SCS ENGINEERS

July 28, 2003

File No.: 01203087.00

Ms. Eva Chu Alameda County Health Care Services Agency 1131 Harbor Bay Parkway, Suite 250 Alameda, California 94502-9335

Subject: Second Quarter 2003 Groundwater Monitoring Report

Friesman Ranch Property, Livermore, California

Dear Ms. Chu:

Attached is the Second Quarter 2003 Groundwater Monitoring Report for the Friesman Ranch Property, 1 600 Friesman Road, Livermore, California (Site). The results of this report are consistent with the results of the previous groundwater monitoring events that have been performed at the Site, with chemicals of concern only being detected in monitoring wells KMW-6 and KMW-7. No chemicals of concern were detected in the other monitoring wells sampled (KMW-1 and KMW-8).

SCS Engineers is planning to perform the next groundwater monitoring event by the end of July, 2003. During this upcoming event, we plan to collect samples from monitoring wells KMW-1, KMW-6, KMW-7 and KMW-8, and analyze them for chemicals of concern.

We trust that the attached submittal meets your requirements. Should you require any additional information and/or clarification, please call.

Very truly yours,

James A. Lehrman, RG, CHG Senior Technical Manager

Attachment

cc: Ms. Lorraine Del Prado, Children's Hospital Medical Foundation Ms. Leah Goldberg, Hansen, Bridgett, Marcus, Vlahos and Rudy, LLP

Alameda County

JUL 3 2003

Environmental Health

QUARTERLY GROUNDWATER MONITORING REPORT SECOND QUARTER 2003 FRIESMAN RANCH PROPERTY LIVERMORE, CALIFORNIA

Prepared for:

Children's Hospital and Research Center Foundation 5225 Dover Street Oakland, California 94609-1809

Prepared by:

SCS Engineers 6850 Regional Street, Suite 240 Dublin, California 94568

> July 28, 2003 File No. 01203087.00

This Quarterly Monitoring Report for the Second Quarter of 2003 for the Friesman Ranch Property, Livermore, California, dated July 28, 2003 is based on data provided by personnel working for ATC Associates of Pleasanton, California. This report has been prepared and reviewed by the following:

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SCS ENGINEERS

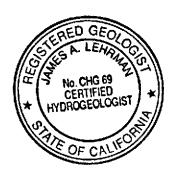


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DISCLAIMER

This report has been prepared for the Children's Hospital and Research Center Foundation with specific application to a Quarterly Monitoring report for property located at 1600 Friesman Road, Livermore, California. The report has been prepared using data provided through fieldwork and sampling conducted by personnel from ATC Associates, Inc. of Pleasanton, California. It is assumed field activities and sampling was conducted in accordance with the care and skill generally exercised by reputable professionals, under similar circumstances, in this or similar localities. No other warranty, either expressed or implied, is made as to the professional advice presented herein.

Changes in site use and conditions may occur due to variations in rainfall, temperature, water usage, or other factors. Additional information which was not available to the consultant at the time of this investigation or changes which may occur on the site or in the surrounding area may result in modification to the site that would impact the summary presented herein. This report is not a legal opinion.

1. INTRODUCTION

This report describes the results of the Second Quarter 2003 Groundwater Monitoring Event at the Friesman Ranch Property, Livermore, California (Site) (Figure 1). Field work was performed by personnel from ATC Associates, Inc. (ATC) of Pleasanton, California. Data was provided to SCS Engineers (SCS), who used it to prepare this report.

1.1 OBJECTIVES AND SCOPE OF WORK

The objectives of the activities performed were to:

- Continue a regularly scheduled groundwater monitoring program to track spatial and temporal variations in groundwater conditions; and
- Assess current Site groundwater conditions.

To meet these objectives, the following scope of work was implemented:

- Implementation of the scheduled groundwater monitoring event by ATC. Groundwater monitoring included water-level measurements, an evaluation of free-product thickness (if any); and collection of water quality samples for chemicals-of-concern (COCs) and biological attenuation (bio-attenuation) parameters including biological and chemical oxygen demand of select samples.
- Evaluation of bio-attenuation parameters by SCS; and
- Preparation of this quarterly groundwater monitoring report by SCS.

2. FIELD ACTIVITES

2.1 INTRODUCTION

This section summarizes the field activities performed for the quarterly groundwater monitoring program. Field activities were performed by ATC on April 15, 2003. Figure 2 shows the locations of the existing groundwater monitoring wells.

2.2 GROUNDWATER MONITORING ACTIVITES

The eight Site wells (KMW-1 through KMW-8) were monitored for depth to groundwater during this event. Wells KMW-1, KMW-6, KMW-7 and KMW-8 were sampled during this event. The goal of these activities was to measure water levels, assess free-product thickness (if any) and collect water quality samples that accurately represent stabilized aquifer conditions.

Prior to sampling, field instrumentation was calibrated and/or checked before opening the monitoring wells. All instruments were successfully calibrated and checked. Logs of field activities are provided in Appendix A.

2.2.1 Water Level Measurement

The wells were opened and ventilated for a minimum of 0.5 hour. Prior to purging, the depth to water was measured in the wells to the nearest 0.01-foot using a clean, calibrated electronic water-level indicator. Water-level data were used to calculate the required purge volumes for sampling. Measurements were recorded on Water-Level Measurement Records (Appendix A).

2.2.2 Groundwater Sample Collection

Upon completion of the water-level measurements, ATC purged the monitoring wells by using a Honda pump and dedicated disposable tubing. During purging, aquifer parameters (hydrogen ion index [pH], temperature, and electrical conductivity) were measured to evaluate whether the water in each well had stabilized prior to sampling (Appendix A). The wells were purged until a minimum of three casing volumes of water were removed, aquifer parameters appeared to stabilize, and water levels were allowed to recover to near static levels before sampling.

Water from each well was collected using disposable polyvinyl chloride (PVC) bailers. Groundwater monitoring well samples were placed in appropriate containers (40-millilter [ml] glass volatile organic analysis [VOA] vials, 1-liter amber glass bottles and/or 500-ml or 250-ml polyethylene bottles), labeled, and the containers were then placed in ZiplocTM plastic bags. The samples were stored in an ice chest packed with loose water-based ice maintained at 4 +/- 2 degrees Celsius (°C) for delivery to the laboratory.

Water from the on-site water supply well was collected from a spigot in front of the dairy building and sampled (TAP sample) during the Second Quarter 2003 event. Prior to sample collection, the tap was run for approximately 2 to 3 minutes. The sample was then collected from the spigot by holding appropriate labeled containers (as listed above) beneath the water flow. Containers were then placed into ZiplocTM plastic bags and stored in an ice chest packed with loose water-based ice maintained at 4 +/- 2 degrees Celsius (°C) for delivery to the laboratory.

2.3 ANALYTICAL LABORATORY PARAMETERS

Groundwater monitoring well samples were analyzed for the following parameters:

- Total petroleum hydrocarbons as gasoline (TPH-g) using Modified United States Environmental Protection Agency (EPA) Method 8015C;
- Total petroleum hydrocarbons as diesel (TPH-d) using Modified EPA Method 8015C;

- Benzene, toluene, ethylbenzene and total xylenes (BTEX) using EPA Method 8021B;
- Methyl tertiary-butyl ether (MTBE) using EPA Method 8021B;
- Alkalinity using Standard Methods for Water and Wastewater (SM) 2320B;
- Ferrous Iron (Fe⁺²) using EPA Method 200.7;
- Sulfate (SO₄⁻²) and Nitrate (NO₃) using EPA Method 300.1;
- Biological Oxygen Demand (BOD) using (SM) 5210B (wells KMW-1 and KMW-6 only); and
- Chemical Oxygen Demand (COD) using EPA Method 410.4 (wells KMW-1 and KMW-6 only).

2.4 QUALITY ASSURANCE/QUALITY CONTROL SAMPLE COLLECTION

Normal quality assurance/quality control (QA/QC) sampling includes the laboratory preparation and analysis of a trip blank that accompanies the ice chest to and from the laboratory, and the collection of a blind duplicate from one sampling location.

For this event, the following QA/QC samples were prepared or collected:

- One trip blank; and
- One blind duplicate collected from well KMW-6.

Because only dedicated and/or new equipment was used to purge the wells and collect the samples, no equipment blank was collected.

2.5 INVESTIGATION-DERIVED WASTE HANDLING PROCEDURES

Investigation-derived wastes (IDW – purge water and decontamination rinsate liquids) were containerized on-site in labeled, United States Department of Transportation (DOT)-approved 55-gallon drums.

Drums were inspected prior to use for physical integrity and condition. Each drum was labeled to identify the waste source location, physical contents, date of collection and generator's name. A total of three drums (containing monitoring well purge water and decontamination rinsate liquids) of IDW were generated during this quarter's monitoring activities. The drums will be disposed of at an appropriate licensed facility.

2.6 SITE RESTORATION

Following completion of monitoring activities, the work area was left in a presentable and workable condition as near as practicable to original conditions.

3. SUMMARY OF RESULTS

3.1 INTRODUCTION

Water-level measurements were recorded on April 15, 2003. Groundwater samples were also collected from four of the eight monitoring wells and the water supply well on the Site and submitted for analysis. The samples were analyzed at McCampbell Analytical, Inc., a laboratory certified by the California Department of Health Services (DHS) Environmental Laboratory Accreditation Program (ELAP) for the specific analyses performed.

Appendix B contains certified analytical laboratory reports and chain-of-custody records. Table 1 contains historical water level and free-product thickness measurements. Groundwater analytical results for the COCs are summarized in Table 2.

3.2 WATER LEVELS

As part of the groundwater monitoring event, water levels were measured in monitoring wells KMW-1 through KMW-8 on April 15, 2003. Depths to water ranged from 10.16 to 12.76 feet below ground surface (bgs) in wells KMW-3 and KMW-5 respectively (Table 1). In April 2003, groundwater flow was to the northwest with a hydraulic gradient of approximately 0.01 feet per foot (ft/ft). These results are generally consistent with the previous groundwater monitoring event in January 2003.

3.3 FREE-PRODUCT THICKNESS

No sheen was observed on any of the samples; however, a hydrocarbon odor was noted in wells KMW-6 and KMW-7. No free product was observed or detected in the wells. Historically, no free product has been detected in any of the wells.

3.4 GROUNDWATER SAMPLES

A total of four monitoring wells (KMW-1 and KMW-6 through KMW-8) were sampled and analyzed for TPH-g, TPH-d, BTEX, MTBE and bio-parameters. The water supply well was sampled and analyzed for TPH-g, BTEX and MTBE. Analytical results are summarized in Tables 2 and 4. Certified analytical laboratory reports are included in Appendix B.

3.4.1 Chemicals of Concern

3.4.1.1 Total Petroleum Hydrocarbons as Gasoline

TPH-g was detected at concentrations of 390 micrograms per liter (μ g/L) in KMW-6 and 880 μ g/L in KMW-7, but was not detected in any of the other wells. The TPH-g concentration in the sample from KMW-6 is at least one order of magnitude lower than previous concentrations detected (Table 2). The concentration detected in the sample from KMW-7 is consistent with historical concentrations detected at the same location (Table 2).

3.4.1.2 Total Petroleum Hydrocarbons as Diesel

TPH-d was detected at concentrations of 110 μ g/L in KMW-6 and 350 μ g/L in KMW-7, but was not detected in any of the other wells. The TPH-d concentration detected in the sample from KMW-6 is one order of magnitude lower than previous concentrations detected (Table 2). The concentration detected in the sample from KMW-7 is lower than historical concentrations detected at the same location (Table 2).

3.4.1.3 Aromatic Hydrocarbons

Aromatic hydrocarbons were detected in monitoring wells KMW-6 and KMW-7, but were not detected in the other wells. Benzene was detected in excess of its drinking water maximum contaminant level (MCL), which is 1 μ g/L, at concentrations of 7.4 μ g/L in KMW-6 and 7.1 μ g/L in KMW-7. Toluene was detected below its MCL (150 μ g/L) at concentrations of 0.58 μ g/L in KMW-6 and 0.69 μ g/L in KMW-7. Ethylbenzene was detected below its MCL (700 μ g/L) at concentrations of 8.5 μ g/L in KMW-6 and 4.4 μ g/L in KMW-7. Total xylenes were detected below the MCL (1,750 μ g/L) at concentrations of 6.1 μ g/L in KMW-6 and 52 μ g/L in KMW-7. These results are consistent with historical concentrations detected, with exception of benzene, toluene, ethylbenzene, and total xylenes detections in the sample from KMW-6; these are at least one order of magnitude lower than previous concentrations detected at this location (Table 2).

3.4.1.4 Methyl Tertiary-Butyl Ether

MTBE was not detected in any of the sampled wells. These results are consistent with historical findings (Table 2).

3.4.2 Bio-Parameters

3.4.2.1 Dissolved Oxygen

Dissolved Oxygen (DO) is the most thermodynamically favored electron acceptor used in the biodegradation of fuel hydrocarbons. During aerobic biodegradation, DO concentrations decrease.

DO was measured in the field at 0.51 milligrams per liter (mg/L) in well KMW-7 (Table 4). This well represents dissolved oxygen conditions inside the hydrocarbon plume. DO measurements in wells KMW-1 and KMW-8 (wells outside the plume) were 0.56 and 0.51, respectively.

3.4.2.2 Oxidation-Reduction Potential

The Oxidation-Reduction Potential (ORP) of groundwater is a measure of electron activity and is an indicator of the relative tendency of a solution to accept or transfer electrons. It influences and is influenced by the nature of biologically mediated degradation of COCs.

ORP ranged from less than -100 millivolts (mV) to 145 mV in wells in which COCs were detected (KMW-6 and KMW-7) (Table 4). ORP ranged from 55 mV to 120 mV in wells in which COCs were not detected (KMW-1 and KMW-8). These values generally indicate oxidizing conditions outside the COC plume and reducing conditions inside the plume.

3.4.2.3 Hydrogen-ion Index (pH) and Temperature

The pH and temperature of the shallow groundwater were at levels conducive for the metabolic activity of bacteria capable of degrading fuel hydrocarbons (Table 4).

3.4.2.4 Ferrous Iron

In some cases, Ferric Iron (Fe⁺³) acts as an electron acceptor during anaerobic biodegradation of petroleum hydrocarbons. During this process, Fe⁺³ is reduced to Ferrous Iron (Fe⁺²). Ferrous Iron can thus be used as an indicator of anaerobic degradation of petroleum compounds.

Ferrous Iron (Fe⁺²) was detected in KMW-1 and KMW-6 at respective concentrations of 0.071 mg/L and 2.4 mg/L. (Table 4). It was not detected in KMW-7 or KMW-8.

3.4.2.5 Alkalinity

In general, areas impacted by petroleum hydrocarbons exhibit a total alkalinity higher than that seen in background areas. This is expected because microbially mediated reactions causing biodegradation of these compounds will cause an increase in total alkalinity of the system.

Alkalinity was reported at levels ranging from 384 mg/L in KMW-1 to 577 mg/L in KMW-7 (Table 4). In the impacted areas (i.e., wells KMW-6 and KMW-7), the average alkalinity was 551.5 mg/L. In areas outside the petroleum hydrocarbon plume, the average alkalinity was 404.5 mg/L.

3.4.2.6 Nitrate

After DO has been depleted in the petroleum hydrocarbon impacted areas, nitrate may be used as an electron acceptor for anaerobic biodegradation via denitrification. Nitrate concentrations are used to estimate the mass of petroleum hydrocarbons that can be degraded by this process.

Nitrate was reported at levels of 1.8 mg/L, 15 mg/L, and 2.4 mg/L in KMW-1, KMW-7, and KMW-8, respectively (Table 4).

3.4.2.7 Sulfate

After DO, nitrate and Fe⁺³ have been depleted in the impacted area, sulfate may be used as an electron acceptor for anaerobic degradation. The process is termed sulfate reduction and results in the production of sulfide.

Sulfate concentrations ranged from 12 mg/L in well KMW-6 to 97 mg/L in well KMW-7 (Table 4). The lowest and greatest sulfate concentrations were both found within the impacted area (i.e., wells KMW-6 and KMW-7); thus, it cannot be determined whether or not sulfate reduction is occurring in the impacted area.

3.4.2.8 Biological Oxygen Demand

BOD is a measure of the demand for oxygen in the subsurface by biological processes.

BOD levels ranged from <2.0 mg/L in well KMW-1 (outside the plume) to 6.4 mg/L in well KMW-6 (inside the plume).

3.4.2.9 Chemical Oxygen Demand

COD is a measure of the demand for oxygen in the subsurface by chemical processes.

COD was not detected above the reporting limit of 20 mg/L in either of the two samples (KMW-1 and KMW-6) analyzed for COD. This indicates that except for biological demands, there are no significant demands for oxygen in this environment.

