ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
COLLEEN CHAWA, Agency Director

DEPARTMENT OF ENVIRONMENTAL HEALTH
LOCAL OVERSIGHT PROGRAM (LOP)
For Hazardous Materials Releases
1131 HARBOR BAY PARKWAY
ALAMEDA, CA 94502
(510) 567-6700
FAX (510) 337-9335

October 24, 2018

Mr. and Mrs. Neil and Mary Cotter
2847 Arguello Drive
Burlingame, CA 94010-5817
(Sent via E-mail to: neil.cotter@comcast.net and mary.cotter@comcast.net

Mr. and Mrs. John and Antoinette Coyle
2193 Trafalgar Place
Oakland, CA 94611
(Sent via E-mail to: trisargil@aol.com)

Subject: Expedited Claim Account Pilot Program (ECAP), UST Claim #13712, Fuel Leak Case No. RO000027 and GeoTracker Global ID T06000102106, Grove Street Wash Rack, 3884 Martin Luther King, Jr. Way, Oakland, CA 94609

Dear Responsible Parties:

This letter transmits the enclosed Remedial Action Completion Certificate and Case Closure Summary Form for the subject Leaking Underground Storage Tank Cleanup Site (LUST) case. These documents confirm the completion of the investigation and cleanup of the unauthorized release at the subject site.

ACDEH has evaluated this case for closure in accordance with the State Water Resource Control Board's Low-Threat Underground Storage Tank Closure Policy (LTCP) for petroleum related contaminants and has determined that the site qualifies for closure as a low risk site. ACDEH's closure determination was based on an analysis of risk to human health and the environment under the current land use scenario as a vacant lot with no structures or buildings and was limited to:

- Exposure to releases of petroleum related contamination from underground storage tank systems, and
- Identified receptors at and in the vicinity of the site under the land use scenario as a vacant lot with no structures or buildings at the time of case closure.

Risk to receptors under different land use scenarios or site configurations, or from other potential contaminants of concern associated with historic land use at and/or in the vicinity of the site were not considered in the closure determination of this LUST case.

Due to residual subsurface contamination on the property associated with historic land use and operations, the property owner is responsible for complying with the following requirements:

1. Notifying contractors and utility workers of residual subsurface contamination at the site prior to implementing any work that could result in exposure to subsurface contamination. Each contractor shall be responsible for the safety of its employees and site visitors, and must adhere to a site-specific health and safety plan prepared for the work in accordance with California Occupational Safety and Health Administration requirements and use properly trained personnel in accordance with California Code of Regulations, Title 29, Part 1910.120 Hazardous Waste Operations and Emergency Response (HAZWOPER) standards; and

2. Notifying ACDEH (as required by Government Code Section 65850.2.2) prior to permitting and implementation of site redevelopment activities that modify the existing site configuration or land use at the time of this case closure. Upon notification, ACDEH will re-evaluate the risk to human health relative to the proposed modifications to existing site improvements or proposed

redevelopment project. ACDEH recommends that notification be provided in the initial stages of the planning and permitting process to facilitate interagency coordination and an efficient permitting process.

ACDEH recommends that during property transactions or bank refinancing for the site or properties in the vicinity of the site that environmental due diligence activities include an evaluation of potential contaminants of concern from all historic land uses at and in the vicinity of the site and associated risk to human health and the environment. Online case files for environmental cases associated with contamination related to historic land use and operations at and in the vicinity of the site can be viewed over the Internet at:

- ACDEH website (http://www.acgov.org/aceh/index.htm)
- State Water Resources Control Boards GeoTracker database: https://geotracker.waterboards.ca.gov;
- California Department of Toxics Substances Control Board's Envirostor database: http://www.dtsc.ca.gov/sitecleanup/cleanup_sites_index.cfm;
- United States Environmental Protection Agency's (EPA) Site Specific National Cleanup database: https://www.epa.gov/cleanups/site-specific-national-cleanup-databases

If you have any questions, please call Karel Detterman at (510) 567-6708 or send her an e-mail to karel.detterman@acgov.org

Sincerely,

Paresh Khatri
LOP Supervisor

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

cc w/enc.:

Susan Hugo, Alameda County Department of Environmental Health CUPA, (sent via e-mail to: susan.hugo@acgov.org)

Mark Arniola, City Of Oakland Public Works Environmental Services, 250 Frank H. Ogawa Plaza, Suite 5301, Oakland, CA 94612 (sent via e-mail to: marniola@oaklandnet.com)

Giorgio Molinario, ERM, 114 Sansome Street, Suite 750, San Francisco, CA 94101 (sent via e-mail to: Giorgio.Molinario@erm.com)

Paresh Khatri, ACDEH, (Sent via e-mail to: paresh.khatri@acgov.org)
Dilan Roe, ACDEH (Sent via E-mail to: dilan.roe@acgov.org)
Karel Detterman, ACDEH, (sent via electronic mail to: karel.detterman@acgov.org)
eFile, GeoTracker

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
COLLEEN CHAWLA, Agency Director

DEPARTMENT OF ENVIRONMENTAL HEALTH
LOCAL OVERSIGHT PROGRAM (LOP)
For Hazardous Materials Releases
1131 HARBOR BAY PARKWAY, SUITE 250
ALAMEDA, CA 94502
(510) 567-6700
FAX (510) 337-9335

REMEDIAL ACTION COMPLETION CERTIFICATION

October 24, 2018

Mr. and Mrs. Neil and Mary Cotter
2847 Arguello Drive
Burlingame, CA 94010-5817
(Sent via E-mail to: neil.cotter@comcast.net and mary.cotter@comcast.net)

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2193 Trafalgar Place
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(Sent via E-mail to: trisargil@aol.com)

Subject: Expedited Claim Account Pilot Program (ECAP), UST Claim #13712, Fuel Leak Case No. RO000027 and GeoTracker Global ID T06000102106, Grove Street Wash Rack, 3884 Martin Luther King, Jr. Way, Oakland, CA 94609

Dear Responsible Parties:

This letter confirms the completion of a site investigation and remedial action for the underground storage tank 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,

Ronald Browder
Director

ALAMEDA COUNTY DEPARTMENT OF ENVIRONMENTAL HEALTH
LEAKING UNDERGROUND STORAGE TANK CLEANUP SITE
CASE CLOSURE SUMMARY FORM

Grove Street Wash Rack, 3884 Martin Luther King Jr, Oakland, CA
Case No.RO0000027, Geotracker ID T0600102106

October 24, 2018

This Case Closure Summary Form was prepared by Alameda County Department of Environmental Health (ACDEH) for the case identified above. This form provides a summary of information on the case and the basis for case closure. ACDEH's closure determination was based upon information in the case file and a case closure evaluation conducted in accordance with the State Water Resources Control Board's Low-Threat Underground Storage Tank Closure Policy (LTCP) for petroleum related contaminants. Based on this evaluation, and with the provision that the information provided to this agency is accurate and representative of site conditions, ACDEH has determined that there is a low threat to human health and safety and the environment at and in the vicinity of the site in its current land use as a vacant lot with no structures or buildings from residual subsurface contamination associated with the unauthorized release of petroleum related constituents from underground storage tank systems at the site.

Information in this Case Closure Summary Form is organized as follows:

- **Section 1 – Case Information**: Facility/site address, case identification numbers, lead regulatory oversight agency information, and responsible party information;
- **Section 2 – Property Information**: Assessor parcel numbers, historic land use and operations, environmental cases associated with the property, and land use at time of case closure;
- **Section 3 – Case Summary**: Reason the case was opened, investigation and cleanup activities, and the basis for the case closure determination;
- **Section 4 – Residual Contamination**: Constituents evaluated during site investigation activities and residual contamination remaining at closure;
- **Section 5 – Engineering and Institutional Controls**: Engineering and institutional controls established for the property; and
- **Section 6 – Completion of Closure Activities**: Status of monitoring and remediation wells and probes and disposal of investigation and remediation derived waste, and stakeholder notification of the proposed case closure.

Supporting documentation is provided in the following attachments:

- **Attachment A – LTCP Evaluation:** Geotracker LTCP checklist, site conceptual model summary, and LTCP media specific evaluation for groundwater, vapor intrusion and direct contact/outdoor air exposure;
- **Attachment B – Site Investigation Data**: Preferential pathways and sensitive receptor survey data, boring logs and media specific data;
- **Attachment C – Responsible Party & Property Information**: Responsible party identification, assessor's office property information, site configuration at time of case closure, and institutional controls (if applicable);
- **Attachment D – Case Closure Public Notification Information**: Public notification fact sheet and distribution list;
- **Attachment E**: List of attachment subcategories, and acronyms and symbols used in the Closure Summary Form.

Additional information on this case can be viewed in the online case file over the Internet on the ACDEH 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). Both databases should be reviewed to obtain a complete history.

