CLEARWATER
GROUP
Environmental Services

May 17, 2006

Mr. Leroy Griffin
Assistant Fire Marshall
Fire Prevention Bureau
Oakland Fire Department
250 Frank H. Ogawa Plaza, Suite 250
Oakland, California 94612

Re: Work Plan for Investigation and Closure of Five Underground Storage Tanks
Markus Supply Ace Hardware
626 2nd Street
Oakland, California

Dear Mr. Griffin;

The Clearwater Group is pleased to present this *Work Plan for Investigation and Closure in Place of Five Underground Storage Tanks* (USTs) at Markus Supply Ace Hardware, 626 2nd Street, in Oakland. The five USTs are located under the sidewalk of 2nd Street.

Following acceptance of this work plan and performance of the investigation Clearwater will request closure in place of the USTs (if applicable after review of the site conditions). The closures in place would be performed according to the procedures presented in this work plan. If you have any questions or concerns please contact me at 510 307-9943 X 237.

Sincerely,
CLEARWATER GROUP

Robert L. Nelson

Robert L. Nelson, PG, CEG
Senior Geologist

cc: Malclom Leader-Picone; Barlett, Leader-Picone & Young, LLP

CLEARWATER
GROUP
Environmental Services

May 3, 2006

Mr. Leroy Griffin
Assistant Fire Marshall
Fire Prevention Bureau
City of Oakland Fire Department
250 Frank H. Ogawa Plaza, Suite 3341
Oakland, California 94612

re: **Workplan for Investigation and Closure in Place of Five Underground Storage Tanks**
Markus Supply Ace Hardware
Assessor's Parcel No. 001-0125-001
Cardanal Brothers, LLC

Site Address: 626 2nd Street
Oakland, California

Dear Mr. Griffin:

Clearwater Group (Clearwater) is pleased to present this workplan for the closure in place of five underground storage tanks (USTs). Please refer to your file addressed "626 2nd St." as your agency has a historical file on this site. The USTs are located in the sidewalk of 2nd Street, closely adjacent to the west wall of the Markus Supply Ace Hardware and Black Sea Galleries building. This wall is an unreinforced masonry wall, 300 feet in length, which was built between 1917 and 1923. Due to the proximity of the USTs to this brick wall, removal of the USTs poses a considerable safety threat to the integrity both of the brick building and to 2nd Street.

A ground penetrating radar survey of the sidewalk (20' X 140') adjacent to the above mentioned structure was completed and the presence of 5 USTs and one anomalous area (since eliminated as a possible UST by soil probing work) was confirmed. (This 140 feet commenced at the corner of the building at the intersection of Martin Luther King Blvd. (MLK) and 2nd Street.) Please find additional detail under following section; "Geophysical Subsurface Investigation".

Site History
Between 1902 and 1912, the Subject Property began to be converted from residential to commercial and light industrial uses. A pickle factory was established on the corner of

229 Tewksbury Avenue ◆ Point Richmond, California 94801 ◆ Telephone: 510-307-9943 ◆ Fax: 510-232-2823

Martin Luther King Way (formerly Grove Street) and 2nd Street. The property was used over time as both a warehouse and a private garage. It is possible that USTs in the sidewalk were used to fuel vehicles which were garaged in the warehouse. In the 1950's, Pacific Gas & Electric (PG&E) leased the property. PG&E used the property for offices and drafting, a parts warehouse and as a garage facility from approximately the late 1950's to the early 1960's. After PG&E vacated the property, the property was used in the 1960s by a door manufacturer. Since the door manufacturer business discontinued use of the facility, the building has been used as a hardware storage warehouse.

There are three USTs in the area of the Second Street sidewalk, which formerly bore the address "626 2nd St." which explains the site address in your files. These USTs are referred to henceforward as UST I, UST II, and UST III (see Figure 2).

UST I was sampled on March 30, 2006 and the liquid contains gasoline and diesel ("Area II" on Kiff Report 49279, Appendix B). UST II appears to be largely filled with concrete. UST III was sampled on March 30, 2006 and the liquid in that tank contains gasoline, diesel, and motor oil ("Area III" on Kiff Report 49279).

The UST I fill port is original and the lid reads "sewer". The UST II fill port was recently uncovered and is now temporarily protected by a 24" X 24" square metal vault. UST III's fill port was crushed and is now protected by an 8" diameter circular metal well vault set into the concrete sidewalk.

Both UST IV and UST V fill ports are covered with vaults and lids reading "sewer". UST V and UST IV were sampled on February 21, 2006 (Kiff report #48663) and January 5, 2006, (Kiff report #48663), respectively. Both of these USTs contained a creosote-like liquid. This liquid may have been used by PG&E for the wood preservation of utility poles.

In addition to the known and confirmed USTs, there is an unknown UST. According to the Sanborn Fire Insurance Company (Sanborn) map and corroborated by the EDR City Directory searching for 202 Grove Street, the Muller Brothers Company occupied part of the subject property between 1912 and 1945. Adjacent to this corner Muller Brothers property, the 1937 Sanborn (City of Oakland, Building Department copy) documents the improvement of the property with a "2000 GAL. OIL TK IN GROUND" adjacent to the building which is then addressed, 634-636 2nd Street. There is no line drawing of the tank location (although there is a distinct L shape in the text) so the placement of the tank is unknown, but presumed to be in the general area.

Site Investigation History

Clearwater conducted a preliminary drilling and soil-sampling event at the Subject

Property on September 13, 1996. The report was mailed to your office at that time. (Additionally, this report was furnished to the Fire Department on March 17, 2006, as an Appendix to the Phase I report.) The purpose of the 1996 investigation was to determine if any soils on the city block had been impacted by possible past releases from USTs. Three soil borings were conducted on the Subject Property (SB-1 through SB-3) in the sidewalk at 626 2nd Street. The soil sample taken at SB-2 was free of detectable concentrations of TPH-g and BTEX, and the soil sample collected from boring SB-3 reported elevated concentrations of TPH-g (90 mg/kg).

An investigation was also conducted by Clearwater at 625 3rd Street, also on September 13, 1996. The report was mailed to your office at that time. (Additionally, this report was furnished to the Fire Department on March 17, 2006, as an Appendix to the Phase I report.) The property of this second investigation is located on the same block as the Subject Property. The purpose of this investigation was to determine if the subsurface had been impacted by fuel hydrocarbons. Two borings were conducted on the site; B-1 was located on the southern portion of the site and B-2 was located on the northern portion of the site. Both soil and groundwater samples were collected from each of the boring locations. The samples were analyzed for total petroleum hydrocarbons as diesel (TPH-d), TPH-gasoline (TPH-g) and benzene, toluene, ethylbenzene and total xylenes (BTEX). The results of the chemical analyses indicated that the soil samples were not contaminated with TPH-d, TPH-g or BTEX. The groundwater samples from the borings reported non-detectable concentrations of TPH-g and BTEX, but TPH-d was detected at concentrations of 210 ug/L and 170 ug/L in water samples taken at the B-1 and B-2, respectively.

Geophysical Subsurface Investigation

A geophysical subsurface investigation was made of the 20' x 140' sidewalk site by the Subtronic Corporation (Subtronic) on March 21, 2006. Subtronic used ground penetrating radar to search for unknown USTs. The search did not discover any additional USTs. A radar anomaly was later disproved of being a UST. A copy of the Subtronic investigation is attached as Appendix A.

UST Characterization

The following summarizes Clearwater's current knowledge of the site's USTs, based on previous investigations and site visits:

- UST I measures approximately 10' x 5' (1,500 gallons) and contains an estimated 750 gallons of a gasoline/diesel/water mixture.
- UST II measures approximately 12' x 6' (2,000 gallons) and contains an estimated no contents besides solid concrete.

- UST III measures approximately 12' x 5' (2,000 gallons) and contains an estimated 800 gallons of a motor oil/gasoline/diesel/water mixture.
- UST IV measures approximately 16' x 8' (5,000 gallons) and contains an estimated 2,500 gallons of a creosote/water mixture.
- UST V measures approximately 16' by 8' (5,000 gallons) and contains an estimated 1,000 gallons of a creosote/water mixture.

It is important to note that neither Tank IV nor Tank V matches the size of the original Sanborn UST (2000 gallons). To date, GPR has not been used in the street to rule out the continued presence of that tank in the area.

OVERSIGHT AND SAFETY

To ensure prompt and professional project completion, a geologist, environmental scientist or engineer working under the supervision of a California Professional Geologist will supervise the project on-site. As required by Federal and State law, all on site personnel will have successfully completed a 40-hour OSHA safety training class and have taken an annual 8-hour refresher course. A safety plan prepared specifically for this project and site will be used during all site activities.

LICENSES

The Auger Group, dba Clearwater Group, founded in 1990, specializes in environmental consulting and is licensed as a general engineering contracting firm with a hazardous waste removal certificate as well as a water well drillers license (#799370). The firm has experienced professional geologists, a professional engineer, a certified hydrogeologist, a driller, equipment operators, registered environmental assessors and AHERA-accredited asbestos inspectors. Clearwater has completed numerous UST removals, UST abandonments, and soil and groundwater remediation projects.

PROCEDURES

The following procedures describe the planning, field and post-field activities for the abandonment of the USTs. The work will be performed according to all applicable Federal, State and Local regulations.

Upon receipt of approval from the City of Oakland Fire Department, Clearwater will perform the following activities:

- Arrange transportation and disposal of UST contents.
- Arrange transportation and disposal of the rinsate liquids.
- Obtain a soil boring permit, and an excavation permit, to abandon five USTs in place, as required by the County of Alameda, and City of Oakland Public Works Department (pending direction regarding the placement of soil boring locations from the Fire Department).

- Obtain a permit to close the 2nd Street sidewalk from the City of Oakland Public Works Department.
- Notify the Bay Area Air Quality Control Board of the planned work
- Mark out the work area with white paint lines.
- Notify Underground Service Alert at least one week prior to starting the field activities.

FIELD ACTIVITIES

UST Cleaning and Removal of Residue and Rinsate

Clearwater Environmental Management will be retained to vacuum out the contents of the USTs. The UST contents will be removed using a vacuum truck and disposed of appropriately. The sidewalk will be closed during the field activities. Clearwater will monitor the Lower Explosive Limit (LEL) at the UST fill ports with a combustible gas indicator during the cleaning and grouting activities. Dry ice will be used, if needed, to displace the UST vapors and lower the oxygen concentration within the USTs to below 15% oxygen. Approximately 15 lbs. of pelletized solid carbon dioxide (dry ice) will be used for every 1,000 gallons of UST capacity.

The USTs will be cleaned internally using a Rokon Fluid Driven UST Washing Nozzle with FAST-TEK Remediation Injection Process (RIP) pressure equipment (see Appendix C). A dilute solution of hydrogen peroxide will be used as the final rinse to remove any residual hydrocarbon from the USTs. If possible, Clearwater will engage a sewer video subcontractor to verify the internal condition and orientation of each UST after cleaning.

As all dispensers have been concreted over, all product lines leading from the USTs the lines will be left as is. All of the fluids collected from the UST rinsing will be collected and disposed of an approved facility. The vent pipes will be sawed off at ground level and grouted up.

Soil Borings

After removing the USTs' contents Clearwater will collect twelve soil samples from under the 5 USTs. One soil sample will be collected from under each UST end and one soil sample will be collected under the middle of each UST using an angled boring. Due to the closeness of USTs I through III to each other, some borings will double up and serve to sample more than one UST. See Figure 2 for the proposed soil boring locations. These samples will be collected using a Geoprobe rig in the accessible areas, and a jackhammer driven Geoprobe sampler in the inaccessible areas. One soil sample will be obtained halfway between the UST centerline and the building or halfway between the vent line on the UST. If groundwater is encountered in a soil boring a grab groundwater

sample will be collected from the boring using a disposable bailer. The Direct-Push Drilling Investigation Procedures are attached as Appendix D.

Sample Analyses
The soil and grab groundwater samples will be analyzed according to the recommended analytical methods listed in the Tri-Regional Board Staff Recommendations for Preliminary Evaluation and Investigation of Underground UST Sites (16 April 2004). Clearwater will arrange for a California certified laboratory to analyze the samples. The samples will be analyzed using a standard turnaround time, unless otherwise noted. The analyses will be:

- USTs I through III; TPH-d by modified EPA Method 8015,TPH-g and BTEX by EPA Method 8260B

- USTs IV through V; EPA Method 8260 (TPH-d, TPH-g, BTEX) and EPA Method 8270C (semi-volatile organic compounds)

Waste Disposal
Waste accumulated during the cleaning and abandonment of the UST will be manifested under an EPA Generator ID, as required for the transportation and disposal of wastes. The waste liquids shall be handled and transported in accordance with Chapter 6.5, Division 20 of the Health and Safety Code and Title 22 of the California Administrative Code. Clearwater will supervise the removal of the liquids for transport to a State Licensed Transport, Storage and Disposal facility.

Interim Reporting
Following the USTs' contents removal and cleaning, and the collection of soil samples from under the USTs, an interim report of findings will be submitted to the City of Oakland Fire Department.

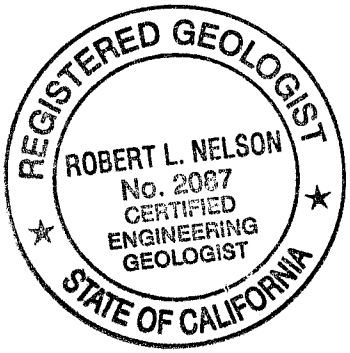
UST Abandonment in Place Procedure
The USTs will be filled with lean cement grout to abandon them in place. The grout will be pumped into each UST with a tremmie pipe, then vibrated with a concrete vibrator to settle the grout and completely fill the UST. The grout will be brought to within 6 inches of the surface. The surface will be patched with concrete to match the existing sidewalk surface.

Final Reporting
Clearwater will provide a final report documenting the closure in place of the 5 USTs. The report will include site maps, photographs, laboratory analysis, waste disposal manifests and conclusions.

CLEARWATER
GROUP, INC.
Environmental Services

Due to safety concerns created by the sidewalk and nearby building, Clearwater requests your approval of this workplan to proceed with the closure in place of five USTs located at 626 2nd Street in Oakland, California. Please call me at (510) 307-9943 X 237 if you have any questions.

