



July 3, 1996 File No. 10-3002-84/007

Ms. Delight Saxton, Vice President McGrath RentCorp 2500 Grant Avenue San Lorenzo, California 94580

SUBJECT: Final Report - Site Investigation and Remediation

2500 Grant Avenue

San Lorenzo, California 94580

Dear Delight:

Kleinfelder, Inc. (Kleinfelder) is pleased to provide you with our final report for Site Investigation and Remediation of the subject site. Our subsurface investigation has been completed, storm drain cleaned, and impacted soils excavated to background levels.

Ms. Roxy Barnett, our Senior Program Biologist, will provide an additional environmental data support document next week. Kleinfelder believes no further environmental action is warranted at this time.

As you requested, copies of this report are being mailed directly by Kleinfelder to the regulatory agencies as cited in our report.

We appreciate your trust in our ability to serve your environmental needs. If you have any further questions, please call us at (510) 484-1700.

Sincerely,

KLEINFELDER, INC.

Alan D. Gibbs, R.G., C.H.G., R.E.A.

Environmental Manager

Enclosures

cc: Mr. Mark Johnson - Regional Water Quality Control Board

Ms. Madhulla Logan - Alameda County Department of Environmental Health

Mr. Wyman Hong - Alameda County Flood Control Water Conservation District

Mr. Mike Cortez - Oro Loma Sanitary District

Ms. Roxy Barnett - Kleinfelder, Inc.

Chris Ream, Esquire

# FINAL REPORT SITE INVESTIGATION AND REMEDIATION 2500 GRANT AVENUE SAN LORENZO, CALIFORNIA

July 2, 1996

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#### A Report Prepared for:

Ms. Delight Saxton, Vice President McGrath RentCorp. 2500 Grant Avenue San Lorenzo, California 94580

FINAL REPORT - SITE INVESTIGATION AND REMEDIATION 2500 GRANT AVENUE SAN LORENZO, CALIFORNIA

No. 4463

Kleinfelder Job No. 10-3002-84/007

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#### 1.0 INTRODUCTION

Kleinfelder, Inc. (Kleinfelder) is pleased to submit this report, on behalf of McGrath RentCorp, which summarizes the initial environmental investigation, storm drain cleaning, drainage ditch sampling, soil excavation at the storm drain outlet, water treatment and ditch excavation at the subject site. A site location map is included as Plate 1. This work was completed in accordance with our proposal dated January 29, 1996, and various add-authorizations signed in March through June 1996.

Kleinfelder has completed our investigation and remediation of the site for zinc impacted sludge in the storm drain and soils at the storm drain outfall. Kleinfelder believes no further environmental action is warranted at this time.

Following is a detailed discussion of work completed by Kleinfelder and others.



#### 2.0 BACKGROUND

Kleinfelder understands that McGrath RentCorp (McGrath) has been leasing the subject property for approximately eight years and is now planning to move to another area. The owner of the site contracted PHASE ONE Inc. to complete a Standard Phase I Environmental Site Assessment for the site. In the assessment report completed in December 1995, several environmental concerns were expressed. The areas of concern were 55 gallon drums, paint storage areas, and storm drain inlets in close proximity to these areas. Most of the drums were not labelled and the contents unknown. The owner of the site requested that McGrath address the concerns outlined in the Phase I report before vacating the site.



#### 3.0 WORK OBJECTIVE AND SCOPE OF WORK

The objective of the work completed by Kleinfelder was to address the concerns outlined in Phase One Inc.'s report. To complete this objective, we first collected soil samples in close proximity to and beneath areas where drums and paint cans have been stored, and collected sludge samples from four storm drain inlets. After assessing the analytical results of that sampling, Kleinfelder recommended that the storm drain be cleaned to remove accumulated sludge, soil and water samples be collected from the manmade drainage ditch, and soils be excavated surrounding the storm drain outlet.

To meet these objectives the following tasks were completed:

- 1. A geophysical survey was completed at each sampling location;
- 2. A drilling permit was obtained from the Alameda County Flood Control and Water Conservation District Zone 7;
- 3. A health and safety plan was prepared (Appendix A);
- 4. Soil samples were collected from eight soil borings and from soil adjacent to abandoned drums. One water sample was collected from the storm drain outlet;
- 5. Sludge samples were collected from four storm drain inlets;
- 6. The storm drain was cleaned;
- 7. Water and sludge samples derived from the storm drain cleaning were analyzed;
- 8. Soil and water samples from the manmade drainage ditch were sampled and analyzed;
- 9. Soil at the storm drain outlet and along the manmade drainage ditch was excavated and excavation confirmation samples were collected; and
- 10. This report was prepared summarizing the work completed to date with analytical results.

These tasks are further described in the following sections.

#### TASK 1 - SUBSURFACE INVESTIGATION

The subsurface investigation was comprised of several subtasks including the geophysical survey, drilling of eight soil borings, and collection of four sludge samples. In addition, one surface soil sample was collected adjacent to four abandoned drums and one water sample was collected from standing water directly beneath the outfall of the storm drain outlet. The sampling locations are shown on Plate 2. These tasks are described below.

#### Geophysical Survey

Before performing on-site drilling, C.U. Surveys conducted a geophysical survey on February 14, 1996 at each proposed boring location to identify underground utilities. C.U. Surveys used electro-magnetic instruments that are sensitive to conductive, inductive, and passive indicators up to a depth of 15 feet. Two of the proposed locations were moved a few feet after the survey because the proposed sampling locations were not accessible due to underground utilities.

#### **Drilling**

On February 15, 1996, Gregg Drilling Company drilled eight soil borings (K-2 through K-9) using a SIMCO drill rig. A probe was hydraulically driven to depths of 2 to 4 feet and soils were sampled continuously. Soil types were noted in the field logs. Two soil samples were collected from each location; one just beneath the parking lot asphalt and baserock and one at first encountered native soil. The more shallow sample was submitted for analysis. The top 1.5 to 2.5 feet beneath the asphalt was red brown sandy clay fill material. Native dark gray or brown clay was encountered beneath the fill. Sample locations are shown on Plate 2. Drilling operations are shown in photograph 1 of Appendix B.

Soil samples collected for chemical analysis were capped with Teflon and plastic end caps, labelled, and placed into iced storage before delivery to the laboratory under chain-of-custody control. Each borehole was backfilled with cement to surface grade.

### Sampling Storm Drain Inlets

At the four storm drain inlets (CB-1, CB-2, CB-3, CB-4) closest to where McGrath worked on their modular units, sludge samples were collected into glass containers provided by the laboratory. Sludge found at the bottom of the inlets contained dried paint, nails, electric tape, and other debris. Standing water in the four storm drain inlets also had visible oily sheens.



#### Water Sample Collection at Storm Drain Outlet

One water sample (K-1) was collected from water ponded directly beneath the storm drain outlet at the south end of the site. No soil sample could be collected because of vegetation. Water samples were collected by dipping a sample bottle into pooled water.

#### Soil Sample Collection at Drums

At the southern end of the site, four empty 55-gallon drums were found abandoned along the railroad tracks. One drum was labelled as being Chevron motor oil; the other drums were not labelled. Of the four drums, three had large rusted holes or their tops missing. One soil sample (K-10) was collected between the drums by scraping the top two inches of soil off the ground and driving a brass sample tube by hand into undisturbed soil.

#### Chemical Analysis

In the subsurface investigation task, nine soil samples, four sludge samples, and one water sample were submitted under chain-of-custody control for analysis to McCampbell Analytical (McCampbell), a state certified analytical laboratory. Analyses were chosen based on the material safety data sheets (MSDS) of products stored and used on-site, which were provided to Kleinfelder by McGrath. Based on our MSDS review, the samples were analyzed by the following Environmental Protection Agency (EPA) Test Methods:

- EPA Method 8270 for semi-volatile organic compounds;
- EPA Method 8015/8020 and 5030 for total petroleum hydrocarbons quantified as gasoline (TPH-g); benzene, toluene, ethylbenzene, and xylenes (BTEX);
- Modified EPA Method 8015/3550 for total petroleum hydrocarbons quantified as diesel (TPH-d), motor oil (TPH-mo), ethylene glycol, diethylene glycol, propanol, and propanal;
- EPA Methods 6010 and 239.2 for lead, tin, and zinc; and
- EPA Method 150.1 for pH.

The soil sample collected beneath the four empty drums was analyzed only for semi-volatile compounds, TPH-d and TPH-mo. After receipt of preliminary analytical data, two storm drain inlet samples (CB-1, CB-3) were noted to contain elevated concentrations of zinc (i.e., total zinc

at concentrations greater than 10 times the soluble threshold limit concentration, or STLC). Therefore, samples CB-1 and CB-3 were analyzed using the STLC extraction method. A summary of organic analytical results is provided in Table 1. A summary of metals and pH analytical results is provided in Table 2. The laboratory report and chain-of-custody records are attached in Appendix C.

#### **Analytical Results**

Analytical results for Task 1 - Subsurface Investigations, are summarized in Tables 1 and 2. Analytical results show that only a few soil samples contained detectable organic compounds. TPH-g was detected in two of the nine soil samples at concentrations of 1.5 milligrams per kilogram (mg/kg) at boring K-10 and 2.4 mg/kg at boring K-3. The laboratory noted that the chromatograms of the soil and sludge samples did not match a typical TPH-g standard (see Table 1 for explanation). TPH-d, TPH-mo, and di-n-butyl phthalate were detected in the soil sample (K-10) collected from the drum area at concentrations of 1.1 mg/kg, 5 mg/kg, and 0.977 mg/kg, respectively. Toluene was detected at a concentration of 0.57 micrograms per liter (mg/L), which is just above the method detection limit, in the water sample (K-1) collected from the storm drain outlet. In Kleinfelder's opinion, these concentrations of organic compounds are of minimal environmental concern.

TPH-g was detected in the four sludge samples at concentrations ranging from 9.2 mg/kg to 440 mg/kg. BTEX compounds were detected in all four sludge samples at concentrations ranging from 0.014-2.2 mg/kg. Two of the semi-volatile compounds were also detected in one of the sludge samples (CB-2).

Lead was detected in the soil, water, and sludge samples at concentrations commonly considered background for native soils from the Bay Area, and well below established United States EPA Preliminary Remediation Goals (PRG) for soils in a residential setting. Tin was detected at low concentrations in two of the four sludge samples. Zinc was detected in the soil samples at moderate levels. Sludge samples, however, contained elevated levels of zinc, but below the residential PRG and California Code of Regulations (CCR) hazardous levels. The water sample collected from the storm drain outlet contained zinc at concentrations that exceeded the PRG for tap water, the California Maximum Contaminant Level (MCL) for drinking water, and State water quality objectives.

#### TASK 2 - STORM DRAIN CLEANING

On April 14 through 20, 1996, First Environmental Group (FEG), subcontracted by Kleinfelder, cleaned the storm drain at the western portion of the site. The section of the storm drain (approximately 1,100 linear feet) that was cleaned is shown on Plate 2. Sludge and debris in the storm drain were cleaned out by hydroblasting, with high pressure water through an array of very small holes on a Sputnick<sup>TM</sup> cleaning nozzle, a probe extended onto a water hose, and pushing and pulling the Sputnick through the storm drain. As the sludge was pushed out of the storm



drain, a vacuum truck vacuumed the sludge, water, and other debris into a solid waste box. From the solid waste box, water was transferred into five 6,500 gallon polyethylene storage tanks. Photographs 2 and 3 in Appendix B show the storm drain cleaning and a solid waste box receiving the vacuumed waste.

Approximately 30,000 gallons of water and 30 cubic yards of sludge were generated during the leaning of the storm drain. On April 30, 1996, samples of the water and sludge were collected for analysis and analyzed by McCampbell. The analytical results for Task 2 - Storm Drain Cleaning are summarized in Table 3. The water samples were collected from each tank by lowering a new disposable bailer into each of the five storage tanks (T-1 through T-5) and decanting the water into sample bottles. These five samples were analyzed for zinc using EPA test method 6010. In addition, the five water samples were composited into one sample at the laboratory and analyzed for the following compounds:

- EPA Method (modified) 8015 for (TPH-g);
- EPA Method 8020 for BTEX;
- EPA Method 9010 for cyanide;
- EPA Method 420.1/9065 for phenolics; and
- EPA Method 6010 for arsenic, cadmium, copper, lead, mercury, nickel, selenium, silver, total chromium, and zinc.

Samples of the sludge were collected from the two roll-off bins (T-6 and T-7), each storing approximately 15 cubic yards of sludge and water. Sludge samples were collected from each bin using a pond sampler, an EPA-approved sampling device, consisting of a wide-mouth sample bottle attached to a flexible plastic pipe. The pond sampler was lowered into both ends of each bin to scoop sludge into sample bottles. The two samples from each bin (T-6a and T-6b, T-7a and T-7b) were composited at the laboratory and were analyzed for zinc using EPA Method 6010.

The analytical report and chain-of-custody records are attached in Appendix A. Analytical results show that water collected in three of the five storage tanks contain zinc concentrations at or above the PRG level of 11 mg/L. The Oro Loma Sanitary District (OLSD) accepts water with zinc concentrations less than 3 mg/L into their sanitary sewer line; water in all the tanks exceeded OLSD zinc concentrations. Concentrations of other metals and the TPH-g concentrations were within the acceptable levels for OLSD disposal. Cyanide and phenolics were not detected. However, BTEX concentrations were higher in the composite water sample than the OLSD

acceptable level (non-detect). Zinc concentrations in the sludge from the bins were below the CCR hazardous levels for TTLC (5,000 mg/kg) and STLC (250 mg/L).

Management of Residuals in Storm Drain Cleaning

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The storm drain cleaning activities generated approximately 30,000 gallons of liquids and 30 cubic yards of sludge, as described above. Kleinfelder presented several options to McGrath for disposal/treatment of these residuals as non-hazardous wastes. For the liquids, McGrath selected on-site treatment to reduce zinc and BTEX concentrations to levels acceptable for sewer discharge. The selected option for sludge was off-site disposal.

Kleinfelder prepared a sewer discharge permit application on behalf of McGrath for treated water, and obtained a discharge permit from OLSD. Copies of the application and permit are enclosed in Appendix D.

McGrath then contracted with Erickson Inc., an on-site wastewater treatment contractor, to perform treatment, sampling, analysis, and discharge of liquids in the tanks. Erickson and Kleinfelder devised a lime-based chemical precipitation process to remove soluble zinc below the OLSD limit of 3 mg/L. Erickson began treating the water on May 17, 1996. On that date, they slurried pre-determined weights of lime into solution and added the slurried lime mixture into each tank. The lime-treated tanks were allowed to stand for several days.

On May 20 and 21, 1996, lime-treated water was filtered using a plate and frame filter press with a diatomaceous earth pre-coat, to remove precipitated zinc. Immediately following the filter press, water was treated with granular activated carbon to remove TPH-g and BTEX to the OLSD limit of non-detect.

A photograph of the wastewater treatment operation is shown as photograph # 5 in Appendix B. Treated water then was accumulated into two 20,000 gallon holding tanks pending analysis. Erickson then sampled the treated water, and analyzed for zinc and TPH-g/BTEX using EPA-approved analytical methods and a laboratory certified in California for the selected, analyses. Samples of treated water contained no detectable TPH-g/BTEX or zinc above laboratory reporting limits. Analytical results for samples of treated water are summarized in Table 3.

Erickson's treated water analytical results (included in Appendix C) were faxed to Ms. Susan Keach of OLSD. OLSD then authorized discharge of the treated water after compliance with the sewer permit limits was confirmed by the analytical results. Erickson then discharged the treated water through the sewer maintenance hole on Phil Drive (the location approved by OLSD), at an estimated flow rate of 100 gallons per minute on May 23, 1996.

After water treatment, the five poly tanks were found to contain up to three feet of silt and sediment from the storm drain cleaning activities. Erickson therefore pumped the silt and sediment out of the poly tanks on May 21 through 23, using a vacuum truck; the material from the tanks was transferred into the two sludge bins already on-site. While pumping, Erickson cleaned each of the poly tanks to the satisfaction of the tank rental company.

On June 20, 1996, Erickson pumped approximately 3,500 gallons of free liquids from the two sludge bins using a vacuum truck. This water was transported as non-hazardous waste to Evergreen in Newark, California. (Please refer to Appendix E for disposal documentation.) The two sludge bins were off-hauled on June 25, 1996 by FEG to the McKittrick (Class II) disposal site. (At the time this draft report was prepared, disposal documentation for sludge was not available.)

TASK 3 - DRAINAGE DITCH SAMPLING AND STORM DRAIN OUTLET Storm Drummy Storm EXCAVATION SAMPLING

**Drainage Ditch Sampling** 

On March 29 and April 17, 1996, 6 soil samples and 2 water samples were collected from the manmade ditch which runs parallel to the south fence approximately 8 feet north of the failroad tracks. Plate 2 shows the approximate sample locations. The samples were collected between 10 to 40 feet east and 10 to 20 feet west of the storm drain outfall in the ditch. Soil samples were collected by scraping off the top half inch of soil and hand driving the sample tube into the soil. The surface water samples were collected by lowering a sample container into standing water in the drainage ditch. It should be noted that standing water was evident after precipitation on-site, and there was run-off to the ditch from the storm drain.

The drainage ditch samples were analyzed for TPH-g and BTEX using EPA Methods 8015/8020, zinc using EPA Method 6010, and pH using EPA Method 150.1. TPH-g and BTEX were not detected in any of the soil samples above method detection limits. Only toluene was detected in one of the water (10E) samples at a concentration of 2.3 µg/L. Zinc was detected in the soil samples at concentrations ranging from 69 mg/kg to 2,900 mg/kg. Table 4 summarizes the analytical results, and the analytical reports and chain-of-custody records are attached in Appendix C.

Based on the zinc concentrations found in the drainage ditch, further investigation was performed on May 28, 1996. This investigation continued soil and water sampling along the drainage ditch to the west. The sample locations ranged from 30 feet to 300 feet west of the storm drain outlet. Eight soil samples (analyzed for zinc by EPA Method 6010) were taken from the bottom of the drainage ditch by scraping off the top half inch of soil and hand driving the sample tube into the soil. Two water samples (analyzed for zinc by EPA Method 239.2) were taken by lowering the sample bottles into standing water.

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The results from the soil sampling showed a significant drop off in zinc concentrations at approximately 120 feet west of the storm drain outlet. Zinc concentrations in the surface water samples west of the storm drain outlet were 1.8  $\mu$ g/L at 100 feet, and 1.4  $\mu$ g/L at 200 feet.

## Excavation Sampling W

On May 7, 1996, a ten by ten foot area was excavated to an approximate depth of two feet at the storm drain outlet. Plate 2 shows the location of the excavation and Plate 4 shows the excavation outline and sampling locations. Two soil samples were collected from each sidewall and five were collected from the bottom of the excavation by hand driving a sample tube into the soil. In addition, two soil samples were collected from the excavated soil stockpiled in the bin. The two samples from each sidewall and stockpiled soil, as well as the five samples from the excavation bottom were composited at the laboratory (six composite samples total). Photograph 6 in Appendix B shows the excavation at the storm drain outlet, and the five sample points on the excavation floor.

The six excavation samples were analyzed for zinc using EPA Method 6010. The stockpiled soil sample was also analyzed for TPH-g and BTEX using EPA Methods 8015/8020. The sidewall, bottom samples, and the stockpiled soil contained zinc at concentrations ranging from 100 mg/kg to 260 mg/kg, well below PRG and TTLC levels. Analytical results are summarized in Table 5. The laboratory report and chain-of-custody records are attached in Appendix C.

Based on the analytical results from Task 3 sampling, continued assessment was conducted through excavation and sampling of the drainage ditch extending west of the storm drain outlet. The description of field activities and sampling results are presented in the following section.

Following is a chronological list of events and conversations which led to the ditch excavation and assessment:

- On June 3, 1996, Alan Gibbs, Dan Carroll, Roxy Barnett, all of Kleinfelder, discussed the site with Mark Johnson and Ravi Arulanantham of the RWQCB. The site address was not disclosed (yet) at the time of this conversation.
- On June 18, 1996, Alan Gibbs talked with Lee Schaffert of OLSD and discussed the excavation site as possibly being on their property and not Alameda County. Site/parcel maps were faxed to OLSD.
- On June 19, 1996, Alan Gibbs met with Mike Cortez, Assistant Engineer with OLSD. A copy
  of our Draft Report dated May 15, 1996 was provided. We walked the job site and discussed
  the scope of work. Mr. Cortez said he required a release from McGrath for future liability



and a statement from Kleinfelder that work would be performed according to regulatory guidelines.

- On June 20, 1996, Alan Gibbs talked with Mark Johnson of the RWQCB, who requested the draft report and a work plan prior to excavation. This information was couriered to him.
- Also on June 20, 1996, Alan Gibbs talked with Ms. Madhulla Logan of the Alameda County Health Agency (ACHA), who also requested a copy of existing draft report, work plan, and \$900 for mitigation. A copy of the reports and check were sent to her on June 20 and 21, 1996, respectively.
- On June 20 and 21, 1996, Erickson and SUT's were contracted to provide bids for excavation and disposal; this work commenced on Monday, June 24, 1996.

#### TASK 4 - DRAINAGE DITCH EXCAVATION AND SAMPLING

On June 24, 1996, the drainage ditch, which extends to the west of the storm drain outlet, was excavated to a depth of approximately 1 foot below existing grade along a length of 125 feet running west of the storm drain outlet, as shown on Plate 4. The excavation was performed by Superior Underground Tank Service (SUT's) and by Erickson, with oversight and sampling performed by Kleinfelder. Kleinfelder's senior program biologist, Roxy Barnett, was on-site for the duration of the excavation. The first 90 feet west of the storm drain outlet was excavated by SUT's using a backhoe. From 90 feet to 125 feet, manual excavation was performed with hand tools by Erickson. (Manual excavation was utilized to decrease the impact to the ditch and areas surrounding the ditch.) Following the excavation, soil samples were taken at measured intervals along the ditch, as described below. These samples were analyzed for zinc by McCampbell. Photographs 7 and 8 (Appendix B) show the excavated drainage ditch looking both west and east, respectively.

### Sample Collection and Chemical Analysis

On June 24, 1996, soil samples were collected at eight locations after completion of excavation, using 10 to 20 feet intervals from the storm drain outlet along the excavated ditch. Four soil samples were taken from each distance interval. Of these two soil samples, two soil samples were taken from the floor of the excavation, and one soil sample was taken from each sidewall of the excavation. The two floor soil samples were composited by McCampbell, as were the two sidewall soil samples. Each sample was collected by hand driving a brass or stainless steel tube into the undisturbed soil. The tubes were then capped and labeled properly. Once composited, the samples were analyzed for zinc by EPA Methods 6010/200.7. A summary of the post-drainage ditch excavation analytical results is provided in Table 6. The laboratory report and chain-of-custody records are attached in Appendix C.

#### **Analytical Results**

A review of the soil sampling results (16 samples) indicated an arithmetic mean zinc concentration of 103 mg/kg and a geometric mean zinc concentration of 94 mg/kg. The geometric mean is statistically a more representative value for the average zinc concentration. These concentrations are indicated to be at levels comparable to the background soil samples collected at the McGrath site, below the levels of concern for human health, and appear not to represent a threat to the environment; however, an environmental assessment report summarizing the findings will follow this report.

On May 28, 1996, Kleinfelder requested McCampbell re-analyze sludge sample CB-1 and soil sample KB-W30 for zinc speciation. This additional task was recommended by Mark Johnson of the RWQCB. Mr. Ed. Hamilton of McCampbell, therefore, performed a series of three extractions on these samples:

- A 1:1 extraction using deionized (DI) water, rotated for 18 hours;
- Using the solids after DI water extraction, mixed 1:1 with an unbuffered pH 4.0 solution for extraction; and
- Remaining solids from step two were then subjected to the TTLC extraction procedure.

Extracts from each step above were analyzed for zinc and selected inorganic constituents.

Sediment and plants then were separated visually from the KB-W30 soil sample and analyzed separately for zinc by TTLC. These analyses will be discussed in the environmental assessment to be submitted under separate cover. Analytical results are enclosed in Appendix C.

### Disposal of Excavated Soils

Excavated soils were stored in four roll-off boxes and amounted to approximately 60 yards. Soil was transported by Erickson to Redwood Landfill, Inc.



#### 4.0 CONCLUSIONS AND RECOMMENDATIONS

The following conclusions are derived from field observations, analytical results, and Kleinfelder's interpretation of regulations for acceptable levels of chemical compounds.

#### Subsurface Investigation

Shallow soils in the vicinity of the drilled boreholes and adjacent to the drums do not appear to be significantly impacted, based on field observations and analytical results.

Sludge samples collected from the four storm drain inlets contained moderate levels of petroleum hydrocarbons and elevated levels of zinc; however, the STLC concentration of zinc in sludge samples CB-1 and CB-3, the samples with the highest zinc concentrations, did not exceed the California Code of Regulations (CCR)-STLC concentration. The sludge was removed from the storm drains and no longer presents an environmental concern.

The water sample collected at location K-1 (beneath the storm drain outlet) contained toluene at 0.57 µg/L and zinc at 35 mg/L. Screening these values against surface water quality goals identified zinc, but not toluene, as a compound present at a concentration of potential concern. California's water quality objectives for zinc in inland surface waters and enclosed bays and estuaries vary with the hardness of the water. The zinc concentration in the sample from location K-1 exceeded these values. This indicates a potential for concern, but does not indicate that adverse effects are necessarily occurring, particularly considering that zinc is readily absorbed by clayey soils and organic matter, specifically in the vegetation found at the site [Alloway, B.J., 1990, Heavy Metals in Soils]. However, the source of the zinc has been removed by cleaning out the storm drain; the area where the water sample was collected, and the drainage ditch were excavated.

An environmental assessment report will follow this report, which will assess the results of the drainage ditch excavation. This document will be a data support document only, as Kleinfelder feels no further assessment is warranted for this site.

#### Storm Drain Cleaning

The storm drain has been cleaned out. Kleinfelder collected samples of the water and sludge that were generated during the cleaning of the storm drain.

#### Manmade Drainage Ditch Sampling

Zinc concentrations in sediments from the drainage ditch in the eastward direction indicated an abrupt decrease from 1,200 mg/kg, 10 feet east of the storm drain outlet to 69 mg/kg, 40 feet east of the outlet. Zinc concentrations in sediments 10 feet to 150 feet west of the outlet were 1,400 mg/kg and 130 mg/kg, respectively. Based on these results, the trench was excavated from 0 to 120 feet west and impacted soils removed.

Zinc concentrations in the water samples decreased from 0.27 mg/L at a 10 foot distance east from the outlet to 0.086 mg/L at the 20 foot distance from the outlet.

Zinc concentrations in the soils (before ditch excavation) were well below PRG and TTLC concentrations. The zinc concentration in the water sample collected 10 feet west of the outlet was below the 11 mg/L PRG level for tap water, but appeared to be above Regional Water Quality Control Board water goals for enclosed bays and estuaries and freshwater and aquatic life protection (from 0.049 to 0.095 mg/L). As noted earlier, standing water was only evident during periods of precipitation, and there was runoff to the ditch from the storm drain. Now that the source of zinc has been removed; we believe that zinc is no longer a concern.

Kleinfelder concludes the site has been cleaned up for the chemical constituents of concern and that no further environmental action is warranted at this time.

Kleinfelder recommends that this report be sent to the following agencies:

Mr. Mark Johnson Regional Water Quality Control Board 2101 Webster Street, 5th Floor Oakland, California 94612

Ms. Madhulia Logan
Alameda County Department of Environmental Health
Hazardous Materials Division
1131 Harbor Bay Parkway, Second Floor
Alameda, California 94502

Alameda County Flood Control Water Conservation District - Zone 7 5997 Parkside Drive Pleasanton, California 94588-5127

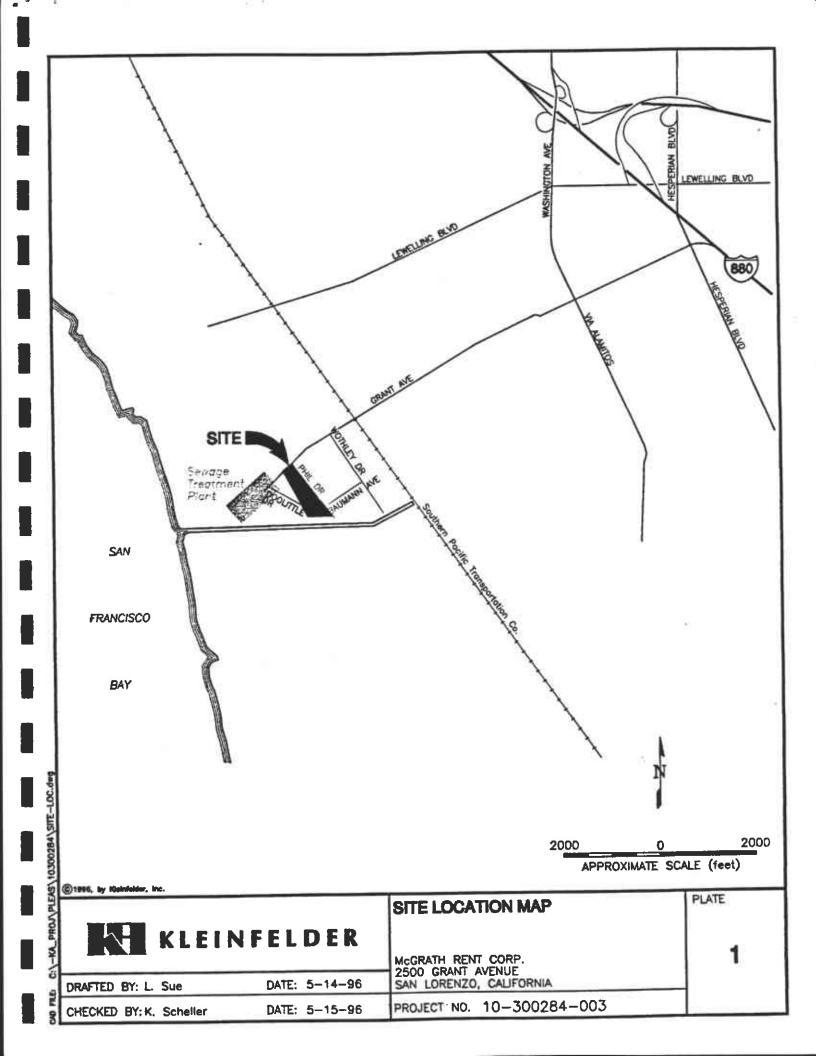
Mr. Mike Cortez Oro Loma Sanitary District 2600 Grant Avenue San Lorenzo, California 94580

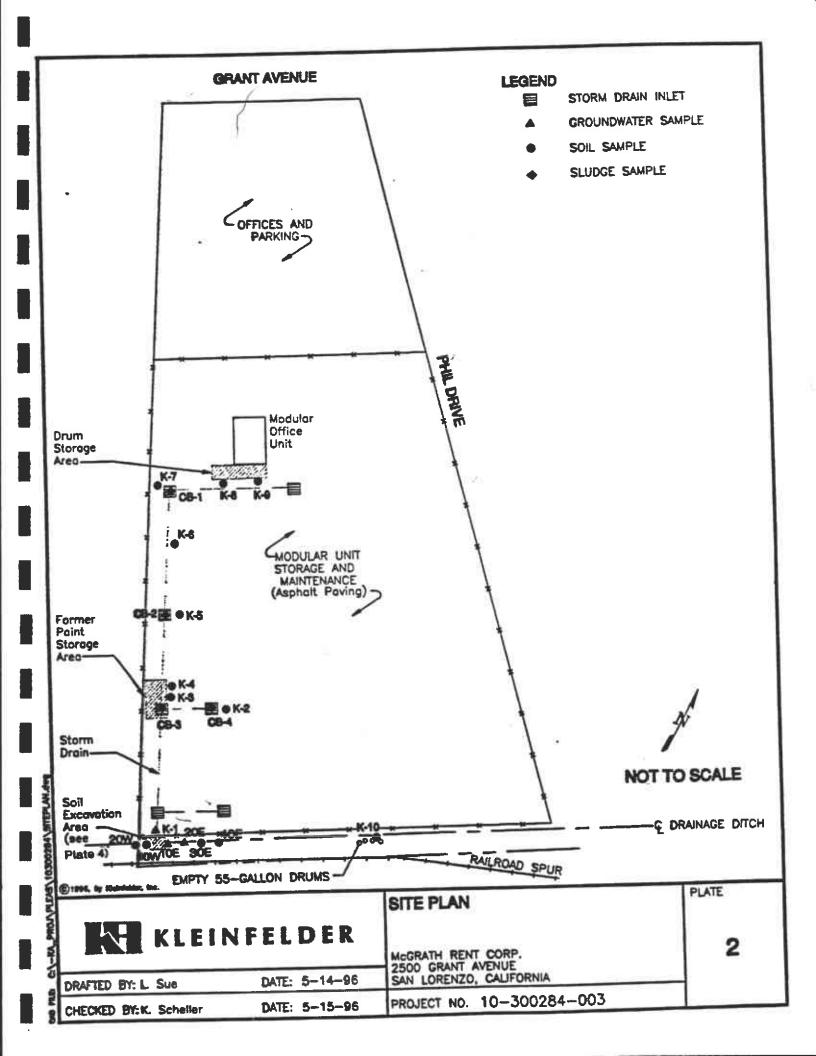
#### **5.0 LIMITATIONS**

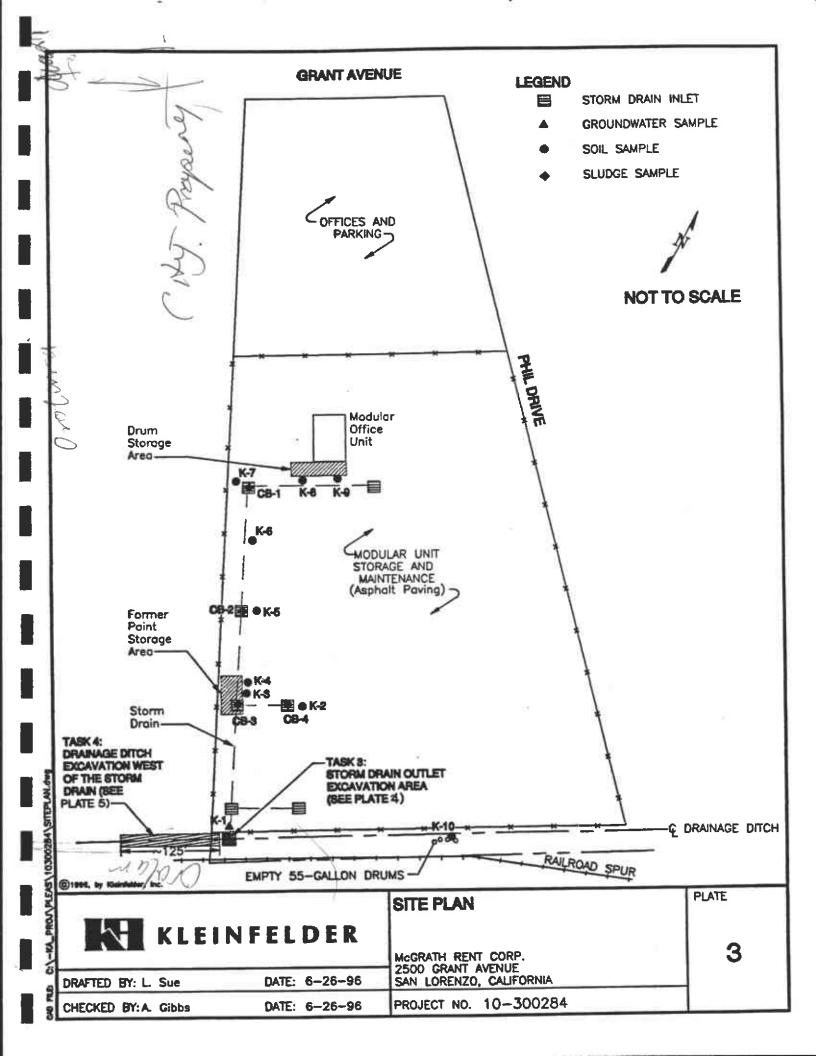
This report was prepared in general accordance with the accepted standard of practice which exists in Northern California at the time the investigation was performed. It should be recognized that definition and evaluation of environmental conditions is a difficult and inexact art. Judgements leading to conclusions and recommendations are generally made with an incomplete knowledge of the conditions present. More extensive studies, including additional environmental investigations, can tend to reduce the inherent uncertainties associated with such studies. If the Client wishes to reduce the uncertainty beyond the level associated with this study, Kleinfelder should be notified for additional consultation.

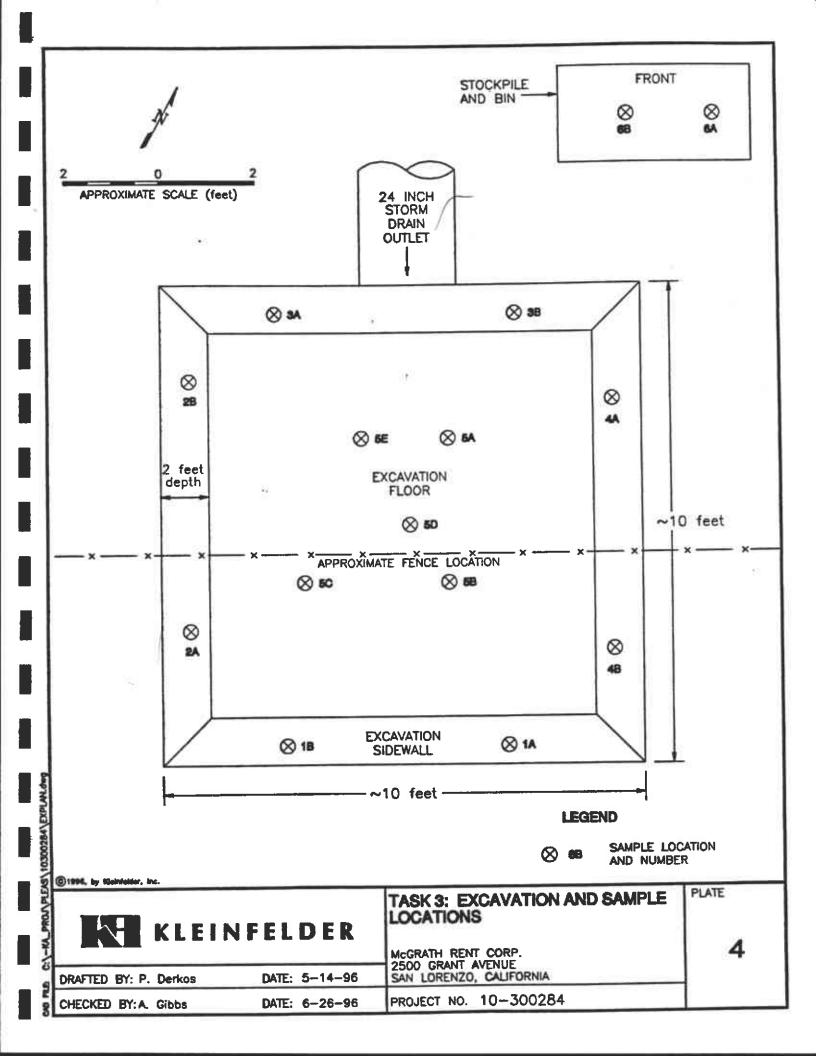
Our firm has prepared this report for the Client's exclusive use for this particular project and in accordance with generally accepted engineering practices within the area at the time of our investigation. No other representations, expressed or implied, and no warranty or guarantee is included or intended.

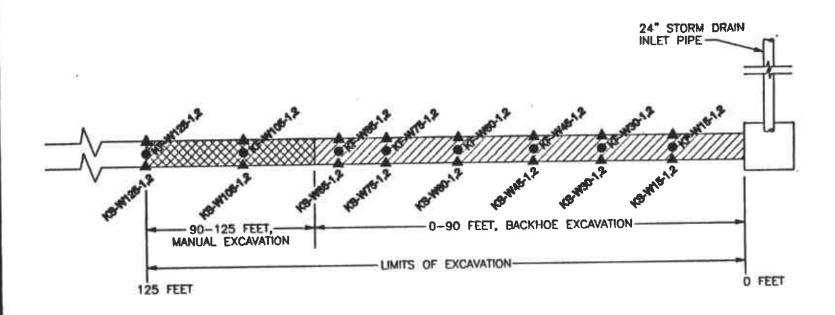
This report may be used only by the Client and only for the purposes stated, within a reasonable time from its issuance. Land use, site conditions (both onsite and offsite) or other factors may change over time, and additional work may be required with the passage of time. Any party other than the Client who wishes to use this report shall notify Kleinfelder of such intended use. Based on the intended use of the report, Kleinfelder may require that additional work be performed and that an updated report be issued. Non-compliance with any of these requirements by the Client or anyone else will release Kleinfelder from any liability resulting from the use of this report by any unauthorized party.





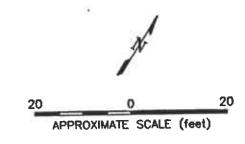






#### LEGEND

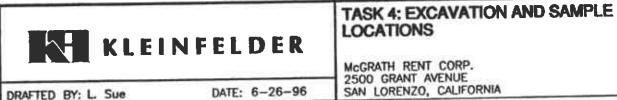
- COMPOSITE OF TWO SAMPLES TAKEN FROM THE FLOOR OF THE EXCAVATION
- ▲ COMPOSITE OF TWO SAMPLES TAKEN FROM EACH SIDE OF THE EXCAVATION



PLATE

5

NOTE: EXCAVATION DEPTH WAS APPROXIMATELY 1 FOOT.