CASE CLOSURE SUMMARY FORM

SECTION 1 - CASE INFORMATION

A. Facility/Site Address (Case Name & Address)

Project Name	Address
Grove Street Wash Rack	3884 Martin Luther King Jr. Way, Oakland, CA 94609

B. Case Identification Numbers

Cleanup Oversight Agencies	Case/ID No.
Alameda County Local Oversight Program (LOP) - Lead Agency	RO0000027
San Francisco Bay Regional Water Quality Control Board (Region 2)	01-2290
State Water Resources Control Board GeoTracker Global ID	T0600102106

C. Lead Agency Information

Agency Name:	Agency Address:	Agency Phone:
Alameda County Department of Environmental Health (ACDEH)	1131 Harbor Bay Parkway, Alameda, CA 94502-6577	(510) 567-6700
Case Worker:	LOP Supervisor:	Land Water Division Chief:
Karel Detterman, PG 5628	Paresh Khatri	Dilan Roe, PE C73703

D. Responsible Party Information

Responsible Parties:	Address:
Lillie Luckett	4102 Lusk Street, Oakland, CA 94609
Lillie Luckett	3884 Martin Luther King Way, Oakland, CA 94609
Lillie and Hillary Luckett	P.O. Box 2973, Oakland, CA 94609
Neil and Mary Cotter John and Antoinette Coyle	2847 Arguello Street, Burlingame, CA 94010-5817

CASE CLOSURE SUMMARY FORM

SECTON 2 - PROPERTY INFORMATION

A. Assessor Parcel Numbers (APNs) & Associated Addresses

	APN(s)	Addresses
Current	12-968-31	3884 Martin Luther King Jr. Way, Oakland, CA 94609
Former	None Identified	None Identified

B. Identified Historic Land Use & Operations

Type	Description
Car Wash	The site has historically been used in a commercial/industrial land use capacity and was the former Grove Street Wash Rack.
Automotive Repair	The site has historically been used in a commercial/industrial land use capacity and was a former automotive repair shop. This auto body shop operated on the eastern portion of the Site until at least 2004.
Gasoline Service Station	A gasoline service station operated on the Site in the 1950s and 1960s. The three underground storage tanks (USTs) associated with this case are believed to be associated with this service station.
Hydraulic Hoist	Former hydraulic hoist was located in the northern portion of the site adjacent to and behind of the former office building.
Other Site Uses	Unknown.

C. Environmental Cases Associated with Property

Case Type	Lead Agency	LOP Case No; Geotracker ID	Case Name	Associated Historic Land Use	Primary PCOCs	Year Case Opened/Closed
Case Associated with this Case Closure Summary Form						
LUST[1]	ACDEH	RO0000027; T0600102106	Grove Street Wash Rack	Fueling Station	**Fuel USTs:** TPH (g), BTEX, MTBE	1995/2018
Other Cases Associated with the Property						
None	----	----	----	----	----	----

CASE CLOSURE SUMMARY FORM

SECTON 3 – CASE SUMMARY

A. Known UST Systems & Service Station Infrastructure

UST System Component	Size/Quantity	Material Stored	Status	URF Filing Date
UST	500-gallon	Gasoline (Last known)	Removed	2/08/1995
UST	650-gallon	Gasoline (Last known)	Removed	2/08/1995
UST	650-gallon	Gasoline (Last known)	Removed	2/08/1995

B. Unauthorized Release Description & Reason Case Opened

Fuel Leak Case No. RO0000027 was opened in 1995 by Alameda County Department of Environmental Health (ACDEH) when three gasoline USTs were removed. During the removal of the three USTs on January 5, 1995, one of the 650-gallon tanks split in two along the welded seam and holes were noted in the other two tanks. The soil surrounding the tanks was stained green and had exhibited strong petroleum odors. Sampling of the surrounding soil detected TPHg and BTEX, indicating that an unauthorized release occurred at the subject site. Fuel Leak Case No. RO0000027 was opened to evaluate potential impacts to human health and the environment from a fuel spill related to a UST release, which identified gasoline in soil samples. Other potential chemicals of concern from land uses at the site not associated with the release of gasoline and related fuel constituents from the fuel leak were not evaluated under this fuel leak case.

C. Site Investigations

Site investigation activities were conducted in 1995, 2004, 2006, 2013, 2014, and 2017 to evaluate the extent of subsurface impacts to soil, soil gas and groundwater from the leaking USTs. Site investigation activities conducted on site included: Stockpile Sampling SS-1 to SS-3 (1995); advancement of 19 direct push borings S-1 through S-19 (2004); advancement of eight soil borings GP1 through GP8 (2006); installation of SB-1 through SB-11 and installation of groundwater monitoring wells MW-1 to MW-5 (2013); installation of groundwater monitoring wells MW-6 to MW-8 (2014); installation of temporary soil vapor sampling points SV-1 to SV-5 (February 2017); installation and monitoring of permanent soil vapor monitoring points SV-1A, SV-2A, SV-4A (July 2017). Semi-annual groundwater monitor and sampling was conducted 2013 through 2017.

Analytical data from soil, groundwater and soil vapor samples indicated that the subsurface beneath the site had been impacted by petroleum hydrocarbons and fuel-related constituents including, but not limited TPHg, TPHd, BTEX, and naphthalene. Analyses of halogenated VOCs, SVOCs, and metals were additionally conducted on soil and groundwater samples during the investigations.

D. Remediation

Remediation on the subject site consisted of removal of the USTs and backfilling the tank pits with the excavated soil.

E. Closure Evaluation

This LUST case was evaluated for closure consistent with the State Water Resource Control Board's Low-Threat Underground Storage Tank Closure Policy (LTCP) for petroleum related contaminants. ACDEH determined that the site met all the LTCP General Criteria and Media Specific Criteria. Therefore, case closure is granted for the current commercial land use as a vacant lot with no structures or buildings. If a change in land use to any residential, commercial other than as a vacant lot with no structures or buildings, or conservative land use, or if any site redevelopment is planned, Alameda County Department of Environmental Health (ACDEH) must be notified as required by Government Code Section 65850.2.2. Any below grade work require planning and implementation of appropriate health and safety procedures by the responsible party prior to and during excavation and construction activities.

SECTON 4 – RESIDUAL CONTAMINATION

A. Constituents Evaluated & Residual Contamination Remaining at Closure

Material Stored/Dispensed in UST System	Analytes		Analytes Sampled in Media & Residual Contamination						
			S	GW	SW	SV	SS	IA	OA
Engine Fuels	TPHg[1]	Sampled	☒	☒	☐	☒	☐	☐	☐
		Residual	☒	☒	☐	☒	☐	☐	☐
☒ Gasoline Fuel (1, 2, 9, 11, 12, 13, 14)	TPHd[2]	Sampled	☒	☐	☐	☐	☐	☐	☐
		Residual	☒	☐	☐	☐	☐	☐	☐
☒ Diesel Fuel (2, 9, 10)	TPHmo[3] (soil only)	Sampled	☒	☐	☐	☐	☐	☐	☐
		Residual	☒	☐	☐	☐	☐	☐	☐
☐ Jet Fuel (1, 2, 4, 9, 10)	TPHjf[4]	Sampled	☐	☐	☐	☐	☐	☐	☐
		Residual	☐	☐	☐	☐	☐	☐	☐
Heating Oils	TPHk[5]	Sampled	☐	☐	☐	☐	☐	☐	☐
		Residual	☐	☐	☐	☐	☐	☐	☐
☐ Kerosene (2, 5, 9, 10,)	TPHss[6]	Sampled	☐	☐	☐	☐	☐	☐	☐
		Residual	☐	☐	☐	☐	☐	☐	☐
☐ Residential Heating Oils (2, 3, 9, 10)	TPHbo[7]	Sampled	☐	☐	☐	☐	☐	☐	☐
		Residual	☐	☐	☐	☐	☐	☐	☐
☐ Commercial & Industrial Heating Oils (1, 2, 3, 7, 9, 10, 15, 16)	TPHho[8]	Sampled	☐	☐	☐	☐	☐	☐	☐
		Residual	☐	☐	☐	☐	☐	☐	☐
	BTEX[9]	Sampled	☒	☒	☐	☒	☐	☐	☐
		Residual	☒	☒	☐	☒	☐	☐	☐
	Naphthalene[10]	Sampled	☒	☒	☐	☒	☐	☐	☐
		Residual	☒	☒	☐	☒	☐	☐	☐
Other Oils	MTBE/TBA[11]	Sampled	☒	☒	☐	☐	☐	☐	☐
		Residual	☐	☐	☐	☐	☐	☐	☐
☐ Waste (Used) Oil (1, 2, 3, 9, 10, 15, 16, 17, 18)	EDB/EDC[12]	Sampled	☒	☒	☐	☒	☐	☐	☐
		Residual	☐	☒	☐	☐	☐	☐	☐
☐ Hydraulic Oil (8, 16, 17)	Organic Lead[13]	Sampled	☐	☐	☐	☐	☐	☐	☐
		Residual	☐	☐	☐	☐	☐	☐	☐
☐ Dielectric Oil (2, 3, 10, 16, 17)	Fuel Oxys[14]	Sampled	☐	☐	☐	☐	☐	☐	☐
		Residual	☐	☐	☐	☐	☐	☐	☐
☐ Unknown Oil (1, 2, 3, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18)	VOCs[15] (full scan)	Sampled	☒	☒	☐	☒	☐	☐	☐
		Residual	☒	☒	☐	☒	☐	☐	☐
	SVOCs[16]	Sampled	☐	☐	☐	☐	☐	☐	☐
		Residual	☐	☐	☐	☐	☐	☐	☐
Solvents	PCBs[17]	Sampled	☒	☐	☐	☐	☐	☐	☐
		Residual	☐	☐	☐	☐	☐	☐	☐
☐ Hydrocarbon Solvents (2, 3, 6, 9, 10)	Wear Metals[18] (soil only)	Sampled	☐	☐	☐	☐	☐	☐	☐
☐ Chlorinated Solvents (15)		Residual	☐	☐	☐	☐	☐	☐	☐

S = Soil, GW = Groundwater, SW = Surface Water, SV = Soil Vapor, SS = Sub-Slab Vapor, IA = Indoor Air, OA = Outdoor Air

CASE CLOSURE SUMMARY FORM

SECTON 5 – ENGINEERING AND INSTITUTIONAL CONTROLS

A. Land Use & Operations at Time of LUST Case Closure

At the time of closure of LUST Case No. RO0000027/ T0600102106 the subject site is located at 3884 Martin Luther King Jr. Way in Oakland and is located in a mixed commercial and residential zoned area adjacent and west of Highway 24 and one block to the Bay Area Rapid Transit (BART) MacArthur station. The site occupies approximately a parcel of 10,250 square feet. The site is currently vacant. The former site buildings were removed and only concrete pads, and paved and unpaved areas remain on the site. The site is surrounded by a chain-link fence.

