

Alameda County
NOV 25 2003
Environmental Health

Additional Soil and
Groundwater Quality Investigation
Silveria Ranch Site
6615 Tassajara Road
Pleasanton, California

April 16, 2001
7941.00-001

Prepared for
SummerHill Homes
777 California Avenue
Palo Alto, California

Handwritten:
Mason Weber
~~775 576 8343~~
Pacific City



April 16, 2001

7941.00-001

Mark A. Beskind, Esq.
Vice President, General Counsel
SummerHill Homes
777 California Avenue
Palo Alto, California 94304

Subject: Additional Soil and Groundwater Quality Investigation at Suspected Underground Storage Tank Location, Silveria Ranch Site, 6615 Tassajara Road, Pleasanton, California

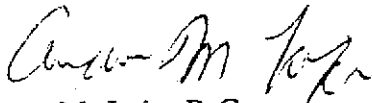
Dear Mr. Beskind:

Enclosed is the subject report regarding the Silveria Ranch Project Site, located at 6615 Tassajara Road in Pleasanton, California ("the Site"). LFR identified a suspected underground storage tank (UST) at the Site and localized groundwater contamination in the vicinity of the UST. Based on the findings of this investigation, LFR recommends that the UST be removed. In addition, it is likely that Alameda County Health Care Services Agency (ACHCSA) will require a minimum of four quarters of groundwater monitoring. A scope of work and cost estimate for the UST removal and groundwater monitoring was presented in our letter to SummerHill Homes, dated March 27, 2001.

Before proceeding with UST removal activities, LFR recommends submitting this report and other supporting documentation to the ACHCSA to notify them of the findings of this investigation and request oversight of future remedial activities at the Site.

If you have any questions or require additional information, please call Lucas Goldstein or me at (510) 652-4500.

Sincerely,



Andrew M. Lojo, R.G.
Senior Geologist

Enclosure

cc: Adam Tennant, SummerHill Homes

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1.0 INTRODUCTION

LFR Levine-Fricke (LFR) has prepared this report on behalf of SummerHill Homes to document the additional soil and groundwater investigation at a suspected underground storage tank (UST) at the Silveria Ranch project site, located at 6615 Tassajara Road in Pleasanton, California ("the Site"; Figures 1 and 2). The objectives of this additional investigation were to locate the suspected UST and to further evaluate the extent of affected soil and groundwater at and in the vicinity of the suspected UST.

1.1 Background

Site Location. The Site is located east of Tassajara Road near the northern boundary of Alameda County, within the limits of the city of Pleasanton (Figures 1 and 2). The Site is approximately 91 acres in size, with hilly topography. Site features include a main residence, a garden shed, three barns, a stable area, and a carport.

Phase I Environmental Site Assessment (ESA). Terrasearch, Inc., conducted a Phase I ESA of the Site. These results were presented in a report to SummerHill Homes, dated March 26, 1999 ("the Terrasearch ESA"). The Terrasearch ESA states that the Site had only been used for grazing livestock and identified the following potential environmental concerns:

- two 550-gallon steel aboveground storage tanks (ASTs)
- a gasoline pump, not connected to a UST
- petroleum staining on the floors of the barns
- containers of pesticides and herbicides in the barns and garden shed

Limited Phase II Soil and Groundwater Investigation. LFR conducted a limited soil and groundwater investigation at the Site in November 2000, during which the property owner, Mr. Chris Haight, showed LFR staff what he said was the location of a suspected gasoline UST at the property. This suspected UST was not identified in the Terrasearch ESA. The results of this investigation are presented in LFR's report to SummerHill Homes entitled, "Limited Phase II Soil and Groundwater Quality Investigation Report, Silveria Ranch Site, 6615 Tassajara Road, Pleasanton, California," dated February 5, 2001, and summarized below.

LFR's limited soil and groundwater investigation included advancing three soil borings to a depth of approximately 15 feet below ground surface (bgs), advancing two soil borings to the first water-yielding interval at the Site (approximately 27 feet bgs), and collecting eight shallow soil samples for chemical analysis from depths of approximately 1 foot bgs. The five soil borings and three of the eight shallow soil samples were collected in areas of potential hydrocarbon contamination (i.e., at the AST locations, the reported location of the suspected UST, and the areas where soil

staining was observed). The remaining five soil samples were collected from the fields and near the pesticide shed. Grab groundwater samples were also collected from the two deeper soil borings at approximately 27 feet bgs.

Selected soil samples were analyzed for arsenic, lead, total petroleum hydrocarbons (TPH) as diesel (TPHd), TPH as gasoline (TPHg), TPH as motor oil (TPHmo), volatile organic compounds (VOCs), pesticides, and herbicides, depending on sample location. The two groundwater samples were analyzed for arsenic, lead, TPHd, TPHg, TPHmo, VOCs, pesticides, and organic lead.

Soil. TPHd and TPHmo were detected in shallow soil samples at five locations. One of these shallow soil samples was collected near the suspected UST, one is located near the carport, and three are from oil-stained areas inside the barn, and the carport. The highest concentration of TPH detected (59 parts per million [ppm] TPHmo, collected from soil inside the carport) is below its Regional Water Quality Control Board (RWQCB) Tier 1 Risk-Based Screening Level (100 ppm; RWQCB 2000). Benzene and other hydrocarbon constituents, which are considered more toxic than TPH, were not detected in these soil samples. Elevated photoionization detector (PID) readings and hydrocarbon odors indicate that hydrocarbon-affected soil is also present at depths of greater than 10 feet bgs in soil borings located 2 feet, 10 feet, and 60 feet from the carport. Metals detected in samples were within generally acceptable background concentrations for Bay Area soils. Isolated concentrations of the pesticides Lindane and DDT were detected in the soil sample collected near the pesticide storage shed, at levels below its U.S. Environmental Protection Agency (U.S. EPA) preliminary remediation goals. ✓

Groundwater. Relatively high concentrations of TPHg were detected in the groundwater sample collected from boring SB-1, located near the presumed former UST (Figure 3). Benzene concentrations in this sample are above the U.S. EPA Maximum Contaminant Levels (MCLs) for drinking water (5 parts per billion [ppb]). In the sample from SB-5, located approximately 50 feet from SB-1 and presumed to be downgradient from SB-1 with respect to the direction of groundwater flow, benzene was also detected. However, the results from these two samples are insufficient to characterize the extent or quantity of benzene in site groundwater. 1,2-Dichloroethane (1,2-DCA) was also detected at 5.5 ppb in the sample from SB-5, above its MCL (5 ppb). 1,2-DCA was reportedly used in the past as a gasoline additive.

1.2 Additional Investigation Scope of Work

To assess if the suspected UST was still present at the Site and evaluate the lateral extent of affected groundwater in the vicinity of the suspected UST, LFR conducted additional investigation activities in February 2001. LFR's scope of work was presented to SummerHill Homes in a work order, dated March 27, 2001, and authorized by Mr. Adam Tennant of SummerHill Homes. Specifically, the scope of work included the following:

- a geophysical investigation to evaluate if the UST had been removed and to assess the extent of the suspected UST pit
- a soil investigation to expose the UST (if still present) and evaluate the extent of any residual affected soil below and in the vicinity of the suspected UST
- conduct an additional groundwater investigation to evaluate the extent of affected groundwater

2.0 FIELDWORK

2.1 Preparation for Fieldwork

Before fieldwork began, LFR obtained a permit for the soil borings from the Alameda County Flood Control and Water Conservation District. LFR also notified Underground Service Alert to identify public underground utilities and subcontracted with a private utility locator to locate underground utilities at the Site. Fieldwork was conducted in accordance with the Health and Safety Plan for the Site (LFR 2000b).

2.2 Geophysical Investigation

Norcal Geophysical Consultants, Inc., under the observation of LFR staff, conducted a geophysical investigation at the suspected UST location on February 16, 2001. Two methods were used to conduct the investigation: standard metal detector and ground penetration radar (GPR) techniques. A standard metal detector was used to evaluate if buried metallic objects suggestive of a UST existed within the vicinity of the suspected UST location. A GPR unit was used to further investigate ambiguous objects delineated by the metal detector. Both the metal detector and the GPR results suggested that there was a single UST located approximately 3 feet northwest of the carport (Figure 3). The corners of the suspected UST were marked in the field.

2.3 Limited Soil Excavation to Expose the UST

Philip Services Inc., under the observation of a LFR geologist, performed limited soil excavation using a backhoe to expose the UST on February 23, 2001. Photographs of the UST are presented in Appendix A. The UST was constructed of steel and is approximately 500 gallons in capacity. Additionally, the UST appeared to have partially collapsed and was filled with gravel. The tank was also heavily corroded and has holes throughout the body of the tank. Pipes associated with the UST were not encountered during the limited soil excavation. Three soil samples were collected for laboratory analysis from the soil immediately west of the UST at depths of 4 feet bgs, 6 feet bgs, and 8 feet bgs, respectively. According to Mr. Haight, the gasoline-dispensing pump and associated piping was located immediately adjacent to the UST and had been removed several years ago.

Silt and clay were the predominant soil types encountered at in the vicinity of the UST at depths of up to 10 feet bgs. A PID was used to assess the presence of VOCs in the excavated soils. Excavated soil did not exhibit hydrocarbon odor or elevated PID readings.

2.4 Grab Groundwater Sampling

Vironix Inc., under the observation of a LFR geologist, advanced five soil borings (SB-6 through SB-10) at the Site using a Geoprobe rig on February 26, 2001. Boring locations, shown on Figure 3, were selected to help evaluate the extent of affected groundwater as follows:

- SB-6 was advanced at a location approximately 60 feet east (upgradient) from the UST
- SB-7 was advanced at a location approximately 150 feet southwest (crossgradient and downgradient) from the UST
- SB-8 was advanced at a location approximately 200 feet southwest (downgradient) from the UST
- SB-9 was advanced at a location approximately 170 feet west (crossgradient and downgradient) from the UST
- SB-10 was advanced at a location approximately 100 feet west (crossgradient and downgradient) from the UST

Soil borings SB-6 through SB-10 were advanced to the first encountered groundwater, at approximately 27 feet bgs. Samples were also collected for lithologic description from each boring and lithologically logged, using the Unified Soil Classification System. The samples were also examined for visible indications of petroleum hydrocarbons. A PID was also used to assess the presence of VOCs in collected soil samples.

Silt and clay were the predominant soil types encountered in borings at the Site. Thin sand units (less than 1 foot thick) were encountered at depths ranging from 20 to 30 feet bgs in borings.

2.5 Groundwater Sample Collection

After soil lithology was recorded and soil samples were collected, soil borings SB-6 through SB-10 were converted into temporary groundwater sampling locations (Figure 3). A 1-inch-diameter polyvinyl chloride well casing was placed into each of the five borings, with approximately 10 feet of 0.010-inch slotted well screen placed at the bottom of the borings. Groundwater samples were transferred directly from each boring, using clean, disposable bailers, into clean laboratory-supplied 40-milliliter vials. Sample containers were labeled and placed into a chilled cooler for transportation

to the analytical laboratory following strict chain of custody protocols. After sample collection, the temporary casing was removed from each boring and the borings were backfilled with neat cement, in accordance with regulatory requirements.

3.0 LABORATORY ANALYSIS AND RESULTS

Soil and groundwater samples were submitted to Curtis & Tompkins, Ltd., a state-certified analytical laboratory located in Berkeley, California. The three soil samples and five groundwater samples were analyzed for TPHg and VOCs. The analyses were performed in accordance with U.S. Environmental Protection Agency (U.S. EPA) methods, as summarized in Table A.

Table A: Summary of Analyses, Additional Soil and Groundwater Investigation

EPA Method	No. of Soil Samples	No. of Water Samples	Analytes
8015M	3	5	TPHg (purgeable hydrocarbons as gasoline)
8260B	3	5	VOCs (complete VOCs, including benzene, toluene, ethylbenzene, and total xylenes [BTEX], and methyl tertiary-butyl ether [MTBE])

Analytical laboratory certificates for soil and groundwater sample analysis are presented in Appendix B.

3.1 Soil Sample Results

TPHg and VOCs (including BTEX) were not detected above the laboratory detection limits in soil samples collected immediately adjacent to the UST at depths of 4 feet, 6 feet, and 8 feet bgs. Additionally, elevated PID readings and/or hydrocarbon odors were not encountered in the excavation pit or the soil borings.

3.2 Groundwater Sample Results

Hydrocarbons. TPHg and VOCs were detected in groundwater samples, as summarized in Table B.

