

ALAMEDA COUNTY  
HEALTH CARE SERVICES

AGENCY

ALEX BRISCOE, Director



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

April 10, 2015

Mr. Ron Mooney  
California Syrup & Extract  
PO Box 8305  
Emeryville, CA 94608

Subject: Case Closure for Fuel Leak Case No. RO0000046 and Geotracker, Global ID # T0600101623, California Syrup & Extract, 1355 55<sup>th</sup> Street, Emeryville, CA 94508

Dear Mr. Mooney:

This letter transmits the enclosed underground storage tank (UST) case closure letter in accordance with Chapter 6.75 (Article 4, Section 25296.10[g]). The State Water Resources Control Board adopted this letter on February 20, 1997. As of March 1, 1997, the Alameda County Environmental Health (ACEH) is required to use this case closure letter for all UST leak sites. We are also transmitting to you the enclosed case closure summary. These documents confirm the completion of the investigation and cleanup of the reported release at the subject site. The subject fuel leak case is closed. This case closure letter and the case closure summary can also be viewed on the State Water Resources Control Board's Geotracker website (<http://geotracker.waterboards.ca.gov>) and the Alameda County Environmental Health website (<http://www.acgov.org/aceh/index.htm>).

Due to residual contamination, the site was closed with Site Management Requirements that limit future land use to the current commercial land use. Site Management Requirements are further described in Additional Information of the attached Case Closure Summary.

If you have any questions, please call Mark Detterman at (510) 567-6876. Thank you.

Sincerely,

A handwritten signature in blue ink that reads "Dilan Roe".

Dilan Roe, P.E.  
LOP and SCP Program Manager

Enclosures: 1. Remedial Action Completion Certification  
2. Case Closure Summary

Cc w/enc.:

Gribi, Gribi Associates, 1090 Adams Street, Suite K, Benicia, CA 94510  
(sent via electronic mail to: [JGribi@gribiassociates.com](mailto:JGribi@gribiassociates.com))

Mark Detterman, ACEH (sent via electronic mail to [mark.detterman@acgov.org](mailto:mark.detterman@acgov.org))  
Geotracker, Electronic File



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**REMEDIAL ACTION COMPLETION CERTIFICATION**

June 16, 2015

Mr. Ron Mooney  
California Syrup & Extract  
PO Box 8305  
Emeryville, CA 94608

Subject: Case Closure for Fuel Leak Case No. RO0000046 and Geotracker, Global ID # T0600101623,  
California Syrup & Extract, 1355 55<sup>th</sup> Street, Emeryville, CA 94508

Dear Mr. Mooney:

This letter confirms the completion of a site investigation and remedial action for the underground storage tanks formerly located at the above-described location. Thank you for your cooperation throughout this investigation. Your willingness and promptness in responding to our inquiries concerning the former underground storage tank(s) are greatly appreciated.

Based on information in the above-referenced file and with the provision that the information provided to this agency was accurate and representative of site conditions, this agency finds that the site investigation and corrective action carried out at your underground storage tank(s) site is in compliance with the requirements of subdivisions (a) and (b) of Section 25296.10 of the Health and Safety Code and with corrective action regulations adopted pursuant to Section 25299.3 of the Health and Safety Code and that no further action related to the petroleum release(s) at the site is required.

Please be aware that claims for reimbursement of corrective action costs submitted to the Underground Storage Tank Cleanup Fund more than 365 days after the date of this letter or issuance or activation of the Fund's Letter of Commitment, whichever occurs later, will not be reimbursed unless one of the following exceptions applies:

- Claims are submitted pursuant to Section 25299.57, subdivision (k) (reopened UST case); or
- Submission within the timeframe was beyond the claimant's reasonable control, ongoing work is required for closure that will result in the submission of claims beyond that time period, or that under the circumstances of the case, it would be unreasonable or inequitable to impose the 365-day time period.

This notice is issued pursuant to subdivision (g) of Section 25296.10 of the Health and Safety Code. Please contact our office if you have any questions regarding this matter.

Sincerely,

A handwritten signature in blue ink that reads "Ronald Browder".

Ronald Browder  
Acting Director

# UST Case Closure Summary Form

**Agency Information**

Date: April 10, 2015

Agency Name: Alameda County Environmental Health	Address: 1131 Harbor Bay Parkway
City/State/Zip: Alameda, CA 94502-6577	Phone: (510) 567-6876
Staff Person: Mark Detterman	Title: Senior Hazardous Materials Specialist

**Case Information**

Facility Name: California Syrup & Extract		
Facility Address: 1355 55 <sup>th</sup> Street, Emeryville, CA 94608		
RB LUSTIS Case No: 01-1754	Local Case No.: 4592	LOP Case No.: RO0000046
URF Filing Date:	GeoTracker Global ID: T0600101623	
APN: 49-1184-13	Current Land Use: Commercial	
Responsible Party(s):	Address:	Phone:
California Syrup & Extract Co, LLC c/o Ron Mooney	PO Box 8305 Emeryville, CA 94608	----

**Tank Information**

Tank No.	Size (gal)	Contents	Closed in-Place/ Removed/Active	Date
1	10,000	Diesel	Closed in-Place	August 1994
2	550 – 1,000	Fuel oil/Waste oil	Closed in-Place	August 1994
3	1,000	Diesel	Closed in-Place	August 1994
4	1,000	Aqueous ammonia	Closed in-Place	August 1994
5	1,000	Gasoline	Closed in-Place	August 1994
6	6,000 – 10,300	Denatured alcohol	Closed in-Place	August 1994
7	10,000	Denatured alcohol	Closed in-Place	August 1994
8	10,000	Denatured alcohol	Closed in-Place	August 1994

**Conceptual Site Model (Attachment 1, 1 page)**

**Closure Criteria Met (Attachment 2, 1 page)**

**LTCP Groundwater Specific Criteria (Attachment 3, 2 pages)**

**LTCP Vapor Specific Criteria (Attachment 4, 2 pages)**

**LTCP Direct Contact and Outdoor Air Exposure Criteria (Attachment 5, 2 pages)**

**Optional Site Maps (Attachment 6, 7 pages)**

**Analytical Data (Attachment 7, 10 pages)**

**Bore Logs (Attachment 8, 15 pages)**

# UST Case Closure Summary Form

**Additional Information:**

Site Management Requirements: This fuel leak case has been evaluated for closure consistent with the State Water Resource Control Board Low-Threat Underground Storage Tank Closure Policy (LTCP). No soil samples were collected in the 0 to 5 foot depth interval. Under the current commercial land use most of the site is paved with minor landscaped areas resulting in a low potential for vapor intrusion and direct contact exposure under the current land use. Therefore, case closure is granted for the current commercial land use.

If a change in land uses to any residential, or if any redevelopment occurs, Alameda County Environmental Health (ACEH) must be notified as required by Government Code Section 65850.2.2. ACEH will re-evaluate the case upon receipt of approved development/construction plans.

Excavation or construction activities in areas of residual contamination require planning and implementation of appropriate health and safety procedures by the responsible party prior to and during excavation and construction activities.



This site is to be entered into the City of Emeryville Permit Tracking System due to the residual contamination on site.

**RWQCB Notification**

Notification Date: October 15, 2014

RWQCB Staff Name: Cherie McCaulou	Title: Engineering Geologist
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**Local Agency Representative**

Prepared by: Mark Detterman	Title: Senior Hazardous Materials Specialist
Signature: 	Date: 4/10/2015
Approved by: Dilan Roe	Title: LOP and SCP Program Manager
Signature: 	Date: 4/10/2015

This Case Closure Summary along with the Case Closure Transmittal letter and the Remedial Action Completion Certification provides documentation of the case closure. This closure approval is based upon the available information and with the provision that the information provided to this agency was accurate and representative of site conditions. The Conceptual Site Model may not contain all available data. Additional information on the case can be viewed in the online case file. The entire case file can be viewed over the Internet on the Alameda County Environmental Health (ACEH) website (<http://www.acgov.org/aceh/lop/ust.htm>) or the State of California Water Resources Control Board GeoTracker website (<http://geotracker.waterboards.ca.gov>). Not all historic documents for the fuel leak case may be available on GeoTracker. A more complete historic case file for this site is located on the ACEH website.

# ATTACHMENT 1

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CSM Report

[GEOTRACKER HOME](#) | [MANAGE PROJECTS](#) | [REPORTS](#) | [SEARCH](#) | [LOGOUT](#)

CALIFORNIA SYRUP & EXTRACT (T0600101623) - [MAP THIS SITE](#)

OPEN - ELIGIBLE FOR CLOSURE

1355 55TH STREET  
EMERYVILLE, CA 94608  
ALAMEDA COUNTY

[ACTIVITIES REPORT](#)  
[PUBLIC WEBPAGE](#)

**CLEANUP OVERSIGHT AGENCIES**  
ALAMEDA COUNTY LOP (LEAD) - CASE #: RO0000046  
CASEWORKER: [MARK DETTERMAN](#) - SUPERVISOR: DILAN ROE  
SAN FRANCISCO BAY RWQCB (REGION 2) - CASE #: 01-1754  
CASEWORKER: [Cherie McCaulou](#) - SUPERVISOR: Cheryl L. Powell  
CR Site ID #: NOT SPECIFIED

THIS PROJECT WAS LAST MODIFIED BY [MARK DETTERMAN](#) ON 4/10/2015 11:06:19 AM - [HISTORY](#)

THIS SITE HAS UNAPPROVED SUBMITTALS. CLICK [HERE](#) TO OPEN A NEW WINDOW WITH THE SUBMITTAL APPROVAL PAGE FOR THIS SITE.

**CSM REPORT** - [VIEW PUBLIC NOTICING VERSION OF THIS REPORT](#)

**UST CLEANUP FUND CLAIM INFORMATION (DATA PULLED FROM SCUIFIS)**

CLAIM NO	PRIORITY	CLAIMANT	SITE ADDRESS	AMT REIMB TO DATE	AGE OF LOC	IMPACTED WELLS?	REVIEW NUM	REVIEWER	FIVE YEAR REVIEW INFORMATION		
									FUND RECOMMENDATION	TO OVERSIGHT DATE	TO CLAIMANT DATE

**PROJECT INFORMATION (DATA PULLED FROM GEOTRACKER) - [MAP THIS SITE](#)**

SITE NAME / ADDRESS	STATUS	STATUS DATE	RELEASE REPORT DATE	AGE OF CASE	CLEANUP OVERSIGHT AGENCIES
CALIFORNIA SYRUP & EXTRACT (Global ID: T0600101623) 1355 55TH STREET EMERYVILLE, CA 94608	Open - Eligible for Closure	7/16/2014	7/20/1993	22	ALAMEDA COUNTY LOP (LEAD) - CASE #: RO0000046 CASEWORKER: <a href="#">MARK DETTERMAN</a> - SUPERVISOR: DILAN ROE SAN FRANCISCO BAY RWQCB (REGION 2) - CASE #: 01-1754 CASEWORKER: <a href="#">Cherie McCaulou</a> - SUPERVISOR: Cheryl L. Powell

**STAFF NOTES (INTERNAL)**

Not all historic documents for the fuel leak case may be available on GeoTracker. A complete case file for this site is located on the Alameda County Environmental Health website at: <http://ehgis.acgov.org/dehpublic/dehpublic.jsp>.

**SITE HISTORY**

Not all historic documents for the fuel leak case may be available on GeoTracker. A complete case file for this site is located on the Alameda County Environmental Health website at: <http://ehgis.acgov.org/dehpublic/dehpublic.jsp>.

Eight USTs were installed beneath the sidewalk at the site between 1930 and 1965, and substances stored included diesel, fuel oil, waste oil, aqueous ammonia, gasoline, and denatured alcohol. Thirteen soil bores were installed adjacent to the USTs prior to abandonment in-place in August 1994. The waste oil, diesel, and ammonia USTs showed evidence of leakage. Two wells were installed in September 1994 adjacent to the diesel and gasoline USTs. Groundwater was sampled once in September 1994, and then again over four consecutive quarters between late 1999 and late 2000. Groundwater wells MW-3 and MW-4 were installed in 2012 and define the downgradient and lateral extent of the dissolved-phase hydrocarbon plume.

Groundwater monitoring since 2009 appears to indicate a stable or declining groundwater plume. An onsite water supply well, was lost during site redevelopment in 2000. The well is estimated to have been located within 15 feet of well MW-4, which for three quarters was non-detect for all petroleum hydrocarbon contaminants present at the site in 2012 and 2013. This lost well causes the site to fail the groundwater media-specific criteria of the LTCP; however, because data indicates that the well was relatively shallow, it does not appear to represent a significant threat to groundwater quality at the site. Should it be found in the future, the well will be required to be properly destroyed under permit by the Alameda County Public Works Agency, or successor organizations.

Due to the lack of shallow soil samples in the 0 to 5 foot depth interval, by which to comprehensively evaluate the threat of vapor intrusion or direct contact under the LTCP, the site was evaluated using alternative site data. Using the alternative information (See closure and LTCP checklist) the site was closed under the LTCP with a commercial land use restriction.

Not all historic documents for the fuel leak case may be available on GeoTracker. A complete case file for this site is located on the Alameda County Environmental Health website at: <http://ehgis.acgov.org/dehpublic/dehpublic.jsp>.