3.5 QUALITY ASSURANCE/QUALITY CONTROL SAMPLES

The QA/QC samples collected and analyzed during this groundwater monitoring event included one trip blank and one blind duplicate sample. The results for these QA/QC samples are summarized on Table 3 and certified analytical laboratory reports are contained in Appendix B.

3.5.1 Trip Blank

One trip blank was prepared and analyzed for the April 2003 groundwater monitoring event. The trip blank contained no detectable concentrations of TPH-d, TPH-g, MTBE or BTEX.

3.5.2 Blind Duplicate Sample

One blind duplicate sample (KMW-16) was collected from monitoring well KMW-6 on April 15, 2003. This duplicate sample was analyzed for TPH-g, TPH-d, BTEX, and MTBE. The Relative Percent Differences (RPDs) for TPH-d, TPH-g, benzene, toluene, ethylbenzene and total xylenes (the analytes detected) were 9.5, 36.4, 55.2, 12.8, 41.1 and 68.1 percent, respectively (Table 3). The RPDs for TPH-g, benzene, ethylbenzene, and total xylenes for Second Quarter 2003 were generally greater than RPDs associated with duplicate data from past sampling events. However, KMW-6 sample concentrations of all detected constituents in the Second Quarter 2003

are significantly reduced with respect to concentrations detected in previous quarters. The absolute differences between KMW-6 sample results and duplicate sample results in the Second Quarter 2003 are small, and do not appear to be significant.

4. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

The summary and conclusions presented in this section are based on research implemented, information collected, and interpretations developed during this and previous investigations performed at the property. The data evaluated in this report was collected by ATC during April 2003. The summary and conclusions that follow are presented in the categories of field activities and groundwater chemistry.

4.1 FIELD ACTIVITIES

- Field activities performed consisted of the Second Quarter 2003 groundwater monitoring event.
- Water level measurements and the collection of water quality samples were conducted. The samples collected were analyzed for COCs (TPH-g, TPH-d, BTEX, and MTBE), bio-attenuation parameters (DO, ORP, alkalinity, Ferrous Iron, nitrate, sulfate, BOD and COD).
- Prior to the initiation of field activities, and between sampling locations, all equipment was decontaminated.
- Purge water and decontamination rinsate liquids were containerized and stored on-site in DOT-approved 55-gallon drums. They will be disposed of at a licensed facility.
- Following completion of field activities, the work area was left in a presentable and workable condition, as nearly as practicable to original conditions.

4.2 GROUNDWATER CHEMISTRY

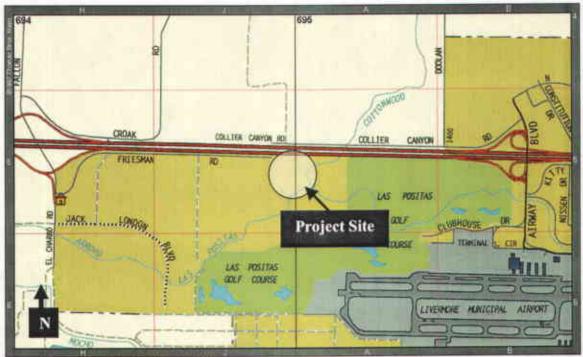
- Only two groundwater monitoring well samples (KMW-6 and KMW-7) contained detectable concentrations of petroleum hydrocarbon compounds. Groundwater samples collected from monitoring wells KMW-1 and KMW-8 and the water supply well (TAP sample) did not contain detectable concentrations of petroleum hydrocarbon compounds.
- The plume is confined to the Site and is stable. Concentrations of COCs continue to decrease with time, indicating that natural processes are working to remediate the plume.
- The subsurface environment appears to be poorly oxygenated. It appears that anaerobic processes (such as iron reduction from Fe⁺³ to Fe⁺²) are operating to decrease the concentrations of COCs in the groundwater.

• The BOD and COD concentrations indicate that the injection of ORC (oxygen releasing compound) into the plume would primarily facilitate Site cleanup by enhancing microbial activity.

4.3 RECOMMENDATIONS

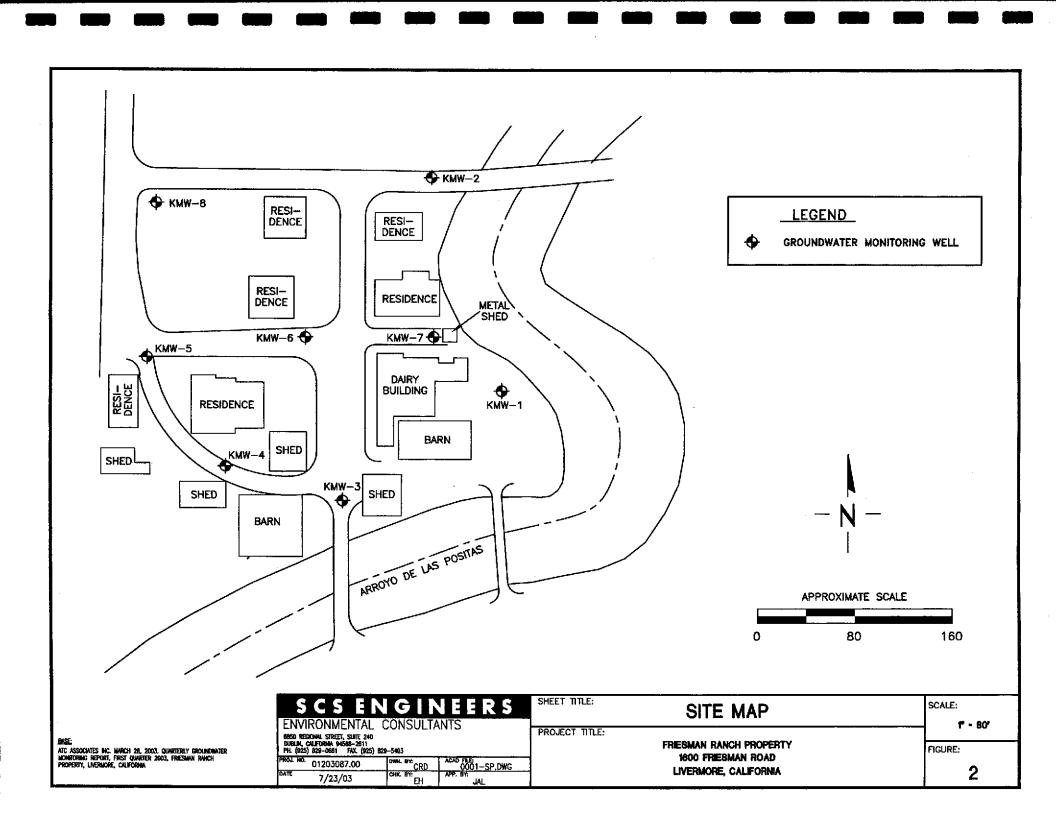
SCS makes the following recommendations concerning further investigations and remedial actions at the property:

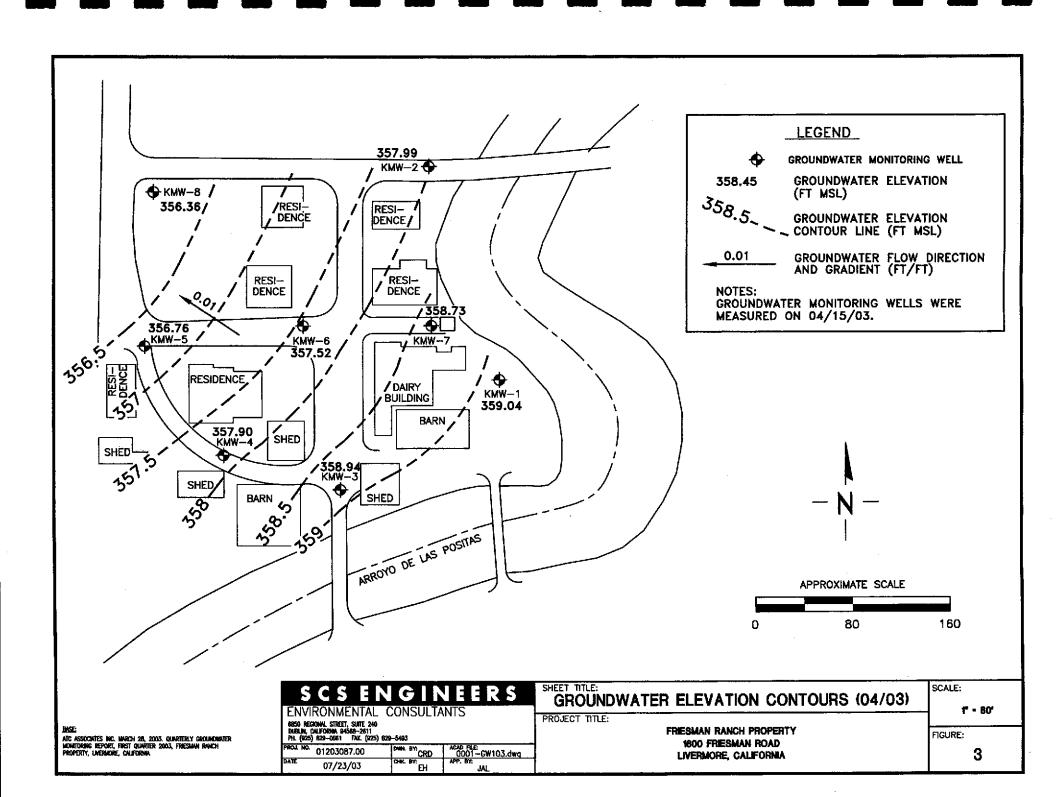
- The regularly scheduled groundwater monitoring program should be continued, with the next event being implemented by the end of July 2003.
- Water levels and free-product thickness should be measured and groundwater quality samples should be collected from monitoring wells KMW-1, KMW-6, KMW-7 and KMW-8.
- Groundwater quality samples collected from the four monitoring wells should be analyzed for TPH-g, TPH-d, BTEX and MTBE, as well as bio-attenuation parameters. The water supply well should be analyzed for TPH-g, BTEX and MTBE.
- Implementation of the Workplan for Soil Vapor Survey which was prepared by ATC Associates (April 22, 2003), and approved by Alameda County Heath in a letter to Ms. Lorraine Del Prado (June 2, 2003).



(Source: Thomas Bros. Maps, Bay Area pg. 694)

Site Vicinity Map Friesman Ranch Property Livermore, California





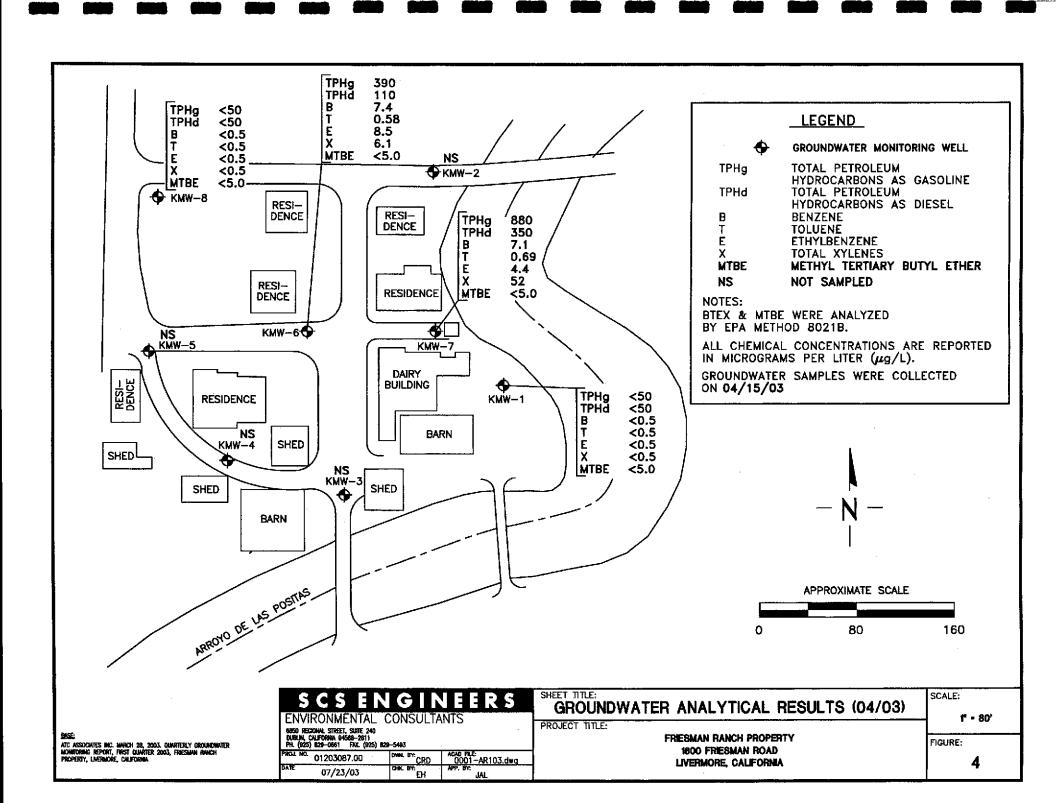


TABLE 1
SUMMARY OF GROUNDWATER ELEVATION DATA
FRIESMAN RANCH PROPERTY
LIVERMORE, ALAMEDA COUNTY, CALIFORNIA

| WELL | SAMPLING | WATER | FREE- | 1,0.C | GROUNDWATER |
|--------|------------|---------------|----------------------|----------------------|--------------------------|
| NUMBER | DATE | LEVEL FROM | PRODUCT THICKNESS | ELEVATION USGS Datum | ELEVATIONS USGS Datum |
| | | T.O.C. | | | |
| | | (feet) | (feet) | (FL above MSL) | (FL above MSL) |
| KMW-1 | 9/8/1997 | 12.82 | 0.00 | 370.12 | 357.30 |
| | 12/28/1998 | 12.72 | 0.00 | | 357.40 |
| | 1/12/1999 | 12.97 | 0.00 | | 357.15 |
| | 3/25/1999 | 11.99 | 0.00 | | 358.13 |
| | 6/21/1999 | NM | NM | | NC |
| | 9/16/1999 | MM | NM | ! | NC |
| | 10/16/2002 | 14.27 | 0.00 | | 355.85 |
| | 1/17/2003 | 11.67 | 0.00 | ! | 358.45 |
| | 4/15/2003 | 11.08 | 0,00 | | 359.04 |
| KMW-2 | 9/8/1997 | 14.28 | 0.00 | 370.72 | 356.44 |
| | 12/28/1998 | 14.08 | 0.00 | | 356.64 |
| | 1/12/1999 | 14.32 | 0.00 | | 356.40 |
| | 3/25/1999 | 13.19 | 0.00 | | 357.53 |
| | 6/21/1999 | ЙM | NM | | NC |
| | 9/16/1999 | NМ | NM | | NC |
| | 10/16/2002 | * | * | | * |
| | 1/17/2003 | 12.77 | 0.00 | | 357.95 |
| | 4/15/2003 | 12.73 | 0.00 | | 357.99 |
| KMW-3 | 9/8/1997 | 12.34 | 0.00 | 369.10 | 356.76 |
| | 12/28/1998 | 12.39 | 0.00 | | 356.71 |
| | 1/12/1999 | 15.13 | 0.00 | | 353.97 |
| | 3/25/1999 | 11.59 | 0.00 | | 357.51 |
| | 6/21/1999 | NM | NM | | ЙC |
| | 9/16/1999 | NM | ŅМ | | NC |
| | 10/16/2002 | 13.69 | 0.00 | | 355.41 |
| | 1/17/2003 | 10.85 | 0.00 | | 345.20 |
| | 4/15/2003 | 10.16 | 0.00 | | 358.94 |
| KMW-4 | 9/8/1997 | 13.76 | 0.00 | 369.80 | 356.04 |
| | 12/28/1998 | 13.76 | 0.00 | | 356.04 |
| | 1/12/1999 | 14.40 | 0.00 | | 355.40 |
| | 3/25/1999 | 12.89 | 0.00 | | 356.91 |
| | 6/21/1999 | NM | NM | | NC |
| | 9/16/1999 | NM | NM | | NC |
| | 10/16/2002 | 15.92 | 0.00 | | 353.88 |
| | 1/17/2003 | 12.17 | 0.00 | : | 357.63 |
| | 4/15/2003 | 11.90 | 0.00 | | 357.90 |

| WELL NUMBER | SAMPLING DATE | WATER LEVEL FROM FOC | FREE- PRODUCT THICKNESS | T.O.C ELEVATION USGS Datum | GROUNDWATER ELEVATIONS USGS Datum |
|----------------|--|---|--------------------------------------|----------------------------------|--|
| | | (feet) | (feet) | (Ft. above MSL) | (Ft. above MSL) |
| KMW-5 | 9/8/1997 | 14.24 | 0.00 | 369.52 | 355.28 |
| | 12/28/1998 | 14.17 | 0.00 | ! | 355.35 |
| | 1/12/1999 | 15.32 | 0.00 | | 354.20 |
| | 3/25/1999 | 13.27 | 0.00 | | 356.25 |
| | 6/21/1999 | NM | NM | | NC |
| | 9/16/1999 | NM | NM | | NC |
| | 10/16/2002 | 16.45 | 0.00 | | 353.07 |
| | 1/17/2003 | 12.60 | 0.00 | | 356.92 |
| | 4/15/2003 | 12.76 | 0.00 | | 356.76 |
| KMW-6 | 9/8/1997 | 14.28 | 0.00 | 370.08 | 355.80 |
| | 12/28/1998 | 14.16 | 0.00 | | 355.92 |
| | 1/12/1999 | 14.47 | 0.00 | | 355,61 |
| | 3/25/1999 | 13.22 | 0.00 | | 356.86 |
| - | 6/21/1999 | 14.56 | 0.00 | | 355.52 |
| | 9/16/1999 | 14.29 | 0.00 | | 355.79 |
| | 10/16/2002 | 16.27 | 0.00 | , | 353.81 |
| | 1/17/2003 | 12.54 | 0.00 | | 357.54 |
| | 4/15/2003 | 12.56 | 0.00 | : | 357.52 |
| KMW-7 | 12/28/1998 | 12.91 | 0.00 | 370.04 | 357.13 |
| | 1/12/1999 | 13.15 | 0.00 | | 356.89 |
| | 3/25/1999 | 12.12 | 0.00 | | 357.92 |
| | 6/21/1999 | 12.86 | 0.00 | | 357.18 |
| | 9/16/1999 | 13.00 | 0.00 | | 357.04 |
| | 10/16/2002 | 14.63 | 0.00 | | 355.41 |
| | 1/17/2003 | 11.77 | 0.00 | | 358.27 |
| | 4/15/2003 | 11.31 | 0.00 | | 358.73 |
| KMW-8 | 12/28/1998 | 13.37 | 0.00 | 368.61 | 355,24 |
| | 1/12/1999 3/25/1999 6/21/1999 9/16/1999 10/16/2002 | 13.70 12.48 13.30 13.57 15.85 | 0.00 0.00 0.00 0.00 0.00 | | 354.91 356.13 355.31 355.04 352.76 |
| | 1/17/2003 4/15/2003 | 11.87 12.25 | 0.00 0.00 | | 356.74 356.36 |

NOTES: G.S. = Ground Surface NC = Not Calculable

NM - Not Measured

T.O.C. = Top of casing. All measurements in feet relative to top of casing.
USGS = United States Geological Survey

All wells have 4" ID casing ≈ 0.65 gallons per casing length (foot).