CHECKED BY: A. Gibbs DATE: 6-26-96 PROJECT NO. 10-300284

1996, by Klainfelder, Inc.

### Summary of Organic Analytical Results - Subsurface Investigation (Task 1) February 15, 1996 McGrath Rent Corp.

	μg/L	μg/L	μg/L	μg/kg μg/L	μg/kg μg/L	μg/kg μg/L	μg/kg μg/L	mg/kg mg/L	mg/kg mg/L	mg/kg mg/L	mg/kg mg/L	mg/kg µg/L
Water	<50		-	<0.5	0.57	<0.5	<0.5	<1	<1	<1	<1	ND
Soil	<1		_	<5	<5	<5	<5	<1	<1	<1	<1	ND
Soil	2.4 (1)	\ -	-	<5	<5	<5	<5	<1	<1	<1	<1	ND
	<1	1 -	_	<5	<5	<5	<5	<1	<1	<1	<1	ND
	<1	_	_	<5	<5	<5	<5	<1	<1	<1	<1	ND
			-	<5	<5	<5	<5	<1	<1	<1	<1	ND
100.000		_	-	<5	<5	<5	<5	<1	<1	<1	<1	ND
		-		<5	<5	<5	<5	<1	<1	<1	<1	ND
20000000000	<1	-	-	<5	<5	<5	<5	<1	<1	<1	<1	ND
Soil	1.5 (b)	1.1	5.0	<5	<5	<5	<5	<1	<1	<1	<1	0.977, e
Sludge	130 (b.c)		_	190	110	290	1,400	<1	<1	<1	<1	ND
			-	450	53	430	1,400	<1	<1	<1	<1	12 + 16, f
200000000000000000000000000000000000000		-	-	2,200	<5	<5	470	<1	<1	<1	<1	ND
- 3		_	-	110	14	36	120	<1	<1	<1	<1,	ND
	Soil Soil Soil Soil Soil Soil Soil Soil	Soil   <1	Soil       <1	Soil       <1	Soil     <1	Soil       <1	Soil     <1	Soil         <1           <5         <5         <5         <5           Soil         <1           <5         <5         <5         <5         <5           Soil	Soil         <1	Soil         <1	Soil         <1	Soil <1 <5 <5 <5 <5 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1

ND - Not detected at or above laboratory reporting limits, which vary for the various EPA 8270 compounds. See laboratory sheets for each limit.

- 4 Strongly aged gasoline or diesel range compounds are significant.
- b Heavier gasoline range compounds are significant (aged gasoline?).
- c One to a few isolated peaks present.
- d TPH pattern that does not appear to be derived from gasoline (mineral spirits/stoddard solvent).
- e Di-n-butyl phthalate detected at 0.977 mg/kg.
- f Butyl benzyl phthalate detected at 12 mg/kg; bis(2-ethylhexyl) phthalate detected at 16 mg/kg.

Table 2
Summary of Metals and pH Analytical Results - Subsurface Investigation (Task 1)
February 15, 1996
McGrath Rent Corp.

Sample Location Units:	Sample Matrix Soil/Sludge Water	Lead mg/kg mg/L	Tin mg/kg mg/L	Zinc (TTLC) mg/kg mg/L	Zinc (STLC) mg/kg mg/L	pН
K-1	Water	0.20	<0.10	35		7.33
K-2	Soil	16	<5.0	95		7.75
K-3	Soil	11	<5.0	94		7.89
K-4	Soil	11	<5.0	86	-	7.42
K-5	Soil	32	<5.0	100		10.53
K-6	Soil	9.2	<5.0	130	-	7.68
K-7	Soil	10	<5.0	88	<del></del> 7	7.60
K-8	Soil	5.4	<5.0	140	-	7.42
K-9	Soil	11	<5.0	170		7.34
CB-1	Sludge	21	6.8	2,700	110	7.31
CB-2 ·	Sludge	38	10	1,300		7.50
CB-3	Sludge	4.5	<5.0	2,900	67	7.37
CB-4	Sludge	9.4	<5.0	470	-	7.60
TTLC (mg/kg)	STATE OF THE PARTY OF	1,000	none	5,000		<2 or >12.5
STLC (mg/L)	4.3	5	none	2 (E.M.)	250	-
Residential PRG (soil)	(mg/kg)	400	46,000	23,000	+	-
Tap Water PRG (mg/		0.004	22	11		-

#### Notes

Soil and aludge in milligrams per kilogram (mg/kg), similar to parts per million.

Water in milligrams per liter (mg/l), similar to parts per million.

TILC - Total threshold limit concentration, California Code of Regulations (CCR) Title 22, Section 66261.

STLC - Soluble threshold limit concentration, 22 CCR 66261.

PRG - US EPA Region IX preliminary remediation goal for soil in a residential setting and for tap water.

- -- Sample not analyzed for that constituent or parameter.
- <0.10 Where the analyte was not detected, the laboratory reporting limit is shown.

#### Table 3

# Analytical Results for Rinse Water, Treated Water, and Sludge (Task 2) April 30, 1996 McGrath Rent Corp.

Sample	Sample			-	IN	ORGA	NIC CON	MPOUND	S		調が、White		ORG	ANIC C	OMPO	UND	3	(F-1)
Location	Number	Arsenio	Cadmium	Chromiun	200000000000000000000000000000000000000	260000000000000000000000000000000000000	Nickel			Zinc (TTLC)	Zinc (STLC)	Cyanide	Phenols	TPHg	В	T	E	X
Units:	Sludge Water	100000	 mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	 mg/L	mg/kg mg/L	mg/L _	mg/L	mg/L	mg/L	μg/L	μg/L	μg/L	μg/L
Water Tank 1	TI	-		-		·	3.7		:=::	31	5 <del>.77</del> .5	-	-	-	-	•	-	-
Water Tank 2	T2	-	-	#		-	144		122	11	1-1		**	( <del>)</del> -	: <del></del> -	**		-
Water Tank 3	Т3	· ;		***		-	-		-	9.2	•	-	-	-	=	-	-	-
Water Tank 4	T4	-	-		₩.	-			-	28	***			-	-	-	7	**
Water Tank 5	T5	-	-	-	-	-	-	*	-	9.9	-		-	-	-	-	: <del>-</del>	1
Composite	T1 - T5	<0.005	<0.01	0.025	0.045	<0.005	0.033	<0.005	<0.01	14		<0.02	<0.05	1.3	26	98	45	300
Sludge Bin # 1	T6A-T6B	-		-	-	-	-	-	-	3,800	63	-		2	-	a	-	
Sludge Bin # 2	T7A-T7B		-	-,-	-	-			-	4,500	79	-	-	-	-	4	-	1,000
Treated Water		-			-	-	-	-		<0.01	-			<0.05	<0.5	<0.5	<0.5	<0.5
OLSD Discharge	Limits	0.8	0.2	2.0	0.5	1.0	1.0	1.0	0.8	3.0		1.0	70	NA	ND	ND	ND	ND
TTLC (mg/kg)		500	100	500	2,500	1,000	2,000	100	500	5,000	- 5							
STLC (mg/L)		5	1	- 5	25	- 5	20	1	5		250	J						

#### Notes:

-- Not analyzed for that constituent or parameter.

Studge in milligrams per kilogram (mg/kg), similar to parts per million

Water in milligrams per liter (mg/l), similar to parts per million

TTLC - Total threshold limit concentration, California Code of Regulations (CCR) Title 22, Section 66261

STLC - Soluble threshold limit concentration, 22 CCR 66261

<0.01 Where the analyte was not detected, the laboratory reporting limit is shown

T1 - T5 Samples from each of the five tunks were composited for analysis by the laboratory

T6A-T6B / T7A-T7B Two samples of sludge were collected and composited for analysis by the laboratory

TPH - Total petroleum hydrocarbons quantified as gasoline (g).

B, T, E, X - Benzene, Tolume, Ethylbenzene, and Xylenes (gasoline constituents)

## Table 4

# Summary of Analytical Results - Man-Made Drainage Ditch Sampling (Task 3) March 29, 1996, April 17, 1996, and May 28, 1996 McGrath Rent Corp.

Sample Number	Sample Date	Sample Location Units:	Sample Matrix Soil Water	Zinc mg/kg mg/L	TPHg mg/kg ug/L	Benzene µg/kg ug/L	Toluene  µg/kg  ug/L	Ethylbenzene µg/kg ug/L	Xylenes μg/kg ug/L	pН
10E	3/29/96	10 feet East of outfall pipe	Water	0.27	<50	<0.5	2.3	<0,5	<0.5	-
20E	3/29/96	20 feet East of outfall pipe	Water	0.086	<50	<0.5	<0.5	<0.5	<0.5	
20E	3/29/96	20 feet East of outfall pipe	Soil	270	<1.0	<	<5	<5	<5	_
20W 1	3/29/96	20 feet West of outfall pipe	Soil	2,900	<1.0	<5	<5	<5	ব	_
10W)	3/29/96	10 feet West of outfall pipe	Soil	1,400	<1.0	<5	ব	<⁵	<5	
10E /	3/29/96	10 feet East of outfall pipe	Soil	1,200	<1.0	<5	<5	<5	ব	-
E30	4/17/96	30 feet East of outfall pipe	Soil	100	<1	<5	⋖	<5	<5	_
E40	4/17/96	40 feet East of outfall pipe	Soil	69	<1	ব	<5	<5	<5	
KB-W30	5/28/96	30 feet West of outfall pipe	Soil	2,200				_		7.00
KB-W50	5/28/96	50 feet West of outfall pipe	Soil	2,600	-	_	••		**	6.84
KB-W75	5/28/96	10 feet West of outfall pipe	Soil	2,800	-		_			6.87
KB-W100	5/28/96	100 feet West of outfall pipe	Soil	1,100-	_	-		_	-	6.62
KB-W100	5/28/96	100 feet West of outfall pipe	Water	1.8		_	-	_		6.68
KB-W150	5/28/96	150 feet West of outfall pipe	Soil	130	_	-	_		- 1	6.50
KB-W200	5/28/96	200 feet West of outfall pipe	Soil	93 1						7.10
KB-W200	5/28/96	200 feet West of outfall pipe	Water	1,4	-	_				7.00
KB-W250	5/28/96	250 feet West of outfall pipe	Soil	550,	-		_	-	-	6.62
KB-W300	5/28/96	300 feet West of outfall pipe	Soil	750	_			<u>-</u>		6.75
TTLC (mg/k STLC (mg/L Residential F		g/kg)		5,000 250 √ 23,000	/ =	=	-	= =	=	-

Notes:

mg/kg - Milligrams per kilogram, approximately equivalent to parts per million.

pg/kg - Micrograms per kilogram, approximately equivalent to parts per billion.

mg/L - Milligrams per liter, approximately equivalent to parts per million.

µg/L - Micrograms per kilogram, approximately equivalent to parts per billion.

TPH - Total petroleum hydrocarbons quantified as gasoline (g), diesel (d), and motor oil (mo).

TTLC - Total threshold limit concentration, California Code of Regulations (CCR) Title 22, Section 66261.

STLC - Soluble threshold limit concentration, 22 CCR 66261.

PRG - US EPA Region IX preliminary remediation goal for soil in a residential setting.

-- Sample not analyzed for that constituent or parameter.

<0.10 Where the analyte was not detected, the laboratory reporting limit is shown.

# Table 5 Summary of Analytical Results - Storm Drain Outlet Excavation (Task 3) May 7, 1996 McGrath Rent Corp.

Jutul- neeplaty

Sample Location Units:	Sample Matrix	Sample Number	Zinc mg/kg	TPHg mg/kg	Benzene µg/kg	Toluene μg/kg	Ethyl- Benzene µg/kg	Xylenes μg/kg
Excavation - South sidewall	Soil	Composite 1 (two-point)	260	-	-	-	-	-
Excavation - West sidewall	Soil	Composite 2 (two-point)	100		-	-		-
Excavation - North sidewall	Soil	Composite 3 (two-point)	230	-	-	-	-	-
Excavation - East sidewall	Soil	Composite 4 (two-point)	260	-	-	-	-	
Excavation - Floor	Soil	Composite 5 (five-point)	170					
Excavated Soils (Bin)	Soil	Composite 6 (two-point)	190	1.4	<5	5	<5	8
FTLC (mg/kg)	1		5,000	-		W 2 3		my 🚊
STLC (mg/L)	197		250	1/2			- "	-
Residential PRG (soil) (mg/kg)			23,000	877 <b>-</b>	T (mark)	4		-

#### Notes:

mg/kg - Milligrams per kilogram, approximately equivalent to parts per million.

µg/kg - Micrograms per kilogram, approximately equivalent to parts per billion.

TPH - Total petroleum hydrocarbons quantified as gasoline (g), diesel (d), and motor oil (mo).

TTLC - Total threshold limit concentration, California Code of Regulations (CCR) Title 22, Section 66261.

STLC - Soluble threshold limit concentration, 22 CCR 66261.

PRG - US EPA Region IX preliminary remediation goal for soil in a residential setting.

-- Sample not analyzed for that constituent or parameter.

< 0.10 Where the analyte was not detected, the laboratory reporting limit is shown.

(four-point) - Four discreet samples were composited for analysis by the analytical laboratory.

Table 6
Summary of Drainage Ditch Analytical Results - Following Excavation (Task 4)
June 24, 1996
McGrath Rent Corp.

Zinc Sample Sample Sample Matrix (mg/kg) Number Location 98 Soil Floor Composite 15 Feet West of Drain Pipe KF-W15-1.2 Side Wall Composite 15 Feet West of Drain Pipe 120 Soil KS-W15-1,2 78 Floor Composite 30 Feet West of Drain Pipe Soil KF-W30-1.2 94 Side Wall Composite 30 Feet West of Drain Pipe Soil KS-W30-1,2 98 Floor Composite 45 Feet West of Drain Pipe Soil KF-W45-1,2 Soil 170 Side Wall Composite 45 Feet West of Drain Pipe KS-W45-1,2 95 Floor Composite 60 Feet West of Drain Pipe Soil KF-W60-1,2 74 Side Wall Composite 60 Feet West of Drain Pipe Soil KS-W60-1.2 86 Floor Composite 75 Feet West of Drain Pipe Soil KF-W75-1,2 83 Soil Side Wall Composite 75 Feet West of Drain Pipe KS-W75-1.2 71 Soil KF-W85-1.2 Floor Composite 85 Feet West of Drain Pipe 79 Soil Side Wall Composite 85 Feet West of Drain Pipe KS-W85-1,2 Soil 82 KF-W105-1,2 Floor Composite 105 Feet West of Drain Pipe 67 Side Wall Composite 105 Feet West of Drain Pipe Soil KS-W105-1,2 58 Soil. Floor Composite 125 Feet West of Drain Pipe KF-W125-1,2 300 Side Wall Composite 125 Feet West of Drain Pipe Soil KS-W125-1,2 5,000 TTLC (mg/kg) 250 STLC (mg/L) 23,000 Residential PRG (soil) (mg/kg)

#### Notes

mg/kg - Milligrams per kilogram, approximately equivalent to parts per million.

µg/kg - Micrograms per kilogram, approximately equivalent to parts per billion.

TPH - Total petroleum hydrocarbons quantified as gasoline (g), diesel (d), and motor oil (mo).

TTLC - Total threshold limit concentration, California Code of Regulations (CCR) Title 22, Section 66261.

STLC - Soluble threshold limit concentration, 22 CCR 66261.

PRG - US EPA Region IX preliminary remediation goal for soil in a residential setting.

-- Sample not analyzed for that constituent or parameter.

<sup>&</sup>lt; 0.10 Where the analyte was not detected, the laboratory reporting limit is shown.

## APPENDIX A HEALTH AND SAFETY PLAN

### KA KLEINFELDER

## HEALTH SAFETY PLAN

Project No. 10-3002-59
Phone No. 5/0 484-1700
Phone No. 5/0 484-1700
flan Gibbs Date: 2-13-96
Contact: Delight Sacton
Phone: 50 274. 2626
(See also attached map)
Phone:
of depth), collect soil
storm drain inlets,
Phone No. 570 527-1234
lattey
oital J ++++
olice Dept. 911
chinery, and evaluate situation.  If needed.
Sign Aid Ma Basid
First Aid Kit Req'd
Phone: 5/0 484-1700 Within 24 hours
Phone: 5/0 484-1700 3-5600 Within 24 hours Report" Within 24 hours Establish a work zone ("exclusion
Phone: 5/0 484-1700 8-5600 Within 24 hours Report" Within 24 hours
Phone: 5/0 484-1700 3-5600 Within 24 hours Report" Within 24 hours Establish a work zone ("exclusion
Phone: 5/0 484-1700 3-5600 Within 24 hours Report" Within 24 hours Establish a work zone ("exclusion
Phone: 5/0 484-1700 3-5600 Within 24 hours Report" Within 24 hours Establish a work zone ("exclusion all be used whenever working
Phone: 5/0 484-1700 S-5600 Within 24 hours Report" Within 24 hours Establish a work zone ("exclusion all be used whenever working chemicals or with soil/water with

## **HEALTH SAFETY PLAN**

roject Name:	Grath Rent Cor	ρ .	Project No. 6 3002-84
	70	Chemical Hazards	
Name	Expected Concentration	Health	n Effects
		See A	Attached
		none expected	
	2	Physical Hazards	k
Heat!	Slip, Trip, Fall	Excavations/Trend	ches
Cold 1	Noise	Moving Equipmen	nt
Rain 1/	/ Underground Haza	rds Confined Spaces	
VFog V	Overhead Hazards		
Other			
		onal Protective Equipment	
= Required A = As  ### Hard Hat	s Needed	R Safety Eyewear (Type)	
R Safety Boots		A Respirator (Type)	
A Orange Vest		Filter (Type)	
Hearing Prote	ction	R Gloves (Type)	
A Tyvek Covera		Other	
	pe Respirator	Other	
(Note: This is a mor	dified Level	_Bc	√D )
	Mon	itorina Equipment on Site	
Organic Vapor An	alyzer	PID with lamp of 10.6	_eV
Oxygen Meter		Dräger Tube	
Combustible Gas	Meter	Passive Dosimeter	
H <sub>2</sub> S Meter .		Air Sampling Pump	
_			
W.B.G.T.		Filter Media	

## **HEALTH SAFETY PLAN**

Project Name: Mr. 6re	ath Kentlorp	Project No. 80- 3002-87
	HEALTH EFFECTS	
	EFFECTS	TARGET ORGANS
1 Abdominal Pain	13 Miosis (Pinpoint Pupils)	A Biadder
2 Coma	14 Narcosis	B Blood
3 Convulsions	15 Nausea	C Bone Marrow
4 Dermattis	16 Nose Imitation	D Central Nervous System
5 Diarrhea	17 Respiratory Irritent	E Eyes
6 Dilated Pupils	18 Staggering Galt	F Heart
7 Dizziness	19 Sweating	G Liver
8 Eye Irritation	20 Tearing	H. Lungs
9 Fatigue	21 Threat irritation	I. Kidneys
10 Giddiness	22 Vertigo	J. Respiratory System
11 Headache	23 Vomiting	K, Skin
12 Light Headed	Ca. Carcinogen	

Or	ganic Chemicals	Pesticides				
Chemical	Health Effects	Target Organs	Chemical	Health Effects	Target Organs	
Acetone	4, 6, 8, 11, 16, 21	J, K	Aldrin	Ca, 2, 3, 7, 11,	D, G. I, K	
Benzene	Ca. 1, 4, 8, 11, 15,	C, D, E, J, K		15		
	17, 18		Cerboryl	1, 3, 5, 13, 15,	D, J, K	
Chloroform	Ca. 7, 8, 11, 15	E, G, I, K	,	22	1	
Coal Tar Naphthe	4, 8, 15	E, J, K	Chlordane	1 3, 6, 15, 22	D, E, G, H, I, K	
Ethylbenzene	2, 4, 8, 11	D, E, J, K	DBCP	Ca, 8, 15, 16,	D, G, I, K	
Hexane	4, 8, 10, 11, 12, 16	E, H, J, K		21, 22		
Hydrogen Suffide	2, 3, 7, 8, 9, 11, 17	E, 3	DDT	Ca, 3, 7, 8, 22	D, G, I, K	
Methylene Chloride	8, 9, 12, 14, 21	D, E, J	Dieldrin	Ca, 2, 3, 7, 11,	D, G, I, K	
Methyl Ethyl Ketone	7, 8, 11, 16, 22	D, H		15, 22		
PCBs	Ca, 4, 8	E, G, K	Endrin	1, 3, 7, 15, 22	D, G	
Petroleum Distillates	7, 8, 11, 16, 21	D, E, J, K	Ethylene	Ca. 4, 8, 17	E, G, I, J, K	
Phenol	3, 4, 8, 16, 21	G, I, K	dibromide			
Tetrachloroethylene	Ca, 7, 8, 11, 10, 20	D, E, G, I, J	Heptachlor	3	D, G	
Toluene	4, 6, 11	D, G, I, K	Lindane	3 4, 8, 16	B, D, E, G, I, K	
1,1,1-Trichloroethane	4, 8, 11	D. E. K	Malathion	1 5, 8, 13, 15,	B, D, G, J	
Tricholoethylene	Ca, 4, 8, 11, 15, 22	D, G, I, J, K		22		
Vinyl Chloride	Ca, 1	B, D, G, J	Perathion	1, 3, 4, 5, 11, 13,	B, D, E, J, K	
Xylenes	1, 5, 8, 16, 18, 21	8, D, E, G, I, K		15, 19	1	

CAS# = Chemical Abstract Services Number OSHA Permissible Exposure Limit PEL

NA

= Not Available

VP

■ Vapor Pressure

## HEALTH SAFETY PLAN

Project No. Project Name:

#### WARNING CONCENTRATIONS

Chemical	CAS#	PEL	Warning Concentration	<b>VP</b>	e√	Solubility	Density
Acetone	67641	750 ppm	100 ppm	266 mm	9.69	Miscible	0.8
Benzene	71432	1 ppm	4,68 ppm	76 mm	9.25	0.16%	0.88
Chloroform	67663	2 ppm	60 ppm	160 mm	11.42	0.80%	1,5
Coal Tar Naphtha	65996794	None	Variable	5 mm	NA	Insoluble	N/A
Ethylbenzene	100414	100 ppm	0.25 ppm	7.1 mm	8.76	0.02%	0.87
Hexane	110543	50 ppm	1400 ppm	124 mm	10.18	0.01%	0.66
Hydrogen Sulfide	7783064	10 ppm	0.8 ppm	20 atm	10,43	2.90%	N/A
Methylene Chloride	750092	100 ppm	25 ppm	350 mm	11.35	1.30%	1,33
Methyl Ethyl Ketone	78933	200 ppm	4.8 ppm	70 mm	9.48	27%	0:81
PCBs	53469219	0.5 mg/m <sup>3</sup>	NA	0.001 mm	N/A	Insoluble	1.44
Petroieum Distillates	8002059	400 ppm	Variable	40 mm	NA	0.04%	' N/A
Phenol	108952	5 ppm	0.1 ppm	0,36 mm	8.5	8.40%	1.07
Tetrachloroethylene	127184	25 ppm	4.68 ppm	14 mm	9.32	0.02%	1.63
Toluene	108883	100 ppm	0,17 ppm	22 mm	8.82	0.05%	0.87
1,1,1, Trichloroethane	71556	350 ppm	20 ppm	100 mm	11.25	0.07%	1.34
Trichloroethylene	79016	26 ppm	21,4 ppm	58 mm	9.47	0.10%	1.47
Vinyl Chloride	75014	1 ppm	260 ppm	2580 mm	9.9995	Slight	0.92
Xylenes	1330207	100 ppm	1.8 ppm	9 mm	8.56	0,00%	0.86

	Pesticides									
Pesticide	CA5#	PEL	Werning Concentration	VP	Solubility					
Aldrin	309002	0.25mg/m <sup>2</sup>	N/A	0.000006 mm	inaoluble					
Carbaryl	63252	5mg/m <sup>a</sup>	Odorless	0.005 mm	0.00%					
Chlordane	57749	0.5mg/m²	Odorless	0.00001 mm	insoluble					
DBCP	96128	1 ppb	NA	0.8 mm	0.10%					
DDT	50293	1 mg/m³	2.9mg/m²	0,00000017 mm	0.00%					
Dieldrin	60571	0.25mg/m <sup>3</sup>	0.41 ppm	0.00000018 mm	10 ppb					
Endrin	72208	0.1mg/m²	N/A	0.0000002 mm	160 ppb					
Ethylene Dibromide	106934	0.13 ppm	10 ppm	11 mm	0.40%					
Heptachlor	76448	0.5mg/m <sup>3</sup>	0.02 ppm	0.0003 mm	Insoluble					
Lindane	56899	0.5mg/m²	3.9mg/m <sup>2</sup>	0.0000094 mm	0.00%					
Malathion	121755	10mg/m <sup>3</sup>	10mg/m <sup>e</sup>	0.00004 mm	0.01%					
Parathion	56382	0,1mg/m²	0.48mg/m³	9.0004 mm	0.00%					

## **HEALTH SAFETY PLAN**

	 			$\overline{}$
Project Name:		Projec	t No.	
( · ·		 	-	

## **WARNING CONCENTRATIONS**

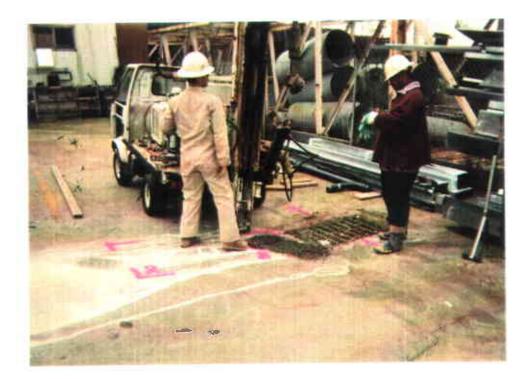
		M	etals		
Metal	CAS#	PEL		Health Effects	Target Organs
Arsenic, inorganic	7440382	0.01	mg/m³	Ca, 4, 17, 20	G, H, I, K
Asbestos	1332214	0.20	fibers/cc	Ca, 17	H
Chromium VI	7440473	0.05	mg/m³	Ca, 17	J
Copper	7440508	1	mg/m³	4, 8, 16, 21	G, I, J, K
Cyanide	151508	6 .	mg/m³	4, 8, 11, 15, 17, 23	D, E, J, K
Leed	7439921	0.05	mg/m³	1 1	B, D, I
Mercury	7439976	0.05	mg/m² · · ·	4, 8, 9, 11	D; E, I, J, F
Phosphorous	7723140	0.1	mg/m³	1, 8, 17	B, E, G, I, J, K
Polynuclear Aromatics (coal tar pitch volatiles)	8007452	0.2	mg/m³	Ca, 4	A, I, J, K
Silica (crystalline)	14808607	0.06	mg/m³	17	J

	PERSO	AL AIR MONITORING	
	Requ	ired? No yes / no	
Sample No.		Sample No.	
Name:		Name:	
Date		Date	
Time On:	Time Off:	Time On:	Time Off:
Laboratory Perform	ning Analysis:		

# HEALTH SAFETY PLAN

Project Name: Mr Grath Ront	lorp	Project No. 10-3002-84
I have reviewed and understa	nd the contents of this Heal	th and Safety Plan.
Name (print)	Signature	Date
ACH NESSINGER	The form	415/26
Trave Joyner	Junks	2.15.96
Dora Back	Ona BOOK	215-96
Kristen Sheller	Willelle-	2.15.96
DAVIDONEAL	1_000-0	\$06.24%
Horace Smith	Horace Smill	6-24-96
alden Sorgin	- los misos	6-24-96
James hilliam	James Williams	6-24.96
La But	Rox4 Barnott	6-29-96
Tall Dia	Todd Davis	6/24/96
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# APPENDIX B PHOTOGRAPHS



PHOTOGRAPH #1

DRILLING OPERATIONS



PHOTOGRAPH #2
STORM DRAIN CLEAN-OUT OPERATIONS



PHOTOGRAPH #3
WATER AND SLUDGE STORAGE FROM OUTLET OF STORM DRAIN PIPE



PHOTOGRAPH #4
SLUDGE / WASTEWATER STORAGE ROLL-OFF BINS



PHOTOGRAPH #5

6,500 GALLON WATER STORAGE CONTAINERS

WITH TEMPORARY WASTEWATER TREATMENT SYSTEM



PHOTOGRAPH #6
STORM DRAIN OUTLET EXCAVATION



PHOTOGRAPH #7

DRAINAGE DITCH EXCAVATION LOOKING WEST



PHOTOGRAPH #8

DRAINAGE DITCH EXCAVATION LOOKING EAST

Kleinfelder		Client Project ID: #10-3002-84/003;				Date Sampled: 04/30/96			
7133 Koll Center Parkway, # 100		McGrath Rent Corp.				Date Received: 04/30/96			
Pleasanton, CA	A 94566	Client Contact: Dan Carroli				Date Extra	Date Received: 04/30/96 Date Extracted: 04/30/96 Date Analyzed: 04/30/96  *, with BTEX* GCFID(5030) Ethylben- zene Xylenes % 1 Surr	/96	
		Client P.	O: # R3574	<u>.</u>		Date Analyzed: 04/30/96			
EPA methods 503	Gasoline Range								
Lab ID	Client ID	Matrix	TPH(g) <sup>+</sup>	Benzene	Toluene	Ethylben- zene	Xylenes	% Rec. Surrogate	
64601-05	T1-T5	w	1300,a	26	98	45	300	<b>9</b> 9	
			-						
Reporting I	imit unless other-	w	50 ug/L	0.5	0.5 0.5 0.5 0.5 0.005 0.005 0.005				
wise stated;	ND means not de- the reporting limit	s	1.0 mg/kg	0.005	0.005	0.005	0.005		

water and vapor samples are reported in ug/L, soil samples in mg/kg, and all TCLP extracts in mg/L

<sup>#</sup> chittered chromatogram; sample peak coelutes with surrogate peak

<sup>+</sup> 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 lattered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (?); f) one to a few isolated peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen is present; i) liquid sample that contains greater than ~ 5 vol. % sediment; j) no recognizable pattern.

Kleinfelder 7133 Koll Center Parkway, # 100		34-6	nt Project Grath Rent Co	ID: #10-3002-84/003; orp.			
					Date Received: 04/30/96		
Pleasanton, C	A 94566	Clie	nt Contact: D	an Carroll	Date Extracted: 04/30/96		
		Clie	nt P.O: # R35	74	Date Analyzed: 05/01/96		
			Met	als by ICP			
EPA analytical m	nethods 6010, 200.7						
Lab ID	Client ID	Matrix	Extraction		Zinc*		
64601	Ti	w	TTLC		31,i		
64602	T2	w	TTLC		11,i		
64603	Т3	w	TTLC		9.2,i		
64604	T4	W	TTLC		28		
64605	T5	W	TTLC		9.9		
64606	Т6А-Т6В	Sludge	TTLC		3800		
64607	T7A-T7B	Sludge	TTLC		4500		
					,		
			n				
Reporting Lim	ait unless otherwise eans not detected	w	TTLC		0.05		
	eans not detected reporting limit	s	TTLC		1.0		
			STLC,TCLP		0.05		

<sup>\*</sup> soil samples are reported in mg/kg, and water samples and all STLC & TCLP extracts in mg/L

o EPA extraction methods 1311(TCLP), 3010/3020(water, TTLC), 3040(organic matrices, TTLC), 3050(solids, TTLC); STLC from CA Title

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.

Kleinfelder 7133 Koll Center Parkway, # 100		Client Project ID: #10-3002-84/003;			Date Sampled: 04/30/96			
		McGra	McGrath Rent Corp.			Date Received: 04/30/96		
Pleasanton, CA 94566		Client	Contact: Dan Carroll		Date Extracted: 04/30/96			
		Client !	P.O: # R3574		Date An	alyzed: (	)5/01-05/	/04/96
			Metals*	4.÷ 3				
EPA methods 6010/200.7; 7060/2 Lab ID		) <u>; 7740/27(</u> 501-05	12 (Se); 239.2 (Pb, water ma	trix)				
Client ID		1-T5				Re	porting Li	mit
Matrix		w				S	w	STLC/
Extraction <sup>0</sup>	Т	TLC				TTLC	TTLC	TCLP
Compound			Concentration	·		mg/kg	mg/L	mg/L
Arsenic (As)	,	ND				2.5	0.005	0.25
Cadmium (Cd)		ND				0.5	0.01	0.01
Chromium (Cr)		0.025				0.5	0.005	0.05
Copper (Cu)	(	0.045				2.0	0.02	0.05
Lead (Pb)		ND				3.0	0.005	0.2
Nickel (Ni)	(	0.033				2.0	0.02	0.05
Selenium (Se)		ND				2.5	0.005	0.25
Silver (Ag)		ND				1.0	0.01	0.05
Zinc (Zn)		14				1.0	0.05	0.05
% Recovery Surrogate		105			_			
Comments								

water samples are reported in mg/L, soil samples in mg/kg and all TCLP & STLC extracts in mg/L

Edward Hamilton, Lab Director

DHS Certification No. 1644

ND means not detected above the reporting limit

o EPA extraction methods 1311(TCLP), 3010/3020(water, TTLC), 3040(organic matrices, TTLC), 3050(solids, TTLC); STLC from CA Title

<sup>#</sup> surrogate diluted out of range; N/A means surrogate not applicable to this analysis

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.

Kleinfelder		CI	ient Project ID: # 10-3002-84/003;	Date Sampled: 04/30/96
7133 Koll Ce	nter Parkway, #1	00 M	Grath Rent Corp.	Date Received: 04/30/96
Pleasanton, C	CA 94566	CI	ient Contact: Dan Carroll	Date Extracted: 05/02/96
		CI	ient P.O: # R3574	Date Analyzed: 05/02/96
			Total Cya	nide
	Analytical methods		EPA 3352, 90	10, 9011
Lab ID	Client ID	Matrix	Cyanid	e <sup>‡</sup>
64601-05	T1-T5	W	ND	
	-			
		,		
	<u> </u>			
	<u> </u>			
tated; ND m	it unless otherwises- eans not detected	W	0.02 mg	
above the	reporting limit	S	1.0 mg.	/Kg
* water sample	s are reported in mg	L and so	il samples in mg/kg	
o solid samples	are extracted in acc	ordance v	with CA Title 22, Chapter 11, Appendix II	

110 2nd Avenue South, #D7, Pacheco, CA 94553 Tele: 510-798-1620 Fax: 510-798-1622

#### QC REPORT FOR HYDROCARBON ANALYSES

Date: 04/30/96

Matrix: Water

	Concent	ration	(ug/L)		* Reco	very	
Analyte	Sample  (#64533)	MS	MSD	Amount   Spiked	MS MS	MSD	RPD
	(#64533)	MP	PISD				
TPH (gas)	0.0	103.0	104.6	100.0	   103.0	104.6	1.5
Benzene	0.0	11.4	11.1	10.0	114.0	111.0	2.7
Toluene	0.0	11.6	11.1	10.0	116.0	111.0	4.4
Ethyl Benzene	0.0	11.6	11.2	10.0	116.0	112.0	3.5
<b>X</b> ylenes	0.0	34.8	33.8	30.0	116.0	112.7	2.9
TPH (diesel)	0	160	160	150	107	107	0.0
TRPH (oil & grease)	0	20600	21400	23700	87	90	3.8

\* Rec. = (MS - Sample) / amount spiked x 100

RPD = (MS - MSD) / (MS + MSD)  $\times$  2  $\times$  100

#### QC REPORT FOR METALS

Date: 05/01/96

Matrix: Water

Extraction: TTLC

	Concent	ration		I	* Reco	very	
Analyte	(m <sub>2</sub>	3/L)		Amount		•	RPD
	Sample  _	MS	MSD	Spiked	MS	MSD	
Arsenic	0.0	5.6	5.6	5.0	112	112	0.1
Selenium	i 0.0	5.2	5.3	5.0	104	105	_
Molybdenum	0.0	5.5	5.3	5.0	109	105	0.7 2.4
Silver	0.0	0.5	0.5	0.5	96	96	
Thallium	0.0	4.9	4.9	5.0	99	98	0.3
Barium	0.0	5.0	5.0	5.0	101	100	0.7
Nickel	0.0	5.5	5.5	5.0	110	100	0.3
Chromium	0.0	5.6	5.4	5.0	111	=	0.5
Vanadium	0.0	5.4	5.5	5.0	109	108 110	2.5
Beryllium	j 0.0	5.6	5.6	5.0	113		0.6
Zinc	0.0	5.6	5.6	5.0	112	113	0.1
Copper	0.0	5.2	5.2	5.0	104	113 104	0.6
Antimony	0.0	5.4	5.2	5.0	107	104	0.0
Lead	0.0	5.4	5.4	5.0	108	104	3.0
Cadmium	0.0	6.0	5.9	5.0	120		0.8
Cobalt	0.0	5.5	5.4	5.0     5.0		119	0.7
Mercury	0.000	0.208	0.201		111	108	2.3
- January	0.000	0.206	0.201	0.2	104	101	3.4

\* Rec. = (MS - Sample) / amount spiked x 100

RPD = (MS - MSD) / (MS + MSD) x 2 x 100

#### QC REPORT FOR AA METALS

Date: 05/04/96

Matrix: Water

	Concent	ration	(mg/L)		* Reco	very	
Analyte	   Sample	MS	MSD	Amount	MS	MSD	RPD
Total Lead	0.00	4.63	4.54	5.00	93	91	2.0
Total Chromium	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Cadmium	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Nickel	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Zinc	N/A	N/A	N/A	N/A	N/A	A\N	N/A
STLC Lead	N/A	N/A	N/A	N/A	N/A	N/A	n/a
Organic Lead	N/A	N/A	N/A	N/A	N/A	N/A	N/A

\* Rec. = (MS - Sample) / amount spiked x 100

RPD =  $(MS - MSD) / (MS + MSD) \times 2 \times 100$ 

# American Environmental Network

## Certificate of Analysis

DOHS Certification: 1172

AIHA Accreditation: 11134

PAGE 1

McCAMPBELL ANALYTICAL 110 2ND AVE. SOUTH, #D7 PACHECO, CA 94553

ATTN: EDWARD HAMILTON CLIENT PROJ. ID: 6287 CLIENT PROJ. NAME: K-MRC REPORT DATE: 05/03/96

DATE(S) SAMPLED: 04/30/96

DATE RECEIVED: 05/01/96

AEN WORK ORDER: 9605012

#### PROJECT SUMMARY:

On May 1, 1996, this laboratory received 1 water sample(s).

Client requested sample(s) be analyzed for chemical parameters. Results of analysis are summarized on the following page(s). Please see quality control report for a summary of QC data pertaining to this project.

Samples will be stored for 30 days after completion of analysis, then disposed of in accordance with State and Federal regulations. Samples may be archived by prior arrangement.

If you have any questions, please contact Client Services at (510) 930-9090.

Larcy Klein

Laboratory Director

PAGE 2

#### McCAMPBELL ANALYTICAL

SAMPLE ID: COMPOSITE 1 - WATER AEN LAB NO: 9605012-01

AEN LAB NO: 9605012-01 AEN WORK ORDER: 9605012 CLIENT PROJ. ID: 6287 DATE SAMPLED: 04/30/96 DATE RECEIVED: 05/01/96 REPORT DATE: 05/03/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
Phenols	EPA 420.1	ND	0.05 m	g/L	05/02/96

ND = Not detected at or above the reporting limit
 \* = Value at or above reporting limit

# AEN (CALIFORNIA) QUALITY CONTROL REPORT

AEN JOB NUMBER: 9605012 CLIENT PROJECT ID: 6287

#### Quality Control and Project Summary

All laboratory quality control parameters were found to be within established limits.

#### Definitions

Laboratory Control Sample (ECS)/Method Spikes(s): Control samples of known composition. LCS and Method Spike data are used to validate batch analytical results.

Matrix Spike(s): Aliquot of a sample (aqueous or solid) with added quantities of specific compounds and subjected to the entire analytical procedure. Matrix spike and matrix spike duplicate QC data are advisory.

Method Blank: An analytical control consisting of all reagents, internal standards, and surrogate standards carried through the entire analytical process. Used to monitor laboratory background and reagent contamination.

Not Detected (ND): Not detected at or above the reporting limit.

Relative Percent Difference (RPD): An indication of method precision based on duplicate analyses.

Reporting Limit (RL): The lowest concentration routinely determined during laboratory operations. The RL is generally 1 to 10 times the Method Detection Limit (MDL). Reporting limits are matrix, method, and analyte dependent and take into account any dilutions performed as part of the analysis.

Surrogates: Organic compounds which are similar to analytes of interest in chemical behaviour, but are not found in environmental samples. Surrogates are added to all blanks, calibration and check standards, samples, and spiked samples. Surrogate recovery is monitored as an indication of acceptable sample preparation and instrument performance.

- D: Surrogates diluted out.
- !: Indicates result outside of established laboratory QC limits.