Table B: Summary of Groundwater Analytical Results for TPHg and VOCs (ppb)

Location	Date	Notes	TPHg	Benzene	Toluene	Ethyl-benzene	Total Xylenes	1,2-DCA
SB-1	11/27/01 ⁰⁹	(1)	18,000	71	3.5	250	481	<3.1
SB-5	11/27/01 ⁰⁰	(1)	240	3.3	<0.5	<0.5	<0.5	5.5
SB-6	2/26/01		<50	<0.5	<0.5	<0.5	<0.5	<0.5
SB-7	2/27/01		<50	<0.5	<0.5	<0.5	<0.5	<0.5
SB-8	2/26/01		<50	0.5	<0.5	<0.5	<0.5	1.1
SB-9	2/26/01	(2)	<50	<0.5	<0.5	<0.5	<0.5	<0.5
SB-10	2/26/01		<50	<300	<0.5	<0.5	<0.5	<0.5

Note: < = not detected above laboratory reporting limit; (1) samples SB-1 and SB-5 were collected during the limited Phase II investigation conducted in November 2000; (2) MTBE detected in sample SB-9 at the detection limit of 0.5 ppb.

3.3 Discussion of Soil and Groundwater Results

Soil. TPHg and VOCs were not detected in soil samples collected immediately adjacent to the UST at depths of 4 feet, 6 feet, and 8 feet bgs.

Groundwater. The five grab groundwater samples collected on February 26, 2001, served to assess the lateral extent of affected groundwater at the Site. TPHg and petroleum constituents (except benzene, 1,2-DCA, and MTBE) were not detected in grab groundwater samples collected upgradient, crossgradient, or downgradient from the UST. MTBE was detected at the detection limit of 0.5 ppb in the grab groundwater sample collected from boring SB-9. 1,2-DCA was detected at 1.1 ppb, below its MCL, and benzene was detected at the detection limit of 0.5 ppb in the sample collected from the boring located 200 feet downgradient from the UST. The estimated extent of the MCL isoconcentration contour line (as defined by various petroleum constituents at SB-1 and by 1,2-DCA at SB-5) is shown on Figure 3.

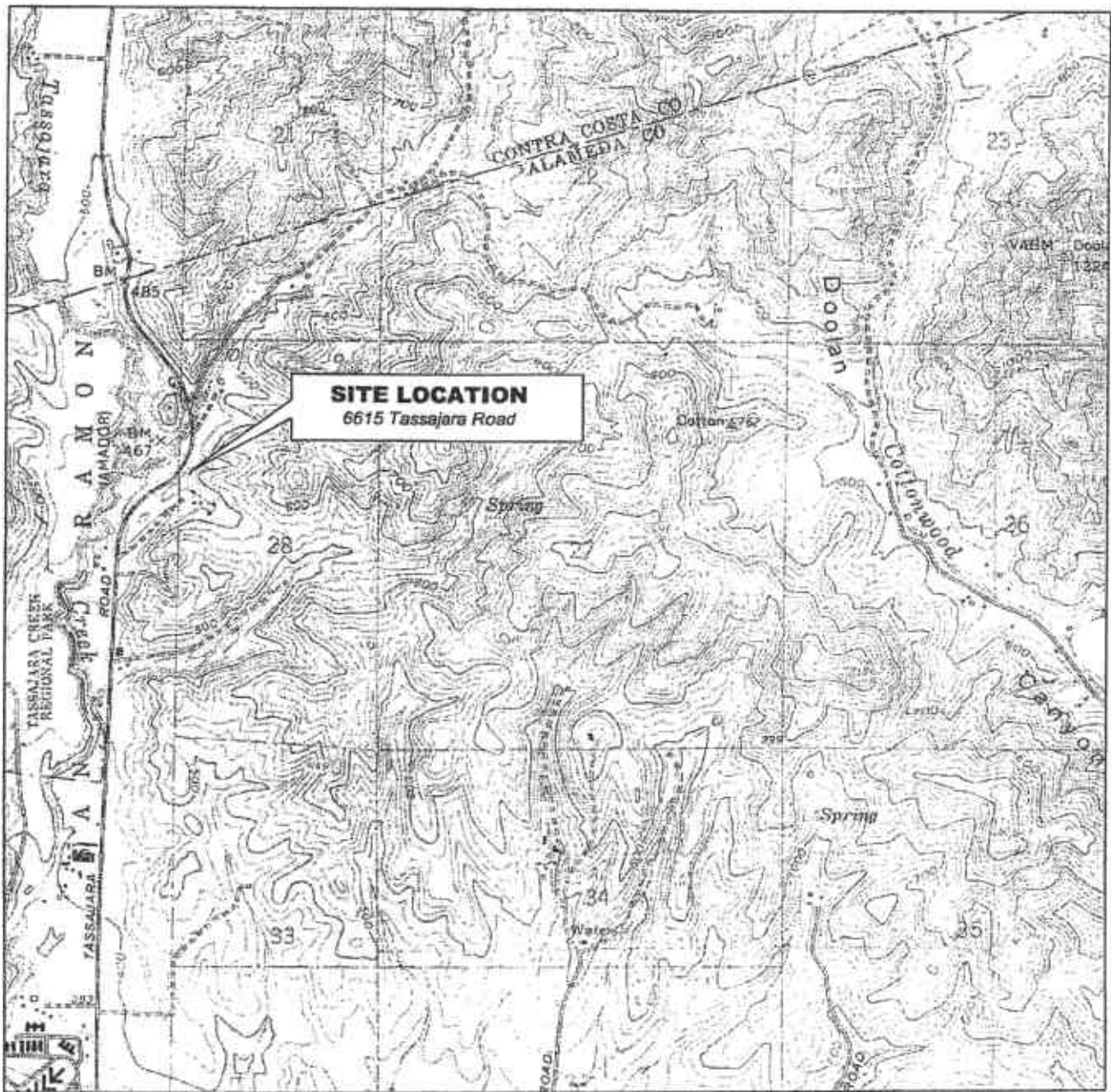
4.0 CONCLUSIONS AND RECOMMENDATIONS

Although preliminary soil samples collected adjacent to the UST did not contain hydrocarbons, a limited amount of petroleum-affected soil may exist directly under the UST and the UST may be a continuing source of contaminants to site soil and groundwater. Therefore, LFR recommends the removal of the UST and any affected soil found beneath the UST.

The extent of affected groundwater has been adequately assessed. LFR recommends passive bioremediation as the remedial management strategy for the Site, because it is the most appropriate and cost-effective strategy for remediation of affected site groundwater. It is likely that one year (four quarters) of groundwater monitoring data will be required by Alameda County Environmental Health Care Agency, the local oversight agency. The purpose of this monitoring data would be to monitor the concentrations of petroleum hydrocarbons in the groundwater. The RWQCB, which sets guidelines that county agencies must follow, generally considers source removal and one year of groundwater monitoring as a minimum requirement before granting case closure for sites with petroleum hydrocarbon-affected groundwater.

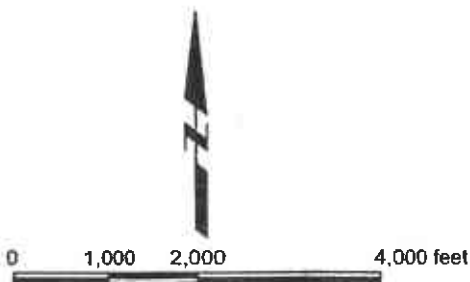
REFERENCES

- LFR Levine-Fricke (LFR) 2000a. Work Order for a Limited Phase II Soil Investigation at 6615 Tassajara Road, Pleasanton, California. August 8.
- . 2000b. Health and Safety Plan for Investigation Activities at 6615 Tassajara Road, Pleasanton, California. November 23.
- . 2001a. Limited Phase II Soil and Groundwater Quality Investigation Report, Silveria Ranch Site, 6615 Tassajara Road, Pleasanton, California. February 5.
- . 2001b. Work Order for Removal of One Underground Storage Tank, Well Installation, and One Year of Groundwater Monitoring, Silveria Ranch Site, 6615 Tassajara Road, Pleasanton, California. March 27.
- RWQCB 2000. Application of Risk-Based Screening Levels and Decision Making to Sites with Impacted Soil and Groundwater. Interim-Final, August.
- Terrasearch 1999. Phase I Environmental Site Assessment of the Silveria and Regwick Properties. March 26.



MAP SOURCE: U.S.G.S Topographic Map, 7.5' Quadrangle, Livermore, California, 1981.

3/7/2001 3:58 P.M. Drawing File(DWG): C:\7941\7941-02A.DWG



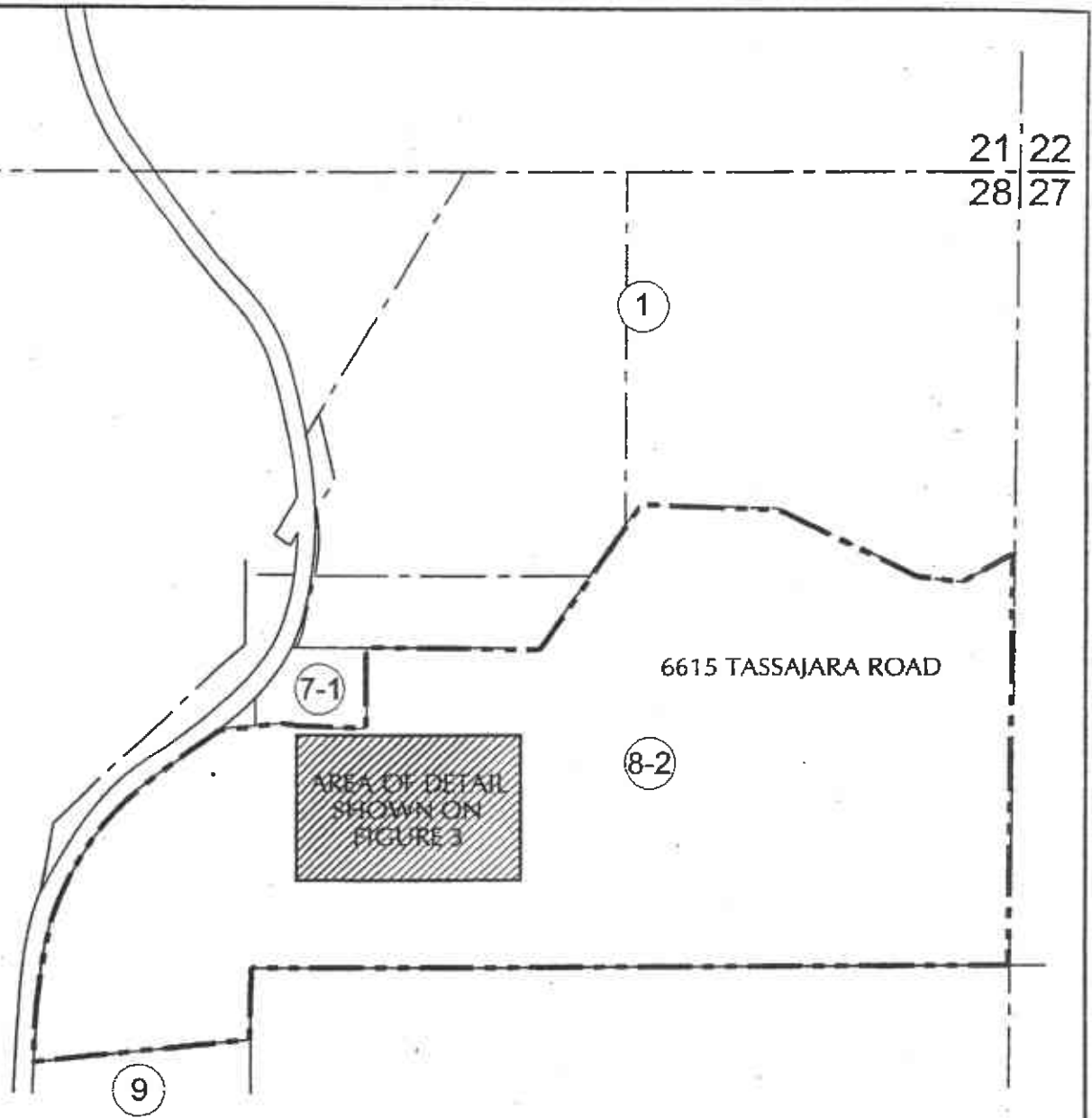
Site Vicinity
6615 Tassajara Road
Pleasanton, CA