**RESPONSIBLE PARTIES**

NAME	ORGANIZATION	ADDRESS	CITY	EMAIL
RON MOONEY	CALIFORNIA SYRUP & EXTRACT INC	PO BOX 8305	EMERYVILLE	

**CLEANUP ACTION INFO**

NO CLEANUP ACTIONS HAVE BEEN REPORTED

**RISK INFORMATION**

[VIEW LTCP CHECKLIST](#)

[VIEW PATH TO CLOSURE PLAN](#)

[VIEW CASE REVIEWS](#)

CONTAMINANTS OF CONCERN	CURRENT LAND USE	BENEFICIAL USE	DISCHARGE SOURCE	DATE REPORTED	STOP METHOD	NEARBY / IMPACTED WELLS
Benzene, Diesel, Gasoline, Waste Oil / Motor / Hydraulic / Lubricating	Commercial	GW - Municipal and Domestic Supply		7/20/1993	Remove Contents	0

FREE PRODUCT	OTHER CONSTITUENTS	NAME OF WATER SYSTEM	LAST REGULATORY ACTIVITY	LAST ESI UPLOAD	LAST EDF UPLOAD	EXPECTED CLOSURE DATE	MOST RECENT CLOSURE REQUEST
NO	YES	EBMUD	10/15/2014	3/13/2015	6/20/2013		11/13/2013

**CDPH WELLS WITHIN 1500 FEET OF THIS SITE**

NONE

**CALCULATED FIELDS (BASED ON LATITUDE / LONGITUDE)**

APN	GW BASIN NAME	WATERSHED NAME
No APN Found	Santa Clara Valley - East Bay Plain (2-9.04)	Bay Bridges - Berkeley (203.30)

COUNTY	PUBLIC WATER SYSTEM(S)
Alameda	EAST BAY MUD - 375 ELEVENTH STREET, OAKLAND, CA 94607

**MOST RECENT CONCENTRATIONS OF PETROLEUM CONSTITUENTS IN GROUNDWATER - [HIDE](#)**

[VIEW ESI SUBMITTALS](#)

FIELD PT NAME	DATE	TPHq	BENZENE	TOLUENE	ETHYL-BENZENE	XYLENES	MTBE	TBA
B-1-W	8/1/2012	OTHER	ND	ND	ND	OTHER	ND	ND
MW-1	12/3/2012	OTHER	ND	ND	ND	OTHER	ND	ND
MW-2	12/3/2012	OTHER	9.9 UG/L	15 UG/L	1.1 UG/L	OTHER	110 UG/L	ND
MW-3	12/3/2012	OTHER	ND	ND	ND	OTHER	ND	ND
MW-4	12/3/2012	OTHER	ND	ND	ND	OTHER	ND	ND

**MOST RECENT CONCENTRATIONS OF PETROLEUM CONSTITUENTS IN SOIL - [HIDE](#)**

[VIEW ESI SUBMITTALS](#)

FIELD PT NAME	DATE	TPHq	BENZENE	TOLUENE	ETHYL-BENZENE	XYLENES	MTBE	TBA
B-1-11.0	8/1/2012	ND	ND	ND	ND	ND	ND	ND
B-1-15.0	8/1/2012	ND	ND	ND	ND	ND	ND	ND
MW-3-10.5	8/1/2012	ND	ND	ND	ND	ND	ND	ND
MW-3-14.0	8/1/2012	ND	ND	ND	ND	ND	ND	ND
MW-4-10.5	8/1/2012	ND	ND	ND	ND	ND	ND	ND
MW-4-14.0	8/1/2012	ND	ND	ND	ND	ND	ND	ND
MW-4-18.5	8/1/2012	ND	ND	ND	ND	ND	ND	ND

**MOST RECENT GEO\_WELL DATA - [HIDE](#)**

[VIEW ESI SUBMITTALS](#)

FIELD PT NAME	DATE	DEPTH TO WATER (FT)	SHEEN	DEPTH TO FREE PRODUCT (FT)
MW-1	6/28/2013	6.35	N	
MW-2	6/28/2013	6.33	N	
MW-3	7/3/2013	8.65	N	
MW-4	6/28/2013	9.36	N	

LOGGED IN AS MARKDETT

[CONTACT GEOTRACKER HELP](#)

# ATTACHMENT 2

LTCP Checklist  GEOTRACKER HOME | MANAGE PROJECTS | REPORTS | SEARCH | LOGOUT

CALIFORNIA SYRUP & EXTRACT (T0600101623) - [MAP THIS SITE](#) OPEN - ELIGIBLE FOR CLOSURE

1355 55TH STREET  
EMERYVILLE, CA 94608  
ALAMEDA COUNTY

[ACTIVITIES REPORT](#)  
[PUBLIC WEBSITE](#)

CLEANUP OVERSIGHT AGENCIES  
ALAMEDA COUNTY LOP (LEAD) - CASE #: R02000046  
CASEWORKER: MARK DETTERMAN - SUPERVISOR: DILAN ROE  
SAN FRANCISCO BAY RWQCB (REGION 2) - CASE #: 01-1754  
CASEWORKER: [Cherie McCauley](#) - SUPERVISOR: Cheryl L. Provell  
CR Site ID #: NOT SPECIFIED

THIS PROJECT WAS LAST MODIFIED BY [MARK DETTERMAN](#) ON 3/13/2015 4:23:08 PM - [HISTORY](#)

THIS SITE HAS UNAPPROVED SUBMITTALS. [CLICK HERE](#) TO OPEN A NEW WINDOW WITH THE SUBMITTAL APPROVAL PAGE FOR THIS SITE.

**CLOSURE POLICY** [CLOSURE POLICY HISTORY](#)

THIS VERSION IS FINAL AS OF 12/31/2014 CHECKLIST INITIATED ON 7/25/2013

**General Criteria - The site satisfies the policy general criteria - [CLEAR SECTION ANSWERS](#)**

a. Is the unauthorized release located within the service area of a public water system?  YES  NO

Name of Water System:  
LEHOU

b. The unauthorized release consists only of petroleum (info).  YES  NO

Contaminants:  Chlorobenzene  PCE  TCE  Chloroform  Vinyl Chloride  Bromoform  
 Other: MIBK, MIBK, acetone

c. The unauthorized ("primary") release from the UST system has been stopped.  YES  NO

d. Free product has been removed to the maximum extent practicable (info).  FP Not Encountered  YES  NO

e. A conceptual site model that assesses the nature, extent, and mobility of the release has been developed (info).  YES  NO

f. Secondary source has been removed to the extent practicable (info).  YES  NO

Impediment to Removing Secondary Source (Check all that Apply):  
 Remediation Has Not Been Attempted  
 Remediation Was Designed Incorrectly  
 Remediation Was Shut Off Prematurely  
 Poor Remediation O&M  
 Other -  
USTs closed in place; secondary source removal not attempted

g. Soil or groundwater has been tested for MTBE and results reported in accordance with Health and Safety Code Section 25296.15.  Not Required  YES  NO

h. Does a nuisance exist, as defined by [Water Code section 13050](#).  YES  NO

**1. Media-Specific Criteria: Groundwater - The contaminant plume that exceeds water quality objectives is stable or decreasing in areal extent, and meets all of the additional characteristics of one of the five classes of sites listed below. - [CLEAR SECTION ANSWERS](#)**

**EXEMPTION - Soil Only Case (Release has not Affected Groundwater - info)**  YES  NO

Does the site meet any of the Groundwater specific criteria scenarios?  YES  NO

1.5 - The regulatory agency determines, based on an analysis of site specific conditions, that the site under current and reasonably anticipated near-term future scenarios, the contaminant plume poses a low threat to human health and safety and to the environment and water quality objectives will be achieved within a reasonable time frame.  YES  NO

**2. Media Specific Criteria: Petroleum Vapor Intrusion to Indoor Air - The site is considered low-threat for the vapor-intrusion-to-air pathway if site-specific conditions satisfy items 2a, 2b, or 2c - [CLEAR SECTION ANSWERS](#)**

**EXEMPTION - Active Commercial Petroleum Fueling Facility**  YES  NO

Does the site meet any of the Petroleum Vapor Intrusion to Indoor Air specific criteria scenarios?  YES  NO

2c - Petroleum Vapor Intrusion to Indoor Air - The regulatory agency has determined petroleum vapors migrating from soil or groundwater will have no significant risk of adversely affecting human health as a result of controlling exposure through the use of mitigation measures or through the use of institutional or engineering controls.  YES  NO

**3. Media Specific Criteria: Direct Contact and Outdoor Air Exposure - The site is considered low-threat for direct contact and outdoor air exposure if it meets 1, 2, or 3 below. - [CLEAR SECTION ANSWERS](#)**

**EXEMPTION - The upper 10 feet of soil is free of petroleum contamination**  YES  NO

Does the site meet any of the Direct Contact and Outdoor Air Exposure criteria scenarios?  YES  NO

3.3 - The regulatory agency has determined the concentration of petroleum constituents in soil will have no significant risk or adversely affect human health.  YES  NO

**Additional Information**

Should this case be closed in spite of NOT meeting policy criteria?  YES  NO

**Explain:**  
Concentrations of non-petroleum chemicals do not appear to be present at concentrations of concern. The onsite water supply well has been damaged and abandoned. The proper destruction of the well is a permitting concern rather than a UST program concern. Additionally concentrations in well MP 4 are non-detectable for all chemicals of concern and appear representative of downgradient groundwater concentrations. The USTs were abandoned in place; removal of the secondary source was not attempted. Based on groundwater concentrations beneath the site, secondary source contamination appears to have sufficiently attenuated since tank abandonment. Soil samples in the 0 to 5 foot depth interval have not been collected; however, based on a 6 ft sample, it is relatively unlikely that concentrations of benzene and ethylbenzene are present beneath the site at concentrations over the commercial direct contact criteria values. Additionally, naphthalene and PMHs have not been collected in association with the abandoned waste oil UST. However due to the paved nature of the site and vicinity, it is likely that only utility workers will have a limited direct contact exposure to these contaminants.

Has this LTCP Checklist been updated for FY 14/15?  YES  NO

[SPELL CHECK](#)

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[CONTACT GEOTRACKER HELP](#)



**ATTACHMENT 3  
LTCP GROUNDWATER SPECIFIC CRITERIA**

**LTCP Groundwater Specific Scenario under which case was closed: Scenario 5.**

Site Data		LTCP Scenario 1 Criteria	LTCP Scenario 2 Criteria	LTCP Scenario 3 Criteria	LTCP Scenario 4 Criteria
Plume Length	<100 feet	<100 feet	<250 feet	<250 feet	<1,000 feet
Free Product	No free product.	No free product	No free product	Removed to maximum extent practicable	No free product
Plume Stable or Decreasing	Stable or Decreasing	Stable or decreasing	Stable or decreasing	Stable or decreasing for minimum of 5 Years	Stable or decreasing
Distance to Nearest Water Supply Well	95 feet; (onsite well lost)	>250 feet	>1,000 feet	>1,000 feet	>1,000 feet
Distance to Nearest Surface Water and Direction	1,650 feet downgradient.	>250 feet	>1,000 feet	>1,000 feet	>1,000 feet
Property Owner Willing to Accept a Land Use Restriction?	See Requirements in Additional Information.	Not applicable	Not applicable	Yes	Not applicable

**GROUNDWATER CONCENTRATIONS**

Constituent	Historic Site Maximum (µg/L)	Current Site Maximum (µg/L)	LTCP Scenario 1 Criteria (µg/L)	LTCP Scenario 2 Criteria (µg/L)	LTCP Scenario 3 Criteria (µg/L)	LTCP Scenario 4 Criteria (µg/L)
Benzene	590	65	No criteria	<3,000	No criteria	<1,000
MTBE	200	40	No criteria	<1,000	No criteria	<1,000
TPH-d (total petroleum hydrocarbons as diesel)	1,500	1,200	No criteria	No criteria	No criteria	No criteria
TPH-g (total petroleum hydrocarbons as gasoline)	59,000	1,500	No criteria	No criteria	No criteria	No criteria
MIBK (methyl isobutyl ketone)	<10	<10	No criteria	No criteria	No criteria	No criteria
MEK (methyl ethyl ketone)	<10	<10	No criteria	No criteria	No criteria	No criteria
Ammonia (as NH3)	<100	<100	No criteria	No criteria	No criteria	No criteria
Total Nitrogen (as N)	408	408	No criteria	No criteria	No criteria	No criteria

Scenario 5: If the site does not meet scenarios 1 through 4, has a determination been made that under current and reasonably expected future scenarios, the contaminant plume poses a low threat to human health and safety and to the environment and water quality objectives will be achieved within a reasonable time frame?

Yes

Comments:

Groundwater Flow Direction: Predominant groundwater flow directions under the site are to the west and south-west.

Water Supply Wells in Vicinity: According GeoTracker Groundwater Ambient Monitoring & Assessment (GAMA), there are no Dept. of Water Resources, Dept. of Pesticide Regulation, and Public Supply wells located within a 2,000 feet radius of the site.

Onsite Water Supply Well: One on-site water supply well existed and was lost during building redevelopment circa 2000. Alameda County Public Works Agency (ACPWA) does not have records of the supply well existence or proper destruction; however, utility searches during monitoring well installation in 2012 proved unfruitful in locating the lost supply well. The supply well is reportedly six-inch diameter, at least 45 feet deep with unknown screen length/depth or use. In Century West Engineering reports, dated October 25, 1994, the water supply well was designated MW-3, which is unrelated to the new monitoring well MW-3 installed in 2012. According to ACPWA, the supply well was a shallow well and should not pose a risk to the deeper groundwater. If the well is found in the future, the property owner must destroy the well through permits. Additionally, well MW-4, estimated to be located within approximately 15 feet of the former water supply well, was non-detectable for TPHg, TPHd, TPHmo, and BTEX and MTBE over three quarterly groundwater monitoring events in late 2012 and early 2013.

Surface Water in Vicinity: The nearest surface water body is Temescal Creek located approximately 1,650 feet south-west and down-gradient of the site.

