R.T. NAHAS COMPANY *Since 1947*
REAL ESTATE DEVELOPERS AND INVESTORS

20630 PATIO DRIVE
CASTRO VALLEY, CALIFORNIA 94546
TELEPHONE (510) 538-9600
FAX (510) 881-7618

April 13, 2000

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

Dear Scott:

Enclosed is the Soil Remediation Closure Report prepared by LifeSprings. I hope, I hope, I hope this meets with your approval and we can be done with this stuff. Not that I haven't enjoyed working with you, but we can do lunch.

Let me know if there is anything else we need to do.

Sincerely,

Randall E. Nahas

Enclosure
REN/tar

TECHNICAL REPORT

SOIL REMEDIATION CLOSURE REPORT

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 98041.2

April 5, 2000

TABLE OF CONTENTS

Life Springs Environmental, Inc.

3275 Stevens Creek Blvd., #208, San Jose, CA 95117

ENVIRONMENTAL CONSULTING ENGINEERS
General Engineering Contractor's License No. 709780

408-243-9292
FAX 408-243-9696

April 5, 2000

Mr. Randall E. Nahas
R.T. Nahas Company
20630 Patio Drive
Castro Valley, CA 94546

Regarding: Soil Remediation Closure Report
R.T. Nahas Property, Castro Valley

Dear Mr. Nahas:

This report summarizes closure activities performed in the last three months of 1999, at the former Tien Unocal Station, 20405 Redwood Road, Castro Valley. As you are aware, the underground fuel storage tanks (UST's) were removed from this site in November 1998. After the 1998-'99 winter, we proceeded to remediate soil impacted with petroleum hydrocarbons, and completed all site closure activities in December 1999. This report presents a summary of this final closure activity, and presents documentation of the work performed.

A **Regional Map, Figure 1**, which shows the site location with respect to nearby streets and the I-580 Freeway, and a **Site Plan, Figure 2**, showing previously existing site features, are attached.

REMEDIATION WORK PERFORMED

Soil Remediation

Beginning in April, 1999, impacted soil from the main UST excavation was laid out in shallow beds, and periodically rototilled. This material was re-stockpiled in August 1999 and the stockpiles were analyzed for Total Petroleum Hydrocarbons as Gasoline (TPHG), the gasoline additives Benzene, Toluene, Ethyl Benzene and Xylenes (BTEX compounds), for Methyl tert-Butyl Ether (MTBE) and for Total Petroleum Hydrocarbons as Diesel (TPHD). Analytical results were forwarded to Mr. Scott Seery of the Alameda County Environmental Health Services (ACEHS) in a report dated October 26, 1999. In a November 2, 1999 letter, Mr. Seery approved re-use of this remediated soil. A copy of Mr. Seery's November 2, 1999 letter is presented in **Appendix A**.

Waste Oil Tank and Sump Pit Re-Excavation

Winter weather considerations led us to replace impacted soil in the excavations for the Waste Oil UST and the Clarifier Sump, in November 1998. These areas also were covered with visqueen to minimize surface water flow into the loosely backfilled pits.

In May 1999 these pits were re-excavated; the impacted soil was placed on visqueen and covered with visqueen. The excavation was extended slightly deeper than the original excavation; soil samples were obtained and analyzed for TPHD and Total Oil and Grease (TOG). These stockpiles also were sampled and analyzed, in preparation for disposal of this impacted soil to a permitted landfill. Analytical results indicated residual traces of TPHD and TOG. These results were discussed with Scott Seery of the Alameda County Environmental Health Services (ACEHS), who indicated minimal concern over low levels of TPHD and TOG, but recommended sampling at deeper levels and analysis for Chlorinated Hydrocarbons (CL HC's). Re-sampling was performed, and results submitted to Mr. Seery in an August 17, 1999 report.

SUPPLEMENTAL CLOSURE WORK PERFORMED

Supplemental Sampling

Attempting to find the "bottom" of the contaminated zone, the Waste Oil UST pit was resampled in September. Results indicated only trace levels of TPHD and no CL HC's.

Also in September, the remediated soil stockpiles were sampled and analyzed. TPHD was detected in each stockpile at concentrations ranging from 3.3 to 8.0 mg/Kg (parts per million - ppm). Discussion with Mr. Seery indicated these trace levels were not of concern. A second Soil Remediation Status Report dated October 26, 1999 was submitted to Mr. Seery. This resulted in his letter dated November 2, 1999, with the following comments:

* Permission to re-use the remediated soil was granted
* Acknowledgement as appropriate, the disposal of soil re-excavated from the Waste Oil UST and Sump Pits, at a permitted landfill
* Permission granted to destroy monitoring well MW-4, and repair MW-2 and MW-101
* Reinstatement of groundwater monitoring was requested on a semi-annual frequency

Supplemental Soil Analysis

In anticipation of disposing stockpiled soil from the Waste Oil UST and Sump pits, four samples (two from each stockpile) were collected on October 27, 1999. These four samples were composited by the laboratory into one sample for analysis, and analyzed for TPHG/BTEX, TPHD and TOG. In addition, a sample was collected from 9.5-feet below grade in the Sump pit, in an attempt to determine the depth of excavation needed to get through all impacted soil. Analysis of this sump sample indicated that at the 9.5-foot depth, the soil was still slightly impacted with TPHG (71 mg/Kg), TPHD (270 mg/Kg) and TOG (220 mg/Kg). Although these results were not of concern to Mr. Seery, they indicated the Sump excavation should be carried slightly deeper than 9.5 feet. These analytical results and the Chain of Custody document are presented in **Appendix B**.

Impacted Soil Disposal

Results for the samples collected October 27, 1999, along with results of sample analyses performed earlier in the year and a Waste Evaluation Request, were submitted to BFI - Vasco Road Sanitary Landfill. Copies of the submittal letter and Waste Evaluation Request (excluding the analytical results attachment) are presented in **Appendix C**. On November 18, 1999, Ms. Judy Erlandson of BFI provided us with **Waste Disposal Approval Code No. CA405-111999-02346.**

On December 13, 1999 soil from the Waste Oil UST and Sump stockpiles was transported and disposed at the BFI Vasco Road Landfill in Livermore. In addition to the stockpiled material, the Waste Oil UST pit was deepened to 10-feet, and the Sump pit was deepened to 14-feet in an attempt to remove most of the impacted soil. This soil from deeper in the respective pit excavations also was transported and disposed at the BFI landfill. Total quantity of soil disposed at the BFI landfill was 36.1 tons. Copies of the Non-Hazardous Waste Manifests and the landfill Weigh Tags are included in **Appendix C**.

36.1 tons soil to BFI

Pit Bottom Sampling

After completing excavation to the deeper levels, soil samples were collected from about 1-foot below the bottom of the deepened excavations, and analyzed for TPHG/BTEX, TPHD and TOG. The sample from 11-feet in the Waste Oil Pit had no detectable TPHG, BTEX compounds, TPHD or TOG. In the 15-foot deep Sump sample, TPHG was detected at 6.3 mg/Kg, Ethyl Benzene at 0.14 mg/Kg and Xylenes at 0.25 mg/Kg; TPHD was detected at 690 mg/Kg, and TOG at 1,200 mg/Kg. These findings were discussed with Mr. Seery, who responded that these concentrations (particularly of the long chain hydrocarbons - TPHD and TOG) were inconsequential and would not adversely impact a case closure decision. The COC and analytical results for the December 13, 1999 sampling episode are presented in **Appendix D**.

Final Site Grading

The Waste Oil Pit and Sump excavations were backfilled with remediated soil. The soil was placed in layers and compacted by rolling with a sheepsfoot roller attached to the backhoe. The shallow depression remaining at the former main UST excavation was backfilled with imported granular soil, with compaction performed as described above.

During backfilling, a representative of BSK & Associates was on site to perform relative compaction measurements using a nuclear gauge. This was to verify backfill compaction to 90 percent of the maximum test value determined by ASTM Test Method D1557. A copy of the BSK & Associates Summary Report is presented in **Appendix E**.

Monitoring Wells

A permit application to close MW-4 was submitted to the Alameda County Public Works Department. MW-4 was closed December 23, 1999 by drilling out the original soil boring, and backfilling it with bentonite-cement slurry placed by tremie. The surface enclosures of MW-2 and MW-101 were replaced, as the original enclosures had been damaged during UST removal. A copy of the **Monitoring Well Closure Permit No. 99WR702** is presented in **Appendix F**.

DISCUSSION

The most recent Waste Oil UST pit bottom (11-feet) sampling and analysis confirms the absence of TPHG/BTEX, TPHD and TOG. Contrarily, sampling below the former Sump (15-feet) indicates a moderate accumulation of long chain hydrocarbons (TPHD and TOG). These results have been discussed with, and determined to be inconsequential by, Mr. Scott Seery of the ACEHS.

