## TECHNICAL REPORT TANK CLOSURE

### UNDERGROUND FUEL TANK SITE R.T. NAHAS COMPANY PROPERTY

(Formerly Frank Tien Unocal 76 Service Station) 20405 Redwood Road Castro Valley, California 94546

For

R. T. Nahas Company

Prepared By:

Kenneth L. Meleen, P.E.

Life Springs Environmental, Inc.

Project Number 98041.1

February 18, 1999

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### TANK CLOSURE TECHNICAL REPORT

For

UNDERGROUND FUEL TANK SITE
R.T. NAHAS COMPANY PROPERTY
(Formerly Frank Tien Unocal 76 Service Station)
20405 Redwood Road
Castro Vailey, California 94546

### INTRODUCTION

This document describes the activities surrounding removal of two 10,000 gallon gasoline Underground Storage Tanks (UST's), a 300 gallon Waste Oil UST, two Hydraulic Hoists and a Clarifier Sump from the subject site. It also presents preliminary analytical data pertaining to excavated and stockpiled "backfill" material, and discusses potential remediation and reuse of this material.

The site is a former gasoline service station and automobile repair facility. A Regional Map showing the site in relation to adjacent roads and freeways, is presented as Figure 1. A Site Plan, Figure 2, shows the primary features of the site including UST and pump island locations. Areas of actual overexcavation are shown on the Excavation Plan, Figure 3. Locations of soil samples from the UST, hoist and sump removal operations are shown on the Site Sampling Plan, Figure 4. Locations of samples collected from the contaminated soil stockpile are shown on the Stockpile Sampling Plan, Figure 5.

Work performed was directed towards implementing a Revised Corrective Action Plan (RCAP) dated June 14, 1996, prepared by Philip Environmental Services Corporation of Emeryville, California (Project No. NHS101/16018.2001). This RCAP was reviewed in a March 9, 1998 letter from Scott Seery of the Alameda County Environmental Health Services (ACEHS), to Mr. Randy Nahas of the R.T. Nahas Company. Mr. Seery's comments and recommendations were incorporated into the Scope of Work as presented subsequently in the Project Work Plan prepared by *Life Springs Environmental*, *Inc.* and dated November 6, 1998.

This work was carried out in accordance with the guidelines of Alameda County Environmental Health Services, Environmental Protection Division (ACEHS), the State of California publication "Leaking Underground Fuel Tank (LUFT) Field Manual: Guidelines for Site Assessment, Cleanup, and Underground Tank Closure" and the San Francisco Bay Regional Water Quality Control Board (RWQCB) document "Regional Board Staff Recommendations for Initial Evaluation and Investigation of Underground Tanks."

### REGULATORY AGENCY GUIDANCE

The March 9, 1998 ACEHS letter reviewed 4 documents that provided background on soil and groundwater conditions on the property, and which recommended specific corrective action work tasks for previously detected soil and groundwater contamination. Mr. Seery presented arguments for limiting the amount of contaminant "chasing" in soil and groundwater, supporting instead a less extensive magnitude and extent of cleanup activities, based upon the risks identified in the Risk Based Corrective Action (RBCA) studies.

Mr. Seery's letter directed that "Soil which may prove [to be] a future source of substantial groundwater degradation ... is to be excavated during UST post-closure activities," to the extent that doing so "may be accomplished in a cost-effective manner." He indicated that gasoline saturated soils, at a minimum, were to be removed, but the scope of overexcavation was to be limited to zones immediately surrounding the UST pits, the pump islands, and along the vent and product pipeline trenches. He also suggested that the requirement for and location of any new monitoring well(s) should be determined after UST closures and soil overexcavation have been completed. He anticipated that several existing wells that were within the planned overexcavation area could be abandoned by removal during the overexcavation phase. However, the actual overexcavation did not reach the two monitoring wells east of the primary UST pit (MW-2 and MW-3), and the issue of monitoring well destruction is yet to be resolved.

### **EXECUTIVE SUMMARY**

The Closure Plan, Work Plan, Health and Safety Plan and the UST removal fee were submitted to the ACEHS November 6, 1998. These documents were approved, the requisite Alameda County Fire Department permit was secured, and preparatory work began on November 16, 1998. The three UST's were removed and transported to ECI in Richmond, California on November 18, 1998. The UST Certificates of Destruction were received February 18, 1999.

A field photoionization detector (PID) was used periodically to monitor hydrocarbon concentrations as the excavation progressed. Overburden material from the primary UST pit was sampled (4 samples composited) on November 17, 1998 and submitted for analysis on a rapid turnaround basis. This sample was determined to be impacted with TPHG (1,700 ppm), Toluene (27 ppm), Ethyl Benzene (42 ppm) and Xylenes (200 ppm), but there was no detectable Benzene. Subsequent sampling and analysis of the contaminated soil stockpile at 1-foot (12/2/98) and 3-foot (12/15/98) depths, indicated no detectable TPHG, MTBE or Benzene. These results indicate that hydrocarbons adsorbed to this granular soil will rapidly volatilize, and remediation by aeration is an appropriate treatment method prior to reusing this material as backfill.

Analysis of soil samples collected from the main gasoline tank UST excavation, along product delivery lines, and at the pump islands indicate minor gasoline contamination (TPHG < 100ppm) remains in the semi permeable soil strata at a 12-foot depth on the periphery of the main excavation. Moderate gasoline contamination (TPHG - 410 ppm) remains at shallow depth in native soil below the south end of the westerly product delivery line. This material should be removed and remediated by aeration, after which it may be reused as backfill.

Soil samples also were collected from beneath the waste oil tank and clarifier sump. Analytical results indicated that at 8-feet below ground surface (BGS), the soil below the waste oil tank is impacted with petroleum hydrocarbons as diesel (TPHD - 270 ppm), as well as Oil and Grease (TOG - 2300 ppm). At a depth of 4.5 feet BGS, soil below the clarifier sump also is impacted with TPHD (120 ppm) and TOG (96 ppm). No significant chlorinated hydrocarbon concentrations (Halogenated Volatile Organics or Semivolatile Organics - EPA 8240A and 8270A analytes) were detected in either the waste oil or clarifier sump samples, and the concentrations of LUFT Metals (Cd, Cr, Pb, Ni and Zn) were well below allowable State Total Threshold Limit Concentrations (TTLC's).

At a depth of 8.5-feet BGS below the westerly hydraulic hoist, TPHD was detected at 1000 ppm [Note: hydraulic fluid also was detected at 2000 ppm, but this is a non-regulated product]. There was no TPHD or hydraulic fluid detected below the easterly hydraulic hoist. These results indicate a moderate amount of soil from the vicinity of the waste oil tank, the clarifier sump and the westerly hydraulic hoist should be excavated and disposed at an appropriately regulated landfill.

In the week following UST removal, the concrete slabs and foundations of the building, fueling area and pump islands were broken up and hauled to a recycling facility. Aggregate Base in a quantity roughly equal (in weight) to that of the concrete removed, was imported. This material was placed in the primary UST excavation in layers, and compacted with a "sheepsfoot" roller attached to the backhoe arm. This pit has been backfilled to within about 5-feet of adjacent ground surface. Further compaction with a self propelled, vibratory compactor is contemplated.

The two hydraulic hoists and a clarifier sump located in the service bay were removed November 19, 1998. The hydraulic hoists were drained of oil, and the clarifier sump was pumped out; this material was disposed by a licensed hazardous liquid hauler, as hazardous waste. The hydraulic hoists were disposed as scrap metal. The concrete clarifier structure was removed intact, then broken up and disposed with the other concrete rubble. The sanitary sewer pipe leading from the clarifier sump was fitted with an elbow and riser pipe, so that its location is clearly marked.

The Alameda County Environmental Health Services will be requested to render a decision regarding retention or closure of each of the site monitoring wells.

### KEY CONTACTS

The following is a listing of current owner and other contact persons relative to this work.

Current Property Owner:

R.T. Nahas Company, Randall E. Nahas, President

20630 Patio Drive

Castro Valley, California 94546

Phone: (510) 538-9600

R. T. Nahas Company UST Removal - TECHNICAL REPORT LSE Project Number 98041.1

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Contractors Lic. No. 709780 w/Hazardous Materials Certificate Registered Civil Engineer No. C 17487 (License Expires 6/30/01)

Local Implementing

Alameda County Environmental Health Services

Agency (LIA): Environmental Protection Division (Contact: Scott Seery)

1131 Harbor Bay Parkway, Suite 250

Alameda, CA 94502-6577 Phone: (510) 567-6700

### SITE DESCRIPTION

The subject property is a 0.37 acre parcel situated on the west side of Redwood Road, immediately north of a major shopping center (Anchor Tenant - Safeway) located northwest of the intersection of Redwood Road and Castro Valley Blvd. Site location is shown on the attached Regional Map, Figure 1.

The site was formerly an active Unocal Service Station and Automobile Repair Facility, built in 1964. The buildings were demolished, and fuel dispensers were removed in the summer of 1997. The three UST's, building foundation remains and concrete slabs, the pump islands, concrete covering the UST's, storm drainage facilities and monitoring wells were the primary features remaining on the site, but these have all been removed. A chain link security fence with two locked gates surrounds the property. The Site Plan, Figure 2, shows these site features.

The two larger UST's were installed in 1964, and it is likely that the smaller waste oil tank was installed about the same time. Of the two 10,000 gallon UST's, one stored unleaded regular gasoline, and the other stored unleaded premium gasoline.

A surface drain inlet on the northern side of the property discharges into the drainage system for the adjacent car wash to the west, which reportedly drains into the sanitary sewer system. Drain inlets on the south side of the property and within the alley south of the site are believed to drain into storm drain pipes flowing easterly and discharging into the storm drain system beneath Redwood Road. The nearest watercourse is Cull Creek, located about 0.9 miles east of the site.

#### WORK PERFORMED

The following is a description of the work tasks completed:

#### **Permits**

A one time EPA Identification Number was obtained. The State Board of Equalization (BOE) was contacted, and it was determined that the BOE number appearing on a previously existing



(August 1997) Form A was the appropriate number to be used for this UST case. A Permit Application and Work Plan dated November 6, 1998 were submitted to the Alameda County Environmental Health Services. A Health and Safety Plan, and the required fee also were submitted to the ACEHS. After the ACEHS permit was issued, additional fees were paid, and the requisite permit from the Alameda County Fire Department (ACFD) was obtained. Copies of the ACEHS permit and the ACFD permit are presented in **Appendix A**.

### Notification

The UST locations were marked on adjacent pavement, using white spray paint. Underground Service Alert (USA) was then notified so that its member public and private agencies could mark underground Public Utilities in the vicinity of the property and UST's. Bay Area Air Quality Management District (BAAQMD) also was notified of the pending excavation and soil remediation activity. A copy of the BAAQMD notification is presented in **Appendix B**.

### Tankpull Preparatory Work

Perimeter warning signs and barricades to alert the public and to keep traffic away from the work area were installed. Warning signs ("No Smoking" signs) were placed within 25-feet of the UST excavation. We verified that all electrical power to the tank site had been disconnected. Excavation boundaries were marked with spray paint, and pavement along these lines was cut with a diamond saw. Concrete and asphalt pavement above the tanks, at the pump islands and over the vent pipes was then broken up and stockpiled.

The UST fill and vent pipes, product delivery and vent lines were then exposed, disassembled and removed in such a manner that all fluid remaining in the lines drained back into the UST. Excavation continued, exposing the top and sides of the UST's.

### Groundwater Control and Tank Pumping

As the "backfill" material was being excavated, groundwater began to collect in the bottom of the excavation. Accumulated groundwater was pumped out on November 17, 1998, the day before UST removal. The waste oil UST and the two hydraulic hoists also were pumped out at this time. Total quantity of groundwater and product pumped was 650 gallons.

Additional groundwater accumulated in the excavation after UST removal. On the advice of Scott Seery of ACEHS, a second "pumpout" of the excavation was performed on Friday November 20, 1998, before any backfill material was placed. This second "pumpout" resulted in another 425 gallons of groundwater being removed, transported and disposed. Copies of the Manifests for groundwater and product transport and disposal are presented in Appendix C.

#### Monitoring Well Abandonment

It turned out that MW-2 and MW-3 were at least 5-feet east of the main UST excavation, and Mr. Seery indicated that no expansion of this excavation was necessary. Therefore, these two monitoring wells were left intact. MW-4 near the waste oil UST, also remains in place and serviceable.

425 gals

### Tank Removal

Prior to UST removal, 300 lbs of dry ice was placed in each of the 10,000 gallon UST's, and 50 lbs of dry ice was placed in the waste oil UST. A Gastech Instrument was used to monitor the Oxygen level  $(O_2)$  and Lower Explosive Limit (LEL) within the tanks, to verify that the target levels (less than 10% in each case) for  $O_2$  and LEL (per ACFD Requirements) had been achieved.

After confirming that the LEL and O<sub>2</sub> levels were suitably lowered, Scott Seery of the ACEHS authorized UST removal. A crane lifted the two larger UST's from the excavation, and the backhoe removed the smaller waste oil UST. The tanks were placed on the adjacent pavement and rolled slightly back and forth, cleaned of adhering soil, and inspected for holes. Some pitting was noted in the larger tanks, but no holes were observed. The waste oil UST had several small holes. The tanks were measured and photographed, then loaded aboard the Ecology Control Industries (ECI) transport trucks and properly secured. A manifest was prepared and signed by the property owner. The UST's, appurtenant pipes and fittings were transported and disposed at ECI's Richmond facility. Copies of the UST Manifests and Certificates of Destruction are presented in Appendix D.

### Soil Sampling and Analysis

At the direction of the ACEHS Inspector, soil samples were collected from each corner of the large excavation, at 11½ to 12-foot depths. A sample also was collected from the pit interior at a 13-foot depth. At the southeast corner of the large pit, the backhoe was used to undercut into the base of the sidewall, allowing a soil sample to be collected from about 3-feet east of the sidewall face (Sample: PITSE+3-12'). Samples also were collected from beneath the waste oil UST, the dispenser islands, and at specified intervals along the product delivery pipeline routes. The following day, soil samples were collected from beneath the clarifier sump, and from beneath each hydraulic hoist. Soil sample locations are shown on the Site Sampling Plan, Figure 4.

Soil samples were collected by excavating a fresh scoop of soil from the appropriate location, then pressing a 2-inch diameter by 6-inch long brass sleeve into this bucket of native soil until the sleeve was completely filled. Sleeve ends were capped with aluminum foil and tightly fitting plastic caps. All samples were collected by a State registered Civil Engineer. Samples were labeled as to project name and number, sample location and depth, date and time of collection, and sampler ID. Sample data was entered onto a Chain of Custody (COC) document, and the samples were placed in a cooler on ice, pending transport to the analytical laboratory.

Soil samples from the main UST excavation, pump islands, and pipeline runs were analyzed for TPHG/BTEX and Methyl tert-Butyl Ether (MTBE) using EPA Method SW846 8020A Nov 1990 /8015 Mod. Soil samples from beneath the waste oil UST and the clarifier sump were analyzed for TPHG/BTEX/MTBE, and additionally for Total Petroleum Hydrocarbons as Diesel (TPHD-EPA 8015M), LUFT Heavy Metals (Cd, Cr, Pb, Ni, and Zn - EPA 6010A), Halogenated Volatile Organics (HVOC's) by GC/MS (EPA 8240A), Oil and Grease (TOG - EPA 5520 E&F), and Semi-Volatile Organics (B/NA's - EPA Method 8270A). Soil samples from below the hydraulic hoists were analyzed for Total Extractable Petroleum Hydrocarbons (TEPH - diesel and hydraulic fluid) using EPA Method 8015M.

All samples were analyzed by Chromalab, Inc., a California certified hazardous materials analytical laboratory. Analytical results for the initial group of samples (including PID results) are summarized on **Table 1**. A copy of **Table 1** also appears opposite the **Site Sampling Plan**, Figure 4.

At the time of UST removal, groundwater in the pit bottom had not collected in sufficient quantity for sample collection. Mr. Seery did not require groundwater sampling or analysis. A copy of Mr. Seery's November 18, 1998 Field Inspection Report is presented in **Appendix E**.

### Overexcavation/Stockpiling

After the tanks were removed and transported from the site, we continued with overexcavation of all loose granular "backfill" material in the main excavation. All excavated material was placed in a "contaminated soil" stockpile along the northerly property boundary. This stockpile is underlain, as well as covered, with 6-mil plastic held in place with wood pallets. As mentioned previously, Mr. Seery did not indicate that the excavation should be expanded to "chase" low level contaminants in soil beneath a significant layer of clean overburden material. The estimated quantity of stockpiled material is about 175 cubic yards.

### Concrete Demolition

Stomper Company was contracted on November 19, 1998 to bring equipment to the site to break up the concrete slabs and footings. Additional concrete breaking was performed using a hydraulic ram attached to the backhoe. Broken concrete was stockpiled, then loaded into George Maciel Trucking, Inc. trucks and hauled to La Vista Quarry for recycling. The trucks returned with Class 3 aggregate base used for backfill. Total amount of concrete hauled was 168 tons, and total amount of aggregate imported was 364 tons. Considering that material required to replace the volume of the UST's removed is about 175 tons, there was an import excess of about 21 tons.

### **Backfill**

The imported granular material was placed in layers at the bottom of the excavation, and compacted by rolling with a sheepsfoot roller attached to the backhoe. This brought the level of backfill in the main pit to within about 5-feet of adjacent ground surface. After remediation, the excavated soil will be placed in 6-8 inch layers, conditioned with water as necessary to aid compaction, and compacted with a Bomag compactor. Additional Class 3 aggregate base may be imported to bring all site areas up to uniform grade. Soil backfill will be compacted as necessary to achieve a dry density equal to at least 90 percent of the maximum test value determined using ASTM Test Method D1557. Compaction testing will be performed intermittently throughout the final backfill placement process.

### Soil Stockpile Analysis

The "contaminated soil" stockpile was initially sampled on December 2, 1998. Twelve samples were collected, each from a depth of about 1-foot, at various locations within the stockpile. These were composited in the laboratory into three samples for analysis, and analyzed for TPHG/BTEX/MTBE, and for Lead (EPA 3050A/7420A). One sample composite was selected for additional analysis for Halogenated Volatile Organics (HVOC's - EPA 8240A).

"Composite" = stock pile sample

Initial analyses indicated no detectable TPHG or Benzene. Thinking that the upper zone of the stockpile had possibly volatilized off most of the adsorbed hydrocarbons, we sampled the stockpile again on December 15, 1998. Again, 12 samples were collected, but this time from a 3-foot depth. As before, these were composited into three samples for analysis, and analyzed only for TPHG/BTEX/MTBE.

### Resurfacing

The owner has indicated that plans for future development of this property have not been finalized, and that repaying at this time would be counterproductive. Therefore, the surface will be restored to uniform grade using aggregate base.

### Monitoring Well Installation

None of the monitoring wells were destroyed, so we do not believe any additional well installations are necessary. The need for and location of any monitoring wells will be at the discretion of ACEHS personnel.

### RESULTS

### Gasoline UST Sample Analytical Results

The <u>composited</u> sample collected the day before UST removal had significant TPHG (1700 ppm), and minor levels of Toluene (27 ppm), Ethyl Benzene (42 ppm) and Xylenes (200 ppm), but no detectable Benzene.

All of the main pit bottom samples had low levels of TPHG (Range: 2.6 - 47). The deeper interior sample had only 14 ppm of TPHG, while there was a slightly higher result for the sample located 3-feet east of the southeast corner (TPHG at 100 ppm). Benzene was detected in only one of these samples (PIT NW 12' - 0.088 ppm). Toluene concentrations ranged from 0.005 to 1.8 ppm; Ethyl Benzene from 0.11 to 2.6 ppm, and Xylenes from 0.5 to 14 ppm.

Most trench samples had no detectable TPHG, BTEX compounds or MTBE. One exception was the north end of the west trench (Sample WLNW-2') where MTBE was detected at 0.018 ppm. The other exception was at the south end of the west trench where TPHG was detected at 410 ppm, Benzene at 3.6 ppm, and the other analytes at trace levels.

Analytical results for the initial group of samples (including PID results) are summarized on Table 1. A copy of Table 1 also appears opposite the Site Sampling Plan, Figure 4. Analytical Results and the related COC documents are presented in Appendix F.

### Waste Oil UST/Clarifier Sump Analytical Results

The sample from below the waste oil tank had no TPHG, Benzene or MTBE. The other three BTEX compounds were detected at trace concentrations. TPHD was detected at 270 ppm, and TOG at 2300 ppm. No EPA 8240 analytes were detected, but there were several trace "hits" in the EPA 8270 analysis (Phenanthrene - 0.10 ppm, Fluoranthene - 0.17 ppm, Pyrene - 0.22 ppm, and BIS (2-Ethylhexyl) Phthalate - 0.60 ppm).

The sample from below the clarifier sump had no detectable TPHG, BTEX compounds or MTBE. TPHD was detected at 120 ppm and TOG at 96 ppm.

Waste oil UST and clarifier sump sample analytical results are summarized on **Table 1**. A copy of **Table 1** also appears opposite the **Site Sampling Plan**, **Figure 4**. Analytical results and the related COC are included in **Appendix F**.

### Hydraulic Hoist Analytical Results

The west hoist had apparently been leaking, and had been closed down. The sample from below this hoist had TPHD at 1000 ppm and Hydraulic Fluid at 2000 ppm. No TPHD or Hydraulic Fluid was detected in the sample from below the east hoist.

Hydraulic hoist sample analytical results are summarized on **Table 1**. A copy of **Table 1** also appears opposite the **Site Sampling Plan**, **Figure 4**. Analytical results and the related COC are included in **Appendix F**.

### Soil Stockpile Analytical Results

Analytical results from the initial set of soil stockpile samples indicated no TPHG, MTBE, Lead or HVOC's, and only trace concentrations of Ethyl Benzene (9.9 - 24 ppm) and Xylenes (19 - 280 ppm). The absence of TPHG and Benzene was noted.

Results from the second set of soil stockpile samples again indicated no detectable TPHG, MTBE or Benzene; only trace concentrations of Toluene (4.4 - 5.6 ppm), Ethyl Benzene (6.6 - 9.0 ppm) and Xylenes (4.3 - 73 ppm) were detected. These results are summarized on Table 2. A copy of Table 2 also appears opposite the Stockpile Sampling Plan, Figure 5. Analytical results and the related COC are presented in Appendix G.

### CONCLUSIONS AND RECOMMENDATIONS

The reported release of petroleum hydrocarbons at this site appears to have impacted primarily the granular "backfill" material surrounding the two 10,000 gallon UST's. The most severely impacted material has been excavated and is presently stockpiled, awaiting favorable weather so that remediation can be pursued. Impacted soil from the south end of the west trench should be excavated and remediated; a confirmation soil sample should be collected from the bottom of this excavation, and analyzed for TPHG/BTEX.

Soil proximate to the waste oil UST, the clarifier sump and the west hoist is impacted with long chain petroleum hydrocarbons that do not remediate readily by aeration. These zones should be excavated, and the material transported and disposed as hazardous waste at a properly permitted facility. When excavation has reached a depth where soil appears to be "clean," confirmation samples should be collected. These samples should be analyzed for TPHD and TOG, with the results either confirming that all contaminated soil has been removed, or that additional excavation is necessary. The excavation/sample analysis process should be repeated, if necessary.