**ATTACHMENT 4  
LTCP VAPOR SPECIFIC CRITERIA**

**LTCP Vapor Specific Scenario under which case was closed: This case should be closed in spite of not meeting the vapor specific media criteria scenarios 1 through 4.**

Active Fueling Station		Active as of Not applicable (commercial office space)					
Site Data		LTCP Scenario 1 Criteria	LTCP Scenario 2 Criteria	LTCP Scenario 3A Criteria	LTCP Scenario 3B Criteria	LTCP Scenario 3C Criteria	LTCP Scenario 4 Criteria
Unweathered LNAPL	No LNAPL	LNAPL in groundwater	LNAPL in soil	No LNAPL	No LNAPL	No LNAPL	No criteria
Thickness of Bioattenuation Zone Beneath Foundation	< 5 feet	≥30 feet	≥30 feet	≥5 feet	≥10 feet	≥5 feet	≥5 feet
Total TPH in Soil in Bioattenuation Zone	No soil samples collected in biozone from 0 to 5 feet	<100 mg/kg	<100 mg/kg	<100 mg/kg	<100 mg/kg	<100 mg/kg	<100 mg/kg
Maximum Current Benzene Concentration in Groundwater	65 - 110 µg/L	No criteria	No criteria	<100 µg/L	≥100 and <1,000 µg/L	<1,000 µg/L	No criteria
Oxygen Data within Bioattenuation Zone	No oxygen data	No criteria	No criteria	No oxygen data or <4%	No oxygen data or <4%	≥4% at lower end of zone	≥4% at lower end of zone
Depth of soil vapor measurement beneath foundation	None Collected	No criteria	No criteria	No criteria	No criteria	No criteria	≥5 feet

**SCENARIO 4 DIRECT MEASUREMENT OF SOIL VAPOR CONCENTRATIONS**

Site Soil Vapor Data			No Bioattenuation Zone		Bioattenuation Zone	
Constituent	Historic Maximum (µg/m <sup>3</sup> )	Current Maximum (µg/m <sup>3</sup> )	Residential	Commercial	Residential	Commercial
Benzene	----	----	<85	<280	<85,000	<280,000
Ethylbenzene	----	----	<1,100	<3,600	<1,100,000	<3,600,000
Naphthalene	----	----	<93	<310	<93,000	<310,000

If the site does not meet scenarios 1 through 4, does a site-specific risk assessment for the vapor intrusion pathway demonstrate that human health is protected?

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If the site does not meet scenarios 1 through 4, has a determination been made that petroleum vapors from soil or groundwater will have no significant risk of adversely affecting human health?

Yes

**Comments:**

A minimum five foot bio-attenuation zone was not established at the site as depth-to-groundwater field measurements indicate groundwater ranges between 4.26 and 7.33 feet below grade surface (bgs) at the site. The site additionally lacks soil samples in the 0 to 5 foot depth interval. However, with the exception of one sampling event, depth to water beneath the site between wells MW-2, MW-3, and MW-4 is greater than 5 feet.

Alternative data however, suggests there is a low risk of vapor intrusion at the site. Specifically, well MW-2 consistently yields the highest concentrations of petroleum hydrocarbons in groundwater at the site, and contains the maximum soil concentrations detected at the site at a depth of 6.0 feet bgs. In 1993, 650 milligrams per kilogram (mg/kg) total petroleum hydrocarbons as gasoline (TPHg), 250 mg/kg TPH as diesel (TPHd), 1.2 mg/kg benzene, and 11 mg/kg ethylbenzene were present in soil. Adjacent soil bores IB-6 and IB-2 lacked indications of hydrocarbon contamination in soil (visual, olfactory, photo-ionization detection or PID) between 0 and 5 feet below grade surface (bgs), and bores IB-13 and MW-2 lacked indications of contamination between 0 and 4 ft bgs. Thus hydrocarbon contamination in soil at the site appears to be largely limited to the general vicinity of well MW-2 and IB-13 and to a depth of 4 feet or greater. Based on groundwater concentrations in well MW-2, dissolved hydrocarbon concentrations are stable or declining in concentration, and groundwater from well MW-4 yielded non detectable concentrations of all petroleum analytes between August 2012 and June 2013. These groundwater concentrations (MW-2) thus appear to support declining residual hydrocarbon concentrations in soil adjacent to the abandoned USTs at the site, and the limited extent (MW-4) of groundwater contaminated by volatile petroleum compounds.

Additionally, review of site stratigraphy indicates that soil beneath the site is largely clay and silt with the exception of lenses of sand between 4.0 to 7.0 feet bgs observed in several bores. The low permeable shallow soil generally acts as an impediment to soil vapor migration. Finally, the foundation of the adjacent building is reported to be slab on grade or limited crawl space.

ATTACHMENT 5  
LTCP DIRECT CONTACT AND OUTDOOR AIR EXPOSURE CRITERIA

**LTCP Direct Contact and Outdoor Air Exposure Specific Scenario under which case was closed: This case should be closed in spite of not meeting the direct contact and outdoor air specific media criteria listed in Table 1 of the policy.**

Are maximum concentrations less than those in Table 1 below? ---

Constituent		Residential		Commercial/Industrial		Utility Worker
		0 to 5 feet bgs (mg/kg)	Volatilization to outdoor air (5 to 10 feet bgs) mg/kg	0 to 5 feet bgs (mg/kg)	Volatilization to outdoor air (5 to 10 feet bgs) mg/kg	0 to 10 feet bgs (mg/kg)
Site Maximum	Benzene	----	1.2	----	1.2	1.2
LTCP Criteria	Benzene	≤1.9	≤2.8	≤8.2	≤12	≤14
Site Maximum	Ethylbenzene	----	11	----	11	11
LTCP Criteria	Ethylbenzene	≤21	≤32	≤89	≤134	≤314
Site Maximum	Naphthalene	----	----	----	----	----
LTCP Criteria	Naphthalene	≤9.7	≤9.7	≤45	≤45	≤219
Site Maximum	PAHs	----	----	----	----	----
LTCP Criteria	PAHs	≤0.063	NA	≤0.68	NA	≤4.5

If maximum concentrations are greater than those in Table 1, are they less than levels from a site-specific risk assessment? ----

If maximum concentrations are greater than those in Table 1, has a determination been made that the concentrations of petroleum in soil will have no significant risk of adversely affecting human health as a result of controlling exposure through the use of mitigation measures or through the use of institutional controls? Yes

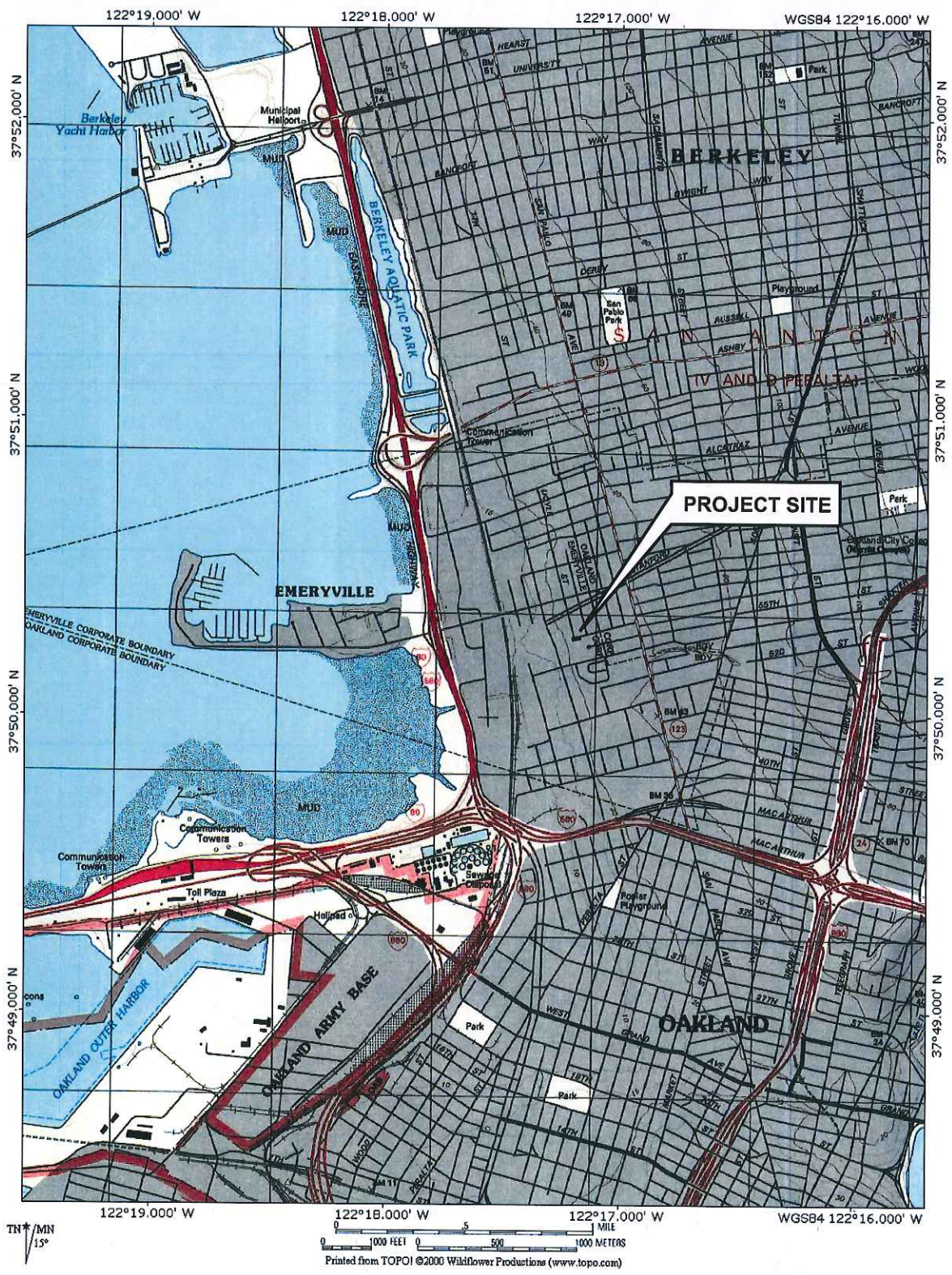
**Comments:**

The abandoned USTs are located in the public right of way; however, as noted above soil samples were not collected in the 0 to 5 foot depth interval. Based on photo-ionization detector (PID) and visual and odor notations on bore logs that are available for the site, it is likely that the preponderance of contamination is deeper than approximately 4 feet below surface grade (bgs). Engineering controls (sidewalk and street paving) are present above the location of the abandoned in-place underground storage tanks (USTs). These structures will help mitigate direct contact exposure with contaminated soils beneath the public right of way and appear to be protective of commercial/industrial and utility worker exposure scenarios.

Analysis for naphthalene and poly-aromatic hydrocarbons (PAHs) were not conducted at the site. In regards to potential naphthalene exposures, the California Leaking Underground Fuel Tank Manual states the maximum concentration of benzene in gasoline is 2.5% and benzene in diesel is 0.1%. The California Leaking Underground Fuel Tank Manual also states the maximum concentration of naphthalene in gasoline is 0.36% and the maximum concentration in diesel is 0.8%. Using the maximum detected benzene concentration (1.2 mg/kg; from a depth of 6 feet) as a surrogate, the theoretical maximum naphthalene concentration would be 0.17 mg/kg. Alternatively, using the highest TPHg concentration (650 mg/kg), the theoretical maximum naphthalene concentration would have been 2.34 mg/kg. Finally, using the highest TPHd concentration (250 mg/kg), the theoretical maximum naphthalene concentration would have been 2.0 mg/kg. These are all substantially below the Table 1 criteria.

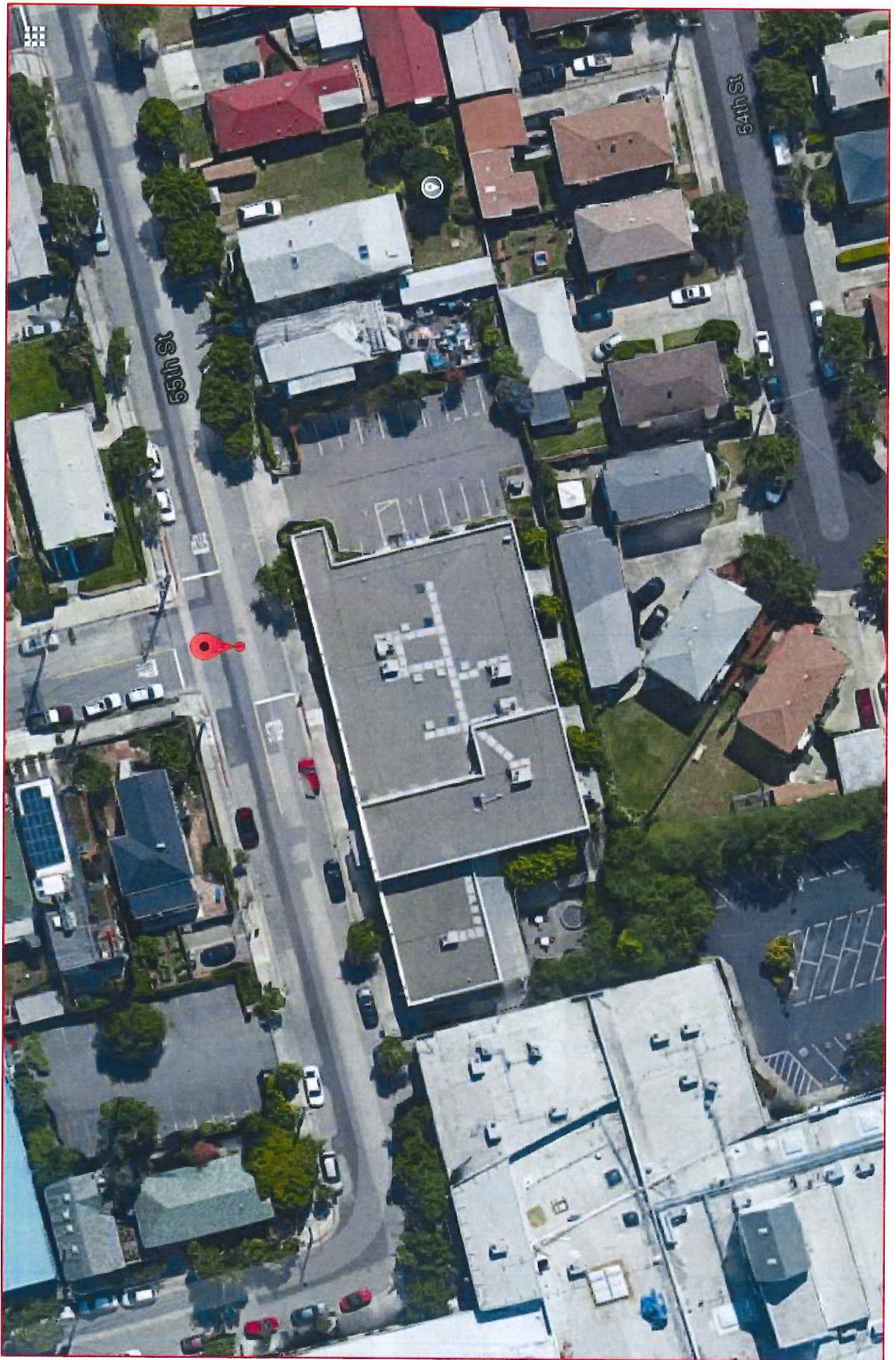
In regards to potential PAH exposures, the site historically contained a waste oil UST and analysis for PAHs was also not undertaken at the site. Soil bores adjacent to USTs No. 2 & 3 have relatively low detections in soil for TPHd and TPH as motor oil (TPHmo; maximum detections of 84 and 150 mg/kg, respectively). Soil bores and USTs 2 & 3 are also adjacent to monitoring well MW-1 which historically has not contained detectable concentrations of TPHd and TPHmo above laboratory RLs. The data appear to indicate limited potential for exposure to PAHs.