Sincerely,



Robert L. Nelson

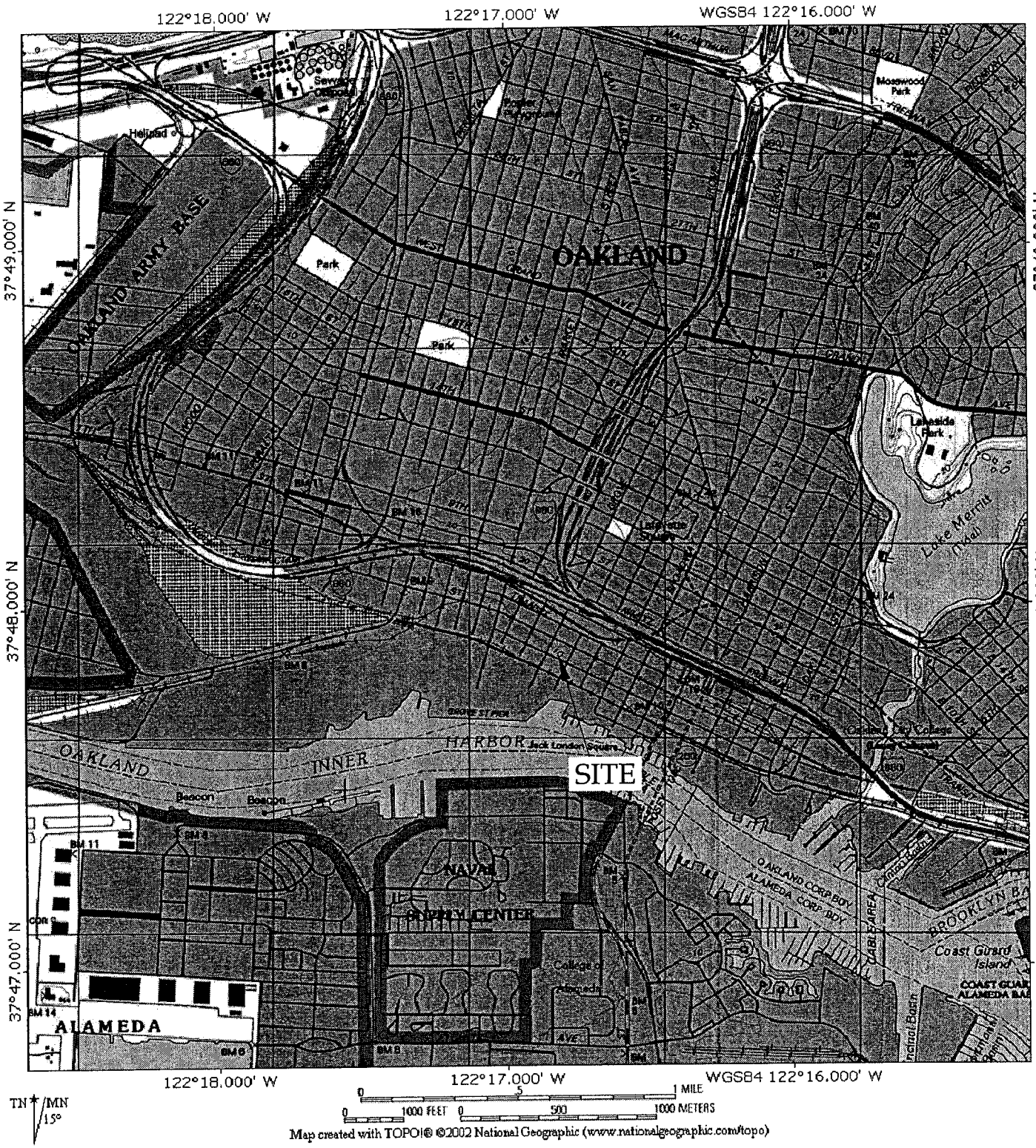
Robert L. Nelson, PG #6270, CEG #2087
Senior Geologist

Figures

Figure 1: Site Location Map
Figure 2: Proposed Soil and Groundwater Sampling Locations (UST Closure in Place)

Appendices

Appendix A: Geophysical Subsurface Investigation by Subtronics Corporation
Appendix B: Analytical Reports (2)
Appendix C: UST Cleaning and Abandonment Procedures
Appendix D: Direct-Push Drilling Investigation Procedures
Appendix E: Site Safety Plan



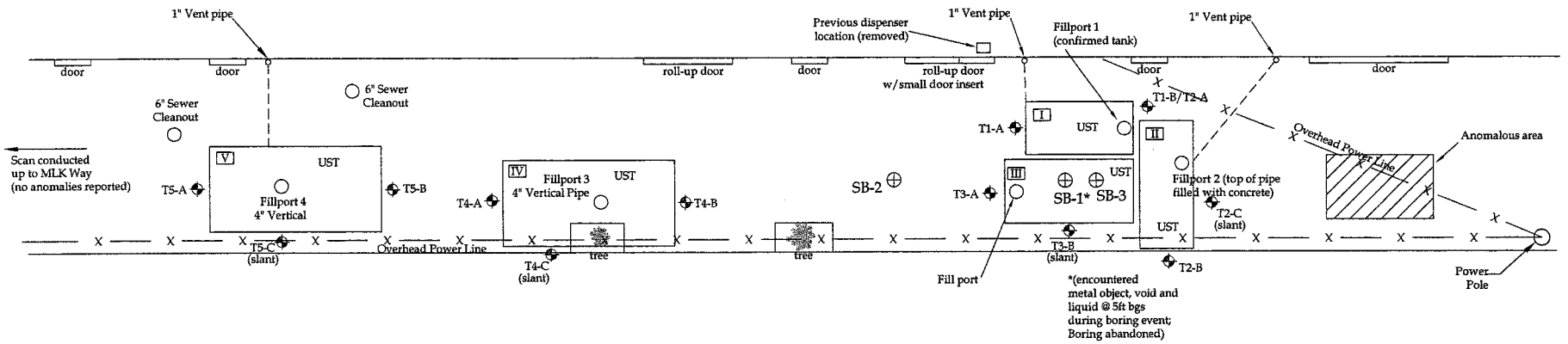
SITE LOCATION MAP

Markus Supply
626 2nd Street, Oakland, CA

CLEARWATER GROUP

Project No.	Figure Date	Figure
GB001	**5/06**	**1**

Markus Supply
Ace Hardware
Building



2nd Street

KEY:
- Boring (locations approximate) for samples taken in 1996
- Fill port
- I Tank #
- Tank Outline
- Proposed Soil and Groundwater Sampling Locations

TANK DIMENSIONS
I - 10' x 5'
II - ~12' x 6'
III - 12' x 5'
IV - 16' x 8'
V - 16' x 8'

N

0 10 20
APPROXIMATE SCALE IN FEET

CLEARWATER GROUP
Environmental Services
229 Tewksbury Avenue, Point Richmond, California 94801
Phone (510-307-9943) Fax (510-232-2823)

PROPOSED SOIL AND GROUNDWATER SAMPLING LOCATIONS (UST CLOSURE IN PLACE) APN 001-125-001
OAKLAND, CALIFORNIA

PROJECT NO. GB001C	FIGURE: 2
DATE : 1/9/06	REVISION: 5/4/06
	DRAWN BY: J. GEKOV

APPENDIX A

subtronic corp

I nal Utility Location
Contractors Association Member

2430 Sprig Court, Suite C
Concord, California 94520
Telephone (925) 686-3747
Fax No. (925) 686-5281
www.subtronic.com

GEOPHYSICAL SUBSURFACE INVESTIGATION

2nd Street
Oakland, CA
For
Clearwater Group

March 21, 2006

Project Location:
The area surveyed is the sidewalk on the north side of 2nd Street, Oakland from Martin Luther King Way, approximately 200 feet southeast to Jefferson Street.

Objective:
The objective of the investigation is to determine the dimensions of known underground storage tanks (UST) and to find any other UST that are not located.

Site Description:
The area surveyed is a concrete covered sidewalk approximately 20 feet wide. It is a typical sidewalk with metal street signs, and power poles placed along the curb edge. Occasionally cars park along the curb. An attempt was made to keep some portions of the curb car free so that the cars would not interfere with the geophysical survey.

Geophysical Equipment

TW-6 M-Scope
The Fisher TW-6 M-Scope is a split box inductive locator and metal detector mounted on a four-foot rod. The split box locator can detect metal lines "inductively". The M-Scope is also used to detect buried metallic objects such as manhole covers, underground storage tanks, etc...

Data from the TW6 is not stored, however a visual and audio signal indicates the presence of metal objects when the instrument is passed over them.

Schondstedt
The Schonstedt is a hand held magnetic locator which functions as a magnetometer but does not log any data. The Schonstedt produces audio signals over buried metal objects. The limits of detection with a Schondstedt is about 8 to 10 feet deep in an open field.

Radiodetection RD 400 Cable and Pipe Tracer

The RD 400-cable locator is a hand-held instrument used to detect buried utilities. The primary application of the RD 400 is to pinpoint the path of electric lines and other power conductors such as CATV and telephone cables. Pipes made of steel or copper and pipes with tracer wire are also easily traced.

SIR 3000 Ground Penetrating Radar with 400 MHz Antenna

The SIR 3000 is the most recent GPR unit produced by Geophysical Survey Systems. The SIR 3000 uses low energy radar waves to profile the underlying soil stratigraphy. The dielectric contrasts between the target objects, typically metal, and the surrounding soil allow them to be "seen" on the graphic profiles. Pipes and UST's will typically show up as an inverted parabola, slightly larger than their actual dimensions.

Survey Methodology:

First, a visual inspection was conducted at each site. Underground utilities, vaults, boxes, exposed piping, topographic mounds and depressions were noted. Exposed piping or risers found on the site were energized, traced out and the surface location was spray painted on the ground.

The split box locator was used to scan the site in two orthogonal directions, and utilities detected by the locator were marked on the ground. The site was then scanned with the magnetic locator in only one direction. The location of the anomalies detected with the split box locator and Schonstedt were noted on a map and marked on the ground. The site was scanned with ground penetrating radar in two orthogonal directions along traverses spaced 5 feet apart. Anomalies identified were marked on the ground.

Survey Results:

A visual inspection of the site indicated three vent pipes and 4 UST fill ports. A survey was conducted to identify the UST edges. The split box locator clearly sounded off the tank edges, and the tank profiles were visible on the radargrams from the ground penetrating radar. The tank edges of UST's for fill ports 1, 2, 3 and 4 were found with the split box locator and the GPR. (see Figure 1 radar gram of UST's). An additional UST was found parallel to UST 1. No fill port was observed for this UST.

Following the marking of the known UST's, the site was then scanned for UST's with no fill ports visible at the ground surface. Again this was done by traversing the site with the split box locator and the GPR using traverses spaced 5 feet apart. The ground penetrating radar did show some UST like radargrams however they were not corroborated with the split box locator.

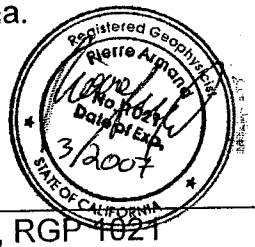
Conclusion:

This geophysical survey helped to determine the edges of 4 known UST's. A fifth UST was found parallel to the fill port No. 1 UST. No other UST's were interpreted from the geophysical survey over the rest of the site.

Limitations

The limits of discernment of this magnetic survey are the detection of objects within five feet of metal fences, buildings, vehicles and other identified metal objects.

The subsurface geology, object size and composition, burial depth, affect the size and shape of geophysical anomalies, which may impede their detection. Geophysical anomalies may not represent unique solutions. Apparently similar anomalies may be created by different subsurface phenomena.



Report Prepared By:

Pierre Armand, RGP 1021

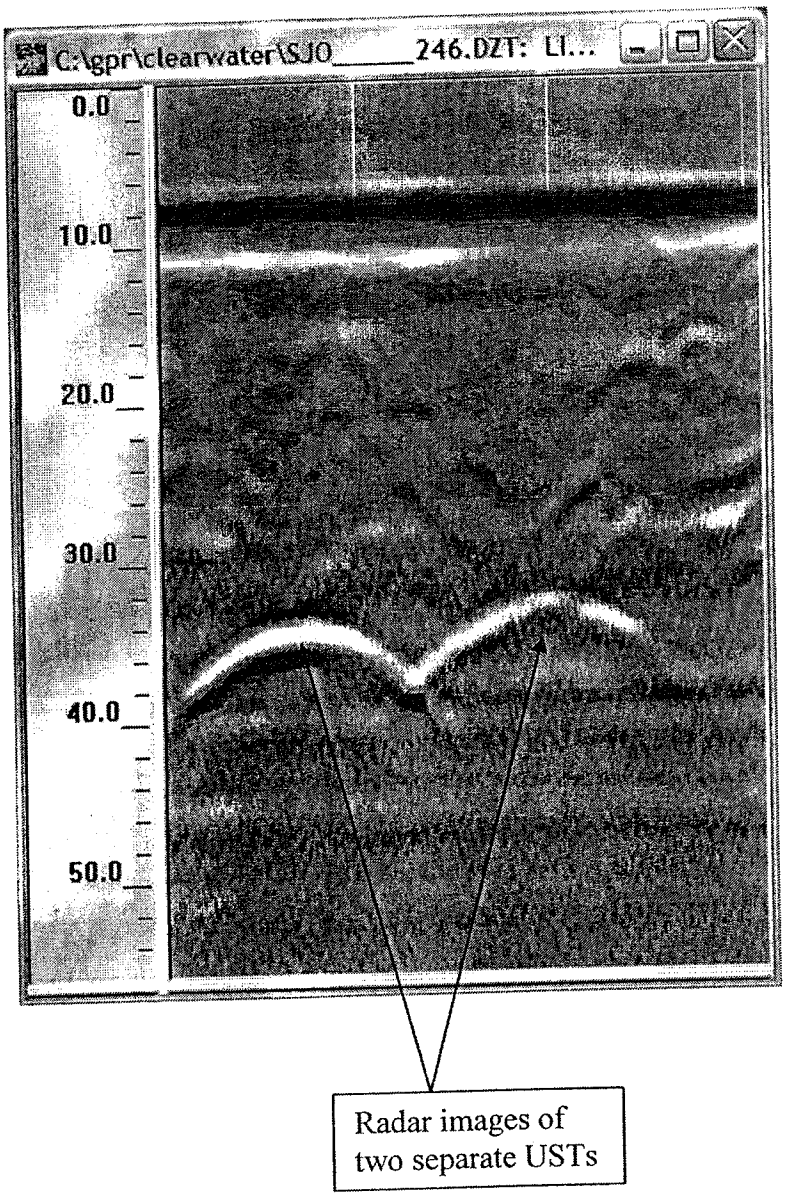


Figure 1. Radargram showing two separate UST's. The UST with the bright reflection is the UST closest to the curb. The following UST is the tank connected to fill port 1.

APPENDIX B

KIFF Analytical LLC

Report Number : 48663
Date : 03/14/2006

Matthew Ryder-Smith
Clearwater Group, Inc.
229 Tewksbury Avenue
Point Richmond, CA 94801

Subject : 1 Samples
Project Name : Markus Supply
Project Number : GB001A

Dear Mr. Ryder-Smith,

Chemical analysis of the samples referenced above has been completed. Summaries of the data are contained on the following pages. Sample(s) were received under documented chain-of-custody. US EPA protocols for sample storage and preservation were followed.

Kiff Analytical is certified by the State of California (# 2236). If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,

Joel Kiff

Calscience
Environmental
Laboratories, Inc.