WORK ORDER: 9605012

QUALITY CONTROL REPORT

PAGE QR-2

**ANALYSIS:** Phenols

MATRIX: Water

METHOD BLANK SAMPLES

INSTR RUN: UV VIS\960503160000/1/ BATCH ID: DISP050296 DILUTION: 1.000000 LAB ID: PHNL\_BLNK SAMPLE TYPE: Blank-Method/Media blank PREPARED:

INSTRUMENT: Novaspec uv/vis spect. ANALYZED: 05/03/96

UNITS: mg/L NETHOD: EPA 420.1

RECOVERY REC LIMITS (%) SPIKE REPORTING REF LOW HIGH RPD (X) LIMIT (X) LIMIT VALUE (%) RESULT RESULT ANALYTE 0.05 Total Phenols ND

METHOD SPIKE SAMPLES

INSTR RUN: UV VIS\960503160000/3/1 BATCH ID: DISP050296 DILUTION: 1.000000 LAB ID: PHNL\_MD PREPARED: SAMPLE TYPE: Spike-Method/Media blank INSTRUMENT: Novaspec uv/vis spect.

ANALYZED: 05/03/96

mg/L EPA 420.1 UNITS: METHOD:

REC LIMITS (%) RPD (%) LIMIT (%) RECOVERY SPIKE REF REPORTING **VALUE** RESULT RESULT LIMIT ANALYTE 120 0.500 0.486 ND 0.05 Total Phenols

INSTR RUN: UV VIS\960503160000/2/1 BATCH ID: DISP050296 DILUTION: 1.000000 PHNL\_MS LAB ID:

SAMPLE TYPE: Spike-Method/Media blank INSTRUMENT: Novaspec uv/vis spect. PREPARED:

ANALYZED: 05/03/96 mg/L EPA 420.1 UNITS:

METHOD: RECOVERY REC LIMITS (%) SPIKE REF REPORTING HIGH RPD (#) LIMIT (#) VALUE RESULT RESULT LIMIT

ANALYTE 99.8 80 120 0.500 0.499 ND 0.05 Total Phenols

METHOD SPIKE DUPLICATES

Total Phenols

INSTR RUN: UV VIS\960503160000/4/2 BATCH ID: DISP050296 DILUTION: 1.000000 LAB ID: PREPARED: SAMPLE TYPE: Method Spike Sample Duplicate PHNL MR

INSTRUMENT: Novaspec uv/vis spect. ANALYZED: 05/03/96 UNITS:

mg/L EPA 420.1 METHOD: RPD RECOVERY REC LIMITS (%) SPIKE REPORTING REF RPD (%) LOW HIGH LIMIT (\*) RESULT LIMIT VALUE **(X)** RESULT **ANALYTE** 2.64 0.05

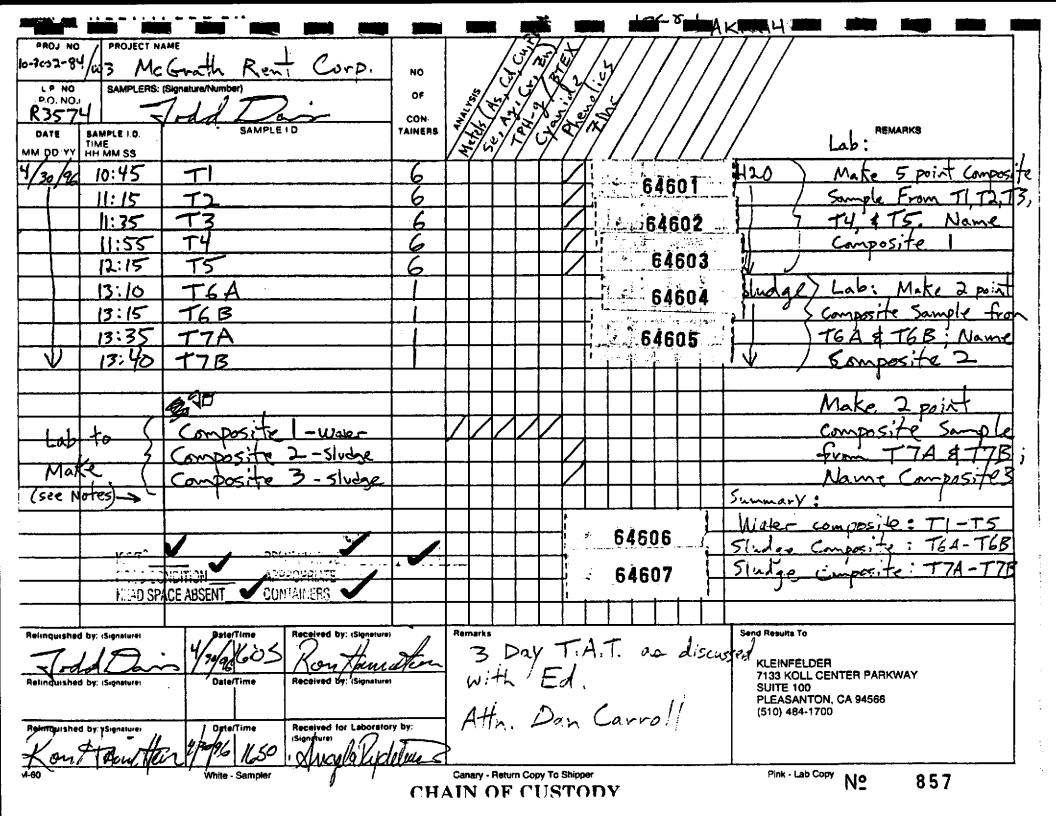
----- End of Quality Control Report -----

0.499

0.486

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PROJECT NU	1) 798-1620 FAX II (510) 798-1622 NUMBERI 6287 PROJECT NAMEI K-MRC							(602/8020	Dick & Irr as Casoume (buc/8020 L 8013)  The as Deset (8015)  Total Petroleum DI & Grease (5520 E8F/5520 BMP)		á			١					¥	ğ												
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# CHROMALAB, INC.

Environmental Services (SD8)

May 21, 1996

Submission #: 9605707

ERICKSON, INC.

Atten: Dave Nielson

Project: MCGRATH IND.

Received: May 20, 1996

Project#: 968284

re: One sample for Miscellaneous Metals analysis.

Method: EPA 3010A/6010A

Client Sample ID: 01

*Spl#:* 85623

Sampled: May 20, 1996

Matrix: WATER

Extracted: May 21, 1996

Analyzed: May 21, 1996

Run#: 1434

RESULT (mg/L) N.D.

REPORTING

LIMIT

(mg/L) 0.010

BLANK RESULT BLANK DILUTION SPIKE FACTOR

Chemist

Labash

Inorganic Supervisor

# CHROMALAB, INC.

Environmental Services (SDB)

May 21, 1996

Submission #: 9605707

ERICKSON, INC.

Atten: Dave Nielson

Project: MCGRATH IND.

Received: May 20, 1996

Project#: 968284

re: 1 sample for Gasoline and BTEX compounds analysis.

Method: EPA 5030/8015M/8020

Sampled: May 20, 1996

Matrix: WATER

Run#: 1450

Analyzed: May 21, 1996

Spl# CLIENT SPL ID	Gasoline (ug/L)	Benzene (uq/L)	Toluene (ug/L)	Ethyl Benzene (ug/L)	Total Xylenes (ug/L)	
85623 Ol	N.D.	N.D.	N.D.	N.D.	N.D.	
Reporting Limits Blank Result Blank Spike Result (%	50 N.D. ) 103	0.50 N.D. 113	0.50 N.D. 115	0.50 N.D. 119	0.50 N.D. 121	

June Zhao Chemist Marianne Alexander Gas/BTEX Supervisor

02/29/96

Dear Kristen:

#### Enclosed are:

- 1). the results of 14 samples from your # 10-3002-84/002 project,
- 2). a QC report for the above samples
- 3). a copy of the chain of custody, and
- 4). a bill for analytical services.

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,

**Edward Hamilton** 

Kleinfelder		Client Pro	ject ID:# 10	-3002-84/00	02 -	Date Samp	led: 02/15/9	<del>6</del>				
7133 Koli Ce	nter Parkway, # 100	k 1				Date Recei	ved: 02/15/	96				
Pleasanton, C	CA 94566	Client Cor	ntact: Krister	Scheller		Date Extra	cted: 02/16	/96				
		Client P.O	: R3283			Date Analy	zed: 02/16	02/17/96				
EPA methods 5	Gasoline Range 030, modified 8015, and 8											
Lab ID	Client ID	Matrix	TPH(g) <sup>+</sup>	Benzene	Toluene	Ethylben- zene	* LAVIENES L-					
61507	K-9-1 96368	s	ND	ND	ND	ND	ND	108				
61509	K-8-1 96370	s	ND	ND	ND	ND	ND	104				
61512	K-7-1 96372	S	ND	ND	ND	ND	ND	105				
61513	CB-1 96376	Sludge	130,b,f	0.19	0.11	0.29	1.4	106				
61514	K-6-1 96378	S	ND	ND	ND	ND	ND	106				
61516	K-5-1 96380	S	ND	ND	ND	ND	ND	108				
61518	CB-2 96382	Sludge	20,a	0.45	0.053	0.43	1.4	95				
61519	K-3-1 96384	S	2.4,g	ND	ND	ND	ND	104				
61521	K-4-1.5 96386	S	ND	ND	ND	ND	ND	104				
61522	K-2-1 96387	S	ND	ND	ND	ND	ND	102				
61524	CB-3 96388	Sludge	440,e	2.2	ND	ND	0.47	112				
61525	CB-4 96392	Sludge	9.2,b	0.11	0.014	0.036	0.12	99				
61526	K-1 96396	w	ND	ND	0.57	ND	ND	99				
61527	K-10	Sludge	1.5,b	ND	ND	ND	ND	101				
Reporting	Limit unless other-	w	50 ug/L	0.5	0.5	0.5	0.5					
	; ND means not de- e the reporting limit	S,Sludge	1.0 mg/kg	0.005	0.005	0.005	0.005					

<sup>\*</sup> water and vapor samples are reported in ug/L, soil & sludge samples in mg/kg, and all TCLP extracts in mg/L

<sup>#</sup> cluttered chromatogram; sample peak coelutes with surrogate peak

<sup>+</sup> 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 (Mineral spirits/Stoddard solvent?); f) one to a few isolated peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen is present; i) liquid sample that contains greater than ~ 5 vol. % sediment; j) no recognizable pattern.

Kleinfelder		Client Pr	oject ID:#10-3002	-84/002	Date Sampled: 0	2/15/96		
7133 Koll Ce	nter Parkway, # 100				Date Received: (	02/15/96		
Pleasanton, C	CA 94566	Client Co	ontact: Kristen Sch	eller	Date Extracted:	02/16/96		
		Client P.	O: R3283		Date Analyzed:	02/17-02/20/96		
EPA methods m	nodified 8015, and 3550/35	10 or <b>50</b> 30	8015 Modified * or 5030					
Lab ID	Client ID	Matrix	Ethylene Glycol*	Diethylene Glycol	Propanal*	Propanol*		
61507	K-9-1 96368	S	ND	ND	ND	ND		
61509	K-8-1 96370	S	ND	ND	ND	ND		
61512	K-7-1 96372	S	ND	ND	ND	ND		
61513	CB-1 96376	Sludge	ND	ND	ND	ND		
61514	K-6-1 96378	S	ND	ND	ND	ND		
61516	K-5-1 96380	S	ND	ND	ND	ND		
61518	CB-2 96382	Sludge	ND	ND	ND	ND		
61519	K-3-1 96384	s	ND	ND	ND	ND		
61521	K-4-1.5 96386	s	ND	ND	ND	ND		
61522	K-2-1 96387	S	ND	ND	ND	ND		
61524	CB-3 96388	Sludge	ND	ND	ND	ND		
<b>6152</b> 5	CB-4 96392	Sludge	ND	ND	ND	ND		
61526	K-1 96396	w	ND	ND	ND	ND		
Reporting	Limit unless other-	w	1.0 mg/L	1.0 mg/L	1.0 mg/L	1.0 mg/L		
tected abov	ND means not de- the reporting limit	S,Sludge	1.0 mg/kg	1.0 mg/kg	1.0 mg/kg	1.0 mg/kg		

<sup>\*</sup> water samples are reported in mg/L, soil & sludge samples in mg/kg, and all TCLP and STLC extracts in mg/L

h) lighter than water immiscible sheen is present; i) liquid sample that contains greater than ~ 5 vol. % sediment.

Date Sampled: 02/15/96 Kleinfelder Client Project ID: # 10-3002-84/002 7133 Koll Center Parkway, # 100 Date Received: 02/15/96 Pleasanton, CA 94566 Client Contact: Kristen Scheller Date Extracted: 02/16/96 Client P.O: R3283 Date Analyzed: 02/21/96 Diesel Range (C10-C23), Motor Oil Range (> C18) Extractable Hydrocarbons as Diesel & Motor Oil \* EPA methods modified 8015, and 3550 or 3510; California RWQCB (SF Bay Region) method GCFID(3550) or GCFID(3510) % Recovery TPH(mo)<sup>†</sup> Lab ID Client ID TPH(d)+ Matrix Surrogate 94 61527 K-10 5.0 Sludge 1.1,g W Reporting Limit unless other-50 ug/L 250 ug/L wise stated; ND means not detected above the reporting limit S 1.0 mg/kg 5.0 mg/kg

<sup>\*</sup> water samples are reported in ug/L, soil samples in mg/kg, and all TCLP and STLC extracts in mg/L

<sup>#</sup> 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.

<sup>+</sup> 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) medium boiling point pattern that does not match diesel (?); f) one to a few isolated peaks present; g) oil range compounds are significant; h) lighter than water immiscible sheen is present; i) liquid sample that contains greater than ~ 5 vol. % sediment.

Kleinfelder		Clie	nt Project ID:	# 10-3002-84/00	)2 Da	te Sampled: 02/1	15/96			
7133 Koll Ce	nter Parkway, # 10	00			Da	te Received: 02/	15/96			
Pieasanton, (	CA 94566	Clie	nt Contact: K	risten Scheller	Da	ite Extracted: 02	/16/96			
		Clie	nt P.O: R328	3	Da	Date Analyzed: 02/20/96				
DDA Brissl		30 2 <sup>+</sup>	P	Metals						
Lab ID	methods 6010/200.7, 2 Client ID		Extraction	Lead	Tin	Zinc	% Rec. Surrogate			
61507	K-9-1 96368	s	TTLC	11	ND	170	107			
61509	K-8-1 96370	S	TTLC	5.4	ND	140	104			
61512	K-7-1 96372	S	TTLC	10	ND	88	105			
61513	CB-1 96376	Sludge	TTLC	21	6.8	2700	105			
61514	K-6-K 96378	S	TTLC	9.2	ND	130	107			
61516	K-5-1 96380	S	TTLC	32	ND	100	107			
61518	CB-2 96382	Sludge	TTLC	38	10	1300	108			
61519	K-3-1 96384	S	TTLC	11	ND	94	109			
61521	K-4-1.5 96386	S	TTLC	11	ND	86	105			
61522	K-2-1 96387	s	TTLC	16	ND	95	103			
61524	CB-3 96388	Sludge	TTLC	4.5	ND	2900	103			
61525	CB-4 96392	Sludge	TTLC	9.4	ND	470	107			
61526	K-1 96396	w	TTLC	0.20	ND	35	105			
	imit unless otherwise	S,Sludge	TTLC	3.0 mg/kg	5.0	1.0				
	means not detected he reporting limit	w	TTLC	0.005 mg/L	0.10	0.01				

soil & studge samples are reported in mg/kg, and water samples and all STLC & TCLP extracts in mg/L

STLC,TCLP

0.05

0.10

<sup>+</sup> Lead is analysed using EPA method 6010 (ICP) for soils, STLC & TCLP extracts and method 239.2 (AA Furnace) for water samples

o EPA extraction methods 1311(TCLP), 3010/3020(water, TTLC), 3040(organic matrices, TTLC), 3050(solids, TTLC); STLC from CA Title 22

<sup>#</sup> surrogate diluted out of range; N/A means surrogate not applicable to this analysis

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.

Date Sampled: 02/15/96 Client Project ID: # 10-3002-84/002 Kleinfelder Date Received: 02/15/96 7133 Koll Center Parkway, # 100 Date Extracted: 02/26-02/28/96 Pleasanton, CA 94566 Client Contact: Kristen Scheller Date Analyzed: 02/28/96 Client P.O: R3283 Metals EPA analytical methods 6010/200.7, 239.2 % Rec. Matrix Extraction° Zinc Lab ID Client ID Surrogate NA 110 CB-1 96376 Słudge STLC 61513 NA STLC 67 61524 CB-3 96388 Sludge 1.0 TTLC S,Shidge Reporting Limit unless otherwise stated; ND means not detected 0.01 TTLC above the reporting limit W 0.05 STLC,TCLP

soil & sludge samples are reported in mg/kg, and water samples and all STLC & TCLP extracts in mg/L

<sup>+</sup> Lead is analysed using EPA method 6010 (ICP) for soils, STLC & TCLP extracts and method 239.2 (AA Furnace) for water samples

o EPA extraction methods 1311(TCLP), 3010/3020(water, TTLC), 3040(organic matrices, TTLC), 3050(solids, TTLC); STLC from CA Title

<sup>#</sup> surrogate diluted out of range; N/A means surrogate not applicable to this analysis

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.

Cleinfelder		Client Pro	ject ID: # 10-3002-84/002	Date Sampled: 02/15/96
7133 Koll Ce	enter Parkway, # 100			Date Received: 02/15/96
leasanton,	CA 94566	Client Con	ntact: Kristen Scheller	Date Extracted: 02/19/96
		Client P.C	): R3283	Date Analyzed: 02/19/96
				рН
	Analytical methods		EPA 1	50.1, 9040, 9045
Lab ID	Client ID	Matrix		рН
61507	K-9-1 96368	s		7.34
61509	K-8-1 96370	S		7.42
61512	K-7-1 96372	S		7.60
61513	CB-1 96376	Sludge		7.31
61514	K-6-1 96378	S		7.68
61516	K-5-1 96380	S		10.53
61518	CB-2 96382	Sludge		7.50
61519	K-3-1 96384	S		7.89
61521	K-4-1.5 96386	S		7.42
61522	K-2-1 96387	S		7.75
61524	CB-3 96388	Sludge		7.37
61525	CB-4 96392	Sludge		7.60
61526	K-1 96396	w		7.33
Reporting Li unless o	mit or Method Accuracy therwise stated; ND	w		± 0.05
means not de ing limit; N	stected above the report- 'A means not applicable	S,Siudge		± 0.1
R	eporting Units	W,S,Sludge		- log(a <sub>H</sub> <sup>+</sup> )

DHS Certification No. 1644

\_\_\_\_Edward Hamilton, Lab Director

#### QC REPORT FOR HYDROCARBON ANALYSES

Date: 02/17/96

Matrix: Water

	Concent	ration	(ug/L)		* Reco	very	<del></del>
Analyte	Sample  (#61428)	MS	MSD	Amount   Spiked 	   MS 	MSD	RPD
   TPH (gas)   Benzene	0.0	114.3	112.5	100	114	112	1.6
Toluene	0.0	10.0 10.4	10.0 10.4	10.0   10.0	100.0	100.0 104.0	0.0
Ethyl Benzene Xylenes	0.0	10.5 32.2	10.6 32.2	10.0	105.0	106.0	0.9
	-	32,4		30.0	107.3	107.3	0.0
TPH (diesel)	N/A	n/a	N/A	l N/A	   N/A 	N/A	N/A
TRPH (oil & grease)	0	22300	24700	23700	94	104	10.2

\* Rec. = (MS - Sample) / amount spiked x 100

RPD = (MS - MSD) / (MS + MSD)  $\times$  2  $\times$  100

#### QC REPORT FOR HYDROCARBON ANALYSES

Date: 02/17/96-02/20/96 Matrix: Soil/Water

	Concentration (ug/L)			Recovery			
Analyte	Sample			Amount			RPD
	(#61570) 	MS	MSD	Spiked	MS	MSD	
TPH (gas)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Benzene	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Toluene	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ethyl Benzene	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Xylenes	N/A	N/A	N/A	N/A	n/a	N/A	N/A
Ethylene Glycol	0	317	282	300	106	94	11.7
TRPH (oil & grease)	N/A	N/A	N/A	N/A	N/A	N/A	N/A

% Rec. = (MS - Sample) / amount spiked x 100

RPD = (MS - MSD) / (MS + MSD) x 2 x 100

#### QC REPORT FOR HYDROCARBON ANALYSES

Date: 02/16/96-02/17/96 Matrix: Soil

Analyte	Concentration (mg/kg)			Recovery			
	Sample   (#59994)	MS	MSD	Amount     Spiked	MS	MSD	RPD
TPH (gas)	0.000	2.036	1.896	2.03	100	93	7.:
Benzene	0.000	0.182	0.176	0.2	91	88	3.4
Toluene	0.000	0.210	0.202	0.2	105	101	3.5
Ethylbenzene	0.000	0.196	0.190	0.2	98	95	3.:
Xylenes	0.000	0.618	0.602	0.6	103	100	2.
TPH (diesel)	0	322	301	300	107	100	6.
TRPH oil and grease)	0.0	20.7	22.1	20.8	100	106	6.

% Rec. = (MS - Sample) / amount spiked  $\times$  100

RPD = (MS - MSD) / (MS + MSD)  $\times$  2  $\times$  100

Tele: 510-798-1620 Fax: 510-798-1622

#### QC REPORT FOR HYDROCARBON ANALYSES

Date: 02/21/96

Matrix: Soil

	Concent	ration	(mg/kg)		* Reco	very	
Analyte	Sample			Amount			RPD
	(#61109) 	MS	MSD	Spiked   	MS	MSD	
TPH (gas)	0.000	1.855	1.982	2.03	91	98	6.7
Benzene	0.000	0.160	0.158	0.2	80	79	1.3
Toluene	0.000	0.182	0.178	0.2	91	89	2.2
Ethylbenzene	0.000	0.188	0.194	0.2	94	97	3.1
Xylenes	0.000	0.572	0.576	0.6	95	96	0.7
TPH (diesel)	0	323	323	300	108	108	0.0
TRPH (oil and grease)	N/A	N/A	N/A	   N/A	N/A	N/A	N/A

\* Rec. - (MS - Sample) / amount spiked x 100

#### QC REPORT FOR AA METALS

Date: 02/20/96

Matrix: Soil

	Concenti	cation			* Recor	very	
Analyte	•	j/kg,mg/1	다)	Amount			RPD
-	Sample	MS	MSD	Spiked	MS	MSD	
Total Lead	0.0	5.2	5.4	5.0	104	108	3.7
Total Tin	0.0	10.2	10.7	10.0	102	107	4.6
Total Chromium	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Nickel	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Zinc	0.0	5.4	5.6	5.0	108	112	3.6
Total Copper	N/A	N/A	N/A	N/A	N/A	n/a	n/A
Organic Lead	N/A	n/a	n/a	N/A	N/A	N/A	N/A

\* Rec. = (MS - Sample) / amount spiked x 100

#### QC REPORT FOR AA METALS

Date: 02/20/96

Matrix: Water

	Concent	ration	(mg/L)	Amount	* Reco	very	RPD
Analyte	Sample	MS	MSD	Amount	MS	MSD	KFD
Total Lead	0.00	5.11	5.21	5.00	102	104	2.0
Total Tin	0.00	9.73	10.02	10.00	97	100	3.0
Total Chromium	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Nickel	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Zinc	0.00	5.27	5.42	5.00	105	108	2.7
Total Copper	N/A	N/A	N/A	N/A	N/A	N/A	n/a
Organic Lead	N/A	N/A	N/A	N/A	N/A	N/A	A/N

t Rec. = (MS - Sample) / amount spiked x 100

110 2nd Avenue South, #D7, Pacheco, CA 94553 Tele: 510-798-1620 Fax: 510-798-1622

#### QC REPORT FOR AA METALS

Date: 02/28/96

Matrix: STLC

	Concent				* Reco	very	
Analyte	(m <u>s</u>	g/kg,mg/:	L)	Amount			RPD
	Sample	MS	MSD	Spiked   	MS	MSD	
Total Lead	   N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Cadmium	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Chromium	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Nickel	N/A	N/A	n/a	N/A	N/A	N/A	N/A
Total Zinc	0.0	5.4	5.3	j 5.0 j	107	106	1.4
Total Copper	N/A	n/a	n/a	N/A	N/A	N/A	N/A
Organic Lead	N/A	N/A	N/A	N/A	N/A	N/A	N/A

\* Rec. = (MS - Sample) / amount spiked x 100

Environmental Services (SDB)

February 26, 1996

Submission #: 9602133

MCCAMPBELL ANALYTICAL, INC.

Atten: Ed Hamilton

Project: K/5840

Project#: 10-3002-84/002

Received: February 16, 1996

re: One sample for Semivolatile Organics (BNAs) analysis.

Method: EPA 3550/8270

SampleID: CB-4

Sample #: 118406 Matrix: SOIL Extracted: February 20, 1996

Sampled: February 15, 1996 Run: 10479-A Analyzed: February 23, 1996

Sampled: repruary 15, 1996	Run: 104	/J-R ALIGE	Zeu. Test.	aux, 20, 200
		REPORTING	BLANK	BLANK SPIKE
PHENOL BIS (2-CHLOROETHYL) ETHER 2-CHLOROPHENOL 1,3-DICHLOROBENZENE 1,4-DICHLOROBENZENE BENZYL ALCOHOL 1,2-DICHLOROBENZENE BENZYL ALCOHOL 1,2-DICHLOROBENZENE 0-METHYLPHENOL BIS (2-CHLOROISOPROPYL) ETHER m+p-METHYLPHENOL N-NITROSO-DI-N-PROPYLAMINE HEXACHLOROETHANE NITROBENZENE ISOPHORONE 2-NITROPHENOL 2,4-DIMETHYLPHENOL BIS (2-CHLOROETHOXY) METHANE 2,4-DICHLOROPHENOL 1,2,4-TRICHLOROBENZENE NAPHTHALENE 4-CHLOROANILINE HEXACHLOROBUTADIENE 4-CHLORO-3-METHYLPHENOL 2,4,5-TRICHLOROPHENOL 2,4-DINITROANILINE ACENAPHTHENE 3-NITROANILINE ACENAPHTHENE 2,4-DINITROPHENOL DIBENZOFURAN 2,4-DINITROPHENOL DIBENZOFURAN 2,4-DINITROTOLUENE DIETHYL PHTHALATE 4-CHLOROPHENYL PHENYL ETHER FLUORENE 4-NITROANILINE 4-CHLOROPHENYL PHENYL ETHER FLUORENE 4-NITROANILINE 4-CHLOROPHENYL PHENYL ETHER	RESULT	LIMIT	RESULT	
3malerka	(mg/Kg)	(mg/Kg)	ROUDDOODOODOODOODOODOODOODOODOODOOOOOOOO	(%)
DUCMOT.	VIIIQ/KG/	10	N.D.	
RIS (2-CHLOROETHYL) ETHER	Ñ.Ď.	īŏ	N.D.	
2-CHLOROPHENOL	Ñ.D.	10	N.D.	81
1.3-DICHLOROBENZENE	N.D.	10	Ŋ.D.	
1.4-DICHLOROBENZENE	N.D.	10	Ŋ.D.	<del>-</del> -
BÉNZYL ALCOHOL	N.D.	20	й.Б.	
1,2-DICHLOROBENZENE	N.D.	10	₩·Ħ·	<b>= -</b>
o-METHYLPHENOL	N.D.	10	N.D.	
BIS (2-CHLOROISOPROPYL) ETHER	й·Б·	70	M. D.	
M+D-WEIHATSHENOT	M.D.	10	M.D.	73
N-NITROSU-DI-N-PROPILAMINE	м.р.	10	N.D.	
HEXACHLOROETHANE	M.D.	10	N.D.	
NITROBENZENE	и.р.	iň	N.D.	
150PHORONE 2_NTTDODUENOT.	N.D.	วีดั	Ñ.D.	<del>-</del> -
2 A-DIMETHVI.DHENOI.	Ñ.D.	īŏ	N.D.	
BIS (2-CHIOROETHOXY) METHANE	N.D.	īŏ	N.D.	
2.4-DICHLOROPHENOL	N.D.	10	N.D.	==
1.2.4-TRICHLOROBENZENE	Ñ.D.	10	N.D.	69
NAPHTHALENE	N.D.	10	Ŋ.D.	
4-CHLOROANILINE	N.D.	20	й·Б·	
HEXACHLOROBUTADIENE	N.D.	10	N.D.	91
4-CHLORO-3-METHYLPHENOL	N.D.	20	й.Б.	91
2-METHYLNAPHTHALENE	и.D.	10	M . D .	
HEXACHLOROCYCLOPENTADIENE	й.Б.	17	M. D.	
2,4,6-TRICHLOROPHENOL	₩·Ħ·	10	и.р.	<u></u>
2,4,5-TRICHLOROPHENOL	M.D.	ξŅ	N.D.	
2-CHLORONAPHTHALENE	й.р.	10	N.D.	_ =
VINDARATO DRARYTYAE	N.D.	Śŏ	Ñ.D.	
PURE THIS ENTRE	N.D.	ĭŏ	N.D.	
3-NITROANII.INE	Ñ.D.	50	N.D.	<b></b>
ACENAPHTHENE	N.D.	10	N.D.	81
2.4-DINITROPHENOL	N.D.	50	N.D.	<b></b>
4-NITROPHENOL	Ŋ.D.	50	й·Б·	
DIBENZOFURAN	N.D.	10	й.Б.	
2,4-DINITROTOLUENE	Ŋ.D.	70	N.D.	
2,6-DINITROTOLUENE	. M.D.	<b>40</b>	M. D.	
DIETHYL PHTHALATE	й. <del>Д</del> .	30	N.D.	
4-CHPOKONHENIT SHENIT EIHEK	и.р.	ŧΧ	N.D.	
FLUUKENE A.MITTONNII IMP	И. р.	ŚΚ	N.D.	
4 C_DINITODO_3_METUVI.DUDNOI.	M. D.	รีกั	N.D.	
4,0-DIMILKO-S-METHIDEMOD	H.D.			

Environmental Services (SDB)

February 26, 1996

Submission #: 9602133

page 2

MCCAMPBELL ANALYTICAL, INC.

Atten: Ed Hamilton

Project: K/5840

Received: February 16, 1996

Project#: 10-3002-84/002

re: One sample for Semivolatile Organics (BNAs) analysis, continued.

Method: EPA 3550/8270

SampleID: CB-4

Sample #: 118406 Matrix: SOIL Extracted: February 20, 1996

Sampled: February 15, 1996 Run: 10479-A Analyzed: February 23, 1996

	Analyte	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE RESULT (%)
	N-NITROSO-DI-N-PHENYLAMINE	N.D.	10	N.D.	
	4-BROMOPHENYL PHENYL ETHER	Ñ.Ď.	īŏ	N.D.	
	HEXACHLOROBENZENE	Ñ.D.	10 10	N.D.	
	PENTACHLOROPHENOL	Ñ.Ď.	5ō	N.D.	43
	PHENATHRENE	Ñ.Ď.	10	N.D.	<del>-</del> -
	ANTHRACENE	N.D.	ĪÒ	N.D.	
	DI-N-BUTYL PHTHALATE	N.D.	10 50	N.D.	
	FLUORANTHENE	N.D.	10	N.D.	==
	PYRENE	N.D.	10	N.D.	57
	BUTYL BENZYL PHTHALATE	N.D.	10000000000000000000000000000000000000	N.D.	
	3,3'-DICHLOROBENZIDINE	N.D.	20	N.D.	
ļ	BENZO (A) ANTHRACENE	N.D.	10	N.D.	
	BIS (2-ETHYLHEXYL) PHTHALATE	N.D.	50	Ŋ.D.	
	CHRYSENE	Ŋ.D.	10	Ŋ.D.	
	DI-N-OCTYL PHTHALATE	Ŋ.D.	50	Ŋ.D.	<b></b>
1	BENZO (B) FLUORANTHENE	N.D.	ŤΛ	Ŋ.D.	
ı	BENZO (K) FLUORANTHENE	Ŋ.D.	<b>⊉</b> 0	Ŋ.D.	
	BENZO (A) PYRENE	Ŋ.D.	2,	N.D. N.D.	
	INDENO(1,2,3 C,D) PYRENE DIBENZ(A,H) ANTHRACENE	N.D.	20	n:D:	
i	DIBENZ (A, H) ANTHRACENE	N.D. N.D.	20	N.D.	<b>-</b> -
	BENZ (G,H,I) PERYLENE	REPORTING LIMITS	אם שוות השפגא		REFERENCE
	For above analyte:	KEPUKIING LIMIIS	KWIDEN DOE IC	LEGITATE THIE	

Alex Tam Chemist Chip Poalinelli

Environmental Services (SDB)

February 26, 1996

Submission #: 9602133

MCCAMPBELL ANALYTICAL, INC.

Atten: Ed Hamilton

Project: K/5840

Project#: 10-3002-84/002

Received: February 16, 1996

re: One sample for Semivolatile Organics (BNAs) analysis.

Method: EPA 3510/8270

SampleID: K-1

Extracted: February 20, 1996 *Matrix:* WATER Sample #: 118407

Analyzed: February 21, 1996 Sampled: February 15, 1996 Run: 10481-A

_		REPORTING	BLANK	BLANK SPIKE
1	RESULT	LIMIT	RESULT	RESULT
3 3 b	(ug/L)	(uq/L)	(ug/L)	(%)
Analyte PHENOL		<u>\udy</u>	N.D.	
PRENOL DIC (3_CUI.ODOETUVI.) ETUED	M.D.	00000000000000000000000000000000000000	Ñ.Đ.	<del>-</del>
BIS (2-CHLOROETHYL) ETHER 2-CHLOROPHENOL 1,3-DICHLOROBENZENE 1,4-DICHLOROBENZENE	N D	20	N.D.	77
1 3 DICHLOROBENZENE	N.D.	20	N.D.	
1 4-DICHLOROBENZENE	Ñ.D.	20	N.D.	<b></b>
BENZYL ALCOHOL	N.D.	50	Ŋ.D.	<del></del>
1.2-DICHLOROBENZENE	N.D.	20	Ŋ.D.	
O-METHYLPHENOL	N.D.	20	й.Б.	
BIS (2-CHLOROISOPROPYL) ETHER	Ŋ.D.	20	ĭ.₽.	
m+p-METHYLPHENOL	Ŋ.D.	20	й.Б.	68
N-NITROSO-DI-N-PROPYLAMINE	й.Б.	20	и.р.	
HEXACHLOROETHANE	й.Б.	20	и.р.	
NITROBENZENE	М.Б.	20	N D	
1 SUPHORONE	M.D.	50	Ñ.D.	
2-NITROPHENOL	M.D.	20	Ñ.D.	
DIG / 2 _ CUI OPOETHOYV METHANE	N.D.	5ŏ	N.D.	
2 A-DICHLOROETROXI/METHAND	N.D.	ŽŎ	N.D.	<del>-</del> -
1 2 4-TRICHLOROBENZENE	Ñ.D.	<b>2</b> 0	N.D.	<b>6</b> 3
NAPHTHALENE	N.D.	20	Ŋ.D.	
1,3-DICHLOROBENZENE 1,4-DICHLOROBENZENE BENZYL ALCOHOL 1,2-DICHLOROBENZENE 0-METHYLPHENOL BIS(2-CHLOROISOPROPYL)ETHER m+p-METHYLPHENOL N-NITROSO-DI-N-PROPYLAMINE HEXACHLOROETHANE ISOPHORONE 2-NITROPHENOL 2,4-DIMETHYL PHENOL BIS(2-CHLOROETHOXY)METHANE 2,4-DICHLOROPHENOL 1,2,4-TRICHLOROBENZENE NAPHTHALENE 4-CHLOROANILINE HEXACHLOROBUTADIENE 4-CHLORO-3-METHYLPHENOL 2-METHYLNAPHTHALENE HEXACHLOROCYCLOPENTADIENE 2,4,5-TRICHLOROPHENOL 2,4,5-TRICHLOROPHENOL 2-CHLORONAPHTHALENE 2-NITROANILINE DIMETHYL PHTHALATE ACENAPHTHYLENE 3-NITROANILINE	N.D.	50	Ŋ.D.	
HEXACHLOROBUTADIENE	Ŋ.D.	20	й.Б.	70
4-CHLORO-3-METHYLPHENOL	Ŋ.D.	40	₩·Ħ·	70
2-METHYLNAPHTHALENE	й.Б.	20	₩.₽.	
HEXACHLOROCYCLOPENTADIENE	й·Б.	20	M.D.	
2,4,6-TRICHLOROPHENOL	M.D.	20	N.D.	
2,4,5-TKICHLOROPHENOL	#.P.	20	Ñ.D.	
2-CHLORUNAPHIRALENE 2-NITTOANTIINT	N D	žŏ	N.D.	. <del></del>
TIMETUVI DUTUALATE	Ñ.Ď.	ŽÕ	N.D.	
ACENAPHTHYLENE	N.D.	20	Ŋ.D.	
3-NITROANILINE	N.D.	20	Ŋ.D.	 
ACENAPHTHENE	Ŋ.D.	20	Ŋ.D.	71
2,4-DINITROPHENOL	Ŋ.D.	100	й. Б.	
4-NITROPHENOL	Ŋ.D.	700	M.P.	
DIBENZOFURAN	N.D.	20	#.p.	<del></del>
2,4-DINITROTOLUENE	й. Б.	<b>£</b> 0	M.D.	
ACEMAPHTHY LENE 3-NITROANILINE ACEMAPHTHENE 2,4-DINITROPHENOL 4-NITROPHENOL DIBENZOFURAN 2,4-DINITROTOLUENE 2,6-DINITROTOLUENE DIETHYL PHTHALATE 4-CHIORODHENYL PHENYL ETHER	M.D.	122252252		
DIETHIL PHINALATE	И.р.	žŏ	N.D.	<del></del>
4-CHLOROPHENYLPHENYLETHER FLUORENE	Ñ.Ď.	5ŏ	N.D.	
4-NITROANILINE	Ñ.Ď.	20 100	N.D.	
4,6-DINITRO-2-METHYLPHENOL		100	N.D.	
-/				

**Environmental Services (SDB)** 

February 26, 1996

Submission #: 9602133 page 2

MCCAMPBELL ANALYTICAL, INC.

Atten: Ed Hamilton

Project: K/5840

Received: February 16, 1996

Project#: 10-3002-84/002

re: One sample for Semivolatile Organics (BNAs) analysis, continued.

Method: EPA 3510/8270

SampleID: K-1

Extracted: February 20, 1996 Matrix: WATER Sample #: 118407

Analyzed: February 21, 1996 Sampled: February 15, 1996 Run: 10481-A

pampied: tenidary 10, 1990		Kun. 1040.			
	Analyte	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE RESULT (%)
	N-NITROSODI-N-PHENYLAMINE	N.D.	20	N.D.	<del>-</del> -
	M-MILKOSODI-N-PRENITABILINE	M. D.	ĒŎ	N.D.	
	4-BROMOPHENYLPHENYLETHER	Ŋ.D.	20 50 20	Ñ.D.	
	HEXACHLOROBENZENE	Ŋ.D.	400	N.D.	36
	PENTACHLOROPHENOL	N.D.	100	N.D.	50
	PHENANTHRENE	N.D.	20	Ŋ.D.	<del>-</del> -
	ANTHRACENE	N.D.	20	Ŋ.D.	<del></del>
	DI-N-BUTYL PHTHALATE	N.D.	50	N.D. N.D.	
	FLUORANTHENE	N.D.	20	N.D.	==
	PYRENE	N.D.	20	N.D.	56
	RITTYL RENZYL PHTHALATE	N.D.	20 50 20 20 50	N.D.	<del>-</del> -
	3,3'-DICHLOROBENZIDINE BENZO(A)ANTHRACENE	N.D.	50	N.D.	
	BENZO (A) ANTHRACENE	N.D.	20	N.D.	<del>-</del> -
	BIS (2-ETHYLHEXYL) PHTHALATE	Ñ.Ď.	$\overline{2}\overline{0}$	N.D.	
	CHRYSENE	Ñ.D.	2ŏ	N.D. N.D.	
	DI-N-OCTYLPHTHALATE	Ñ.D.	รีด้	N.D.	
	BENZO (B) FLUORANTHENE	Ñ.Đ.	วีกั	N.D.	
	DENZO (D) FLOORMINENE	M.D.	วีกั	N.D. N.D.	<u> `</u>
	BENZO (K) FLUORANTHENE	N.D. N.D.	50 20 20 20	Ñ.Ď.	
	BENZO (A) PYRENE	N.D.	20	N.D.	
	INDENO (1, 2, 3-CD) PYRENE DIBENZO (A, H) ANTHRACENE BENZ (GHI) PERYLENE	ŭ. D.	20 20	N.D.	
	DIBENZO (A, H) ANTHRACENE	Ŋ.D.	20	N.D.	
	RENZ (GHT) BEKATENE	Ŋ.D.	20	й.Б.	
	BENZOIC ACID	N.D.	20	MATRIX INTE	D D D D D D D D D D D D D D D D D D D
	For above analyte:	REPORTING LIMITS	RAISED DUE TO	MAIRIA INTE	Krekence

Alex Tan

Chemist

Chip Poalinelli

Environmental Services (SDB)

February 26, 1996

Submission #: 9602133

MCCAMPBELL ANALYTICAL, INC.