Wells KMW-7 and KMW-8 installed on December 23, 1998

* Well obstructed, no water level measurement taken

TABLE 2

SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

FRIESMAN RANCH PROPERTY

LIVERMORE, ALAMEDA COUNTY, CALIFORNIA

| WELL | SAMPLE | TPH-D | TPH-G | BENZENE | TOLUENE | ETHYL | TOTAL | MTBE | PAHs | LEAD |
|---------------|-------------------------|------------------------|----------------------|----------------------|-------------------|-------------------------------|------------------------|-----------------|--------------|------------------|
| NUMBER | COLLECTION | ARAGE | | LITELY NEW HIGH SAFE | High thirt choice | BENZENE | BRU PARTER AV | gwegelow i.e. | Mark Mark | (Japaksawa |
| MONIDER | DATE | (µg/L) | (µg/L) | (µg/L) | (µg/L) | and control of the special of | idajatu an aerat estir | (µg/L) | (µg/L) | (ng/L) |
| KMW-1 | 9/8/1997 | <50 | <50 | g 70.000000 | <0.5 | (µg/L) <0.5 | (µg/L) | 5-100 ter. 110) | -10 ×10 | 1487115 Land 199 |
| VIALAA-1 | 12/28/1998 | <50 <50 | <50 | <0.5 <0.5 | <0.5 | <0.5 | <0.5 <0.5 | <5.0 <5.0 | <10 <10 | 7.8 |
| dup. | 12/28/1998 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <5.0 | <10 | 5.9 |
| | 3/25/1999 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <5.0 | | |
| | 6/21/1999 | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| 1 | 9/16/1999 | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 10/16/2002 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <5.0 | ٠ | - |
| | 1/17/2003 4/15/2003 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <5.0 | • | - |
| KMW-2 | 9/8/1997 | <50 <50 | <50 <50 | <0.5 <0.5 | <0.5 <0.5 | <0.5 <0.5 | <0.5 <0.5 | <5.0 <5.0 | <10 | |
| KIVI VY +2 | 12/28/1998 | <50 | <50 <50 | <0.5 | <0.5 | <0.5 | <0.5 | <5.0 <5.0 | <10 | <5.0 |
| | 3/25/1999 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <5.0 | -10 | |
| | 6/21/1999 | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 9/16/1999 | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 10/16/2002 | NS | NS | NS | NS . | NS | N\$ | NS | - | |
| | 1/17/2003 | NS : | NS | NS | NS | NS | NS | NS | NS | NS |
| CC 8 (13) C 2 | 4/15/2003 | NS | NS cco | NS 10.5 | NS | NS | NS | NS | NS | NS |
| KMW-3 | 9/8/1997 12/28/1998 | <50 <50 | <50 <50 | <0.5 <0.5 | <0.5 <0.5 | <0.5 <0.5 | <0.5 <0.5 | <5.0 <5.0 | <10 <10 | <5.0 |
| | 3/25/1999 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <5.0 <5.0 | -10 | ~3.0 |
| | 6/21/1999 | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 9/16/1999 | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| · | 10/16/2002 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <5.0 | - | |
| , | 1/17/2003 | NS | NS | NS | NS | NS | NS | N5 | NS | NS |
| 773 F137 A | 4/15/2003 | NS | NS | N5 | NS | NS | NS | NS | NS | NS |
| KMW-4 | 9/8/1997 12/28/1998 | <50 <50 | <50 <50 | <0.5 | <0.5 | <0.5 | <0.5 | <5.0 | <10 | |
| | 3/25/1999 | <50 <50 | <50 | <0.5 <0.5 | <0.5 <0.5 | <0.5 <0.5 | <0.5 <0,5 | <5.0 <5.0 | <10 | 7.5 |
| | 6/21/1999 | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 9/16/1999 | NS : | NS | NS | NS | NS | NS | NS | NS | NS |
| l i | 10/16/2002 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <5.0 | - | - |
| | 1/17/2003 | NS : | NS | NS | NS | NS | NS | NS | NS | NS |
| | 4/15/2003 | N\$ | NS | NS | NS | NS | NS | NS | NS | NS |
| KMW-5 | 9/8/1997 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <5.0 | <10 | - |
| dup. | 9/8/1997 12/28/1998 | <50 <50 | <50 <50 | <0.5 <0.5 | <0.5 <0.5 | <0.5 <0.5 | <0.5 | <5.0 | <10 | - 0.5 |
| | 3/25/1999 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 <0.5 | <5.0 <5.0 | <10 | 8.5 |
| | 6/21/1999 | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 9/16/1999 | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 10/16/2002 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <5.0 | | - |
| | 1/17/2003 | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 4/15/2003 | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| KMW-6 | 9/8/1997 | 3,200, d | 13,000, a | 250 | 14 | 560 | 490 | <150** | 140* | |
| | 12/28/1998 3/26/1999 | 1,800, d 1,700, d,b | 3,200, a 7,000, a | 86 160 | 3,6 5,1 | 140 270 | 90 200 | <50** <100** | 130* 100* | 15 <5.0 |
| đup. | 3/26/1999 | 1,700, d,b | 6.700, a | 170 | 6.5 | 270 | 200 | <100** | 100* | <3.0 |
| | 6/21/1999 | 1,500, d,b | 3,800, a | 170 | <0.5 | 260 | 160 | <10 | 200* | <5.0 |
| | 9/16/1999 | 1,900, d | 7,100, a | 230 | 9.8 | 300 | 210 | <120 | <10 | <5.0 |
| | 10/16/2002 | 1,600, d | 4,600, a | 100 | 8.4 | 190 | 110 | <50 | - | - |
| dup. | 10/16/2002 | 1,900, d | 5,100, a | 110 | 10 | 210 | 110 | <50 | - | • |
| 4 | 1/17/2003 | 2,100, d | 5,700, a | 87 | 4.3 | 170 | 100 | <25 | - | - |
| dup. | 1/17/2003 4/15/2003 | 1,900, d 110, d | 5,800, a | 89 | 6.4 | 180 | 100 | <25 | - | _ |
| dup. | 4/15/2003 | 100, d | 390, a 270, a | 7.4 4.2 | 0.5X 0.51 | 8.5 5,6 | 6.1 3.0 | <5.0 <5.0 | - |] |
| KMW-7 | 12/28/1998 | 1,000, d,h | 9,100, a,h | 23 | 17 | 190 | 700 | <70** | 110* | 38 |
| | 3/25/1999 | 1,200 d,b | 4,300, a,h | 19 | 16 | \$6 | 270 | <70** | 23 * | 22 |
| | 6/21/1999 | 1,300, d.b | 1,300, a | 6.5 | <0.5 | 21 | 62 | <5.0 | 27 * | <5.0 |
| dup. | 6/21/1999 | 1,200, d | 2,000 a | 6,4 | 6.7 | 24 | 76 | <5.0 | 17 * | - |
| | 9/16/1999 | 1,100, d | 950, a | 3.3 | 2 | 19 | 33 | <10 | <10 | <10 |
| | 10/16/2002 | 480, d | 270, a | 1.3 | <0.5 | 4 | 15 | <5.0 | - | • |
| | 1/17/2003 4/15/2003 | 610, d | 1,100, a | 7.8 | 1.3 | 24 | 84 | <10 | - | - |
| KMW-8 | 12/28/1998 | 350, d <50 | 880, a <50 | 7.1 <0.5 | 0.69 <0.5 | 4.4 <0.5 | 52 | <5.0 | - - (10 | 12 |
| 121A1 A1 - 0 | 3/25/1999 | <50 <50 | <50 <50 | <0.5 <0.5 | <0.5 <0.5 | <0.5 <0.5 | <0.5 <0.5 | <5,0 <5,0 | <10 | 12 |
| | 6/21/1999 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | | _ |
| | 9/16/2002 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | _ | |
| | 10/16/2002 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <5,0 | - | - |
| | 1/17/2003 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <5.0 | | |
| | 4/15/2003 4/15/2003 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <5.0 | - | • |
| TAP Sample | | - | <50 | < 0.5 | <0.5 | <0.5 | < 0.5 | <5.0 | | |

Notes: TPH-D

Total Petroleum Hydrocarbons as Diesel

TPH-G Total Petroleum Hydrocarbons as Gasoline

MTBE Methyl Tertiary-Butyl Ether

PAHs Polyaromatic Hydrocarhons
MCL Cal/EPA Maximum Contaminant Level

µg/L Micrograms per Liter (approx. equal to parts per billion)

<0.5 Not detected at or above the laboratory method reporting limit

TAP Sample was collected from the water supply well on-site.

- Unmodified or weakly modified gasoline is significant Diesel range compounds are significant; no recognizable pattern
- Gasoline range compounds are significant Lighter than water immiscible sheen is present
- h ** Reporting limit raised due to high presence of TPH-g
- Not enalyzed
- NS Not Sampled
- Napthalene only, all other chemicals were <10 micrograms per liter

TABLE 3 QUALITY ASSURANCE/QUALITY CONTROL SAMPLE ANALYTICAL RESULTS FRIESMAN RANCH PROPERTY LIVERMORE, ALAMEDA COUNTY, CALIFORNIA April 2003

| QA/QC | SAMPLE | SAMPLE | ТРН-D | TPH-G | BENZENE | TOLUENE | ETHYL | TOTAL | MTBE | PAHs | LEAD |
|------------------|------------|--------------------|--------|--------|---------|---------|-------------------|-------------------|--------|--------|--------|
| SAMPLE TYPE | ID | COLLECTION DATE | (µg/L) | (µg/L) | (µg/L) | (µg/L) | BENZENE (µg/L) | XVLENES (µg/L) | (µg/L) | (µg/L) | (µg/L) |
| Primary Sample | KMW-6 | 4/15/2003 | 110 | 390 | 7.4 | 0.58 | 8.5 | 6.1 | <5.0 | - | - |
| Duplicate Sample | KMW-16 | 4/15/2003 | 100 | 270 | 4.2 | 0.51 | 5.6 | 3.0 | <5.0 | - | - |
| Trip Blank | Trip Blank | 4/15/2003 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <5.0 | - | • |
| | RPD | | 9.5% | 36.4% | 55.2% | 12.8% | 41.1% | 68.1% | NC | NC | NC |

| Notes: | |
|--------|--|
| TPH-D | Total Petroleum Hydrocarbons as Diesel |
| TPH-G | Total Petroleum Hydrocarbons as Gasoline |
| MTBE | Methyl Tertiary-Butyl Ether |
| RPD | Relative Percent Difference |
| μg/L | Micrograms per Liter (approx. equal to parts per billion) |
| < 0.5 | Not detected at or above the laboratory method reporting limit |
| NC | Not calculable |
| - | Not Analyzed |
| | |

TABLE 4
BIO-ATTENUATION PARAMETER ANALYTICAL RESULTS

| Analyte | KMW-1 | KMW-2 | KMW-3 | KMW-4 | KMW-5 | KMW-6 | KMW-7 | KMW-8 |
|------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| W72 Y J Ball | | | | | | | | |
| Field Measurements | | | 1 | | | | | |
| DO (mg/L) | 0.56 | NM | NM | NM | NM | NM | 0.51 | 0.51 |
| ORP (mV) | 55 | NM | NM | NM | NM | <-100 | 145 | 120 |
| Temperature (°C) | 18.1 | NM | NM | NM | NM | 19.3 | 17.7 | 16.2 |
| pΗ | 6.73 | NM | NM | NM | NM | 6.06 | 6.12 | 6.50 |
| Turbidity (NTU) | 1.70 | NM | NM | NM | NM | 9.4 | 5.1 | 11.8 |
| Laboratory Measurement | | | | | | | | |
| Alkalinity (mg/L) | 384 | NM | NM | NM | NM | 526 | 577 | 425 |
| BOD (mg/L) | <2.0 | NM | NM | NM | NM | 6.4 | NA | NA |
| COD (mg/L) | <20 | NM | NM | NM | NM | <20 | NA | NA |
| Ferrous Iron, FE (II) (mg/L) | 0.071 | NM | NM | NM | NM | 2.4 | <0.05 | <0.05 |
| Nitrate (mg/L) | 1.8 | NM | NM | NM | NM | <1.0 | 15 | 2.4 |
| Sulfate (mg/L) | 78 | NM | NM | NM | NM | 12 | 97 | 81 |

Notes:

DO = Dissolved Oxygen.

ORP = Oxidation-Reduction Potential (measured in millivolts [mV]).

BOD = Biological Oxygen Demand.

COD = Chemical Oxygen Demand.

NA = Not Analysed.

< 5.0 = Analyte not present at or above indicated reporting limit.

FE(II) = Percent Ferrous Iron represents percentage of Fe(II) of Total Fe in system.