March 14, 2006

Joel Kiff
Kiff Analytical
2795 2nd Street, Suite 300
Davis, CA 95616-6593

Subject: **Calscience Work Order No.:** **06-03-0174**
Client Reference: **Markus Supply**

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 3/3/2006 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Systems Manual, applicable standard operating procedures, and other related documentation. The original report of any subcontracted analysis is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Amanda Porter for

Calscience Environmental
Laboratories, Inc.
Stephen Nowak
Project Manager

Calscience Environmental Laboratories, Inc.

Analytical Report

Kiff Analytical
2795 2nd Street, Suite 300
Davis, CA 95616-6593

Date Received: 03/03/06
Work Order No: 06-03-0174
Preparation: EPA 3580A
Method: EPA 8270C
Units: mg/kg

Project: Markus Supply

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
GB001A-Product Sample 2	06-03-0174-1	02/21/06	Oil	03/02/06	03/06/06	060303L05

Parameter	Result	RL	DF	Qual
N-Nitrosodimethylamine	ND	100	10	
Aniline	ND	100	10	
Phenol	ND	100	10	
Bis(2-Chloroethyl) Ether	ND	100	10	
2-Chlorophenol	ND	100	10	
1,3-Dichlorobenzene	ND	100	10	
1,4-Dichlorobenzene	ND	100	10	
Benzyl Alcohol	ND	1000	10	
1,2-Dichlorobenzene	ND	100	10	
2-Methylphenol	ND	100	10	
Bis(2-Chloroisopropyl) Ether	ND	100	10	
3/4-Methylphenol	ND	100	10	
N-Nitroso-di-n-propylamine	ND	1000	10	
Hexachloroethane	ND	100	10	
Nitrobenzene	ND	100	10	
Isophorone	ND	100	10	
2-Nitrophenol	ND	100	10	
2,4-Dimethylphenol	ND	100	10	
Benzoic Acid	ND	1000	10	
Bis(2-Chloroethoxy) Methane	ND	100	10	
2,4-Dichlorophenol	ND	100	10	
1,2,4-Trichlorobenzene	ND	100	10	
Pyridine	ND	100	10	
Naphthalene	370	100	10	
4-Chloroaniline	ND	100	10	
Hexachloro-1,3-Butadiene	ND	100	10	
4-Chloro-3-Methylphenol	ND	100	10	
2-Methylnaphthalene	960	100	10	
1-Methylnaphthalene	680	400	10	
Hexachlorocyclopentadiene	ND	100	10	
2,4,5-Trichlorophenol	ND	100	10	
2-Chloronaphthalene	ND	100	10	
2-Nitroaniline	ND	1000	10	
Dimethyl Phthalate	ND	100	10	
Acenaphthylene	ND	100	10	
3-Nitroaniline	ND	1000	10	

Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	103	25-121	
Nitrobenzene-d5	135	23-120	2
2,4,6-Tribromophenol	64	19-122	

Parameter	Result	RL	DF	Qual
Acenaphthene	ND	100	10	
2,4-Dinitrophenol	ND	1000	10	
4-Nitrophenol	ND	1000	10	
Dibenzofuran	ND	100	10	
2,4-Dinitrotoluene	ND	100	10	
2,6-Dinitrotoluene	ND	100	10	
Diethyl Phthalate	ND	100	10	
4-Chlorophenyl-Phenyl Ether	ND	100	10	
Fluorene	120	100	10	
4-Nitroaniline	ND	1000	10	
Azobenzene	ND	100	10	
4,6-Dinitro-2-Methylphenol	ND	1000	10	
N-Nitrosodiphenylamine	ND	1000	10	
2,4,6-Trichlorophenol	ND	100	10	
4-Bromophenyl-Phenyl Ether	ND	100	10	
Hexachlorobenzene	ND	100	10	
Pentachlorophenol	ND	1000	10	
Phenanthrene	130	100	10	
Anthracene	ND	100	10	
Di-n-Butyl Phthalate	ND	100	10	
Fluoranthene	ND	100	10	
Benzidine	ND	100	10	
Pyrene	ND	100	10	
Butyl Benzyl Phthalate	ND	100	10	
3,3'-Dichlorobenzidine	ND	100	10	
Benzo (a) Anthracene	ND	100	10	
Bis(2-Ethylhexyl) Phthalate	ND	100	10	
Chrysene	ND	100	10	
Di-n-Octyl Phthalate	ND	500	10	
Benzo (k) Fluoranthene	ND	400	10	
Benzo (b) Fluoranthene	ND	400	10	
Benzo (a) Pyrene	ND	500	10	
Indeno (1,2,3-c,d) Pyrene	ND	500	10	
Dibenz (a,h) Anthracene	ND	500	10	
Benzo (g,h,i) Perylene	ND	500	10	

Surrogates:	REC (%)	Control Limits	Qual
Phenol-d6	108	24-113	
2-Fluorobiphenyl	128	30-115	2
p-Terphenyl-d14	146	18-137	2

RL - Reporting Limit . DF - Dilution Factor . Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Kiff Analytical
2795 2nd Street, Suite 300
Davis, CA 95616-6593

Date Received: 03/03/06
Work Order No: 06-03-0174
Preparation: EPA 3580A
Method: EPA 8270C
Units: mg/kg

Project: Markus Supply

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
Method Blank	098-01-011-197	N/A	Oil	03/02/06	03/06/06	060303L05

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
N-Nitrosodimethylamine	ND	10	1		Acenaphthene	ND	10	1	
Aniline	ND	10	1		2,4-Dinitrophenol	ND	100	1	
Phenol	ND	10	1		4-Nitrophenol	ND	100	1	
Bis(2-Chloroethyl) Ether	ND	10	1		Dibenzofuran	ND	10	1	
2-Chlorophenol	ND	10	1		2,4-Dinitrotoluene	ND	10	1	
1,3-Dichlorobenzene	ND	10	1		2,6-Dinitrotoluene	ND	10	1	
1,4-Dichlorobenzene	ND	10	1		Diethyl Phthalate	ND	10	1	
Benzyl Alcohol	ND	100	1		4-Chlorophenyl-Phenyl Ether	ND	10	1	
1,2-Dichlorobenzene	ND	10	1		Fluorene	ND	10	1	
2-Methylphenol	ND	10	1		4-Nitroaniline	ND	100	1	
Bis(2-Chloroisopropyl) Ether	ND	10	1		Azobenzene	ND	10	1	
3/4-Methylphenol	ND	10	1		4,6-Dinitro-2-Methylphenol	ND	100	1	
N-Nitroso-di-n-propylamine	ND	100	1		N-Nitrosodiphenylamine	ND	100	1	
Hexachloroethane	ND	10	1		2,4,6-Trichlorophenol	ND	10	1	
Nitrobenzene	ND	10	1		4-Bromophenyl-Phenyl Ether	ND	10	1	
Isophorone	ND	10	1		Hexachlorobenzene	ND	10	1	
2-Nitrophenol	ND	10	1		Pentachlorophenol	ND	100	1	
2,4-Dimethylphenol	ND	10	1		Phenanthrene	ND	10	1	
Benzoic Acid	ND	100	1		Anthracene	ND	10	1	
Bis(2-Chloroethoxy) Methane	ND	10	1		Di-n-Butyl Phthalate	ND	10	1	
2,4-Dichlorophenol	ND	10	1		Fluoranthene	ND	10	1	
1,2,4-Trichlorobenzene	ND	10	1		Benzidine	ND	10	1	
Pyridine	ND	10	1		Pyrene	ND	10	1	
Naphthalene	ND	10	1		Butyl Benzyl Phthalate	ND	10	1	
4-Chloroaniline	ND	10	1		3,3'-Dichlorobenzidine	ND	10	1	
Hexachloro-1,3-Butadiene	ND	10	1		Benzo (a) Anthracene	ND	10	1	
4-Chloro-3-Methylphenol	ND	10	1		Bis(2-Ethylhexyl) Phthalate	ND	10	1	
2-Methylnaphthalene	ND	10	1		Chrysene	ND	10	1	
1-Methylnaphthalene	ND	40	1		Di-n-Octyl Phthalate	ND	50	1	
Hexachlorocyclopentadiene	ND	10	1		Benzo (k) Fluoranthene	ND	40	1	
2,4,5-Trichlorophenol	ND	10	1		Benzo (b) Fluoranthene	ND	40	1	
2-Chloronaphthalene	ND	10	1		Benzo (a) Pyrene	ND	50	1	
2-Nitroaniline	ND	100	1		Indeno (1,2,3-c,d) Pyrene	ND	50	1	
Dimethyl Phthalate	ND	10	1		Dibenz (a,h) Anthracene	ND	50	1	
Acenaphthylene	ND	10	1		Benzo (g,h,i) Perylene	ND	50	1	
3-Nitroaniline	ND	100	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	92	25-121		Phenol-d6	99	24-113	
Nitrobenzene-d5	112	23-120		2-Fluorobiphenyl	104	30-115	
2,4,6-Tribromophenol	69	19-122		p-Terphenyl-d14	88	18-137	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Klff Analytical
2795 2nd Street, Suite 300
Davis, CA 95616-6593

Date Received: 03/03/06
Work Order No: 06-03-0174
Preparation: EPA 5030B
Method: EPA 8260B
Units: ug/kg

Project: Markus Supply

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
GB001A-Product Sample 2	06-03-0174-1	02/21/06	Oil	03/06/06	03/07/06	060307L02

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	20000	400		1,3-Dichloropropane	ND	2000	400	
Benzene	ND	2000	400		2,2-Dichloropropane	ND	2000	400	
Bromobenzene	ND	2000	400		1,1-Dichloropropene	ND	2000	400	
Bromochloromethane	ND	2000	400		c-1,3-Dichloropropene	ND	2000	400	
Bromodichloromethane	ND	2000	400		t-1,3-Dichloropropene	ND	2000	400	
Bromoform	ND	2000	400		Ethylbenzene	ND	2000	400	
Bromomethane	ND	10000	400		2-Hexanone	ND	20000	400	
2-Butanone	ND	20000	400		Isopropylbenzene	ND	2000	400	
n-Butylbenzene	20000	2000	400		p-Isopropyltoluene	8200	2000	400	
sec-Butylbenzene	8600	2000	400		Methylene Chloride	ND	20000	400	
tert-Butylbenzene	ND	2000	400		4-Methyl-2-Pentanone	ND	20000	400	
Carbon Disulfide	ND	20000	400		Naphthalene	240000	20000	400	
Carbon Tetrachloride	ND	2000	400		n-Propylbenzene	ND	2000	400	
Chlorobenzene	ND	2000	400		Styrene	ND	2000	400	
Chloroethane	ND	2000	400		1,1,1,2-Tetrachloroethane	ND	2000	400	
Chloroform	ND	2000	400		1,1,2,2-Tetrachloroethane	ND	2000	400	
Chloromethane	ND	10000	400		Tetrachloroethene	ND	2000	400	
2-Chlorotoluene	ND	2000	400		Toluene	ND	2000	400	
4-Chlorotoluene	ND	2000	400		1,2,3-Trichlorobenzene	ND	4000	400	
Dibromochloromethane	ND	2000	400		1,2,4-Trichlorobenzene	ND	2000	400	
1,2-Dibromo-3-Chloropropane	ND	4000	400		1,1,1-Trichloroethane	ND	2000	400	
1,2-Dibromoethane	ND	2000	400		1,1,2-Trichloroethane	ND	2000	400	
Dibromomethane	ND	2000	400		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	20000	400	
1,2-Dichlorobenzene	ND	2000	400		Trichloroethene	ND	2000	400	
1,3-Dichlorobenzene	ND	2000	400		1,2,3-Trichloropropane	ND	2000	400	
1,4-Dichlorobenzene	ND	2000	400		1,2,4-Trimethylbenzene	3700	2000	400	
Dichlorodifluoromethane	ND	2000	400		Trichlorofluoromethane	ND	20000	400	
1,1-Dichloroethane	ND	2000	400		1,3,5-Trimethylbenzene	4200	2000	400	
1,2-Dichloroethane	ND	2000	400		Vinyl Acetate	ND	20000	400	
1,1-Dichloroethene	ND	2000	400		Vinyl Chloride	ND	2000	400	
c-1,2-Dichloroethene	ND	2000	400		p/m-Xylene	ND	2000	400	
t-1,2-Dichloroethene	ND	2000	400		o-Xylene	ND	2000	400	
1,2-Dichloropropane	ND	2000	400		Methyl-t-Butyl Ether (MTBE)	ND	2000	400	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
Dibromofluoromethane	101	73-139			1,2-Dichloroethane-d4	105	73-145		
Toluene-d8	100	90-108			1,4-Bromofluorobenzene	110	71-113		

RL - Reporting Limit . DF - Dilution Factor . Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Kiff Analytical
2795 2nd Street, Suite 300
Davis, CA 95616-6593

Date Received: 03/03/06
Work Order No: 06-03-0174
Preparation: EPA 5030B
Method: EPA 8260B
Units: ug/kg

Project: Markus Supply

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
Method Blank	099-10-005-11,937	N/A	Solid	03/07/06	03/07/06	060307L02

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	1300	25		1,3-Dichloropropane	ND	130	25	
Benzene	ND	130	25		2,2-Dichloropropane	ND	130	25	
Bromobenzene	ND	130	25		1,1-Dichloropropene	ND	130	25	
Bromochloromethane	ND	130	25		c-1,3-Dichloropropene	ND	130	25	
Bromodichloromethane	ND	130	25		t-1,3-Dichloropropene	ND	130	25	
Bromoform	ND	130	25		Ethylbenzene	ND	130	25	
Bromomethane	ND	630	25		2-Hexanone	ND	1300	25	
2-Butanone	ND	1300	25		Isopropylbenzene	ND	130	25	
n-Butylbenzene	ND	130	25		p-Isopropyltoluene	ND	130	25	
sec-Butylbenzene	ND	130	25		Methylene Chloride	ND	1300	25	
tert-Butylbenzene	ND	130	25		4-Methyl-2-Pentanone	ND	1300	25	
Carbon Disulfide	ND	1300	25		Naphthalene	ND	1300	25	
Carbon Tetrachloride	ND	130	25		n-Propylbenzene	ND	130	25	
Chlorobenzene	ND	130	25		Styrene	ND	130	25	
Chloroethane	ND	130	25		1,1,1,2-Tetrachloroethane	ND	130	25	
Chloroform	ND	130	25		1,1,2,2-Tetrachloroethane	ND	130	25	
Chloromethane	ND	630	25		Tetrachloroethene	ND	130	25	
2-Chlorotoluene	ND	130	25		Toluene	ND	130	25	
4-Chlorotoluene	ND	130	25		1,2,3-Trichlorobenzene	ND	250	25	
Dibromochloromethane	ND	130	25		1,2,4-Trichlorobenzene	ND	130	25	
1,2-Dibromo-3-Chloropropane	ND	250	25		1,1,1-Trichloroethane	ND	130	25	
1,2-Dibromoethane	ND	130	25		1,1,2-Trichloroethane	ND	130	25	
Dibromomethane	ND	130	25		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	1300	25	
1,2-Dichlorobenzene	ND	130	25		Trichloroethene	ND	130	25	
1,3-Dichlorobenzene	ND	130	25		1,2,3-Trichloropropane	ND	130	25	
1,4-Dichlorobenzene	ND	130	25		1,2,4-Trimethylbenzene	ND	130	25	
Dichlorodifluoromethane	ND	130	25		Trichlorofluoromethane	ND	1300	25	
1,1-Dichloroethane	ND	130	25		1,3,5-Trimethylbenzene	ND	130	25	
1,2-Dichloroethane	ND	130	25		Vinyl Acetate	ND	1300	25	
1,1-Dichloroethene	ND	130	25		Vinyl Chloride	ND	130	25	
c-1,2-Dichloroethene	ND	130	25		p/m-Xylene	ND	130	25	
t-1,2-Dichloroethene	ND	130	25		o-Xylene	ND	130	25	
1,2-Dichloropropane	ND	130	25		Methyl-t-Butyl Ether (MTBE)	ND	130	25	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
Dibromofluoromethane	93	73-139			1,2-Dichloroethane-d4	98	73-145		
Toluene-d8	101	90-108			1,4-Bromofluorobenzene	94	71-113		