# ATTACHMENT 6

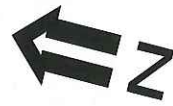
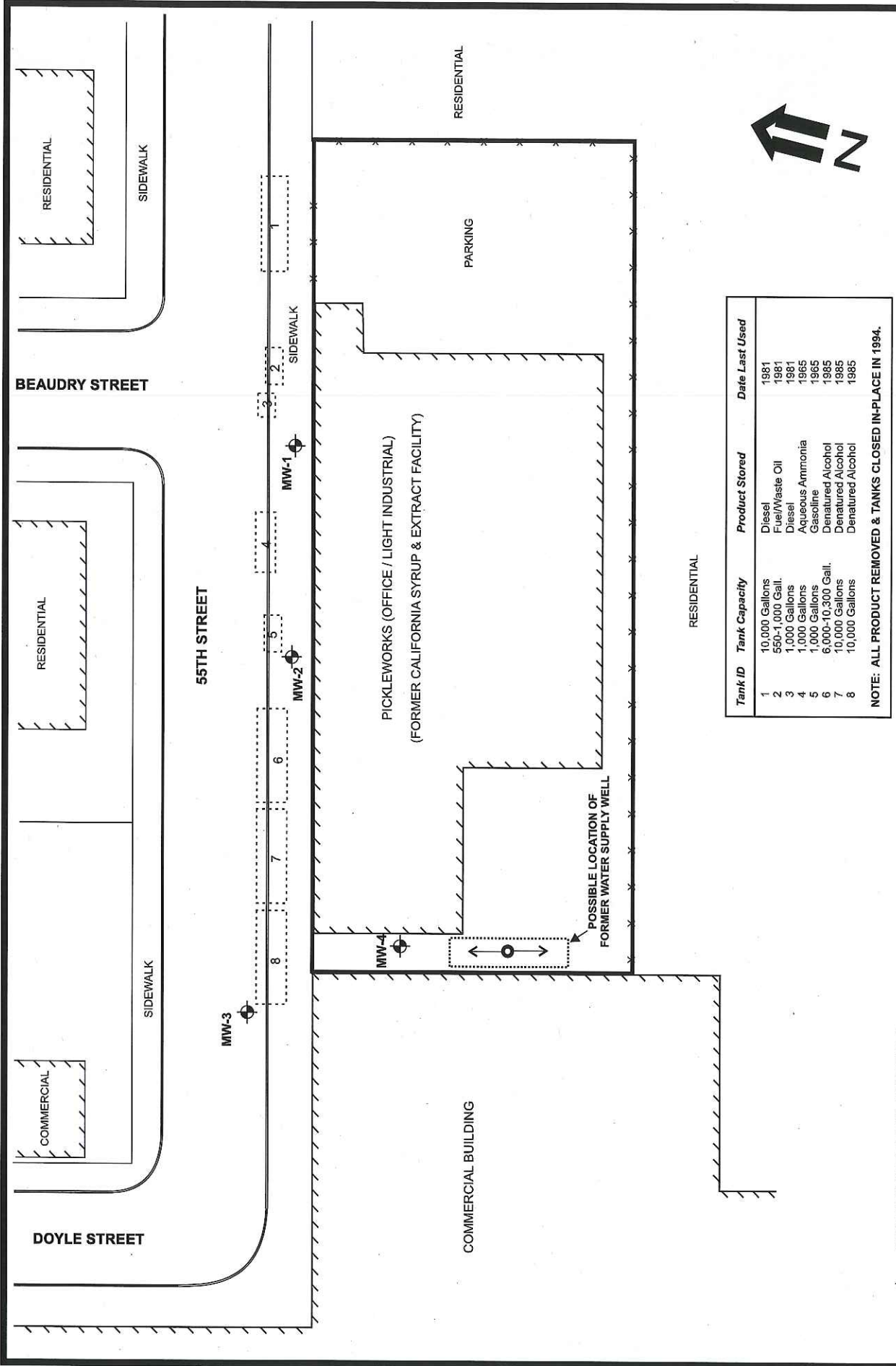


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DESIGNED BY:	CHECKED BY:	<b>SITE VICINITY MAP</b>	DATE: 09/07/2012	FIGURE: 1
DRAWN BY: JG	SCALE:			
PROJECT NO: 320-01-01				



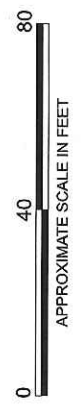




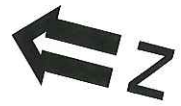
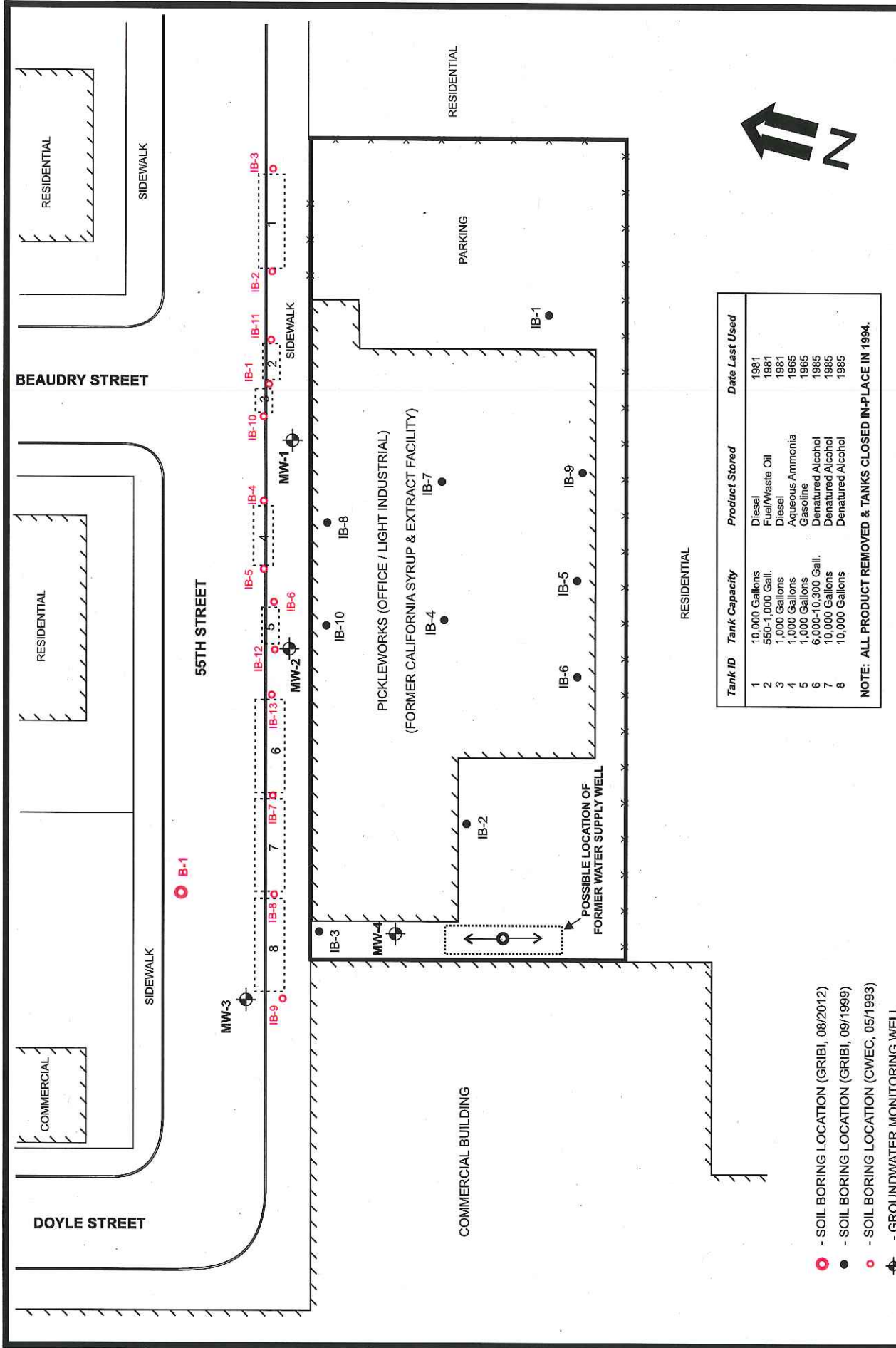
Tank ID	Tank Capacity	Product Stored	Date Last Used
1	10,000 Gallons	Diesel	1981
2	550-1,000 Gall.	Fuel/Waste Oil	1981
3	1,000 Gallons	Diesel	1981
4	1,000 Gallons	Aqueous Ammonia	1965
5	1,000 Gallons	Gasoline	1965
6	6,000-10,300 Gall.	Denatured Alcohol	1985
7	10,000 Gallons	Denatured Alcohol	1985
8	10,000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

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

◆ - GROUNDWATER MONITORING WELL



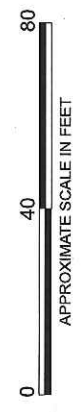
DESIGNED BY:	CHECKED BY:	<b>SITE PLAN</b> 1375 55TH STREET EMERYVILLE, CALIFORNIA	DATE: 09/24/2013	FIGURE: <b>2</b>
DRAWN BY: JEG	SCALE:			
PROJECT NO:				



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.

- - SOIL BORING LOCATION (GRIBI, 08/2012)
- - 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 BORING LOCATIONS  
 1375 55TH STREET  
 EMERYVILLE, CALIFORNIA

DATE: 09/24/2013

FIGURE: 3



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

**55TH STREET**

SOIL (MG/KG)	
Depth	5.5'
TPH-MO	-
TPH-D:	<1.0
TPH-G:	<0.003
B:	<0.003
T:	<0.003
E:	<0.003
X:	<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:	16
TPH-G:	<0.003
B:	0.021
T:	0.24
E:	0.15
X:	-
MTBE:	-

7

6

5

4

IB-7

IB-13

IB-6

IB-5

SIDEWALK

MW-2

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

IB-10

IB-8

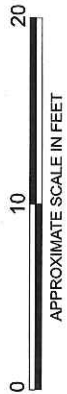
SOIL (MG/KG)	
Depth	6.0'
TPH-MO	<100
TPH-D:	250
TPH-G:	650
B:	1.2
T:	3.4
E:	11
X:	16
MTBE:	-

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

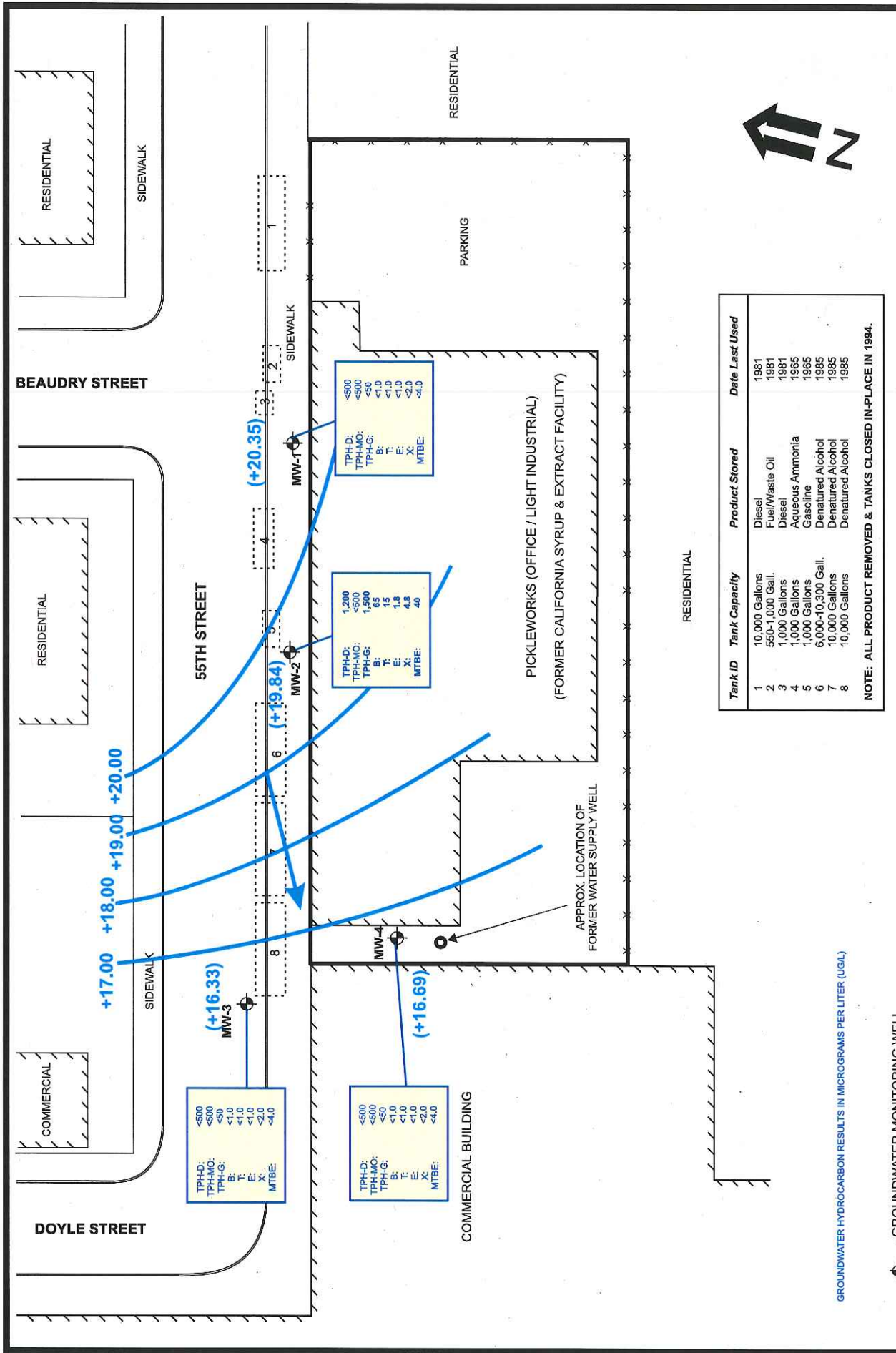


- - SOIL BORING LOCATION (GRIBI, 09/1999)
- - SOIL BORING LOCATION (CWEC, 05/1993)
- ⊙ - GROUNDWATER MONITORING WELL



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



Tank ID	Tank Capacity	Product Stored	Date Last Used
1	10,000 Gallons	Diesel	1981
2	500-1,000 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: \_\_\_\_\_