Summerhill Homes



Figure 1

21 22
28 27



EXPLANATION

----- PROPERTY BOUNDARY

NOT TO SCALE

Parcel Map
6615 Tassajara Road
Pleasanton, CA

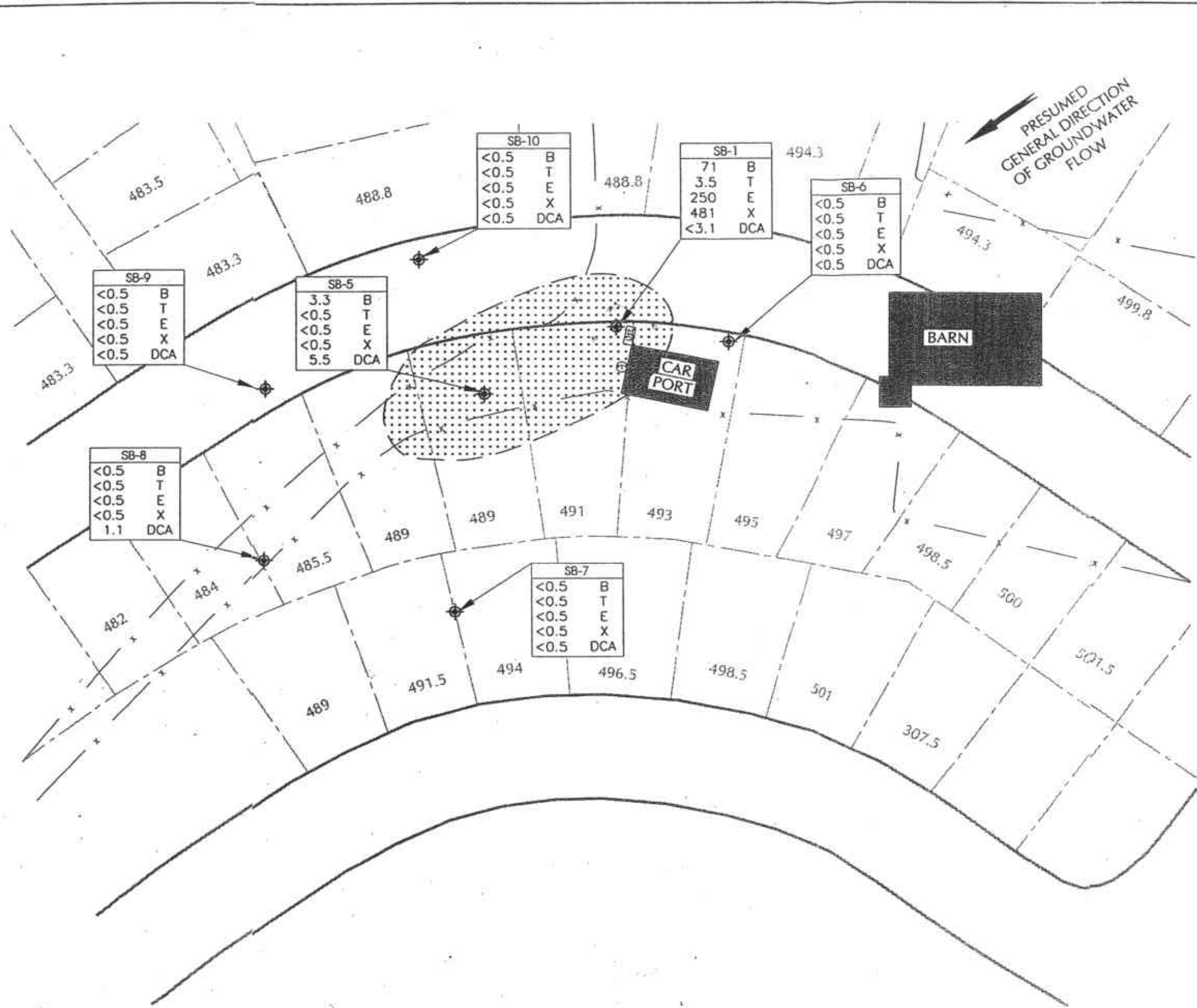
Summerhill Homes



Figure 2

SOURCE: Alameda County Assessor's Map 985.

4/13/2001 3:19 P.M. Drawing File: D:\DWG\7941\79411001.DWG



LEGEND:

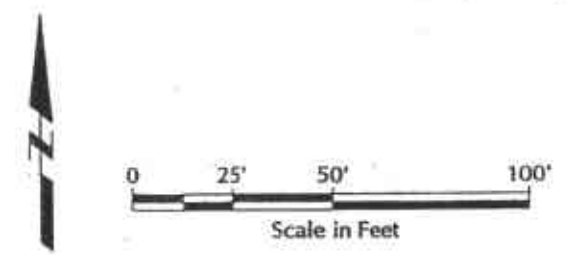
- GRAB GROUNDWATER SAMPLE LOCATION
- UNDERGROUND STORAGE TANK
- FORMER ABOVEGROUND STORAGE TANK
- FENCE
- PROPOSED LOT BOUNDARY (Lot Numbers Shown)
- BUILDING
- ESTIMATED EXTENT OF MAXIMUM CONTAMINANT LEVEL (MCL) ISOCONCENTRATION CONTOUR LINE

KEY TO CHEMICALS

B	BENZENE
T	TOLUENE
E	ETHYLBENZENE
X	XYLENES
DCA	1,2-DICHLOROETHANE

NOTE:

- PROPOSED LOT LAYOUT FROM SITE PLAN ALTERNATIVE D SILVERIA PROPERTY, RSA 2000
- DOWNGRAIDENT EXTENT OF MCL CONTOUR BASED ON DCA (5 PPB US EPA MCL)
- GRAB GROUNDWATER SAMPLES SB-1 AND SB-5 COLLECTED IN NOVEMBER 2000
- GRAB GROUNDWATER SAMPLES SB-6 THROUGH SB-10 COLLECTED IN FEBRUARY 2001



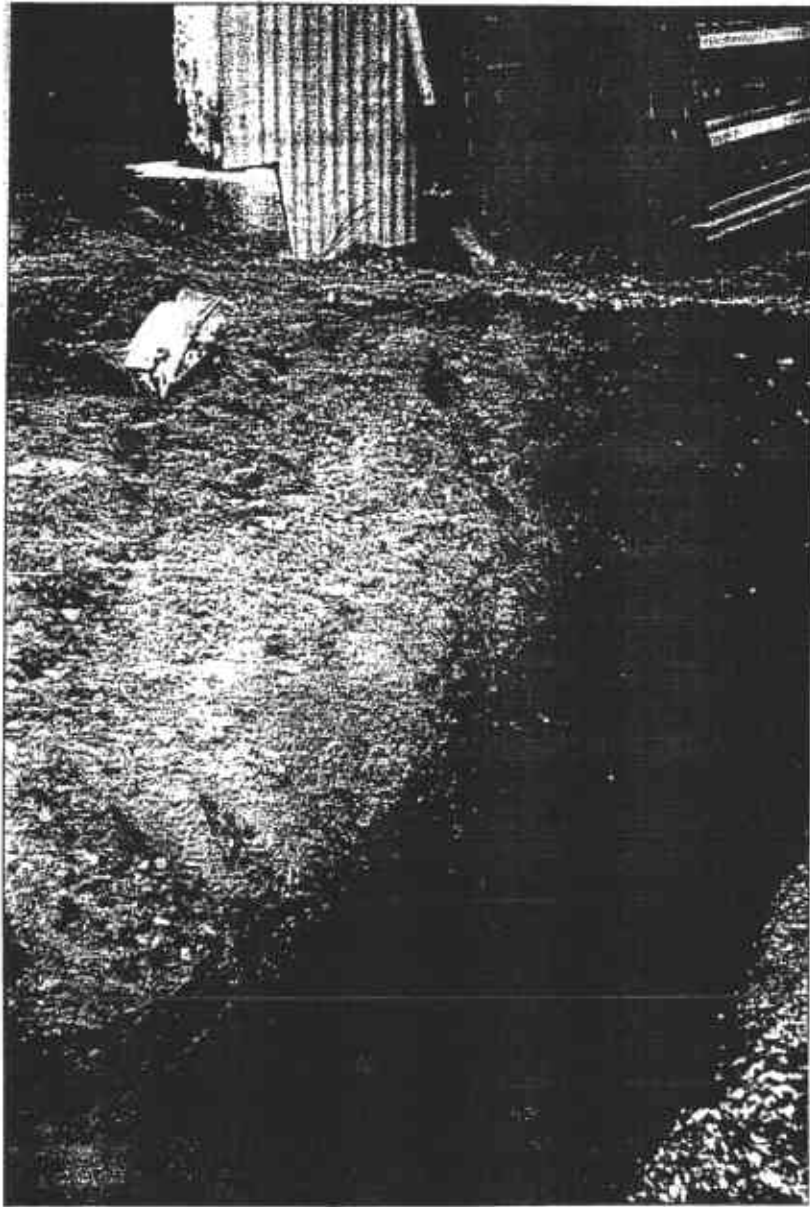
Hydrocarbon Constituents in Groundwater
(In Parts Per Billion)
6615 Tassajara Road, Pleasanton, CA
Summerhill Homes



Figure 3

APPENDIX A

UST Photographs



Photograph 1: Underground Storage Tank (view toward southeast)



Photograph 2: Location of Underground Storage Tank, Located Immediately Northwest of the Carport (view toward southeast)

APPENDIX B

Laboratory Analytical Reports



February 27, 2001

Lucas Goldstein
Levine Fricke Recon
1900 Powell Street, 12th floor
Emeryville, CA 94608-1827

Dear Mr. Goldstein

This report presents the findings of a geophysical investigation performed by NORCAL Geophysical Consultants, Inc. on a portion of the 6615 Tassajara Road site in Pleasanton, California. Geophysicist David Bissiri conducted the field investigation on February 16, 2001.

SITE DESCRIPTION

The site is a rural property with a residence and several out-buildings, one of which was a carport (See Plate 1). The area of interest was an approximately 50- by 40-foot rectangular area north of the carport. The boundary limits of the investigation area was established by Levine Fricke Recon personnel.

PURPOSE AND METHODOLOGY

The purpose of the geophysical survey is to investigate for a suspected steel underground storage tank (UST). Two methods were used to conduct the investigation: standard metal detection and ground penetrating radar (GPR) techniques.

A Fisher TW-6 M-scope metal detector was used to determine if any shallowly buried metallic objects suggestive of a UST exist within the investigation area. A Geophysical Survey Systems Inc., SIR-2000 GPR unit was used to further investigate suspicious buried objects delineated by the metal detector.

GEOPHYSICAL METHODS

M-scope Metal Detector

This instrument is used to detect shallowly buried metallic objects. The instrument is a "split-box" type of device with a radio transmitter mounted on one end of a short staff and receiver mounted on the opposite end. As the instrument is carried over a shallowly buried metal object of sufficient size, say a pipe or steel UST, the device gives rise to both an audible tone and meter reading. Nearby above ground metallic objects can also cause the instrument to respond. Under favorable conditions the orientation and dimensions of a shallowly buried object can be determined to within a few feet. This instrument does not display or record quantitative data so instrument readings are therefore essentially qualitative, or comparative in nature. Results for areas with a significant instrument response are usually limited to the surface trace of the detected feature being marked on the ground with paint or flagging and mapping the results.



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February 27, 2001
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Ground Penetrating Radar (GPR)

Ground penetrating radar is a method that provides a continuous, high resolution graphical cross-section that depicts variations in the electrical properties of the shallow subsurface. The method is particularly sensitive to variations in electrical conductivity and electrical permittivity (the ability of a material to hold a charge when an electrical field is applied). Under favorable conditions these variations can be correlated to geological stratigraphy or buried man-made objects. The system operates by repeatedly radiating an electromagnetic pulse into the ground from a transducer (antenna) as it is moved along a traverse. Reflected signals are received by the transducer and processed by a control console. The data are then printed as a vertical cross-section on a graphical recorder.

Since most earthen and earthen-like materials (such as concrete) are fairly transparent to electromagnetic energy only a portion of the radar signal is reflected back to the surface from interfaces within such materials. However, when the signal encounters a shallowly buried metal object (such as a UST) much of the incident energy is reflected. As a result buried tanks, drums, and pipes often appear on the records as a series of inverted "V" images imbedded within the horizontal banding produced by the hosting media (see GPR profiles in Appendix A). The effective depth of penetration is ultimately a function of the signal-to-noise ratio of the reflected signal. The amplitude of the received signal is dependant on several factors. Among the factors which reduce signal amplitude are: damping by the hosting material(s); scattering of the signal by objects other than the target (especially if cobbles and boulders are present); and geometrical spreading (which increases with increasing depth). Generally speaking, deeper targets are harder to detect than shallower ones and electrically conductive materials such as clay and saturated silt dampen the radar signal more than clean sand.