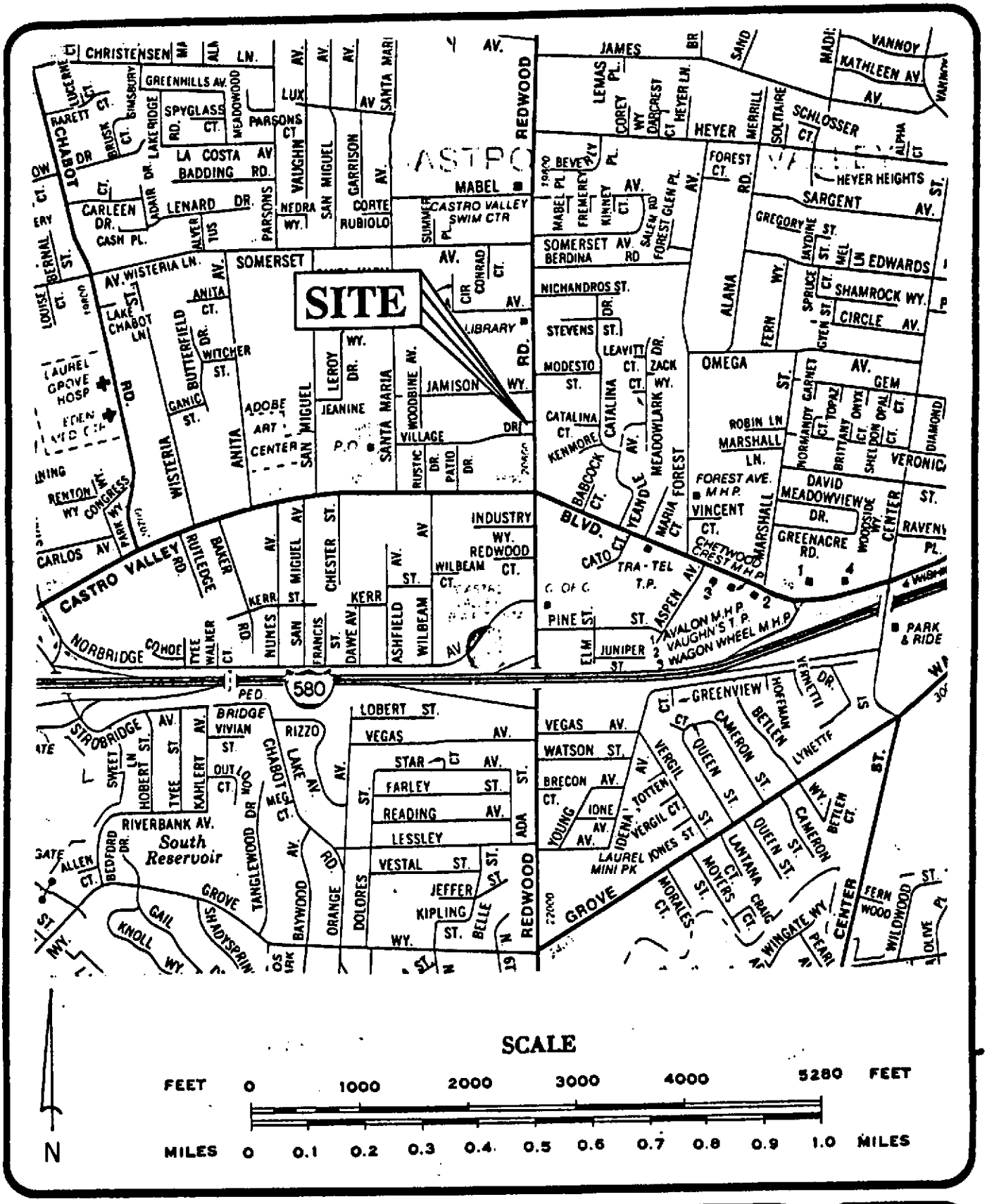
The preparation of this report describing final closure activities for this former service station site completes our UST removal and site remediation activities. Any questions regarding this report or the activities performed on this site should be addressed to the undersigned.

Report prepared by,

Life Springs Environmental, Inc.

Kenneth L. Meleen
Licensed Civil Engineer No. C 17487
License Expires 6/30/2001

FIGURES



Life Springs Environmental, Inc.

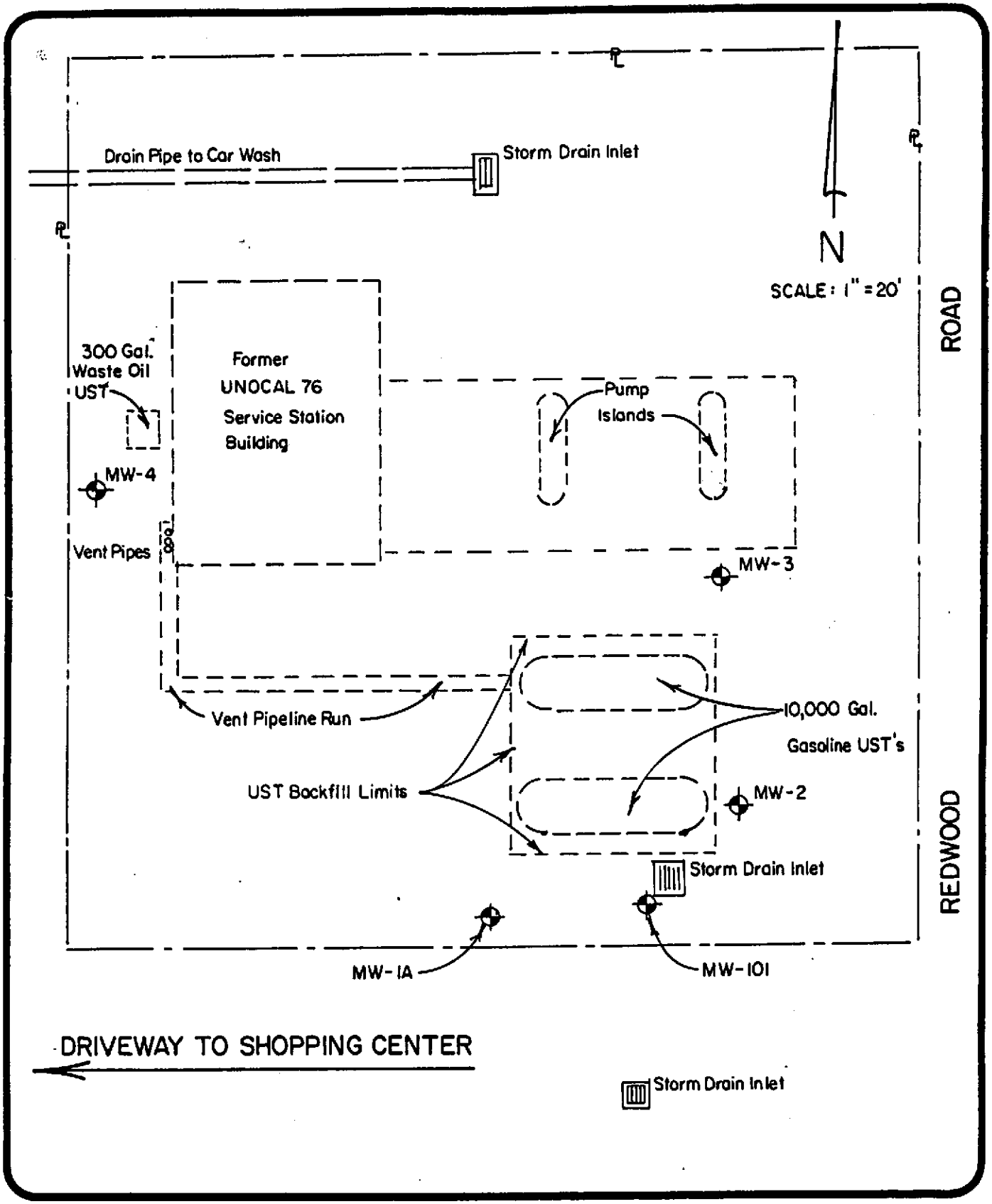
REGIONAL MAP

R.T. NAHAS COMPANY UST SITE

20405 Redwood Road
Castro Valley, California

Figure No. 1

98041.2 Project No.



Life Springs Environmental, Inc.

SITE PLAN

R.T. NAHAS COMPANY UST SITE

20405 Redwood Road
Castro Valley, California

Figure No. 2

98041.2
Project No.

APPENDIX A

ALAMEDA COUNTY ENVIRONMENTAL HEALTH SERVICES LETTER OF NOVEMBER 2, 1999
(Scott Seery)

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

ENVIRONMENTAL HEALTH SERVICES
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
(510) 337-9335 (FAX)

November 2, 1999

STID 650

Mr. Randy Nahas
R.T. Nahas Company
20630 Patio Drive
Castro Valley, CA 94546

RE: (FORMER) TIEN'S UNOCAL, 20405 REDWOOD ROAD, CASTRO VALLEY

Dear Mr. Nahas:

I have completed review of the August 17 and October 26, 1999 Life Springs Environmental, Inc. ("Life Springs") status reports for the latest stages of site restoration, sampling, and soil remediation associated with the subject site. The work documented in the Life Springs reports stems from the November 1998 removals of three underground storage tanks (UST) from the site.

Life Springs reports that final samples were collected from the three fuel UST stockpiles, a reported total of ~175 yds^3, in September of this year following several months of actively-managed on-site aeration. Final stockpile samples were analyzed for the presence of fuel compounds. Life Springs reports that only a maximum of 8.0 mg/kg of total petroleum hydrocarbons as diesel fuel (TPH-D) were detected in these stockpile samples. All other target analytes were below laboratory detection limits.

The fuel UST stockpiles are proposed for reuse to complete restoration of the site. This use is acceptable based on data presented in the cited Life Springs reports.

Life Spring also reports that all soil excavated from the waste oil UST pit and beneath the separator sump will be transported as non-hazardous waste to the BFI Vasco Road Landfill in Livermore. This destination is appropriate based on the type and concentration of compounds (e.g., lead, PNA's) remaining in those stockpiles.

In response to a request from Mr. Ken Meleen (Life Springs), permission is granted for the permanent destruction of well MW-4. You may recall that correspondence from this office dated March 9, 1998 granted prior approval for the destruction of this and several others of the on-site wells in anticipation of extensive over-excavation associated with the (then) pending UST closures. Such extensive over-excavation did not occur, nor were any of the noted wells removed, although I understand that at least two were damaged and will require repair.

Finally, please reinstate a semi-annual schedule of well sampling, monitoring, and reporting. You are requested to initiate this effort during the first quarter of 2000, adhering to a 1st and 3rd quarter schedule. The initial sampling event is also to include off-site wells MW-5, -6, and -7. Target analytes shall continue to be the entire gasoline suite – TPH-gas, BTEX, and MtBE. Any "tentative" detection of MtBE shall be followed by confirmation using EPA Method 8260 on the sample showing the highest concentration.

Please call me at (510) 567-6733 should you have any questions about the content of this letter.

Sincerely,

Scott O. Seery, CHMM
Hazardous Materials Specialist

c: Chuck Headlee, RWQCB
Robert Weston, ACDEH
James deGeorgio, SWRCB (UST Fund)
Ken Meleen, Life Springs Environmental, Inc.
3275 Stevens Creek Blvd., #208, San Jose, CA 95117

APPENDIX B

CHAIN OF CUSTODY DOCUMENT
and
ANALYTICAL RESULTS
for
October 27, 1999 Soil Samples

CHROMALAB, INC.
Environmental Services (SDB)

Submission #: 1999-10-0482
Date: November 3, 1999

Life Springs Environmental
3275 Stevens Creek Blvd., Suite 208
San Jose, CA 95117-1148

Attn.: Mr. Kenneth Meleen

Project: 98041.2
R.T. Nahas Co.

Dear Mr. Meleen,

Attached is our report for your samples received on Wednesday October 27, 1999. This report has been reviewed and approved for release. Reproduction of this report is permitted only in its entirety.