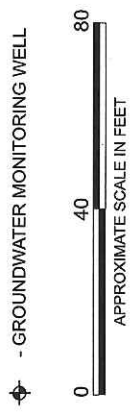
DRAWN BY: JEG SCALE: \_\_\_\_\_

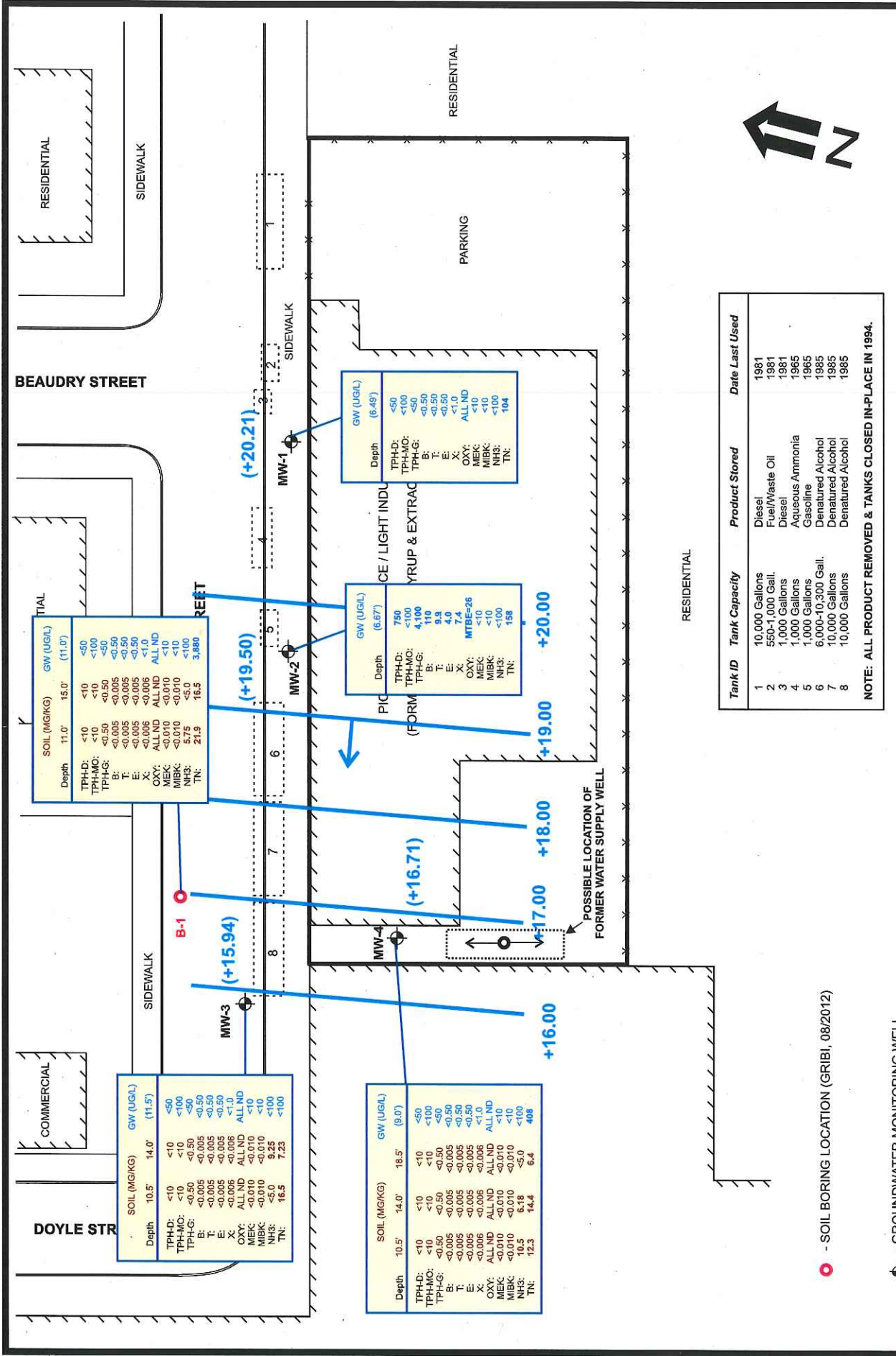
PROJECT NO: \_\_\_\_\_

**GROUNDWATER MONITORING RESULTS, 06/28/2013**

1375 55TH STREET  
EMERYVILLE, CALIFORNIA

DATE: 09/24/2013 FIGURE: 6





Depth	SOIL (MG/KG)	GW (UG/L)	(11.07)
11.0'	<10	<10	<50
	TPH-D: <10	<10	<100
	TPH-MO: <0.50	<0.50	<50
	TPH-G: <0.005	<0.005	<0.50
	B: <0.005	<0.005	<0.50
	T: <0.005	<0.005	<0.50
	E: <0.005	<0.005	<0.50
	X: <0.005	<0.005	<1.0
	OXY: ALL ND	ALL ND	ALL ND
	MEK: <0.010	<0.010	<10
	MIBK: <0.010	<0.010	<100
	NH3: 5.75	<5.0	<100
	TN: 21.9	16.5	3,880

Depth	SOIL (MG/KG)	GW (UG/L)	(11.5)
10.5'	<10	<10	<50
	TPH-D: <10	<10	<100
	TPH-MO: <0.50	<0.50	<50
	TPH-G: <0.005	<0.005	<0.50
	B: <0.005	<0.005	<0.50
	T: <0.005	<0.005	<0.50
	E: <0.005	<0.005	<0.50
	X: <0.005	<0.005	<1.0
	OXY: ALL ND	ALL ND	ALL ND
	MEK: <0.010	<0.010	<10
	MIBK: <0.010	<0.010	<100
	NH3: <5.0	9.25	<100
	TN: 16.5	7.23	<100

Depth	SOIL (MG/KG)	GW (UG/L)	(9.0)
10.5'	<10	<10	<50
	TPH-D: <10	<10	<100
	TPH-MO: <0.50	<0.50	<50
	TPH-G: <0.005	<0.005	<0.50
	B: <0.005	<0.005	<0.50
	T: <0.005	<0.005	<0.50
	E: <0.005	<0.005	<0.50
	X: <0.005	<0.005	<1.0
	OXY: ALL ND	ALL ND	ALL ND
	MEK: <0.010	<0.010	<10
	MIBK: <0.010	<0.010	<100
	NH3: 19.5	6.18	<5.0
	TN: 12.3	14.4	498

Depth	GW (UG/L)	(6.67)
TPH-D:	750	
TPH-MO:	<100	
TPH-G:	4,100	
B:	110	
T:	9.3	
E:	7.0	
X:	7.0	
OXY:	MTEB=26	
MEK:	<10	
MIBK:	<100	
NH3:	<100	
TN:	158	

Depth	GW (UG/L)	(6.49)
TPH-D:	<50	
TPH-MO:	<100	
TPH-G:	<50	
B:	<50	
T:	<0.50	
E:	<0.50	
X:	<1.0	
OXY:	ALL ND	
MEK:	<10	
MIBK:	<100	
NH3:	<100	
TN:	104	

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.



○ - SOIL BORING LOCATION (GRIBI, 08/2012)

⊕ - GROUNDWATER MONITORING WELL



DESIGNED BY:	CHECKED BY:	DATE: 09/24/2013	FIGURE: 5
DRAWN BY: JEG	SCALE:	<b>SOIL &amp; GROUNDWATER LAB</b> <b>RESULTS, 08/2012</b> 1375 55TH STREET EMERYVILLE, CALIFORNIA	
PROJECT NO:			



# ATTACHMENT 7

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

Sample ID	Sample Depth	Soil concentrations, in milligrams per kilogram (mg/kg)						
		TPH-G	TPH-D	TPH-MO	B	T	X	E
<b>Tank No. 1</b>								
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)
<b>Tank Nos. 2 &amp; 3</b>								
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 <sup>1</sup>	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)
<b>Tank No. 5</b>								
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						
<b>Tank No. 4</b>								
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	Soil concentrations, in milligrams per kilogram (mg/kg)						
		TPH-alcohol <sup>1</sup>	TPH-G	B	T	X	E	
<b>Tank Nos. 6, 7 &amp; 8</b>								
IB-13.1	5.5 ft	ND <sup>2</sup>	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.

<sup>1</sup> = Analyzed for TPH as alcohols and ketones by EPA Method 8015 (Modified). This method identifies 14 alcohols and ketones using GC methods.  
<sup>2</sup> = 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	<0.005	<0.010	<0.010	<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	<0.005	<0.010	<0.010	<0.010	<0.010	<5.0	16.5
B-1-W	Water	(9.0 ft)	<50	<100	<50	<0.50	<0.5	<1.0	ALL ND	<10	<10	<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	<0.005	<0.010	<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	<0.005	<0.010	<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	<0.005	<0.010	<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	<0.005	<0.010	<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	<0.005	<0.010	<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 (DIFE), 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
<b>MW-1</b>	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	<b>120</b>	<0.5	<0.5	<0.5	<b>0.84</b>	<0.050
	3/23/2000	4.79	21.91	<50	<100	<b>97</b>	<b>0.58</b>	<0.5	<0.5	<b>21</b>	<0.005
	6/28/2000	8.90	17.80	<50	<100	<b>110</b>	<b>28</b>	<b>2.2</b>	<b>8.7</b>	<b>17</b>	<0.005
	10/04/2000	8.36	18.34	<50	<100	<50	<0.5	<0.5	<0.5	<b>1.5</b>	<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	<b>4.1</b>	<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
<b>MW-2</b>	9/24/1994	7.88	18.29	<b>630</b>	<0.50	<b>970</b>	<b>57</b>	<b>3.4</b>	<b>3.6</b>	<b>3.0</b>	-
<26.17>	12/29/1999	7.29	18.88	<0.050	<0.100	<b>8,800</b>	<b>430</b>	<b>370</b>	<b>250</b>	<b>410</b>	<1.0
	3/23/2000	6.03	20.14	<0.050	<0.100	<b>10,000</b>	<b>590</b>	<b>90</b>	<b>210</b>	<b>640</b>	<1.0
	6/28/2000	7.11	19.06	<0.050	<0.100	<b>3,600</b>	<b>310</b>	<b>19</b>	<b>94</b>	<b>100</b>	<b>120</b>
	10/4/2000	7.64	18.53	<0.050	<0.100	<b>4,100</b>	<b>280</b>	<b>15</b>	<b>58</b>	<b>81</b>	<b>100</b>
	9/25/2009	7.55	18.62	<b>8,100</b>	<b>2,900</b>	<b>59,000</b>	<b>58</b>	<b>69</b>	<b>170</b>	<b>160</b>	-
	2/18/2010	5.96	20.21	<b>610</b>	<100	<b>1,400</b>	<b>12</b>	<b>5.4</b>	<1.0	<2.0	<b>97</b>
	7/26/2010	6.90	19.27	<b>560</b>	<100	<b>3,700</b>	<b>40</b>	<b>7.5</b>	<1.0	<2.0	<b>100</b>
	2/14/2011	6.99	19.18	<b>1,200</b>	<100	<b>2,400</b>	<b>17</b>	<b>11</b>	<b>4.2</b>	<b>4.4</b>	<b>49</b>
	8/03/2011	6.63	19.54	<b>1,500</b>	<b>860</b>	<b>2,100</b>	<b>6.2</b>	<b>15</b>	<1.0	<2.0	<b>200</b>
	1/30/2012	7.01	19.16	<b>1,100</b>	<b>220</b>	<b>2,400</b>	<b>80</b>	<b>31</b>	<1.0	<2.0	<b>200</b>
	8/16/2012	6.67	19.50	<b>750</b>	<100	<b>4,100</b>	<b>110</b>	<b>9.9</b>	<b>4.0</b>	<b>7.4</b>	<b>26</b>
	12/03/2012	4.35	21.82	<b>1,500</b>	<100	<b>910</b>	<b>9.9</b>	<b>15</b>	<b>1.1</b>	<b>1.4</b>	<b>110</b>
	06/28/2013	6.33	19.84	<b>1,200</b>	<500	<b>1,500</b>	<b>65</b>	<b>15</b>	<b>1.8</b>	<b>4.8</b>	<b>40</b>

**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
<b>ESLs, VI Concerns, Commercial, Fine Grained</b>				--	--	--	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