DATA ACQUISITION and ANALYSIS

After the investigation area boundaries were established by Levine Fricke Recon, the initial task was to conduct a reconnaissance of the entire area using the metal detector. This consisted of a series of parallel traverses spaced approximately three feet apart in both the north-south and east-west directions. The outlines of suspicious objects were marked on the ground with white spray paint. Following this, the next task was to obtain GPR data profiles from traverses crossing over the suspicious object(s). These GPR profiles were examined for reflections suggestive of a UST. The locations of the GPR profiles are depicted on Plate 1 as the solid red lines.

RESULTS

The results of the geophysical investigation are shown on Plate 1. Both the metal detector and GPR results suggest there exists a single UST located approximately 3 feet from the northwest corner of the carport, with its axis oriented north-south. The location of the suspected UST is depicted on Plate 1 as the shaded blue area. The corners of the suspected UST were also



Levine Fricke Recon
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marked in the field with pink plastic "brush flags" nailed into the ground. The suspected UST has an apparent length of 3.5 feet and a diameter of 2.5 feet. Assuming this is a cylindrical tank, these dimensions result in the tank having a volume of approximately 130 gallons. Annotated GPR profiles of the six traverses conducted over and around the suspected UST are provided in Appendix A. All of the profiles except Profile B were obtained from traverses oriented perpendicular to the apparent axis of the suspect tank. Profile B was obtained from a traverse parallel to the axis. While the metal detector and GPR data does suggest the detected object is a UST, other buried metallic objects of similar size and mass could also yield similar instrument responses.

LIMITATIONS

Metal Detector

The ability to detect a particular metallic object is primarily dependant on the depth of burial and the horizontal cross sectional area of that object. The deeper the depth of burial and the smaller the cross-sectional area, the more difficult it is to detect. The electrical conductivity of the soil can also have some effect on the results. Unusually conductive soils may "mask" the effects of buried metallic objects. Usually, steel UST's that are buried at standard depths of 3 - 4 feet to top- of- tank are readily detectable. However, large above ground metallic objects such as cars, walls, and chain-link fences also affect the metal detector. Instrument readings taken within four feet or so of such above ground objects may not be reliable. Therefore, buried objects near these objects may be undetected.

GPR Techniques

The ability to detect subsurface targets (both metallic and non-metallic) is dependent on site specific conditions. These conditions include depth of burial, the size or diameter of the target, the condition of the specific target in question, the type of backfill material associated with the target, and the surface conditions over the target. Typically, the GPR depth of detection will be reduced as the clay content in the subsurface increases. Therefore, it is possible that targets (UST's and utilities), buried greater than 2 to about 4 feet, may not be detectable by the GPR technique.

STANDARD CARE AND WARRANTY

The scope of NORCAL's services for this project consisted of using geophysical methods to characterize the shallow subsurface. The accuracy of our findings is subject to specific site conditions and limitations inherent to the techniques used. The services were performed in a manner consistent with the level of skill ordinarily exercised by members of the profession currently employing similar methods. No warranty, with respect to the performance of services or products delivered under this agreement, expressed or implied, is made by NORCAL.



Levine Fricke Recon
February 27, 2001
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We appreciate having the opportunity to provide you with this information.

Respectfully,

NORCAL Geophysical Consultants, Inc.

A handwritten signature in black ink, appearing to read "David Bissiri".

David Bissiri
Geophysicist GP-1009

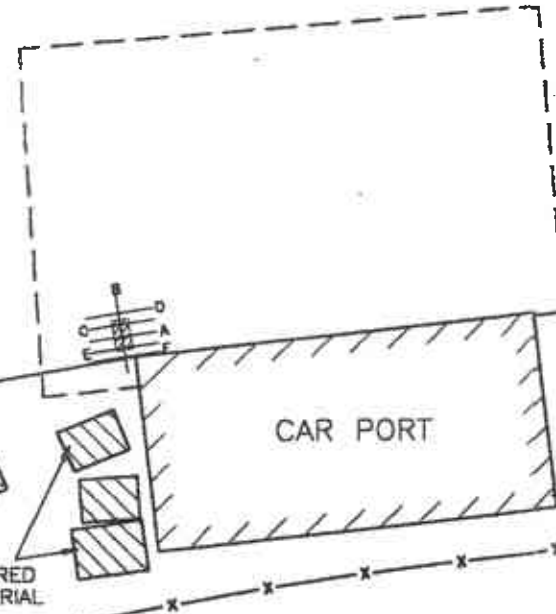
DJB/KGB/jm

Enclosures: Plate 1
Appendix A: GPR PROFILES



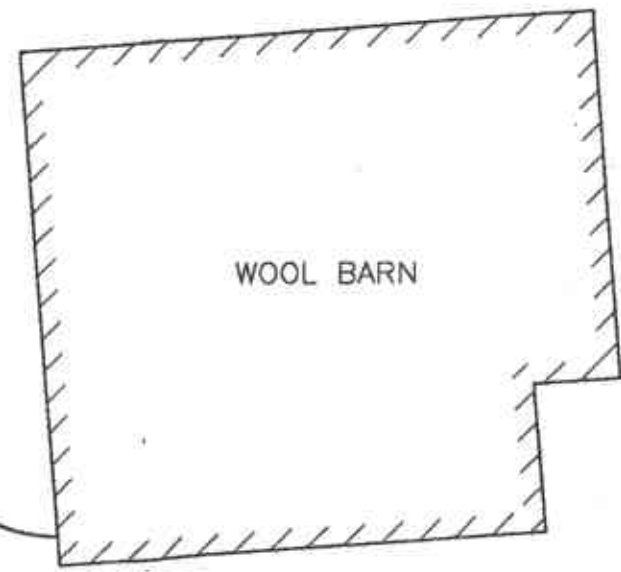
DRIVEWAY

RESIDENCE



STORED EQUIPMENT

CAR PORT



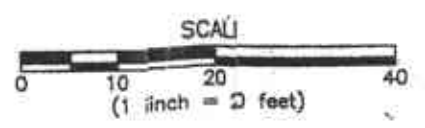
WOOL BARN

COW PASTURE

DRIVEWAY

LEGEND

	APPROXIMATE LIMITS OF INVESTIGATION AREA
	GPR TRAVERSE
	FENCE
	SUSPECTED UST



NOTE: SITE MAP ADAPTED FROM LEVINE FRICKE RECON MAP SUPPLIED TO NORCAL



JOB #: 01-299.21

DATE: FEB. 2001

SITE MAP

LOCATION: PLEASANTON, CALIFORNIA

CLIENT: LEVINE FRICKE RECON

NORCAL GEOPHYSICAL CONSULTANTS INC.

DRAWN BY: G.RANDALL

APPROVED BY: DJB

PLATE

1

Position: 0.0rS Range: 60.0rS

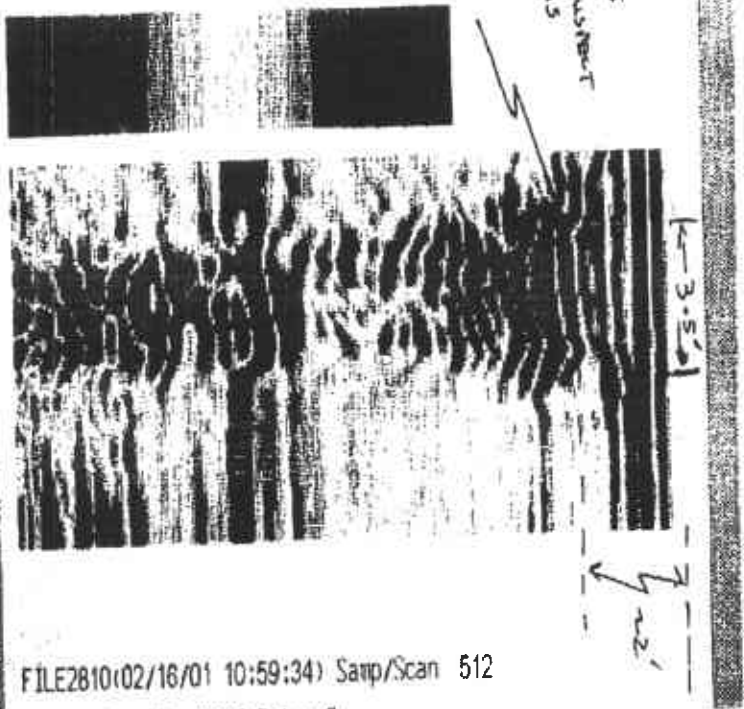
Range Gain -4 35 52 64 79

V(IIR LP N=1 F=1000)

V(IIR HP N=2 F=30)

H(IIR STK TC=4)

Table #15; Transform #1



FILE2810(02/16/01 10:59:34) Samp/Scan 512

Profile B

FILE2808(02/16/01 10:53:04) Samp/Scan 512

Scan/Sec 32.0 Bits: 8

Dielectric: 1.00

Position: 0.0rS Range: 60.0rS

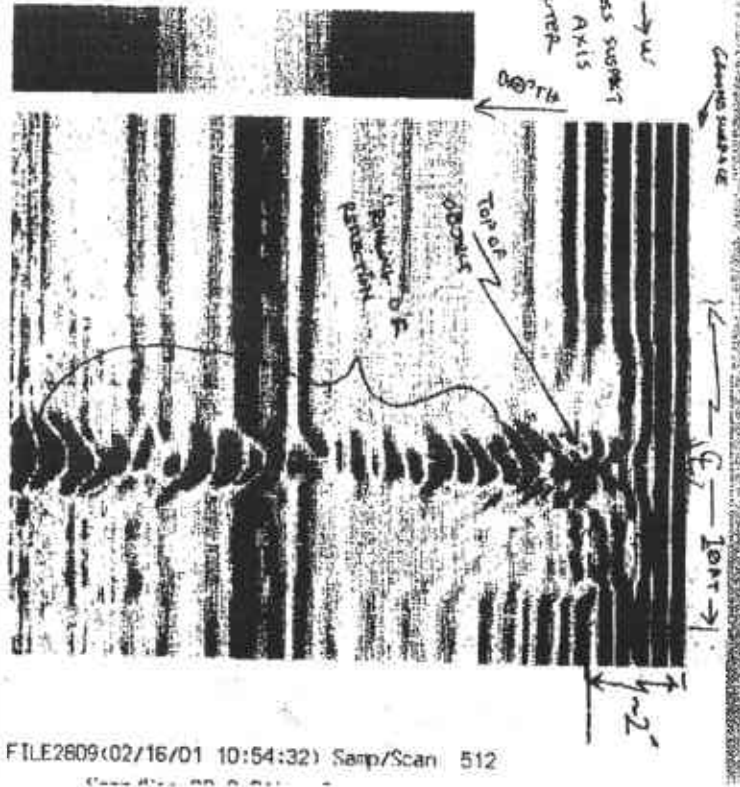
Range Gain -4 35 52 64 79

V(IIR LP N=1 F=1000)

V(IIR HP N=2 F=30)

H(IIR STK TC=4)

Table #15; Transform #1



FILE2609(02/16/01 10:54:32) Samp/Scan 512

Profile A

FILE2813(02/16/01 11:04:24) Samp/Scan 512

Scan/Sec 32.0 Bits: 8

Dielectric: 1.00

Position: 0.0nS Range: 60.0nS

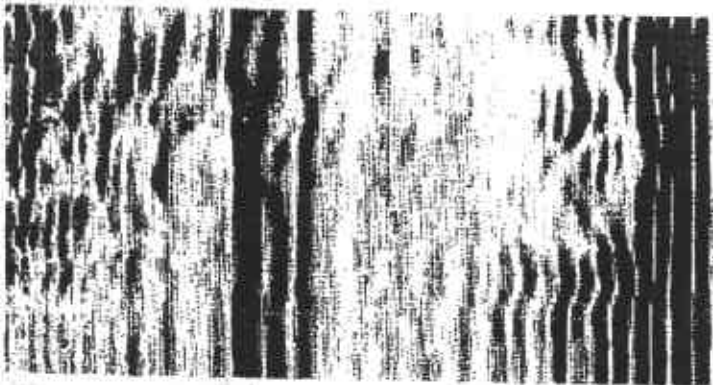
Range Gain -4 35 52 64 79

V(IIR LP N=1 F=1000)

V(IIR HP N=2 F=30)

H(IIR STK TC=4)