NTU = Nephelometric Turbidity Units

NM = Not Measured

mg/L = milligrams per liter

pH = Hydrogen-ion index

APPENDIX A FIELD MONITORING NOTES

RECORD OF WATER LEVEL MEASUREMENTS APRIL 15, 2003

FIELD REPORT/DATA SHEET

Date: 4.15.03

Project Number: <u>75.23909</u>, 0001

Field Technician: PARROYO

| Order | [Manual Parks Parks | Diam | Lock | Exp. | Total Dejith | V/TU IAIIII | DTSV | I Time | Comments |
|-------|---|------|------|------|-----------------|----------------|-------|--------|--|
| · . | KMW-1 | 4 | Good | Good | 23.40 | 11.08 | 11.08 | 1140 | 1888 8 8 8 8 8 8 9 8 Comments in the Principle of the Pri |
| | KMW-Z | Ч | | | 13.30 | 12.73 | 12.73 | NS | |
| | KMW-3 | _4 | | | 23.90 | 10.16 | 10.16 | NS | |
| | KMW-4 | _4_ | | | 23.65 | 11.90 | 11.90 | 2 2 | |
| | KMW-5 | 4 | | | 23.40 | 12.76 | 12.76 | NS | |
| | KMW-6 | 4 | | | 23.40 | 12.56 | 12.56 | 1520 | |
| | KHW-7 | - 니 | | | 23.50 | 11.31 | 11.31 | 1430 | |
| | KMW-8 | 4 | | | 23.65 | 12.25 | 12.25 | 1320 | |
| | | | | | | | | | |
| ES: | | | | | | | | | |

Number of Drums Ousite

| Full | Empty | TOTAL |
|------------------|-------|-------|
| | Ø | |
| Estimated Value: | / | |

FIELD PURGE/SAMPLING WORKSHEETS APRIL 15, 2003

| Project Name: FRIESMAN KANCH | _ Project Number: 73, 23909, 000 / |
|--|--|
| Address: 1600 FRIESMAN RD. LIVERMORE, CA | Date: 4·15·03 Well Lock Number: |
| Well Number: KM W− I | Well Integrity: Good |
| Development/Purge/Sampler(s): P. Accoyo | Ambient Conditions: Sunny |
| | |
| Pre-Purge DO (mg/L)SGo | |
| Screened at WELL VOLUME CALCUL Well Casing Total Well Depth to Linear Fe | et Gallons Per |
| Diameter (in.) Depth (ft.) Goundwater (GW) of GW | Linear Foot 1 Well Volume (gal.) X 0.17 = |
| = | X 0.38 = |
| 23.40 11.08 = 12.3 | 32 X 0.66 = 8.13 X 0.83 = |
| 6 - = | X 1.5 = |
| | INSPECTION (BAILER CHECK) |
| Floating Product (ft.) (in.): Sheen/Iride | escence: None Odor: Nene |
| CPOLINDWATER PLIE | RGING PURGE METHOD |
| <u> </u> | |
| Stainless Steel Bailer; Submersible Pump; Air Diaph | ragm Pump; |
| Stagnant Volume | |
| Stagnant Volume Volumes Purged Conducti | vity Temp. Color/Turbidity |
| Purged (gal.) Time pH (µs/umho | · · |
| (gan) Time pri (porumit | (5.1.6.7) |
| 0 0 1121 6.75 4045 | 19.4 Cloudy |
| 1 8.0 1124 7./3 1271 | 18.1 CLEAR Recovery |
| 2 16.0 1127 7.01 1101 | 17.6 Rate: |
| 3 24:0 1130 6:73 1085 | 18.1 (Fast) |
| | Medium |
| 4 | Slow |
| 5 | |
| 6 | |
| 7 | |
| 8 | |
| 9 | |
| 10 | |
| GROUNDWATER SAMPLING Sampling Equivalent Level Recovery Sample | uipment: Disposable Bailer |
| Depth to GW (ft.) | e Containers No. Preservation Method/pH |
| | L), amber glass 1 None |
| (P) After Purging 1235 40 ml \ | |
| P - 0.8 (P-I) = 11.33 80% Recovery 500 ml | polypropylene 3 None (1 H2SO4) |
| (S) Before Sampling 11.08 Trip Bla | ank / HCL |
| (P-S) / (P-I) X 100 = <u>iOO</u> % Total Recovery | |
| Sample Date/Time: 4.15.03 / 1140 Turbio | dity (NTU): 1-7 |
| Calibrate Date/Time: 4-15-63 | EH (MEV): 55 |
| PURGED WATE | R CONTAINMENT |
| Total drums at site: Water 3 Soil Ø | Vater pump through treatment system |
| - | |
| Remarks: | |
| | |

| Project Name: FRIESMAN RANCH | Project Number: 75, 23909, 000 / |
|--|---|
| Address: 1600 FRIESMAN RD. | Date: <u>4-75-03</u> |
| LIVERMORE, CA | Well Lock Number: |
| Well Number: KMW-6 | Well Integrity: Good |
| Development/Purge/Sampler(s): P. Arroyo | Ambient Conditions: Clouby |
| | I |
| Pre-Purge DO (mg/L) | |
| Screened at WELL VOLUME CALCULA | TION |
| Well Casing Total Well Depth to Linear Feet | Gallons Per |
| Diameter (in.) Depth (ft.) Goundwater (GW) of GW | <u>Linear Foot</u> 1 Well Volume (gal.) X 0.17 = |
| 3 = | × X 0.38 = |
| 23.40 - 12.56 = 10.84 | X 0.66 = 7.15 |
| 4.5 | X 0.83 = 1.5 × 1.5 |
| | X 1.5 = |
| GROUNDWATER SURFACE INS Floating Product (ft.) (in.): Sheen/Iridesc GROUNDWATER PURGI | ence: Nove Odor: YES |
| Stainless Steel Bailer; Submersible Pump; Air Diaphrag | .) |
| Stagnant Volume | |
| Volumes Purged Conductivity | / Temp. Color/Turbidity |
| Purged (gal.) Time pH (µs/umhos) | · |
| targed (gaily time pri (paralilitos) | (Other) |
| 1110.5 | 200 |
| 0 1456 656 1403 | 21.3 CIEAN Recovery |
| 1 7.0 1501 6.21 1371 | 17.23 |
| 2 14.0 1506 6.09 1358 | 19.4 Rate: |
| 3 21.0 /5// 6.06 1354 | 19.3 Fast |
| 4 | Medium |
| | Slow |
| 5 | |
| 6 | |
| 7 | |
| 8 | |
| 9 | |
| 10 | |
| | |
| GROUNDWATER SAMPLING Sampling Equipmediater Level Recovery Sample Co | nent: <u>Disposable Bailer</u> |
| Depth to GW (ft.) | No. Preservation Method/pH |
| (my many | amber glass None |
| (P) After Purging 13:30 40 ml VOA | |
| | ypropylene 3 None (1 H2So4) |
| (S) Before Sampling 12.54 Trip Blank |) |
| (P-S) / (P-I) X 100 = 100 % Total Recovery | |
| To strict the strict that the strict the strict that the strict the strict that the strict tha | |
| Sample Date/Time: 4.15.03 / 1520 Turbidity | (NTU): <u>94</u> |
| Calibrate Date/Time: 4.15.63 | EH (MEV): ∠-100 |
| PURGED WATER O | ONTAINMENT |
| FUNGED WATER C | |
| Total drums at site: Water 3 Soil Water | r pump through treatment system |
| Remarks: Took Duplicate | |
| TOOK LANDICATIO | |

| Project Nar Address: | ne: <u>FRie</u> | SMAN FRIESMA | | | Project Date: | t Numbe | r: <u>75. 23</u> 4-15-03 | 3 <i>909.</i> 00 | 00/ |
|-------------------------------|---------------------------------|---|---------------------------------------|-------------------------------|-----------------------|--|-----------------------------|---------------------------------------|--------------|
| - | IVERMOR | E, CA | | | | ock Num | iber: | | |
| Well Numb | er:K | MW-7 | | | | ntegrity: | <u>Good</u> | | |
| Developme | ent/Purge/Sar | npler(s): | P. Arroys | | Ambie | nt Condi | tions: <i>Ci</i> | bupy_ | |
| Pre-Purg | e DO (mg/L) | .5 | · · · · · · · · · · · · · · · · · · · | | ··· ··· ·· | | | | |
| Screened : Well Ca | sing Total | Well | Depth to | IME CALCULAT | (| Gallons Pe | | Br. II Male | (mal.) |
| Diameter 2 | r (in.) Depth | <u>1 (tt.) Go</u> - | undwater (GW) | of GW = | <u>_</u> | <u>inear Foo</u> r 0.17 | <u>t 1'</u> | Well Volume | (gai.) |
| 3 | | - | | = . | X | 0.38 | = | | |
| 45 | 2 3.st | | 11.31 | = 12.19 | X X | 0.66 0.83 | = 8 | ² , 04 | |
| 6 | | | | = | <u> </u> | 1.5 | 2 | · · · · · · · · · · · · · · · · · · · | |
| Floating Pr | oduct (ft.) (in. | | 10, | SURFACE INS Sheen/Iridesco | ence: _ | <u>Non</u> | e Odo | | <u> </u> |
| Stainles | s Steel Bailer | ; Subme | rsible Pump; | | | 1 | nda Pump | Other | |
| Stagnant Volumes Purged | Volume Purged (gal.) | Time | pН | Conductivity (µs/umhos) | | • | Color/Turbidi (other) | ity | |
| | | 2.1 dan | | | | _ | a | | |
| 0 | 0 | 1310 | W.47 | _1385 | 19. | | CIEAR | | Recovery |
| 1 | 80 | 1415 | <u>6.10</u> | 1324 | <u>.20.1</u> | | | | Rate: |
| 2 | 16.0 | 1420 | 6.11 | 1275 | 18. | <u>3 </u> | | <u>/</u> _ | |
| 3 | 24.0 | 1425 | 6.12 | 125/ | 17. | 2 | | | ast |
| 4 | | | | | | | | | Medium |
| 5 | | | | | | | | | Slow |
| 6 | | | | | | | | | |
| 7 | | | | | | | | | |
| 8 | | | | | | | | | |
| . 9 | | | | | | | | | |
| 10 | | <u> </u> | | | | | | | |
| | IDWATER SA el Recovery De | AMPLING | | ımpling Equipr Sample Co | nent: ontaine | <u>Disp</u> | | <i>Bail</i> 6 ervation Me | 4 |
| (I) Initially | | 11.31 | - | 1 liter (L), | amber (| glass | L No | one | |
| (P) After P | | <u> 1.20 </u> | | 40 ml VOA | | | 3 HO | الـ | |
| P - 0.8 (P- | | 148 80% | 6 Recovery | 500 ml pol | | ene | | ne . | |
| | Sampling | | | Trip Blank | | | _1_ HC | L | |
| (P-S) / (P-I) | X 100 = | 100 % 10 | otal Recover | у | | | | | |
| Sample Da | te/Time: 4. | 15.03 | 1430 | Turbidity | (NTU): | 5.1 | | | |
| Calibrate D | ate/Time: 4 | 15.03 | | | | | EH (M | EV): <u>14</u> | 5 |
| | | | PUR | GED WATER C | ONTA | INMENT | | | |
| Total drums | s at site: Wat | er <u> </u> | Soil | Ø Wate | r pump | through | treatment sy | stem | |
| Remarks: | | | | - <u></u> - | | | | | |
| | | | | | | | | | |

| | ne: FRit | | | | Project Num | | 09.0001 |
|----------------------|--------------------|--------------------------------|---------------------------|----------------------------|---------------------------|-------------------------|--|
| Address: | | FRIESMA | a RD. | | Date: | 4.15.03 | |
| Well Number | VERMON | <u>`∈ , C/A</u> VW - 8 | ·· | | Well Lock N | | ······································ |
| | | | · Arroyo | · | Well Integrit Ambient Cor | | Di / |
| Developme | nivi urge/cai | impier(a). <u> </u> | · Haraka | ·· | Willipierir Col | riditions. <u>Cross</u> | |
| Pre-Purg | e DO (mg/L |)_ ,51 | | **** | | | |
| Screened a | | | | ME CALCULATI | | _ | |
| Weil Cas Diameter | | l Well h (ft.) → Gοι | Depth to indwater (GW) | Linear Feet of GW | Gallons Linear F | | Volume (gal.) |
| 2 | | - | | = | X 0.17 | 7 = | Totalio (gan) |
| (4) | 23.6 | 4 | 2.25 | = = (140 | X 0.38 X 0.66 | | n |
| 4.5 | W 51. W | - 1 | C. C.3 | = 1140 | X 0.83 | | مان |
| 6 | | • . | <u></u> | ± | X 1.5 | = | |
| Cleating Dec | advet (ft.) (i.e. | | | | | AILER CHECK) | N. In o |
| rioating Pro | oduct (ft.) (in | ·): | 0. | Sheen/Iridesce | nce: ///o | oneOdor: | None |
| | | | | ATER PURGIN | - | | |
| Stainless | Steel Bailer | r; Submer | sible Pump; | Air Diaphragr | n Pump;)€ | fonda Pumpi Ot | her |
| Stagnant | Volume | | | | | | |
| Volumes | Purged | | | Conductivity | • | Color/Turbidity | , |
| Purged | (gai.) | Time | рH | (µs/umhos) | (°C) | (other) | |
| 0 - | 0 | 1305 | 6.82 | 1336 | 17.7 | CLEAR | <u></u> |
| 1 | 7.0 | 1309 | 6.65 | 1233 | 16.4 | 1 | Recovery |
| 2 | 14.0 | 1313 | 6.52 | 1232 | 167 | | Rate: |
| 3 | 21.0 | 1318 | 6.50 | 1266 | 16.2 | | - (Fast) |
| | <u> </u> | 1010 | <u></u> | 1.00 | 767-2 | | Medium |
| 4 . | | | | | | | Slow |
| 5 | | | | | | | _ SIOW |
| 6 . | | | | | | | |
| 7 . | | | | | | | |
| 8 . | | | | | | | _ |
| 9 . | | • | | | | | _ |
| 10 | | | | | | | - |
| GROUN Water Level | DWATER SA | AMPLING | Sat | npling Equipm Sample Co | ent: <u>Dî</u> | sposable E | BAILER |
| | | pth to GW (f | t.) | <u>carripic co</u> | TIGHT CT O | No. Preserva | tion Method/pH |
| (I) Initially | | 2.25 | , | 1 liter (L), a | moer glass | 1 None | · · · · · · · · · · · · · · · · · · · |
| (P) After Pu | irging 1 | 2.80 | | 40 ml VOA | J | 3 HCL | |
| P - 0.8 (P-I) |) = | <i>2.30</i> 80% | Recovery | 500 ml poly | propylene | | |
| (S) Before S | Sampling/ | 2.25 | | Trip Blank | | | |
| (P-S) / (P-I) | X 100 = | <u>(○○</u> % To | tal Recovery | | | | |
| Sample Date | e/Time: <u>4</u> . | 15.03 | 1820 | Turbidity (I | NTU): 11.5 | 8_ | |
| Calibrate Da | ate/Time: 4 | 15.03 | | | | EH (MEV) | 120 |
| | | | PURG | SED WATER CO | ONTAINMEN | IT | 7 |
| Total drums | at site: Wat | ter <u>3</u> | Soil | ✓ Water | pump throug | gh treatment syster | m |
| Remarks: | | | • | | | | • |
| | | | | | | | |

APPENDIX B CHAIN OF CUSTODY RECORDS AND CERTIFIED ANALYTICAL LABORATORY REPORTS

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560 Telephone: 925-798-1620 Fax: 925-798-1622 http://www.mccampbell.com E-nail: main@mccampbell.com

| ATC Associates | Client Project ID: #75.23909.0001 | Date Sampled: 04/15/03 | | |
|------------------------|-----------------------------------|--------------------------|--|--|
| 6602 Owens Drive, #100 | | Date Received: 04/15/03 | | |
| Pleasanton, CA 94588 | Client Contact: Jim Lehrman | Date Reported: 04/22/03 | | |
| | Client P.O.: | Date Completed: 04/22/03 | | |

WorkOrder: 0304240

April 22, 2003

Dear Jim:

Enclosed are:

- 1). the results of 7 analyzed samples from your #75.23909.0001 project,
- 2). a QC report for the above samples
- 3). a copy of the chain of custody, and
- 4). a bill for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits. If you have any questions please contact me. McCampbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Angela Rydelius, Lab Manager

Yours truly,

McCampbell Analytical Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560 Telephone: 925-798-1620 Fax: 925-798-1622 http://www.mccampbell.com E-mail: main@mccampbell.com

| ATC Associates | Client Project ID: #75.23909.0001 | Date Sampled: 04/15/03 |
|------------------------|-----------------------------------|-----------------------------------|
| 6602 Owens Drive, #100 | | Date Received: 04/15/03 |
| DI | Client Contact: Jim Lehrman | Date Extracted: 04/16/03-04/18/03 |
| Pleasanton, CA 94588 | Client P.O.: | Date Analyzed: 04/16/03-04/18/03 |

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE*

| Extraction | method: SW5030B | | ,• (00 012) | Analytical methods: SW8021B/8015Cm | | | | Work Order: 0304240 | | |
|--|-----------------|--|-------------|------------------------------------|---------|---------|--------------|---------------------|----|------|
| Lab ID | Client ID | Matrix | TPH(g) | MTBE | Benzene | Toluene | Ethylbenzene | Xylenes | DF | % SS |
| 001A | KMW-1 | w | ND | ND | ND | ND | ND | ND | 1 | 87.3 |
| 002A | KMW-6 | w | 390,a | ND | 7.4 | 0.58 | 8.5 | 6.1 | 1 | # |
| 003A | KMW-16 | w | 270,a | ND | 4.2 | 0.51 | 5.6 | 3.0 | 1 | 110 |
| 004A | KMW-7 | w | 880,a | ND | 7.1 | 0.69 | 4.4 | 52 | 1 | 104 |
| 005A | KMW-8 | w | ND | ND | ND | ND | ND | ND | 1 | 98.8 |
| 006A | Trip Blank | w | ND | ND | ND | ND | ND | ND | 1 | 100 |
| 007A | TAP Sample | w | ND | ND | ND | ND | ND | ND | 1 | 103 |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | - |
| | | The state of the s | · | | | | | | | |
| Reporting Limit for DF =1; ND means not detected at or above the reporting limit | | W | 50 | 5.0 | 0.5 | 0.5 | 0.5 | 0.5 | 1 | μg/L |
| | | S | NA | NA | NA | NA | NA | NA | 1 | mg/K |

*water and vapor samples are reported in µg/L, soil and sludge samples in mg/kg, wipe samples in µg/wipe, and TCLP extracts in µg/L.

cluttered chromatogram; sample peak coelutes with surrogate peak.