# Superior Precision Analytical, Inc.

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CENTURY WEST ENGINEERING  
Attn: JIM GRIBI

Project 20539-001-01  
Reported 30-July-1993

## EPA SW-846 METHOD 8240 - VOLATILE ORGANICS

Laboratory Number	Sample Identification	Matrix
56838- 7	IB-1.2	Soil

### RESULTS OF ANALYSIS

Laboratory Number: 56838- 7

Chloromethane:	ND<50
Bromomethane:	ND<50
Vinyl Chloride:	ND<50
Chloroethane:	ND<50
Methylene Chloride:	ND<50
Acetone:	ND<50
Carbon Disulfide:	ND<15
Trichlorofluoromethane:	ND<15
1,1-Dichloroethene:	ND<15
1,1-Dichloroethane:	ND<15
t-1,2-Dichloroethene:	ND<15
Chloroform:	ND<15
1,2-Dichloroethane:	ND<5
2-Butanone:	ND<100
1,1,1-Trichloroethane:	ND<15
Carbon tetrachloride:	ND<15
Vinyl Acetate:	ND<50
Bromodichloromethane:	ND<15
1,2-Dichloropropane:	ND<15
c-1,2-Dichloroethene:	ND<15
c-1,3-Dichloropropene:	ND<15
Trichloroethene:	ND<15
Dibromochloromethane:	ND<15
1,1,2-Trichloroethane:	ND<15
Benzene:	6
t-1,3-Dichloropropene:	ND<15
2-Chloroethyl Vinyl Et:	ND<15
Bromoform:	ND<15
4-Methyl-2-Pentanone:	ND<50

Concentration: ug/kg



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Project 20539-001-01  
Reported 30-July-1993

## EPA SW-846 METHOD 8240 - VOLATILE ORGANICS

Laboratory Number	Sample Identification	Matrix
56838- 7	IB-1.2	Soil

Laboratory Number: 56838- 7      **RESULTS OF ANALYSIS**

2-Hexanone:	ND<50
Tetrachloroethene:	ND<15
1,1,2,2-Tetracl-ethane:	ND<15
Toluene:	ND<15
Chlorobenzene:	ND<15
Ethyl Benzene:	ND<15
Styrene:	ND<15
Xylenes:	ND<15
1,3-Dichlorobenzene:	ND<15
1,4-Dichlorobenzene:	ND<15
1,2-Dichlorobenzene:	ND<15
1,2-Dichloroethane-d4:	96%
Toluene-d8:	102%
Bromofluorobenzene:	99%
Concentration:	ug/kg



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CENTURY WEST ENGINEERING  
Attn: JIM GRIBI

Project 20539-001-01  
Reported 30-July-1993

## Alcohols and Ketones by Modified Method 8015

Laboratory Number	Sample Identification	Matrix
56838- 16	IB-13.1 5 1/2'	Soil
56838- 17	IB-13.2 10'	Soil
56838- 18	IB-7.1 9 1/2'	Soil
56838- 20	IB-8.2 11'	Soil

### RESULTS OF ANALYSIS

Laboratory Number: 56838-16 56838- 17 56838- 18 56838- 20

	56838-16	56838- 17	56838- 18	56838- 20
Methanol:	ND<5	ND<5	ND<5	ND<5
Ethanol:	ND<2	ND<2	ND<2	ND<2
Acetone:	ND<3	ND<3	ND<3	ND<3
iso-Propanol:	ND<2	ND<2	ND<2	ND<2
Methyl-tert-Butylether:	ND<10	ND<10	ND<10	ND<10
n-Propanol:	ND<2	ND<2	ND<2	ND<2
Methyl-Ethylketone:	ND<2	ND<2	ND<2	ND<2
Tetrahydrofuran:	ND<4	ND<4	ND<4	ND<4
1Methoxy-2Propanol:	ND<3	ND<3	ND<3	ND<3
n-Butanol:	ND<2	ND<2	ND<2	ND<2
2Methoxy-Ethanol:	ND<2	ND<2	ND<2	ND<2
Methyl-iso-Butylketone:	ND<6	ND<6	ND<6	ND<6
Cyclohexanone:	ND<2	ND<2	ND<2	ND<2
3-Octanone:	ND<2	ND<2	ND<2	ND<2
Concentration:	mg/kg	mg/kg	mg/kg	mg/kg



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CENTURY WEST ENGINEERING  
Attn: JIM GRIBI

Project 20539-001-01  
Reported 30-July-1993

## Alcohols and Ketones by Modified Method 8015

Laboratory Number	Sample Identification	Matrix
56838- 21	IB-9.1 6 1/2'	
56838- 22	IB-9.2 10'	

### RESULTS OF ANALYSIS

Laboratory Number: 56838-21 56838- 22

Methanol:	ND<5	ND<5
Ethanol:	ND<2	ND<2
Acetone:	ND<3	ND<3
iso-Propanol:	ND<2	ND<2
Methyl-tert-Butylether:	ND<10	ND<10
n-Propanol:	ND<2	ND<2
Methyl-Ethylketone:	ND<2	ND<2
Tetrahydrofuran:	ND<4	ND<4
1Methoxy-2Propanol:	ND<3	ND<3
n-Butanol:	ND<2	ND<2
2Methoxy-Ethanol:	ND<2	ND<2
Methyl-iso-Butylketone:	ND<6	ND<6
Cyclohexanone:	ND<2	ND<2
3-Octanone:	ND<2	ND<2
Concentration:	mg/kg	mg/kg



# Superior Precision Analytical, Inc.

1555 Burke, Unit I ▪ San Francisco, California 94124 ▪ (415) 647-2081 / fax (415) 821-7123

## Alcohols and Ketones by Modified Method 8015 Quality Assurance and Control Data - Water

Laboratory Number 56838

Compound	Method Blank (mg/kg)	PQL (mg/kg)	Average Spike Recovery (%)	Limits (%)	RPD (%)
Methanol:	ND<5	5			
Ethanol:	ND<2	2	105%	60-120	0%
Acetone:	ND<3	3			
iso-Propanol:	ND<2	2			
Methyl-tert-Butylether:	ND<10	10	98%	60-120	4%
n-Propanol:	ND<2	2			
Methyl-Ethylketone:	ND<2	2			
Tetrahydrofuran:	ND<4	4			
1Methoxy-2Propanol:	ND<3	3			
-Butanol:	ND<2	2			
Methoxy-Ethanol:	ND<2	2			
Methyl-iso-Butylketone:	ND<6	6	99%	60-120	1%
Cyclohexanone:	ND<2	2			
-Octanone:	ND<2	2			

### Definitions:

ND = Not Detected

PQL = Practical Quantitation Limit

RPD = Relative Percent Difference

File No. 56838

*Cecilia G. Joazum*  
Senior Analyst



# ATTACHMENT 8

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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: 6.5 ft					
Purpose:		Logged By: Bob Bogar		Final GW Depth:					
Date: July 20, 1993		Blank Casing:		From: To:					
Consulting Firm: Century West Engineering		Performance:		From: To:					
Project Number: 20539-091-01		Filter Sand:		From: To:					
Drilling Contractor: Kvillhaug Drilling		Bentonite:		From: To:					
Drilling Method: Hollow Stem Auger		Grout:		From: To:					
Depth	Sample ID	Blow Counts	Profile	Soil Description	Remarks				
01				Concrete with rebar					
02				Dark to light brown CLAY, moist, firm, silty, no hydrocarbon odor or stain.					
03									
04									
05									
06									
07									
08									
09									
10	T IB-1.1			Grey green CLAY, silty, moist moderate to strong hydrocarbon odor.	IB-1.1 Sub sample from casing cuttings from = 6 ft.				
11	L			Total Depth: 10.5 ft Ground Water: 6.5 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		Performance:		From: To:					
Project Number: 20539-001-01		Filter Sand:		From: To:					
Drilling Contractor: Kvillhaug Drilling		Bentonite:		From: To:					
Drilling Method: Hollow Stem Auger		Grout:		From: To:					
Depth	Sample ID	Blow Counts	Profile	Soil Description	Remarks				
01				Concrete with rebar					
02				Light brown CLAY, moist, firm, silty some angular pebbles, no hydrocarbon odor or stain.					
03									
04									
05									
06									
07									
08	T								
09	L			Light green CLAY, moist, firm, slight hydrocarbon odor.					
10									
11									
12									
13	T			Light brown silty CLAY, moist, silty, some pebbles, no hydrocarbon odor or staining.					
14	L								
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: 20538-001-01		Filler Sand:	From: To:		
Drilling Contractor: Kvitkaug 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, (blackill hydraulician odor or stain,
03					
04					
05					
06					
07					
08					
09					
10				11.0 - 11.5 ft	lt brown silty CLAY, wet to saturated, no hydrocarbon odor or stain.
11	T	19			
12	L	8			
13					
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: 20538-001-01		Filler Sand:	From: To:		
Drilling Contractor: Kvitkaug 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	10			
12	L	18			
13					
14					
15				Total Depth - 11.5 ft No ground water	

**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: 20559-001-01	Filter Sand:	From: To:			
Drilling Contractor: Kuhlhaug 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	
03				Grey to buff silty SAND, backfill material, moist to wet, no hydrocarbon odor or stain.	
04					
05					
06					
07					
08					
09					
10					
11	T	18		10.0 - 11.5 ft	Light brown CLAY, silty, wet to saturated, no hydrocarbon odor or staining.
12	L	32			
13					
14					
15					
				Total depth - 11.0 ft	
				Ground water - 8.5 ft	

**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: 20559-001-01	Filter Sand:	From: To:			
Drilling Contractor: Kuhlhaug 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	
03				Dark to light brown sandy CLAY, silty, moist, firm, some angular pebbles, no hydrocarbon odor or stain.	
04					
05					
06					
07					
08					
09	T			5.0 - 9.5 ft	Light to dark green silty CLAY, sandy, moist, firm, moderate to strong hydrocarbon odor.
10	L				
11				Total depth - 9.5 ft	IB-6.1: Grab sample at 8.5 ft depth. No ground water cuttings from 6 to 9 ft.

**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: 20389-001-01		Filler Sand:		From: To:	
Drilling Contractor: Kvitlung Drilling		Bentonite:		From: To:	
Drilling Method: Hollow Stem Auger		Grout:		From: To:	
Depth	Sample ID	Blew Counts	Profile	Soil Description	Remarks
01				0 - 0.5 ft	Concrete and rebar
02				0.5 - 10.5 ft	Dark brown to grey SAND, (probably silted) with some wet, no hydrocarbon odor or stain.
03					
04					
05					
06					
07					
08					
09					
10	T SBZ-71	8 22	V		
11	L	18		Total Depth - 10.5 ft Ground Water - 10.0 ft	
12					
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: 20389-001-01		Filler Sand:		From: To:	
Drilling Contractor: Kvitlung Drilling		Bentonite:		From: To:	
Drilling Method: Hollow Stem Auger		Grout:		From: To:	
Depth	Sample ID	Blew Counts	Profile	Soil Description	Remarks
01				0 - 0.5 ft	Concrete and rebar
02				0.5 - 11.0 ft	Dark to light brown SAND, (backfill material) with some wet, no hydrocarbon odor or stain.
03					
04					
05					
06	T IB-8-1	4 5 7			
07	L				
08					
09					
10					
11	T IB-8-2	8 9 24		Total Depth - 12.0 ft No ground water	
12	L				

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 Boyer	Final GW Depth:				
Date: July 21, 1983	Blank Casing:	From: To:				
Consulting Firm: Century West Engineering	Perforations:	From: To:				
Project Number: 20539-001-01	Filter Sand:	From: To:				
Drilling Contractor: Killhaug 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 - 11.5 ft		
03				Light to dark green CLAY, very firm, moist, some granular particles, slight hydrocarbon odor.		
04						
05						
06						
07						
08						
09						
10						
11				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 #8	Elevation:	Initial GW Depth: -				
Purpose:	Logged By: Bob Boyer	Final GW Depth:				
Date: July 21, 1983	Blank Casing:	From: To:				
Consulting Firm: Century West Engineering	Perforations:	From: To:				
Project Number: 20539-001-01	Filter Sand:	From: To:				
Drilling Contractor: Killhaug 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		
03				Light to dark brown silty CLAY, moist, no hydrocarbon odor or stain.		
04						
05						
06				4.0 - 6.0 ft		
07				Light to dark green CLAY, moist, firm, moderate hydrocarbon odor.		
08						
09				6.0 - 10.5 ft		
10				Light brown silty CLAY, slight green tinge, moist, moderate to slight hydrocarbon odor.		
				Total Depth - 10.5 ft No ground water.		
					IB-10.2: Grab samples from drilling cuttings from 4 to 6 ft. Free product found in soil sample	

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 Boyer		Final GW Depth:					
Date: July 21, 1999		Blank Casing:		From: To:					
Consulting Firm: Century West Engineering		Penetrations:		From: To:					
Project Number: 20589-001-01		Filler Sand:		From: To:					
Drilling Contractor: Kivilaung 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				0.5 - 11.0 ft					
06				Light to dark green CLAY, moist, silty, no hydrocarbon odor.					
07									
08									
09									
10	T	IB-11.2							
11	T			Total Depth - 11.0 ft No ground water.					
					IB-11.1: Grab sample from cuttings at 3 ft.				

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 Boyer		Final GW Depth:					
Date: July 21, 1999		Blank Casing:		From: To:					
Consulting Firm: Century West Engineering		Penetrations:		From: To:					
Project Number: 20589-001-01		Filler Sand:		From: To:					
Drilling Contractor: Kivilaung 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				5.0 - 10.5 ft	Gray green CLAY, firm, moist, occas. silty, slight to moderate hydrocarbon odor.				
06									
07									
08									
09									
10	T	IB-12.2							
11	T			Total Depth - 10.5 ft No ground water.					
					IB-12.1: Grab sample from cuttings from 5 to 10.6 ft.				

