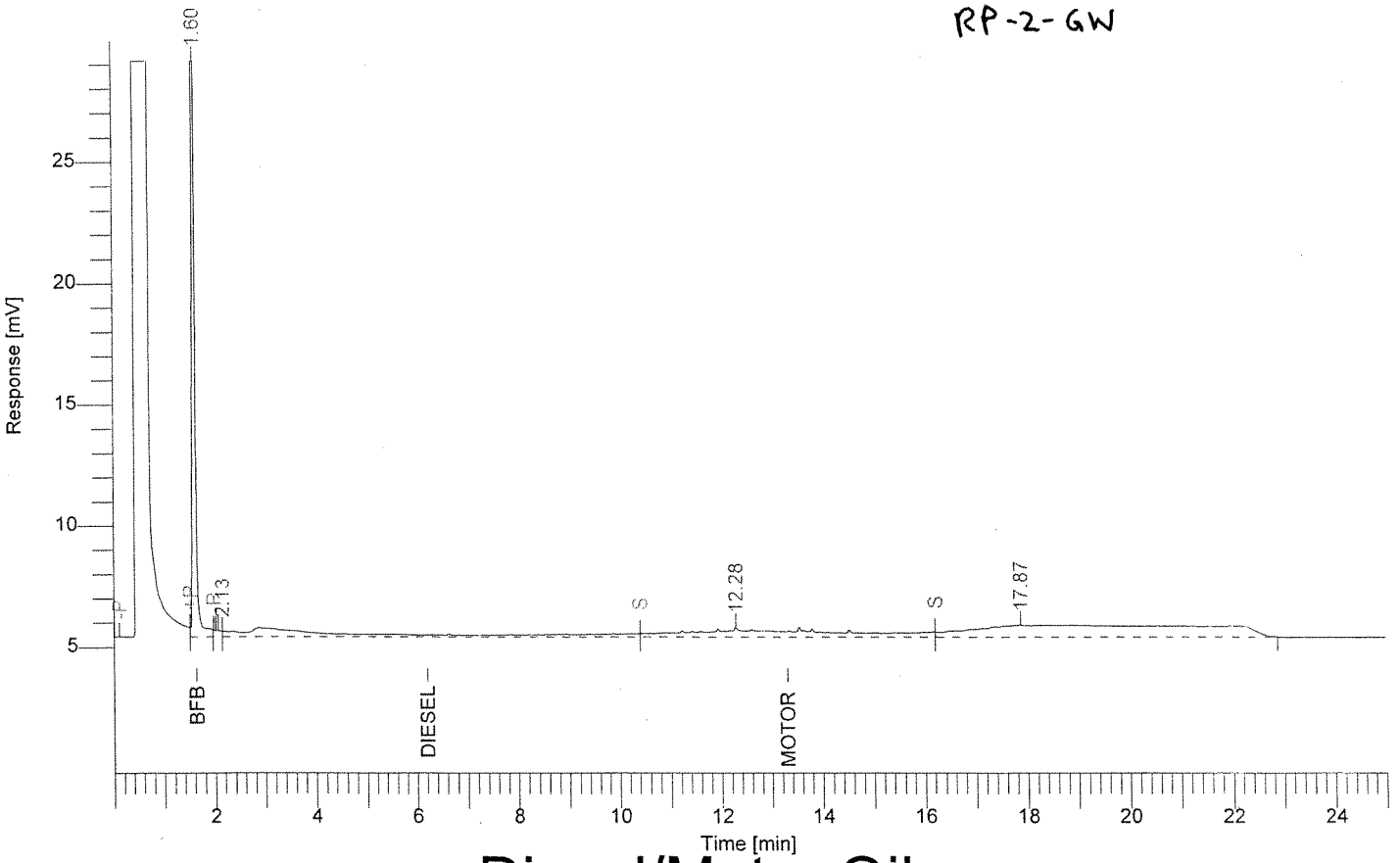
| Peak # | Time [min] | Component Name | Raw Amount | Area [uV*sec] | Height [uV] |
|---|---|---|---|---|---|
| 1 | 1.60 | BFB | 7.449 | 166114 | 48400 |
| 2 | 1.86 | | 0.005 | 4804 | 345 |
| 3 | 7.67 | Diesel | 3.314 | 166465 | 286 |
| 4 | 12.30 | Motor Oil | 21.237 | 634262 | 2946 |
| 5 | 18.89 | | 0.253 | 253398 | 668 |
| | | | 32.258 | 1225044 | 52645 |

Report stored in ASCII file: C:\PenExe\TcWS\Stats\Data\ATDAT360.TX0

| | | | |
|---|---|---|---|
| Software Version | : 6.1.2.0.1:D19 | Date | : 7/17/03 12:51:05 PM |
| Sample Name | : A307306-02 | Data Acquisition Time | : 7/17/03 12:25:56 PM |
| Instrument Name | : DsMo | Channel | : A |
| Rack/Vial | : 0/0 | Operator | : marvin |
| Sample Amount | : 1.000000 | Dilution Factor | : 1.000000 |
| Cycle | : 7 | | |

Result File : C:\PenExe\TcWS\Stats\Data\ATDAT361.rst
Sequence File : C:\PenExe\TcWS\Stats\Sequences\Seq_DsMo_071703_2.seq

RP-2-GW



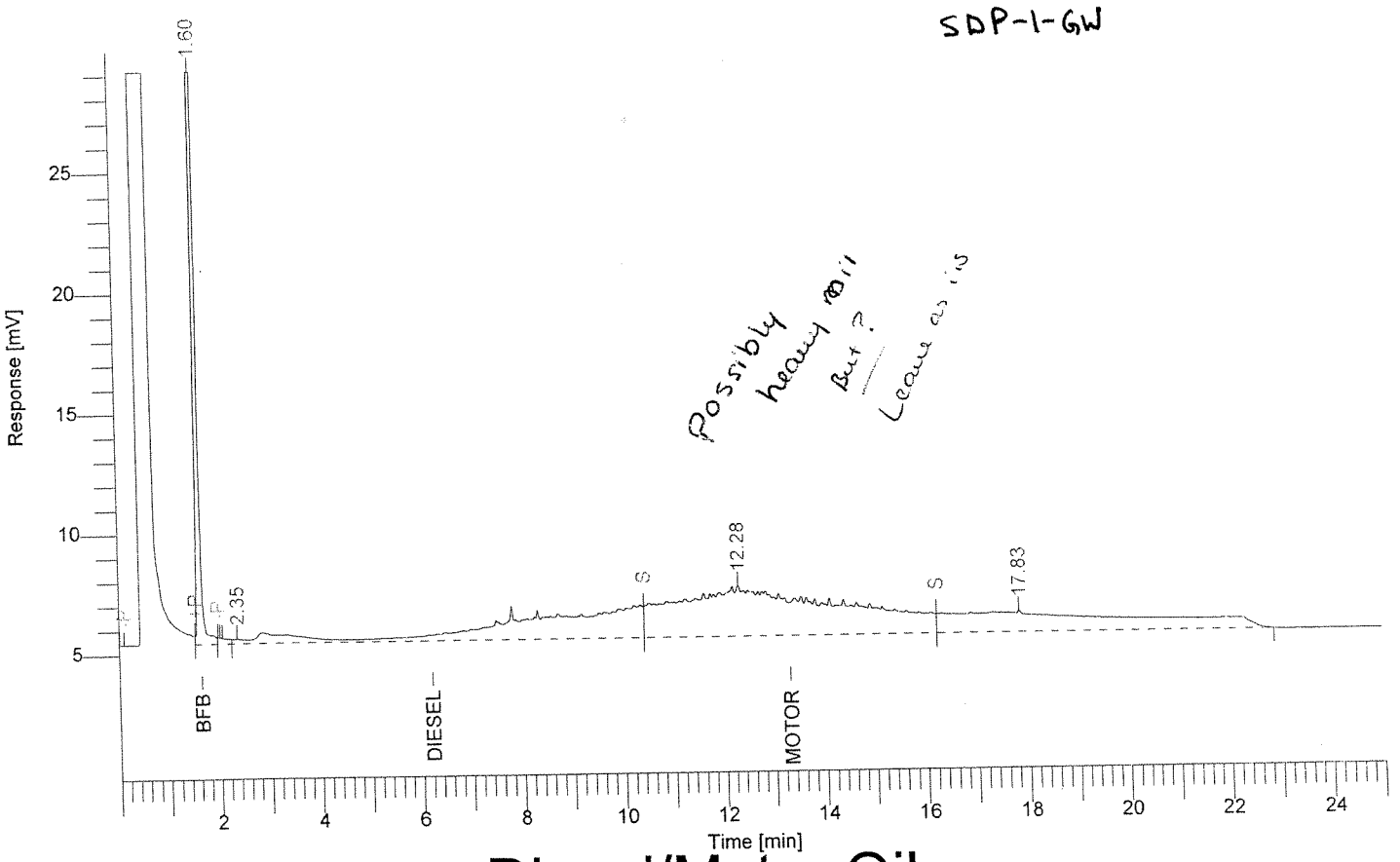

# Diesel/Motor Oil

| Peak # | Time [min] | Component Name | Raw Amount | Area [uV*sec] | Height [uV] |
|---|---|---|---|---|---|
| 1 | 1.60 | BFB | 5.779 | 128186 | 34989 |
| 2 | 2.13 | Diesel | 0.753 | 62044 | 226 |
| 3 | 12.28 | Motor Oil | 1.561 | 68095 | 413 |
| 4 | 17.87 | | 0.158 | 158125 | 493 |
| | | | 8.251 | 416449 | 36121 |

Report stored in ASCII file: C:\PenExe\TcWS\Stats\Data\ATDAT361.TX0

| | | | |
|---|---|---|---|
| Software Version | : 6.1.2.0.1:D19 | Date | : 7/17/03 1:31:38 PM |
| Sample Name | : A307306-03 | Data Acquisition Time | : 7/17/03 1:06:28 PM |
| Instrument Name | : DsMo | Channel | : A |
| Rack/Vial | : 0/0 | Operator | : marvin |
| Sample Amount | : 1.000000 | Dilution Factor | : 1.000000 |
| Cycle | : 8 | | |

Result File : C:\PenExe\TcWS\Stats\Data\ATDAT362.rst
Sequence File : C:\PenExe\TcWS\Stats\Sequences\Seq_DsMo_071703_2.seq




# Diesel/Motor Oil

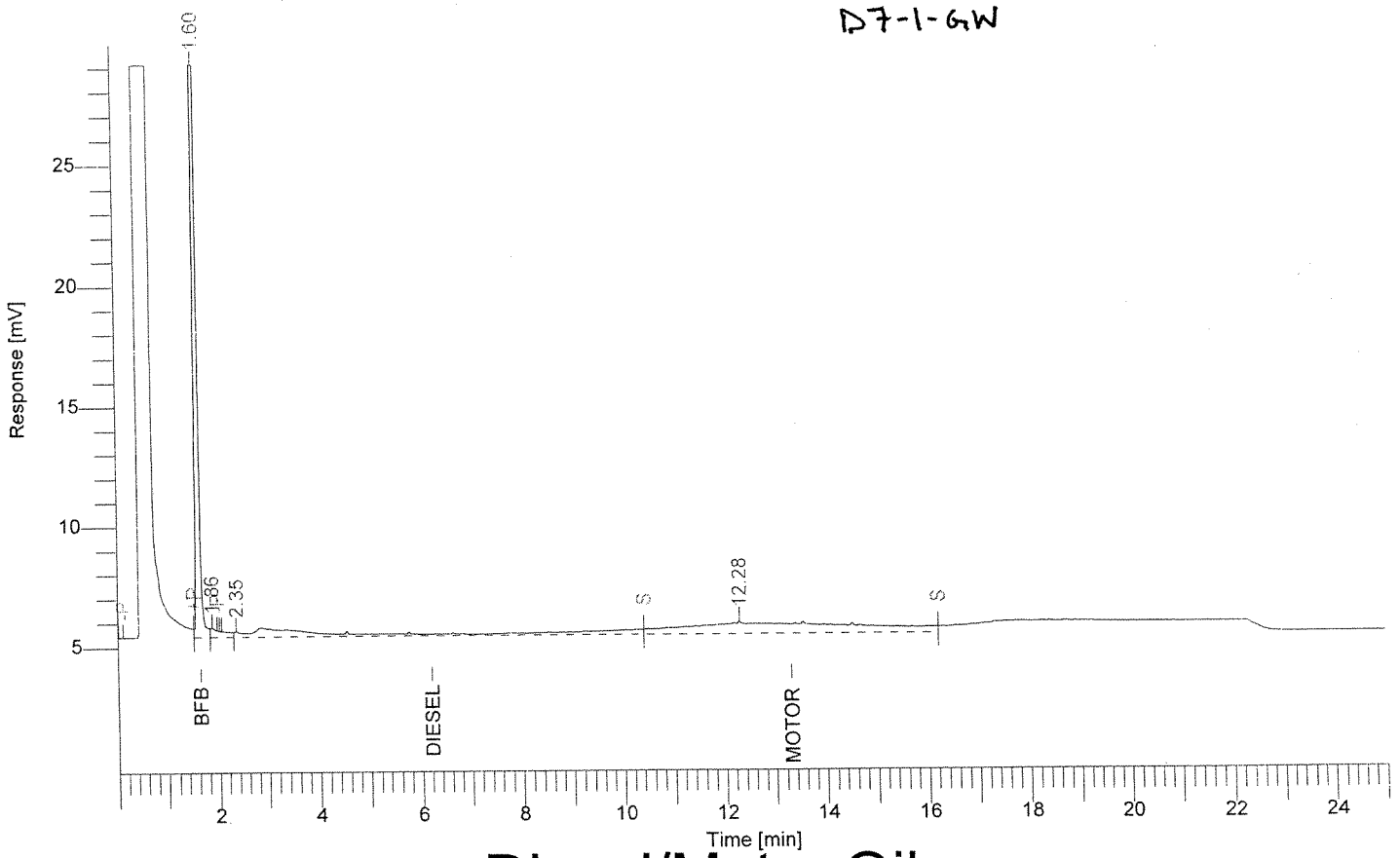
| Peak # | Time [min] | Component Name | Raw Amount | Area [uV*sec] | Height [uV] |
|---|---|---|---|---|---|
| 1 | 1.60 | BFB | 7.741 | 172796 | 47202 |
| 2 | 2.35 | Diesel | 5.245 | 245144 | 204 |
| 3 | 12.28 | Motor Oil | 15.769 | 477748 | 2100 |
| 4 | 17.83 | | 0.230 | 229770 | 858 |
| | | | 28.984 | 1125458 | 50364 |

Report stored in ASCII file: C:\PenExe\TcWS\Stats\Data\ATDAT362.TX0

| | | | |
|---|---|---|---|
| Software Version | : 6.1.2.0.1:D19 | Date | : 7/17/03 2:12:05 PM |
| Sample Name | : A307306-04 | Data Acquisition Time | : 7/17/03 1:46:57 PM |
| Instrument Name | : DsMo | Channel | : A |
| Rack/Vial | : 0/0 | Operator | : marvin |
| Sample Amount | : 1.000000 | Dilution Factor | : 1.000000 |
| Cycle | : 9 | | |

Result File : C:\PenExe\TcWS\Stats\Data\ATDAT363.rst
Sequence File : C:\PenExe\TcWS\Stats\Sequences\Seq_DsMo_071703_2.seq

D7-1-GW



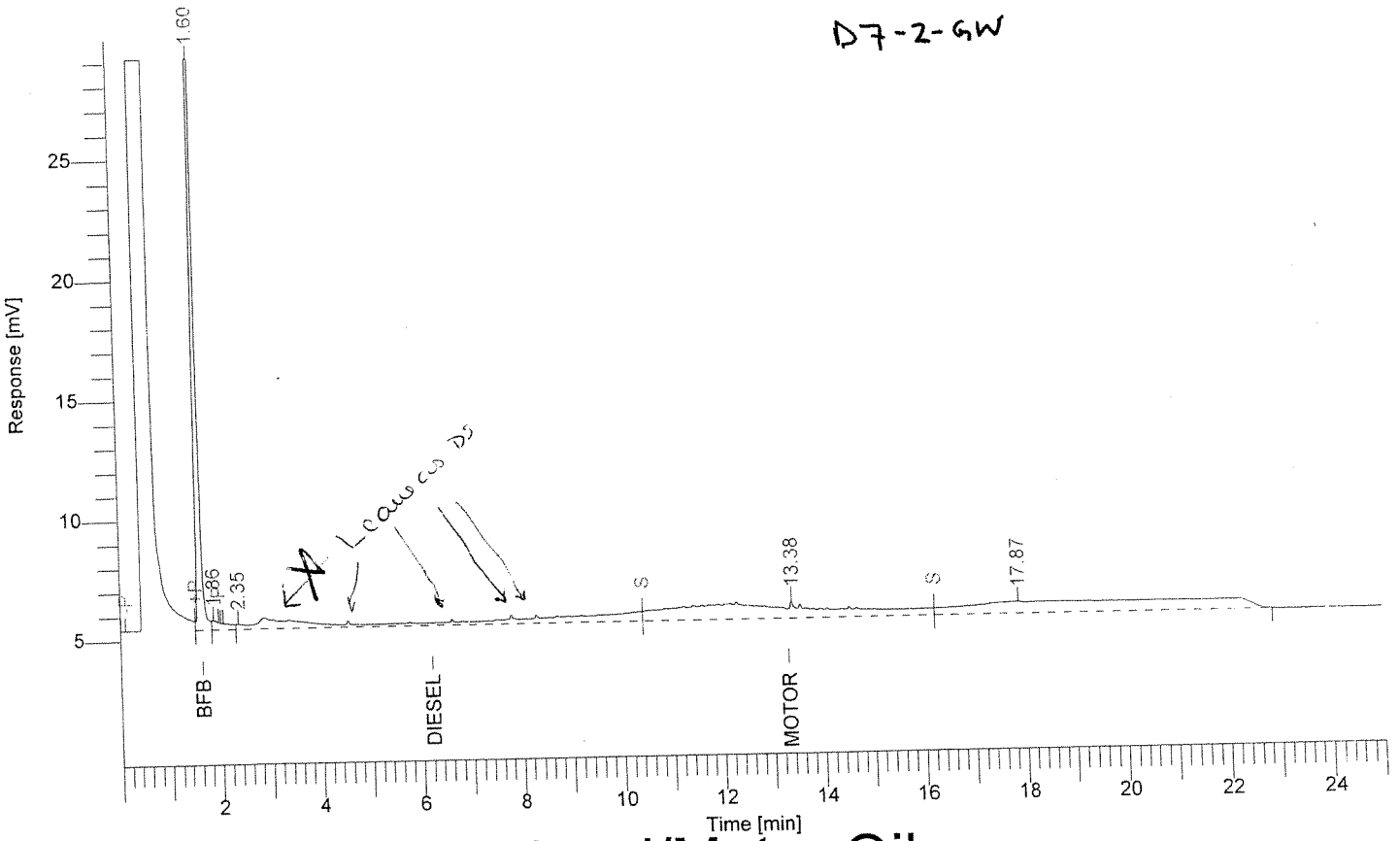

# Diesel/Motor Oil

| Peak # | Time [min] | Component Name | Raw Amount | Area [uV*sec] | Height [uV] |
|---|---|---|---|---|---|
| 1 | 1.60 | BFB | 8.654 | 193788 | 55932 |
| 2 | 1.86 | | 0.008 | 7579 | 389 |
| 3 | 2.35 | Diesel | 0.780 | 63149 | 225 |
| 4 | 12.28 | Motor Oil | 3.135 | 113692 | 519 |
| | | | 12.577 | 378207 | 57065 |

Report stored in ASCII file: C:\PenExe\TcWS\Stats\Data\ATDAT363.TX0

| | | | |
|---|---|---|---|
| Software Version | : 6.1.2.0.1:D19 | Date | : 7/17/03 2:52:52 PM |
| Sample Name | : A307306-05 | Data Acquisition Time | : 7/17/03 2:27:31 PM |
| Instrument Name | : DsMo | Channel | : A |
| Rack/Vial | : 0/0 | Operator | : marvin |
| Sample Amount | : 1.000000 | Dilution Factor | : 1.000000 |
| Cycle | : 10 | | |

Result File : C:\PenExe\TcWS\Stats\Data\ATDAT364.rst
Sequence File : C:\PenExe\TcWS\Stats\Sequences\Seq_DsMo_071703_2.seq




# Diesel/Motor Oil

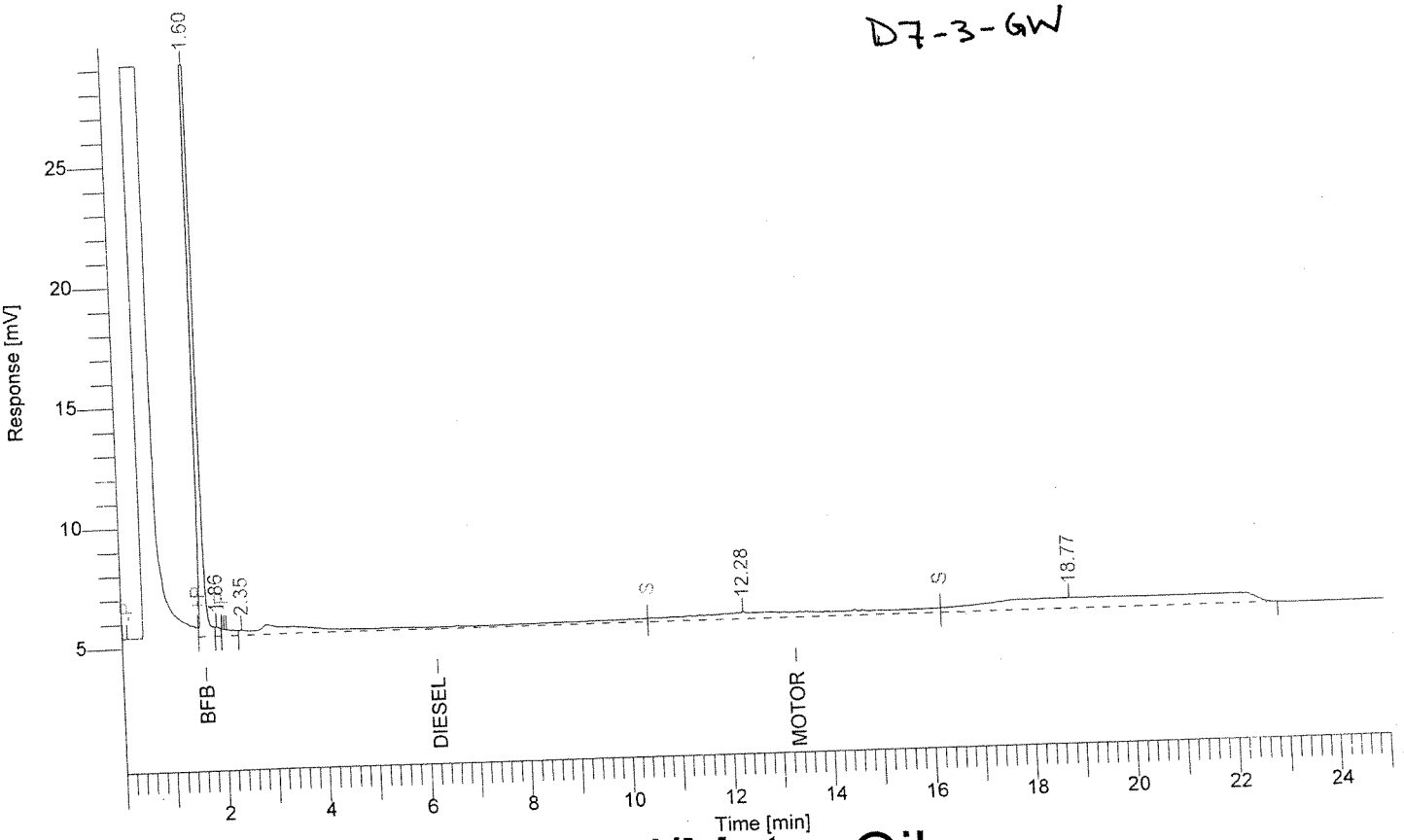
| Peak # | Time [min] | Component Name | Raw Amount | Area [uV*sec] | Height [uV] |
|---|---|---|---|---|---|
| 1 | 1.60 | BFB | 8.446 | 188995 | 56053 |
| 2 | 1.86 | | 0.008 | 7820 | 395 |
| 3 | 2.35 | Diesel | 1.511 | 92976 | 221 |
| 4 | 13.38 | Motor Oil | 4.262 | 146307 | 721 |
| 5 | 17.87 | | 0.158 | 158016 | 493 |
| | | | 14.385 | 594114 | 57883 |

Report stored in ASCII file: C:\PenExe\TcWS\Stats\Data\ATDAT364.TX0

| | | | |
|---|---|---|---|
| Software Version | : 6.1.2.0.1:D19 | Date | : 7/17/03 3:33:34 PM |
| Sample Name | : A307306-06 | Data Acquisition Time | : 7/17/03 3:08:05 PM |
| Instrument Name | : DsMo | Channel | : A |
| Rack/Vial | : 0/0 | Operator | : marvin |
| Sample Amount | : 1.000000 | Dilution Factor | : 1.000000 |
| Cycle | : 11 | | |

Result File : C:\PenExe\TcWS\Stats\Data\ATDAT365.rst
Sequence File : C:\PenExe\TcWS\Stats\Sequences\Seq_DsMo_071703_2.seq

D7-3-GW




# Diesel/Motor Oil

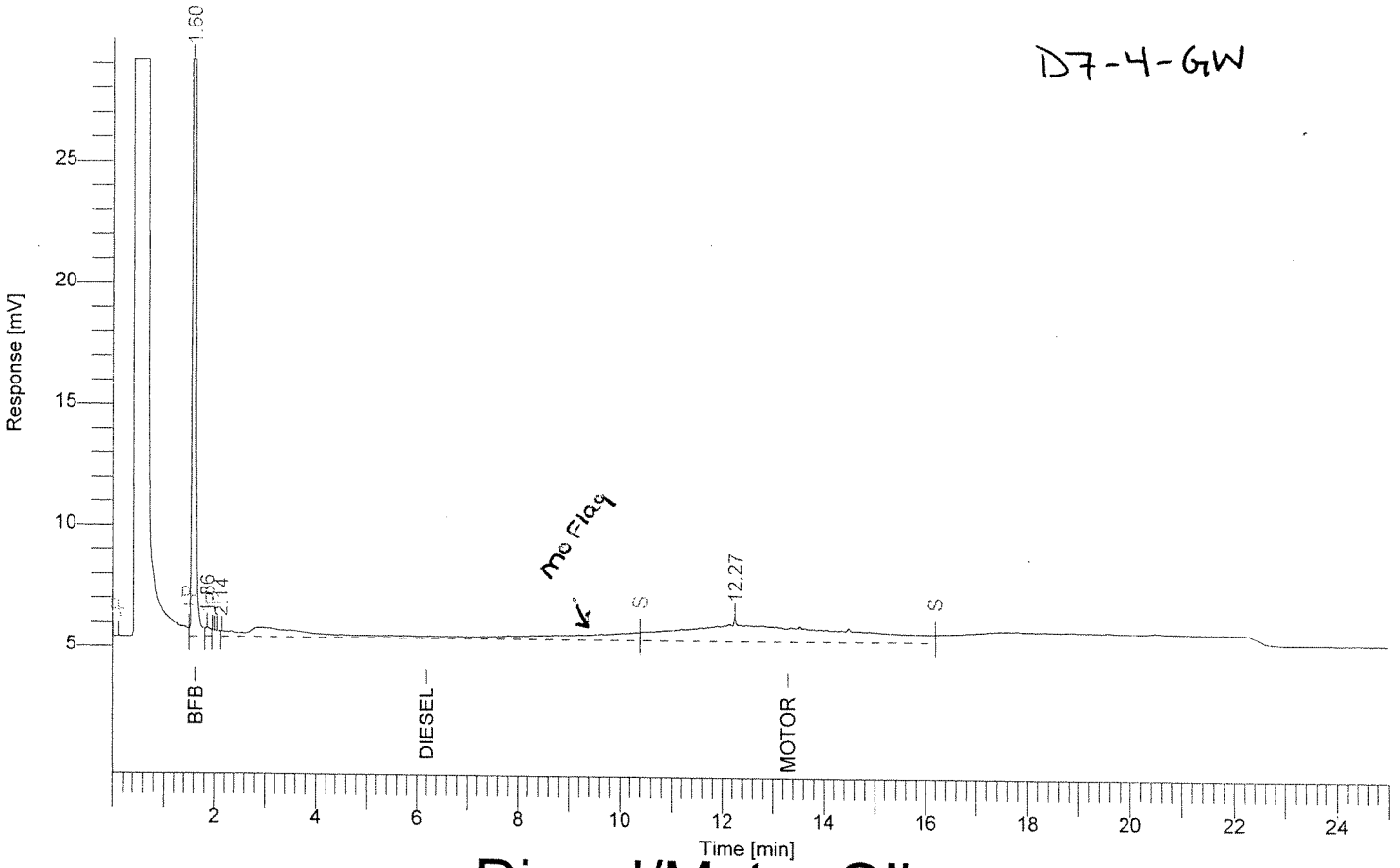
| Peak # | Time [min] | Component Name | Raw Amount | Area [uV*sec] | Height [uV] |
|---|---|---|---|---|---|
| 1 | 1.60 | BFB | 8.581 | 192113 | 55655 |
| 2 | 1.86 | | 0.003 | 2671 | 393 |
| 3 | 2.35 | Diesel | 0.680 | 59069 | 216 |
| 4 | 12.28 | Motor Oil | 1.471 | 65480 | 300 |
| 5 | 18.77 | | 0.144 | 144419 | 435 |
| | | | 10.879 | 463751 | 56999 |

Report stored in ASCII file: C:\PenExe\TcWS\Stats\Data\ATDAT365.TX0

| | | | |
|---|---|---|---|
| Software Version | : 6.1.2.0.1:D19 | Date | : 7/18/03 2:01:49 AM |
| Sample Name | : A307306-07 | Data Acquisition Time | : 7/18/03 1:36:39 AM |
| Instrument Name | : DsMo | Channel | : A |
| Rack/Vial | : 0/0 | Operator | : marvin |
| Sample Amount | : 1.000000 | Dilution Factor | : 1.000000 |
| Cycle | : 7 | | |

Result File : C:\PenExe\TcWS\Stats\Data\ATDAT374.rst
Sequence File : C:\PenExe\TcWS\Stats\Sequences\Seq_DsMo_071703_3.seq

D7-4-GW




# Diesel/Motor Oil

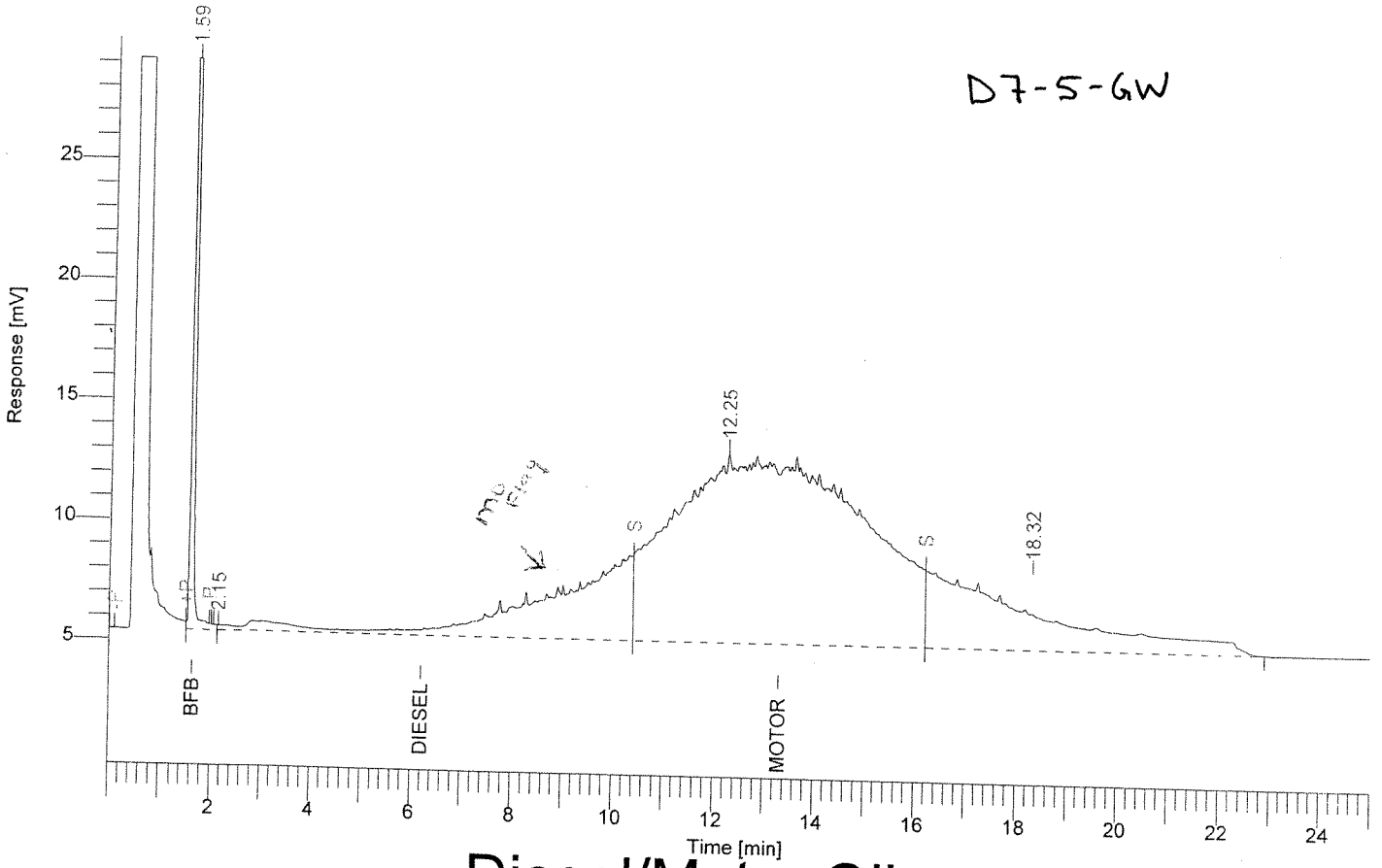
| Peak # | Time [min] | Component Name | Raw Amount | Area [uV*sec] | Height [uV] |
|---|---|---|---|---|---|
| 1 | 1.60 | BFB | 7.744 | 172875 | 48945 |
| 2 | 1.86 | | 0.003 | 2670 | 355 |
| 3 | 2.14 | Diesel | 1.200 | 80297 | 217 |
| 4 | 12.27 | Motor Oil | 5.103 | 170625 | 997 |
| | | | 14.050 | 426467 | 50514 |

Report stored in ASCII file: C:\PenExe\TcWS\Stats\Data\ATDAT374.TX0

| | | | |
|---|---|---|---|
| Software Version | : 6.1.2.0.1:D19 | Date | : 7/18/03 2:42:19 AM |
| Sample Name | : A307306-08 | Data Acquisition Time | : 7/18/03 2:17:11 AM |
| Instrument Name | : DsMo | Channel | : A |
| Rack/Vial | : 0/0 | Operator | : marvin |
| Sample Amount | : 1.000000 | Dilution Factor | : 1.000000 |
| Cycle | : 8 | | |

Result File : C:\PenExe\TcWS\Stats\Data\ATDAT375.rst
Sequence File : C:\PenExe\TcWS\Stats\Sequences\Seq_DsMo_071703_3.seq

D7-5-GW



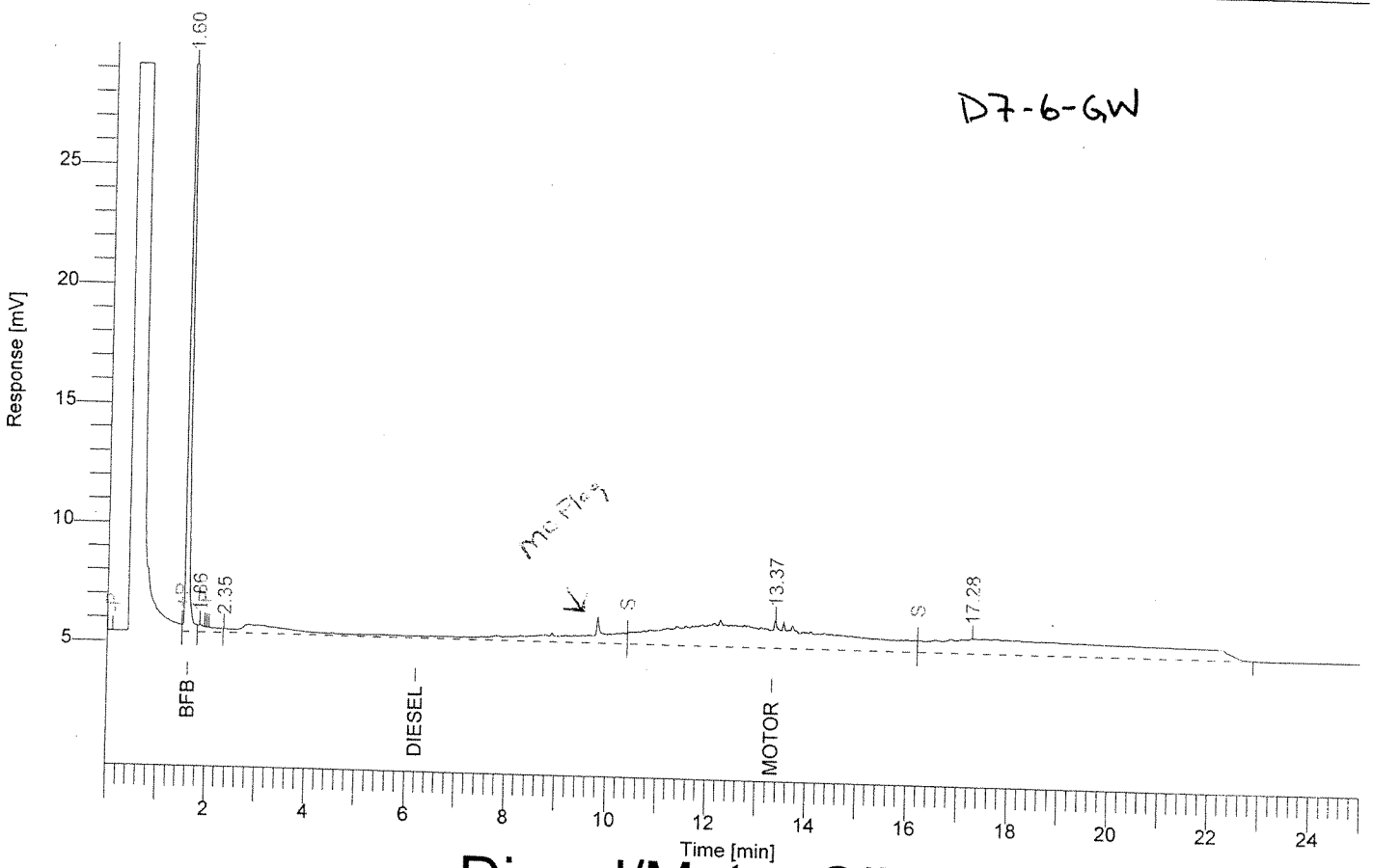

# Diesel/Motor Oil

| Peak # | Time [min] | Component Name | Raw Amount | Area [uV*sec] | Height [uV] |
|---|---|---|---|---|---|
| 1 | 1.59 | BFB | 7.453 | 166195 | 43199 |
| 2 | 2.15 | Diesel | 9.731 | 427709 | 208 |
| 3 | 12.25 | Motor Oil | 71.356 | 2038818 | 7902 |
| 4 | 18.32 | | 0.502 | 502283 | 1500 |
| | | | 89.041 | 3135006 | 52809 |