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Kiff Analytical
2795 2nd Street, Suite 300
Davis, CA 95616-6593

Date Received: 03/03/06
Work Order No: 06-03-0174
Preparation: EPA 3580A
Method: EPA 8270C

Project Markus Supply

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
06B001A-Product Sample 2	Oil	GC/MS P	03/02/06	03/06/06	060303S05

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Phenol	6	6	20-120	4	0-42	3
2-Chlorophenol	6	6	23-134	0	0-40	3
1,4-Dichlorobenzene	7	7	20-124	3	0-28	3
N-Nitroso-di-n-propylamine	8	8	0-230	4	0-38	
1,2,4-Trichlorobenzene	7	6	44-142	6	0-28	3
Acenaphthene	9	9	47-145	4	0-31	3
2,4-Dinitrotoluene	11	11	39-139	2	0-38	3

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Kiff Analytical
2795 2nd Street, Suite 300
Davis, CA 95616-6593

Date Received: 03/03/06
Work Order No: 06-03-0174
Preparation: EPA 5030B
Method: EPA 8260B

Project Markus Supply

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
06-02-1462-9	Solid	GC/MS W	03/07/06	03/07/06	060307S01

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	99	96	79-115	3	0-13	
Carbon Tetrachloride	120	119	55-139	1	0-15	
Chlorobenzene	98	96	79-116	2	0-17	
1,2-Dichlorobenzene	93	92	63-123	1	0-23	
1,1-Dichloroethene	107	107	69-123	0	0-16	
Toluene	101	100	79-115	0	0-15	
Trichloroethene	288	1472	66-144	115	0-14	3,4
Vinyl Chloride	104	103	60-126	1	0-14	
Methyl-t-Butyl Ether (MTBE)	107	102	68-128	4	0-14	
Tert-Butyl Alcohol (TBA)	111	105	44-134	6	0-37	
Diisopropyl Ether (DIPE)	105	104	75-123	1	0-12	
Ethyl-t-Butyl Ether (ETBE)	102	101	75-117	0	0-12	
Tert-Amyl-Methyl Ether (TAME)	106	103	79-115	3	0-12	
Ethanol	88	96	42-138	8	0-28	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Kiff Analytical
2795 2nd Street, Suite 300
Davis, CA 95616-6593

Date Received: N/A
Work Order No: 06-03-0174
Preparation: EPA 3580A
Method: EPA 8270C

Project: Markus Supply

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
096-01-011-197	Oil	GC/MS P	03/02/06	03/06/06	060303L05

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Phenol	106	105	20-120	1	0-42	
2-Chlorophenol	98	99	23-134	1	0-40	
1,4-Dichlorobenzene	107	109	20-124	2	0-28	
N-Nitroso-di-n-propylamine	106	109	0-230	2	0-38	
1,2,4-Trichlorobenzene	112	111	44-142	1	0-28	
Acenaphthene	108	109	47-145	1	0-31	
2,4-Dinitrotoluene	107	112	39-139	5	0-38	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Kiff Analytical
2795 2nd Street, Suite 300
Davis, CA 95616-6593

Date Received: N/A
Work Order No: 06-03-0174
Preparation: EPA 5030B
Method: EPA 8260B

Project: Markus Supply

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-10-005-11,937	Solid	GC/MS W	03/07/06	03/07/06	060307L02

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	103	104	84-114	1	0-7	
Carbon Tetrachloride	124	125	66-132	1	0-12	
Chlorobenzene	101	101	87-111	1	0-7	
1,2-Dichlorobenzene	102	100	79-115	2	0-8	
1,1-Dichloroethene	113	110	73-121	3	0-12	
Toluene	103	104	78-114	1	0-7	
Trichloroethene	108	107	84-114	2	0-8	
Vinyl Chloride	107	105	63-129	2	0-15	
Methyl-t-Butyl Ether (MTBE)	115	113	77-125	2	0-11	
Tert-Butyl Alcohol (TBA)	120	118	47-137	2	0-27	
Diisopropyl Ether (DIPE)	111	111	76-130	0	0-8	
Ethyl-t-Butyl Ether (ETBE)	112	110	76-124	2	0-12	
Tert-Amyl-Methyl Ether (TAME)	117	113	82-118	3	0-11	
Ethanol	99	99	59-131	1	0-21	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 06-03-0174

Qualifier	Definition
*	See applicable analysis comment.
1	Surrogate compound recovery was out of control due to a required sample dilution, therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike or Matrix Spike Duplicate compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported with no further corrective action required.
A	Result is the average of all dilutions, as defined by the method.
B	Analyte was present in the associated method blank.
C	Analyte presence was not confirmed on primary column.
E	Concentration exceeds the calibration range.
H	Sample received and/or analyzed past the recommended holding time.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
N	Nontarget Analyte.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
U	Undetected at the laboratory method detection limit.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

KIFF Analytical LLC

2795 Second Street, Suite 300
Davis, CA 95616
Lab: 530.297.4800
Fax: 530.297.4808

Cal Science Environmental
7440 Lincoln Way
Garden Grove, CA 92841
714-895-5494

Lab No. 0174

Page 1 of 1

Chain-of-Custody Record and Analysis Request

Project Contact (Hardcopy or PDF to): Troy Turpen

EDF Report? ___ Yes _X_ No

Company/Address: Kiff Analytical, LLC

Recommended but not mandatory to complete this section:

Sampling Company Log Code:

Global ID:

Phone No.: FAX No.:

Project Number: GB001A

P.O. No.: 48663

EDF Deliverable to (Email Address):

Project Name: Markus Supply

E-mail address: inbox@kiffanalytical.com

Project Address:

Analysis Request

Sample Designation	Sampling Date	Sampling Time	Container: Glass Jar	Container: Sleeve*	Container: Amber	Container:	Container:	Preservative: HCl	Preservative: HNO3	Preservative: ICE	Preservative: NONE	Preservative: Na2S2O3	Matrix: WATER	Matrix: SOIL	Matrix: PRODUCT	Volatile Organic Compounds by EPA 8260**	Semi-Volatile Organic Compounds by EPA 8270**					Date due:	Date due: March 9, 2006	For Lab Use Only
GB001A - Product Sample 2	2/21/06				1					X					X	X	X						X	

Relinquished by:	Date	Time	Received by:
[signature] KIFF Analytical	030606	1500	
Relinquished by:	Date	Time	Received by:
Relinquished by:	Date	Time	Received by Laboratory:
	3/3/06	0830	[signature] CEL

Remarks: **Standard archiving of 45 days; Analyses on the dark globules only (Product), not on the water phase; Care should be used in opening the container, as hand cleanser may still be present on the outside of the bottle and cap.

Bill to: Accounts Payable

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 06 - 03 - 0174

Cooler 1 of 1

SAMPLE RECEIPT FORM

CLIENT: Kiff **DATE:** 3/3/06

TEMPERATURE – SAMPLES RECEIVED BY:

CALSCIENCE COURIER:

_____ Chilled, cooler with temperature blank provided.
_____ Chilled, cooler without temperature blank.
_____ Chilled and placed in cooler with wet ice.
_____ Ambient and placed in cooler with wet ice.
_____ Ambient temperature.
_____ °C Temperature blank.

LABORATORY (Other than Calscience Courier):

3.3 °C Temperature blank.
_____ °C IR thermometer.
_____ Ambient temperature.

Initial: JH

CUSTODY SEAL INTACT:

Sample(s): _____ Cooler: ✓ No (Not Intact): _____ Not Applicable (N/A): _____

Initial: JH

SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody document(s) received with samples	✓		
Sample container label(s) consistent with custody papers	✓		
Sample container(s) intact and good condition	✓		
Correct containers for analyses requested	✓		
Proper preservation noted on sample label(s)			✓
VOA vial(s) free of headspace.			✓
Tedlar bag(s) free of condensation			✓

Initial: JP

COMMENTS:

KIFF ANALYTICAL LLC
2795 2nd Street Suite 300
Davis, CA 95616
Lab: 530.297.4800
Fax: 530.297.4808

Lab No. 48663

Page 1 of 1

Chain-of-Custody Record and Analysis Request

Project Contact (Hardcopy or PDF To): Matthew Ryder-Smith	**California EDF Report?** ☐ Yes ☑ No
Company / Address: 229 Tewksbury Ave, Point Richmond, CA	Recommended but not mandatory to complete this section: **Sampling Company Log Code:** CWGO
Phone No.: 510-307-9943 **Fax No.:** 510-232-2823	**Global ID:**
Project Number: GB001A **P.O. No.:**	**EDF Deliverable To (Email Address):**
Project Name: Markus Supply	**Sampler Signature:**
Project Address: APN # 001-0125-001-00, Oakland CA 94607	

Sample Designation	Sampling: Date	Sampling: Time	Container: 40 ml VOA	Container: SLEEVE	Container: POLY	Container: AMBER	Container: Glass	Preservative: HCl	Preservative: HNO_3	Preservative: ICE	Preservative: NONE	Matrix: WATER	Matrix: SOIL	Matrix: PRODUCT	BTEX (8021B)	BTEX/TPH Gas/MTBE (8021B/M8016)	TPH as Diesel (M8015)	TPH as Motor Oil (M8015)	TPH Gas/BTEX/MTBE (8260B)	5 Oxygenates/TPH Gas (8260B)	7 Oxygenates/TPH Gas (8260B)	5 Oxygenates (8260B)	7 Oxygenates (8260B)	Lead Scav. (1,2 DCA & 1,2 EDB - 8260B)	EPA 8260B (Full List)	Volatile Halocarbons (EPA 8260B)	Lead (7421/239.2) TOTAL ☐ V.E.T. ☐	8260 / 8270			TAT	For Lab Use Only
GB001A - Product Sample 2	2/21/2006						X							X														X			1 wk	01

TAT: 12hr ○ 24hr ○ 48hr ○ 72hr ○ 1wk ◉ 2wk ○

	Date	Time	
Relinquished by:	03/01/06		Received by:
Relinquished by:			Received by:
Relinquished by:	030106	13K	Received by Laboratory:

Remarks:

Please keep sample for future testing

Bill to:

KIFF Analytical LLC

Report Number : 49279
Date : 04/06/2006

Matthew Ryder-Smith
Clearwater Group, Inc.
229 Tewksbury Avenue
Point Richmond, CA 94801

Subject : 2 Water Samples
Project Name : Markus Supply
Project Number : GB001C

Dear Mr. Ryder-Smith,

Chemical analysis of the samples referenced above has been completed. Summaries of the data are contained on the following pages. Sample(s) were received under documented chain-of-custody. US EPA protocols for sample storage and preservation were followed.

Kiff Analytical is certified by the State of California (# 2236). If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,

Joel Kiff

KIFF Analytical LLC

Report Number : 49279
Date : 04/06/2006

Subject : 2 Water Samples
Project Name : Markus Supply
Project Number : GB001C

Case Narrative

Non-standard containers were received for TPH as Gasoline analysis. Water from the original amber bottle samples was decanted into non-preserved VOA vials prior to TPH as Gasoline analysis.

Approved By: Joel Kiff

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

KIFF Analytical LLC

Report Number : 49279
Date : 04/06/2006

Project Name : **Markus Supply**
Project Number : **GB001C**

Sample : **Area II** Matrix : Water Lab Number : 49279-01
Sample Date :03/30/2006

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
TPH as Gasoline	**250**	50	ug/L	EPA 8260B	04/05/2006
Toluene - d8 (Surr)	106		% Recovery	EPA 8260B	04/05/2006
4-Bromofluorobenzene (Surr)	97.8		% Recovery	EPA 8260B	04/05/2006
TPH as Diesel	**880**	50	ug/L	M EPA 8015	04/01/2006
TPH as Motor Oil	**< 100**	100	ug/L	M EPA 8015	04/01/2006
Octacosane (Diesel Surrogate)	80.0		% Recovery	M EPA 8015	04/01/2006

Sample : **Area III** Matrix : Water Lab Number : 49279-02
Sample Date :03/30/2006

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
TPH as Gasoline	**1200**	50	ug/L	EPA 8260B	04/04/2006
Toluene - d8 (Surr)	108		% Recovery	EPA 8260B	04/04/2006
4-Bromofluorobenzene (Surr)	95.2		% Recovery	EPA 8260B	04/04/2006
TPH as Diesel	**4000**	50	ug/L	M EPA 8015	04/01/2006
TPH as Motor Oil	**870**	100	ug/L	M EPA 8015	04/01/2006
Octacosane (Diesel Surrogate)	87.4		% Recovery	M EPA 8015	04/01/2006

Approved By: Joel Kiff

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800

Report Number : 49279

Date : 04/06/2006

QC Report : Method Blank Data

Project Name : **Markus Supply**

Project Number : **GB001C**

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
TPH as Diesel	< 50	50	ug/L	M EPA 8015	04/01/2006
TPH as Motor Oil	< 100	100	ug/L	M EPA 8015	04/01/2006
Octacosane (Diesel Surrogate)	72.8		%	M EPA 8015	04/01/2006
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	04/04/2006
Toluene - d8 (Surr)	97.6		%	EPA 8260B	04/04/2006
4-Bromofluorobenzene (Surr)	103		%	EPA 8260B	04/04/2006
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	04/05/2006
Toluene - d8 (Surr)	108		%	EPA 8260B	04/05/2006
4-Bromofluorobenzene (Surr)	98.6		%	EPA 8260B	04/05/2006

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Report Number : 49279

Date : 04/06/2006

QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : **Markus Supply**

Project Number : **GB001C**

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
TPH as Diesel	Blank	<50	1000	1000	899	1070	ug/L	M EPA 8015	4/1/06	89.9	107	17.8	70-130	25
Benzene	49292-06	<0.50	40.0	40.0	38.3	37.4	ug/L	EPA 8260B	4/4/06	95.7	93.4	2.37	70-130	25
Toluene	49292-06	<0.50	40.0	40.0	36.8	36.7	ug/L	EPA 8260B	4/4/06	92.1	91.8	0.351	70-130	25
Benzene	49297-02	<0.50	40.0	40.0	39.0	38.0	ug/L	EPA 8260B	4/5/06	97.4	95.0	2.48	70-130	25
Toluene	49297-02	<0.50	40.0	40.0	41.6	40.8	ug/L	EPA 8260B	4/5/06	104	102	1.77	70-130	25

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Report Number : 49279

Date : 04/06/2006

QC Report : Laboratory Control Sample (LCS)

Project Name : **Markus Supply**

Project Number : **GB001C**

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Benzene	40.0	ug/L	EPA 8260B	4/4/06	86.3	70-130
Toluene	40.0	ug/L	EPA 8260B	4/4/06	87.2	70-130
Benzene	40.0	ug/L	EPA 8260B	4/5/06	87.7	70-130
Toluene	40.0	ug/L	EPA 8260B	4/5/06	95.4	70-130

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Calscience
Environmental
Laboratories, Inc.