Based upon the two initial episodes of stockpile sampling and analysis, it appears that soil remediation by aeration is a viable method applicable to these granular soils. This method requires the soil to be placed in thin beds and rototilled or mixed as necessary to achieve total volatilization of hydrocarbons. Since the scheduling of the UST removal and subsequent stockpile sampling extended the work into mid December, with winter weather more likely than not, soil remediation has been postponed until at least March, 1999, when more favorable weather conditions may be expected. This process will adhere to the guidelines of the BAAQMD, which limit amount of soil being processed at one time. The capacity of the equipment being used, and the amount of site space available for this purpose also may limit the rate of soil processing.

Detection of petroleum hydrocarbons in the area of the waste oil UST suggests that MW-4 should be retained and monitored for several more episodes, to ascertain the post-UST removal quality of groundwater in the vicinity of this UST. Likewise, MW-2 and MW-3 remain intact (the surface enclosures need to be repaired or replaced), and these two wells should be included in followup groundwater monitoring episodes. A formal decision from the ACEHS is requested in this regard.

Soil remediation and final site grading will proceed as soon as the winter weather pattern has abated, and weather conditions more compatible with soil aeration operations can be anticipated. A supplemental report will be prepared upon completing additional soil excavation and disposal, remediation of impacted "backfill" material, and completion of final site grading.

Life Springs Environmental, Inc. presents this Technical Report as an interim document describing activities related to the tank removal project which have been completed to date. Any questions or comments regarding this Report should be addressed to the undersigned at (408) 244-7202.

Report prepared by:

Life Springs Environmental, Inc.

Kenneth L. Meleen Registered Civil Engineer Number C 17487 License Expires 6/30/01



### **TABLES**

- **TABLE 1.** Laboratory Analytical Results UST Soil Samples
- TABLE 2. Laboratory Analytical Results Stockpile Soil Samples

TABLE 1
LABORATORY ANALYTICAL RESULTS - UST SOIL SAMPLES
R.T. NAHAS COMPANY UST REMOVAL PROJECT

20405 Redwood Road Castro Valley, California

			Laboratory Analytical Results (mg/Kg)								
Sample Description	Sampling	PID Result	TPHG	Benzene	Toluene	Ethyl	Total	MTBE	TPHD	TOG	Pb
	Date	(ppm)		=		Benzene	Xylenes				
Composite from Excav.	11/17/98		1700	<6.2	27	42	200				6.3
Exc. Center 4'	11/17/98	162									
WO-8	11/18/98		<1.0	<0.005	0.0061	0.027	0.079	<0.005	270	2300	9
Exc. West End 9	11/18/98	1000									
Exc. Between Tanks 31	11/18/98	27									
PIT NE COR 12'	11/18/98		47	<0.62	<0.62	0.74	3.4	<0.62			
PIT NE BOT 13'	11/18/98		14	<0.62	<0.62	<0.62	<0.62	<0.62			
PIT SE 12'	11/18/98		31	<0.62	1.8	<0.62	3.0	<0.62			
PIT SE+3' - 12'	11/18/98	165	100	<2.5	<2.5	2.6	14	<2.5			
PIT West Center 11	11/18/98	234									
PIT SW 11.5'	11/18/98		22	<0.62	<0.62	<0.62	3.0	<0.62			
PIT NW 12'	11/18/98		2.6	0.088	0.0054	0.11	0.52	0.014			
WLNW - 2'	11/18/98		<1.0	<0.005	<0.005	<0.005	<0.005	0.018			
WLJ - 2'	11/18/98		<1.0	<0.005	<0.005	<0.005	<0.005	<0.005			
WIS S - 2'	11/18/98		410	3.6	11	12	72	0.80			
WIS N - 2"	11/18/98		<1.0	<0.005	<0.005	<0.005	<0.005	< 0.005			
EJ - 2'	11/18/98		<1.0	<0.005	<0.005	<0.005	<0.005	<0.005			
EIS S - 2'	11/18/98		<1.0	<0.005	<0.005	<0.005	<0.005	<0.005			
EIS N - 2'	11/18/98		<1.0	<0.005	<0.005	<0.005	<0.005	<0.005			
CJ - 2'	11/18/98		<1.0	<0.005	<0.005	<0.005	<0.005	<0.005			
West Hoist 8.5'	11/19/98	870							1000*		
East Hoist 8.51	11/19/98	27							<1.0**		
Sump - 4.5'	11/19/98		<1.0	< 0.005	<0.005	<0.005	<0.005	<0.005	120	96	7.9

<sup>\*</sup> West Hoist also had 2000 mg/Kg Hydraulic Oil

<sup>\*\*</sup> East Hoist had no detectable TPHD (<1.0 mg/Kg) or Hydraulic Oil (<50 mg/Kg)

### TABLE 2 LABORATORY ANALYTICAL RESULTS STOCKPILE SOIL SAMPLES

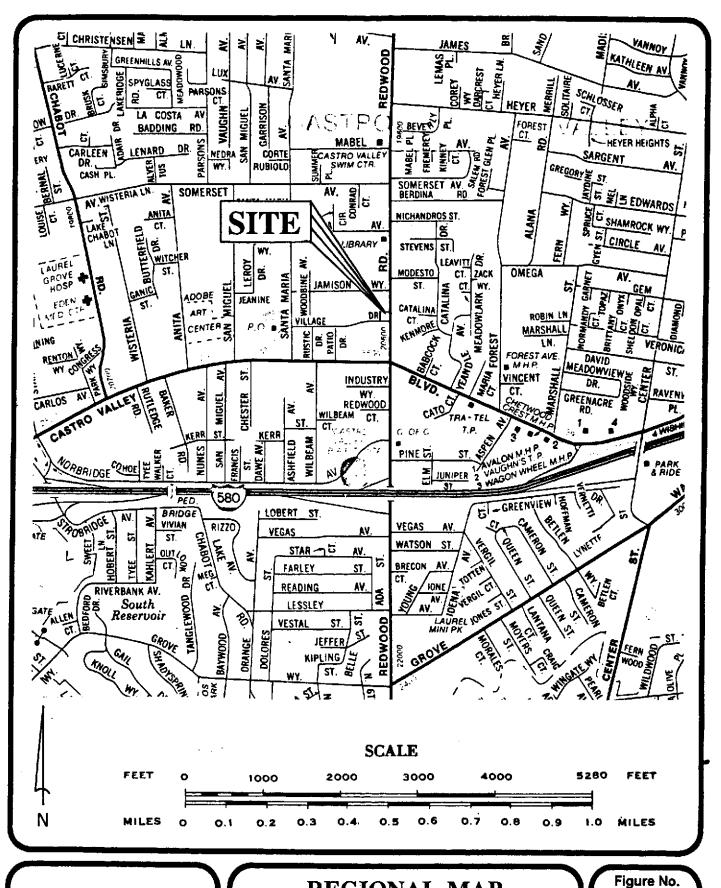
### R.T. NAHAS COMPANY UST REMOVAL PROJECT

20405 Redwood Road Castro Valley, California

		Laboratory Analytical Results (mg/Kg)						
Sample Description	Sampling	TPHG	Benzene	Toluene	Ethyl	Total	MTBE	Pb
_	Date				Benzene	Xylenes		
Stockpile - West:								
0+10\$				,				
0+20S								
0+10N								
0+20N	12/02/98	<40	<2.5	<2.5	<2.5	19	<2.5	<5.0
Stockpile - Center								
0+30S								
0+40S								
0+30N								
0+30S	12/02/98	<40	<2.5	<2.5	9.9	100	<2.5	<5.0
Stockpile - East:								
0+55S								
0+70S	1							
0+55N								
0+70N	12/02/98	<100	<6.2	<6.2	24	280	<6.2	<5.0
Stockpile - West								
0+10S-2								
0+15S-3								
0+25TOP+3								
0+30N-3	12/15/98	<50	<3.1	<b>31</b>	<3.1	4.3	<3.1	
Stockpile - Center:								
0+35TOP-3	İ							
0+42S-3								
0+45N-3		:						
0+50TOP-3	12/15/98	<50	<3.1	5,6	9	51	<3,1	
Stockpile - East:								
0+60N+3								
0+65N-3								
0+62S-3								
0+72S-3	12/15/98	<50	<31	4.4	6.6	73	<3.1	

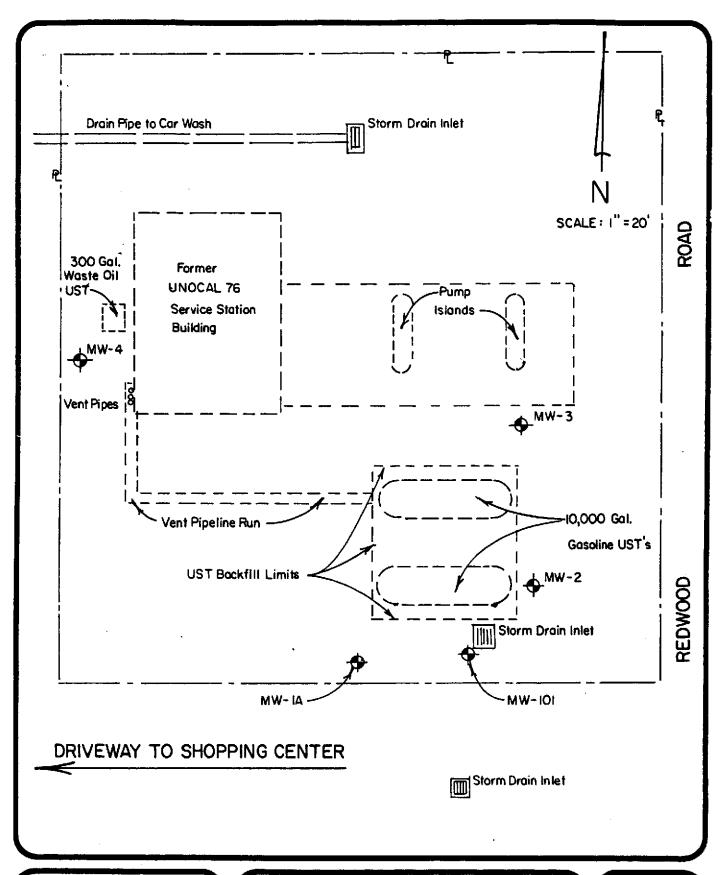
### **FIGURES**

- FIGURE 1. REGIONAL MAP
- FIGURE 2. SITE PLAN
- FIGURE 3. EXCAVATION PLAN
- FIGURE 4. SITE SAMPLING PLAN
- FIGURE 5. STOCKPILE SAMPLING PLAN



### REGIONAL MAP R.T. NAHAS COMPANY UST SITE

20405 Redwood Road Castro Valley, California 1 98041.1 Project No.



SITE PLAN R.T. NAHAS COMPANY UST SITE

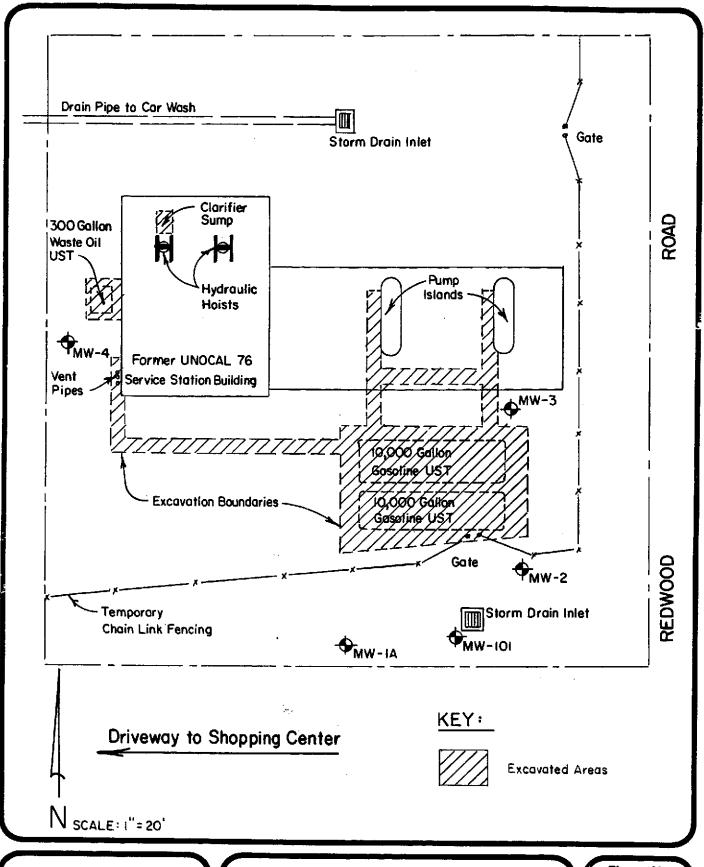
> 20405 Redwood Road Castro Valley, California

Figure No.

2

98041.1

**Project No** 



### EXCAVATION PLAN

R.T. NAHAS COMPANY UST SITE

20405 Redwood Road Castro Valley, California Figure No.

3

98041.1 Project No.

### TABLE 1

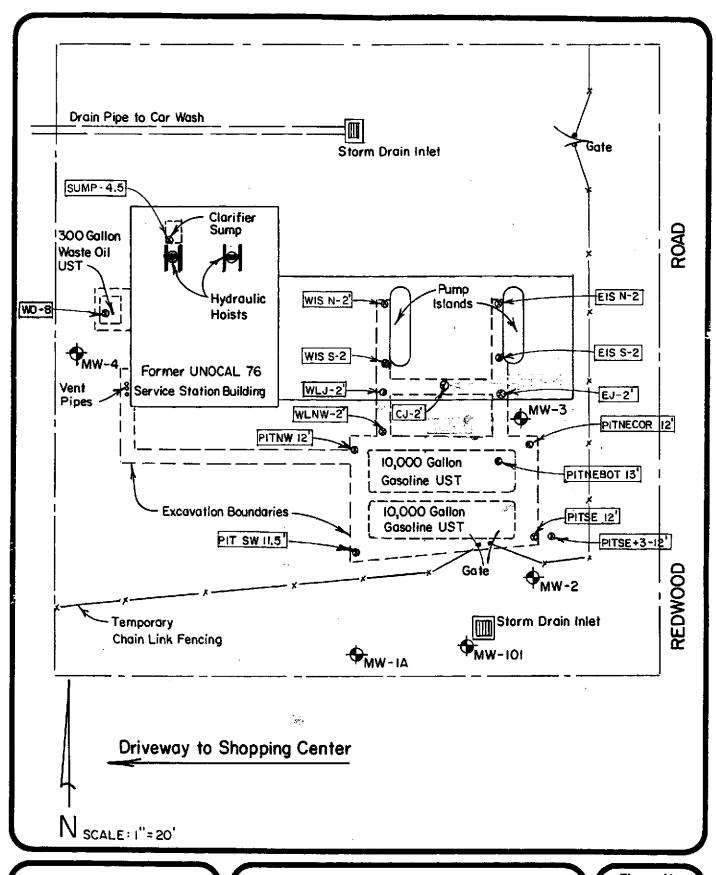
### LABORATORY ANALYTICAL RESULTS - UST SOIL SAMPLES R.T. NAHAS COMPANY UST REMOVAL PROJECT

20405 Redwood Road Castro Valley, California

		1	Laboratory Analytical Results (mg/Kg)								
Sample Description	Sampling	PID Result	TPHG	Benzene	Toluene	Ethyl	Total	MTBE	TPHD	TOG	Pb
	Date	(ppm)				Benzene	Xylenes				
Composite from Excav.	11/17/98		1700	<6.2	27	42	200				6.3
Exc. Center 4	11/17/98	162									
WO-8	11/18/98		<1.0	<0.005	0.0061	0.027	0.079	<0.005	270	2300	9
Exc. West End 9	11/18/98	1000									
Exc. Between Tanks 3'	11/18/98	27									
PIT NE COR 12'	11/18/98		47	<0.62	<0.62	0.74	3.4	<0.62			
PIT NE BOT 13'	11/18/98		14	<0.62	<0.62	<0.62	<0.62	<0.62			
PIT SE 12'	11/18/98		31	<0.62	1.8	<0.62	3.0	<0.62			
PIT SE+3' - 12'	11/18/98	165	100	<2.5	<2.5	2.6	14	<2.5			
PIT West Center 11	11/18/98	234									
PIT SW 11.5'	11/18/98		22	<0.62	<0.62	<0.62	3.0	<0.62			
PIT NW 12'	11/18/98		2.6	0.088	0.0054	0.11	0.52	0.014			
WLNW - 2'	11/18/98		<1.0	<0.005	<0.005	<0.005	<0.005	0.018	·		
WLJ-2	11/18/98		<1.0	≪0.005	≪0.005	<0.005	<0.005	<0.005			
Wiss-4	11/18/98		410		11	12	72	0.80			**************************************
WIS N - 2'	11/18/98		<10	<0.005	<0.005	<0.005	<0.005	<0.005			
EJ - 2'	11/18/98		<1.0	<0.005	<0.005	<0.005	<0.005	<0.005			
EIS S - 2'	11/18/98		<1.0	<0.005	<0.005	<0.005	<0.005	<0.005			
EIS N - 2'	11/18/98		<1.0	<0.005	<0.005	<0.005	<0.005	<0.005		••••	
CJ+2'	11/18/98		<1.0	<0.005	<0.005	<0.005	<0.005	<0.005			
West Hoist 8.5'	11/19/98	<b>8</b> 70		· · · · · · · · · · · · · · · · · · ·					1000*		
East Hoist 8.5'	11/19/98	27							31.0		
Sump - 4.5'	11/19/98		<1.0	< 0.005	<0.005	<0.005	<0.005	<0.005	120	96	7.9

<sup>\*</sup> West Hoist also had 2000 mg/Kg Hydraulic Oil

\*\* East Hoist had no detectable TPHD (<1.0 mg/Kg) or Hydraulic Oil (<50 mg/Kg)



### SITE SAMPLING PLAN R.T. NAHAS COMPANY UST SITE

20405 Redwood Road Castro Valley, California Figure No.

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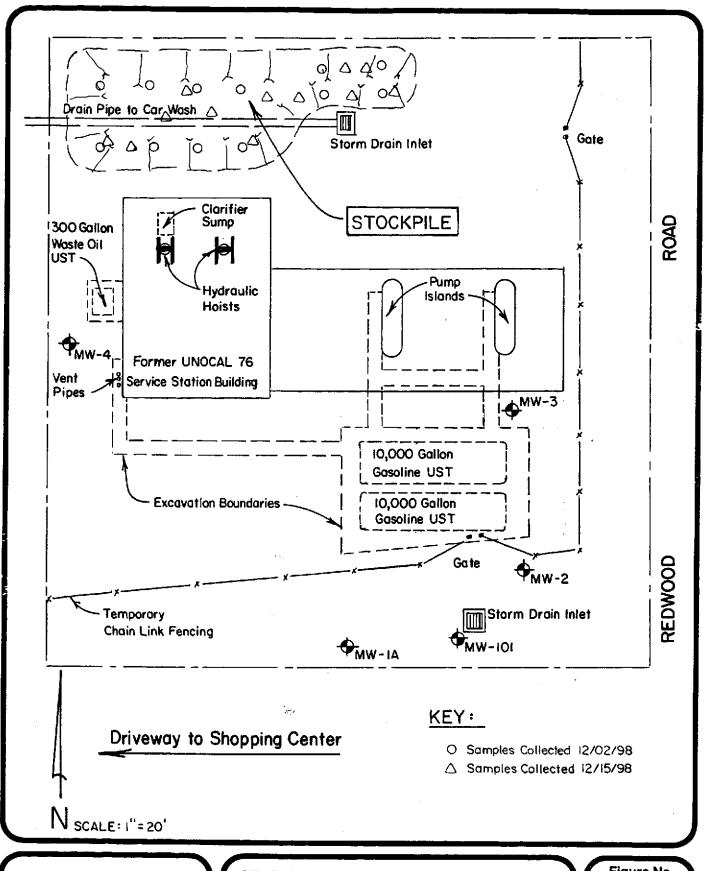
98041.1

Project No.

# TABLE 2 LABORATORY ANALYTICAL RESULTS STOCKPILE SOIL SAMPLES R.T. NAHAS COMPANY UST REMOVAL PROJECT

20405 Redwood Road Castro Valley, California

	ſ	Laboratory Analytical Results (mg/Kg)						
Sample Description	Sampling	TPHG	Benzene	Toluene	Ethyl	Total	MTBE	Pb
	Date				Benzene	Xylenes		
Stockpile - West:								
0+10S								
0+20S								
0+10N			l i					
0+20N	12/02/98	<40	<2.5	<2.5	<2.5	19	<2.5	<5.0
Stockpile - Center								
0+30S								
0+40S								
0+30N								
0+30S	12/02/98	<40	<2.5	<2.5	9.9	100	<2.5	<5.0
Stockpile - East:								
0+55S								
0+70S								
0+55N				•				
0+70N	12/02/98	<100	<6.2	<6.2	24	280	<6.2	<5.0
Stockpile - West:								
0+105-2								
0+15S-3								
0+25TOP-3								
0+30N-3	12/15/98	<50	<3.1	<31	<3.1	4.3	<3.1	
Stockpile - Center:								
0+35TOP-3								
0+428-3								
0+45N-3			÷					
0+50TOP-3	12/15/98	<50	<3.1	5.6	9	51	<3.1	
Stockpile - East								
0+60N+3	1							
0+65N-3								
0+62S-3								
0+725-3	12/15/98	<50	<3.1	4.4	6.6	73	<31	



### STOCKPILE SAMPLING PLAN R.T. NAHAS COMPANY UST SITE

20405 Redwood Road Castro Valley, California Figure No.

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98041.1

Project No.

