

RECEIVED

By Alameda County Environmental Health at 3:42 pm, Oct 04, 2013

October 4, 2013

Alameda County Department of
Environmental Health
1131 Harbor Bay Parkway, 2nd Floor
Alameda, CA 94502

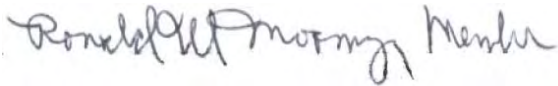
Attention: Mark Detterman

Subject: Request for Regulatory Site Closure
1355 55th Street, Emeryville, California
ACDEH Site No. RO0000046, Geotracker Global ID No. T0600101623

Ladies and Gentlemen:

Attached please find a copy of the *Request for Regulatory Site Closure* prepared by Gribi Associates. I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge.

Very truly yours,



Ronald W. Mooney, Member
California Syrup & Extract Co. LLC
PO Box 8305
Emeryville, CA 94608



October 4, 2013

Alameda County Department of
Environmental Health
1131 Harbor Bay Parkway, 2nd Floor
Alameda, CA 94502

Attention: Mark E. Detterman

Subject: Request for Regulatory Site Closure
1355 55th Street, Emeryville, California
ACDEH Site No. RO0000046, Geotracker Global ID No. T0600101623

Ladies and Gentlemen:

Gribi Associates is pleased to submit this letter on behalf of California Syrup & Extract Co. LLC for the former California Syrup & Extract underground storage tank (UST) site at 1355 55th Street in Emeryville, California (Site) (see Figure 1 and Figure 2). On June 3, 2013, ACEH issued a letter which provided a review of the Site using the newly-adopted *Low-Threat Underground Storage Tank Case Closure Policy (LTCP)* criteria and, based on their review, stated that the Site did not meet the LTCP relative to general and media-specific criteria. From our point of view, we believe strongly that this site does meet LTCP and general low threat closure criteria and should be granted regulatory site closure. The following sections provide a Conceptual Site Model (CSM) for the Site, an evaluation of LTCP closure criteria relative to the Site, and a request for regulatory closure of the Site.

1.0 CONCEPTUAL SITE MODEL

The following Conceptual Site Model (CSM) has been developed to assist in risk-based decision making. In developing the CSM, we have evaluated actual and potential contaminant sources, migratory pathways, and environmental receptors. This CSM is based on my understanding of currently-available data, which was collected by me or under my direction and which dates back to 1993. As part of this CSM, we have included tabulated data summaries (see Tables 1 through 5), narrative figures (see Figures 3 through 6), and copies of boring logs (see Attachment A).

1.1 Contaminant Sources

The contaminants of concern at the Site consist of gasoline constituents. Specific COCs include TPH-G; Benzene, Toluene, Ethylbenzene, and Xylenes (BTEX). Note that, while diesel and motor oil range hydrocarbons (i.e. TPH-D and TPH-MO) have been reported in groundwater

samples from well MW-2, a review of available chromatograms indicates that the diesel and motor oil range detections are actually carry over from gasoline range hydrocarbons.

The COCs identified on the Site appear to have originated from the former underground storage tank (UST) identified as Tank No. 5 (former 1,000-gallon gasoline tank) located in the 55th Street sidewalk in front of the Site. This UST was apparently constructed of single wall steel, and the bottom of the tank was at about 7.5 feet below surface grade. This tank and seven other USTs located in the 55th Street sidewalk were closed in place under County permit in August 1994.

Soil analytical data for the Site do not indicate the presence of a secondary soil or groundwater hydrocarbon source, or sources, relative to this Site. Also, the lack of any significant hydrocarbon impacts in soil and groundwater downgradient from the source area many decades after operation of the source UST clearly indicates that the source hydrocarbon release was relatively small.

1.2 Nature and Extend of Impacts

Both field and laboratory analytical results from all historical and recent Site investigations indicate relatively small, low-concentration soil and groundwater gasoline-range hydrocarbon plumes adjacent to the southwest corner of Tank No. 5 (see Figures 3 through 6). Soil samples from source area borings IB-6, IB-12, and IB-13 in 1993, well boring MW-2 in 1994, and boring IW-10 in 1999 clearly show very localized soil hydrocarbon impacts at the southwest corner of Tank No. 5. Also, boring logs and lab results from the 1999 borings IB-1 through IB-10, drilled within the Site building prior to redevelopment, show no field evidence of shallow hydrocarbon impacts and no significant hydrocarbon detections in soil samples at approximately five to seven feet in depth (approximate groundwater depth). Copies of boring logs for Site borings and wells are included as Attachment A. Also, the lack of soil and groundwater hydrocarbon detections in recent downgradient wells MW-3 and MW-4, so many decades after Tank No. 5 was last in use, clearly demonstrate that the fuel release at Tank No. 5 (and at any of the other USTs, for that matter) was relatively small. Further, given the many decades since the tank was last in use, it is clear that these conditions will not change in the future, other than to naturally degrade over time.

Note that soil gas or sub-slab vapor sampling has not been conducted at the Site. However, there is no reasonable expectation of soil vapor impacts beneath the Site building, given: (1) Boring logs and lab results from the 1999 borings IB-1 through IB-10, drilled within the Site building prior to redevelopment, show no field evidence of shallow hydrocarbon impacts and no significant hydrocarbon detections in soil samples at approximately five to seven feet in depth (approximate groundwater depth); (2) Groundwater benzene concentrations in well MW-2 are below the SFBRWQCB's benzene ESL of 270 ug/l for vapor intrusion concerns at commercial sites and (3) Engineering controls were installed during redevelopment of the Site in 2000, which included a visqueen vapor barrier and six-inch thick concrete slab over the entire interior of the building.

1.3 Preliminary Risk Evaluation

Results of our preliminary risk evaluation of all potential exposure pathways for this UST site are summarized below.

Exposure Pathway	Complete?	Risk Level	Discussion
Air Exposure Pathway			
Surface soil volatilization to ambient air	Possible	Low	Possible risk due to low-concentration soil TPH-G/BTEX in shallow soils; risk expected to be low due to clay-dominated soils, small aerial extent of impacts beneath site, low COC concentrations and lack of VOCs.
Subsurface soil volatilization to ambient air	Possible	Low	Possible risk due to low-concentration soil TPH-G/BTEX; risk expected to be low due to clay-dominated soils, small aerial extent of impacts beneath site, depth of soil impacts and low VOC concentrations.
Subsurface soil volatilization to enclosed space	Possible	Low	Possible risk due to low-concentration soil TPH-G/BTEX; risk expected to be low due to clay-dominated soils beneath site, depth of soil impacts and no detectable VOC concentrations beneath Site building .
Groundwater volatilization to ambient air	Possible	Low	Possible risk due to low-concentration groundwater TPH-G/BTEX; risk expected to be low due to clay-dominated soils beneath site, depth of groundwater impacts and low VOC concentrations.
Groundwater volatilization to enclosed space	Possible	Low	Possible risk due to low-concentration groundwater TPH-G/BTEX; risk expected to be low due to clay-dominated soils beneath site, depth of groundwater impacts and low VOC concentrations.
Soil Exposure Pathway			
Dermal contact/ingestion of surface soils	Possible	Low	Construction worker only; possible risk due to low-concentration soil TPH-G/BTEX beneath 55 th St. sidewalk; risk expected to be low due to low VOC concentrations
Dermal contact/ingestion of subsurface soils	Possible	Low	Construction worker only; possible risk due to low-concentration soil TPH-G/BTEX beneath 55 th St. sidewalk; risk expected to be low due to low VOC concentrations
Groundwater Exposure Pathway			
Soil leaching to groundwater, ingestion	No	None	No nearby downgradient (W-SW) water supply wells.
Dissolved/free phase groundwater ingestion	No	None	No nearby downgradient (W-SW) water supply wells.
Surface Water Exposure Pathway			
Soil leaching to surface water	No	None	No nearby surface water bodies.
Groundwater plume discharge to surface water	No	None	No nearby surface water bodies.

As the table above illustrates, complete exposure pathways exist relative to potential air exposure and soil exposure pathways. However, the potential risk associated with these exposure pathways is low, given: (1) The small size of remnant soil and groundwater

hydrocarbon plumes; (2) The relatively low concentrations of VOCs in soil and groundwater associated with these plumes; and (3) The low permeability clay-dominated soils underlying the site.

2.0 LOW THREAT CLOSURE POLICY EVALUATION

The ACEH June 3, 2013 letter states that the Site “fails to meet the LTCP General Criteria e (Site Conceptual Model), and the Media-Specific Criteria for Groundwater and Vapor Intrusion to Indoor Air...ACEH’s determination is based on the presence of an onsite non-decommissioned water supply well located approximately 100 feet downgradient of well MW-2 with the highest concentration in groundwater, and insufficient data and analysis to support protection of human occupants of existing buildings from vapor intrusion.”

The LTCP guidance states: “It is important to emphasize that the criteria described in this policy do not attempt to describe all low-threat petroleum UST sites in the State. The regulatory agency shall issue a closure letter for a case that does not meet these criteria if the regulatory agency determines the site to be low-threat based upon a site-specific analysis.” Further, we do not believe that it is the intent of the LTCP to be a “cookbook” check list that denies closure simply because a particular box is not checked. Nor do we believe that the LTCP is the only criteria to be used to grant closure, but rather one more tool that can be used to close sites. In this case, we believe strongly that a common-sense evaluation of low-threat closure criteria clearly shows that regulatory closure should be granted for this site.

2.1 LTCP General Criteria

In order to meet the LTCP general criteria for a CSM, we have provided a CSM herein. Generally, the data supports a CSM which posits:

- **Source:** Primarily gasoline-range hydrocarbons that were released from Tank No. 5, which was closed in-place in 1994. This 1,000-gallon gasoline UST was last used in about 1965. There are no significant secondary sources associated with this release.
- **Nature and Extent of Impacts: Soil:** Several borings in the immediate vicinity of Tank No. 5 clearly demonstrate very limited soil hydrocarbon impacts near the southwest corner of the tank. Although shallow (0-5 ft bgs) soil samples were not collected, boring logs from ten borings in the building immediately south of Tank 5 in 1999 showed no field evidence of hydrocarbons and no detections in samples from 5-7 ft bgs (approximate groundwater depth). **Groundwater:** Groundwater hydrocarbon impacts are limited to MW-2 and do not extend offsite to the west (property boundary is approximately 100 feet away). Given the distant age of the release (at least 50 years old), there is no reasonable expectation the plume will migrate offsite; rather, natural attenuation will further degrade the plume to water quality objectives.

- **Receptors/Risk Evaluation:** There are no nearby water supply wells or surface water bodies; hence, the only potential complete exposure pathways are indoor/outdoor vapor exposure and direct exposure. Relative to vapor intrusion, soil boring field and lab evidence clearly demonstrates that soil beneath the Site building is not significantly impacted. In addition, engineering controls (vapor barrier and six-inch thick concrete slab) were installed during redevelopment of the Site in 2000. Also, groundwater benzene levels meet the ESL for vapor intrusion concerns at commercial sites. Hence, vapor intrusion is not a significant concern. Finally, since soil hydrocarbon impacts are limited to the sidewalk area, where the closed in-place tanks are located, the expectation of direct exposure is limited to construction worker only.

2.2 LTCP Media-Specific Criteria: Groundwater

The Site appears to meet the first criteria (hydrocarbon plume less than 100 feet in length, no free product, nearest water supply well greater than 250 feet away). We believe also, based on Site conditions, that the fifth criteria (the contaminant plume poses a low threat to humans and to the environment) is applicable.

Note that, although a water supply well was present on the Site in the past, this well was lost during Site development and is no longer present at the Site. Further, in accordance with the June 3, 2013 ACEH letter, we supplied additional information about the historical well to Alameda County Public Works (ACPW), and we subsequently received an email from Mr. James Yoo of ACPW indicating that they considered the well to be lost. Mr. Yoo further indicated that the well was apparently shallow and that it would not pose a risk to deeper groundwater. Accordingly, ACPW is not requiring additional activities relative to the nonexistent well, except that, if the well is ever found in the future, the property owner must destroy the well under proper permit. A copy of the email correspondences related to this determination are included as Attachment B.

2.3 LTCP Media-Specific Criteria: Vapor Intrusion to Indoor Air

Soil boring field and lab evidence clearly demonstrates that soil hydrocarbon impacts are very limited laterally and do not extend beneath the Site building itself. In addition, engineering controls (vapor barrier and six-inch thick concrete slab) were installed during redevelopment of the Site in 2000. Also, groundwater benzene levels is below the groundwater benzene ESL for vapor intrusion concerns at commercial sites. The LTCP guidance clearly provides latitude for regulatory agencies to make site-specific determinations relative to specific media-specific criteria. In this case, the data clearly indicate a low risk relative to indoor vapor intrusion; hence, we believe that the vapor intrusion to indoor air criteria is met.

2.4 LTCP Media-Specific Criteria: Direct Contact and Outdoor Air Exposure

All field and laboratory data for this Site indicate that soil hydrocarbon impacts are located beneath the 55th Street sidewalk and do not extend beneath the Site building. Further, engineering controls (sidewalk and roadway paving) limit potential exposure to these possible direct exposure to construction workers. (Note that the sidewalks and roadways in front of the Site were completely redeveloped during redevelopment of the Site in about 2000.) The LTCP guidelines allow regulatory agencies to evaluate site-specific risks and determine that the direct contact/outdoor air exposure risk is not significant. Although there are not specific shallow soil lab data for this Site, we believe that both field and lab data support this determination for the Site.

2.5 LTC Policy: Summary

Although there may be disagreement relative to whether or not this Site meets all LTCP criteria, the LTC Policy specifically allows for case closure even when a site does not meet all criteria, provided the site is a low-threat site.¹ Clearly, this site meets generally-accepted pre-LTCP low-threat closure criteria and does not pose a significant environmental or human health risk.