April 07, 2006

Joel Kiff
Kiff Analytical
2795 2nd Street, Suite 300
Davis, CA 95616-6593

Subject: **Calscience Work Order No.:** **06-04-0077**
Client Reference: **Markus Supply**

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 4/4/2006 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Systems Manual, applicable standard operating procedures, and other related documentation. The original report of any subcontracted analysis is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Calscience Environmental
Laboratories, Inc.
Stephen Nowak
Project Manager

Calscience Environmental Laboratories, Inc.

Analytical Report

Kiff Analytical
2795 2nd Street, Suite 300
Davis, CA 95616-6593

Date Received: 04/04/06
Work Order No: 06-04-0077
Preparation: EPA 3010A Total
Method: EPA 6010B
Units: mg/L

Page 1 of 1

Project: Markus Supply

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
Area II	**06-04-0077-1**	**03/30/06**	**Aqueous**	**04/04/06**	**04/05/06**	**060404L04**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Cadmium	0.0270	0.0050	1		Nickel	0.849	0.005	1	
Chromium	0.544	0.005	1		Zinc	70.3	0.1	10	
Lead	0.543	0.010	1						

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
Area III	**06-04-0077-2**	**03/30/06**	**Aqueous**	**04/04/06**	**04/05/06**	**060404L04**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Cadmium	0.399	0.005	1		Nickel	1.97	0.00500	1	
Chromium	1.15	0.00500	1		Zinc	113	0.100	10	
Lead	15.2	0.0100	1						

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
Method Blank	**097-01-003-5,976**	**N/A**	**Aqueous**	**04/04/06**	**04/05/06**	**060404L04**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Cadmium	ND	0.00500	1		Nickel	ND	0.00500	1	
Chromium	ND	0.00500	1		Zinc	ND	0.0100	1	
Lead	ND	0.0100	1						

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Kiff Analytical
2795 2nd Street, Suite 300
Davis, CA 95616-6593

Date Received: 04/04/06
Work Order No: 06-04-0077
Preparation: EPA 3010A Total
Method: EPA 6010B

Project Markus Supply

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
Area II	**Aqueous**	**ICP 3300**	**04/04/06**	**04/05/06**	**060404S04**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Cadmium	103	101	82-124	2	0-7	
Chromium	97	86	86-122	6	0-8	
Lead	100	87	84-120	6	0-7	
Nickel	95	82	84-120	5	0-7	3
Zinc	4X	4X	89-131	4X	0-8	Q

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Kiff Analytical
2795 2nd Street, Suite 300
Davis, CA 95616-6593

Date Received: N/A
Work Order No: 06-04-0077
Preparation: EPA 3010A Total
Method: EPA 6010B

Project: Markus Supply

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
097-01-003-5,976	Aqueous	ICP 3300	04/04/06	04/05/06	060404L04

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Cadmium	106	106	80-120	0	0-20	
Chromium	105	105	80-120	0	0-20	
Lead	106	106	80-120	0	0-20	
Nickel	106	107	80-120	1	0-20	
Zinc	103	103	80-120	0	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 06-04-0077

Qualifier	Definition
*	See applicable analysis comment.
1	Surrogate compound recovery was out of control due to a required sample dilution, therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike or Matrix Spike Duplicate compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported with no further corrective action required.
A	Result is the average of all dilutions, as defined by the method.
B	Analyte was present in the associated method blank.
C	Analyte presence was not confirmed on primary column.
E	Concentration exceeds the calibration range.
H	Sample received and/or analyzed past the recommended holding time.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
N	Nontarget Analyte.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
U	Undetected at the laboratory method detection limit.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

KIFF Analytical LLC

2795 Second Street, Suite 300
Davis, CA 95616
Lab: 530.297.4800
Fax: 530.297.4808

Cal Science Environmental
7440 Lincoln Way
Garden Grove, CA 92841
714-895-5494

Lab No. 0077

Chain-of-Custody Record and Analysis Request

Project Contact (Hardcopy or PDF to): Troy Turpen

EDF Report? __ Yes _X_ No

Recommended but not mandatory to complete this section:

Company/Address: Kiff Analytical, LLC

Sampling Company Log Code:

Global ID:

Phone No.: FAX No.:

EDF Deliverable to (Email Address):

Project Number: GB001C

P.O. No.: 49279

Project Name: Markus Supply

E-mail address: inbox@kiffanalytical.com

Project Address:

Sample Designation	Sampling Date	Sampling Time	Container: Glass	Container: Poly	Container: Sleeve	Container: Amber	Container: Other	Preservative: HCl	Preservative: HNO3	Preservative: Other	Preservative: NONE	Preservative: H2SO4	Matrix: WATER	Matrix: SOIL	Matrix: Other	Analysis Request: LUFT 5 Metals	Analysis Request: Other	Date due: April 7, 2006	For Lab Use Only
Area II	03/30/06	1240				1						X	X			X		X	
Area III	03/30/06	1400				1						X	X			X		X	

Relinquished by:	Date	Time	Received by:
[illegible] Kiff Analytical	040306	1900	
Relinquished by:	Date	Time	Received by:
Relinquished by: CD	4-4-06	0830	Received by Laboratory: [illegible] CEL

Remarks:

Bill to: Accounts Payable

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 06 - 04 - 0077

Cooler 1 **of** 1

SAMPLE RECEIPT FORM

CLIENT: KIFF ANALYTICAL **DATE:** 4-4-06

TEMPERATURE – SAMPLES RECEIVED BY:

CALSCIENCE COURIER:

_____ Chilled, cooler with temperature blank provided.
_____ Chilled, cooler without temperature blank.
_____ Chilled and placed in cooler with wet ice.
_____ Ambient and placed in cooler with wet ice.
_____ Ambient temperature.
_____ °C Temperature blank.

LABORATORY (Other than Calscience Courier):

3.2 °C Temperature blank.
_____ °C IR thermometer.
_____ Ambient temperature.

Initial: WB

CUSTODY SEAL INTACT:

Sample(s): _____ Cooler: ✓ No (Not Intact) : _____ Not Applicable (N/A): _____

Initial: WB

SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody document(s) received with samples	✓		
Sample container label(s) consistent with custody papers	✓		
Sample container(s) intact and good condition	✓		
Correct containers for analyses requested	✓		
Proper preservation noted on sample label(s)	✓		
VOA vial(s) free of headspace.			✓
Tedlar bag(s) free of condensation			✓

Initial: WB

COMMENTS:

KIFF Analytical LLC

2795 2nd Street, Suite 300
Davis, CA 95616
Lab: 530.297.4800
Fax: 530.297.4802

SRG # / Lab No. 49279 Page 1 of 1

Chain-of-Custody Record and Analysis Request

Project Contact (Hardcopy or PDF To): Matthew Ryder-Smith

California EDF Report? ☐ Yes ☒ No

Company / Address: Clearwater Group

Sampling Company Log Code:

Phone #: 510-307-9943 Fax #: 510-232-2823

Global ID:

Project #: GB001C P.O. #:

EDF Deliverable To (Email Address):

Project Name: Markus Supply

Sampler Signature: Robert L. Nelson

Project Address: 6266 2nd Street Oakland, CA

Sample Designation	Sampling Date	Sampling Time	Container: 40 ml VOA	Sleeve	Poly	Glass	Tedlar	Preservative: HCl	HNO_3	None	H_2SO_4	Matrix: Water	Soil	Air	MTBE (EPA 8260B) per EPA 8021 level @ 5.0 ppb	MTBE (EPA 8260B) @ 0.5 ppb	BTEX (EPA 8260B)	TPH Gas (EPA 8260B)	5 Oxygenates (EPA 8260B)	7 Oxygenates (EPA 8260B)	Lead Scav. (1,2 DCA & 1,2 EDB-EPA 8260B)	Volatile Halocarbons (EPA 8260B)	Volatile Organics Full List (EPA 8260B)	Volatile Organics (EPA 524.2 Drinking Water)	TPH as Diesel (EPA 8015M)	TPH as Motor Oil (EPA 8015M)	Total Lead (EPA 6010)	W.E.T. Lead (STLC)	Luft 5	TPH g/d/mo	TAT	For Lab Use Only
Area II	3-30	1240				1				X		X																	X	X		01
Area III	2006	1400				1				X		X																	X	X		02

TAT: ☐ 12 hr ☐ 24 hr ☐ 48 hr ☐ 72 hr ☒ 1 wk

Relinquished by:	Date	Time	Received by:
Robert L. Nelson	3-30-2006		
Relinquished by:	Date	Time	Received by:
Relinquished by:	Date	Time	Received by Laboratory:
	033106	1530	[illegible] Kiff Analytical LLC

Remarks:

Bill to:

For Lab Use Only: Sample Receipt

Temp °C	Initials	Date	Time	Therm. ID #	Coolant Present
1.8	TJA	033106	1541	TR-4	(Yes) No

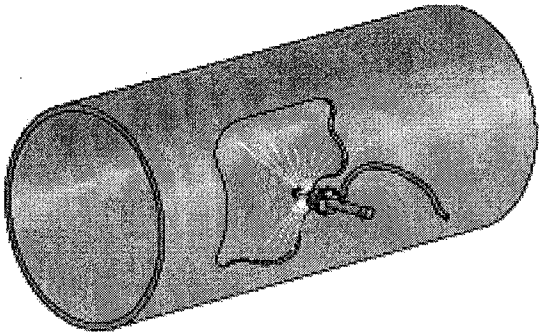
Distribution: White - Lab; Pink - Originator
Rev: 051805

APPENDIX C

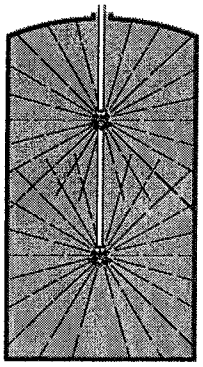
CLEARWATER
GROUP, INC.
~~CLEARWATER GROUP~~
Environmental Services

UST Cleaning & Abandonment Procedures

Underground storage tanks (USTs) are frequently abandoned in place if the safety of the street or building is at risk during a conventional UST removal by excavation. In these cases, a Clearwater licensed civil engineer reviews the plans and situations and evaluates the options. Where abandonment of a UST in place is needed an industrial cleaning process should be used to insure that the UST has been adequately cleaned of the residual hydrocarbon liquids.



View looking down on top of UST
Cleaning uses a 360° spray coverage



Cleaning in a vertical UST.

Clearwater will use a Rokon Fluid Driven UST Washing Nozzle. The nozzle rinses USTs up to 12 feet in diameter. A flexible stainless-steel wrapped hose will be placed in the UST and moved around to the extent possible. The washing nozzle on the tip of the flexible stainless-steel wrapped hose rotates at approximately 30 RPM. The flow rate will be about 10 gallons per minute at 230 psi (16 bar). The fluid driven UST-washing nozzle is designed to spray at over 200 psi in a 360-degree pattern.

FAST-TEK pressure injection equipment will power the washing nozzle at 200-250 psi. The nozzle will fit inside the 2-inch diameter (outer diameter) fill port. The spray will be potable water. Surfactants and 3% hydrogen peroxide may be added to the water to help remove and destroy any residual hydrocarbons in the UST, prior to grouting. The liquid wastes will be removed using a vacuum truck hose through the 2-inch diameter fill port. The cleaning will continue until the water is relatively clean. All liquid wastes will be collected for proper disposal. The neat cement grout (1-2 sack mix) will be pumped into the UST and vibrated with a concrete vibrator. Cement will be used to top off the fill port.

APPENDIX D

CLEARWATER
GROUP, INC.
Environmental Services
CLEARWATER GROUP

Direct-Push Drilling Investigation Procedures

The direct push method of soil boring has several advantages over hollow-stem auger drill rigs. The direct push method produce no drill cuttings, is capable of 150 to 200 feet of boring or well installation per workday. Direct push can be used for soil gas surveys, soil sampling, groundwater sampling, installation of small-diameter monitoring wells, and components of remediation systems such as air sparge points. The equipment required to perform direct push work is varied ranging from a roto-hammer and operator to a pickup truck-mounted rig capable of substantial static downward force combined with percussion force. This method allows subsurface investigation work to be performed in areas inaccessible to conventional drill rigs such as in basements, beneath canopies, or below power lines. Direct push equipment is ideal at sites with unconsolidated soil or overburden, and sampling depths of less than 30 feet. This method is not appropriate for boring through bedrock or gravelly soils.

Permitting and Site Preparation

Prior to direct push boring work, Clearwater Group will obtain all necessary permits and locate all underground and above ground utilities through Underground Service Alert (USA) and a thorough site inspection. All drilling equipment will be inspected daily and will be maintained in safe operating condition. All down-hole drilling equipment will be cleaned prior to arriving on-site. Working components of the rig near the borehole, as well as driven casing and sampling equipment will be thoroughly decontaminated between each boring location by either steam cleaning or washing with an Alconox soap solution. All drilling and sampling methods will be consistent with ASTM Method D-1452-80 and county, state and federal regulations.