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (stoddard solvent / mineral spinit?); f) one to a few isolated non-target peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~2 vol. % sediment; j) reporting limit raised due to high MTBE content; k) TPH pattern that does not appear to be derived from gasoline (aviation gas). m) no recognizable pattern.

DHS Certification No. 1644

Angela Rydelius, Lab Manager

| | McCamp |
|--|--------|
|--|--------|

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| ATC Associates | Client Project ID: #75.23909.0001 | Date Sampled: 04/15/03 |
|------------------------|-----------------------------------|----------------------------------|
| 6602 Owens Drive, #100 | | Date Received: 04/15/03 |
| 71 04500 | Client Contact: Jim Lehrman | Date Extracted: 04/15/03 |
| Pleasanton, CA 94588 | Client P.O.: | Date Analyzed: 04/16/03-04/22/03 |

Diesel Range (C10-C23) Extractable Hydrocarbons as Diesel*

| Diesel Range (C10-C23) Extractable Hydrocarbons as Diesel* Extraction method: SW3510C Analytical methods: SW8015C | | | | | 0304240 |
|--|---------------------------------------|--------|--------|-----|---------|
| Lab ID | Client ID | Matrix | TPH(d) | DF | % SS |
| 0304240-001B | KMW-1 | w | ND | 1 | 98.2 |
| 0304240-002B | KMW-6 | w | 110,d | į t | 104 |
| 0304240-003B | KMW-16 | W | 100,d | 1 | 95.7 |
| 0304240-004B | KMW-7 | w | 350,d | 1 | 102 |
| 0304240-005B | KMW-8 | w | ND | 1 | 104 |
| | | | | | |
| | · · · · · · · · · · · · · · · · · · · | | | | |
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| | | | | | |
| Reporting Limit for DF =1; | | w | 50 | | g/L |
| ND means not detected at or above the reporting limit | | S | NA | 1 | NΑ |

^{*} water and vapor samples are reported in µg/L, wipe samples in ug/wipe, soil/solid/sludge samples in mg/kg, product/oil/non-aqueous liquid samples in mg/L, and all TCLP / STLC / SPLP extracts in µg/L

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified diesel is significant; b) diesel range compounds are significant; no recognizable pattern; c) aged diesel? is significant); d) gasoline range compounds are significant; e) unknown medium boiling point pattern that does not appear to be derived from diesel; f) one to a few isolated peaks present; g) oil range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~2 vol. % sediment; k) kerosene/kerosene range; l) bunker oil; m) fuel oil; n) stoddard solvent / mineral spirit.

Jh.

Angela Rydelius, Lab Manager

[#] cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract.

| Analytical | Inc |
|------------|------------|
| | Analytical |

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Telephone: 925-798-1620 Fax: 925-798-1622

| | | | | http://w | ww.mccampbell.com E-mail: main@mcc | impbell.com | | | | | |
|------------------------|------------------------------------|------------|----------------|-------------------------|---------------------------------------|-------------|----------|--|--|--|--|
| ATC Associates | i | Client Pro | oject ID: #75. | 23909.0001 | Date Sampled: 04/15/ | 03 | | | | | |
| 6602 Owens Dr | ive, #100 | | | | Date Received: 04/15/03 | | | | | | |
| Pleasanton, CA | 04500 | Client Co | ntact: Jim Leh | rman | Date Extracted: 04/15/03 | | | | | | |
| Ficasamon, CA | 9 4 366 | Client P.0 | D.: | | Date Analyzed: 04/16/ | 03 | | | | | |
| Extraction method: E20 | 00.7 | | | letals* methods: E200.7 | | Work Order: | 0304240 | | | | |
| Lab ID | Client ID | Matrix | Extraction | | DF | % SS | | | | | |
| 0304240-001D | KMW-1 | w | DISS. | | 0.071 | | | | | | |
| 0304240-002D | KMW-6 | w | DISS. | | 1 | N/A | | | | | |
| 0304240-003E | KMW-16 | w | DISS. | | 1 | N/A | | | | | |
| 0304240-004E | KMW-7 | w | DISS. | | ND | 1 | N/A | | | | |
| 0304240-005E | KMW-8 | w | DISS. | | ND | 1 | N/A | | | | |
| | | | | | | | <u> </u> | | | | |
| | And Andrew Co. 1999 | | | | | | | | | | |
| | | | | | | | | | | | |
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| | A Charles . A Laborr for Entry Co. | | | | A A A A A A A A A A A A A A A A A A A | | | | | | |
| | | | | , | | | | | | | |
| | | | | | | | - | | | | |

| ND means not detected at or | W | DISS. | 0.05 | mg/L |
|---|-----------------|--------------------|--|-------------|
| above the reporting limit | S | TTLC | NA | mg/kg |
| * water/liquid/oil samples are reported in my | g/L, soil/sludg | e/solid/product sa | mples in mg/kg, wipes in µg/wipe and all TCLP / STLC / DIS | STLC / SPLP |

extracts in mg/L.

means surrogate recovery outside of acceptance range due to matrix interference. ND means not detected above the reporting limit: N/A means not

means surrogate recovery outside of acceptance range due to matrix interference; ND means not detected above the reporting limit; N/A means not applicable to this sample or instrument.

Analytical Methods: EPA 6010C/200.7 for all elements except: 200.9 (water/liquid-Sb, As, Pb, Se, Tl); 245.1 (Hg); 7010 (sludge/soil/soild/oil/product/wipes - As, Se, Tl); 7471B (Hg).

i) liquid sample that contains greater than ~2 vol. % sediment; this sediment is extracted with the liquid, in accordance with EPA methodologies and can significantly effect reported metal concentrations; j) reporting limit raised due to insufficient sample amount; y) estimated values due to low surrogate recovery; z) reporting limit raised due to matrix interference.

ATC Associates

Client Project ID: #75.23909.0001

Date Sampled: 04/15/03

Date Received: 04/15/03

Client Contact: Jim Lehrman

Date Extracted: 04/15/03

Client P.O.:

Date Analyzed: 04/15/03-04/16/03

Inorganic Anions by IC*

Extraction method: E300.1 Analytical methods: E300.1 Work Order: 0304240

| extraction method: E30 | 0.1 | | Analytical methods: E300.1 | | Work O | rder: 0304240 |
|------------------------|-----------|--------|----------------------------|---|--------|---------------|
| Lab ID | Client ID | Matrix | Nitrate as N | Sulfate | DF | % SS |
| 0304240-001C | KMW-1 | w | 1.8 | 78 | 1 | 89.0 |
| 0304240-002C | KMW-6 | w | ND | 12 | 1 | 90.0 |
| 0304240-003C | KMW-16 | w | 1.2 | 15 | . 1 | 91.0 |
| 0304240-004C | KMW-7 | w | 15 | 97 | 1 | 109 |
| 0304240-005C | KMW-8 | w | 2.4 | 81 | 1 | 91.0 |
| | | | | | | 1 |
| | | | | FF * ***(\$1,500,000,000,000,000,000,000,000,000,00 | | |
| | | | | | | |
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| j | | | | | | |
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| | | | | | | |
| | | | | | | |

| Reporting Limit for DF =1; | W | 1.0 | 1.0 | mg/L |
|---|---|-----|-----|-------|
| ND means not detected at or above the reporting limit | S | NA | NA | mg/Kg |

^{*} water samples are reported in mg/L, liquid and soil samples in mg/kg, wipe samples in μ g/wipe.

[#] surrogate diluted out of range or surrogate coelutes with another peak; N/A means surrogate not applicable to this analysis.

⁽j) sample diluted due to high inorganic content.

QC SUMMARY REPORT FOR SW8021B/8015Cm

Matrix: W

WorkOrder: 0304240

| EPA Method: SW802 | Spiked Sample ID: 0304240-007A | | | | | | | | | |
|------------------------|--------------------------------|--------|--------|--------|--------|--------|--------|----------|-----------|----------------|
| Commonad | Sample | Spiked | MS* | MSD* | MS-MSD | LCS | LCSD | LCS-LCSD | Acceptano | e Criteria (%) |
| Compound | րց/և րչ | µg/L | % Rec. | % Rec. | % RPD | % Rec. | % Rec. | % RPD | Low | High |
| TPH(btex) [£] | ND | 60 | 101 | 101 | 0 | 111 | 103 | 7.78 | 80 | 120 |
| MTBE | ND | 10 | 111 | 112 | 1.01 | 102 | 108 | 5.54 | 80 | 120 |
| Benzene | ND | 10 | 98.2 | 99.9 | 1.72 | 98.9 | 98.4 | 0.535 | 80 | 120 |
| Toluene | ND | 10 | 102 | 103 | 1.38 | 103 | 102 | 0,663 | 80 | 120 |
| Ethylbenzene | ND | 10 | 102 | 103 | 0.530 | 103 | 103 | 0 | 80 | 120 |
| Xylenes | ND | 30 | 107 | 107 | 0 | 107 | 107 | 0 | 80 | 120 |
| %SS: | 103 | 100 | 99.3 | 100 | 0.965 | 99.5 | 98.9 | 0.636 | 80 | 120 |

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions: NONE

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

[%] Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / (MS + MSD) * 2.

^{*} MS and / or MSD spike recoveries may not be near 100% or the RPDs near 0% if: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) if that specific sample matrix interferes with spike recovery.

 $[\]pounds$ TPH(blex) = sum of BTEX areas from the FID.

[#] cluttered chromatogram; sample peak coelutes with surrogate peak.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or

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QC SUMMARY REPORT FOR SW8015C

Matrix: W

WorkOrder: 0304240

| EPA Method: SW8015C | Extraction: SW3510C BatchID: 6554 Spiked Sar | | | | piked Sampl | le ID: N/A | | | | |
|---------------------|--|--------|--------|--------|-------------|------------|--------|----------|------------|----------------|
| 0 | Sample | Spiked | MS* | MSD* | MS-MSD | LCS | LCSD | LCS-LCSD | Acceptance | e Criteria (%) |
| Compound | μg/L | μg/L | % Rec. | % Rec. | % RPD | % Rec. | % Rec. | % RPD | Low | High |
| TPH(d) | N/A | 7500 | N/A | N/A | N/A | 92 | 92 | 0 | 70 | 130 |
| %SS: | N/A | 100 | N/A | N/A | N/A | 90.2 | 90.2 | 0 | 70 | 130 |

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions: NONE

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / (MS + MSD) * 2.

QC SUMMARY REPORT FOR E200.7

Matrix: W

WorkOrder: 0304240

| EPA Method: E200.7 | EPA Method: E200.7 Extraction: E200.7 | | | | | BatchID: 6550 Spiked Sample ID: N/A | | | | | |
|--------------------|---------------------------------------|--------|--------|--------|--------|-------------------------------------|--------|----------|------------|--------------|--|
| Compound | Sample | Spiked | MS* | MSD* | MS-MSD | LCS | LCSD | LCS-LCSD | Acceptance | Criteria (%) | |
| Compound | mg/L | mg/L | % Rec. | % Rec. | % RPD | % Rec. | % Rec. | % RPD | Low | High | |
| Iron | N/A | 10 | N/A | N/A | N/A | 118 | 107 | 9.71 | 70 | 130 | |

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions: NONE

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / (MS + MSD) * 2.

QC SUMMARY REPORT FOR E300.1

Matrix: W

WorkOrder: 0304240

| EPA Method: E300.1 | Е | extraction: | E300.1 | | BatchID: | 6576 | S | Spiked Sample ID: N/A | | | |
|--------------------|--------|-------------|--------|--------|----------|--------|--------|-----------------------|------------|----------------|--|
| Compound | Sample | Spiked | MS* | MSD* | MS-MSD | LCS | LCSD | LCS-LCSD | Acceptance | e Criteria (%) | |
| Compound | mg/L | mg/L | % Rec. | % Rec. | % RPD | % Rec. | % Rec. | % RPD | Low | High | |
| Nitrate as N | N/A | 1000 | N/A | N/A | N/A | 88.3 | 88.9 | 0.681 | 80 | 120 | |
| Sulfate | N/A | 1000 | N/A | N/A | N/A | 94.2 | 94.8 | 0.616 | 80 | 120 | |
| %SS; | N/A | 100 | N/A | N/A | N/A | 90.4 | 90.9 | 0.574 | 80 | 120 | |

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions: NONE

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / (MS + MSD) * 2.

GeoAnalytical Laboratories, Inc. 1405 Kansas Avenue Modesto, CA 95351 Phone (209) 572-0900 Fax (209) 5

Phone (209) 572-0900 Fax (209) 572-0916

CERTIFICATE OF ANALYSIS

Report # P106-02

McCampbell Analytical 110 2nd Ave. South #D7

Project: #75.23909.0001

Date Rec'd: Date Started:

4/16/03 4/19/03

CA 94553 Pacheco

PO#

Date Completed: 4/23/03

Date: 4/23/03

Date Sampled:

4/15/03

Time: Sampler:

| Sample ID | Lab ID | RL | Method | Analyte | Results | Units |
|-----------------|---------|----------|------------------|---|-----------|--------------|
| 0304240 - 001 E | P303685 | 20 20 | SM2320B 410.4 | Total Alkalinity as CaCO ₃ Chemical Oxygen Demand | 384 ND | mg/L mg/L |
| 0304240 - 002 E | P303686 | 20 20 | SM2320B 410.4 | Total Alkalinity as CaCO ₃ Chemical Oxygen Demand | 526 ND | mg/L mg/L |
| 0304240 - 003 D | P303687 | 20 | SM2320B | Total Alkalinity as CaCO ₃ | 516 | mg/L |
| 0304240 - 004 D | P303688 | 20 | SM2320B | Total Alkalinity as CaCO3 | 577 | mg/L |
| 0304240 - 005 D | P303689 | 20 | SM2320B | Total Alkalinity as CaCO ₃ | 425 | mg/L |

Kohit Bombaywala Inorganic Supervisor

Certification # 1157

Donna Keller Laboratory Director

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1405 Kansas Avenue Modesto, CA 95351

PO#

CERTIFICATE OF ANALYSIS

Report # P106-02

Date: 4/21/03

McCampbell Analytical 110 2nd Ave. South #D7

Project: #75.23909.0001

Date Rec'd: 4/16/03 Date Started: 4/16/03

Pacheco CA 94553 Date Completed: 4/21/03

Date Sampled:

4/15/03

Time: Sampler:

| Sample ID | Lab ID | RL | Method | Analyte | Results Units | |
|-----------------|---------|-----|---------|---------|---------------|--|
| 0304240 - 001 E | P303685 | 2.0 | SM5210B | B.O.D | ND mg/L | |
| 1 | | | | | | |
| 0304240 - 002 E | P303686 | 2.0 | SM5210B | B.O.D | 6.4 mg/L | |

Kanti Gandhi Chemist

Donna Keller Laboratory Director

Certification # 1157

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Phone (209) 572-0900 Fax (209) 572-0916

Report# P106-02

QC REPORT

McCampbell Analytical 110 2nd Ave. South #D7

Pacheco

CA 94553

| Analyte | Method | Batch # | Dates Analyzed | Orig. | Dupl. | MS %Rec | MSD %Rec | RPD | LCS %Rec | Blank | Comments |
|---------------------------|---------|---------|----------------|-------|-------|------------|-------------|-----|-------------|-------|----------|
| Total Alkalinity as CaCO3 | SM2320B | 102854 | 4/19/03 | | | 82.3 | 90.8 | 1.1 | 109.2 | ND | |
| Chemical Oxygen Demand | 410.4 | 102876 | 4/23/03 | | | 103.3 | 103.3 | 0.0 | 103.3 | ND | |

* LCS/LCSD (see comments)

Rohit Bombaywala Inorganic Supervisor

Certification # 1157

Laboratory Director

GeoAnalytical Laboratories, Inc.

1405 Kansas Avenue Modesto, CA 95351

Phone (209) 572-0900 Fax (209) 572-0916

Report# P106-02

QC REPORT

McCampbell Analytical 110 2nd Ave. South #D7

Pacheco

CA 94553

| Analyte | Method | Batch # | Dates Analyzed | Orig. | Dupl. | MS %Rec | MSD %Rec | RPD | LCS %Rec Blank | Comments |
|---------|---------|---------|-----------------|-------|-------|------------|-------------|-----|-------------------|----------|
| B.O.D | SM5210B | B00209 | 4/16/03-4/21/03 | 87 | 90 | | | 3.4 | ND | |

* LCS/LCSD (see comments)

Kanti Gandhi Chemist

Certification # 1157

Donna Keller Laboratory Director

P106-02

McCampbell Analytical Inc.