Table #15; Transform #1



*LI → E
 Adjusts
 support list
 Program
 Screenshot*

Profile F

FILE2812(02/16/01 11:03:10) Samp/Scan 512

Scan/Sec 32.0 Bits: 8

Dielectric: 1.00

Position: 0.0nS Range: 60.0nS

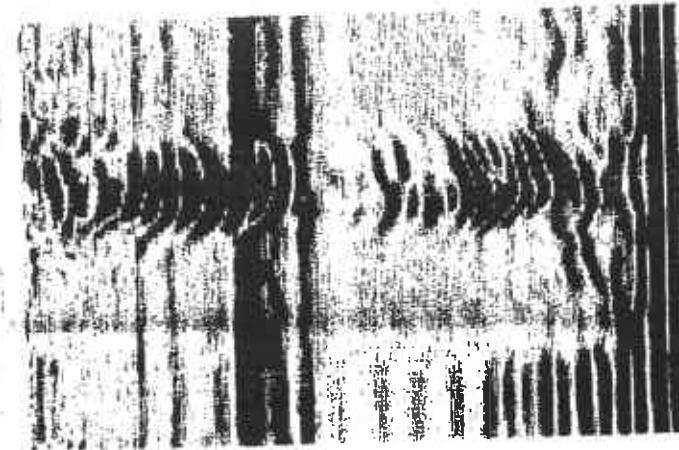
Range Gain -4 35 52 64 79

V(IIR LP N=1 F=1000)

V(IIR HP N=2 F=30)

H(IIR STK TC=4)

Table #15; Transform #1



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 E
 Adjusts
 support list
 Program
 Screenshot*

E

Profile E



Purgeable Organics by GC/MS

Lab #:	150569	Location:	Summer Hill/6615 Tassara
Client:	LFR Levine Fricke	Prep:	EPA 5030
Project#:	7941.00.002	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	61893
Units:	ug/L	Analyzed:	03/01/01
Diln Fac:	1.000		

ype: BS Lab ID: QC138901

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	50.00	45.40	91	74-132
Benzene	50.00	45.84	92	80-116
Trichloroethene	50.00	48.06	96	80-119
Toluene	50.00	49.46	99	80-120
Chlorobenzene	50.00	47.69	95	80-117

Surrogate	%REC	Limits
Dibromofluoromethane	104	80-122
1,2-Dichloroethane-d4	106	78-123
Toluene-d8	104	80-110
Bromofluorobenzene	100	80-115

ype: BSD Lab ID: QC138902

Analyte	Spiked	Result	%REC	Limits	RPD
1,1-Dichloroethene	50.00	43.85	88	74-132	3
Benzene	50.00	44.83	90	80-116	2
Trichloroethene	50.00	46.34	93	80-119	4
Toluene	50.00	47.90	96	80-120	3
Chlorobenzene	50.00	46.42	93	80-117	3

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-122
1,2-Dichloroethane-d4	106	78-123
Toluene-d8	105	80-110
Bromofluorobenzene	99	80-115

**Purgeable Organics by GC/MS**

Lab #:	150569	Location:	Summer Hill/6615 Tassara
Client:	LFR Levine Fricke	Prep:	EPA 5030
Project#:	7941.00.002	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	61867
Units:	ug/L	Analyzed:	02/28/01
Diln Fac:	1.000		

Type: BS Lab ID: QC138819

Analyte	Spiked	Result	UREC	Limits
1,1-Dichloroethene	50.00	45.43	91	74-132
Benzene	50.00	46.09	92	80-116
Trichloroethene	50.00	48.26	97	80-119
Toluene	50.00	49.36	99	80-120
Chlorobenzene	50.00	47.88	96	80-117

Surrogate	UREC	Limits
Dibromofluoromethane	102	80-122
1,2-Dichloroethane-d4	101	78-123
Toluene-d8	103	80-110
Bromofluorobenzene	100	80-115

Type: BSD Lab ID: QC138820

Analyte	Spiked	Result	UREC	Limits	RPD
1,1-Dichloroethene	50.00	47.02	94	74-132	3
Benzene	50.00	44.82	90	80-116	3
Trichloroethene	50.00	46.67	93	80-119	3
Toluene	50.00	47.68	95	80-120	3
Chlorobenzene	50.00	46.84	94	80-117	2

Surrogate	UREC	Limits
Dibromofluoromethane	102	80-122
1,2-Dichloroethane-d4	106	78-123
Toluene-d8	103	80-110
Bromofluorobenzene	100	80-115



Purgeable Organics by GC/MS

Lab #:	150569	Location:	Summer Hill/6615 Tassara
Client:	LFR Levine Fricke	Prep:	EPA 5030
Project#:	7941.00.002	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC138821	Batch#:	61867
Matrix:	Water	Analyzed:	02/28/01
Units:	ug/L		

Analyte	Result	RL
Bromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
o-Chlorotoluene	ND	0.5
m-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	0.5
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	0.5
Naphthalene	ND	1.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	IRGC	Limits
Bromofluoromethane	105	80-122
1,2-Dichloroethane-d4	106	78-123
Toluene-d8	104	80-110
Bromofluorobenzene	100	80-115

ND= Not Detected

RL= Reporting Limit

**Purgeable Organics by GC/MS**

Lab #:	150569	Location:	Summer Hill/6615 Tassara
Client:	LFR Levine Fricke	Prep:	EPA 5030
Project#:	7941.00.002	Analysis:	EPA 8260B
Field ID:	TRIP BLANK	Batch#:	61867
Lab ID:	150569-014	Sampled:	02/26/01
Matrix:	Water	Received:	02/27/01
Units:	ug/L	Analyzed:	02/28/01
Diln Fac:	1.000		

Analyte	Result	RL
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
o-Xylenes	ND	0.5
m-Xylene	ND	0.5
p-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
o-Chlorotoluene	ND	0.5
m-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	0.5
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	0.5
Naphthalene	ND	1.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	REC	Limits
Dibromofluoromethane	104	80-122
1,2-Dichloroethane-d4	106	78-123
Toluene-d8	103	80-110
Bromofluorobenzene	101	80-115

D= Not Detected

L= Reporting Limit

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Purgeable Organics by GC/MS

Lab #:	150569	Location:	Summer Hill/6615 Tassara
Client:	LFR Levine Fricke	Prep:	EPA 5030
Project#:	7941.00.002	Analysis:	EPA 8260B
Field ID:	SB-10	Batch#:	61867
Lab ID:	150569-005	Sampled:	02/26/01
Matrix:	Water	Received:	02/27/01
Units:	ug/L	Analyzed:	02/28/01
Diln Fac:	1.000		

Analyte	Result	RL
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	0.5
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	0.5
Naphthalene	ND	1.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	REC	Limits
Dibromofluoromethane	104	80-122
1,2-Dichloroethane-d4	108	78-123
Toluene-d8	105	80-110
Bromofluorobenzene	102	80-115

D= Not Detected

L= Reporting Limit



Purgeable organics by GC/MS

Lab #:	150569	Location:	Summer Hill/6615 Tassara
Client:	LFR Levine Fricke	Prep:	EPA 5030
Project#:	7941.00.002	Analysis:	EPA 8260B
Field ID:	SB-9	Batch#:	61893
Lab ID:	150569-004	Sampled:	02/26/01
Matrix:	Water	Received:	02/27/01
Units:	ug/L	Analyzed:	03/01/01
Diln Fac:	1.000		

Analyte	Result	RL
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	0.5
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	0.5
Naphthalene	ND	1.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	REC	Limits
Dibromofluoromethane	105	80-122
1,2-Dichloroethane-d4	107	78-123
Toluene-d8	105	80-110
Bromofluorobenzene	101	80-115

ND= Not Detected

RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	150569	Location:	Summer Hill/6615 Tassara
Client:	LFR Levine Fricke	Prep:	EPA 5030
Project#:	7941.00.002	Analysis:	EPA 8260B
Field ID:	SB-8	Batch#:	61893
Lab ID:	150569-003	Sampled:	02/26/01
Matrix:	Water	Received:	02/27/01
Units:	ug/L	Analyzed:	03/01/01
Injection Fac:	1.000		

Analyte	Result	RL
tetrachloroethene	ND	0.5
tribromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
chlorobenzene	ND	0.5
1,1,2-Tetrachloroethane	ND	0.5
ethylbenzene	ND	0.5
p-Xylenes	ND	0.5
m-Xylene	ND	0.5
styrene	ND	0.5
formaldehyde	ND	1.0
isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
propylbenzene	ND	0.5
chlorobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
o-Chlorotoluene	ND	0.5
p-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
o-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	0.5
1,2,4-Trichlorobenzene	ND	0.5
hexachlorobutadiene	ND	0.5
naphthalene	ND	1.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	REC	Limits
tribromofluoromethane	104	80-122
1,2-Dichloroethane-d4	107	78-123
toluene-d8	105	80-110
bromofluorobenzene	102	80-115

ND = Not Detected
 RL = Reporting Limit
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**Purgeable Organics by GC/MS**

Lab #:	150569	Location:	Summer Hill/6615 Tassara
Client:	LFR Levine Fricke	Prep:	EPA 5030
Project#:	7941.00.002	Analysis:	EPA 8260B
Field ID:	SB-7	Batch#:	61867
Lab ID:	150569-002	Sampled:	02/27/01
Matrix:	Water	Received:	02/27/01
Units:	ug/L	Analyzed:	02/28/01
Diln Fac:	1.000		

Analyte	Result	RL
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	0.5
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	0.5
Naphthalene	ND	1.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	REC	Limits
Dibromofluoromethane	105	80-122
1,2-Dichloroethane-d4	107	78-123
Toluene-d8	104	80-110
Bromofluorobenzene	101	80-115

ND= Not Detected

RL= Reporting Limit

**Purgeable Organics by GC/MS**

Lab #:	150569	Location:	Summer Hill/6615 Tassara
Client:	LFR Levine Fricke	Prep:	EPA 5030
Project#:	7941.00.002	Analysis:	EPA 8260B
Field ID:	SB-6	Batch#:	61867
Lab ID:	150569-001	Sampled:	02/26/01
Matrix:	Water	Received:	02/27/01
Units:	ug/L	Analyzed:	02/28/01
Diln Fac:	1.000		

Analyte	Result	RL
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	0.5
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	0.5
Naphthalene	ND	1.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	REC	Limits
Dibromofluoromethane	104	80-122
1,2-Dichloroethane-d4	107	78-123
Toluene-d8	104	80-110
Bromofluorobenzene	101	80-115

D= Not Detected

L= Reporting Limit

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Gasoline by GC/FID CA LUFT

Lab #:	150569	Location:	Summer Hill/6615 Tassara
Client:	LFR Levine Fricke	Prep:	EPA 5030
Project#:	7941.00.002	Analysis:	EPA 8015M
Field ID:	ZZZZZZZZZZ	Batch#:	61934
MS Lab ID:	150586-001	Sampled:	02/28/01
Matrix:	Water	Received:	02/28/01
Units:	ug/L	Analyzed:	03/03/01
Concn Fac:	1.000		

MS Lab ID: QC139060

Analyte	MSS Result	Spiked	Result	%REC	Limit
Gasoline C7-C12	1,262	2,000	3,136	94	65-131

Surrogate	%REC	Limits
Trifluorotoluene (FID)	100	59-135
Bromofluorobenzene (FID)	80	60-140

MSD Lab ID: QC139061

Analyte	Spiked	Result	%REC	Limits	RPD	L
Gasoline C7-C12	2,000	3,133	94	65-131	0	21

Surrogate	%REC	Limits
Trifluorotoluene (FID)	100	59-135
Bromofluorobenzene (FID)	79	60-140



Gasoline by GC/FID CA LUPT

Lab #:	150569	Location:	Summer Hill/6615 Tassyara
Client:	LFR Levine Fricke	Prep:	EPA 5030
Project#:	7941.00.002	Analysis:	EPA 8015M
Matrix:	Water	Batch#:	61934
Units:	ug/L	Received:	02/27/01
Concn Fac:	1.000	Analyzed:	03/03/01

Field ID:	SB-9	Lab ID:	150569-004
Sample:	SAMPLE	Sampled:	02/26/01

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
1,2,4-Trifluorotoluene (FID)	98	59-135
1,2,4-Trichlorobenzene (FID)	81	60-140

Field ID:	SB-10	Lab ID:	150569-005
Sample:	SAMPLE	Sampled:	02/26/01

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
1,2,4-Trifluorotoluene (FID)	96	59-135
1,2,4-Trichlorobenzene (FID)	77	60-140

Sample:	BLANK	Lab ID:	QC139058
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Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
1,2,4-Trifluorotoluene (FID)	90	59-135
1,2,4-Trichlorobenzene (FID)	68	60-140

SOP Volume: Client Services
Section: 1.1.2
Page: 1 of 1
Effective Date: 10-May-99
Revision: 1 Number 3 of 3
Filename: F:\QC\Forms\QC\Cooler.wpd