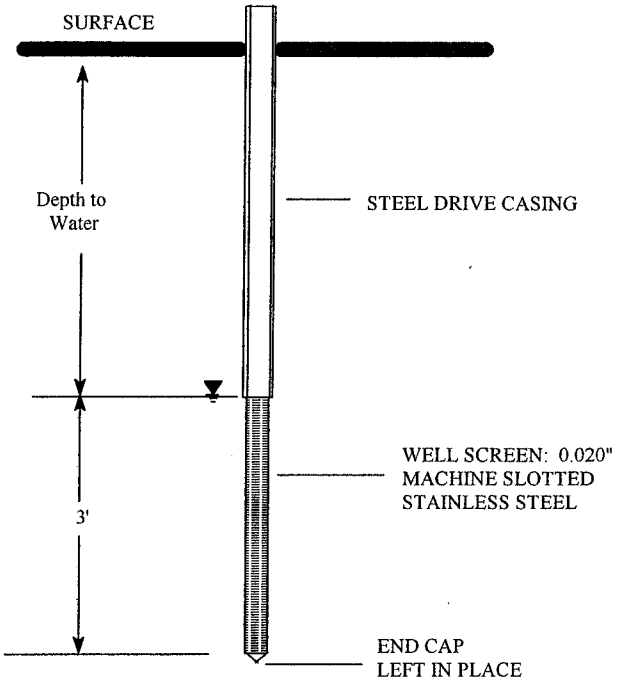
Boring Installation and Soil Sampling

Direct push uses a 1.5-inch outer barrel with an inner rod held in place during pushing. Soil samples are collected by penetrating to the desired depth, retracting the inner rod and attaching a spoon sampler. The sampler is then thrust beyond the outer barrel into native soil. Soil samples are recovered in brass or stainless containers lining the spoon sampler.

Soil removed from the upper tube section is used for lithologic descriptions (according to the Unified Soil Classification System) and for organic vapor field analysis. If organic vapors will be analyzed in the field, a portion of each soil sample will be placed in a plastic zip-lock bag. The bag will be sealed and warmed for approximately 10 minutes to allow vapors to be released from the soil sample and diffuse into the head space of the bag. The bag is then pierced with the probe of a calibrated organic vapor detector. The results of the field testing will be noted with the lithologic descriptions on field exploratory soil boring log. For the soil samples selected for laboratory analysis, the sample tubes will be covered on both ends with Teflon™ tape and plastic end caps. The samples will then be labeled, documented on a chain-of-custody form and placed in a cooler for transport to a state certified analytical laboratory.

CLEARWATER
GROUP, INC.
Environmental Services

Temporary Well Installation and Groundwater Sampling



Groundwater samples are collected by removing the inner rod and attaching a 4 foot stainless steel screen with a drive point at the end (Figure 1). The screen and rod is then inserted in the outer barrel and driven to the desired depth where the outer rod is retracted to expose the screen. If the stainless well screen does not produce enough water for sampling a 1-inch PVC screen can be installed in the boring and the outer rod retracted to leave a temporary well point for collecting groundwater samples or water levels.

Monitoring Well Installation and Development

Permanent small-diameter monitoring wells are installed by driving the outer barrel and inner rod as described above. Upon reaching the desired depth the system is removed and 2-inch OD (1/2-inch ID) pre-packed PCV piping is installed. The well plug is created using granular bentonite. The well seal is constructed of cement and sealed at the surface with a conventional "Christy Box" or similar vault. Monitoring wells are developed by bailing the well, then surging the well with a small diameter bailer and removing water until the produced water is clear.

CLEARWATER
GROUP, INC.
Environmental Services

Groundwater Sample Collection and Water Level Measurement

Prior to collecting groundwater from the wells the depths to water are measured in all wells using an electronic water level gauge. Monitoring wells are prepared for sampling by purging a minimum of three well bore volumes. Water is removed using small diameter bailers, a peristaltic pump, or manually using tubing with a check valve at the bottom. Once during removal of each volume the temperature, pH and conductivity are checked and noted on the field sampling form. Successive well volumes are removed until the parameters have stabilized or the well has gone dry. Prior to sampling the well is allowed to recover to within 90% of the stabilized water levels.

Groundwater samples[1] are collected using small diameter bailers. Groundwater samples are decanted into laboratory supplied containers, labeled, noted on a chain-of-custody form and placed on ice for transport to a laboratory.

[1] Small diameter wells often produce small quantity samples and are appropriate for analysis of volatile and aromatic compounds using VOA vials and dissolved metals analysis. Obtaining liter samples can be difficult and time consuming. Monitoring wells installed by the direct push method are most effective at sites where the subsurface soils are coarser than silt, gasoline components are the key contaminants of concern, and the depth to water is not more than 25 feet below ground surface.

APPENDIX E

CLEARWATER
GROUP
Environmental Services

CLEARWATER GROUP
SITE SAFETY PLAN

CLIENT: Malcolm Leader-Picone **CLIENT No:**

CITY: Oakland **JOB NO:** GB001C

ADDRESS: 626 2nd Street, Oakland, California

CLIENT CONTACT No: (510) 444-2404 X 24

FAX NO : (510) 444-1291

ON-SITE MANAGER: Dan Altwarg **CONTACT No:** (415) 454-4200

Cell: 510-772-7625

SCOPE OF WORK (Check all that apply):

Soil Stockpile Sampling (S) ☐
Monitoring Well Sampling.(M) ☐
Monitoring Well Installation (MW) ☐
System Operation and Maintenance (O&M) ☐
Borehole Installation (BHI) X
UST Closure in Place (UST) X

FIELD DATE(S):	TYPE OF WORK						SSO
	S	M	MW	O&M	BHI	UST	
	S	M	MW	O&M	BHI	UST	
	S	M	MW	O&M	BHI	UST	
	S	M	MW	O&M	BHI	UST	
	S	M	MW	O&M	BHI	UST	
	S	M	MW	O&M	BHI	UST	
	S	M	MW	O&M	BHI	UST	
	S	M	MW	O&M	BHI	UST	

229 Tewksbury Avenue ◆ Point Richmond, California 94801 ◆ Telephone: 510-307-9943 ◆ Fax: 510-232-2823

CLEARWATER
GROUP, INC.
Environmental Services

TABLE OF CONTENTS

FIGURES

ATTACHMENT

1.0 PURPOSE

This Site Safety Plan (SSP) establishes the safety guidelines and requirements for work at 626 2nd Street, Oakland, California (Site Vicinity Map - Figure 1) and addresses the expected potential hazards that may be encountered during this project.

The work tasks are as follows:

- Driving soil borings using a Geoprobe rig.
- Emptying 5 underground storage tanks (USTs) of sludge and liquid contents.
- Rinsing five USTs and removing the rinsate.
- Grouting the USTs and pipe runs with cement slurry.
- Disposal of all fluids.

The provisions in this SSP will apply to Clearwater Group, Inc. (Clearwater) employees and any subcontractors working for Clearwater at the job site. All personnel working for Clearwater, including subcontractors, at the job site must read this SSP, and sign the attached Compliance Agreement, Section 11.0 on Page 13, daily before engaging in work at this site.

2.0 FACILITY BACKGROUND

2.1 Site Layout and History (Site vicinity - Fig. 1, site plan - Figs. 2 and 3)

Previous Site Operations: Pickle Factory; bottle cleaning, junkyard, PG&E vehicle storage, materials storage, door manufacturer From: before 1912 To: 1993

Is site currently active? [Yes] No hardware storage warehouse

Work surface is: Asphalt [Concrete] Gravel/Dirt [Sidewalk]

ASTs/USTs present?: [Yes] No Location: 5 in sidewalk between warehouse and street

Number of USTs removed: 0 Location: _____ Date removed _____

2.2 Soil Contamination

Maximum TPH-d concentration known in soil: ethylbenzene 45 parts per billion (ppb), xylenes 65 ppb,

2.3 Groundwater Wells and Contamination

Number of active monitoring wells at the site: O

Maximum TPH-d concentration in groundwater to date: 0.21 parts per million (ppm) diesel

Location: adjacent to tanks

2.4 Remediation

Previous remedial system operation: Not Applicable From To:
Active remediation: Not Applicable
Number of SVE wells: 0 AS wells: 0 GWE wells: 0
Other (trenches, sumps): N/A
Remediation equipment on site: N/A

3.0 JOB HAZARD ANALYSIS

3.1 Chemical Hazards

The contaminants expected to be encountered on-site are motor oil, gasoline, and diesel its hydrocarbon constituents along with creosote and its constituents. The potential breathing zone concentrations of petroleum hydrocarbons and creosote are not expected to reach the permissible exposure limits (PEL) or the threshold limit values (TLV). The potential exposure pathways are inhalation and skin contact. The personnel protective equipment (PPE) specified in this Plan will be mandatory for field personnel. Engineering controls (fans) will be used to flush the ambient breathing zone during site work.

The anticipated contaminants of concern are described briefly below. Information regarding the physical characteristics, incompatibilities, toxic effects, routes of entry, and target organs has been summarized from the NIOSH Pocket Guide to Chemical Hazards (February 2004).

BENZENE: Benzene is colorless, aromatic liquid that may create an explosion hazard. It is incompatible with strong oxidizers, chlorine, and bromine with iron. Benzene is irritating to the eyes, nose, and respiratory system. Prolonged exposure may result in giddiness, headache, nausea, staggering gait, fatigue, bone marrow depression, or abdominal pain. Routes of entry include inhalation, absorption, ingestion, and skin or eye contact. Its target organs are the blood, central nervous system, skin, bone marrow, eyes, and respiratory system. Benzene is carcinogenic.

TOLUENE: Toluene is a colorless, aromatic liquid that may create an explosion hazard. It is incompatible with strong oxidizers. Prolonged exposure may result in fatigue, confusion, euphoria, dizziness, headache, dilation of pupils, eye tearing, insomnia, dermatitis, or photophobia. Routes of entry are inhalation, absorption, ingestion, and skin or eye contact. Its target organs are the central nervous system, liver, kidneys, and skin.

ETHYLBENZENE: Ethylbenzene is a colorless aromatic liquid that may create an explosion hazard. It is incompatible with strong oxidizers and irritates the eyes and mucous membranes. Prolonged exposure may result in headache, dermatitis, narcosis, or coma. Routes of entry include

inhalation, ingestion, and skin or eye contact. Its target organs are the eyes, upper respiratory system, skin, and the central nervous system.

XYLENES: Xylenes are a colorless, aromatic liquid that may create an explosion hazard. It is incompatible with strong oxidizers and irritates the eyes, nose, and throat. Prolonged exposure may result in dizziness, excitement, drowsiness, staggering gait, corneal vacuolization, vomiting, abdominal pain, or dermatitis. Routes of entry are inhalation, absorption, ingestion, and skin or eye contact. Its target organs are the central nervous system, eyes, gastrointestinal tract, blood, liver, kidneys, and skin.

CREOSOTE: Creosote (coal tar residue) is a black to dark brown residue. It is ignitable as a liquid or solid. It is incompatible with strong oxidizers. Prolonged exposure can result in loss of vision, vomiting, headache, convulsions, redness or blistering of skin. Its target organs are the respiratory system, skin, bladder and kidneys.

A photo ionization detector (PID) will be used to measure hydrocarbon concentrations in the breathing zone throughout the work day. The PID will be calibrated daily using 100 ppm iso-butylene calibration gas and recorded in the daily field log. The PID will monitor the work zone at the breathing zone height of approximately 5 feet above the ground surface. Measurements will be read and recorded every hour in the daily field log.

3.1.1 Permissible Exposure Limits

The following are time weighted average exposure limits (TWAs) of vapor in air based upon that exposure incurred in an average 8-hour day. The numbers referenced below were taken from "The Hazardous Chemical Desk Reference", 5th edition by Richard J. Lewis Sr. (2002).

• TPH-d:	none listed	8-hour max for 24 hours
• benzene:	10-ppm (parts per million)	8-hour max for 24 hours
• toluene:	200-ppm	8-hour max for 24 hours
• ethylbenzene:	100-ppm	8-hour max for 24 hours
• xylenes:	100-ppm	8-hour max for 24 hours
• Creosote	10-ppm	8-hour max for 24 hours

The use of respiratory protection is required once an action level of 10 ppm for benzene or creosote is reached.

The PID measures the total amount of petroleum hydrocarbons in the breathing space and cannot distinguish between the various contaminants (benzene, toluene, etc.). Therefore, the most conservative concentration (10 ppm for benzene) is selected as the action level.

3.1.2 Exposure Controls

Field personnel shall be informed of the non-visible effects of the toxins described above. The controls to limit potential for exposure to chemical hazards are addressed below:

- Fans directing air out of the contact zone may control inhalation of contaminants. The use of a half face respirator equipped with organic vapor cartridges is required if/when PID level exceeds 10 ppm of hydrocarbons. Engineering controls such as high volume air moving fans and mixing equipment can be used to minimize exposure and dilute the gases in the ambient air.

- Ingestion of contaminants will be controlled by prohibiting eating, drinking, smoking, and chewing gum/tobacco or other substances while working. In addition, workers shall wash their hands and face after leaving the work zone.

- Absorption of contaminants will be controlled by wearing protective clothing such as shirts with long sleeves, long legged trousers, and gloves. Tyvek coveralls will be worn when deemed necessary. Face shields shall be worn while using pressurized liquids while rinsing or grouting the USTs.

- Accidental injection of contaminants will be controlled by wearing heavy work or rubber gloves and by stopping and depressurizing any leaking powered equipment.

- A decontamination area will be set up prior to initiating all work. The decontamination area will include an eyewash station.

3.2 Physical Hazards

The potential physical hazards expected at the job site are addressed below:

- The potential for physical injury exists from the operation of moving or powered equipment such as drill rigs and trucks. Moving equipment may cause injury by crushing, from falling or hurtling objects, and penetration of subsurface energized utilities or structures. Use of brightly colored vests, steel toe boots, hard hats, and safety glasses will be required when in the work area. No person other than the equipment operator shall approach within 5-feet of activated equipment at any time.

- Backup alarms are required on all vehicles.

- The potential for physical injury exists when pumping rinsate to clean the USTs or fill the USTs with cement slurry, should any high pressure leak occur and contact with the contents occur. The bodily injection of hydraulic fluid , or any other fluid under pressure, requires immediate medical attention.

- The potential for physical injury exists from public traffic on the site. Work will be performed in the public right-of-way. The work zone will be barricaded and the sidewalk will be closed. The public will be prohibited from the work area by establishing and monitoring the work area perimeter, using barricades, caution tape and work area signage. The perimeter will be moved along with the work area and only authorized personnel will be allowed within the work perimeter.

- The potential for burns from hot surfaces may exist from the operation of internal combustion engines. Exhaust pipes can burn exposed flesh. All hot surfaces shall be allowed to cool or be handled with thick work gloves.

- The potential for noise hazards exist at the site from the operation of equipment, such as a cement slurry mixer, UST cleaning pump, or Geoprobe rig. It is not expected that noise levels will exceed the CAL-OSHA permissible exposure level of 90 dB. However, workers should be aware of the presence of these hazards and take steps to avoid them. Hearing protection, though not required, shall be available to all personnel within the job site in the event noise levels exceed worker comfort level or the permissible exposure level of 90 dB. As a rule of thumb if workers cannot communicate with each other over a distance greater than 5 feet due to ambient noise hearing protection should be used.

- Personnel should realize that when PPE, such as respirators, safety glasses or gloves, is worn their visibility, hearing, and manual dexterity are impaired.

- With a "buddy team" work team, each member is responsible for the awareness/safety of the other team member(s).