Please note that any unused portion of the samples will be discarded after November 26, 1999 unless you have requested otherwise. We appreciate the opportunity to be of service to you. If you have any questions, please call me at (925) 484-1919.

Sincerely,

Pierre Monette

Diesel

Life Springs Environmental

3275 Stevens Creek Blvd., Suite 208
San Jose, CA 95117-1148

Attn: Kenneth Meleen

Phone: (408) 243-9292 Fax: (408) 243-9696

Project #: 98041.2

Project: R.T. Nahas Co.

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
WO/SUMP COMP	Soil	10/27/1999	1
SUMP-9.5	Soil	10/27/1999 14:20	2

To: **Life Springs Environmental**
Attn.: Kenneth Meleen

Test Method: 8015m
Prep Method: 3550/8015M

Diesel

Sample ID:	**WO/SUMP COMP**	Lab Sample ID:	**1999-10-0482-001**
Project:	98041.2 R.T. Nahas Co.	Received:	10/27/1999 15:30
		Extracted:	11/01/1999 09:00
Sampled:	10/27/1999	QC-Batch:	1999/11/01-01.10
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	220	1.0	mg/Kg	1.00	11/02/1999 01:50	Id
Surrogate(s)						
o-Terphenyl	102.5	60-130	%	1.00	11/02/1999 01:50	

To: **Life Springs Environmental**
Attn.: Kenneth Meleen

Test Method: 8015m
Prep Method: 3550/8015M

Diesel

Sample ID:	**SUMP-9.5**	Lab Sample ID:	**1999-10-0482-002**
Project:	98041.2 R.T. Nahas Co.	Received:	10/27/1999 15:30
		Extracted:	11/01/1999 09:00
Sampled:	10/27/1999 14:20	QC-Batch:	1999/11/01-01.10
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	270	1.0	mg/Kg	1.00	11/02/1999 01:14	,ofp
Surrogate(s)						
o-Terphenyl	99.6	60-130	%	1.00	11/02/1999 01:14	

To: **Life Springs Environmental**
Attn.: Kenneth Meleen

Test Method: 8015m
Prep Method: 3550/8015M

Batch QC Report
Diesel

Method Blank | **Soil** | **QC Batch # 1999/11/01-01.10**

MB: 1999/11/01-01.10-001 | Date Extracted: 11/01/1999 08:00

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Diesel	ND	1	mg/Kg	11/01/1999 11:39	
Surrogate(s)					
o-Terphenyl	99.0	60-130	%	11/01/1999 11:39	

To: **Life Springs Environmental**
Attn: Kenneth Meleen

Test Method: 8015m
Prep Method: 3550/8015M

Batch QC Report

Diesel

Laboratory Control Spike (LCS/LCSD) **Soil** **QC Batch # 1999/11/01-01.10**

LCS: 1999/11/01-01.10-002 Extracted: 11/01/1999 08:00 Analyzed: 11/01/1999 10:28
LCSD: 1999/11/01-01.10-003 Extracted: 11/01/1999 08:00 Analyzed: 11/01/1999 11:37

Compound	Conc. [mg/Kg]		Exp.Conc. [mg/Kg]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Diesel	25.0	29.6	41.7	41.7	60.0	71.0	16.8	60-130	25		
Surrogate(s)											
o-Terphenyl	18.7	20.1	20.0	20.0	93.5	100.5		60-130			

To: **Life Springs Environmental**
Attn:Kenneth Meleen

Test Method: 8015m
Prep Method: 3550/8015M

Legend & Notes

Diesel

Analysis Notes

SUMP-9.5 (Lab# 1999-10-0482-002)

ofp= Estimated concentration reported due to overlapping fuel patterns.

Analyte Flags

ld

Hydrocarbon reported is in the late Diesel range, and does not match our Diesel standard

CHROMALAB, INC.
Environmental Services (SDB)

Submission #: 1999-10-0482

Gas/BTEX and MTBE

Life Springs Environmental
3275 Stevens Creek Blvd., Suite 208
San Jose, CA 95117-1148
Attn: Kenneth Meleen
Phone: (408) 243-9292 Fax: (408) 243-9696
Project #: 98041.2
Project: R.T. Nahas Co.

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
WO/SUMP COMP	Soil	10/27/1999	1

To: **Life Springs Environmental**

Attn.: Kenneth Meleen

Test Method: 8020
8015M

Prep Method: 5030

Gas/BTEX and MTBE

Sample ID:	**WO/SUMP COMP**	Lab Sample ID:	**1999-10-0482-001**
Project:	98041.2 R.T. Nahas Co.	Received:	10/27/1999 15:30
		Extracted:	11/01/1999 12:25
Sampled:	10/27/1999	QC-Batch:	1999/11/01-01.04
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	1.00	11/01/1999 12:25	
Benzene	ND	0.0050	mg/Kg	1.00	11/01/1999 12:25	
Toluene	ND	0.0050	mg/Kg	1.00	11/01/1999 12:25	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	11/01/1999 12:25	
Xylene(s)	ND	0.0050	mg/Kg	1.00	11/01/1999 12:25	
MTBE	ND	0.0050	mg/Kg	1.00	11/01/1999 12:25	
Surrogate(s)						
Trifluorotoluene	77.6	53-125	%	1.00	11/01/1999 12:25	
Trifluorotoluene-FID	68.8	53-125	%	1.00	11/01/1999 12:25	

To: **Life Springs Environmental**

Attn.: Kenneth Meleen

Test Method: 8020
8015M

Prep Method: 5030

Batch QC Report
Gas/BTEX and MTBE

Method Blank | **Soil** | **QC Batch # 1999/11/01-01.04**

MB: 1999/11/01-01.04-001

Date Extracted: 11/01/1999 06:48

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	11/01/1999 06:48	
Benzene	ND	0.0050	mg/Kg	11/01/1999 06:48	
Toluene	ND	0.0050	mg/Kg	11/01/1999 06:48	
Ethyl benzene	ND	0.0050	mg/Kg	11/01/1999 06:48	
Xylene(s)	ND	0.0050	mg/Kg	11/01/1999 06:48	
MTBE	ND	0.0050	mg/Kg	11/01/1999 06:48	
Surrogate(s)					
Trifluorotoluene	81.2	53-125	%	11/01/1999 06:48	
4-Bromofluorobenzene-FID	78.4	58-124	%	11/01/1999 06:48	

To: **Life Springs Environmental**

Attn: Kenneth Meleen

Test Method: 8020
8015M

Prep Method: 5030

Batch QC Report

Gas/BTEX and MTBE

Laboratory Control Spike (LCS/LCSD) **Soil** **QC Batch # 1999/11/01-01.04**

LCS: 1999/11/01-01.04-002 Extracted: 11/01/1999 07:15 Analyzed: 11/01/1999 07:15

LCSD: 1999/11/01-01.04-003 Extracted: 11/01/1999 07:42 Analyzed: 11/01/1999 07:42

Compound	Conc. [mg/Kg]		Exp.Conc. [mg/Kg]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Gasoline	0.518	0.522	0.500	0.500	103.6	104.4	0.8	75-125	35		
Benzene	0.0974	0.0785	0.1000	0.1000	97.4	78.5	21.5	77-123	35		
Toluene	0.103	0.0832	0.1000	0.1000	103.0	83.2	21.3	78-122	35		
Ethyl benzene	0.104	0.0849	0.1000	0.1000	104.0	84.9	20.2	70-130	35		
Xylene(s)	0.316	0.264	0.300	0.300	105.3	88.0	17.9	75-125	35		
Surrogate(s)											
Trifluorotoluene	438	357	500	500	87.6	71.4		53-125			
4-Bromofluorobenzene-FI	429	407	500	500	85.8	81.4		58-124			

Gas/BTEX (Methanol Extraction)

Life Springs Environmental

✉ 3275 Stevens Creek Blvd., Suite 208
San Jose, CA 95117-1148

Attn: Kenneth Meleen

Phone: (408) 243-9292 Fax: (408) 243-9696

Project #: 98041.2

Project: R.T. Nahas Co.

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
SUMP-9.5	Soil	10/27/1999 14:20	2

To: **Life Springs Environmental**

Attn.: Kenneth Meleen

Test Method: 8020
8015M

Prep Method: 5030

Gas/BTEX (Methanol Extraction)

Sample ID:	**SUMP-9.5**	Lab Sample ID:	**1999-10-0482-002**
Project:	98041.2 R.T. Nahas Co.	Received:	10/27/1999 15:30
		Extracted:	11/01/1999 19:32
Sampled:	10/27/1999 14:20	QC-Batch:	1999/11/01-06.01
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	71	10	mg/Kg	1.00	11/01/1999 19:32	g
Benzene	ND	0.62	mg/Kg	1.00	11/01/1999 19:32	
Toluene	ND	0.62	mg/Kg	1.00	11/01/1999 19:32	
Ethyl benzene	ND	0.62	mg/Kg	1.00	11/01/1999 19:32	
Xylene(s)	ND	0.62	mg/Kg	1.00	11/01/1999 19:32	
MTBE	ND	0.62	mg/Kg	1.00	11/01/1999 19:32	
Surrogate(s)						
Trifluorotoluene	83.0	53-125	%	.00	11/01/1999 19:32	
4-Bromofluorobenzene-FID	118.6	58-124	%	.00	11/01/1999 19:32	

To: **Life Springs Environmental**

Attn.: Kenneth Meleen

Test Method: 8020
8015M

Prep Method: 5030

Batch QC Report
Gas/BTEX (Methanol Extraction)

Method Blank | **Soil** | **QC Batch # 1999/11/01-06.01**

MB: 1999/11/01-06.01-001

Date Extracted: 11/01/1999 15:45

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Gasoline	ND	10	mg/Kg	11/01/1999 15:45	
Benzene	ND	0.62	mg/Kg	11/01/1999 15:45	
Toluene	ND	0.62	mg/Kg	11/01/1999 15:45	
Ethyl benzene	ND	0.62	mg/Kg	11/01/1999 15:45	
Xylene(s)	ND	0.62	mg/Kg	11/01/1999 15:45	
MTBE	ND	0.62	mg/Kg	11/01/1999 15:45	
Surrogate(s)					
Trifluorotoluene	81.8	53-125	%	11/01/1999 15:45	
4-Bromofluorobenzene-FID	74.2	58-124	%	11/01/1999 15:45	

To: **Life Springs Environmental**

Attn: Kenneth Meleen

Test Method: 8020
8015M

Prep Method: 5030

Batch QC Report

Gas/BTEX (Methanol Extraction)

Laboratory Control Spike (LCS/LCSD) **Soil** **QC Batch # 1999/11/01-06.01**

LCS: 1999/11/01-06.01-002 Extracted: 11/01/1999 19:27 Analyzed: 11/01/1999 19:27

LCSD: 1999/11/01-06.01-003 Extracted: 11/01/1999 16:42 Analyzed: 11/01/1999 16:42

Compound	Conc. [mg/Kg]		Exp.Conc. [mg/Kg]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Gasoline	0.516	0.471	0.625	0.625	82.6	75.4	9.1	75-125	35		
Benzene	0.123	0.116	0.125	0.125	98.4	92.8	5.9	77-123	35		
Toluene	0.130	0.116	0.125	0.125	104.0	92.8	11.4	78-122	35		
Ethyl benzene	0.131	0.109	0.125	0.125	104.8	87.2	18.3	70-130	35		
Xylene(s)	0.414	0.339	0.375	0.375	110.4	90.4	19.9	75-125	35		
Surrogate(s)											
Trifluorotoluene	459	457	500	500	91.8	91.4		53-125			
4-Bromofluorobenzene-FI	403	376	500	500	80.6	75.2		58-124			

To: **Life Springs Environmental**

Attn:Kenneth Meleen

Test Method: 8020
8015M

Prep Method: 5030

Legend & Notes

Gas/BTEX (Methanol Extraction)

Analyte Flags

g

Hydrocarbon reported in the gasoline range does not match our gasoline standard.