3.0 REQUEST FOR REGULATORY SITE CLOSURE

The preponderance of evidence clearly shows that this site meets generally-accepted closure requirements and should be granted regulatory site closure as a “low risk” site with unrestricted land use. Specifically, site closure should be granted because: (1) The contaminant sources have been largely removed/mitigated; (2) The site has been adequately characterized; (3) The contaminant plume is not migrating, and chemical concentrations in groundwater are expected to meet water quality objectives in the future; (4) No other waters of the State, water supply wells, or other sensitive receptors are likely to be impacted; and (5) The site does not pose a significant risk to human or environmental receptors. This site should be closed as a “low risk” site with unrestricted land use.

3.1 Contaminant Source Removal

Past investigative results indicate that: (1) The only significant release relative to the eight former Site USTs was from Tank No. 5; (2) Gasoline-range hydrocarbons are the primary contaminants of concern relative to the Site USTs; (3) Gasoline-range hydrocarbons are limited to very small soil and groundwater plumes located adjacent to the southwest corner of Tank No.

¹ The SFBRWQCB recently granted regulatory closure for the St. Francis Pie Shop site at 1125 67th Street in Oakland. The closure letter states “...we conclude that, while this case does not meet all the criteria of the State Board's Low-Threat Case Closure (LTC) Policy, a no Further Action determination is still appropriate because the LTC policy allows for case closure when a case is a low-threat site. In this case, the relevant data are consistent with a No Further Action determination when viewed with respect to the Regional Water Board's supplemental guidance criteria for low risk case closure.”

5; (4) Hydrocarbons associated with Tank No. 5 appear to have undergone significant natural attenuation over the several decades since release occurrence; and (5) There are no secondary sources (free product or heavily-contaminated soils) associated with the Site. Note that Tank No. 5 consisted of a 1,000-gallon gasoline UST installed in about 1930 and taken out of use in 1965.

The eight Site USTs were closed in-place under County permit in August 1994 by completely filling each tank with a cement/sand slurry. This effectively removed the eight USTs as potential sources of contamination. Soil removal is not warranted, given the limited, low-level remnant hydrocarbon impacts in soil beneath the Site.

3.2 Adequate Site Characterization

A total of 23 soil borings and four groundwater monitoring wells were installed and sampled at the Site. These borings and wells have adequately characterized soil and groundwater hydrocarbon impacts, showing that these impacts are relatively low in concentration and are limited primarily to the 55th Street sidewalk in front of the Site building. Soils beneath the Site consist primarily of low-permeable silts and clays with occasional thin, discontinuous sand layers.

Although soil vapor sampling has not been conducted, field and laboratory analytical results from soil borings and wells clearly indicate low hydrocarbon impacts beneath the Site building and do not, we believe, indicate a need for soil vapor sampling at the Site (particularly given the several decades since hydrocarbon releases occurred at the Site).

3.3 Plume Migration and Natural Attenuation

Contaminant soil and groundwater plume migration has been minimal. Residual soil hydrocarbon impacts are limited to a small area on the southwest side of Tank No. 5. During the drilling of 13 pre-closure soil borings IB-1 through IB-13 in 1993, it was noted that, although soils exhibited field evidence (staining and odors) indicating significant hydrocarbon impacts, laboratory analytical results showed low hydrocarbon concentrations. These results clearly demonstrated that natural attenuation had occurred over the decades since the Site USTs were last in use.

Groundwater hydrocarbon impacts are low in near-source well MW-2 and are nondetect in downgradient wells MW-3 and MW-4. These results clearly indicate that the fuel release from Tank No. 5 was relatively small, that the groundwater plumes is stable (particularly given the many decades since the tank was last in use). Further, hydrocarbon concentrations in MW-2 are clearly trending downward due to natural attenuation, and it is likely that water quality objectives will be met at the Site in a reasonable time frame.

3.4 Sensitive Receptors Impacts

Soil and groundwater hydrocarbon impacts from this site do not extend beyond the property boundary and there is no expectation that these conditions will change. Also, there are no surface water bodies in close proximity to the Site. In addition, the former water supply well on the site is not present and the State Water Board's Geotracker database identifies no public water wells within the site vicinity. Thus, there are no sensitive receptors relative to surface water, groundwater, or offsite ambient and enclosed space air receptors associated with the Site hydrocarbon impacts.

While onsite potential ambient and/or indoor air sensitive receptors are present, the risk associated with these receptors is minimal, given that: (1) The site is essentially fully paved, with relatively new concrete and vapor barrier under the Site building; and (2) Field and lab results indicate no hydrocarbon impacts in shallow soils beneath the Site building.

2.5 Risk Evaluation

Results of our preliminary risk evaluation indicate that complete exposure pathways exist relative to potential air exposure and soil exposure pathways. However, the potential risk associated with these exposure pathways is low, given: (1) The small size of remnant soil and groundwater hydrocarbon plumes; (2) The relatively low concentrations of VOCs in soil and groundwater associated with these plumes; and (3) The low permeability clay-dominated soils underlying the Site.

4.0 SUMMARY

The LTCP is only one tool that can be used by regulatory agencies to evaluate and grant regulatory closure. Certainly, the LTCP is not meant to slow site closures or to act as a "be all and end all" for site closures. Also, the policy does allow regulatory agencies discretion to grant closure based on generally-accepted low-threat closure criteria.

Regulatory closure should be granted for this site based on the following generally-accepted closure criteria: (1) The contaminant source, Tank No. 5, has been closed in-place, effectively removing it as a source; (2) The site has been adequately characterized; (3) The contaminant plume is not migrating, and chemical concentrations in groundwater are expected to meet water quality objectives in the future; (4) No other waters of the State, water supply wells, or other sensitive receptors are likely to be impacted; and (5) The site does not pose a significant risk to human health or safety. This site should be closed as a "low risk" site with unrestricted land use.

We appreciate this opportunity to provide this report for your review. Please contact us if there are questions or if additional information is required.

Very truly yours,



James E. Gribi
Registered Geologist
California No. 5843



c Ron Mooney, California Syrup & Extract Co. LLC
Cherie McCaulou, SFRWQCB
Walter Bahm, SWRCB

Enclosures: Figure 1: Site Vicinity Map
Figure 2: Site Plan
Figure 3: Historical Soil Boring Locations
Figure 4: Historical Hydrocarbon Results in Tank No. 5 Source Area
Figure 5: Soil & Groundwater Lab Results, 08/2012
Figure 6: Groundwater Monitoring Results, 06/28/2013

Attachment A: Site Soil Boring and Well Logs
Attachment B: Communication Records with ACPW Regarding Former Site
Water Supply Well

TABLES

Table 1
SOIL ANALYTICAL RESULTS - TANK CLOSURE BORINGS, MAY 1993
 California Syrup & Extract Company UST Site

Sample ID	Sample Depth	Soil1 concentrations, in milligrams per kilogram (mg/kg)						
		TPH-G	TPH-D	TPH-MO	B	T	X	E
Tank No. 1								
IB-3.1	11.0 ft	ND(1)	ND(10)	ND(10)	ND(0.003)	ND(0.003)	ND(0.009)	ND(0.003)
IB-2.1	8.0 ft	ND(1)	ND(10)	ND(10)	ND(0.003)	ND(0.003)	ND(0.009)	ND(0.003)
Tank Nos. 2 & 3								
IB-11.2	9.5 ft	ND(1)	51	65	ND(0.003)	ND(0.003)	ND(0.009)	ND(0.003)
IB-1.1	9.0 ft	1	84	150 ¹	ND(0.003)	0.004	0.013	ND(0.003)
IB-1.2	Grab	2	32	50	0.004	0.008	0.028	0.004
IB-10.1	9.0 ft	ND(1)	84	110	ND(0.003)	0.005	ND(0.009)	ND(0.003)
Tank No. 5								
IB-6.2	9.0 ft	16	NA	NA	ND(0.003)	0.021	0.15	0.24
IB-12.2	9.0 ft	ND(1)	ND(10)	ND(10)	0.11	ND(0.003)	ND(0.009)	0.013
Sample ID	Sample Depth	Soil Concentration (milligrams per kilogram, mg/kg)						
		Ammonia						
Tank No. 4								
IB-4.1	11.0 ft	6.8						
IB-5.1	11.0 ft	230						
IB-6.2	9.0 ft	ND(0.5)						
Sample ID	Sample Depth	Soil1 concentrations, in milligrams per kilogram (mg/kg)						
		TPH-alcohol ¹	TPH-G	B	T	X	E	
Tank Nos. 6, 7 & 8								
IB-13.1	5.5 ft	ND ²	ND(1)	ND(0.003)	ND(0.003)	ND(0.009)	ND(0.003)	
IB-13.2	10.0 ft	ND	ND(1)	ND(0.003)	ND(0.003)	ND(0.009)	ND(0.003)	
IB-7.1	9.5 ft	ND	ND(1)	ND(0.003)	ND(0.003)	ND(0.009)	ND(0.003)	
IB-8.2	11.0 ft	ND	ND(1)	ND(0.003)	ND(0.003)	ND(0.009)	ND(0.003)	
IB-9.1	6.5 ft	ND	ND(1)	ND(0.003)	ND(0.003)	ND(0.009)	ND(0.003)	
IB-9.2	10.0 ft	ND	ND(1)	ND(0.003)	ND(0.003)	ND(0.009)	ND(0.003)	

Table Notes

TPH-D = Total Petroleum Hydrocarbons as Diesel
 TPH-MO = Total Petroleum Hydrocarbons as Motor Oil
 TPH-G = Total Petroleum Hydrocarbons as Gasoline
 B = Benzene, T = Toluene, E = Ethylbenzene, X = Xylenes
 ND (1) = Not detected above the levels expressed in parentheses.
 NA = Not analyzed for listed constituent.

¹ = Analyzed for TPH as alcohols and ketones by EPA Method 8015 (Modified). This method identifies 14 alcohols and ketones using GC methods.

² = Detection limits for the 14 alcohols and ketones range from 2 ppm to 10 ppm. Due to field evidence of hydrocarbon, the 6.5-foot sample from IB-9 (IB-9.1) was also analyzed for TPH-diesel/motor oil. No detectable levels of diesel or motor oil were encountered in this sample.

Table 2
SUMMARY OF SOIL ANALYTICAL RESULTS, SEPTEMBER 1994
 California Syrup & Extract Company UST Site

Sample ID	Sample Depth	Soil concentrations, in milligrams per kilogram (mg/kg)						
		TPH-D	TPH-MO	TPH-G	B	T	E	X
MW-1.1	6.0 ft	28	<100	16	<0.005	0.15	0.080	0.38
MW-1.2	10.5 ft	<10	<100	<1.0	<0.005	<0.005	<0.0025	<0.005
MW-2.1	6.0 ft	250	<100	650	1.2	3.4	11	16
MW-2.2	10.0 ft	<10	<100	<0.500	0.051	<0.005	0.070	0.006

Table Notes

TPH-D = Total Petroleum Hydrocarbons as Diesel
 TPH-MO = Total Petroleum Hydrocarbons as Motor Oil
 TPH-G = Total Petroleum Hydrocarbons as Gasoline
 B = Benzene, T = Toluene, E = Ethylbenzene, X = Xylenes
 <100 : Not detected above the expressed value

Table 3
SUMMARY OF SOIL ANALYTICAL RESULTS, SEPTEMBER 1999
 California Syrup & Extract Company UST Site

Sample ID	Sample Depth	Soil concentrations in milligrams per kilogram (mg/kg)								
		TPH-D	TPH-MO	TPH-G	B	T	E	X	MTBE	Amm
IB-1.1	6.0 ft	<1.0	<10	<1.0	<0.005	<0.005	<0.005	<0.005	<0.050	<0.75
IB-2.1	5.5 ft	<1.0	<10	<1.0	<0.005	<0.005	<0.005	<0.005	<0.050	2.3
IB-3.1	5.5 ft	<1.0	<10	<1.0	<0.005	<0.005	<0.005	<0.005	<0.050	2.0
IB-4.1	6.0 ft	<1.0	<10	<1.0	<0.005	<0.005	<0.005	<0.005	<0.050	<0.75
IB-5.1	5.5 ft	<1.0	<10	<1.0	<0.005	<0.005	<0.005	<0.005	<0.050	<0.75
IB-6.1	7.5 ft	<1.0	<10	<1.0	<0.005	<0.005	<0.005	<0.005	<0.050	<0.75
IB-7.1	5.5 ft	<1.0	<10	<1.0	<0.005	<0.005	<0.005	<0.005	<0.050	<0.75
IB-8.1	7.5 ft	<1.0	<10	<1.0	<0.005	<0.005	<0.005	<0.005	<0.050	10
IB-9.1	5.5 ft	<3.0	58	<1.0	<0.005	<0.005	<0.005	<0.005	<0.050	<0.75
IB-10.1	7.5 ft	<1.0	<10	<1.0	<0.005	<0.005	<0.005	<0.005	<0.050	2.0

Table Notes

TPH-D = Total Petroleum Hydrocarbons as Diesel
 TPH-MO = Total Petroleum Hydrocarbons as Motor Oil
 TPH-G = Total Petroleum Hydrocarbons as Gasoline
 B = Benzene, T = Toluene, E = Ethylbenzene, X = Xylenes

MTBE = Methyl-tert-butyl ether
 Amm = Ammonia
 <1.0 : Not detected above the expressed value

Table 4
SUMMARY OF SOIL AND GRAB GROUNDWATER ANALYTICAL RESULTS, AUGUST 2012
California Syrup & Extract Company UST Site

Sample ID	Sample Matrix	Sample Depth	Soil concentrations in milligrams per kilogram (mg/kg) Groundwater concentrations in micrograms per liter (ug/l)											
			TPH-D	TPH-MO	TPH-G	B	T	E	X	OXY	MEK	MIBK	NH3	TN
B-1-11.0	Soil	11.0 ft	<10	<10	<0.500	<0.005	<0.005	<0.005	<0.005	ALL ND	<0.010	<0.010	5.75	21.9
B-1-15.0	Soil	15.0 ft	<10	<10	<0.500	<0.005	<0.005	<0.005	<0.005	ALL ND	<0.010	<0.010	<5.0	16.5
<i>B-1-W</i>	<i>Water</i>	<i>(9.0 ft)</i>	<50	<100	<50	<0.50	<0.50	<0.5	<1.0	ALL ND	<10	<10	<100	3,880
MW-3-10.5	Soil	10.5 ft	<10	<10	<0.500	<0.005	<0.005	<0.005	<0.005	ALL ND	<0.010	<0.010	<5.0	3.1
MW-3-14.0	Soil	14.0 ft	<10	<10	<0.500	<0.005	<0.005	<0.005	<0.005	ALL ND	<0.010	<0.010	9.25	7.23
MW-4-10.5	Soil	10.5 ft	<10	<10	<0.500	<0.005	<0.005	<0.005	<0.005	ALL ND	<0.010	<0.010	10.5	12.3
MW-4-14.0	Soil	14.0 ft	<10	<10	<0.500	<0.005	<0.005	<0.005	<0.005	ALL ND	<0.010	<0.010	6.18	14.4
MW-4-18.5	Soil	18.5 ft	<10	<10	<0.500	<0.005	<0.005	<0.005	<0.005	ALL ND	<0.010	<0.010	<5.0	6.4

Table Notes:

TPH-D = Total Petroleum Hydrocarbons as Diesel
TPH-MO = Total Petroleum Hydrocarbons as Motor Oil
TPH-G = Total Petroleum Hydrocarbons as Gasoline
B = Benzene, T = Toluene, E = Ethylbenzene, X = Xylenes
Oxy = Oxygenates, includes Tert-butyl alcohol (TBA), Di-isopropyl ether (DIPE), Ethyl tert-butyl ether (ETBE), and Methyl-tert-butyl ether (MTBE).