Report stored in ASCII file: C:\PenExe\TcWS\Stats\Data\ATDAT375.TX0

| | | | |
|---|---|---|---|
| Software Version | : 6.1.2.0.1:D19 | Date | : 7/18/03 3:22:43 AM |
| Sample Name | : A307306-09 | Data Acquisition Time | : 7/18/03 2:57:34 AM |
| Instrument Name | : DsMo | Channel | : A |
| Rack/Vial | : 0/0 | Operator | : marvin |
| Sample Amount | : 1.000000 | Dilution Factor | : 1.000000 |
| Cycle | : 9 | | |

Result File : C:\PenExe\TcWS\Stats\Data\ATDAT376.rst
Sequence File : C:\PenExe\TcWS\Stats\Sequences\Seq_DsMo_071703_3.seq




# Diesel/Motor Oil

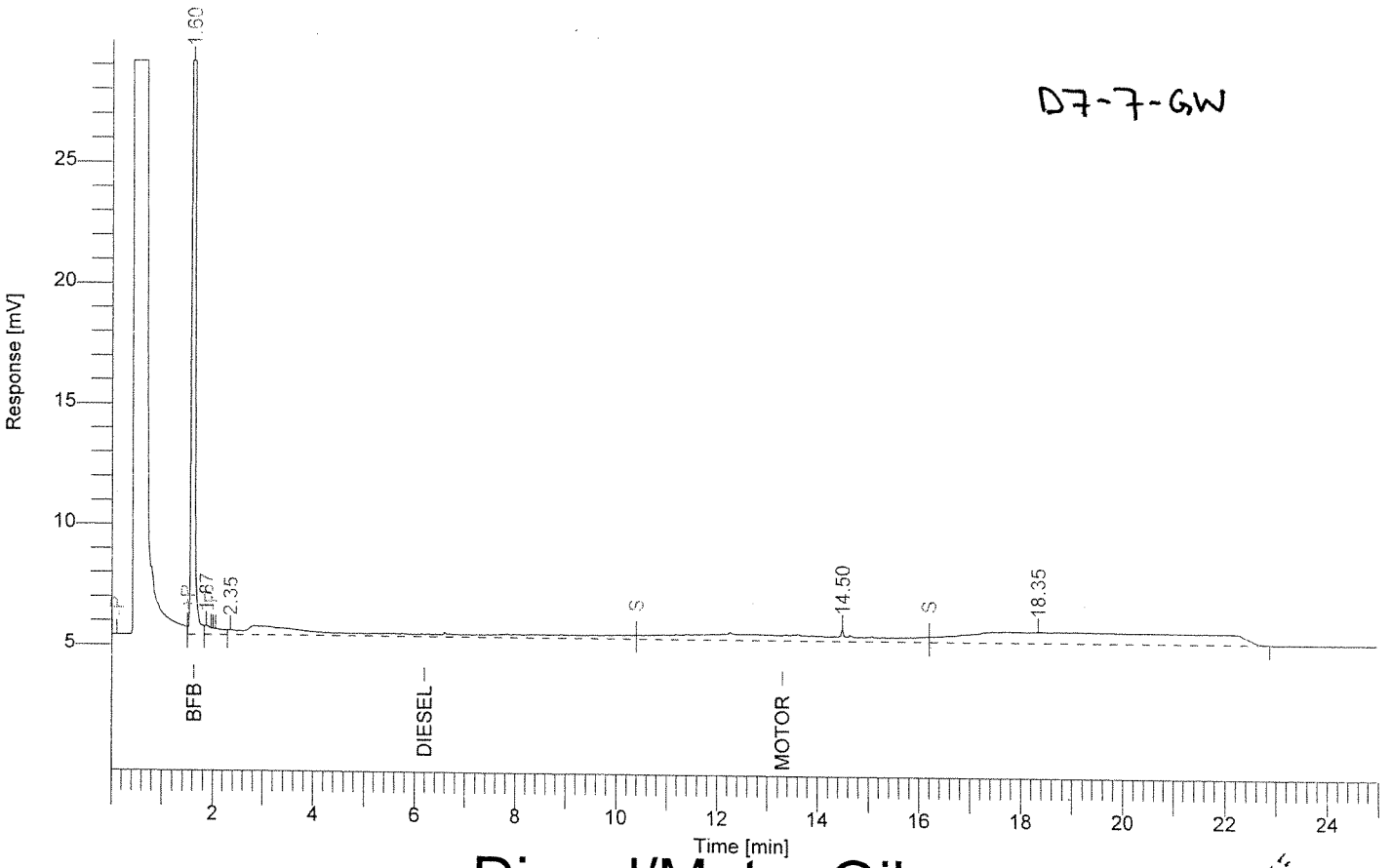
| Peak # | Time [min] | Component Name | Raw Amount | Area [uV*sec] | Height [uV] |
|---|---|---|---|---|---|
| 1 | 1.60 | BFB | 6.579 | 146289 | 43318 |
| 2 | 1.86 | | 0.006 | 6287 | 294 |
| 3 | 2.35 | Diesel | 1.365 | 86999 | 177 |
| 4 | 13.37 | Motor Oil | 7.398 | 236935 | 1162 |
| 5 | 17.28 | | 0.196 | 195569 | 630 |
| | | | 15.544 | 672079 | 45581 |

Report stored in ASCII file: C:\PenExe\TcWS\Stats\Data\ATDAT376.TX0

| | | | |
|---|---|---|---|
| Software Version | : 6.1.2.0.1:D19 | Date | : 7/18/03 4:03:07 AM |
| Sample Name | : A307306-10 | Data Acquisition Time | : 7/18/03 3:37:58 AM |
| Instrument Name | : DsMo | Channel | : A |
| Rack/Vial | : 0/0 | Operator | : marvin |
| Sample Amount | : 1.000000 | Dilution Factor | : 1.000000 |
| Cycle | : 10 | | |

Result File : C:\PenExe\TcWS\Stats\Data\ATDAT377.rst
Sequence File : C:\PenExe\TcWS\Stats\Sequences\Seq_DsMo_071703_3.seq

D7-7-GW




# Diesel/Motor Oil

| Peak # | Time [min] | Component Name | Raw Amount | Area [uV*sec] | Height [uV] |
|---|---|---|---|---|---|
| 1 | 1.60 | BFB | 9.376 | 210504 | 59937 |
| 2 | 1.87 | | 0.007 | 6849 | 366 |
| 3 | 2.35 | Diesel | 0.904 | 68192 | 198 |
| 4 | 14.50 | Motor Oil | 1.621 | 69827 | 505 |
| 5 | 18.35 | | 0.152 | 151674 | 451 |
| | | | 12.059 | 507046 | 61457 |

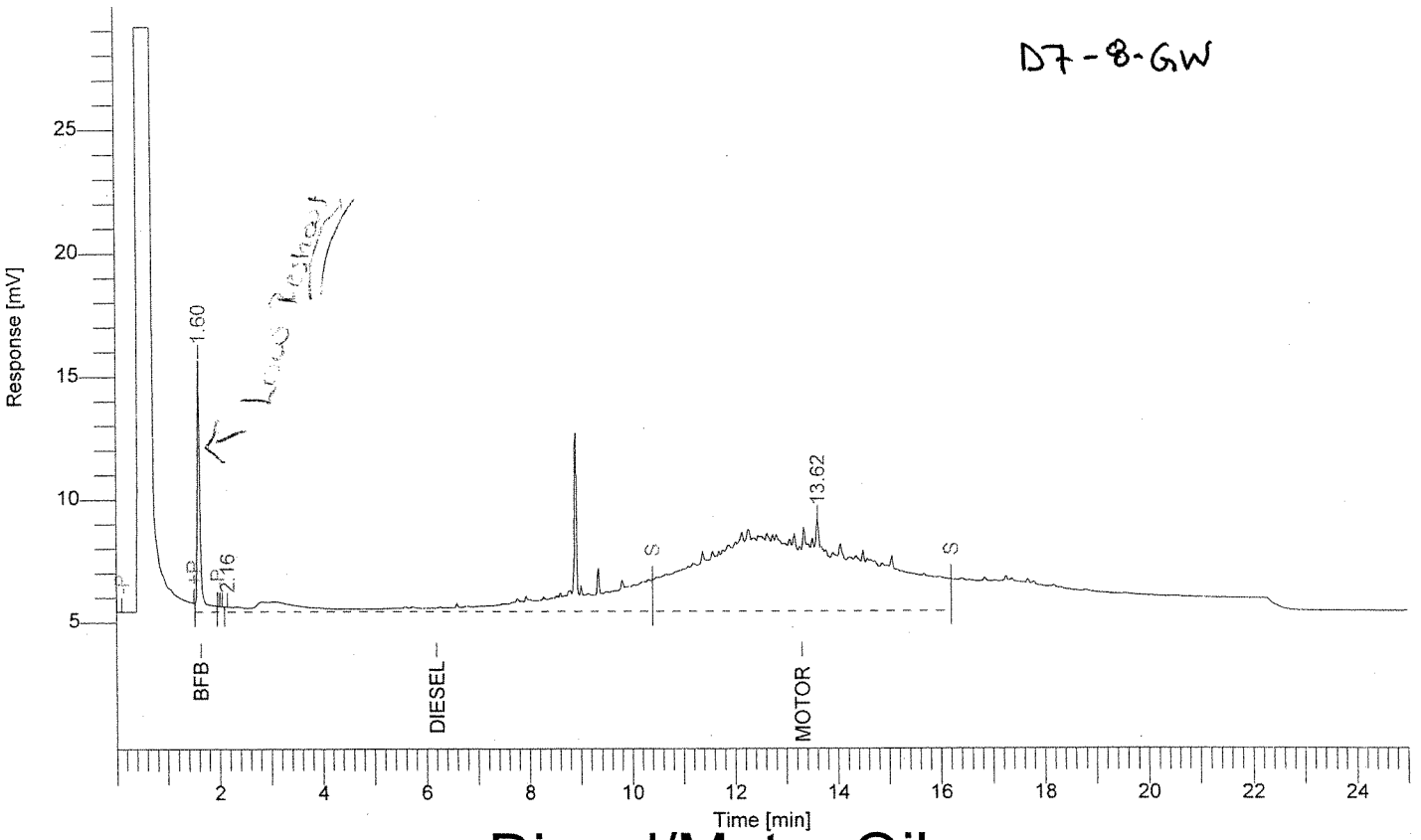
890mL Raise Reporting Limit since Min. Detect. Limit = 1.008

Report stored in ASCII file: C:\PenExe\TcWS\Stats\Data\ATDAT377.TX0

| | | | |
|---|---|---|---|
| Software Version | : 6.1.2.0.1:D19 | Date | : 7/18/03 4:43:31 AM |
| Sample Name | : A307306-11 | Data Acquisition Time | : 7/18/03 4:18:21 AM |
| Instrument Name | : DsMo | Channel | : A |
| Rack/Vial | : 0/0 | Operator | : marvin |
| Sample Amount | : 1.000000 | Dilution Factor | : 1.000000 |
| Cycle | : 11 | | |

Result File : C:\PenExe\TcWS\Stats\Data\ATDAT378.rst
Sequence File : C:\PenExe\TcWS\Stats\Sequences\Seq_DsMo_071703_3.seq

D7-8-GW



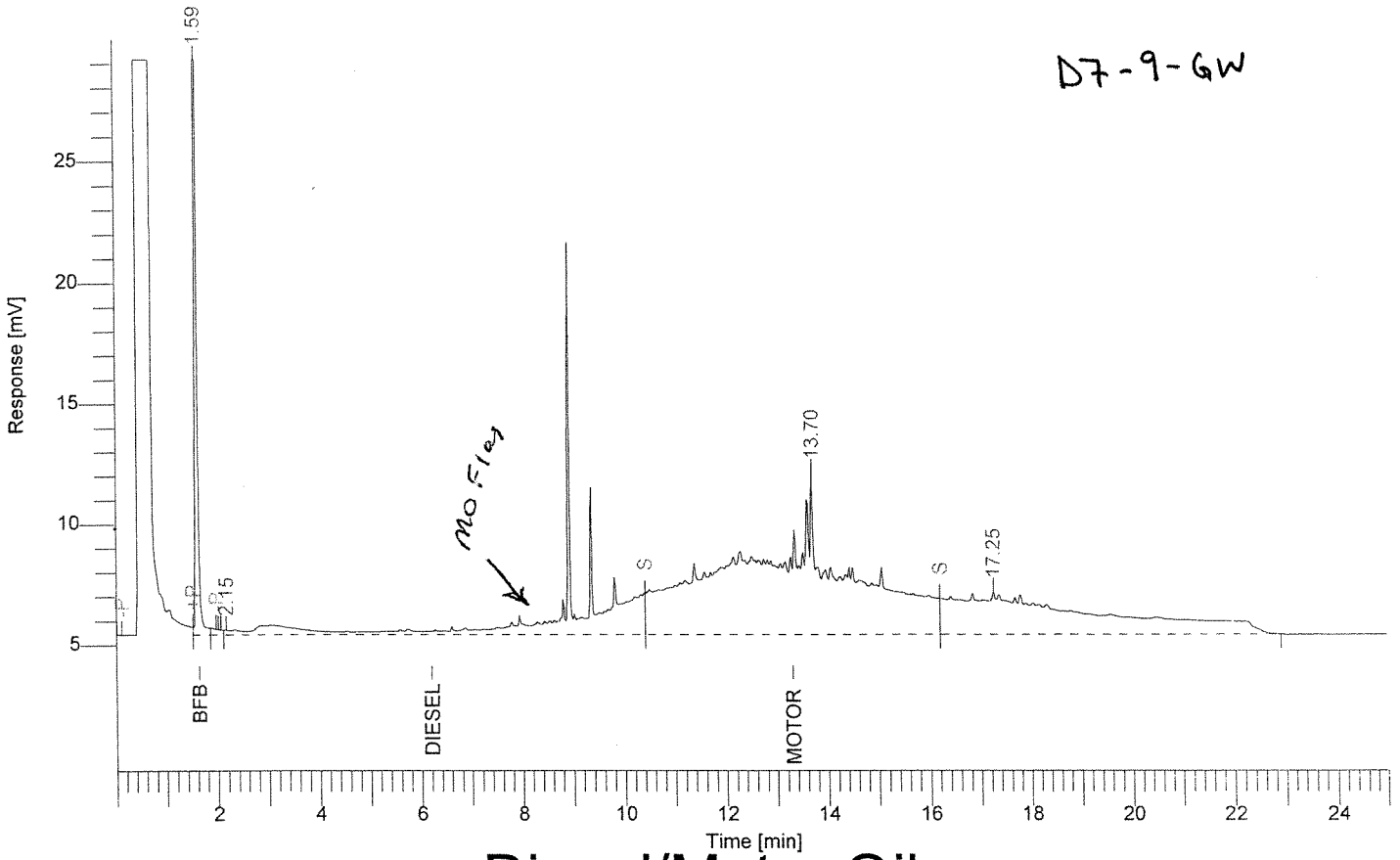

# Diesel/Motor Oil

| Peak # | Time [min] | Component Name | Raw Amount | Area [uV*sec] | Height [uV] |
|---|---|---|---|---|---|
| 1 | 1.60 | BFB | 1.792 | 39691 | 9446 |
| 2 | 2.16 | Diesel | 4.173 | 201492 | 193 |
| 3 | 13.62 | Motor Oil | 25.478 | 755193 | 3726 |
| | | | 31.443 | 996376 | 13365 |

Report stored in ASCII file: C:\PenExe\TcWS\Stats\Data\ATDAT378.TX0

| | | | |
|---|---|---|---|
| Software Version | : 6.1.2.0.1:D19 | Date | : 7/18/03 5:23:56 AM |
| Sample Name | : A307306-12 | Data Acquisition Time | : 7/18/03 4:58:48 AM |
| Instrument Name | : DsMo | Channel | : A |
| Rack/Vial | : 0/0 | Operator | : marvin |
| Sample Amount | : 1.000000 | Dilution Factor | : 1.000000 |
| Cycle | : 12 | | |

Result File : C:\PenExe\TcWS\Stats\Data\ATDAT379.rst
Sequence File : C:\PenExe\TcWS\Stats\Sequences\Seq_DsMo_071703_3.seq



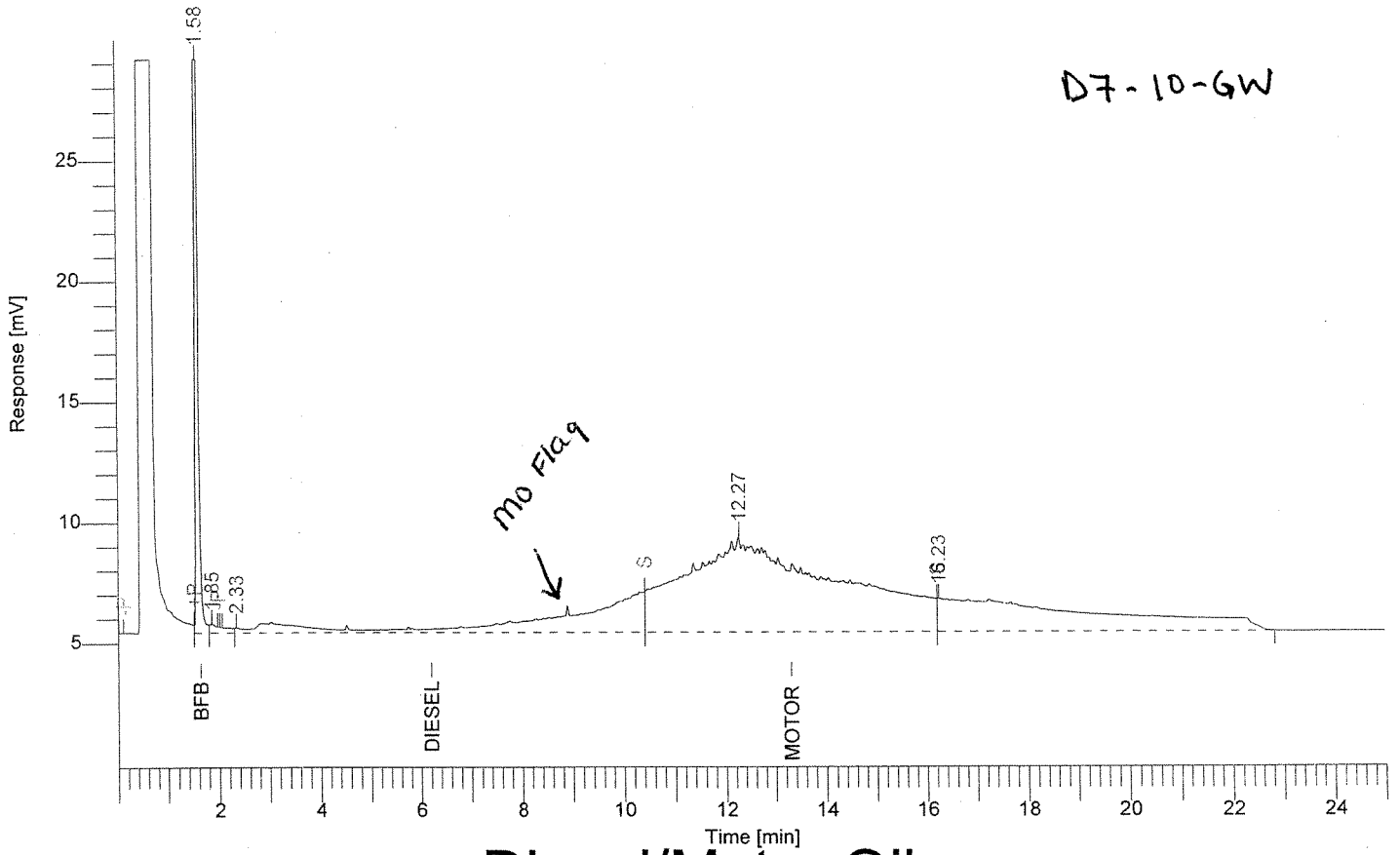

# Diesel/Motor Oil

| Peak # | Time [min] | Component Name | Raw Amount | Area [uV*sec] | Height [uV] |
|---|---|---|---|---|---|
| 1 | 1.59 | BFB | 4.356 | 96277 | 25804 |
| 2 | 2.15 | Diesel | 5.158 | 241619 | 201 |
| 3 | 13.70 | Motor Oil | 28.391 | 838047 | 6686 |
| 4 | 17.25 | | 0.351 | 350640 | 1747 |
| | | | 38.256 | 1526582 | 34439 |

Report stored in ASCII file: C:\PenExe\TcWS\Stats\Data\ATDAT379.TX0

| | | | |
|---|---|---|---|
| Software Version | : 6.1.2.0.1:D19 | Date | : 7/18/03 9:15:41 PM |
| Sample Name | : A307306-13 | Data Acquisition Time | : 7/18/03 8:50:13 PM |
| Instrument Name | : DsMo | Channel | : A |
| Rack/Vial | : 0/0 | Operator | : marvin |
| Sample Amount | : 1.000000 | Dilution Factor | : 1.000000 |
| Cycle | : 6 | | |

Result File : C:\PenExe\TcWS\Stats\Data\ATDAT390.rst
Sequence File : C:\PenExe\TcWS\Stats\Sequences\Seq_DsMo_071803_2.seq



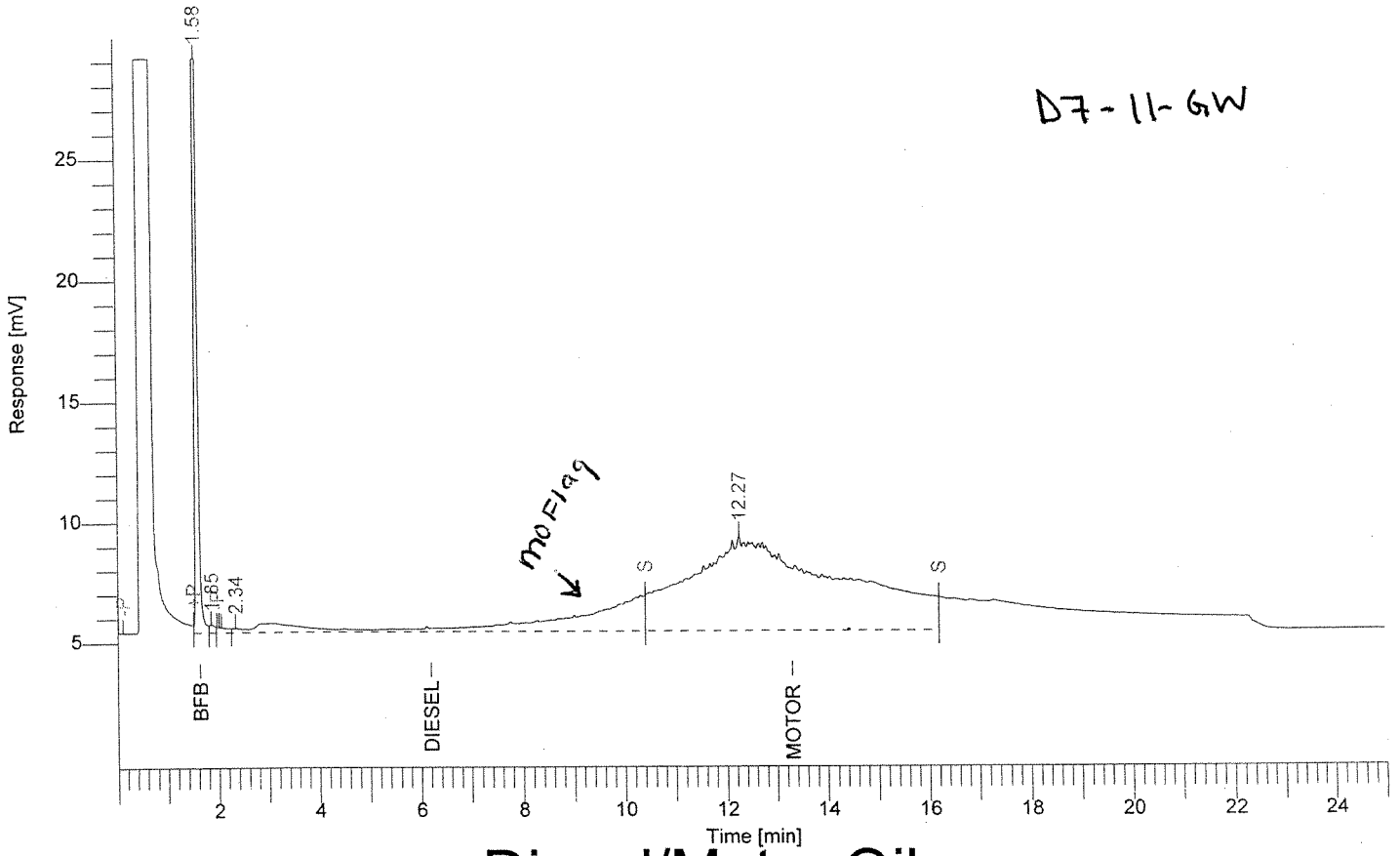

# Diesel/Motor Oil

| Peak # | Time [min] | Component Name | Raw Amount | Area [uV*sec] | Height [uV] |
|---|---|---|---|---|---|
| 1 | 1.58 | BFB | 7.059 | 157220 | 44643 |
| 2 | 1.85 | | 0.007 | 7172 | 350 |
| 3 | 2.33 | Diesel | 4.018 | 195160 | 202 |
| 4 | 12.27 | Motor Oil | 27.490 | 812463 | 3972 |
| 5 | 16.23 | | 0.303 | 302848 | 1364 |
| | | | 38.878 | 1474863 | 50531 |

Report stored in ASCII file: C:\PenExe\TcWS\Stats\Data\ATDAT390.TX0

| | | | |
|---|---|---|---|
| Software Version | : 6.1.2.0.1:D19 | Date | : 7/18/03 9:55:58 PM |
| Sample Name | : A307306-14 | Data Acquisition Time | : 7/18/03 9:30:38 PM |
| Instrument Name | : DsMo | Channel | : A |
| Rack/Vial | : 0/0 | Operator | : marvin |
| Sample Amount | : 1.000000 | Dilution Factor | : 1.000000 |
| Cycle | : 7 | | |

Result File : C:\PenExe\TcWS\Stats\Data\ATDAT391.rst
Sequence File : C:\PenExe\TcWS\Stats\Sequences\Seq_DsMo_071803_2.seq




# Diesel/Motor Oil

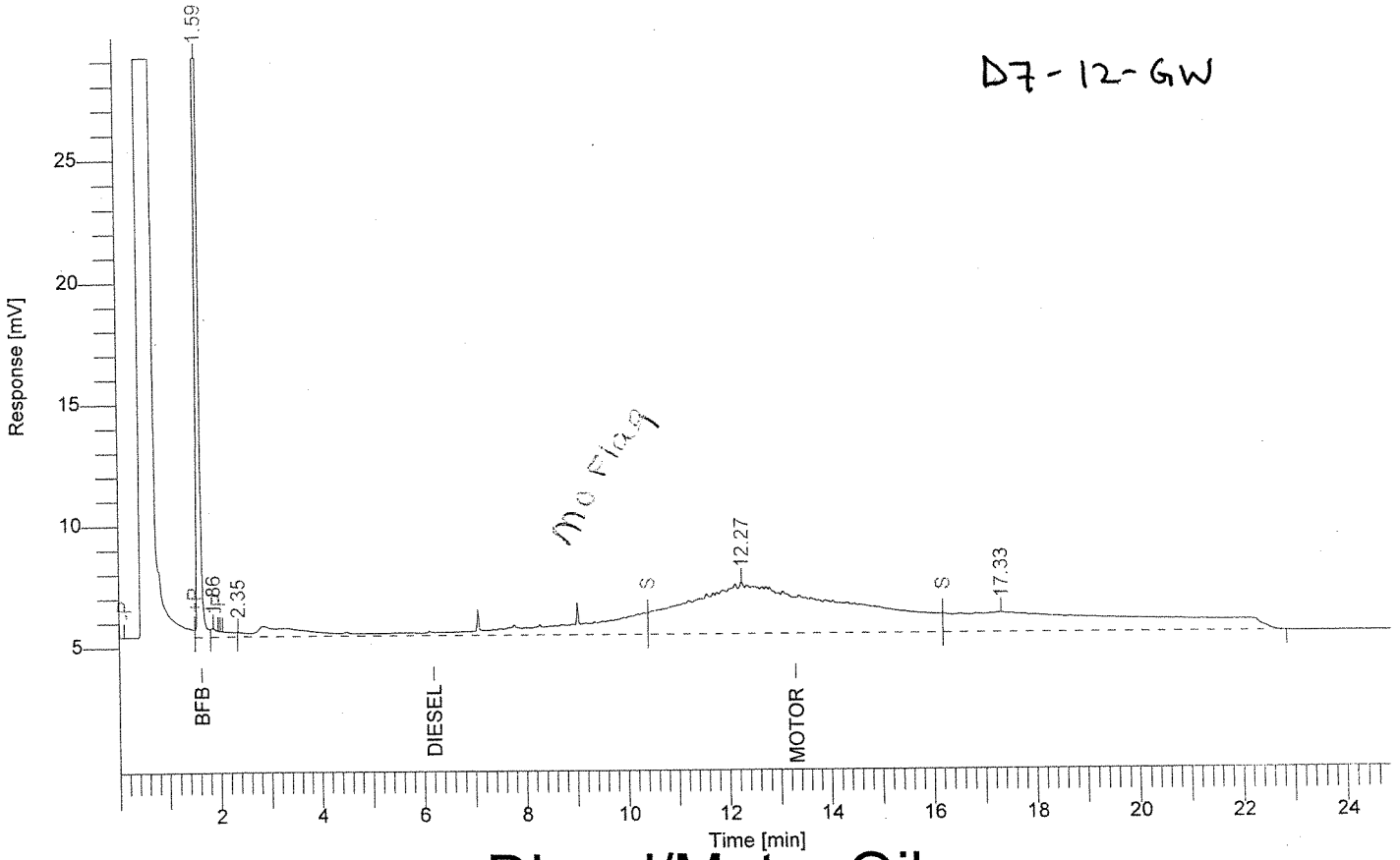
| Peak # | Time [min] | Component Name | Raw Amount | Area [uV*sec] | Height [uV] |
|---|---|---|---|---|---|
| 1 | 1.58 | BFB | 7.124 | 158705 | 45899 |
| 2 | 1.85 | | 0.003 | 2684 | 332 |
| 3 | 2.34 | Diesel | 3.465 | 172619 | 190 |
| 4 | 12.27 | Motor Oil | 27.395 | 809759 | 3957 |
| | | | 37.987 | 1143767 | 50378 |

Report stored in ASCII file: C:\PenExe\TcWS\Stats\Data\ATDAT391.TX0

| | | | |
|---|---|---|---|
| Software Version | : 6.1.2.0.1:D19 | Date | : 7/18/03 10:11:08 PM |
| Sample Name | : A307306-15 | Data Acquisition Time | : 7/18/03 10:11:08 PM |
| Instrument Name | : DsMo | Channel | : A |
| Rack/Vial | : 0/0 | Operator | : marvin |
| Sample Amount | : 1.000000 | Dilution Factor | : 1.000000 |
| Cycle | : 8 | | |

Result File : C:\PenExe\TcWS\Stats\Data\ATDAT392.rst
Sequence File : C:\PenExe\TcWS\Stats\Sequences\Seq_DsMo_071803_2.seq

D7-12-GW




# Diesel/Motor Oil

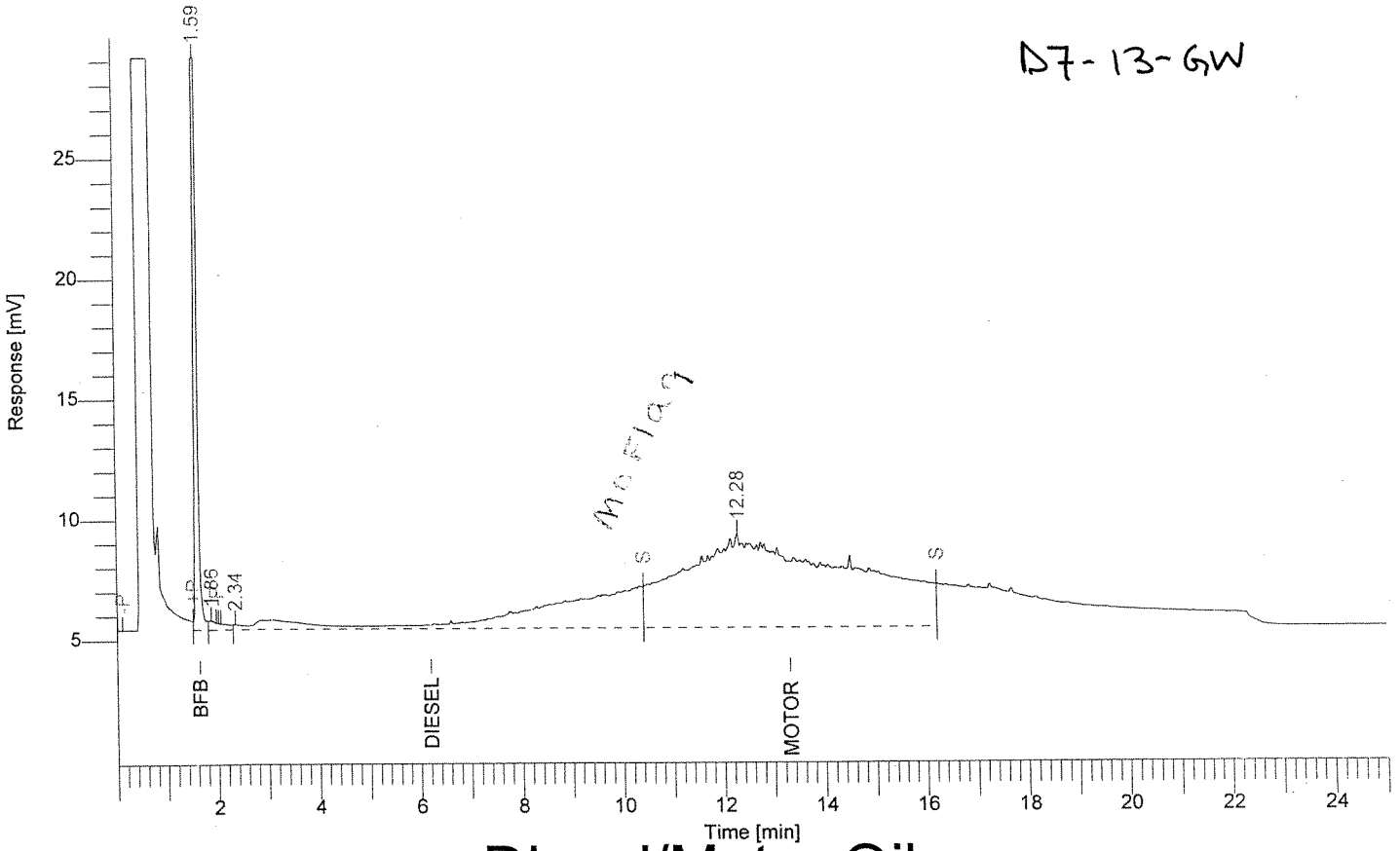
| Peak # | Time [min] | Component Name | Raw Amount | Area [uV*sec] | Height [uV] |
|---|---|---|---|---|---|
| 1 | 1.59 | BFB | 8.376 | 187381 | 53341 |
| 2 | 1.86 | | 0.007 | 7234 | 353 |
| 3 | 2.35 | Diesel | 2.585 | 136755 | 186 |
| 4 | 12.27 | Motor Oil | 15.004 | 455813 | 2121 |
| 5 | 17.33 | | 0.227 | 226644 | 809 |
| | | | 26.199 | 1013827 | 56809 |

Report stored in ASCII file: C:\PenExe\TcWS\Stats\Data\ATDAT392.TX0

| | | | |
|---|---|---|---|
| Software Version | : 6.1.2.0.1:D19 | Date | : 7/18/03 11:16:53 PM |
| Sample Name | : A307306-16 | Data Acquisition Time | : 7/18/03 10:51:37 PM |
| Instrument Name | : DsMo | Channel | : A |
| Rack/Vial | : 0/0 | Operator | : marvin |
| Sample Amount | : 1.000000 | Dilution Factor | : 1.000000 |
| Cycle | : 9 | | |

Result File : C:\PenExe\TcWS\Stats\Data\ATDAT393.rst
Sequence File : C:\PenExe\TcWS\Stats\Sequences\Seq_DsMo_071803_2.seq