**CENTURY WEST ENGINEERING CORPORATION**  
**SOIL BORING LOG**  
**CALIFORNIA SYRUP AND EXTRACT**

Site Location: 1355 65th 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, 1983	Blank Change:	From: To:			
Consulting Firm: Century West Engineering	Perforations:	From: To:			
Project Number: 20533-001-01	Filter Sand:	From: To:			
Drilling Contractor: Kuhnau 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 Gray to dark gray CLAY, moist, no hydration odor or stain.	
.04					
.05					
.06					
.07	IB-13.1	9 14 19		4.0 - 10.5 ft Dark to medium green CLAY, moist, firm, slight hydration odor.	
.08					
.09					
.10			V		
.11	IB-13.2	11 16 22		10.5 - 11.5 ft Light brown CLAY with some green mottling, strong hydration odor.	
.12				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: 3.0 ft	
Purpose: Ground water investigation		Logged By: Bob Bogar		Final GW Depth:	
Date: September 8, 1994		Blank Casings:		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		Filler Sand:		From: 20.4 To: 4.0 ft	
Drilling Contractor: Kihhaug 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 ± 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				4.0 - 8.0 ft Dark green sandy SILT; moist, soft; slight to strong hydrocarbon odor.	
05				8.0 - 15.0 ft Light reddish brown clayey SILT; no hydrocarbon odor or discoloration.	
06	T	10		15.0 - 20.0 ft Grey brown, clayey sandy SILT; no hydrocarbon odor or discoloration.	
07	L	10			
08		10			
09					
10	T	6			
11	L	9			
12		15			
13					
14					
15					
16					
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: 3.0 ft	
Purpose: Ground water investigation		Logged By: Bob Bogar		Final GW Depth:	
Date: September 8, 1994		Blank Casings:		From: 5.35 To: 0.0 ft	
Consulting Firm: Century West Engineering		Perforations:		From: 20.0 To: 5.35 ft	
Project Number: 20539-001-02		Filler Sand:		From: 20.4 To: 4.0 ft	
Drilling Contractor: Kihhaug 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 ± 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				4.0 - 7.0 ft Light to dark green SILT; moist, soft; strong hydrocarbon odor.	
05				7.0 - 10.0 ft Light brown to grey silty CLAY; moist, slight hydrocarbon odor.	
06	T	2		10.0 - 20.0 ft Light brown clayey SILT; moist, soft; no hydrocarbon odor or discoloration.	
07	L	3			
08					
09					
10	T	8			
11	L	20			
12					
13					
14					
15					
16					
17					
18					
19					
20					
				Final Auger Depth: 20 ft	
				Ground Water: - 8 ft	

# LOG OF WELL BORING

**BORING NUMBER:** IB-2  
**BORING LOCATION:** SOUTH YARD  
**BORING TYPE:** INVESTIGATIVE BORING  
**PROJECT NAME:** CSE-50TH STREET  
**PROJECT NUMBER:** 167-01-01

SHEET \_1\_ OF \_1\_

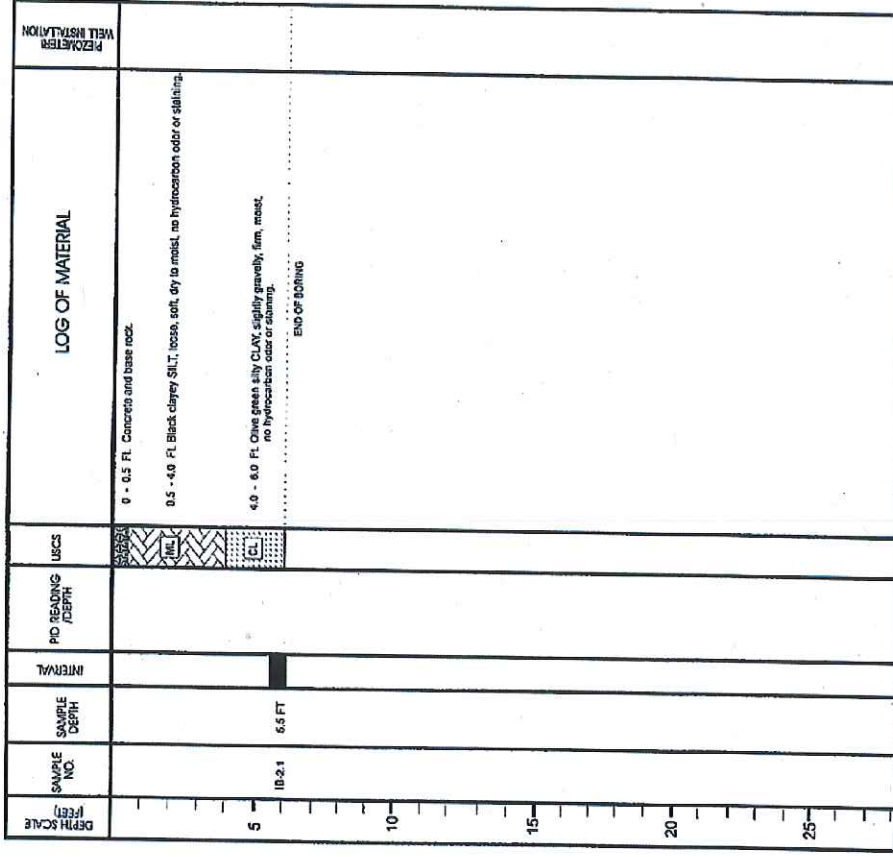
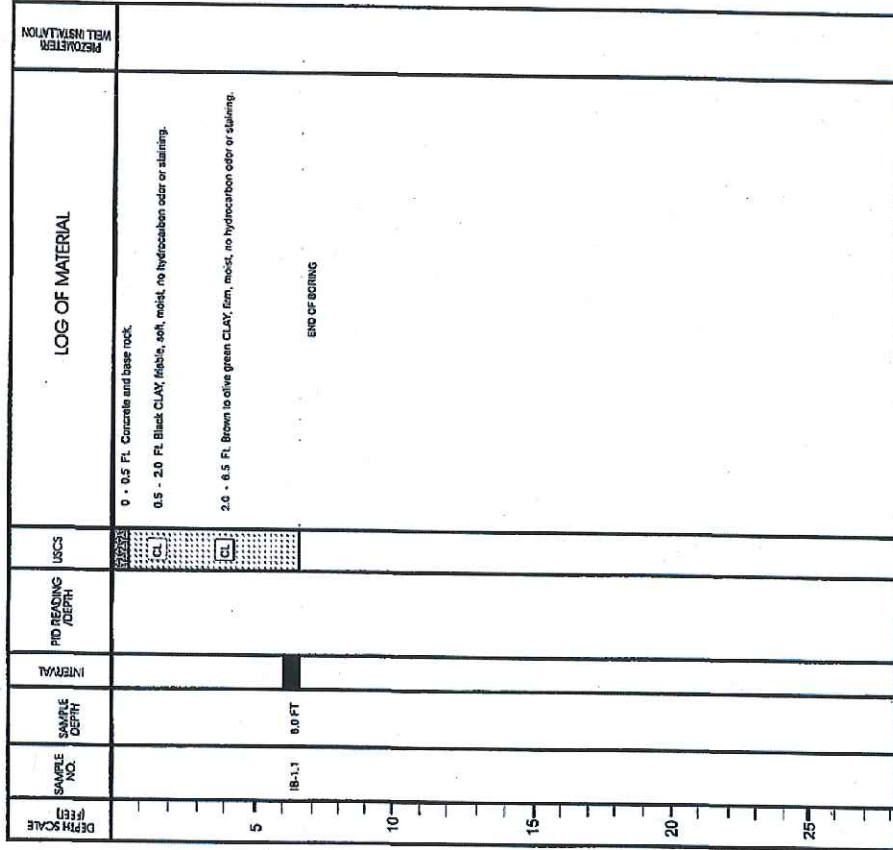
**DRILLING CONTRACTOR:** GREGG DRILLING  
**DRILLING METHOD:** DIRECT PUSH  
**BORERHOLE DIAMETER:** 2 INCHES  
**COMPLETION METHOD:** GROUTED  
**BORING TOTAL DEPTH:** 6.0 FEET  
**GROUNDWATER TOTAL DEPTH:** NONE

# LOG OF WELL BORING

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

SHEET \_1\_ OF \_1\_

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



**LOG OF WELL BORING**

SHEET 1 OF 1

BORING NUMBER: IB-3

BORING LOCATION: WEST GATE

BORING TYPE: INVESTIGATIVE BORING

PROJECT NAME: CSE-55TH STREET

PROJECT NUMBER: 167-01-01

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	INTERNAL	PID READING /DEPTH	USCS	LOG OF MATERIAL	PERMETER WELL INSTALLATION
5	IB-3.1	5.5 FT			CL	0 - 0.5 FT. Concrete and base rock. 0.5 - 3.0 FT. Black to brown clayey SILT, loose, soft, moist, no hydrocarbon odor or staining. 3.0 - 6.0 FT. Olive green silty CLAY, firm, moist, no hydrocarbon odor or staining.	
10						END OF BORING	
15							
20							
25							

**LOG OF WELL BORING**

SHEET 1 OF 1

BORING NUMBER: IB-4

BORING LOCATION: WAREHOUSE MIDDLE WEST

BORING TYPE: INVESTIGATIVE BORING

PROJECT NAME: CSE-55TH STREET

PROJECT NUMBER: 167-01-01

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	INTERNAL	PID READING /DEPTH	USCS	LOG OF MATERIAL	PERMETER WELL INSTALLATION
5	IB-4.1	0.0 FT			CL, SM	0 - 0.5 FT. Concrete and base rock. 0.5 - 4.0 FT. Black clayey SILT, loose, soft to moist, no hydrocarbon odor or staining. 4.0 - 5.0 FT. Brown CLAY, firm, moist, no hydrocarbon odor or staining. 5.0 - 6.5 FT. Brown gravelly silty SAND, loose to firm, dry to moist, no hydrocarbon odor or staining.	
10							
15							
20							
25							

# LOG OF WELL BORING

SHEET 1 OF 1

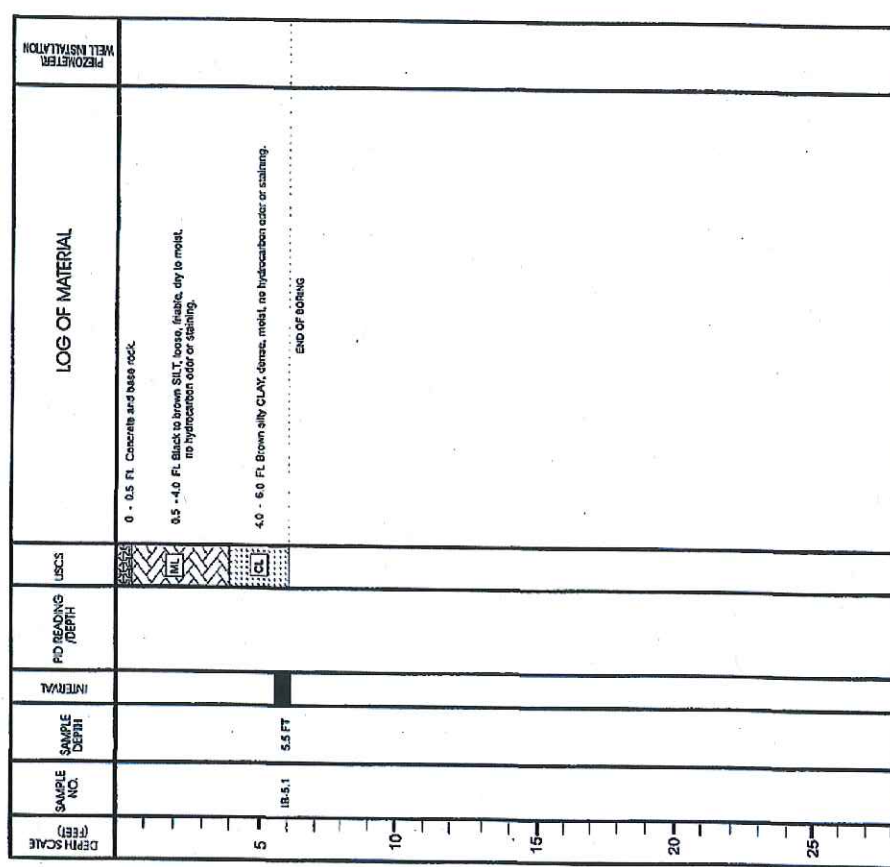
BORING NUMBER: IB-5

WAREHOUSE MIDDLE OF SOUTH WALL

BORING LOCATION: WAREHOUSE MIDDLE OF SOUTH WALL  
 BORING TYPE: INVESTIGATIVE BORING  
 PROJECT NAME: CSE-55TH STREET  
 PROJECT NUMBER: 167-01-01