B. Engineering and Institutional Controls

Engineering Controls
Not Applicable
Institutional Controls
Not Applicable

CASE CLOSURE SUMMARY FORM

SECTION 6 - COMPLETION OF CLOSURE ACTIVITIES

As a condition of case closure all monitoring and remediation wells and probes must be properly destroyed (unless the owner of the property on which the monitoring point is located certifies that the monitoring point will be maintained); all remediation systems must be decommissioned; all investigation and remediation derived waste must be properly disposed of; and all stakeholders notified of the proposed case closure.

A. Well Status (Groundwater)

No. of Wells Installed: 8 (MW-1 through MW-8)	No. of Wells Lost: 0
No. of Wells Destroyed: 8	No. of Wells Retained: 0

B. Vapor Probe Status

No. of Soil Vapor Probes (VP) Installed: 3 (SV-1A, SV-2A, SV-4A) No. of Sub-Slab Probes Installed: 0	No. of VPs Lost: 0
No. of VPs Destroyed: 3	No. of VPs Retained: 0

C. Remediation System Decommissioning

Type of System	N/A
Remediation System Components Removed	N/A

D. Investigation and Remediation Derived Waste Removal Status

All investigation and remediation derived waste associated with the UST releases was removed from the site. Soil that was excavated from the UST pits during tank removal activities was used to backfill the tank pits after collection of soil samples for chemical analysis.

E. Public Comment

A 60 day public notification period was completed on March 31, 2018. No comments were received.

ATTACHMENT A-1

Geotracker LTCP Evaluation Checklist

GROVE STREET WASH RACK (T0600102106) - MAP THIS SITE — PUBLIC PAGE

3884 MARTIN LUTHER KING JR
OAKLAND , CA 94609
ALAMEDA COUNTY
LUST CLEANUP SITE (INFO)
STATUS: COMPLETED - CASE CLOSED

PERTINENT INFORMATION:
CUF Claim #: 13712 CUF Priority Assigned: B CUF Amount Paid: $190,275

CLEANUP OVERSIGHT AGENCIES
ALAMEDA COUNTY LOP (LEAD) - CASE #: RO0000027 - KAREL DETTERMAN
SAN FRANCISCO BAY RWQCB (REGION 2) - CASE #: 01-2290 - Regional Water Board

THIS PROJECT WAS LAST MODIFIED BY KAREL DETTERMAN ON 10/24/2018 1:17:26 PM - HISTORY

CLOSURE POLICY

THIS VERSION IS FINAL AS OF 10/19/2018 — CHECKLIST INITIATED ON 7/30/2013 — CLOSURE POLICY HISTORY

General Criteria - *The site satisfies the policy general criteria* - CLEAR SECTION ANSWERS — YES

a. Is the unauthorized release located within the service area of a public water system?
Name of Water System : East Bay Municipal Utility District — ◉ YES ○ NO

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

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

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 — YES

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

1.3 - The contaminant plume that exceeds water quality objectives is <250 feet in length. Free product has been removed to the maximum extent practicable, may still be present below the site where the release originated, but does not extend off-site. The plume has been stable or decreasing for a minimum of five years. The nearest existing water supply well and/or surface water body is >1,000 feet from the defined plume boundary. The property owner is willing to accept a land use restriction if the regulatory agency requires a land use restriction as a condition for closure. — ◉ 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 — YES

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

2a - Scenario 4 (example): Direct Measurement of Soil Gas Concentrations — YES

i. Soil Gas Sampling Locations – No Bioattenuation Zone:
- Beneath or adjacent to an existing building: Soil gas sample is collected at least 5 feet below the bottom of the building foundation. — ○ YES ○ NO
- Future construction: The soil gas sample shall be collected from at least 5 feet below the ground surface (bgs). — ○ YES ○ NO

ii. Soil Gas Sampling Locations – with Bioattenuation Zone: The criteria in Column A in the Soil Gas Criteria table (page 5 of the Policy) apply if the following requirements for a bioattenuation zone are satisfied: — YES
- Minimum of 5 feet of soil between the soil vapor measurement and the foundation of an existing or ground surface of future construction. — ◉ YES ○ NO
- TPH (TPHg + TPHd) is <100 mg/kg (measured in at least two depths within the 5-ft zone) — ◉ YES ○ NO
- Oxygen is ≥ 4% measured at the bottom of the 5-ft zone. — ◉ 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 — YES

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(a) - Maximum concentrations of petroleum constituents in soil are less than or equal to those listed in the following table (LINK) for the specified depth below ground surface. — ◉ YES ○ NO

Additional Information

This case should be kept OPEN in spite of meeting policy criteria. — ○ YES ◉ NO

Has this LTCP Checklist been updated for FY 18/19? — ◉ YES ○ NO

SPELL CHECK

Save Form as Partially Completed | Save Form as Complete

ATTACHMENT A-2

Site Conceptual Model Summary

ATTACHMENT A-2

SITE CONCEPTUAL MODEL SUMMARY

A. Site Geology & Hydrogeology

The geologic and hydrogeologic characteristics of the site were evaluated using data from the site's boring logs generated during site investigations. Soil encountered during drilling generally consisted of fine grained soil (clays, silty clay, gravelly clay) with layers of coarse grained soil (gravelly sand with clay, silty sand with clay and gravel) interspersed from the ground surface to 24 feet bgs, the total depth explored.

Boring logs indicate that depths to first encountered groundwater ranged from 9 feet to 19.5 feet bgs. The boring log SV-1 indicated saturated zone was encountered at 4 feet bgs, possibly indicating perched groundwater. Boring logs did not indicate whether groundwater is a water table, confined, or semiconfined. The groundwater monitoring well network indicates that depth to groundwater varies seasonally in a range of 8.60 feet bgs to 18.24 feet bgs. Between 2013 and 2017, the groundwater gradient flow direction ranged from northwest to southwest at an approximate gradient of 0.02 feet per feet.

B. Dissolved Phase Contaminant Plume

A grab groundwater samples from SB-1 located 55 feet across from the site on the west side of Martin Luther King Jr. Way detected 120 ug/L TPHg in 2013.

Long term monitoring of dissolved phase concentration of contaminants in groundwater has been conducted in monitoring wells MW-1 to MW-5 for four years, from October 2013 to July 2017, and MW-6 through MW-8 for three years, from September 2014 through July 2017. Monitoring well screen intervals have not been submerged for most of the events except during the December 2016 event, when most wells screens were submerged due to the exceptionally wet winter of 2016-2017.

Analysis for the following contaminants of concern (COCs) in groundwater have included total petroleum hydrocarbon as gasoline (TPHg), benzene, toluene, ethylbenzene, xylene (BTEX), naphthalene, MTBE, and 1,2-DCA.

Concentrations of COCs in groundwater have been reported below the respective laboratory detect limits for MW-1, MW-3, MW-5, MW-7 and MW-8 throughout the four years of monitoring and sampling. However, elevated concentrations of the following COCs have been detected in groundwater: TPHg in MW-2, MW-4 and MW-6 (maximum concentrations of 11,000; 32,000; and 2,100 ug/L respectively); benzene in MW-2, MW-4 and MW-6 (maximum concentrations of 8,200; 3,100; and 160 ug/L respectively); naphthalene in MW-2 and MW-4, (maximum concentrations of 17; and 530 ug/L, respectively), and 1,2-DCA in MW-1, MW-2, and MW-4 (maximum concentrations of 4.5; 4.3; and 0.7 ug/L, respectively).

At case closure, the dissolved phase contaminant plume appears to be defined by the off-site monitoring wells. Well MW-2, the site's most impacted well, is located approximately 25 feet upgradient of MW-7, which has not had any detections. There is an electrical utility trench between MW-2 and MW-7 which may have acted as a preferential pathway; however this was not evaluated. MW-8, located approximately 140 feet downgradient of the site, had no detections of TPHg, BTEX, or naphthalene in three years of groundwater monitoring and sampling.