D7-13-GW




# Diesel/Motor Oil

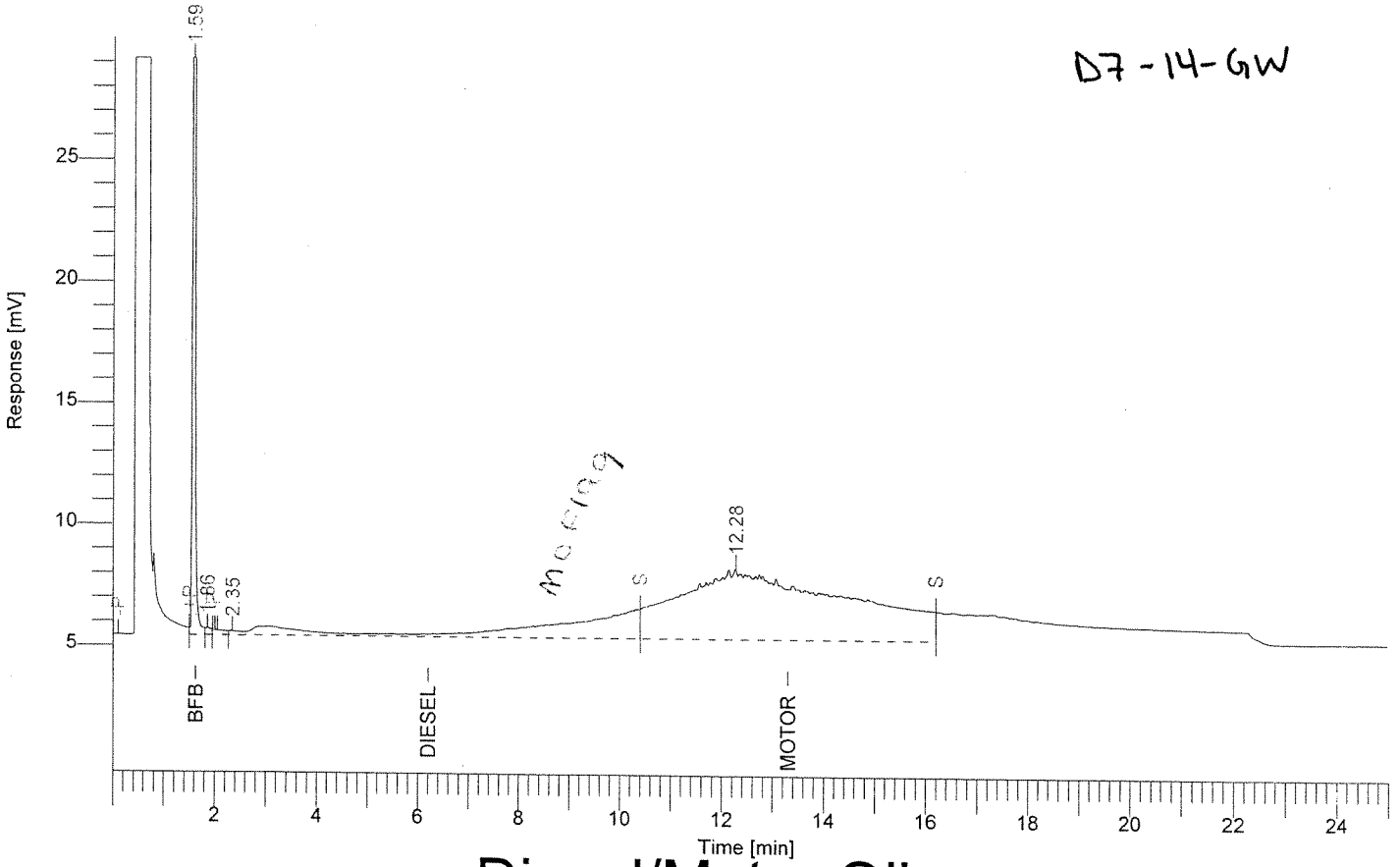
| Peak # | Time [min] | Component Name | Raw Amount | Area [uV*sec] | Height [uV] |
|---|---|---|---|---|---|
| 1 | 1.59 | BFB | 7.053 | 157066 | 42240 |
| 2 | 1.86 | | 0.008 | 7829 | 385 |
| 3 | 2.34 | Diesel | 5.448 | 253421 | 218 |
| 4 | 12.28 | Motor Oil | 30.008 | 883960 | 3879 |
| | | | 42.516 | 1302276 | 46722 |

Report stored in ASCII file: C:\PenExe\TcWS\Stats\Data\ATDAT393.TX0

| | | | |
|---|---|---|---|
| Software Version | : 6.1.2.0.1:D19 | Date | : 7/18/03 11:57:21 PM |
| Sample Name | : A307306-17 | Data Acquisition Time | : 7/18/03 11:32:03 PM |
| Instrument Name | : DsMo | Channel | : A |
| Rack/Vial | : 0/0 | Operator | : marvin |
| Sample Amount | : 1.000000 | Dilution Factor | : 1.000000 |
| Cycle | : 10 | | |

Result File : C:\PenExe\TcWS\Stats\Data\ATDAT394.rst
Sequence File : C:\PenExe\TcWS\Stats\Sequences\Seq_DsMo_071803_2.seq

D7-14-GW



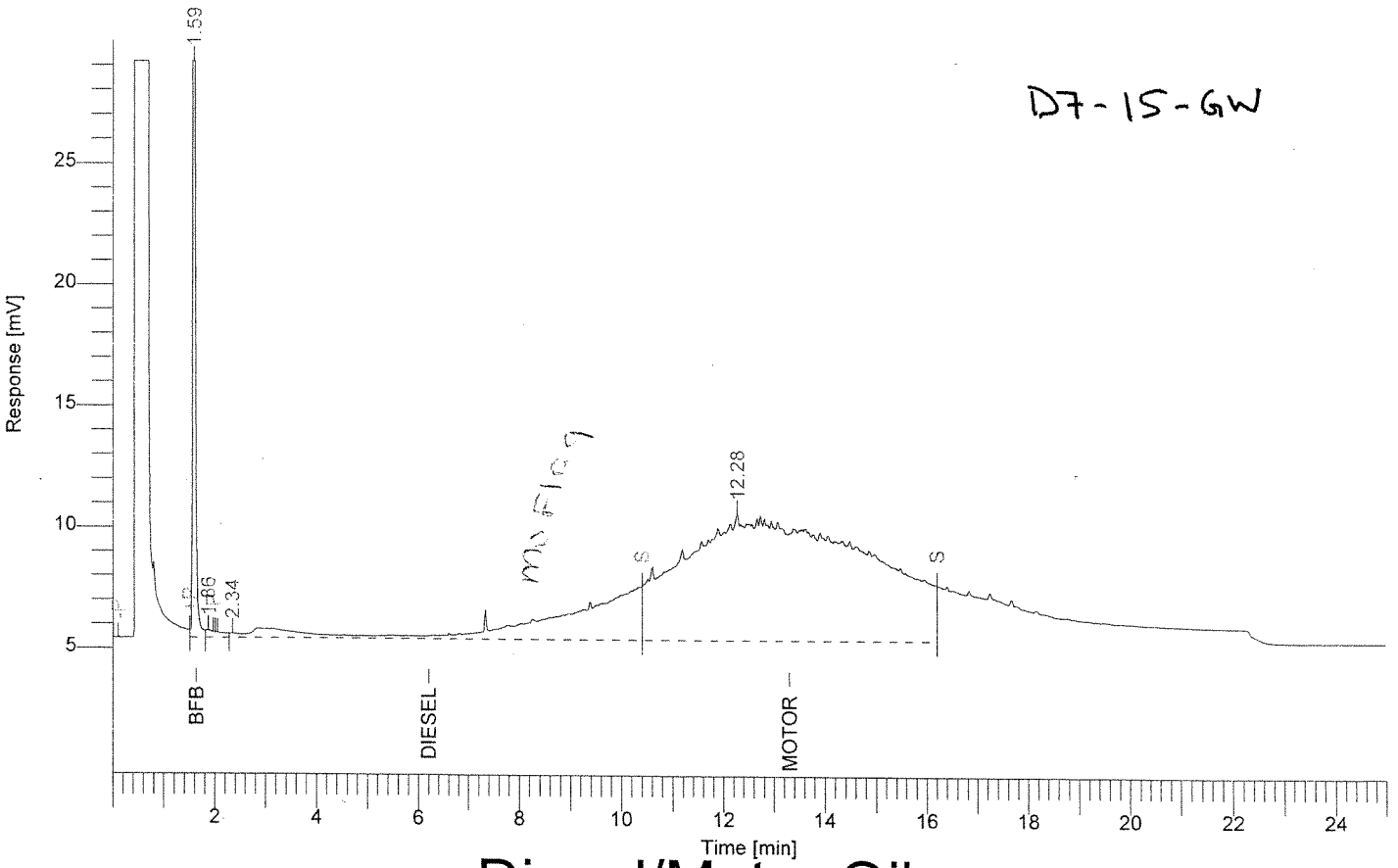

# Diesel/Motor Oil

| Peak # | Time [min] | Component Name | Raw Amount | Area [uV*sec] | Height [uV] |
|---|---|---|---|---|---|
| 1 | 1.59 | BFB | 6.933 | 154336 | 45400 |
| 2 | 1.86 | | 0.002 | 2182 | 284 |
| 3 | 2.35 | Diesel | 3.097 | 157606 | 162 |
| 4 | 12.28 | Motor Oil | 22.088 | 658571 | 2920 |
| | | | 32.120 | 972694 | 48766 |

Report stored in ASCII file: C:\PenExe\TcWS\Stats\Data\ATDAT394.TX0

| | | | |
|---|---|---|---|
| Software Version | : 6.1.2.0.1:D19 | Date | : 7/19/03 12:37:51 AM |
| Sample Name | : A307306-18 | Data Acquisition Time | : 7/19/03 12:12:33 AM |
| Instrument Name | : DsMo | Channel | : A |
| Rack/Vial | : 0/0 | Operator | : marvin |
| Sample Amount | : 1.000000 | Dilution Factor | : 1.000000 |
| Cycle | : 11 | | |

Result File : C:\PenExe\TcWS\Stats\Data\ATDAT395.rst
Sequence File : C:\PenExe\TcWS\Stats\Sequences\Seq_DsMo_071803_2.seq



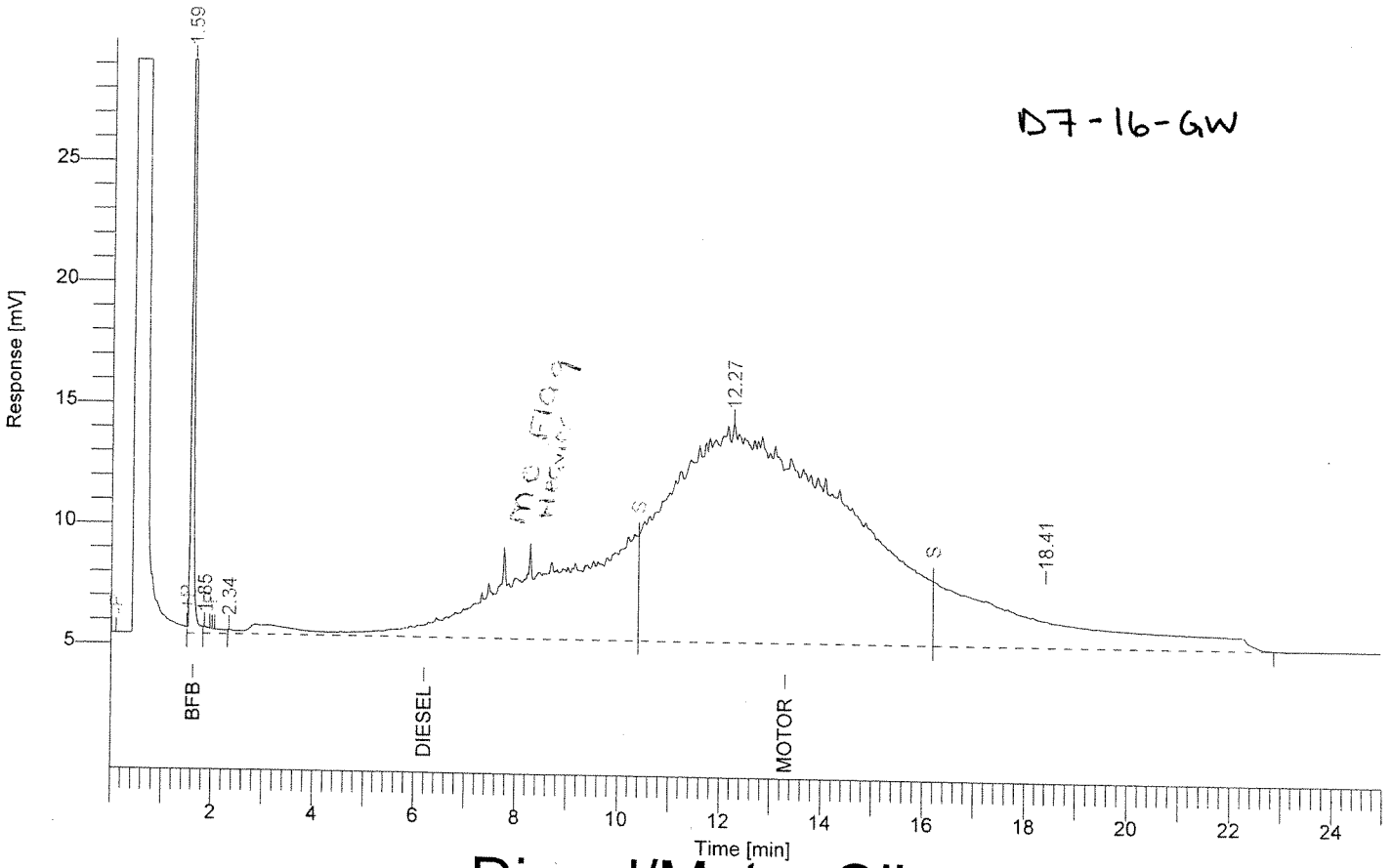

# Diesel/Motor Oil

| Peak # | Time [min] | Component Name | Raw Amount | Area [uV*sec] | Height [uV] |
|---|---|---|---|---|---|
| 1 | 1.59 | BFB | 5.785 | 128326 | 35875 |
| 2 | 1.86 | | 0.006 | 6230 | 311 |
| 3 | 2.34 | Diesel | 5.517 | 256241 | 186 |
| 4 | 12.28 | Motor Oil | 45.382 | 1317655 | 5223 |
| | | | 56.691 | 1708452 | 41596 |

Report stored in ASCII file: C:\PenExe\TcWS\Stats\Data\ATDAT395.TX0

| | | | |
|---|---|---|---|
| Software Version | : 6.1.2.0.1:D19 | Date | : 7/19/03 1:18:18 AM |
| Sample Name | : A307306-19 | Data Acquisition Time | : 7/19/03 12:53:05 AM |
| Instrument Name | : DsMo | Channel | : A |
| Rack/Vial | : 0/0 | Operator | : marvin |
| Sample Amount | : 1.000000 | Dilution Factor | : 1.000000 |
| Cycle | : 12 | | |

Result File : C:\PenExe\TcWS\Stats\Data\ATDAT396.rst
Sequence File : C:\PenExe\TcWS\Stats\Sequences\Seq_DsMo_071803_2.seq



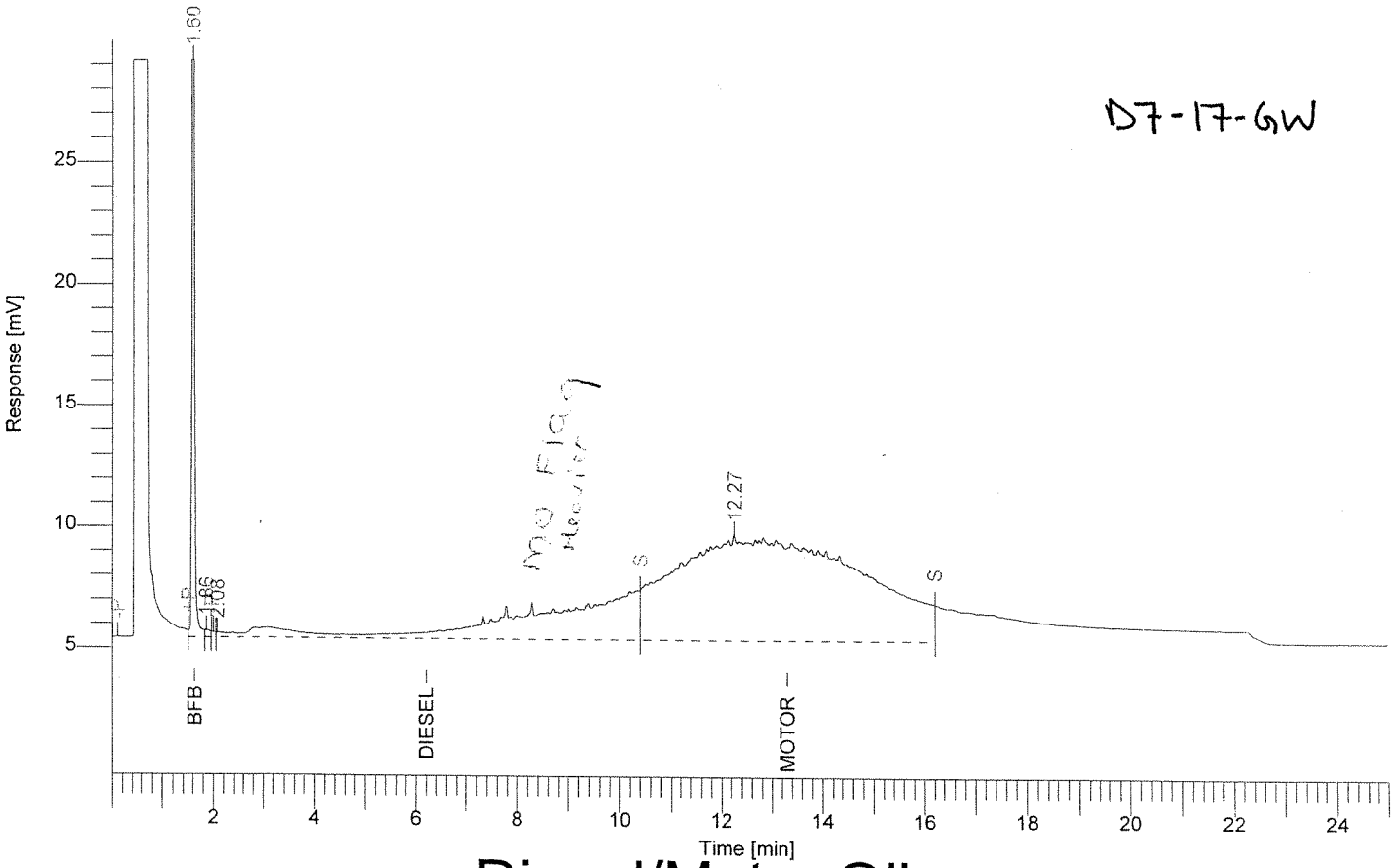

# Diesel/Motor Oil

| Peak # | Time [min] | Component Name | Raw Amount | Area [uV*sec] | Height [uV] |
|---|---|---|---|---|---|
| 1 | 1.59 | BFB | 5.477 | 121379 | 36188 |
| 2 | 1.85 | | 0.005 | 5490 | 275 |
| 3 | 2.34 | Diesel | 15.277 | 653062 | 164 |
| 4 | 12.27 | Motor Oil | 76.020 | 2166780 | 9115 |
| 5 | 18.41 | | 0.408 | 407625 | 1081 |
| | | | 97.187 | 3354336 | 46823 |

Report stored in ASCII file: C:\PenExe\TcWS\Stats\Data\ATDAT396.TX0

| | | | |
|---|---|---|---|
| Software Version | : 6.1.2.0.1:D19 | Date | : 7/19/03 1:58:48 AM |
| Sample Name | : A307306-20 | Data Acquisition Time | : 7/19/03 1:33:31 AM |
| Instrument Name | : DsMo | Channel | : A |
| Rack/Vial | : 0/0 | Operator | : marvin |
| Sample Amount | : 1.000000 | Dilution Factor | : 1.000000 |
| Cycle | : 13 | | |

Result File : C:\PenExe\TcWS\Stats\Data\ATDAT397.rst
Sequence File : C:\PenExe\TcWS\Stats\Sequences\Seq_DsMo_071803_2.seq




# Diesel/Motor Oil

| Peak # | Time [min] | Component Name | Raw Amount | Area [uV*sec] | Height [uV] |
|---|---|---|---|---|---|
| 1 | 1.60 | BFB | 5.762 | 127817 | 36871 |
| 2 | 1.86 | | 0.002 | 1981 | 297 |
| 3 | 2.08 | Diesel | 6.734 | 305795 | 201 |
| 4 | 12.27 | Motor Oil | 37.446 | 1094416 | 4364 |
| | | | 49.945 | 1530009 | 41733 |

Report stored in ASCII file: C:\PenExe\TcWS\Stats\Data\ATDAT397.TX0

Alpha Analytical Laboratories Inc.
208 Mason St. Ukiah, California 95482
e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

10 September 2003

MFG, Inc
Attn: Ed Conti
180 Howard St. Suite 200
San Francisco, CA 94105-2941
RE: SPI-Arcata/Task #4
Work Order: A307607

Enclosed are the results of analyses for samples received by the laboratory on 07/25/03 15:40. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Karen Daly

Karen A. Daly For Sheri L. Speaks
Project Manager

Alpha Analytical Laboratories Inc.
208 Mason St. Ukiah, California 95482
e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

# CHEMICAL EXAMINATION REPORT



MFG, Inc
180 Howard St. Suite 200
San Francisco, CA 94105-2941
Attn: Ed Conti

Report Date: 09/10/03 08:37
Project No: 030229.4
Project ID: SPI-Arcata/Task #4

| Order Number | Receipt Date/Time | Client Code | Client PO/Reference |
|---|---|---|---|
| A307607 | 07/25/2003 15:40 | MFGINC | |

## ANALYTICAL REPORT FOR SAMPLES

| Sample ID | Laboratory ID | Matrix | Date Sampled | Date Received |
|---|---|---|---|---|
| RP-3-SW | A307607-01 | Water | 07/24/03 11:20 | 07/25/03 15:40 |
| D6-1-GW | A307607-02 | Water | 07/22/03 10:00 | 07/25/03 15:40 |
| D6-2-GW | A307607-03 | Water | 07/22/03 10:50 | 07/25/03 15:40 |
| D6-3-GW | A307607-04 | Water | 07/22/03 11:25 | 07/25/03 15:40 |
| D6-4-GW | A307607-05 | Water | 07/22/03 12:00 | 07/25/03 15:40 |
| D6-5-GW | A307607-06 | Water | 07/22/03 15:15 | 07/25/03 15:40 |
| D6-6-GW | A307607-07 | Water | 07/22/03 15:45 | 07/25/03 15:40 |
| D6-7-GW | A307607-08 | Water | 07/22/03 16:25 | 07/25/03 15:40 |
| D6-8-GW | A307607-09 | Water | 07/23/03 09:30 | 07/25/03 15:40 |
| D6-9-GW | A307607-10 | Water | 07/23/03 10:15 | 07/25/03 15:40 |
| D6-10-GW | A307607-11 | Water | 07/23/03 10:45 | 07/25/03 15:40 |
| D6-11-GW | A307607-12 | Water | 07/23/03 11:05 | 07/25/03 15:40 |
| D6-12-GW | A307607-13 | Water | 07/23/03 11:30 | 07/25/03 15:40 |
| D6-13-GW | A307607-14 | Water | 07/23/03 14:10 | 07/25/03 15:40 |
| D6-14-GW | A307607-15 | Water | 07/23/03 14:45 | 07/25/03 15:40 |
| D6-15-GW | A307607-16 | Water | 07/23/03 15:25 | 07/25/03 15:40 |
| D6-16-GW | A307607-17 | Water | 07/23/03 15:50 | 07/25/03 15:40 |
| D6-17-GW | A307607-18 | Water | 07/23/03 16:30 | 07/25/03 15:40 |
| D6-18-GW | A307607-19 | Water | 07/24/03 09:30 | 07/25/03 15:40 |
| D6-19-GW | A307607-20 | Water | 07/24/03 09:45 | 07/25/03 15:40 |
| D6-20-GW | A307607-21 | Water | 07/24/03 09:50 | 07/25/03 15:40 |
| D6-21-GW | A307607-22 | Water | 07/24/03 10:10 | 07/25/03 15:40 |
| D6-22-GW | A307607-23 | Water | 07/24/03 10:30 | 07/25/03 15:40 |
| D6-23-GW | A307607-24 | Water | 07/24/03 10:40 | 07/25/03 15:40 |

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Karen A. Daly For Sheri L. Speaks
Project Manager

9/10/03

Alpha Analytical Laboratories Inc.
208 Mason St. Ukiah, California 95482
e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267



# CHEMICAL EXAMINATION REPORT



MFG, Inc
180 Howard St. Suite 200
San Francisco, CA 94105-2941
Attn: Ed Conti

Report Date: 09/10/03 08:37
Project No: 030229.4
Project ID: SPI-Arcata/Task #4

| Order Number | Receipt Date/Time | Client Code | Client PO/Reference |
|---|---|---|---|
| A307607 | 07/25/2003 15:40 | MFGINC | |

| | | | | | |
|---|---|---|---|---|---|
| D6-24-GW | A307607-25 | Water | 07/24/03 11:00 | 07/25/03 15:40 | |

This represents an amended copy of the original report.

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Project Manager

9/10/03

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Project ID: SPI-Arcata/Task #4

| Order Number | Receipt Date/Time | Client Code | Client PO/Reference |
|---|---|---|---|
| A307607 | 07/25/2003 15:40 | MFGINC | |

## Alpha Analytical Laboratories, Inc.

| | METHOD | BATCH | PREPARED | ANALYZED | DILUTION | RESULT | | PQL | NOTE |
|---|---|---|---|---|---|---|---|---|---|
| **RP-3-SW (A307607-01)** | | | **Sample Type: Water** | | | **Sampled: 07/24/03 11:20** | | | |
| **Metals (Dissolved) by EPA 6000/7000 Series Methods** | | | | | | | | | |
| Cadmium, dissolved | EPA 6010 | AG33110 | 07/31/03 | 08/04/03 | 1 | ND mg/l | | 0.010 | |
| Chromium, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Nickel, dissolved | " | " | " | " | " | ND " | | 0.10 | |
| Lead, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Zinc, dissolved | " | " | " | " | " | ND " | | 0.10 | |
| **TPH as Diesel and Motor Oil by EPA Method 8015 Modified** | | | | | | | | | |
| **TPH as Diesel** | 8015DRO | AG32826 | 07/28/03 | 07/29/03 | 1.058 | **60 ug/l** | | **53** | D-06 |
| **TPH as Motor Oil** | " | " | " | " | " | **120 "** | | **110** | |
| *Surrogate: 1,4-Bromofluorobenzene* | " | " | " | " | | *18.2 %* | *14-116* | | |
| **D6-1-GW (A307607-02)** | | | **Sample Type: Water** | | | **Sampled: 07/22/03 10:00** | | | |
| **Metals (Dissolved) by EPA 6000/7000 Series Methods** | | | | | | | | | |
| Cadmium, dissolved | EPA 6010 | AG33110 | 07/31/03 | 08/01/03 | 1 | ND mg/l | | 0.010 | |
| Chromium, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Nickel, dissolved | " | " | " | " | " | ND " | | 0.10 | |
| Lead, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Zinc, dissolved | " | " | " | " | " | ND " | | 0.10 | |
| **TPH as Diesel and Motor Oil by EPA Method 8015 Modified** | | | | | | | | | |
| **TPH as Diesel** | 8015DRO | AG32826 | 07/28/03 | 07/29/03 | 1.176 | **190 ug/l** | | **59** | D-09 |
| **TPH as Motor Oil** | " | " | " | " | " | **1000 "** | | **120** | |
| *Surrogate: 1,4-Bromofluorobenzene* | " | " | " | " | | *6.81 %* | *14-116* | | *S-04* |
| **D6-2-GW (A307607-03)** | | | **Sample Type: Water** | | | **Sampled: 07/22/03 10:50** | | | |
| **Metals (Dissolved) by EPA 6000/7000 Series Methods** | | | | | | | | | |
| Cadmium, dissolved | EPA 6010 | AG33110 | 07/31/03 | 08/01/03 | 1 | ND mg/l | | 0.010 | |
| Chromium, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Nickel, dissolved | " | " | " | " | " | ND " | | 0.10 | |
| Lead, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Zinc, dissolved | " | " | " | " | " | ND " | | 0.10 | |

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Karen A. Daly For Sheri L. Speaks
Project Manager

9/10/03

Alpha Analytical Laboratories Inc.
208 Mason St. Ukiah, California 95482
e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

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MFG, Inc.

## CHEMICAL EXAMINATION REPORT



MFG, Inc
180 Howard St. Suite 200
San Francisco, CA 94105-2941
Attn: Ed Conti

Report Date: 09/10/03 08:37
Project No: 030229.4
Project ID: SPI-Arcata/Task #4

| Order Number | Receipt Date/Time | Client Code | Client PO/Reference |
|---|---|---|---|
| A307607 | 07/25/2003 15:40 | MFGINC | |

### Alpha Analytical Laboratories, Inc.

| | METHOD | BATCH | PREPARED | ANALYZED | DILUTION | RESULT | | PQL | NOTE |
|---|---|---|---|---|---|---|---|---|---|
| **D6-2-GW (A307607-03)** | | | **Sample Type: Water** | | | **Sampled: 07/22/03 10:50** | | | |
| **TPH as Diesel and Motor Oil by EPA Method 8015 Modified** | | | | | | | | | |
| **TPH as Diesel** | 8015DRO | AG32826 | 07/28/03 | 07/29/03 | 1.124 | **440 ug/l** | | **56** | D-09 |
| **TPH as Motor Oil** | " | " | " | " | " | **2000 "** | | **110** | |
| *Surrogate: 1,4-Bromofluorobenzene* | " | " | " | " | | *8.68 %* | *14-116* | | *S-04* |
| **D6-3-GW (A307607-04)** | | | **Sample Type: Water** | | | **Sampled: 07/22/03 11:25** | | | |
| **Metals (Dissolved) by EPA 6000/7000 Series Methods** | | | | | | | | | |
| Cadmium, dissolved | EPA 6010 | AG33110 | 07/31/03 | 08/01/03 | 1 | ND mg/l | | 0.010 | |
| Chromium, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Nickel, dissolved | " | " | " | " | " | ND " | | 0.10 | |
| Lead, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Zinc, dissolved | " | " | " | " | " | ND " | | 0.10 | |
| **TPH as Diesel and Motor Oil by EPA Method 8015 Modified** | | | | | | | | | |
| **TPH as Diesel** | 8015DRO | AG33002 | 07/29/03 | 07/30/03 | 1.0753 | **250 ug/l** | | **54** | D-09 |
| **TPH as Motor Oil** | " | " | " | " | " | **930 "** | | **110** | |
| *Surrogate: 1,4-Bromofluorobenzene* | " | " | " | " | | *34.4 %* | *14-116* | | |
| **D6-4-GW (A307607-05)** | | | **Sample Type: Water** | | | **Sampled: 07/22/03 12:00** | | | |
| **Metals (Dissolved) by EPA 6000/7000 Series Methods** | | | | | | | | | |
| Cadmium, dissolved | EPA 6010 | AG33110 | 07/31/03 | 08/01/03 | 1 | ND mg/l | | 0.010 | |
| Chromium, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Nickel, dissolved | " | " | " | " | " | ND " | | 0.10 | |
| Lead, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Zinc, dissolved | " | " | " | " | " | ND " | | 0.10 | |

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Project Manager

9/10/03

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# CHEMICAL EXAMINATION REPORT



MFG, Inc
180 Howard St. Suite 200
San Francisco, CA 94105-2941
Attn: Ed Conti

Report Date: 09/10/03 08:37
Project No: 030229.4
Project ID: SPI-Arcata/Task #4

| Order Number | Receipt Date/Time | Client Code | Client PO/Reference |
|---|---|---|---|
| A307607 | 07/25/2003 15:40 | MFGINC | |

## Alpha Analytical Laboratories, Inc.

| | METHOD | BATCH | PREPARED | ANALYZED | DILUTION | RESULT | | PQL | NOTE |
|---|---|---|---|---|---|---|---|---|---|
| **D6-4-GW (A307607-05)** | | | **Sample Type: Water** | | | **Sampled: 07/22/03 12:00** | | | |
| **TPH as Diesel and Motor Oil by EPA Method 8015 Modified** | | | | | | | | | |
| **TPH as Diesel** | 8015DRO | AG33002 | 07/29/03 | 07/30/03 | 1.22 | **670 ug/l** | | **61** | D-09 |
| **TPH as Motor Oil** | " | " | " | " | " | **2500 "** | | **120** | |
| *Surrogate: 1,4-Bromofluorobenzene* | " | " | " | " | | *32.6 %* | *14-116* | | |
| **D6-5-GW (A307607-06)** | | | **Sample Type: Water** | | | **Sampled: 07/22/03 15:15** | | | |
| **Metals (Dissolved) by EPA 6000/7000 Series Methods** | | | | | | | | | |
| Cadmium, dissolved | EPA 6010 | AG33110 | 07/31/03 | 08/01/03 | 1 | ND mg/l | | 0.010 | |
| Chromium, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Nickel, dissolved | " | " | " | " | " | ND " | | 0.10 | |
| Lead, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Zinc, dissolved | " | " | " | " | " | ND " | | 0.10 | |
| **TPH as Diesel and Motor Oil by EPA Method 8015 Modified** | | | | | | | | | |
| TPH as Diesel | 8015DRO | AG33002 | 07/29/03 | 07/30/03 | 1.429 | ND ug/l | | 71 | R-01 |
| **TPH as Motor Oil** | " | " | " | " | " | **380 "** | | **140** | |
| *Surrogate: 1,4-Bromofluorobenzene* | " | " | " | " | | *45.8 %* | *14-116* | | |
| **D6-6-GW (A307607-07)** | | | **Sample Type: Water** | | | **Sampled: 07/22/03 15:45** | | | |
| **Metals (Dissolved) by EPA 6000/7000 Series Methods** | | | | | | | | | |
| Cadmium, dissolved | EPA 6010 | AG33110 | 07/31/03 | 08/01/03 | 1 | ND mg/l | | 0.010 | |
| Chromium, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Nickel, dissolved | " | " | " | " | " | ND " | | 0.10 | |
| Lead, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Zinc, dissolved | " | " | " | " | " | ND " | | 0.10 | |

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Karen A. Daly For Sheri L. Speaks
Project Manager

9/10/03

Alpha Analytical Laboratories Inc.
208 Mason St. Ukiah, California 95482
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## CHEMICAL EXAMINATION REPORT



MFG, Inc
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Report Date: 09/10/03 08:37
Project No: 030229.4
Project ID: SPI-Arcata/Task #4

| Order Number | Receipt Date/Time | Client Code | Client PO/Reference |
|---|---|---|---|
| A307607 | 07/25/2003 15:40 | MFGINC | |

### Alpha Analytical Laboratories, Inc.

| | METHOD | BATCH | PREPARED | ANALYZED | DILUTION | RESULT | | PQL | NOTE |
|---|---|---|---|---|---|---|---|---|---|
| **D6-6-GW (A307607-07)** | | | **Sample Type: Water** | | | **Sampled: 07/22/03 15:45** | | | |
| **TPH as Diesel and Motor Oil by EPA Method 8015 Modified** | | | | | | | | | |
| **TPH as Diesel** | 8015DRO | AG33002 | 07/29/03 | 07/30/03 | 1.205 | **380 ug/l** | | **60** | D-09 |
| **TPH as Motor Oil** | " | " | " | " | " | **1400 "** | | **120** | |
| *Surrogate: 1,4-Bromofluorobenzene* | " | " | " | " | | *57.1 %* | *14-116* | | |
| **D6-7-GW (A307607-08)** | | | **Sample Type: Water** | | | **Sampled: 07/22/03 16:25** | | | |
| **Metals (Dissolved) by EPA 6000/7000 Series Methods** | | | | | | | | | |
| Cadmium, dissolved | EPA 6010 | AG33110 | 07/31/03 | 08/01/03 | 1 | ND mg/l | | 0.010 | |
| Chromium, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Nickel, dissolved | " | " | " | " | " | ND " | | 0.10 | |
| Lead, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Zinc, dissolved | " | " | " | " | " | ND " | | 0.10 | |
| **TPH as Diesel and Motor Oil by EPA Method 8015 Modified** | | | | | | | | | |
| **TPH as Diesel** | 8015DRO | AG33002 | 07/29/03 | 07/30/03 | 1.176 | **290 ug/l** | | **59** | D-09 |
| **TPH as Motor Oil** | " | " | " | " | " | **1200 "** | | **120** | |
| *Surrogate: 1,4-Bromofluorobenzene* | " | " | " | " | | *48.2 %* | *14-116* | | |
| **D6-8-GW (A307607-09)** | | | **Sample Type: Water** | | | **Sampled: 07/23/03 09:30** | | | |
| **Metals (Dissolved) by EPA 6000/7000 Series Methods** | | | | | | | | | |
| Cadmium, dissolved | EPA 6010 | AG33110 | 07/31/03 | 08/01/03 | 1 | ND mg/l | | 0.010 | |
| Chromium, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Nickel, dissolved | " | " | " | " | " | ND " | | 0.10 | |
| Lead, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Zinc, dissolved | " | " | " | " | " | ND " | | 0.10 | |

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Karen A. Daly For Sheri L. Speaks
Project Manager

9/10/03

Alpha Analytical Laboratories Inc.
208 Mason St. Ukiah, California 95482
e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267



## CHEMICAL EXAMINATION REPORT



MFG, Inc
180 Howard St. Suite 200
San Francisco, CA 94105-2941
Attn: Ed Conti

Report Date: 09/10/03 08:37
Project No: 030229.4
Project ID: SPI-Arcata/Task #4

| Order Number | Receipt Date/Time | Client Code | Client PO/Reference |
|---|---|---|---|
| A307607 | 07/25/2003 15:40 | MFGINC | |