COOLER RECEIPT CHECKLIST

Login#: _____ Date Received: 2/27/01 Number of Coolers: 1
Client: LFA Project: Silvera Ranch

- A. Preliminary Examination Phase
Date Opened: 2/27/01 By (print): Jane Branticek (sign) [Signature]
1. Did cooler come with a shipping slip (airbill, etc.)?..... YES NO
 - If YES, enter carrier name and airbill number: _____
 2. Were custody seals on outside of cooler?..... YES NO
 - How many and where? _____ Seal date: _____ Seal name: _____
 3. Were custody seals unbroken and intact at the date and time of arrival?..... YES NO
 4. Were custody papers dry and intact when received?..... YES NO
 5. Were custody papers filled out properly (ink, signed, etc.)?..... YES NO
 6. Did you sign the custody papers in the appropriate place?..... YES NO
 7. Was project identifiable from custody papers?..... YES NO
 - If YES, enter project name at the top of this form.
 8. If required, was sufficient ice used? Samples should be 2-6 degrees C. YES NO
 - Type of ice: wet ice Temperature: chilled

- B. Login Phase
Date Logged In: 2/28/01 By (print): Andrew Lohel (sign) [Signature]
1. Describe type of packing in cooler: foamies
 2. Did all bottles arrive unbroken?..... YES NO
 3. Were labels in good condition and complete (ID, date, time, signature, etc.)?... YES NO
 4. Did bottle labels agree with custody papers?..... YES NO *
 5. Were appropriate containers used for the tests indicated?..... YES NO
 6. Were correct preservatives added to samples?..... YES NO
 7. Was sufficient amount of sample sent for tests indicated?..... YES NO
 8. Were bubbles absent in VOA samples? If NO, list sample Ids below..... YES NO
 9. Was the client contacted concerning this sample delivery?..... YES NO
 - If YES, give details below.
 - Who was called? _____ By whom? _____ Date: _____

Additional Comments:
* One SB-6 VOA missing, only 5 present instead of 6

Laboratory Numbers: **150569**
Client: **LFR-Levine-Fricke**
Project #: **7941.00.002**
Location: **Summer Hill/6615 Tassyara**
COC#: **7344**

Sampled Date: **02/26,27/01**
Received Date: **02/27/01**

CASE NARRATIVE

This hardcopy data package contains sample and QC results for fourteen water samples, which were received from the site referenced above on February 27, 2001. The samples were received cold and intact. All data were faxed to Lucas Goldstein on March 06, 2001.

TVH (EPA 8015M):

No analytical problems were encountered.

VOCs (EPA 8260):

No analytical problems were encountered.



Purgeable Organics by GC/MS

Lab #:	150511	Location:	Summer Hill/6615 Tassara
Client:	LFR Levine Fricke	Prep:	EPA 5030
Project#:	7941.00.002	Analysis:	EPA 8260B
Field ID:	OW-ON-06	Diln Fac:	0.9615
MSS Lab ID:	150511-003	Batch#:	61797
Matrix:	Soil	Sampled:	02/23/01
Units:	ug/Kg	Received:	02/23/01
Basis:	wet	Analyzed:	02/27/01

Type: MS Lab ID: QC138570

Analyte	MSS Result	Spike ^c	Result	%REC	Limit
1,1-Dichloroethene	ND	48.08	42.44	88	42-1
Benzene	ND	48.08	42.26	88	50-1
Trichloroethene	ND	48.08	44.68	93	33-1
Toluene	ND	48.08	42.92	89	45-1
Chlorobenzene	ND	48.08	39.02	81	38-1

Surrogate	%REC	Limits
Dibromofluoromethane	98	63-133
1,2-Dichloroethane-d4	100	76-127
Toluene-d8	99	80-111
Bromofluorobenzene	121	77-126

Type: MSD Lab ID: QC138571

Analyte	Spiked	Result	%REC	Limits	RPD
1,1-Dichloroethene	48.08	43.34	90	42-145	2
Benzene	48.08	42.78	89	50-133	1
Trichloroethene	48.08	45.51	95	33-133	2
Toluene	48.08	43.95	91	45-134	2
Chlorobenzene	48.08	41.29	86	38-137	6

Surrogate	%REC	Limits
Dibromofluoromethane	98	63-133
1,2-Dichloroethane-d4	100	76-127
Toluene-d8	100	80-111
Bromofluorobenzene	106	77-126



Purgeable Organics by GC/MS

Lab #:	150511	Location:	Summer Hill/6615 Tassara
Client:	LFR Levine Fricke	Prep:	EPA 5030
Project#:	7941.00.002	Analysis:	EPA 8260B
Type:	BLANK	Basis:	wet
Lab ID:	QC138569	Diln Fac:	1.000
Matrix:	Soil	Batch#:	61797
Units:	ug/Kg	Analyzed:	02/26/01

Analyte	Result	RL
1,2-Dibromoethane	ND	5.0
Chlorobenzene	ND	5.0
1,1,1,2-Tetrachloroethane	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0
Styrene	ND	5.0
Bromoform	ND	5.0
Isopropylbenzene	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
1,2,3-Trichloropropane	ND	5.0
Propylbenzene	ND	5.0
Bromobenzene	ND	5.0
1,3,5-Trimethylbenzene	ND	5.0
o-Chlorotoluene	ND	5.0
p-Chlorotoluene	ND	5.0
tert-Butylbenzene	ND	5.0
1,2,4-Trimethylbenzene	ND	5.0
sec-Butylbenzene	ND	5.0
para-Isopropyl Toluene	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
n-Butylbenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0
1,2-Dibromo-3-Chloropropane	ND	5.0
1,2,4-Trichlorobenzene	ND	5.0
Hexachlorobutadiene	ND	5.0
Naphthalene	ND	5.0
1,2,3-Trichlorobenzene	ND	5.0

Surrogate	REC	Limits
Dibromofluoromethane	97	63-133
1,2-Dichloroethane-d4	103	76-127
Toluene-d8	98	80-111
Bromofluorobenzene	106	77-126

ND = Not Detected

RL = Reporting Limit

**Purgeable Organics by GC/MS**

Lab #:	150511	Location:	Summer Hill/6615 Tassara
Client:	LFR Levine Fricke	Prep:	EPA 5030
Project#:	7941.00.002	Analysis:	EPA 8260B
Field ID:	OW-ON-06	Diln Fac:	0.9615
Lab ID:	150511-003	Batch#:	61797
Matrix:	Soil	Sampled:	02/23/01
Units:	ug/Kg	Received:	02/23/01
Basis:	wet	Analyzed:	02/27/01

Analyte	Result	RL
Dibromochloromethane	ND	4.8
1,2-Dibromoethane	ND	4.8
Chlorobenzene	ND	4.8
1,1,1,2-Tetrachloroethane	ND	4.8
Ethylbenzene	ND	4.8
o,p-Xylenes	ND	4.8
m-Xylene	ND	4.8
Styrene	ND	4.8
Bromoform	ND	4.8
Isopropylbenzene	ND	4.8
1,1,2,2-Tetrachloroethane	ND	4.8
1,2,3-Trichloropropane	ND	4.8
Propylbenzene	ND	4.8
Bromobenzene	ND	4.8
1,3,5-Trimethylbenzene	ND	4.8
o-Chlorotoluene	ND	4.8
m-Chlorotoluene	ND	4.8
tert-Butylbenzene	ND	4.8
1,2,4-Trimethylbenzene	ND	4.8
sec-Butylbenzene	ND	4.8
p-ara-Isopropyl Toluene	ND	4.8
1,3-Dichlorobenzene	ND	4.8
1,4-Dichlorobenzene	ND	4.8
n-Butylbenzene	ND	4.8
1,2-Dichlorobenzene	ND	4.8
1,2-Dibromo-3-Chloropropane	ND	4.8
1,2,4-Trichlorobenzene	ND	4.8
Hexachlorobutadiene	ND	4.8
Naphthalene	ND	4.8
1,2,3-Trichlorobenzene	ND	4.8

Surrogate	%REC	Limits
Dibromofluoromethane	96	63-133
1,2-Dichloroethane-d4	104	76-127
Toluene-d8	100	80-111
Bromofluorobenzene	125	77-126

= Not Detected

= Reporting Limit

Purgeable Organics by GC/MS

ab #:	150511	Location:	Summer Hill/6615 Tassyara
Client:	LFR Levine Fricke	Prep:	EPA 5030
Project#:	7941.00.002	Analysis:	EPA 8260B
Field ID:	OW-ON-08	Diln Fac:	1.020
Lab ID:	150511-002	Batch#:	61797
Matrix:	Soil	Sampled:	02/23/01
Units:	ug/Kg	Received:	02/23/01
Analysis:	wet	Analyzed:	02/27/01

Analyte	Result	RL
ibromochloromethane	ND	5.1
,2-Dibromoethane	ND	5.1
chlorobenzene	ND	5.1
,1,1,2-Tetrachloroethane	ND	5.1
ethylbenzene	ND	5.1
,p-Xylenes	ND	5.1
m-Xylene	ND	5.1
styrene	ND	5.1
chloroform	ND	5.1
isopropylbenzene	ND	5.1
,1,2,2-Tetrachloroethane	ND	5.1
,2,3-Trichloropropane	ND	5.1
propylbenzene	ND	5.1
chlorobenzene	ND	5.1
,3,5-Trimethylbenzene	ND	5.1
m-Chlorotoluene	ND	5.1
p-Chlorotoluene	ND	5.1
tert-Butylbenzene	ND	5.1
,2,4-Trimethylbenzene	ND	5.1
sec-Butylbenzene	ND	5.1
para-Isopropyl Toluene	ND	5.1
,3-Dichlorobenzene	ND	5.1
,4-Dichlorobenzene	ND	5.1
n-Butylbenzene	ND	5.1
,2-Dichlorobenzene	ND	5.1
,2-Dibromo-3-Chloropropane	ND	5.1
,2,4-Trichlorobenzene	ND	5.1
hexachlorobutadiene	ND	5.1
naphthalene	ND	5.1
,2,3-Trichlorobenzene	ND	5.1

Surrogate	REC	Limits
ibromofluoromethane	101	63-133
,2-Dichloroethane-d4	105	76-127
toluene-d8	97	80-111
chlorofluorobenzene	102	77-126

**Purgeable Organics by GC/MS**

Lab #:	150511	Location:	Summer Hill/6615 Tassara
Client:	LFR Levine Fricke	Prep:	EPA 5030
Project#:	7941.00.002	Analysis:	EPA 8260B
Field ID:	OW-ON-04	Diln Fac:	0.9804
Lab ID:	150511-001	Batch#:	61797
Matrix:	Soil	Sampled:	02/23/01
Units:	ug/Kg	Received:	02/23/01
Basis:	wet	Analyzed:	02/27/01

Analyte	Result	RL
Dibromochloromethane	ND	4.9
1,2-Dibromoethane	ND	4.9
Chlorobenzene	ND	4.9
1,1,1,2-Tetrachloroethane	ND	4.9
Ethylbenzene	ND	4.9
n,p-Xylenes	ND	4.9
o-Xylene	ND	4.9
Styrene	ND	4.9
Bromoform	ND	4.9
Isopropylbenzene	ND	4.9
1,1,2,2-Tetrachloroethane	ND	4.9
1,2,3-Trichloropropane	ND	4.9
Propylbenzene	ND	4.9
Bromobenzene	ND	4.9
1,3,5-Trimethylbenzene	ND	4.9
2-Chlorotoluene	ND	4.9
4-Chlorotoluene	ND	4.9
tert-Butylbenzene	ND	4.9
1,2,4-Trimethylbenzene	ND	4.9
sec-Butylbenzene	ND	4.9
para-Isopropyl Toluene	ND	4.9
1,3-Dichlorobenzene	ND	4.9
1,4-Dichlorobenzene	ND	4.9
n-Butylbenzene	ND	4.9
1,2-Dichlorobenzene	ND	4.9
1,2-Dibromo-3-Chloropropane	ND	4.9
1,2,4-Trichlorobenzene	ND	4.9
Hexachlorobutadiene	ND	4.9
Naphthalene	ND	4.9
1,2,3-Trichlorobenzene	ND	4.9

Surrogate	%REC	Limits
Dibromofluoromethane	97	63-133
1,2-Dichloroethane-d4	101	76-127
Toluene-d8	98	80-111
Bromofluorobenzene	105	77-126

D= Not Detected

L= Reporting Limit



Gasoline by GC/FID CA LUFT

Lab #:	150511	Location:	Summer Hill/6615 Tassara
Client:	LFR Levine Fricke	Prep:	EPA 5030
Project#:	7941.00.002	Analysis:	EPA 8015M
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000
ISS Lab ID:	150515-011	Batch#:	61786
Matrix:	Soil	Sampled:	02/22/01
Units:	mg/Kg	Received:	02/23/01
Basis:	wet	Analyzed:	02/27/01