Total Oil & Grease

Life Springs Environmental

✉ 3275 Stevens Creek Blvd., Suite 208
San Jose, CA 95117-1148

Attn: Kenneth Meleen

Phone: (408) 243-9292 Fax: (408) 243-9696

Project #: 98041.2

Project: R.T. Nahas Co.

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
WO/SUMP COMP	Soil	10/27/1999	1
SUMP-9.5	Soil	10/27/1999 14:20	2

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 1999-10-0482

To: **Life Springs Environmental**
Attn.: Kenneth Meleen

Test Method: 5520 E
Prep Method: 5520 E

Total Oil & Grease

Sample ID:	**WO/SUMP COMP**	Lab Sample ID:	**1999-10-0482-001**
Project:	98041.2 R.T. Nahas Co.	Received:	10/27/1999 15:30
		Extracted:	10/28/1999
Sampled:	10/27/1999	QC-Batch:	1999/10/28-01.23
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Oil & Grease (total)	400	50	mg/Kg	1.00	10/29/1999	

To: **Life Springs Environmental**
Attn.: Kenneth Meleen

Test Method: 5520 E
Prep Method: 5520 E

Total Oil & Grease

Sample ID:	**SUMP-9.5**	Lab Sample ID:	**1999-10-0482-002**
Project:	98041.2 R.T. Nahas Co.	Received:	10/27/1999 15:30
		Extracted:	10/28/1999
Sampled:	10/27/1999 14:20	QC-Batch:	1999/10/28-01.23
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Oil & Grease (total)	220	50	mg/Kg	1.00	10/29/1999	

To: **Life Springs Environmental**
Attn.: Kenneth Meleen

Test Method: 5520 E
Prep Method: 5520 E

Batch QC Report
Total Oil & Grease

Method Blank | **Soil** | **QC Batch # 1999/10/28-01.23**

MB: 1999/10/28-01.23-001

Date Extracted: 10/28/1999

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Oil & Grease (total)	ND	50	mg/Kg	10/29/1999	

To: **Life Springs Environmental**
Attn: Kenneth Meleen

Test Method: 5520 E
Prep Method: 5520 E

Batch QC Report

Total Oil & Grease

Laboratory Control Spike (LCS/LCSD) **Soil** **QC Batch # 1999/10/28-01.23**

LCS: 1999/10/28-01.23-002 Extracted: 10/28/1999 Analyzed: 10/29/1999
LCSD: 1999/10/28-01.23-003 Extracted: 10/28/1999 Analyzed: 10/29/1999

Compound	Conc. [mg/Kg]		Exp.Conc. [mg/Kg]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Oil & Grease (total)	406	388	400	400	101.5	97.0	4.5	80-120	20		

CHROMALAB, INC.

Environmental Services (SDB) (DOHS 1094)

99-10-0482

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

Reference #: 48759

Chain of Custody

DATE 10/27/99 PAGE 1 OF 1

PROJ MGR Kenneth L. Meleen
COMPANY Life Springs Environmental, Inc.
ADDRESS 3275 Stevens Creek Blvd., #208
San Jose, CA 95117

SAMPLERS (SIGNATURE) Kenneth L. Meleen

(PHONE NO.) (408) 243-9292
(FAX NO.) (408) 243-9696

ANALYSIS REPORT

SAMPLE ID.	DATE	TIME	MATRIX	PRESERV.	TPH-(EPA 8015,8020) ☐ Gas w/☐ BTEX ☐MTBE	PURGEABLE AROMATICS BTEX (EPA 8020)	TPH-Diesel (EPA 8015M)	TEPH (EPA 8015M) ☐Extract. ☐Diesel, ☐N.C.	PURGEABLE HALOCARBONS (EPHCs) (EPA 8010)	VOLATILE ORGANICS (VOCs) (EPA 8260)	SEMIVOLATILES (EPA 8270)	TOTAL OIL AND GREASE (SM 5520 B+F, E+F)		☐ PESTICIDES(EPA 8080) ☐ PCB'S (EPA 8080)	PNA's by ☐ 8270 ☐ 8310	☐ Spec. Cond. ☐ TSS ☐ TDS	LUFT METALS: Cd, Cr, Pb, Ni, Zn	CAM 17 METALS (EPA 6010/7470/7471)	TOTAL LEAD	☐ W.E.T. (STLC) ☐ TCLP	☐ Reservient Chromium ☐ pH (24 hr hold time for H20)				NUMBER OF CONTAINERS
WO/SUMP COMP	10/27/99	~~1350~~	Soil	Ice																					—
WO-N	↓	~~1350~~ 1355	↓	↓																					1
WO-S		1400																							1
SUMP-N		1405			X		X					X													1
SUMP-S		1410																							1
SUMP-9.5	↓	1420	↓	↓	X		X					X													1

PROJECT INFORMATION

PROJECT NAME: R.T. Nahas Co.
PROJECT NUMBER: 98041.2
P.O. #: LSE-202-99

SAMPLE RECEIPT

TOTAL NO. OF CONTAINERS	5
HEAD SPACE	
TEMPERATURE	
CONFORMS TO RECORD	

TAT	STANDARD 5-DAY			24	48	72	OTHER

Report: ☐ Routine ☐ Level 2 ☐ Level 3 ☐ Level 4 ☐ Electronic Report

SPECIAL INSTRUCTIONS/COMMENTS:
Composite 4 WO and Sump Samples into one Sample for analysis

5.6°C

RELINQUISHED BY 1.	RELINQUISHED BY 2	RELINQUISHED BY 3
Kenneth L. Meleen 1530 (SIGNATURE) (TIME)	(SIGNATURE) (TIME)	(SIGNATURE) (TIME)
Kenneth L. Meleen 10/27/99 (PRINTED NAME) (DATE)	(PRINTED NAME) (DATE)	(PRINTED NAME) (DATE)
Life Springs Environmental Inc. (COMPANY)	(COMPANY)	(COMPANY)
RECEIVED BY 1.	**RECEIVED BY 2**	**RECEIVED BY (LABORATORY) 3**
(SIGNATURE) (TIME)	(SIGNATURE) (TIME)	Denise Harrington (SIGNATURE) (TIME)
(PRINTED NAME) (DATE)	(PRINTED NAME) (DATE)	D. Harrington 1530 (PRINTED NAME) (DATE)
(COMPANY)	(COMPANY)	Chromalab 10/27/99 (LAB)

Revised 8/98

APPENDIX C

SUBMITTAL LETTER/WASTE EVALUATION REQUEST

NON-HAZARDOUS WASTE MANIFESTS
and
LANDFILL WEIGH TAGS

Life Springs Environmental, Inc.

3275 Stevens Creek Blvd., #208, San Jose, CA 95117
408-243-9292
FAX 408-243-9696

ENVIRONMENTAL CONSULTING ENGINEERS
General Engineering Contractor's License No. 709780

November 11, 1999

Ms. Judy Erlandson
BFI - Vasco Road Sanitary Landfill
4001 N. Vasco Road
Livermore, CA 94550

Regarding: Disposal of Soil from former Service Station Site

Dear Ms. Erlandson:

Life Springs Environmental, Inc. is coordinating the cleanup of the former Tien Unocal Service Station site at 20405 Redwood Road in Castro Valley, California. The underground tanks and a clarifier sump were removed in November 1998. The backfill material excavated from the gasoline UST pit has been remediated on site, to the point where the Alameda County Environmental Health Department is allowing re-use of this material for backfill.

Soil excavated from the vicinity of the Waste Oil UST and Sump has been determined to be contaminated with used motor oil (TOG) and petroleum hydrocarbons as diesel (TPHD). We have about 50 cubic yard of this material that we would like to dispose at the BFI Vasco Road Landfill. A Waste Evaluation Request form is enclosed for your review. Additionally, we would like to point out that composite samples of the sump and waste oil excavated material stockpiles have been analyzed on several occasions over the past six months. The following explains the nature and purpose of each sampling and analysis episode, and a synopsis of the results.

<u>May 5, 1999 Sampling Event</u>
After discussion with Judy Erlandson, we sampled the two stockpiles (four discreet samples from each, composited into one sample per stockpile for analysis), and analyzed for Semi-Volatile Organic Compounds (SVOC's - EPA 8270), Volatile Organic Compounds (VOC's - EPA 8260), Total Oil and Grease (TOG - EPA 5520 E&F), and CAM 17 Metals. Both stockpiles had no detectable SVOC's or VOC's. For the Sump Composite, TOG was detected at 270 mg/Kg, and for the Waste Oil Composite, TOG was detected at 140 mg/Kg.

The Sump Composite sample had total lead at 11 mg/Kg which is not a problem, but the Waste Oil Composite sample had total lead at 55 mg/Kg, which is more than 10 times the allowable Soluble Threshold Limit Concentration (STLC). This sample should have been subjected to STLC extraction and analyzed for soluble lead, but this was overlooked. Another subsequent sample was obtained and analyzed for both TTLC and STLC lead (see subsequent discussion of this issue).