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



# LOG OF WELL BORING

SHEET 1 OF 1

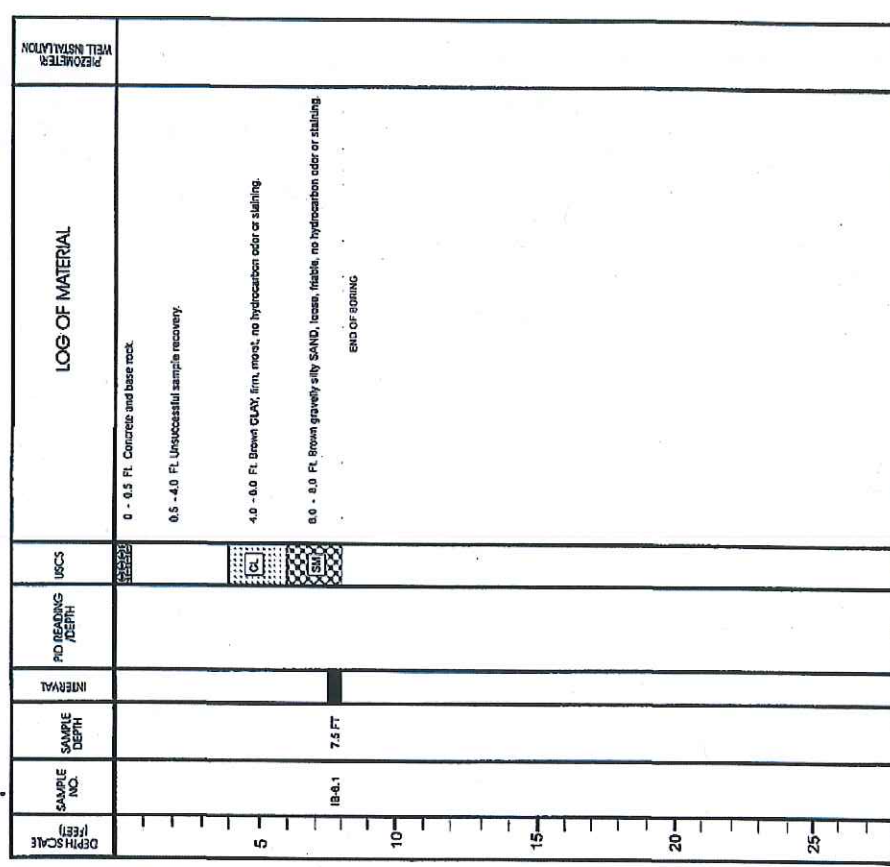
BORING NUMBER: IB-6

WAREHOUSE SOUTHWEST CORNER

BORING LOCATION: WAREHOUSE SOUTHWEST CORNER  
 BORING TYPE: INVESTIGATIVE BORING  
 PROJECT NAME: CSE-55TH STREET  
 PROJECT NUMBER: 167-01-01

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



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

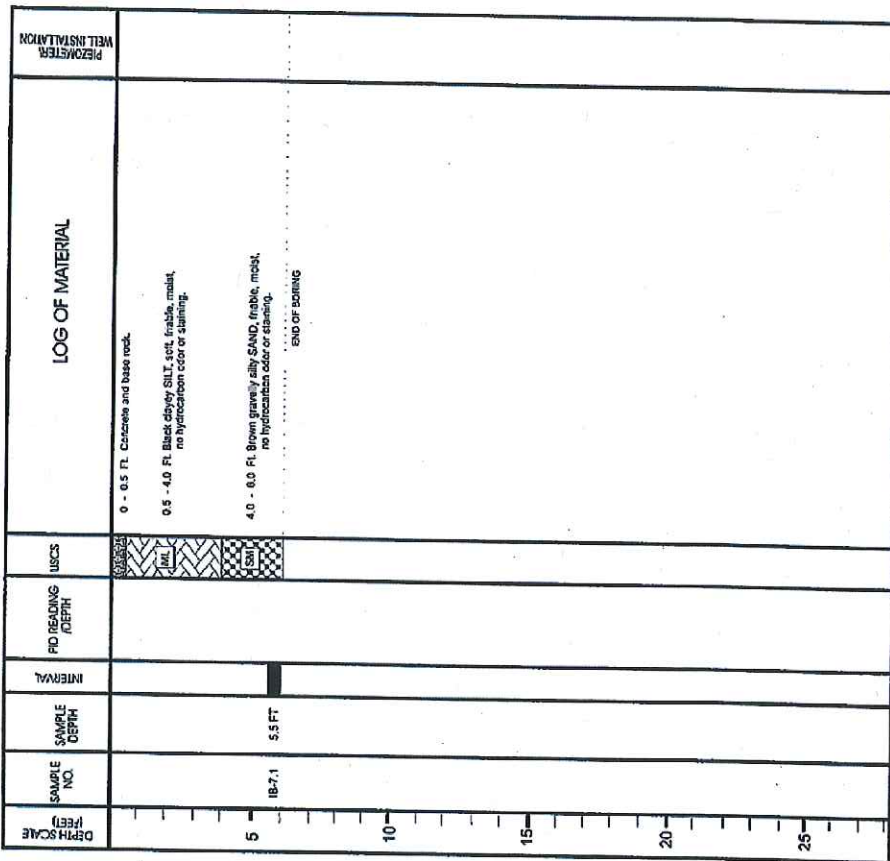
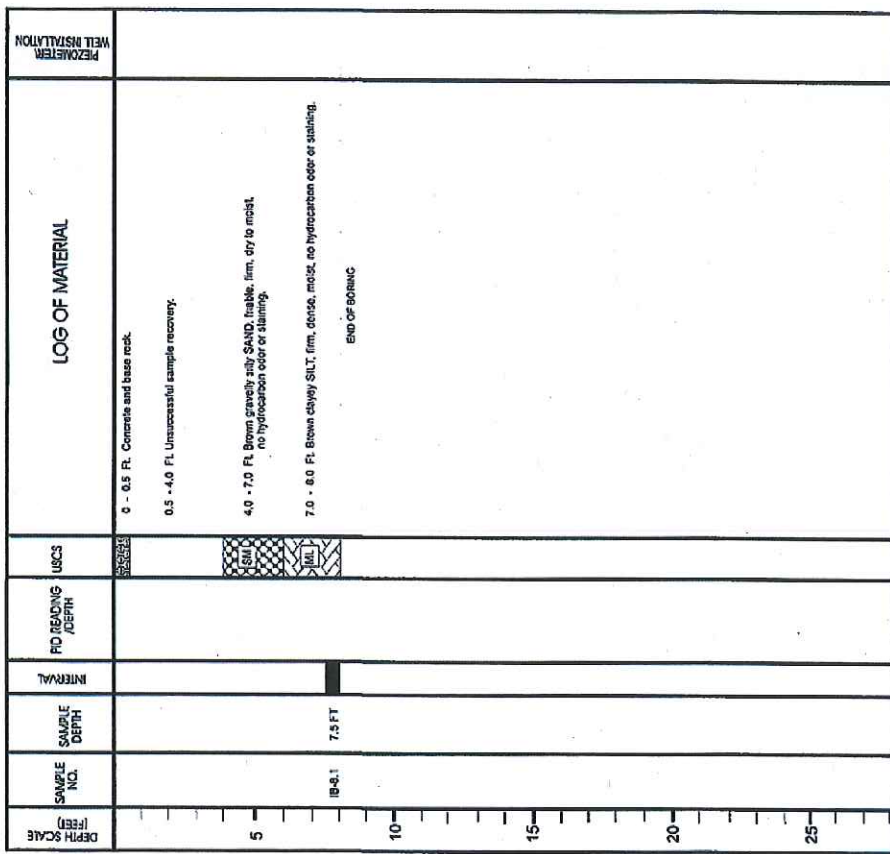
**LOG OF WELL BORING**  
**GRIBI Associates**

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

**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**

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



# LOG OF WELL BORING

SHEET 1 OF 1

BORING NUMBER: IB-10  
 BORING LOCATION: WAREHOUSE WEST OF NORTHWALL  
 BORING TYPE: INVESTIGATIVE BORING  
 PROJECT NAME: CSE-55TH STREET  
 PROJECT NUMBER: 167-01-01

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

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

# LOG OF WELL BORING

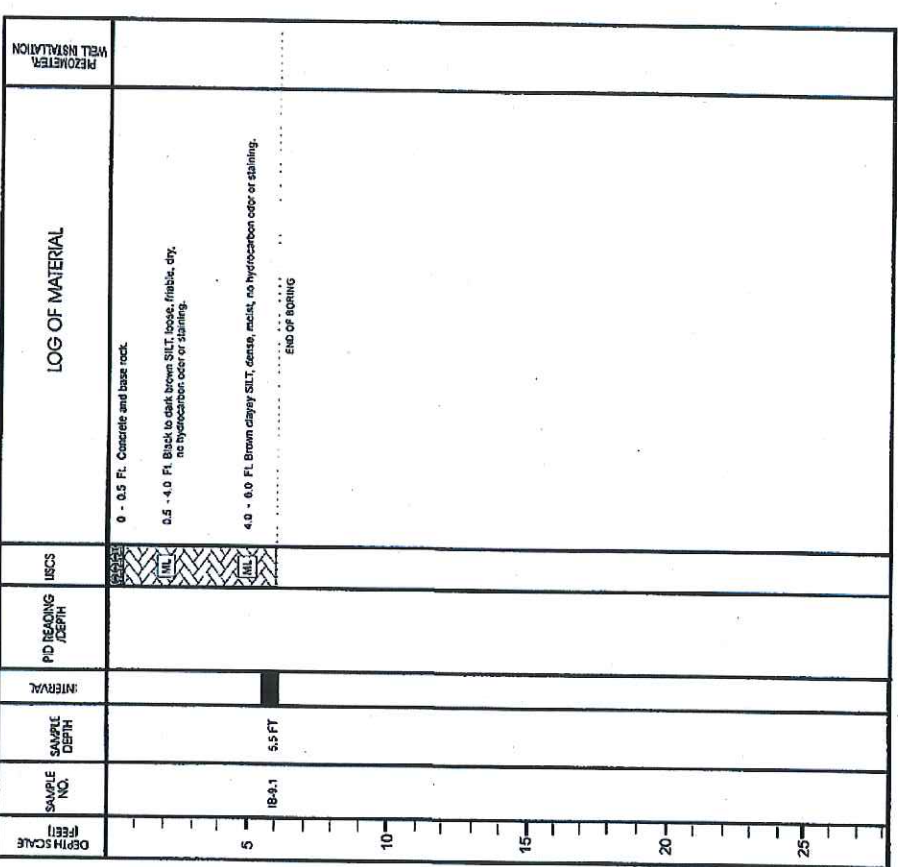
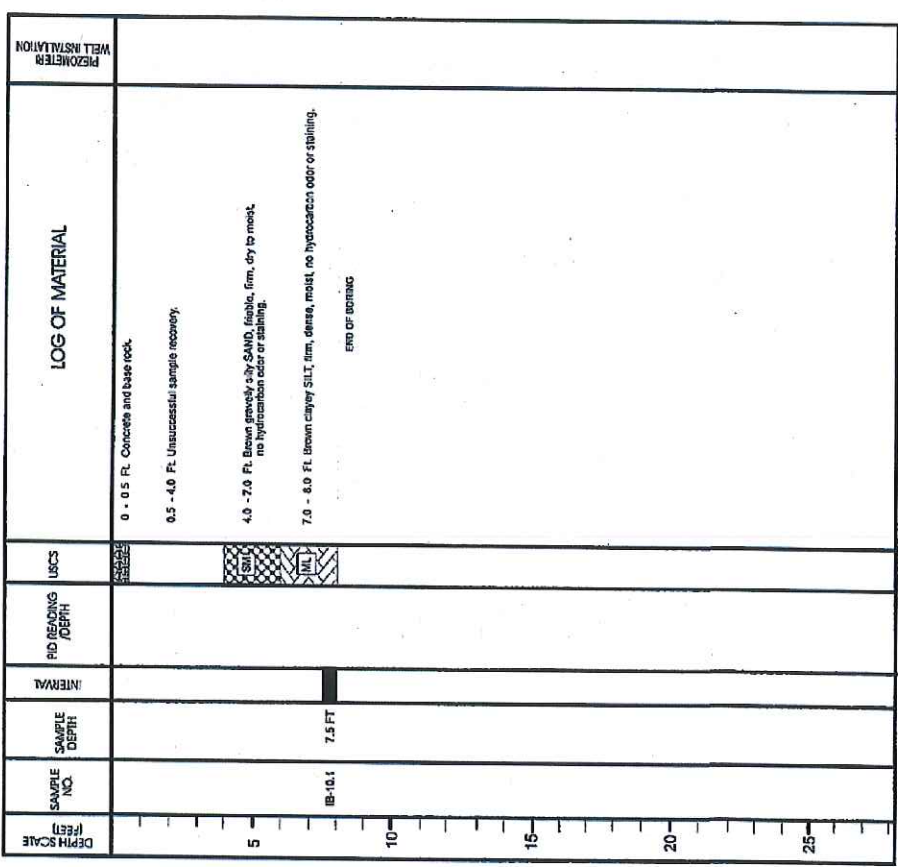
SHEET 1 OF 1

BORING NUMBER: IB-9  
 BORING LOCATION: WAREHOUSE EAST OF SOUTH WALL  
 BORING TYPE: INVESTIGATIVE BORING  
 PROJECT NAME: CSE-55TH STREET  
 PROJECT NUMBER: 167-01-01

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

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



# 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

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

START DATE: 08/01/2012  
 COMPLETION DATE: 08/01/2012



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-1-7.5 855	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-1-11.0 900	11.0 FT.		0	GP	10.0 - 15.0 ft. Silty Clayey Gravel (GP) Light brown, leathery, loose to firm, wet at about 11.0 ft., no odors or staining, water saturated from 11 ft to 13.5 ft.
15	B-1-15.0 910	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

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

START DATE: 09/01/2012  
 COMPLETION DATE: 09/01/2012



DEPTH SCALE (FEET)	SAMPLE NO.	SAMPLE DEPTH	INTERVAL	PID READING BLOW COUNTS - INITIAL - FINAL	USCS	LOG OF MATERIAL
0.0 - 1.5 ft.						Asphalt & concrete.
5.0	B-3-6.0 1050	6.0 FT.		0	CL	1.5 - 11.5 ft. Silty Clay (CL) Dark grey to olive
10	B-3-10.5 1100	10.5 FT.		0	GP	11.5 - 15.0 ft. Sandy Gravel (GP) Brown-olive grey, loose, silty, wet at 11.5 ft, closest to 2 inch, water saturated, no odors or staining.
15	B-3-14.0 1110	14.0 FT.		0		
						TOTAL DEPTH: 16.0 FEET

**WELL SPECIFICATIONS**

A - WELL SCREEN DEPTH: 9.97 FT  
 B - WELL SCREEN TO TOP OF SAND: 8.00 FT  
 C - DEPTH TO TOP OF SAND: 8.00 FT  
 D - DEPTH BENTONITE SEAL: 6.00 FT

CASING TYPE: SCH 40 PVC  
 CASING SIZE: 2 INCH  
 SLOT SIZE: 0.020 INCH

# 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

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

START DATE: 08/01/2012  
 COMPLETION DATE: 08/01/2012