Spec: MS Lab ID: QC138534

Analyte	MSS Result	Spiked	Result	%REC	Limit
Gasoline C7-C12	<0.08800	10.31	9.960	97	41-132

Surrogate	%REC	Limits
Trifluorotoluene (FID)	115	62-138
Bromofluorobenzene (FID)	78	46-150

Spec: MSD Lab ID: QC138535

Analyte	Spiked	Result	%REC	Limits	RPD	Ld
Gasoline C7-C12	10.31	9.816	95	41-132	1	25

Surrogate	%REC	Limits
Trifluorotoluene (FID)	114	62-138
Bromofluorobenzene (FID)	77	46-150



Gasoline by GC/FID CA LUFT

Lab #:	150511	Location:	Summer Hill/6615 Tassara
Client:	LFR Levine Fricke	Prep:	EPA 5030
Project#:	7941.00.002	Analysis:	EPA 8015M
Matrix:	Soil	Batch#:	61786
Units:	mg/Kg	Sampled:	02/23/01
Basis:	wet	Received:	02/23/01
Diln Fac:	1.000	Analyzed:	02/26/01

Field ID: 0W-0N-04
 Sample: SAMPLE

Lab ID: 150511-001

Analyte	Result	RL
Gasoline C7-C12	ND	0.93

Surrogate	%REC	Limits
Trifluorotoluene (FID)	93	62-138
Bromofluorobenzene (FID)	72	46-150

Field ID: 0W-0N-08
 Sample: SAMPLE

Lab ID: 150511-002

Analyte	Result	RL
Gasoline C7-C12	ND	1.0

Surrogate	%REC	Limits
Trifluorotoluene (FID)	98	62-138
Bromofluorobenzene (FID)	79	46-150

Field ID: 0W-0N-06
 Sample: SAMPLE

Lab ID: 150511-003

Analyte	Result	RL
Gasoline C7-C12	ND	1.0

Surrogate	%REC	Limits
Trifluorotoluene (FID)	95	62-138
Bromofluorobenzene (FID)	75	46-150

Sample: BLANK

Lab ID: QC138532

Analyte	Result	RL
Gasoline C7-C12	ND	1.0

Surrogate	%REC	Limits
Trifluorotoluene (FID)	95	62-138
Bromofluorobenzene (FID)	78	46-150

CHAIN OF CUSTODY / ANALYSES REQUEST FORM

150511

Project No.: 7941.00.002		Project Location: Pleasanton CA		Date: 2/23/01		Serial				
Project Name: Summerville / 6615 Tassara		Field Logbook No.: —		Sample Event Name: —		No: 7708				
Sampler (Signature):				ANALYSES			Samplers: LXX			
SAMPLE INFORMATION (Print Clearly)										
SAMPLE NO.	DATE	TIME	LAB SAMPLE NO.	NO. OF CON-TAINERS	SAMPLE TYPE	EPA 8260	TPH/g	HOLD	RUSH	REMARKS
0W-0N-04 (LF)										
0W-0N-04	2/23	1000		1	Soil	x	x			STANDARD TAT
0W-0N-08		1010		1	↓	x	x			FAX RESULTS TO
0W-0N-06		1030		1	↓	x	x			LUCAS GOLDSTEIN
RELINQUISHED BY: (Signature)		DATE	TIME	RECEIVED BY: (Signature)		DATE	TIME			
RELINQUISHED BY: (Signature)		DATE	TIME	RECEIVED BY: (Signature)		DATE	TIME			
RELINQUISHED BY: (Signature)		DATE	TIME	RECEIVED BY: (Signature)		DATE	TIME			
METHOD OF SHIPMENT:		DATE	TIME	LAB COMMENTS:						
Sample Collector: LEVINE-FRICKE-RECON 1900 Powell Street, 12th Floor Emeryville, California 94608-1827 (510) 652-4500				Analytical Laboratory: C+T						



Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

A N A L Y T I C A L R E P O R T

Prepared for:

LFR Levine Fricke
1900 Powell Street
12th Floor
Emeryville, CA 94608

Date: 14-MAR-01
Lab Job Number: 150511
Project ID: 7941.00.002
Location: Summer Hill/6615 Tassyara

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis.

Reviewed by: Tracy Bob, 2
Project Manager

Reviewed by: [Signature]
Operations Manager

This package may be reproduced only in its entirety.

Laboratory Numbers: 150511
Client: LFR-Levine-Fricke
Project #: 7941.00.002
Location: Summer Hill/6615 Tassyara
COC#: 7708

Sampled Date: 02/23/01
Received Date: 02/23/01

CASE NARRATIVE

This hardcopy data package contains sample and QC results for three soil samples, which were received from the site referenced above on February 23, 2001. The samples were received cold and intact. All data were faxed to Lucas Goldstein on March 05, 2001.

VOCs (EPA 8260):

No analytical problems were encountered.

TVH (EPA 8015M):

No analytical problems were encountered.

SOP Volume: Client Services
Section: 1.1.2
Page: 1 of 1
Effective Date: 10-May-99
Revision: 1 Number 2 of 3
Filename: F:\QC\Forms\QC\Cooler.wpd



Curtis & Tompkins, Ltd.

COOLER RECEIPT CHECKLIST

Login#: _____ Date Received: 2/23/01 Number of Coolers: 1
Client: LFR Project: Summer hill

A. Preliminary Examination Phase

Date Opened: 2/23/01 By (print): James Brantzel (sign) _____

1. Did cooler come with a shipping slip (airbill, etc.)?..... YES NO
- If YES, enter carrier name and airbill number: _____
2. Were custody seals on outside of cooler?..... YES NO
- How many and where? _____ Seal date: _____ Seal name: _____
3. Were custody seals unbroken and intact at the date and time of arrival?..... YES NO
4. Were custody papers dry and intact when received?..... YES NO
5. Were custody papers filled out properly (ink, signed, etc.)?..... YES NO
6. Did you sign the custody papers in the appropriate place?..... YES NO
7. Was project identifiable from custody papers?..... YES NO
- If YES, enter project name at the top of this form.
8. If required, was sufficient ice used? Samples should be 2-6 degrees C. YES NO
- Type of ice: wet ice / Blue Ice Temperature: Chilled

B. Login Phase

Date Logged In: _____ By (print): _____ (sign) _____

1. Describe type of packing in cooler: Ziplocks
2. Did all bottles arrive unbroken?..... YES NO
3. Were labels in good condition and complete (ID, date, time, signature, etc.)?... YES NO
4. Did bottle labels agree with custody papers?..... YES NO
5. Were appropriate containers used for the tests indicated?..... YES NO
6. Were correct preservatives added to samples?..... YES NO
7. Was sufficient amount of sample sent for tests indicated?..... YES NO
8. Were bubbles absent in VOA samples? If NO, list sample Ids below..... YES NO
9. Was the client contacted concerning this sample delivery?..... YES NO

If YES, give details below.

Who was called? _____ By whom? _____ Date: _____

Additional Comments:

Gasoline by GC/FID CA LUFT

Lab #:	150511	Location:	Summer Hill/6615 Tassara
Client:	LFR Levine Fricke	Prep:	EPA 5030
Project#:	7941.00.002	Analysis:	EPA 8015M
Type:	LCS	Basis:	wet
Lab ID:	QC138533	Diln Fac:	1.000
Matrix:	Soil	Batch#:	61786
Units:	mg/Kg	Analyzed:	02/26/01

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	10.00	9.629	96	75-123

Surrogate	%REC	Limits
Trifluorotoluene (FID)	108	62-138
Bromofluorobenzene (FID)	72	46-150



Purgeable Organics by GC/MS

Lab #:	150511	Location:	Summer Hill/6615 Tassara
Client:	LFR Levine Fricke	Prep:	EPA 5030
Project#:	7941.00.002	Analysis:	EPA 8260B
Field ID:	OW-ON-04	Diln Fac:	0.9804
Lab ID:	150511-001	Batch#:	61797
Matrix:	Soil	Sampled:	02/23/01
Units:	ug/Kg	Received:	02/23/01
Basis:	wet	Analyzed:	02/27/01

Analyte	Result	RL
Freon 12	ND	9.8
Chloromethane	ND	9.8
Vinyl Chloride	ND	9.8
Bromomethane	ND	9.8
Chloroethane	ND	9.8
Trichlorofluoromethane	ND	4.9
Acetone	ND	20
Freon 113	ND	4.9
1,1-Dichloroethene	ND	4.9
Methylene Chloride	ND	20
Carbon Disulfide	ND	4.9
MTBE	ND	4.9
trans-1,2-Dichloroethene	ND	4.9
Vinyl Acetate	ND	49
1,1-Dichloroethane	ND	4.9
2-Butanone	ND	9.8
cis-1,2-Dichloroethene	ND	4.9
2,2-Dichloropropane	ND	4.9
Chloroform	ND	4.9
Bromochloromethane	ND	4.9
1,1,1-Trichloroethane	ND	4.9
1,1-Dichloropropene	ND	4.9
Carbon Tetrachloride	ND	4.9
1,2-Dichloroethane	ND	4.9
Benzene	ND	4.9
Trichloroethene	ND	4.9
1,2-Dichloropropane	ND	4.9
Bromodichloromethane	ND	4.9
Dibromomethane	ND	4.9
4-Methyl-2-Pentanone	ND	9.8
cis-1,3-Dichloropropene	ND	4.9
Toluene	ND	4.9
trans-1,3-Dichloropropene	ND	4.9
1,1,2-Trichloroethane	ND	4.9
2-Hexanone	ND	9.8
1,3-Dichloropropane	ND	4.9
Tetrachloroethene	ND	4.9

ND= Not Detected

RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	150511	Location:	Summer Hill/6615 Tassyara
Client:	LFR Levine Fricke	Prep:	EPA 5030
Project#:	7941.00.002	Analysis:	EPA 8260B
Field ID:	OW-ON-08	Diln Fac:	1.020
Lab ID:	150511-002	Batch#:	61797
Matrix:	Soil	Sampled:	02/23/01
Units:	ug/Kg	Received:	02/23/01
Basis:	wet	Analyzed:	02/27/01

Analyte	Result	RL
Freon 12	ND	10
Chloromethane	ND	10
Vinyl Chloride	ND	10
Bromomethane	ND	10
Chloroethane	ND	10
Trichlorofluoromethane	ND	5.1
Acetone	ND	20
Freon 113	ND	5.1
1,1-Dichloroethene	ND	5.1
Methylene Chloride	ND	20
Carbon Disulfide	ND	5.1
MTBE	ND	5.1
trans-1,2-Dichloroethene	ND	5.1
Vinyl Acetate	ND	51
1,1-Dichloroethane	ND	5.1
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	5.1
2,2-Dichloropropane	ND	5.1
Chloroform	ND	5.1
Bromochloromethane	ND	5.1
1,1,1-Trichloroethane	ND	5.1
1,1-Dichloropropene	ND	5.1
Carbon Tetrachloride	ND	5.1
1,2-Dichloroethane	ND	5.1
Benzene	ND	5.1
Trichloroethene	ND	5.1
1,2-Dichloropropane	ND	5.1
Bromodichloromethane	ND	5.1
Dibromomethane	ND	5.1
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	5.1
Toluene	ND	5.1
trans-1,3-Dichloropropene	ND	5.1
1,1,2-Trichloroethane	ND	5.1
2-Hexanone	ND	10
1,3-Dichloropropane	ND	5.1
Tetrachloroethene	ND	5.1

**Purgeable Organics by GC/MS**

Lab #:	150511	Location:	Summer Hill/6615 Tassara
Client:	LFR Levine Fricke	Prep:	EPA 5030
Project#:	7941.00.002	Analysis:	EPA 8260B
Field ID:	OW-ON-06	Diln Fac:	0.9615
Lab ID:	150511-003	Batch#:	61797
Matrix:	Soil	Sampled:	02/23/01
Units:	ug/Kg	Received:	02/23/01
Basis:	wet	Analyzed:	02/27/01