MEK: Methyl ethyl ketone
MIBK: Methyl isobutyl ketone
NH3 = Ammonia
TN = Total nitrogen
<50 : Not detected above the expressed value

Table 5
CUMULATIVE GROUNDWATER ANALYTICAL RESULTS
California Syrup & Extract Company UST Site

Sample ID	Sample Date	DTW	GW Elev.	Concentration, micrograms per liter (ug/L)							
				TPH-D	TPH-MO	TPH-G	B	T	E	X	MTBE
MW-1	9/24/1994	8.01	18.69	<50	<50	<50	<0.5	<0.5	<0.5	<0.5	-
<26.70>	12/29/1999	5.77	20.93	<50	<100	120	<0.5	<0.5	<0.5	0.84	<0.050
	3/23/2000	4.79	21.91	<50	<100	97	0.58	<0.5	<0.5	21	<0.005
	6/28/2000	8.90	17.80	<50	<100	110	28	2.2	8.7	17	<0.005
	10/04/2000	8.36	18.34	<50	<100	<50	<0.5	<0.5	<0.5	1.5	<0.005
	9/25/2009	6.89	19.81	<50	<100	<50	<1.0	<1.0	<1.0	<2.0	-
	2/18/2010	5.74	20.96	<50	<100	<50	<1.0	<1.0	<1.0	<2.0	<4.0
	7/26/2010	6.92	19.78	<50	<100	<50	<1.0	<1.0	<1.0	<2.0	<4.0
	2/14/2011	6.76	19.94	<50	<100	<50	<1.0	4.1	<1.0	<2.0	<4.0
	8/03/2011	7.08	19.62	<50	<100	<50	<1.0	<1.0	<1.0	<2.0	<4.0
	1/30/2012	7.57	19.13	<50	<100	<50	<1.0	<1.0	<1.0	<2.0	<4.0
	8/16/2012	6.49	20.21	<50	<100	<50	<0.50	<0.50	<0.50	<1.0	<1.0
	12/03/2012	4.26	22.44	<50	<100	<50	<1.0	<1.0	<1.0	<2.0	<4.0
	06/28/2013	6.35	20.35	<500	<500	<50	<1.0	<1.0	<1.0	<2.0	<4.0
MW-2	9/24/1994	7.88	18.29	630	<0.50	970	57	3.4	3.6	3.0	-
<26.17>	12/29/1999	7.29	18.88	<0.050	<0.100	8,800	430	370	250	410	<1.0
	3/23/2000	6.03	20.14	<0.050	<0.100	10,000	590	90	210	640	<1.0
	6/28/2000	7.11	19.06	<0.050	<0.100	3,600	310	19	94	100	120
	10/4/2000	7.64	18.53	<0.050	<0.100	4,100	280	15	58	81	100
	9/25/2009	7.55	18.62	8,100	2,900	59,000	58	69	170	160	-
	2/18/2010	5.96	20.21	610	<100	1,400	12	5.4	<1.0	<2.0	97
	7/26/2010	6.90	19.27	560	<100	3,700	40	7.5	<1.0	<2.0	100
	2/14/2011	6.99	19.18	1,200	<100	2,400	17	11	4.2	4.4	49
	8/03/2011	6.63	19.54	1,500	860	2,100	6.2	15	<1.0	<2.0	200
	1/30/2012	7.01	19.16	1,100	220	2,400	80	31	<1.0	<2.0	200
	8/16/2012	6.67	19.50	750	<100	4,100	110	9.9	4.0	7.4	26
	12/03/2012	4.35	21.82	1,500	<100	910	9.9	15	1.1	1.4	110
	06/28/2013	6.33	19.84	1,200	<500	1,500	65	15	1.8	4.8	40

Table 5
CUMULATIVE GROUNDWATER ANALYTICAL RESULTS
 California Syrup & Extract Company UST Site

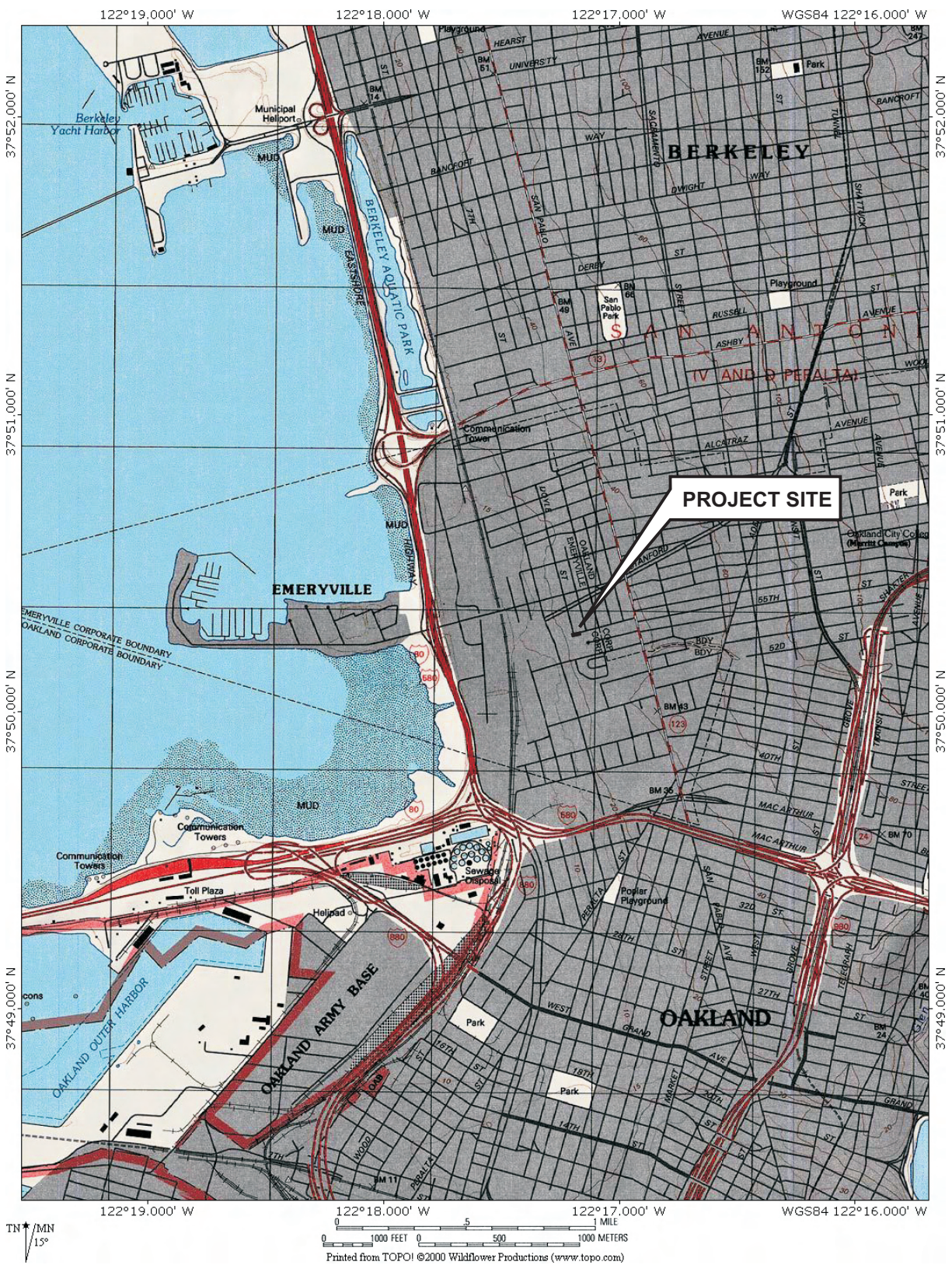
Sample ID	Sample Date	DTW	GW Elev.	Concentration, micrograms per liter (ug/L)							
				TPH-D	TPH-MO	TPH-G	B	T	E	X	MTBE
MW-3	8/16/2012	9.04	15.94	<50	<100	<50	<0.50	<0.50	<0.50	<1.0	1.2
<24.98>	12/03/2012	6.28	18.70	<50	<100	<50	<1.0	<1.0	<1.0	<2.0	<4.0
	07/03/2013	8.65	16.33	<500	<500	<50	<1.0	<1.0	<1.0	<2.0	<4.0
MW-4	8/16/2012	9.34	16.71	<50	<100	<50	<0.50	<0.50	<0.50	<1.0	<1.0
<26.05>	12/03/2012	7.33	18.72	<50	<100	<50	<1.0	<1.0	<1.0	<2.0	<4.0
	06/28/2013	9.36	16.69	<500	<500	<50	<1.0	<1.0	<1.0	<2.0	<4.0
ESLs, VI Concerns, Commercial, Fine Grained				--	--	--	270	95,000	3,100	37,000	10,000

Table Notes:

DTW = Depth to Water, in feet below top of casing.
 GW Elev. = Groundwater mean sea level elevation.
 TPH-D = Total Petroleum Hydrocarbons as Diesel
 TPH-MO = Total Petroleum Hydrocarbons as Motor Oil
 TPH-G = Total Petroleum Hydrocarbons as Gasoline
 B = Benzene, T = Toluene, E = Ethylbenzene, X = Xylenes
 MTBE = Methyl-tert-Butyl Ether
 <50 = Not detected above the expressed value.

-- = Not analyzed or not available.
 ALL ND = No detectable concentrations of individual analytes.
 <38.15> = Top of casing mean sea level (msl) elevation
 ESL = Environmental Screening Level (*Screening for Environmental Concerns with Contaminated Soil and Groundwater*, SFBRWQCB, May 2013).
 VI = Vapor Intrusion