ATTACHMENT A-2

SITE CONCEPTUAL MODEL SUMMARY (CONTINUED)

C. Non Aqueous Phase Liquid (NAPL)

Free liquid LNAPL has not been directly observed at the site; however, as described in the LTCP's Technical Justification for Vapor Intrusion Media-Specific Criteria, indirect evidence of LNAPL was evidenced in groundwater samples from MW-2 and MW-4: benzene was detected in MW-2 exceeding 3,000 ug/L between 2013 and 2015 and TPHg was detected in MW-4 exceeding 20,000 ug/L between 2014 and 2015.

D. Soil Impacts

Site soil data collected from 1995 to 2017 have shown detected elevated concentrations of TPHg, BTEX, naphthalene, 1,2-DCA and cis-1,2-DCE in the subsurface soil 10 to 16 feet bgs in the northwest quadrant of the site near the former USTs and pump island. Indirect evidence of LNAPL, as described in the LTCP's Technical Justification for Vapor Intrusion Media-Specific Criteria, was evidenced in soil collected during the installation of MW-4 where TPHg of 2,700 mg/kg was detected in the soil sample at 16' bgs and 1,400 mg/kg TPHg was detected in a soil sample from SB-6 at 16 feet bgs. The highest concentrations observed include: benzene concentration of 4.6 mg/kg observed in SB-6 at 16 feet bgs, and naphthalene concentration of 12 mg/kg in MW-4 at 16 feet bgs. The boring for offsite well MW-6 detected 0.52 mg/kg TPHg at 9 feet. TPHg, BTEX, or naphthalene were not detected in soil samples for offsite wells MW-7 or MW-8.

E. Preferential Pathways

A preferential pathway survey was conducted to evaluate the potential for contaminant migration via preferential utility lines, utility vaults, and trenches within the site vicinity. The conduit study identified several subsurface utilities on and near the site.

F. Sensitive Receptors & Exposure Pathways

A sensitive receptor survey was conducted that included a search for domestic, irrigation, and municipal wells within 2,000 feet radius of the site and identification of the nearest surface water bodies and land usage near the site. The purpose of the sensitive receptor survey was to help determine if site contamination poses risks to human health and the environment. A well survey conducted in 2016 found no domestic, irrigation, or industrial wells within 2,000 feet of the site; however the survey indicated the presence of groundwater monitoring wells within the radius. Residential property is located to south of the Site at 3860 Martin Luther King Jr. Way and to the west approximately 55 feet across Martin Luther King Jr. Way. The closest downgradient surface water body was identified as San Francisco Bay, located 1.45 miles west of the Site.

ATTACHMENT A-3

LTCP Media Specific Evaluation for Groundwater

ATTACHMENT A-3

LTCP Media Specific Evaluation - Groundwater

Closure Scenario

☐ Exemption - Site has not affected groundwater;

☐ Scenario 1 – Short stabilized contaminant plume;

☐ Scenario 2, ☒ Scenario 3 – Moderate stabilized contaminant plumes;

☐ Scenario 4 – Long stabilized contaminant plumes;

☐ Scenario 5 – Site specific conditions demonstrate that the contaminant plume poses a low threat to the human health and the environment

Evaluation Criteria

Key: Shading = site specific data; ☒ = type of data or criteria met; hatched box indicates no criteria

Element Evaluated	Site Specific Data	Short Plume Scenario 1	Moderate Plume Scenarios 2 & 3		Long Plume Scenario 4
Plume Length (feet)	☐ <100 ☒ <250 ☐ <1,000 ☐ ≥1,000	☐ <100	☒ <250	☒ <250	☒ <1,000
Free Product	☒ No FP ☐ FP Onsite ☐ FP Offsite ☐ Removed to Max Extent	☒ No FP	☒ No FP	☐ Removed to max extent onsite; ☐ Does not extend offsite	☒ No FP
Plume Stability	☐ Extent Undefined ☒ Stable ☐ Decreasing ☐ ≥5 Years	☒ Stable or decreasing	☒ Stable or decreasing	☐ Stable or decreasing for ≥ 5 years	☒ Stable or decreasing
Distance to Nearest Water Supply Well from Plume Boundary (feet)	☐ <250 ☐ >250 ☒ >1,000	☒ >250	☒ >1,000	☒ >1,000	☒ >1,000
Distance to Nearest Surface Water Body from Plume Boundary (feet)	☐ >250 ☒ >1,000	☒ >250	☒ >1,000	☒ >1,000	☒ >1,000
Maximum Benzene Concentrations @ Closure (µg/l)	☐ < 1,000 ☒ < 3,000 ☐ > 3,000		☒ <3,000		☒ <1,000
Maximum MTBE Concentrations @ Closure (µg/l)	☒ < 1,000 ☐ > 1,000		☒ <1,000		☒ <1,000
Land Use Restriction	☒ Not Required ☐ Recorded			☐ Recorded	

ATTACHMENT A-3

LTCP Media Specific Evaluation - Groundwater	
Element	**Analysis**
Plume Length	The off-site extent of the plume is defined by monitoring wells MW-1, MW-6, MW-7, MW-8, SB-1, and SB-2 installed west and southwest of the site. A grab groundwater samples from SB-1 located 55 feet across from the site on the west side of Martin Luther King Jr. Way detected 120 ug/L TPHg in 2013. MW-6, located approximately 10 feet downgradient of the site, detected TPHg and benzene during the four years of groundwater sampling except for the final event in July 2017. MW-8, located approximately 140 feet downgradient of the site, had no detections of TPHg, BTEX, or naphthalene in three years of groundwater monitoring and sampling. Therefore, the petroleum hydrocarbon dissolved phase plume was determined to be less than 250 feet in length. The groundwater plume has been defined to water quality objectives, therefore it poses a low threat to human health and the environment.
Free Product	LNAPL was not directly observed in any of the investigations; however, as described in the LTCP's Technical Justification for Vapor Intrusion Media-Specific Criteria, indirect evidence of LNAPL was evidenced in groundwater samples from MW-2 and MW-4: benzene was detected in MW-2 exceeding 3,000 ug/L between 2013 and 2015 and TPHg was detected in MW-4 exceeding 20,000 ug/L between 2014 and 2015.
Plume Stability	Three years of groundwater monitoring data, from 2014 to 2017, indicate the dissolved phase groundwater plume concentrations are decreasing and/or stable. At the time of case closure, the estimated lateral extent of the dissolved phase groundwater plume was defined based on samples collected from downgradient and off-site groundwater monitoring well MW-8.
Benzene Concentrations	Benzene has been detected at elevated concentrations in groundwater in site monitoring wells MW-2 and MW-4. The maximum grab groundwater historic benzene concentration, 17,600 ug/L, was detected in GP3. The maximum historic benzene concentration, 8,200 ug/L, was detected in well MW-2 located in the southwestern corner of the site, a location that does not appear to be adjacent to any known sources. However, an underground utility survey indicated that an electrical trench traversed from the former pump island south to the vicinity of MW-2 and may act as a preferential pathway. The second highest historic benzene concentration, 3,100 ug/L, was detected in well MW-4 located adjacent to former UST #3 near 39th Avenue and the former office. Benzene concentrations in wells MW-2 and MW-4 remained elevated but relatively stable. In July 2017, the final groundwater sampling event, 1,500 µg/L and 1,100 ug/L benzene was detected in MW-2 and MW-4, respectively.
MTBE Concentrations	The maximum MTBE detection in grab groundwater samples was 7.9 ug/L in 2004.
Water Supply Wells	The results from an Alameda County Public Works Agency (ACPWA) survey and the GeoTracker Groundwater Ambient Monitoring Assessment (GAMA) website indicated there are no domestic, irrigation, and municipal wells located within a 2,000 foot radius of the site.
Surface Water Bodies	The closest downgradient surface water body was identified as San Francisco Bay, located 1.45 miles west of the Site.

ATTACHMENT A-4

LTCP Media Specific Evaluation for Vapor Intrusion

ATTACHMENT A-4

LTCP Media Specific Evaluation – Vapor Intrusion

Closure Scenario

☐ Exemption (Onsite) - Active fueling station exempt from vapor specific criteria;
☐ Scenario 1 – Unweathered free phase LNAPL on groundwater; ☐ Scenario 2 – Unweathered residual LNAPL in soil;
☐ Scenario 3a, ☐ Scenario 3b, ☐ Scenario 3c – Dissolved phase benzene concentrations in groundwater;
☐ Scenario 4a - Soil vapor concentrations without bioattenuation zone;
☒ Scenario 4b - Soil vapor concentrations with bioattenuation zone;
☐ Site specific risk assessment demonstrates human health is protected;
☐ Exposure controlled through use of mitigation measures or institutional or engineering controls

Evaluation Criteria

Key: Shading = site specific data; ☒ = type of data or criteria met; hatched box indicates no criteria