- Hazards could ensue from boring into subsurface features, (sewer lines/mains, electrical lines/mains, water lines/mains,) with the possible result of disrupting a conduit or encountering unknown subsurface elements (electrocution, injury from pressurized mains bursting, etc.).

- An explosive hazard exists from vapors within the UST. Engineering controls include UST ventilation, inerting the UST and monitoring with a combustible gas indicator (CGI).

3.3 Heat Stress

The potential for heat stress is present if the air temperature exceeds 80°F, clothing prevents sweat from evaporating, or shade is not available. Some signs and symptoms of heat stress are:

- Heat rash may result from continuous exposure to heat or humid air.

- Heat cramps are caused by heavy sweating with inadequate electrolyte replacement. Signs and symptoms include: muscle spasms, heavy sweating, dizziness, nausea and fainting.

- Heat exhaustion occurs from increased stress on various body organs including inadequate blood circulation due to cardiovascular insufficiency or dehydration. Signs and symptoms include: pale, cool, moist skin; heavy sweating; dizziness; nausea and fainting.

- Heat stroke is the most serious form of heat stress. Temperature regulation fails and the body temperature rises to critical levels. Immediate action must be taken to cool the body before serious injury and death occurs. Competent medical help must be obtained. Signs and symptoms are: red, hot, unusually dry skin; lack of or reduced perspiration; nausea; dizziness and confusion; strong, rapid pulse and coma.

3.3.1 Heat Stress Monitoring

All personnel (including subcontractors) at the job site shall be monitored for heat stress. Workers at the job site are expected to wear cotton or synthetic work clothes. Monitoring for heat stress will consist of personnel constantly observing each other for any of the heat stress symptoms discussed above. The on-site Safety Officer shall mandate work slowdowns as needed.

3.3.2 Heat Stress Prevention

Heat stress can be avoided by taking the following precautions:

- Adequate liquid intake
- Cooling by water misting
- Shade
- Work early and/or late in the day

3.4 Fire and Explosive Hazards

The potential for fire or explosion exists whenever flammable liquids or vapors are present above lower explosions limit (LEL) concentrations and sufficient oxygen is present to support combustion. These potential fire hazards are addressed below:

- A potential exists for petroleum hydrocarbon vapors to exceed 10 % LEL concentrations within USTS with the lid bolted tightly. When removing the lid stand back and allow enough time for to allow build up vapors to escape. Then use a CGI to determine if the air space within the UST is below 10% LEL. If the LEL concentration in a UST reaches 10%, the UST should be inerted with dry ice until the LEL drops below 10% and the oxygen concentration drops below 15%.

An operative fire extinguisher will be located in each vehicle at the site. The fire extinguishers will be kept under or behind the driver's seat, in an easily reached location. All personnel shall be familiar with fire extinguisher use.

In the event of a fire or explosion, call 911 to summon the local fire department. Be prepared to give the following information: location, nature, and identification of any hazardous materials on site.

If it is safe to do so, site personnel may use fire fighting equipment to extinguish the fire and remove or isolate flammable or other hazardous materials which may contribute to the fire. Otherwise, immediate evacuation of the area is indicated.

In the event of an explosion, all personnel shall be evacuated and the fire department notified. No one shall re-enter the area until it has been cleared by explosives safety personnel.

3.5 Electrical Hazards

No electrical enclosures will be opened unless the electrical power is disconnected. Power will be verified disconnected with a meter prior to working on any circuits.

3.6 Biological Hazards

The potential for biological hazards such as insect and/or animal bites and exposure to poisonous plants is more prevalent in rural areas. Personnel shall use caution when entering areas that may shelter indigenous creatures such as snakes, spiders, ticks and/or rodents. Precautions shall be taken against exposure to poisonous plants like poison oak by wearing protective clothing. Exposed skin should be washed with Tecnu™ skin cleanser.

3.7 General Public Hazards

Use fencing or barricades to define the work zone and prevent the ingress of pedestrians or vehicles.

4.0 EMERGENCY RESPONSE PROCEDURES

The Site Manager, with assistance from the SSO, has responsibility and authority for coordinating all emergency response activities until emergency response authorities arrive and assume control of the site.

4.1 Emergency Medical Procedures

For severe injuries, illnesses, or contaminant exposure:

- Remove the injured or exposed person(s) from immediate danger.
- If possible, partial decontamination should be completed. Wash, rinse, and/or cut off protective clothing and equipment and redress the victim in clean coveralls.
- If decontamination cannot be done, wrap the victim in blankets or plastic sheeting to reduce contamination of other personnel.
- Render emergency first aid and call an ambulance for transport to the local hospital immediately.
- Evacuate other personnel on site to a safe place until the SSO determines that it is safe to resume work.

For minor injuries or illnesses:

- Complete a full decontamination.
- Administer first aid. Minor injuries may be treated on site, but trained medical personnel will examine all injuries. Victims of serious bites or stings will be taken to a hospital.
- Notify the PM and SSO immediately.

4.2 First Aid – Chemical Injury

If the injury to the worker is due to a chemical exposure, the following first aid procedures are to be initialized as soon as possible:

Eye Exposure	If a contaminated solid or liquid gets into the eyes, wash eyes immediately with sterile saline solution, lifting the lower and upper lids occasionally. Continue eye wash for 15 minutes. Cover the eye with a dry pad and obtain medical attention immediately.
Skin Exposure	If a contaminated solid or liquid gets on the skin, promptly wash contaminated skin for 15 minutes using soap or mild detergent and water. If solids or liquids penetrate the clothing, remove the clothing immediately and wash the skin using soap or mild detergent and water. Obtain medical attention immediately if symptoms warrant.

4.3 First Aid – Physical Injury

Animal Bites	Thoroughly wash the wound with soap and water. Flush the area with running water and apply a sterile dressing. Immobilize affected part until a physician has examined the victim. See that the animal is kept alive and in quarantine. Obtain name and address of the owner of the animal.
Burns (minor)	Do not apply vaseline or grease of any kind. Apply cold water until pain subsides. Cover with a wet sterile gauze dressing. Do not break blisters or remove tissues. Seek medical attention.
Burns (severe)	Do not remove adhered particles or clothing. Do not apply ice or immerse in cold water. Do not apply grease, vaseline, or ointment of any kind. Cover burns with thick sterile dressings. Keep burned feet or legs elevated. Seek medical attention immediately.
Cuts	Apply pressure with sterile gauze dressing and elevate the area until bleeding stops. Apply a bandage and seek medical attention.

Eyes	Keep the victim from rubbing the eye. Flush the eye with clean water. If flushing fails to remove the object, apply a dry, protective dressing and consult a physician.
Fainting	Keep the victim lying down with feet elevated. Loosen tight clothing. If victim vomits, roll them onto their side or turn their head to the side. If necessary wipe out their mouth. Maintain an open airway. Bathe face gently with cool water. Unless recovery is prompt, seek medical attention.
Fracture	Deformity of an injured part usually means a fracture. If a fracture is suspected, splint the part as it lies. Do not attempt to move the injured part of the person. Seek medical attention immediately.
Snake Bites	Submerge the bite area in ice water or cover the bite area with ice. Keep bite area as low as possible. Transport the victim immediately to a medical facility.
Insect Bites	Remove the stinger. Keep affected part below the level of the heart. Apply ice bag. For minor bites and stings apply soothing lotions, such as Calamine.
Puncture Wounds	If puncture wound is deeper than skin surface, seek medical attention. Serious infection can arise unless proper treatment is received.
Sprains	Elevate injured part and apply ice bag or cold packs. Do not soak in hot water. If pain and swelling persist, seek medical attention.
Unconsciousness	Do not attempt to give any fluid or solid by mouth. Keep victim flat and maintain an open airway. If victim is not breathing, provide artificial mouth-to-mouth resuscitation and call for an ambulance immediately.

5.0 PERSONAL PROTECTIVE EQUIPMENT

Level D personal protective equipment (PPE) is expected to be the highest protective level required for this project. Modified Level C PPE may be required at the discretion of the Site Safety Officer. The following lists summarize the PPE that shall be used by all field personnel in the work zone:

Level D Protection (shall be worn at all times)

- Boots with steel toes
- Safety glasses
- Chemical splash goggles or face shield for Geoprobe rig operator/cement mixer operator

- Hardhat
- Latex gloves required when handling samples
- Thick work gloves required when handling dry ice
- Long legged trousers
- Long sleeves required for UST liquids pumping tasks.

Modified Level C Protection (to be available at all times.)

- Half-face air purifying respirator with organic vapor/HEPA cartridges will be used if ambient organic vapor concentrations exceed 10 ppm, as indicated by a PID.
- Hearing protection

6.0 TRAINING REQUIREMENTS

All site personnel will be required to have completed 40 hours of basic OSHA-SARA training for personnel assigned to hazardous waste sites, in compliance with OSHA Standard 29 CFR 1910.120, Hazardous Waste Operations and Emergency Response. All site personnel are required to participate in an annual OSHA-SARA 8-hour refresher course.

7.0 MEDICAL SURVEILLANCE PROGRAM

Clearwater personnel engaged in field operations shall participate in the Clearwater Medical Surveillance program, consisting of a preliminary physical examination followed by annual physical examinations, and must be cleared by the examining physician(s) to wear respiratory protection devices and protective clothing for working with hazardous materials. Respiratory fit testing for Clearwater personnel shall be completed every six months. Respirators shall be supplied to Clearwater employees as needed. The applicable requirements under California Administrative Code (CAC) Title 8, Section 5216, available at the Clearwater office, shall be observed.

All subcontractors are responsible for establishing and maintaining a medical surveillance program for their employees.

8.0 EMERGENCY RESPONSE PLAN

In the event of an accident resulting in physical injury, first aid will be administered and the most able-bodied and immediately available person will transport the injured worker to the Kaiser Foundation Hospital. Severely injured personnel will be transported by ambulance to the hospital.

In the event of a fire or explosion, local fire or emergency response agencies will be called by dialing 911. The Project Manager shall be notified next. The Project Manager in turn will notify the Clearwater CEO.

Emergency Telephone Numbers:
Fire and Police.....911
Kaiser Foundation Hospital.....(510) 752-1000

Directions to Hospital: See Figure 3

Start out going southeast on 2nd Street toward Jefferson Street (stay on 2nd Street)- travel 0.2 miles

Turn Left onto Broadway - travel 2.1 miles

Turn Right onto W Macarthur Blvd - travel <0.1 miles

Arrive at 280 W Macarthur Blvd, on left side of road

Additional Contingency Telephone Numbers:
CLEARWATER.....Olivia Jacobs.....(510) 307-9943 ext 223....(510) 590-1099....(cell)
Project Manager.....Robert Nelson.....(510) 307-9943 ext 237
Office Manager.....Sharon Hardin.....(510) 307-9943 ext 221

All cases where an accident has occurred will require filling out an incident/accident report and submitting the report within 48 hours of the accident. Incident /accident forms (Attachment 1) are maintained in each company vehicle.

9.0 KEY SAFETY PERSONNEL AND RESPONSIBILITIES

All personnel working for Clearwater and its subcontractors at the job site are responsible for project safety. Specific individual responsibilities are listed below:

Project Manager: Robert L. Nelson

The Project Manager is responsible for preparation of this SSP. He/she has the authority to provide for the auditing of compliance with the provisions of this SSP, suspend or modify work practices, and to report to Olivia Jacobs, CEO, any individual whose conduct does not meet the provisions presented in this SSP. The Project Manager can be reached at (510) 307-9943 ext 237.

Site Safety Officer: _____ **Date:**_____
Site Safety Officer: _____ **Date:**_____
Site Safety Officer: _____ **Date:**_____
Site Safety Officer: _____ **Date:**_____
Site Safety Officer: _____ **Date:**_____

The Site Safety Officer (SSO) is responsible for the dissemination of the information contained in this SSP to all Clearwater personnel working at the job site, and to the responsible representative(s) of each subcontractor firm working for Clearwater at the job site.

The SSO is responsible for ensuring the following items are adequately addressed and documenting when these items have been addressed:

- Inspection of tools, drilling equipment and safety equipment
- Safety supplies and equipment inventory
- Site-specific training/hazard communication
- Accident/incident reporting
- Decontamination/contamination reduction procedures

The Site Safety Officer and all site personnel shall take the necessary steps to ensure that all personnel are protected from physical hazards, which could include;

- Falling objects such as tools or equipment
- Fall from elevations
- Tripping over hoses, pipes, tools, or equipment
- Slipping on wet or oily surfaces
- Insufficient or faulty protective equipment
- Insufficient or faulty operations, equipment, or tools
- Noise
- Mobile objects, such as spinning augers that may have become dislodged.

The SSO has the authority to suspend work anytime he/she determines the safety provisions set-forth in this SSP are inadequate to ensure worker safety. The SSO or Project Manager must be present during all phases of the site work.

10.0 DOCUMENTATION

All personnel shall sign the compliance agreement (Section 11.0). All personnel training documents, including medical certifications, will be kept with the onsite SSP.

A daily log, completed by the Site Safety Officer in his/her field notebook, shall provide daily documentation. The Site Safety Officer shall record the names of all personnel working for Clearwater, its subcontractors and any site visitor(s). The SSO shall also record accidents, illness and other safety related matters. In the case of an accident, or injury, during field operations the SSO will prepare and submit an Incident/Accident Report (Attachment 1).

and other safety related matters. In the case of an accident, or injury, during field operations the SSO will prepare and submit an Incident/Accident Report (Attachment 1).