# ALAMEDA COUNTY HEALTH CARE SERVICES AGENCY ENVIRONMENTAL HEALTH SERVICES 1131 HARBOR BAY PARKWAY, RM 250 ALAMEDA, CA 94502-6577 PHONE # 510/567-6700

Supposed Storings Teck Classes Parish Application stands County Civil is at Sameters Majoring debelond by this Occurrence to asserte completice with their and lived lived lives. The project proposed nearth is now relicised for their live of any respisar beliefling permits for Those closing from the first been received and found o the recognition and constitution and the manifestante of State and Local Seath Less Objects to your overse pays One doping the composed plans must be on the job and medical to all our recise and enformer included with the oftinges, part the form is made of State and local laws. Notly bys Simerament at teast 72 hours profit to the following closure, is department on compliance with accepted plans Any changap or ahoustans of thosa plans east specifications must be a unitable to this total Department and to the Ma and feeting to prestore Department to thremine it such featuance of all partrill to operate, b) permanent site THERE IS A FENANCIAL PENALTY FOR NOT CETAINING THESE INSPECTIONS: 1181 Harbor Bay Perhway, Suite 250 Removal of Tank(s) and Ploing Alembria, OA Odergi LAIT なのい。田中中田の and all applicable laws and regulations. Final Inspection Scholing CONTRACTOR (\$100 CT TO STATE required in participal Contact Specialist: removed. -

### UNDERGROUND TANK CLOSURE PLAN \* \* \* Complete plan according to attached instructions \* \* \*

1.	Name of Business R.T. Nahas Property (Formerly Tien UNOCAL 76 Service Station)
	Business Owner or Contact Person (PRINT) Randall E. Nahas
2	Site Address 20405 Redwood Road
	City Castro Valley Zip 94546 Phone Inactive
з.	Mailing Address c/o Owner
	City
4.	Property Owner R.T. Nahas Company
	Business Name (if applicable) R.T.Nahas Company
	Address _ 20630 Patio Drive
	City, State <u>Castro Valley, CA</u> Zip <u>94546</u>
5.	Generator name under which tank will be manifested
	R.T.Nahas Company
	EPA ID# under which tank will be manifested C A C 0 0 1 4 6 5 7 8 4

6.	Contractor Life Springs Environmental, Inc.							
	Address 3275 Stevens Creek Blvd., #208							
	City San Jose CA 95117 Phone (408) 243-9292							
	License Type A HAZ ID# 709730							
7.	Consultant (if applicable) Life Springs Environmental, Inc.							
	Address 3275 Stevens Creek Blvd., #208							
	City, State San Jose, CA 95117 Phone (408) 243-9292							
8.	Main Contact Person for Investigation (if applicable)							
	Name Kenneth Mleeen Title Field Supervisor/Chief Engineer							
	Company Life Springs Environmental, Inc.							
	Phone (408) 243-9292 Cell Phone: (408) 981-3776							
9.	Number of underground tanks being closed with this plan3							
	Length of piping being removed under this plan130 Feet (+/-)							
	Total number of underground tanks at this facility (**confirmed with owner or operator) $3$							
10.	State Registered Hazardous Waste Transporters/Facilities (see instructions).							
	** Underground storage tanks must be handled as hazardous waste **							
	a) Product/Residual Sludge/Rinsate Transporter							
	Name Excell Environmental Services EPA I.D. No. CACO00170148							
	Hauler License No. <u>3662</u> License Exp. Date <u>February 28, 1999</u>							
	Address 1141 Catalina Drive, Suite 162							
	City <u>Livermore</u> State <u>CA</u> Zip <u>94550</u>							
	b) Dundunt (Danidun) Gludgo (Dingato Dignosal Site							
	b) Product/Residual Sludge/Rinsate Disposal Site  Name Alviso Oil EPA ID# CACOOO161743							
	Address 5002 Archer Street  City Alviso State CA Zip 95002							
	City Alviso State CA Zip 35002							

	c) Tank and Piping Transporter
	Name <u>Ecology Control Industries</u> EPA I.D. No. <u>CAD009466392</u>
	Hauler License No. 1533 License Exp. Date March 31, 1999
	Address 20846 Normandie Avenue
	City <u>Torrance</u> State <u>CA</u> Zip <u>94801</u>
	d) Tank and Piping Disposal Site
	Name Ecology Control Industries EPA I.D. No. CAD009466392
	Address 255 Parr Blvd.
	City <u>Richmond</u> State <u>CA</u> Zip <u>94801</u>
11.	Sample Collector
	Name <u>Kenneth Meleen</u>
	Company Life Springs Environmental, Inc.
	Address 3275 Stevens Creek Blva., #208
	City <u>San Jose</u> State <u>CA</u> Zip <u>95117</u> Phone (408) 243-9292
12.	
	Name <u>Chromalab</u> , Inc.
	Address 1220 Quarry Lane
	City Pleasanton State CA Zip 94566-4756
	State Certification No. 1094
13.	Have tanks or pipes leaked in the past? Yes[X] No[] Unknown[]
	If yes, describe. Revised Corrective Action Plan dated June 14, 1996 by Philip
	Environmental describes detection of petroleum hydrocarbons in soil and groundwater
	beneath the site, and groundwater impacted by phase separated hydrocarbons.
14.	
	Vapor displacement with dry ice (CO <sub>2</sub> ) at the rate of 15 pounds per 1,000 gallons of tank capacity. OR PER FIRE DEPT REQUIREMENTS
	of care capacity.

Before tanks are pumped out and inerted, all associated piping must be flushed back into the tank(s). All accessible piping must then be removed. Inaccessible piping must be permanently plugged using grout.

The Bay Area Air Quality Management District, 415/771-6000, along with local Fire and Building Departments, must also be contacted for tank removal permits. Fire departments typically require the use of a combustible gas indicator to verify tank inertness. It is the contractor's responsibility to have a functional combustible gas indicator on-site to verify that the tank(s) is inerted.

### 15. Tank History and Sampling Information \*\*\* (see instructions) \*\*\*

	Tank	Material to be sampled (tank	Location and Depth of	
Capacity	Use History include date last used (estimated)	contents, soil, groundwater)	Samples	
	Installed 1964 Stored Gasoline Tanks pumped out and shut down in 1996  Installation Date unknown, but probably in 1964 when station	Soil - 2 samples per each 10,000 gallon tank + 1 sample below waste oil tank  Groundwater - 1 "grab" sample of any groundwater that enters excavation  Sample analyses will be available for groundwater	Each end at 13' BCS* for 10,000 gallon tanks ** Fill end of waste oil tank at 6' BGS*	
	was built	pumped from MW-101  * Note; auticipated that fare sitting in ground water sumples will be required in	*BGS - Below Ground Surface us! USTs Huce, Sidewall So.	

One soil sample must be collected for every 20 linear feet of piping that is removed. A ground water sample must be collected if any ground water is present in the excavation.

### Excavated/Stockpiled Soil

Stockpiled Soil Volume (estimated)

Initial excavation for UST removal:

Clean Overburden - 180 Cubic Yards

Contaminated Soil - 90 Cubic Yards

Remedial Excavation - 1,000 Cubic Yards

Sampling Plan

After Remediation: I sample (comprised of 4 separate composited samples) per each 50 cubic vards of material treated

Stockpiled soil must be placed on bermed plastic and must be completely covered by plastic sheeting.

Will the excavated soil be returned to the excavation immediately after tank removal? [X] yes [X] no [] unknown

If yes, explain reasoning Clean upper overburden soil that is uncontaminated

(as determined in the field using a PID) will be used for backfill, placed over clean granular import.

If unknown at this point in time, please be aware that excavated soil may not be returned to the excavation without <u>prior</u> approval from this office. This means that the contractor, consultant, or responsible party must communicate with the Specialist IN ADVANCE of backfilling activities.

16. Chemical methods and associated detection limits to be used for analyzing samples:

The Tri-Regional Board recommended minimum verification analyses and practical quantitation reporting limits should be followed. See attached Table 2.

17. Submit Site Health and Safety Plan (See Instructions)

Contaminant Sought	EPA or Other Sample Preparation Method Number	EPA or Other Analysis Method Number	Method Detection Limit
Petroleum Hydro- carbons as Gasoline (TPHg), Benzene Toluene, Ethyl Ben- zene, Total Xylene (BTEX), Methyl Tert-Butyl Ether (MTBE)	5230 - 3550	SW846 8020A NOV 1990/8015M	(mg/Kg) TPHg: 1.0 BTEX: 0.005 MTBE: 0.005
TPH.C and BTEX Petroleum Hydro- carbons as Diesel (TPHd) LUFT Metals Petroleum Hydro- carbons as Motor	(as above) -3510 -3550 -3550 -3510	3015M	TPHd: 1.0 0.005 TPHo: 50
Oil (TPHO) CL HC's - · · SVOC's · ·	- 3510- - 3510-	+ 8010 + 8270 ★ SEE ATT	CL HC's: 0.01 SVOC's: 0.01 ACHED Table

18. Submit Worker's Compensation Certificate copy

Name of Insurer <u>Exemption filed 4/1/97 with Contractors State License Board</u> - Copy Attached

19. Submit Plot Plan \*\*\*(See Instructions)\*\*\*
See Work Plan

20. Enclose Deposit (See Instructions)

Attached

- 21. Report all leaks or contamination to this office within 5 days of discovery.

  The written report shall be made on an Underground Storage Tank Unauthorized Leak/Contamination Site Report (ULR) form.
- 22. Submit a closure report to this office within 60 days of the tank removal. The report must contain all information listed in item 22 of the instructions.
- 23. Submit State (Underground Storage Tank Permit Application) Forms A and B (one-B form for each UST to be removed) (mark box 8 for "tank removed" in the upper right hand corner)

I declare that to the best of my knowledge and belief that the statements and information provided above are correct and true.

I understand that information, in addition to that provided above, may be needed in order to obtain approval from the Environmental Protection Division and that no work is to begin on this project until this plan is approved.

I understand that any changes in design, materials or equipment will void this plan if prior approval is not obtained.

I understand that all work performed during this project will be done in compliance with all applicable OSHA (Occupational Safety and Health Administration) requirements concerning personnel health and safety. I understand that site and worker safety are solely the responsibility of the property owner or his agent and that this responsibility is not shared nor assumed by the County of Alameda.

Once I have received my stamped, accepted closure plan, I will contact the project Hazardous Materials Specialist at least three working days in advance of site work to schedule the required inspections.

### CONTRACTOR INFORMATION

Name of Business Life Spr	ings Environmental, Inc.
Name of Individual Kenneth	L. Weleen
Signature Kennell &	Melen Date November 4, 1998
PROPERTY OWNER OR MOST RECENT	TANK OPERATOR (Circle one)
Name of Business R.T. Na	has Company
Name of Individual Randall	E. Nahas
Signature //	Date November 4, 1998

#### INSTRUCTIONS

### General Instructions

- \* Three (3) copies of this plan plus attachments and a deposit must be submitted to this Department.
- \* Any cutting into tanks requires local fire department approval.
- \* One complete copy of your approved plan must be at the construction site at all times; a copy of your approved plan must also be sent to the landowner.
- \* State of California Permit Application Forms A and B are to be submitted to this office. One Form A per site, one Form B for each removed tank.

### Line Item Specific Instructions

- 2. <u>SITE ADDRESS</u>
  Address at which closure is taking place.
- 5. <u>EPA I.D. NO. under which the tanks will be manifested</u>
  EPA I.D. numbers may be obtained from the State Department of Toxic Substances Control, 916/324-1781.
- 6. <u>CONTRACTOR</u>
  Prime contractor for the project.
- 10. STATE REGISTERED HAZARDOUS WASTE TRANSPORTERS/FACILITIES
  - a) All residual liquids and sludges are to be removed from tanks before tanks are inerted.
  - c) Tanks must be hauled as hazardous waste.
  - d) This is the place where tanks will be taken for cleaning.
- 15. TANK HISTORY AND SAMPLING INFORMATION
  Use History This information is essential and must be accurate.
  Include tank installation date, products stored in the tank, and the date when the tank was last used.

Material to be sampled - e.g. water, oil, sludge, soil, etc.

Location and depth of samples - e.g. beneath the tank a maximum of two feet below the native soil/backfill interface, side wall at the high water mark, etc.

### 16. CHEMICAL METHODS AND ASSOCIATED DETECTION LIMITS See attached Table 2.

### 17. SITE HEALTH AND SAFETY PLAN

A <u>site specific</u> Health and Safety plan must be submitted. We advocate the site health and safety plan include the following items, at a minimum:

- a) The name and responsibilities of the site health and safety officer;
- b) An outline of briefings to be held before work each day to appraise employees of site health and safety hazards;
- c) Identification of health and safety hazards of each work task. Include potential fire, explosion, physical, and chemical hazards;
- d) <u>For each hazard</u>, identify the action levels (contaminant concentrations in air) or physical conditions which will trigger changes in work habits to ensure workers are not exposed to unsafe chemical levels or physical conditions;
- e) Description of the work habit changes triggered by the above action levels or physical conditions;
- f) Frequency and types of air and personnel monitoring along with the environmental sampling techniques and instrumentation - to be used to detect the above action levels. Include instrumentation maintenance and calibration methods and frequencies;
- g) Confined space entry procedures (if applicable);
- h) Decontamination procedures;
- Measures to be taken to secure the site, excavation and stockpiled soil during and after work hours (e.g. barricades, caution tape, fencing, trench plates, plastic sheeting, security guards, etc.);
- j) Spill containment/emergency/contingency plan. Be sure to include emergency phone numbers, the location of the phone nearest the site, and directions to the hospital nearest the site;
- k) Documentation that all site workers have received the appropriate OSHA approved trainings and participate in appropriate medical surveillance per 29 CFR 1910.120; and
- 1) A page for employees to sign acknowledging that they have read and will comply with the site health and safety plan.

The safety plan must be distributed to all employees and contractors working in hazardous waste operations on site. A complete copy of the site health and safety plan along with any standard operating procedures shall be on site and accessible at all times.

NOTE: These requirements are <u>excerpts</u> from 29 CFR Part 1910.120(b)(4), Hazardous Waste Operations and Emergency Response; Final Rule, March 6, 1989. Safety plans of certain underground tank sites may need to meet the <u>complete</u> requirements of this Rule.

### 19. PLOT PLAN

The plan should consist of a scaled view of the facility at which the tank(s) are located and should include the following information:

- a) Scale;
- b) North Arrow;
- c) Property Lines;
- d) Location of all Structures;
- e) Location of all relevant existing equipment including tanks and piping to be removed and dispensers;
- f) Streets;
- g) Underground conduits, sewers, water lines, utilities;
- h) Existing wells (drinking, monitoring, etc.);
- i) Depth to ground water; and
- j) All existing tank(s) and piping in addition to the tank(s) being removed.

rev. 11/01/96 ust closure plan

### 20. DEPOSIT

A deposit, payable to "Treasurer of Alameda County" for the amount indicated on the Alameda County Underground Storage Tank Fee Schedule, must accompany the plans.

21. Blank Unauthorized Leak/Contamination Site Report forms may be obtained in limited quantities from this office or from the San Francisco Bay Regional Water Quality Control Board (510/286-1255). Larger quantities may be obtained directly from the State Water Resources Control Board at (916) 739-2421.

### 22. TANK CLOSURE REPORT

The tank closure report should contain the following information:

- a) General description of the closure activities;
- b) Description of tank, fittings and piping conditions. Indicate tank size and former contents; note any corrosion, pitting, holes, etc.;
- c) Description of the excavation itself. Include the tank and excavation depth, a log of the stratigraphic units encountered within the excavation, a description of root holes or other potential contaminant pathways, the depth to any observed ground water, descriptions and locations of stained or odor-bearing soil, and descriptions of any observed free product or sheen;
- d) Detailed description of sampling methods; i.e. backhoe bucket, drive sampler, bailer, bottle(s), sleeves
- e) Description of any remedial measures conducted at the time of tank removal;
- f) To-scale figures showing the excavation size and depth, nearby buildings, sample locations and depths, and tank and piping locations. Include a copy of the plot plan prepared for the Tank Closure Plan under item 19;
- g) Chain of custody records;
- h) Copies of signed laboratory reports;
- i) Copies of "TSDF to Generator" Manifests for all hazardous wastes hauled offsite (sludge, rinsate, tanks and piping, contaminated soil, etc.); and
- j) Documentation of the disposal of/and volume and final destination of all non-manifested contaminated soil disposed offsite.

TABLE #2

RECOMMENDED MINIMUM VERIFICATION ANALYSES FOR UNDERGROUND TANK LEAKS

				<del></del>			
HYDROCARBON LEAK	SOIL ANAL	YSIS	<u>WATER ANA</u>	LYSIS			
Unknown Fuel	TPH G TPH D	GCFID(5030) GCFID(3550)	TPH G TPH D	GCFID(5030) GCFID(3510)			
	BTX&E	8020 or 8240	BTX&E	602, 624 or			
		TX&E 8260	DIAGD	8260			
Leaded Gas	TPH G	GCFID(5030)	TPH G	GCFID(5030)			
	BTX&E	8020 OR 8240	BTX&E	602 or 624			
	TPH AND E	TX&E 8260	TOTAL LEA	D AA			
		ional					
		DHS-LUFT	TEL	DHS-LUFT			
	EDB	DHS-AB1803	EDB	DHS-AB1803			
Unleaded Gas	TPH G	GCFID(5030)	TPH G	GCFID (5030)			
	BIXEE	8020 OF 6240	BTX&E	602, 624 or 8260			
	TPH AND E	BTX&E 8260		8260			
Diesel, Jet Fuel and	TPH D	GCFID(3550)	TPH D	GCFID(3510)			
Kerosene	BTX&E	8020 or 8240	BTX&E	602, 624 or			
	TPH AND E	3TX&E 8260		8260			
Fuel/Heating Oil	TPH D	GCFID(3550)	TPH D	GCFID (3510)			
	BTX&E	8020 or 8240	BTX&E	602, 624 or			
	TPH AND E	BTX&E 8260		8260			
Chlorinated Solvents	CL HC	8010 or 8240	CL HC	601 or 624			
CHIDITHACCA COLVENCE	BTX&E	8020 or 8240	BTX&E				
		CL HC AND BTX&E 8260 CL HC AND BTX&E 8260					
Non-chlorinated Solvents	TPH D	GCFID (3550)	TPH D	GCFID(3510)			
	BTX&E	8020 or 8240	BTX&E	602 or 624			
	TPH AND E	3TX&E 8260	TPH and I	3TX&E 8260			
Waste and Used Oil	TPH G	GCFID(5030)	TPH G	GCFID(5030)			
or Unknown	TPH D	GCFID (3550)	TPH D	GCFID(3510			
(All analyses must be		BTX&E 8260					
completed and submitted)	O & G	5520 D & F	O & G	5520 B & F			
	BTX&E	8020 or 8240	BTX&E	602, 624 or 8260			
	CL HC	8010 or 8240	CL HC	601 or 624			
	ICAP or A	AA TO DETECT METALS 270 FOR SOIL OR WAT	: Cd, Cr, P) ER TO DETECT	o, Zn, Ni F:			
	PCB*		PCB				
	PCP*		PCP				
	PNA		PNA				
	CREOSOTE		CREOSOTE				

<sup>\*</sup> If found, analyze for dibenzofurans (PCBs) or dioxins (PCP)

Reference: Tri-Regional Board Staff Recommendations for Preliminary Evaluation and Investigation of Underground Tank Sites, 10 August 1990 Based upon a Regional Board survey of Department of Health Services Certified Laboratories, the Practical Quantitation Reporting Limits are attainable by a majority of laboratories with the exception of diesel fuel in soils. The Diesel Practical Quantitation Reporting Limits, shown by the survey, are:

ROUTINE		MODIFIED	PROTOCOL
<pre>≤ 10 ppm ≤ .5 ppm ≤ .1 ppm</pre>	(19%)	<pre>≤ 10 ppm ≤ 5 ppm ≤ 1 ppm</pre>	(21%)

When the Practical Quantitation Reporting Limits are not achievable, an explanation of the problem is to be submitted on the laboratory data sheets.

- 10. LABORATORY DATA SHEETS are to be signed and submitted and include the laboratory's assessment of the condition of the samples on receipt including temperature, suitable container type, air bubbles present/absent in VOA bottles, proper preservation, etc. The sheets are to include the dates sampled, submitted, prepared for analysis, and analyzed.
- 11. IF PEAKS ARE FOUND, when running samples, that do not conform to the standard, laboratories are to report the peaks, including any unknown complex mixtures that elute at times varying from the standards. Recognizing that these mixtures may be contrary to the standard, they may not be readily identified; however, they are to be reported. At the discretion of the LIA or Regional Board the following information is to be contained in the laboratory report:

The relative retention time for the unknown peak(s) relative to the reference peak in the standard, copies of the chroma-togram(s), the type of column used, initial temperature, temperature program is C/minute, and the final temperature.

12. REPORTING LIMITS FOR TPH are: gasoline standard ≤ 20 carbon atoms, diesel and jet fuel (kerosene) standard ≤ 50 carbon atoms. It is not necessary to continue the chromatography beyond the limit, standard, or EPA/DHS method protocol (whichever time is greater).

#### **EPILOGUE**

ADDITIVES: Major oil companies are being encouraged or required by the federal government to reformulate gasoline as cleaner burning fuels to reduce air emissions. MTBE (Methyl-tertiary butyl ether), ETHANOL (ethyl alcohol), and other chemicals may be added to reformulate gasolines to increase the oxygen content in the fuel and thereby decrease undesirable emissions (about four percent with MTBE). MTBE and ethanol are, for practical purposes, soluble in water. The removal from the water column will be difficult. Other compounds are being added by the oil companies for various purposes. The refinements for detection and analysis for all of these additives are still being worked out. If you have any questions about the methodology, please call your Regional Board representative.

#### EXPLANATION FOR TABLE #2: MINIMUM VERIFICATION ANALYSIS

- 1. OTHER METHODOLOGIES are continually being developed and as methods are accepted by EPA or DHS, they also can be used.
- 2. For DRINKING WATER SOURCES, EPA recommends that the 500 series for volatile organics be used in preference to the 600 series because the detection limits are lower and the QA/QC is better.
- 3. APPROPRIATE STANDARDS for the materials stored in the tank are to be used for all analyses on Table #2. For instance, seasonally, there may be five different jet fuel mixtures to be considered.
- 4. To AVOID FALSE POSITIVE detection of benzene, benzene-free solvents are to be used.
- 5. TOTAL PETROLEUM HYDROCARBONS (TPH) as gasoline (G) and diesel (D) ranges (volatile and extractible, respectively) are to be analyzed and characterized by GCFID with a fused capillary column and prepared by EPA method 5030 (purge and trap) for volatile hydro- carbons, or extracted by sonication using 3550 methodology for extractable hydrocarbons. Fused capillary columns are preferred to packed columns; a packed column may be used as a "first cut" with "dirty" samples or once the hydrocarbons have been characterized and proper QA/QC is followed.
- 6. TETRAETHYL LEAD (TEL) analysis may be required if total lead is detected unless the determination is made that the total lead concentration is geogenic (naturally occurring).
- 7. CHLORINATED HYDROCARBONS (CL HC) AND BENZENE, TOLUENE, XYLENE AND ETHYLBENZENE (BTX&E) are analyzed in soil by EPA methods 8010 and 8020 respectively, (or 8240) and in water, 601 and 602, respectively (or 624).
- 8. OIL AND GREASE (O & G) may be used when heavy, straight chain hydrocarbons may be present. Infrared analysis by method 418.1 may also be acceptable for O & G if proper standards are used. Standard Methods" 17th Edition, 1989, has changed the 503 series to 5520.
- 9. PRACTICAL QUANTITATION REPORTING LIMITS are influenced by matrix problems and laboratory QA/QC procedures. Following are the Practical Quantitation Reporting Limits:

	SOIL PPM	WATER PPB
TPH G	1.0	50.0
TPH D	1.0	50.0
BTX&E	0.005	0.5
0 & G	50.0	5,000.0

#### **ALAMEDA COUNTY ENVIRONMENTAL PROTECTION DIVISION**

#### DECLARATION OF SITE ACCOUNT REFUND RECIPIENT

There may be excess funds remaining in the Site Account at the completion of this project. The PAYOR (person or company that issues the check) will use this form to predesignate another party to receive any funds refunded at the completion of this project. In the absence of this form, the PAYOR will receive the refund.

650	SITE INFO	ORMATION:
Site ID Number (if known)		
R.T.Nahas Company (F	onmerly Tien UNOCAI	L 76 Service Station)
	Name o	f Site
20405 Redwood Road		
	Street :	Address
Castro Valley, CA 94		
	City, State	& Zip Code
I designate the any refund due projects:  Life Springs Envilonme  3275 Stevens Cree Street Address  San Jose, CA 9511 City, State &	ronmental, Inc.  ek Blvd., #208	son or business to receive ion of all deposit/refund
Kemull & M. Signatur	cleun e of Payor	November 4, 1998 Date
	<u>-</u> <u>-</u>	,
Kenneth I. Meleen	£ 70	Life Springs Environmental, Inc
	f Payor NT CLEARLY)	Company Name of Payor

#### **RETURN FORM TO:**

County of Alameda, Environmental Protection 1131 Harbor Bay Parkway, Rm 250 Alameda CA 94502-6577 Phone#(510) 567-6700





STATE OF CALIFORNIA
STATE AND CONSUMER SERVICES AGENCY CONTRACTORS STATE LICENSE BOARD

Building Quality

HAZARDOUS SUBSTANCES REMOVAL AND REMEDIAL
ACTIONS CERTIFICATION

Pursuant to the provisions of Section 7058.7 of the Business and Professions Code, the Registrar of Contractors does hereby certify that the following qualifying person has successfully completed the hazardous substances removal and remedial actions examination.