Element Evaluated	Site Specific Data	High Concentration Source Scenarios 1, 2	Low Concentration Source Scenarios 3a, 3b, 3c			Soil Vapor Scenarios 4a, 4b	
		Unweathered NAPL	Maximum Dissolved Phase Benzene Concentration in Groundwater @ Closure			Without Bio. Zone	With Bio. Zone
Groundwater ☒ WT ☐ SC ☐ CF	Max Benzene Concentration: (µg/L): Historic:17,600; at closure: 1,500		☐ <100	☐ ≥100 & <1,000	☐ <1,000		
NAPL ☐ No NAPL ☐ NAPL in Soil ☒ NAPL on GW	☐ Direct Evidence ☒ Indirect Evidence ☐ W; ☐ UW	☐ UW in Soil or ☐ UW on GW	☒ No UW in Soil or GW				
Foundations ☒ None ☐ Existing ☐ Proposed	☐ Slab on Grade ☐ Crawl Space ☐ Subterranean Features						
Bioattenuation Zone	Highest Historic Water Level (ft bgs): 8.6	☐ ≥30	☒ ≥5	☐ ≥10	☒ ≥5	☐ <5 or ☒ ≥ 5	☒ ≥ 5
	TPH(g+d) Concentration (mg/kg): <1	☒ <100	☒ <100	☒ <100	☒ <100	☒ <100 ☐ ≥100	☒ <100 (at 2 depths)
	Bio Zone Thickness (ft): ☐ <5; ☒ ≥5; ☐ ≥10; ☐ ≥30	☐ ≥30	☒ ≥5	☐ ≥10	☒ ≥5	☐ <5 or ☒ ≥ 5	☒ ≥ 5
	Oxygen Conc (%): ☐ <4; ☒ ≥4; ☐ No data		☐ No data ☐ <4, ☒ ≥4	☐ No data ☐ <4, ☒ ≥4	☒ ≥4	☐ < 4 ☒ ≥4	☒ ≥4 (at bottom)
Soil Vapor (Current Conditions) ☐ No Samples Collected	Sample Depth (ft bgs) ☐ Subslab = Not Applicable ☒ Soil Gas = 5					☐ <5 or ☒ ≥5	☒ ≥5
	Benzene Concentration (µg/m³): <64					☒ R< 85	☒ C<85,000
						☒ C<280	☒ C<280,000
	Ethylbenzene Concentration (µg/m³): 370					☒ R<1,100	☒ R<1,100,000
						☒ C<3,600	☒ C<3,600,000
	Naphthalene Concentration (µg/m³): <1,000					☐ R<93	☒ R<93,000
						☐ R<310	☒ C<310,000

GW = Groundwater WT = Water Table SC = Semi-Confined CF = Confined W= Weathered UW = Unweathered
R=Residential C=Commercial

ATTACHMENT A-4

LTCP Media Specific Evaluation – Vapor Intrusion	
Location	**Analysis**
Onsite	The site was evaluated for vapor intrusion risk based on the current site configuration as a vacant lot. The site meets the LTCP's Media Specific Vapor Intrusion to Indoor Air. The bioattenuation zone appears to be at least five feet bgs and soil vapor samples were collected at depths of five feet bgs. Soil vapor concentrations meet both the residential and commercial with a five-foot thick bioattenuation zone.
Offsite	Offsite soil vapor intrusion risk was not evaluated. The groundwater plume does not appear to extend across Martin Luther King Jr. Way. Therefore a risk of vapor intrusion does not appear to be a concern for properties west of Martin Luther King Jr. Way.

ATTACHMENT A-5

LTCP Media Specific Evaluation for Direct Contact & Outdoor Air Exposure

LTCP Media Specific Evaluation – Direct Contact & Outdoor Air						
Closure Scenario						
☐ Exemption (no petroleum hydrocarbons in upper 10 feet); ☒ Maximum concentrations of petroleum hydrocarbons are less than or equal to those in Table 1 below; ☐ Maximum concentrations of petroleum constituents are less than levels that a site specific risk assessment demonstrates will have no significant risk of adversely affecting human health; ☐ 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 or engineering controls; ☐ This case should be closed in spite of not meeting the direct contact and outdoor air specific media criteria						
Evaluation Criteria						
Key: Shading = site specific data; ☒ = type of data or criteria met; hatched box indicates no criteria						
Constituent (LTCP Criteria & Site Maximum)		**Residential**		**Commercial/Industrial**		**All Scenarios**
		Direct Contact	**Volatilization to Outdoor Air**	**Direct Contact**	**Volatilization to Outdoor Air**	**Construction or Utility Worker**
		0 to 5 ft bgs (mg/kg)	5 to 10 ft bgs (mg/kg)	0 to 5 ft bgs (mg/kg)	5 to 10 ft bgs (mg/kg)	0 to 10 ft bgs (mg/kg)
Analysis Required For All USTs						
Benzene	Current Site Max	0.011	<0.46	0.011	<0.46	<0.46
	LTCP Criteria	☒ ≤1.9	☒ ≤2.8	☒ ≤8.2	☒ ≤12	☒ ≤14
Ethylbenzene	Current Site Max	0.022	0.23	0.022	0.23	0.23
	LTCP Criteria	☒ ≤21	☒ ≤32	☒ ≤89	☒ ≤134	☒ ≤314
Naphthalene	Current Site Max	0.078	4.1	0.078	4.1	4.1
	LTCP Criteria	☒ ≤9.7	☒ ≤9.7	☒ ≤45	☒ ≤45	☒ ≤219
Analysis Required For USTs with Waste Oil, Bunker C Fuel or Unknown Contents						
PAHs[1]	Current Site Max	NR	NR	NR	NR	NR
	LTCP Criteria	☐ ≤0.063		☐ ≤0.68		☐ ≤4.5

NR = Not Required NA = Not Analyzed

Notes:

1. Based on the seven carcinogenic poly-aromatic hydrocarbons (PAHs) as benzo(a)pyrene toxicity equivalent (BaPe).
2. The area of impacted soil where a particular exposure occurs is ≤ 82 by 82 feet

LTCP Media Specific Evaluation – Direct Contact & Outdoor Air	
Location	**Analysis**
Onsite	The current maximum concentrations of hydrocarbons in soil within the 0 to 10 foot interval are less than the concentrations in Table 1 for residential, commercial and construction worker exposure. No data has been collected for poly-aromatic hydrocarbons (PAHs) as there was no documented waste oil UST at the site and therefore the analysis is not warranted according to the LUFT Manual.
Offsite	The petroleum hydrocarbon soil contamination does not appear to extend offsite.