### Alpha Analytical Laboratories, Inc.

| | METHOD | BATCH | PREPARED | ANALYZED | DILUTION | RESULT | PQL | NOTE |
|---|---|---|---|---|---|---|---|---|
| **D6-8-GW (A307607-09)** | | | **Sample Type: Water** | | | **Sampled: 07/23/03 09:30** | | |
| **TPH as Diesel and Motor Oil by EPA Method 8015 Modified** | | | | | | | | |
| **TPH as Diesel** | 8015DRO | AG33002 | 07/29/03 | 07/30/03 | 1.105 | **220 ug/l** | **55** | D-09 |
| **TPH as Motor Oil** | " | " | " | " | " | **830** " | **110** | |
| *Surrogate: 1,4-Bromofluorobenzene* | " | " | " | " | | *24.7 %* *14-116* | | |
| **D6-9-GW (A307607-10)** | | | **Sample Type: Water** | | | **Sampled: 07/23/03 10:15** | | |
| **Metals (Dissolved) by EPA 6000/7000 Series Methods** | | | | | | | | |
| Cadmium, dissolved | EPA 6010 | AG33110 | 07/31/03 | 08/01/03 | 1 | ND mg/l | 0.010 | |
| Chromium, dissolved | " | " | " | " | " | ND " | 0.050 | |
| Nickel, dissolved | " | " | " | " | " | ND " | 0.10 | |
| Lead, dissolved | " | " | " | " | " | ND " | 0.050 | |
| Zinc, dissolved | " | " | " | " | " | ND " | 0.10 | |
| **TPH as Diesel and Motor Oil by EPA Method 8015 Modified** | | | | | | | | |
| **TPH as Diesel** | 8015DRO | AG33002 | 07/29/03 | 07/30/03 | 1.064 | **59 ug/l** | **53** | D-09 |
| **TPH as Motor Oil** | " | " | " | " | " | **250** " | **110** | |
| *Surrogate: 1,4-Bromofluorobenzene* | " | " | " | " | | *22.9 %* *14-116* | | |
| **D6-10-GW (A307607-11)** | | | **Sample Type: Water** | | | **Sampled: 07/23/03 10:45** | | |
| **Metals (Dissolved) by EPA 6000/7000 Series Methods** | | | | | | | | |
| Cadmium, dissolved | EPA 6010 | AG33110 | 07/31/03 | 08/01/03 | 1 | ND mg/l | 0.010 | |
| Chromium, dissolved | " | " | " | " | " | ND " | 0.050 | |
| Nickel, dissolved | " | " | " | " | " | ND " | 0.10 | |
| Lead, dissolved | " | " | " | " | " | ND " | 0.050 | |
| Zinc, dissolved | " | " | " | " | " | ND " | 0.10 | |

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Project Manager

9/10/03

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e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267



## CHEMICAL EXAMINATION REPORT



MFG, Inc
180 Howard St. Suite 200
San Francisco, CA 94105-2941
Attn: Ed Conti

Report Date: 09/10/03 08:37
Project No: 030229.4
Project ID: SPI-Arcata/Task #4

| Order Number | Receipt Date/Time | Client Code | Client PO/Reference |
|---|---|---|---|
| A307607 | 07/25/2003 15:40 | MFGINC | |

### Alpha Analytical Laboratories, Inc.

| | METHOD | BATCH | PREPARED | ANALYZED | DILUTION | RESULT | | PQL | NOTE |
|---|---|---|---|---|---|---|---|---|---|
| **D6-10-GW (A307607-11)** | | | **Sample Type: Water** | | | **Sampled: 07/23/03 10:45** | | | |
| **TPH as Diesel and Motor Oil by EPA Method 8015 Modified** | | | | | | | | | |
| TPH as Diesel | 8015DRO | AG33002 | 07/29/03 | 07/30/03 | 1.22 | ND ug/l | | 61 | R-01 |
| TPH as Motor Oil | " | " | " | " | " | ND " | | 120 | |
| *Surrogate: 1,4-Bromofluorobenzene* | " | " | " | " | | *23.9 %* | *14-116* | | |
| **D6-11-GW (A307607-12)** | | | **Sample Type: Water** | | | **Sampled: 07/23/03 11:05** | | | |
| **Metals (Dissolved) by EPA 6000/7000 Series Methods** | | | | | | | | | |
| Cadmium, dissolved | EPA 6010 | AG33110 | 07/31/03 | 08/01/03 | 1 | ND mg/l | | 0.010 | |
| Chromium, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Nickel, dissolved | " | " | " | " | " | ND " | | 0.10 | |
| Lead, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Zinc, dissolved | " | " | " | " | " | ND " | | 0.10 | |
| **TPH as Diesel and Motor Oil by EPA Method 8015 Modified** | | | | | | | | | |
| TPH as Diesel | 8015DRO | AG33002 | 07/29/03 | 07/30/03 | 1.099 | ND ug/l | | 55 | |
| TPH as Motor Oil | " | " | " | " | " | ND " | | 110 | |
| *Surrogate: 1,4-Bromofluorobenzene* | " | " | " | " | | *23.4 %* | *14-116* | | |
| **D6-12-GW (A307607-13)** | | | **Sample Type: Water** | | | **Sampled: 07/23/03 11:30** | | | |
| **Metals (Dissolved) by EPA 6000/7000 Series Methods** | | | | | | | | | |
| Cadmium, dissolved | EPA 6010 | AG33110 | 07/31/03 | 08/01/03 | 1 | ND mg/l | | 0.010 | |
| Chromium, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Nickel, dissolved | " | " | " | " | " | ND " | | 0.10 | |
| Lead, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Zinc, dissolved | " | " | " | " | " | ND " | | 0.10 | |

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Project Manager

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e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

## CHEMICAL EXAMINATION REPORT



MFG, Inc
180 Howard St. Suite 200
San Francisco, CA 94105-2941
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Report Date: 09/10/03 08:37
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|---|---|---|---|
| A307607 | 07/25/2003 15:40 | MFGINC | |

### Alpha Analytical Laboratories, Inc.

| | METHOD | BATCH | PREPARED | ANALYZED | DILUTION | RESULT | | PQL | NOTE |
|---|---|---|---|---|---|---|---|---|---|
| **D6-12-GW (A307607-13)** | | | **Sample Type: Water** | | | **Sampled: 07/23/03 11:30** | | | |
| **TPH as Diesel and Motor Oil by EPA Method 8015 Modified** | | | | | | | | | |
| **TPH as Diesel** | 8015DRO | AG33002 | 07/29/03 | 07/30/03 | 1.047 | **74 ug/l** | | **52** | D-09 |
| **TPH as Motor Oil** | " | " | " | " | " | **170 "** | | **100** | |
| *Surrogate: 1,4-Bromofluorobenzene* | " | " | " | " | | *25.2 %* | *14-116* | | |
| **D6-13-GW (A307607-14)** | | | **Sample Type: Water** | | | **Sampled: 07/23/03 14:10** | | | |
| **Metals (Dissolved) by EPA 6000/7000 Series Methods** | | | | | | | | | |
| Cadmium, dissolved | EPA 6010 | AG33110 | 07/31/03 | 08/04/03 | 1 | ND mg/l | | 0.010 | |
| Chromium, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Nickel, dissolved | " | " | " | " | " | ND " | | 0.10 | |
| Lead, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Zinc, dissolved | " | " | " | " | " | ND " | | 0.10 | |
| **TPH as Diesel and Motor Oil by EPA Method 8015 Modified** | | | | | | | | | |
| **TPH as Diesel** | 8015DRO | AG33002 | 07/29/03 | 07/30/03 | 1.163 | **58 ug/l** | | **58** | D-09 |
| **TPH as Motor Oil** | " | " | " | " | " | **170 "** | | **120** | |
| *Surrogate: 1,4-Bromofluorobenzene* | " | " | " | " | | *14.7 %* | *14-116* | | |
| **D6-14-GW (A307607-15)** | | | **Sample Type: Water** | | | **Sampled: 07/23/03 14:45** | | | |
| **Metals (Dissolved) by EPA 6000/7000 Series Methods** | | | | | | | | | |
| Cadmium, dissolved | EPA 6010 | AG33110 | 07/31/03 | 08/04/03 | 1 | ND mg/l | | 0.010 | |
| Chromium, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Nickel, dissolved | " | " | " | " | " | ND " | | 0.10 | |
| Lead, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Zinc, dissolved | " | " | " | " | " | ND " | | 0.10 | |

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e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267



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| A307607 | 07/25/2003 15:40 | MFGINC | |

## Alpha Analytical Laboratories, Inc.

| | METHOD | BATCH | PREPARED | ANALYZED | DILUTION | RESULT | | PQL | NOTE |
|---|---|---|---|---|---|---|---|---|---|
| **D6-14-GW (A307607-15)** | | | **Sample Type: Water** | | | **Sampled: 07/23/03 14:45** | | | |
| **TPH as Diesel and Motor Oil by EPA Method 8015 Modified** | | | | | | | | | |
| **TPH as Diesel** | 8015DRO | AG33002 | 07/29/03 | 07/30/03 | 1.36 | **500 ug/l** | | **68** | D-09 |
| **TPH as Motor Oil** | " | " | " | " | " | **2500 "** | | **140** | |
| *Surrogate: 1,4-Bromofluorobenzene* | " | " | " | " | | *12.5 %* | *14-116* | | *S-04* |
| **D6-15-GW (A307607-16)** | | | **Sample Type: Water** | | | **Sampled: 07/23/03 15:25** | | | |
| **Metals (Dissolved) by EPA 6000/7000 Series Methods** | | | | | | | | | |
| Cadmium, dissolved | EPA 6010 | AG33110 | 07/31/03 | 08/04/03 | 1 | ND mg/l | | 0.010 | |
| Chromium, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Nickel, dissolved | " | " | " | " | " | ND " | | 0.10 | |
| Lead, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Zinc, dissolved | " | " | " | " | " | ND " | | 0.10 | |
| **TPH as Diesel and Motor Oil by EPA Method 8015 Modified** | | | | | | | | | |
| **TPH as Diesel** | 8015DRO | AG33002 | 07/29/03 | 07/30/03 | 13.245 | **1000 ug/l** | | **660** | D-09 |
| **TPH as Motor Oil** | " | " | " | " | " | **4400 "** | | **1300** | |
| *Surrogate: 1,4-Bromofluorobenzene* | " | " | " | " | | *0.968 %* | *14-116* | | *S-04* |
| **D6-16-GW (A307607-17)** | | | **Sample Type: Water** | | | **Sampled: 07/23/03 15:50** | | | |
| **Metals (Dissolved) by EPA 6000/7000 Series Methods** | | | | | | | | | |
| Cadmium, dissolved | EPA 6010 | AG33110 | 07/31/03 | 08/04/03 | 1 | ND mg/l | | 0.010 | |
| Chromium, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Nickel, dissolved | " | " | " | " | " | ND " | | 0.10 | |
| Lead, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Zinc, dissolved | " | " | " | " | " | ND " | | 0.10 | |

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Project Manager

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Alpha Analytical Laboratories Inc.
208 Mason St. Ukiah, California 95482
e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

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## CHEMICAL EXAMINATION REPORT



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180 Howard St. Suite 200
San Francisco, CA 94105-2941
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| A307607 | 07/25/2003 15:40 | MFGINC | |

### Alpha Analytical Laboratories, Inc.

| | METHOD | BATCH | PREPARED | ANALYZED | DILUTION | RESULT | | PQL | NOTE |
|---|---|---|---|---|---|---|---|---|---|
| **D6-16-GW (A307607-17)** | | | **Sample Type: Water** | | | **Sampled: 07/23/03 15:50** | | | |
| **TPH as Diesel and Motor Oil by EPA Method 8015 Modified** | | | | | | | | | |
| **TPH as Diesel** | 8015DRO | AG33002 | 07/29/03 | 07/30/03 | 1.242 | **440 ug/l** | | **62** | D-09 |
| **TPH as Motor Oil** | " | " | " | " | " | **2100** " | | **120** | |
| *Surrogate: 1,4-Bromofluorobenzene* | " | " | " | " | | *13.3 %* | *14-116* | | *S-04* |
| **D6-17-GW (A307607-18)** | | | **Sample Type: Water** | | | **Sampled: 07/23/03 16:30** | | | |
| **Metals (Dissolved) by EPA 6000/7000 Series Methods** | | | | | | | | | |
| Cadmium, dissolved | EPA 6010 | AG33110 | 07/31/03 | 08/04/03 | 1 | ND mg/l | | 0.010 | |
| Chromium, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Nickel, dissolved | " | " | " | " | " | ND " | | 0.10 | |
| Lead, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Zinc, dissolved | " | " | " | " | " | ND " | | 0.10 | |
| **TPH as Diesel and Motor Oil by EPA Method 8015 Modified** | | | | | | | | | |
| **TPH as Diesel** | 8015DRO | AG33007 | 07/30/03 | 07/31/03 | 1.099 | **310 ug/l** | | **55** | D-09 |
| **TPH as Motor Oil** | " | " | " | " | " | **1300** " | | **110** | |
| *Surrogate: 1,4-Bromofluorobenzene* | " | " | " | " | | *37.1 %* | *14-116* | | |
| **D6-18-GW (A307607-19)** | | | **Sample Type: Water** | | | **Sampled: 07/24/03 09:30** | | | |
| **Metals (Dissolved) by EPA 6000/7000 Series Methods** | | | | | | | | | |
| Cadmium, dissolved | EPA 6010 | AG33110 | 07/31/03 | 08/04/03 | 1 | ND mg/l | | 0.010 | |
| Chromium, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Nickel, dissolved | " | " | " | " | " | ND " | | 0.10 | |
| Lead, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Zinc, dissolved | " | " | " | " | " | ND " | | 0.10 | |

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| A307607 | 07/25/2003 15:40 | MFGINC | |

### Alpha Analytical Laboratories, Inc.

| | METHOD | BATCH | PREPARED | ANALYZED | DILUTION | RESULT | | PQL | NOTE |
|---|---|---|---|---|---|---|---|---|---|
| **D6-18-GW (A307607-19)** | | | **Sample Type: Water** | | | **Sampled: 07/24/03 09:30** | | | |
| **TPH as Diesel and Motor Oil by EPA Method 8015 Modified** | | | | | | | | | |
| **TPH as Diesel** | 8015DRO | AG33007 | 07/30/03 | 07/31/03 | 1.205 | **320 ug/l** | | **60** | D-09 |
| **TPH as Motor Oil** | " | " | " | " | " | **1300** " | | **120** | |
| *Surrogate: 1,4-Bromofluorobenzene* | " | " | " | " | | *58.4 %* | *14-116* | | |
| **D6-19-GW (A307607-20)** | | | **Sample Type: Water** | | | **Sampled: 07/24/03 09:45** | | | |
| **Metals (Dissolved) by EPA 6000/7000 Series Methods** | | | | | | | | | |
| Cadmium, dissolved | EPA 6010 | AG33110 | 07/31/03 | 08/04/03 | 1 | ND mg/l | | 0.010 | |
| Chromium, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Nickel, dissolved | " | " | " | " | " | ND " | | 0.10 | |
| Lead, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Zinc, dissolved | " | " | " | " | " | ND " | | 0.10 | |
| **TPH as Diesel and Motor Oil by EPA Method 8015 Modified** | | | | | | | | | |
| **TPH as Diesel** | 8015DRO | AG33007 | 07/30/03 | 07/31/03 | 1.136 | **80 ug/l** | | **57** | D-09 |
| **TPH as Motor Oil** | " | " | " | " | " | **320** " | | **110** | |
| *Surrogate: 1,4-Bromofluorobenzene* | " | " | " | " | | *45.3 %* | *14-116* | | |
| **D6-20-GW (A307607-21)** | | | **Sample Type: Water** | | | **Sampled: 07/24/03 09:50** | | | |
| **Metals (Dissolved) by EPA 6000/7000 Series Methods** | | | | | | | | | |
| Cadmium, dissolved | EPA 6010 | AG33111 | 07/31/03 | 08/04/03 | 1 | ND mg/l | | 0.010 | |
| Chromium, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Nickel, dissolved | " | " | " | " | " | ND " | | 0.10 | |
| Lead, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Zinc, dissolved | " | " | " | " | " | ND " | | 0.10 | |



Karen A. Daly For Sheri L. Speaks
Project Manager

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## CHEMICAL EXAMINATION REPORT



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| A307607 | 07/25/2003 15:40 | MFGINC | |

### Alpha Analytical Laboratories, Inc.

| | METHOD | BATCH | PREPARED | ANALYZED | DILUTION | RESULT | | PQL | NOTE |
|---|---|---|---|---|---|---|---|---|---|
| **D6-20-GW (A307607-21)** | | | **Sample Type: Water** | | | **Sampled: 07/24/03 09:50** | | | |
| **TPH as Diesel and Motor Oil by EPA Method 8015 Modified** | | | | | | | | | |
| **TPH as Diesel** | 8015DRO | AG33007 | 07/30/03 | 07/31/03 | 1.1905 | **63 ug/l** | | **60** | D-09 |
| **TPH as Motor Oil** | " | " | " | " | " | **190 "** | | **120** | |
| *Surrogate: 1,4-Bromofluorobenzene* | " | " | " | " | | *37.6 %* | *14-116* | | |
| **D6-21-GW (A307607-22)** | | | **Sample Type: Water** | | | **Sampled: 07/24/03 10:10** | | | |
| **Metals (Dissolved) by EPA 6000/7000 Series Methods** | | | | | | | | | |
| Cadmium, dissolved | EPA 6010 | AG33111 | 07/31/03 | 08/04/03 | 1 | ND mg/l | | 0.010 | |
| Chromium, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Nickel, dissolved | " | " | " | " | " | ND " | | 0.10 | |
| Lead, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Zinc, dissolved | " | " | " | " | " | ND " | | 0.10 | |
| **TPH as Diesel and Motor Oil by EPA Method 8015 Modified** | | | | | | | | | |
| **TPH as Diesel** | 8015DRO | AG33007 | 07/30/03 | 07/31/03 | 1.143 | **130 ug/l** | | **57** | D-09 |
| **TPH as Motor Oil** | " | " | " | " | " | **430 "** | | **110** | |
| *Surrogate: 1,4-Bromofluorobenzene* | " | " | " | " | | *41.0 %* | *14-116* | | |
| **D6-22-GW (A307607-23)** | | | **Sample Type: Water** | | | **Sampled: 07/24/03 10:30** | | | |
| **Metals (Dissolved) by EPA 6000/7000 Series Methods** | | | | | | | | | |
| Cadmium, dissolved | EPA 6010 | AG33111 | 07/31/03 | 08/04/03 | 1 | ND mg/l | | 0.010 | |
| Chromium, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Nickel, dissolved | " | " | " | " | " | ND " | | 0.10 | |
| Lead, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Zinc, dissolved | " | " | " | " | " | ND " | | 0.10 | |

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Karen A. Daly For Sheri L. Speaks
Project Manager

9/10/03

Alpha Analytical Laboratories Inc.
208 Mason St. Ukiah, California 95482
e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

## CHEMICAL EXAMINATION REPORT



MFG, Inc
180 Howard St. Suite 200
San Francisco, CA 94105-2941
Attn: Ed Conti

Report Date: 09/10/03 08:37
Project No: 030229.4
Project ID: SPI-Arcata/Task #4

| Order Number | Receipt Date/Time | Client Code | Client PO/Reference |
|---|---|---|---|
| A307607 | 07/25/2003 15:40 | MFGINC | |

### Alpha Analytical Laboratories, Inc.

| | METHOD | BATCH | PREPARED | ANALYZED | DILUTION | RESULT | | PQL | NOTE |
|---|---|---|---|---|---|---|---|---|---|
| **D6-22-GW (A307607-23)** | | | **Sample Type: Water** | | | **Sampled: 07/24/03 10:30** | | | |
| **TPH as Diesel and Motor Oil by EPA Method 8015 Modified** | | | | | | | | | |
| TPH as Diesel | 8015DRO | AG33007 | 07/30/03 | 07/31/03 | 1.1236 | ND ug/l | | 56 | |
| TPH as Motor Oil | " | " | " | " | " | ND " | | 110 | |
| *Surrogate: 1,4-Bromofluorobenzene* | " | " | " | " | | *35.8 %* | *14-116* | | |
| **D6-23-GW (A307607-24)** | | | **Sample Type: Water** | | | **Sampled: 07/24/03 10:40** | | | |
| **Metals (Dissolved) by EPA 6000/7000 Series Methods** | | | | | | | | | |
| Cadmium, dissolved | EPA 6010 | AG33111 | 07/31/03 | 08/04/03 | 1 | ND mg/l | | 0.010 | |
| Chromium, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Nickel, dissolved | " | " | " | " | " | ND " | | 0.10 | |
| Lead, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Zinc, dissolved | " | " | " | " | " | ND " | | 0.10 | |
| **TPH as Diesel and Motor Oil by EPA Method 8015 Modified** | | | | | | | | | |
| TPH as Diesel | 8015DRO | AG33007 | 07/30/03 | 07/31/03 | 1.1696 | ND ug/l | | 58 | |
| TPH as Motor Oil | " | " | " | " | " | ND " | | 120 | |
| *Surrogate: 1,4-Bromofluorobenzene* | " | " | " | " | | *32.9 %* | *14-116* | | |
| **D6-24-GW (A307607-25)** | | | **Sample Type: Water** | | | **Sampled: 07/24/03 11:00** | | | |
| **Metals (Dissolved) by EPA 6000/7000 Series Methods** | | | | | | | | | |
| Cadmium, dissolved | EPA 6010 | AG33111 | 07/31/03 | 08/04/03 | 1 | ND mg/l | | 0.010 | |
| Chromium, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Nickel, dissolved | " | " | " | " | " | ND " | | 0.10 | |
| Lead, dissolved | " | " | " | " | " | ND " | | 0.050 | |
| Zinc, dissolved | " | " | " | " | " | ND " | | 0.10 | |



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### Alpha Analytical Laboratories, Inc.

| | METHOD | BATCH | PREPARED | ANALYZED | DILUTION | RESULT | | PQL | NOTE |
|---|---|---|---|---|---|---|---|---|---|
| **D6-24-GW (A307607-25)** | | | **Sample Type: Water** | | | **Sampled: 07/24/03 11:00** | | | |
| **TPH as Diesel and Motor Oil by EPA Method 8015 Modified** | | | | | | | | | |
| TPH as Diesel | 8015DRO | AG33007 | 07/30/03 | 07/31/03 | 1.099 | ND ug/l | | 55 | |
| TPH as Motor Oil | " | " | " | " | " | ND " | | 110 | |
| *Surrogate: 1,4-Bromofluorobenzene* | " | " | " | " | | *33.5 %* | *14-116* | | |

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SourceResult

## Metals (Dissolved) by EPA 6000/7000 Series Methods - Quality Control

| Analyte(s) | Result | PQL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Flag |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AG33110 - EPA 200 Series** | | | | | | | | | | |
| **Blank (AG33110-BLK1)** | | | | Prepared: 07/31/03 Analyzed: 08/04/03 | | | | | | |
| Cadmium, dissolved | ND | 0.010 | mg/l | | | | | | | |
| Chromium, dissolved | ND | 0.050 | " | | | | | | | |
| Lead, dissolved | ND | 0.050 | " | | | | | | | |
| Nickel, dissolved | ND | 0.10 | " | | | | | | | |
| Zinc, dissolved | ND | 0.10 | " | | | | | | | |
| **LCS (AG33110-BS1)** | | | | Prepared: 07/31/03 Analyzed: 08/04/03 | | | | | | |
| Cadmium, dissolved | 0.205 | 0.010 | mg/l | 0.200 | | 102 | 85-115 | | | |
| Chromium, dissolved | 0.207 | 0.050 | " | 0.200 | | 104 | 85-115 | | | |
| Lead, dissolved | 0.195 | 0.050 | " | 0.200 | | 97.5 | 85-115 | | | |
| Nickel, dissolved | 0.192 | 0.10 | " | 0.200 | | 96.0 | 85-115 | | | |
| Zinc, dissolved | 0.225 | 0.10 | " | 0.200 | | 112 | 85-115 | | | |
| **LCS Dup (AG33110-BSD1)** | | | | Prepared: 07/31/03 Analyzed: 08/04/03 | | | | | | |
| Cadmium, dissolved | 0.203 | 0.010 | mg/l | 0.200 | | 102 | 85-115 | 0.980 | 20 | |
| Chromium, dissolved | 0.209 | 0.050 | " | 0.200 | | 104 | 85-115 | 0.962 | 20 | |
| Lead, dissolved | 0.201 | 0.050 | " | 0.200 | | 100 | 85-115 | 3.03 | 20 | |
| Nickel, dissolved | 0.192 | 0.10 | " | 0.200 | | 96.0 | 85-115 | 0.00 | 20 | |
| Zinc, dissolved | 0.221 | 0.10 | " | 0.200 | | 110 | 85-115 | 1.79 | 20 | |
| **Duplicate (AG33110-DUP1)** | **Source: A307607-01** | | | Prepared: 07/31/03 Analyzed: 08/04/03 | | | | | | |
| Cadmium, dissolved | ND | 0.010 | mg/l | | ND | | | | 20 | |
| Chromium, dissolved | ND | 0.050 | " | | ND | | | | 20 | |
| Lead, dissolved | ND | 0.050 | " | | ND | | | | 20 | |
| Nickel, dissolved | ND | 0.10 | " | | ND | | | | 20 | |
| Zinc, dissolved | ND | 0.10 | " | | ND | | | | 20 | |
| **Matrix Spike (AG33110-MS1)** | **Source: A307607-01** | | | Prepared: 07/31/03 Analyzed: 08/04/03 | | | | | | |

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Project Manager

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## Metals (Dissolved) by EPA 6000/7000 Series Methods - Quality Control

| Analyte(s) | Result | PQL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Flag |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AG33110 - EPA 200 Series** | | | | | | | | | | |
| **Matrix Spike (AG33110-MS1)** | | **Source: A307607-01** | | Prepared: 07/31/03 Analyzed: 08/04/03 | | | | | | |
| Cadmium, dissolved | 0.198 | 0.010 | mg/l | 0.200 | ND | 99.0 | 70-130 | | | |
| Chromium, dissolved | 0.212 | 0.050 | " | 0.200 | ND | 105 | 70-130 | | | |
| Lead, dissolved | 0.208 | 0.050 | " | 0.200 | ND | 96.5 | 70-130 | | | |
| Nickel, dissolved | 0.194 | 0.10 | " | 0.200 | ND | 97.0 | 70-130 | | | |
| Zinc, dissolved | 0.234 | 0.10 | " | 0.200 | ND | 112 | 70-130 | | | |
| **Matrix Spike Dup (AG33110-MSD1)** | | **Source: A307607-01** | | Prepared: 07/31/03 Analyzed: 08/04/03 | | | | | | |
| Cadmium, dissolved | 0.198 | 0.010 | mg/l | 0.200 | ND | 99.0 | 70-130 | 0.00 | 20 | |
| Chromium, dissolved | 0.208 | 0.050 | " | 0.200 | ND | 103 | 70-130 | 1.90 | 20 | |
| Lead, dissolved | 0.205 | 0.050 | " | 0.200 | ND | 95.0 | 70-130 | 1.45 | 20 | |
| Nickel, dissolved | 0.194 | 0.10 | " | 0.200 | ND | 97.0 | 70-130 | 0.00 | 20 | |
| Zinc, dissolved | 0.231 | 0.10 | " | 0.200 | ND | 110 | 70-130 | 1.29 | 20 | |
| **Batch AG33111 - EPA 200 Series** | | | | | | | | | | |
| **Blank (AG33111-BLK1)** | | | | Prepared: 07/31/03 Analyzed: 08/04/03 | | | | | | |
| Cadmium, dissolved | ND | 0.010 | mg/l | | | | | | | |
| Chromium, dissolved | ND | 0.050 | " | | | | | | | |
| Lead, dissolved | ND | 0.050 | " | | | | | | | |
| Nickel, dissolved | ND | 0.10 | " | | | | | | | |
| Zinc, dissolved | ND | 0.10 | " | | | | | | | |
| **LCS (AG33111-BS1)** | | | | Prepared: 07/31/03 Analyzed: 08/04/03 | | | | | | |
| Cadmium, dissolved | 0.204 | 0.010 | mg/l | 0.200 | | 102 | 85-115 | | | |
| Chromium, dissolved | 0.208 | 0.050 | " | 0.200 | | 104 | 85-115 | | | |
| Lead, dissolved | 0.197 | 0.050 | " | 0.200 | | 98.5 | 85-115 | | | |
| Nickel, dissolved | 0.194 | 0.10 | " | 0.200 | | 97.0 | 85-115 | | | |
| Zinc, dissolved | 0.222 | 0.10 | " | 0.200 | | 111 | 85-115 | | | |

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### Metals (Dissolved) by EPA 6000/7000 Series Methods - Quality Control

| Analyte(s) | Result | PQL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Flag |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AG33111 - EPA 200 Series** | | | | | | | | | | |
| **LCS Dup (AG33111-BSD1)** | | | | Prepared: 07/31/03 Analyzed: 08/04/03 | | | | | | |
| Cadmium, dissolved | 0.204 | 0.010 | mg/l | 0.200 | | 102 | 85-115 | 0.00 | 20 | |
| Chromium, dissolved | 0.207 | 0.050 | " | 0.200 | | 104 | 85-115 | 0.482 | 20 | |
| Lead, dissolved | 0.201 | 0.050 | " | 0.200 | | 100 | 85-115 | 2.01 | 20 | |
| Nickel, dissolved | 0.194 | 0.10 | " | 0.200 | | 97.0 | 85-115 | 0.00 | 20 | |
| Zinc, dissolved | 0.218 | 0.10 | " | 0.200 | | 109 | 85-115 | 1.82 | 20 | |
| **Duplicate (AG33111-DUP1)** | | **Source: A307607-21** | | Prepared: 07/31/03 Analyzed: 08/04/03 | | | | | | |
| Cadmium, dissolved | ND | 0.010 | mg/l | | ND | | | | 20 | |
| Chromium, dissolved | ND | 0.050 | " | | ND | | | | 20 | |
| Lead, dissolved | ND | 0.050 | " | | ND | | | | 20 | |
| Nickel, dissolved | ND | 0.10 | " | | ND | | | | 20 | |
| Zinc, dissolved | ND | 0.10 | " | | ND | | | | 20 | |
| **Matrix Spike (AG33111-MS1)** | | **Source: A307607-21** | | Prepared: 07/31/03 Analyzed: 08/04/03 | | | | | | |
| Cadmium, dissolved | 0.192 | 0.010 | mg/l | 0.200 | ND | 96.0 | 70-130 | | | |
| Chromium, dissolved | 0.211 | 0.050 | " | 0.200 | ND | 101 | 70-130 | | | |
| Lead, dissolved | 0.194 | 0.050 | " | 0.200 | ND | 90.5 | 70-130 | | | |
| Nickel, dissolved | 0.196 | 0.10 | " | 0.200 | ND | 96.3 | 70-130 | | | |
| Zinc, dissolved | 0.224 | 0.10 | " | 0.200 | ND | 109 | 70-130 | | | |
| **Matrix Spike Dup (AG33111-MSD1)** | | **Source: A307607-21** | | Prepared: 07/31/03 Analyzed: 08/04/03 | | | | | | |
| Cadmium, dissolved | 0.194 | 0.010 | mg/l | 0.200 | ND | 97.0 | 70-130 | 1.04 | 20 | |
| Chromium, dissolved | 0.215 | 0.050 | " | 0.200 | ND | 103 | 70-130 | 1.88 | 20 | |
| Lead, dissolved | 0.197 | 0.050 | " | 0.200 | ND | 92.0 | 70-130 | 1.53 | 20 | |
| Nickel, dissolved | 0.193 | 0.10 | " | 0.200 | ND | 94.8 | 70-130 | 1.54 | 20 | |
| Zinc, dissolved | 0.225 | 0.10 | " | 0.200 | ND | 109 | 70-130 | 0.445 | 20 | |

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## TPH as Diesel and Motor Oil by EPA Method 8015 Modified - Quality Control

| Analyte(s) | Result | PQL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Flag |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AG32826 - EPA 3510B Water** | | | | | | | | | | |
| **Blank (AG32826-BLK1)** | | | | Prepared: 07/28/03 Analyzed: 07/29/03 | | | | | | |
| TPH as Diesel | ND | 50 | ug/l | | | | | | | |
| TPH as Motor Oil | ND | 100 | " | | | | | | | |
| *Surrogate: 1,4-Bromofluorobenzene* | *439* | | " | *620* | | *70.8* | *14-116* | | | |
| **LCS (AG32826-BS1)** | | | | Prepared: 07/28/03 Analyzed: 07/29/03 | | | | | | |
| TPH as Diesel | 2060 | 50 | ug/l | 2090 | | 98.6 | 57-136 | | | |
| TPH as Motor Oil | 2260 | 100 | " | 2090 | | 108 | 58-138 | | | |
| *Surrogate: 1,4-Bromofluorobenzene* | *474* | | " | *620* | | *76.5* | *14-116* | | | |
| **LCS Dup (AG32826-BSD1)** | | | | Prepared: 07/28/03 Analyzed: 07/29/03 | | | | | | **QM-10** |
| TPH as Diesel | 2080 | 50 | ug/l | 2090 | | 99.5 | 57-136 | 0.966 | 25 | |
| TPH as Motor Oil | 2300 | 100 | " | 2090 | | 110 | 58-138 | 1.75 | 25 | |
| *Surrogate: 1,4-Bromofluorobenzene* | *483* | | " | *620* | | *77.9* | *14-116* | | | |
| **Batch AG33002 - EPA 3510B Water** | | | | | | | | | | |
| **Blank (AG33002-BLK1)** | | | | Prepared: 07/29/03 Analyzed: 08/01/03 | | | | | | |
| TPH as Diesel | ND | 50 | ug/l | | | | | | | |
| TPH as Motor Oil | ND | 100 | " | | | | | | | |
| *Surrogate: 1,4-Bromofluorobenzene* | *356* | | " | *620* | | *57.4* | *14-116* | | | |
| **LCS (AG33002-BS1)** | | | | Prepared: 07/29/03 Analyzed: 08/01/03 | | | | | | |
| TPH as Diesel | 1540 | 50 | ug/l | 2090 | | 73.7 | 57-136 | | | |
| TPH as Motor Oil | 2020 | 100 | " | 2090 | | 96.7 | 58-138 | | | |
| *Surrogate: 1,4-Bromofluorobenzene* | *299* | | " | *620* | | *48.2* | *14-116* | | | |
| **LCS Dup (AG33002-BSD1)** | | | | Prepared: 07/29/03 Analyzed: 08/01/03 | | | | | | **QM-10** |
| TPH as Diesel | 1600 | 50 | ug/l | 2090 | | 76.6 | 57-136 | 3.82 | 25 | |

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### TPH as Diesel and Motor Oil by EPA Method 8015 Modified - Quality Control

| Analyte(s) | Result | PQL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Flag |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch AG33002 - EPA 3510B Water** | | | | | | | | | | |
| **LCS Dup (AG33002-BSD1)** | | | | Prepared: 07/29/03 Analyzed: 08/01/03 | | | | | | QM-10 |
| TPH as Motor Oil | 2290 | 100 | " | 2090 | | 110 | 58-138 | 12.5 | 25 | |
| *Surrogate: 1,4-Bromofluorobenzene* | *292* | | " | *620* | | *47.1* | *14-116* | | | |
| **Batch AG33007 - EPA 3510B Water** | | | | | | | | | | |
| **Blank (AG33007-BLK1)** | | | | Prepared: 07/30/03 Analyzed: 07/31/03 | | | | | | |
| TPH as Diesel | ND | 50 | ug/l | | | | | | | |
| TPH as Motor Oil | ND | 100 | " | | | | | | | |
| *Surrogate: 1,4-Bromofluorobenzene* | *463* | | " | *620* | | *74.7* | *14-116* | | | |
| **LCS (AG33007-BS1)** | | | | Prepared: 07/30/03 Analyzed: 07/31/03 | | | | | | |
| TPH as Diesel | 1990 | 50 | ug/l | 2090 | | 95.2 | 57-136 | | | |
| TPH as Motor Oil | 2190 | 100 | " | 2090 | | 105 | 58-138 | | | |
| *Surrogate: 1,4-Bromofluorobenzene* | *503* | | " | *620* | | *81.1* | *14-116* | | | |
| **LCS Dup (AG33007-BSD1)** | | | | Prepared: 07/30/03 Analyzed: 07/31/03 | | | | | | QM-10 |
| TPH as Diesel | 1910 | 50 | ug/l | 2090 | | 91.4 | 57-136 | 4.10 | 25 | |
| TPH as Motor Oil | 2130 | 100 | " | 2090 | | 102 | 58-138 | 2.78 | 25 | |
| *Surrogate: 1,4-Bromofluorobenzene* | *460* | | " | *620* | | *74.2* | *14-116* | | | |

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**Notes and Definitions**

| | |
|---|---|
| D-06 | The sample chromatographic pattern does not resemble the fuel standard used for quantitation. |
| D-09 | Results in the diesel organics range are primarily due to overlap from a heavy oil range product. |
| QM-10 | LCSD prepared with analytical batch due to insufficient sample for MS/MSD. |
| R-01 | The Reporting Limit for this analyte has been raised to account for matrix interference. |
| S-04 | The surrogate recovery for this sample is outside of established control limits possibly due to a sample matrix effect. |
| DET | Analyte DETECTED |
| ND | Analyte NOT DETECTED at or above the reporting limit |
| NR | Not Reported |
| dry | Sample results reported on a dry weight basis |
| RPD | Relative Percent Difference |
| PQL | Practical Quantitation Limit |

# MFG, INC.

## CHAIN-OF-CUSTODY RECORD AND REQUEST FOR ANALYSIS

COC No. 42655


☐ Arcata Office
1165 G Street, Suite E
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uite 101
ynnwood, WA 98036-5707
el: (425) 921-4000
ax: (425) 921-4040


PROJECT NO: 030229.4 PROJECT NAME: Sierra Pacific PAGE: 1 OF: 5

SAMPLER (Signature): John Mills PROJECT MANAGER: Ed Conti DATE: 7/25/03

METHOD OF SHIPMENT: Courier CARRIER/WAYBILL NO: N/A DESTINATION: Alpha

### SAMPLES

### ANALYSIS REQUEST

| Field Sample Identification | Sample DATE | Sample TIME | Sample Matrix* | Preservation HCl | Preservation $HNO_3$ | Preservation $H_2SO_4$ | Preservation COLD | Preservation | FILTRATION* | Containers VOLUME (ml/oz) | Containers TYPE* | Containers NO. | Constituents/Method: Temp, pH, Cl, alk, sp. cond. + Dissolved Metals | Handling: HOLD | Handling: RUSH | Handling: STANDARD | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RP-3-GW RP-3-SW as per attached Ed | 7/24 | 1120 | AQ | | | | X | | U | 1L | G | 1 | X | | | X | A3076007 -1 |
| RP-3-GW | 7/24 | 1120 | AQ | | X | | X | | F | 1L | G | 1 | X | | | X | |
| DL-1-GW | 7/23 | 1000 | AQ | | | | X | | U | 1L | G | 1 | X | | | X | 2 |
| DL-1-GW | | 1000 | AQ | | X | | X | | F | 1L | G | 1 | X | | | X | |
| DL-2-GW | | 1050 | AQ | | | | X | | U | 1L | G | 1 | X | | | X | 3 |
| DL-2-GW | | 1050 | AQ | | X | | X | | F | 1L | G | 1 | X | | | X | |
| DL-3-GW | | 1125 | AQ | | | | X | | U | 1L | G | 1 | X | | | X | 4 |
| DL-3-GW | | 1125 | AQ | | X | | X | | F | 1L | G | 1 | X | | | X | |
| DL-4-GW | | 1200 | AQ | | | | X | | U | 1L | G | 1 | X | | | X | 5 |
| DL-1-GW | | 1200 | AQ | | X | | X | | F | 1L | G | 1 | X | | | X | |