Qualifier: Kenneth Leroy Meleen

Qualifier: Kenneth Leroy Meleen

License No.: 709780

Business Name: Life Springs environmental inc

WITTEN map hand and official year highs

Registrar of Contractors is not registrate of Contractors is not registrate of Contractors in the property of the Registrar of Contractors is not registrate of Contractors in the property of the Registrar of Contractors is not registrate of Contractors in the property of the Registrar of Contractors is not registrate of Contractors in the property of the Registrar of Contractor

6720



State of California CONTRACTORS STATE LICENSE BOARD **ACTIVE LICENSE** 



Entity CORP

LIFE SPRINGS ENVIRONMENTAL INC

Classification(s) A HAZ

Expiration Date 07/31/1999





#### CONTRACTORS STATE LICENSE BOARD

9835 GOETHE ROAD, SACRAMENTO, CALIFORNIA MAILING ADDRESS: P.O. BOX 26000 SACRAMENTO, CALIFORNIA 95826 (916) 255-3900



#### EXEMPTION FROM WORKERS' COMPENSATION

Pursuant to Section 7125.1 of the Business and Professions Code, prior to issuance of a new license or reinstatement, reactivation, or renewal of an existing license, and as a condition of continued maintenance of an existing license, the applicant or licensee must have on file a Certificate of Workers' Compensation Insurance or a Certification of Self-Insurance from the Director of Industrial Relations. If the applicant or licensee has no employees, an exemption certificate must be submitted, certifying under penalty of perjury that he/she does not employ any person in any manner to be subject to the Workers' Compensation laws of California. A certificate or exemption is not required on an inactive license.

#### COMPLETE THIS EXEMPTION CERTIFICATE ONLY IF YOU DO NOT EMPLOY ANY PERSON.

NOTE: If the license is qualified by a Responsible Managing Employee (RME), an exemption certificate cannot be submitted.

OUT-OF-STATE CONTRACTORS: If you do not hire employees who reside in California, check this box [ ] and send the completed exemption certificate and a Certificate of Workers' Compensation Insurance which covers the employees from your state who are working in California. Note: If California does not have a reciprocity agreement with your state, you will be required to purchase a California Workers' Compensation policy to cover your employees while working in California.

PLEASE TYPE OR PRINT IN INK. FORMS COMPLETED IN PENCIL ARE NOT ACCEPTABLE. Send the completed certificate to the Contractors State License Board (CSLB) at the address above.

FULL NAME OF BUSINESS (AS IT CURRENTLY APPEARS ON THE RECORDS OF THE CSLB)					
LIFE SPRINGS ENVIRONMENTAL INC					
BUSINESS HAS/HAD NO EMPLOYEES AS OF (MONTH/DAY/YEAR):					
April 1, 1997					
received at our headquarters office as the effective date.					
DAYTIME BUSINESS TELEPHONE NUMBER EVENING TELEPHONE NUMBER					
( 415 ) 965–2439					

#### FALSIFICATION OF ANY DOCUMENT IS CAUSE FOR DISCIPLINARY ACTION

On April 1, 1997	at San Jose.	Santa Clara,	California
Date - Month/Day/Year	City	County	State
any person in any manner so	as to become subject to t sent a Certificate of Wo	the Workers' Compensation laws rkers' Compensation Insurance (	e named business does not employ of California. I further certify that or a Certification of Self-Insurance ect to the Workers' Compensation
		Termett of. M.	
SIGNATURE OF OWNER, PA	RTNER, OR OFFICER	Cennell of 100	ween
PRINT OR TYPE NAME OF T	HE PERSON SIGNING $\_^{ m I}$	Kenneth L. Meleen, Vice	President

THIS EXEMPTION WILL REMAIN ON FILE UNTIL YOU NOTIFY THE CSLB OF ANY CHANGES. PURSUANT TO SECTION 7083 OF THE BUSINESS AND PROFESSIONS CODE, FAILURE TO NOTIFY THE CSLB OF ANY CHANGES WITHIN 90 DAYS IS GROUNDS FOR DISCIPLINARY ACTION.

#### R.T. NAHAS COMPANY Since 1947

REAL ESTATE DEVELOPERS AND INVESTORS

PROTECTION.

99 FEB 25 PM DRIVE 20630 PATION DRIVE CASTRO VALLEY, CALIFORNIA 94546 TELEPHONE (510) 538-9600 FAX (510) 881-7618

February 24, 1999

Mr. Scott Seery Hazardous Materials Specialist Alameda County Health Care Services 1131 Harbor Bay Parkway, Suite 250 Oakland, CA 94502-6577

Dear Scott:

Enclosed is the Technical Report for the Tank Closure. I hope this meets with your approval. I guess we are waiting for a prolonged time of good weather so we can start the remediation on the piles. It now appears this process may be relatively easy.

If there is anything else I need to do to finalize the tank closing, please let me know.

Thanks for all your help.

Sincerely

Randall E. Mahas

REN/hrs Enclosure

#### **APPENDIX A**

# ALAMEDA COUNTY ENVIRONMENTAL HEALTH SERVICES PERMIT

ALAMEDA COUNTY FIRE DEPARTMENT PERMIT



PPROVED BY DATE

[ ] City of Dublin

FD# <u>98-2076</u> REC'D DATE ///c/98 Acfd'form/FP-21(9-98)

#### ALAMEDA COUNTY FIRE DEPARTMENT FIRE PREVENTION BUREAU

### NON-FIRE SYSTEM PLAN REVIEW APPLICATION OCCUPANCY INSPECTION REQUEST

[ ] City of Dublin [ ] City of San Leandro [ ] Unincorporated Alameda County
A COPY OF THIS APPLICATION SHALL BE INCLUDED WITH RESUBMITTALS
PROJECT/BUSINESS NAME R.T. Klahas Property DATE 11/10/98
PROJECT/INSP ADDRESS 20405 Redwood Road CITY Castro Valley CONTACT NAME Kenneth Meleen PHONE GOB) 263-9292
ADDRESS/CITY/STATE/ZIP Life Springs Environmental, 3275 Stevens Ceek Blok Samson
THE OF INSPECTION NEEDED Caper Freeing of
FIRE PERMIT     STATE LICENSE     POLICE STEPPED BOOK
I ATUTO AND
CONTRACTOR (IF APPLICABLE) ATTACH COPY OF WORKERS COMP & BUSINESS LICENSE
TOTAL SPENDS CHUINNAMENTE CATOER ALLAS
ADDRESS/CITY/STATE/ZIP 3275 Stevens Creek Blud. #208 Samboo CA 95/17 CONTACT PERSON Kennefy Meleen PHONE/FAX (408) 243-9892 Fx 243-9696
BUSINESS OWNER   BUILDING OWNER
NAME Landa (FAC)
ADDRESS/CITY/STATE/ZIP 20630 Patio Drive, Casto Valley CA 94546  PLAN DESIGNER OF APPLICABLES
PLAN DESIGNER (IF APPLICABLE)
COMPANY NAME  LICENSE TYPE/NUMBER
ADDRESS/CITY/STATE/ZIP
CONTACT PERSON PHONE/FAX
BUILDING INFORMATION (FOR INSPECTION REQUESTS, ONLY ITALICS NEED TO BE FILLED OUT)  TRACT OF PARCEL MAD #
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EXISTING FIRE SYSTEMS: [] Fire Sprinklers ()13 () 13R () 13D; [] Fire Alarm; [] Standpipes; []
MIROVALDIELS
Deposits and American Date Police and American Balance Due State Date Police Po
Reject Pare/By Reject Date/By Reject Pare/By



## Alameda County Fire Department

Proudly serving the Unincorporated Area of Alameda County and the communities of San Leandro and Dublin

## Flammable and Combustible Liquid Underground Storage Tank Removal Guideline

#### **PERMITS**

Article 4 - Uniform Fire Code - Section 4.101-18

Permit is required an shall be obtained from the Fire Prevention Office to remove, abandon, place temporarily out of service, or otherwise dispose of any combustible or flammable liquid storage tank. In addition, the contractor shall have passed the hazardous substance removal certification examination in acordance with Senate Bill 2004. Contact Contractors' State License Board for more information.

Permit application can be obtained from Alameda County Fire Prevention, 22341 Redwood Road, Castro Valley, CA 94546. For more information, call (510)670-5853.

NOTE: In addition to a completed permit application, a coy of your closure plan approved by the Alameda County Environmental Health Department shall be submitted for review.

#### **PRIOR TO REMOVAL**

- 1. Notify the Fire Prevention office a minimum of 48 hours in advance to schedule an inspection for removal. The inspection shall be coordinated with the Alameda County Environmental Health Department, who will have a representative on site a well.
- Ensure that any tank product or residue has been satisfactorily removed from tank and all product lines, manifested, and transported following state and local regulations.
- 3. Electrical lines, piping and like items associated with the tanks shall be isolated or disconnected.
- Proper fire safety procedures shall be followed:

"NO SMOKING" signs shall be posted.

No cutting torches, spark producing equipment or open flame shall be used on tanks or piping.

A minimum of 2 portable fire extinguishers rated 2A-40 B/C shall be on site. A first aid kit shall be on site and readily accessible.

5. The vent piping shall be left intact until the tank is properly purged. Purge all vapors through the vent piping which shall terminate a minimum 12 feet above grade, 3 feet from adjacent roof line.

If the vent piping is not in place, then a vent pipe shall be installed by the contractor prior to purging the tank.

- 6. To purge tank, place a minimum 15 pounds of dry ice per 1000 gallons of tank capacity into the tank **TWO HOURS PRIOR** to any further work being performed. Dry ice should be in pellet form to increase vaporization. If dry ice is to be installed through the fill line, "drop tub" and/or sleeve shall be removed from the tank prior to inserting the ice.
- 7. As the dry ice vaporized, flammable vapor will flow out of the tank and may surround the area. Therefore, where practical, plug all tank openings **except the vent** after introducing the dry ice, an continue to observe all safety precautions regarding combustible and flammable vapor.
- 8. Flammable vapors may be ventilated following procedures listed in API Recommended Practice 1604, Second Edition, December 1987.
- 9. Atmosphere within the tank and the excavation area shall be regularly tested for flammable and combustible vapor concentrations until the tank is removed from the excavation and the site. Test is to be taken with an instrument capable of reading combustible gas levels as well as oxygen levels. The instrument shall be properly calibrated and operated by person(s) familiar with the use and interpretation of the instrument's readings.

The tank vapor space is to be tested by placing the probe from the combustible gas indicator into the fill opening with the drop tube removed. Readings shall be taken at the bottom, middle, and upper level of the tank. The instrument shall be cleared after each reading.

Reading of 10% oxygen and 10% LEL shall be obtained prior to the tank being considered safe for removal.

10. After the tank has been freed of vapors and before it is removed form the excavation, plug or cap all accessible holes. One plug shall have an 1/8<sup>th</sup> inch vent hole to prevent the tank from being subjected to excessive pressure caused by temperature changes.

#### **REMOVAL**

- Tank can now be removed from the excavation, inspected for holes and corrosion, placed on a transport vehicle, secured, identified, and transported following state and local regulations.
- 2. Soil samples can now be obtained from the site.
- 3. Soil samplings, required tests, remediation plans and short and long term control of contamination is coordinated by the Alameda County Environmental Health Department.

## APPENDIX B

## **BAAQMD NOTIFICATION**



939 ELLIS STREET SAN FRANCISCO, CALIFORNIA 94109 (415) 771-6000

#### **REGULATION 8, RULE 40 NOTIFICATION FORM**

Check √	☐ Removal or Replacement of Tanks
	☐ Excavation of Contaminated Soil

SITE INFO	RMATION
Site Address Former UNOCAL Station, 20405 Redwood	RoaG
City, State Castro Valley, CA	Zip 94546
Owner Name R. T. Nahas Company	
Specific location of project West side of Redwood Road,	500' North of Castro Valley Blvd.
Tank Removal	Contaminated Soil Excavation
Scheduled startup date November 18, 1998	Scheduled Startup Date November 19, 1998
Vapors removed by:	Stockpiles will be covered? Yes XX NoNo
☐ Water wash	Indicate below the method used to comply with
☑ Vapor freeing (CO²)	Regulation 8, Rule 40, Section 402.4:
☐ Ventilation	Check (√) 8-40-301 ☑ 8-40-302 ☐ (permit required)
Indicate below if an A/C was obtained for tank replacement:	A/C or P/O #
Yes NoXX	A/C = Authority to Construct P/O = Permit to Operate
ency Alameda County Fire Dept. Contact Bob Bown  BAAQMD CONTRACTOR IN	
Name Life Springs Environmental, Inc.	Contact Kenneth Meleen
Address 3275 Stevens Creek Blvd., #208	Phone (408) 243-9292
City, State, Zip San Jose, CA 95117	
CONSULTANT INFOR	MATION (if applicable)
Name Life Springs Environmental, Inc.	Contact Kenneth Meleen
Address 3275 Stevens Creek Blvd., #208	Phone ( 408 ) 243-9292
City, State, Zip San Jose, CA 95117	
FOR OFFICE USE ONLY	
Date Received Fax: Sent 11/13/98 9:05 am	Date Postmarked:
Inspector No.:	Date: By
date: Contact Name	Date: By
Update: Contact Name	Date: By

#### INSTRUCTIONS

Specific Location of Project: Indicate where the tank removal or soil excavation is taking place.

Examples:

- Northwest corner of Gas Station lot
- · Pit D of South Excavation area
- Fuel storage area north of Auxiliary Road

Scheduled Startup Date: Indicate a correct and accurate startup date. If this date is delayed (by no more than five working days), telephone the District at (415) 749-4795 to report the new startup date. If the project is delayed for more than five days, submit a new form and indicate the status of your previous notification.

Soil Excavation: On the reverse side, provide all the information required in Section 402.

TANK REMOVAL: On the reverse side, provide all the information required in Section 401.

Contractor Information: Indicate the name, address, appropriate contact person and phone number of the contractor performing and responsible for the tank removal and/or soil excavation.

Consultant Information: If applicable, indicate the name, address, appropriate contact person and phone number of any environmental consultant used.

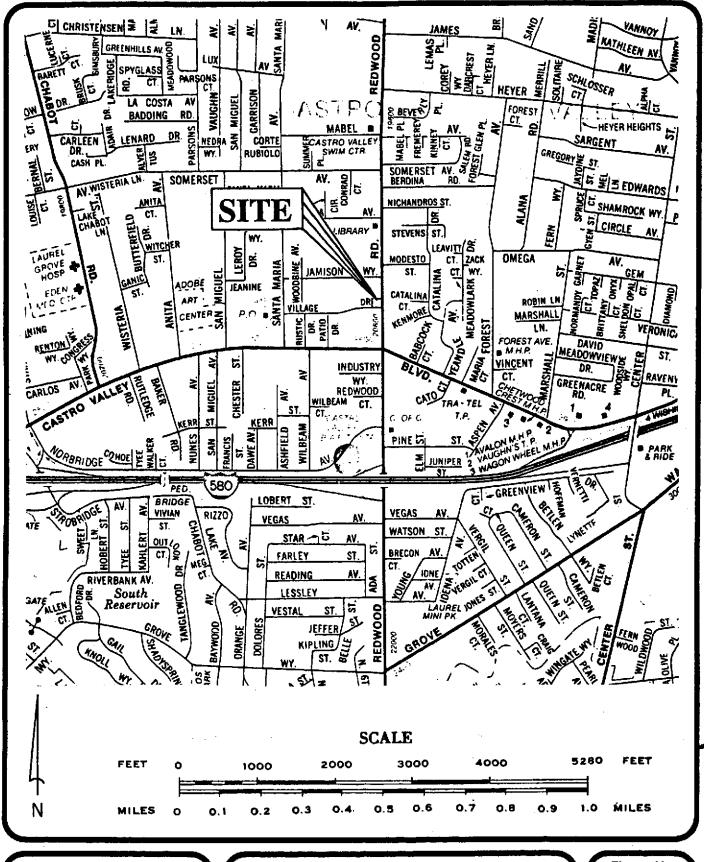
An invoice for \$100.00 will be generated and sent to the contractor responsible for the excavation and/or tank pull. (See fee exemptions in Regulation 3, Sections 105.1 and 105.2.)

#### NOTE

- Notification must be postmarked at least five days prior to startup of tank removal and/or soil excavation.
- Aeration of contaminated soil shall be reported to the District by telephone (415) 749-4979 no less than 24 hours prior to the spreading or heating of any contaminated soil.
- Return this form by FAX (415) 928-0338 or mail to:

Bay Area Air Quality Management District 939 Ellis Street San Francisco, CA 94109 Attn: Enforcement Division

- Soil aeration operations do not require a BAAQMD permit unless:
  - 1. The project exceeds three months time.
- 2. An alternative method other than spreading the soil for evaporation will be used.
- Use this form to meet the reporting requirements of Regulation 8, Rule 40, Section 400.
- If you have any questions, please call the Compliance Assistance Counselor at (415) 749-4999.



Life
Springs
Environmental, Inc.

REGIONAL MAP R.T. NAHAS COMPANY UST SITE

> 20405 Redwood Road Castro Valley, California

Figure No.

1

98041.1

Project No.

## **APPENDIX C**

# MANIFEST for PRODUCT and POLLUTED GROUNDWATER DISPOSAL

#### See Instructions on back of page 6.

Department of Toxic Substances Control Sacramento, California

<b></b>	UNIFORM HAZARDOUS	Generator's US EPA ID	No.	Manifest Document	: No.	2. Page 1		the shaded areas I by Federal law.
	WASTE MANIFEST	LCIACO $O$ UI9		<u>000</u>		of /		
	3. Generator's Name and Mailing Address	AT BE DAH	A5 60.		A. State N	Agnifest Document N	97	3835
	4. Generator's Phone 5/01536.  5. Transporter 1 Company Name	630 PA-10	DK. GAGAR.	2世岁	10/10/10/20/15/0	enerator's ID		
	4. Generator's Phone 5/01636.  5. Transporter 1 Company Name	<u> イム等</u> 6. US	EPA ID Number	454/6		ransporter's ID	, granding on	
		i			D. Transp	orter's Phone	5.2 <i>7/-</i>	1
	7. Transporter 2 Company Name	NV/co 5   CVA 8. US	i EPA ID Number	V M D	E. State Ti	ransporter's ID		
		1 1		1111	F. Transpo	arter's Phone	gar ger gar ger gyaz ye ala Kasakiya yang kiz	20mm 10mm 10mm 10mm 10mm 10mm 10mm 10mm
5	9. Designated Facility Name and Site Address	10. US	EPA ID Number	~ <del></del>	G. State F	acility s ID عندان المراكد	121	74/S
	A viso Oil	,* <i>R</i>	1600 - 1	1. 1. 2.1.7	H_ Facility	AL DOO	952-	R21)
5	Alviso CA. (4500)		<u> LOOV/6</u>	12. Cor	SMESSES AS	13. Total	14. Unit	
; ,	11. US DOT Description (including Proper Ship	ping Name, Hazard Class, and	d ID Number)	No.	Туре	Quantity	Wt/Vol i	Waste Number
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	Additional Descriptions to Materials Listed A     Additional Descriptions to Materials Listed A	<b>Urbre</b>			K. Handli a.	ng Codes for Waste	Listed Above b	
2			AF HOSES STATE		r is	and the second second		
ţ			Contract to the second		13 77 17 16 12 N			
	15. Special Handling Instructions and Addition	al Information					-	
2	4 77/	Can 27	a series of the series					:
	16. GENERATOR'S CERTIFICATION: Thereby	<u> </u>	C12 5	d annumentalis dasses		ne proper chinging ru	ame and are ch	nssified nacked
5	marked, and labeled, and are in all respe	cts in proper condition for tran	sport by highway accord	ling to applicable	internationa	l and national gover	nment regulati	ons.
1 1	If i am a large quantity generator, I certif practicable and that I have selected the pr	acticable method of treatment	: storane, or disposal ču	rrently available to	me which i	minimizes the preser	ij ana ivrure m	rear to numan neoith
Ś	and the environment; OR, if I am a small available to me and that I can afford.	quantity generator, I have mo	de a good faith effort to	minimize my was	te generatio	n and select the bes	t waste manag	ement method that is
اٍ اِ	Printed/Typed Name		Signature	27 1 1	1. 1 m	p. a. ~	Month / / /	Day   Year 
<u> </u>	17. Transporter 1 Acknowledgement of Receipt	t of Materials	A comment					
RANK	Printed/Typed Name	. 1	Signature	1			Month	Day Year
) P 0 0 0	18. Transporter 2 Acknowledgement of Receip Printed/Typed Name		Signature				Month	Day Year
J E	Trimed/ Typed Nume							
, F	19. Discrepancy Indication Space							
E A C			-					
	20. Facility Owner or Operator Certification o	freceipt of hazardous materia	ls covered by this manife	st except as noted	in Item 19,			
ή Υ	Printed/Typed Name	····	Signature				Month	Day Year

DO NOT WRITE BELOW THIS LINE.