ATTACHMENT B-1

Site Vicinity & Site Maps with Sampling Locations

7/30/14 vsa/hk ...T:\3884 MLK\Jul_2014\Fig1_site_location.ai

Source: Esri Aerial Imagery, DeLorme, NAVTEC, 2012

0 500 1000 FEET

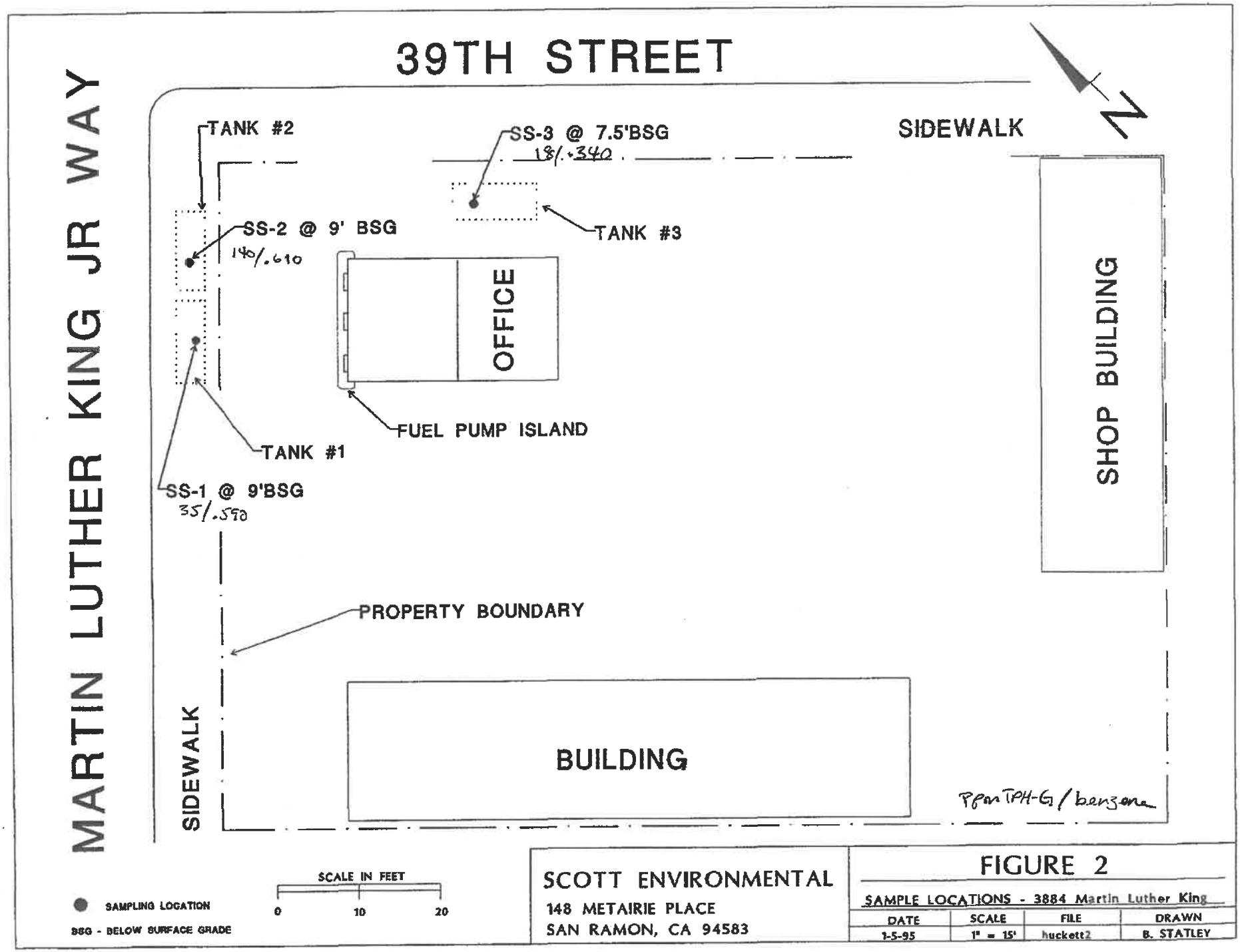
SITE LOCATION MAP

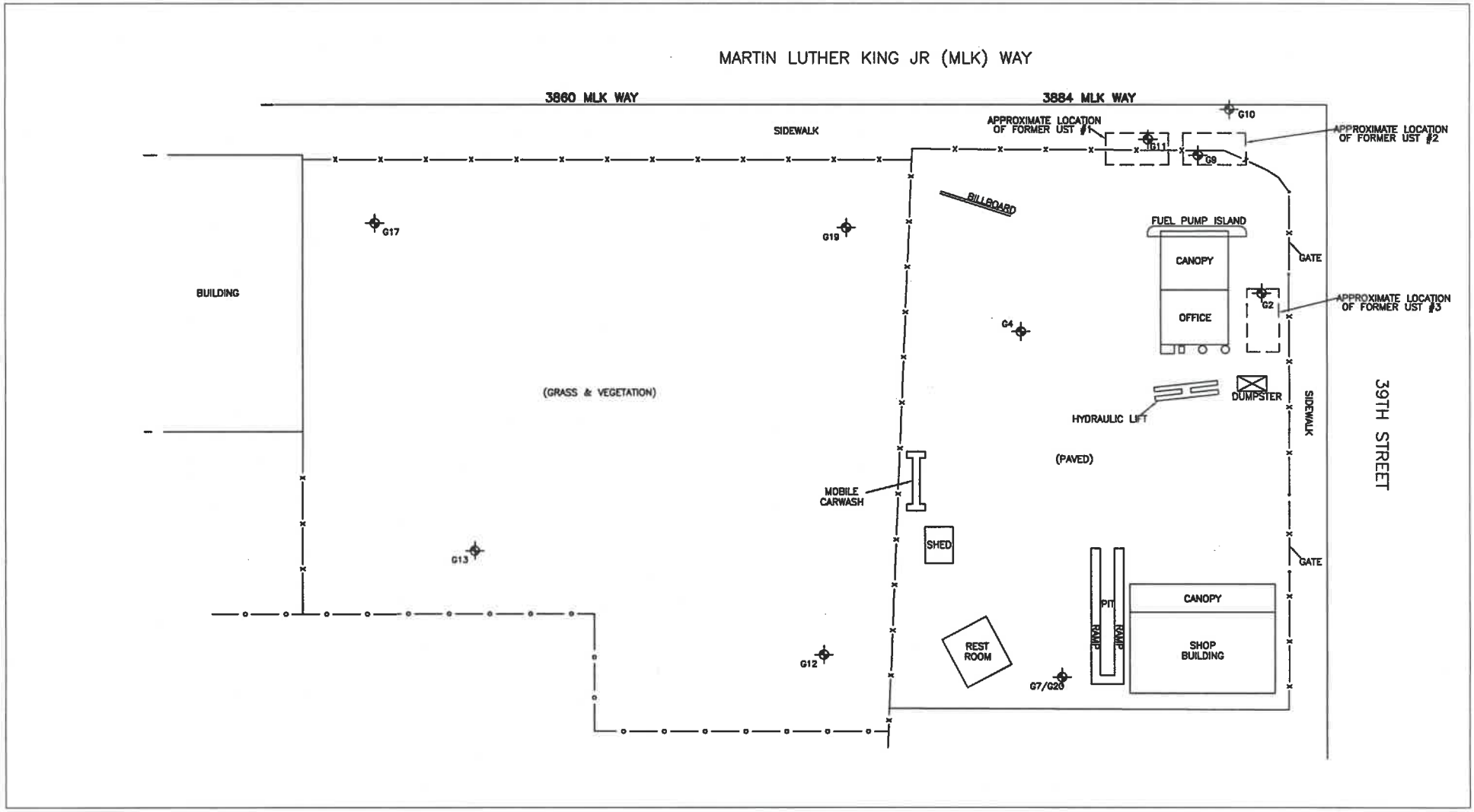
July 2014
28068161

3884 Martin Luther King, Jr. Way
Oakland, California

URS

FIGURE 1


39TH STREET
MARTIN LUTHER KING JR WAY
TANK #2
SS-3 @ 7.5'BSG
18/.340
SIDEWALK
SS-2 @ 9' BSG
140/.610
TANK #3
OFFICE
SHOP BUILDING
FUEL PUMP ISLAND
TANK #1
SS-1 @ 9'BSG
35/.590
PROPERTY BOUNDARY
SIDEWALK
BUILDING
Ppm TPH-G / benzene
SAMPLING LOCATION
BSG - BELOW SURFACE GRADE
SCALE IN FEET
0
10
20
SCOTT ENVIRONMENTAL
148 METAIRIE PLACE
SAN RAMON, CA 94583
FIGURE 2
SAMPLE LOCATIONS - 3884 Martin Luther King
DATE
1-5-95
SCALE
1" = 15'
FILE
huckett2
DRAWN
B. STATLEY



LEGEND

- G2 — GROUNDWATER SAMPLE LOCATION
- G7/G20 — DUPLICATE SAMPLE
- —x— CHAIN-LINK FENCE
- —o— WOOD FENCE

N

SCALE
0 10 20 40
(1 inch = 20 feet)

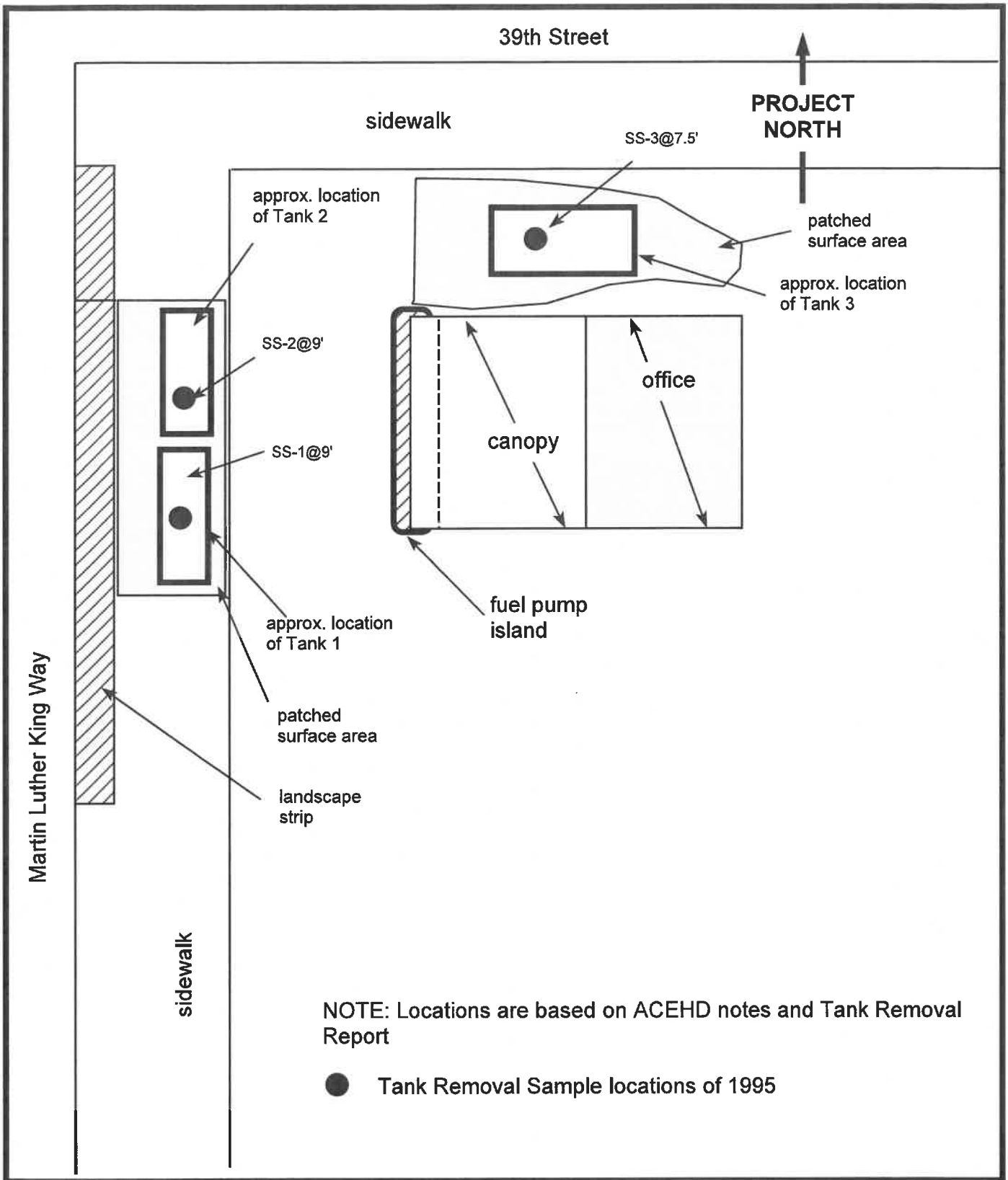
SITE MAP AND GROUNDWATER SAMPLE LOCATIONS

Environmental Investigation Report
Lucky's Auto Body
Department of Toxic Substances Control
Oakland, CA