110 Second Avenue South, #D7 Pacheco, CA 94553-5560 (925) 798-1620

CHAIN-OF-CUSTODY RECORD

Page 1 of 1

WorkOrder: 0304240

Subcontractor:

GEO ANALYTICAL LABORATORIES

1405 Kansas Avenue Modesto, CA 95351 TEL:

(209) 572-0900

FAX:

(209) 572-0916

ProjectNo:

#75.23909.0001

Acct #:

N/A

Date Received:

4/15/03

Date Printed:

4/15/03

| | | | | | | | | Requested Tests |
|--------------|--------------|--------|---------------------|----------|------------|-----|----------|---|
| Sample ID | ClientSampID | Matrix | Collection Date | TAT | Alkalinity | BOD | COD | Me to the second and A and a control of the second and a |
| 0304240-001E | KMW-1 | Water | 4/15/03 11:40:00 AM | Standard | 1 | 1 | · 1 | P303685 3 |
| 0304240-002E | KMW-6 | Water | 4/15/03 3:20:00 PM | Standard | 1 | 1 | 1 | P303686 L |
| 0304240-003D | KMW-16 | Water | 4/15/03 3:20:00 PM | Standard | 1 | | | P303687 (1) |
| 0304240-004D | KMW-7 | Water | 4/15/03 2:30:00 PM | Standard | 1 | | <u> </u> | P308688 1 |
| 0304240-005D | KMW-8 | Water | 4/15/03 1:20:00 PM | Standard | 1 | | | P303 1089 L |

Comments:

PLEASE ANALYZE SAMPLES FOR ALKALINITY, BOD, AND COD; STANDARD TAT; PLEASE FAX RESULTS AS SOON AS READY;

THANK YOU....

Please send results to: Melissa Valles

Relinquished by: Melioir Valle 04/15 6:00pm Received by: Jed 4/16/03

Relinquished by: Jed ex 4/16/03

Received by: Jed ex 4/16/03

Received by: Jed ex 4/16/03

McCampbell Analytical Inc.



110 Second Avenue South, #D7 Pacheco, CA 94553-5560 (925) 798-1620

CHAIN-OF-CUSTODY RECORD

Page I of I

WorkOrder: 0304240

Client:

ATC Associates

6602 Owens Drive, #100 Pleasanton, CA 94588 TEL:

(925) 460-5300

FAX:

(925) 463-2559

ProjectNo:

#75.23909.0001

PO:

Date Received:

4/15/03

Date Printed:

4/15/03

| | | | | | | | F | Requested Tests | } | | |
|-------------|--------------|--------|---------------------|-------|------------|-----|---------|-----------------|---------------------------------------|---------|------------|
| Sample ID | ClientSamplD | Matrix | Collection Date | Hold | Alkalinity | BOD | COD | E200_7 | E300_1 | SW8015C | 8021B/8015 |
| 0304240-001 | KMW-1 | Water | 4/15/03 11:40:00 AM | | . E ; | Ë | . E | . D | c | В | , A |
| 0304240-002 | KMW-6 | Water | 4/15/03 3:20:00 PM | 1.1-1 | Е | E | E | D | С | В | A |
| 0304240-003 | KMW-16 | Water | 4/15/03 3:20:00 PM | 7 | D | | | Е | С | В | A |
| 0304240-004 | KMW-7 | Water | 4/15/03 2:30:00 PM | | D | | | E | C | В | Α |
| 0304240-005 | KMW-8 | Water | 4/15/03 1:20:00 PM | | D | | | Е | С | В | A |
| 0304240-006 | Trip Blank | Water | 4/15/03 | | | | | | , , , , , , , , , , , , , , , , , , , | | A |
| 0304240-007 | TAP Sample | Water | 4/15/03 4:00:00 PM | | | | | <u>-</u> | | | A |

Prepared by: Melissa Valles

Comments:

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.

| | | | | Plea | santor | , CA 9 | | 030 | 04240 | С | H | 411 | V (|)F | С | US | ST | 10 | ΣY | F | OF | RM |
|-----------------------------|-------------|--------------|------------------|-------|---------|----------------|----------------------|--------------------|----------------------|--------------------------------|-----------------|-----------------------|---------------|--------------|-------------|------------------------------------|------------------------|---------------------------------------|---------------------------------------|------------|----------|----------|
| | | | | | | | 460-5300 463-2559 | | | Turn | arni | ınd | | V 1 1 | n da | v | 3 | dav | | 2 | -8 hr | |
| Project Name: | FRIESMAN | | I.a | | | | vens Hos | in trai | | Time | | and | | • | ' day | | 2 | | | 0 | | |
| Project Number: | 75, 239 | | | - | , | Task: | 2 | SPITAL | | (worl | king | day | | | | | 2 | | | | (|) |
| Project Address: | | | | RD. | Liv | | ore, CA | | | | | | | | | | | | | | | |
| Laboratory: | McCampb | sell Ane | Julio | n Co | ontact: | (925 | 7798-16 | 20 | | | | | ~~ | An | alys | es F | lequ | este | d | | | |
| Lab Address/Phone: | lio Se | COND (| AME | Sea | th i | *D-7 | Pacheo | e. CA | • | | | | | | | (ĝ | | 10 | | | | |
| ATC Project Manager | Jim | LEHM | mn | | | | | | | | | | | | | 0760 | | FE | > | Ì | 1 1 | |
| ATC PM Ph. No.: | (925) 225- | 7815 | | | Email: | LEHI | rman 75 | `@atc-er | viro.com | | | | | | | ě | 35.2 | <u>τ</u> Ε, | 7-2 | | | |
| ATC Sampler: | P. Arre | | | _ F | hone: | (925) | 225-781 | .3 | | TBE | (8260) | Ê | [€ | | | etect) | al (33 | чH'h | £ 1.1 | | 1 1 | |
| | Sa | mple Inf | orma | tion | | Con | tainer Info | rmation | | X/M | nates | 3015 | (80 | 8020 | 8260 | p woj) | , Tot | E, S. | Z | BOD | A | |
| | | | | Matr | х | No. | Type | Preser- vative | Comments / | TPHG/BTEX/MTBE (8015M/8020) | Fuel Oxygenates | TPHd (8015M) | HVOCs (8010) | VOCs (8020) | VOCs (8260) | PP Metals (fow detect) (7000/6010) | Cyanide, Total (335.2) | Nitremte, Sulfibite, | TOTAL ALICANIMITY | Bı | COD | |
| ATC Sample ID | Date | Time | Soil | Water | Vapor | | | P _T C S | Field Notes | 14 ye | Fue | 上 | 主 | ≥_ | 2 | 8 | ठे | 2 | P | | | _ |
| KMW-1 | 4.15.03. | 1140 | | X | | 3 | VOA | HCL | | $\perp X$ | | ļ., | | | | <u> </u> | ļ | | | ļ | | |
| KMW-1 | | | <u> </u> | X | | 1 | ILAG. | None | | | | X | | | <u> </u> | <u> </u> | ļ | X 2 | | | | |
| KMW - I | | | <u> </u> | X | | | SoomL | None | | | | | | | | | ļ | X | \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ | | | |
| KMM.] | | | | X | | 1 | SOOML | None | | | | ļ., | | | | <u> </u> | <u> </u> | | X | | | |
| KMW-1 | | | | X | | 1 | Stome | None. | | | | | | | | | ļ | | | X. | | |
| KMW-1 | | V | | X | | i | SBOML | 14250H | | | <u></u> | | | | | | ļ | | | | X | |
| KMW-6 | | 1520 | | X | | 3 | VOA | HCL | | X | | L., | | | | <u> </u> | <u> </u> | | | | | \dashv |
| KMW-6 | | ١ | | X | | 1 | IL A.G. | None | , | | | X | | <u> </u> | | | | · · · · · · · · · · · · · · · · · · · | | | | |
| KMW-6 | | | | ľX | | Ì | 500 ML | None | | | | | | | <u> </u> | | | X | | | | _ |
| KMW-b | | | | X | | 1 | SOCIML | Nove | | | | | | | | | | | X | | 1 | _ |
| KMW-60 | | | Ì | X | | 1 | 500mL | None | | | <u> </u> | | | | | | | | | X, | 5-2- | |
| KMW-ks | | | | X | - | i | 500mc | Hasay | | | | | | | | <u> </u> | | | | | Δ | |
| KMW-16 | | | | X | | .3 | VOA | HCL | | X | | | | | | | | | | | | |
| KMW-16 | | | | X | | i | IL A.G. | None | | | | X | | | | | ļ | , | | | | |
| KMW-16 | | | | X | | 1 | STORL | Nove | | | | | | | | | | \geq | | | | |
| KMW-160 | | V | | X | | | Scome | None | | | | | | | | | | | \times | | | |
| Additional Comments | * FILTE | 12 3 Pr | ese. | 2VE | Σĸ | Э <i>И</i>] « | SAMPLES | upor | 1 IRB ARRIVA | 9 L | | | | | | | | | | | | |
| | * INVO | | | ren. | | Spir | / | rectly | | | <u></u> | | a | ٠ | | | | | | ···· | | |
| Relinquished By: | 171 | the | 4 | | Date/ | Time: | 4.15.03, | 1700 | Received By: | Mu | 06 | 110 | ďΰ | | | Dat | e/Tin | ne. | 4/ | 13 | 5 | pin |
| Relinquished By: | 1 1 1 1 L | 177 | /=- - | | Date/ | | 113.03/ | 7700 | Received By: | | | . v · | <u>~~,5€`</u> | | | Dat | e/Tir | ne: | | | | |
| Relinquished By: | | / | | | Date/ | | | | Reserved By: V | | 14 | near | PUAY | <u>"!"</u> | VO. | ball | e /Ti | | | OTHE | | |
| Sample Condition, Good? Yes | No | On Ice? Y | es | No | • | | Temp | | Transportation Metho | d: | <i>(</i> - | rrid N iv i | | | V. | - | - | ~ | Pag | e <u>1</u> | _of_ | 2_ |

White - Lab
L/Admin/Subsurtice Group/revised chain of custody; revised 05/08/01

Yellow - Lab

Pink - ATC

| | | | Pleasanto Main Line | n, CA 9 : (925) - | 460-5300 | 03 | 64240 | | | | | | | | | | | | OF | |
|---|--|--|-------------------------------|--|-----------------|-------------------|--|--|------------------------|--------------|--------------|--------------|------------------|--|------------------------|-----------------------|---------------------|---------------|-----------------|-------------|
| Project Namé: | | n Ranci | Facsimile: | CHIL | ovens Ho | spiral | <u> </u> | Turn | : | | | | | y | 2 | day day | , | | 2-8 hr other | |
| Project Number: | | 07.000 l | | _ | 2_ | | _ | (wor | kıng | day | (S) | — | b day | y | 2 | 24 NF | | | <u> </u> |) |
| Project Address: Laboratory: | 1600 | <u>FRIESMA</u> | n RD. LIV | Ermo | <u> 215, CA</u> | | _ | | | | | Ā | 20 124 | ses F | 2000 | octo | - d | | | |
| Lab Address/Phone: | MCComple | ell Anal | utich (Contact | (929 | 5)798-16 | 20 | - | | | т | Т | T | iaiy: | | (equ | 6311 | - | | | —т |
| ATC Project Manager: | 110 55 | cond Av | ie South | *D-7 | +AChE | <u> 20, UA</u> | - | | | | | | l | 910 | | Ä | > | | | |
| ATC Project Manager. ATC PM Ph. No.: | | EHCMAN | Email | 1500 | man 75 | (a) ata a | - nvisa com | | | | | | l | 9/00 | 7 | ر ا | 5 | | 1 | |
| ATC Sampler: | | 7815 040 | | | 225- 781 | | - - | 7BE | (8260) | (E | <u>©</u> | ٥ | | etect) (70 | al (335 | alfigh | KALin | | | |
| | Sa | mple Infor | mation | Con | tainer Info | rmation | | X X | nates | 25 | 8 | 18 | 280 | low d | Ţot | S | = | BOD | Clop | |
| | | | Matrix | No. | Туре | Preser- vative | Comments / | TPHg/BTEX/MTBE (8015M/8020) | Fuel Oxygenates (8260) | TPHd (8015M) | HVOCs (8010) | VOCs (8020) | VOCs (8260) | PP Metals (low detect) (7000/6010) | Cyanide, Total (335.2) | Nitrate, Sulfinte, FE | Total AIKALINITY | Ã | ව | |
| ATC Sample ID | Date | | Soil Water Vapor | | 310.0 | | Field Notes | F ® | 교 | <u> </u> | 工 | > | > | 1 4 | O. | 72 | } | | | \dashv |
| <u>KMW-7</u> | 4.15.03 | 1430 | $- \mathcal{S} $ | 3 | AOV | HCC | | + | | | | | ┼ | | | | - | | | |
| <u> KMW-7</u> | | 1-1 | - | 1 | IL AG. | Nove | | ļ | | | - | - | - | ┼─ | ├ | $\overline{}$ | | | | \dashv |
| KMW·7 | - | | $- \diamondsuit $ | | Stam | None | | | | | - | | | | ├─ | Ζλ. | | | | \dashv |
| <u> </u> | | 1700 | - | | Soom | None | | \ / | | ├ | | | - | | | | \sim | | | -+ |
| KMW-9 | | 1320 | - | 13 | VOA | HCL | | X | - | \forall | ╁ | ┼ | ┼ | + | | | | | | |
| KMW-8 | | 1 1 - 1 | | 1 1 | ILAG. | None | | | | ∤△ | ╁ | | - | | | V | | | + | \dashv |
| KHM-3 | | + 1 | $\rightarrow \bigcirc \vdash$ | 1 | Sooml | Nove | | | _ | - | ╁ | - | | | | Δ | $\overline{\nabla}$ | | + | |
| | | 1-1/- | $\rightarrow \bigcirc \vdash$ | 1 | SOUMI | Nove | | 17 | <u> </u> | - | + | \vdash | | - | ļ | | Δ | \vdash | | |
| TRIP BLANK | | 1.00 | $-+ \diamond +$ | | VDA | HCL | | $\langle \rangle$ | | | ┼ | - | - | | | | | - | + | \dashv |
| TAP Sample | | 1600 | - \$ | 3 | YOA | HCC | | | | ├ | ├- | - | | - | - | | | | | -+ |
| | | +-}- | - & | | ILAG. | Mora | | | | - | - | | | - | | | | | -+ | |
| | | | | <u> </u> | 500 m1 | None | | <u> </u> | | ├ | | | | - | | | | | | - |
| V | W | V | $- \Delta $ | | 500ML | None | TOTAL MINISTER PRINCIPLE | 11/ | | | RESI | SVA | areas | VOAS | 0 | ≱G | MET. | ILS | ОТНЕ | |
| | | | | | | <u> </u> | 686 17 4 min da 4 ki 2 i 2 min i 1 i 1 i 3 i 2 ki 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | | | <u> </u> | RES | Pat | | 1 | - | | | | $\overline{}$ | |
| | ļ <u>.</u> | | | ļ | | | Lake Line Lange | ميل | <u> </u> | | , Ex | RVA | ننذر | AB_ | | | - | | | |
| Addition | -26 | | | <u> </u> | | | | <u></u> | ļ | <u> </u> | <u> </u> | <u> </u> | L | | | | | | | |
| Additional Comments: | * FILTE | | iserve II | | | | n 196 ARRIV | AC | | | | Δa | | | | | | | | |
| Relinquished By: Relinquished By: | fito | Ayr | | Time: Time: | 41502/ | 1700 | Received By: | \mathcal{A} | rel | /a | Va | ĽV. | | _ | e/Tin e/Tin | | 17/ | \$ | S/?/ | m |
| Relinquished By: | | | | Time: | | | Received By: | | | | | | | _ | e/Tin | ne: | | | | |
| Sample Condition, Good? Yes _ | No | On Ice? Yes | No | Cooler T | етр | | Transportation Method | | | | | | | - | • | I | Page | e <u>Z</u> | <u>-</u> of _ | <u> 2-</u> |

White - Lab
L:/Admin/Subsurface Group/revised chain of custody: revised 05/08/01

| ATC Associates | Client Project ID: #75.23909.0001 | Date Sampled: 04/15/03 |
|------------------------|-----------------------------------|--------------------------|
| 6602 Owens Drive, #100 | | Date Received: 04/15/03 |
| Pleasanton, CA 94588 | Client Contact: Jim Lehrman | Date Reported: 04/22/03 |
| ricasamon, CA 94368 | Client P.O.: | Date Completed: 04/22/03 |

WorkOrder: 0304240

April 22, 2003

Dear Jim:

Enclosed are:

- 1). the results of 7 analyzed samples from your #75.23909.0001 project,
- 2). a QC report for the above samples
- 3). a copy of the chain of custody, and
- 4). a bill for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits. If you have any questions please contact me. McCampbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Yours truly,

| ATC Associates | Client Project ID: #75.23909.0001 | Date Sampled: 04/15/03 |
|------------------------|-----------------------------------|-----------------------------------|
| 6602 Owens Drive, #100 | | Date Received: 04/15/03 |
| Pleasanton, CA 94588 | Client Contact: Jim Lehrman | Date Extracted: 04/16/03-04/18/03 |
| rieasanion, CA 94500 | Client P.O.: | Date Analyzed: 04/16/03-04/18/03 |

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE*

| Extraction | method: SW5030B | | | Analytical: | methods: SW8021 | B/8015Cm | | Work | Order: 0 | 304240 |
|------------|---------------------|--------|--------|-------------|-----------------|----------|--------------|---------|----------|--------|
| Lab ID | Client ID | Matrix | TPH(g) | MTBE | Benzene | Toluene | Ethylbenzene | Xylenes | DF | % SS |
| 001A | KMW-i | w | ND | ND | ND | ND | ND | ND | 1 | 87.3 |
| 002A | KMW-6 | w | 390,a | ND | 7.4 | 0.58 | 8.5 | 6.1 | 1 | # |
| 003A | KMW-16 | w | 270,a | ND | 4.2 | 0.51 | 5.6 | 3.0 | 1 | 110 |
| 004A | KMW-7 | w | 880,a | ND | 7.1 | 0.69 | 4.4 | 52 | 1 | 104 |
| 005A | KMW-8 | w | ND | ND | ND | ND | ND | ND | 1 | 98.8 |
| 006A | Trip Blank | w | ND | ND | ND | ND | · ND | ND | 1 | 100 |
| 007A | TAP Sample | w | ND | ND | ND | ND | ND | ND | 1 | 103 |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | , | | | } | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | ng Limit for DF =1; | W | 50 | 5.0 | 0.5 | 0.5 | 0.5 | 0.5 | 1 | μg/L |
| | the reporting limit | S | NA | NA | NA | NA | NA | NA | 1 | mg/K |

^{*}water and vapor samples are reported in μg/L, soil and sludge samples in mg/kg, wipe samples in μg/wipe, and TCLP extracts in μg/L.