#### **APPENDIX D**

# MANIFESTS for UST TRANSPORT/DISPOSAL and CERTIFICATES of DISPOSAL

	The second second				· · · · · · · · · · · · · · · · · · ·	ramenia, California
UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator's US EPA ID No. Ma CJA C O O 1 4 6 5 7 8 4 7	nifest Documer	74	2. Page 1	is not require	n the shaded areas ed by Federal law.
3. Generator's Name and Mailing Address	la con	1541	A. State	Monifest Document N	<sup>umb</sup> (3)	80841 <b>88</b>
4. Generator's Phone (5/10) 500	e Castro Valley CA 9- -9600	70 71p	B. State C	enerotor's ID		
5. Transporter 1 Company Name	6. US EPA ID Number		C State	gangportes (D. Rese		
TRIDENT TRUCKLINES	A A PLANTA A		D. Transp	orter s Phone (Co.)	<u>ie</u> ro – to	
7. Transporter 2 Company Name	C A ID 9 8 2 4 8 4 8. US EPA ID Number	13 / U	7	romporter: VD		178352881
		1 1 1		orter's Phone		
9. Designated Facility Name and Site Address	10. US EPA ID Number		G. State	acility's ID		
ERICKSON INC.			CA	00096	F663	912
255 PARR BLVD RICHMOND: CA 94801	CAD00946	ماماداد	H. Focilit	/a Phone	E IO	-235-1393
11. US DOT Description (including Proper Shipping	g Name, Hazard Class, and ID Number)	12. Cor	ntoiners	13. Total	14. Unit	<del>-230-1393</del>
a.		No.	Type	Quantity	670	Waste Number
WASTE EMPTY STORA		1,				512 PA/Other s
Non-RCRA hazardous w	vaste solid	001	112	10000	Г	NONE
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d.		1 1 1			.5	hile .
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ু Additional Descriptions for Materials Listed Abov	•		K. Haddi	g Codes for Wastes		
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©TYZ_AM_EMR®YSTORAGE	\$P.NK(S) 		9 19	Saliza		
15. Special Handling Instructions and Additional In		л 				
		CITE I	OC 41	TON: #04	(05 /)	0 000
24 Hour Emergency Telep	ve clothing when handling. hone Number: (\$70) \$6	311E L	.UUA I	ION: 209 Coss	han 12	loves
24 Hour Emergency Conta	act: Roberto Rivet	01-01				ERG 171
To: GENERATOR'S CERTIFICATION: Thereby decir	are that the contents of this consignment are fully and acc n proper condition for transport by highway according t	curately describ	ed above b	y proper shipping na	me and are cla	·f- 1
						1
	at I have a program in place to reduce the volume and cable method of treatment, storage, or disposal current					
available to me and that I can afford.	ntity generator, I have made a good faith effort to mini	imize my waste	generation ء م	and select the best	waste manage	ement method that is
Printed/Typed Name RANDALL E. NAHAS	Signature	100	//	1	Month	Doy Year
17. Transporter 1 Acknowledgement of Receipt of N	Materials Ma Will	121	VULL X	<u></u>	1 2 1 /	11070
Printed/Typed Name	Statue		6	÷	Month	Day Year
18. Transporter 2 Acknowledgement of Receipt of A	Materials	11/1	an	1		1898
Printed/Typed Name	Signature			//	Month	Day Year   1   8   9   8
The space marginary space						
						·
20. Facility Owner or Operator Certification of rece	eipt of hazardous materials covered by this manifest exc	ant or noted	ltow 10		_	
Printed/Typed Name	Signaluce Signal	A	neal 17.		Month	Day Year
MIVID ONTO	Lave >	170			///	11/8/9/8

F A C I

LITY

IN CASE OF EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802: WITHIN CALIFORNIA, CALL 1-800-852-7550

	1	UNIFORM HAZARDOUS WASTE MANIFEST	F. Generator's US EPA ID		LLI -	 7.11	2. (uge )	s not requir	ed by Federal law.
0		3 Generator's Name and Mailing Address	CACODIA		A	State Ma	prifest Document Nu	nbe e	8084 <b>119/</b> *
		RT NAHAS COMPAN, 20630 Patio Drive	y control 11	Mar CA OA	esale !		neralor(s II)		
1-800-852-7550		4. Generator's Phone (510) 538	2600	Hey, CA 74	- LA			and the same	
852-		5. Transporter 1 Company Name	8. US	EPA ID Number	G	#Slop Jr			
800		TRIDENT TRUCKLINES  7. Transporter 2 Company Name	<u> </u>	D 9 8 2 4 8 4 EPA ID Number	370	Stole Im		<u> </u>	0) 783-2881
		7. Hullspotter 2 Company (40mg	8. Ua			Bet Si	ier's Phone 1855	<u>. 4</u>	
Sell Sell		Designated Facility Name and Site Address	10. US	EPA ID Number		State Fo	aliyaD. DiOlo 194	66	3 <u>6</u> 일 일
ŢŠ		ERICKSON INC. 255 PARR BLVD			- 16	Facility's	s Phone	1.00	and the state of t
CALIFORNIA,		RICHMOND. CA 94801		DI01019141616	3 9 2 12. Contai	iners	13. Total	14. Unit	04235-1393
סכ סz		11. US DOT Description (including Proper Shipping.		ID Number]	No.	Туре	Quantity	Wt/Vol	I. Waste Number State
NITHIN NITHIN	1	WASTE EMPTY STOR			0012	гр	101800	Р	512 EPA/Other
	E	Non-RCRA hazardous v	waste solid	<u> </u>	DIDIA		IUBU		NONE State
4-88	E								EPA/Other
1-800-424-8802:	A T	C.			<del>                                     </del>		<u> </u>		State
	Q R					1			EPA/Other
CENTER		d.	<u></u> .						State :
									EPA/Other
ONS		e :: Additional Descriptions for Materials In Hell Po							
RESP		en <u>er 14</u> 00 zij <b>an</b> zenenze	TANKOLI TANKSIT <b>W</b> E	<u>.                                    </u>					
NAL		Francisco de constituir de la	NEW YEAR WELL						
THE NATIONAL RESPONSE		15. Special Handling Instructions and Additional Wear appropriate protect 24 Hour Emergency Tele	tive clothing w	hen handling.	SITE LO	OCAT	ion: 20	105 K	Ledovoud Koad Lv. CA
出		24 Hour Emergency Tele 24 Hour Emergency Conf	phone Number	: (5/0) 8E	7176/		مراد هی	U VAL	ERG 171
CALL T		16. GENERATOR'S CERTIFICATION: I hereby de marked, and labeled, and are in all respect			curately describe to applicable in	ed above b ternational	y proper shipping n and national gover	ome and are nment regul	classified, packed,
		at a second second	at made a substantial and a		d sovicise of was	to nonorah	ed to the degree I b	ave determ	ined to be economically
? SPII		practicable and that I have selected the pra and the environment; OR, if I am a small a available to me and that I can afford.							
IN CASE OF EMERGENCY OR SPILL,		Printed/Typed Name	:	Signety	11.	1/	<u> </u>	Mo	1   1   8   9   8
3ENC	Ţ	17. Transporter 1 Acknowledgement of Receipt	AHAS of Materials	Helmolan	K	La		141	
MER	R A N S	Printed/Typed Name		Signature		· 		Moi 1	nth Day Yeor
Ą.	POR	18. Transporter 2 Acknowledgement of Receipt Printed/Typed Name		Signature	1			Mo	nth Day Year
ASE	R		2		(al-a	1			17 8 7 2
Z	1		<del>-</del> ,	•					
	C								
	T	20. Facility Owner or Operator Certification of Printed/Typed Name		s covered by this manifest ex Signotyre	xcept as noted in	<u>ltem 19.</u>		Mo	nth Day Year
ı	Y							. [[	1/1/18/98
	•		DO NO	T WRITE BELOW	THIS LINE.		,		

DAY OR NIGHT TELEPHONE (510) 235-1393

#### CERTIFICATE

#### **CERTIFIED SERVICES COMPANY**

255 Parr Boulevard - Richmond, California 94801

**NO.** 31148

CUSTOMER

JOB NO. 974674 LIFE SPRINGS ENV.

		FOR:	ERICKSON, INC.	TANK NO.	24701
	LO	CATION:	RICHMOND, CA	DATE: 11/20/98	9:00:37
TE	ST METHOD	VISUAL GA	STECH/1314 SMPN	LAST PRODUCT _	GAS
	Petroleum Inst This certificat	titute and have e is based or	found the condition	n to be in accordar g at the time the	in accordance with the American nce with its assigned designation. inspection herein set forth was d instructions.
	TANK SIZE	10,000 GA	LLON TANK	CONDITION_	SAFE FOR FIRE
	REMARKS:	OXYGEN 20.9% L	OWER EXPLOSIVE LIMIT L	ESS THAN 0.1% ERICKSO	ON, INC. HERBY CERTIFIES THAT THE
		ABOVE NUMBER	ED TANK HAS BEEN CUT C	PEN, PROCESSED, AND	THEREFORE DESTROYED AT OUR
		PERMITTED HAZ	ARDOUS WASTE FACILITY	•	
		ERICKSON, INC.	HAS THE APROPRIATE PE	RMITS FOR, AND HAS AC	CEPTED THE TANK SHIPPED TO US
		FOR PROCESSIA	IG		
		·			
				<del></del>	
					ns of the above tanks, or if in any doubt, or 24 hours if no physical or atmospheric
	STANDARE	SAFETY	DESIGNATION		
	19.5 percent by v judgment of the	olume; and that ( Inspector, the res	b) Toxic materials in the	atmosphere are within p	gen content of the atmosphere is at least permissable concentrations; and (c) In the als under existing atmospheric conditions
T <sub>2</sub>	atmosphere is be not capable of pr and while mainta	elow 10 percent or roducing a higher lined as directed of event the spread of	f the lower explosive limit concentration that permit on the inspector's certification	t; and that (b) In the ju- ted under existing atmo ate, and further, (c) All	centration of flammable materials in the dgment of the Inspector, the residues are espheric conditions in the presence of fire adjacent spaces have either been cleaned fuel tanks, have been treated as deemed
	The undersigned which it was issued		nowledges receipt of this	certificate and understa	ands the conditions and limitations under

DAY OR NIGHT TELEPHONE (510) 235-1393

#### CERTIFICATE

#### **CERTIFIED SERVICES COMPANY**

255 Parr Boulevard • Richmond, California 94801

**NO.** 31149

	• •	Ψ.	 1	`
CUSTOMER				
				_
JOB NO. 9	7467	4		

LIFE SPRINGS ENV.

	FOR:E	RICKSON, INC.	TANK NO	24702
LOCATIO	ON: RICH	IMOND, CA	DATE: <u>11/24/98</u>	TIME: 9:01:41
TEST METHOD	VISUAL GASTECH	H/1314 SMPN	LAST PRODUCT _	GAS
Petroleum Institute	and have fou based on co	nd the condition nditions existing the conditions are not the conditions.	n to be in accorda g at the time the	s in accordance with the American not with its assigned designation. Inspection herein set forth was not instructions.
TANK SIZE	10,000 GALLON	TANK	CONDITION_	SAFE FOR FIRE
			·	ON, INC. HERBY CERTIFIES THAT THE
		US WASTE FACILIT		THERE ORE DESTROYED AT SON
		<u> </u>		CCEPTED THE TANK SHIPPED TO US
FOR	PROCESSING.			
		<del>.</del>		
In the event of any physimmediately stop all ho changes occur.	sical or atmosphe t work and conta	eric changes affect act the undersigne	ng the gas-free condition J. This permit is valid for	ons of the above tanks, or if in any doubt, or 24 hours if no physical or atmospheric
STANDARD SA	FETY DES	IGNATION		
19.5 percent by volume;	and that (b) To tor, the residues	kic materials in the are not capable of	atmosphere are within	tygen content of the atmosphere is at least permissable concentrations; and (c) In the ials under existing atmospheric conditions
atmosphere is below 10 not capable of producin and while maintained as	percent of the lig a higher concest directed on the spread of fire,	ower explosive limentration that permented in the limentration that permented in the limentration is settification.	it; and that (b) In the ju itted under existing atmo ate, and further, (c) All	centration of flammable materials in the udgment of the Inspector, the residues are ospheric conditions in the presence of fire adjacent spaces have either been cleaned of fuel tanks, have been treated as deemed
The undersigned represe which it was issued.  REPRESENTATIVE	entative acknowle	dges receipt of this	s certificate and underst	ands the conditions and limitations under

DAY OR NIGHT TELEPHONE (510) 235-1393

#### CERTIFICATE

#### **CERTIFIED SERVICES COMPANY**

255 Parr Boulevard • Richmond, California 94801

**NO.** 31150

CUSTOMER

JOB NO. 974674 LIFE SPRINGS ENV.

		FOR:	ERICKSON, INC.	TANK NO	24703	
		LOCATION:	RICHMOND, CA	DATE:	TIME: 9:05:30	_
ſΕ	ST METHOD	VISUAL GA	STECH/1314 SMPN	LAST PRODUCT .	WASTE OIL	4.7 
	Petroleum This certifi	Institute and have icate is based or	e found the condition n conditions existi	an to be in accorda	s in accordance with ince with its assigne inspection herein nd instructions.	o cesignation.
	TANK SIZE	300 GALL	ON TANK	CONDITION	SAFE FOR FIRE	
	REMARKS:	ABOVE NUMBER	RED TANK HAS BEEN CU ZARDOUS WASTE FACILI	TOPEN, PROCESSED, AN	SON, INC. HERBY CERTIFII  THEREFORE DESTROYS  ACCEPTED THE TANK SHIP	ED AT OUR
-		and the second s	NG.			
	In the event immediately changes occ	stop all hot work an	mospheric changes affer d contact the undersign	cting the gas-free condit led. This permit is valid	tions of the above tanks, for 24 hours if no physic	or if in any doubt, cal or atmospheric
	SAFE FOR I 19.5 percent judgment of while mainta	MEN: Means that in the t by volume; and that f the Inspector, the re ained as directed on the	<ul> <li>(b) Toxic materials in testidues are not capable le Inspector's certificate.</li> </ul>	e so designated (a) The one of the atmosphere are within of producing toxic maters.	oxygen content of the atm n permissable concentration erials under existing atmo	ospheric conditions
	atmosphere not capable and while r sufficiently	e is below 10 percent e of producing a high	of the lower explosive in concentration that per	rmitted under existing at	oncentration of flammable judgment of the Inspector mospheric conditions in t All adjacent spaces have to of fuel tanks, have been	he presence of fire either been cleaned
	The undersi	igned representative as issued.	cknowledges receipt of	this certificate and unde	rstands the conditions an	d limitations under

## **APPENDIX E**

ACEHS (Scott Seery)
FIELD INSPECTION REPORT
November 18, 1998

white -env.health yellow -facility pink -files

# RLAMEDA COUNTY, DEPARTMENT OF ENUIRONMENTAL HEALTH

The second of th

Hazardous Materials Inspection Form

1131 Harbor Bay Pkwy Alameda CA 94502 510/567-6700

11, 111

	Site ID # 650 Site Name 11eu's Unocal Today's Date 1/18/88
	Site Address 22315 Redwood Rd.
	city Castro Valley Zip 94546 Phone
	MAX AMT stored > 500 lbs, 55 gal., 200 cft.? // - /2:45
	Inspection Categories:  I. Haz. Mat/Waste GENERATOR/TRANSPORTER  3:00 - 4:15
	Hazar dous Materials Business Plan, Acutely Hazar dous Materials  III. Under ground Storage Tanks
	* Calif. Administration Code (CAC) or the Health & Safety Code (HS&C)
	Comments: On-sife to cirtuess neuronal of 2 fuel and one
	waste oil USTs. Fire Dept was not present during removal.
1%	
	w/o benefit of air hypors volve) and was < 5% (indicated) in.
	each. Vent standpipes were removed and USTs offered?
	to be lifted from the excavation
11:20	South tank - bare steel construction. Heavy within and steel evosion
	noted in scattered location along both welded seams and
	section lives radiating around The tank circumference. Although
	near penetrations were seen, in Through going lubes were noted.
11:40	unste oil - 02 conc. <5%; LEL 0%. This tank was also bore
	steel construction. Heavy corrosion and throughgoing holos were note
	Oily usides was observed cooting the base of the tank.
12:00	North tank - base steel construction. Moderate pitting locally, particularly
	alone the "water line." No holes observed.
	Contact Key Melecy II, III
	Title Inchestor
	Signature Signature Signature
-	

white -env.health y ellow -facility pink -files

# ALAMEDA COUNTY, DEPARTMENT OF ENUIRONMENTAL HEALTH

and the state of the second of

310/3

Alameda CA 94502 510/567-6700

1131 Harbor Bay Pkwy

## II, III

Hazardous Materials Inspection Form

Site ID # 650 Site Name Trens Unocal Today's Date 11/18/98  Site Address Reduced Rd  City Castro Valley Zip 94546 Phone	
MAX AMT stored > 500 lbs, 55 gal., 200 cft.?  Inspection Categories:  I. Haz. Mat/Waste GENERATOR/TRANSPORTER  II. Hazar dous Materials Business Plan, Acutely Hazar dous Materials  * Calif. Administration Code (CAC) or the Health & Safety Code (HS&C)  Comments:	
Inspection Categories: I. Haz. Mat/Waste GENERATOR/TRANSPORTERII. Hazar dous Materials Business Plan, Acutely Hazar dous MaterialsIII. Under ground Stor age Tanks  * Calif. Administration Code (CAC) or the Health & Safety Code (HS&C)  * Comments:	
I. Haz. Mat/Waste GENERATOR/TRANSPORTERII. Hazar dous Materials Business Plan, Acutely Hazar dous Materials III. Under ground Storage Tanks  * Calif. Administration Code (CAC) or the Health & Safety Code (HS&C)  * Comments:	
II. Hazardous Materials Business Plan, Acutely Hazardous Materials	
* Calif. Administration Code (CAC) or the Health & Safety Code (HS&C)  * Comments:	
* Calif. Administration Code (CAC) or the Health & Safety Code (HS&C)	
Comments:	
Sampling,	ŦĬ,
Samp I'm ,	
	<del></del>
1) waste oil UST - a single sample was collected from the base of	
The excavation from notive clay. Oily medidue and stro	MG
odor were evident in sampled material!	
(2) fuel tank pit	····
To prepare the fuel UST execution for sampling, The Sound Gor	<u>k 61/ .</u>
was excavated from the p.t. Apparent Gw had welled into the	origina:
excavation and pooled in the tank inverts in the look fill material.	The
"GW (which had exhibited a product shoen) did not necharge into the	
excavation. However, slight GW seeps were seen in a couple or	205
of the p.+ ~ 11/2 BG - 12' BG.	
Sidewoll samples (4) were collected - true (2) from each side a	3 <del>4</del>
The pit adjacent each (former) tank and. A bottom sample u	<u> </u>
also collected. Sampled material appeared to be soudy silt silty o	lav.
GW was observed on surfaces of fractures of stiff soil meterial when is	roken.
3) Dispusars/ piping tranches Samples were collected Geneute as dispus	<u>ar (4)</u>
and Three others (3) where there were elborus or Ts. A fourth	<u> </u>
surgle was collected from the location of an elbow of old steel piping lon	y sabando
	· •
Contact Ray Me Leen	11, 111
Title Kenned & Melen Inspector 5.199	
SignatureSignature	000000000000000000000000000000000000000

## APPENDIX F

COC and ANALYTICAL RESULTS
for
UST PITS, SUMP and PIPELINE TRENCHES

Grang 2 /2/6231

## CHROMALAB, INC.

Environmental Services (SDB) (DOHS 1094)

SUBM #: 9811257 REP: PM CLIENT: LIFESPRINGS

ME: REF #:43183

11/18/98

			•	Ch	air	) 1 O	/ 3/ F.C.			١v
		<u> 44</u>	[17]	198	a 11	PAGE _	_/_		г <u> </u>	-, =
	RT	LUFT METALS: Cd, Cr, Pb, Zn, Ni	CAM METALS (17)	PRIORITY POLLUTANT METALS (13)	TOTAL LEAD	EXTRACTION (TCLP, STLC)				NUMBER OF CONTAINERS
1								X		1
-								2		1
		<b></b>		<del> </del>	<del> </del>	<del> </del> -		1	T	

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PRO	J. MGR	Kennet	h Melec	<u>n</u>				_			SZ						418.1		7						•	1	δ
		Life S	prings	Enviro	nmenta.	L, Inc		TPH - Gasoline (5030, 8015) w/BTEX (EPA 602, 8020)		ក្	PURGEABLE HALOCARBONS (EPA 601, 8010)		23.53				! <b>∢</b> !		Z, Z		12				1	1	NUMBER OF CONTAINERS
Al	DDRESS _	3275 S San Jo	tevens	Creek	Blvd. 1	208		30,	T 2012	MAT 20)	ర్థ	NICS 124.2	7 ACI	EAS!			ZABL 4S (E		5	171	5			i 1	į.	l	
	-	San Jo	se, CA				15)	e (50 602,	TEP1 50, 8	4RO 2, 80	HAU 10)	70 4 70 5 70 5	7 82	2 T	080)	8	S SE		5	LS (	POLI	QΨ	χo				ŏ K
SAMP	LEAS (SIG	SNATURE)	· <del></del>	(40	8) 243	ONE NO.) -9292	solin 0, 80	Solin EPA	esel, 0/35	8LE, A 60	BLE 1, 80	4, 82	S/62	20,	8, 8	10 ES	A A		Š	MET/	F13	97 71	שַׁ בַּ			Ì	EB (
1/	/	ell T.	/ Me	lun	(FA (8) 243	X NO.)	TPH - Gasoline (EPA 5030, 8015)	TPH - Gasoline (5030, 80 w/BTEX (EPA 602, 8020)	TPH - Diesel, TEPH (EPA 3510/3550, 8015)	PURGEABLE AROMATICS BTEX (EPA 602, 8020)	PURCEABLE HA (EPA 601, 8010)	VOLATILE ORGANICS (EPA 624, 8240, 524.2)	BASE/NEUTRALS, ACIDS (EPA 625/627, 8270, 525)	TOTAL OIL & GREASE (EPA 5520, B+F, E+F)	PC8 (EPA 608, 8080)	PESTICIDES (EPA 608, 8080)	TOTAL RECOVERABLE HYDROCARBONS (EP.		LUFT METALS: Cd, Cr, Pb,	CAM METALS (17)	PRIORITY POLLUTANT METALS (13)	TOTAL LEAD	EXTRACTION (TCLP, STLC)	]			3
LE			DATE	(40	8) 243 Matrix	–9696 Preserv.	TPH (EPA	F 3	돌릴	5 E	2 9	오팔	BA.	유별	P.C8	F 5	오호		3 ₹		2 2		w -		-		
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PRO				TOTAL	L NO. OF CO		_	1	7 6	em	ret		Me	len		<u> 1 '10</u>	noil	ict	}	14.3	3 <u>7</u>	(SIGNA	TURE				(TIME)
1	.T. Na	1645 6.	1/1	HEAD	SPACE				(SIG	NATURE	) T	Mol	Loon	11/12	MEI	SIGNATE	MEI C. M	iten	c.C.	1417	198	10.0.0.					
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Environmental Services (SDB)

November 19, 1998

Submission #: 9811257

LIFE SPRINGS ENVIRONMENTAL

Atten: Kenneth Meleen

Project: R.T.NAHAS CO.T/P

Received: November 17, 1998

Project#: 98041.1

re: One sample for Gasoline BTEX analysis.

Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: STOCKPILE W SIDE, 8', CATCH

Sp1#: 216231

Matrix: SOIL

Sampled: November 17, 1998 Run#:16072

Analyzed: November 19, 1998

2 272 T WITE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK DI SPIKE F. (%)	LUTION ACTOR
ANALYTE GASOLINE BENZENE	1700 N.D.	100	N.D. N.D.	90 97	10 10
TOLUENE ETHYL BENZENE	27 42 200	6.2 6.2 6.2	N.D. N.D. N.D.	102 103 101	10 10 10

Note: Surrogate Recoveries biased high due to Hydrocarbon co-elution.

Vincent Vancil

Analyst

Michael Verona

Operations Manager

Environmental Services (SDB)

November 24, 1998

Submission #: 9811257

LIFE SPRINGS ENVIRONMENTAL

Atten: Kenneth Meleen

Project: R.T.NAHAS CO.T/P

Project#: 98041.1

Received: November 17, 1998

re: One sample for CAM 17 METALS analysis.

Method: EPA 3050A/6010A/7471A Nov 1990

Client Sample ID: STOCKPILE W SIDE, 8', CATCH

Spl#: 216231

Extracted: November 18, 1998 Matrix: SOIL

Analyzed: November 20, 1998 Sampled: November 17, 1998 Run#: 16038

	<b>च्य</b> टारा क	REPORTING LIMIT	BLANK RESULT	BLANK I SPIKE	ILUTION FACTOR
ANALYTE	RESULT (mg/Kg)	(mg/Kg)	(mg/Kg)	(%)	
ANTIMONY	N.D.	2.0	N.D.	102	1
ARSENIC	N.D.	1.0	N.D.	104	1
BARIUM	60	1.0	N.D.	100	1
BERYLLIUM	N.D.	0.50	N.D.	102_	1
CADMIUM	N.D.	0.50	N.D.	98.7	Ţ
CHROMIUM	26	1.0	${ t N.D.}$	100	1
COBALT	9.2	1.0	N.D.	104	1
COPPER	20	1.0	N.D.	108	1
LEAD	6.3	1.0	N.D.	103	1
MOLYBDENUM	N.D.	1.0	N.D.	106	1
NICKEL	32	1.0	N.D.	102	1
SELENIUM	N.D.	2.0	N.D.	98.1	1
SILVER	N.D.	1.0	N.D.	102	1
THALLIUM	N.D.	1.0	N.D.	97.2	1
VANADIUM	28	1.0	N.D.	105	1
ZINC	120	1.0	N.D.	98.2	ļ
MERCURY	N.D.	0.050	N.D.	104	1

Mercury extracted on and analyzed on November 23, 1998.