Atten: Ed Hamilton

Project: K/5840

Project#: 10-3002-84/002

Received: February 16, 1996

re: One sample for Semivolatile Organics (BNAs) analysis.

Method: EPA 3550/8270

SampleID: K-9-1

Extracted: February 20, 1996 *Matrix:* SOIL Sample #: 118395

Analyzed: February 22, 1996 Sampled: February 15, 1996 Run: 10479-A

Analyte	<u>-</u>		REPORTING	BLANK	BLANK SPIKE
ADDITION   COLOR   C		RESULT	LIMIT	RESULT	RESULT
PHENOL   N.D.   0.10   N.D.	Analyte	(mg/Kg)	(mq/Kg)	(mg/Kg)	
BENZYL ALCOHOL	PHENOL BIS (2-CHLOROETHYL) ETHER 2-CHLOROPHENOL 1,3-DICHLOROBENZENE 1,4-DICHLOROBENZENE	N.D. N.D. N.D. N.D. N.D.	0.10 0.10 0.10 0.10 0.10	N.D. N.D. N.D. N.D.	81 
N-NITROSO-DI-N-PROPYLAMINE   N.D.   0.10   N.D.   73     HEXACHLOROETHANE   N.D.   0.10   N.D.       NITROBENZENE   N.D.   0.10   N.D.       ISOPHORONE   N.D.   0.10   N.D.       ISOPHORONE   N.D.   0.10   N.D.       2-NITROPHENOL   N.D.   0.10   N.D.       2-LOINETHYLPHENOL   N.D.   0.10   N.D.       2-LOICHLOROPHENOL   N.D.   0.10   N.D.       2-LOICHLOROPHENOL   N.D.   0.10   N.D.   69     NAPHTHALENE   N.D.   0.10   N.D.   69     NAPHTHALENE   N.D.   0.10   N.D.       LEXACHLOROBUTADIENE   N.D.   0.10   N.D.       HEXACHLOROBUTADIENE   N.D.   0.10   N.D.       L-CHLORO-3-METHYLPHENOL   N.D.   0.20   N.D.   91     L-CHLORO-3-METHYLPHENOL   N.D.   0.10   N.D.       L-CHLOROPHENOL   N.D.   0.10   N.D.       L-CHLOROPHENOL   N.D.   0.10   N.D.       L-CHLOROPHENOL   N.D.   0.50   N.D.       L-CHLOROPHENOL   PHENYL ETHER   N.D.   0.50	BENZYL ALCOHOL  1,2-DICHLOROBENZENE  0-METHYLPHENOL  BIS (2-CHLOROISOPROPYL) ETHER  THO-METHYLPHENOL	N.D. N.D. N.D. N.D.	0.20 0.10 0.10 0.10 0.20	N.D. N.D. N.D. N.D.	
2 4 - DIMETHYLPHENOL	N-NITROSO-DI-N-PROPYLAMINE HEXACHLOROETHANE NITROBENZENE ISOPHORONE 2-NITROPHENOL	N.D. N.D. N.D. N.D. N.D.	0.10 0.10 0.10 0.10 0.10	N.D. N.D. N.D. N.D.	73  
4-CHLOROANILINE	2,4-DIMETHYLPHENOL BIS(2-CHLOROETHOXY)METHANE 2,4-DICHLOROPHENOL 1,2,4-TRICHLOROBENZENE NAPHTHALENE	N.D. N.D. N.D. N.D.	0.10 0.10 0.10 0.10	N.D. N.D. N.D. N.D.	69
2,4,5-TRICHLOROPHENOL N.D. 0.10 N.D 2-CHLORONAPHTHALENE N.D. 0.50 N.D 2-NITROANILINE N.D. 0.10 N.D DIMETHYL PHTHALATE N.D. 0.50 N.D ACENAPHTHYLENE N.D. 0.10 N.D 3-NITROANILINE N.D. 0.50 N.D 3-NITROANILINE N.D. 0.50 N.D 4-DINITROPHENOL N.D. 0.50 N.D 14-NITROPHENOL N.D. 0.50 N.D 14-NITROPHENOL N.D. 0.50 N.D 2,4-DINITROTOLUENE N.D. 0.10 N.D 2,4-DINITROTOLUENE N.D. 0.10 N.D 2,4-DINITROTOLUENE N.D. 0.10 N.D 2,4-CHLOROPHENYL PHENYL ETHER N.D. 0.50 N.D 15-CHLOROPHENYL PHENYL ETHER N.D. 0.10 N.D 16-CHLOROPHENYL PHENYL ETHER N.D. 0.10 N.D 17-CHLOROPHENYL PHENYL ETHER N.D. 0.10 N.D 18-CHLOROPHENYL PHENYL ETHER N.D. 0.50 N.D 18-CHLOROPHENYL PHENYL ETHER N.D. 0.	4-CHLOROANILINE HEXACHLOROBUTADIENE 4-CHLORO-3-METHYLPHENOL 2-METHYLNAPHTHALENE HEXACHLOROCYCLOPENTADIENE	N.D. N.D. N.D. N.D.	0.10 0.20 0.10 0.10	N.D. N.D. N.D. N.D.	91  
3-NITROANILINE N.D. 0.50 N.D. 81 ACENAPHTHENE N.D. 0.50 N.D 2,4-DINITROPHENOL N.D. 0.50 N.D 4-NITROPHENOL N.D. 0.50 N.D DIBENZOFURAN N.D. 0.10 N.D 2,4-DINITROTOLUENE N.D. 0.10 N.D 2,6-DINITROTOLUENE N.D. 0.20 N.D 2,6-DINITROTOLUENE N.D. 0.50 N.D 4-CHLOROPHENYL PHENYL ETHER N.D. 0.50 N.D FLUORENE N.D. 0.10 N.D FLUORENE N.D. 0.10 N.D 4-NITROANILINE N.D. 0.50 N.D 4-NITROANILINE N.D. 0.50 N.D	2,4,5-TRICHLOROPHENOL 2-CHLORONAPHTHALENE 2-NITROANILINE DIMETHYL PHTHALATE ACENAPHTHYLENE	N.D. N.D. N.D. N.D.	0.10 0.50 0.10 0.50	N.D. N.D. N.D. N.D.	
2,4-DINITROTOLUENE N.D. 0.20 N.D 2,6-DINITROTOLUENE N.D. 0.50 N.D DIETHYL PHTHALATE N.D. 0.50 N.D 4-CHLOROPHENYL PHENYL ETHER N.D. 0.10 N.D FLUORENE N.D. 0.10 N.D 4-NITROANILINE N.D. 0.50 N.D 4-NITROANILINE N.D. 0.50 N.D	3-NITROANILINE ACENAPHTHENE 2,4-DINITROPHENOL 4-NITROPHENOL DIBENZOFURAN	N.D. N.D. N.D. N.D.	0.50 0.50 0.50 0.10	N.D. N.D. N.D. N.D.	81  
	2,4-DINITROTOLUENE 2,6-DINITROTOLUENE DIETHYL PHTHALATE 4-CHLOROPHENYL PHENYL ETHER FLUORENE 4-NITROANILINE	N.D. N.D. N.D. N.D.	0.120 0.510 0.110 0.50	N.D. N.D. N.D. N.D.	  

Environmental Services (SDB)

February 26, 1996

Submission #: 9602133 page 2

MCCAMPBELL ANALYTICAL, INC.

Atten: Ed Hamilton

Project: K/5840

Received: February 16, 1996

Project#: 10-3002-84/002

re: One sample for Semivolatile Organics (BNAs) analysis, continued.

Method: EPA 3550/8270

SampleID: K-9-1

Sample #: 118395

Matrix: SOIL

Extracted: February 20, 1996

Analyzed: February 22, 1996 Run: 10479-A Sampled: February 15, 1996

	Analyte	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE RESULT (%)		
	N-NITROSO-DI-N-PHENYLAMINE	N.D.	0.10	N.D.			
	4-BROMOPHENYL PHENYL ETHER	N.D.	0.10	N.D.			
`	HEXACHLOROBENZENE	N.D.	0.10	N.D.	<del></del>		
	PENTACHLOROPHENOL	N.D.	0.50	N.D.	43		
	PHENATHRENE	N.D.	0.10	Ŋ.D.			
	ANTHRACENE ·	N.D.	0.10	N.D.			
	DI-N-BUTYL PHTHALATE	N.D.	0.50	Ŋ.D.	<b></b> .		
	FLUORANTHENE	N.D.	0.10	Ŋ.D.			
	PYRENE	Ŋ.D.	0.10	Ŋ.D.	57		
	BUTYL BENZYL PHTHALATE	N.D.	0.50	Ŋ.D.	<del></del>		
	3,3'-DICHLOROBENZIDINE	N.D.	0.20	Ŋ.D.	<b></b>		
٠	BÉNZO (A) ANTHRACENE	Ŋ.D.	0.10	Ŋ.D.			
	BIS (2-ETHYLHEXYL) PHTHALATE	Ŋ.D.	0.50	N.D. N.D.			
	CHRYSENE	Ŋ.D.	0.10 0.50	N.D.	<del>-</del> <del>-</del>		
	DI-N-OCTYL PHTHALATE BENZO (B) FLUORANTHENE	N.D. N.D.	0.10	N.D.			
	BENZO (K) FLUORANTHENE BENZO (K) FLUORANTHENE	N.D.	0.20	N.D.			
	BENZO (A) PYRENE	N.D.	0.05	N.D.			
	INDENO (1,2,3 C, D) PYRENE	N.D.	0.20	N.D.			
	DIBENZ (A, H) ANTHRACENE	N.D.	0.20	N.D.			
	BENZ (G, H, I) PERYLENE	Ñ.D.	0.20	N.D.			

Alex Tam Chemist

Chip Poalinelli

**Environmental Services (SDB)** 

February 26, 1996

Submission #: 9602133

MCCAMPBELL ANALYTICAL, INC.

Atten: Ed Hamilton

Project: K/5840

Project#: 10-3002-84/002

Received: February 16, 1996

re: One sample for Semivolatile Organics (BNAs) analysis.

Method: EPA 3550/8270

SampleID: K-8-1

Sample #: 118396

Sample #: 118396 Matrix: SOIL Extracted: February 20, 1996
Sampled: February 15, 1996 Run: 10479-A Analyzed: February 22, 1996

			REPORTING	BLANK	BLANK SPIKE
į		RESULT	LIMIT	RESULT	RESULT
	Analyte PHENOL BIS (2-CHLOROETHYL) ETHER 2-CHLOROPHENOL 1,3-DICHLOROBENZENE 1,4-DICHLOROBENZENE BENZYL ALCOHOL 1,2-DICHLOROBENZENE 0-METHYLPHENOL BIS (2-CHLOROISOPROPYL) ETHER m+p-METHYLPHENOL N-NITROSO-DI-N-PROPYLAMINE HEXACHLOROETHANE NITROBENZENE ISOPHORONE 2-NITROPHENOL 2,4-DIMETHYLPHENOL BIS (2-CHLOROETHOXY) METHANE 2,4-DIMETHYLPHENOL 1,2,4-TRICHLOROBENZENE NAPHTHALENE 4-CHLOROANILINE HEXACHLOROBUTADIENE 4-CHLORO-3-METHYLPHENOL 2-METHYLNAPHTHALENE HEXACHLOROCYCLOPENTADIENE 2,4,6-TRICHLOROPHENOL 2,4,5-TRICHLOROPHENOL 2,4,5-TRICHLOROPHENOL 2,4,5-TRICHLOROPHENOL 2,1,5-TRICHLOROPHENOL 2,1,1-TROANILINE DIMETHYL PHTHALATE ACENAPHTHENE 3-NITROANILINE DIMETHYL PHTHALATE ACENAPHTHENE 2,4-DINITROPHENOL DIBENZOFURAN 2,4-DINITROTOLUENE DIETHYL PHTHALATE 4-CHLOROPHENYL PHENYL ETHER FLUORENE 4-NITROANILINE 4-CHLOROPHENYL PHENYL ETHER FLUORENE 4-NITROANILINE	(mg/Kg)	(mq/Kg)	(mg/Kg)	(%)
	PHENOL	N.D.	00000000000000000000000000000000000000		
ı	BIS (2-CHLOROETHYL) ETHER	N.D.	0.10	Ŋ.D.	0.7
	2-CHLOROPHENOL	N.D.	0.10	N.D.	81
	1,3-DICHLOROBENZENE	N.D.	0.10	й·Б.	<del></del>
	1,4-DICHLOROBENZENE	N.D.	0.40	M.D.	
	BENZYL ALCOHOL	й.Б.	0.20	M.D.	
V	1,2-DICHLOROBENZENE	и.р.	0.10	и. р.	
ŀ	O-METHILPHENOL	M.D.	ŏ. 10	Ñ.Ď.	
L	MAN_METUVI.DUENOI.	N D	0.20	Ñ.Ď.	
	N-NITROSO-DI-N-PROPYLAMINE	N.D.	ŏ.īŏ	N.D.	<b>7</b> 3
	HEXACHLOROETHANE	Ñ.D.	0.10	N.D.	
ľ	NITROBENZENE	N.D.	0.10	N.D.	<del>-</del> -
	ISOPHORONE	N.D.	0.10	Ŋ.D.	
	2-NITROPHENOL	Ŋ.D.	0.10	Ŋ.D.	<del></del>
	2,4-DIMETHYLPHENOL	N.D.	0.10	<b>ऑ</b> .₽.	
	BIS (2-CHLOROETHOXY) METHANE	Ŋ.D.	0.10	M.D.	==
•	2,4-DICHLOROPHENOL	ม.บ.	0.10	й.р.	69
	1,2,4-TRICHLOROBENZENE	N.D.	8.49	N.D.	==
1	A_CULODONITITME	N D	0.20	N.D.	
1	HEXACHIOROBITIADI ENE	N.D.	ŏ.īŏ	Ñ.D.	<del>-</del> -
I	4-CHIORO-3-METHYLPHENOL	N.D.	0.20	N.D.	91
	2-METHYLNAPHTHALENE	N.D.	0.10	N.D.	<del>-</del> -
	HEXACHLOROCYCLOPENTADIENE	N.D.	0.10	N.D.	
	2,4,6-TRICHLOROPHENOL	N.D.	0.10	N.D.	<b>**</b> **
,	2,4,5-TRICHLOROPHENOL	N.D.	0.10	й. Б.	
	2-CHLORONAPHTHALENE	й·Б.	0.50	M.D.	
	2-NITROANILINE	N.D.	X · FX	N.D.	<del>-</del> -
	DIMETHYL PHIHALATE	M.D.	0.10	N.D.	<del>-</del> -
!	ACENAPHIHIDENE S NITTONNITITME	M.D.	0.50	N.D.	<del>-</del> -
	2-MILKOMITHE	N.D.	ŏ.īŏ	N.D.	81
r	2.4-DINTTROPHENOL	Ñ.D.	0.50	Ŋ.D.	
	4-NITROPHENOL	N.D.	0.50	N.D.	
,	DIBENZOFURAN	N.D.	0.10	й.р.	<del>-</del> -
	2,4-DINITROTOLUENE	Ŋ.D.	0.10	M . D .	
	2,6-DINITROTOLUENE	й.Б.	0.40	M.D.	
1	DIETHYL PHTHALATE	м. <del>Д</del> .	0.50	N.D.	
ļ	4-CHLOROPHENIL PHENIL ETHER	ир.	0.10	N.D.	
	FLUURENE A-NTTDANTITME	N.D.	ŏ.5ŏ	N.D.	
	4.6-DINTTRO-2-METHYLPHENOL	Ñ.Ď.	0.50	N.D.	<b>-</b>

Environmental Services (SDB)

February 26, 1996

Submission #: 9602133

page 2

MCCAMPBELL ANALYTICAL, INC.

Atten: Ed Hamilton

Project: K/5840

Project#: 10-3002-84/002

Received: February 16, 1996

re: One sample for Semivolatile Organics (BNAs) analysis, continued.

Method: EPA 3550/8270

SampleID: K-8-1

Sample #: 118396

Matrix: SOIL

Extracted: February 20, 1996

Sampled: February 15, 1996

Run: 10479-A

Analyzed: February 22, 1996

Analyte	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE RESULT (%)
N-NITROSO-DI-N-PHENYLAMINE	N.D.	0.10	N.D.	
4-BROMOPHENYL PHENYL ETHER	N.D.	0.10	Ŋ.D.	<del>-</del> -
HEXACHLOROBENZENE	Ŋ.D.	0.10	Ŋ.D.	43
PENTACHLOROPHENOL	N.D. N.D.	0.50	Ŋ.D.	43
PHENATHRENE	й·Б·	0.10	Ŋ.D.	
ANTHRACENE	N.D. N.D.	0.10	Ŋ.D.	
DI-N-BUTYL PHTHALATE	й.Б.	0.50	Ŋ.D.	<b>-</b> -
FLUORANTHENE	N.D.	0.10	Ŋ.Đ.	5 <del>7</del>
PYRENE	Ŋ.D.	0.10	N.D.	5 /
BUTYL BENZYL PHTHALATE	Ŋ.D.	0.50	N.D. N.D.	
3,3'-DICHLOROBENZIDINE	Ŋ.D.	0.20	N.D.	<del>-</del> -
BENZO (A) ANTHRACENE	N.D.	0.10	Ŋ.D.	<u></u>
BIS (2-ETHYLHEXYL) PHTHALATE	Ŋ.D.	0.50	Ŋ.D.	
CHRYSENE	Ŋ.D.	0.10	Ŋ.D.	
DI-N-OCTYL PHTHALATE	N.D.	0.50	Ŋ.D.	
BENZO (B) FLUORANTHENE	N.D.	0.10	Ŋ.D.	
BENZO (K) FLUORANTHENE	N.D.	0.20	Ŋ.D.	
BENZO (A) PYRENE	Ŋ.D.	0.05	N.D. N.D.	==
INDENO(1,2,3 C,D) PYRENE DIBENZ(A,H) ANTHRACENE BENZ(G,H,I) PERYLENE	Ŋ.D.	0.20	N.D.	
DIBENZ (A, H) ANTHRACENE	Ŋ.D.	0.20		
BENZ (G, H, I) PERILENE	N.D.	0.20	N.D.	

Alex Tam Chemist

Chip Poalinelli

**Environmental Services (SDB)** 

February 26, 1996

Submission #: 9602133

MCCAMPBELL ANALYTICAL, INC.

Atten: Ed Hamilton

Project: K/5840

Project#: 10-3002-84/002

Received: February 16, 1996

re: One sample for Semivolatile Organics (BNAs) analysis.

Method: EPA 3550/8270

SampleID: K-7-1

Sample #: 118397 Matrix: SOIL Extracted: February 20, 1996

Sampled: February 15, 1996 Run: 10479-A Analyzed: February 22, 1996

Sampled: Lepidary 13, 1330	Kmi. Iva	/J-A Midi	bed. I cor	uung
Analyte PHENOL BIS (2-CHLOROETHYL) ETHER 2-CHLOROPHENOL 1,3-DICHLOROBENZENE BENZYL ALCOHOL 1,2-DICHLOROBENZENE BENZYL ALCOHOL 1,2-DICHLOROBENZENE 0-METHYLPHENOL BIS (2-CHLOROISOPROPYL) ETHER m+p-METHYLPHENOL N-NITROSO-DI-N-PROPYLAMINE HEXACHLOROETHANE NITROBENZENE ISOPHORONE 2-NITROPHENOL 2,4-DIMETHYLPHENOL BIS (2-CHLOROETHOXY) METHANE 2,4-DICHLOROPHENOL 1,2,4-TRICHLOROBENZENE NAPHTHALENE 4-CHLORO-3-METHYLPHENOL 2-METHYLNAPHTHALENE 4-CHLORO-3-METHYLPHENOL 2-METHYLNAPHTHALENE 2-NITROANILINE HEXACHLOROCYCLOPENTADIENE 2,4,5-TRICHLOROPHENOL 2,4,5-TRICHLOROPHENOL 2,4-DINITROPHENOL 2-CHLORONAPHTHALENE 3-NITROANILINE ACENAPHTHYLENE 3-NITROANILINE ACENAPHTHENE 2,4-DINITROPHENOL DIBENZOFURAN 2,4-DINITROPHENOL DIBENZOFURAN 2,4-DINITROTOLUENE DIETHYL PHTHALATE 4-CHLOROPHENYL PHENYL ETHER FLUORENE 4-NITROANILINE 4-CHLOROPHENYL PHENYL ETHER FLUORENE 4-NITROANILINE		REPORTING	BLANK	BLANK SPIKE
	RESULT	LIMIT	RESULT	RESULT
Analyte	(mg/Kg)	(mg/Kg)	(mg/Kg)	(%)
PHENOL	N.D.	0.10	N.D.	
BIS (2-CHLOROETHYL) ETHER	N.D.	0.10	N.D.	
2-CHLOROPHENOL	N.D.	0.10	Ŋ.D.	81
1,3-DICHLOROBENZENE	N.D.	0.10	Ŋ.D.	<del>-</del> -
1,4-DICHLOROBENZENE	Ŋ.D.	0.10	й·Б.	
BENZYL ALCOHOL	Ŋ.D.	0.20	M.D.	
1,2-DICHLOROBENZENE	Ŋ.D.	ŭ. <u>†</u> ŭ	M.D.	==
O-WETHYLPHENOL	₩.ħ.	8.48	M.D.	
BIS (2-CHLOROISOPROPYL) ETHER	й.Б.	0.50	M.D.	
M+D-METHILPHENUL	и.р.	0.20	M.D.	73
N-NITROSO-DI-N-PROPILAMINE	M.D.	8.48	N.D.	
MITTOODENSENS	M. D.	ñ. 1 ñ	N.D.	. <b></b>
TOUDIODONE NITRODENZENE	М. Д.	0.10	Ñ.D.	
2_NITEOPHENOI.	N.D.	ŏ.1ŏ	Ñ.Ď.	
2 4 - DIMETHYLPHENOL	Ñ.D.	ŏ.īŏ	N.D.	
BIS (2-CHLOROETHOXY) METHANE	N.D.	0.10	N.D.	
2.4-DICHLOROPHENOL	N.D.	0.10	N.D.	
1.2.4-TRICHLOROBENZENE	N.D.	0.10	Ŋ.D.	69
NAPHTHALENE	N.D.	0.10	Ŋ.D.	
4-CHLOROANILINE	Ŋ.D.	0.20	й.Б.	<del></del>
HEXACHLOROBUTADIENE	N.D.	0.10	й.Б.	01
4-CHLORO-3-METHYLPHENOL	й.Б.	0.20	м.р.	31
2-METHYLNAPHTHALENE	ŭ.D.	0.10	M.D.	
HEXACHLOROCYCLOPENTADIENE	Ν.D.	8.48	M. D.	
2,4,6-TRICHLOROPHENOL	M.D.	8.48	N D	
2,4,5-TRICHLOROPHENOL	M.D.	χ·ξχ	N.D.	-
2-CHLORUNAPHIHALIENE	M.D.	กำกั	N.D.	
Z-NIIKVANIDINO DIMETUVI DUTUNIATE	M.D.	ŏ.5ŏ	N.D.	
ACENA DUTUVI.ENE	N.D.	ŏ.īŏ	N.D.	
3-NITROANILINE	Ñ.D.	0.50	N.D.	= =
ACENAPHTHENE	N.D.	0.10	N.D.	81
2.4-DINITROPHENOL	N.D.	0.50	Ŋ.D.	<del></del>
4-NITROPHENOL	N.D.	0.50	N.D.	<del></del>
DIBENZOFURAN	N.D.	0.10	й.Б.	
2,4-DINITROTOLUENE	Ŋ.D.	0.10	M.D.	
2,6-DINITROTOLUENE	й.Б.	0. <u>₹</u> 0	M.D.	
DIETHYL PHTHALATE	й·Б.	0.30	M. D.	
4-CHLOROPHENYL PHENYL ETHER	й. Н.	8.48	₩.р.	
FLUCKENE	M.D.	2.49	ที่ กั	
4-NITKUANILINE	и.р.	۸٠ <u>۶</u> ۸	Ñ.Ď.	
4.0-DINTIKO-S-WEIDITERDROD	и.р.	0.50	*****	

Environmental Services (SDB)

February 26, 1996

Submission #: 9602133 page 2

MCCAMPBELL ANALYTICAL, INC.

Atten: Ed Hamilton

Project: K/5840

Project#: 10-3002-84/002

Received: February 16, 1996

re: One sample for Semivolatile Organics (BNAs) analysis, continued.

Method: EPA 3550/8270

SampleID: K-7-1

Sample #: 118397

Matrix: SOIL

Extracted: February 20, 1996

Sampled: February 15, 1996

Run: 10479-A

Analyzed: February 22, 1996

, bumpred, repredery rol root				
Analyte	RESULT	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE RESULT (%)
N-NITROSO-DI-N-PHENYLAMINE	N.D.	0.10	N.D.	
	N.D.	ŏ.1ŏ	N.D.	
4-BROMOPHENYL PHENYL ETHER	₩·ñ·	8.48	Ñ.Ď.	
HEXACHLOROBENZENE	N.D.	0.10		43
PENTACHLOROPHENOL	N.D.	0.50	Ŋ.D.	4.5
PHENATHRENE	. N.D.	0.10	Ŋ.D.	
ANTHRACENE	N.D.	0.10	N.D.	
DI-N-BUTYL PHTHALATE	N.D.	0.50	N.D.	
FLUORANTHENE	Ñ.Ď.	0.10	N.D.	
	n.d.	ŏ.īŏ	N.D.	57
PYRENE	13. P.	0.50	N.D.	<u> </u>
BUTYL BENZYL PHTHALATE	Ŋ.D.	0.30		
3,3'-DICHLOROBENZIDINE	N.D.	0.20	Ŋ.D.	<del>-</del> -
BENZO (A) ANTHRACENE	N.D.	0.10	Ŋ.D.	
BIS (2-ETHYLHEXYL) PHTHALATE	N.D.	0.50	Ŋ.D.	
CHRYSENE	N.D.	0.10	N.D.	
DI-N-OCTYL PHTHALATE	N.D.	0.50	N.D.	
BENZO (B) FLUORANTHENE	N.D.	0.10	N.D.	
BENZO (K) FLUORANTHENE	N.D.	0.20	N.D.	
BENZO (A) PYRENE	Ñ.Ď.	ŏ.ō5	N.D.	
THOUSE (1 2 2 C D) DVDENE	N.D.	0.20	N.D.	<del></del>
INDENO (1,2,3 C,D) PYRENE DIBENZ (A,H) ANTHRACENE	₩.H.	0.20	Ñ.Ď.	
DIBENZ (A, H) ANTHRACENE	Ŋ.D.	0.20	N.D.	
BENZ (G, H, I) PERYLENE	N.D.	0.20	H.D.	

Chemist

Environmental Services (SDB)

February 26, 1996

Submission #: 9602133

MCCAMPBELL ANALYTICAL, INC.

Atten: Ed Hamilton

Project: K/5840

Project#: 10-3002-84/002

Received: February 16, 1996

re: One sample for Semivolatile Organics (BNAs) analysis.

Method: EPA 3550/8270

SampleID: K-6-1

Sample #: 118398 Matrix: SOIL Extracted: February 20, 1996
Sampled: February 15, 1996 Run: 10479-A Analyzed: February 22, 1996

REPORTING BLANK BLANK SPIKE RESULT RESULT RESULT LIMIT (mg/Kg) (mg/Kg) (%) (mg/Kg) N.D. N.D.  $0.10 \\ 0.10$ PHENOL BIS (2-CHLOROETHYL) ETHER 2-CHLOROPHENOL N.D. 81 0.10 N.D. 1,3-DICHLOROBENZENE 1,4-DICHLOROBENZENE BENZYL ALCOHOL 1,2-DICHLOROBENZENE N.D. 0.10 N.D. 0.10 0.20 N.D. \_ \_ 0.10 0.10 0.10 N.D. N.D. O-METHYLPHENOL N.D. BIS (2-CHLOROISOPROPYL) ETHER m+p-METHYLPHENOL N-NITROSO-DI-N-PROPYLAMINE N.D. N.D. 0.20 N.D. 73 0.10HEXACHLOROETHANE N.D. NITROBENZENE 0.10 0.10 0.10 N.D. ISOPHORONE -NITROPHENOI N.D. 2,4-DIMETHYLPHENOL BIS (2-CHLOROETHOXY) METHANE 2,4-DICHLOROPHENOL 1,2,4-TRICHLOROBENZENE N.D. 0.10 0.10 0.10 N.D. N.D. N.D. N.D. N.D. 4-TRICHLOROBENZENE NAPHTHALENE N.D. N.D. 0.20 N.D. 4-CHLOROANILINE HEXACHLOROBUTADIENE N.D. N.D. 4-CHLOROBUTALIENE
4-CHLORO-3-METHYLPHENOL
2-METHYLNAPHTHALENE
HEXACHLOROCYCLOPENTADIENE
2,4,6-TRICHLOROPHENOL
2,4,5-TRICHLOROPHENOL
2-CHLORONAPHTHALENE 91 N.D. N.D. N.D. 0.10 0.10 0.10 N.D. N.D. N.D. N.D. N.D. 0.10 0.50 0.10 0.50 N.D. N.D. N.D. -NITROANILINE N.D. DIMETHYL PHTHALATE ACENAPHTHYLENE 3-NITROANILINE N.D. --N.D. 0.50 0.10 N.D. N.D. 81 N.D. ACENAPHTHENE 2,4-DINITROPHENOL 4-NITROPHENOL N.D. N.D. N.D. N.D. DIBENZOFURAN 2,4-DINITROTOLUENE N.D. N.D. N.D. N.D. 6-DINITROTOLUENE N.D. DIETHYL PHTHALATE 4-CHLOROPHENYL PHENYL ETHER N.D. N.D. N.D. FLUORENE N.D. 4-NITROANILINE N.D. N.D. 4,6-DINITRO-2-METHYLPHENOL

Environmental Services (SDB)

February 26, 1996

Submission #: 9602133

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MCCAMPBELL ANALYTICAL, INC.

Atten: Ed Hamilton

Project: K/5840

Project#: 10-3002-84/002

Received: February 16, 1996

re: One sample for Semivolatile Organics (BNAs) analysis, continued.

Method: EPA 3550/8270

SampleID: K-6-1

Sample #: 118398 Matrix: SOIL Extracted: February 20, 1996

Sampled: February 15, 1996 Run: 10479-A Analyzed: February 22, 1996

Analyte	RESULT	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE RESULT (%)
N-NITROSO-DI-N-PHENYLAMINE	N.D.	0.10	N.D.	
4-BROMOPHENYL PHENYL ETHER	N.D.	0.10	Ŋ.D.	
HEXACHLOROBENZENE	Ŋ.D.	0.10 0.50	Ŋ.D.	43
PENTACHLOROPHENOL	Ŋ.D.	0.50	N.D.	43
PHENATHRENE	Ŋ.D.	0.10	Ŋ.D.	
ANTHRACENE	Ñ.D.	0.10	Ŋ.D.	<del></del>
DI-N-BUTYL PHTHALATE	Ŋ.D.	0.50	N.D.	==
FLUORANTHENE	Ŋ.D.	0.10	N.D. N.D.	57
PYRENE	N.D. N.D.	0.10 0.50	N.D.	- <u></u>
BUTYL BENZYL PHTHALATE	₩·Ħ·	0.20	N.D.	
3,3'-DICHLOROBENZIDINE BENZO(A)ANTHRACENE	N.D. N.D.	0.10	Ñ.D.	
BENZO (A) ANTHRACENE	N.D.	0.50	N.D.	<del>-</del> -
BIS (2-ETHYLHEXYL) PHTHALATE	N.D.	0.10	N.D.	
CHRYSENE DI-N-OCTYL PHTHALATE	N.D.	0.50	N.D.	
BENZO (B) FLUORANTHENE	N.D.	0.10	Ñ.Ď.	<del>-</del> -
BENZO (K) FLUORANTHENE	N.D.	0.20	N.D.	
BENZO (A) PYRENE	N.D.	0.05	N.D.	
TNDENO(1 2 3 C D) DVRENE	N.D.	ŏ.žŏ	N.D.	
INDENO (1,2,3 C,D) PYRENE DIBENZ (A,H) ANTHRACENE	Ñ.Ď.	0.20	N.D.	
BENZ (G, H, I) PERYLENE	N.D.	ŏ.2ŏ	N.D.	

Alex Tam Chemist Chip Poalinelli

Environmental Services (SDB)

February 26, 1996

Submission #: 9602133

MCCAMPBELL ANALYTICAL, INC.

Atten: Ed Hamilton

Project: K/5840 ·

Project#: 10-3002-84/002

Received: February 16, 1996

re: One sample for Semivolatile Organics (BNAs) analysis.

Method: EPA 3550/8270

SampleID: K-5-1

Extracted: February 20, 1996 Sample #: 118399 Matrix: SOIL

Analyzed: February 22, 1996 Sampled: February 15, 1996 Run: 10479-A

sampled: Lepidary 12, 1996	Run: 104	/3-W WIGT)	zea. rebr	uary 22, 100
Analyte PHENOL BIS (2-CHLOROETHYL) ETHER 2-CHLOROPHENOL 1,3-DICHLOROBENZENE 1,4-DICHLOROBENZENE BENZYL ALCOHOL 1,2-DICHLOROBENZENE 0-METHYLPHENOL BIS (2-CHLOROISOPROPYL) ETHER m+p-METHYLPHENOL N-NITROSO-DI-N-PROPYLAMINE HEXACHLOROETHANE NITROBENZENE ISOPHORONE 2-NITROPHENOL 2,4-DIMETHYLPHENOL BIS (2-CHLOROETHOXY) METHANE 2,4-DICHLOROPHENOL 1,2,4-TRICHLOROBENZENE NAPHTHALENE 4-CHLOROANILINE HEXACHLOROBUTADIENE 4-CHLORO-3-METHYLPHENOL 2-METHYLNAPHTHALENE 2-METHYLNAPHTHALENE 2-MITROANILINE HEXACHLOROPHENOL 2,4,5-TRICHLOROPHENOL 2,4,5-TRICHLOROPHENOL 2-CHLORONAPHTHALENE 2-NITROANILINE DIMETHYL PHTHALATE ACENAPHTHENE 3-NITROANILINE ACENAPHTHENE 2,4-DINITROPHENOL DIBENZOFURAN 2,4-DINITROTOLUENE 2,6-DINITROTOLUENE DIETHYL PHTHALATE 4-CHLOROPHENYL PHENYL ETHER FLUORENE 4-NITROANILINE 4-CHLOROPHENYL PHENYL ETHER FLUORENE 4-NITROANILINE 4-CHLOROPHENYL PHENYL ETHER		REPORTING	BLANK	BLANK SPIKE
	RESULT	LIMIT	RESULT	RESULT
Analysto	(ma/Fa)	(ma/Fa)	(mar/Ka)	(%)
DUENOT	/mg/kg/	10	N D	
RIS (2-CHLOROETHYL) ETHER	N D	ŤŎ	N.D.	
2-CHLOROPHENOL	N.D.	īŏ	N.D.	81
1.3-DICHLOROBENZENE	N.D.	10	N.D.	
1.4-DICHLOROBENZENE	N.D.	10	N.D.	
BÉNZYL ALCOHOL	N.D.	20	Ŋ.D.	
1,2-DICHLOROBENZENE	N.D.	10	Ŋ.D.	
o-METHYLPHENOL	N.D.	10	N.D.	
BIS (2-CHLOROISOPROPYL) ETHER	Ŋ.D.	10	Ŋ.D.	
m+p-METHYLPHENOL	N.D.	20	й·Б·	<u></u>
N-NITROSO-DI-N-PROPYLAMINE	N.D.	īŏ	й.Б.	/3
HEXACHLOROETHANE	N.D.	10	й.Б.	
NITROBENZENE	й.Б.	Ťζ	N.D.	
1 SUPHURUNE	N.D.	10	M.D.	
2-NITROPHENOL	й. Н.	10	M D	
2.4-DIMEINIDINOD Die/2 CUI ODOPTUOVY) METUNNE	M.D.	±0	M.D.	<u>-</u> -
1 2 4-DICULOROELDOAL/MELDANE	M.D.	10	N D	
1 2 A TO I CUI OPORENZENE	И. Д.	iň	N.D.	69
NA DHTHAT.ENE	ND	īŏ	Ñ.D.	
4-CHLOROANTITHE	N D	ŽŎ	Ñ.Ď.	
HEXACHLOROBITTADIENE	N.D.	īō	N.D.	
4-CHLORO-3-METHYLPHENOL	Ñ.D.	ŽŎ	N.D.	91
2-METHYLNAPHTHALENE	N.D.	10	N.D.	
HEXACHLOROCYCLOPENTADIENE	N.D.	10	N.D.	
2,4,6-TRICHLOROPHENOL	N.D.	10	N.D.	<del>-</del> -
2,4,5-TRICHLOROPHENOL	N.D.	10	N.D.	
2-CHLORONAPHTHALENE	N.D.	50	Ŋ.D.	<b>-</b>
2-NITROANILINE	N.D.	10	й.Б.	
DIMETHYL PHTHALATE	N.D.	ξÖ	й·Б·	
ACENAPHTHYLENE	ŭ.ħ.	<u> </u>	N.D.	<u></u>
3-NITROANILINE	й.Б.	ąχ	M.D.	<b>8</b> 1
ACENAPHTHENE	й. Б.	ŦΧ	M. D.	
2,4-DINITROPHENOL	M.D.	50	й.р.	
TENTACOPIENOL	M. D.	ĭň	ที่ ก	<del>-</del> -
	מ' א	iň	N.D.	
2 6-DINITROTOLUENE	N.D.	2ŏ	N.D.	
DÍETHÝI. PHTHÁLATE	Ñ.Ď.	5ŏ	N.D.	
4-CHLOROPHENYL PHENYL ETHER	N.D.	ĪŌ	N.D.	
FLUORENE	N.D.	10	N.D.	
4-NITROANILINE	N.D.	50	N.D.	<b></b>
4,6-DINITRO-2-METHYLPHENOL	N.D.	50	N.D.	<b></b> .

Environmental Services (SDB)

February 26, 1996

Submission #: 9602133

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MCCAMPBELL ANALYTICAL, INC.

Atten: Ed Hamilton

Project: K/5840

Project#: 10-3002-84/002

Received: February 16, 1996

re: One sample for Semivolatile Organics (BNAs) analysis, continued.

Method: EPA 3550/8270

SampleID: K-5-1

Sample #: 118399 Extracted: February 20, 1996 Matrix: SOIL

Analyzed: February 22, 1996 Sampled: February 15, 1996 Run: 10479-A

)		RESULT	REPORTING LIMIT	RESULT	BLANK SPIKE RESULT
,	Analyte	(mq/Kq)	(mg/Kg)	(mg/Kg)	(%)
	N-NITROSO-DI-N-PHENYLAMINE	N.D.	10	N.D.	
	4-BROMOPHENYL PHENYL ETHER	N.D.	11511511521515120 5	N.D. N.D. N.D. N.D.	<del></del>
	HEXACHLOROBENZENE	N.D.	10	Ŋ.D.	7.5
	PENTACHLOROPHENOL	N.D.	50	Ŋ.D.	43
,	PHENATHRENE	N.D.	10	N.D.	
	ANTHRACENE	N.D. N.D.	10	N.D.	==
h	DI-N-BUTYL PHTHALATE	N.D.	50	N.D.	<del>-</del> -
ſ	FLUORANTHENE	N.D.	10	N.D.	==
	PYRENE	N.D.	10	N.D. N.D. N.D. N.D.	57
	BUTYL BENZYL PHTHALATE	N.D.	50	Ŋ.D.	= -
	3,3'-DICHLOROBENZIDINE	N.D.	20	N.D.	
Ì	BENZO (A) ANTHRACENE	N.D.	10	Ŋ.D.	
ı	BENZO (A) ANTHRACENE BIS (2-ETHYLHEXYL) PHTHALATE	N.D. N.D.	50	N.D. N.D.	
	CHRYSENE	N.D.	10	N.D.	=-
	DI-N-OCTYL PHTHALATE	N.D.	50	N.D.	
r	BENZO (B) FLUORANTHENE	N.D.	10	N.D. N.D. N.D. N.D.	<del>-</del> -
ŀ	BENZO (K) FLUORANTHENE	Ŋ.D.	20_	Ŋ.D.	
ľ	BENZO (A) PYRENE	N.D.	0.5	й.Б.	
	INDENO(1,2,3 C,D) PYRENE	N.D.	20 20	Ŋ.D.	
	INDENO (1,2,3 C,D) PYRENE DIBENZ (A,H) ANTHRACENE BENZ (G,H,I) PERYLENE	N.D.	20	Ŋ.D.	
1	BENZ (G, H, I) PERYLENE	N.D.	20	N.D.	
i	For above analyte:	REPORTING LIMITS	RAISED DUE TO	MATRIX INTE	RFERENCE

Alex Tam Chemist

Environmental Services (SDB)

February 26, 1996

Submission #: 9602133

MCCAMPBELL ANALYTICAL, INC.

Atten: Ed Hamilton

Project: K/5840

Project#: 10-3002-84/002

Received: February 16, 1996

re: One sample for Semivolatile Organics (BNAs) analysis.