DHS Certification No. 1644

[#] cluttered chromatogram; sample peak coelutes with surrogate peak.

⁺The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (stoddard solvent / mineral spirit?); f) one to a few isolated non-target peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~2 vol. % sediment; j) reporting limit raised due to high MTBE content; k) TPH pattern that does not appear to be derived from gasoline (aviation gas). m) no recognizable pattern.

| ATC Associates | Client Project ID: #75.23909.0001 | Date Sampled: 04/15/03 |
|------------------------|-----------------------------------|----------------------------------|
| 6602 Owens Drive, #100 | | Date Received: 04/15/03 |
| M | Client Contact: Jim Lehrman | Date Extracted: 04/15/03 |
| Pleasanton, CA 94588 | Client P.O.: | Date Analyzed: 04/16/03-04/22/03 |

| extraction method: SW | | | tractable Hydrocarbons as Diesel* cal methods: SW8015C | Work Order: | 0304240 |
|-----------------------|--------------------------------------|--------|--|-------------|---------|
| Lab ID | Client ID | Matrix | TPH(d) | DF | % SS |
| 0304240-001B | KMW-1 | w | ND | 1 | 98.2 |
| 0304240-002В | KMW-6 | w | 110,d | 1 | 104 |
| 0304240-003B | KMW-16 | w | 100,d | 1 | 95.7 |
| 0304240-004B | KMW-7 | w | 350,d | 1 | 102 |
| 0304240-005B | KMW-8 | W | ND | 1 | 104 |
| | | | | | |
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| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| Reporting I | imit for DF =1; | W | 50 | μ | ıg/L |
| | ot detected at or reporting limit | S | NA |] | NA |

^{*} water and vapor samples are reported in µg/L, wipe samples in ug/wipe, soil/solid/sludge samples in mg/kg, product/oil/non-aqueous liquid samples in mg/L, and all TCLP / STLC / SPLP extracts in µg/L

[#] cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract.

⁺The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified diesel is significant; b) diesel range compounds are significant; no recognizable pattern; c) aged diesel? is significant); d) gasoline range compounds are significant; e) unknown medium boiling point pattern that does not appear to be derived from diesel; f) one to a few isolated peaks present; g) oil range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~2 vol. % sediment; k) kerosene/kerosene range; l) bunker oil; m) fuel oil; n) stoddard solvent / mineral spirit.

| ATC Associates | Client Project ID: #75.23909.0001 | Date Sampled: 04/15/03 |
|------------------------|-----------------------------------|--------------------------|
| 6602 Owens Drive, #100 | | Date Received: 04/15/03 |
| , | Client Contact: Jim Lehrman | Date Extracted: 04/15/03 |
| Pleasanton, CA 94588 | Client P.O.: | Date Analyzed: 04/16/03 |
| | | |

| M | eta | le | * |
|---|-----|----|---|
| | | | |

| Extraction method: E20 | 00.7 | | Analytical | methods: E200.7 | Work Order: | |
|------------------------|--------------------------------------|--------|------------|-----------------|-------------|------|
| Lab ID | Client ID | Matrix | Extraction | Iron | DF | % SS |
| 0304240-001D | KMW-1 | w | DISS. | 0.071 | 1 | N/A |
| 0304240-002D | KMW-6 | w | DISS. | 2.4 | 1 | N/A |
| 0304240-003E | KMW-16 | w | DISS. | 1.9 | 1 | N/A |
| 0304240-004E | KMW-7 | w | DISS. | ND | 1 | N/A |
| 0304240-005E | KMW-8 | w | DISS. | ND | 1 | N/A |
| | r - 48 | | | | | |
| | | | | | | |
| | | | | | - | _ |
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| | | | | | | |
| | | | | | | |
| | | | | | | |
| Reporting L | imit for DF =1; ot detected at or | W | DISS. | 0.05 | | g/L |
| | reporting limit | S | TTLC | NA | mį | g/kg |

^{*} water/liquid/oil samples are reported in mg/L, soil/sludge/solid/product samples in mg/kg, wipes in µg/wipe and all TCLP / STLC / DISTLC / SPLP extracts in mg/L.

means surrogate recovery outside of acceptance range due to matrix interference; ND means not detected above the reporting limit; N/A means not applicable to this sample or instrument.

Analytical Methods: EPA 6010C/200.7 for all elements except: 200.9 (water/liquid-Sb, As, Pb, Se, Tl); 245.1 (Hg); 7010 (sludge/soil/solid/oil/product/wipes - As, Se, Tl); 7471B (Hg).

i) liquid sample that contains greater than ~2 vol. % sediment; this sediment is extracted with the liquid, in accordance with EPA methodologies and can significantly effect reported metal concentrations; j) reporting limit raised due to insufficient sample amount; y) estimated values due to low surrogate recovery; z) reporting limit raised due to matrix interference.

ATC Associates

Client Project ID: #75.23909.0001

Date Sampled: 04/15/03

Date Received: 04/15/03

Client Contact: Jim Lehrman

Date Extracted: 04/15/03

Client P.O.:

Date Analyzed: 04/15/03-04/16/03

| Extraction method: E30 | 00.1 | | Inorganic Anions by IC* Analytical methods: E300.1 | | Work Order: 0304240 | | |
|------------------------|-----------|--------|--|---------|---------------------|------|--|
| Lab ID | Client ID | Matrix | Nitrate as N | Sulfate | DF | % SS | |
| 0304240-001C | KMW-1 | w | 1.8 | 78 | 1 | 89.0 | |
| 0304240-002C | KMW-6 | w | ND | 12 | 1 | 90.0 | |
| 0304240-003C | KMW-16 | w | 1.2 | 15 | 1 | 91.0 | |
| 0304240-004C | KMW-7 | w | 15 | 97 | 1 | 109 | |
| 0304240-005C | KMW-8 | w | 2.4 | 81 | 1 | 91.0 | |
| | | | | | | [| |
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| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

| Reporting Limit for DF =1; | W | 1.0 | 1.0 | mg/L |
|---|---|-----|-----|-------|
| ND means not detected at or above the reporting limit | S | NA | NA | mg/Kg |

^{*} water samples are reported in mg/L, liquid and soil samples in mg/kg, wipe samples in μ g/wipe.

[#] surrogate diluted out of range or surrogate coelutes with another peak; N/A means surrogate not applicable to this analysis.

⁽j) sample diluted due to high inorganic content.

QC SUMMARY REPORT FOR SW8021B/8015Cm

Matrix: W

WorkOrder: 0304240

| EPA Method: SW802 | 1B/8015Cm E | xtraction: | SW50308 | SW5030B BatchID: 6573 | | | | Spiked Sample ID: 0304240-007A | | | | | |
|------------------------|-------------|------------|---------|-----------------------|--------|--------|--------|--------------------------------|------------|--------------|--|--|--|
| Cananavad | Sample | Spiked | MS* | MSD* | MS-MSD | LCS | LCSD | LCS-LCSD | Acceptance | Criteria (%) | | | |
| Compound | μg/L | μg/L | % Rec. | % Rec. | % RPD | % Rec. | % Rec. | % RPD | Low | High | | | |
| TPH(btex) ^E | ND | 60 | 101 | 101 | 0 | 111 | 103 | 7.78 | 80 | 120 | | | |
| МТВЕ | ND | 10 | 111 | 112 | 1.01 | 102 | 108 | 5.54 | 80 | 120 | | | |
| Benzene | ND | 10 | 98.2 | 99.9 | 1.72 | 98.9 | 98.4 | 0.535 | 80 | 120 | | | |
| Toluene | ND | 10 | 102 | 103 | 1.38 | 103 | 102 | 0.663 | 80 | 120 | | | |
| Ethylbenzene | ND | 10 | 102 | 103 | 0.530 | 103 | 103 | 0 | 80 | 120 | | | |
| Xylencs | ND | 30 | 107 | 107 | 0 | 107 | 107 | 0 | 80 | 120 | | | |
| %SS: | 103 | 100 | 99.3 | 100 | 0.965 | 99.5 | 98.9 | 0.636 | 80 | 120 | | | |

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation

[%] Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / (MS + MSD) * 2.

^{*} MS and / or MSD spike recoveries may not be near 100% or the RPDs near 0% if: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) if that specific sample matrix interferes with spike recovery.

[£] TPH(btex) = sum of BTEX areas from the FID.

[#] cluttered chromatogram; sample peak coelutes with surrogate peak.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560 Telephone: 925-798-1620 Fax: 925-798-1622

http://www.mccampbell.com E-mail: main@mccampbell.com

QC SUMMARY REPORT FOR SW8015C

Matrix: W

WorkOrder: 0304240

| EPA Method: SW8015C | Extraction: SW3510C | | | | BatchID: | 6554 | Spiked Sample ID: N/A | | | |
|---------------------|---------------------|--------|-------------|------|----------|--------|-----------------------|----------|------------|--------------|
| 0 | Sample | Spiked | MS* | MSD* | MS-MSD | LCS | LCSD | LCS-LCSD | Acceptance | Criteria (%) |
| Compound | µg/L | μg/L | μg/L % Rec. | | % RPD | % Rec. | % Rec. | % RPD | Low | High |
| TPH(d) | N/A | 7500 | N/A | N/A | N/A | 92 | 92 | 0 | 70 | 130 |
| %SS: | N/A | 100 | N/A | N/A | N/A | 90.2 | 90.2 | 0 | 70 | 130 |

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS – MSD) / (MS + MSD) * 2.

QC SUMMARY REPORT FOR E200.7

Matrix: W

WorkOrder: 0304240

| EPA Method: E200.7 | Extraction: E20 | | | | BatchID: | 6550 | Spiked Sample ID: N/A | | | |
|--------------------|-----------------|--------|--------|--------|----------|--------|-----------------------|----------|------------|----------------|
| Compound | Sample | Spiked | MS* | MSD* | MS-MSD | LCS | LCSD | LCS-LCSD | Acceptance | : Criteria (%) |
| Compound | mg/L | mg/L | % Rec. | % Rec. | % RPD | % Rec. | % Rec. | % RPD | Low | High |
| Iron | N/A | 10 | N/A | N/A | N/A | 118 | 107 | 9.71 | 70 | 130 |

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions: NONE

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / (MS + MSD) * 2.

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http://www.mccampbell.com E-mail: main@mccampbell.com

QC SUMMARY REPORT FOR E300.1

Matrix: W

WorkOrder: 0304240

| EPA Method: E300.1 | E | xtraction: | E300.1 | | BatchID: 6576 | | | Spiked Sample ID: N/A | | | |
|--------------------|--------|------------|--------|--------|---------------|--------|--------|-----------------------|------------|----------------|--|
| | Sample | Spiked | MS* | MSD* | MS-MSD | LCS | LCSD | LCS-LCSD | Acceptance | e Criteria (%) | |
| Compound | mg/L | mg/L | % Rec. | % Rec. | % RPD | % Rec. | % Rec. | % RPD | Low | High | |
| Nitrate as N | N/A | 1000 | N/A | N/A | N/A | 88.3 | 88.9 | 0.681 | 80 | 120 | |
| Sulfate | N/A | 1000 | N/A | N/A | N/A | 94.2 | 94.8 | 0.616 | 80 | 120 | |
| %SS: | N/A | 100 | N/A | N/A | N/A | 90.4 | 90.9 | 0.574 | 80 | 120 | |

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions: NONE

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / (MS + MSD) * 2.

GeoAnalytical Laboratories, Inc.

1405 Kansas Avenue Modesto, CA 95351

PO#

Phone (209) 572-0900 Fax (209) 572-0916

CERTIFICATE OF ANALYSIS

Report # P106-02

Pacheco

McCampbell Analytical

110 2nd Ave. South #D7

CA 94553

Project: #75.23909.0001

Date Started:

Date Rec'd:

4/16/03

4/19/03

Date Completed: 4/23/03

Date: 4/23/03

Date Sampled:

4/15/03

Time: Sampler:

| Sample ID | Lab ID | RL | Method | Analyte | Result | s Units |
|-----------------|---------|----------|------------------|---|-----------|--------------|
| 0304240 - 001 E | P303685 | 20 20 | SM2320B 410.4 | Total Alkalinity as CaCO₃ Chemical Oxygen Demand | 384 ND | mg/L mg/L |
| 0304240 - 002 E | P303686 | 20 20 | SM2320B 410.4 | Total Alkalinity as CaCO₃ Chemical Oxygen Demand | 526 ND | mg/L mg/L |
| 0304240 - 003 D | P303687 | 20 | SM2320B | Total Alkalinity as CaCO₃ | 516 | mg/L |
| 0304240 - 004 D | P303688 | 20 | SM2320B | Total Alkalinity as CaCO3 | 577 | mg/L |
| 0304240 - 005 D | P303689 | 20 | SM2320B | Total Alkalinity as CaCO3 | 425 | mg/L |

Rohit Bombaywala Inorganic Supervisor

Donna Keller Laboratory Director

Certification # 1157

GeoAnalytical Laboratories, Inc.

1405 Kansas Avenue Modesto, CA 95351

Project: #75.23909.0001

Phone (209) 572-0900 Fax (209) 572-0916

CERTIFICATE OF ANALYSIS

Report # P106-02

Date: 4/21/03

McCampbell Analytical 110 2nd Ave. South #D7

Date Rec'd:

4/16/03 4/16/03

CA 94553 Pacheco

Date Started:

Date Completed: 4/21/03

PO#

Date Sampled:

4/15/03

Time: Sampler:

| Sample ID | Lab ID | RL | Method | Analyte | Results | Units |
|-----------------|---------|-----|---------|---------|---------|-------|
| 0304240 - 001 E | P303685 | 2.0 | SM5210B | B.O.D | ND | mg/L |
| 0304240 - 002 E | P303686 | 2.0 | SM5210B | B.O.D | 6.4 | mg/L |

Kanti Gandhi

Chemist

Donna Keller Laboratory Director

Certification # 1157

GeoAnalytical Laboratories, Inc. 1405 Kansas Avenue Modesto, CA 95351 Phone (209) 572-0900 Fax (209) 5

Phone (209) 572-0900 Fax (209) 572-0916

Report# P106-02

QC REPORT

McCampbell Analytical 110 2nd Ave. South #D7

Pacheco

CA 94553

| Analyte | Method | Batch # | Dates Analyzed | Orig. | Dupl. | MS %Rec | MSD %Rec | RPD | LCS %Rec | Blank | Comments |
|---------------------------|---------|---------|----------------|-------|-------|------------|-------------|-----|-------------|-------|----------|
| Total Alkalinity as CaCO3 | SM2320B | I02854 | 4/19/03 | | | 82.3 | 90.8 | 1.1 | 109.2 | ND | |
| Chemical Oxygen Demand | 410.4 | 102876 | 4/23/03 | | | 103.3 | 103.3 | 0.0 | 103.3 | ND | |

* LCS/LCSD (see comments)

Rohit Bombaywala Inorganic Supervisor

Certification # 1157

Laboratory Director

GeoAnalytical Laboratories, Inc.