FIGURES

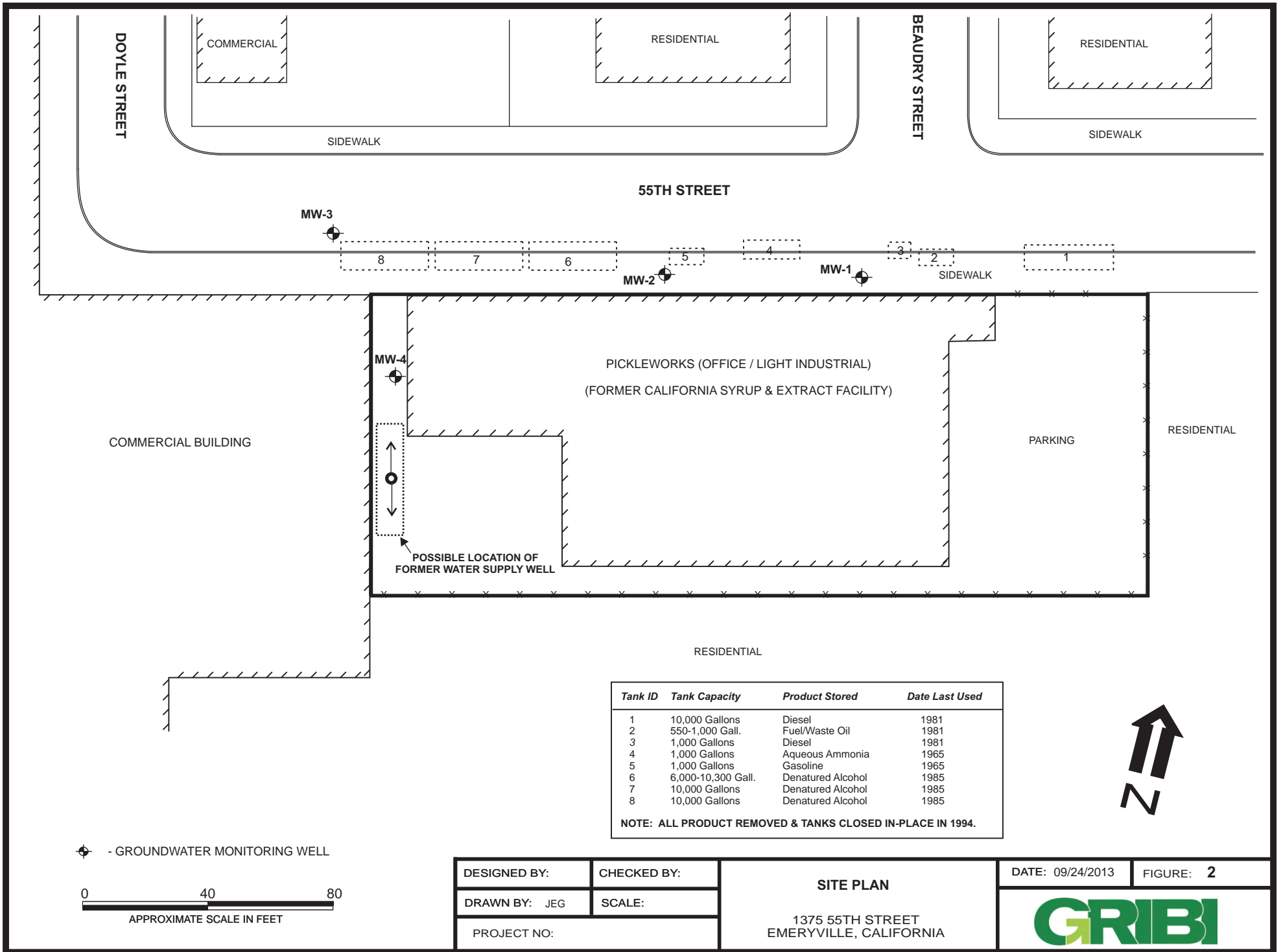


DESIGNED BY:	CHECKED BY:
DRAWN BY: JG	SCALE:
PROJECT NO: 320-01-01	

SITE VICINITY MAP

CALIFORNIA SYRUP AND EXTRACT
1375 55TH STREET
EMERYVILLE, CALIFORNIA

DATE: 09/07/2012	FIGURE: 1

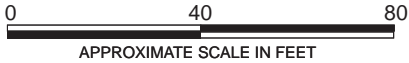


Tank ID	Tank Capacity	Product Stored	Date Last Used
1	10,000 Gallons	Diesel	1981
2	550-1,000 Gall.	Fuel/Waste Oil	1981
3	1,000 Gallons	Diesel	1981
4	1,000 Gallons	Aqueous Ammonia	1965
5	1,000 Gallons	Gasoline	1965
6	6,000-10,300 Gall.	Denatured Alcohol	1985
7	10,000 Gallons	Denatured Alcohol	1985
8	10,000 Gallons	Denatured Alcohol	1985

NOTE: ALL PRODUCT REMOVED & TANKS CLOSED IN-PLACE IN 1994.



⊕ - GROUNDWATER MONITORING WELL

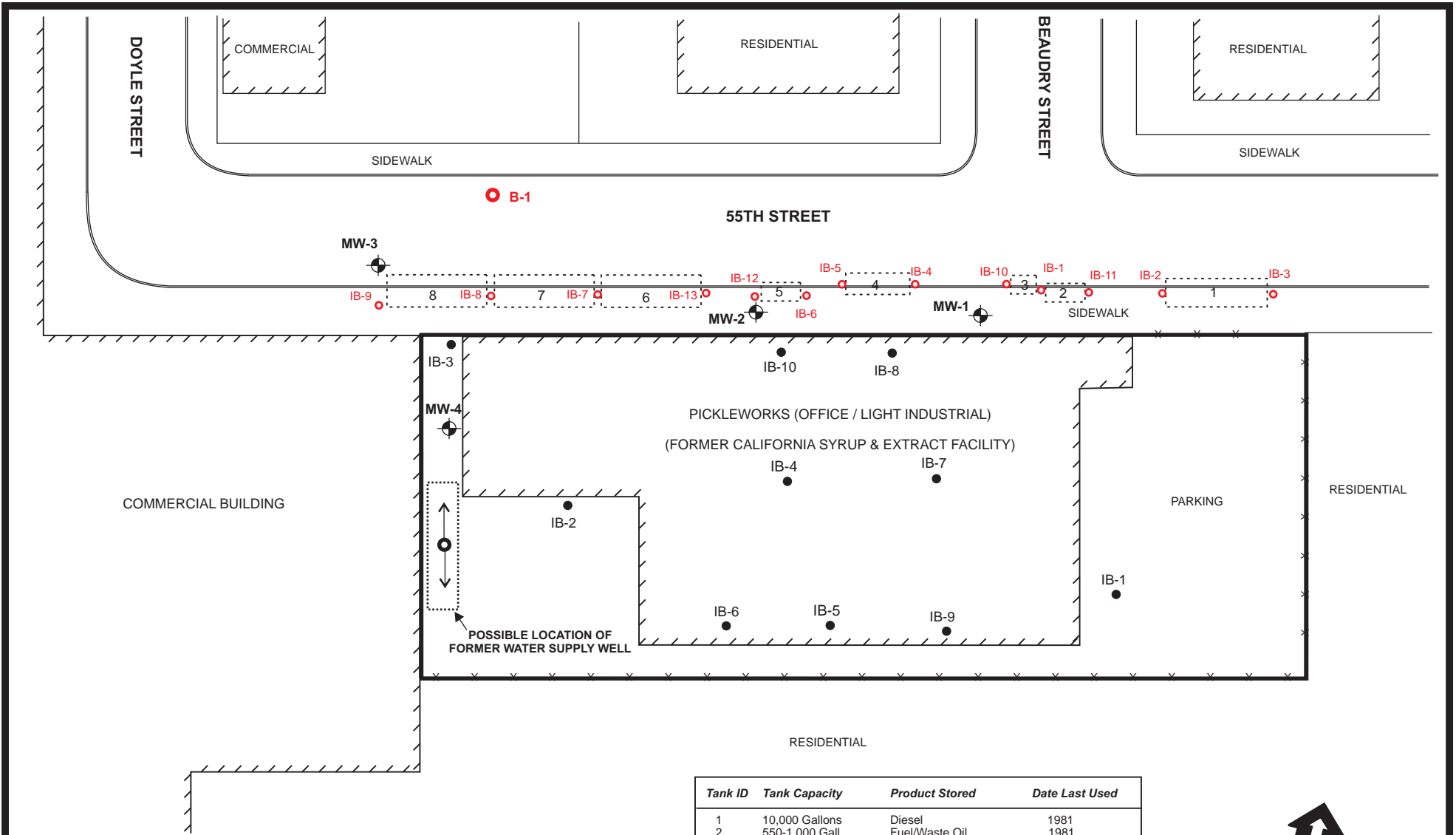


DESIGNED BY:	CHECKED BY:
DRAWN BY: JEG	SCALE:
PROJECT NO:	

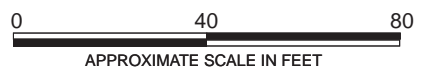
SITE PLAN

1375 55TH STREET
EMERYVILLE, CALIFORNIA

DATE: 09/24/2013 FIGURE: **2**



- - SOIL BORING LOCATION (GRIBI, 08/2012)
- - SOIL BORING LOCATION (GRIBI, 09/1999)
- ◌ - SOIL BORING LOCATION (CWEC, 05/1993)
- ⊕ - GROUNDWATER MONITORING WELL



Tank ID	Tank Capacity	Product Stored	Date Last Used
1	10,000 Gallons	Diesel	1981
2	550-1,000 Gall.	Fuel/Waste Oil	1981
3	1,000 Gallons	Diesel	1981
4	1,000 Gallons	Aqueous Ammonia	1965
5	1,000 Gallons	Gasoline	1965
6	6,000-10,300 Gall.	Denatured Alcohol	1985
7	10,000 Gallons	Denatured Alcohol	1985
8	10,000 Gallons	Denatured Alcohol	1985

NOTE: ALL PRODUCT REMOVED & TANKS CLOSED IN-PLACE IN 1994.



DESIGNED BY:	CHECKED BY:
DRAWN BY: JEG	SCALE:
PROJECT NO:	

HISTORICAL SOIL BORING LOCATIONS
 1375 55TH STREET
 EMERYVILLE, CALIFORNIA

DATE: 09/24/2013	FIGURE: 3

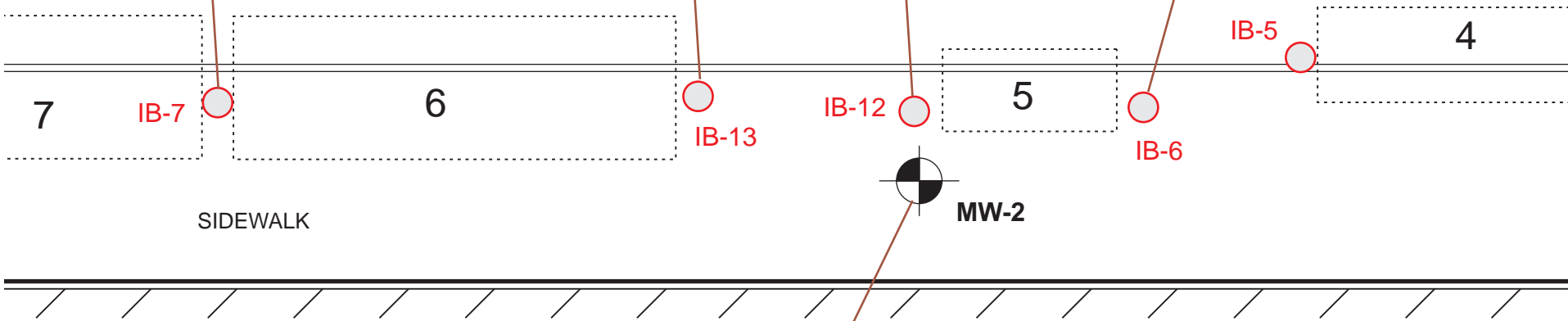
SOIL (MG/KG)	
Depth	9.5'
TPH-MO	-
TPH-D:	-
TPH-G:	<1.0
B:	<0.003
T:	<0.003
E:	<0.003
X:	<0.009
MTBE:	-

55TH STREET

SOIL (MG/KG)		
Depth	5.5'	10.0'
TPH-MO	-	-
TPH-D:	-	-
TPH-G:	<1.0	<1.0
B:	<0.003	<0.003
T:	<0.003	<0.003
E:	<0.003	<0.003
X:	<0.009	<0.009
MTBE:	-	-

SOIL (MG/KG)	
Depth	9.0'
TPH-MO	<10
TPH-D:	<10
TPH-G:	<1.0
B:	0.11
T:	<0.003
E:	<0.003
X:	<0.009
MTBE:	-

SOIL (MG/KG)	
Depth	9.0'
TPH-MO	-
TPH-D:	-
TPH-G:	16
B:	<0.003
T:	0.021
E:	0.24
X:	0.15
MTBE:	-






SIDEWALK

PICKLEWORKS (OFFICE / LIGHT INDUSTRIAL)
(FORMER CALIFORNIA SYRUP & EXTRACT FACILITY)

SOIL (MG/KG)		
Depth	6.0'	10.0'
TPH-MO	<100	<100
TPH-D:	250	<10
TPH-G:	650	<0.50
B:	1.2	0.051
T:	3.4	<0.005
E:	11	0.070
X:	16	0.006
MTBE:	-	-

SOIL (MG/KG)	
Depth	7.5'
TPH-MO	<10
TPH-D:	<1.0
TPH-G:	<1.0
B:	<0.005
T:	<0.005
E:	<0.005
X:	<0.005
MTBE:	<0.050

SOIL (MG/KG)	
Depth	7.5'
TPH-MO	<10
TPH-D:	<1.0
TPH-G:	<1.0
B:	<0.005
T:	<0.005
E:	<0.005
X:	<0.005
MTBE:	<0.050

-  - SOIL BORING LOCATION (GRIBI, 09/1999)
-  - SOIL BORING LOCATION (CWEC, 05/1993)
-  - GROUNDWATER MONITORING WELL



DESIGNED BY:	CHECKED BY:
DRAWN BY: JEG	SCALE:
PROJECT NO:	