TOTAL NUMBER OF CONTAINERS (50)

LABORATORY COMMENTS/CONDITION OF SAMPLES

Cooler Temp:

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MFG, Inc.

| RELINQUISHED BY: SIGNATURE | PRINTED NAME | COMPANY | DATE | TIME | RECIEVED BY: SIGNATURE | PRINTED NAME | COMPANY |
|---|---|---|---|---|---|---|---|
| John Mills | John Mills | MFG | 7/25/03 | 1130 | | | |
| | | | 7/25/03 | 11:38 | J. Matthews | J. Matthews | Alpha LABORATORY |
| J. Matthews | J. Matthews | Alpha | 7/25/03 | 15:40 | S. Speaks | S. Speaks | |

*KEY Matrix: AQ - aqueous NA - nonaqueous SO - soil SL - sludge P - petroleum A - air OT - other Containers: P - plastic G - glass T - teflon B - brass OT - other Filtration: F - filtered U - unfiltered

DISTRIBUTION: PINK: Field Copy YELLOW: Laboratory Copy WHITE: Return to Originator

# MFG, INC.

## CHAIN-OF-CUSTODY RECORD AND REQUEST FOR ANALYSIS

COC No. 42056


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Suite 300W
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Fax: (425) 921-4040


PROJECT NO: 030209.4 PROJECT NAME: Sierra Pacific PAGE: 2 OF: 5

SAMPLER (Signature): John Mills PROJECT MANAGER: Ed Condi DATE: 7/25/03

METHOD OF SHIPMENT: courier CARRIER/WAYBILL NO: NA DESTINATION: Alpha

| SAMPLES | | | | | | | | | | | | | | ANALYSIS REQUEST | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Sample | | | Preservation | | | | | | Containers | | | | Constituents/Method | | | | | Handling | | | Remarks |
| Field Sample Identification | DATE | TIME | Matrix* | HCl | $HNO_3$ | $H_2SO_4$ | COLD | | FILTRATION* | VOLUME (ml/oz) | TYPE* | NO. | | TEPH diesel + m.o. | Dissolved Metals | | | | HOLD | RUSH | STANDARD | |
| DL-5-GW | 7/22 | 1515 | AQ | | | | X | | U | 1L | G | 1 | | X | | | | | | | X | A3076607 - 6 |
| DL-5-GW | | 1515 | AQ | | X | | X | | F | 1L | G | 1 | | | X | | | | | | X | |
| DL-6-GW | | 1545 | AQ | | | | X | | U | 1L | G | 1 | | X | | | | | | | X | 7 |
| DL-6-GW | | 1545 | AQ | | X | | X | | F | 1L | G | 1 | | | X | | | | | | X | |
| DL-7-GW | | 1625 | AQ | | | | X | | U | 1L | G | 1 | | X | | | | | | | X | 8 |
| DL-7-GW | | 1625 | AQ | | X | | X | | F | 1L | G | 1 | | | X | | | | | | X | |
| DL-8-GW | 7/23 | 0930 | AQ | | | | X | | U | 1L | G | 1 | | X | | | | | | | X | 9 |
| DL-8-GW | | 0930 | AQ | | X | | X | | F | 1L | G | 1 | | | X | | | | | | X | |
| DL-9-GW | | 1015 | AQ | | | | X | | U | 1L | G | 1 | | X | | | | | | | X | 10 |
| DL-9-GW | | 1015 | AQ | | X | | X | | F | 1L | G | 1 | | | X | | | | | | X | Please report |
| | | | | | | | | | | TOTAL NUMBER OF CONTAINERS | | (5V) | | LABORATORY COMMENTS/CONDITION OF SAMPLES | | | | | | | Cooler Temp: |

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SEP 12 2003
MFG, Inc.

| RELINQUISHED BY: | | | DATE | TIME | RECIEVED BY: | | |
|---|---|---|---|---|---|---|---|
| SIGNATURE | PRINTED NAME | COMPANY | | | SIGNATURE | PRINTED NAME | COMPANY |
| John Mills | John Mills | MFG | 7/25/03 | 11:30 | | | |
| | | | 7/25/03 | 1:35 | L. Matthews | J. Matthews | Alpha |
| Jason Matthews | Jason Matthews | Alpha | 7/25/03 | 15:40 | S. Speaks | S. Speaks | LABORATORY |

*KEY Matrix: AQ - aqueous NA - nonaqueous SO - soil SL - sludge P - petroleum A - air OT - other Containers: P - plastic G - glass T - teflon B - brass OT - other Filtration: F - filtered U - unfiltered

DISTRIBUTION: PINK: Field Copy YELLOW: Laboratory Copy WHITE: Return to Originator

# MFG, INC.

## CHAIN-OF-CUSTODY RECORD AND REQUEST FOR ANALYSIS

COC No. 42657


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Suite 300W
Boulder, CO 80301-6118
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PROJECT NO: 030229.4 PROJECT NAME: Sierra Pacific PAGE: 3 OF: 5

SAMPLER (Signature): John Mills PROJECT MANAGER: Ed Conti DATE: 7/25/03

METHOD OF SHIPMENT: courier CARRIER/WAYBILL NO: NA DESTINATION: Alpha

| SAMPLES | | | | | | | | | | | | | | ANALYSIS REQUEST | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Sample | | | Preservation | | | | | | Containers | | | | Constituents/Method | | | | | Handling | | | Remarks |
| Field Sample Identification | DATE | TIME | Matrix* | HCl | $HNO_3$ | $H_2SO_4$ | COLD | | FILTRATION* | VOLUME (ml/oz) | TYPE* | NO. | | TEPH diesel + m.e. | Dissolved Mercury Metals | | | | HOLD | RUSH | STANDARD | |
| DL-10-GW | 7/23 | 1045 | AQ | | | | X | | U | 1L | G | 1 | | X | | | | | | | X | A3076007-11 |
| DL-10-GW | | 1045 | AQ | | X | | X | | F | 1L | G | 1 | | | X | | | | | | X | |
| DL-11-GW | | 1105 | AQ | | | | X | | U | 1L | G | 1 | | X | | | | | | | X | 12 |
| DL-11-GW | | 1105 | AQ | | X | | X | | F | 1L | G | 1 | | | X | | | | | | X | |
| DL-12-GW | | 1130 | AQ | | | | X | | U | 1L | G | 1 | | X | | | | | | | X | 13 |
| DL-12-GW | | 1130 | AQ | | X | | X | | F | 1L | G | 1 | | | X | | | | | | X | |
| DL-13-GW | | 1410 | AQ | | | | X | | U | 1L | G | 1 | | X | | | | | | | X | 14 |
| DL-13-GW | | 1410 | AQ | | X | | X | | F | 1L | G | 1 | | | X | | | | | | X | |
| DL-14-GW | | 1445 | AQ | | | | X | | U | 1L | G | 1 | | X | | | | | | | X | 15 |
| DL-14-GW | ↓ | 1445 | AQ | | X | | X | | F | 1L | G | 1 | | | X | | | | | | X | |
| | | | | | | | | | | TOTAL NUMBER OF CONTAINERS | | (56) | | LABORATORY COMMENTS/CONDITION OF SAMPLES | | | | | | | | Cooler Temp: |

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MFG, Inc.

| RELINQUISHED BY: | | | | | RECIEVED BY: | | |
|---|---|---|---|---|---|---|---|
| SIGNATURE | PRINTED NAME | COMPANY | DATE | TIME | SIGNATURE | PRINTED NAME | COMPANY |
| John Mills | John Mills | MFG | 7/25/03 | 1130 | | | |
| | | | 7/25/03 | 11:35 | J. Mathews | J. Mathews | Alpha LABORATORY |
| John Mathews | John Mathews | Alpha | 7/25/03 | 15:40 | S. Speaks | S. Speaks | |

*KEY Matrix: AQ - aqueous NA - nonaqueous SO - soil SL - sludge P - petroleum A - air OT - other Containers: P - plastic G - glass T - teflon B - brass OT - other Filtration: F - filtered U - unfiltered

DISTRIBUTION: PINK: Field Copy YELLOW: Laboratory Copy WHITE: Return to Originator

# MFG, INC.

## CHAIN-OF-CUSTODY RECORD AND REQUEST FOR ANALYSIS

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Fax: (707) 826-8437

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4900 Pearl East Circle
Suite 300W
Boulder, CO 80301-6118
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☐ _____


PROJECT NO: 030279.4 PROJECT NAME: Sierra Pacific PAGE: 4 OF: 5

SAMPLER (Signature): Julie Mills PROJECT MANAGER: Ed Conti DATE: 7/25/03

METHOD OF SHIPMENT: courrier CARRIER/WAYBILL NO: NA DESTINATION: Alpha

| SAMPLES | | | | | | | | | | | | | | ANALYSIS REQUEST | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Sample | | | Preservation | | | | | | Containers | | | | Constituents/Method | | | | | Handling | | | Remarks |
| Field Sample Identification | DATE | TIME | Matrix* | HCl | $HNO_3$ | $H_2SO_4$ | COLD | | FILTRATION* | VOLUME (ml/oz) | TYPE* | NO. | | TEPH diesel + m.o. | Dissolved Lead Metals | | | | HOLD | RUSH | STANDARD | |
| DL-15-GW | 7/23 | 1525 | AQ | | | | X | | U | 1L | G | 1 | | X | | | | | | | X | A3076607 - 16 |
| DL-15-GW | | 1525 | AQ | | X | | X | | F | 1L | G | 1 | | | X | | | | | | X | |
| DL-16-GW | | 1550 | AQ | | | | X | | U | 1L | G | 1 | | X | | | | | | | X | 17 |
| DL-16-GW | | 1550 | AQ | | X | | X | | F | 1L | G | 1 | | | X | | | | | | X | |
| DL-17-GW | | 1630 | AQ | | | | X | | U | 1L | G | 1 | | X | | | | | | | X | 18 |
| DL-17-GW | | 1630 | AQ | | X | | X | | F | 1L | G | 1 | | | X | | | | | | X | |
| DL-18-GW | 7/24 | 0930 | AQ | | | | X | | U | 1L | G | 1 | | X | | | | | | | X | 19 |
| DL-18-GW | | 0930 | AQ | | X | | X | | F | 1L | G | 1 | | | X | | | | | | X | |
| DL-19-GW | | 0945 | AQ | | | | X | | U | 1L | G | 1 | | X | | | | | | | X | 20 |
| DL-19-GW | | 0945 | AQ | | X | | X | | F | 1L | G | 1 | | | X | | | | | | X | |
| | | | | TOTAL NUMBER OF CONTAINERS | | | | | | | | (50) | | LABORATORY COMMENTS/CONDITION OF SAMPLES | | | | | | | | Cooler Temp: |

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| RELINQUISHED BY: | | | | | RECIEVED BY: | | |
|---|---|---|---|---|---|---|---|
| SIGNATURE | PRINTED NAME | COMPANY | DATE | TIME | SIGNATURE | PRINTED NAME | COMPANY |
| Julie Mills | Julie Mills | MFG | 7/25/03 | 1130 | | | |
| | | | 7/25/03 | 11:35 | J. Matthews | J. Matthews | Alpha |
| Jack Matthews | Jack Matthews | Alpha | 7/25/03 | 15:40 | S. Speaks | S. Speaks | LABORATORY |

*KEY Matrix: AQ - aqueous NA - nonaqueous SO - soil SL - sludge P - petroleum A - air OT - other Containers: P - plastic G - glass T - teflon B - brass OT - other Filtration: F - filtered U - unfiltered

DISTRIBUTION: PINK: Field Copy YELLOW: Laboratory Copy WHITE: Return to Originator

# MFG, INC.

## CHAIN-OF-CUSTODY RECORD AND REQUEST FOR ANALYSIS

COC No. 42659


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PROJECT NO: 030279.4 PROJECT NAME: Sierra Pacific PAGE: 5 OF: 5

SAMPLER (Signature): John Mills PROJECT MANAGER: Ed Conti DATE: 7/25/03

METHOD OF SHIPMENT: courier CARRIER/WAYBILL NO: NA DESTINATION: Alpha

### SAMPLES

| Field Sample Identification | Sample DATE | Sample TIME | Matrix* | Preservation HCl | Preservation $HNO_3$ | Preservation $H_2SO_4$ | Preservation COLD | FILTRATION* | Containers VOLUME (ml/oz) | Containers TYPE* | Containers NO. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| DL-20-GW | 7/24 | 0950 | AQ | | | | X | U | 1L | G | 1 |
| DL-20-GW | | 0950 | AQ | | X | | X | F | 1L | G | 1 |
| DL-21-GW | | 1010 | AQ | | | | X | U | 1L | G | 1 |
| DL-21-GW | | 1010 | AQ | | X | | X | F | 1L | G | 1 |
| DL-22-GW | | 1030 | AQ | | | | X | U | 1L | G | 1 |
| DL-22-GW | | 1030 | AQ | | X | | X | F | 1L | G | 1 |
| DL-23-GW | | 1040 | AQ | | | | X | U | 1L | G | 1 |
| DL-23-GW | | 1040 | AQ | | X | | X | F | 1L | G | 1 |
| DL-24-GW | | 1100 | AQ | | | | X | U | 1L | G | 1 |
| DL-24-GW | ↓ | 1100 | AQ | | X | | X | F | 1L | G | 1 |

TOTAL NUMBER OF CONTAINERS (50)

### ANALYSIS REQUEST

| Constituents/Method | Handling HOLD | Handling RUSH | Handling STANDARD | Remarks |
|---|---|---|---|---|
| TEPH diesel + motor oil | | | | |
| Dissolved Lead Metals | | | | |
| X | | | X | A307607 - 21 |
| X | | | X | |
| X | | | X | 22 |
| X | | | X | |
| X | | | X | 23 |
| X | | | X | |
| X | | | X | 24 |
| X | | | X | |
| X | | | X | 25 |
| X | | | X | |

LABORATORY COMMENTS/CONDITION OF SAMPLES

Cooler Temp:

RECEIVED
SEP 12 2003
MFG, Inc.

### RELINQUISHED BY:

| SIGNATURE | PRINTED NAME | COMPANY | DATE | TIME |
|---|---|---|---|---|
| John Mills | John Mills | MFG | 7/25/03 | 1130 |
| | | | 7/25/03 | 11:35 |
| Jack Matthews | Jack Matthews | Alpha | 7/25/03 | 15:40 |

### RECIEVED BY:

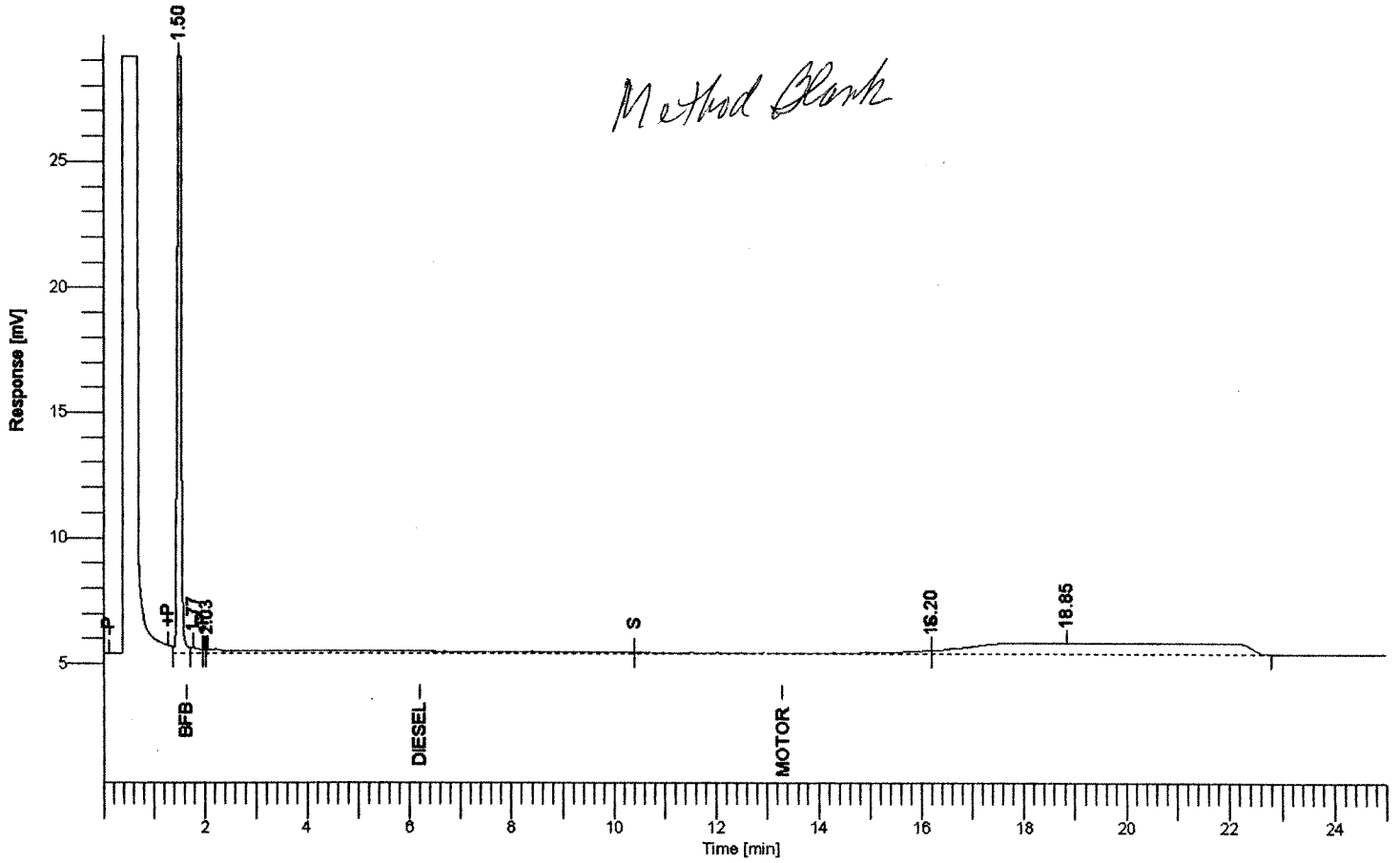
| SIGNATURE | PRINTED NAME | COMPANY |
|---|---|---|
| J. Matthews | J. Matthews | Alpha LABORATORY |
| S. Speaks | S. Speaks | |

*KEY Matrix: AQ - aqueous NA - nonaqueous SO - soil SL - sludge P - petroleum A - air OT - other Containers: P - plastic G - glass T - teflon B - brass OT - other Filtration: F - filtered. U - unfiltered

DISTRIBUTION: PINK: Field Copy YELLOW: Laboratory Copy WHITE: Return to Originator

| | | | |
|---|---|---|---|
| Software Version | : 6.1.2.0.1:D19 | Date | : 9/5/03 2:24:23 |
| Sample Name | : AG32826-BLK1 | Data Acquisition Time | : 7/29/03 4:22:56 AM |
| Instrument Name | : DsMo | | |
| Rack/Vial | : 0/0 | | |
| Sample Amount | : 1.000000 | Channel | : A |
| Cycle | : 29 | Operator | : marvin |
| | | Dilution Factor | : 1.000000 |

Result File : C:\Archive_PenExe\Stats_082203\Data\ATDAT583.rst
Sequence File : C:\PenExe\TcWS\Stats\Sequences\Seq_DsMo_072803.seq




## Diesel/Motor Oil

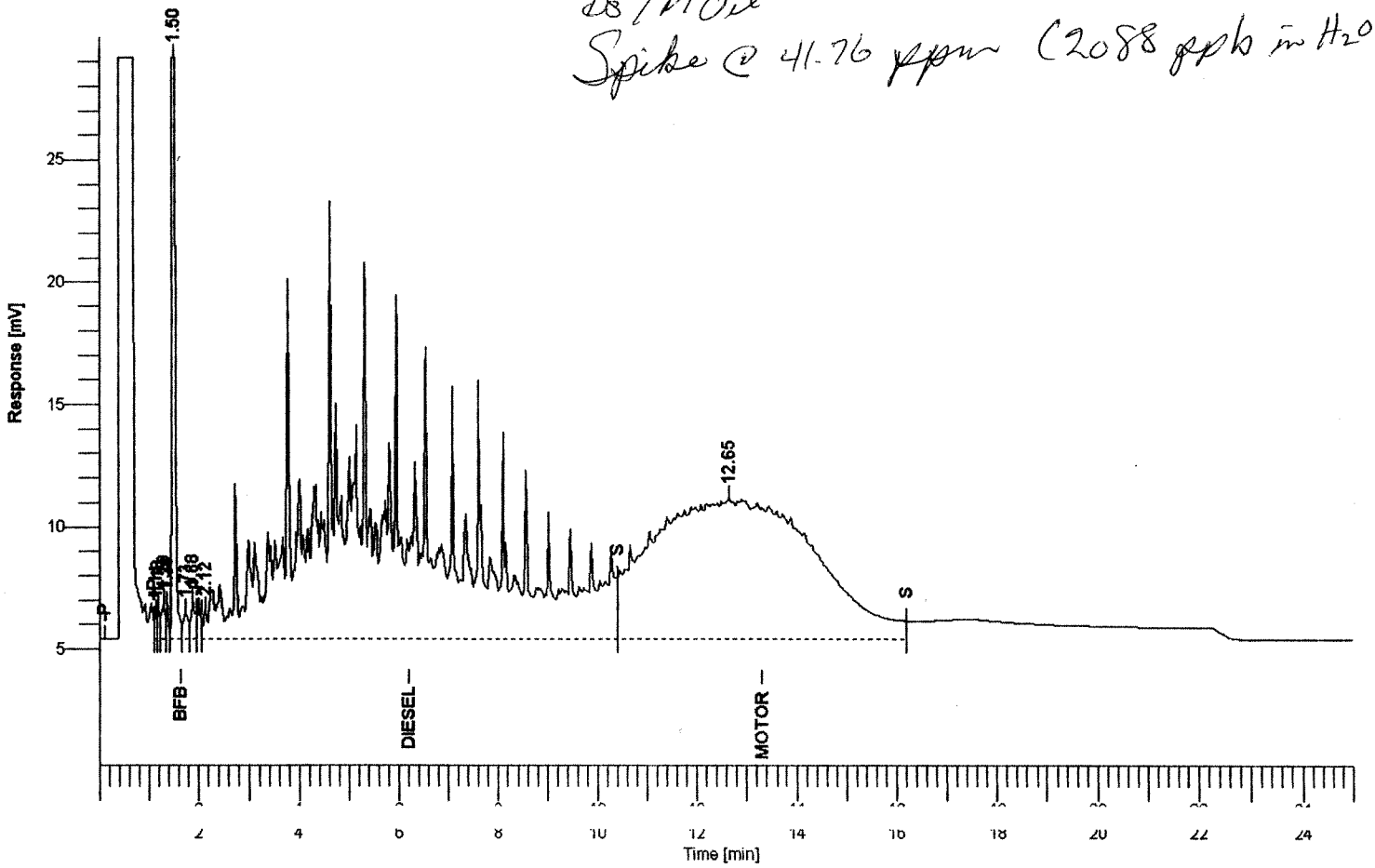
| Peak # | Time [min] | Component Name | Raw Amount | Area [uV*sec] | Height [uV] |
|---|---|---|---|---|---|
| 1 | 1.50 | BFB | 8.782 | 196757 | 55223 |
| 2 | 1.77 | | 0.003 | 2933 | 262 |
| 3 | 2.03 | Diesel | 0.334 | 44954 | 151 |
| 4 | 16.20 | Motor Oil | -0.167 | 17962 | 150 |
| 5 | 18.85 | | 0.147 | 147482 | 434 |
| | | | 9.100 | 410087 | 56220 |

Report stored in ASCII file:
C:\Archive_PenExe\Stats_082203\Data\ATDAT583.TXO

| | | | | | |
|---|---|---|---|---|---|
| Software Version | : | 6.1.2.0.1:D19 | Date | : | 9/5/03 2:24:30 |
| Sample Name | : | AG32826-BS1 | Data Acquisition Time | : | 7/29/03 5:03:30 AM |
| Instrument Name | : | DsMo | | | |
| Rack/Vial | : | 0/0 | | | |
| Sample Amount | : | 1.000000 | Channel | : | A |
| Cycle | : | 30 | Operator | : | marvin |
| | | | Dilution Factor | : | 1.000000 |

Result File : C:\Archive_PenExe\Stats_082203\Data\ATDAT584.rst
Sequence File : C:\PenExe\TcWS\Stats\Sequences\Seq_DsMo_072803.seq

Ds/MOil
Spike @ 41.76 ppm (2088 ppb in $H_2O$)




# Diesel/Motor Oil

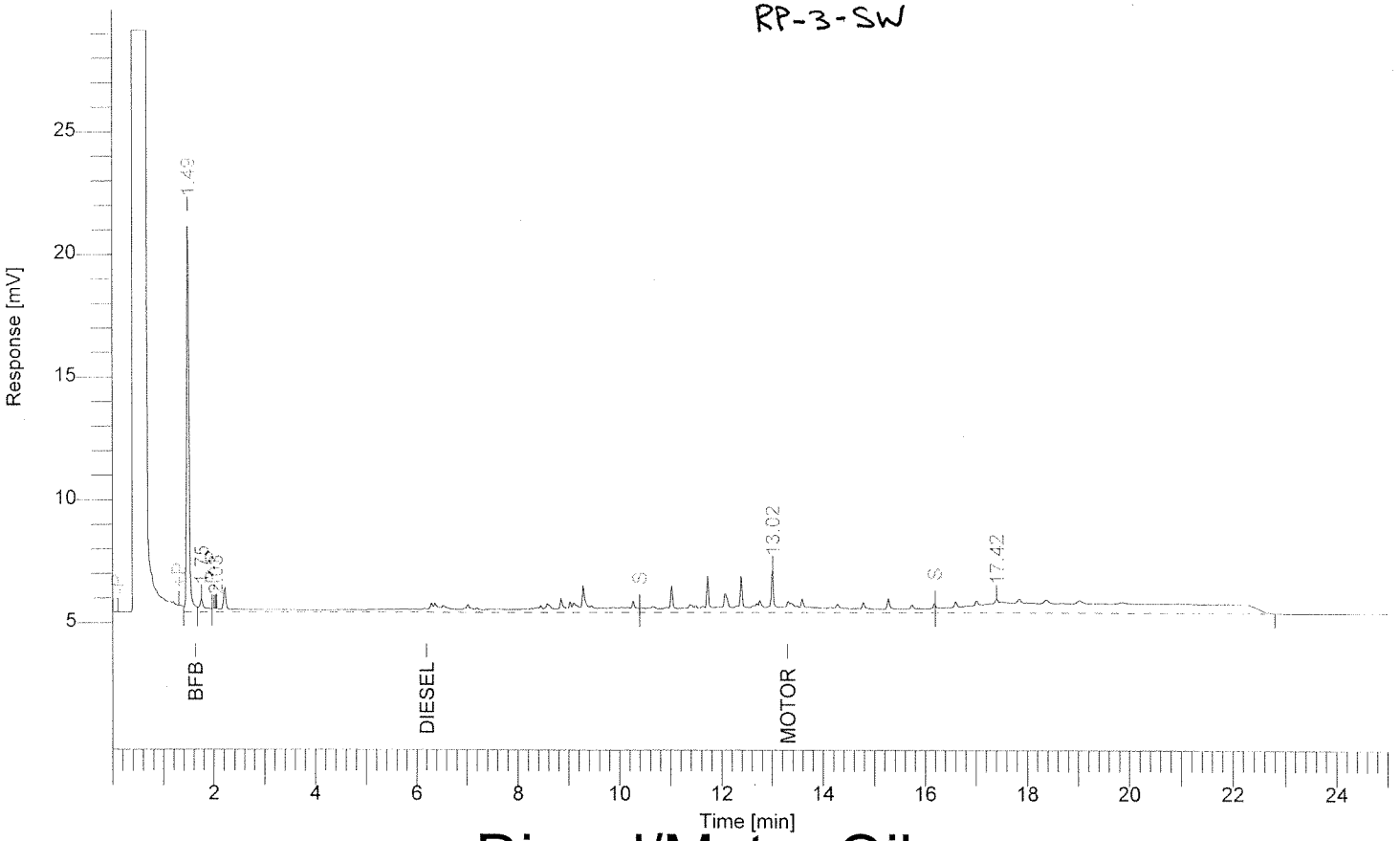
| Peak # | Time [min] | Component Name | Raw Amount | Area [uV*sec] | Height [uV] |
|---|---|---|---|---|---|
| 1 | 1.14 | | 0.003 | 2702 | 970 |
| 2 | 1.18 | | 0.004 | 4246 | 1130 |
| 3 | 1.29 | | 0.008 | 7573 | 1333 |
| 4 | 1.36 | | 0.005 | 4745 | 1288 |
| 5 | 1.50 | BFB | 9.478 | 212860 | 60702 |
| 6 | 1.73 | | 0.007 | 7101 | 1065 |
| 7 | 1.88 | | 0.009 | 9270 | 1453 |
| 8 | 2.12 | Diesel | 41.192 | 1700448 | 1129 |
| 9 | 12.65 | Motor Oil | 45.229 | 1313359 | 5724 |
| | | | 95.934 | 3262303 | 74793 |

Report stored in ASCII file:
C:\Archive_PenExe\Stats_082203\Data\ATDAT584.TXO

| | | | |
|---|---|---|---|
| Software Version | : 6.1.2.0.1:D19 | Date | : 9/5/03 2:28:47 PM |
| Sample Name | : A307607-01 | Data Acquisition Time | : 7/29/03 10:32:08 PM |
| Instrument Name | : DsMo | Channel | : A |
| Rack/Vial | : 0/0 | Operator | : marvin |
| Sample Amount | : 1.000000 | Dilution Factor | : 1.000000 |
| Cycle | : 11 | | |

Result File : C:\Archive_PenExe\Stats_082203\Data\ATDAT602.rst
Sequence File : C:\PenExe\TcWS\Stats\Sequences\Seq_DsMo_072903_3.seq

RP-3-SW




# Diesel/Motor Oil

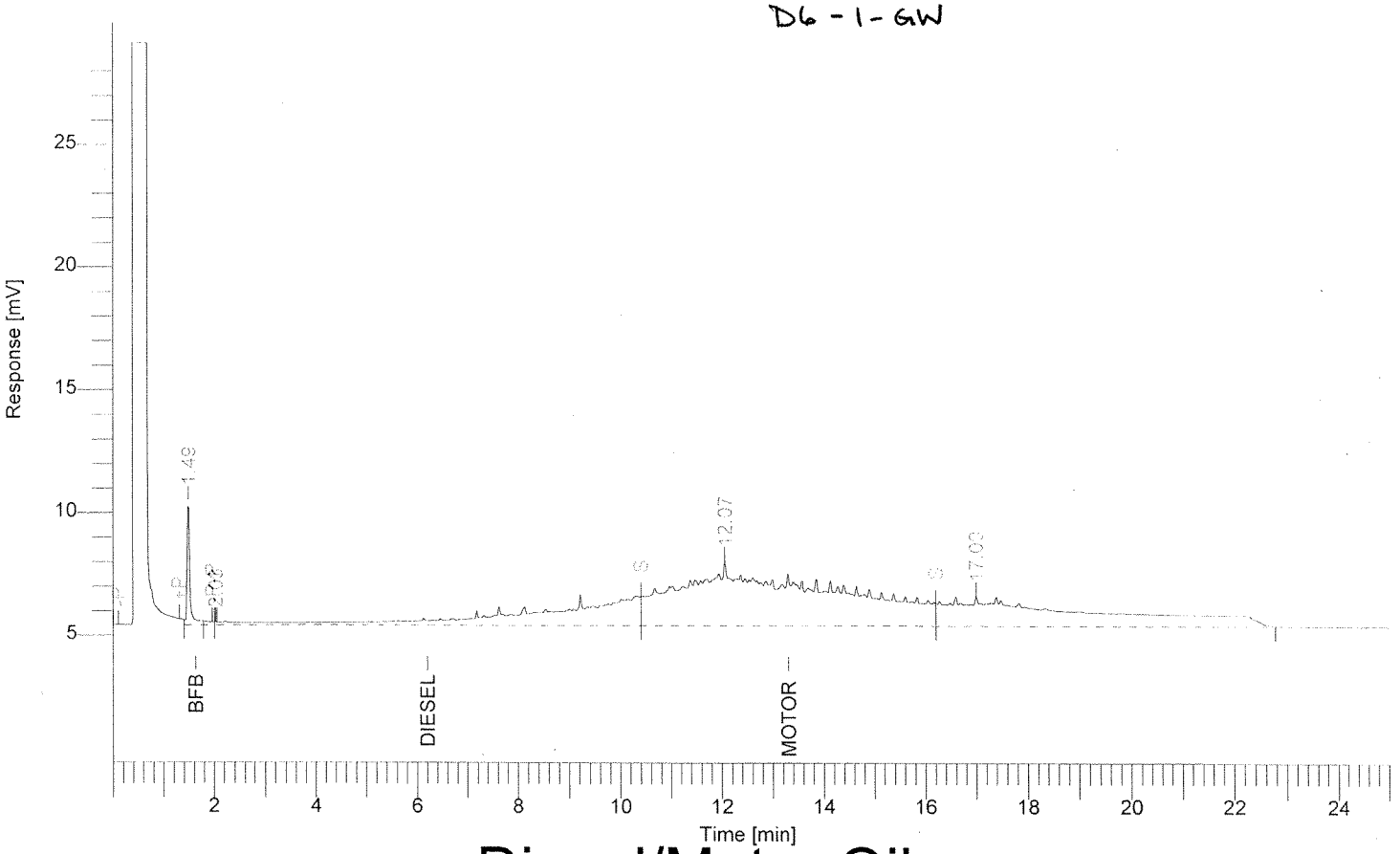
| Peak # | Time [min] | Component Name | Raw Amount | Area [uV*sec] | Height [uV] |
|---|---|---|---|---|---|
| 1 | 1.49 | BFB | 2.268 | 50103 | 14345 |
| 2 | 1.75 | | 0.004 | 3762 | 500 |
| 3 | 2.03 | Diesel | 1.133 | 77545 | 148 |
| 4 | 13.02 | Motor Oil | 2.338 | 90612 | 1734 |
| 5 | 17.42 | | 0.141 | 141323 | 574 |
| | | | 5.884 | 363346 | 17301 |

Report stored in ASCII file: C:\Archive_PenExe\Stats_082203\Data\ATDAT602.TX0

| | | | |
|---|---|---|---|
| Software Version | : 6.1.2.0.1:D19 | Date | : 9/5/03 2:28:54 PM |
| Sample Name | : A307607-02 | Data Acquisition Time | : 7/29/03 11:12:31 PM |
| Instrument Name | : DsMo | Channel | : A |
| Rack/Vial | : 0/0 | Operator | : marvin |
| Sample Amount | : 1.000000 | Dilution Factor | : 1.000000 |
| Cycle | : 12 | | |

Result File : C:\Archive_PenExe\Stats_082203\Data\ATDAT603.rst
Sequence File : C:\PenExe\TcWS\Stats\Sequences\Seq_DsMo_072903_3.seq

D6 - 1 - GW




# Diesel/Motor Oil

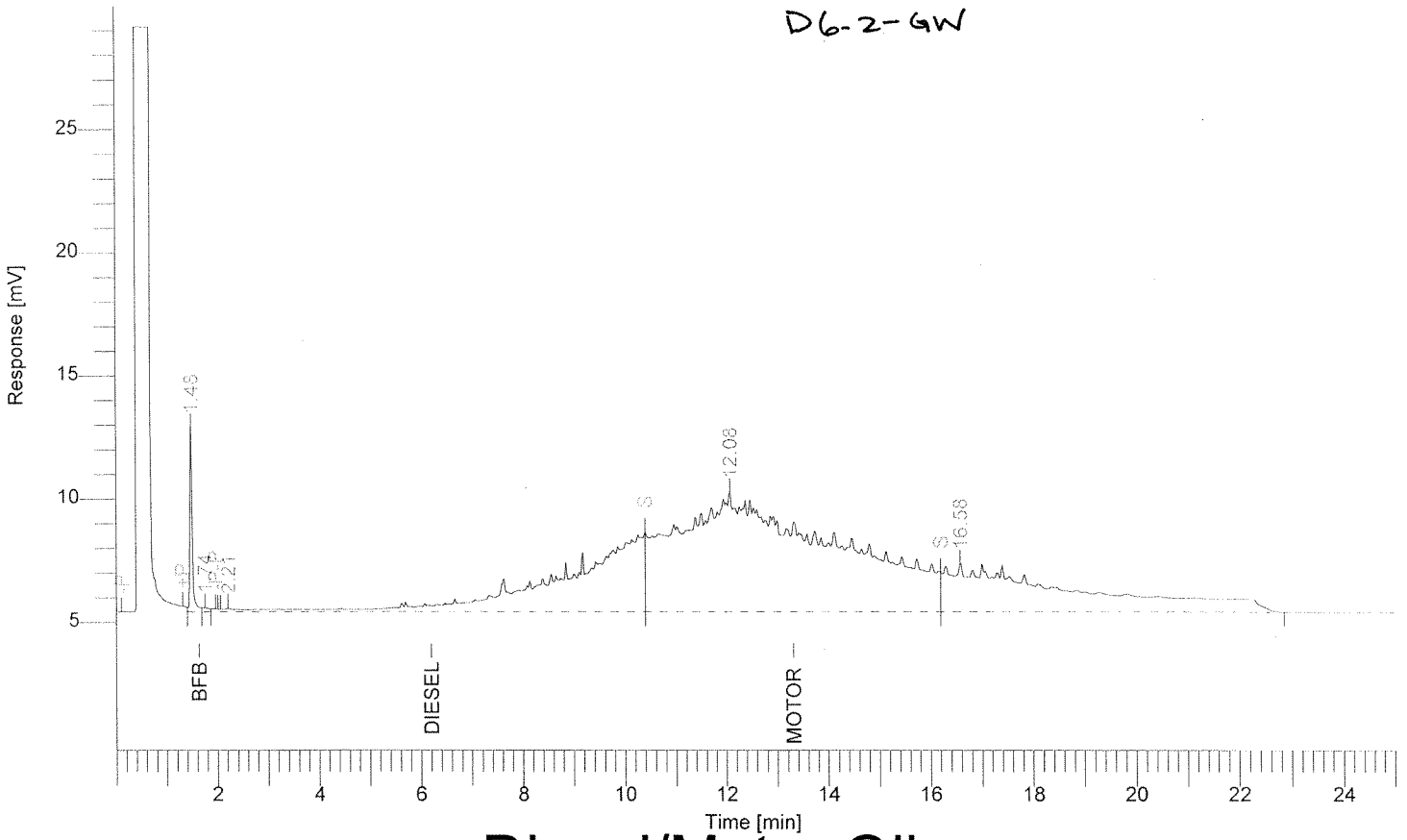
| Peak # | Time [min] | Component Name | Raw Amount | Area [uV*sec] | Height [uV] |
|---|---|---|---|---|---|
| 1 | 1.49 | BFB | 0.845 | 19101 | 4586 |
| 2 | 2.03 | Diesel | 3.316 | 166537 | 115 |
| 3 | 12.07 | Motor Oil | 17.040 | 514207 | 2643 |
| 4 | 17.00 | | 0.235 | 235299 | 1225 |
| | | | 21.437 | 935143 | 8570 |