Method: EPA 3550/8270

SampleID: K-3-1

Extracted: February 20, 1996 Sample #: 118400 Matrix: SOIL

Analyzed: February 23, 1996 Sampled: February 15, 1996 Run: 10479-A

sampled: replacif 19, 1990	Kun: 104	/y-A Alaz]	ZCG. ICDI	adij 20, 200
		REPORTING	BLANK	BLANK SPIKE
PHENOL BIS (2-CHLOROETHYL) ETHER 2-CHLOROPHENOL 1,3-DICHLOROBENZENE 1,4-DICHLOROBENZENE BENZYL ALCOHOL 1,2-DICHLOROBENZENE O-METHYLPHENOL BIS (2-CHLOROISOPROPYL) ETHER M+D-METHYLPHENOL N-NITROSO-DI-N-PROPYLAMINE HEXACHLOROETHANE NITROBENZENE ISOPHORONE 2-NITROPHENOL 2,4-DIMETHYLPHENOL BIS (2-CHLOROETHOXY) METHANE 2,4-DICHLOROPHENOL 1,2,4-TRICHLOROBENZENE NAPHTHALENE 4-CHLOROANILINE 4-CHLORO-3-METHYLPHENOL 2-METHYLNAPHTHALENE HEXACHLOROCYCLOPENTADIENE 4-CHLORO-3-METHYLPHENOL 2,4,5-TRICHLOROPHENOL 2,4,5-TRICHLOROPHENOL 2,4,5-TRICHLOROPHENOL 2,4,5-TRICHLOROPHENOL 2,4,5-TRICHLOROPHENOL 2,4,5-TRICHLOROPHENOL 2,4-DINITROPHENOL 3-NITROANILINE ACENAPHTHYLENE 3-NITROANILINE ACENAPHTHENE 2,4-DINITROPHENOL DIBENZOFURAN 2,4-DINITROTOLUENE 2,6-DINITROTOLUENE DIETHYL PHTHALATE 4-CHLOROPHENYL PHENYL ETHER FLUORENE 4-NITROANILINE 4-CHLOROPHENYL PHENYL ETHER	RESULT	LIMIT	RESULT	
2maluta	(mg/Yg)	(mg/Kg)	(mg/Kg)	
DUENOT.	/IIId/Vd/	10	N.D.	
RIS (2-CHLOROETHYL) ETHER	N.D.	īŏ	Ñ.Ď.	
2-CHLOROPHENOL	N.D.	īŏ	N.D.	81
1.3-DICHLOROBENZENE	Ñ.D.	10	N.D.	
1,4-DICHLOROBENZENE	N.D.	10	N.D.	
BENZYL ALCOHOL	N.D.	20	N.D.	
1,2-DICHLOROBENZENE	Ŋ.D.	10	N.D.	
o-METHYLPHENOL	N.D.	10	₩·Ħ·	
BIS (2-CHLOROISOPROPYL) ETHER	N.D.	70	N.D.	
W+D-WELHATSHENOT	₽·ħ·	20	N.D.	73
N-NITROSU-DI-N-PROPYLAMINE	й.р.	10	й. Д.	75
MEXACHLOROSTHANE	м.р.	10	M.D.	
MITCODENCEME	#.P.	ŧδ	N.D.	
2_NITEODUENOI.	M.D.	iŏ	N.D.	
2.4-DIMETHYLPHENOL	N.D.	īŏ	N.D.	<del>-</del> -
BIS (2-CHLOROETHOXY) METHANE	Ñ.D.	īō	N.D.	
2.4-DICHLOROPHENOL	N.D.	10	N.D.	77
1.2.4-TRICHLOROBENZENE	N.D.	10	N.D.	69
NAPHTHALENE	N.D.	10	Ŋ.D.	<del>-</del> -
4-CHLOROANILINE	N.D.	20	Ŋ.D.	
HEXACHLOROBUTADIENE	N.D.	10	й·Б·	
4-CHLORO-3-METHYLPHENOL	N.D.	20	₩.ħ.	91
2-METHYLNAPHTHALENE	N.D.	10	M.D.	
HEXACHLOROCYCLOPENTADIENE	й.Б.	48	M. P.	
2,4,6-TRICHLOROPHENOL	N.D.	10	й.р.	
2,4,5-TRICHLOROPHENOL	₩.₽.	ξň	N D	<del>-</del> -
2-CHDORONAFHIRADENE 2-NITTOANTITNE	й.р.	รักั	N.D.	<u></u>
DIMETHYL PHTHALATE	N.D.	5ŏ	Ñ.D.	
ACENAPHTHYLENE	Ñ.D.	ĬŌ	N.D.	<del>* =</del>
3-NITROANILINE	N.D.	50	N.D.	77
ACENAPHTHENE	N.D.	10	N.D.	81
2,4-DINITROPHENOL	N.D.	50	Ŋ.D.	
4-NITROPHENOL	N.D.	50	N.D.	
DIBENZOFURAN	N.D.	10	й·Б.	<del></del>
2,4-DINITROTOLUENE	Ŋ.D.	10	й. h.	
2,6-DINITROTOLUENE	й. h.	20	M. D.	
DIETHYL PHTHALATE	M.D.	30	И. р.	
4-CHLOROPHENIL PHENIL ETHER	N.D.	10		<b></b> '
F HUUKENE A NITTEANTITME	M. D.	ร์กั	N.D.	
* -NIIIKOMMIDINE *-NIIKOMMIDINE	M. D.	รักั	Ñ.Ď.	
4'0-DIMITIO-S-METHINEMON	14.17.			•

Environmental Services (SDB)

February 26, 1996

Submission #: 9602133

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MCCAMPBELL ANALYTICAL, INC.

Atten: Ed Hamilton

Project: K/5840

Project#: 10-3002-84/002

Received: February 16, 1996

re: One sample for Semivolatile Organics (BNAs) analysis, continued.

Method: EPA 3550/8270

SampleID: K-3-1

Sample #: 118400 Matrix: SOIL Extracted: February 20, 1996

Sampled: February 15, 1996 Run: 10479-A Analyzed: February 23, 1996

	Analyte	RESULT	REPORTING LIMIT (mg/Kg)	RESULT (mg/Kg)	BLANK SPIKE RESULT (%)
	N-NITROSO-DI-N-PHENYLAMINE	N.D.	10	N.D.	
	4-BROMOPHENYL PHENYL ETHER	N.D.	10000000000000000000000000000000000000	N.D.	- <del>-</del>
	HEXACHLOROBENZENE	N.D.	10	Ŋ.D.	
	PENTACHLOROPHENOL	N.D.	50	N.D.	43
	PHENATHRENE	N.D.	10	$\mathbf{N}.\mathbf{D}$ .	
	ANTHRACENE	N.D.	10	N.D. N.D.	
	DI-N-BUTYL PHTHALATE	N.D.	50	й·Б.	<del></del>
	FLUORANTHENE	N.D. N.D. N.D.	10	N.D.	57
	PYRENE	N.D.	Ŧδ	N.D. N.D. N.D. N.D.	57
	BUTYL BENZYL PHTHALATE	N.D.	50	M.D.	
	3,3'-DICHLOROBENZIDINE	Ŋ.D.	20	M.D.	
	BENZO (A) ANTHRACENE	й·Б·	ŦΧ	N.D.	
	BIS (2-ETHYLHEXYL) PHTHALATE	N.D. N.D. N.D.	50 10	M D	= =
	CHRYSENE	й. <del>Б</del> .	ξX	M. D.	
	DI-N-OCTYL PHTHALATE	N.D. N.D.	10	N.D. N.D. N.D.	
٠.	BENZO (B) FLUORANTHENE BENZO (K) FLUORANTHENE	N.D.	20	Ñ.Ď.	<del></del>
	DENZO (K) PUDENE	N.D.	กัร	n.d.	
	BENZO (A) PYRENE	N.D.	ວິດີ	Ñ.D.	
	INDENO (1,2,3 C,D) PYRENE DIBENZ (A,H) ANTHRACENE BENZ (G,H,I) PERYLENE	N.D.	20 20	N.D.	
	DENZIA TI DEDVIENE	N.D.	ŽŎ	Ñ.D.	
,	For above analyte:				RFERENCE

Alex Tam Chemist

Environmental Services (SDB)

February 26, 1996

Submission #: 9602133

MCCAMPBELL ANALYTICAL, INC.

Atten: Ed Hamilton

Project: K/5840

Project#: 10-3002-84/002

Received: February 16, 1996

re: One sample for Semivolatile Organics (BNAs) analysis.

Method: EPA 3550/8270

SampleID: K-4-1.5

Sample #: 118401 Matrix: SOIL Extracted: February 20, 1996

Sampled: February 15, 1996 Run: 10479-A Analyzed: February 23, 1996

Analyte PHENOL BIS (2-CHLOROETHYL) ETHER 2-CHLOROPHENOL 1,3-DICHLOROBENZENE BENZYL ALCOHOL 1,2-DICHLOROBENZENE BENZYL ALCOHOL 1,2-DICHLOROBENZENE 0-METHYLPHENOL BIS (2-CHLOROISOPROPYL) ETHER M+D-METHYLPHENOL N-NITROSO-DI-N-PROPYLAMINE HEXACHLOROETHANE NITROBENZENE ISOPHORONE 2-NITROPHENOL 2,4-DIMETHYLPHENOL BIS (2-CHLOROETHOXY) METHANE 2,4-DIMETHYLPHENOL 1,2,4-TRICHLOROBENZENE NAPHTHALENE 4-CHLOROANILINE HEXACHLOROBUTADIENE 4-CHLOROBUTADIENE 4-CHLORO-3-METHYLPHENOL 2-METHYLNAPHTHALENE HEXACHLOROCYCLOPENTADIENE 2,4,5-TRICHLOROPHENOL 2,4,5-TRICHLOROPHENOL 2-CHLORONAPHTHALENE 2-NITROANILINE DIMETHYL PHTHALATE ACENAPHTHENE 3-NITROANILINE ACENAPHTHENE 3-NITROANILINE ACENAPHTHENE 2,4-DINITROPHENOL DIBENZOFURAN 2,4-DINITROTOLUENE 2,6-DINITROTOLUENE DIETHYL PHTHALATE 4-CHLOROPHENYL PHENYL ETHER FLUORENE 4-NITROANILINE	RESULT	REPORTING LIMIT	BLANK RESULT	BLANK SPIKE RESULT
Analista	(mg/Kg)	(ma/Ka)	(mq/Kg)	(%)
DHENOI.	N.D.	0.50	N.D.	
BIS (2-CHLOROETHYL) ETHER	Ñ.D.	0.50	N.D.	==
2-CHLOROPHENOL	N.D.	0.50	N.D.	81
1.3-DICHLOROBENZENE	N.D.	0.50	N.D.	<del>-</del> -
1.4-DICHLOROBENZENE	N.D.	0.50	N.D.	<del>-</del> -
BENZYL ALCOHOL	N.D.	1.0_	Ŋ.D.	<b></b>
1,2-DICHLOROBENZENE	N.D.	0.50	₩.Ħ.	<del></del>
o-METHYLPHENOL	N.D.	0.50	й.Б.	<b>-</b> -
BIS (2-CHLOROISOPROPYL) ETHER	N.D.	0.50	N.D.	
m+p-METHYLPHENOL	й·Б·	7.57	и.р.	73
N-NITROSO-DI-N-PROPYLAMINE	M.D.	0.50	N.D.	
HEXACHLOROSTHANE	M.D.	ñ.5ñ	Ñ.D.	
NITROBENZENE	й. <del>р</del> .	0.50	Ñ.Ď.	
2-NITTOODUENOI.	й.р.	0.50	N.D.	
• 2 4-DIMETHVI.PHENOI.	Ñ.Đ.	0.50	N.D.	
BIS (2-CHLOROETHOXY) METHANE	N.D.	0.50	N.D.	<del></del> .
2.4-DICHLOROPHENOL	N.D.	<b>0.</b> 50	Ŋ.D.	
1.2.4-TRICHLOROBENZENE	N.D.	0.50	Ŋ.D.	69
NAPHTHALENE	N.D.	0.50	й.Б.	
4-CHLOROANILINE	N.D.	1.0	₩·Ħ·	
HEXACHLOROBUTADIENE	й.Ď.	បុ.ភូប	M.D.	91
4-CHLORO-3-METHYLPHENOL	ŭ.ħ.	4.EV	M.D.	<u>-</u> -
Z-METHYLNAPHTHALENE	й. Н.	χ.ξχ	N.D.	<del>-</del> -
MEXACHIOROCICLOPENIADIENE	M.D.	ŏ. Šŏ	N.D.	
2,4,6-IKICHLOROPHENOL	N.D.	0.50	N.D.	<u> </u>
2-CHLORONAPHTHALENE	N.D.	2.5	N.D.	
2-NITROANILINE	N.D.	0.50	Ŋ.D.	
DIMETHYL PHTHALATE	N.D.	2.5	Ŋ.D.	
ACENAPHTHYLENE	N.D.	0.50	й·Б·	<del></del>
3-NITROANILINE	Ŋ.D.	2.5	й. Б.	81
ACENAPHTHENE	₩·ħ·	Ž.50	M.D.	
2,4-DINITROPHENOL	M.D.	2.5	й.р.	
4-NITROPHENOL	N.D.	ก็รัก	N.D.	
	N.D.	0.50	N.D.	
2 6-DINITROTOLITENE	Ñ.Ď.	1.0	N.D.	<b>→</b> →'
I ĎÍETHÝT. PHTHALATE	N.D.	$\bar{2}.5$	N.D.	
4-CHLOROPHENYL PHENYL ETHER	N.D.	Q. <u>5</u> Q	Ŋ.D.	
FLUORENE	$\underline{\mathtt{N}}.\underline{\mathtt{D}}.$	0.50	й.Б.	
4-NITROANILINE	Ŋ.D.	2.5		
4,6-DINITRO-2-METHYLPHENOL	N.D.	2.5	и.р.	_

Environmental Services (SDB)

February 26, 1996

Submission #: 9602133

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MCCAMPBELL ANALYTICAL, INC.

Atten: Ed Hamilton

Project: K/5840

Project#: 10-3002-84/002

Received: February 16, 1996

re: One sample for Semivolatile Organics (BNAs) analysis, continued.

Method: EPA 3550/8270

SampleID: K-4-1.5

Sample #: 118401 Matrix: SOIL Extracted: February 20, 1996

Sampled: February 15, 1996 Run: 10479-A Analyzed: February 23, 1996

,	Analyte	RESULT	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE RESULT (%)
	N-NITROSO-DI-N-PHENYLAMINE	N.D.	0.50	N.D.	
	4-BROMOPHENYL PHENYL ETHER	N.D.	0.50	Ŋ.D.	
	HEXACHLOROBENZENE	N.D.	0.50	N.D.	
	PENTACHLOROPHENOL	N.D.	2.5	N.D.	43
	PHENATHRENE	N.D.	0.50	N.D.	<del></del>
	ANTHRACENE	N.D.	0.50	N.D.	
ı	DI-N-BUTYL PHTHALATE	N.D.	2.5	N.D. N.D.	
	FLUORANTHENE	N.D.	0.50	N.D.	==
-	PYRENE	N.D.	0.50	N.D. N.D.	57
	BUTYL BENZYL PHTHALATE	N.D.	2.5	N.D.	
	3,3'-DICHLOROBENZIDINE	N.D.	1.0	N.D.	<del></del>
	BÉNZO (A) ANTHRACENE	N.D.	0.50	N.D.	
	BIS (2-ETHYLHEXYL) PHTHALATE	N.D.	2.5	N.D.	
	CHRYSENE	N.D.	0.50	N.D.	
	DI-N-OCTYL PHTHALATE	N.D.	2.5	N.D. N.D.	
1	BENZO (B) FLUORANTHENE	N.D.	0.50	N.D.	
	BENZO (K) FLUORANTHENE	Ñ.D.	1.0	N.D.	
ŀ	RENZO (A) PYRENE	Ñ.D.	0.25	N.D.	<del></del>
	INDENO(1, 2, 3, C, D) PYRENE	N.D.	1.0	N.D.	
	INDENO(1,2,3 C,D) PYRENE DIBENZ(A,H) ANTHRACENE	Ñ.D.	ī.ŏ	N.D.	
,	BENZ (G, H, I) PERYLENE	NID.	1.0	N.D.	<b></b>
ľ	For above analyte:	REPORTING LIMITS	RAISED DUE TO	MATRIX INTE	RFERENCE

Alex Tam Chemist

Environmental Services (SDB)

February 26, 1996

Submission #: 9602133

MCCAMPBELL ANALYTICAL, INC.

Atten: Ed Hamilton

Project: K/5840

Project#: 10-3002-84/002

Received: February 16, 1996

re: One sample for Semivolatile Organics (BNAs) analysis.

Method: EPA 3550/8270

SampleID: K-2-1

Extracted: February 20, 1996 Matrix: SOIL Sample #: 118402

Analyzed: February 23, 1996 Sampled: February 15, 1996 Run: 10479-A

Dempica, replacif 15, 1550	1021. 201			
		REPORTING	BLANK	BLANK SPIKE
Analyte PHENOL BIS (2-CHLOROETHYL) ETHER 2-CHLOROPHENOL 1,3-DICHLOROBENZENE 1,4-DICHLOROBENZENE BENZYL ALCOHOL 1,2-DICHLOROBENZENE 0-METHYLPHENOL BIS (2-CHLOROISOPROPYL) ETHER m+D-METHYLPHENOL N-NITROSO-DI-N-PROPYLAMINE HEXACHLOROETHANE NITROBENZENE ISOPHORONE 2-NITROPHENOL 2,4-DIMETHYLPHENOL BIS (2-CHLOROETHOXY) METHANE 2,4-DICHLOROPHENOL 1,2,4-TRICHLOROBENZENE NAPHTHALENE 4-CHLOROANILINE HEXACHLOROBUTADIENE 4-CHLORO-3-METHYLPHENOL 2-METHYLNAPHTHALENE 2-METHYLNAPHTHALENE 2-4,6-TRICHLOROPHENOL 2,4,5-TRICHLOROPHENOL 2,4,5-TRICHLOROPHENOL 2-NITROANILINE DIMETHYL PHTHALATE ACENAPHTHENE 3-NITROANILINE ACENAPHTHENE 2-4-DINITROPHENOL 4-NITROPHENOL DIBENZOFURAN 2,4-DINITROTOLUENE 2,6-DINITROTOLUENE DIETHYL PHTHALATE 4-CHLOROPHENYL PHENYL ETHER FLUORENE 4-NITROANILINE	RESULT	LIMIT	RESULT	RESULT
	KESOUI	/ / <del></del> / \		
Analyte	(mg/Kg)	<u> (ma\var_va)</u>	<u>imalvar</u>	
PHENOL	<u>й.</u> Д.	0.50	M.D.	<del>-</del> -
BIS (2-CHLOROETHYL) ETHER	N.D.	0.50	₩·Ħ·	81
2-CHLOROPHENOL	N.D.	0.50	₩.₽.	81
1,3-DICHLOROBENZENE	N.D.	0.50	₩.Ħ.	
1,4-DICHLOROBENZENE	N.D.	0.50	₩.₽.	<u> </u>
BENZYL ALCOHOL	N.D.	7.5	й·Б.	
1,2-DICHLOROBENZENE	N.D.	0.50	ద	<u></u>
o-METHYLPHENOL	N.D.	0.50	й·Б.	- 21
BIS (2-CHLOROISOPROPYL) ETHER	N.D.	Ų. <u>5</u> 0	й·Б.	
m+p-METHYLPHENOL	N.D.	7.57	й.р.	73
N-NITROSO-DI-N-PROPYLAMINE	й.Б.	ດ້າອີດ	₩.₽.	75
HEXACHLOROETHANE	N.D.	9.50	й·Б.	
NITROBENZENE	N.D.	0.50	й.Б.	<del>-</del> -
ISOPHORONE	N.D.	0.50	₩.₽.	
2-NITROPHENOL	N.D.	0.50	₩.ħ.	
2,4-DIMETHYLPHENOL	<u>N</u> .D.	0.50	й. Б.	
BIS (2-CHLOROETHOXY) METHANE	N.D.	0.50	₩.H.	
2,4-DICHLOROPHENOL	N.D.	Ŏ. ĐŎ	₩·₽·	69
1,2,4-TRICHLOROBENZENE	N.D.	0.50	м.р.	0 3
NAPHTHALENE	М.D.	ប្ត.50	и.р.	
4-CHLOROANILINE	й.D.	¥.5°	м.р.	
HEXACHLOROBUTADIENE	<u>и</u> .р.	0.50	M.D.	91
4-CHLORO-3-METHYLPHENOL	й.Б.	7.57	쑀.片.	91 
2-METHYLNAPHTHALENE	й·Б·	0.50	M.P.	
MEXACHLOROCYCLOPENTADIENE	ีพี.กั.	0.50	#.P.	
2,4,6-TRICHLOROPHENOL	й.Б.	0.50	M.D.	
2,4,5-TRICHLOROPHENOL	й.Б.	Λ·5 <sub>0</sub>	M. D.	
2-CHLORONAPHTHALENE	₩·Ħ•	₹.5°	#.P.	
2-NITROANILINE	й·Б.	0.50	M.D.	
DIMETHYL PHTHALATE	₩·Ħ·	۲٠ <u>۶</u> ٠	M D	
ACENAPHTHYLENE	₩.Ħ.	Ď. Đo	й.р.	
3-NITROANILINE	М·Б.	¥. £0	й. р.	81
ACENAPHTHENE	M.D.	5.50	N.D.	
2,4-DINITROPHENOL	M·H.	2.5	M.D.	
4-NITROPHENOL	M.D.	(m0000010001000000000000000000000000000	(mininananananananananananananananananana	<del></del> -
DIBENZOFUKAN	M.D.	እ· <u> </u>	Ñ.Ď.	
Z,4-DINITKUTULUENE	Ж.Д.	1.70	N.D.	
5.6-DINITROTOLUENE	И. р.	う・5	N.D.	
DIETHIL PHIMALATE	#.F.	ก็รัก	Ñ.Ď.	
4-CUPOKOLURNIT LURUIT RIURK	셨.뭐.	۲. ۲۷	N.D.	
* FLUUKENE A NITTOONNII IND	셨.뭐.	2.5	Ñ.D.	<del></del>
4-NIIKUANILINE	M.D.	5 · E	Ñ.D.	
# 4'0-DINTIKO-%-METHIPANEMOP	и	٠.٠		

**Environmental Services (SDB)** 

February 26, 1996

Submission #: 9602133

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MCCAMPBELL ANALYTICAL, INC.

Atten: Ed Hamilton

Project: K/5840

Project#: 10-3002-84/002

Received: February 16, 1996

re: One sample for Semivolatile Organics (BNAs) analysis, continued.

Method: EPA 3550/8270

SampleID: K-2-1

Sample #: 118402 Matrix: SOIL Extracted: F

Extracted: February 20, 1996

Sampled: February 15, 1996 Run: 10479-A

Analyzed: February 23, 1996

Í	Analyte	RESULT	REPORTING LIMIT (mg/Kq)	BLANK RESULT (mg/Kg)	BLANK SPIKE RESULT (%)
	N-NITROSO-DI-N-PHENYLAMINE	N.D.	0.50	N D	
	4-BROMOPHENYL PHENYL ETHER	N.D.	<b>0.</b> 50	N.D.	
ŀ	HEXACHLOROBENZENE	N.D.	0.50	N.D.	
	PENTACHLOROPHENOL	N.D.	2.5	N.D.	43
	PHENATHRENE	N.D.	2.5 0.50	N.D.	÷ ÷
	ANTHRACENE	M.D.	0.50	N.D. N.D. N.D. N.D.	
	DI-N-BUTYL PHTHALATE	N.D. N.D. N.D.	0.50 2.5	N.D. N.D. N.D.	<del>-</del> -
	FLUORANTHENE	M.D.	0 50	N.D.	
	PYRENE	N.D. N.D.	000000000000000000000000000000000000000	N.D.	57
•	BUTYL BENZYL PHTHALATE	Ñ.Đ.	2.5	XT TX	
	3,3'-DICHLOROBENZIDINE	N'D'	า์.กั	N.D.	
i.	BENZO (A) ANTHRACENE	N.D. N.D. N.D.	ō.šo	N.D.	<b></b> ,
	BIS (2-ETHYLHEXYL) PHTHALATE	Ñ.D.	2.5	N.D.	
	CHRYSENE CHRYSENE	Ñ.Ď.	ก็เร็ด	N.D.	
	DI-N-OCTYL PHTHALATE	N. D.	2.5	N.D.	<b></b>
	BENZO (B) FLUORANTHENE	N.D. N.D. N.D.	ดีโร้ด	N N N N N N N N	
ì	BENZO (K) FLUORANTHENE	พ.บ.	1.0	N.D.	
	BENZO (A) PYRENE	N.D.	0.25	N.D.	
,	INDENO(1 2 2 C D) DVDENE	Ñ.Ď.	1.0	N.D.	<del>-</del> - '
	DIDENS (A U ANTUDACENE	Ñ.D.	ī.ŏ	N.D.	
,	INDENO (1,2,3 C,D) PYRENE DIBENZ (A,H) ANTHRACENE BENZ (G,H,I) PERYLENE	N.D.	ī.ŏ	N.D.	<del></del>
	For above analyte:		RAISED DUE TO		RFERENCE

Alex Tam Chemist Chip Poalinelli

Environmental Services (SDB)

February 26, 1996

Submission #: 9602133

MCCAMPBELL ANALYTICAL, INC.

Atten: Ed Hamilton

Project: K/5840

Project#: 10-3002-84/002

Received: February 16, 1996

re: One sample for Semivolatile Organics (BNAs) analysis.

Method: RPA 3550/8270

SampleID: CB-1

Sample #: 118403 Matrix: SOIL

Extracted: February 20, 1996

Sampled: February 15, 1996 Run: 10479-A

un: 10479-A Analyzed: February 23, 1996

Sampled: February 15, 1996	Run: 104	12-2 20102	2000	
		REPORTING	BLANK	BLANK SPIKE
				RESULT
	RESULT	LIMIT	RESULT	
_	//Fal	(mg/Kg)	(mq/Kg)	(%)
Analyte PHENOL	(mg/Kg) N.D.	10	N.D.	
PHENOL	หั.ก.	± ×	N D	
BIS (2-CHLOROETHYL) ETHER	N.D.	Ťζ	И. Д.	81
2 CHI OROPHENOI.	N.D.	70	₩.₽.	
1 2 DICULOPOPENZENE	N.D.	10	й.Б.	
1,3-DICKLOROBENZENE	N.D.	10	Ν·ħ·	
1,4-DICHLOROBENZENE	ND.	20	N.D.	
BENZIL ALCONOL	N.D.	10	N.D.	
1,2-DICHLOROBENZENE	N D	10	N.D.	
O-WETHYLPHENOL	M. P.	รีด้	N.D.	
BIS (2-CHLOROISOPROPYL) ETHER	₩.¥.	วีดั	N.D.	==
m+p-METHYLPHENOL	₩.H.	ĩň	N.D.	73
N-NITROSO-DI-N-PROPYLAMINE	₩.Ң.	ŧχ	N.D.	
HEXACHLOROETHANE	<u>₩</u> .ñ.	10	N D	
NITROBENZENE	N.D.	10	M.D.	<b></b>
TSOPHORONE	N.D.	ŦŎ	M.D.	
2-NITROPHENOI.	N.D.	10	M . D .	
E 2 A DIMETHYLDHENOL	N.D.	ΪŌ	₩·Ħ·	
THE (2 CUT OPORTHOXY) METHANE	N.D.	10	й.Б.	
BIS (Z-CHLOROETHOXI) THE TIMES	N.D.	10	ทั.ก.	69
2,4-DICALOROFAENOL	N.D.	10	N.D.	69
T. N. 4 - IKICHTOKOBEMBEME	N D	10	N.D.	
NAPHTHALENE	ที่กั	1111121112111111111111121211111	N.D.	
4-CHLOROANILINE	#:F:	īò	N.D.	
HEXACHLOROBUTADIENE	#.E.	วิกั	N.D.	91
4-CHLORO-3-METHYLPHENOL	и.р.	รีกั	N.D.	<del>-</del> -
2-METHYLNAPHTHALENE	M.D.	10	N.D.	<b></b>
HEXACHLOROCYCLOPENTADIENE	₩·ñ·	<b> </b>	ND	
2.4.6-TRICHLOROPHENOL	N.D.	40 -	ND	<b>+-</b>
2.4.5-TRICHLOROPHENOL	й.Б.	Ŧζ	N'D'	
2-CHLORONAPHTHALENE	N.D.	žγ	M.D.	<b>.</b> -
2-NITROANILINE	N.D.	ŦΧ	77. 77.	·
DIMETHYL PHTHALATE	N.D.	20	74. P.	<b></b>
ACENA DUTUVI.ENE	N.D.	10	M· H.	
2_NITTOOANII.INE	N.D.	50	₩·Ħ·	81
2 - MI I KOMIZDIND	N.D.	10	₩.ñ.	ο <u>-</u>
ACENAFAIREMA A A ATRITUDADUENAT.	N.D.	50	й.Б.	<del></del>
Z,4-DINIROPHENOL	N.D.	50	й.Б.	
#-NIIKOPREMOH	N.D.	10	N.D.	
DIBENZURUKAN	Ñ.Ď.	10	N.D.	
2,4-DINITROTODUENE	N.D.	<b>2</b> 0	N.D.	
5'9-DINILKOLOPORNE	й. <u>р</u> .	50	N.D.	<del></del>
DIETHYL PHTHALATE	М. Д.	īō	N.D.	<del></del>
4-CHLOROPHENYL PHENYL ETHER	#. P.	īň	N.D.	
FLUORENE	₩.K.	ĒŇ	N.D.	
4-NITROANILINE	ば・だ・	15151515511251		<del>-</del> -
Analyte PHENOL BIS (2-CHLOROETHYL) ETHER 2-CHLOROPHENOL 1,3-DICHLOROBENZENE 1,4-DICHLOROBENZENE BENZYL ALCOHOL 1,2-DICHLOROBENZENE 0-METHYLPHENOL BIS (2-CHLOROISOPROPYL) ETHER m+p-METHYLPHENOL N-NITROSO-DI-N-PROPYLAMINE HEXACHLOROETHANE NITROBENZENE ISOPHORONE 2-NITROPHENOL 2,4-DIMETHYLPHENOL BIS (2-CHLOROETHOXY) METHANE 2,4-DICHLOROPHENOL 1,2,4-TRICHLOROBENZENE NAPHTHALENE 4-CHLOROANILINE HEXACHLOROSUTADIENE 4-CHLORO-3-METHYLPHENOL 2-METHYLNAPHTHALENE HEXACHLOROCYCLOPENTADIENE 2,4,5-TRICHLOROPHENOL 2,4,5-TRICHLOROPHENOL 2,4,5-TRICHLOROPHENOL 2,4,5-TRICHLOROPHENOL 2,4-DINITROPHENOL 2-CHLORONAPHTHALENE 3-NITROANILINE ACENAPHTHENE 2,4-DINITROPHENOL DIBENZOFURAN 2,4-DINITROTOLUENE 2,6-DINITROTOLUENE DIETHYL PHTHALATE 4-CHLOROPHENYL PHENYL ETHER FLUORENE 4-NITROANILINE 4-CHLOROPHENYL PHENYL ETHER	N.D.	50	411.01	
•				

Environmental Services (SDB)

February 26, 1996

Submission #: 9602133

page 2

MCCAMPBELL ANALYTICAL, INC.

Atten: Ed Hamilton

Project: K/5840

Project#: 10-3002-84/002

Received: February 16, 1996

re: One sample for Semivolatile Organics (BNAs) analysis, continued.

Method: EPA 3550/8270

SampleID: CB-1

Extracted: February 20, 1996 Matrix: SOIL Sample #: 118403

Analyzed: February 23, 1996 Run: 10479-A Sampled: February 15, 1996

1 1	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIK RESULT (%)
Analyte		10	N.D.	
N-NITROSO-DI-N-PHENYLAMINE	N.D.	17	Ñ.D.	
4-BROMOPHENYL PHENYL ETHER	Ŋ.D.	10 10	Ñ.Ď.	
HEXACHLOROBENZENE	Ŋ.D.	ΕV	N.D.	43
PENTACHLOROPHENOL	Ŋ.D.	50	N.D.	
PHENATHRENE	Ŋ.D.	10	M.D.	
ANTHRACENE	Ŋ.D.	ŤΛ	N.D. N.D.	
DI-N-BUTYL PHTHALATE FLUORANTHENE	Ŋ.D.	5115115215151 5115115215151	N.D.	
FLUORANTHENE	N.D. N.D.	10	N.D.	57
PYRENE	N.D.	<u> </u>	N.D.	J,
BUTYL BENZYL PHTHALATE	Ŋ.D.	50	M.D.	
3,3'-DICHLOROBENZIDINE	N.D. N.D. N.D.	20	Ŋ.D.	
RENZO (A) ANTHRACENE	N.D.	ŤÕ	Ŋ.D.	
BIS (2-ETHYLHEXYL) PHTHALATE	N.D.	50	₩.₽.	
CHRYSENE	N.D.	10	N.D. N.D. N.D.	<b>-</b> -
DI-N-OCTYL PHTHALATE	N.D.	50	й.ñ.	
BENZO (B) FLUORANTHENE	N.D. N.D.	10	N.D.	
BENZO (K) FLUORANTHENE	N.D.	20	Ŋ.D.	
RENZO (A) PYRENE	N.D.	5	Ŋ.D.	
INDENO(1,2,3 C,D) PYRENE DIBENZ(A,H) ANTHRACENE	N.D.	20 5 20 20	N.D.	
DIBENZ (A H) ANTHRACENE	N.D.	20	N.D.	
BENZ (G, H, I) PERYLENE	N.D.	20	N.D.	
For above analyte:	REPORTING LIMITS		O MATRIX INTE	RFERENCE

Alex Tam Chemist

Environmental Services (SDB)

February 26, 1996

Submission #: 9602133

MCCAMPBELL ANALYTICAL, INC.

Atten: Ed Hamilton

Project: K/5840

Project#: 10-3002-84/002

Received: February 16, 1996

re: One sample for Semivolatile Organics (BNAs) analysis.

Method: EPA 3550/8270

SampleID: CB-2

Sample #: 118404 Matrix: SOIL Extracted: February 20, 1996
Sampled: February 15, 1996 Run: 10479-A Analyzed: February 23, 1996 Sample #: 118404

	•		REPORTING	BLANK	BLANK SPIKE
<b>7</b> 1		RESULT	LIMIT	RESULT	RESULT
ľ		(mg/Kg)	(mg/Kg)	(mg/Kg)	(%)
ı.	Analyte	<u>/mg/kg/</u>	0.50	N.D.	
	PHENOL OF CRITICAL AND PRINCIPLE	N.D.	0.50	N.D.	81
	BIS(S-CHPOKOFILID) FILEK	N.D.	0.50	N.D.	81
١	2-CHLOROPHENOD	N.D.	0.50	й·Б.	
ŀ	1, A-DICHLOROBENZENE	N.D.	0.50	M.D.	<del>-</del> <del>-</del>
	PENZVI. ALCOHOL	N.D.	1.2	N.D.	
	1 2-DICHLOROBENZENE	Ŋ.D.	γ. <u>5</u> Υ	M. D.	
l	O-METHYLPHENOL	Ŋ.D.	0.50	N D	<del>-</del> -
Ĺ	BIS (2-CHLOROISOPROPYL) ETHER	й·Б·	0.50	N.D.	
	m+p-METHYLPHENOL	₩.₽.	<u>ተ.</u> ደບ	N.D.	<b>7</b> 3
_	N-NITROSO-DI-N-PROPYLAMINE	M.D.	ň šŏ	N.D.	<del></del>
٨	HEXACHLOROETHANE	M.D.	ŏ.5ŏ	N.D.	
l	NITROBENZENE	N D	0.50	Ŋ.D.	
•	ISOPHORUNE	N.D.	0.50	Ν.D.	
	2-NITROPHENOL	Ñ.D.	0.50	й.Б.	<u> </u>
ľ	51c (2-CULOPOETHOXY) METHANE	N.D.	0.50	₩·Ħ·	
ı	2 4-DICHLOROPHENOL	N.D.	0.50	м.р.	69
•	1 2 4 TRICHLOROBENZENE	N.D.	ŏ.5ŏ	M.D.	
	NAPHTHALENE	N.D.	0.50	и.р.	<b></b>
	4-CHLOROANILINE	N.D.	7.50	N D	<del>-</del> -
I	HEXACHLOROBUTADIENE	₩.ħ.	1.00	N.D.	91
ı.	4-CHLORO-3-METHYLPHENOL	M.D.	กำรัก	N.D.	
	2-METHYLNAPHTHALENE	M.D.	0.50	N.D.	
	HEXACHTOROCACTOLEMIADIEME	N D	Ŏ.5Ŏ	N.D.	<del>-</del> -
ľ	2,4,6-TRICHLORUPHENOL	N.D.	0.50	Ŋ.D.	<del></del>
þ	2,4,5-TRICHLOROFIENDE	Ñ.D.	2.5	Ŋ.D.	
	2-CHORONAPHINADIND	N.D.	0.50	й·Б·	<b># -</b>
6	DIMETHYI. PHTHALATE	N.D.	2.5	й.р.	
ľ	ACENAPHTHYLENE	Ŋ.D.	გ. 50	M.D.	
Ų.	3-NITROANILINE	N.D.	2.5	и.р.	81
	ACENAPHTHENE	Ŋ.D.	Ž.Žv	N.D.	==
	2.4-DINITROPHENOL	й.Б.	2.5	N.D.	
ľ	4-NITROPHENOL	M.D.	ก็เรีย	N.D.	
J	DIBENZOFURAN	#. p.	0.50	N.D.	<del>-</del> -
•	2,4-DINITROTOLUENE	N D	ĭ.ō-	N.D.	<del></del>
	5.6-DINILKOLOPOENE	N.D.	2.5	Ŋ.D.	
	DISTRIC PRIMALATE	Ñ.Đ.	0.50	Ŋ.D.	<b></b>
ľ	#-CUDOKONUCKIT PITEMIT DITTE	N.D.	0.50	й.ħ.	
	A_NITROANTLINE	N.D.	(MOOOOO 000 0000000000 0 00 00 00 00 00 00		
_	Analyte PHENOL BIS (2-CHLOROETHYL) ETHER 2-CHLOROPHENOL 1,3-DICHLOROBENZENE BENZYL ALCOHOL 1,2-DICHLOROBENZENE BENZYL ALCOHOL 1,2-DICHLOROBENZENE 0-METHYLPHENOL BIS (2-CHLOROISOPROPYL) ETHER M+D-METHYLPHENOL M-NITROSO-DI-N-PROPYLAMINE HEXACHLOROETHANE NITROBENZENE ISOPHORONE 2-NITROPHENOL 2,4-DIMETHYLPHENOL BIS (2-CHLOROETHOXY) METHANE 2,4-DICHLOROPHENOL 1,2,4-TRICHLOROBENZENE NAPHTHALENE 4-CHLOROANILINE HEXACHLOROSUTADIENE 4-CHLORO-3-METHYLPHENOL 2-METHYLNAPHTHALENE 4-CHLOROANILINE DIMETHYL PHTHALATE 2-A,6-TRICHLOROPHENOL 2,4,5-TRICHLOROPHENOL 2,4,5-TRICHLOROPHENOL 2,4,5-TRICHLOROPHENOL 2,4,5-TRICHLOROPHENOL 2,4,5-TRICHLOROPHENOL 2,4,5-TRICHLOROPHENOL 2,4-DINITROANILINE DIMETHYL PHTHALATE ACENAPHTHENE 3-NITROANILINE ACENAPHTHENE 2,4-DINITROPHENOL 4-NITROPHENOL DIBENZOFURAN 2,4-DINITROTOLUENE 2,6-DINITROTOLUENE DIETHYL PHTHALATE 4-CHLOROPHENYL PHENYL ETHER FLUORENE 4-NITROANILINE	N.D.	2.5	N.D.	

Environmental Services (SDB)

February 26, 1996

Submission #: 9602133 page 2

MCCAMPBELL ANALYTICAL, INC.

Atten: Ed Hamilton

Project: K/5840

Received: February 16, 1996

Project#: 10-3002-84/002

sived. February 10, 1550

re: One sample for Semivolatile Organics (BNAs) analysis, continued.