Christopher A

Analyst

Operations Manager

787319 126919 - 214733

## CHROMALAB, INC.

SUBM #: 9811319 REP: PM

CLIENT: LIFESPRINGS

Chain of Custody

	Environme	ental S	ervic	es (SDB) (	DOHS	3 1094	4)	Di		11/24/										[/	//0	198		PAGE _		0	)「 <u> </u>	$\stackrel{\sim}{=}$
	Kennet	h Me	lee	n				K	EF #:43	242			<u> </u>	,			1	.PC	PT					1				1
PROJ. MGR	Life S	prin	gs	Enviro	nmei	ntal	, Inc	1	<u>*</u>		S	Š			ļ			418.		Z					Ì	1		န္မ
ADDRESS	3275 S	teve	ns	Creek	Blv	d. ‡	208	ŀ	3, 80	2)	ĮĮ (	ARB	୬ ନ	CIDS , 525	SE			ILE EPA		, Zn,		ANA						Ž (
ADDRESS	San Jo	se,	CA	95117				<u> </u>	(503)	PH.	802C	٦٥١	ANI , 524	S, A 8270	SREAS ; E+F)	â	(	ERAB		Cr, Pb,	(17)	3			}		1	CONTAINERS
SAMPLERS (SIGN	ATURE)					(PHO	ONE NO.) -9292	ğ <u>ş</u> i.	TPH - Gasoline (5030, 8015) w/BTEX (EPA 602, 8020) 🔏	TPH - Diesel, TEPH (EPA 3510/3550, 8015)	PURCEABLE AROMATICS BTEX (EPA 602, 8020)	PURGEABLE HALOCARBONS (EPA 601, 8010)	VOLATILE ORGANICS (EPA 624, 8240, 524.2)	BASE/NEUTRALS, ACIDS (EPA 625/627, 8270, 525)	TOTAL OIL & GREASE (EPA 5520, B+F, E+F)	PCB (EPA 608, 8080)	PESTICIDES (EPA 608, 8080)	TOTAL RECOVERABLE HYDROCARBONS (EP	•	B)	CAM METALS (17)	PRIORITY POLLUTANT METALS (13)	EAD	Ş Ş Ş	1		ŀ	8
Kinnet	011	M. P	2	(40	18)	-24 5 (FA)	-9 <i>292</i> (NO.)	TPH - Casoline (EPA 5030, 801	C S	TPH - Diesel, (EPA 3510/35	EA81	EAB1	TILE 624,	/NEU	1 O1	608,	PESTICIDES (EPA 608, 8	5 5		LUFT METALS: Cd,	+ ME	PRIORITY PC METALS (13)	TOTAL LEAD	EXTRACTION (TCLP, STLC)	1			NUMBER
Kinner	471-11	ur	e e r	(40	(8)	2 <u>4</u> 3-	( NO.) -9696	J≖≾	PH.	PH-	25.0	EPA CE	O A	SASE. EPA	EP 4	PCB (EPA	PEST (EPA	TOTAL		NET E	ð	PRIC	5	E 5				Ž
SAMPLE	<b>.</b>	DAI	E I	111415		~~~~	RESERV		F   \$	13				1/				-										$\overline{}$
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PITNECON	c 12'			3:15	1	_			X								<b> </b>					ļ. <u></u>						_
PHNEBOT	f 13'			3:20					X						-				ļ		· · · ·						-	
Pitse 1				3:25		_			X		<u> </u>	<u> </u>						<u> </u>				<u> </u>	<b></b>					
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Pitsw 1				3:35					X		<u> </u>					196			<u> </u>				<u> </u>	<b> </b>				1
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P.O. 1 25E	- 174	2- 9	R				DITION/C	OLD .	<del> </del>								MNTÉDA C∵T	NAME)			r (c	DATE) (	PRINTE	D NAME)			1	(DATE)
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Include MTBE W/TPH6+BTEX Analyes 3.0 CAP (5 toles									<u></u>	MOANY		<u>`</u>			-\ <del>\</del>	CHEAN	<u>~~~</u>	~0 _				LAB)						

2811919 1216919-216993

#### CHROMALAB, INC.

1220 Quarry Lane • Pleasanton, California 94566-4756 510/484-1919 • Facsimile 510/484-1096

· Chain of Custody

DATE 11/18/98 PAGE 2 OF 2 Environmental Services (SDB) (DOHS 1094) **ANALYSIS REPORT** Kenneth Meleen PROJ MGR PURCEABLE HALOCARBONS (EPA 601, 8010) Life Springs Environmental, Inc Ī NUMBER OF CONTAINERS BASE/NEUTRALS, ACIDS (EPA 625/627, 8270, 525) PRIORITY POLLUTANT METALS (13) ADDRESS 3275 Stevens Creek Blvd. #208 VOLATILE ORCANICS (EPA 624, 8240, 524.2) TOTAL OIL & GREASE (EPA 5520, B+F, E+F) METALS: Cd, Cr, Pb, San Jose, CA 95117 CAM METALS (17) (EPA 608, 8080) EXTRACTION (TCLP, STLC) TOTAL LEAD MPLERS (SIGNATURE) (408) 243-9292 (FAX NO.)
(408) 243-9696 SAMPLERS (SIGNATURE) TIME MATRIX PRESERV. SAMPLE ID. WIS 5-2' 11/13/93 3:54 X IN IS N -2' 3:55 EJ-2' X 3:58 E Is 5-2' 4:01 EIS N-2' CJ-2' 4:10 1. RELINGUISHERS RELINQUISHED BY RELINQUISHED BY PROJECT INFORMATION SAMPLE RECEIPT Kermeth of Welson 11.30 17.00 RT NAHAS CO T/P
PROJECT NUMBER
98041.1 TOTAL NO. OF CONTAINERS (SIGNATURE) **HEAD SPACE** Kenneth L. Meleen ///9/26 REC'D GOOD CONDITION/COLD OATE IPRINTED NAME 4.0. LSE-178-9B Life Springs Environment CONFORMS TO RECORD (COMPANY) STANDARD RECEIVED BY (LABORATORY) RECEIVED BY RECEIVED BY SPECIAL INSTRUCTIONS/COMMENTS: \* Include MTBE with TPHE/BTEX Analysis (SIGNATURE) (TIME) (SIGNATURE) (TIME) PRINTED NAMES PRINTED NAME) (DATE) (PRINTED NAME) (LAB) (COMPANY)

Environmental Services (SDB)

November 24, 1998

Submission #: 9811319

LIFE SPRINGS ENVIRONMENTAL

Atten: Kenneth Meleen

Project: RT NAHAS CO. T/P

Received: November 19, 1998

Project#: 98041.1

re: One sample for Gasoline BTEX MTBE analysis.

Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: WO-8

Spl#: 216919

Matrix: SOIL

Sampled: November 18, 1998 Run#:16136

Analyzed: November 20, 1998

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK DILUTION SPIKE FACTOR (%)
GASOLINE	N.D.	1.0	N.D.	105 1
MTBE	N.D.	0.0050	N.D.	89 1
BENZENE	N.D.	0.0050	N.D.	89 1
TOLUENE	0.0061	0.0050	N.D.	88 1
ETHYL BENZENE	0.027	0.0050	N.D.	92 1
XYLENES	0.079	0.0050	N.D.	89 1

Hydrocarbon found in Gasoline Range is uncharacteristic of Gasoline Profile. If quantified using Gasoline's response factor, concentration

would equal 9.8mg/Kg.

Vincent Vancil

Analyst

Michael Verona

Operations Manager

**Environmental Services (SDB)** 

November 25, 1998

Submission #: 9811319

LIFE SPRINGS ENVIRONMENTAL

Atten: Kenneth Meleen

Project: RT NAHAS CO. T/P

Received: November 19, 1998

Project#: 98041.1

re: 1 sample for TPH - Diesel analysis.

Method: EPA 8015M

*Matrix:* SOIL

Extracted: November 23, 1998

Sampled: November 18, 1998 Run#: 16117 Analyzed: November 25, 1998

REPORTING BLANK BLANK DILUTION DIESEL LIMIT RESULT SPIKE FACTOR

 Spl#
 CLIENT SPL ID
 (mg/Kg)
 (mg/Kg)
 (mg/Kg)
 (%)

 216919 WO-8
 270
 50
 N.D.
 90.9
 50

Note: Hydrocarbon reported is in the late Diesel Range and does not match our

Diesel Standard. Surrogate has been diluted out.

rolyn House Bruce Havli

Analyst

Environmental Services (SDB)

November 23, 1998

Submission #: 9811319

LIFE SPRINGS ENVIRONMENTAL

Atten: Kenneth Meleen

Project: RT NAHAS CO. T/P

Project#: 98041.1

Received: November 19, 1998

re: One sample for Halogenated Volatile Organics by GC/MS analysis.

Method: 8010 Compounds by Method 8240A Nov 1990

Client Sample ID: WO-8

Spl#: 216919

Matrix: SOIL

Sampled: November 18, 1998 Run#: 16120

Analyzed: November 20, 1998

	RESULT	REPORTING LIMIT	BLANK RESULT	BLANK SPIKE	DILUTION FACTOR
2 272 T 1/1110	(ug/Kg)	(ug/Kg)	(ug/Kg)	(%)	
ANALYTE BROMODICHLOROMETHANE	N.D.	5.0	N.D.		1
BROMOFORM	N.D.	5.0	N.D.		1
BROMOMETHANE	N.D.	10	N.D.	<del>~ -</del>	1
CARBON TETRACHLORIDE	N.D.	5.0	N. $D$ .		1 1
CHLOROBENZENE	N.D.	5.0	N.D.	96.9	<u> </u>
CHLOROETHANE	N.D.	10	Ŋ.D.		1
2-CHLOROETHYLVINYLETHER	N.D.	50	Ŋ.D.	- <b>-</b>	1
CHLOROFORM	N.D.	5.0	N.D.	- <del>-</del>	1
CHLOROMETHANE	N.D.	10	N.D.		1
DIBROMOCHLOROMETHANE	N.D.	5.0	N.D.	- <b>-</b>	1
1,2-DICHLOROBENZENE	N.D.	5.0	N.D. N.D.		<u> </u>
1 3-DICHLOROBENZENE	N.D.	5.0	N.D.		ī
1,4-DICHLOROBENZENE	N.D.	5.0 5.0	N.D.		ī
1,1-DICHLOROETHANE	N.D.	5.0	N.D.		ī
1,2-DICHLOROETHANE	N.D. N.D.	5.0	N.D.	98.2	1
1,1-DICHLOROETHENE	N.D.	5.0	N.D.		1
1,2-DICHLOROETHENE (CIS) 1,2-DICHLOROETHENE (TRANS)	N.D.	5.ŏ	N.D.		1
1,2-DICHLOROPROPANE	N.D.	5.0	N.D.		1
CIS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	<del>-</del> -	1
TRANS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	- <b>-</b>	1
METHYLENE CHLORIDE	N.D.	5.0	N.D.		Ţ
1,1,2,2-TETRACHLOROETHANE	N.D.	5.0	N.D.		1 1
TETRACHLOROETHENE	N.D.	5.0	N.D.		<u> </u>
1,1,1-TRICHLOROETHANE	N.D.	5.0	Ŋ.D.		<u> </u>
1,1,2-TRICHLOROETHANE	N.D.	5.0	Ŋ.D.	700	<u> </u>
TRICHLOROETHENE	N.D.	5.0	N.D.	103	<b>1</b>
VINYL CHLORIDE	Ŋ.D.	5.0	N.D.		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
TRICHLOROTRIFLUOROETHANE	Ŋ.D.	5.0	N.D. N.D.		i
TRICHLOROFLUOROMETHANE	N.D.	5.0	14.17.		-

June Zhao Analyst

Michael Verona Operations Manager

Environmental Services (SDB)

November 23, 1998

Submission #: 9811319

LIFE SPRINGS ENVIRONMENTAL

Atten: Kenneth Meleen

Project: RT NAHAS CO. T/P

Received: November 19, 1998

Project#: 98041.1

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

Method: SW846 Method 8270A Nov 1990

Client Sample ID: WO-8

*Spl#:* 216919

*Matrix:* SOIL

Extracted: November 19, 1998

Sampled: November 18, 1998 Run#: 16107 Analyzed: November 20, 1998

ANALYTE	RESULT	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK DI SPIKE F (%)	LUTION ACTOR
PHENOL	N.D.	0.10	N.D.	64.5	1
BIS (2-CHLOROETHYL) ETHER	N.D.	0.10	N.D.		Ŧ
2-CHLOROPHENOL	N.D.	0.10	N.D.	65.0	1 1
1,3-DICHLOROBENZENE	N.D.	0.10	N.D.		ī
1,4-DICHLOROBENZENE	N.D.	0.10	N.D.	70.8	ī
BENZYL ALCOHOL	N.D.	0.20	N.D.	,	1 1 1
1,2-DICHLOROBENZENE	N.D.	0.10	N.D.		Ť
2-METHYLPHENOL	N.D.	0.10	N.D.		1
BIS (2-CHLOROISOPROPYL) ETHER	N.D.	0.10	N.D.		ī
4-METHYLPHENOL	N.D.	0.20	N.D.		i
N-NITROSO-DI-N-PROPYLAMINE	N.D.	0.10	N.D.	64.0	1
HEXACHLOROETHANE	N.D.	0.10	N.D.	04.0	ī
NITROBENZENE	N.D.	0.10	N.D.		i
ISOPHORONE	N.D.	0.10	N.D.		1
2-NITROPHENOL	N.D.	0.10	N.D.		i
2,4-DIMETHYLPHENOL	N.D.	0.10	N.D.	<del></del>	i
BIS (2-CHLOROETHOXY) METHANE	N.D.	0.10	N.D.		1
2,4-DICHLOROPHENOL	N.D.	0.10	N.D.		1
1,2,4-TRICHLOROBENZENE	N.D.	0.10		71.7	<u> </u>
NAPHTHALENE	M.D.		N.D.	/1./	1
4-CHLOROANILINE	N.D.	0.10	N.D.		1
HEXACHLOROBUTADIENE	N.D.	0.20	N.D.		1
	N.D.	0.10	N.D.		1
4-CHLORO-3-METHYLPHENOL	N.D.	0.20	Ŋ.D.	70.5	1
2-METHYLNAPHTHALENE	Ŋ.D.	0.10	Ŋ.D.		Ţ
HEXACHLOROCYCLOPENTADIENE	N.D.	0.10	N.D.		ī
2,4,6-TRICHLOROPHENOL	N.D.	0.10	N.D.	<del>-</del> -	1
2,4,5-TRICHLOROPHENOL	Ŋ.D.	0.10	N.D.		1
2-CHLORONAPHTHALENE	N.D.	0.10	Ŋ.D.		1
2-NITROANILINE	Ŋ.D.	0.50	Ŋ.D.		1
DIMETHYL PHTHALATE	Ŋ.D.	0.50	N.D.	<del>-</del> -	1
ACENAPHTHYLENE	Ŋ.D.	0.10	N.D.		1
3-NITROANILINE	Ŋ.D.	0.10	N.D.		1.
ACENAPHTHENE	Ŋ.D.	0.10	N.D.	68.9	1
2,4-DINITROPHENOL	Ŋ.D.	0.50	N.D.	<del>-</del> -	1
4-NITROPHENOL	$\mathbf{N} \cdot \mathbf{D}$ .	0.50	N.D.	64.0	1
DIBENZOFURAN	N.D.	0.10	N.D.		1
2,4-DINITROTOLUENE	Ŋ.D.	0.10	N.D.	70.4	1
2,6-DINITROTOLUENE	Ŋ.D.	0.20	N.D.		1
DIETHYL PHTHALATE	Ŋ.D.	0.50	Ŋ.D.		1
4-CHLOROPHENYL PHENYL ETHER	N.D.	0.10	N.D.		1

**Environmental Services (SDB)** 

November 23, 1998

Submission #: 9811319

page 2

LIFE SPRINGS ENVIRONMENTAL

Atten: Kenneth Meleen

Project: RT NAHAS CO. T/P

Received: November 19, 1998

Project#: 98041.1

Method: SW846 Method 8270A Nov 1990

Client Sample ID: WO-8

Spl#: 216919

Sampled: November 18, 1998

Matrix: SOIL Run#: 16107

re: One sample for Semivolatile Organics (B/NAs) analysis, continued.

Extracted: November 19, 1998

Analyzed: November 20, 1998

	RESULT	REPORTING LIMIT	BLANK RESULT	BLANK I	DILUTION FACTOR
ANALYTE	(mg/Kg)	(mg/Kg)	(mg/Kg)	(%)	
FLUORENE	N.D.	0.10	N.D.		1
4-NITROANILINE	N.D.	0.50	N.D.		1
2-METHYL-4,6-DINITROPHENOL	N.D.	0.50	N.D.		1
n-NITROSODIPHENYLAMINE	N.D.	0.10	N.D.		1
4-BROMOPHENYL PHENYL ETHER	N.D.	0.10	N.D.		1
HEXACHLOROBENZENE	N.D.	0.10	N.D.		1
PENTACHLOROPHENOL	N.D.	0.50	N.D.	30.6	1
PHENANTHRENE	0.10	0.10	N.D.		1.
ANTHRACENE	N.D.	0.10	N.D.		1
DI-N-BUTYL PHTHALATE	N.D.	2.0	N.D.		1
FLUORANTHENE	0.17	0.10	N.D.		1
PYRENE	0.22	0.10	N.D.	86.4	1
BUTYL BENZYL PHTHALATE	N.D.	0.50	N.D.	÷	1
3,3'-DICHLOROBENZIDINE	N.D.	0.20	N.D.		1
BÉNZO (A) ANTHRACENE	N.D.	0.10	N.D.		1
BIS(2-ETHYLHEXYL)PHTHALATE	0.60	0.50	N.D.	- <del>-</del>	1
CHRYSENE	N.D.	0.10	N.D.		1
DI-N-OCTYL PHTHALATE	N.D.	0.50	N.D.		1
BENZO (B) FLUORANTHENE	N.D.	0.10	N.D.		1
BENZO (K) FLUORANTHENE	N.D.	0.20	N.D.		1
BENZO (A) PYRENE	N.D.	0.050	N.D.		1
INDENO(1,2,3 C,D)PYRENE	N.D.	0.20	N.D.		1
DIBENZO (A, H) ANTHRACENE	N.D.	0.20	N.D.	<del></del>	1
BENZO(G, H, I) PERYLENE	N.D.	0.20	N.D.		1
BENZOIC-ACID	N.D.	0.50	N.D.		1
Market Ma					

Michael Lee

Analyst

Michael Verona

Operations Manager

Environmental Services (SDB)

November 24, 1998

Submission #: 9811319

LIFE SPRINGS ENVIRONMENTAL

Atten: Kenneth Meleen

Project: RT NAHAS CO. T/P

Received: November 19, 1998

Project#: 98041.1

re: 1 sample for Oil and Grease analysis.

Method: 5520 E&F

Matrix: SOIL

Extracted: November 24, 1998

Analyzed: November 24, 1998

Sampled: November 18, 1998

16156 Run#:

BLANK

OIL & GREASE

REPORTING LIMIT

RESULT

BLANK DILUTION

CLIENT SPL ID

(mq/Kq)

(mq/Kq)

(mq/Kq)

FACTOR SPIKE

Environmental Services (SDB)

November 25, 1998

Submission #: 9811319

LIFE SPRINGS ENVIRONMENTAL

Atten: Kenneth Meleen

Project: RT NAHAS CO. T/P

Project#: 98041.1

Received: November 19, 1998

re: One sample for Miscellaneous Metals analysis.

Method: EPA 3010A/3050A/6010A Nov 1990

Client Sample ID: WO-8

Spl#: 216919

Matrix: SOIL

Extracted: November 20, 1998

Sampled: November 18, 1998

Run#: 16111

Analyzed: November 23, 1998

BLANK DILUTION REPORTING BLANK FACTOR RESULT LIMIT RESULT SPIKE (%) ANALYTE (mg/Kg) (mq/Kq)(mg/Kg) CADMIUM 108 N.D. 0.50 N.D. 1 1 1 CHROMIUM 1.0 N.D. 112 22 LEAD 9.0 1.0 N.D. 110 1.0 NICKEL 19 N.D. 110 108 1.0 N.D. ZINC 31

Christopher Arndt

Analyst

hichael Verona

Environmental Services (SDB)

November 24, 1998

Submission #: 9811319

LIFE SPRINGS ENVIRONMENTAL

Atten: Kenneth Meleen

Project: RT NAHAS CO. T/P

Received: November 19, 1998

Project#: 98041.1

re: One sample for Gasoline BTEX MTBE analysis.

Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: PITNECOR 12'

Spl#: 216920

Matrix: SOIL

Sampled: November 18, 1998 Run#:16137

Analyzed: November 23, 1998

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK DI SPIKE E (%)	LUTION FACTOR
GASOLINE	47	10	N.D.	122	1
MTBE	N.D.	0.62	N.D.	88	1
BENZENE	N.D.	0.62	N.D.	112	1
TOLUENE	N.D.	0.62	N.D.	114	1
ETHYL BENZENE	0.74	0.62	N.D.	110	1
XYLENES	3.4	0.62	N.D.	109	1

Vincent Vancil

Analyst

Environmental Services (SDB)

November 24, 1998

Submission #: 9811319

LIFE SPRINGS ENVIRONMENTAL

Atten: Kenneth Meleen

Project: RT NAHAS CO. T/P

Received: November 19, 1998

Project#: 98041.1

re: One sample for Gasoline BTEX MTBE analysis.

Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: PITNEBOT 13'

Sp1#: 216921

*Matrix:* SOIL

Sampled: November 18, 1998 Run#:16137

Analyzed: November 23, 1998

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT _ (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK DII SPIKE FA (%)	UTION CTOR
GASOLINE	14	10	N.D.	122 1	-
MTBE	N.D.	0.62	N.D.	88 1	•
BENZENE	N.D.	0.62	N.D.	112 1	-
TOLUENE	N.D.	0.62	N.D.	114 1	_
ETHYL BENZENE	N.D.	0.62	N.D.	110 1	_
XYLENES	N.D.	0.62	N.D.	109 1	-

Vincent Vancil

Analyst

Michael Verona

Environmental Services (SDB)

November 24, 1998

Submission #: 9811319

LIFE SPRINGS ENVIRONMENTAL

Atten: Kenneth Meleen

Project: RT NAHAS CO. T/P

Received: November 19, 1998

Project#: 98041.1

re: One sample for Gasoline BTEX MTBE analysis.

Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: PITSE 12'

Spl#: 216922

Matrix: SOIL

Sampled: November 18, 1998 Run#:16137

Analyzed: November 24, 1998

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK DILUTION SPIKE FACTOR (%)	
GASOLINE	31	10	N.D.	122 1	
MTBE	N.D.	0.62	N.D.	88 1	
BENZENE	N.D.	0.62	N.D.	112 1	
TOLUENE	1.8	0.62	N.D.	114 <b>1</b>	
ETHYL BENZENE	N.D.	0.62	N.D.	110 <b>1</b>	
XYLENES	3.0	0.62	N.D.	109 1	

Vincent Vancil

Analyst

Michael Verona

Environmental Services (SDB)

November 24, 1998

Submission #: 9811319

LIFE SPRINGS ENVIRONMENTAL

Atten: Kenneth Meleen

Project: RT NAHAS CO. T/P

Received: November 19, 1998

Project#: 98041.1

re: One sample for Gasoline BTEX MTBE analysis.

Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: PITSE+3-12'

Spl#: 216923

Matrix: SOIL

Sampled: November 18, 1998 Run#:16137

Analyzed: November 23, 1998

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK DILUTION SPIKE FACTOR (%)
GASOLINE	100	40	N.D.	122 4
MTBE	N.D.	2.5	N.D.	88 4
BENZENE	N.D.	2.5	N.D.	112 4
TOLUENE	N.D.	2.5	N.D.	114 4
ETHYL BENZENE	2.6	2.5	N.D.	110 4
XYLENES	14	2.5	N.D.	109 4

Vincent Vancil

Analyst

Michael Verona Operations Manager

**Environmental Services (SDB)** 

November 24, 1998

Submission #: 9811319

LIFE SPRINGS ENVIRONMENTAL

Atten: Kenneth Meleen

Project: RT NAHAS CO. T/P

Received: November 19, 1998

Project#: 98041.1

re: One sample for Gasoline BTEX MTBE analysis.

Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: PIT SW 11.5'

Spl#: 216924

Matrix: SOIL

Sampled: November 18, 1998 Run#:16137

Analyzed: November 23, 1998

	RESULT	REPORTING LIMIT	BLANK RESULT	BLANK DI SPIKE E	LUTION FACTOR
ANALYTE	(mg/Kg)	(mq/Kq)	(mg/Kg)	(%)	
GASOLINE	22	10	N.D.	122	1
MTBE	N.D.	0.62	N.D.	88	1
BENZENE	N.D.	0.62	N.D.	112	1
TOLUENE	N.D.	0.62	N.D.	114	1
ETHYL BENZENE	N.D.	0.62	N.D.	110	1
XYLENES	3.0	0.62	N.D.	109	1

Vincent Vancil

Analyst

Environmental Services (SDB)

November 24, 1998

Submission #: 9811319

LIFE SPRINGS ENVIRONMENTAL

Atten: Kenneth Meleen

Project: RT NAHAS CO. T/P

Received: November 19, 1998

Project#: 98041.1

re: One sample for Gasoline BTEX MTBE analysis.

Method: SW846 8020A Nov 1990 / 8015Mod

PIT NW 12'

Client Sample ID: PIT NE 12'

Spl#: 216925

Matrix: SOIL

Sampled: November 18, 1998

Run#:16136

Analyzed: November 20, 1998

	RESULT	REPORTING LIMIT	BLANK RESULT	BLANK SPIKE	DILUTION FACTOR
ANALYTE	(mg/Kg)	(mg/Kg)	(mg/Kg)	(왕)	
GASOLINE	2.6	1.0	N.D.	105	1
MTBE	0.014	0.0050	N.D.	89	1
BENZENE	0.088	0.0050	N.D.	89	1
TOLUENE	0.0054	0.0050	N.D.	88	1
ETHYL BENZENE	0.11	0.0050	N.D.	92	1
XYLENES	0.52	0.0050	N.D.	89	1

Vincent Vancil

Analyst

Michael Verona

**Environmental Services (SDB)** 

December 1, 1998

Submission #: 9811319

LIFE SPRINGS ENVIRONMENTAL

REVISED

Atten: Kenneth Meleen

Project: RT NAHAS CO. T/P

Project#: 98041.1

Received: November 19, 1998

re: One sample for Gasoline BTEX MTBE analysis.

Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: WLNW-2'

Spl#: 216926

Matrix: SOIL

Sampled: November 18, 1998 Run#:16136

Analyzed: November 20, 1998

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mq/Kq)	BLANK RESULT (mg/Kg)	BLANK DILUTION SPIKE FACTOR (%)	
GASOLINE	N.D.	1.0	N.D.	105 1	
MTBE	0.018	0.0050	N.D.	89 <b>1</b>	
BENZENE	N.D.	0.0050	N.D.	89 <b>1</b>	
TOLUENE	N.D.	0.0050	N.D.	88 <b>1</b>	
ETHYL BENZENE	N.D.	0.0050	N.D.	92 1	
XYLENES	N.D.	0.0050	N.D.	89 1	

Vincent Vancil

Analyst

**Environmental Services (SDB)** 

November 24, 1998

Submission #: 9811319

LIFE SPRINGS ENVIRONMENTAL

Atten: Kenneth Meleen

Project: RT NAHAS CO. T/P

Project#: 98041.1

Received: November 19, 1998

re: One sample for Gasoline BTEX MTBE analysis.

Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: WLJ-2'

Spl#: 216927

Matrix: SOIL

Sampled: November 18, 1998 Run#:16098

Analyzed: November 20, 1998

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK DILUTION SPIKE FACTOR (%)	N
GASOLINE	N.D.	1.0	N.D.	99 1	
MTBE	N.D.	0.0050	N.D.	88 1	
BENZENE	N.D.	0.0050	N.D.	88 <b>1</b>	
TOLUENE	N.D.	0.0050	N.D.	88 <b>1</b>	
ETHYL BENZENE	N.D.	0.0050	N.D.	88 1	
XYLENES	N.D.	0.0050	N.D.	88 1	

Craig Huntzinger

Analyst

Michael Verona

Laboratory Operations Manager

**Environmental Services (SDB)** 

December 1, 1998

Submission #: 9811319

LIFE SPRINGS ENVIRONMENTAL

REVISED

Atten: Kenneth Meleen

Project: RT NAHAS CO. T/P

Project#: 98041.1

Received: November 19, 1998

re: One sample for Gasoline BTEX MTBE analysis.

Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: WIS S-2'

Spl#: 216928

Matrix: SOIL

Sampled: November 18, 1998

Run#:16137

Analyzed: November 23, 1998

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK DILUTION SPIKE FACTOR (%)
GASOLINE	410	10	N.D.	122 1
MTBE	0.80	0.62	Ŋ.D.	88 1
BENZENE	3.6	0.62	$\mathbf{N} \cdot \mathbf{D}$ .	112 1
TOLUENE	11	0.62	N.D.	114 1
ETHYL BENZENE XYLENES	12 72	0.62 0.62	N.D. N.D.	110 1 109 1

Vincent Vancil

Analyst

Michael Verona

**Environmental Services (SDB)** 

November 24, 1998

Submission #: 9811319

LIFE SPRINGS ENVIRONMENTAL

Atten: Kenneth Meleen

Project: RT NAHAS CO. T/P

Received: November 19, 1998

Project#: 98041.1

re: One sample for Gasoline BTEX MTBE analysis.

Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: WIS N-2'

Spl#: 216929

Matrix: SOIL

Sampled: November 18, 1998

Run#:16136

Analyzed: November 20, 1998

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK D SPIKE (%)	ILUTION FACTOR
GASOLINE	N.D.	1.0	N.D.	105	1
MTBE	N.D.	0.0050	N.D.	89	1
BENZENE	N.D.	0.0050	N.D.	89	1
TOLUENE	N.D.	0.0050	N.D.	88	1
ETHYL BENZENE	N.D.	0.0050	N.D.	92	1
XYLENES	N.D.	0.0050	N.D.	89	1

Vincent Vancil

Analyst

Michael Verona

Environmental Services (SDB)

November 24, 1998

Submission #: 9811319

LIFE SPRINGS ENVIRONMENTAL

Atten: Kenneth Meleen

Project: RT NAHAS CO. T/P

Received: November 19, 1998

Project#: 98041.1

re: One sample for Gasoline BTEX MTBE analysis.

Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: EJ-2'

Spl#: 216930

Matrix: SOIL

Sampled: November 18, 1998 Run#:16098

Analyzed: November 21, 1998

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/kg)	BLANK RESULT (mg/Kg)	BLANK DESPIKE (%)	ILUTION FACTOR
GASOLINE	N.D.	1.0	N.D.	99	1
MTBE	N.D.	0.0050	N.D.	88	1
BENZENE	N.D.	0.0050	N.D.	88	1
TOLUENE	N.D.	0.0050	N.D.	88	1
ETHYL BENZENE	N.D.	0.0050	N.D.	88	1
XYLENES	N.D.	0.0050	N.D.	88	1

Craig Huntzinger

Analyst

Michael Verona

Laboratory Operations Manager

**Environmental Services (SDB)** 

November 24, 1998

Submission #: 9811319

LIFE SPRINGS ENVIRONMENTAL

Atten: Kenneth Meleen

Project: RT NAHAS CO. T/P

Project#: 98041.1

Received: November 19, 1998

re: One sample for Gasoline BTEX MTBE analysis.

Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: EIS S-2'

Sp1#: 216931

Matrix: SOIL

Sampled: November 18, 1998 Run#:16144

Analyzed: November 23, 1998

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	1.0	N.D.	101	1
MTBE	N.D.	0.0050	N.D.	102	1
BENZENE	N.D.	0.0050	N.D.	94	1
TOLUENE	N.D.	0.0050	N.D.	93	1
ETHYL BENZENE	N.D.	0.0050	N.D.	93	1
XYLENES	N.D.	0.0050	N.D.	92	1

Vincent Vancil

Analyst

Michael Verona

Environmental Services (SDB)

November 24, 1998

Submission #: 9811319

LIFE SPRINGS ENVIRONMENTAL

Atten: Kenneth Meleen

Project: RT NAHAS CO. T/P

Project#: 98041.1 Received: November 19, 1998

re: One sample for Gasoline BTEX MTBE analysis.

Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: EIS N-2'

Spl#: 216932

Matrix: SOIL

Sampled: November 18, 1998

Run#:16144

Analyzed: November 23, 1998

ANALYTE	RESULT	REPORTING LIMIT (mq/Kg)	BLANK RESULT (mg/Kg)		ILUTION FACTOR
GASOLINE	N.D.	1.0	N.D.	101	1
MTBE	N.D.	0.0050	N.D.	102	1
BENZENE	N.D.	0.0050	N.D.	94	1
TOLUENE	N.D.	0.0050	N.D.	93	1
ETHYL BENZENE	N.D.	0.0050	N.D.	93	1
XYLENES	N.D.	0.0050	N.D.	92	1

Vincent Vancil

Analyst

Environmental Services (SDB)

November 24, 1998

Submission #: 9811319

LIFE SPRINGS ENVIRONMENTAL

Atten: Kenneth Meleen

Project: RT NAHAS CO. T/P

Received: November 19, 1998

Project#: 98041.1

re: One sample for Gasoline BTEX MTBE analysis.

Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: CJ-2'

Spl#: 216933

Matrix: SOIL

Sampled: November 18, 1998 Run#:16144 Analyzed: November 23, 1998

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	FACTOR
GASOLINE	N.D.	1.0	N.D.	101	1.
MTBE	N.D.	0.0050	N.D.	102	1
BENZENE	N.D.	0.0050	N.D.	94	1
TOLUENE	N.D.	0.0050	N.D.	93	1
ETHYL BENZENE	N.D.	0.0050	N.D.	93	1
XYLENES	N.D.	0.0050	N.D.	92	1

Vincent Vancil

Analyst

Michael Verona

SUBM #: 9811352 REP: PM

CLIENT: LIFESPRINGS

12/01/98

REF #:43272

· Chain of Custody

DATE 11/20/98 PAGE \_\_\_\_\_ OF \_\_\_\_\_\_ 991/352/217893-95 Environmental Services (SDB) (DOHS 1094) ANALYSIS REPORT Kenneth Meleen PROJ. MGR Life Springs Environmental, Inc NUMBER OF CONTAINERS PRIORITY POLLUTANT METALS (13) COMPANY ADDRESS 3275 Stevens Creek Blvd. #208 TOTAL OIL & GREASE (EPA 5520, B+F, E+F) San Jose, CA 95117 EXTRACTION (TCLP, STLC) SAMPLERS (SIGNATURE) SAMPLE ID. Sump-4.5 11/20/98 4:05 pm Sail W. Hoist 8:5 4:10 pm E. Hoist 8.5 RELINQUISHED BY RELINQUISHED BY SAMPLE RECEIPT PROJECT INFORMATION Kernett S. Welen 5:52 PROJECT NAME TOTAL NO. OF CONTAINERS (TIME) (SIGNATURE) R.T. No. 405 Company T/P
PROJECT NUMBER (SIGNATURE) HEAD SPACE Kenneth L. Meleen 11/24/20 DATE PRINTED NAME) 98041.1 (PRINTED NAME) REC'D GOOD CONDITION/COLD Life Springs Environmental, Inc. CONFORMS TO RECORD OTHER RECEIVED BY (LABORATORY) RECEIVED BY SPECIAL INSTRUCTIONS/COMMENTS: Add MTBE to TEPHG/BTEX Analysis
TEPH-Diesel-Look for Hydroculic Fluid
51 UB TIME SIGNATURE (TIME) SIGNATURE (DATE) (PRINTED NAME) IPPINTED NAMEL (LAB) (COMPANY)

Environmental Services (SDB)

December 1, 1998

Submission #: 9811352

LIFE SPRINGS ENVIRONMENTAL

Atten: Kenneth Meleen

Project: R.T. NAHAS COMPANY

Project#: 98041.1D

Received: November 20, 1998

re: One sample for Gasoline BTEX MTBE analysis.

Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: SUMP-4.5

Spl#: 217293 Matr Sampled: November 20, 1998 Ru

Matrix: SOIL Run#:16216

Analyzed: November 30, 1998

		REPORTING	BLANK		DILUTION
	RESULT	LIMIT	RESULT	SPIKE	FACTOR
ANALYTE	(mg/Kg)	(mg/Kg)	(mg/Kg)	(%)	
GASOLINE	N.D.	1.0	N.D.	107	1
MTBE	N.D.	0.0050	N.D.	93	1
BENZENE	<b>N</b> .D.	0.0050	N.D.	89	1
TOLUENE	<b>N</b> .D.	0.0050	N.D.	88	1
ETHYL BENZENE	N.D.	0.0050	N.D.	87	1
XYLENES	N.D.	0.0050	N.D.	87	1

Note: Hydrocarbon found in Gasoline Range is uncharacteristic of Gasoline Profile.If quantified using Gasoline's response factor, estimated

concentration would equal 18mg/Kg.

Vincent Vancil

Analyst

Michael Verona

Environmental Services (SDB)

December 3, 1998

Submission #: 9811352

LIFE SPRINGS ENVIRONMENTAL

Atten: Kenneth Meleen

Project: R.T. NAHAS COMPANY

Received: November 20, 1998

Project#: 98041.1D

re: One sample for TEPH analysis.

Method: EPA 8015M

Client Sample ID: SUMP-4.5

Spl#: 217293

Matrix: SOIL

Extracted: November 30, 1998

Sampled: November 20, 1998

Run#:16208

Analyzed: December 3, 1998

REPORTING BLANK BLANK DILUTION RESULT LIMIT RESULT SPIKE FACTOR (mg/Kg) (mg/Kg)Hydrocarbon reported does not match the pattern of our Diesel

Standard.

HYDRAULIC OIL

98

50

N.D.

1

Bruce Havlik

Analyst

**Environmental Services (SDB)** 

November 24, 1998

Submission #: 9811352

LIFE SPRINGS ENVIRONMENTAL

Atten: Kenneth Meleen

Project: R.T. NAHAS COMPANY

Project#: 98041.1D

Received: November 20, 1998

re: One sample for Halogenated Volatile Organics by GC/MS analysis.

Method: 8010 Compounds by Method 8240A Nov 1990

Client Sample ID: SUMP-4.5

Spl#: 217293

Matrix: SOIL

Sampled: November 20, 1998 Run#: 16146

Analyzed: November 23, 1998

		REPORTING	BLANK	BLANK I	DILUTION
	RESULT	LIMIT	RESULT	SPIKE	FACTOR
ANALYTE	(ug/Kg)	(ug/Kg)	(ug/Kg)	(%)	
BROMODICHLOROMETHANE	N.D.	5.0	N.D.		1
BROMOFORM	N.D.	5.0	N.D.		1
BROMOMETHANE	N.D.	10	N.D.		1
CARBON TETRACHLORIDE	N.D.	5.0	N.D.	<del>-</del> -	, 1
CHLOROBENZENE	N.D.	5.0	N.D.	98.2	1
CHLOROETHANE	N.D.	10	N.D.		1
2-CHLOROETHYLVINYLETHER	N.D.	50	N.D.		1
CHLOROFORM	N.D.	5.0	N.D.		1
CHLOROMETHANE	N.D.	10	N.D.		1
DIBROMOCHLOROMETHANE	N.D.	5.0	N.D.		1 1
1,2-DICHLOROBENZENE	N.D.	5.0	N.D.		1
1,3-DICHLOROBENZENE	N.D.	5.0	N.D.		1
1,4-DICHLOROBENZENE	N.D.	5.0	N.D.		1
1,1-DICHLOROETHANE	N.D.	5.0	N.D.		1
1,2-DICHLOROETHANE	N.D.	5.0	N.D.		<u>1</u>
1,1-DICHLOROETHENE	N.D.	5.0	N.D.	95.3 <sub>.</sub>	1
1,2-DICHLOROETHENE (CIS)	N.D.	5.0	N.D.		1
1,2-DICHLOROETHENE (TRANS)	N.D.	5.0	N.D.		1
1,2-DICHLOROPROPANE	N.D.	5.0	N.D.		1
CIS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.		1
TRANS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.		1
METHYLENE CHLORIDE	N.D.	5.0	N.D.		1
1,1,2,2-TETRACHLOROETHANE	N.D.	5.0	N.D.		ļ
TETRACHLOROETHENE	N.D.	5.0	N.D.		1
1,1,1-TRICHLOROETHANE	N.D.	5.0	N.D.		1
1,1,2-TRICHLOROETHANE	N.D.	5.0	N.D.		1 1
TRICHLOROETHENE	N.D.	5.0	N.D.	97.8	1
VINYL CHLORIDE	N.D.	5.0	N.D.		1
TRICHLOROTRIFLUOROETHANE	N.D.	5.0	N.D.		1
TRICHLOROFLUOROMETHANE	N.D.	5.0	N.D.		1
amente de la constitución de la			~		

June Zhao Analyst

Michael Verona Operations Manage

**Environmental Services (SDB)** 

December 1, 1998

Submission #: 9811352

LIFE SPRINGS ENVIRONMENTAL

Atten: Kenneth Meleen

Project: R.T. NAHAS COMPANY

Received: November 20, 1998

Project#: 98041.1D

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

Method: SW846 Method 8270A Nov 1990

Client Sample ID: SUMP-4.5

*Spl#*: 217293

Matrix: SOIL

Extracted: November 23, 1998

Sampled: November 20, 1998 Run#: 16128 Analyzed: November 23, 1998

	RESULT	REPORTING LIMIT	BLANK RESULT		ILUTION FACTOR
ANALYTE	(mg/Kg)	(mg/Kg)	(mg/Kg)	(%)	
PHENOL	N.D.	0.10	N.D.	68.0	1
BIS (2-CHLOROETHYL) ETHER	N.D.	0.10	N.D.		1
2-CHLOROPHENOL	Ŋ.D.	0.10	N.D.	69.5	1
1,3-DICHLOROBENZENE	Ŋ.D.	0.10	Ŋ.D.	7.	1
1,4-DICHLOROBENZENE	Ŋ.D.	0.10	Ŋ.D.	74.8	1
BÉNZYL ALCOHOL	Ŋ.D.	0.20	Ŋ.D.		1
1,2-DICHLOROBENZENE 2-METHYLPHENOL	N.D.	0.10	N.D.	<del>-</del> -	1
Z-MEINILPHENUL	N.D.	0.10	Ŋ.D.		1
BIS (2-CHLOROISOPROPYL) ETHER 4-METHYLPHENOL	N.D.	0.10	Ŋ.D.	~ ~	Ţ
N-NITROSO-DI-N-PROPYLAMINE	N.D.	0.20	Ŋ.D.		1
HEXACHLOROETHANE	N.D.	0.10	N.D.	74.1	Ţ
NITROBENZENE	N.D.	0.10	N.D.		Ţ
ISOPHORONE	N.D.	0.10	N.D.		Ť
2-NITROPHENOL	N.D.	0.10 0.10	N.D.		<u> </u>
2,4-DIMETHYLPHENOL	N.D. N.D.	0.10	N.D. N.D.	<del></del>	1 1
BIS (2-CHLOROETHOXY) METHANE	N.D.	0.10	N.D.		1
2,4-DICHLOROPHENOL	N.D.	0.10	N.D.		1
1,2,4-TRICHLOROBENZENE	N.D.	0.10	N.D.	75.6	1
NAPHTHALENE	N.D.	0.10	N.D.	73.0	1
4-CHLOROANILINE	N.D.	0.20	N.D.		111111111111111111111111111
HEXACHLOROBUTADIENE	N.D.	0.10	N.D.		i
4-CHLORO-3-METHYLPHENOL	N.D.	0.20	N.D.	78.5	ī
2-METHYLNAPHTHALENE	N.D.	0.10	N.D.		ī
HEXACHLOROCYCLOPENTADIENE	N.D.	0.10	N.D.		1
2,4,6-TRICHLOROPHENOL	N.D.	0.10	N.D.	~ ~	ī
2,4,5-TRICHLOROPHENOL	N.D.	0.10	N.D.		1 1 1
2-CHLORONAPHTHALENE	N.D.	0.10	N.D.		1
2-NITROANILINE	N.D.	0.50	N.D.		1
DIMETHYL PHTHALATE	N.D.	0.50	N.D.		1
ACENAPHTHYLENE	N.D.	0.10	N.D.		1 1 1 1 1
3-NITROANILINE	N.D.	0.10	N.D.		1
ACENAPHTHENE	N.D.	0.10	N.D.	68.8	1
2,4-DINITROPHENOL	N.D.	0.50	N.D.		1
4-NITROPHENOL	N.D.	0.50	N.D.	54.5	1
DIBENZOFURAN	N.D.	0.10	N.D.		1
2,4-DINITROTOLUENE	Ŋ.D.	0.10	Ν.Д.	65.1	1 1
2,6-DINITROTOLUENE	N.D.	0.20	N.D.		
DIETHYL PHTHALATE	N.D.	0.50	N.D.		1
4-CHLOROPHENYL PHENYL ETHER	N.D.	0.10	N.D.		1

**Environmental Services (SDB)** 

December 1, 1998

Submission #: 9811352

page 2

LIFE SPRINGS ENVIRONMENTAL

Atten: Kenneth Meleen

Project: R.T. NAHAS COMPANY

Received: November 20, 1998

on Callea

Project#: 98041.1D

re: One sample for Semivolatile Organics (B/NAs) analysis, continued.