August 20, 1999 Sampling Event

A single discrete sample from the Waste Oil Stockpile was analyzed for total and soluble lead. TTLC lead was found at 81 mg/Kg, , and STLC lead was detected at 1.8 mg/L. This latter result was well below the hazardous material designation value of 5.0 mg/L.

October 27, 1999 Sampling Event

After reviewing BFI's Waste Acceptance Guidelines, it was apparent that we hadn't analyzed the soil stockpiles for the typical TPHG/BTEX compounds. Two discrete samples were collected from each stockpile, and composited into one sample for analysis. (Note: A confirmation sample from below the bottom of the Sump also was collected and analyzed in this event.)

There was no detectable TPHG or BTEX compounds in the composited sample. TPHD was detected at 220 mg/Kg, and TOG was detected at 400 mg/Kg.

Copies of the analytical results and the related Chain of Custody documents are enclosed.

We believe the enclosed Waste Evaluation Request and the supporting analytical data provides sufficient information for you to accept this material. Upon receipt of formal acceptance notification, we will schedule transport and disposal of this material.

Please call the undersigned at (408) 243-9292 if you have any questions or comments.

Sincerely,

Life Springs Environmental, Inc.

Kenneth L. Meleen, P.E.

Enclosures

cc: Randall E. Nahas, R.T. Nahas Company

BROWNING-FERRIS INDUSTRIES

WCD NO. SZ 49008

/ / /

BFI WASTE CODE

WASTE EVALUATION REQUEST

BFI to complete this area.

BFI Initiator: _____

Location: _____

Company Number: _____

Telephone: ( ) _____

Fax: ( ) _____

Date: _____

Action Requested: ☐ New Waste Approval

☐ Up-Date Approval - Previous Number: _____

Disposal Site Requested: _____

Company Number: _____

Disposal Method Requested: ☐ Working Face ☐ Daily Cover

☐ Other: _____

WASTE CHARACTERIZATION DATA
Petroleum Contaminated Soils

IMPORTANT: This form is to be used to describe contaminated soils resulting from the release of petroleum products only and is not to be used for hazardous waste or PCB's regulated by a federal or applicable state, provincial or local authority.

INSTRUCTIONS: Information for physical completion of this form must be obtained from an authorized representative of the generator. Please be thorough in your answers. The entire form must be completed, answers must be legibly printed in ink or typewritten, and the completed form must be signed and dated. Please attach any additional relevant information such as analytical data that will help to describe the waste and expedite its review. Use the form only one time since this form has a unique WCD number assigned.

1. GENERATOR INFORMATION

a) Generator's Name: R.T. Nahas Company

b) Generating Facility's Address: 20405 Redwood Road

City: Castro Valley State: CA Zip: 94546

c) Generator's Representative: Randall E. Nahas

Title: President

Telephone: (510) 538-9600

Fax: (510) 881-7618

d) Emergency/Information Contact: Kenneth L. Meleen

Title: Consultant

Telephone: (408) 243-9292 or Cell Phone (408) 981-3776

Billing Information

e) Customer's Name: Life Springs Environmental, Inc.

f) Customer's Mailing Address: 3275 Stevens Creek Blvd. #208

City: San Jose State: CA Zip: 95117

g) Representative: Kenneth L. Meleen

Telephone: (408) 243-9292

Fax: (408) 243-9696

2. GENERAL WASTE STREAM INFORMATION

a) This waste was generated as a result of: 1) ☒ UST Activity 2) ☐ AST Activity 3) ☐ Spill

b) Type of facility generating the contaminated soil: Unocal Service Station with underground Fuel Storage tanks, Waste Oil Tank and Oil/Water Separator Sump.

c) Is this waste subject to the UST corrective action regulations under 40 CFR 280? ☒ Yes ☐ No

d) Anticipated volume: 50 ☒ cubic yards ☐ tons ☐ gallons ☐ cubic meters ☐ tonnes (metric) Other _____

Per: ☐ year ☐ month ☐ week ☒ day ☐ one time ☒ other Several Semi-Truck Loads

To be transported in: ☒ bulk ☐ drums (type/size) _____ ☐ Other _____

e) Is this a "Hazardous Waste" as defined by State, Provincial, or local Regulations? ☐ Yes ☒ No

If yes, enter the Waste Identification Number if one has been assigned: _____

f) Recommended personal protection equipment and special handling procedures: Gloves

/ / /

BFI WASTE CODE

3. THIS WASTE CONTAINS

Does the waste contain any of the following: (Check all that apply) If any are checked, specify type (if applicable) and include its concentration.

- ☐ Free Liquids
- ☐ Free Cyanide
- ☐ Free Sulfide
- ☐ Organic Solvents
- ☐ OSHA Substances
- ☐ Etiological Agents
- ☐ Radioactive Materials
- ☐ PCB'S not regulated by TSCA 40 CFR 761
- ☒ None of the Above

Type and concentration _____

4. SPECIAL WASTE COMPOSITION

Description of the waste:

- ☐ Soil contaminated with leaded gasoline
- ☐ Soil contaminated with unleaded gasoline
- ☒ Soil contaminated with diesel fuel
- ☐ Soil contaminated with heating oil
- ☒ Soil contaminated with vehicle drain oil
- ☐ Soil contaminated with other petroleum products

Specify: Analytical results indicate TPHD present at a concentration of approximately 200 ppm while TOG was detected in a range of 140 to 400 ppm. Lead present at 81 mg/Kg (TTLC), or 1.8 mg/L (STLC).

5. GENERATOR'S CERTIFICATION

I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine, that no deliberate or willful omissions of composition or properties exist, that all known or suspected hazards have been disclosed, analytical results submitted are accurate and representative of the waste (per SW846), and that the waste is not a regulated hazardous waste by the USEPA, by an applicable State or Provincial authority, or by any applicable local authority, and does not contain PCBs regulated by TSCA (i.e., 40 CFR 761) or any Provincial authority.

GENERATOR'S AUTHORIZED SIGNATORY

DATE: November 15, 1999

PRINT NAME: Randall E. Nahas SIGNATURE: _____ TITLE: President

TELEPHONE: (510) 538-9600 FAX: (510) 881-7618

NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

If waste is asbestos waste, complete Sections I, II, III and IV.
If waste is NOT asbestos waste, complete only Sections I, II and III.

No. 612432

Section I — GENERATOR (Generator completes all of Section I)

a. Generator Name: R.T. Nahas Company
b. Generating Location: Former Tien Unocal 76 Service Station
c. Address: 20630 Patio Drive, Castro Valley, CA 94546
d. Address: 20405 Redwood Road, Castro Valley, CA 94546
e. Phone No.: (510) 538-9600
f. Phone No.: Not in Service

If owner of the generating facility differs from the generator, provide:

g. Owner's Name: Randall E. Nahas, President
h. Owner's Phone No.:

i. BFI WASTE CODE: CA 405 | 111999 | 02346 | Containers:

TYPE
DM - METAL DRUM
DP - PLASTIC DRUM
B - BAG
BA - 6 MIL. PLASTIC BAG or WRAP
T - TRUCK
O - OTHER

j. Description of Waste: Soil contaminated with Diesel Fuiel and used Motor Oil
k. Quantity: 22000 | Units: P | No.: 1 | TYPE: T

UNITS
P - POUNDS
Y - YARDS
M^3 - CUBIC METERS
Y^3 - CUBIC YARDS
O - OTHER

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; **AND, if the waste is a treatment residue of a previously restricted hazardous waste** subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261.

Randall E. Nahas — Generator Authorized Agent Name
Signature
12/13/99 — Shipment Date

Section II — TRANSPORTER (Generator complete a-d; Transporter I complete e-g; Transporter II complete h-n)

TRANSPORTER I

a. Name: George Maciel Trucking, Inc.
b. Address: 41550 Boscell, Fremont, CA 94538
c. Driver Name/Title: Jerry Moore (PRINT/TYPE)
d. Phone No.: (510) 226-9244
e. Truck No.: 1
f. Vehicle License No./State: 9A50973
Acknowledgement of Receipt of Materials.
g. Driver Signature
12/13/99 — Shipment Date

TRANSPORTER II

h. Name:
i. Address:
j. Driver Name/Title: (PRINT/TYPE)
k. Phone No.:
l. Truck No.:
m. Vehicle License No./State:
Acknowledgement of Receipt of Materials.
n. Driver Signature
Shipment Date

Section III — DESTINATION (Generator completes a-d, destination site completes e-f.)

a. Site Name: BFI/Vasco Road Sanitary Landfill
b. Physical Address: 4001 N. Vasco Road, Livermore, CA 94550
c. Phone No.: (925) 447-0491
d. Mailing Address: 4001 N. Vasco Road, Livermore, CA 94550
e. Discrepancy Indication Space:

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

f. Name of Authorized Agent
Signature
12/13/99 — Receipt Date

Section IV — ASBESTOS (Generator complete a-d, f, g, Shipper* completes e.)

a. Shippers's* Name:
b. Shippers's* Phone No.:
c. Shippers's* Address:
d. Shippers's Special Handling Instructions and additional information:

CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packaged, marked, and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

If waste is asbestos waste, complete Sections I, II, III and IV.
If waste is NOT asbestos waste, complete only Sections I, II and III.

No. 612433

Section I GENERATOR (Generator completes all of Section I)

a. Generator Name: R.T. Nahas Company
b. Generating Location: Former Tien Unocal 76 Service Station
c. Address: 20630 Patio Drive, Castro Valley, CA 94546
d. Address: 20405 Redwood Road, Castro Valley, CA 94546
e. Phone No.: (510) 538-9600
f. Phone No.: Not in Service

If owner of the generating facility differs from the generator, provide:

g. Owner's Name:
h. Owner's Phone No.:

i. BFI WASTE CODE: CA | 405 | 111999 | 02346 | Containers:

TYPE: DM - METAL DRUM; DP - PLASTIC DRUM; B - BAG; BA - 6 MIL. PLASTIC BAG or WRAP; T - TRUCK; O - OTHER

j. Description of Waste: Soil contaminated with Diesel Fuel and used Motor Oil
k. Quantity: 22000 | Units: P | No.: 1 | TYPE: T

UNITS: P - POUNDS; Y - YARDS; M³ - CUBIC METERS; Y³ - CUBIC YARDS; O - OTHER

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; **AND, if the waste is a treatment residue of a previously restricted hazardous waste** subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261.