Method: EPA 3550/8270

SampleID: CB-2

Sample #: 118404

Matrix: SOIL

Extracted: February 20, 1996

Sampled: February 15, 1996

Run: 10479-A

Analyzed: February 23, 1996

	Dampied. February 10, 1000	10011 1021	<i>_</i>	., <del></del>	
	Analyte	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE RESULT (%)
	N-NITROSO-DI-N-PHENYLAMINE	N.D.	0.50	N.D.	<b>- -</b> .
	4-BROMOPHENYL PHENYL ETHER	N.D.	0.50	N.D.	<del>-</del> -
	HEXACHLOROBENZENE	N.D.	0.50	N.D. N.D. N.D.	
	PENTACHLOROPHENOL	Ñ.Ď.	2.5	N.D.	43
	PHENATHRENE	Ñ.D.	กีร์ด	N.D.	
	ANTHRACENE	N.D.	0.50 2.50 0.50	Ŋ.D.	<del>-</del>
	DI-N-BUTYL PHTHALATE	Ñ.D.	2.5	N.D.	<del>-</del> -
	FLUORANTHENE	Ñ.D.	อี.รีด	N.D. N.D.	<del>-</del> -
	PYRENE	M.D.	ก๊ร์กั	Ñ.D.	57
	BUTYL BENZYL PHTHALATE	N.D. 12_	0.50 2.5	N.D.	<del>-</del> -
	3,3'-DICHLOROBENZIDINE	й.́D.	ร์ กั	N.D. N.D. N.D. N.D.	
	BENZO (A) ANTHRACENE	N.D.	<b>₹.</b> ₹0	N D	
	BENZO (A) ANTHRACENE	16	1.0 0.55 0.55 0.55 0.55	M.D.	
	BIS(2-ETHYLHEXYL) PHTHALATE	N.D.	นึงรัก	พี กั	
	CHRYSENE	₩.H.	2.5	N.D.	
	DI-N-OCTYL PHTHALATE	N.D. N.D.	₹. £v	M D	
١.	BENZO (B) FLUORANTHENE	ŭ·ñ.	0.50 1.0_	N.D. N.D.	<b></b>
	BENZO (K) FLUORANTHENE	ᅜ. 단.	o.25	Ñ.Ď.	
	BENZO (A) PYRENE	N.D. N.D. N.D.	1.0	N.D.	
	INDENO(1,2,3 C,D) PYRENE DIBENZ(A,H) ANTHRACENE BENZ(G,H,I) PERYLENE	й·Б.	4.8	N.D.	
	DIBENZ (A, H) ANTHRACENE	Ŋ.D.	1.0	N.D.	
	BENZ (G, H, I) PERYLENE	N.D.	1.U	MATRIX INTE	ים ייעים פיתו
	For above analyte:	REPORTING LIMITS	RAISED DUE TO	WHIKIY INTE	rf erence

Alex Tam Chemist Chip Poalinelli

Environmental Services (SDB)

February 26, 1996

Submission #: 9602133

MCCAMPBELL ANALYTICAL, INC.

Atten: Ed Hamilton

Project: K/5840

Project#: 10-3002-84/002

Received: February 16, 1996

re: One sample for Semivolatile Organics (BNAs) analysis.

Method: EPA 3550/8270

SampleID: CB-3

Extracted: February 20, 1996 Matrix: SOIL Sample #: 118405

Analyzed: February 23, 1996 Run: 10479-A Sampled: February 15, 1996

	Sampled: February 15, 1996	Run: 1047	'9-A Anaij	/zea: Febr	uary 23, 1996
	Analyte PHENOL BIS (2-CHLOROETHYL) ETHER 2-CHLOROPHENOL 1,3-DICHLOROBENZENE 1,4-DICHLOROBENZENE BENZYL ALCOHOL 1,2-DICHLOROBENZENE BENZYL ALCOHOL 1,2-CHLOROISOPROPYL) ETHER m+D-METHYLPHENOL BIS (2-CHLOROISOPROPYL) ETHER m+D-METHYLPHENOL N-NITROSO-DI-N-PROPYLAMINE HEXACHLOROETHANE NITROBENZENE ISOPHORONE 2-NITROPHENOL 2,4-DIMETHYLPHENOL BIS (2-CHLOROETHOXY) METHANE 2,4-DICHLOROPHENOL 1,2,4-TRICHLOROBENZENE NAPHTHALENE 4-CHLOROANILINE HEXACHLOROBUTADIENE 4-CHLORO-3-METHYLPHENOL 2-METHYLNAPHTHALENE 4-CHLOROCYCLOPENTADIENE 2,4,6-TRICHLOROPHENOL 2,4,5-TRICHLOROPHENOL 2-CHLORONAPHTHALENE 2-NITROANILINE DIMETHYL PHTHALATE ACENAPHTHENE 3-NITROANILINE ACENAPHTHENE 2,4-DINITROPHENOL 4-NITROPHENOL DIBENZOFURAN 2,4-DINITROTOLUENE DIETHYL PHTHALATE 4-CHLOROPHENYL PHENYL ETHER FLUORENE 4-NITROANILINE 4,6-DINITRO-2-METHYLPHENOL	RESULT	REPORTING LIMIT	BLANK RESULT	
	Analyce	(mā\ va)	(md/vd)	NT D	
	PHENOL	<u>й</u> .Б.	50	й. Б.	
	BIS (2-CHLOROETHYL) ETHER	N.D.	50	N.D.	
	2-CHLOROPHENOL	N.D.	50	N.D.	81
	1.3-DICHLOROBENZENE	N.D.	50	N.D.	
	1 4-DICHLOROBENZENE	N.D.	50	N.D.	
	BENZYL ALCOHOL	N.D.	100	N.D.	
	1 2-DICHLOROBENZENE	N D	5ŏ-	N.D.	
	O-METUVI DUENOI.	พี่กั	รีกั	N.D.	
	PTC / 2 CUI OPOTCOPPODYI \ PTUPP	# B	ξň	ND	
	DIS (2-CHLORUISOPROFIL) EIRER	袋.长.	1 ñ n	M D	
	M+D-MEINILPREMOL	ŭ.Đ.	£00	M.D.	73
	N-NITROSO-DI-N-PROPYLAMINE	ชี.ก.	50	N.D.	, ,
	HEXACHLOROETHANE	й.Б.	ັ້ລັດ	M.D.	
į	NITROBENZENE	$\underline{\mathbf{N}}.\underline{\mathbf{D}}.$	ຂັດ	й.ñ.	
	ISOPHORONE	N.D.	50	й.Б.	<b></b>
	2-NITROPHENOL	N.D.	50	<u>N</u> .D.	<b>-</b> -
	2.4-DIMETHYLPHENOL	N.D.	50	N.D.	
١	BIS (2-CHLOROETHOXY) METHANE	N.D.	50	N.D.	
	2 4-DICHLOROPHENOL	N.D.	50	N.D.	<del></del>
	1 2 4-TRICHLOROBENZENE	N.D.	50	N.D.	<b>69</b>
	NA DUTHAT. ENE	ND	50	N.D.	<del></del>
	A_CULODONITITME	N D	วีดัด	N.D.	<del>-</del> -
	A-CITOCOMATETIAE	พี`กั	รีกั	N.D.	<del></del>
	V CHI OBO 3 MEMBATENE	M. D.	วีดัก	N D	91
		M. D.	ξŏ	หักั	==
	Z-METHYLNAPHTHALEND	и.р.	50	N D	
	HEXACHLOROCYCLOPENTADIENE	₩.₽.	50	M D	
1	2,4,6-TRICHLOROPHENOL	й.Б.	50	M.D.	
	2,4,5-TRICHLOROPHENOL	й.Б.	257	M.D.	
	2-CHLORONAPHTHALENE	N.D.	250	й·Б.	
	2-NITROANILINE	N.D.	50	ŭ.Ď.	
	DIMETHYL PHTHALATE	N.D.	250	й.Б.	
	ACENAPHTHYLENE	N.D.	50	й.Б.	
	3-NITROANILINE	N.D.	250	<u>м</u> .р.	==
	ACENAPHTHENE	N.D.	50	N.D.	81
	2.4-DINITROPHENOL	N.D.	250	N.D.	
	A-NITROPHENOL.	N.D.	250	N.D.	
	DIBENZOFIDAN	ת א	50	N.D.	<del></del>
	2 A _ DINITUPOTOT TENTE	N D	รัก	N.D.	
	2, 3 DINITEDOTOLULUS	N D	ี วีดัด	N.D.	<del>-</del> -
	DIEMUVI DEMENTAND	# 5 T	วิรัก	N.D.	
į	A GII ODODIEMAI DIEMA EMIED DIEIUID KUIUMPATE	и.р.	57	ND	<b></b>
,	4-Chlorophenia Phenia Einek	M. Z.	£ 2	<b>N</b> D	
	FLUCKENE	₩·₩·	360	₩.₽.	
	4-NITKOANILINE	й.ħ.	430 250	MUNICATION OF THE PROPERTY OF	
	4,6-DINITRO-2-METHYLPHENOL	и.ы.	250	N.D.	<del>-</del> -

**Environmental Services (SDB)** 

February 26, 1996

Submission #: 9602133 page 2

MCCAMPBELL ANALYTICAL, INC.

Atten: Ed Hamilton

Project: K/5840

Project#: 10-3002-84/002

Received: February 16, 1996

re: One sample for Semivolatile Organics (BNAs) analysis, continued.

Method: EPA 3550/8270

SampleID: CB-3

Sample #: 118405 Matrix: SOIL Extracted: February 20, 1996

Sampled: February 15, 1996 Run: 10479-A Analyzed: February 23, 1996

)	Analyte	RESULT (mq/Kq)	REPORTING LIMIT (mg/Kg)	RESULT (mq/Kg)	BLANK SPIKE RESULT (%)
	N-NITROSO-DI-N-PHENYLAMINE	N.D.	50 50 50	Ŋ.D.	<b>-</b>
	4-BROMOPHENYL PHENYL ETHER HEXACHLOROBENZENE	N.D.	50	Ŋ.D.	
,	PENTACHLOROPHENOL	N.D. N.D.	250	N.D. N.D.	43
)	PHENATHRENE	N.D.	50	N.D.	4.7
	ANTHRACENE	Ñ.Ď.	50 50	Ñ.Ď.	
	DI-N-BUTYL PHTHALATE	N.D.	250	N.D.	
	FLUORANTHENE	N.D.	50	N.D.	<b>= -</b>
	PYRENE	N.D. N.D.	50	N.D.	57
	BUTYL BENZYL PHTHALATE	Ŋ.D.	250	Ŋ.D.	
	3,3'-DICHLOROBENZIDINE BENZO(A) ANTHRACENE	N.D.	100	Ŋ.D.	
	BIS (2-ETHYLHEXYL) PHTHALATE	N.D.	50	N.D.	
,	CHRYSENE CHRYSENE	N.D.	250 50	N.D. N.D.	
	DI-N-OCTYL PHTHALATE	N.D. N.D.	250	N.D.	
	BENZO (B) FLUORANTHENE	Ñ.D.	50	Ñ.Ď.	
	BENZO (K) FLUORANTHENE	N.D.	100	N.D.	
	BENZO (A) PYRENE	N.D.	25	N.D.	
	INDENO(1,2,3 C,D) PYRENE DIBENZ(A,H) ANTHRACENE BENZ(G,H,I) PERYLENE	N.D.	100	N.D.	<del>-</del> -
	DIBENZ (A, H) ANTHRACENE	N.D.	100	Ŋ.D.	
	BENZ (G, H, I) PERYLENE	N.D.	100	N.D.	
	For above analyte:	REPORTING LIMITS	RAISED DUE TO	MATRIX INTE	RFERENCE

Chemist

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Environmental Services (SDB)

February 27, 1996

Submission #: 9602587

MCCAMPBELL ANALYTICAL, INC.

Atten: Ed Hamilton

Project: K/5840

Project#: 10-3002-84-002

Received: February 20, 1996

re: One sample for Semivolatile Organic Compounds (B/NAs) analysis.

Method: EPA 3550/8270

Client Sample ID: K-10

Spl#: 79674 Matrix: SOIL Extracted: February 22, 1996
Sampled: February 15, 1996 Run#: 715 Analyzed: February 24, 1996

Sampled: Lepidary 12, 1990	Run#:	710	arybou. r		,
	RESULT	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK I SPIKE (%)	ILUTION FACTOR
ANALYTE	(mg/Kg)				ī
PHENOL	N.D.	0.0971	N.D.		i
BIS (2-CHLOROETHYL) ETHER	N.D.	0.0971	N.D.		4
2-CHLOROPHENOL	N.D.	0.0971	N.D.	92.0	1
2-CHLOROPHENOL 1,3-DICHLOROBENZENE	N.D.	0.0971	N.D.		. 1
1,4-DICHLOROBENZENE	N.D.	0.0971	N.D.		1
	N.D.	0.194	N.D.		1 1 1 1
BENZYL ALCOHOL 1,2-DICHLOROBENZENE 2-METHYLPHENOL	N.D. N.D.	0.0971	N.D.		1
2-METHYLPHENOL	N.D.	0.0971	N.D.		1
BIS (2-CHLOROISOPROPYL) ETHER	N.D.	0.0971	N.D.		1
4-METHYLPHENOL	N.D.	0.194	N.D.		1
N-NITROSO-DI-N-PROPYLAMINE	N.D.	0.0971	N.D.	75.5	1
M-MITKOPO-DI-M-EKOLITEMITME	N.D.	0.0971	N.D.		1 1 1 1
HEXACHLOROETHANE	N.D.	0.0971	N.D.		Ī
NITROBENZENE	N.D.	0.0971	N.D.		ī
ISOPHORONE	N.D. N.D.	0.0971	N.D.		ī
2-NITROPHENOL	и.Б.	0.0971	N.D.		
2-NITROPHENOL 2,4-DIMETHYLPHENOL	N.D.		N.D.		<u> </u>
BIS(2-CHLOROETHOXI) METHANE	N.D. N.D.	0.0971	N.D.		<b>i</b>
2,4-DICHLOROPHENOL 1,2,4-TRICHLOROBENZENE	й.Б.	0.0971	N.D.	83.2	1 1 1 1 1 1
1,2,4-TRICHLOROBENZENE	N.D.	0.0971	N.D.	63.2	1
MAFUINAMA	N.D. N.D.	0.0971			<b>†</b>
4-CHLOROANILINE	N.D.	0.194	Ŋ.D.		<b>+</b>
HEXACHLOROBUTADIENE	N.D.	0.0971	Ŋ.D.	75.2	1
4-CHLORO-3-METHYLPHENOL	N.D.	0.194	N.D.	15.2	± +
2-METHYLNAPHTHALENE	N.D.	0.0971	$\mathbf{N} \cdot \mathbf{D}$		<u> </u>
HEXACHLOROCYCLOPENTADIENE	N.D.	0.0971	N.D.		Ţ
2,4,6-TRICHLOROPHENOL	N.D.	0.0971	N.D.		‡
2,4,5-TRICHLOROPHENOL	N.D.	0.0971	N.D.		1
2-CHLORONAPHTHALENE	N.D.	0.0971	N.D.		1
2-NITROANILINE	N.D.	0.486	N.D.		1
DIMETHYL PHTHALATE	N.D.	0.486	N.D.	<del>-</del> -	Ī
ACENAPHTHYLENE	N.D.	0.0971	N.D.		1
3-NITROANILINE	N.D.	0.0971	N.D.	·	1
ACENAPHTHENE	N.D.	0.0971	N.D.	90.4	1
2,4-DINITROPHENOL	N.D.	0.486	N.D.		1
4-NITROPHENOL	N.D.	0.486	N.D.	<del>-</del> -	111111111111111111
DIBENZOFURAN	N.D.	0.0971	N.D.		1
2,4-DINITROTOLUENE	N.D.	0.0971	N.D.		
2,4-DINITROTOLUENE	N.D.	0.194	N.D.		1
DIETHYL PHTHALATE	N.D.	0.486	N.D.		1
ATPINIT LUINWIWIE	# . L/ .	V. 400			

Environmental Services (SDB)

February 27, 1996

Submission #: 9602587

page 2

MCCAMPBELL ANALYTICAL, INC.

Atten: Ed Hamilton

Project: K/5840

Project#: 10-3002-84-002

Received: February 20, 1996

re: One sample for Semivolatile Organic Compounds (B/NAs) analysis,

continued.

Method:

EPA 3550/8270

Client Sample ID: K-10

Spl#: 79674 Matrix: SOIL Extracted: February 22, 1996
Sampled: February 15, 1996 Run#: 715 Analyzed: February 24, 1996

Sampled: February 15, 1996	KUII#:	\T2 \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\	laiyeed. I	CDIUGI	22, 2220
	•	REPORTING	BLANK	BLANK	DILUTION
	RESULT	LIMIT	RESULT	SPIKE	FACTOR
ANALYTE	(mg/Kg)	(mg/Kg)	(mq/Kq)	(%)	
4-CHLOROPHENYL PHENYL ETHER	N.D.	0.0971	N.D.		1
FLUORENE	N.D.	0.0971	N.D.		1
4-NITROANILINE	N.D.	0.486	N.D.		1
4,6-DINITRO-2-METHYLPHENOL	N.D.	0.486	N.D.		1
N-NITROSO-DI-N-PHENYLAMINE	N.D.	0.0971	N.D.		1
4-BROMOPHENYL PHENYL ETHER	N.D.	0.0971	N.D.		1
HEXACHLOROBENZENE	N.D.	0.0971	N.D.		1
PENTACHLOROPHENOL	N.D.	0.486	N.D.	32.8	1
PHENANTHRENE	N.D.	0.0971	N.D.		1 1
ANTHRACENE	N.D.	0.0971	N.D.		1
DI-N-BUTYL PHTHALATE	0.977	0.486	0.530		1
FLUORANTHENE	N.D.	0.0971	N.D.	_=	1
PYRENE	N.D.	0.0971	N.D.	67.5	1
BUTYL BENZYL PHTHALATE	N.D.	0.486	N.D.		1
3,3'-DICHLOROBENZIDINE	N.D.	0.194	N.D.		1
BÉNZO (A) ANTHRACENE	N.D.	0.0971	N.D.		1
BIS (2-ETHYLHEXYL) PHTHALATE	N.D.	0.486	N.D.		<u> </u>
CHRYSENE	N.D.	0.0971	Ŋ.D.		1
DI-N-OCTYL PHTHALATE	N.D.	0.486	N.D.		1
BENZO (B) FLUORANTHENE	N.D.	0.0971	Ŋ.D.		Ţ
BENZO (K) FLUORANTHENE	N.D.	0.194	N.D.		‡
BENZO (A) PYRENE	N.D.	0.0486	N.D.		Ť
INDENO(1,2,3 C,D) PYRENE	N.D.	0.194	N.D.		Ţ
DIBENZO (A, H) ANTHRACENE	N.D.	0.194	N.D.		<u> </u>
BENZO (G, H, I) PERYLENE	N.D.	0.194	N.D.		<u> </u>
BENZOIC ACID	N.D.	0.486	N.D.	<del>-</del> -	Ţ

Alex Tam Chemist

	McCAMPBELL ANALYTICAL 110 2nd AVENUE, # D7 10) 798-1620 PACHECO, CA 94553 FAX (510) 798-																											-					CORD
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TASK 2
ANALYTICAL RESULTS
Sample Date: April 30, 1996

Kleinfelder				2-84/003;	Date Sampled: 04/30/96					
7133 Koli Center Parkway, # 10	0 McGrath	n Rent Corp.			Date Rece	ived: 04/30/	/96			
Pleasanton, CA 94566	Client Co	ontact: Dan (	Carroll		Date Extracted: 04/30/96  Date Analyzed: 04/30/96					
	Client P.	O: # R3574								
Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline*, with BTEX*  EPA methods 5030, modified 8015, and 8020 or 602; California RWQCB (SF Bay Region) method GCFID (5030)										
Lab ID Client ID	Matrix	TPH(g) <sup>+</sup>	Benzene	Toluene	Ethylben- zene	Xylenes	% Rec. Surrogate			
64601-05 T1-T5	w	1300,a	26	98	45	300	<b>9</b> 9			
Reporting Limit unless other	r- W	50 ug/L	0.5	0.5	0.5	0.5				
wise stated; ND means not de tected above the reporting lin		1.0 mg/kg	0.005	0.005	0.005	0.005				

water and vapor samples are reported in ug/L, soil samples in mg/kg, and all TCLP extracts in mg/L

<sup>#</sup> cluttered chromatogram; sample peak coelutes with surrogate peak

<sup>+</sup> 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 (?); f) one to a few isolated peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen is present; i) liquid sample that contains greater than ~ 5 vol. % sediment; j) no recognizable pattern.

Kleinfelder		Clie	ent Project	ID: #10-3002-84/003;	Date Sampled: 04/30/96
7133 Koli Cent	ter Parkway, #	100 Mc	Grath Rent Co	orp.	Date Received: 04/30/96
Pleasanton, Ca	A 94566	Clie	nt Contact: D	an Carroll	Date Extracted: 04/30/96
		Clie	nt P.O: # R35	574	Date Analyzed: 05/01/96
		<b>,</b>	Met	als by ICP*	
EPA <b>anal</b> ytical m	ethods 6010, 200.7				
Lab ID	Client ID	Matrix	Extraction <sup>0</sup>		Zinc*
64601	Ti	w	TTLC		31,i
64602	T2	w	TTLC		11,i
64603	<b>T</b> 3	W	TTLC		9.2,i
64604	T4	w	TTLC		28
64605	Т5	w	TTLC		9.9
64606	T6A-T6B	Sludge	TTLC		3800
64607	T7A-T7B	Sludge	TTLC		4500
	· -· · · · · · · · · · · · · · · · · ·				
	<del> </del>				
Reporting Limit	t unless otherwise	w	TTLC		0.05
	ans not detected eporting limit	s	TTLC		1.0
		_	STLC,TCLP		0.05

<sup>\*</sup> soil samples are reported in mg/kg, and water samples and all STLC & TCLP extracts in mg/L

o EPA extraction methods 1311(TCLP), 3010/3020(water, TTLC), 3040(organic matrices, TTLC), 3050(solids, TTLC); STLC from CA Title 22

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.

Kleinfelder		Client Project ID: #10-3002-84/003;			B; Date Sar	Date Sampled: 04/30/96				
7133 Koli Center Parkway, #	<b>‡ 10</b> 0	McGrat	h Rent Corp.		Date Re	Date Received: 04/30/96				
Pleasanton, CA 94566		Client Contact: Dan Carroll			Date Ex	tracted:	04/30/96			
		Client P	.O:# R3574	Date An	alyzed: (	05/01-05	/04/96			
			Meta							
EPA methods 6010/200.7; 7060/20  Lab ID		; 7740/270. 01-05	2 (Se); 239.2 (Pb,	water matrix)						
Client ID		1-T5			,	Re	porting Li	mit		
Matrix		W			S	w	STLC/			
Extraction <sup>0</sup>	TTLC					TTLC	TTLC	TCLP		
Compound		Concentration				mg/kg	mg/L	mg/L		
Arsenic (As)	ND					2.5	0.005	0.25		
Cadmium (Cd)	ND					0.5	0.01	0.01		
Chromium (Cr)	0	.025				0.5	0.005	0.05		
Copper (Cu)	0	.045				2.0	0.02	0.05		
Lead (Pb)	7	ND				3.0	0.005	0.2		
Nickel (Ni)	0	.033				2.0	0.02	0.05		
Selenium (Se)		ND				2.5	0.005	0.25		
Silver (Ag)	]	ND				1.0	0.01	0.05		
Zinc (Zn)		14				1.0	0.05	0.05		
% Recovery Surrogate		105								
Comments										

<sup>•</sup> water samples are reported in mg/L, soil samples in mg/kg and all TCLP & STLC extracts in mg/L

ND means not detected above the reporting limit

Edward Hamilton, Lab Director

DHS Certification No. 1644

o EPA extraction methods 1311(TCLP), 3010/3020(water, TTLC), 3040(organic matrices, TTLC), 3050(solids, TTLC); STLC from CA Title 22

<sup>#</sup> surrogate diluted out of range; N/A means surrogate not applicable to this analysis

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.

McCAMPBELL ANALYTICAL INC.

110 2nd Avenue South, #D7, Pacheco, CA 94553 Tele: 510-798-1620 Fax: 510-798-1622

Kleinfelder 7133 Koll Center Parkway, # 100		13.4	lient Project ID: #10-3002-84/003; cGrath Rent Corp.	Date Sampled: 04/30/96  Date Received: 04/30/96		
leasanton, C	CA 94566	C	lient Contact: Dan Carroll	Date Extracted: 05/02/96		
		C	lient P.O: # R3574	Date Analyzed: 05/02/96		
			Total Cya	nide		
	Analytical methods	ods EPA 335.2, 9010, 9011				
Lab ID	Client ID	Matri	x Cyanid	e <sup>‡</sup>		
<b>64601</b> -05	T1-T5	W	ND			
· · · · · · · · · · · · · · · · · · ·						
	it unless otherwises-	w	0.02 m	g/L		
	eans not detected reporting limit	s	1.0 mg	/kg		
			oil samples in mg/kg with CA Title 22, Chapter 11, Appendix II			

### QC REPORT FOR HYDROCARBON ANALYSES

Date: 04/30/96

Matrix: Water

	Concent	ration	(ug/L)	* Recovery			
Analyte	Sample			Amount			RPD
	(#64533)  -	MS	MSD	Spiked	MS 	MSD	
TPH (gas)	0.0	103.0	104.6	100.0	103.0	104.6	1.5
Benzene	j 0.0	11.4	11.1	10.0	114.0	111.0	2.7
Toluene	0.0	11.6	11.1	10.0	116.0	111.0	4.4
Ethyl Benzene	0.0	11.6	11.2	10.0	116.0	112.0	3.5
Xylenes	0.0	34.8	33.8	30.0 	116.0	112.7	2.9
TPH (diesel)	0	160	160	150	107	107	0.0
TRPH (oil & grease)	0	20600	21400	23700	87	90	3.8

\* Rec. = (MS - Sample) / amount spiked x 100

RPD = (MS - MSD) / (MS + MSD)  $\times$  2  $\times$  100

### QC REPORT FOR METALS

Date: 05/01/96

Matrix: Water

Extraction: TTLC

	Concent	ration		* Recovery					
Analyte	[ (m	g/L)		Amount		-	RPD		
<del></del>	Sample	MS	MSD	Spiked	MS	MSD			
Arsenic	0.0	5.6	5.6	5.0	112	112			
Selenium	j 0.0	5.2	5.3	5.0	104	105	0.1		
Molybdenum	0.0	5.5	5.3	5.0	109	107	0.7 2.4		
Silver	0.0	0.5	0.5	0.5	96	96	0.3		
<b>Thallium</b>	0.0	4.9	4.9	5.0	99	98			
Barium	0.0	5.0	5.0	5.0	101	100	0.7		
Nickel	0.0	5.5	5.5	5.0	110	100	0.3		
Chromium	0.0	5.6	5.4	5.0	111	109	0.5		
Vanadium	0.0	5.4	5.5	5.0	109	110	2.5		
Beryllium	0.0	5.6	5.6	5.0	113	113	0.6		
Zinc	0.0	5.6	5.6	5.0	112	113	0.1		
Copper	0.0	5.2	5.2	5.0	104	104	0.6		
Antimony	0.0	5.4	5.2	5.0	107	104	0.0		
Lead	0.0	5.4	5.4	5.0	107	104	3.0		
Cadmium	0.0	6.0	5.9	5.0	120		0.8		
Cobalt	0.0	5.5	5.4	5.0	111	119	0.7		
<b>lercury</b>	0.000	0.208	0.201	0.2	104	108 101	2.3 3.4		

Rec. • (MS - Sample) / amount spiked x 100 RPD = (MS - MSD) / (MS + MSD) x 2 x 100

### QC REPORT FOR AA METALS

Date: 05/04/96

Matrix: Water

	Concent:	ration	(mg/L)	1	& Reco	very	
Analyte	Sample	MS	MSD	Amount	MS   MS	MSD	RPD
Total Lead	0.00	4.63	4.54	5.00	93	91	2.0
Total Chromium	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Cadmium	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Nickel	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Zinc	N/A	N/A	N/A	N/A	N/A	N/A	N/A
STLC Lead	N/A	N/A	N/A	N/A	   N/A 	n/A	N/A
Organic Lead	N/A	N/A	N/A	N/A	N/A	N/A	N/A

\* Rec. - (MS - Sample) / amount spiked x 100

RPD + (MS - MSD) / (MS + MSD)  $\times$  2  $\times$  100

## American Environmental Network

### Certificate of Analysis

DOHS Certification: 1172

AIHA Accreditation: 11134

PAGE 1

McCAMPBELL ANALYTICAL 110 2ND AVE. SOUTH, #D7 PACHECO. CA 94553

ATTN: EDWARD HAMILTON CLIENT PROJ. ID: 6287 CLIENT PROJ. NAME: K-MRC REPORT DATE: 05/03/96

DATE(S) SAMPLED: 04/30/96

DATE RECEIVED: 05/01/96

AEN WORK ORDER: 9605012

### PROJECT SUMMARY:

On May 1. 1996, this laboratory received 1 water sample(s).

Client requested sample(s) be analyzed for chemical parameters. Results of analysis are summarized on the following page(s). Please see quality control report for a summary of QC data pertaining to this project.

Samples will be stored for 30 days after completion of analysis, then disposed of in accordance with State and Federal regulations. Samples may be archived by prior arrangement.

If you have any questions, please contact Client Services at (510) 930-9090.

Lar Klein

Laboratory Director

PAGE 2

### McCAMPBELL ANALYTICAL

**SAMPLE ID: COMPOSITE 1 - WATER** 

AEN LAB NO: 9605012-01 AEN WORK ORDER: 9605012 CLIENT PROJ. ID: 6287

**DATE SAMPLED: 04/30/96** DATE RECEIVED: 05/01/96 REPORT DATE: 05/03/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT UNITS	DATE ANALYZED
Phenols	EPA 420.1	ND	0.05 mg/L	05/02/96

ND = Not detected at or above the reporting limit
\* = Value at or above reporting limit

PAGE OR-1

### AEN (CALIFORNIA) QUALITY CONTROL REPORT

AEN JOB NUMBER: 9605012 CLIENT PROJECT ID: 6287

### Quality Control and Project Summary

All laboratory quality control parameters were found to be within established limits.

#### **Definitions**

Laboratory Control Sample (LCS)/Method Spikes(s): Control samples of known composition. LCS and Method Spike data are used to validate batch analytical results.

Matrix Spike(s): Aliquot of a sample (aqueous or solid) with added quantities of specific compounds and subjected to the entire analytical procedure. Matrix spike and matrix spike duplicate QC data are advisory.

Method Blank: An analytical control consisting of all reagents, internal standards, and surrogate standards carried through the entire analytical process. Used to monitor laboratory background and reagent contamination.

Not Detected (ND): Not detected at or above the reporting limit.

Relative Percent Difference (RPD): An indication of method precision based on duplicate analyses.

Reporting Limit (RL): The lowest concentration routinely determined during laboratory operations. The RL is generally 1 to 10 times the Method Detection Limit (MDL). Reporting limits are matrix, method, and analyte dependent and take into account any dilutions performed as part of the analysis.

Surrogates: Organic compounds which are similar to analytes of interest in chemical behaviour, but are not found in environmental samples. Surrogates are added to all blanks, calibration and check standards, samples, and spiked samples. Surrogate recovery is monitored as an indication of acceptable sample preparation and instrument performance.

- D: Surrogates diluted out.
- !: Indicates result outside of established laboratory QC limits.

WORK ORDER: 9605012

QUALITY CONTROL REPORT

PAGE QR-2

ANALYSIS: Phenols

MATRIX: Water

### METHOD BLANK SAMPLES

INSTR RUN: UV VIS\960503160000/1/ BATCH ID: DISP050296 DILUTION: 1.000000 LAB ID: PHNL BLNK
PREPARED:
ANALYZED: 05/03/96 SAMPLE TYPE: Blank-Method/Media blank INSTRUMENT: Novaspec uv/vis spect. mg/L EPA 420.1 UNITS: METHOD: SPIKE RECOVERY REC LIMITS (%) RPD VALUE (%) LOW HIGH RPD (%) LIMIT (%) ref REPORTING LINIT ANALYTE RESULT RESULT Total Phenois ND 0.05

### METHOD SPIKE SAMPLES

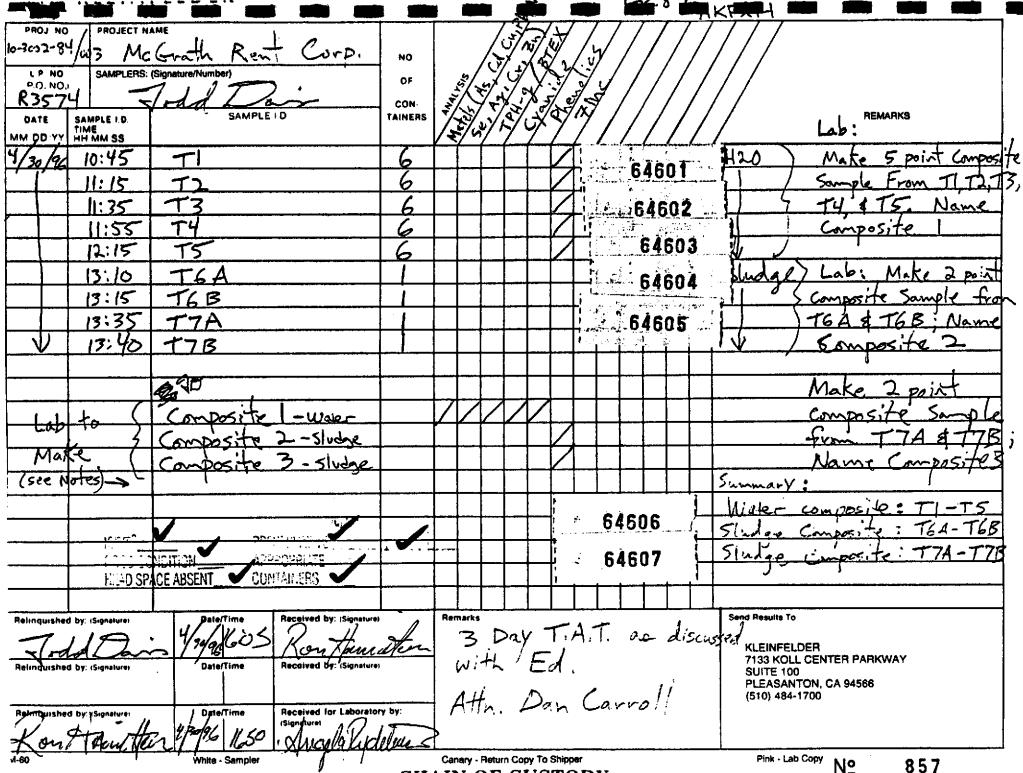
INSTRUMENT: UNITS:	mg/L EPA 420.1  E RESULT Phenols 0.486  TYPE: Spike-Hethod/Media blank MENT: Movaspec uv/vis spect. mg/L EPA 420.1	blank bect.		LAB ID: PREPARED ANALYZED	PHNL_MD : 05/03/96		INSTR RUN: UV VIS\960503160000/3/1 BATCH ID: DISP050296 DILUTION: 1.000000
METHOD:  ANALYTE Total Phenois		RESULT 0.486	REF Result ND	REPORTING LIMIT 0.05	SPIKE VALUE 0.500	RECOVERY (%) 97.2	REC LIMITS (%) RPD LOW HIGH RPD (%) LIMIT (%) 80 120
INSTRUMENT: UNITS:	Movaspec uv/vis s mg/L	a blank pect.		LAB ID: PREPARED ANALYZED	PHNL_MS ): 0: 05/03/96		INSTR RUN: UV VIS\960503160000/2/1 BATCH ID: DISP050296 DILUTION: 1.000000
METHOO:  ANALYTE Total Phenols		RESULT 0.499	REF Result ND	REPORTING LIMIT 0.05	SPIKE VALUE 0.500	RECOVERY (%) 99.8	REC LIMITS (%) RPD LOW HIGH RPD (%) LIMIT (%) 80 120

### METHOD SPIKE DUPLICATES

SAMPLE TYPE: Method Spike SaminSTRUMENT: Novaspec uv/vis	mple Duplica	ate LAB ID: PHNL_MR PREPARED: ANALYZED: 05/03/96				INSTR RUN: UV VIS\960503160000/4/2 BATCH ID: DISP050296 DILUTION: 1.000000			
METHOD: EPA 420.1		REF	REPORTING	SPIKE	RECOVERY	REC LIMITS (X)	RPD		
ANALYTE Total Phenols	RESULT 0.486	RESULT 0.499	LIMIT 0.05	VALUE	(*)	LOW HIGH RPD (%) 2.64	LIMIT (*) 15		

----- End of Quality Control Report -----

CHAIN OF CUSTODY RECORD McCAMPBELL ANALYTICAL 110 2nd AVENUE, # D7 48 HOUR TURN AROUND TIME: PACHECO, CA 94553 24 HOUR (510) 798-1620 FAX (510) 798-1622 RUSH 5 DAY REPORT TO Ed Hamilton BILL TO: ANALYSIS REQUES: DTHER COMPANY, M'Campbell Analytical NS (5520 ENF/3520 ocarbons (418.1) TELE (510) 798-1620 FAX 1-(510)798-1622 PROJECT NAME: K-MRC PROJECT NUMBERI 6287 LEAD (7240/7421/239,2/6030) SAMPLER SIGNATURE COMMENTS PROJECT LOCATION: Total Petroleum CR & Gre Total Petroleum Hydr BTEX & TPH es Gaso METHOD PRESERVED EPA 624/8240/8260 CONTAINERS **MATRIX** SAMPLING CONTAINERS CAM - 17 Netals Phenolics EPA 608/8086 EPA 625/8278 CPA 602/8020 EPA 608/8080 OTHER 14.5% EPA 601/8010 SAMPLE LOCATION ĪĐ St. UDGE VATER OTER. DATE TIME SOIL. Ź 호 4/30/96 10:45 Composite1-OIA 6A601water 64605 RECEIVED BY DATE TIME REMARKS 5/196 2:05 pm 14.20 TIME RELINGUISHED BY 5-1-96 1420



CHAIN OF CUSTODY

### CHROMALAB, INC.

Environmental Services (\$08)

May 21, 1996

Submission #: 9605707

ERICKSON, INC.

Atten: Dave Nielson

Project: MCGRATH IND. Received: May 20, 1996 Project#:

968284

re: One sample for Miscellaneous Metals analysis.

Method: EPA 3010A/6010A

Client Sample ID: 01

*Spl#:* 85623

Sampled: May 20, 1996

Matrix: WATER

Run#: 1434

Extracted: May 21, 1996

Analyzed: May 21, 1996

RESULT

(mg/L)

REPORTING LIMIT

BLANK RESULT BLANK DILUTION SPIKE PACTOR

N.D.

(EQ/L) 0.010

**Voash** 

Chemist

Inorganic Supervisor

## CHROMALAB, INC.

Environmental Services (SDB)

May 21, 1996

Submission #: 9605707

ERICKSON, INC.

Atten: Dave Nielson

Project: MCGRATH IND.

Project#: 968284

Received: May 20, 1996

re: 1 sample for Gasoline and BTEX compounds analysis.

Method: EPA 5030/8015M/8020

Sampled: May 20, 1996

Matrix: WATER

Run#: 1450

Analyzed: May 21, 1996

Spl# CLIENT SPL	Gasoline D (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl Benzene (ug/L)	Total Yylenes (ug/L)	
Sp1# CLIENT SPL 3 85623 01	N.D.	N.D.	N.D.	N.D.	N.D.	
Reporting Limits Blank Result Blank Spike Result	50 N.D. (%) 103	0.50 N.D. 113	0.50 N.D. 115	0.50 N.D. 119	0.50 N.D. 121	

June Zhao Chemist Marianne Alexander Gas/BTEX Supervisor PAGE, 884

ERICKSON

# TASK 3 ANALYTICAL RESULTS

Sample Dates: March 29, 1996, April 17, 1996, May 7, 1996, and May 28, 1996

Klein <b>felde</b> r		Client Pr	oject ID: # 1	0- <b>3002-84</b> /0	03	Date Samp	led: 03/29/	96	
7133 <b>Koli</b> Cen	nter Parkway, # 100					Date Received: 03/29/96  Date Extracted: 03/30-04/03/96			
Pleasanton, C	A 94566	Client Co	ontact: Kriste	n Scheller					
		Client P.	O:	-	-	Date Anal	yzed: 03/30	-04/03/96	
EDA methode Si	Gasoline Range	(C6-C12)	Volatile Hyd	irocarbons	as Gasolin	e*, with BT	<b>EX*</b>		
Lab ID	Client ID	Matrix	TPH(g) <sup>+</sup>	Benzene	Toluene	Ethylben- zene	Xylenes	% Rec. Surrogate	
62873	10 E 1700	w	ND	ND	2.3	ND	ND	98	
62874	20 E 1704	w	ND	ND	ND	ND	ND	93	
62875	20 E 1693	S	ND	ND	ND	ND	ND	96	
62 <b>87</b> 6	20 W 1694	S	ND	ND	ND	ND	ND	99	
62877	10 W 1697	s	ND	ND	ND	ND	ND	99	
62 <b>878</b>	10 E 1692	S	ND	ND	ND	ND	ND	96	
								,	
								-	
Passetina	Limit unless other-	w	50 ug/L	0.5	0,5	0.5	0.5		
wise stated	; ND means not de- the reporting limit	<del>                                     </del>	1.0 mg/kg	<u> </u>	0.005	0.005	0.005	-	

<sup>\*</sup> water and vapor samples are reported in ug/L, soil samples in mg/kg, and all TCLP extracts in mg/L

<sup>#</sup> clustered chromatogram; sample peak coelutes with surrogate peak

<sup>+</sup> 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 modificant 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 (?); f) one to a few isolated peakspresent; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen is present; i) liquid sample that contains greater than ~ 5 vol. % sediment; j) no recognizable pattern.