July 2004
28066607

URS

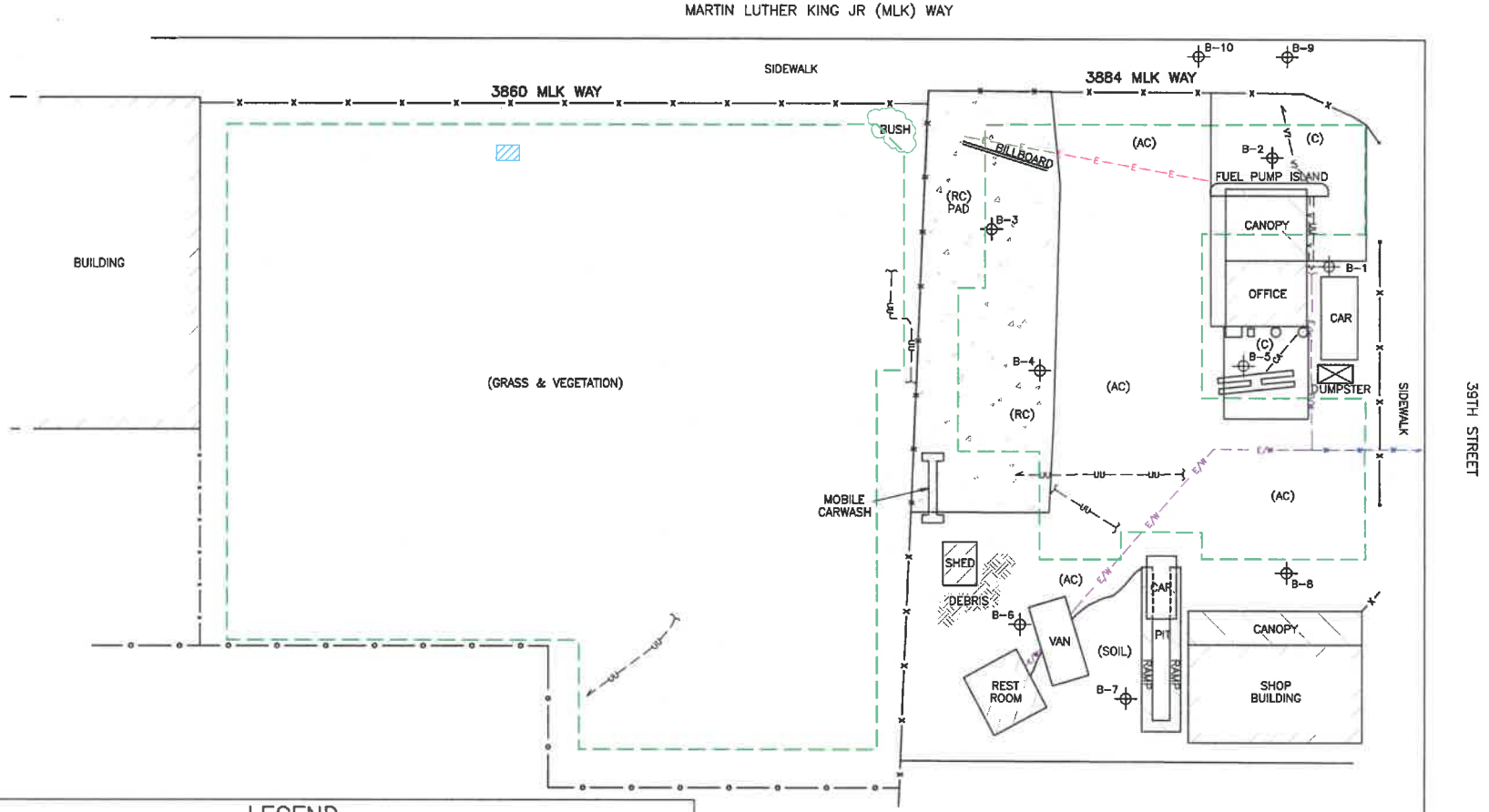
FIGURE 3



NOTE: Locations are based on ACEHD notes and Tank Removal Report

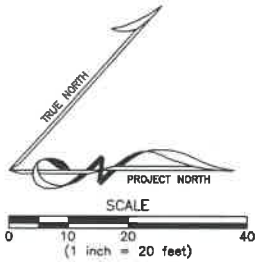
● Tank Removal Sample locations of 1995

JOHN CARVER CONSULTING 415 235 4648	SITE PLAN 3884 Martin Luther King Way Oakland, CA			
Project 9795	by: jnc	Scale 1" = 10'	March 2006	Figure 2



LEGEND

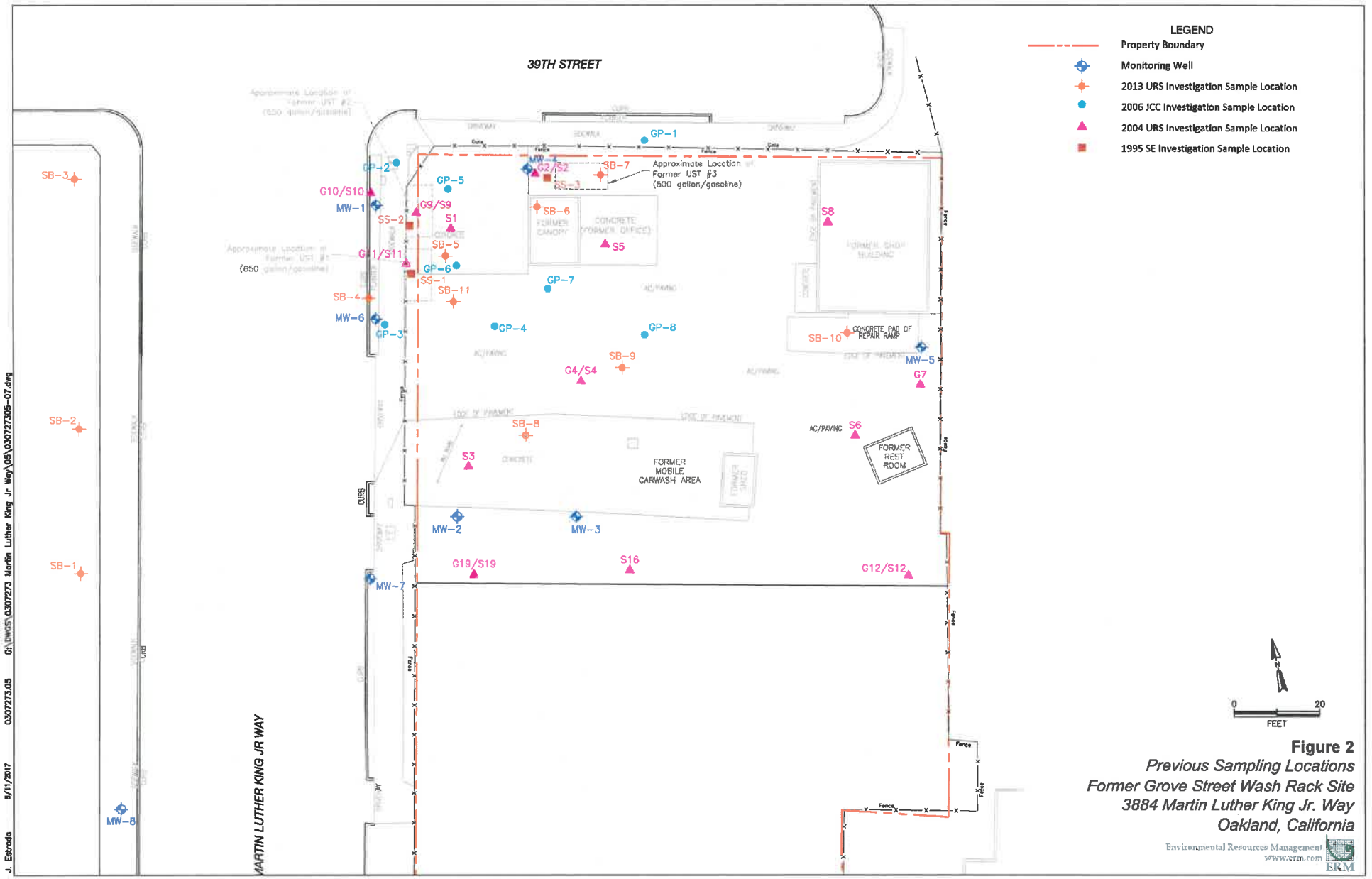
— — —	LIMITS OF GEOPHYSICAL SURVEY	—W—	WATER LINE
▨	METAL DETECTOR ANOMALY	——X——	CHAIN–LINK FENCE
—CA—	COMPRESSED AIR LINE	—x—x—	IRON FENCE
– – E/W – –	ELECTRIC/WATER LINES	—o—o—	WOOD FENCE
—E—	ELECTRIC LINE	⊕	APPROXIMATE LOCATION OF PROPOSED BORING
—UU—	UNDIFFERENTIATED UTILITY LINE	(AC)	ASPHALT
— V —	VENT LINE	(C)	CONCRETE
— V?— V?—	SUSPECTED VENT LINE	(RC)	REINFORCED CONCRETE