Randall E. Nahas — Generator Authorized Agent Name
Signature
12/13/99 — Shipment Date

Section II TRANSPORTER (Generator complete a-d; Transporter I complete e-g; Transporter II complete h-n)

TRANSPORTER I

a. Name: George Maciel Trucking, Inc.
b. Address: 41550 Boscell, Fremont, CA 94538
c. Driver Name/Title: [illegible] (PRINT/TYPE)
d. Phone No.: (510) 226-9244
e. Truck No.: 51
f. Vehicle License No./State: 9A50973
Acknowledgement of Receipt of Materials.
g. Driver Signature
12/13/99 — Shipment Date

TRANSPORTER II

h. Name:
i. Address:
j. Driver Name/Title: (PRINT/TYPE)
k. Phone No.:
l. Truck No.:
m. Vehicle License No./State:
Acknowledgement of Receipt of Materials.
n. Driver Signature
Shipment Date

Section III DESTINATION (Generator completes a-d, destination site completes e-f.)

a. Site Name: BFI/Vasco Road Sanitary Landfill
c. Phone No.: (925) 447-0491
b. Physical Address: 4001 N. Vasco Road, Livermore, CA 94550
d. Mailing Address: 4001 N. Vasco Road, Livermore, CA 94550
e. Discrepancy Indication Space:

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

f. Name of Authorized Agent
Signature
12/13/99 — Receipt Date

Section IV ASBESTOS (Generator complete a-d, f, g, Shipper* completes e.)

a. Shippers's* Name:
b. Shippers's* Phone No.:
c. Shippers's* Address:
d. Shippers's Special Handling Instructions and additional information:

CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packaged, marked, and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

VASCO ROAD SANITARY LANDFILL No: 1182553

A DIVISION OF BFI® BROWNING-FERRIS INDUSTRIES

4001 VASCO ROAD
LIVERMORE, CA 94550
(510) 447-0491

Date : 12-13-99 Time In: 10:13:14 Time Out: 10:32:14
Ticket # : A21155 CMS # : 1018068 LMS #: 1018068
Customer : LIFE SPRINGS ENVIRONMENTAL INC
Vehicle # : JI Lic Plate:
ALA CASTRO VALLEY
Manifest # : 612432 PO #: Transporter: 0
Source Cd : Generator : RTN RT NAHAS CO
Comment : Operator: MARK
Capacity : 20.00 yd Scale In # : Manual Scale Out #: 2
Gross Wt : 33.02 Tare Wt: 15.37 Net Wt: 17.65 t

Item	Descr	Actual	Bill Qty	$/Unit	Extended
02346	SOIL	13.00	17.65 t	18.00000	317.70
	Sub Total..... $				317.70
	Total..... $				317.70

THANK YOU FOR YOUR BUSINESS!!!
HAVE A GREAT DAY!!!

WARNING: Transporting any unauthorized hazardous waste to this facility for disposal is prohibited by law. Persons violating this prohibition are subject to civil and criminal prosecution.

All children must remain in vehicles. Absolutely no salvaging allowed.

Ninõs deben de permaneceren en los carros a todas horas.

No se permite llevar cosas del dompe absolutamente.

DRIVER

DRIVER

VASCO ROAD SANITARY LANDFILL No: 1182652

A DIVISION OF BFI® BROWNING-FERRIS INDUSTRIES

4001 VASCO ROAD
LIVERMORE, CA 94550
(510) 447-0491

Date : 12-13-99 Time In: 13:16:45 Time Out: 13:16:45
Ticket # : A21264 CMS # : 1018068 LMS #: 1018068
Customer : LIFE SPRINGS ENVIRONMENTAL INC
Vehicle # : JI Lic Plate:
ALA CASTRO VALLEY
Manifest # : 612433 PO #: Transporter: 0
Source Cd : Generator : RTN RT NAHAS CO
Comment : Operator: MARK
Capacity : 20.00 yd Scale In # : 1 Scale Out #: Stored
Gross Wt : 33.82 Tare Wt: 15.37 Net Wt: 18.45 t

Item	Descr	Actual	Bill Qty	$/Unit	Extended
02346	SOIL	14.00	18.45 t	18.00000	332.10
	Sub Total..... $				332.10
	Total..... $				332.10

THANK YOU FOR YOUR BUSINESS!!!
HAVE A GREAT DAY!!!

WARNING: Transporting any unauthorized hazardous waste to this facility for disposal is prohibited by law. Persons violating this prohibition are subject to civil and criminal prosecution.

All children must remain in vehicles. Absolutely no salvaging allowed.

Ninõs deben de permaneceren en los carros a todas horas.

No se permite llevar cosas del dompe absolutamente.

DRIVER

APPENDIX D

CHAIN OF CUSTODY DOCUMENT
and
ANALYTICAL RESULTS
for
December 13, 1999 Soil Samples

Life Springs Environmental
3275 Stevens Creek Blvd., Suite 208
San Jose, CA 95117-1148

Attn.: Mr. Kenneth Meleen

Project: 98041.2
RT Nahas Co.

Dear Mr. Meleen,

Attached is our report for your samples received on Monday December 13, 1999
This report has been reviewed and approved for release. Reproduction of this report is permitted only in its entirety.

Please note that any unused portion of the samples will be discarded after January 12, 2000 unless you have requested otherwise. We appreciate the opportunity to be of service to you. If you have any questions, please call me at (925) 484-1919

Sincerely,

Vincent Vancil

Diesel

Life Springs Environmental

3275 Stevens Creek Blvd., Suite 208
San Jose, CA 95117-1148

Attn: Kenneth Meleen

Phone: (408) 243-9292 Fax: (408) 243-9696

Project #: 98041.2

Project: RT Nahas Co.

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
WO-11	Soil	12/13/1999 09:10	1
SUMP-15	Soil	12/13/1999 09:25	2

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 1999-12-0223

To: **Life Springs Environmental**
Attn.: Kenneth Meleen

Test Method: 8015m
Prep Method: 3550/8015M

Diesel

Sample ID: **WO-11**
Project: 98041.2
RT Nahas Co.
Sampled: 12/13/1999 09:10
Matrix: Soil

Lab Sample ID: **1999-12-0223-001**
Received: 12/13/1999 16:02
Extracted: 12/15/1999 09:00
QC-Batch: 1999/12/15-03.10

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	ND	1.0	mg/Kg	1.00	12/17/1999 09:57	
Surrogate(s)						
o-Terphenyl	80.2	60-130	%	1.00	12/17/1999 09:57	

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 1999-12-0223

To: **Life Springs Environmental**
Attn.: Kenneth Meleen

Test Method: 8015m
Prep Method: 3550/8015M

Diesel

Sample ID:	**SUMP-15**	Lab Sample ID:	**1999-12-0223-002**
Project:	98041.2 RT Nahas Co.	Received:	12/13/1999 16:02
		Extracted:	12/15/1999 09:00
Sampled:	12/13/1999 09:25	QC-Batch:	1999/12/15-03.10
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	690	2.0	mg/Kg	2.00	12/20/1999 14:01	ndp
Surrogate(s)						
o-Terphenyl	80.8	60-130	%	2.00	12/20/1999 14:01	

To: **Life Springs Environmental**
Attn.: Kenneth Meleen

Test Method: 8015m
Prep Method: 3550/8015M

Batch QC Report
Diesel

Method Blank | **Soil** | **QC Batch # 1999/12/15-03.10**

MB: 1999/12/15-03.10-003

Date Extracted: 12/15/1999 09:00

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Diesel	ND	1	mg/Kg	12/16/1999 14:53	
Surrogate(s)					
o-Terphenyl	76.0	60-130	%	12/16/1999 14:53	

To: **Life Springs Environmental**

Attn: Kenneth Meleen

Test Method: 8015m

Prep Method: 3550/8015M

Batch QC Report

Diesel

Laboratory Control Spike (LCS/LCSD) **Soil** **QC Batch # 1999/12/15-03.10**

LCS: 1999/12/15-03.10-001 Extracted: 12/15/1999 09:00 Analyzed: 12/16/1999 13:58

LCSD: 1999/12/15-03.10-002 Extracted: 12/15/1999 09:00 Analyzed: 12/16/1999 14:36

Compound	Conc. [mg/Kg]		Exp.Conc. [mg/Kg]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Diesel	32.3	32.1	41.7	41.7	77.5	77.0	0.6	60-130	25		
Surrogate(s)											
o-Terphenyl	18.5	17.7	20.0	20.0	92.5	88.5		60-130			

To: **Life Springs Environmental**
Attn:Kenneth Meleen

Test Method: 8015m
Prep Method: 3550/8015M

Legend & Notes

Diesel

Analyte Flags

ndp

Hydrocarbon reported does not match the pattern of our Diesel standard

Gas/BTEX and MTBE

Life Springs Environmental

3275 Stevens Creek Blvd., Suite 208
San Jose, CA 95117-1148

Attn: Kenneth Meleen

Phone: (408) 243-9292 Fax: (408) 243-9696

Project #: 98041.2

Project: RT Nahas Co.

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
WO-11	Soil	12/13/1999 09:10	1
SUMP-15	Soil	12/13/1999 09:25	2

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 1999-12-0223

To: **Life Springs Environmental**

Attn.: Kenneth Meleen

Test Method: 8020
8015M

Prep Method: 5030

Gas/BTEX and MTBE

Sample ID: **WO-11**

Project: 98041.2
RT Nahas Co.