Method: SW846 Method 8270A Nov 1990

Client Sample ID: SUMP-4.5

Spl#: 217293

*Matrix:* SOIL

Extracted: November 23, 1998

Sampled: November 20, 1998 Run#: 16128 Analyzed: November 23, 1998

		REPORTING	BLANK	BLANK	DILUTION
	RESULT	LIMIT	RESULT	SPIKE	FACTOR
ANALYTE	(mg/Kg)	(mg/Kg)	(mg/Kg)	(%)	
FLUORENE	N.D.	0.10	N.D.		1
4-NITROANILINE	N.D.	0.50	N.D.		1
2-METHYL-4,6-DINITROPHENOL	N.D.	0.50	N.D.		1
n-NITROSODIPHENYLAMINE	N.D.	0.10	N.D.		1
4-BROMOPHENYL PHENYL ETHER	N.D.	0.10	N.D.		1
HEXACHLOROBENZENE	N.D.	0.10	N.D.		1
PENTACHLOROPHENOL	N.D.	0.50	N.D.	29.5	1
PHENANTHRENE	N.D.	0.10	N.D.		1
ANTHRACENE	N.D.	0.10	N.D.		1
DI-N-BUTYL PHTHALATE	N.D.	2.0	N.D.		1
FLUORANTHENE	N.D.	0.10	N.D.		1
PYRENE	N.D.	0.10	N.D.	75.7	1
BUTYL BENZYL PHTHALATE	N.D.	0.50	N.D.		1,
3,3'-DICHLOROBENZIDINE	N.D.	0.20	N.D.		1
BÉNZO (A) ANTHRACENE	N.D.	0.10	N.D.		1
BIS (2-ETHYLHEXYL) PHTHALATE	N.D.	0.50	N.D.		1
CHRYSENE	N.D.	0.10	N.D.		1
DI-N-OCTYL PHTHALATE	N.D.	0.50	N.D.		1
BENZO (B) FLUORANTHENE	N.D.	0.10	N.D.		1
BENZO (K) FLUORANTHENE	Ŋ.D.	0.20	N.D.		1
BENZO (A) PYRENE	N.D.	0.050	N.D.		1
INDENO(1,2,3 C,D) PYRENE	Ŋ.D.	0.20	N.D.		1
DIBENZO (A, H) ANTHRACENE	Ŋ.D.	0.20	Ŋ.D.	~ ~	1
BENZO (G, H, I) PERYLENE	Ŋ.D.	0.20	N.D.		1
BENZOIC ACID	N.D.	0.50	N.D.		1

Michael Lee

Analyst

Michael Verona

Environmental Services (SDB)

December 1, 1998

Submission #: 9811352

LIFE SPRINGS ENVIRONMENTAL

Atten: Kenneth Meleen

Project: R.T. NAHAS COMPANY

Received: November 20, 1998

Project#: 98041.1D

re: 1 sample for Oil and Grease analysis.

Method: 5520 E&F

Matrix: SOIL

Extracted: November 24, 1998

Sampled: November 20, 1998 Analyzed: November 24, 1998 Run#: 16156

BLANK DILUTION REPORTING BLANK OIL & GREASE LIMIT RESULT SPIKE FACTOR CLIENT SPL ID (mg/Kg)(mg/Kg) (mg/Kg)

217293 SUMP-4.5

Joan Mullen for: Michael Verona Operations Manager

Environmental Services (SDB)

December 2, 1998

Submission #: 9811352

LIFE SPRINGS ENVIRONMENTAL

Atten: Kenneth Meleen

Project: R.T. NAHAS COMPANY

Project#:

98041.1D

Received: November 20, 1998

re: One sample for Miscellaneous Metals analysis.

Method: EPA 3010A/3050A/6010A Nov 1990

Client Sample ID: SUMP-4.5

Spl#: 217293

Sampled: November 20, 1998

Matrix: SOIL

Extracted: November 30, 1998

Run#: 16229

Analyzed: December 2, 1998

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
CADMIUM CHROMIUM	1.0 27	0.50	N.D. N.D.	105 106	1
LEAD	7.9	1.0	N.D.	108	ī
NICKEL	28	1.0	N.D.	107 105	1
Christopher Arndt Analyst	59	1.0	N.D. nael Verona rations Mar	- L	1

Environmental Services (SDB)

December 3, 1998

Submission #: 9811352

LIFE SPRINGS ENVIRONMENTAL

Atten: Kenneth Meleen

Project: R.T. NAHAS COMPANY

Project#: 98041.1D

Received: November 20, 1998

re: One sample for TEPH analysis.

Method: EPA 8015M

Client Sample ID: W. HOIST 8.5

Spl#: 217294 Matrix: SOIL Extracted: November 24, 1998

Sampled: November 20, 1998 Run#:16200 Analyzed: December 3, 1998

REPORTING BLANK BLANK DILUTION RESULT RESULT SPIKE FACTOR LIMIT (mg/Kg) (mg/Kg) (ma/Ka) 100 Hydrocarbon reported is in the late Diesel Range and does not match

our Diesel Standard. Surrogate diluted out.

HYDRAULIC OIL 2000

N.D.

Analyst

100

Environmental Services (SDB)

December 3, 1998

Submission #: 9811352

LIFE SPRINGS ENVIRONMENTAL

Atten: Kenneth Meleen

Project: R.T. NAHAS COMPANY

Received: November 20, 1998

Project#: 98041.1D

re: One sample for TEPH analysis.

Method: EPA 8015M

Client Sample ID: E. HOIST 8.5

Spl#: 217295

Matrix. SOIL

Extracted: November 24, 1998

Sampled: November 20, 1998

Run#:16200

Analyzed: December 3, 1998

REPORTING BLANK BLANK DILUTION RESULT SPIKE FACTOR

RESULT LIMIT ANALYTE (mg/Kg)(mg/Kg) (mg/Kg) DIESEL N.D. N.D. 1.0 HYDRAULIC OIL 50 N.D. 1

Analyst

#### **APPENDIX G**

# COC and ANALYTICAL RESULTS for SOIL STOCKPILE ANALYSIS

-18120371218845- Alb 643

CHROMALAB, INC.

SURM #: 9812037 REP: PM CLIENT: LIFESPRINGS

12/89/98

Reference #: 43416

Chain of Custody

DATE 12/2/98 PAGE 1 OF 2 Environmental Services (SDB) (DOHS 1094) REF #:43416 тийчен мемлили Address 3275 Stevens Creek Blod \$ 20 TEH (EPA 8015M OXeroner, Obland, DWET. (STLC) DTCL? O PESTICIDESIEPA O PCS'S IEPA 8080 LUFT METALS: Cd. Cr. Pb. Ni. 2 TOTAL LEAD SAMPLENS (SIGNATURE) Kennett d. Melcan SAMPLE ID DATE TIME MATRIX PRESERV. 12/2/98 11:55 04105 01205 12:00 0 + 10 N 12:05 0+20N 12:10 04 30 5 12:15 01405 12:20/ 0+30N 12:25 0+305 PHOJECT INFORMATION **BAMPLE RECEIPT** RELINGUISHED BY RELINQUISITED BY 2 I RELINDUISHED BY TOTAL NO. OF CONTAINERS (SIGNATURE) (SKONATURE) HEAD SPACE TEMPERATURE (PINNIED HAME) (TIMALI CISTANE) MATER Lite springs Environmental CONFORMS TO RECORD COMPANY (COMPANY) OTHER RECENED BY **RECEIVED BY** RECEIVED BY (LADOINATORY) Clex Pares

FIGURET Pareles

Fronted HAMES Report: (1) Routine (11.evel 2 1) Level 3 11 Level 4 1) Electronic Report **BPECIAL INSTRUCTIONS/COMMENTS:** (SIGNATURE) CHALL ISKUMATONE CHAICE (PINHIED HAME) (PARALE DIAME)

(COMPANY)

1220 Quarry Lane • Plensanton, California 94566-4756 510/404-1919 • Facsimile 510/404-1096

#### Chain of Custody

DATE 12/2/98 PAGE 2 OF 2 Environmental Services (SDB, (DOLIS 1094) ANALYBIS REPORT EDMITARY Life Springs Emminmental Inc.
ADDRESS 3225 Stevens Creek Blod #200 San. Tose CA 95117 DWEI. (STLC) OTCL? SAMPLENS (SIGNATURE) O Spec Court O TSS O TDS TOTAL LEAD Lemittof Milan BAMPLE ID. DATE TIME 12/2/9/8 12:35 04555 01705 0455 N 12: 45 0+70N 12:10 E. HOITAMROANI TOSLONG BAMPLE HECEIPT RELIHOUISHED BY HELINONISHED BY HELIHOUISHED BY TOTAL NO. OF CONTAINERS (SIGNATURE) BIONATURE HEAD BRACE TEMPENATURE (PINITED HAME) FINALL CHAMES LSE - 183-98 CONFORMS TO RECORD COMPAIN NEILLO 72 *NECENED DY* RECEIVED BY **NECEIVED BY (CABORATORY)** Report: () Routine () Level 2 11 Level 3 11 Level 4 11 Electronic Report SPECIAL MISTRUCTIONS/COMMENTS: (SICHALUNE) (SIGHATURE) CHAIL (SIGHATURE) (TANE) PRIMITED HAMES RIALE) PROMILED HAME) (CINNED HAME) COMPANY

COMPANY

Environmental Services (SDB)

December 9, 1998

Submission #: 9812037

LIFE SPRINGS ENVIRONMENTAL

Atten: Kenneth Meleen

Project: RT NAHAS CO

Project#: 98041.1

Received: December 2, 1998

re: One sample for Gasoline BTEX MTBE analysis.

Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: O+10S,20S,10N,20N

Spl#: 218843

*Matrix:* SOIL

Sampled: December 2, 1998

Run#:16336

Analyzed: December 9, 1998

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	40	N.D.	95	4
MTBE	N.D.	2.5	N.D.	75	4
BENZENE	N.D.	2.5	N.D.	87	4
TOLUENE	N.D.	2.5	N.D.	87	4
ETHYL BENZENE	N.D.	2.5	N.D.	88	4
XYLENES	19	2.5	N.D.	89	4

Hydrocarbon found in Gasoline Range is uncharacteristic of Gasoline Profile. If quantified using Gasoline's response factor, concentration would equal 820mg/Kg.

Vincent Vancil

Analyst

Environmental Services (SDB)

December 9, 1998

Submission #: 9812037

LIFE SPRINGS ENVIRONMENTAL

Atten: Kenneth Meleen

Project: RT NAHAS CO

Project#: 98041.1

Received: December 2, 1998

re: One sample for Gasoline BTEX MTBE analysis.

Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: 0+30S,40S,30N,30S

Spl#: 218844

*Matrix:* SOIL

Sampled: December 2, 1998

Run#:16336

Analyzed: December 9, 1998

	RESULT	REPORTING LIMIT	BLANK RESULT	BLANK I SPIKE	DILUTION FACTOR
ANALYTE	(mg/Kg)	(mg/Kg)	(mg/Kg)	(%)	<u></u>
GASOLINE	N.D.	40	N.D.	95	4
MTBE	N.D.	2.5	N.D.	75	4
BENZENE	N.D.	2.5	N.D.	87	4
TOLUENE	N.D.	2.5	N.D.	87	4
ETHYL BENZENE	9.9	2.5	N.D.	88	4
XYLENES	100	2.5	N.D.	89	4

Note: Hydrocarbon found in Gasoline Range is uncharacteristic of Gasoline

Profile. If quantified using Gasoline's response factor, concentration

would equal 1400mg/Kg.

Vincent Vancil

Analyst

Michael Verona

Environmental Services (SDB)

December 9, 1998

Submission #: 9812037

LIFE SPRINGS ENVIRONMENTAL

Atten: Kenneth Meleen

Project: RT NAHAS CO

Received: December 2, 1998

Project#: 98041.1

re: One sample for Gasoline BTEX MTBE analysis.

Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: 0+55S,70S,55N,70N

Spl#: 218845

Matrix: SOIL

Sampled: December 2, 1998

Run#:16336

Analyzed: December 9, 1998

ANALYTE	RESULT	REPORTING LIMIT	BLANK RESULT		UTION CTOR
	(mg/Kg)	(mg/Kg)	(mg/Kg)	(%)	<del></del>
GASOLINE	N.D.	100	N.D.	95 1	.0
MTBE	N.D.	6.2	N.D.	75 1	.0
BENZENE	N.D.	6.2	N.D.	87 1	.0
TOLUENE	N.D.	6.2	N.D.	87 1	.0
ETHYL BENZENE	24	6.2	N.D.	88 1	.0
XYLENES	280	6.2	N.D.	89 1	.0

Hydrocarbon found in Gasoline Range is uncharacteristic of Gasoline Profile. If quantified using Gasoline's response factor, concentration

would equal 1900mg/Kg.

Vincent Vancil

Analyst

Michael Verona

Environmental Services (SDB)

December 8, 1998

Submission #: 9812037

LIFE SPRINGS ENVIRONMENTAL

Atten: Kenneth Meleen

Project: RT NAHAS CO

Project#: 98041.1

Received: December 2, 1998

re: One sample for Halogenated Volatile Organics by GC/MS analysis.

Method: 8010 Compounds by Method 8240A Nov 1990

Client Sample ID: 0+305,405,30N,30S

Spl#: 218844

Matrix: SOIL

Sampled: December 2, 1998

Run#: 16363

Analyzed: December 4, 1998

ANALYTE	RESULT (ug/Kg)	REPORTING LIMIT (ug/Kg)	BLANK RESULT (ug/Kg)	BLANK I SPIKE (%)	FACTOR
BROMODICHLOROMETHANE	N.D.	20	N.D.		4
BROMOFORM	N.D.	20	N.D.		4
BROMOMETHANE	N.D.	41	N.D.		4
CARBON TETRACHLORIDE	N.D.	20	N.D.		4
CHLOROBENZENE	N.D.	20	N.D.	96.1	4
CHLOROETHANE	N.D.	41	N.D.	<del>-</del> -	4
2-CHLOROETHYLVINYLETHER	N.D.	200	N.D.		4
CHLOROFORM	N.D.	20	N.D.		4
CHLOROMETHANE	N.D.	41	N.D.		4
DIBROMOCHLOROMETHANE	N.D.	20	N.D.		4
1,2-DICHLOROBENZENE	N.D.	20	N.D.		4
1,3-DICHLOROBENZENE	N.D.	20	N.D.		4
1,4-DICHLOROBENZENE	N.D.	20	N.D.		4
1,1-DICHLOROETHANE	N.D.	20	N.D.		4 4 4 4 4 4 4 4 4
1,2-DICHLOROETHANE	N.D.	20	N.D.		4
1,1-DICHLOROETHENE	N.D.	20	N.D.	89.7	
1,2-DICHLOROETHENE (CIS)	N.D.	20	N.D.		4
1,2-DICHLOROETHENE (TRANS)	N.D.	20	N.D.	~ -	4
1,2-DICHLOROPROPANE	N.D.	20	N.D.		4
CÍS-1,3-DICHLOROPROPENE	N.D.	20	N.D.		4 4 4 4 4 4 4
TRANS-1,3-DICHLOROPROPENE	N.D.	20	N.D.		4
METHYLENE CHLORIDE	N.D.	20	N.D.		4
1,1,2,2-TETRACHLOROETHANE	N.D.	20	N.D.		4
TETRACHLOROETHENE	N.D.	20	N.D.		4
1,1,1-TRICHLOROETHANE	N.D.	$\bar{2}\bar{0}$	N.D.	- <del>-</del>	4
1,1,2-TRICHLOROETHANE	N.D.	20	N.D.		4
TRICHLOROETHENE	N.D.	$\frac{1}{2}$ 0	N.D.	95.9	4
VINYL CHLORIDE	N.D.	20	N.D.		4 4 4
TRICHLOROTRIFLUOROETHANE	N.D.	20	N.D.		$ar{4}$
TRICHLOROFLUOROMETHANE	N.D.	$\tilde{2}\tilde{0}$	N.D.		$ar{4}$
		<del></del>	77		-

June Zhao

June Zhao Analyst Michael Verona Operations Manager

**Environmental Services (SDB)** 

December 9, 1998

Submission #: 9812037

LIFE SPRINGS ENVIRONMENTAL

Atten: Kenneth Meleen

Project: RT NAHAS CO

Received: December 2, 1998

Project#: 98041.1

re: 3 samples for Lead analysis.

Method: EPA 3050A/7420A

Matrix: SOIL

Extracted: December 3, 1998

Sampled: December 2, 1998 Run#: 16283

Analyzed: December 3, 1998

REPORTING BLANK BLANK DILUTION LEAD RESULT SPIKE LIMIT FACTOR CLIENT SPL ID (mq/Kq) (mg/Kg)(mg/Kg)(왕) 218843 O+10S, 20S, 10N, 20N N.D.

Matrix: SOIL

Extracted: December 3, 1998

Sampled: December 2, 1998

Run#: 16324 Analyzed: December 3, 1998

REPORTING BLANK BLANK DILUTION RESULT LEAD LIMIT SPIKE FACTOR CLIENT SPL ID (mq/Kq)(mg/Kg) (왕) (mq/Kq)

Spl#

218844 O+30S,40S,30N,30S

Matrix: SOIL

Extracted: December 3, 1998

Sampled: December 2, 1998 Run#: Analyzed: December 7, 1998 16324

REPORTING BLANK BLANK DILUTION RESULT SPIKE FACTOR LEAD LIMIT CLIENT SPL ID (mg/Kg) (mg/Kg) (mg/Kg)

218845 O+55S,70S,55N,70N

N.D.

5.0

Analyst

Verona

SUBN N: 9618261 REP: PR CLIENT: LIFESPRINGS

Duk : 12789/99 But kenjes?

#### 99/226//22/43/-33 1220 Quarry Lane • Piensanion, California 94566-4756 510/464-1919 • Facsimile 510/464-1096

Chain of Custody

DATE 12/15/98 PAGE / OF 2.

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SAMPLENS (SIGNATURE)  Kennell & M  BAMPLE ID.	Welser DATE	(A TIME	CE) 2 CE) 24 MAII	(FAX HO (FAX H	110) 292 21) 24 24 21	TPH-EPA 8015,	PURGEABLE AROMATICS BIEX (EPA 8020) (A) 74	TPH-Dissel (EPA 8015M	TEH (EPA 8015M)	TURGEANT E HALDCA (EVOCS) (EPA \$010)	VOLATILE ORGANICS (VOCs) (FPA \$260)	SEMINOLATILES (EPA 8270)	TOTAL OIL AND ISM 5520 B+F,		C PESTICEDES(EPA 8	PNA's by 0 8270	O Spec. Cond.	LUFT METALS: Cd. Cr. Pb. Nf. Zn	CAM 17 METALS IEPA 6010/7470/747	TOTAL LEAD	OWET. (STLC) OTCL?	D Bezavalent Chro				NUMBER OF C
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Environmental Services (SDB) (DOLIS 1094)

1220 Quarry Lane • Plensanton, California 94566-4756 510/464-1919 • Facsimilo 510/464-1096 Reference #: Y 2647

**Chain of Custody** 

DATE 13/15/98 PAGE 2 01 2

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PROJ MOR KEN I COMPANY LIKES ADDRESS 3275 SAMPLERS (SIGNATURE)	neth Oning Stev Tose	Mel s Env cus Ci CA 9	een rechbl	MASON	8015,8020]	FURNING STEX MATTER PURCEASE ARONATICS BYEX (EPA 8020)	► (EPA 8015M)	8015M) Dixeral, DM.O.	EHALOCARBONS, TPA 8010)	ORGANICS PA 8260)	महर	AND GREASE 8+F, E+F)	AR	9080)			VLS: NI. Zn	ETALS 147074711	Q.	TLC)	at Chromina hold time for R20)				NUMBER OF CONTAINERS
EAMPLENS ISIGNATURE)  Kennett Z  BAMPLEID.	, Me	lein	(cb) 84 (0 (cs) 84 (M) 1111	<i>3-92</i> 9. Fax Ho.) <i>3-969</i> Pristr	TPH-(EPA 8	PURGEAR		TEH (EPA 8015M Diame, Diblord,	PUNCEASET EALO (EYOC) (EPA SE)	VOCATILE (VOCS) (E)	SELENCIATILES (EPA 6270)	TOTAL OIL.		C PESTICOESIEPA C POSTS (EPA BOST	PIA's by (3 8270	O Spec. Cond.	CA. Cr. Pt. NI.	CAM 17 METALS IEPA 6010/7470/47	TOTAL LEAD	OWET. (STLC) OTCL?	O Bensvalent Chros O pH (24 hr hold tto				NUMBER OF
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PROFILE TEMPERATURE  TEMPERATURE  TEMPERATURE			ns	4	1300	BEGINATURE)  Kenneth L. Meleen 12/15) Printed Haus			[imi		GHATUN	<del>(</del> )			C	(1996) (2001) (1997) (19				fravio					
					K				eth L. Meleen 12/15/98			FURNIED HAME! HAVE!				AIEI	PINITEO IIANCI (TÁTI)								
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**Environmental Services (SDB)** 

December 28, 1998

Submission #: 9812261

LIFE SPRINGS ENVIRONMENTAL

Atten: Kenneth Meleen

Project: NAHAS COMPANY

Received: December 15, 1998

Project#: 98041.2

re: One sample for Gasoline BTEX MTBE analysis.

Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: 0+10S-2,0+15S,25TOP,30N-3

Spl#: 221431

Matrix: SOIL

Sampled: December 15, 1998 Run#:16651

Analyzed: December 22, 1998

	RESULT	REPORTING LIMIT	BLANK RESULT	BLANK SPIKE	DILUTION FACTOR
ANALYTE	(mg/Kg)	(mg/Kg)	(mg/Kg)	(%)	
GASOLINE	N.D.	50	N.D.	98	5
MTBE	N.D.	3.1	N.D.	97	5
BENZENE	N.D.	3.1	N.D.	96	5
TOLUENE	N.D.	3.1	N.D.	97	5
ETHYL BENZENE	N.D.	3.1	N.D.	96	5
XYLENES	4.3	3.1	N.D.	99	5

Hydrocarbon found in Gasoline Range is uncharacteristic of Gasoline Profile. If quantified using Gasoline's response factor, concentration would equal 130mg/Kg.

Vincent Vancil

Analyst

Michael Verona

**Environmental Services (SDB)** 

December 28, 1998

Submission #: 9812261

LIFE SPRINGS ENVIRONMENTAL

Atten: Kenneth Meleen

Project: NAHAS COMPANY

Received: December 15, 1998

Project#: 98041.2

re: One sample for Gasoline BTEX MTBE analysis.

Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: O+35TOP,42S,45N,50TOP-3

Spl#: 221432

Matrix: SOIL

Sampled: December 15, 1998

Run#:16651

Analyzed: December 22, 1998

	RESULT	REPORTING LIMIT	BLANK RESULT	BLANK DILUTION SPIKE FACTOR	
ANALYTE	(mg/Kg)	(mq/Kq)	(mg/Kg)	(%)	
GASOLINE	N.D.	50	N.D.	98 5	
MTBE	N.D.	3.1	N.D.	97 5	
BENZENE	N.D.	3.1	N.D.	96 5	
TOLUENE	5.6	3.1	N.D.	97 5	
ETHYL BENZENE	9.0	3.1	N.D.	96 5	
XYLENES	51	3.1	N.D.	99 5	

Note: Hydrocarbon found in Gasoline Range is uncharacteristic of Gasoline Profile.If quantified using Gasoline's response factor, concentration

would equal 640mg/Kg.

Vincent Vancil

Analyst

Michael Verona

**Environmental Services (SDB)** 

December 28, 1998

Submission #: 9812261

LIFE SPRINGS ENVIRONMENTAL

Atten: Kenneth Meleen

Project: NAHAS COMPANY

Project#: 98041.2

Received: December 15, 1998

re: One sample for Gasoline BTEX MTBE analysis.

Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: O+60N,65N,62S,72S-3

Spl#: 221433

Matrix: SOIL

Sampled: December 15, 1998 Run#:16651

Analyzed: December 22, 1998

2272 T. WORTE	RESULT	REPORTING LIMIT (mq/Kq)	BLANK RESULT (mg/Kg)	BLANK DILUTION SPIKE FACTOR (%)	
ANALYTE	(mg/Kg)				_
GASOLINE	N.D.	50	N.D.	98 5	
MTBE	N.D.	3.1	N.D.	97 5	
BENZENE	N.D.	3.1	N.D.	96 5	
TOLUENE	4.4	3.1	N.D.	97 5 .	
ETHYL BENZENE	6.6	3.1	N.D.	96 5	
XYLENES	73	3.1	N.D.	99 5	

Hydrocarbon found in Gasoline Range is uncharacteristic of Gasoline Profile. If quantified using Gasoline's response factor, concentration

would equal 810mg/Kg.

Vincent Vandil

Analyst

Michael Verona