Report stored in ASCII file: C:\Archive_PenExe\Stats_082203\Data\ATDAT603.TX0

| | | | |
|---|---|---|---|
| Software Version | : 6.1.2.0.1:D19 | Date | : 9/5/03 2:29:01 PM |
| Sample Name | : A307607-03 | Data Acquisition Time | : 7/29/03 11:52:52 PM |
| Instrument Name | : DsMo | Channel | : A |
| Rack/Vial | : 0/0 | Operator | : marvin |
| Sample Amount | : 1.000000 | Dilution Factor | : 1.000000 |
| Cycle | : 13 | | |

Result File : C:\Archive_PenExe\Stats_082203\Data\ATDAT604.rst
Sequence File : C:\PenExe\TcWS\Stats\Sequences\Seq_DsMo_072903_3.seq

D6-2-GW



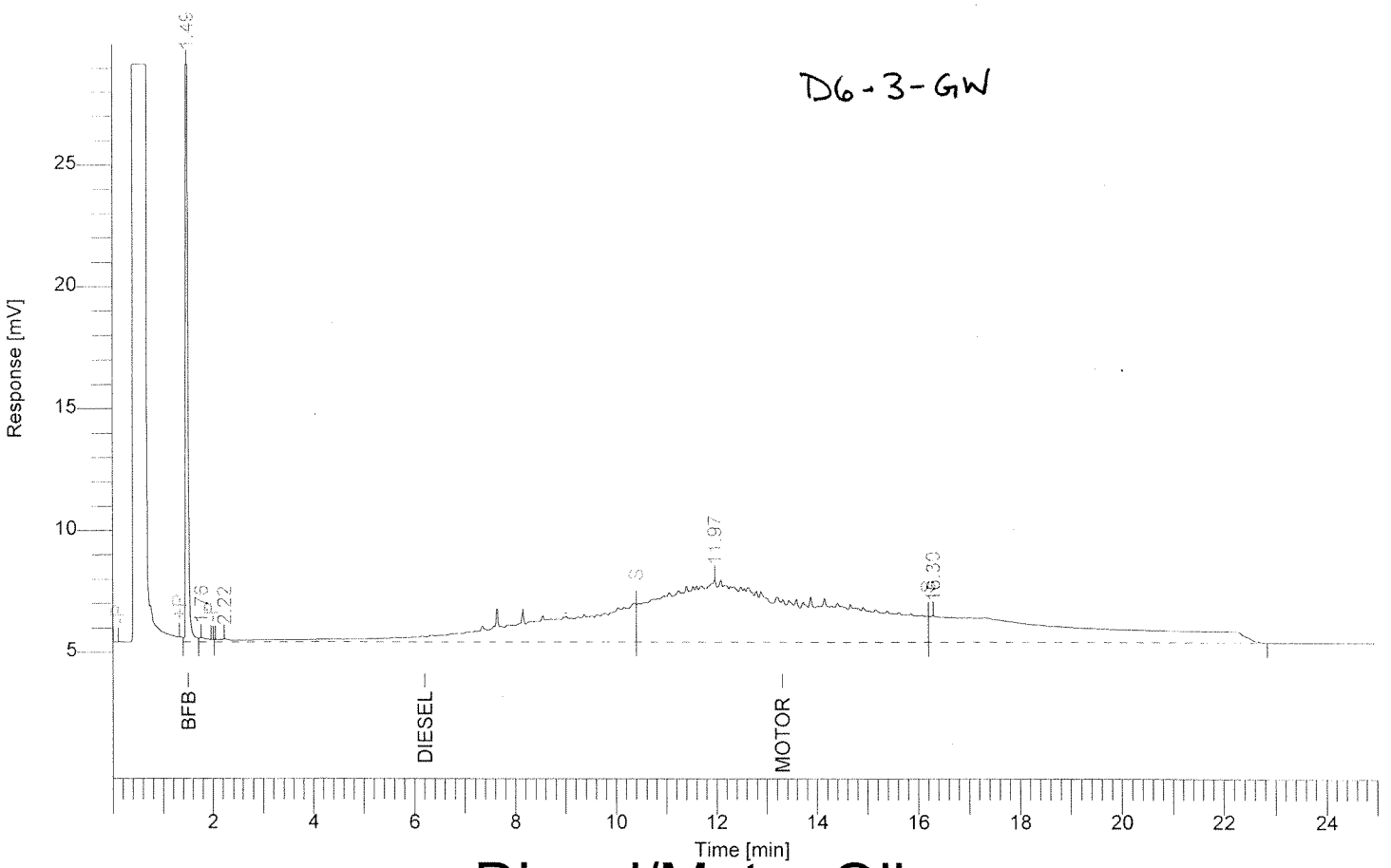

# Diesel/Motor Oil

| Peak # | Time [min] | Component Name | Raw Amount | Area [uV*sec] | Height [uV] |
|---|---|---|---|---|---|
| 1 | 1.48 | BFB | 1.077 | 24129 | 6663 |
| 2 | 1.74 | | 0.002 | 1675 | 176 |
| 3 | 2.21 | Diesel | 7.825 | 350184 | 144 |
| 4 | 12.08 | Motor Oil | 35.711 | 1045442 | 4839 |
| 5 | 16.58 | | 0.335 | 334850 | 1958 |
| | | | 44.950 | 1756280 | 13780 |

Report stored in ASCII file: C:\Archive_PenExe\Stats_082203\Data\ATDAT604.TX0

| | | | |
|---|---|---|---|
| Software Version | : 6.1.2.0.1:D19 | Date | : 9/5/03 1:41:39 PM |
| Sample Name | : A307607-04 | Data Acquisition Time | : 7/30/03 3:56:03 AM |
| Instrument Name | : DsMo | Channel | : A |
| Rack/Vial | : 0/0 | Operator | : marvin |
| Sample Amount | : 1.000000 | Dilution Factor | : 1.000000 |
| Cycle | : 19 | | |

Result File : C:\Archive_PenExe\Stats_082203\Data\ATDAT610.rst
Sequence File : C:\PenExe\TcWS\Stats\Sequences\Seq_DsMo_072903_3-20030729-153709.idx



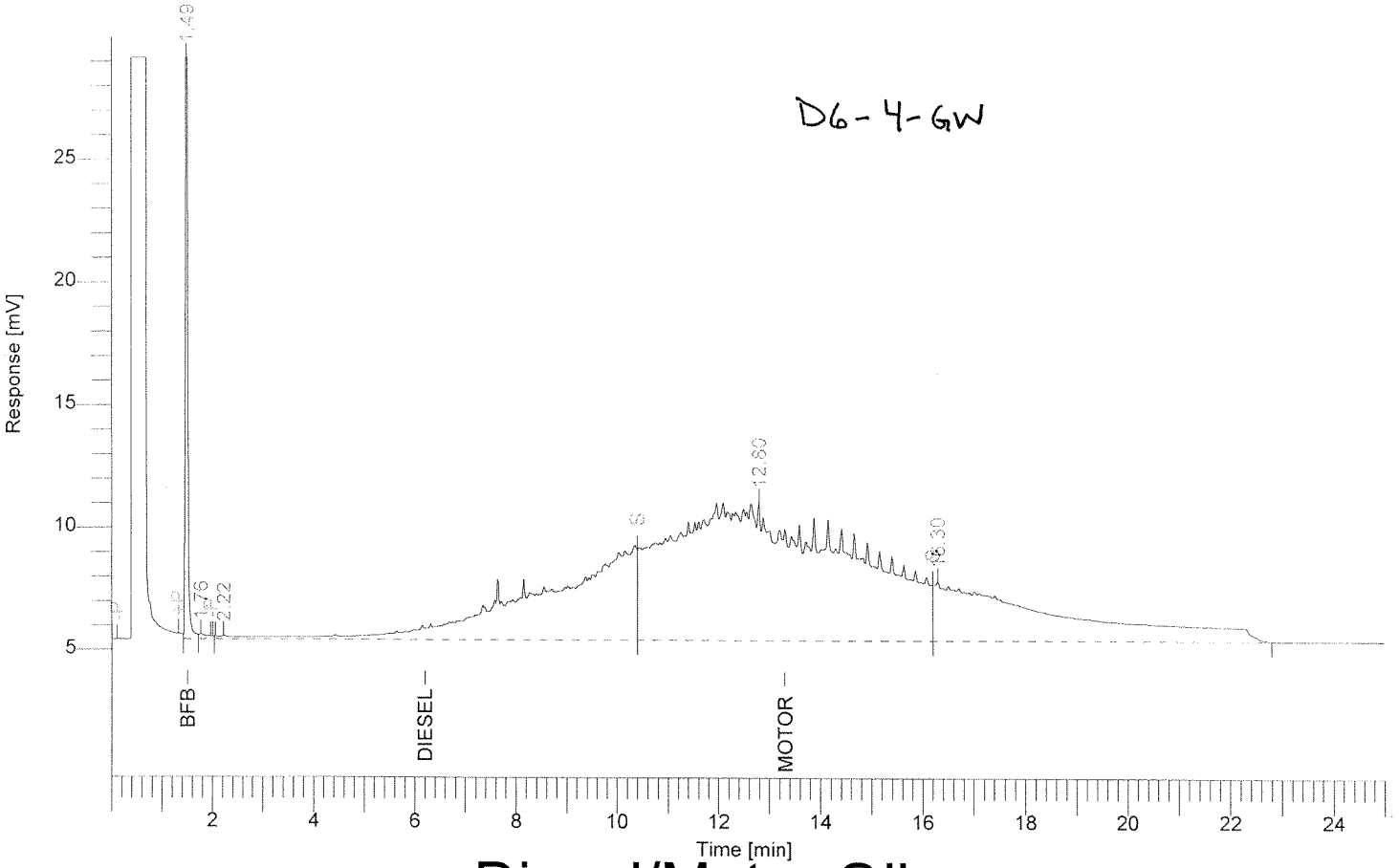

# Diesel/Motor Oil

| Peak # | Time [min] | Component Name | Raw Amount | Area [uV*sec] | Height [uV] |
|---|---|---|---|---|---|
| 1 | 1.49 | BFB | 4.255 | 86439 | 26582 |
| 2 | 1.76 | | 0.002 | 2306 | 166 |
| 3 | 2.22 | Diesel | 4.707 | 228736 | 118 |
| 4 | 11.97 | Motor Oil | 17.258 | 590147 | 2588 |
| 5 | 16.30 | | 0.253 | 252892 | 1103 |
| | | | 26.475 | 1160521 | 30557 |

Report stored in ASCII file: C:\Archive_PenExe\Stats_082203\Data\ATDAT610.TX0

| | | | |
|---|---|---|---|
| Software Version | : 6.1.2.0.1:D19 | Date | : 9/5/03 1:41:47 PM |
| Sample Name | : A307607-05 | Data Acquisition Time | : 7/30/03 4:36:41 AM |
| Instrument Name | : DsMo | Channel | : A |
| Rack/Vial | : 0/0 | Operator | : marvin |
| Sample Amount | : 1.000000 | Dilution Factor | : 1.000000 |
| Cycle | : 20 | | |

Result File : C:\Archive_PenExe\Stats_082203\Data\ATDAT611.rst
Sequence File : C:\PenExe\TcWS\Stats\Sequences\Seq_DsMo_072903_3-20030729-153709.idx



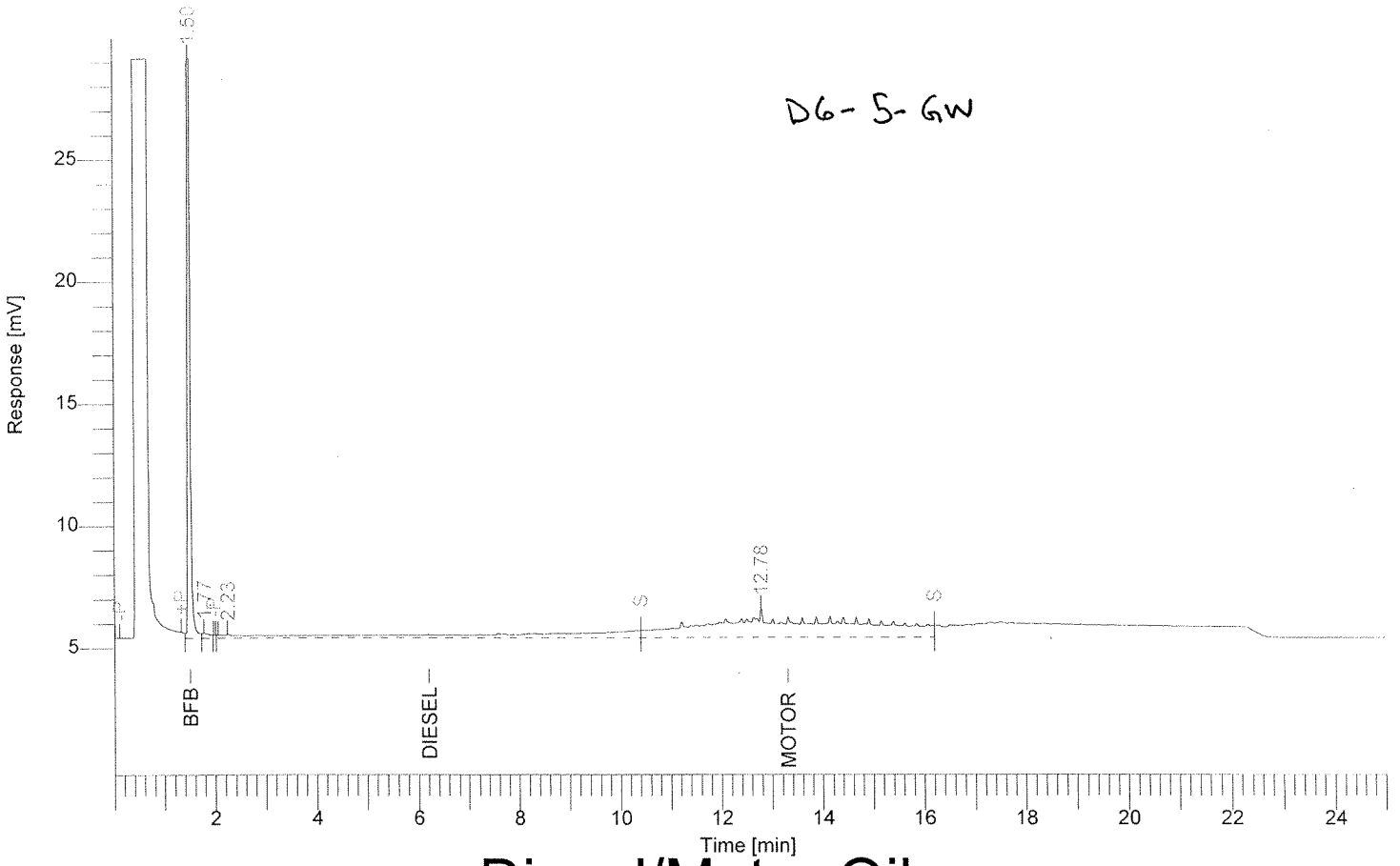

# Diesel/Motor Oil

| Peak # | Time [min] | Component Name | Raw Amount | Area [uV*sec] | Height [uV] |
|---|---|---|---|---|---|
| 1 | 1.49 | BFB | 4.039 | 82078 | 25019 |
| 2 | 1.76 | | 0.003 | 2817 | 193 |
| 3 | 2.22 | Diesel | 11.053 | 505714 | 139 |
| 4 | 12.80 | Motor Oil | 40.394 | 1375161 | 5664 |
| 5 | 16.30 | | 0.408 | 408237 | 2426 |
| | | | 55.898 | 2374007 | 33441 |

Report stored in ASCII file: C:\Archive_PenExe\Stats_082203\Data\ATDAT611.TX0

| | | | |
|---|---|---|---|
| Software Version | : 6.1.2.0.1:D19 | Date | : 9/5/03 1:42:01 PM |
| Sample Name | : A307607-06 | Data Acquisition Time | : 7/30/03 5:17:15 AM |
| Instrument Name | : DsMo | Channel | : A |
| Rack/Vial | : 0/0 | Operator | : marvin |
| Sample Amount | : 1.000000 | Dilution Factor | : 1.000000 |
| Cycle | : 21 | | |

Result File : C:\Archive_PenExe\Stats_082203\Data\ATDAT612.rst
Sequence File : C:\PenExe\TcWS\Stats\Sequences\Seq_DsMo_072903_3-20030729-153709.idx



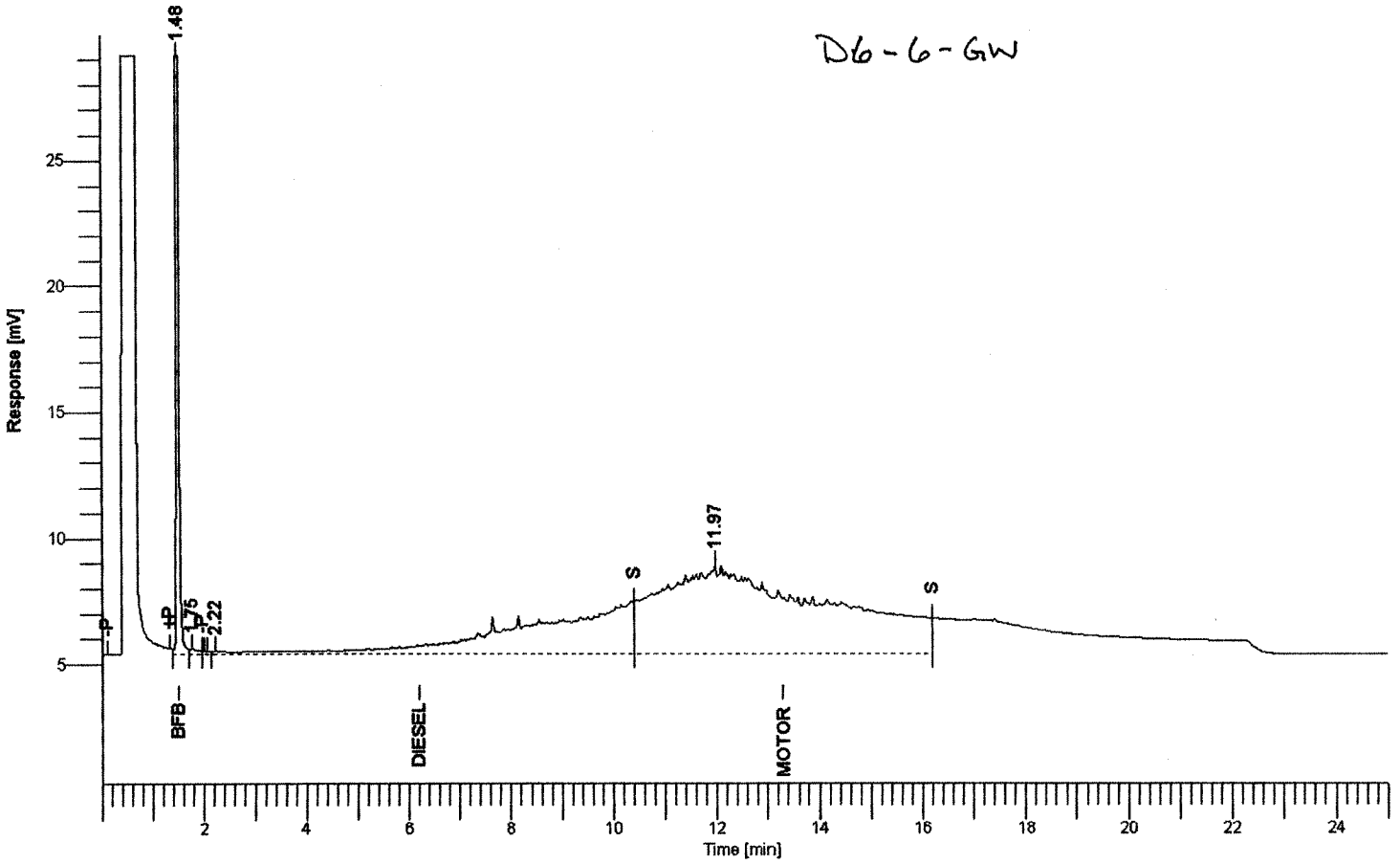

# Diesel/Motor Oil

| Peak # | Time [min] | Component Name | Raw Amount | Area [uV*sec] | Height [uV] |
|---|---|---|---|---|---|
| 1 | 1.50 | BFB | 5.688 | 116339 | 36994 |
| 2 | 1.77 | | 0.002 | 2082 | 194 |
| 3 | 2.23 | Diesel | 0.848 | 60179 | 135 |
| 4 | 12.78 | Motor Oil | 5.257 | 182448 | 1135 |
| | | | 11.795 | 361048 | 38458 |

Report stored in ASCII file: C:\Archive_PenExe\Stats_082203\Data\ATDAT612.TX0

| | | | |
|---|---|---|---|
| Software Version | : 6.1.2.0.1:D19 | Date | : 9/5/03 2:20:41 |
| Sample Name | : A307607-07 | Data Acquisition Time | : 7/30/03 5:57:54 AM |
| Instrument Name | : DsMo | | |
| Rack/Vial | : 0/0 | | |
| Sample Amount | : 1.000000 | Channel | : A |
| Cycle | : 22 | Operator | : marvin |
| | | Dilution Factor | : 1.000000 |

Result File : C:\Archive_PenExe\Stats_082203\Data\atdat613.rst
Sequence File :
C:\PenExe\TcWS\Stats\Sequences\Seq_DsMo_072903_3-20030729-153709.idx




# Diesel/Motor Oil

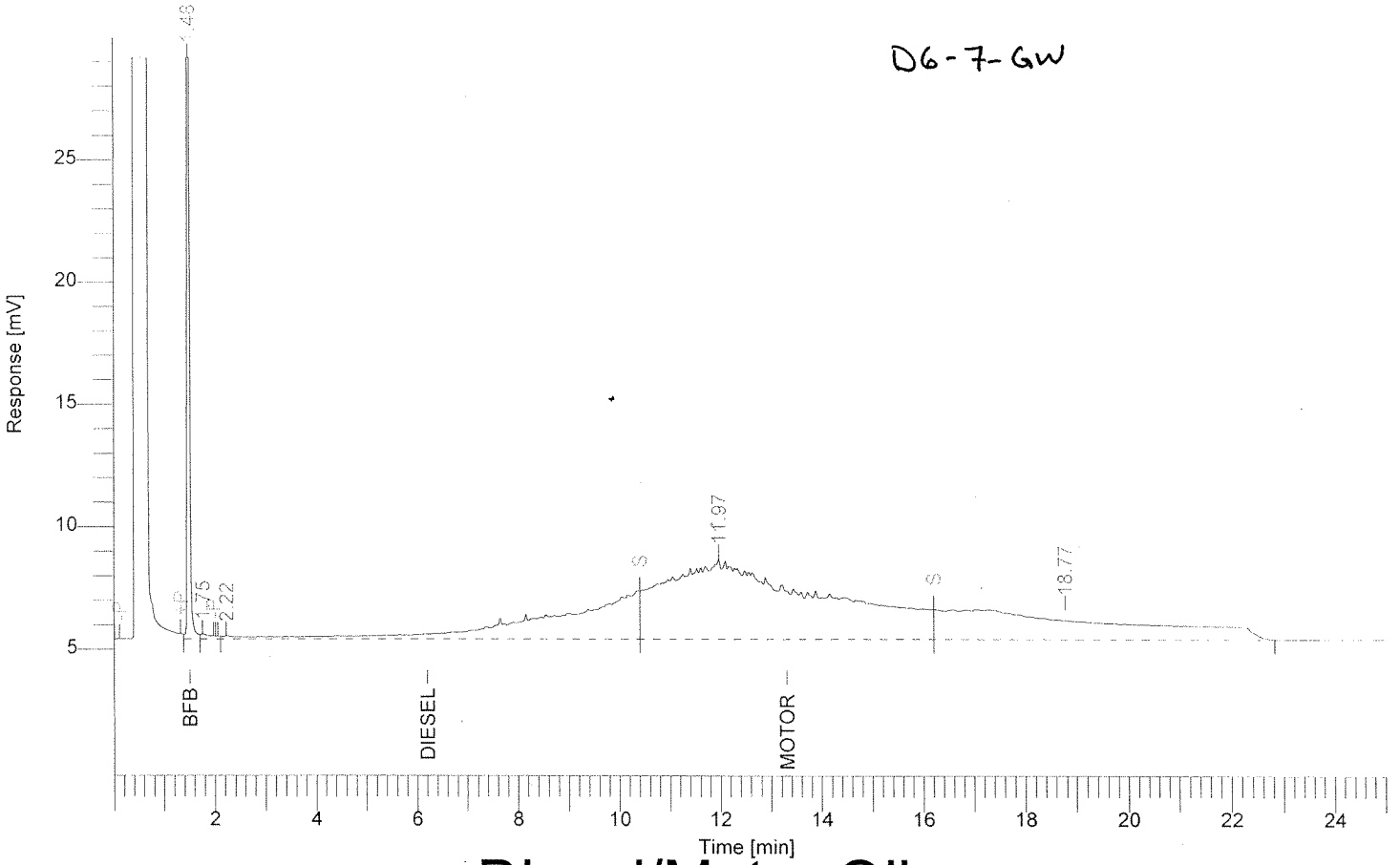
| Peak # | Time [min] | Component Name | Raw Amount | Area [uV*sec] | Height [uV] |
|---|---|---|---|---|---|
| 1 | 1.48 | BFB | 7.075 | 146882 | 45722 |
| 2 | 1.75 | | 0.002 | 2451 | 215 |
| 3 | 2.22 | Diesel | 6.306 | 298556 | 139 |
| 4 | 11.97 | Motor Oil | 22.932 | 782798 | 3529 |
| | | | 36.315 | 1230688 | 49605 |

Report stored in ASCII file:
C:\Archive_PenExe\Stats_082203\Data\atdat613.TXO

| | | | |
|---|---|---|---|
| Software Version | : 6.1.2.0.1:D19 | Date | : 9/5/03 1:42:37 PM |
| Sample Name | : A307607-08 | Data Acquisition Time | : 7/30/03 6:38:28 AM |
| Instrument Name | : DsMo | Channel | : A |
| Rack/Vial | : 0/0 | Operator | : marvin |
| Sample Amount | : 1.000000 | Dilution Factor | : 1.000000 |
| Cycle | : 23 | | |

Result File : C:\Archive_PenExe\Stats_082203\Data\ATDAT614.rst
Sequence File : C:\PenExe\TcWS\Stats\Sequences\Seq_DsMo_072903_3-20030729-153709.idx

D6-7-GW




# Diesel/Motor Oil

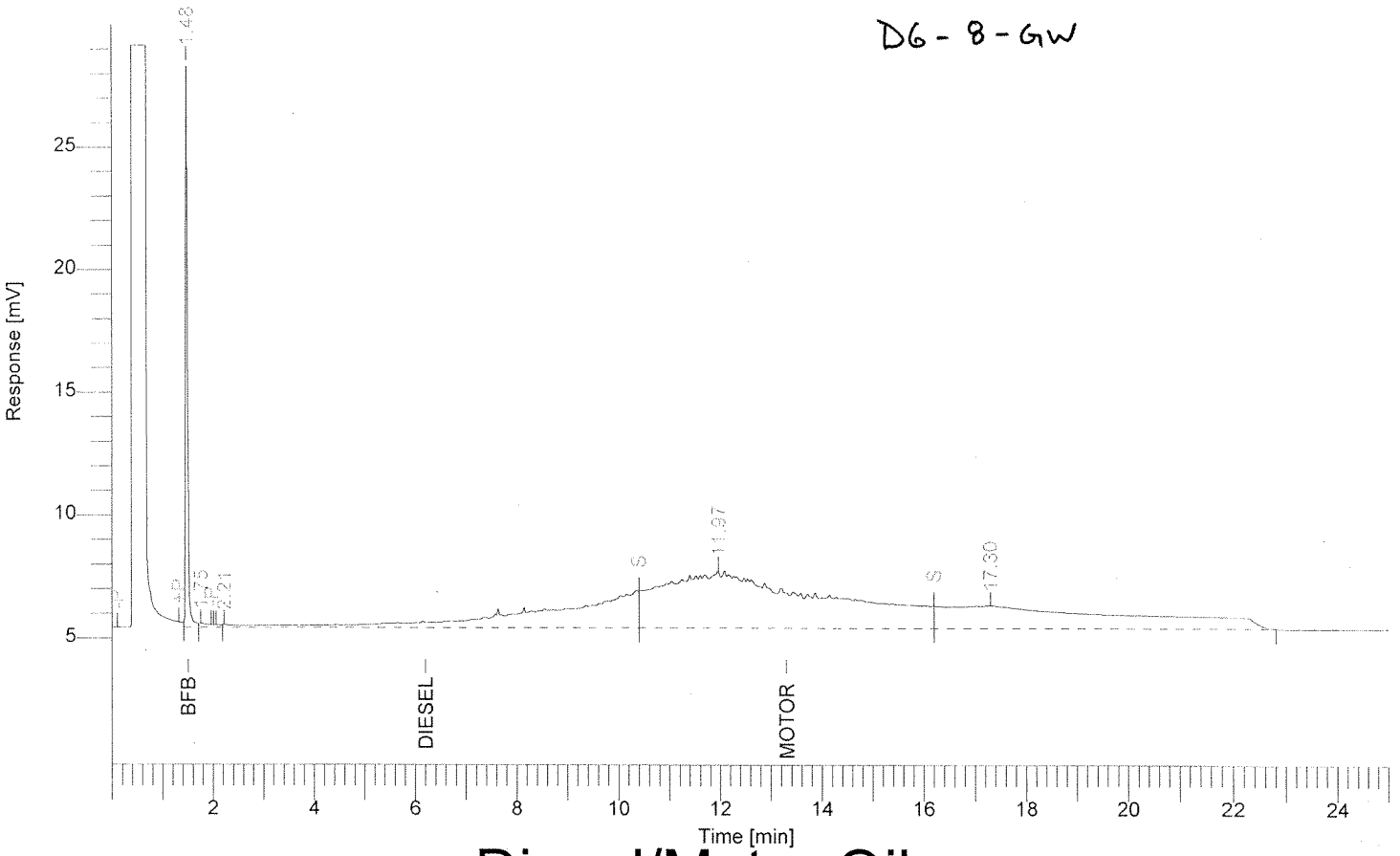
| Peak # | Time [min] | Component Name | Raw Amount | Area [uV*sec] | Height [uV] |
|---|---|---|---|---|---|
| 1 | 1.48 | BFB | 5.978 | 122607 | 38417 |
| 2 | 1.75 | | 0.003 | 3231 | 192 |
| 3 | 2.22 | Diesel | 4.924 | 238223 | 124 |
| 4 | 11.97 | Motor Oil | 20.636 | 704858 | 3291 |
| 5 | 18.77 | | 0.293 | 292653 | 761 |
| | | | 31.834 | 1361572 | 42785 |

Report stored in ASCII file: C:\Archive_PenExe\Stats_082203\Data\ATDAT614.TX0

| | | | |
|---|---|---|---|
| Software Version | : 6.1.2.0.1:D19 | Date | : 9/5/03 1:55:49 PM |
| Sample Name | : A307607-09 | Data Acquisition Time | : 7/30/03 6:14:46 PM |
| Instrument Name | : DsMo | Channel | : A |
| Rack/Vial | : 0/0 | Operator | : marvin |
| Sample Amount | : 1.000000 | Dilution Factor | : 1.000000 |
| Cycle | : 9 | | |

Result File : C:\Archive_PenExe\Stats_082203\Data\atdat631.rst
Sequence File : C:\PenExe\TcWS\Stats\Sequences\Seq_DsMo_073003.seq

D6 - 8 - GW




# Diesel/Motor Oil

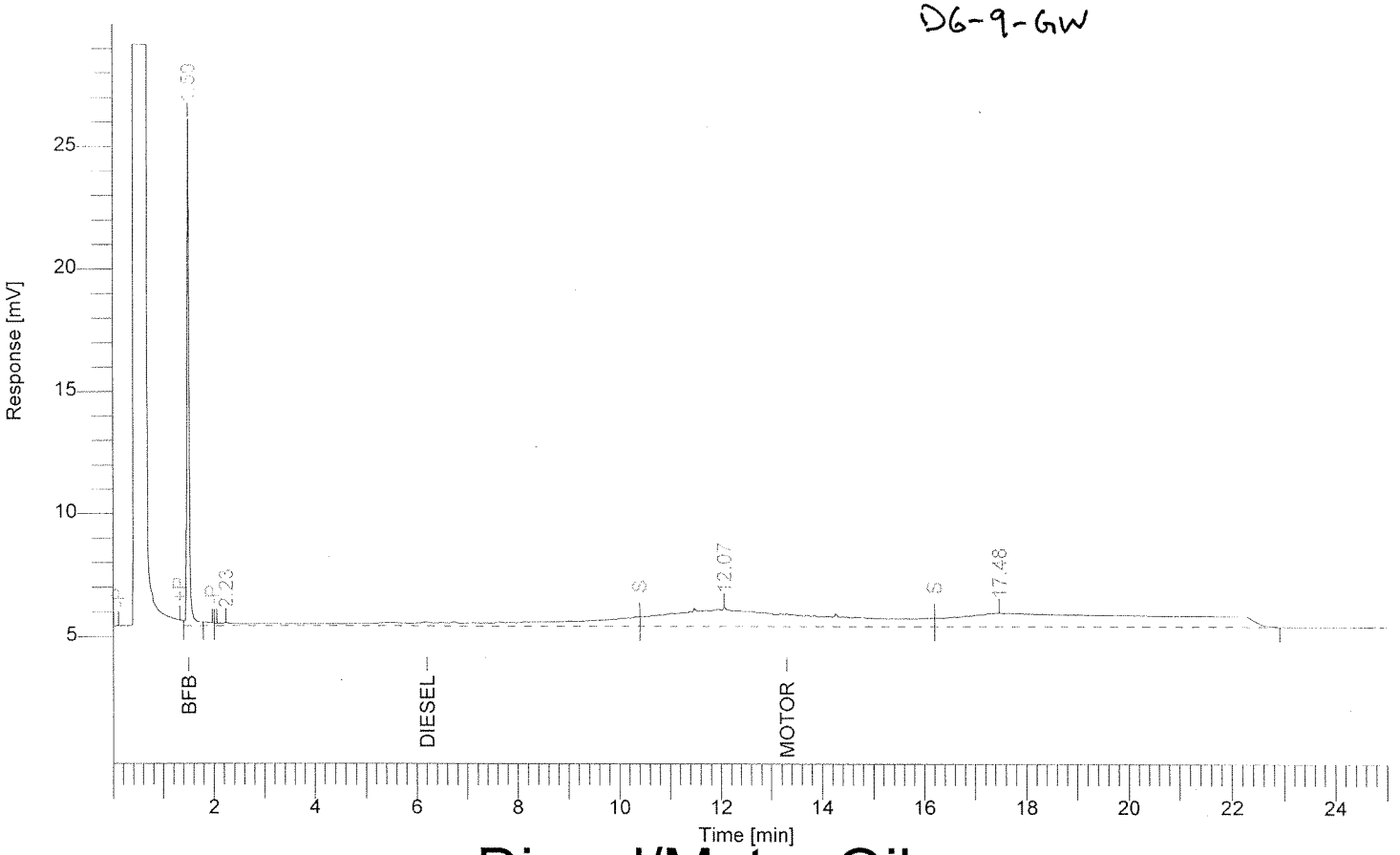
| Peak # | Time [min] | Component Name | Raw Amount | Area [uV*sec] | Height [uV] |
|---|---|---|---|---|---|
| 1 | 1.48 | BFB | 3.059 | 62739 | 19742 |
| 2 | 1.75 | | 0.003 | 3338 | 161 |
| 3 | 2.21 | Diesel | 3.922 | 194470 | 119 |
| 4 | 11.97 | Motor Oil | 15.101 | 516889 | 2336 |
| 5 | 17.30 | | 0.243 | 242672 | 926 |
| | | | 22.328 | 1020108 | 23283 |

Report stored in ASCII file: C:\Archive_PenExe\Stats_082203\Data\atdat631.TXT

| | | | |
|---|---|---|---|
| Software Version | : 6.1.2.0.1:D19 | Date | : 9/5/03 1:55:59 PM |
| Sample Name | : A307607-10 | Data Acquisition Time | : 7/30/03 6:55:23 PM |
| Instrument Name | : DsMo | Channel | : A |
| Rack/Vial | : 0/0 | Operator | : marvin |
| Sample Amount | : 1.000000 | Dilution Factor | : 1.000000 |
| Cycle | : 10 | | |

Result File : C:\Archive_PenExe\Stats_082203\Data\atdat632.rst
Sequence File : C:\PenExe\TcWS\Stats\Sequences\Seq_DsMo_073003.seq