Sampled: 12/13/1999 09:10

Matrix: Soil

Lab Sample ID: **1999-12-0223-001**

Received: 12/13/1999 16:02

Extracted: 12/20/1999 14:03

QC-Batch: 1999/12/20-01.03

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	1.00	12/20/1999 14:03	
Benzene	ND	0.0050	mg/Kg	1.00	12/20/1999 14:03	
Toluene	ND	0.0050	mg/Kg	1.00	12/20/1999 14:03	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	12/20/1999 14:03	
Xylene(s)	ND	0.0050	mg/Kg	1.00	12/20/1999 14:03	
MTBE	ND	0.0050	mg/Kg	1.00	12/20/1999 14:03	
Surrogate(s)						
Trifluorotoluene	100.2	53-125	%	1.00	12/20/1999 14:03	
4-Bromofluorobenzene-FID	90.8	58-124	%	1.00	12/20/1999 14:03	

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 1999-12-0223

To: **Life Springs Environmental**

Attn.: Kenneth Meleen

Test Method: 8020
8015M

Prep Method: 5030

Gas/BTEX and MTBE

Sample ID:	**SUMP-15**	Lab Sample ID:	**1999-12-0223-002**
Project:	98041.2 RT Nahas Co.	Received:	12/13/1999 16:02
		Extracted:	12/20/1999 14:34
Sampled:	12/13/1999 09:25	QC-Batch:	1999/12/20-01.03
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	6.3	1.0	mg/Kg	1.00	12/20/1999 14:34	g
Benzene	ND	0.0050	mg/Kg	1.00	12/20/1999 14:34	
Toluene	ND	0.0050	mg/Kg	1.00	12/20/1999 14:34	
Ethyl benzene	0.14	0.0050	mg/Kg	1.00	12/20/1999 14:34	
Xylene(s)	0.25	0.0050	mg/Kg	1.00	12/20/1999 14:34	
MTBE	ND	0.0050	mg/Kg	1.00	12/20/1999 14:34	
Surrogate(s)						
Trifluorotoluene	77.0	53-125	%	1.00	12/20/1999 14:34	
Trifluorotoluene-FID	83.0	53-125	%	1.00	12/20/1999 14:34	

To: **Life Springs Environmental**

Attn.: Kenneth Meleen

Test Method: 8020
8015M

Prep Method: 5030

Batch QC Report

Gas/BTEX and MTBE

Method Blank | **Soil** | **QC Batch # 1999/12/20-01.03**

MB: 1999/12/20-01.03-001

Date Extracted: 12/20/1999 04:15

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	12/20/1999 04:15	
Benzene	ND	0.0050	mg/Kg	12/20/1999 04:15	
Toluene	ND	0.0050	mg/Kg	12/20/1999 04:15	
Ethyl benzene	ND	0.0050	mg/Kg	12/20/1999 04:15	
Xylene(s)	ND	0.0050	mg/Kg	12/20/1999 04:15	
MTBE	ND	0.0050	mg/Kg	12/20/1999 04:15	
Surrogate(s)					
Trifluorotoluene	112.2	53-125	%	12/20/1999 04:15	
4-Bromofluorobenzene-FID	113.6	58-124	%	12/20/1999 04:15	

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 1999-12-0223

To: **Life Springs Environmental**

Test Method: 8020
8015M

Attn: Kenneth Meleen

Prep Method: 5030

Batch QC Report

Gas/BTEX and MTBE

Laboratory Control Spike (LCS/LCSD) **Soil** **QC Batch # 1999/12/20-01.03**

LCS: 1999/12/20-01.03-002 Extracted: 12/20/1999 13:00 Analyzed: 12/20/1999 13:00

LCSD: 1999/12/20-01.03-003 Extracted: 12/20/1999 05:17 Analyzed: 12/20/1999 05:17

Compound	Conc. [mg/Kg]		Exp.Conc. [mg/Kg]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Gasoline	0.492	0.432	0.500	0.500	98.4	86.4	13.0	75-125	35		
Benzene	0.0802	0.104	0.1000	0.1000	80.2	104.0	25.8	77-123	35		
Toluene	0.0808	0.100	0.1000	0.1000	80.8	100.0	21.2	78-122	35		
Ethyl benzene	0.0793	0.101	0.1000	0.1000	79.3	101.0	24.1	70-130	35		
Xylene(s)	0.239	0.301	0.300	0.300	79.7	100.3	22.9	75-125	35		
Surrogate(s)											
Trifluorotoluene	450	561	500	500	90.0	112.2		53-125			
4-Bromofluorobenzene-FI	509	434	500	500	101.8	86.8		58-124			

To: **Life Springs Environmental**

Attn:Kenneth Meleen

Test Method: 8015M
8020

Prep Method: 5030

Legend & Notes

Gas/BTEX and MTBE

Analyte Flags

g

Hydrocarbon reported in the gasoline range does not match our gasoline standard.

Petroleum Oil & Grease

Life Springs Environmental

3275 Stevens Creek Blvd., Suite 208
San Jose, CA 95117-1148

Attn: Kenneth Meleen

Phone: (408) 243-9292 Fax: (408) 243-9696

Project #: 98041.2

Project: RT Nahas Co.

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
WO-11	Soil	12/13/1999 09:10	1
SUMP-15	Soil	12/13/1999 09:25	2

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 1999-12-0223

To: **Life Springs Environmental**
Attn.: Kenneth Meleen

Test Method: 5520 E & F
Prep Method: 5520 E & F

Petroleum Oil & Grease

Sample ID:	**WO-11**	Lab Sample ID:	**1999-12-0223-001**
Project:	98041.2 RT Nahas Co.	Received:	12/13/1999 16:02
		Extracted:	12/20/1999
Sampled:	12/13/1999 09:10	QC-Batch:	1999/12/20-01.23
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Oil & Grease (Petroleum)	ND	50	mg/Kg	1.00	12/20/1999	

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 1999-12-0223

To: **Life Springs Environmental**
Attn.: Kenneth Meleen

Test Method: 5520 E & F
Prep Method: 5520 E & F

Petroleum Oil & Grease

Sample ID: **SUMP-15**
Project: 98041.2
RT Nahas Co.
Sampled: 12/13/1999 09:25
Matrix: Soil

Lab Sample ID: **1999-12-0223-002**
Received: 12/13/1999 16:02
Extracted: 12/20/1999
QC-Batch: 1999/12/20-01.23

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Oil & Grease (Petroleum)	1200	50	mg/Kg	1.00	12/20/1999	

To: **Life Springs Environmental**
Attn.: Kenneth Meleen

Test Method: 5520 E & F
Prep Method: 5520 E & F

Batch QC Report
Petroleum Oil & Grease

Method Blank | **Soil** | **QC Batch # 1999/12/20-01.23**

MB: 1999/12/20-01.23-001

Date Extracted: 12/20/1999

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Oil & Grease (Petroleum)	ND	50	mg/Kg	12/20/1999	

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 1999-12-0223

To: **Life Springs Environmental**

Attn: Kenneth Meleen

Test Method: 5520 E & F

Prep Method: 5520 E & F

Batch QC Report

Petroleum Oil & Grease

Laboratory Control Spike (LCS/LCSD) **Soil** **QC Batch # 1999/12/20-01.23**

LCS: 1999/12/20-01.23-002 Extracted: 12/20/1999 Analyzed: 12/20/1999

LCSD: 1999/12/20-01.23-003 Extracted: 12/20/1999 Analyzed: 12/20/1999

Compound	Conc. [mg/Kg]		Exp.Conc. [mg/Kg]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Oil & Grease (Petroleum)	394	408	400	400	98.5	102.0	3.5	80-120	20		

CHROMALAB, INC.

Environmental Services (SDB) (DOHS 1094)

99120223

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

Reference #: 4912

Chain of Custody

DATE 12/13/99 PAGE 1 OF 1

PROJ MGR Kenneth L. Meleen
COMPANY Life Springs Environmental, Inc.
ADDRESS 3275 Stevens Creek Blvd., #208
San Jose, CA 95117

SAMPLERS (SIGNATURE) Kenneth L. Meleen

(PHONE NO.) (408) 243-9292
(FAX NO.) (408) 243-9696

ANALYSIS REPORT

SAMPLE ID.	DATE	TIME	MATRIX	PRESERV.	TPH-(EPA 8015,8020) ☐Gas w/ ☐ BTEX ☐MTBE	PURGEABLE AROMATICS BTEX (EPA 8020)	TPH-Diesel (EPA 8015M)	TEPH (EPA 8015M) ☐Kerosene, ☐Diesel, ☐M.O.	PURGEABLE HALOCARBONS, (EVOCs) (EPA 8010)	VOLATILE ORGANICS (VOCs) (EPA 8260)	SEMIVOLATILES (EPA 8270)	TOTAL OIL AND GREASE (SM 5520 B+F, E+F)		☐ PESTICIDES(EPA 8080) ☐ PCB'S (EPA 8080)	PNA's by ☐ 8270 ☐ 8310	☐ Spec. Cond. ☐ TSS ☐ TDS	LUFT METALS: Cd, Cr, Pb, Ni, Zn	CAM 17 METALS (EPA 6010/7470/7471)	TOTAL LEAD	☐ W.E.T. (STLC) ☐ TCLP	☐ Recruvalent Chromium ☐ pH (24 hr hold time for H20)				NUMBER OF CONTAINERS
WO-11	12/13/99	0910	Soil	Ice	X		X					X														1
SUMP-15	12/13/99	0915	Soil	Ice	X		X					X														1

PROJECT INFORMATION

PROJECT NAME: RT Nakao Co.
PROJECT NUMBER: 98041.2
P.O. #: LSE-204-99

TAT: STANDARD 5-DAY | 24 | 48 | 72 | OTHER

Report: (1) Routine (1) Level 2 (1) Level 3 (1) Level 4 (1) Electronic Report

SPECIAL INSTRUCTIONS/COMMENTS:

SAMPLE RECEIPT

TOTAL NO. OF CONTAINERS	2
HEAD SPACE	
TEMPERATURE	
CONFORMS TO RECORD	

RELINQUISHED BY 1.	RELINQUISHED BY 2	RELINQUISHED BY 3
Kenneth L. Meleen 15:30 (SIGNATURE) (TIME)	(SIGNATURE) (TIME)	(SIGNATURE) (TIME)
Kenneth L. Meleen 12/13/99 (PRINTED NAME) (DATE)	(PRINTED NAME) (DATE)	(PRINTED NAME) (DATE)
Life Springs Environmental Inc. (COMPANY)	(COMPANY)	(COMPANY)
RECEIVED BY 1.	**RECEIVED BY 2**	**RECEIVED BY (LABORATORY) 3**
(SIGNATURE) (TIME)	(SIGNATURE) (TIME)	Reaparas 15:30 (SIGNATURE) (TIME)
(PRINTED NAME) (DATE)	(PRINTED NAME) (DATE)	CRISELDA 12/13/99 (PRINTED NAME) (DATE)
(COMPANY)	(COMPANY)	(LAB)

Revised 8/98

APPENDIX E

BSK & ASSOCIATES

SOIL COMPACTION TESTING REPORT

BSK
1181 Quarry Lane, Building 300
Pleasanton, CA 94566
(925) 462-4000 • FAX (925) 462-6283

December 31, 1999

BSK JOB NO. 04-20-0571

Mr. Kenneth L. Meleen
Life Spring Environmental
3275 Stevens Creek Boulevard, #208
San Jose, California 95117

Subject: **SUMMARY REPORT**
Compaction Testing Services
Remediation Phase
Tien's Unocal Station
20405 Redwood Road
Castro Valley, California
(Period Covered: November 1998 and December 1999)

Dear Mr. Meleen:

At your request and authorization, we have performed earthwork testing and observation services during the remediation phase for the subject project.