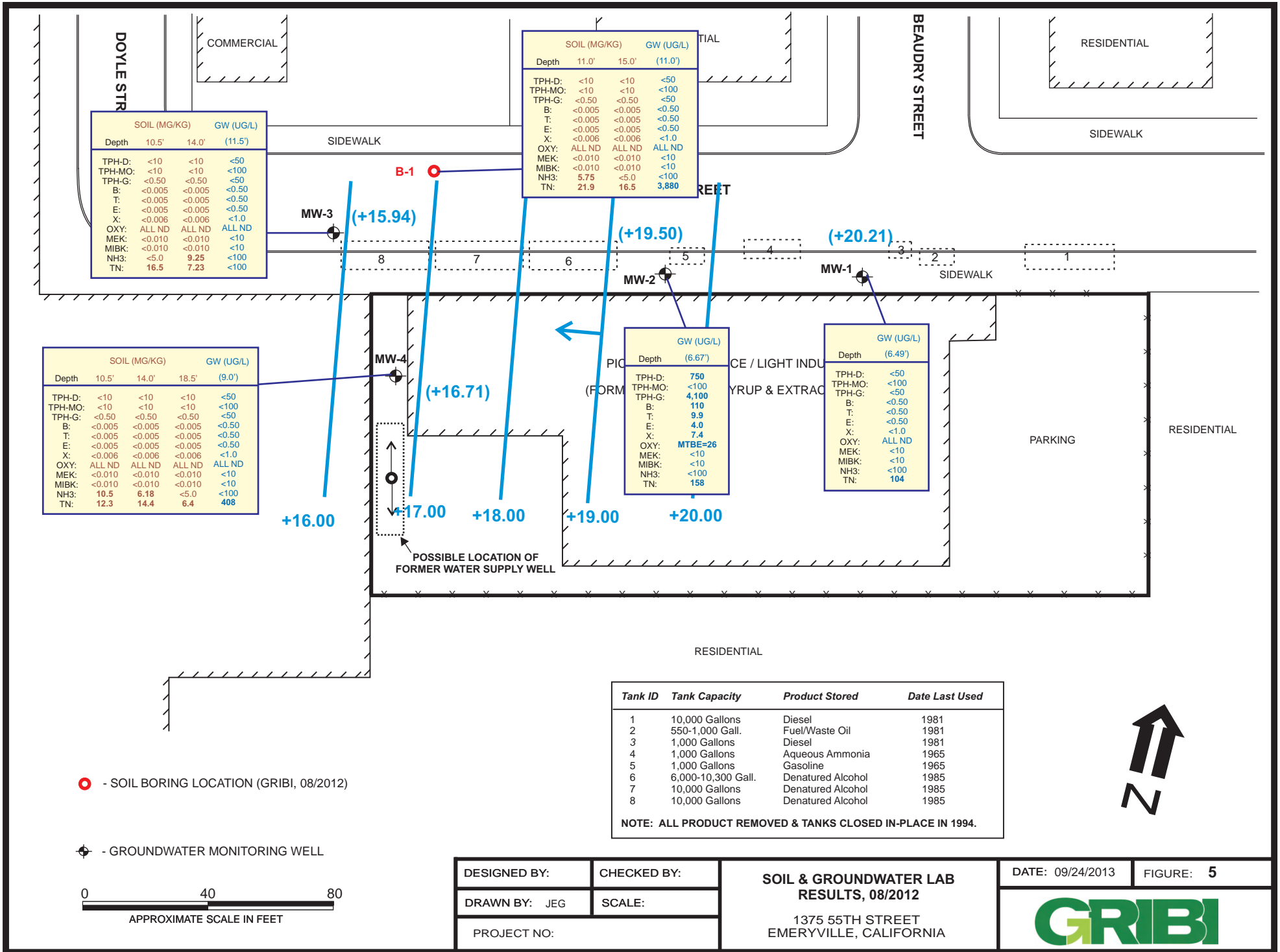
**HISTORICAL SOIL HYDROCARBON
RESULTS IN TANK NO. 5 SOURCE AREA**

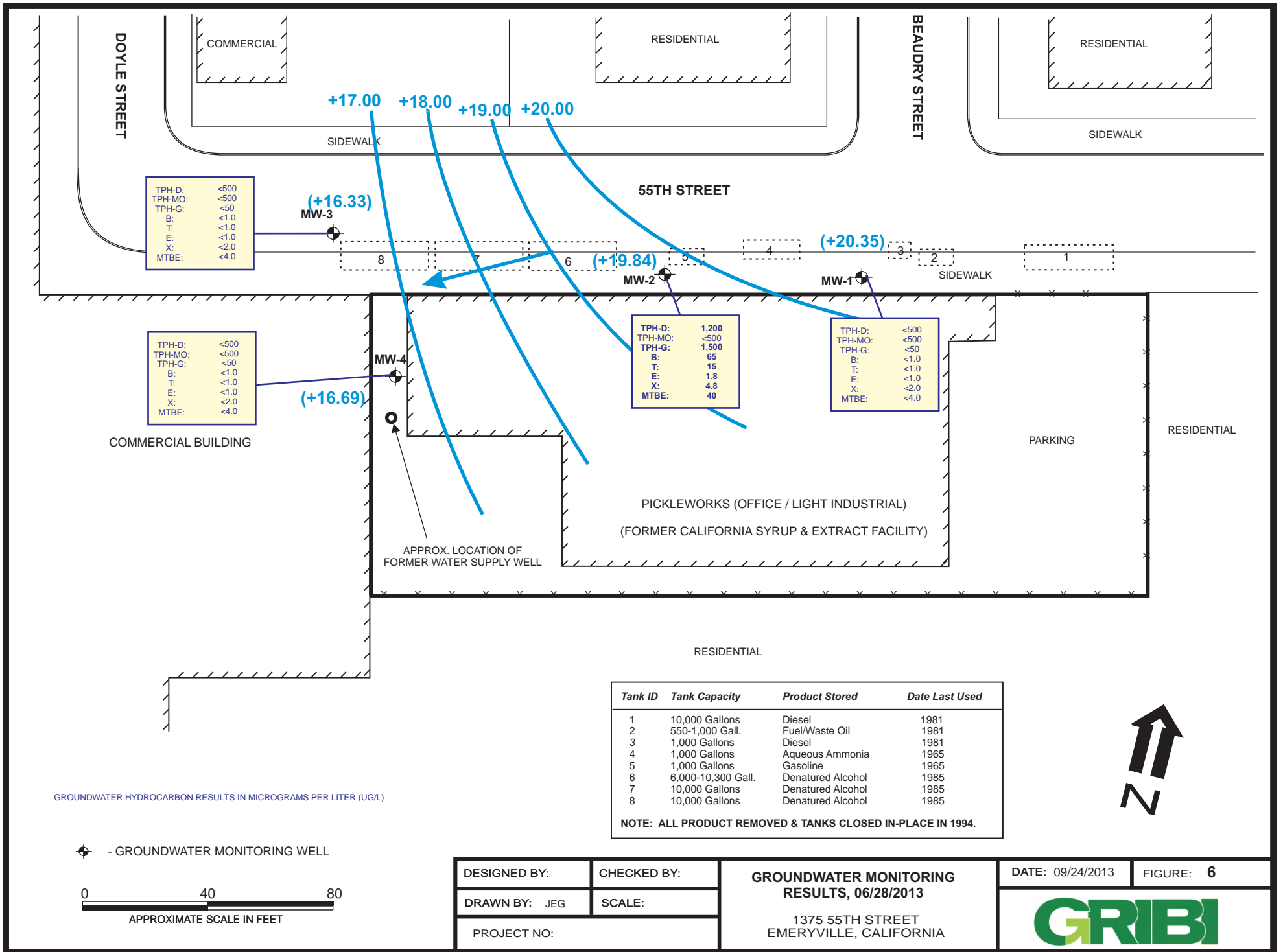
1375 55TH STREET
EMERYVILLE, CALIFORNIA

DATE: 09/24/2013

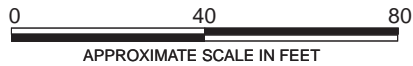
FIGURE: 4







⊕ - GROUNDWATER MONITORING WELL



DESIGNED BY:	CHECKED BY:
DRAWN BY: JEG	SCALE:
PROJECT NO:	

GROUNDWATER MONITORING RESULTS, 06/28/2013

1375 55TH STREET
EMERYVILLE, CALIFORNIA

DATE: 09/24/2013

FIGURE: 6



ATTACHMENT A
SITE SOIL BORING AND WELL LOGS

CENTURY WEST ENGINEERING CORPORATION
SOIL BORING LOG
CALIFORNIA SYRUP AND EXTRACT

Site Location: 1355 55th Street		Boring ID: IB-1	Total Depth: 10.5 ft
Boring Location: Between Tank #2 and Tank #3 fill ports		Elevation:	Initial GW Depth: 8.5 ft
Purpose:		Logged By: Bob Bogar	Final GW Depth:
Date: July 20, 1993		Blank Casing:	From: To:
Consulting Firm: Century West Engineering		Perforations:	From: To:
Project Number: 20539-001-01		Filter Sand:	From: To:
Drilling Contractor: Kvilhaug Drilling		Bentonite:	From: To:
Drilling Method: Hollow Stem Auger		Grout:	From: To:

Depth	Sample ID	Blow Counts	Profile	Soil Description	Remarks
.01				0 - 0.5 ft Concrete with rebar	
.02				0.5 - 3.5 ft Dark to light brown CLAY, moist, firm, silty, no hydrocarbon odor or stain.	
.03					
.04					
.05					
.06				3.5 - 10.5 ft Grey green CLAY, sl silty, moist, moderate to strong hydrocarbon odor.	IB-1.2: Grab sample from drilling cuttings from ≈ 6 ft.
.07					
.08					
.09	T				
10	IB-1.1 ¹				
11	⊥			Total Depth - 10.5 ft Ground Water - 8.5 ft	

¹ - For some of the borings, low clearance under phone lines did not allow the driller to "lower up", and sampler was pushed rather than pounded. Thus, for these borings, no blow counts are recorded.

CENTURY WEST ENGINEERING CORPORATION
SOIL BORING LOG
CALIFORNIA SYRUP AND EXTRACT

Site Location: 1355 55th Street		Boring ID: IB-2	Total Depth: 14.5 ft
Boring Location: West of Tank #1 fill port		Elevation:	Initial GW Depth: -
Purpose:		Logged By: Bob Bogar	Final GW Depth:
Date: July 20, 1993		Blank Casing:	From: To:
Consulting Firm: Century West Engineering		Perforations:	From: To:
Project Number: 20539-001-01		Filter Sand:	From: To:
Drilling Contractor: Kvilhaug Drilling		Bentonite:	From: To:
Drilling Method: Hollow Stem Auger		Grout:	From: To:

Depth	Sample ID	Blow Counts	Profile	Soil Description	Remarks
.01				0 - 0.5 ft Concrete with rebar	
.02				0.5 - 6.0 ft Light brown CLAY, moist, firm, silty some angular pebbles, no hydrocarbon odor or stain.	
.03					
.04					
.05					
.06				5.0 - 10.0 ft Light green CLAY, moist, firm, slight hydrocarbon odor.	
.07					
.08	T				
.09	⊥	IB-2.1			
10					
11				10.0 - 14.5 ft Light brown silty CLAY, moist, silty, few pebbles, no hydrocarbon odor or staining.	
12					
13	T				
14	⊥	IB-2.2			
15				Total depth - 14.5 ft No ground water	

CENTURY WEST ENGINEERING CORPORATION
SOIL BORING LOG
CALIFORNIA SYRUP AND EXTRACT

Site Location: 1355 55th Street		Boring ID: IB-3	Total Depth: 11.5 ft
Boring Location: East end of Tank #1		Elevation:	Initial GW Depth: 10.0 ft
Purpose:		Logged By: Bob Bogar	Final GW Depth:
Date: July 20, 1993		Blank Casing:	From: To:
Consulting Firm: Century West Engineering		Perforations:	From: To:
Project Number: 20539-001-01		Filter Sand:	From: To:
Drilling Contractor: Kvilhaug Drilling		Bentonite:	From: To:
Drilling Method: Hollow Stem Auger		Grout:	From: To:

Depth	Sample ID	Blow Counts	Profile	Soil Description	Remarks
.01				0 - 0.5 ft Concrete and rebar	
.02				0.5 - 11.0 ft Dark brown to grey SAND, (backfill material), silty, moist, no hydrocarbon odor or stain.	
.03					
.04					
.05					
.06					
.07					
.08					
.09					
10			▽		
11	T	IB-3.1	16	11.0 - 11.5 ft Lt brown silty CLAY, wet to saturated, no hydrocarbon odor or stain.	
12	L		5		
13			8		
14					
15				Total Depth - 11.5 ft Ground Water - 10.0 ft	

CENTURY WEST ENGINEERING CORPORATION
SOIL BORING LOG
CALIFORNIA SYRUP AND EXTRACT

Site Location: 1355 55th Street		Boring ID: IB-4	Total Depth: 11.5 ft
Boring Location: East end of Tank #4		Elevation:	Initial GW Depth: -
Purpose:		Logged By: Bob Bogar	Final GW Depth:
Date: July 20, 1993		Blank Casing:	From: To:
Consulting Firm: Century West Engineering		Perforations:	From: To:
Project Number: 20539-001-01		Filter Sand:	From: To:
Drilling Contractor: Kvilhaug Drilling		Bentonite:	From: To:
Drilling Method: Hollow Stem Auger		Grout:	From: To:

Depth	Sample ID	Blow Counts	Profile	Soil Description	Remarks
.01				0 - 0.5 ft Concrete with rebar	
.02				0.5 - 11.5 ft dark to light brown silty CLAY, moist, firm, no hydrocarbon odor or stain.	
.03					
.04					
.05					
.06					
.07					
.08					
.09					
10					
11	T	IB-4.1	10	Total Depth - 11.5 ft No ground water	
12	L		12		
13			18		
14					
15					

CENTURY WEST ENGINEERING CORPORATION
SOIL BORING LOG
CALIFORNIA SYRUP AND EXTRACT

Site Location: 1355 55th Street		Boring ID: IB-5	Total Depth: 11.0 ft
Boring Location: West end of Tank #4		Elevation:	Initial GW Depth: 8.5 ft
Purpose:		Logged By: Bob Bogar	Final GW Depth:
Date: July 20, 1993		Blank Casing:	From: To:
Consulting Firm: Century West Engineering		Perforations:	From: To:
Project Number: 20539-001-01		Filter Sand:	From: To:
Drilling Contractor: Kvilhaug Drilling		Bentonite:	From: To:
Drilling Method: Hollow Stem Auger		Grout:	From: To:

Depth	Sample ID	Blow Counts	Profile	Soil Description	Remarks
.01				0 - 0.5 ft Concrete and rebar	
.02				0.5 - 10.0 ft Grey to buff silty SAND, (backfill material), moist to wet, no hydrocarbon odor or stain.	
.03					
.04					
.05					
.06			_v_		
.07				10.0 - 11.5 ft Light brown CLAY, sl silty, wet to saturated, no hydrocarbon odor or staining.	
.08					
.09					
.10					
.11	T J	IB-5.1	18 16 32		
.12				Total depth - 11.0 ft Ground water - 8.5 ft	
.13					
.14					
.15					

CENTURY WEST ENGINEERING CORPORATION
SOIL BORING LOG
CALIFORNIA SYRUP AND EXTRACT

Site Location: 1355 55th Street		Boring ID: IB-6	Total Depth: 9.5 ft
Boring Location: East end of Tank #5		Elevation:	Initial GW Depth: -
Purpose:		Logged By: Bob Bogar	Final GW Depth:
Date: July 20, 1993		Blank Casing:	From: To:
Consulting Firm: Century West Engineering		Perforations:	From: To:
Project Number: 20539-001-01		Filter Sand:	From: To:
Drilling Contractor: Kvilhaug Drilling		Bentonite:	From: To:
Drilling Method: Hollow Stem Auger		Grout:	From: To:

Depth	Sample ID	Blow Counts	Profile	Soil Description	Remarks
.01				0 - 0.5 ft Concrete and rebar	
.02				0.5 - 5.0 ft Dark to light brown sandy CLAY, silty, moist, firm, some angular pebbles, no hydrocarbon odor or stain.	
.03					
.04					
.05					
.06					
.07				5.0 - 9.5 ft Light to dark green silty CLAY, sandy, moist, firm, moderate to strong hydrocarbon odor.	IB-6.1: Grab sample from drilling cuttings from 5 to 9 ft.
.08	T	IB-6.1			
.09	J				
.10					
.11				Total depth - 9.5 ft No ground water	

CENTURY WEST ENGINEERING CORPORATION
SOIL BORING LOG
CALIFORNIA SYRUP AND EXTRACT

Site Location: 1355 55th Street		Boring ID: IB-7	Total Depth: 10.5 ft
Boring Location: West of Tank #6		Elevation:	Initial GW Depth: 10.0 ft
Purpose:		Logged By: Bob Bogar	Final GW Depth:
Date: July 20, 1993		Blank Casing:	From: To:
Consulting Firm: Century West Engineering		Perforations:	From: To:
Project Number: 20539-001-01		Filter Sand:	From: To:
Drilling Contractor: Kvilhaug Drilling		Bentonite:	From: To:
Drilling Method: Hollow Stem Auger		Grout:	From: To:

Depth	Sample ID	Blow Counts	Profile	Soil Description	Remarks
.01				0 - 0.5 ft Concrete and rebar	
.02					
.03					
.04					
.05					
.06				0.5 - 10.5 ft Dark brown to grey SAND, (probably backfill material), silty, moist to wet, no hydrocarbon odor or stain.	
.07					
.08					
.09	T	8			
10	SB-7.1	22	V		
11	⊥	18		Total Depth - 10.5 ft	
12				Ground Water - 10.0 ft	
13					
14					
15					

CENTURY WEST ENGINEERING CORPORATION
SOIL BORING LOG
CALIFORNIA SYRUP AND EXTRACT

Site Location: 1355 55th Street		Boring ID: IB-8	Total Depth: 11.0 ft
Boring Location: West of Tank #7		Elevation:	Initial GW Depth: -
Purpose:		Logged By: Bob Bogar	Final GW Depth:
Date: July 20, 1993		Blank Casing:	From: To:
Consulting Firm: Century West Engineering		Perforations:	From: To:
Project Number: 20539-001-01		Filter Sand:	From: To:
Drilling Contractor: Kvilhaug Drilling		Bentonite:	From: To:
Drilling Method: Hollow Stem Auger		Grout:	From: To:

Depth	Sample ID	Blow Counts	Profile	Soil Description	Remarks
.01				0 - 0.5 ft Concrete and rebar	
.02					
.03					
.04					
.05					
.06	T	4		0.5 - 11.0 ft Dark to light brown SAND, (backfill material), silty, moist to wet, no hydrocarbon odor or stain.	
.07	⊥	5			
.08		7			
.09					
10					
11	T	6		Total Depth - 12.0 ft	
12	⊥	9		No ground water	
		24			

CENTURY WEST ENGINEERING CORPORATION
SOIL BORING LOG
CALIFORNIA SYRUP AND EXTRACT

Site Location: 1355 55th Street		Boring ID: IB-9	Total Depth: 11.5 ft
Boring Location: West end of Tank #8		Elevation:	Initial GW Depth: 10.0 ft
Purpose:		Logged By: Bob Bogar	Final GW Depth:
Date: July 21, 1993		Blank Casing:	From: To:
Consulting Firm: Century West Engineering		Perforations:	From: To:
Project Number: 20539-001-01		Filter Sand:	From: To:
Drilling Contractor: Kvilhaug Drilling		Bentonite:	From: To:
Drilling Method: Hollow Stem Auger		Grout:	From: To:

Depth	Sample ID	Blow Counts	Profile	Soil Description	Remarks
.01				0 - 0.5 ft Concrete and rebar	
.02					
.03					
.04					
.05					
.06	T			0.5 - 11.5 ft Light to dark green CLAY, very firm, moist, some angular pebbles, slight hydrocarbon odor.	
.07	J	IB-9.1	11 16 26		
.08					
.09					
.10			_ v _		
.11	T J	IB-9.2	10 24 50	Total Depth - 11.5 ft Ground Water - 10.0 ft	

CENTURY WEST ENGINEERING CORPORATION
SOIL BORING LOG
CALIFORNIA SYRUP AND EXTRACT

Site Location: 1355 55th Street		Boring ID: IB-10	Total Depth: 10.5 ft
Boring Location: West of Tank #3		Elevation:	Initial GW Depth: -
Purpose:		Logged By: Bob Bogar	Final GW Depth:
Date: July 21, 1993		Blank Casing:	From: To:
Consulting Firm: Century West Engineering		Perforations:	From: To:
Project Number: 20539-001-01		Filter Sand:	From: To:
Drilling Contractor: Kvilhaug Drilling		Bentonite:	From: To:
Drilling Method: Hollow Stem Auger		Grout:	From: To:

Depth	Sample ID	Blow Counts	Profile	Soil Description	Remarks
.01				0 - 0.5 ft Concrete and rebar	
.02				0.5 - 4.0 ft Light to dark brown silty CLAY, moist, no hydrocarbon odor or stain.	
.03					
.04					
.05					
.06				4.0 - 6.0 ft Light to dark green CLAY, moist, firm, moderate hydrocarbon odor.	IB-10.2: Grab sample from drilling cuttings from 4 to 6 ft.
.07					
.08				6.0 - 10.5 ft Light brown silty CLAY, slight green tinge, moist, moderate to slight hydrocarbon odor.	Free product found in soil sample
.09	T	IB-10.1			
.10	J			Total Depth - 10.5 ft No ground water.	

CENTURY WEST ENGINEERING CORPORATION
SOIL BORING LOG
CALIFORNIA SYRUP AND EXTRACT

Site Location: 1355 55th Street		Boring ID: IB-11	Total Depth: 11.0 ft		
Boring Location: East end of Tank #2		Elevation:	Initial GW Depth:		
Purpose:		Logged By: Bob Bogar	Final GW Depth:		
Date: July 21, 1993		Blank Casing:	From: To:		
Consulting Firm: Century West Engineering		Perforations:	From: To:		
Project Number: 20539-001-01		Filter Sand:	From: To:		
Drilling Contractor: Kvilhaug Drilling		Bentonite:	From: To:		
Drilling Method: Hollow Stem Auger		Grout:	From: To:		
Depth	Sample ID	Blow Counts	Profile	Soil Description	Remarks
.01				0 - 0.5 ft Concrete and rebar	IB-11.1: Grab sample taken from cuttings at 3 ft.
.02					
.03					
.04					
.05					
.06				0.5 - 11.0 ft Light to dark green CLAY, moist, firm, moderate to strong hydrocarbon odor.	
.07					
.08					
.09	T				
.10	IB-11.2				
.11	L			Total Depth - 11.0 ft No ground water.	

CENTURY WEST ENGINEERING CORPORATION
SOIL BORING LOG
CALIFORNIA SYRUP AND EXTRACT

Site Location: 1355 55th Street		Boring ID: IB-12	Total Depth: 10.5 ft		
Boring Location: West end of Tank #5		Elevation:	Initial GW Depth: -		
Purpose:		Logged By: Bob Bogar	Final GW Depth:		
Date: July 21, 1993		Blank Casing:	From: To:		
Consulting Firm: Century West Engineering		Perforations:	From: To:		
Project Number: 20539-001-01		Filter Sand:	From: To:		
Drilling Contractor: Kvilhaug Drilling		Bentonite:	From: To:		
Drilling Method: Hollow Stem Auger		Grout:	From: To:		
Depth	Sample ID	Blow Counts	Profile	Soil Description	Remarks
.01				0 - 0.5 ft Concrete	
.02					
.03				0.5 - 5.0 ft Brown to dark brown CLAY, moist, silty, no hydrocarbon odor or stain.	
.04					
.05					
.06				5.0 - 10.5 ft Grey green CLAY, firm, moist, occas. silty, slight to moderate hydrocarbon odor.	IB-12.1: Grab sample from cuttings from 5 to 10.5 ft.
.07					
.08					
.09	T				
.10	IB-12.2				
.11	L			Total Depth - 10.5 ft No ground water	

CENTURY WEST ENGINEERING CORPORATION

**SOIL BORING LOG
CALIFORNIA SYRUP AND EXTRACT**

Site Location: 1355 55th Street		Boring ID: IB-13	Total Depth: 11.5 ft		
Boring Location: East end of Tank #4		Elevation:	Initial GW Depth: 10.0 ft		
Purpose:		Logged By: Bob Bogar	Final GW Depth:		
Date: July 21, 1993		Blank Casing:	From: To:		
Consulting Firm: Century West Engineering		Perforations:	From: To:		
Project Number: 20539-001-01		Filter Sand:	From: To:		
Drilling Contractor: Kvilhaug Drilling		Bentonite:	From: To:		
Drilling Method: Hollow Stem Auger		Grout:	From: To:		
Depth	Sample ID	Blow Counts	Profile	Soil Description	Remarks
.01				0 - 0.5 ft Concrete	
.02					
.03				0.5 - 4.0 ft Grey to dark grey CLAY, moist, no hydrocarbon odor or stain.	
.04					
.05					
.06	T			4.0 - 10.5 ft Dark to medium green CLAY, moist, firm, slight hydrocarbon odor.	
.07	L	IB-13.1	9 14 19		
.08					
.09					
10			- v -		
11	T			10.5 - 11.5 ft Light brown CLAY with some green mottling, strong hydrocarbon odor.	
12	L	IB-13.2	11 16 22		
				Total depth - 11.5 ft Ground water - 10.0 ft	

CENTURY WEST ENGINEERING CORPORATION
MONITORING WELL LOG - MW-1
CALIFORNIA SYRUP AND EXTRACT

Site Location: 1355 55th Street	Boring ID: MW-1	Total Depth: 20.0 ft
Boring Location: East Well	Elevation:	Initial GW Depth: 8.0 ft
Purpose: Ground water investigation	Logged By: Bob Bogar	Final GW Depth:
Date: September 8, 1994	Blank Casing:	From: 5.10 To: 0.0 ft
Consulting Firm: Century West Engineering	Perforations:	From: 20.0 To: 5.10 ft
Project Number: 20539-001-02	Filter Sand:	From: 20.4 To: 4.0 ft
Drilling Contractor: Kvilhaug Drilling	Bentonite:	From: 4.0 To: 3.0 ft
Drilling Method: Hollow Stem Auger	Grout:	From: 3.0 To: 0.5 ft

Depth	Sample ID	Blow Counts	Profile	Soil Description	Remarks
01				0 - 0.5 ft Concrete	Note: Hand augered to 2 1/2 ft.
02				0.5 - 2.0 ft Dark brown clayey SILT; moist, soft; no hydrocarbon odor or discoloration.	
03				2.0 - 4.0 ft Light brown clayey SILT; moist, soft; no hydrocarbon odor or discoloration.	
04					
05					
06	T	MW-1.1	10	4.0 - 8.0 ft Dark green sandy SILT; moist, soft; slight to strong hydrocarbon odor.	
07	L		10		
08			10		
09					
10	T		6		
11	L	MW-1.2	9	8.0 - 15.0 ft Light reddish brown clayey SILT; no hydrocarbon odor or discoloration.	
12			15		
13					
14					
15					
16				15.0 - 20.0 ft Grey brown, clayey sandy SILT; no hydrocarbon odor or discoloration.	
17					
18					
19					
20					

Final Auger Depth - 20 ft
Ground Water - 8 ft

CENTURY WEST ENGINEERING CORPORATION
MONITORING WELL LOG - MW-2
CALIFORNIA SYRUP AND EXTRACT

Site Location: 1355 55th Street	Boring ID: MW-2	Total Depth: 20.0 ft
Boring Location: West Well	Elevation:	Initial GW Depth: 8.0 ft
Purpose: Ground water investigation	Logged By: Bob Bogar	Final GW Depth:
Date: September 8, 1994	Blank Casing:	From: 5.36 To: 0.0 ft
Consulting Firm: Century West Engineering	Perforations:	From: 20.0 To: 5.36 ft
Project Number: 20539-001-02	Filter Sand:	From: 20.4 To: 4.0 ft
Drilling Contractor: Kvilhaug Drilling	Bentonite:	From: 4.0 To: 3.0 ft
Drilling Method: Hollow Stem Auger	Grout:	From: 3.0 To: 0.5 ft

Depth	Sample ID	Blow Counts	Profile	Soil Description	Remarks
01				0 - 0.5 ft Concrete	Note: Hand augered to 2 1/2 ft.
02				0.5 - 2.5 ft Light brown SILT; moist, soft; no hydrocarbon odor or discoloration; blocks of concrete to 1 ft.	
03				2.5 - 4.0 ft Light brown clayey SILT; moist, soft; no hydrocarbon odor or discoloration.	
04					
05					
06	T	MW-2.1	2 3 8	4.0 - 7.0 ft Light to dark green SILT; moist, soft; strong hydrocarbon odor.	
07	L				
08					
09					
10	T	MW-2.2	8 12		
11	L		20	7.0 - 10.0 ft Light brown to grey silty CLAY; moist; slight hydrocarbon odor.	
12					
13					
14					
15					
16				10.0 - 20.0 ft Light brown clayey SILT; moist, soft; no hydrocarbon odor or discoloration.	
17					
18					
19					
20					

Final Auger Depth - 20 ft
Ground Water - 8 ft

BORING NUMBER: IB-1
 BORING LOCATION: EAST YARD
 BORING TYPE: INVESTIGATIVE BORING
 PROJECT NAME: CSE-55TH STREET
 PROJECT NUMBER: 167-01-01