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Phone (209) 572-0900 Fax (209) 572-0916

Report# P106-02

QC REPORT

McCampbell Analytical 110 2nd Ave. South #D7

Pacheco

CA 94553

| Analyte | Method | Batch # | Dates Analyzed | Orig. | Dupl. | MS %Rec | MSD %Rec | RPD | LCS %Rec Blank | Comments |
|---------|---------|---------|-----------------|-------|-------|------------|-------------|-----|-------------------|----------|
| B.O.D | SM5210B | B00209 | 4/16/03-4/21/03 | 87 | 90 | | | 3.4 | ND | |

* LCS/LCSD (see comments)

Kanti Gandhi Chemist

Certification # 1157

Donna Keller

Laboratory Director

P106-02

McCampbell Analytical Inc.

CHAIN-OF-CUSTODY RECORD

Page 1 of 1



110 Second Avenue South, #D7 Pacheco, CA 94553-5560 (925) 798-1620

WorkOrder: 0304240

Subcontractor:

GEO ANALYTICAL LABORATORIES

1405 Kansas Avenue Modesto, CA 95351 TEL:

(209) 572-0900

FAX:

(209) 572-0916 #75.23909.0001

ProjectNo: Acct #:

N/A

Date Received:

4/15/03

Date Printed:

4/15/03

| | | | | - | - | | | equested Tests |
|------------------------------|----------------|----------------|---------------------|----------|------------|-----|-----|----------------|
| Sample ID | ClientSampID | Matrix | Collection Date | TAT | Alkalinity | BOD | COD | |
| | LCB NAT A | Water | 4/15/03 11:40:00 AM | Stondard | 1 : | | | D252685 3 |
| 0304240-001E 0304240-002E | KMW-1 KMW-6 | Water Water | 4/15/03 3:20:00 PM | Standard | 1 | 1 | 1 | 7303686 L |
| 0304240-003D | KMW-16 | Water | 4/15/03 3:20:00 PM | Standard | 1 | | | P303687 (D) |
| 0304240-004D | KMW-7 | Water | 4/15/03 2:30:00 PM | Standard | 1 | | | P308 688 |
| 0304240-005D | KMW-8 | Water | 4/15/03 1:20:00 PM | Standard | 1 | | | P3031089 1 |

Comments:

PLEASE ANALYZE SAMPLES FOR ALKALINITY, BOD, AND COD; STANDARD TAT; PLEASE FAX RESULTS AS SOON AS READY;

THANK YOU....

Please send results to: Melissa Valles

Relinquished by: Hullion Valla 04/15 6:00pm Received by: July 4/16/03
Received by: July 4/16/03
Received by: July 4/16/03

McCampbell Analytical Inc.

CHAIN-OF-CUSTODY RECORD

Page 1 of 1

À

110 Second Avenue South, #D7 Pacheco, CA 94553-5560 (925) 798-1620

WorkOrder: 0304240

Client:

ATC Associates

6602 Owens Drive, #100 Pleasanton, CA 94588 TEL:

(925) 460-5300

FAX:

(925) 463-2559

ProjectNo:

#75.23909.0001

PO:

Date Received:

4/15/03

Date Printed:

4/15/03

| Sample ID | | <u> </u> | | | | | R | Requested Test | S | | |
|-------------|--------------|----------|------------------------|------|------------|-------|-------|----------------|--------|------------|------------|
| | ClientSamplD | Matrix | Collection Date | Hold | Alkalinity | BOD | COD | E200_7 | E300_1 | SW8015C | 8021B/8015 |
| 0304240-001 | KMW-1 | Water | 4/15/03 11:40:00 AM | | | E | E | Đ | С | В | Α |
| 0304240-002 | KMW-6 | Water | 4/15/03 3:20:00 PM | | Е | Е | E | D | С | В | Α |
| 0304240-003 | KMW-16 | Water | 4/15/03 3:20:00 PM | 405, | D | | | E | С | В | A |
| 0304240-004 | KMW-7 | ; Water | 4/15/03 2:30:00 PM | b | D | | | E | С | В | A |
| 0304240-005 | KMW-8 | Water | 4/15/03 1:20:00 PM | Li | D | .,. | | E | С | В | <u>A</u> |
| 0304240-006 | Trip Blank | Water | 4/15/03 | [| | | ! | | | ļ | Α |
| 0304240-007 | TAP Sample | Water | 4/15/03 4:00:00 PM | Ĺ | | | 1 | | | d. an even | A |

Prepared by: Melissa Valles

Comments:

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.

| | 6602 Owens Drive, Suite 100 Pleasanton, CA 94588 Main Line: (925) 460-5300 | | | | | | | | | CHAIN OF CUSTODY FORM | | | | | | | | | | | | |
|-----------------------------------|---|--|---------------|----------------|-------------|----------------------|-----------------------------|-------------------|--------------------|--------------------------------|-------------------|--------------|----------------------|--------------|--------------|------------------------|------------------------|--------------------|--------------|--------------|----------|--|
| | | | | | | | 160-5300 | | | Turn | aror | լոժ | | V) 1 | 10 da | v | 3 | dav | | 2- | 8 hr | |
| 1 | CIATES | | | | | | 163-2559 <u>vens Hos</u> | - nue-44 | | Time | | u | | • | 7 day | | 2 | day | | 01 | | |
| Project Name: Project Number: | FIZIESMAY | 1 Kanc 109.00 | | - ` | . IIټالل | <u>uruu)</u> Task | <u>vens nos</u> 2 | SC IIII | | (work | | days | | 5 | 5 day | | 2 | 4 hr | | | (|) |
| Project Number. Project Address: | 73, 23 | <u> Fri Cenau</u> | $\frac{9}{2}$ | RD. | 111 | | | | | ` | | | | | | | | | | | | |
| Laboratory: | 1600 Friesman RD. LIVERMORE, CA McCampbell Analytical Contact: (925)798-1620 | | | | | | | | | | | | | An | alys | es F | tequ | este | d | <u> </u> | | |
| Lab Address/Phone: | 110 Second AVE South #D-7 PACHEGO, CA | | | | | | | | | | | | | | | Đ | | lu | | | | |
| ATC Project Manager: | Jim | Jim GEHRMAN | | | | | | | | | | | | | | (7000/6010) | ر ا | 五日 | 7+ | | 1 | |
| ATC PM Ph. No.: | (925) 225 | 925) 225- 1815 Email: LEHYMAN 75 @atc-enviro.com | | | | | | | | | _ | | | | | 9 | 35. | 1E | 2 | | | |
| ATC Sampler: | P. Arr | 040 | | _ P | hone: | (925) | 225- 781 | 3 | | BE BE | (8250) | 5 | ြ | | | etect) | al (3 | чĤн | ALICATIONITY | | | |
| | Sa | ample inf | orma | tion | | Con | tainer Info | rmation | | X/MT | nates | 1015 | (801 | 3020 | 8260 | low d | , Tot | É, S. | | 7 31 | A | |
| At Market | | | | Matri | x | No. | Туре | Preser- vative | Comments / | TPHg/BTEX/MTBE (8015M/8020) | Fuel Oxygenates (| TPHd (8015M) | HVOCs (8010) | VOCs (8020) | VOCs (8260) | PP Metals (low detect) | Cyanide, Total (335.2) | Nitrate, Sulfiate, | TOTAL | Be | COD | |
| ATC Sample ID | Date | Time | Soll | Water | Vapor | | | | Field Notes | F 8 | Ē | E | 三 | ≥ | × | 8. | Ó. | 2 | | | | |
| KMW-1 | 4.15.03 | 1140 | | X | | 3 | VOA | HCL | | $\perp X$ | <u> </u> | _ | ļ | | ╀ | _ | | | <u> </u> | - | | |
| KMW- | <u> </u> | 1 | | X | | 1 | IL A.G. | None | | _ | | X | ļ | | | <u> </u> | | \ \ \ \ \ | | | | |
| KMW - 1 | | | | \perp | | | SOOML | None | | | | <u> </u> | - | <u> </u> | | | ļ | Х | \ / | | | |
| KMM-1 | | | | $ \mathbf{X} $ | | 1 | SCOML | None | | | | <u> </u> | ļ | ļ | - | <u> </u> | | - | \triangle | | | |
| KMW-1 | | | | X | | l | STOME | None | | | | <u> </u> | | <u> </u> | <u> </u> | | - | | | X. | Ċ | |
| KMW~1 | | 1 | | X | | 1 | SBOML | 14250u | | | | ļ | ļ | | igl | <u> </u> | | | | - | Χ. | |
| KMW-6 | | 1520 | | X | | 3_ | VOA | HCL | | \perp | ļ | ļ., | | <u> </u> | 1_ | ļ | | _ | | - | | - |
| KMW-6 | | \ | | X | | \ | ILAG. | None | | | <u> </u> | X | | | ļ | | | | | ļ | | - |
| KMW-10 | | | | ľΧ | | 1 | Sooml | None | | | | ļ | _ | ļ | . | | - | X | V | - | | |
| KMW-6 | | | | X | | | SOOML | Nove | | | ļ | | <u> </u> | | - | ļ | 1_ | | Δ | \downarrow | | |
| KMW-10 | | | | X | | 1 | SOCIAL | None | | | <u> </u> | | <u> </u> | <u> </u> | | | ļ | <u> </u> | ļ | X | | |
| KMW-K2 | | | | X | | li | 500ING | H2504 | | | <u> </u> | <u> </u> | ļ | <u> </u> | ļ | ļ | | | | | Δ | |
| KMW-16 | | | <u> </u> | X | | 3 | VOA | HCL | | X | | Ĺ., | | <u> </u> | <u> </u> | <u> </u> | ļ | | <u> </u> | - | | |
| KMW-16 | | | | X | | Ì | IL A.G. | None | | | | X | | | _ | | - | | | ļ | | |
| KHW-16 | | | 1 | ĪΧ | | 1 | SUDME | Nave | | | | <u> </u> | | | <u> </u> | <u> </u> | - | X | _ | ļ | | |
| KMW-160 | | | 1 | X | | | STOME | None | | | | <u> </u> | | | <u> </u> | | <u></u> | | X | | | |
| Additional Comments | * FILT | ER 3 P | nese | ,2VE | Σĸ | on | SAMPLES | s upo | n IND ARRIV | AL | | | | | | | | | | | | |
| | * INVO | | | | | Spir | | irectly | | | | | | 1.07 | | | | | | | | |
| | - /) - / | / | | | Data | /Time: | ALIC KO | 1700 | Received By: | M | el | 1/2 | W | te | | Da | le/Tii | me: | 4/ | 13 | 5 | pm |
| Relinquished By: | #Ma | -/41 | <u>/</u> | | - | /Time: | 415.03 | 1 1 100 | Received-By | 1-10 | | <u> </u> | <u> </u> | · . | | _Da | te/Ti | me: | | | | - |
| Relinquished By: Relinquished By: | 1 | | <u></u> | | _ | /Time: | | | Respived By | | F | HET | RVA: | TICH | , VV | b a | ê7ri | ner. | | | | |
| Sample Condition, Good? Yes | No | On Ice? | Yes_ | _ No | | Cooler | Temp | | ranspertation Meth | od: | 1 | TTIM | \mathcal{H}^{*} d | | | _ | | | Pag | ë! | _ ŏf | _2_ |
| - Inpla Callation (cook) | | | | | | | | | Dicklossamil | LAB | | | AUNE ERV E | | LAB | | | ÷ | | | | |
| White - Lab | | | | | | | <u></u> | Yellow - | Lab | | | | | | | | | | | Pi | nk - | ATC |

| | | | Ple | asanto | n, CA 9 | re, Suite 10 94588 460-5300 | o 03 | 64240 | С | H | ٩II | N (| OF | C | :US | ST | Ol | DΥ | ′ F | OR | ١N | | | |
|----------------------------|---|--|--------------------------|--|-----------------|-----------------------------------|-------------------|---|---|------------------------|--------------|--|-----------------------------|--------------|------------------------------------|------------------------|-------------------|------------------|--|--------------|-------------|--|--|--|
| ASSO | CIATES | INC. | | | | 463-2559 | | | Turn | aroı | und | | | 10 da | | | 3 day | | | -8 hr | | | | |
| Project Name: | FRIESMA | ESMAN RANCH Client: CHILDVENS HOSPITAL | | | | | | | | | | | Time:7 day2 day other | | | | | | | | | | | |
| Project Number: | 75.2390 | 75.23907.000 Task: 2 | | | | | | | | | | | (working days) 5 day24 hr (| | | | | | | | | | | |
| Project Address: | 1600 | 1600 FRIESMAN RD. LIVERMORE, CA | | | | | | | | | | | Ā | - Alve | ses F | 2000 | inet | a ci | | | | | | |
| _aboratory: | Mc Compt | 1c Campbell Analytical Contact: (925)798-1620 | | | | | | | | | _ | т- | T | laiye | T | T | 6316 | | | \Box | | | | |
| _ab Address/Phone: | | 110 SECOND AVE South #D-7 PACHECO, CA | | | | | | | | | • | | | 1 |) § | | FE | 7 | | | ı | | | |
| ATC Project Manager | | Jim LEHCMAN (925) 225- 7815 Email: LEHCMAN 75 @atc-enviro.com | | | | | | | | | | | | | 900 | ন | -J | -5 | | | J | | | |
| ATC PM Ph. No.: | (925) 225- | | | | | | | nviro.com | | a | | 1 | | | Ĕ | 335 | t. | اڅ | 1 1 | | | | | |
| ATC Sampler: | P. Arr | oyo | | Phone | e. <u>(925)</u> | 225- 181 | <u> </u> | - | TBE | Fuel Oxygenates (8260) | Ĕ | 5 | 6 | 6 | PP Metals (low detect) (7000/6010) | Cyanide, Total (335.2) | Nitrate, Sulfate, | Tatel Alkalinity | | | | | | |
| | Sa | ımple info | rmation | , | Con | tainer Info | rmation | | TPHG/BTEX/MTBE (8015M/8020) | enate | TPHd (8015M) | HVOCs (8010) | VOCs (8020) | VOCs (8260) | (low | <u>ا</u> ر | 6 | | BOD | COO | | | | |
| | | | Ma | trix | | 75 | , ee . | Comments / | 3/BT | Dxyg | 후 | ပ္ကြ | 8 | 8 | etals | niđ | (g) | इ | M | ව | | | | |
| ATC Sample ID | Date | Time | Soil Wat | er Vapo | | Туре | Preser- vative | Field Notes | (801) | Fuel | Ē | Ĭ | Š | Š | <u>8</u> | Ç | 2 | 10 | | | | | | |
| KMW-7 | 4.15.03 | 1430 | | <u> </u> | 3. | AOV | HCC | | $\perp \!\!\! \! \! \! \! \! \! \! \! \! \! \! \! \! \! \! \! \!$ | | <u> </u> | ļ | <u> </u> | ــ | — | | | | | | | | | |
| KMW.7 | 1 | | | | | IL A.G. | Nove | | <u> </u> | <u> </u> | X | ↓_ | | | ↓ | | k | - | | | | | | |
| KMW-7 | | | | | <u> </u> | Soom | None | | | | <u> </u> | ļ | | | ↓ | <u> </u> | $ \Delta $ | | | | _ | | | |
| KMW-7 | | 1 | !× | | 1 | SOOM | None | | <u> </u> | | | ļ | <u> </u> | <u> </u> | ↓ | ļ | <u> </u> | X | | ├ ──┼ | | | | |
| KMW-8 | | 1320 | × | | 3 | VOA | HCL | | X | | L., | | <u> </u> | | ↓ | ↓ | | <u> </u> | | | | | | |
| KMW-8 | | 1 | $\overline{}$ | | | ILAG. | None | | | | X | | | | <u> </u> | <u> </u> | ļ.,, | <u> </u> | | | | | | |
| KMW-8 | | | × | | 1 | 500ml | None | | | <u> </u> | <u> </u> | <u> </u> | | | <u> </u> | | X | <u></u> | | | | | | |
| KMW-8 | | W | $\neg \mid \mathbf{x}$ | | 1 | Sound | Nove | |] | | | | | <u> </u> | | 1 | | X | | | | | | |
| TRIP BLANK | | - | $\neg \uparrow \searrow$ | 7 | Ī | VDA | HCL | | X | | | | | - | | <u> </u> | | <u> </u> | | | | | | |
| TAP Sample | | 1600 | | > | 3 | VOA | HCC | | X | | | | T | | | Γ | Ī | | | | | | | |
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| additional Comment | S. Mr. +11 | <u> </u> | | <u> </u> | Pal | SAMPLE | S (100 | n IAb Anzi | VAL. | J | <u> </u> | | | | | | | | | <u> </u> | | | | |
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| ample Condition, Good? Yes | No | On Ice? Ye | es No _ | | Cooler | Temp | | Transportation Metho | đ: | | | | | | _ | | | ray | E | | | | | |
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White - Lab

L:/Admin/Subsurfar'e Group/revised chain of custody; revised 05/08/01

Yellow - Lab

Pink - ATC