Our activities were coordinated by Mr. Kenneth L. Meleen who was apprised of the results at the time of testing. Based on our observations and nuclear density test results, the top 3 to 5 feet of the excavation backfill tested, met the required minimum relative compaction of 90 percent.

Enclosed are summaries of our daily field activities and results of field compaction and laboratory tests performed for this project.

Respectfully submitted,
BSK & Associates

Alex Y. Eskandari, P.E.
Project Manager
C.E. 38101

AYE:hhc
(DOC\GEO\DATA\RPTS\0420 571.R#1)

Enclosures:
Summaries of Field Activities and Test Results
Terms and Limitations

Distribution:
Life Spring Environmental
Attn: Mr. Kenneth L. Meleen (2 copies)

SUMMARY REPORT
Compaction Testing Services
Remediation Phase
Tien's Unocal Station
20405 Redwood Road
Castro Valley, California
(Period Covered: November 1998 and December 1999)

BSK Job No. 04-20-0571
December 31, 1999
Enclosure 1

SUMMARY OF FIELD ACTIVITIES

Obtained a bulk sample of imported fill from the site stockpile and transported it to our laboratory for a moisture/density curve determination.

SUMMARY OF LABORATORY TEST DATA

Test:	Moisture/Density Curve Determination
Method:	ASTM D 1557 (6" Mold)
Date Sampled:	November 25, 1998
Date Tested:	November 30, 1998
Sample Location:	Site Stockpile
Material Description:	Gray Silty Gravel (Imported Backfill)
Maximum Dry Density:	139.5 p.c.f.
Optimum Moisture:	7.5 percent

TECHNICIAN: R. Greguras

WORK PERFORMED ON: Wednesday, 11/25/98

TIME: 2 Hours

FIELD REPRESENTATIVE: K. Meleen

BSK

SUMMARY OF FIELD ACTIVITIES

A bulk sample of soil was delivered to our laboratory by Mr. Kenneth L. Meleen of Life Springs Environmental on 12/08/99 for a moisture/density curve determination.

SUMMARY OF LABORATORY TEST DATA

Test:	Moisture/Density Curve Determination
Method:	ASTM D 1557 (4" Mold)
Date Sampled:	December 8, 1999
Date Tested:	December 8, 1999
Sample Location:	Site Stockpile ("Clean" Excavation Spoil)
Material Description:	Brown Silty Gravelly Sand
Maximum Dry Density:	124.0 p.c.f.
Optimum Moisture:	13.0 percent

NUCLEAR FIELD DENSITY TESTS RESULTS

Test No.	Test Location	Depth Below Existing Adjacent Grade (Feet)	Field Moisture (Percent)	Maximum Dry Density (pcf)	Field Compaction (Percent)	Required Compaction (Percent)
Gas Storage Tank Removal Excavation Backfill (Imported Fill)						
1	See Attached Site Plan	2.0	9.5	139.4	94	90
2	" "	2.0	8.8	139.5	94	90
Pit Excavation Backfill - Waste Oil Tank and Dispenser Area (On-Site Soil)						
3	See Attached Site Plan	5.0	12.2	124.0	92	90
4	" "	5.0	13.4	124.0	85	90
4R1*	" "	5.0	12.0	124.0	90	90
5	" "	3.0	12.0	124.0	91	90
6	" "	3.0	13.1	124.0	91	90
Gas Storage Tank Removal Excavation Backfill (On-Site Soil)						
7	See Attached Site Plan	0.0	10.9	124.0	90	90
8	" "	0.0	10.1	124.0	93	90

*Denotes Retest

(Date Work Performed: Monday, 12/13/99)

Continued on next page

BSK

NUCLEAR FIELD DENSITY TESTS RESULTS

SUMMARY OF FIELD ACTIVITIES

Test No.	Test Location	Depth Below Existing Grade (Feet)	Field Moisture (Percent)	Maximum Dry Density (pcf)	Field Compaction (Percent)	Required Compaction (Percent)
Pit Excavation Backfill - Waste Oil Tank and Dispenser Areas (On-Site Soil)						
9	See Attached Site Plan	0.0	10.5	124.0	88	90
9R1*	" "	0.0	13.1	124.0	90	90

*Denotes Retest

ACTIVITIES: Observed backfilling of the top 3 to 5 feet of the excavations for tank and dispenser removal and performed nuclear density tests and a *retest* on the backfill materials to monitor degree of compaction.

TECHNICIAN: G. Minerales

WORK PERFORMED ON: Monday, 12/13/99

TIME: 4 Hours

FIELD REPRESENTATIVE: K. Meleen

BSK

SUMMARY REPORT
Compaction Testing Services
Remediation Phase
Tien's Unocal Station
20405 Redwood Road
Castro Valley, California
(Period Covered: November 1998 and December 1999)

BSK Job No. 04-20-0571
December 31, 1999
Enclosure 2

Terms and Limitations

Compaction test results reported herein provide an indication of the degree of compaction of materials for specific, prescribed locations but do not necessarily reflect the overall character of the prepared materials. Test results should be considered accurate only at the locations and depths indicated. All results are submitted to the project engineer and representing job inspector for their review and evaluation.

Interpretation of test results as to the adequacy of compacted materials remains solely the responsibility of the project engineer and no engineering evaluations, unless specifically stated, are provided herein as to the adequacy of compacted material.

Respectfully submitted,
BSK & Associates

BSK

APPENDIX F

ALAMEDA COUNTY PUBLIC WORKS DEPARTMENT

MONITORING WELL CLOSURE PERMIT NO. 99WR702

COUNTY OF ALAMEDA
PUBLIC WORKS AGENCY
951 Turner Court, Room 300
Hayward, CA 94545-2651

FAX TRANSMITTAL

TO: Kenneth Meleen
Life Springs
Environmental Inc.

DATE: 12/9/99

FAX NO.: 408-243-9696

TRANSMITTING THE FOLLOWING:

TITLE/DESCRIPTION
Drilling Permit 99WR702 and destruction requirements -

3 **TOTAL PAGES INCLUDING THIS SHEET.**

FROM WATER RESOURCES

NAME: Marlon Magallanes/Cindy Hutchinson **TEL:** (510) 670-5248 **FAX:** (510) 670-5262

E-MAIL: Wrebcc@acwpa.mail.co.alameda.ca.us-Cindyh@acwpa.mail.co.alameda.ca.us

IF YOU EXPERIENCE PROBLEMS WITH THIS TRANSMISSION, PLEASE CALL US.
REMARKS:

ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION
951 TURNER COURT, SUITE 300, HAYWARD, CA 94545-2651
PHONE (510) 670-5248 MARLON MAGALLANES/CINDY HUTCHINSON
FAX (510) 670-5262

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT Former Tien Unocal Service Station
20405 Redwood Road
Castro Valley, CA 94546

CLIENT
Name R.T. Nahas Co.
Address 20630 Patio Drive Phone (510) 538-9600
City Castro Valley Zip 94546

APPLICANT
Name Life Springs Environmental Inc.
(Kenneth Melvold, P.E.) Fax (408) 247-9696
Address 2275 Stevens Creek Blvd Phone (408) 247-9292
City San Jose Zip 95117

TYPE OF PROJECT
Well Construction
- Cathodic Protection ☐
- Water Supply ☐
- Monitoring ☐

Geotechnical Investigation
- General ☐
- Contamination ☐
- Well Destruction ☒

PROPOSED WATER SUPPLY WELL USE
- New Domestic ☐
- Municipal ☐
- Industrial ☐
- Replacement Domestic ☐
- Irrigation ☐
- Other ______ ☐

DRILLING METHOD:
- Mud Rotary ☐
- Cable ☐
- Air Rotary ☐
- Other ☒ Pressure Grout
- Auger ☐

DRILLER'S LICENSE NO. C-57 - 484288
Exploration Geoservices, Inc.

WELL PROJECTS
Drill Hole Diameter 8 in.
Casing Diameter 2 in.
Surface Seal Depth ______ ft.
Maximum Depth 25 ft
Number MW-4

GEOTECHNICAL PROJECTS
Number of Borings ______
Hole Diameter ______ in.
Maximum Depth ______ ft.

ESTIMATED STARTING DATE week of 12/13/99
ESTIMATED COMPLETION DATE No later than 12/23/99

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-68.

APPLICANT'S SIGNATURE Kenneth L. Melvold DATE 12/09/99
Licensed Civil Engineer No. C17487
License Expires 06/30/2001

FOR OFFICE USE

PERMIT NUMBER 99WR702
WELL NUMBER ______
APN ______

PERMIT CONDITIONS
Circled Permit Requirements Apply

(A.) GENERAL
(1.) A permit application should be submitted so as to arrive at the ACPWA office five days prior to proposed starting date.
(2.) Submit to ACPWA within 60 days after completion of permitted work the original Department of Water Resources Water Well Drillers Report or equivalent for well projects, or drilling logs and location sketch for geotechnical projects.
(3.) Permit is void if project not begun within 90 days of approval date.

B. WATER SUPPLY WELLS
1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved.

C. GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS
1. Minimum surface seal thickness is two inches of cement grout placed by tremie
2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet

D. GEOTECHNICAL
Backfill bore hole with compacted cuttings or heavy bentonite and upper two feet with compacted material. In areas of known or suspected contamination, tremied cement grout shall be used in place of compacted cuttings

E. CATHODIC
Fill hole above anode zone with concrete placed by tremie.

(F.) WELL DESTRUCTION
See attached.

G. SPECIAL CONDITIONS

APPROVED Frank L. Codd DATE 12-9-99

** TOTAL PAGE.02 **

ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION
951 TURNER COURT, SUITE 300, HAYWARD, CA 94545-2651
PHONE (510) 670-5575 ANDREAS GODFREY FAX (510) 670-5262
(510) 670-5248 ALVIN KAN

WATER RESOURCES SECTION
GROUNDWATER PROTECTION ORDINANCE
For Monitoring Well at Clean or Contaminated Site

Destruction Requirements:

1. Drill out the well so that the casing, seal, and gravel pack are removed to the bottom of the well.
2. Sound the well as deeply as practicable and record for your report.
3. Using a tremie pipe, fill the hole to 2 feet below the lower of finished grade or original ground with neat cement.
4. After the seal has set, backfill the remaining hole with compacted material.