Analyte	Result	RL
Freon 12	ND	9.6
Chloromethane	ND	9.6
Vinyl Chloride	ND	9.6
Bromomethane	ND	9.6
Chloroethane	ND	9.6
Trichlorofluoromethane	ND	4.8
Acetone	ND	19
Freon 113	ND	4.8
1,1-Dichloroethene	ND	4.8
Methylene Chloride	ND	19
Carbon Disulfide	ND	4.8
MTBE	ND	4.8
trans-1,2-Dichloroethene	ND	4.8
Vinyl Acetate	ND	48
1,1-Dichloroethane	ND	4.8
2-Butanone	ND	9.6
cis-1,2-Dichloroethene	ND	4.8
2,2-Dichloropropane	ND	4.8
Chloroform	ND	4.8
Bromochloromethane	ND	4.8
1,1,1-Trichloroethane	ND	4.8
1,1-Dichloropropene	ND	4.8
Carbon Tetrachloride	ND	4.8
1,2-Dichloroethane	ND	4.8
Benzene	ND	4.8
Trichloroethene	ND	4.8
1,2-Dichloropropane	ND	4.8
Bromodichloromethane	ND	4.8
Dibromomethane	ND	4.8
4-Methyl-2-Pentanone	ND	9.6
cis-1,3-Dichloropropene	ND	4.8
Toluene	ND	4.8
trans-1,3-Dichloropropene	ND	4.8
1,1,2-Trichloroethane	ND	4.8
2-Hexanone	ND	9.6
1,3-Dichloropropane	ND	4.8
Tetrachloroethene	ND	4.8

ND= Not Detected

RL= Reporting Limit

**Purgeable Organics by GC/MS**

Lab #:	150511	Location:	Summer Hill/6615 Tassara
Client:	LFR Levine Fricke	Prep:	EPA 5030
Project#:	7941.00.002	Analysis:	EPA 8260B
Type:	BLANK	Basis:	wet
Lab ID:	QC138569	Diln Fac:	1.000
Matrix:	Soil	Batch#:	61797
Units:	ug/Kg	Analyzed:	02/26/01

Analyte	Result	RL
Freon 12	ND	10
Chloromethane	ND	10
Vinyl Chloride	ND	10
Bromomethane	ND	10
Chloroethane	ND	10
Trichlorofluoromethane	ND	5.0
Acetone	ND	20
Freon 113	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	20
Carbon Disulfide	ND	5.0
MTBE	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
Vinyl Acetate	ND	50
1,1-Dichloroethane	ND	5.0
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	5.0
2,2-Dichloropropane	ND	5.0
Chloroform	ND	5.0
Bromochloromethane	ND	5.0
1,1,1-Trichloroethane	ND	5.0
1,1-Dichloropropene	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
Dibromomethane	ND	5.0
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	5.0
Toluene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
2-Hexanone	ND	10
1,3-Dichloropropane	ND	5.0
Tetrachloroethene	ND	5.0
Dibromochloromethane	ND	5.0

ND= Not Detected

RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	150511	Location:	Summer Hill/6615 Tassara
Client:	LFR Levine Fricke	Prep:	EPA 5030
Project#:	7941.00.002	Analysis:	EPA 8260B
Type:	LCS	Basis:	wet
Lab ID:	QC138568	Diln Fac:	1.000
Matrix:	Soil	Batch#:	61797
Units:	ug/Kg	Analyzed:	02/26/01

Analyte	Spiked	Result	IREC	Limits
1,1-Dichloroethene	50.00	44.66	89	66-138
Benzene	50.00	50.15	100	76-121
Trichloroethene	50.00	49.71	99	75-124
Toluene	50.00	49.96	100	75-124
Chlorobenzene	50.00	49.49	99	78-115

Surrogate	IREC	Limits
Dibromofluoromethane	97	63-133
1,2-Dichloroethane-d4	102	76-127
Toluene-d8	99	80-111
Bromofluorobenzene	101	77-126



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2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

A N A L Y T I C A L R E P O R T

Prepared for:

LFR Levine Fricke
1900 Powell Street
12th Floor
Emeryville, CA 94608

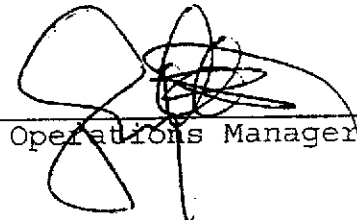
Date: 19-MAR-01
Lab Job Number: 150569
Project ID: 7941.00.002
Location: Summer Hill/6615 Tassara

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis.

Reviewed by:


Project Manager

Reviewed by:


Operations Manager

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CHAIN OF CUSTODY / ANALYSES REQUEST FORM

150569

Project No.: 7941.00.002		Project Location: Pescator, CA		Date: 2/27/01		Serial	
Project Name: Siveria Ranch		Field Logbook No.: —		Sample Event Name: —		No. 7344	
Sampler (Signature):				ANALYSES			Samplers: LXL
SAMPLE INFORMATION (Print Clearly)						HOLD	RUSH
SAMPLE NO.	DATE	TIME	LAB SAMPLE NO.	NO. OF CONTAINERS	SAMPLE TYPE		REMARKS
SB-6	2/26	1000		6	water	X X	Standard TAT FAX Results to Lucas Goldstein
SB-7	2/27	1400		4	↓	X X	
SB-8	2/26	1800		6	↓	X X	
SB-9		1800		4	↓	X X	
SB-10		1800		4	↓	X X	
SB-6-1		800		1	soil	X	
SB-6-5		815		1		X	
SB-6-12		830		1		X	
SB-7-5		1700		1		X	
SB-7-25		1750		1		X	
SB-P-4		1300		1		X	
SB-10-15		1310		1		X	
SB-9-28		1500		1		X	
TRIP BLANK		800		2	water	X	

RELINQUISHED BY: (Signature)	DATE: 2/27/01	TIME: 1600	RECEIVED BY: (Signature)	DATE: 2/27/01	TIME: 5:36
RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature)	DATE	TIME
RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature)	DATE	TIME
METHOD OF SHIPMENT:	DATE	TIME	LAB COMMENTS:		

Sample Collector: LEVINE-FRICKE-RECON 1900 Powell Street 12th Floor Emeryville, California 94608-1827 (510) 852-4500	Analytical Laboratory: C&T
--	---------------------------------------



Gasoline by GC/FID CA LUFT

Lab #:	150569	Location:	Summer Hill/6615 Tassara
Client:	LFR Levine Fricke	Prep:	EPA 5030
Project#:	7941.00.002	Analysis:	EPA 8015M
Matrix:	Water	Batch#:	61934
Units:	ug/L	Received:	02/27/01
Diln Fac:	1.000	Analyzed:	03/03/01

Field ID:	SB-6	Lab ID:	150569-001
Type:	SAMPLE	Sampled:	02/26/01

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	98	59-135
Bromofluorobenzene (FID)	78	60-140

Field ID:	SB-7	Lab ID:	150569-002
Type:	SAMPLE	Sampled:	02/27/01

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	95	59-135
Bromofluorobenzene (FID)	76	60-140

Field ID:	SB-8	Lab ID:	150569-003
Type:	SAMPLE	Sampled:	02/26/01

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	97	59-135
Bromofluorobenzene (FID)	81	60-140

Gasoline by GC/FID CA LUFT

Lab #:	150569	Location:	Summer Hill/6615 Tassara
Client:	LFR Levine Fricke	Prep:	EPA 5030
Project#:	7941.00.002	Analysis:	EPA 8015M
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC139059	Batch#:	61934
Matrix:	Water	Analyzed:	03/03/01
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	1,981	99	73-121

Surrogate	%REC	Limits
Trifluorotoluene (FID)	111	59-135
Bromofluorobenzene (FID)	74	60-140



Purgeable Organics by GC/MS

Lab #:	150569	Location:	Summer Hill/6615 Tassara
Client:	LFR Levine Fricke	Prep:	EPA 5030
Project#:	7941.00.002	Analysis:	EPA 8260B
Field ID:	SB-6	Batch#:	61867
Lab ID:	150569-001	Sampled:	02/26/01
Matrix:	Water	Received:	02/27/01
Units:	ug/L	Analyzed:	02/28/01
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	0.5
Acetone	ND	10
Freon 113	ND	5.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	5.0
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
2-Chloroethylvinylether	ND	10
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5

ND= Not Detected

RL= Reporting Limit



Purgeable Organics by GC/MS

Lab #:	150569	Location:	Summer Hill/6615 Tassara
Client:	LFR Levine Fricke	Prep:	EPA 5030
Project#:	7941.00.002	Analysis:	EPA 8260B
Field ID:	SB-7	Batch#:	61867
Lab ID:	150569-002	Sampled:	02/27/01
Matrix:	Water	Received:	02/27/01
Units:	ug/L	Analyzed:	02/28/01
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	0.5
Acetone	ND	10
Freon 113	ND	5.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	5.0
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
2-Chloroethylvinylether	ND	10
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5

ND= Not Detected

RL= Reporting Limit

**Purgeable Organics by GC/MS**

Lab #:	150569	Location:	Summer Hill/6615 Tassara
Client:	LFR Levine Fricke	Prep:	EPA 5030
Project#:	7941.00.002	Analysis:	EPA 8260B
Field ID:	SB-8	Batch#:	61893
Lab ID:	150569-003	Sampled:	02/26/01
Matrix:	Water	Received:	02/27/01
Units:	ug/L	Analyzed:	03/01/01
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	0.5
Acetone	ND	10
Freon 113	ND	5.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	5.0
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	1.1	0.5
Benzene	0.5	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
2-Chloroethylvinylether	ND	10
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5

ND= Not Detected

RL= Reporting Limit



Purgeable Organics by GC/MS

Lab #:	150569	Location:	Summer Hill/6615 Tassara
Client:	LFR Levine Fricke	Prep:	EPA 5030
Project#:	7941.00.002	Analysis:	EPA 8260B
Field ID:	SB-9	Batch#:	61893
Lab ID:	150569-004	Sampled:	02/26/01
Matrix:	Water	Received:	02/27/01
Units:	ug/L	Analyzed:	03/01/01
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	0.5
Acetone	ND	10
Freon 113	ND	5.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	5.0
Carbon Disulfide	ND	0.5
MTBE	0.5	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
2-Chloroethylvinylether	ND	10
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5

ND= Not Detected

RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	150569	Location:	Summer Hill/6615 Taseyara
Client:	LFR Levine Fricke	Prep:	EPA 5030
Project#:	7941.00.002	Analysis:	EPA 8260B
Field ID:	SB-10	Batch#:	61867
Lab ID:	150569-005	Sampled:	02/26/01
Matrix:	Water	Received:	02/27/01
Units:	ug/L	Analyzed:	02/28/01
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	0.5
Acetone	ND	10
Freon 113	ND	5.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	5.0
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
2-Chloroethylvinylether	ND	10
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5

ND= Not Detected

RL= Reporting Limit

**Purgeable Organics by GC/MS**

Lab #:	150569	Location:	Summer Hill/6615 Tassara
Client:	LFR Levine Fricke	Prep:	EPA 5030
Project#:	7941.00.002	Analysis:	EPA 8260B
Field ID:	TRIP BLANK	Batch#:	61867
Lab ID:	150569-014	Sampled:	02/26/01
Matrix:	Water	Received:	02/27/01
Units:	ug/L	Analyzed:	02/28/01
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	0.5
Acetone	ND	10
Freon 113	ND	5.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	5.0
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
2-Chloroethylvinylether	ND	10
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5

ND= Not Detected

RL= Reporting Limit

**Purgeable Organics by GC/MS**

Lab #:	150569	Location:	Summer Hill/6615 Tassara
Client:	LFR Levine Fricke	Prep:	EPA 5030
Project#:	7941.00.002	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC138821	Batch#:	61867
Matrix:	Water	Analyzed:	02/28/01
Units:	ug/L		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	0.5
Acetone	ND	10
Freon 113	ND	5.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	5.0
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
2-Chloroethylvinylether	ND	10
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected

RL= Reporting Limit



Purgeable Organics by GC/MS

Lab #:	150569	Location:	Summer Hill/6615 Tassara
Client:	LFR Levine Fricke	Prep:	EPA 5030
Project#:	7941.00.002	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC138903	Batch#:	61893
Matrix:	Water	Analyzed:	03/01/01
Units:	ug/L		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	0.5
Acetone	ND	10
Freon 113	ND	5.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	5.0
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
2-Chloroethylvinylether	ND	10
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected

RL= Reporting Limit



Purgeable Organics by GC/MS

Lab #:	150569	Location:	Summer Hill/6615 Tassara
Client:	LFR Levine Fricke	Prep:	EPA 5030
Project#:	7941.00.002	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC138903	Batch#:	61893
Matrix:	Water	Analyzed:	03/01/01
Units:	ug/L		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	0.5
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	0.5
Naphthalene	ND	1.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	VRBC	Limits
Dibromofluoromethane	105	80-122
1,2-Dichloroethane-d4	105	78-123
Toluene-d8	104	80-110
Bromofluorobenzene	99	80-115

ND= Not Detected

RL= Reporting Limit

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