D6-9-GW




# Diesel/Motor Oil

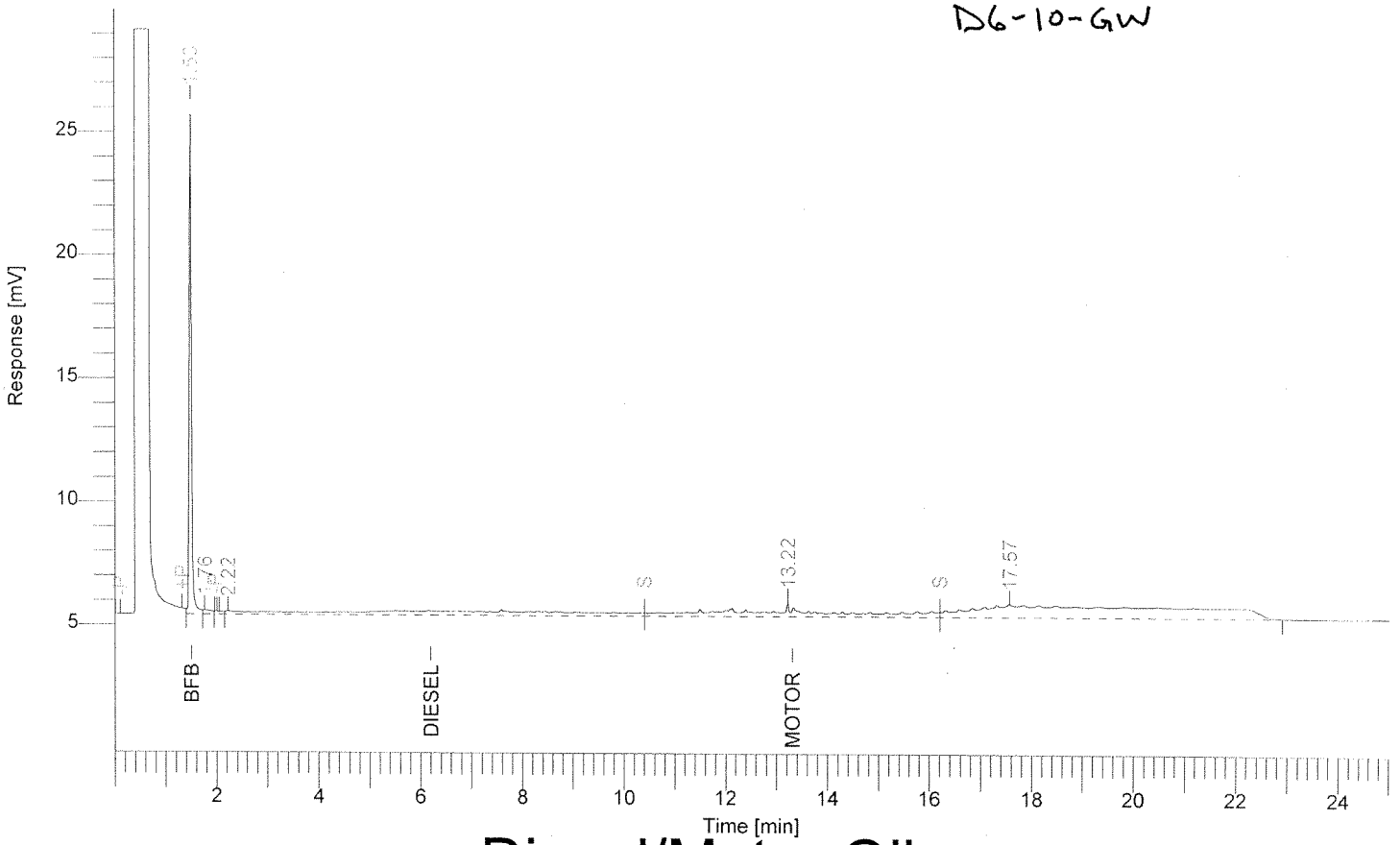
| Peak # | Time [min] | Component Name | Raw Amount | Area [uV*sec] | Height [uV] |
|---|---|---|---|---|---|
| 1 | 1.50 | BFB | 2.832 | 58375 | 17413 |
| 2 | 2.23 | Diesel | 1.117 | 71929 | 127 |
| 3 | 12.07 | Motor Oil | 4.647 | 161716 | 767 |
| 4 | 17.48 | | 0.173 | 172969 | 552 |
| | | | 8.770 | 464989 | 18859 |

Report stored in ASCII file: C:\Archive_PenExe\Stats_082203\Data\atdat632.TX0

| | | | |
|---|---|---|---|
| Software Version | : 6.1.2.0.1:D19 | Date | : 9/5/03 1:56:06 PM |
| Sample Name | : A307607-11 | Data Acquisition Time | : 7/30/03 7:35:53 PM |
| Instrument Name | : DsMo | Channel | : A |
| Rack/Vial | : 0/0 | Operator | : marvin |
| Sample Amount | : 1.000000 | Dilution Factor | : 1.000000 |
| Cycle | : 11 | | |

Result File : C:\Archive_PenExe\Stats_082203\Data\atdat633.rst
Sequence File : C:\PenExe\TcWS\Stats\Sequences\Seq_DsMo_073003.seq

D6-10-GW




# Diesel/Motor Oil

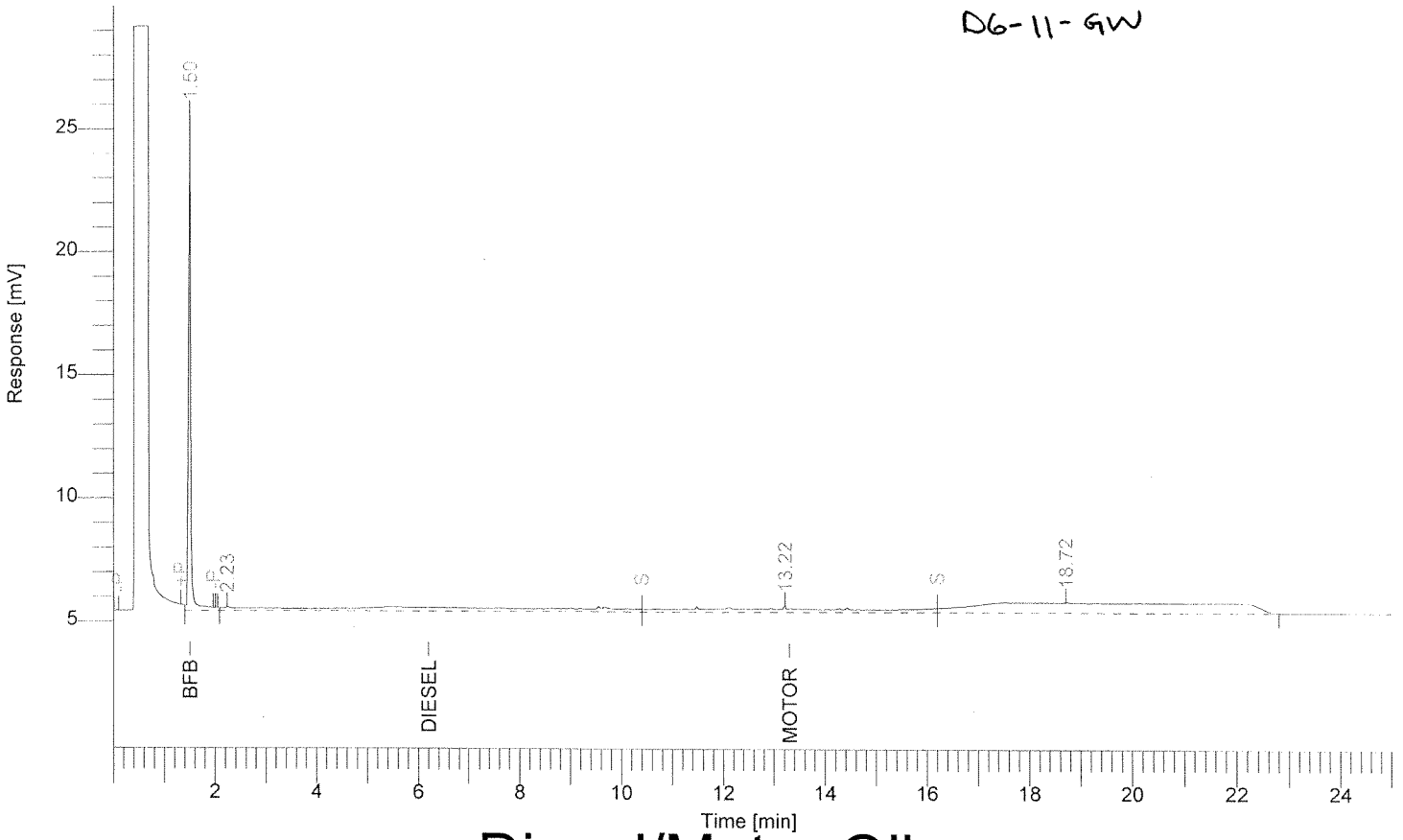
| Peak # | Time [min] | Component Name | Raw Amount | Area [uV*sec] | Height [uV] |
|---|---|---|---|---|---|
| 1 | 1.50 | BFB | 2.953 | 60691 | 17562 |
| 2 | 1.76 | | 0.002 | 1910 | 166 |
| 3 | 2.22 | Diesel | 0.900 | 62436 | 131 |
| 4 | 13.22 | Motor Oil | 1.567 | 57002 | 566 |
| 5 | 17.57 | | 0.154 | 154029 | 539 |
| | | | 5.576 | 336068 | 18964 |

Report stored in ASCII file: C:\Archive_PenExe\Stats_082203\Data\atdat633.TX0

| | | | |
|---|---|---|---|
| Software Version | : 6.1.2.0.1:D19 | Date | : 9/5/03 1:56:15 PM |
| Sample Name | : A307607-12 | Data Acquisition Time | : 7/30/03 8:16:31 PM |
| Instrument Name | : DsMo | Channel | : A |
| Rack/Vial | : 0/0 | Operator | : marvin |
| Sample Amount | : 1.000000 | Dilution Factor | : 1.000000 |
| Cycle | : 12 | | |

Result File : C:\Archive_PenExe\Stats_082203\Data\atdat634.rst
Sequence File : C:\PenExe\TcWS\Stats\Sequences\Seq_DsMo_073003.seq

D6-11-GW




# Diesel/Motor Oil

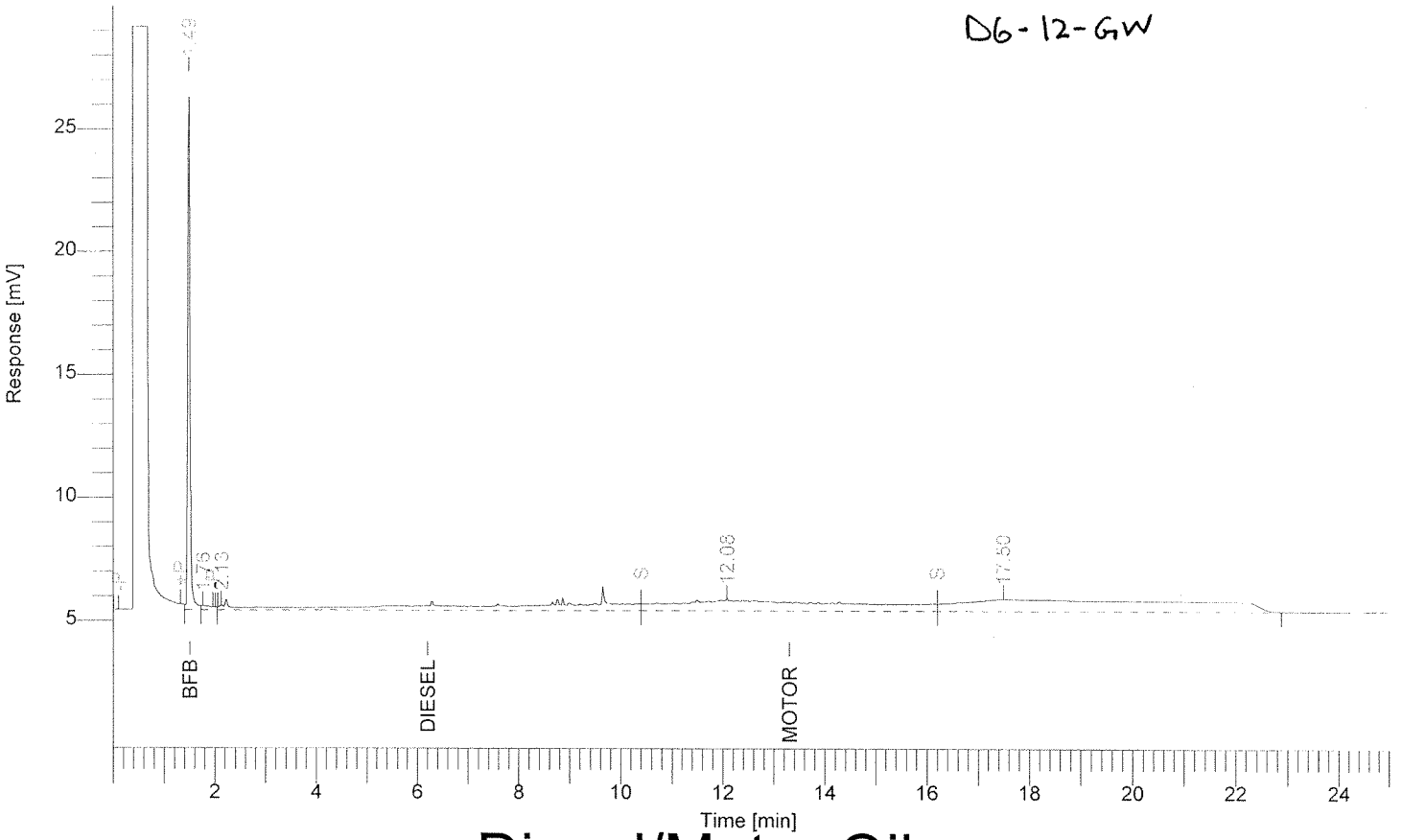
| Peak # | Time [min] | Component Name | Raw Amount | Area [uV*sec] | Height [uV] |
|---|---|---|---|---|---|
| 1 | 1.50 | BFB | 2.893 | 59541 | 16799 |
| 2 | 2.23 | Diesel | 0.743 | 55578 | 137 |
| 3 | 13.22 | Motor Oil | 1.092 | 40839 | 244 |
| 4 | 18.72 | | 0.139 | 139484 | 415 |
| | | | 4.867 | 295442 | 17595 |

Report stored in ASCII file: C:\Archive_PenExe\Stats_082203\Data\atdat634.TX0

| | | | |
|---|---|---|---|
| Software Version | : 6.1.2.0.1:D19 | Date | : 9/5/03 1:56:23 PM |
| Sample Name | : A307607-13 | Data Acquisition Time | : 7/30/03 8:57:01 PM |
| Instrument Name | : DsMo | Channel | : A |
| Rack/Vial | : 0/0 | Operator | : marvin |
| Sample Amount | : 1.000000 | Dilution Factor | : 1.000000 |
| Cycle | : 13 | | |

Result File : C:\Archive_PenExe\Stats_082203\Data\atdat635.rst
Sequence File : C:\PenExe\TcWS\Stats\Sequences\Seq_DsMo_073003.seq

D6-12-GW




# Diesel/Motor Oil

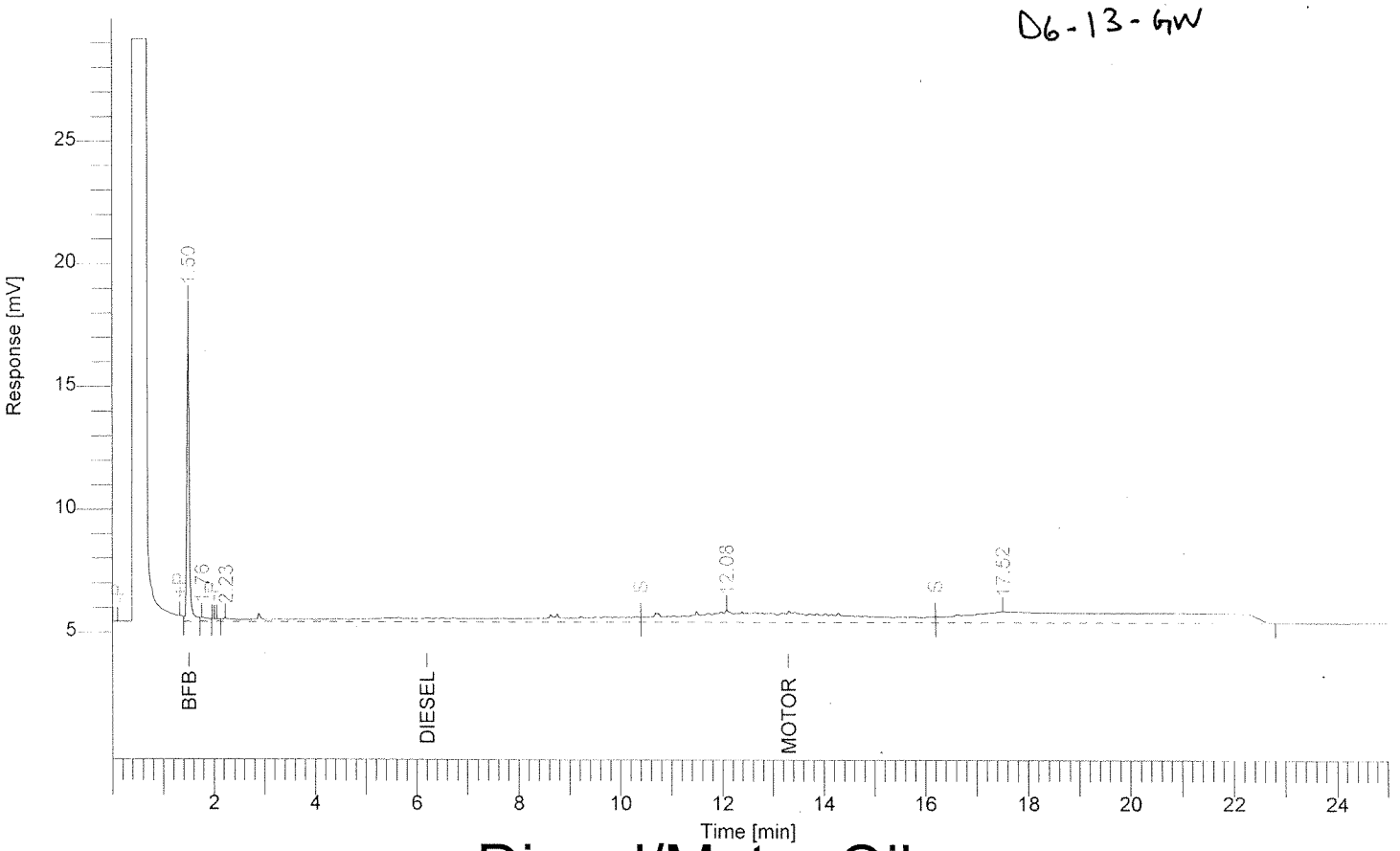
| Peak # | Time [min] | Component Name | Raw Amount | Area [uV*sec] | Height [uV] |
|---|---|---|---|---|---|
| 1 | 1.49 | BFB | 3.116 | 63833 | 18663 |
| 2 | 1.76 | | 0.003 | 2640 | 176 |
| 3 | 2.13 | Diesel | 1.421 | 85201 | 186 |
| 4 | 12.08 | Motor Oil | 3.208 | 112771 | 490 |
| 5 | 17.50 | | 0.156 | 156145 | 499 |
| | | | 7.903 | 420590 | 20014 |

Report stored in ASCII file: C:\Archive_PenExe\Stats_082203\Data\atdat635.TX0

| | | | |
|---|---|---|---|
| Software Version | : 6.1.2.0.1:D19 | Date | : 9/5/03 1:56:33 PM |
| Sample Name | : A307607-14 | Data Acquisition Time | : 7/30/03 9:37:42 PM |
| Instrument Name | : DsMo | Channel | : A |
| Rack/Vial | : 0/0 | Operator | : marvin |
| Sample Amount | : 1.000000 | Dilution Factor | : 1.000000 |
| Cycle | : 14 | | |

Result File : C:\Archive_PenExe\Stats_082203\Data\atdat636.rst
Sequence File : C:\PenExe\TcWS\Stats\Sequences\Seq_DsMo_073003.seq

D6-13-GW




# Diesel/Motor Oil

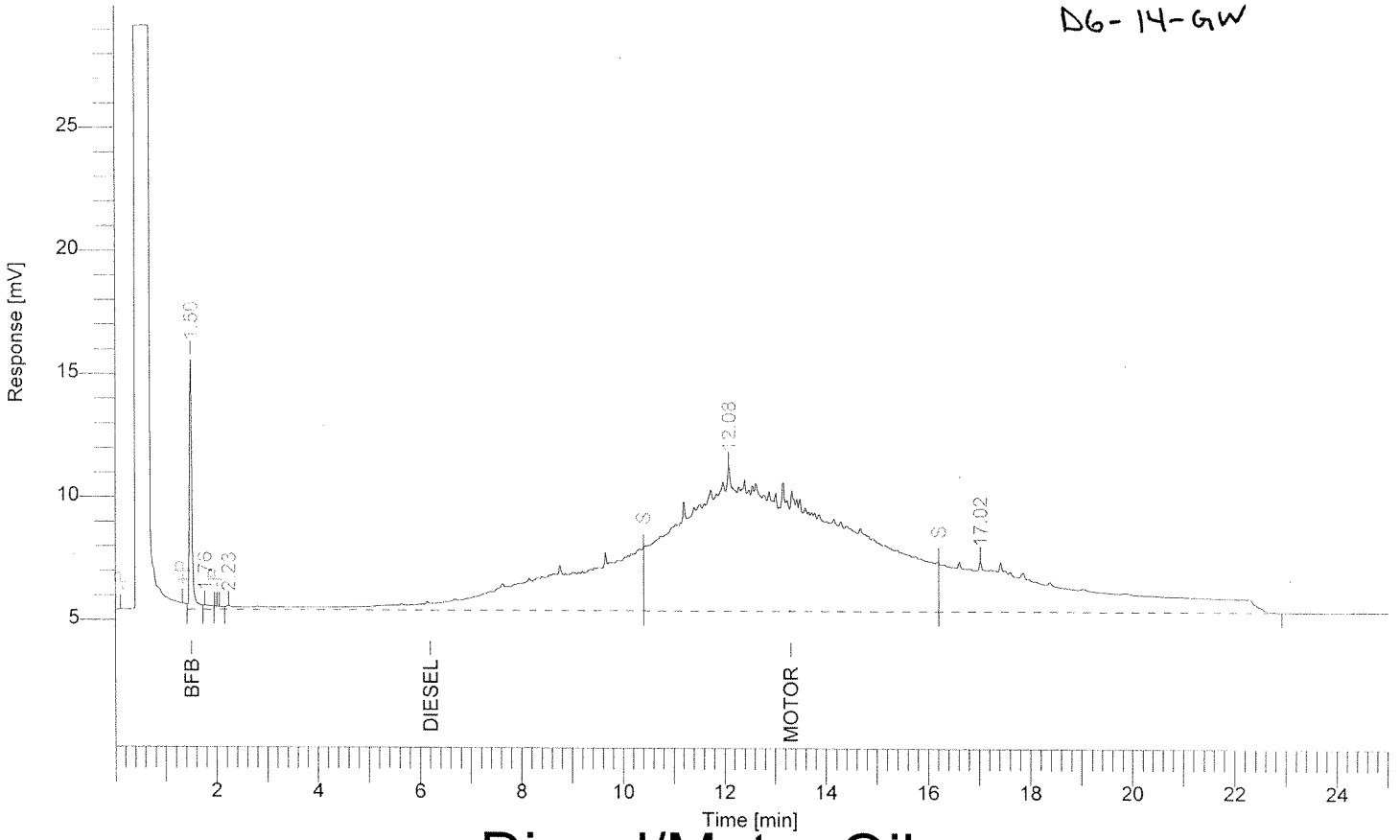
| Peak # | Time [min] | Component Name | Raw Amount | Area [uV*sec] | Height [uV] |
|---|---|---|---|---|---|
| 1 | 1.50 | BFB | 1.824 | 39473 | 11119 |
| 2 | 1.76 | | 0.002 | 1898 | 169 |
| 3 | 2.23 | Diesel | 1.001 | 66843 | 136 |
| 4 | 12.08 | Motor Oil | 2.956 | 104207 | 539 |
| 5 | 17.52 | | 0.143 | 143386 | 468 |
| | | | 5.925 | 355806 | 12431 |

Report stored in ASCII file: C:\Archive_PenExe\Stats_082203\Data\atdat636.TX0

| | | | |
|---|---|---|---|
| Software Version | : 6.1.2.0.1:D19 | Date | : 9/5/03 1:56:41 PM |
| Sample Name | : A307607-15 | Data Acquisition Time | : 7/30/03 10:18:18 PM |
| Instrument Name | : DsMo | Channel | : A |
| Rack/Vial | : 0/0 | Operator | : marvin |
| Sample Amount | : 1.000000 | Dilution Factor | : 1.000000 |
| Cycle | : 15 | | |

Result File : C:\Archive_PenExe\Stats_082203\Data\atdat637.rst
Sequence File : C:\PenExe\TcWS\Stats\Sequences\Seq_DsMo_073003.seq

D6-14-GW




# Diesel/Motor Oil

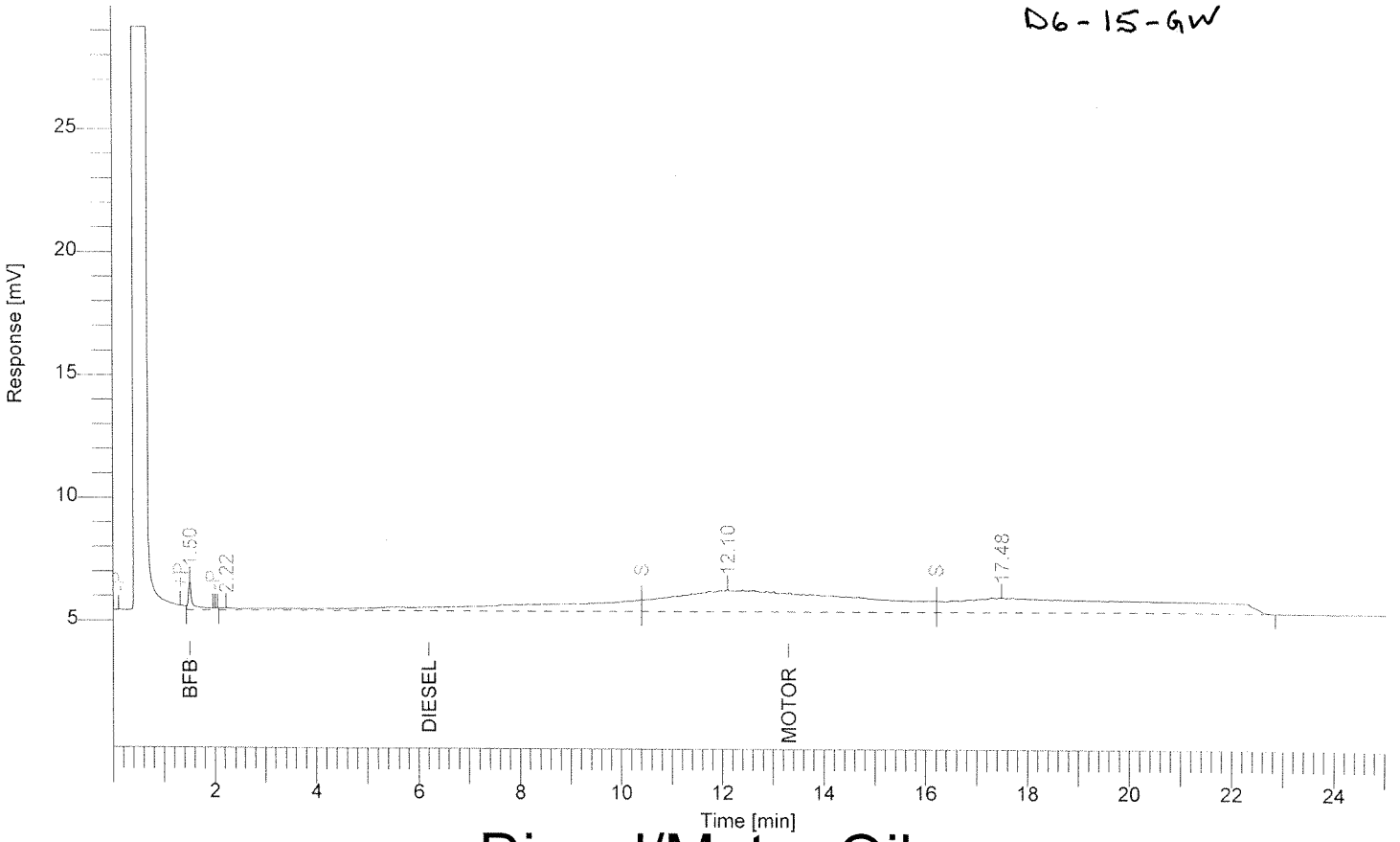
| Peak # | Time [min] | Component Name | Raw Amount | Area [uV*sec] | Height [uV] |
|---|---|---|---|---|---|
| 1 | 1.50 | BFB | 1.549 | 34465 | 9478 |
| 2 | 1.76 | | 0.002 | 1972 | 172 |
| 3 | 2.23 | Diesel | 7.336 | 343535 | 145 |
| 4 | 12.08 | Motor Oil | 37.389 | 1273254 | 5910 |
| 5 | 17.02 | | 0.380 | 379917 | 2072 |
| | | | 46.656 | 2033142 | 17778 |

Report stored in ASCII file: C:\Archive_PenExe\Stats_082203\Data\atdat637.TX0

| | | | |
|---|---|---|---|
| Software Version | : 6.1.2.0.1:D19 | Date | : 9/5/03 1:56:52 PM |
| Sample Name | : A307607-16@10X | Data Acquisition Time | : 7/30/03 10:58:59 PM |
| Instrument Name | : DsMo | Channel | : A |
| Rack/Vial | : 0/0 | Operator | : marvin |
| Sample Amount | : 1.000000 | Dilution Factor | : 1.000000 |
| Cycle | : 16 | | |

Result File : C:\Archive_PenExe\Stats_082203\Data\atdat638.rst
Sequence File : C:\PenExe\TcWS\Stats\Sequences\Seq_DsMo_073003.seq

D6-15-GW




# Diesel/Motor Oil

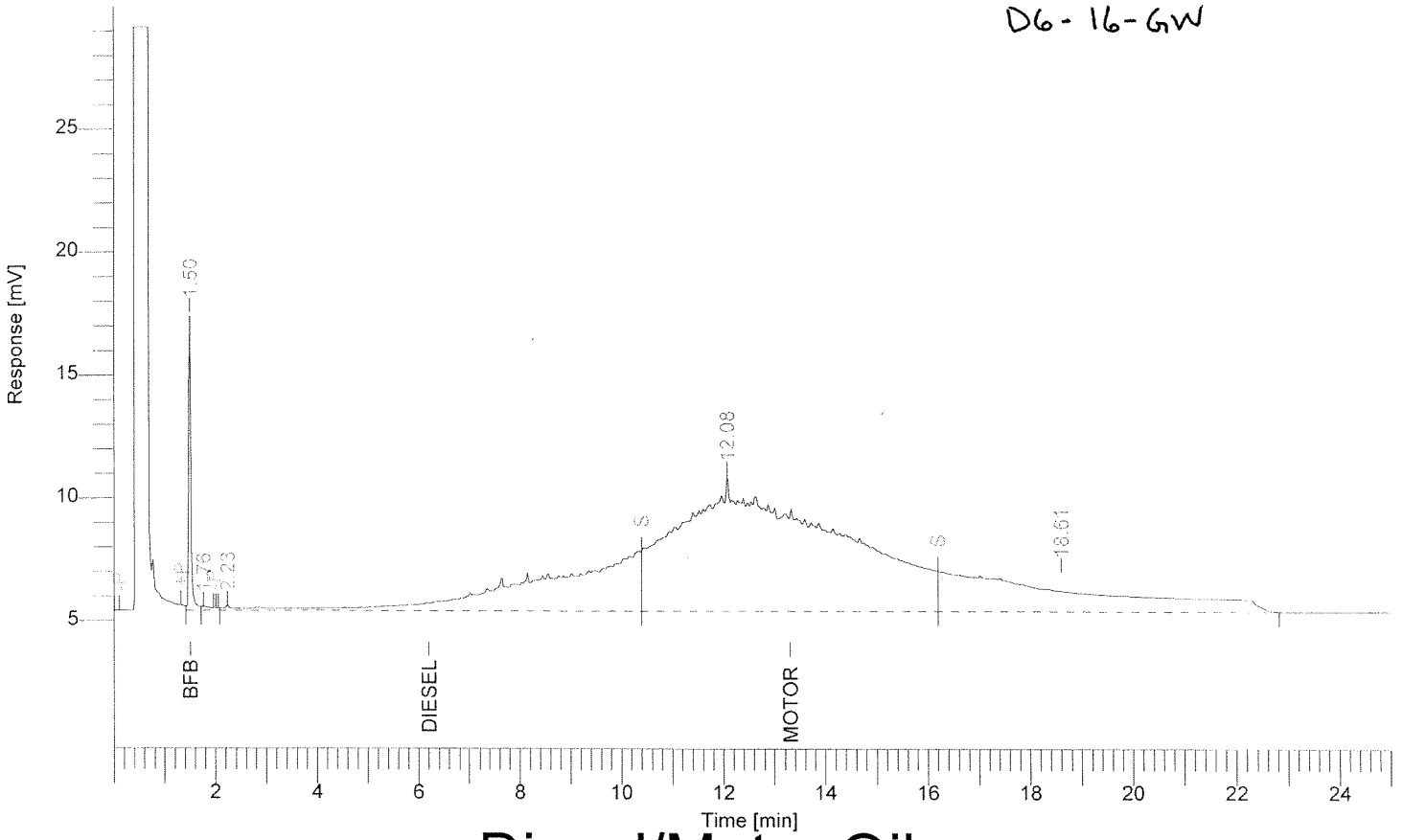
| Peak # | Time [min] | Component Name | Raw Amount | Area [uV*sec] | Height [uV] |
|---|---|---|---|---|---|
| 1 | 1.50 | BFB | 0.012 | 7576 | 1134 |
| 2 | 2.22 | Diesel | 1.519 | 89475 | 105 |
| 3 | 12.10 | Motor Oil | 6.584 | 227554 | 911 |
| 4 | 17.48 | | 0.182 | 181556 | 601 |
| | | | 8.297 | 506161 | 2751 |

Report stored in ASCII file: C:\Archive_PenExe\Stats_082203\Data\atdat638.TX0

| | | | |
|---|---|---|---|
| Software Version | : 6.1.2.0.1:D19 | Date | : 9/5/03 1:57:01 PM |
| Sample Name | : A307607-17 | Data Acquisition Time | : 7/30/03 11:39:36 PM |
| Instrument Name | : DsMo | Channel | : A |
| Rack/Vial | : 0/0 | Operator | : marvin |
| Sample Amount | : 1.000000 | Dilution Factor | : 1.000000 |
| Cycle | : 17 | | |

Result File : C:\Archive_PenExe\Stats_082203\Data\atdat639.rst
Sequence File : C:\PenExe\TcWS\Stats\Sequences\Seq_DsMo_073003.seq

D6-16-GW




# Diesel/Motor Oil

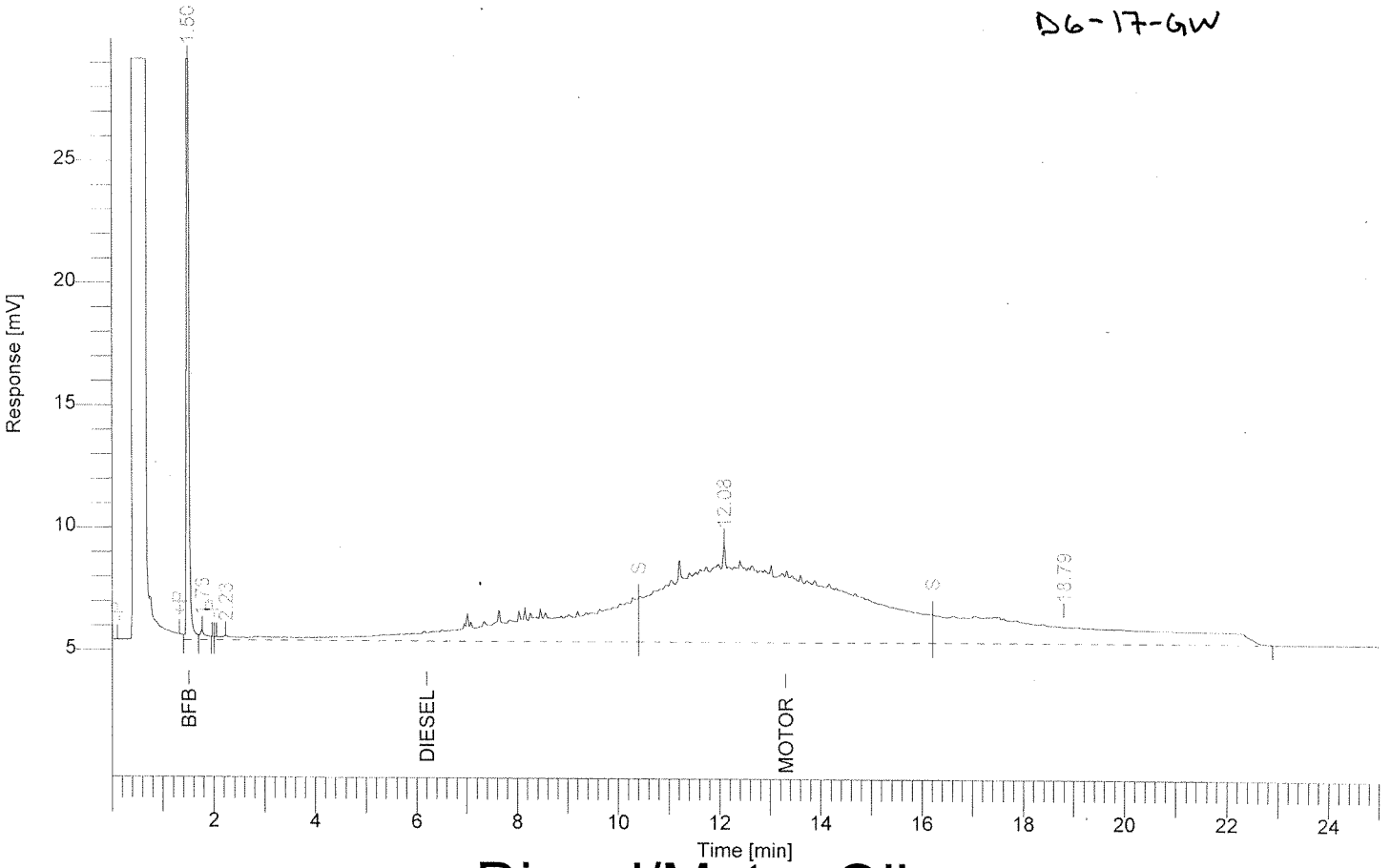
| Peak # | Time [min] | Component Name | Raw Amount | Area [uV*sec] | Height [uV] |
|---|---|---|---|---|---|
| 1 | 1.50 | BFB | 1.650 | 36295 | 10832 |
| 2 | 1.76 | | 0.002 | 2492 | 159 |
| 3 | 2.23 | Diesel | 7.084 | 332547 | 195 |
| 4 | 12.08 | Motor Oil | 33.555 | 1143240 | 5530 |
| 5 | 18.61 | | 0.314 | 314100 | 817 |
| | | | 42.606 | 1828673 | 17534 |