LOG OF WELL BORING

GRIBI Associates

SHEET _1_ OF _1_

DRILLING CONTRACTOR: GREGG DRILLING
 DRILLING METHOD: DIRECT PUSH
 BOREHOLE DIAMETER: 2 INCHES
 COMPLETION METHOD: GROUTED
 BORING TOTAL DEPTH: 6.5 FEET
 GROUNDWATER TOTAL DEPTH: NONE

START DATE: 9/7/99
 COMPLETION DATE: 9/7/99

DEPTH SCALE (FEET)	SAMPLE NO.	SAMPLE DEPTH	INTERVAL	PID READING /DEPTH	USCS	LOG OF MATERIAL	PEZOMETER WELL INSTALLATION
						0 - 0.5 Ft. Concrete and base rock.	
					CL	0.5 - 2.0 Ft. Black CLAY, friable, soft, moist, no hydrocarbon odor or staining.	
					CL	2.0 - 6.5 Ft. Brown to olive green CLAY, firm, moist, no hydrocarbon odor or staining.	
5	IB-1.1	6.0 FT					
10							
15							
20							
25							
						END OF BORING	

BORING NUMBER: IB-2
 BORING LOCATION: SOUTH YARD
 BORING TYPE: INVESTIGATIVE BORING
 PROJECT NAME: CSE-55TH STREET
 PROJECT NUMBER: 167-01-01

LOG OF WELL BORING

GRIBI Associates

SHEET _1_ OF _1_

DRILLING CONTRACTOR: GREGG DRILLING
 DRILLING METHOD: DIRECT PUSH
 BOREHOLE DIAMETER: 2 INCHES
 COMPLETION METHOD: GROUTED
 BORING TOTAL DEPTH: 6.0 FEET
 GROUNDWATER TOTAL DEPTH: NONE

START DATE: 9/7/99
 COMPLETION DATE: 9/7/99

DEPTH SCALE (FEET)	SAMPLE NO.	SAMPLE DEPTH	INTERVAL	PID READING /DEPTH	USCS	LOG OF MATERIAL	PEZOMETER WELL INSTALLATION
						0 - 0.5 Ft. Concrete and base rock.	
					ML	0.5 - 4.0 Ft. Black clayey SILT, loose, soft, dry to moist, no hydrocarbon odor or staining.	
					CL	4.0 - 6.0 Ft. Olive green silty CLAY, slightly gravelly, firm, moist, no hydrocarbon odor or staining.	
5	IB-2.1	6.5 FT					
10							
15							
20							
25							
						END OF BORING	

BORING NUMBER: IB-3
 BORING LOCATION: WEST GATE
 BORING TYPE: INVESTIGATIVE BORING
 PROJECT NAME: CSE-55TH STREET
 PROJECT NUMBER: 167-01-01

LOG OF WELL BORING

GRIBI Associates

SHEET _1_ OF _1_

DRILLING CONTRACTOR: GREGG DRILLING
 DRILLING METHOD: DIRECT PUSH
 BOREHOLE DIAMETER: 2 INCHES
 COMPLETION METHOD: GROUTED
 BORING TOTAL DEPTH: 6.0 FEET
 GROUNDWATER TOTAL DEPTH: NONE

START DATE: 9/7/99
 COMPLETION DATE: 9/7/99

DEPTH SCALE (FEET)	SAMPLE NO.	SAMPLE DEPTH	INTERVAL	PID READING /DEPTH	USCS	LOG OF MATERIAL	PIEZOMETER WELL INSTALLATION
0					CA	0 - 0.5 Ft. Concrete and base rock.	
0.5					ML	0.5 - 3.0 Ft. Black to brown clayey SILT, loose, soft, moist, no hydrocarbon odor or staining.	
3.0					CL	3.0 - 6.0 Ft. Olive green silty CLAY, firm, moist, no hydrocarbon odor or staining.	
5.5	IB-3.1	5.5 FT				END OF BORING	
10							
15							
20							
25							

BORING NUMBER: IB-4
 BORING LOCATION: WAREHOUSE MIDDLE WEST
 BORING TYPE: INVESTIGATIVE BORING
 PROJECT NAME: CSE-55TH STREET
 PROJECT NUMBER: 167-01-01

LOG OF WELL BORING

GRIBI Associates

SHEET _1_ OF _1_

DRILLING CONTRACTOR: GREGG DRILLING
 DRILLING METHOD: DIRECT PUSH
 BOREHOLE DIAMETER: 2 INCHES
 COMPLETION METHOD: GROUTED
 BORING TOTAL DEPTH: 6.5 FEET
 GROUNDWATER TOTAL DEPTH: NONE

START DATE: 9/7/99
 COMPLETION DATE: 9/7/99

DEPTH SCALE (FEET)	SAMPLE NO.	SAMPLE DEPTH	INTERVAL	PID READING /DEPTH	USCS	LOG OF MATERIAL	PIEZOMETER WELL INSTALLATION
0					CA	0 - 0.5 Ft. Concrete and base rock.	
0.5					ML	0.5 - 4.0 Ft. Black clayey SILT, loose, dry to moist, no hydrocarbon odor or staining.	
4.0					CL	4.0 - 5.0 Ft. Brown CLAY, firm, moist, no hydrocarbon odor or staining.	
5.0					SM	5.0 - 6.5 Ft. Brown gravelly silty SAND, loose to firm, dry to moist, no hydrocarbon odor or staining.	
6.0	IB-4.1	6.0 FT				END OF BORING	
10							
15							
20							
25							

BORING NUMBER : IB-5

LOG OF WELL BORING

SHEET _1_ OF _1_

BORING LOCATION:
WAREHOUSE MIDDLE OF SOUTH WALL

GRIBI Associates

DRILLING CONTRACTOR: GREGG DRILLING

DRILLING METHOD: DIRECT PUSH

BOREHOLE DIAMETER: 2 INCHES

COMPLETION METHOD: GROUTED

BORING TOTAL DEPTH: 6.0 FEET

GROUNDWATER TOTAL DEPTH: NONE

PROJECT NAME: CSE-55TH STREET

START DATE: 9/7/99

COMPLETION DATE: 9/7/99

PROJECT NUMBER: 167-01-01

DEPTH SCALE (FEET)	SAMPLE NO.	SAMPLE DEPTH	INTERVAL	PID READING /DEPTH	USCS	LOG OF MATERIAL	PIEZOMETER WELL INSTALLATION
						0 - 0.5 Ft. Concrete and base rock.	
					ML	0.5 - 4.0 Ft. Black to brown SILT, loose, friable, dry to moist, no hydrocarbon odor or staining.	
5	IB-5.1	5.5 FT			CL	4.0 - 6.0 Ft. Brown silty CLAY, dense, moist, no hydrocarbon odor or staining.	
						END OF BORING	

BORING NUMBER : IB-6

LOG OF WELL BORING

SHEET _1_ OF _1_

BORING LOCATION:
WAREHOUSE SOUTHWEST CORNER

GRIBI Associates

DRILLING CONTRACTOR: GREGG DRILLING

DRILLING METHOD: DIRECT PUSH

BOREHOLE DIAMETER: 2 INCHES

COMPLETION METHOD: GROUTED

BORING TOTAL DEPTH: 8.0 FEET

GROUNDWATER TOTAL DEPTH: NONE

PROJECT NAME: CSE-55TH STREET

START DATE: 9/7/99

COMPLETION DATE: 9/7/99

PROJECT NUMBER: 167-01-01

DEPTH SCALE (FEET)	SAMPLE NO.	SAMPLE DEPTH	INTERVAL	PID READING /DEPTH	USCS	LOG OF MATERIAL	PIEZOMETER WELL INSTALLATION
						0 - 0.5 Ft. Concrete and base rock.	
						0.5 - 4.0 Ft. Unsuccessful sample recovery.	
5					CL	4.0 - 6.0 Ft. Brown CLAY, firm, moist, no hydrocarbon odor or staining.	
	IB-6.1	7.5 FT			SM	6.0 - 8.0 Ft. Brown gravelly silty SAND, loose, friable, no hydrocarbon odor or staining.	
						END OF BORING	

BORING NUMBER: IB-7
 BORING LOCATION:
 WAREHOUSE MIDDLE EAST
 BORING TYPE: INVESTIGATIVE BORING
 PROJECT NAME: CSE-55TH STREET
 PROJECT NUMBER: 167-01-01

LOG OF WELL BORING

GRIBI Associates

SHEET _1_ OF _1_

DRILLING CONTRACTOR: GREGG DRILLING
 DRILLING METHOD: DIRECT PUSH
 BOREHOLE DIAMETER: 2 INCHES
 COMPLETION METHOD: GROUTED
 BORING TOTAL DEPTH: 6.0 FEET
 GROUNDWATER TOTAL DEPTH: NONE

START DATE: 9/7/99
 COMPLETION DATE: 9/7/99

DEPTH SCALE (FEET)	SAMPLE NO.	SAMPLE DEPTH	INTERVAL	PID READING /DEPTH	USCS	LOG OF MATERIAL	PIEZOMETER WELL INSTALLATION
0						0 - 0.5 Ft. Concrete and base rock.	
					ML	0.5 - 4.0 Ft. Black clayey SILT, soft, friable, moist, no hydrocarbon odor or staining.	
5	IB-7.1	5.5 FT			SM	4.0 - 6.0 Ft. Brown gravelly silty SAND, friable, moist, no hydrocarbon odor or staining.	
						END OF BORING	
10							
15							
20							
25							

BORING NUMBER: IB-8
 BORING LOCATION:
 WAREHOUSE-NORTHEAST OF NORTHWALL
 BORING TYPE: INVESTIGATIVE BORING
 PROJECT NAME: CSE-55TH STREET
 PROJECT NUMBER: 167-01-01

LOG OF WELL BORING

GRIBI Associates

SHEET _1_ OF _1_

DRILLING CONTRACTOR: GREGG DRILLING
 DRILLING METHOD: DIRECT PUSH
 BOREHOLE DIAMETER: 2 INCHES
 COMPLETION METHOD: GROUTED
 BORING TOTAL DEPTH: 8.0 FEET
 GROUNDWATER TOTAL DEPTH: NONE

START DATE: 9/7/99
 COMPLETION DATE: 9/7/99

DEPTH SCALE (FEET)	SAMPLE NO.	SAMPLE DEPTH	INTERVAL	PID READING /DEPTH	USCS	LOG OF MATERIAL	PIEZOMETER WELL INSTALLATION
0						0 - 0.5 Ft. Concrete and base rock.	
						0.5 - 4.0 Ft. Unsuccessful sample recovery.	
5					SM	4.0 - 7.0 Ft. Brown gravelly silty SAND, friable, firm, dry to moist, no hydrocarbon odor or staining.	
	IB-8.1	7.5 FT			ML	7.0 - 8.0 Ft. Brown clayey SILT, firm, dense, moist, no hydrocarbon odor or staining.	
						END OF BORING	
10							
15							
20							
25							

BORING NUMBER: IB-9

LOG OF WELL BORING

SHEET _1_ OF _1_

BORING LOCATION:
WAREHOUSE-EAST OF SOUTH WALL
BORING TYPE: INVESTIGATIVE BORING

GRIBI Associates

DRILLING CONTRACTOR: GREGG DRILLING
DRILLING METHOD: DIRECT PUSH
BOREHOLE DIAMETER: 2 INCHES
COMPLETION METHOD: GROUTED
BORING TOTAL DEPTH: 6.0 FEET
GROUNDWATER TOTAL DEPTH: NONE

PROJECT NAME: CSE-55TH STREET

START DATE: 9/7/99

PROJECT NUMBER: 167-01-01

COMPLETION DATE: 9/7/99

DEPTH SCALE (FEET)	SAMPLE NO.	SAMPLE DEPTH	INTERVAL	PID READING /DEPTH	USCS	LOG OF MATERIAL	PIEZOMETER WELL INSTALLATION
						0 - 0.5 Ft. Concrete and base rock.	
					ML	0.5 - 4.0 Ft. Black to dark brown SILT, loose, friable, dry, no hydrocarbon odor or staining.	
5	IB-9.1	5.5 FT			ML	4.0 - 6.0 Ft. Brown clayey SILT, dense, moist, no hydrocarbon odor or staining.	
						END OF BORING	
10							
15							
20							
25							

BORING NUMBER: IB-10

LOG OF WELL BORING

SHEET _1_ OF _1_

BORING LOCATION:
WAREHOUSE-WEST OF NORTH WALL
BORING TYPE: INVESTIGATIVE BORING

GRIBI Associates

DRILLING CONTRACTOR: GREGG DRILLING
DRILLING METHOD: DIRECT PUSH
BOREHOLE DIAMETER: 2 INCHES
COMPLETION METHOD: GROUTED
BORING TOTAL DEPTH: 8.0 FEET
GROUNDWATER TOTAL DEPTH: NONE

PROJECT NAME: CSE-55TH STREET

START DATE: 9/7/99

PROJECT NUMBER: 167-01-01

COMPLETION DATE: 9/7/99

DEPTH SCALE (FEET)	SAMPLE NO.	SAMPLE DEPTH	INTERVAL	PID READING /DEPTH	USCS	LOG OF MATERIAL	PIEZOMETER WELL INSTALLATION
						0 - 0.5 Ft. Concrete and base rock.	
						0.5 - 4.0 Ft. Unsuccessful sample recovery.	
5					SM	4.0 - 7.0 Ft. Brown gravelly silty SAND, friable, firm, dry to moist, no hydrocarbon odor or staining.	
	IB-10.1	7.5 FT			ML	7.0 - 8.0 Ft. Brown clayey SILT, firm, dense, moist, no hydrocarbon odor or staining.	
						END OF BORING	
10							
15							
20							
25							