Kleinfelde	r		Client Project	ID: # 10-3002-84/003	Date Sampled: 03/29/96				
133 <b>Koli</b>	Center Parkway,	# 100			Date Received: 03	/29/96			
leasanto	n, CA 94566		Client Contac	t: Kristen Scheller	Date Extracted: 03/29/96				
			Client P.O:		Date Analyzed: 03/29/96				
PA analyti	cal methods 6010/200	.7, 239.2 <sup>+</sup>		Zinc*		-			
Lab ID	Client ID		Extraction	Zinc		% Rec. Surrogate			
62875	20 E 1693	S	TTLC	270		92			
62876	20 W 1694	s	TTLC	2900		89			
62877	10 W 1697	S	TTLC	1400		97			
62878	10 E 1692	s	TTLC	1200		91			
	-	<del></del>							
			_						
· · · <del></del>									
			-						
Reporting	Limit unless other-	s	TTLC	1.0					
wise states tected abor	i; ND means not de- ve the reporting limit	w	TTLC	0.01					
		_	STLC,TCLP	0.05					

<sup>\*</sup> soil samples are reported in mg/kg, and water samples and all STLC & TCLP extracts in mg/L

o EPA extraction methods 1311(TCLP), 3010/3020(water, TTLC), 3040(organic matrices, TTLC), 3050(solids, TTLC); STLC from CA Title 22

surregate diluted out of range; N/A means surrogate not applicable to this analysis

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.

			Client Project	ID: # 10-3002-84/003	Date Sampled: 03/29/96					
133 <b>Koli</b> (	Center Parkway,	# 100			Date Received: 0	Date Received: 03/29/96				
leasamor	ı, CA 94566	Ţ	Client Contact	: Kristen Scheller	Date Extracted: 03/29/96  Date Analyzed: 03/29/96					
			Client P.O:							
				ssolved Zinc*						
	al methods 6010/200			_,		% Rec.				
Lab ID	Client ID	Matrix	Extraction	Zinc		Surrogate				
62873	10 E 1700	W	TTLC	0.27		NA				
62874	528 <b>74</b> 20 E 1704 W		TTLC	0.086		NA				
-										
-		-								
		ļ			<del></del>	<u> </u>				
				<u></u>						
						<del> </del>				
D	I isah unlasa sebas	S	TTLC	1.0						
wise stated	Reporting Limit unless otherwise stated; ND means not deected above the reporting limit		TTLC	0.01						
			STLC,TCLP	0.05						
		1		d all STLC & TCLP extracts in ma	-A					

### QC REPORT FOR HYDROCARBON ANALYSES

Date: 03/30/96

Matrix: Water

	Concent	ration	(ug/L)		very		
Analyte	Sample  (#62829)	MS	MSD	Amount   Spiked	   Mis	MSD	RPD
TPH (gas)	0.0	100.9	99.4	100.0	100.9	99.4	1.5
Benzene	0.0	9.5	9.7	10.0	95.0	97.0	2.1
Toluene	1 0.0	9.5	9.7	10.0	95.0	97.0	2.1
Ethyl Benzene	0.0	9.4	9.6	10.0	94.0	96.0	2.1
Xylenes	0.0	27.6	28.2	30.0 	92.0	94.0	2.2
TPH (diesel)	0	146	145	150	97	97	0.8
TRPH (oil & grease)	N/A	N/A	N/A	N/A	N/A	N/A	N/A

<sup>\*</sup> Rec. = (MS - Sample) / amount spiked x 100

 $RFD = (MS - MSD) / (MS + MSD) \times 2 \times 100$ 

McCAMPBELL ANALYTICAL INC.

110 2nd Avenue South, #D7, Pacheco, CA 94553 Tele: 510-798-1620 Fax: 510-798-1622

### QC REPORT FOR HYDROCARBON ANALYSES

Date:

04/01/96

Matrix: Soil

	Concent:	ration	(mg/kg)		* Reco		
Analyte	Sample			Amount			RPD
	(#62725) 	MS	MSD	Spiked   	MS	MSD	
TPH (gas)	0.000	1.843	1.643	2.03	91	81	11.5
Benzene	0.000	0.196	0.198	0.2	98	99	1.0
Toluene	0.000	0.210	0.208	0.2	105	104	1.0
Ethylbenzene	0.000	0.208	0.204	j 0.2 j	104	102	1.9
Xylenes	0.000	0.606	0.602	0.6	101	100	0.7
TPH (diesel)	0	305	295	300	102	98	3.4
TRPH (oil and grease)	N/A N/A		N/A	   N/A	N/A	N/A	N/A

\* Rec. - (MS - Sample) / amount spiked x 100

RPD = (MS - MSD) / (MS + MSD)  $\times 2 \times 100$ 

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### QC REPORT FOR HYDROCARBON ANALYSES

Date:

04/02/96

Matrix: Soil

` <b>.</b>	Concent	ration	(mg/kg)	1	* Reco		
Analyte	Sample  (#62725) 	MS	MSD	Amount     Spiked	MS	MSD	RPD
TPH (gas)	0.000	1.984	2.085	2.03	98	103	4.9
Benzene	0.000	0.186	0.198	0.2	93	99	6.3
Toluene	0.000	0.188	0.206	0.2	94	103	9.1
Ethylbenzene	0.000	0.186	0.206	0.2	93	103	10.2
Xylenes	0.000	0.546	0.608	0.6	91	101	10.7
TPH (diesel)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
TRPH oil and grease)	N/A	N/A	N/A	N/A	N/A	N/A	N/A

% Rec. • (MS - Sample) / amount spiked x 100

RPD = (MS - MSD) / (MS + MSD) x 2 x 100

### QC REPORT FOR HYDROCARBON ANALYSES

Date: 04/02/96-04/03/96 Matrix: Water

	Concent	ration	(ug/L)		* Reco		
Analyte	Sample  (#62941)	MS	MSD	Amount Spiked	   Mis 	MSD	RPD
TPH (gas)	0.0	105.2	107.0	100.0	105.2	107.0	1.7
Benzene Toluene	0.0	10.9 11.0	11.2 11.2	10.0	109.0	112.0 112.0	2.7 1.8
Ethyl Benzene Xylenes	0.0	11.0 33.3	11.2 34.0	10.0 30.0	110.0	112.0 113.3	1.8 2.1
TPH (diesel)	0	147	147	150	98	98	0.3
TRPH (oil & grease)	N/A	N/A	N/A	N/A	N/A	N/A	N/A

% Rec. • (MS - Sample) / amount spiked x 100

RPD = (MS - MSD) / (MS + MSD)  $\times 2 \times 100$ 

### QC REPORT FOR AA METALS

Date: 03/29/96

Matrix: Water

Small retra	Concent	ration	(mg/L)		* Reco	DDD	
Analyte	Sample MS		MSD	Amount     	MS	MSD	RPD
Total Lead	0.00	5.43	5.14	5.00	109	103	5.5
Total Cadmium	0.00	5.87	5.80	5.00	117	116	1.3
Total Chromium	0.00	5.46	5.44	5.00	109	109	0.3
Total Nickel	0.00	5.24	5.18	5.00	105	104	1.2
Total Zinc	0.00	5.56	5.54	5.00   	111	111	0.4
Total Copper	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Organic Lead	N/A	n/a	N/A	N/A	N/A	N/A	N/A

\* Rec. = (MS - Sample) / amount spiked x 100

RFD = (MS - MSD) / (MS + MSD) x 2 x 100

### QC REPORT FOR AA METALS

Date: 03/29/96

Matrix: Soil

•	Concent:	ration		ļ ·	* Reco	very	
Analyte	(me	g/kg,mg/	L)	Amount		-	RPD
	Sample	MS	MSD	Spiked	MS	MSD	
Total Lead	0.0	4.79	4.79	5.0	96	96	0.1
Total Cadmium	0.0	5.19	5.16	5.0	104	103	0.4
Total Chromium	0.0	4.88	4.83	5.0	98	97	1.0
Total Nickel		4.76	4.80	5.0	95	96	0.9
Total Zinc	0.0	4.98	4.94	5.0	100	99	0.7
STLC Lead	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Organic Lead	N/A	N/A	N/A	N/A	N/A	N/A	N/A

% Rec. - (MS - Sample) / amount spiked x 100

RFD = (MS - MSD) / (MS + MSD) x 2 x 100

INDE I NAME E INSTERNA 6131ARFX6 PROJECT NAME PROJ NO 10-3002-84/003 NO LP NO SAMPLERS: (Signature/Number) P.O. NO. OF R3537 CON DATE SAMPLE ID SAMPLEID TAINERS **REMARKS** TIME HH MM SS MM DD YY 3.29.96 1210 62873 10'E 1700 Dissolut Zn 1220 4 20'E 1704 52874 20 E 1693 1694 62875 1200 20 W 1150 1677 H 62876 1205 1672 62877 62878 WAS LOCK LATER LINEISE PRESERVATIVE VI GOOD CONDITION 9 APPROPRIATE w. Filtered Ared Keserved In Late HEAD SPACE ABSENT\_ CONTAINERS UPAN HELLIVAL Relinguished by: (Signature) Received by: (Signature) 327 Date/Time Remarks Send Results to Kristen Scheller Standard TAT 329 1400 KLEINFELDER Relinquished by: (Signature) Date/Time 7133 KOLL CENTER PARKWAY SUITE 100 PLEASANTON, CA 94566 (510) 484-1700 Relifiquished by: Isignature Date/Time Received for Laboratory by: 481 5838 FAX Pink - Lab Copy No Canary - Return Copy To Shipper

CHAIN OF CHEMONY

Kleinfelder		Client Pr	oject ID:# 10	0-3002-84.0	03	Date Sampled: 04/17/96					
7133 Koll Cer	nter Parkway, # 100					Date Rece	ived: 04/17/	/96			
Pleasanton, C	A 94566	Client Co	ontact: Kriste	n Scheller		Date Extracted: 04/17/96					
		Client P.	O:#R3540		Date Anal	yzed: 04/17	/96				
EPA methods 50	Gasoline Range	(C6-C12) Volatile Hydrocarbons as Gasoline*, with BTEX* 020 or 602; California RWQCB (SF Bay Region) method GCFID(5030)									
Lab ID	Client ID	Matrix	TPH(g) <sup>+</sup>	Benzene	Ethylben- zene	Xylenes	% Rec. Surrogate				
63306	E30	S	ND	ND	ND	ND	ND	101			
63307	E40	s	ND	ND	ND	ND	ND	101			
		-									
Reporting	Limit unless other-	w	50 ug/L	0.5	0.5	0.5	0.5				
wise stated	; ND means not de- e the reporting limit	S	1.0 mg/kg	0.005	0.005	0.005	0.005				

water and vapor samples are reported in ug/L, soil samples in mg/kg, and all TCLP extracts in mg/L

<sup>#</sup> chittered chromatogram; sample peak cochites with surrogate peak

<sup>+</sup> 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 (?); f) one to a few isolated peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen is present; i) liquid sample that contains greater than ~ 5 vol. % sediment; j) no recognizable pattern.

Kleinfelder		c	lient Project ID:	# 10-3002-84.003	Date Sampled: 04/17/96  Date Received: 04/17/96  Date Extracted: 04/17/96  Date Analyzed: 04/18/96				
133 Koll C	enter Parkway, #	100							
leasanton,	CA 94566	C	lient Contact: K	risten Scheller					
		C	lient P.O: # R35	40					
PA analytica	l methods 6010/200.	7		Zinc*					
			Extraction <sup>0</sup>	Zinc		% Rec. Surrogate			
63306	E30	E30 S TTLC 100				96			
63307	63307 E40		TTLC	69		96			
	. <u>.</u>					,			
	····					<del></del> . <del></del>			
			<u> </u>	<u></u>					
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Reporting I	Limit unless other-	S	TTLC	1.0					
wise stated; tected above	ND means not de- the reporting limit	w	TTLC						
		_	STLC,TCLP	0.05					

<sup>\*</sup> soil samples are reported in mg/kg, and water samples and all STLC & TCLP extracts in mg/L

o EPA entraction methods 1311(TCLP), 3010/3020(water, TTLC), 3040(organic matrices, TTLC), 3050(solids, TTLC); STLC from CA Title

<sup>#</sup> surrogate diluted out of range; N/A means surrogate not applicable to this analysis

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.

### QC REPORT FOR METALS

Date: 04/18/96

Matrix: Soil

Extraction: TTLC

	Concenti				* Reco		
Analyte	(m <u>c</u>	g/kg)		Amount			RPD
	Sample	MS	MSD	Spiked	MS	MSD	
Arsenic	0.00	4.71	4.82	5.0	94	96	2.4
Selenium	0.00	4.39	4.56	5.0	88	91	3.9
Molybdenum	0.00	4.54	4.64	5:0	91	93	2.2
Silver	0.00	0.40	0.41	0.5	80	83	3.0
Thallium	0.0	4.85	4.84	5.0	97	97	0.0
Barium	0.00	4.10	4.20	5.0	82	84	2.3
Nickel	0.00	4.70	4.82	5.0	94	96	2.6
Chromium	0.00	4.64	4.77	5.0	93	95	2.8
Vanadium	0.00	4.53	4.62	5.0	91	92	1.9
Beryllium	0.00	4.66	4.76	5.0	93	95	2.2
Zinc	0.00	4.68	4.84	5.0	94	97	3.4
Copper	0.00	4.25	4.34	5.0	85	87	2.1
Antimony	0.00	4.48	4.62	5.0	90	92	3.1
Lead	0.00	4.45	4.56	5.0	89	91	2.4
Cadmium	0.00	4.87	4.99	5.0	97	100	2.6
Cobalt	0.00	4.57	4.66	5.0	91	93	2.1
Mercury	0.000	0.255	0.270	0.25	102	108	5.7

\* Rec. = (MS - Sample) / amount spiked x 100

RPD = (MS - MSD) / (MS + MSD) x 2 x 100

				• •					•		_					•		•	602	29AKFX13
DATE	SAMPLE LO	ERS: (S Int	<u> 200</u>	4		NO OF CONTAINERS	44.		//				//					//		
MM DD YY	TIME HH MM SS							7	/			/	/	/	/	/	/	/		REMARKS
41796			E30				I	10												63306
			EYO	)			L													— 63307 —
				<del></del>																
			1CF/T°		a PRESS	VEAS PLATIVE	1130	11/1	ALS	1077	Ti Ti									
			GOOD C HEAD SI	ONDITION PACE ABS	APPRO ENT_CONTA	PRIATE INTERS														
				······································	***************************************															
	***															_				
Relinguished	ihell		4.67 96 Date	1340	Received by: (Signal Backived by: (Signal	Price	Ren	narks		da	ð -	TA	-7					•	KLEINFELDER	NTER PARKWAY , CA 94566
Relinquished   M-80	by, (Signature)		Date/		Received for Labora (Signature)	lory by:	L				- 1,4								, ,	5838 FAX
***************************************			White -	Sampler			Can	ary - I	Return	Сор	y To S	hippe	r						Pink - Lab Corr	

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Kleinfelder 7133 Koll Center Parkway, # 100				# 10-300	Date Sampled: 05/07/96  Date Received: 05/08/96					
		McGrath	1							
Pleasanton, C	Center Parkway, # 100 CA 94566  Gasoline Range (a 5030, modified 8015, and 80 Client ID Composite 6	Client Co	ontact: Dan C	Carroll	Date Extracted: 05/08/96					
		Client P.	O:#R3599	-	Date Analyzed: 05/08/96					
EPA methods 50										
Lab ID	Client ID	Matrix	TPH(g) <sup>+</sup>	Benzene	Toluene	Ethylben- zene	Xylenes	% Rec. Surrogate		
64870	Composite 6	S	1.4,b,d	ND	0.005	ND	0.008	103		
							"			
					-					
Reporting	Limit unless other-	w	50 ug/L	0.5	0.5	0.5	0.5			
wise stated; ND means not de- tected above the reporting limit		S	1.0 mg/kg	0.005	0.005	0.005	0.005			

<sup>\*</sup> water and vapor samples are reported in ug/L, soil samples in mg/kg, and all TCLP extracts in mg/L

<sup>#</sup> cluttered chromatogram; sample peak coelutes with surrogate peak

<sup>+</sup> 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 (?); f) one to a few isolated peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen is present; i) liquid sample that contains greater than ~ 5 vol. % sediment; j) no recognizable pattern.

Client Project ID: #10-3002-84/003; Date Sampled: 05/07/96 Kleinfelder McGrath 7133 Koll Center Parkway, # 100 Date Received: 05/08/96 Pieasanton, CA 94566 Date Extracted: 05/09/96 Client Contact: Dan Carroll Date Analyzed: 05/10/96 Client P.O: # R3599 Total Zinc EPA analytical methods 6010/200.7 % Rec. Matrix Extraction<sup>o</sup> Client ID Zinc Lab ID Surrogate 93 100 64867 S TTLC Composite 2 TTLC 230 96 64868 Composite 3 S 92 260 64869 Composite 1 S TTLC 92 190 S TTLC 64870 Composite 6 94 170 64871 Composite 5 S TTLC 94 64872 S TTLC 260 Composite 4 TTLC 1.0 S Reporting Limit unless otherwise stated; ND means not detected above the reporting limit W TTLC 0.01 STLC,TCLP

<sup>\*</sup> soil samples are reported in mg/kg, and water samples and all STLC & TCLP extracts in mg/L

a EPA extraction methods 1311(TCLP), 3010/3020(water, TTLC), 3040(organic matrices, TTLC), 3050(solids, TTLC); STLC from CA Title 22.

<sup>#</sup> surrogate diluted out of range; N/A means surrogate not applicable to this analysis

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.

### QC REPORT FOR HYDROCARBON ANALYSES

Date: 05/08/96

Matrix: Soil

	Concent:	ration	(mg/kg)		* Reco			
Analyte	Sample			Amount			RPD	
· · · · · · · · · · · · · · · · · · ·	(#63141)	MS ——	MSD	Spiked   	MS	MSD		
TPH (gas)	0.000	1.667	1.686	2.03	82	83	1.1	
Benzene	0.000	0.164	0.164	0.2	82	82	0.0	
Toluene	0.000	0.170	0.170	0.2	85	85	0.0	
Ethylbenzene	0.000	0.174	0.172	0.2	87	86	1.2	
Xylenes	0.000	0.508	0.510	0.6	85	85	0.4	
TPH (diesel)	0	326	322	300	109	107	1.4	
TRPH (oil and grease)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

% Rec. = (MS - Sample) / amount spiked x 100

RPD = (MS - MSD) / (MS + MSD)  $\times$  2  $\times$  100

### QC REPORT FOR AA METALS

Date: 05/10/96

Matrix: Soil

	Concent				* Reco		
Analyte	{mg	g/kg,mg/1	L)	Amount			RPD
	Sample	MS	MSD	Spiked   	MS	MSD	
Total Lead	0.0	5.21	5.25	5.0	104	105	0.8
Total Cadmium	0.0	5.57	5.61	5.0	111	112	0.8
Total Chromium	j 0.0	5.20	5.27	5.0	104	105	1.3
Total Nickel	0.0	5.07	5.17	5.0	101	103	2.0
Total Zinc	0.0	5.38	5.42	5.0	108	108	0.6
Total Copper	N/A	N/A	N/A	N/A	N/A	N/A	n/a
Organic Lead	N/A	N/A	N/A	N/A	N/A	N/A	N/A

\* Rec. = (MS - Sample) / amount spiked x 100

RPD = (MS - MSD) / (MS + MSD)  $\times$  2  $\times$  100

PROJ NO	PROJECT NA		İ				$\langle \cdot \rangle$		//	/ /		//	6341	/		
300z-e		McGrath		NO			r/K	7 /	//	//	///	//	///			
3599	SAMPLERS: (		0 14	OF CON-	* / ·	\$/E ///			//		///					
M DD YY	IAMPLE I D IME IH MM SS	SAMPLE I.D.	•	AINERS					//		///	//			REMARKS	
-7-96	11:20	$\frac{2A}{3}$ com	posite 2		×								Soil		64867	i-
-   -	11:30	<u> Z B/</u>						_		1	$\bot$				04007	_!_
+	11:35	3A con	posite 3		×	_ -						+	<del> </del>		64868	}
	11:48	· 4A								<u> </u>						\_ 
19-10	11.55	1B) compe	site.		X				_						64869	
-	12:00	1A/ (0B) Com	osike 6		X	$\frac{1}{x}$	╁╌┨	-		-		╁┪				<u></u>
	12:25	GAZ	w									1-1			64870	
	12,35	<u>4B</u>														
	12:55	5E \ 50					-	+	<del> </del>				-			
	13:05		mposite5		×		$\Box$				++		<del> </del>	) . !		
\	13:18	5C													64871	ļ
$\overline{\Psi}$	1315	5B/											1	<del></del>		
		composite 4		<del> </del>	X.	- -		_ -		<u> </u>			<b>BMPOSITH</b>	· 4=	4A44B	
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Relinquished by: (Signature)  Selinquished by: (Signature)  Selinquished by: (Signature)  Date/Time Received by: (Signature)  Relinquished by: (Signature)		19 Standard T.A.T								Send Results To  Attn: Dan Carroll  KLEINFELDER 7133 KOLL CENTER PARKWAY						
twelu	in 719	5.8-96 11:47	dide Rice	$_{ u}$									SUITE PLEAS			
linquished by	: (Signature)	Date/Time Rece	ived for Laboratory by	<del>)</del> r:								1	(310) 41	u (		

Kleinfelder		Client P	roject ID: # 10	0-3002-84; McGrath	irath Date Sampled: 05/28/96		
7133 Koll Cer	nter Parkway, # 100				Date Received: 0:	5/28/96	
Pleasanton, C	CA 94566	Client C	ontact: Alan (	Gibbs	Date Extracted: 0	5/28-05/29/96	
		Client P	.O: R3647		Date Analyzed: 0	)5/29/96	
EPA analytical n	nethods 6010/200.7, 239.2	+	Zin	c*			
Lab ID	Client ID	Matrix	Extraction <sup>0</sup>	Zinc*		% Recovery Surrogate	
65424	KB-W30	S	TTLC	220	00	96	
65425	KB-W50	S	TTLC	260	)0	94	
65426	KB-W75	s	TTLC	280	)0	93	
65427	KB-W100	S	TTLC	110	00	94	
65428	KW-W100	W	TTLC	1.	1.8		
65431	KW-W200	w	TTLC	1.	4	99	
65429	KB-W150	S	TTLC	13	0	93	
65430	KB-W200	s	TTLC	9:	3	102	
65432	KB-W250	S	TTLC	55	60	103	
65433	KB-W300	S	TTLC	75	50	90	
	it unless otherwise stated	S	TTLC	1.0 n	g/kg		
	orting limit	w	TTLC	0.010	mg/L		
		-	STLC,TCLP	0.05	ng/L		

<sup>\*</sup> soil samples are reported in mg/kg, and water samples and all STLC & TCLP extracts in mg/L

<sup>+</sup> Lead is analysed using EPA method 6010 (ICP) for soils, STLC & TCLP extracts and method 239.2 (AA Furnace) for water samples

o EPA extraction methods 1311(TCLP), 3010/3020(water, TTLC), 3040(organic matrices, TTLC), 3050(solids, TTLC); STLC from CA Title

<sup>#</sup> surrogate diluted out of range; N/A means surrogate not applicable to this analysis

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.

Kleinfelder		Client Pro	oject ID: # 10-3002-84; McGrath	Date Sampled: 05/28/96
7133 Koll Cen	ter Parkway, # 100			Date Received: 05/28/96
Pleasanton, C	A 94566	Client Co	ntact: Alan Gibbs	Date Extracted: 05/29/96
		Client P.C	D: R3647	Date Analyzed: 05/29/96
			pΗ	Ignitability
	Analytical methods		EPA 150.1, 9040, 9045	EPA 1010
Lab ID	Client ID	Matrix	рН	Flashpoint
65424	KB-W30	s	7.00	
65425	KB-W50	s	6.84	
65426	KB-W75	S	6.87	
65427	KB-W100	S	6.62	***
65428	KW-W100	w	6.68	
65431	KW-W250	w	7.00	
65429	KB-W150	s	6.65	***
65430	KB-W200	S	7.10	
65432	KB-W250	s	6.62	
65433	KB-W300	S	6.75	
	it or Method Accuracy erwise stated; ND	w	±0.05	± 2°C
means not dete ing limit; N/A	cted above the report- means not applicable	S	± 0.1	N/A
Repo	orting Units	w,s	- log(a <sub>H</sub> <sup>+</sup> )	°C

McCAMPBELL ANALYTICAL INC.

110 2nd Avenue South, #D7, Pacheco, CA 94553 Tele: 510-798-1620 Fax: 510-798-1622

> Alan Gibbs Kleinfelder Inc. 7133 Koll Center Parkway, # 100 Pleasanton, CA 94566

June 20, 1996

Dear Alan:

This note is to explain / interpret the result of the solid phase study that we did for Kleinfelder from 06/04-06/13/96 on two high zinc samples.

A low power microscopic examination of CB-1 ("the source") revealed the presence of flexible, irregularly shaped 'strips' of paint. Zn is present as finely ground metallic power in Zn-rich primer paints. A similar examination of KB-W30 (a 'downstream' Zn-rich sample) revealed abundant plant material intermixed with sediment.

Three extractions were performed sequentially on each sample, with methodologies and results as follows.

Initially, 20ml deionized water was mixed with 20g soil by rotating TCLP style for 18 hours. This water was removed after centrifugation and for both samples was found to contain very low levels of Zn relative to the TTLC extraction (< 0.1%), indicating that readily water soluble zinc salts such as ZnSO<sub>4</sub> or ZnCl are negligible.

Next, the same sediment, after decanting all of the deionized water, was mixed with 20ml of deionized water that was made to pH=  $4.0\pm0.1$  with 1:1 HCl. The sample was vortexed and centrifuged repeatedly until the desired water pH was achieved. A faint H<sub>2</sub>S smell was noted. Again, this fluid was removed after centrifugation and found to contain relatively low levels of Zn (< 5% of the TTLC value) for both samples, indicating that ZnCO<sub>3</sub>, ZnO and Zn(OH)<sub>2</sub> are not present in significant quantities. I do not know for certain but believe that ZnS would not be appreciably soluble at this pH.

Next, after decanting the previous fluid, a 2.0 gram vertical section aliquot was removed for TTLC extraction. Much higher Zn values were found than by the other two extractions, indicating that Zn was present as  $Zn^{\circ}$ , ZnS, incorporated in other sulfide mineral lattices (FeS, FeS<sub>2</sub>) or incorporated in bio/plant mass. Sulfate was looked for by the addition of BaNO<sub>3</sub> to the TTLC extracts to precipitate BaSO<sub>4</sub> followed by filtration and gravimetric measurement. This technique did not have adequate sensitivity, but a crude estimate of the S leached is  $\sim 200$  mg/kg equivalent to  $\sim 400$  mg/kg Zn, assuming that all of the S is bonded to Zn and ZnS stoichiometry. However, FeS is a more likely source of acid-soluble S rather than ZnS because of Fe's predominance in sediments. Although Zn may plausibly substitute into the FeS<sub>2</sub> lattice, this iron mineral is very difficult to decompose and is unlikely to be affected by the TTLC digestion. Hence Zn is probably present unchanged as Zn<sup>o</sup> or incorporated into plant mass.

McCAMPBELL	ANALYTICAL	INC.

110 2nd Avenue South, #D7, Pacheco, CA 94553 Tele: 510-798-1620 Fax: 510-798-1622

CB-I had little plant material but it was abundant in KB-W30. Plant and sediment from a different portion of KB-W30 were separated with the aid of a microscope and TTLC digested. Approximately 75% of the Zn resided in the sediment and 25% in the plants.

Yours truly,

Edward Hamilton, Laboratory Director

DHS Certification No. 1644

Edward Hamilton, Lab Director

Kleinfelder 7133 Koll Cente	er Parkway, # 100		Project ID: # 10-3002-84; McGrath	Date Sampled:	<del> </del>
Picasanton, CA	94566	Client (	Contact: Alan Gibbs	Date Extracted	
		Client I	P.O: R3647	Date Analyzed:	06/04-06/13/96
		· ]	Zinc*		
PA analytical met	thods 6010/200.7,				0/ P
Lab ID	Client ID	Matrix	Extraction <sup>o</sup>	Zinc	% Recovery Surrogate
61513	CB-1	S	1:1 DI Extract <sup>(1)</sup>	0.30	N/A
61513	CB-1	s	1:1 pH= 4.0 DI Extract <sup>(2)</sup>	22	N/A
61513	CB-1	s	TTLC <sup>(3)</sup>	3700	94
65424	KB-W30	s	1:1 DI Extract <sup>(1)</sup>	1.9	N/A
65424	KB-W30	S	1:1 pH= 4.0 DI Extract <sup>(2)</sup>	74	N/A
65424	KB-W30	s	TTLC <sup>(3)</sup>	1960	93
65424	KB-W30	sediment	TTLC	76%= 1490	
65424	KB-W30	plants	TTLC	24%= 470	
(2) 20 ml pH~ (3) SO4 <sup>-2</sup> was k by 0.45 um filt estimate of the	ooked for by the ration &gravime S leached is ~ 2	HCl) DI:2 addition o tric measu 00 mg/kg,	r 18 hours  20g soil extraction, vortexed for 60  f barium nitrate to these TTLC extrement. This technique did not the equivalent to ~ 400 mg/kg Zn, assoH= 4 extraction.	tracts to precipitate ave adequte sensa	e BaSO4, followe
Reporting Limit stated: ND me	unless otherwise ans not detected	S	TTLC	1.0 mg/kg	
	porting limit	S	DI Extractions	0.05 mg/L	
-			STLC  nples and all D1, STLC & TCLP extracts is (water,TTLC), 3040(organic matrices,TT)		); STLC from CA Ti
# surrogate dilute	that contains greate	r than ~ 2 s	ogate not applicable to this analysis vol. % sediment; this sediment is extrac	ed with the liquid, in	accordance with E

110 2nd Avenue South, #D7, Pacheco, CA 94553 Tele: 510-798-1620 Fax: 510-798-1622

	1		Client Project ID: # 10-3002-84; McGrath				Date Sampled: 05/28/96			
7133 Kol	l Center Pa	arkway, # 100					Date Rec	eived: 05/28	/96	
Pleasant	on, CA 945	666	Client	Contact: Ala	ın Gibbs		Date Extracted: 06/04-06/08/96			
			Client	P.O: R3647			Date Ana	lyzed: 06/07	-06/13/96	
	_			Metal	ls by ICP			- <b>-</b>		
EPA analy	tical methods	6010, 200.7							1	
Lab ID	Client ID	Extraction	n <sup>o</sup>	Copper	Manganese	Iron*	Magne- sium	Sodium	Calcium	
61513	CB-1	1:1 DI Extrac	ction <sup>(1)</sup>	ND	0.076	0.15	21	<b>8</b> 9	41	
65424	KB-W30	1:1 DI Extrac	tion <sup>(1)</sup>	0.072	5.6	7.1	28	68	48	
<sup>1)</sup> 20ml	DI:20g soil	l extraction, ro	tated fo	or 18 hours						
(1) 20ml	DI:20g soil	extraction, ro	otated fo	or 18 hours						
Reports less other ND me	DI:20g soil	1:1 DI Extr	action	0.05 mg/L	0.05	0.05	0.05	0.5	0.05	

o EPA entraction methods 1311(TCLP), 3010/3020(water, TTLC), 3040(organic matrices, TTLC), 3050(solids, TTLC); STLC from CA Title

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.

Kleinfelder		Client P	roject ID:#10	D: # 10-3002-84; McGrath Date Sampled: 05/2	5/28/96	
7133 Koll Cen	ter Parkway, # 100				Date Received: 0	5/28/96
Pleasanton, C.	A. 94566	Client C	ontact: Alan C	dibbs	Date Extracted:	)5/30-05/31/96
		Client P	.O: R3647		Date Analyzed: 0	5/31/96
EPA analytical m	ethods 6010/200.7, 239.2		Zin	c*		
Lab ID	Client ID	Matrix	Matrix Extraction Zinc*		c <sup>*</sup>	% Recovery Surrogate
65 <b>42</b> 6	KB-W75	s	DI TCLP	1.	1	N/A
65429	KB-W150	s	DI TCLP	0.2	13	N/A
65433	KB-W300	S	DITCLP	0.1	6	N/A
Reporting Limit	t unless otherwise stated t detected above the re-	; S	TTLC	1.0 r	ng/kg	
	orting limit	w	TTLC	0.010	mg/L	
		-	DI TCLP	0.02	mg/L	

soil samples are reported in mg/kg, and water samples and all STLC & TCLP extracts in mg/L

<sup>+</sup> Lead is analysed using EPA method 6010 (ICP) for soils, STLC & TCLP extracts and method 239.2 (AA Furnace) for water samples

o EPA extraction methods 1311(TCLP), 3010/3020(water, TTLC), 3040(organic matrices, TTLC), 3050(solids, TTLC); STLC from CA Title

<sup>#</sup> surrogate diluted out of range; N/A means surrogate not applicable to this analysis

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.

Date: 05/29/96

Matrix: Soil

	Concent				t Reco	very		
Analyte	Sample	g/kg,mg/: MS	l) MSD	Amount     Spiked	MS	Wan	RPD	
·	- Jampie	FIS	FISU	Spiked		MSD		
Total Lead	N/A	N/A	N/A	   N/A	N/A	N/A	N/A	
Total Cadmium	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Total Chromium	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Total Nickel	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Total Zinc	0.0	5.07	5.03	5.0	101	101	0.9	
STLC Lead	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
SPLP Lead	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

% Rec. = (MS - Sample) / amount spiked x 100

Date:

05/29/96

Matrix: Water

_	Concent	ration	(mg/L)	1	* Reco	very	•••
Analyte	Sample	MS	MSD	Amount	MS	MSD	RPD -
Total Lead Total Chromium	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Cadmium	N/A N/A	N/A N/A	N/A N/A	N/A     N/A	N/A   N/A	n/a n/a	N/A N/A
Total Nickel	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Zinc	0.00 	4.72	4.79	j 5.00 j	94	96	1.3
Total Copper	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Organic Lead	N/A	N/A	N/A	N/A	N/A	N/A	N/A

\* Rec. • (MS - Sample) / amount spiked x 100

Date: 06/04/96

Matrix: Solids

	Concent	ration			* Recov	very		
Analyte	(mg	g/kg,mg/	<b>L)</b>	Amount			RPD	
	Sample	MS	MSD	Spiked	MS	MSD		
Total Lead	N/A	N/A	N/A	N/A	N/A	n/a	N/A	
Total Cadmium	N/A	N/A	N/A	N/A	n/a	N/A	N/A	
Total Chromium	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Total Nickel	N/A	N/A	N/A	N/A	N/A	N/A	A/N	
Total Zinc	0.0	5.10	5.08	5.0	102	102	0.5	
STLC Lead	N/A	n/a	n/a	N/A	N/A	N/A	N/A	
SPLP Lead	N/A	n/a	N/A	N/A	N/A	N/A	N/A	

\* Rec. = (MS - Sample) / amount spiked x 100

Date: 06/13/96

Matrix: Soil

	Concent	ration		1	t Reco	very	
Analyte	(mg	g/kg,mg/	L)	Amount			RPD
	Sample	MS	MSD	Spiked	MS	MSD	
Total Lead	0.0	4.82	4.69	5.0	96	94	2.7
Total Cadmium	0.0	5.27	5.08	5.0	105	102	3.8
Total Chromium	0.0	4.88	4.72	5.0	98	94	3.3
Total Nickel	0.0	4.93	4.76	5.0	99	95	3.6
Total Zinc	0.0	5.13	5.06	5.0	103	101	1.5
STLC Lead	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SPLP Lead	N/A	N/A	N/A	N/A	N/A	N/A	N/A

\* Rec. = (MS - Sample) / amount spiked x 100

Date: 06/07/96

Matrix: Soil

_	Concent:	ration		l I	* Reco	very	_	
Analyte	, (mg	g/kg,mg/	L)	Amount		-	RPD	
	Sample	MS	MSD	Spiked	MS	MSD		
Total Lead	0.0	5.27	5.25	5.0	105	105	0.3	
Total Cadmium	0.0	5.76	5.68	5.0	115	114	0.3 1.5	
Total Chromium	0.0	5.34	5.30	5.0	107	106	0.8	
Total Nickel	0.0	5.22	5.27	5.0	104	105	1.0	
Total Zinc	0.0	5.53	5.50	5.0	111	110	0.5	
STLC Lead	0.00	5.24	5.11	5.0	105	102	2.5	
SPLP Lead	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

% Rec. = (MS - Sample) / amount spiked x 100

Date: 05/31/96

Matrix: DI TCLP

	Concent	ration		1	* Reco	very		
Analyte	(mg	g/kg,mg/	L)	Amount		_	RPD	
	Sample	MS	MSD	Spiked	MS	MSD	-	
Total Lead	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Total Cadmium	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Total Chromium	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Total Nickel	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Total Zinc	0.0	5.18	5.22	5.0	104	104	0.7	
STLC Lead	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
SPLP Lead	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

\* Rec. - (MS - Sample) / amount spiked x 100



### GeoAnalytical Laboratories, Inc.

1405 Kansas Avenue Modesto, CA 95351

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

### **CERTIFICATE OF ANALYSIS**

Report# H162-01 McCampbell Analytical 110 2nd Avenue #D7 Pacheco CA 94553

06/13/96 Date of Report: Date Received: 06/10/96 Date Started: 06/10/96

Date Completed: 06/13/96

Project Name:

Project # 5840,6470

Sample ID	Lab ID	Detection Limit	Method	Analyte	Results	Units mg/L
CB-1	H10219	1	300 300	Sulfate Chloride	<b>14</b> 1 <i>7</i> 5	
KB-W30	H10220	1 1	300 300	Sulfate Chloride	35 135	

Amero Salgado Chemist

Donna Allsup Laboratory Director

Certification # 1157

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			<b>/</b>	VOAS   OAG   MFTA	LSOTHER	a.	nal	Jse	>								PLEASANTON, CA 9 (510) 484-1700	4568	
		CEAT TOWNS THE	Dala Hills	PRIAINE PORTER OF LABORATOR	·, d,-		Z.,	. 50	y, 0	1,14	. 45,	Na	, 4	1	May		510484-58	38 FAX	
		HEAD SPACE ABSENT CONTAINERS						1)Z 400	ex	LAD. Zn.	My	Z44 ; 77	tis 122	19.44 2320	-4	~			
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PROJ NO 16-3007	2.84 Ma	2.Grath	NO		'	N/V	N. O. W.			/				7/	-X20		
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-28-96		KB-W30	1	X	×						X				Soil		65424
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TASK 4
ANALYTICAL RESULTS
Sample Date: June 24, 1996

110 2nd Avenue South, #D7, Pacheco, CA 94553 Tele: 510-798-1620 Fax: 510-798-1622

06/30/96

Dear Alan:

#### Enclosed are:

- 1). the results of 16 samples from your # 10-3002-84/004; McGrath project,
- 2). a QC report for the above samples
- 3). a copy of the chain of custody, and
- 4). a bili for analytical services.

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,

Edward Hamilton, Lab Director

Kleinfelder, I 7133 Koll Cer		Client McGrat		# 10-3002-84/004;	Date Sampled: 06/2	<del></del>
Pleasanton, C		Client C	ontact: Alan (	Gibbs	Date Extracted: 06	
		Client P	.O: R3724		Date Analyzed: 06	24/96
EPA analytical r	nethods 6010/200.7		Zin	c*		
Lab ID	Client ID	Matrix	Extraction <sup>0</sup>	Zin	c.	% Recovery Surrogate
66246	KF-W30-1,2	S	TTLC	7:	3	94
66247	KS-W30-1,2	s	TTLC	9-	1	97
66248	KF-W45-1,2	s	TTLC	9	3	85
66249	KS-W45-1,2	S	TTLC	17	0	92
66250	KF-W60-1,2	S	TTLC	9	5	95
66251	KS-W60-1,2	S	TTLC	7	4 .	95
66252	KF-W15-1,2	S	TTLC	9	8	95
66253	KS-W15-1,2	s	TTLC	12	:0	96
66254	KF-W75-1,2	s	TTLC	8	6	94
66255	KS-W75-1,2	S	TTLC	8	3	96
66256	KF-W85-1,2	s	TTLC	7	1	95
66257	KS-W85-1,2	s	TTLC	7	9	97
66258	KF-W105-1,2	S	TTLC	8	2	93
66259	KS-W105-1,2	S	TTLC	6	7	94
66260	KF-W125-1,2	S	TTLC	5	8	94
66261	KS-W125-1,2	s	TTLC	30	00	95
	it unless otherwise stated;	s	TTLC	4.0 n	ng/kg	
	et detected above the re- corting limit	W	TTLC	0.05	mg/L	
		_	STLC,TCLP	0.2 1	ng/L	

<sup>\*</sup> soil and sludge samples are reported in mg/kg, and water samples and all STLC & TCLP extracts in mg/L

<sup>&</sup>lt;sup>6</sup> EPA extraction methods 1311(TCLP), 3010/3020(water, TTLC), 3050(solids, TTLC); STLC from CA Title 22

<sup>\*</sup> surrogate diluted out of range; N/A means surrogate not applicable to this analysis

reporting limit raised due matrix interference

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.