Report stored in ASCII file: C:\Archive_PenExe\Stats_082203\Data\atdat639.TX0

| | | | |
|---|---|---|---|
| Software Version | : 6.1.2.0.1:D19 | Date | : 9/5/03 1:57:32 PM |
| Sample Name | : A307607-18 | Data Acquisition Time | : 7/31/03 2:22:02 AM |
| Instrument Name | : DsMo | Channel | : A |
| Rack/Vial | : 0/0 | Operator | : marvin |
| Sample Amount | : 1.000000 | Dilution Factor | : 1.000000 |
| Cycle | : 21 | | |

Result File : C:\Archive_PenExe\Stats_082203\Data\atdat643.rst
Sequence File : C:\PenExe\TcWS\Stats\Sequences\Seq_DsMo_073003.seq

D6-17-GW




# Diesel/Motor Oil

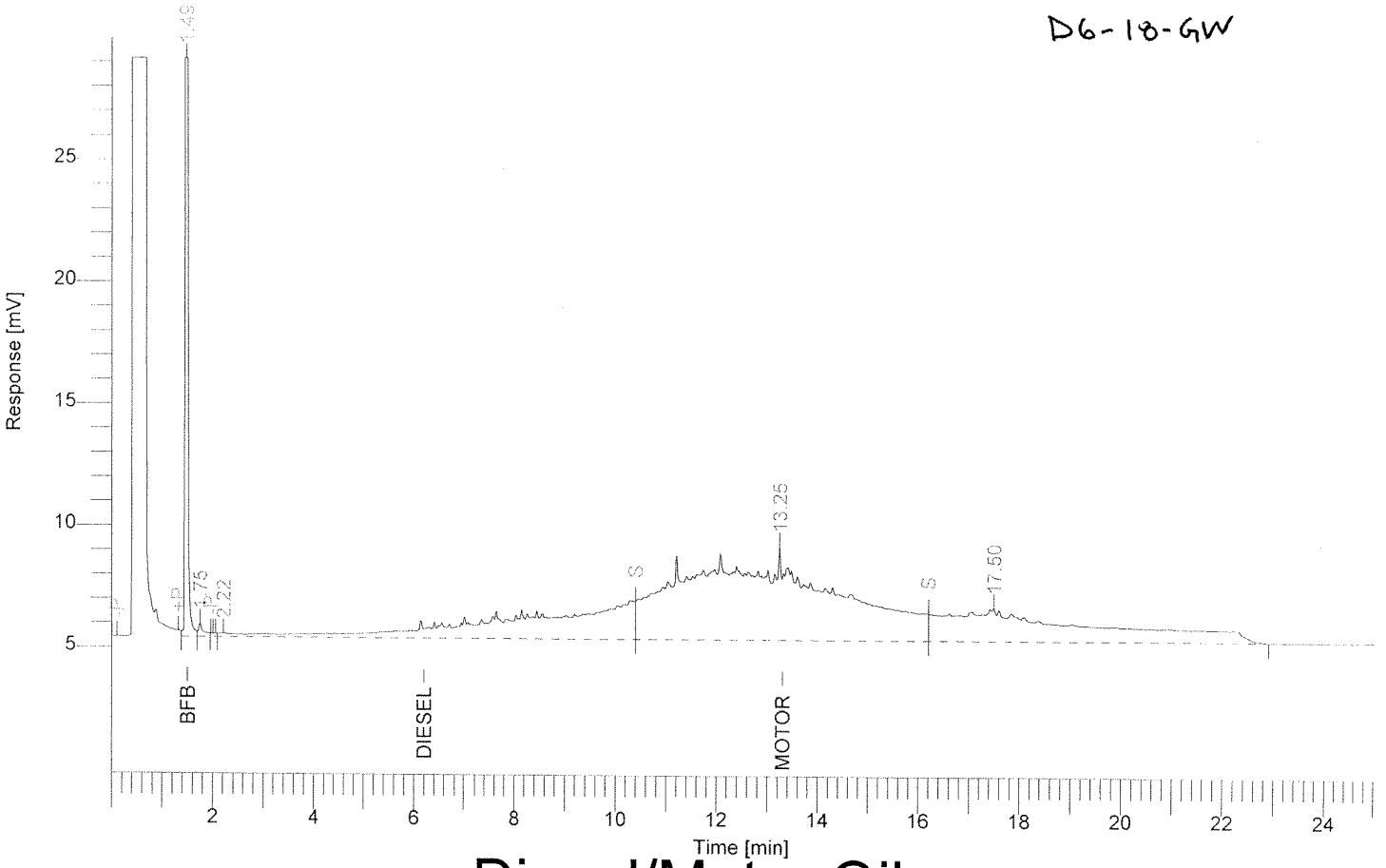
| Peak # | Time [min] | Component Name | Raw Amount | Area [uV*sec] | Height [uV] |
|---|---|---|---|---|---|
| 1 | 1.50 | BFB | 4.599 | 93468 | 28699 |
| 2 | 1.76 | | 0.003 | 2986 | 361 |
| 3 | 2.23 | Diesel | 5.712 | 272642 | 162 |
| 4 | 12.08 | Motor Oil | 23.410 | 799011 | 4062 |
| 5 | 18.79 | | 0.265 | 264986 | 674 |
| | | | 33.989 | 1433092 | 33958 |

Report stored in ASCII file: C:\Archive_PenExe\Stats_082203\Data\atdat643.TX0

| | | | |
|---|---|---|---|
| Software Version | : 6.1.2.0.1:D19 | Date | : 9/5/03 1:57:44 PM |
| Sample Name | : A307607-19 | Data Acquisition Time | : 7/31/03 3:02:41 AM |
| Instrument Name | : DsMo | Channel | : A |
| Rack/Vial | : 0/0 | Operator | : marvin |
| Sample Amount | : 1.000000 | Dilution Factor | : 1.000000 |
| Cycle | : 22 | | |

Result File : C:\Archive_PenExe\Stats_082203\Data\atdat644.rst
Sequence File : C:\PenExe\TcWS\Stats\Sequences\Seq_DsMo_073003.seq

D6-18-GW




# Diesel/Motor Oil

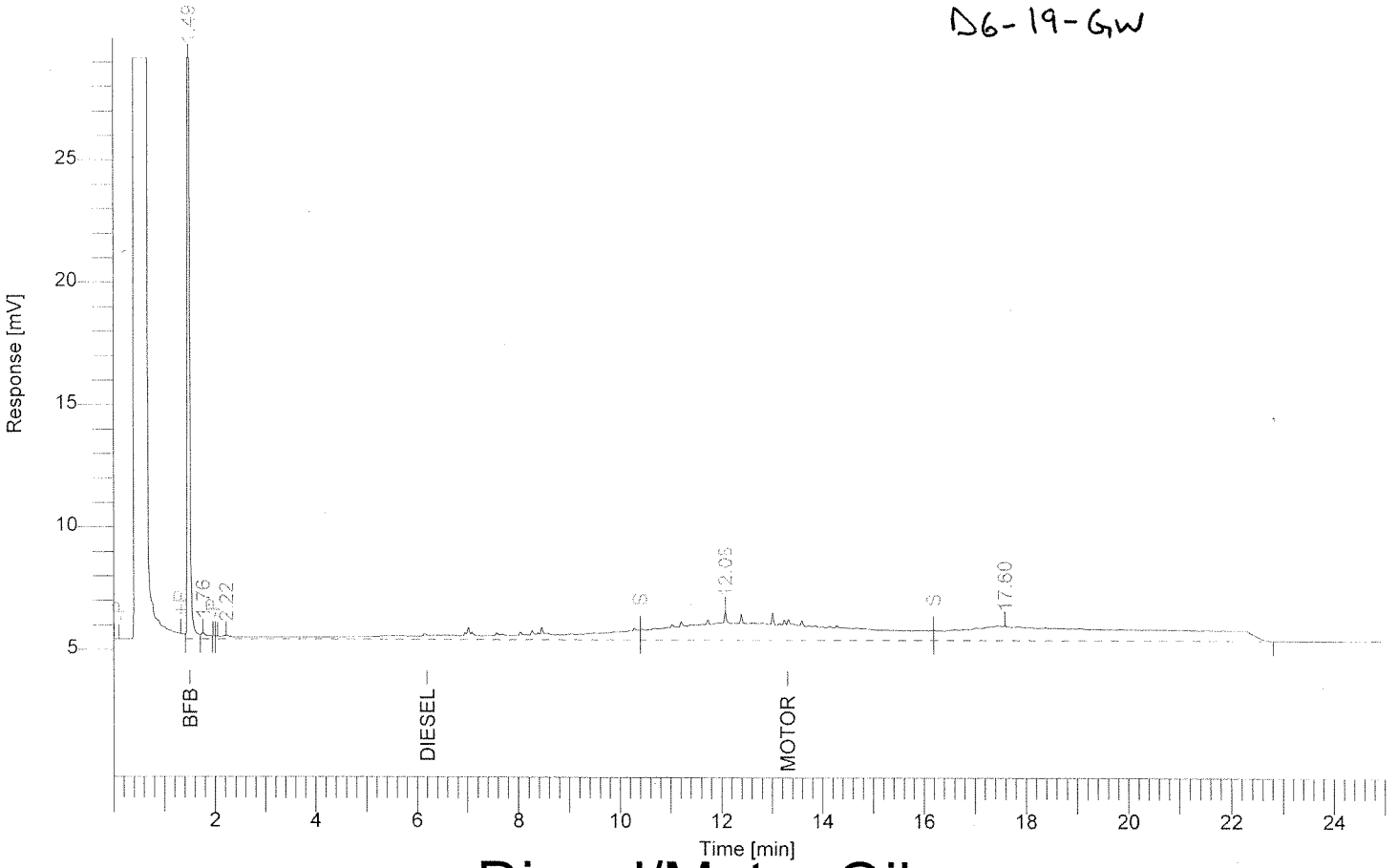
| Peak # | Time [min] | Component Name | Raw Amount | Area [uV*sec] | Height [uV] |
|---|---|---|---|---|---|
| 1 | 1.49 | BFB | 7.244 | 150706 | 46001 |
| 2 | 1.75 | | 0.004 | 3846 | 525 |
| 3 | 2.22 | Diesel | 5.345 | 256606 | 164 |
| 4 | 13.25 | Motor Oil | 21.562 | 736304 | 3843 |
| 5 | 17.50 | | 0.277 | 276949 | 1351 |
| | | | 34.432 | 1424410 | 51884 |

Report stored in ASCII file: C:\Archive_PenExe\Stats_082203\Data\atdat644.TX0

| | | | |
|---|---|---|---|
| Software Version | : 6.1.2.0.1:D19 | Date | : 9/5/03 1:57:57 PM |
| Sample Name | : A307607-20 | Data Acquisition Time | : 7/31/03 3:43:15 AM |
| Instrument Name | : DsMo | Channel | : A |
| Rack/Vial | : 0/0 | Operator | : marvin |
| Sample Amount | : 1.000000 | Dilution Factor | : 1.000000 |
| Cycle | : 23 | | |

Result File : C:\Archive_PenExe\Stats_082203\Data\atdat645.rst
Sequence File : C:\PenExe\TcWS\Stats\Sequences\Seq_DsMo_073003.seq

D6-19-GW




# Diesel/Motor Oil

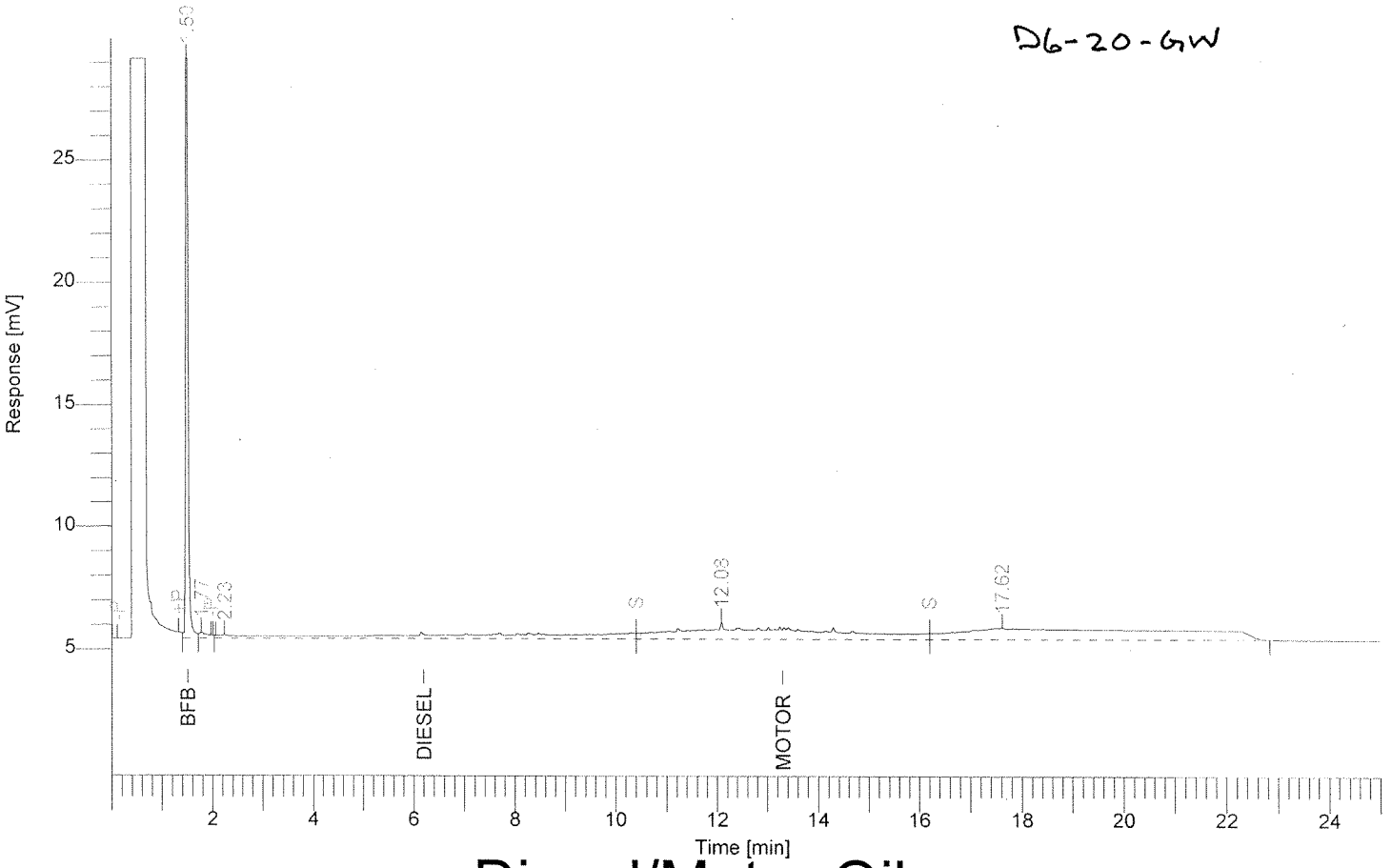
| Peak # | Time [min] | Component Name | Raw Amount | Area [uV*sec] | Height [uV] |
|---|---|---|---|---|---|
| 1 | 1.49 | BFB | 5.617 | 114815 | 34675 |
| 2 | 1.76 | | 0.002 | 2450 | 249 |
| 3 | 2.22 | Diesel | 1.403 | 84439 | 147 |
| 4 | 12.08 | Motor Oil | 5.622 | 194851 | 1191 |
| 5 | 17.60 | | 0.174 | 174379 | 618 |
| | | | 12.819 | 570934 | 36879 |

Report stored in ASCII file: C:\Archive_PenExe\Stats_082203\Data\atdat645.TX0

| | | | |
|---|---|---|---|
| Software Version | : 6.1.2.0.1:D19 | Date | : 9/5/03 1:58:26 PM |
| Sample Name | : A307607-21 | Data Acquisition Time | : 7/31/03 12:52:13 PM |
| Instrument Name | : DsMo | Channel | : A |
| Rack/Vial | : 0/0 | Operator | : marvin |
| Sample Amount | : 1.000000 | Dilution Factor | : 1.000000 |
| Cycle | : 3 | | |

Result File : C:\Archive_PenExe\Stats_082203\Data\atdat649.rst
Sequence File : C:\PenExe\TcWS\Stats\Sequences\Seq_DsMo_073103.seq

D6-20-GW



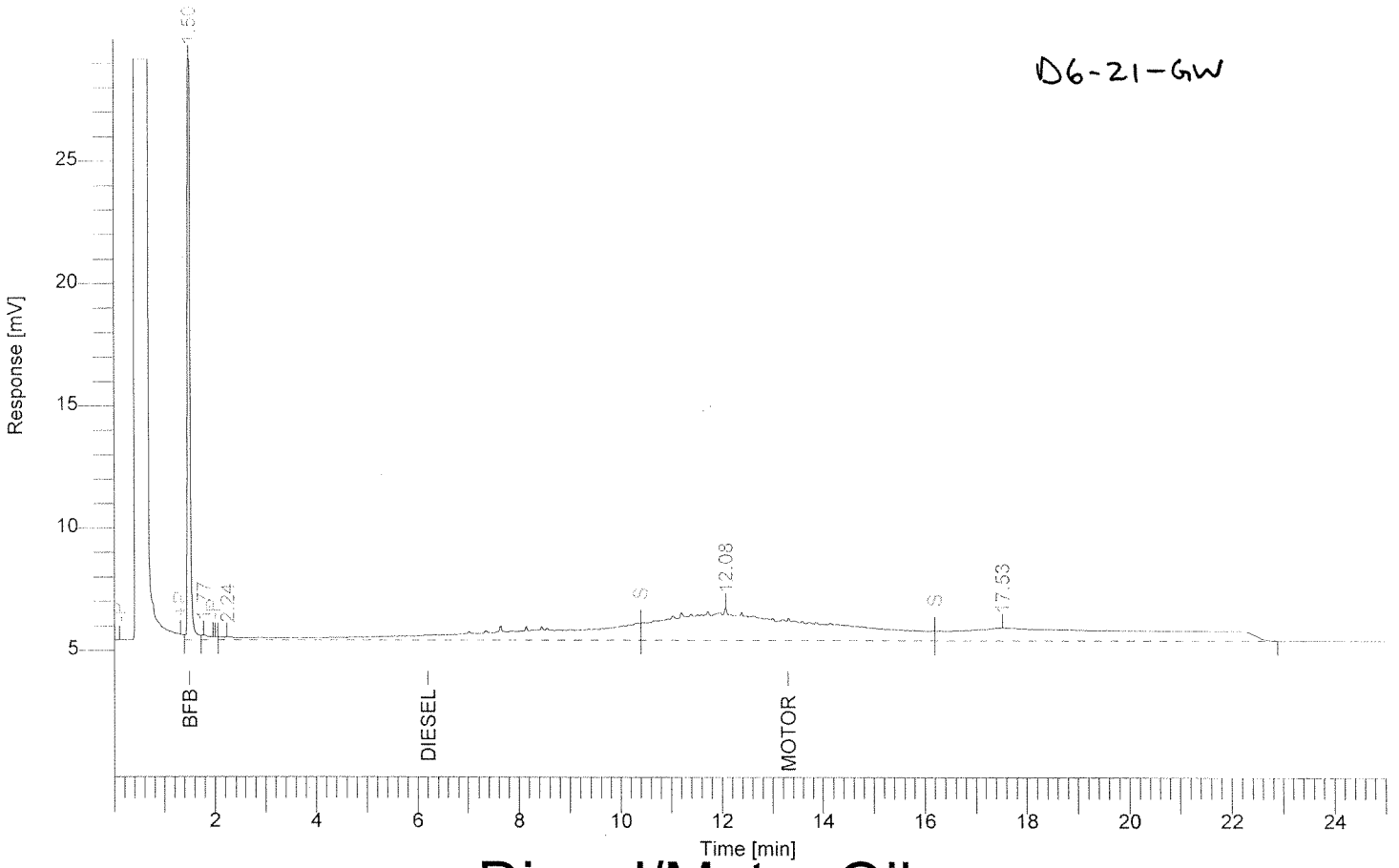

# Diesel/Motor Oil

| Peak # | Time [min] | Component Name | Raw Amount | Area [uV*sec] | Height [uV] |
|---|---|---|---|---|---|
| 1 | 1.50 | BFB | 4.668 | 94882 | 30123 |
| 2 | 1.77 | | 0.003 | 3134 | 254 |
| 3 | 2.23 | Diesel | 1.053 | 69150 | 153 |
| 4 | 12.08 | Motor Oil | 3.238 | 113802 | 705 |
| 5 | 17.62 | | 0.146 | 146057 | 483 |
| | | | 9.108 | 427024 | 31717 |

Report stored in ASCII file: C:\Archive_PenExe\Stats_082203\Data\atdat649.TX0

| | | | |
|---|---|---|---|
| Software Version | : 6.1.2.0.1:D19 | Date | : 9/5/03 1:58:35 PM |
| Sample Name | : A307607-22 | Data Acquisition Time | : 7/31/03 1:32:42 PM |
| Instrument Name | : DsMo | Channel | : A |
| Rack/Vial | : 0/0 | Operator | : marvin |
| Sample Amount | : 1.000000 | Dilution Factor | : 1.000000 |
| Cycle | : 4 | | |

Result File : C:\Archive_PenExe\Stats_082203\Data\atdat650.rst
Sequence File : C:\PenExe\TcWS\Stats\Sequences\Seq_DsMo_073103.seq



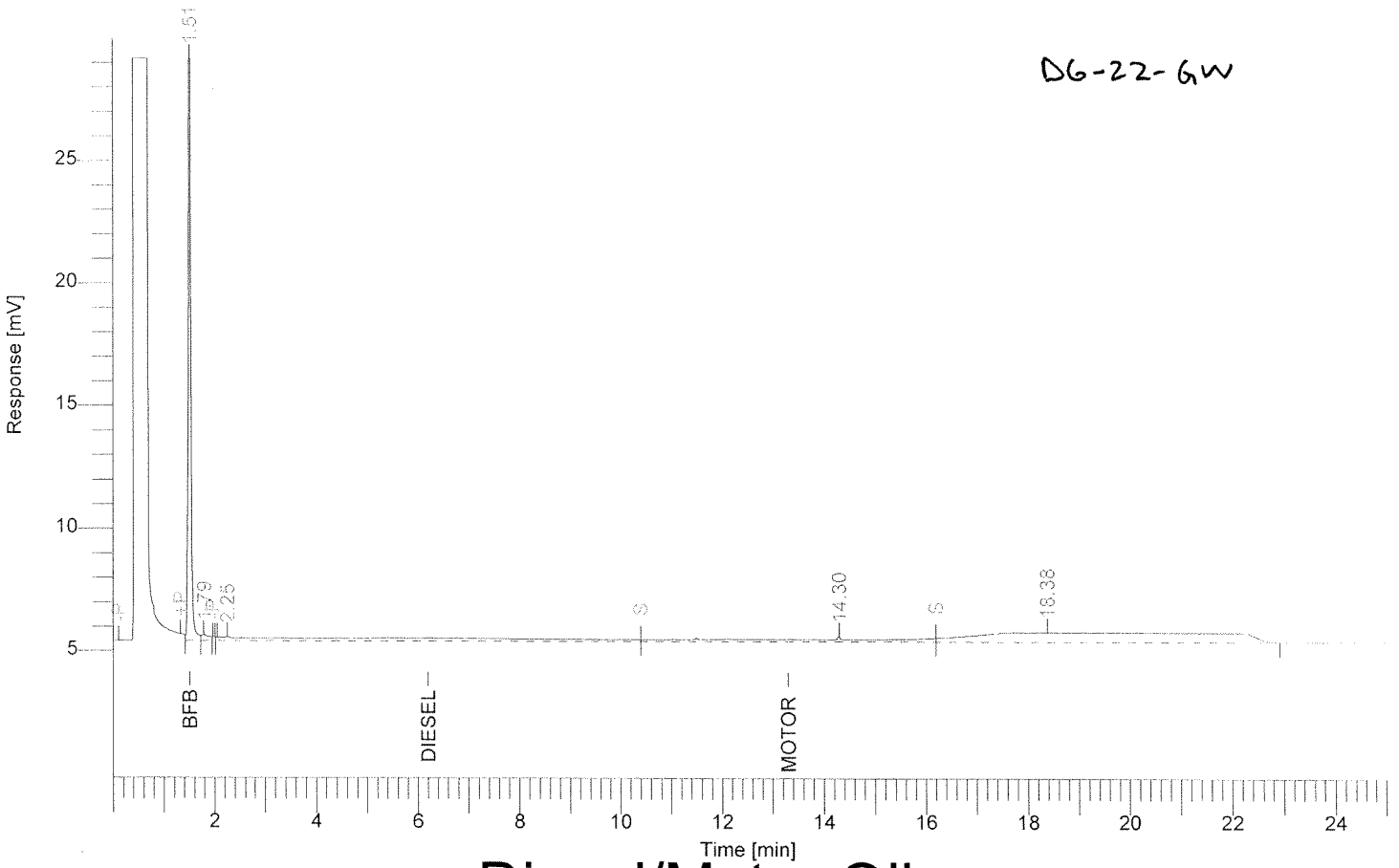

# Diesel/Motor Oil

| Peak # | Time [min] | Component Name | Raw Amount | Area [uV*sec] | Height [uV] |
|---|---|---|---|---|---|
| 1 | 1.50 | BFB | 5.075 | 103355 | 32099 |
| 2 | 1.77 | | 0.003 | 2906 | 207 |
| 3 | 2.24 | Diesel | 2.308 | 123981 | 125 |
| 4 | 12.08 | Motor Oil | 7.589 | 261708 | 1369 |
| 5 | 17.53 | | 0.159 | 159117 | 530 |
| | | | 15.135 | 651067 | 34329 |

Report stored in ASCII file: C:\Archive_PenExe\Stats_082203\Data\atdat650.TX0

| | | | |
|---|---|---|---|
| Software Version | : 6.1.2.0.1:D19 | Date | : 9/5/03 1:58:46 PM |
| Sample Name | : A307607-23 | Data Acquisition Time | : 7/31/03 2:13:11 PM |
| Instrument Name | : DsMo | Channel | : A |
| Rack/Vial | : 0/0 | Operator | : marvin |
| Sample Amount | : 1.000000 | Dilution Factor | : 1.000000 |
| Cycle | : 5 | | |

Result File : C:\Archive_PenExe\Stats_082203\Data\atdat651.rst
Sequence File : C:\PenExe\TcWS\Stats\Sequences\Seq_DsMo_073103.seq



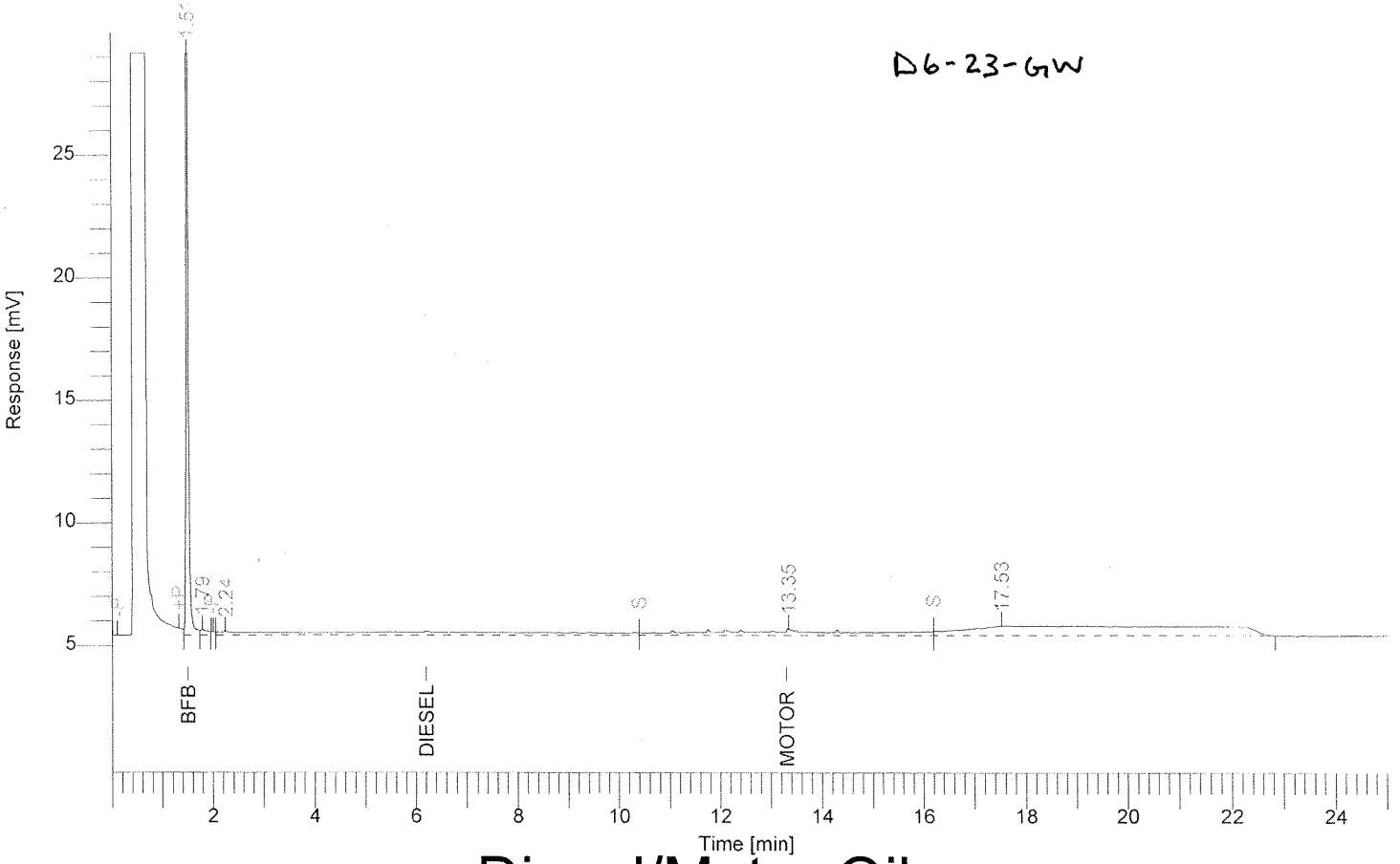

# Diesel/Motor Oil

| Peak # | Time [min] | Component Name | Raw Amount | Area [uV*sec] | Height [uV] |
|---|---|---|---|---|---|
| 1 | 1.51 | BFB | 4.446 | 90331 | 26205 |
| 2 | 1.79 | | 0.003 | 2525 | 245 |
| 3 | 2.25 | Diesel | 0.603 | 49445 | 152 |
| 4 | 14.30 | Motor Oil | 0.780 | 30250 | 210 |
| 5 | 18.38 | | 0.131 | 130554 | 384 |
| | | | 5.962 | 303104 | 27196 |

Report stored in ASCII file: C:\Archive_PenExe\Stats_082203\Data\atdat651.TX0

| | | | |
|---|---|---|---|
| Software Version | : 6.1.2.0.1:D19 | Date | : 9/5/03 1:58:53 PM |
| Sample Name | : A307607-24 | Data Acquisition Time | : 7/31/03 2:53:51 PM |
| Instrument Name | : DsMo | Channel | : A |
| Rack/Vial | : 0/0 | Operator | : marvin |
| Sample Amount | : 1.000000 | Dilution Factor | : 1.000000 |
| Cycle | : 6 | | |

Result File : C:\Archive_PenExe\Stats_082203\Data\atdat652.rst
Sequence File : C:\PenExe\TcWS\Stats\Sequences\Seq_DsMo_073103.seq




# Diesel/Motor Oil

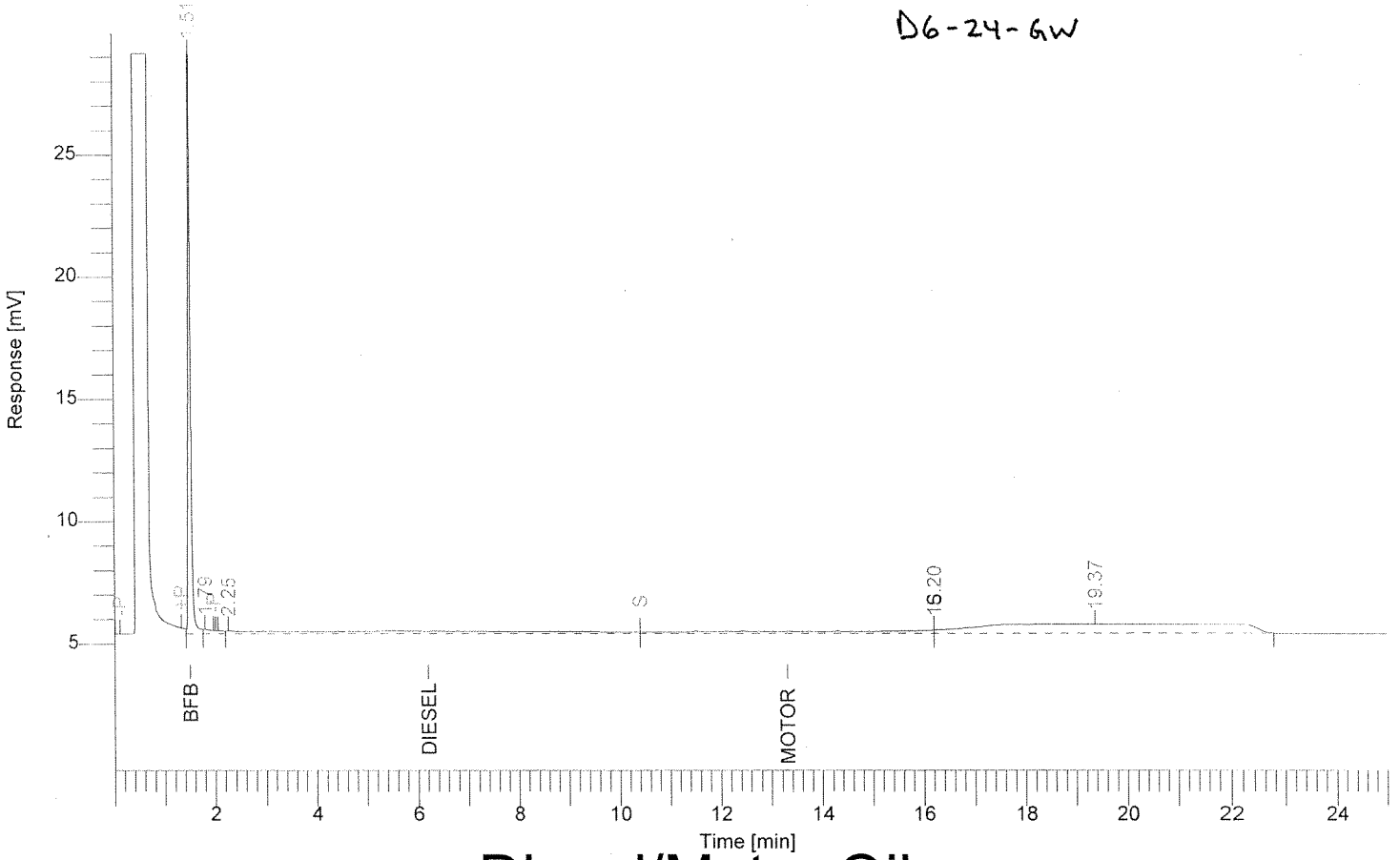
| Peak # | Time [min] | Component Name | Raw Amount | Area [uV*sec] | Height [uV] |
|---|---|---|---|---|---|
| 1 | 1.51 | BFB | 4.072 | 82726 | 23753 |
| 2 | 1.79 | | 0.002 | 2267 | 218 |
| 3 | 2.24 | Diesel | 0.662 | 52048 | 150 |
| 4 | 13.35 | Motor Oil | 1.185 | 44024 | 276 |
| 5 | 17.53 | | 0.129 | 129500 | 386 |
| | | | 6.051 | 310565 | 24783 |

Report stored in ASCII file: C:\Archive_PenExe\Stats_082203\Data\atdat652.TX0

| | | | |
|---|---|---|---|
| Software Version | : 6.1.2.0.1:D19 | Date | : 9/5/03 1:58:59 PM |
| Sample Name | : A307607-25 | Data Acquisition Time | : 7/31/03 3:34:29 PM |
| Instrument Name | : DsMo | Channel | : A |
| Rack/Vial | : 0/0 | Operator | : marvin |
| Sample Amount | : 1.000000 | Dilution Factor | : 1.000000 |
| Cycle | : 7 | | |

Result File : C:\Archive_PenExe\Stats_082203\Data\atdat653.rst
Sequence File : C:\PenExe\TcWS\Stats\Sequences\Seq_DsMo_073103.seq

D6-24-GW




# Diesel/Motor Oil

| Peak # | Time [min] | Component Name | Raw Amount | Area [uV*sec] | Height [uV] |
|---|---|---|---|---|---|
| 1 | 1.51 | BFB | 4.162 | 84548 | 23229 |
| 2 | 1.79 | | 0.003 | 3310 | 175 |
| 3 | 2.25 | Diesel | 0.372 | 39384 | 122 |
| 4 | 16.20 | Motor Oil | 0.655 | 26009 | 130 |
| 5 | 19.37 | | 0.123 | 122621 | 359 |
| | | | 5.316 | 275872 | 24015 |

Report stored in ASCII file: C:\Archive_PenExe\Stats_082203\Data\atdat653.TX0