SSP prepared by: Jeannette Popp/Robert L. Nelson Date: April 26, 2006

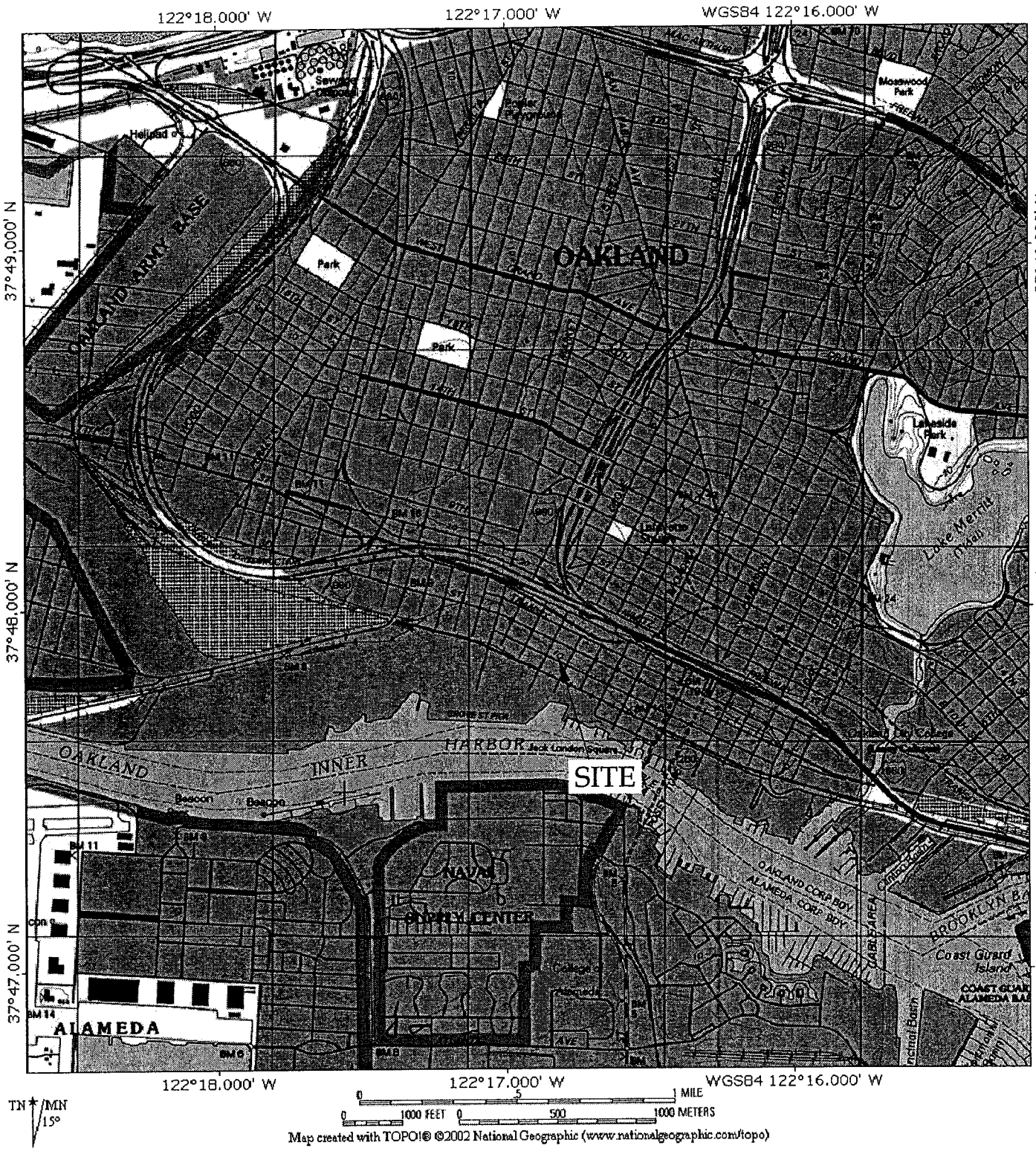
SSP Approved by: _____ Date: _____

11.0 COMPLIANCE AGREEMENT

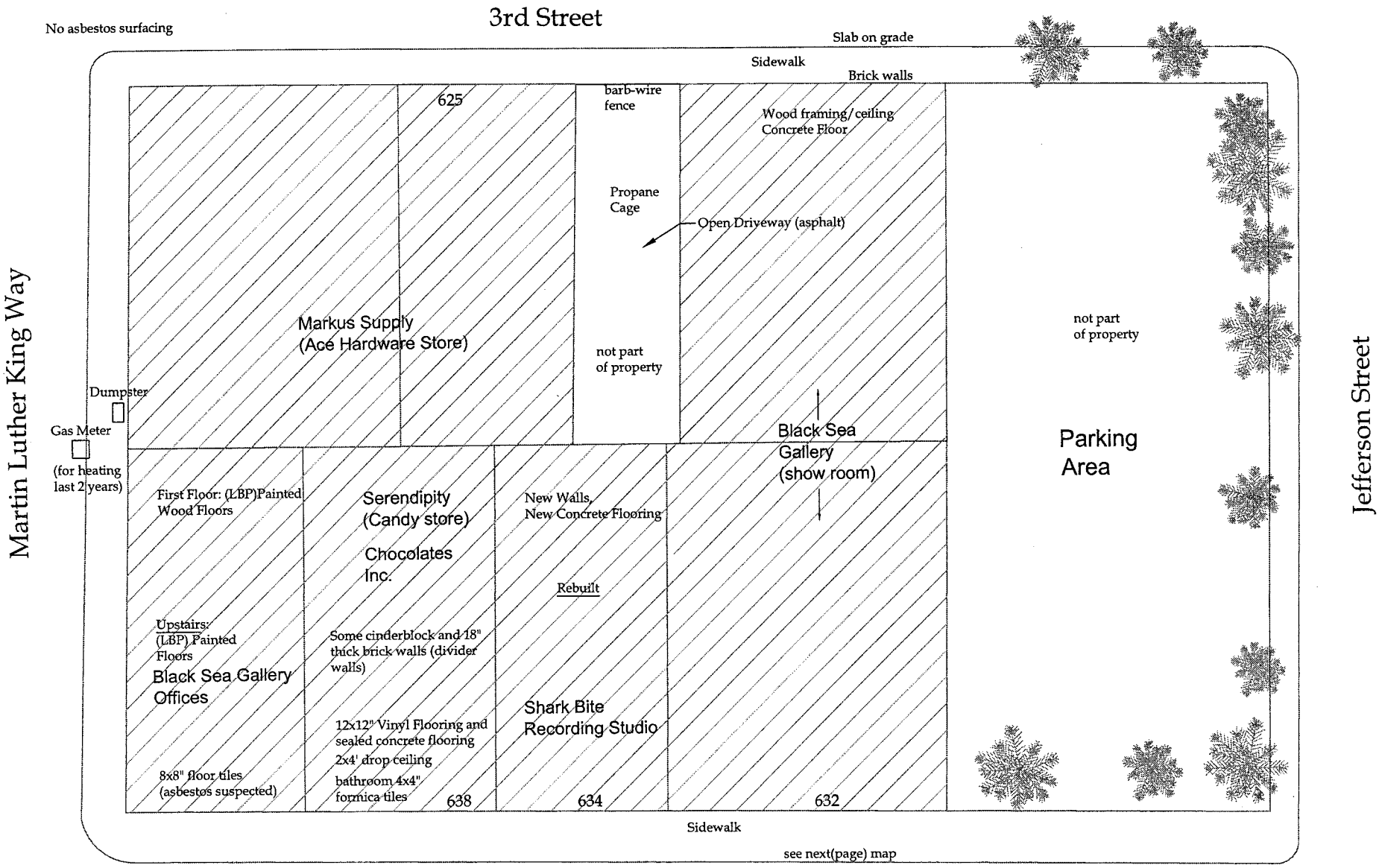
I have read and understand the Site Safety Plan.

I will comply with the safety requirements set forth in this Site Safety Plan by signing below. I agree to notify Clearwater should any unsafe acts be witnessed by me while I am on this site and to immediately contact the Clearwater SSO should any unsafe practice continue after a verbal notification to change the practice has occurred.

Print Name	Company	Signature	Date



SITE LOCATION MAP	CLEARWATER GROUP		
Markus Supply 626 2nd Street, Oakland, CA	Project No. **GB001**	Figure Date **5/06**	Figure **1**



0 40 80

APPROXIMATE SCALE IN FEET

Site Map with Current Tenants and Building Materials

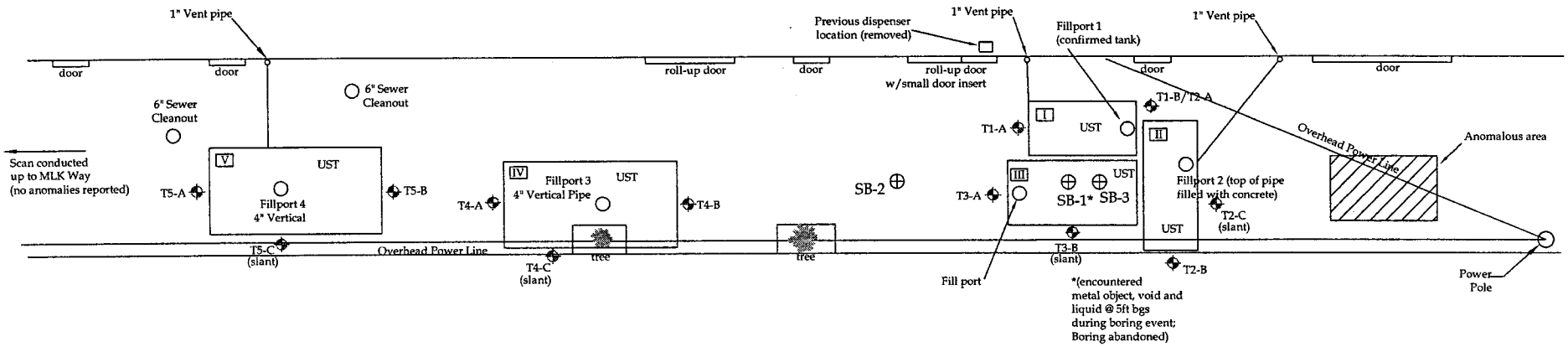
APN: 001-0125-001-00

Oakland, California

CLEARWATER GROUP

Project No.	Figure Date	Figure
GB001C	**3/1/06**	2

Markus Supply
Ace Hardware
Building



2nd Street

KEY:
- Boring (locations approximate) for samples taken in 1996
- Fill port
- 1 Tank #
- Tank Outline
- Proposed Soil and Groundwater Sampling Locations

TANK DIMENSIONS
I - 10' x 5'
II - ~12' x 6'
III - 12' x 5'
IV - 16' x 8'
V - 16' x 8'

0 15 30
APPROXIMATE SCALE IN FEET

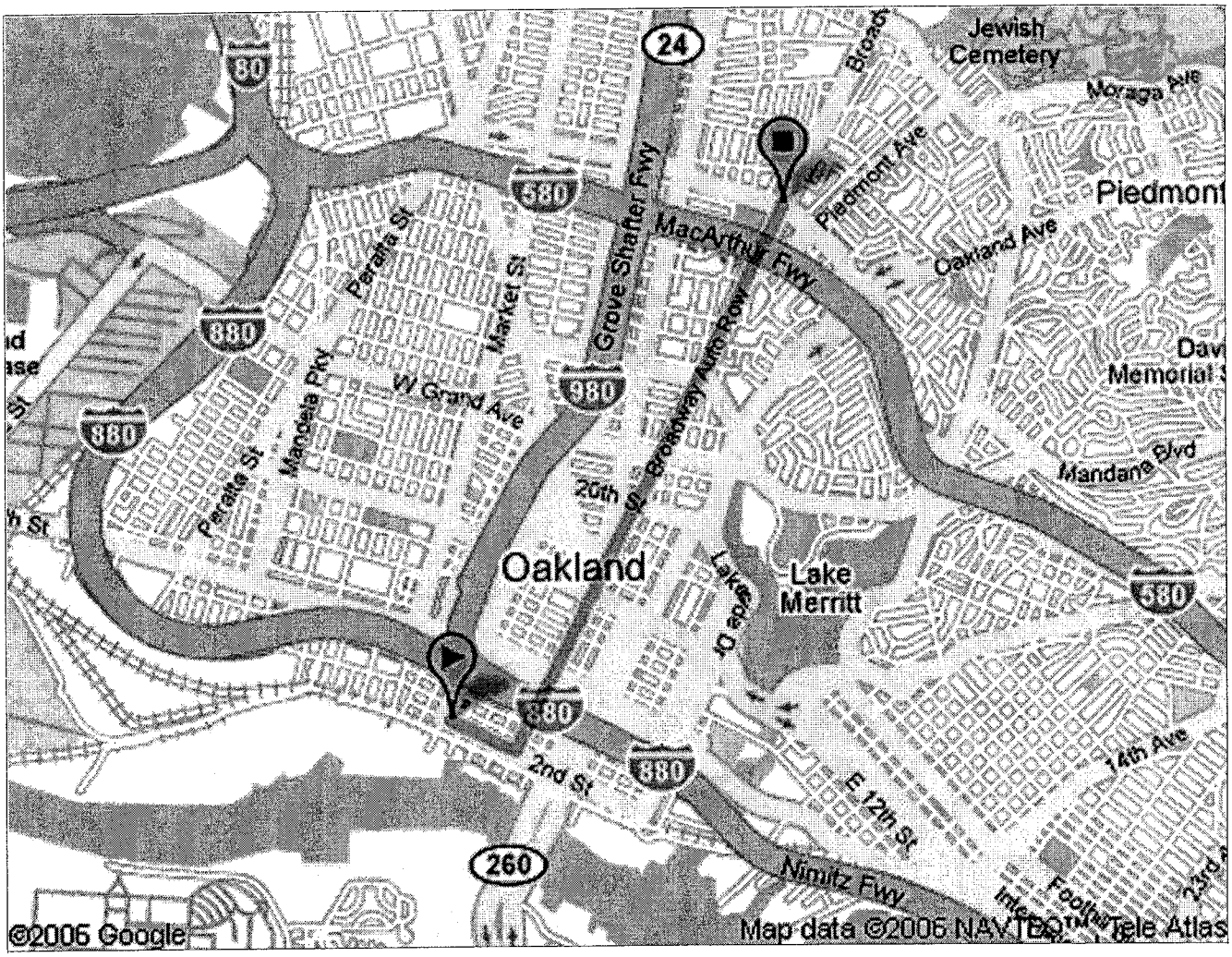
Sidewalk Detail Map Portion of 600-650 Block of 2nd Street

CLEARWATER GROUP

Project No.	Figure Date	Figure
GB001C	5/4/06	3

Google Maps

Start address: **626 2nd St**
Oakland, CA 94607
End address: **Kaiser Permanente Medical Center-Oakland: Hospital**
280 W MacArthur Blvd, Oakland, CA 94611
Distance: **2.4 mi (about 5 mins)**



1.	Head **east** from **2nd St** - go **0.3 mi**
2.	Turn **left** at **Broadway** - go **1.0 mi**
3.	Continue on **Broadway Auto Row** - go **1.0 mi**
4.	Continue on **Broadway** - go **0.2 mi**

These directions are for planning purposes only. You may find that construction projects, traffic, or other events may cause road conditions to differ from the map results.

ATTACHMENT 1

HEALTH AND SAFETY INCIDENT REPORT

Project Name: _____

Project Number: _____

Date of Incident: _____

Time of Incident: _____

Location: _____

_____

TYPE OF INCIDENT (Check all applicable items)

☐ Illness

☐ Injury

☐ Property Damage

☐ Health & Safety Infraction

☐ Other (describe) _____

☐ Fire, explosion, flash

☐ Unexpected exposure

☐ Vehicular Accident

DESCRIPTION OF INCIDENT (Describe what happened and possible cause. Identify individual involved, witnesses, and their affiliations; and describe emergency or corrective action taken. Attach additional sheets, drawings, or photographs as needed.)

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Reporter: _____ _____ _____

Print Name Signature Date

Reporter must deliver this report to the Operating Unit Health & Safety Officer within 24 hours of the reported incident for medical treatment cases and within five days for other incidents.

Reviewed by: _____ _____

Operating Unit Health & Safety Officer Date

Distribution by HSO:

- Corporate Health and Safety Officer
- Project Manager
- Personnel Office (medical treatment cases only)