LOG OF SOIL BORING

BORING NUMBER : **B-1**

BORING LOCATION: N SIDE OF 55TH STREET

BORING TYPE: SOIL BORING

PROJECT NAME: CALIFORNIA SYRUP & EXTRACT

FIELD SCIENTIST: J. GRIB



START DATE: 08/01/2012

COMPLETION DATE: 08/01/2012

DRILLING CONTRACTOR: GREGG DRILLING

DRILLING METHOD: DIRECT PUSH

BOREHOLE DIAMETER: 2.5 INCHES

COMPLETION METHOD: BORING

BORING TOTAL DEPTH: 16.0 FEET

GROUNDWATER DEPTH: INITIAL: 10.5 FEET
FINAL: NM

DEPTH SCALE (FEET)	SAMPLE NO.	SAMPLE DEPTH	INTERVAL	PID READING & BLOW COUNTS - INITIAL - FINAL	USCS	LOG OF MATERIAL	
						0.0 - 1.5 ft. Asphalt & base gravel	
5.0	B-1-7.5 8.55	7.5 FT.		0	CL	1.5 - 10.0 ft. Silty Clay (CL) Dark grey to olive grey, firm, moist, no odors or sheens, slightly sandy & gravelly at 9 ft. to 10 ft.	
10	B-1-11.0 9.00	11.0 FT.		0	GP	10.0 - 15.0 ft. Silty, Clayey Gravel (GP) Light brown, lightly sandy, loose to firm, wet at about 11.0 ft., no odors or staining, water saturated from 11 ft. to 13.5 ft.	
15	B-1-15.0 9.10	15.0 FT.		0	SM	15.0 - 16.0 ft. Silty Sand (SM) Light brown, slightly clayey, moist to wet, soft to firm, no odors.	
						COLLECTED GRAB GROUNDWATER SAMPLE B-1-W; open hole AT 16 FT BGS ON 8/01/12 AT 9:20.	
						TOTAL DEPTH: 16.0 FEET	

LOG OF SOIL BORING

BORING NUMBER : **MW-3**

BORING LOCATION: 55TH STREET

BORING TYPE: SOIL BORING

PROJECT NAME: CALIFORNIA SYRUP & EXTRACT

FIELD SCIENTIST: J. GRIB



START DATE: 08/01/2012

COMPLETION DATE: 08/01/2012

DRILLING CONTRACTOR: GREGG DRILLING

DRILLING METHOD: DIRECT PUSH

BOREHOLE DIAMETER: 2.5 INCHES

COMPLETION METHOD: BORING

BORING TOTAL DEPTH: 15.0 FEET

GROUNDWATER DEPTH: INITIAL: 11.5 FEET
FINAL: 9.04 FEET

DEPTH SCALE (FEET)	SAMPLE NO.	SAMPLE DEPTH	INTERVAL	PID READING & BLOW COUNTS - INITIAL - FINAL	USCS	LOG OF MATERIAL		PIEZOMETER WELL INSTALLATION
						0.0 - 1.5 ft. Asphalt & concrete.		
5.0	B-3-6.0 10.50	6.0 FT.		0	CL	1.5 - 11.5 ft. Silty Clay (CL) Dark grey to olive		
10	B-3-10.5 11.00	10.5 FT.		0	GP	11.5 - 15.0 ft. Sandy Gravel (GP) Brown-olive grey, loose, silty, wet at 11.5 ft, clast to 2 inch, water saturated, no odors or staining.		
15	B-3-14.0 11.10	14.0 FT.		0				
						TOTAL DEPTH: 16.0 FEET		
						<p style="text-align: center;"><u>WELL SPECIFICATIONS</u></p> <p>A - WELL SCREEN DEPTH: 9.87 FT CASING TYPE: SCH 40 PVC B - WELL SCREEN LENGTH: 5.00 FT CASING SIZE: 2-INCH C - DEPTH TO TOP OF SAND: 8.00 FT SLOT SIZE: 0.020 INCH D - DEPTH BENTONITE SEAL: 6.00 FT</p>		

LOG OF SOIL BORING

BORING NUMBER : **MW-4**

BORING LOCATION: SOUTH OF MW-3

BORING TYPE: SOIL BORING

PROJECT NAME: CALIFORNIA SYRUP & EXTRACT

FIELD SCIENTIST: J. GRIB



START DATE: 08/01/2012

COMPLETION DATE: 08/01/2012

DRILLING CONTRACTOR: GREGG DRILLING

DRILLING METHOD: DIRECT PUSH

BOREHOLE DIAMETER: 2.5 INCHES

COMPLETION METHOD: BORING

BORING TOTAL DEPTH: 20.0 FEET

GROUNDWATER DEPTH: INITIAL: NONE
FINAL: 9.34 FEET

DEPTH SCALE (FEET)	SAMPLE NO.	SAMPLE DEPTH	INTERVAL	PID READING & BLOW COUNTS - INITIAL - FINAL	USCS	LOG OF MATERIAL	PIEZOMETER WELL INSTALLATION
0.0						0.0 - 2.0 ft. Asphalt & base rock.	
5.0	B-4-6.0 12:45	6.0 FT.		0		2.0 - 14.5 ft. Silty Clay (CL) Dark grey to olive grey	
10.0	B-4-10.5 12:50	10.5 FT.		0			
15.0	B-4-14.0 12:55	14.0 FT.		0			
20.0	B-4-18.5 13:10	18.5 FT.		0		14.5 - 20.0 ft. Gravelly Clay (GP) Light brown, firm, dense, sub rounded gravel clasts to 1.5 inch, moist, slightly wet at 14.0 ft. & 18 ft to 19 ft., no free water in boring.	
25.0						TOTAL DEPTH: 20.0 FEET	

WELL SPECIFICATIONS

A - WELL SCREEN DEPTH:	9.77 FT	CASING TYPE:	SCH 40 PVC
B - WELL SCREEN LENGTH:	10.00 FT	CASING SIZE:	2-INCH
C - DEPTH TO TOP OF SAND:	8.00 FT	SLOT SIZE:	0.020 INCH
D - DEPTH BENTONITE SEAL:	6.00 FT		

ATTACHMENT B

**COMMUNICATION RECORDS WITH ACPW REGARDING
FORMER SITE WATER SUPPLY WELL**

James Gribi

From: James Gribi
Sent: Tuesday, September 17, 2013 10:00 AM
To: 'Yoo, James'
Cc: 'Ron Mooney'
Subject: RE: ACEH Correspondence for RO46-(1355 55th Street, Emeryville)
Attachments: Calif Syrup & Extract Figure.pdf; Calif Syrup & Extract Old Well FIGURE.pdf; Picklewerks Alley Photo 2.jpg; Picklewerks Alley Photo 3.jpg; Picklewerks Alley Photo 4.jpg

James

This was an unused water supply well that was present at California Syrup & Extract prior to redevelopment in about 2000. The well is no longer visible and has been covered over by newer asphalt and/or concrete during redevelopment.

Ron Mooney, whose family has owned the facility since the early 1900s, worked at California Syrup & Extract while in high school in the 1970s and remembers that the well was not being used at that time. I have worked on this site since the early 1990s (while at Century West Engineering), and we sampled the well in September 1994. The sampling report indicates that the well was six-inch diameter and at least 45 feet deep. I remember the well consisting of a pipe sticking out of the ground, with no pump or other appurtenances.

The Mooney family redeveloped the site as office space (Picklewerks building) in about 2000. This consisted of leaving the historical front brick façade and completely rebuilding the remainder of the building and site. As part of the redevelopment, they completely resurfaced the site, and the well was lost in the redevelopment. When we conducted recent drilling at the site, I had the utility locator, Simon Taylor at ForeSite, completely scan with several instruments the southwest corner of the site where the well would have been located, and he did not find anything that resembled a well or metal pipe. Thus, my guess is that the well pipe was partially excavated and removed during redevelopment and that any trace of the pipe is buried below ground.

I have attached an old site plan and a newer site plan, along with pictures of the west edge of the Picklewerks property, where the well was formerly located.

It would be very difficult or perhaps impossible at this point to find the former well, given the current site conditions. Also, this site is in Emeryville and there is no expectation of groundwater use in the foreseeable future. Hence, we ask that ACPW deem this former well as decommissioned. (Although it wasn't properly decommissioned, it was in fact decommissioned and is no longer present on the site.)

Please let me know if you have questions or require additional information.

Thanks
Jim

From: Yoo, James [<mailto:jamesy@acpwa.org>]
Sent: Tuesday, June 26, 2012 3:39 PM
To: James Gribi
Cc: Detterman, Mark, Env. Health
Subject: RE: ACEH Correspondence for RO46-(1355 55th Street, Emeryville)

James:

Can you let me know the specs of this water well/production well or a map showing this well on the property ? I have searched my data base and looks like I have three monitoring wells at this. MW-1, MW-2 and MW-3 (Permit number 94522), but no water well information.

Please call or email me back regarding this well.

Thanks.

James

JAMES YOO
ENVIRONMENTAL COMPLIANCE SPECIALIST
ALAMEDA COUNTY PUBLIC WORKS AGENCY
WATER RESOURCES SECTION
399 Elmhurst Street
Hayward, CA 94544
Ph: 510-670-6633
Fax: 510-782-1939
jamesy@acpwa.org
www.acgov.org/pwa/wells

From: Detterman, Mark, Env. Health
Sent: Friday, June 22, 2012 9:35 AM
To: Yoo, James
Cc: 'James Gribi'
Subject: FW: ACEH Correspondence for RO46

James,

I forgot to copy you on this letter regarding a former water production well in Emeryville that apparently was not properly decommissioned in the mid 1990's. Let me know if you've got questions.

Best,

Mark Detterman
Senior Hazardous Materials Specialist, PG, CEG
Alameda County Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502
Direct: 510.567.6876
Fax: 510.337.9335
Email: mark.detterman@acgov.org

PDF copies of case files can be downloaded at:

<http://www.acgov.org/aceh/lop/ust.htm>

From: dehloptoxic, Env. Health
Sent: Thursday, June 21, 2012 5:23 PM
To: James Gribi

Cc: Drogos, Donna, Env. Health; Detterman, Mark, Env. Health

Subject: ACEH Correspondence for RO46

Dear Interested Parties,

Attached is Alameda County Environmental Health's (ACEH) correspondence for your case, RO0000046.

Please add our e-mail address to your address book to prevent future e-mails from being filtered as spam.

Sincerely,

ACEH

James Gribi

From: Yoo, James [jamesy@acpwa.org]
Sent: Tuesday, September 24, 2013 9:47 AM
To: James Gribi
Subject: RE: ACEH Correspondence for RO46-(1355 55th Street, Emeryville)

Jim:

Thanks for the additional information. I double check my data base and I have no records or this well. I also believe that this water well is lost, but also it was a very shallow well to begin with and should not pose a risk to the deeper groundwater. If this well is found in the future, please info the property owner that they must destroy the well through permits.

Thanks.
James

JAMES YOO
ENVIRONMENTAL COMPLIANCE SPECIALIST
ALAMEDA COUNTY PUBLIC WORKS AGENCY
WATER RESOURCES SECTION
399 Elmhurst Street
Hayward, CA 94544
Ph: 510-670-6633
Fax: 510-782-1939
jamesy@acpwa.org
www.acgov.org/pwa/wells

From: James Gribi [<mailto:Jgribi@gribiassociates.com>]
Sent: Tuesday, September 17, 2013 10:19 AM
To: Yoo, James
Subject: RE: ACEH Correspondence for RO46-(1355 55th Street, Emeryville)

James

I have also attached herein the report for Permit number 94522. The permit was actually for 2 wells (MW-1 and MW-2). We designated the water supply well as MW-3 in the old report. We didn't sample the water production well (because it would have been in a deeper zone, so wouldn't be expected to show hydrocarbon detections). More recently, we installed MW-3 and MW-4 (see attached report) and these wells have shown no detectable hydrocarbon impacts.

Thanks
Jim

James E. Gribi, PG
Senior Geologist/Principal
Gribi Associates
1090 Adams Street, Suite K
Benicia, CA 94510

Phone: (707) 748-7743

Fax: (707) 748-7763

Cell: (707)631-1505

From: Yoo, James [<mailto:jamesy@acpwa.org>]
Sent: Tuesday, June 26, 2012 3:39 PM
To: James Gribi
Cc: Detterman, Mark, Env. Health
Subject: RE: ACEH Correspondence for RO46-(1355 55th Street, Emeryville)

James:

Can you let me know the specs of this water well/production well or a map showing this well on the property ? I have searched my data base and looks like I have three monitoring wells at this. MW-1, MW-2 and MW-3 (Permit number 94522), but no water well information.

Please call or email me back regarding this well.
Thanks.

James

JAMES YOO
ENVIRONMENTAL COMPLIANCE SPECIALIST
ALAMEDA COUNTY PUBLIC WORKS AGENCY
WATER RESOURCES SECTION
399 Elmhurst Street
Hayward, CA 94544
Ph: 510-670-6633
Fax: 510-782-1939
jamesy@acpwa.org
www.acgov.org/pwa/wells

From: Detterman, Mark, Env. Health
Sent: Friday, June 22, 2012 9:35 AM
To: Yoo, James
Cc: 'James Gribi'
Subject: FW: ACEH Correspondence for RO46

James,

I forgot to copy you on this letter regarding a former water production well in Emeryville that apparently was not properly decommissioned in the mid 1990's. Let me know if you've got questions.

Best,

Mark Detterman
Senior Hazardous Materials Specialist, PG, CEG

*Alameda County Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502
Direct: 510.567.6876
Fax: 510.337.9335
Email: mark.detterman@acgov.org*

PDF copies of case files can be downloaded at:

<http://www.acgov.org/aceh/lop/ust.htm>

From: dehloptoxic, Env. Health
Sent: Thursday, June 21, 2012 5:23 PM
To: James Gribi
Cc: Drogos, Donna, Env. Health; Detterman, Mark, Env. Health
Subject: ACEH Correspondence for RO46

Dear Interested Parties,

Attached is Alameda County Environmental Health's (ACEH) correspondence for your case, RO0000046.

Please add our e-mail address to your address book to prevent future e-mails from being filtered as spam.

Sincerely,

ACEH