Date: 06/24/96

Matrix: Soil

	Concent	ration		1 1	* Reco	very	
Analyte	(mg	g/kg,mg/	L)	Amount		_	RPD
	Sample	MS	MSD	Spiked	MS	MSD	
Total Lead	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Cadmium	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Chromium	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Nickel	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Zinc	0.0	4.95	4.92	j 5.0	99	98	0.7
STLC Lead	N/A	N/A	n/a	N/A	N/A	N/A	N/A
SPLP Lead	N/A	N/A	N/A	N/A	N/A	N/A	N/A

% Rec. = (MS - Sample) / amount spiked  $\times$  100

-300 LP	NO	SAMPLERS	(Signature/Number)	· · · · · · · · · · · · · · · · · · ·	$\dashv$	)¢	2	/ ا				JANUAT PASE !	OM TOWN	_ /_	PRESERVATIVE PEROPRIATE CUNTAINERS	. به با است. او است. او او است. او او او او او او او او او او او او او
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124/		13:50	KF-W30-1	<u> </u>	1	· · · · · · · · · · · · · · · · · · ·	7	1	ff	1	f	-	ff		2/.	
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			KS-W45-1	*	_\		$\angle$					,			3 composite	66249
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1			K5-W60-1	•			4		<b>↓</b> _↓					+	Composite	66251
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1		14:40	kF-W15-	•	+		4	-	$\vdash$		-				3 composite	<b>─</b> 66252
			KF-W15-2	•	-		4		╀		$\left  - \right $				<u>{</u>	
╁			KS-W15-1		_		4		╁╼╂	-	-	_			3 Composite	F6253
+		V Im -	KS-W15-2		+		$\mathcal{A}$	┥	<del>├</del> -				+-+	-	) ' '	<u> </u>
-}-	_	15:00	KF-W75-1	•			4	-	╂═┼	- -	╢		╂╌╂╌		Composite	66254
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V	+	<del>-   ,</del>	KS-W75-2	•				-	-		╂╌┼		╁┼	++	{ composite	<del></del>
	shed t	by: (Signature)	Date/Time 9	Received by: (Signal	IDe)	**-	Rema		———— •	1	<b></b>	!	<u> </u>	11	Send Results To	
Jingui	ahed t	Des	6/21/8 7:10 Detertime	Received by: (Signal	wette				to		70)	484	-583; 7-17	8	KLEINFELDER 7133 KOLL CENTE SUITE 100	R PARKWAY
							ć	أست	to	15	(6)	5/7	7-17	96	PLEASANTON, CA (510) 484-1700	94566
PQUI	shed b	by: (Signature)	Ditertime   5:10   7:70   7:70	Received for Labor (Signature)	atory by:		•		i	(-,		-	-		12.27	

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lo-300 }- 9- project NAI	Gratik	No		//	//	///		//	
R3724 SAMPLERS: (S	Signature/Number)	OF CON-	A NO.			///		//	
MM DD YY HH MM SS	SAMPLE ID.	TAINERS				///		//	PEMARKS
6/24/16 15:20	KFW85-1 .	1	4			6	6256	1	? Composite FARMENT Soil
	KF280 KSW85-1.					ε	6257		? composite ***
15:25	KS W85-2 . KFW105-1 .						6258		$\frac{1}{2}$
	KFW105-Z .		4		Image: Control of the control of the		0250		3 Composite
	KSW105-1 '		H			6	6259	H	Composite
15:30	KFW125-1 .		4			; (	6260		2 Composite
	KFW125-2 , KSW125-1 ,		Н			,		il	2 it.
A 4	ksw125-2 ·	V				<del>T </del> 1	66261 	,	3 composite
	24_ *								
	PRESERVATIVE L 4	ĥ							
3 3 SAUTTON	APPROPRIATE CONTAINERS								
(" 4) PLACE ADOCTAL	- Contract C								
Relinquished by: (Signature) Relinquished by: (Signature)	Date/Time Berejved by: (Signature)  12/22 110	Han	Remarks	Toni. (510)	ght 148	Fa) 4-59	1 to	l to	Send Results To  KLEINFELDER 7133 KOLL CENTER PARKWAY SUITE 100 PLEASANTON, CA 94566 (510) 484-1700
Retinguished b) (Signature)	Date Time Received for Laborator (Signature)	y by:		(510)	31	/_/	776		(0.0) 404-1700

M-60

Cenary - Return Copy To Shipper

Pink - Lab Copy No

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# APPENDIX D SEWER PERMIT APPLICATION AND ORO LOMA SANITARY DISTRICT PERMIT

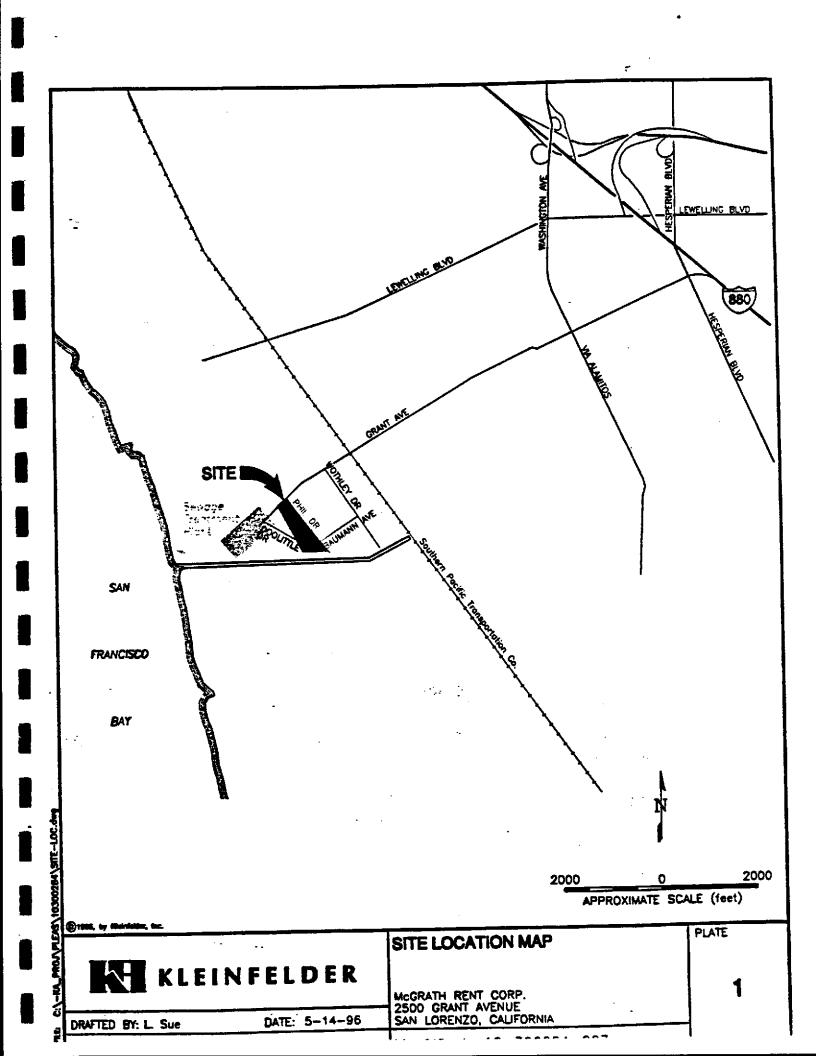
## ORO LOMA SANITARY DISTRICT SPECIAL DISCHARGE PERMIT APPLICATION

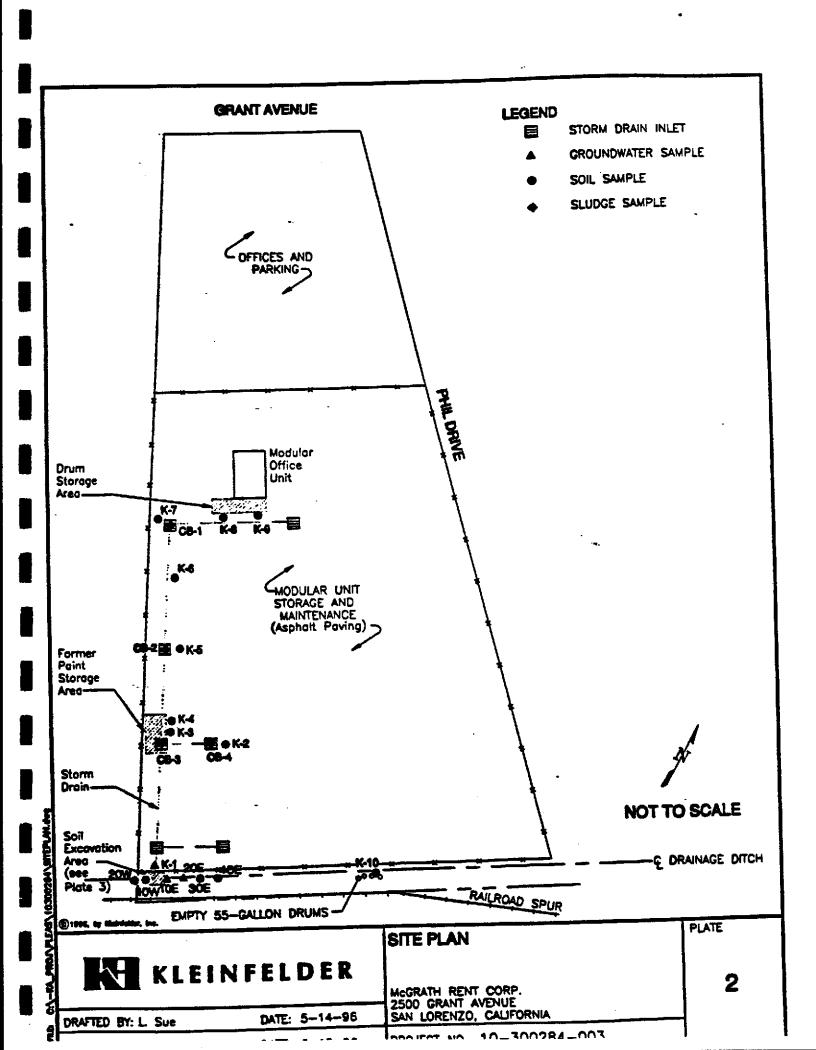
SE	CTION 2	SITE INFORMAT	ION								
1,	Name and A	ddress of Remediation	n Site								
	Name	McGrath Rent Cor	р.								
	Street	2500 Grant Avenu	e,								
	City/State/Zi	San Lorenzo, CA	94580								
2.	reasonable a additional pa	Iternative but to disch ges as necessary).	narge into the was	son(s) why there is no tewater system. (Attach or were generated in							
	indus	trial cleaning ac	tivities. Kle	infelder and McGrath							
	found	that on-site tre	atment was the	most cost-effective and							
	lowes	t liability optio	on of all option	ons considered. This							
	is a	one-time project	with about a c	ne-week duration.							
3.	<ul> <li>3. Site Description</li> <li>a) Provide a map showing the location of the site.</li> <li>b) Provide a diagram showing location of all monitoring wells, treatment unit and connection point to the District sewer system.</li> <li>c) Provide copies of laboratory analysis of pollutant concentration.</li> </ul>										
4.	Wastewater	Flow Information	50								
	Estimated Dis Peak Hourly i	charge Flow Rate	100	_ (gal/min) _ (gal/min)							
	Maximum Da		15	(gal/min)							
	Estimated Du	ration of Discharge	one week								

# ORO LOMA SANITARY DISTRICT SPECIAL DISCHARGE PERMIT APPLICATION

### SECTION 3 TREATMENT SYSTEM INFORMATION

- 1) Provide a narrative description of treatment system. Be sure to include the following Information. (Use additional sheets if necessary)
  - a) Describe how the groundwater will be treated; (best available technology is required.
  - b) Describe the efficiency of the treatment unit.
  - c) Describe where and how it will connect to the District's sewer system.
  - d) Emergency procedures/security provisions.
    - (a) McGrath has contracted with Erickson Inc., an on-site wastewater treatment contractor, to perform the treatment, sampling, analysis, and discharge described below. Groundwater will be treated using a chemical precipitation process to remove soluble zinc below the OLSD limit of 3 mg/L. Water will be filtered using a plate and frame filter press. Filtered water will be treated with granular activated carbon to remove total petroleum hydrocarbons as gasoline (TPH-g); and benzene, toluene, ethylbenzene, and xylenes (BTEX) to the OLSD limit of non-detect. Treated water then will be accumulated into a 20,000 gallon holding tank. Each batch will be sampled, and analyzed for zinc and TPH-g/BTEX using EPA-sapproved analytical methods. Once compliance with sewer limits is confirmed by analytical results, 20,000 gallon batches will be discharged at an estimated flow rate of 50 100 gallons per minute.
    - (b) The treatment unit described above is generally 80 to 95% effective in zinc removal, and 99.9% effective in removing TPH-g and BTEX constituents. Treatment system performance will be verified by analytical results before batch discharges.
    - (c) When a batch is ready for discharge, the 20,000 gallon tank will be connected to the sewer system using flexible hose. This project has an estimated duration of one week. The temporary sewer connection will be made at a location to be approved by Susan Keach of OLSD at a field meeting with Kleinfelder on May 15, 1996 at 2:00 p.m. We plan to locate a cleanout or sewer maintenance hole acceptable to OLSD during that field meet.
    - (d) Emergency provisions: The wastewater treatment contractor is an established hazardous materials emergency response subcontractor. Although they are not contracted for emergency response, their on-site treatment personnel are trained and knowledgeable regarding safe handling practices and operating procedures. The 20,000 gallon accumulation tank will be equipped with a valve so that the discharge can be stopped readily in case of any emergency.
- 2) Please attached a detailed drawing of the treatment system.





# Table 1 Analytical Results for Rinse Water Samples (Before Treatment) April 30, 1996 McGrath Rent Corp.

Sample .	Sample				T N	ORGA	VIOLE(O)	POUND	S .				ORC	ANIC	OMPC	o (p.Vid)	3	
Location	Number	Arsenic	Cadmium	Chromium	Copper	Lend	Nickel	Selenium	Silver	Zinc (TTLC)	Zine (STLC)	Cymide	Phenols	TPH	В	T	E	X
Units:	Sludge	-	-	-	4	-	-	-	-	mg/kg	mg/L	-	-	-	-	••	•	-
	Water	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	-	mg/L	mg/L	mg/L	HB/L	##/L	PE/L	n#\r
Water Tank 1	TI		arte.	**		3				31	-	-	-	**		-	-	-
Water Tank 2	T2		_	-	-	-		-		11	<b></b>	-	-	*	-		-	_
Water Tank 3	Т3	-	a <del>-</del>			-	-	-	==	9.2	-		-	-	1	-	-	-
Water Tank 4	T4	-		_	-	-	-	-		28	**	-	-		-	-	-	-
Water Tank 5	T5	-	**		-	-	. ==	-	-	9.9	-	-		-		+	-	-
Composite	T1 - T5	<b>⊲9.00</b> 5	<b>&lt;0.01</b>	<b>◆9.0</b> 25	0.045	<4.005	0.033	<0.005	<0.01	14		<0.02	49.05	1.3	26	98	45	300
OLSD Discharg	Linits	9.8	0.2	2,8	0.5	1.0	1.0	1.0	0.8	3.0		1.0	70	NA	מא	ND	ND	ND
TTLC (mg/kg)		500	100	500	2,500	1,004	2,000	100	500	5,000	-							
STLC (mg/L ext	rati)	5	1	5	25	- 5	20	1	5	-	250							

#### Notes:

-- Not analyzed for that constituent or parameter.

Sludge in milligrams per kilogram (mg/kg), similar to parts per million

Water in milligrams per liter (mg/l), similar to parts per million

TTLC - Total threshold limit concentration, California Code of Regulations (CCR) Title 22, Section 66261

STLC - Soluble threshold limit concentration, 22 CCR 66261

<0.01 Where the analyte was not detected, the laboratory reporting limit is shown

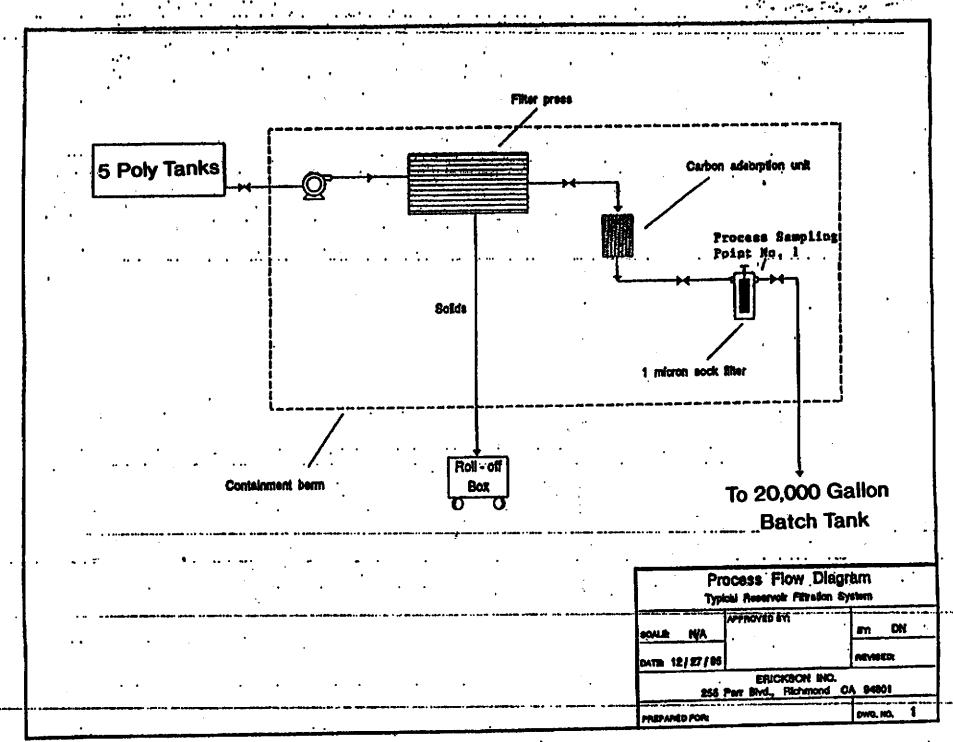
T1 - T5 Samples from each of the five tanks were composited for analysis by the laboratory

T6A-T6B / T7A-T7B Two samples of studge were collected and composited for analysis by the laboratory

TPH - Total petroleum hydrocarbons quantified as gasoline (g).

B, T, E, X - Benzene, Toluene, Ethylbenzene, and Xylenes (gasoline constituents)





TOTAL P.EC



### ORO LOMA SANITARY DISTRICT

2600 GRANT AVENUE SAN LORENZO, CALIFORNIA 94580 TELEPHONE 510 276-4700 ADMINSTRATION FAX 510 276-1528 PLANT FAX 510 278-7382

May 16, 1996

Mr. Daniel S. Carroll Kleinfelder 7133 Koll Center Parkway, Suite 100 Pleasanton, CA 94566

Subject:

Special Discharge Permit Application for McGrath Rent Corp. Project., 2500

Grant Avenue, San Lorenzo, CA

Dear Mr. Carroll:

Your application for a Special Discharge Permit for the site referenced above is approved subject to the conditions listed below:

- 1. Compliance with all the permit conditions outlined in the Special Discharge Permit No. 028 (attached). This permit is divided into five parts. (Parts 1-4 are General Conditions that apply to all dischargers. Part 5 are Special Conditions that apply specifically to the site referenced above.
- Compliance with all conditions described in the Sewer User Ordinance No 39-6.
   (Copy attached)
- 3. Payment of the permit fee of \$420.00 and flow discharges of \$59.10. (Invoice attached.)

Please don't hesitate to call us at (510) 276-4700 extension 149, with any questions or concerns.

Sincerely,

Edward A. Heuer

**Director of Water Quality Services** 

Susan Keach

Industrial Waste Inspector

EH:SK:LR

F:\GROUPS\OPS\SUSAN\uncgrath.per\tr

### ORO LOMA SANITARY DISTRICT

### WASTEWATER DISCHARGE PERMIT

COMPANY NAME	Mc Grath Rent Corp									
MAILING ADDRESS	2500 Grant Avenue									
	San Lorenzo, CA 94580									
FACILITY ADDRESS:	Same									
· i										
Loma Sanitary District se	above named company is authorized to discharge wastewater to the Orona Sanitary District sewerage system subject to compliance with the District's nance No. 39 (as amended) titled:									
SEWERS AND WATERS AND PROVIDING FO PERMIT AND N	CE REGULATING THE USE OF PUBLIC AND PRIVATE D DRAINS. REGULATING THE DISCHARGE OF D WASTE INTO THE PUBLIC SEWER SYSTEM. R WASTEWATER DISCHARGE PERMITS AND FIXING MONITORING FEES, AND PROVIDING FOR LIABILITIES TIES FOR THE VIOLATION OF THE PROVISIONS									
	nce with any Federal or State regulations that apply, all thin this permit, and payment, of fees and charges when									
1996. in the office of	d in accordance with the application filed on <u>May 15</u> , the Oro Loma Sanitary District and in conformity with mation submitted to the District in support of the above									
PERMIT NO: 028	EFFECTIVE DATE: May 20. 1996									
APPROVED 3.	EXPIRATION DATE: <u>May 19, 1997</u> 2									

### PART I GENERAL

DEFINITION. See Section 1.2 Ordinance No. 39-6 attached.

V.,

- 2. GENERAL The user shall comply with all the general prohibitive discharge standards in Article II: Regulations of Ordinance No. 39-6.
- 3. RIGHT OF ENTRY Ready and immediate access to the facility, the pretreatment area and the sampling points shall be provided to District personnel at all times.
- 4. RECORDS RETENTION. The user shall retain and preserve for no less than three (3) years any records, books, documents, memoranda, reports, correspondence and any and all summaries thereof, relating to monitoring, sampling and chemical analyses made by, or on behalf of the User in connection with its discharge. Records shall be made available for inspection and copying by representatives of the District, the California Regional Water Quality Control Board or the environmental Protection Agency. All records that pertain to matters that are the subject of special orders or any other enforcement or litigation activities brought by the District shall be retained and preserved by the User until all enforcement activities have concluded and all periods of limitation with respect to any and all appeals have expired.
- 5. <u>CONFIDENTIAL INFORMATION</u> Except for data determined to be confidential under the provisions of Ordinance No. 39-6, all reports required by this permit shall be available for public inspection at the District Office, 2600 Grant Avenue, San Lorenzo, California 94580.
- 6. TIME SCHEDULES. Time schedules for achieving compliance which are required through a notice of violation, administrative or judicial order, or any other written correspondence from the District are deemed to be a condition of the permit.
- 7. SIGNATORY REQUIREMENT. All reports required by this permit shall be signed by an authorized representative of the permittee or his designee, as defined in Ordinance No. 39-6.
- 8. REVOCATION OF PERMIT. The permit issued to the user by the District may be revoked when, after inspection, monitoring or analysis, it is determined that the discharge of wastewater to the sanitary sewer is in violation of Federal, State or local laws, ordinances, or regulations. Additionally, falsification or intentional misrepresentation of data or statements pertaining to the permit application or any other required reporting form shall be cause for permit revocation.
- 9. LIMITATION OF PERMIT TRANSFER. Wastewater discharge permits are issued to a specific user for a specific operation and are not assignable to another user or transferable to any other location without the prior written approval of the District. Sale by a User shall obligate the purchaser to seek prior written approval of the District for continued discharge to the sewerage system and issuance of new permit.

### PART I

#### GENERAL

- 10. FALSIFYING INFORMATION OR TAMPERING WITH MONITORING EQUIPMENT.

  Knowingly making any false statement on any report or other document required by this permit, or knowingly rendering any monitoring device or method inaccurate may result in punishment in accordance with District Ordinance 39-6 or other applicable laws.
- 11. MODIFICATION OR REVISION OF THE PERMIT. The terms and conditions of this permit may be subject to modification by the District at any time as limitations or requirements as identified in the District Ordinance No. 39-6 are modified, or if other just cause exists.

This permit may also be modified to incorporate special conditions resulting from the issuance of a special order by an agency which regulates the District's discharge.

The terms and conditions may be modified as a result of Environmental Protection Agency promulgating a new federal pretreatment standard.

Any permit modifications which result in new conditions in the permit shall include a reasonable time schedule for compliance, if necessary.

- 12. **DUTY TO REAPPLY** Within thirty (30) days of the notification, the user shall reapply for reissuance of the permit on a form provided by the District.
- 13. SEVERABILITY The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provisions to other circumstances and the remainder of this permit shall not be affected thereby.
- 14. PROPERTY RIGHTS The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any invasion of personal rights, nor any infringement of Federal, State or Local regulations.
- 15 PERMIT DURATION The wastewater discharge permit will remain in effect for one year from the effective date of the permit. Users who are issued a wastewater discharge permit or renew a wastewater discharge permit shall pay the permit fee set forth in the current schedule of fees as adopted in the most current amendment to Ordinance No. 39-6.

### PART 2 DISCHARGE REQUIREMENTS

### 1. Maintenance of Pretreatment Equipment and Monitoring Systems

- a. The waste treatment system shall be kept in a fully operational condition at all times. This includes maintaining adequate chemical supplies for treating wastewater, proper calibrations of all instrumentation (pH meters, etc.) and proper removal of sludges and unacceptable wastes. A qualified operator of the system shall be available to maintain the pretreatment system during all discharge periods.
- b. The District shall be notified immediately if there are problems with the pretreatment system. Any proposed modifications to the system or the processes for pretreating the wastewater must be reviewed and approved by the District's Source Control Staff prior to implementation.

### 2. Discharge Limitations.

a. The wastewater discharge shall not contain constituents in excess of the following limits, and compliance with these units shall be demonstated at the sampling location specified in Part 3 of this Permit.

<u>Parameter</u>	<u>Symbol</u>	Limit for any one Sample
Parameter  Arsenic Cadmium Copper Cyanide Lead Mercury Nickel Selenium Silver	As Cd Cu Cn Pb Hg Ni Se Ag	0.8 mg/L 0.2 mg/L 0.5 mg/L 1.0 mg/L 1.0 mg/L 0.01 mg/L 1.0 mg/L 1.0 mg/L 1.0 mg/L 1.0 mg/L
Total Chromium Zinc T.I.C.H.* Phenolic compounds Oil and Grease (Miner Oil and Grease (Anima	Cr Zn al)	2.0 mg/L 3.0 mg/L 0.02 mg/L 70 mg/L 100 mg/L 300 mg/L
pH Temperature		No lower than 5.5 units No higher than 150° F

\*(T.I.C.H.: Total Identifiable Chlorinated Hydrocarbons)

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## PART 2 DISCHARGE REQUIREMENTS

- b) The permittee shall comply with all limits, prohibitions and requirements set forth in this permit and in Ordinance 39-6. Wastewater strength limits for constituents not listed above may be established based upon available treatment technology, existing wastewater conditions in the District's facilities or other factors as determined by the District.
- c) Should Federal Categorical Standards for a particular industrial category be more stringent than the limits set forth in this permit or ordinance, the more stringent Federal limits shall apply.
- 3. **DILUTION OR RYPASSING**No user shall increase the use of potable or process water or, in any way, attempt to dilute a discharge as a partial or complete substitute for adequate treatment to achieve compliance with the limitations contained in this permit. User shall not divert their wastestreams from the pretreatment systems.
- 4. PROPER DISPOSAL OF PRETREATMENT SLUDGES AND SPENT CHEMICALS

  The disposal of sludges and spent chemicals generated shall be done in accordance with all applicable State and Federal regulations. Copies of all Hazardous Wastes Manifests shall be maintained as part of the Records Retention Requirement Section 4.8 of Ordinance 39-6.

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## PART 3 REPORTING REQUIREMENTS

- 1. NOTICE TO EMPLOYEES In order that employees of user be informed of District requirements, users shall make available to their employees, copies of the Districts Discharge Regulations together with other wastewater information and notices which may be furnished by the District. User shall permanently post a notice advising employees whom to call in case of spill or accidental discharge. This notice shall be posted in a prominent place.
- 2. ACCIDENTIAL SPILL OR SLUG DISCHARGE The user shall notify the District immediately upon any accidental or slug discharge to the sanitary sewers as outlined in Ordinance No. 39-6 Section 2.12. Formal written notification discussing circumstances and remedies shall be submitted to the District within five days of the occurrence. The user shall work with the District to resolve any problems caused by such accidental or slug discharge. The District will evaluate the need for a spill prevention plan for all significant industrial users no less than once every two years. Should the District determine there is a need for spill prevention plan, the industrial user will be notified and required to submit such a plan to the District.
- 3. NOTIFICATION OF CHANGED DISCHARGE. The user shall promptly notify the District of any changes (permanent or temporary) to the premises, operation of the firm, quality or volume of wastewater, water usage, process, installation or removal of tanks or equipment prior to implementation.
- 4. NOTIFICATION OF UPSET. Any upset experienced by the user of any of its treatment processes that places the user in a temporary state of noncompliance with the wastewater discharge limitations contained in this permit or other limitations specified in the District's Ordinance shall be reported to the District within 24 hours of first awareness of the commencement of the upset. A detailed report shall be filed with the District within five days of the start of the upset.
- 5. PERIODIC REPORTS OF COMPLIANCE As required by 40 CFR 403.12, all significant industrial users, both categorical and non-categorical, must submit periodic reports of continued compliance to the District. These reports are due by June 30 and December 31 of each year. The content and format of these reports must be in compliance with EPA and District requirements.

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#### PART 3

### REPORTING REQUIREMENTS

### 6 (A) SELF MONITORING: GENERAL REQUIREMENTS

In addition to self monitoring required elsewhere in this permit, the following conditions must be met:

- 1. All samples and measurements must be representative of the wastestream and taken under normal discharging conditions when monitored pollutants are likely to be present. Samples collected to determine compliance with Federal point Source Wastewater Discharge limitations must be taken immediately downstream from the pretreatment facilities. If no pretreatment is performed the samples must be taken immediately downstream from the regulated process, before the process wastewater combines with sanitary or other diluting waterstreams (non-contact cooling water, boiler blowdown, etc.).
- 2. Sampling performed for periodic reports of continued compliance must be collected, processed, stored, analyzed and reported in compliance with EPA and District requirements.
- 3. All monitoring information and records must be retained for at least three years from the date of the sample, measurement, or report. This information must be made available for inspection and copying by District personnel or a District authorized representative upon request.
- 4. If self monitoring indicates a violation, the permittee must notify the District within 24 hours of becoming aware of the violation and must resample immediately. The results of the resample must be submitted to the District within 30 days after becoming aware of the violation. (40 CFR 403.12(g)(2)
- 5. Self monitoring required through a Notice of Violation, Administrative Order, or any other written correspondence from the District is deemed to be a condition of this permit.
- 6. If any pollutant is monitored more frequently than required by the District or Federal regulation, the results of this additional sampling must also be included in the Periodic Reports of Continued Compliance.

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## PART 3 REPORTING REQUIREMENTS

### 7. HAZARDOUS MATERIALS NOTIFICATION

- a. The permittee shall notify the District, the E.P.A., Regional Waste Management Division Director and the California Department of Health Services in writing, of any intentional or accidental discharge of a RCRA characteristic or listed hazardous waste or material. Notification must be made within 180 days after the discharge, and must include the name and E.P.A. hazardous waste number of the material, the type of discharge, (continuous, batch or other), an identification of the hazardous constituents of the waste, an estimate of the mass and concentration in the wastestream discharge during that calendar month.
- b. The Notification Requirement does not apply to pollutants already reported in periodic self-monitoring reports.

Revision Date: 05/11/92 Page 7 of 12

### PART 4

### PENALTIES AND FEES

SIGNIFICANT NON-COMPLIANCE Should the District determine that the permittee is in significant non-compliance with applicable pretreatment requirements, the District will list the facility in the Pubic Notice of Significant Wastewater Violations in the largest daily newspaper in the area. This list will be published annually, but may be published more frequently at the discretion of the District.

An industrial user is in significant non-compliance if one or more of the following violations occurs:

- a. Chronic violations of wastewater discharge limits, defined as those in which 66 percent or more of all of the measurements taken during a six month period exceed (by any magnitude) the daily maximum limit or the average limit for the same pollutant parameter.
- b. Technical Review Criteria (TRC) violations, defined as those in which 33 percent or more of all of the measurements for each pollutant parameter taken during a six month period equal or exceed the product of the daily maximum limit or the average limit multiplied by the applicable TRC (TRC=1.4 for BOD, TSS, fats, oil, and grease, and 1.2 for all other pollutants except pH.)
- c. Any other violation of a pretreatment effluent limit (daily maximum or longer-term average) that the District determines has caused, alone or in combination with other discharges, interference or pass through (including endangering the health of District personnel or the general public).
- d. Any discharge of a pollutant that has caused imminent endangerment to human health, welfare or to the environment or has resulted in the District's exercise of its emergency authority to halt or prevent such a discharge.
- e. Failure to meet, within 90 days after the schedule date, a compliance schedule milestone contained in a permit or enforcement order for starting construction, completing construction, or attaining final compliance.
- f. Failure to provide, within 30 days after the due date, required reports such as baseline monitoring reports, 90 day compliance reports, periodic self monitoring reports, and reports on compliance with compliance schedules.
- g. Failure to accurately report non-compliance.
- h. Any other violation deemed significant by the District.

## PART 4 PENALTIES AND FEES

2. CIVIL AND CRIMINAL LIABILITY

Any person who violates any requirements or conditions of this permit, Ordinance 39-6, an order of the District, or violates any cease and desist order, prohibition, effluent limitation, National Standard of Performance, pretreatment or toxicity standard shall be liable civilly for a penalty not to exceed \$25,000.00 for each day in which such violation occurs or continues. In addition to penalties, the District may recover reasonable attorney's fees and other expenses of litigation.

Any person who commits such violations is guilty of a misdemeanor and upon conviction is subject to criminal penalties of not more than \$25,000.00 and or imprisonment for not more than 30 days in the county jail.

Nothing in this permit relieves the permittee from civil and or criminal penalties for non-compliance under state or federal laws or regulations.

3. WASTEWATER CHARGES AND FEES. The User shall pay to the District all sewer service charges, permit fees, monitoring charges and laboratory analysis charges levied in accordance with current District Ordinances. All charges are due and payable upon receipt of statement of charges. Failure to pay fees within 30 days may result in revocation of wastewater discharge permit and termination of service. Overdue fees shall be assessed a 10 percent penalty plus interest of 1.5 percent per month until fees have been paid.

#### PART 5

### SPECIAL CONDITIONS - GROUNDWATER DISCHARGES

1. GENERAL The permittee shall provide easily accessible sampling points for both pre and post-treatment samples. The District reserves the right to sample at will for any constituents deemed necessary on water samples collected from either pre or post-treatment locations.

There shall be no bypassing of any treatment process or unit or direct discharge into the sewer system at any time.

The permittee assumes full responsibility for any and all damages including but not limited to the District property and equipment, the collection system and the Oro Loma/Castro Valley Treatment Plant.

2. PRE-PUMPING AND EMERGENCY NOTIFICATION The permittee shall notify the District's Industrial Waste Inspector at 276-4700 extension 149 no less than twenty-four(24) hours prior to commencement of any pumping activity and request an inspection of the site. No pumping shall occur until District staff have inspected the site, piping, pumping set-up, metering and discharge points.

In the event of any explosive condition or other potentially harmful situation which may affect either the collection system or the P.O.T.W., the permittee shall contact the District's Industrial Waste Inspector at 276-4700 immediately (operators are on duty 24 hours per day).

The Fire Department shall be notified of the clean-up operation.

If air stripping is part of the treatment process, the Bay Area Air Quality Control Board shall be notified of the process. If a permit is issued by the Air Board, a copy of that permit and subsequent extensions shall be submitted to the District.

3(A) PRE-DISCHARGE SAMPLING: Discharge to the District's sanitary sewer system will be authorized only after compliance with the discharge standards listed in 3(B) can be demonstrated.

Pre-discharge sampling shall be performed as follows: the water shall be pumped through the treatment system described in the permit application. The effluent shall then be pumped back into holding tanks.

Each batch shall be sampled and analyzed for zinc, TPH (g), and BTEX.

Further processing and discharge of the water will be allowed only after laboratory analysis demonstrates compliance with all discharge limits set forth in this permit.

### PART 5 Special Discharge - Groundwater Discharges

### 3(B) Sampling Requirements

### **Parameter**

### O.L.S.D. Limit

### Metals

Arsenic	0.8 mg/L
Cadmium	0.2 mg/L
Copper	0.5 mg/L
Lead	1.0 mg/L
Mercury	0.01 mg/L
Nickel	1.0 mg/L
Selenium	1.0 mg/L
Silver	0.8 mg/L
Total Chromium	2.0 mg/l
Zinc	3.0 mg/L

Additional Testing

Additional Footing		
Total Petroleum Hydrocarbons (EPA 8015)	15 mg/L	
B.T.E.X. (EPA 8020)	Non-detectable_	
Phenois	70 mg/L	
Cyanide	1.0 mg/L	

General Analysis

COD	N/A
Suspended Solids	N/A
рН	No lower than 5.5 units

# PART 5 Special Discharge - Groundwater Discharges

- 4. FLOW RATE The treated water shall be discharged at a rate not to exceed one tenth (1/10) of the capacity of the public sewer into which it drains.
- 5 POINT OF DISCHARGE The point of discharge to the District's sanitary sewer shall be established prior to discharge. The point of discharge may not be changed without prior authorization from the District. (See Attachment "A" Designated Point of Discharge)
- 6. **DISCHARGE ACTIVITIES** Permittee shall perform pumping activity in compliance with all applicable health and safety, OSHA and traffic control regulations.
- 7 INDEMNIFICATION Permittee indemnifies the District for any claims for damages to personal or private property or injuries incurred by individuals not employed by the District, arising out of, or in connection with the pumping activity authorized by this letter.
- 8. METERING The permittee must report the total volume of water discharged to the sanitary sewer. A meter with a non-resettable totalizer may be used for this purpose. The District may accept an estimate of the total volume to be discharge if provided with the calculations and description of how the estimate was determined.

The calculation must be approved prior to discharge. The District reserves the right to require metering in the event the estimate is not deemed acceptable.

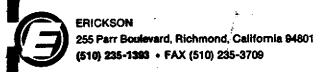
9. **BILLING AND PERMIT EXTENSIONS** The permittee shall pay all District fees for sampling, monitoring inspections, loading charges, as well as any other related District expenses billed prior to the expiration of this permit.

The District will not consider an extension of this permit until all fees and reimbursable costs have been paid to the permittee.

10 FEES An annual permit fee of \$ 420 is charged with the issuance and any subsequent renewals of this discharge permit.

Sewer service and use charges will be \$1.97 per thousand gallons of water discharged.

# APPENDIX E DISPOSAL DOCUMENTATION



### **NON-HAZARDOUS WASTE DATA FORM**

<u> </u>	
TO BE COMPLETED BY GENERATOR	ADDRESS JSDO GRANT ALC:  CITY, STATE DANLUV PUZD, CA 945 KO  CONTAINERS: No
TRANSPORTER	NAME ERICKSON JUC.  ADDRESS DSS PARR BLAD.  SERVICE ORDER NO. 768545  CITY, STATE, ZIP RICHMONC! CA. 94801  PHONE NO. 50) \$235-/393  TRUCK, LIMIT, LD. NO.  TYPED OR PRINTED FULL NAME & SIGNATURE  PAREY  LD. CAMMONISK MGB SPON  SERVICE ORDER NO. 768545  PICK UP DATE 6-24-96  TYPED OR PRINTED FULL NAME & SIGNATURE  EPA  LD. CAMMONISK MGB SPON  SERVICE ORDER NO. 768545  PICK UP DATE  6-24-96
TSD FACILITY	NAME REDYOOD HAACH IL TIC.  ADDRESS 8750 PENUMOOD HULL  CITY, STATE, ZIP NAVATO, CA. 94918  PHONE NO. 1410 872 - 2851  TYPED OR PRINTED FULL NAME & SIGNATURE  DATE  GEN OLD/NEW L. A. TONS TRANS S. B.  C/O RT/CD HWDF NONE DISCREPANCY

### **NON-HAZARDOUS WASTE DATA FORM**

•	NAME MCGRATA RENTE CORP			
	ADDRESS ZSSO G-RASZ AVE.			
,	CITY STATE ZIP SAN LUREN 70 CA PHONE NO. 1510 276-2626			
` <b>K</b>				
GENERATOR	CONTAINERS: No. ONE VOLUME 3, 500 GAL. WEIGHT			
Z ER	TYPE: TANK DUMP DRUMS CARTONS DOTHER VALUUM LRUCK			
GEI	WASTE DESCRIPTION WATER GENERATING PROCESS CLEAN OUT OF STORM DRY			
₽	COMPONENTS OF WASTE PPM % COMPONENTS OF WASTE PPM %			
	, Water			
Ä	2			
COMPLETED	7			
TO BE	*			
۲	PROPERTIES: pH (c. 1) SOLID			
	HANDLING INSTUCTIONS:			
	THE GENERATOR CERTIFIES THAT THE WASTE AS DESCRIBED IS 100%			
•	TOUR DATE TOURS TO			
٠,	EPA O			
	NAME ERICKSON, INC. DAIDIGIOFILLIGISIFIZ			
8	ADDRESS 255 PARR BLUD. SERVICE ORDER NO. 968518			
RANSPORTER	CITY, STATE, ZIP RICK UP DATE 6-20-96			
F A	PHONE NO. (5/0 2 35-1393 1)			
	TRUCK UNIT, ID. NO. 1 1 27 / 2 6 27 TYPED OR PRINTED FULL NAME & SIGNATURE DAME			
	EPA A			
	DISPOSAL METHOD			
_ ₹	ADDRESS 6880 5mm AVE LANDFILL GOTHER			
	CITY, STATE, ZIP Newark, CA 94560			
<b>*</b>	PHONE NO. 1-800 - 972-5284			
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TSD FACILITY	TYPED OR PRINTED FULL NAME & SIGNATURE DATE			
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