NORCAL

SITE MAP
3860 & 3884 MARTIN LUTHER KING JR WAY

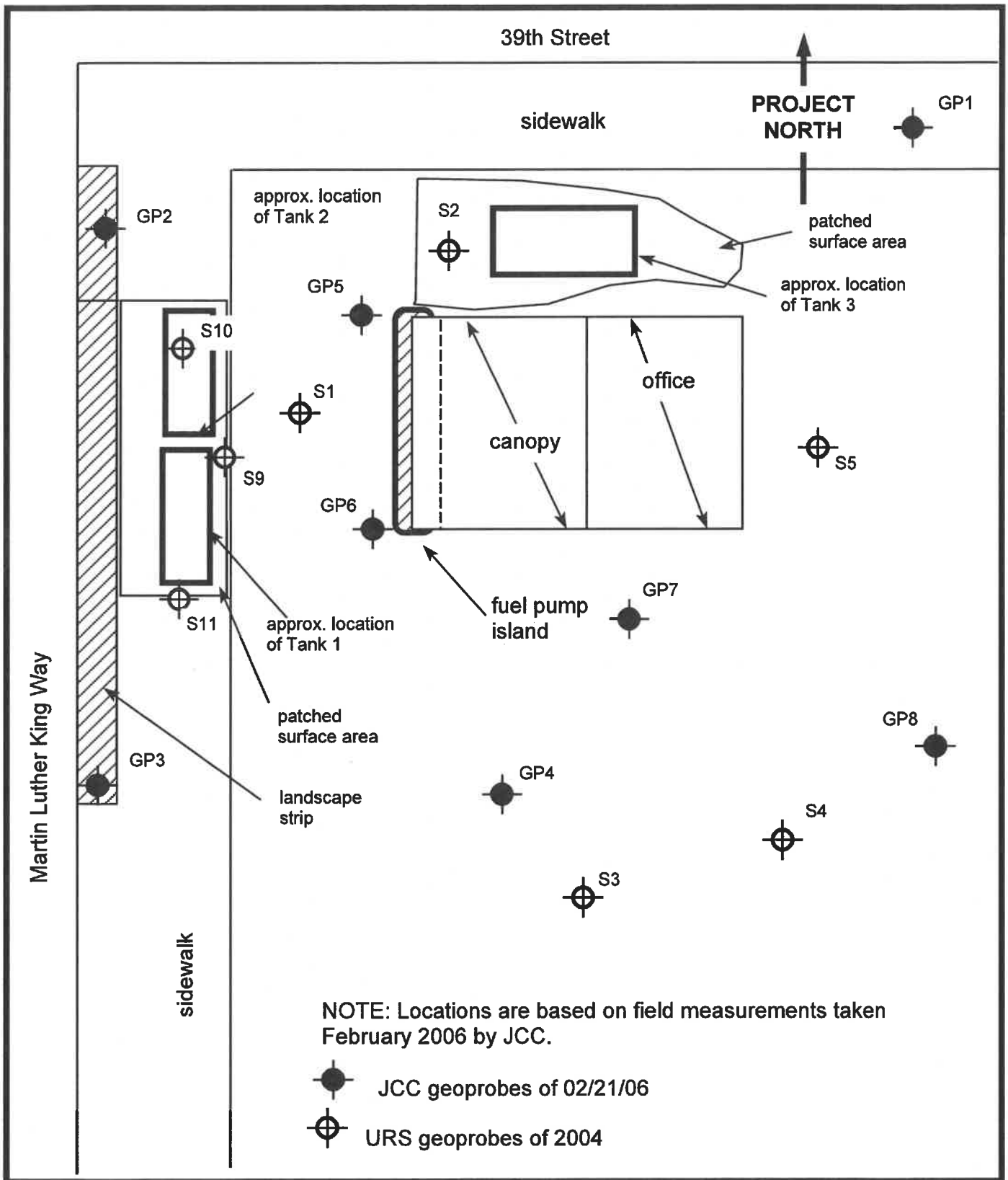
LOCATION: OAKLAND, CALIFORNIA		PLATE 1
CLIENT: URS CORP.		
JOB #: 04–628.42	NORCAL GEOPHYSICAL CONSULTANTS INC.	
DATE: APR. 2004	DRAWN BY: G.RANDALL	APPROVED BY: DJB



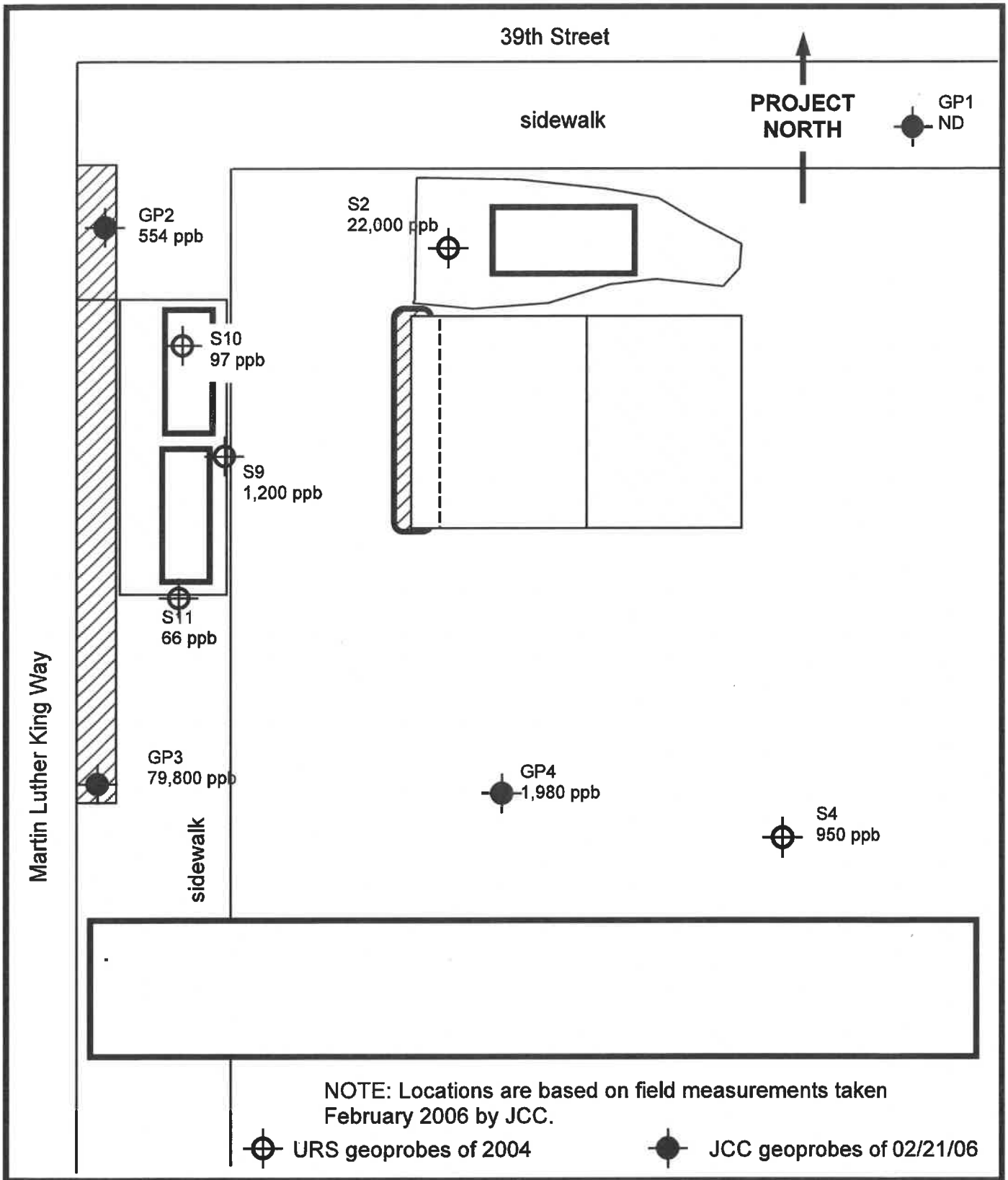
J. Estrada 8/11/2017 0307273.05 G:\DWGS\0307273 Martin Luther King Jr Way\05\0307273G05-07.dwg

Figure 2
Previous Sampling Locations
Former Grove Street Wash Rack Site
3884 Martin Luther King Jr. Way
Oakland, California

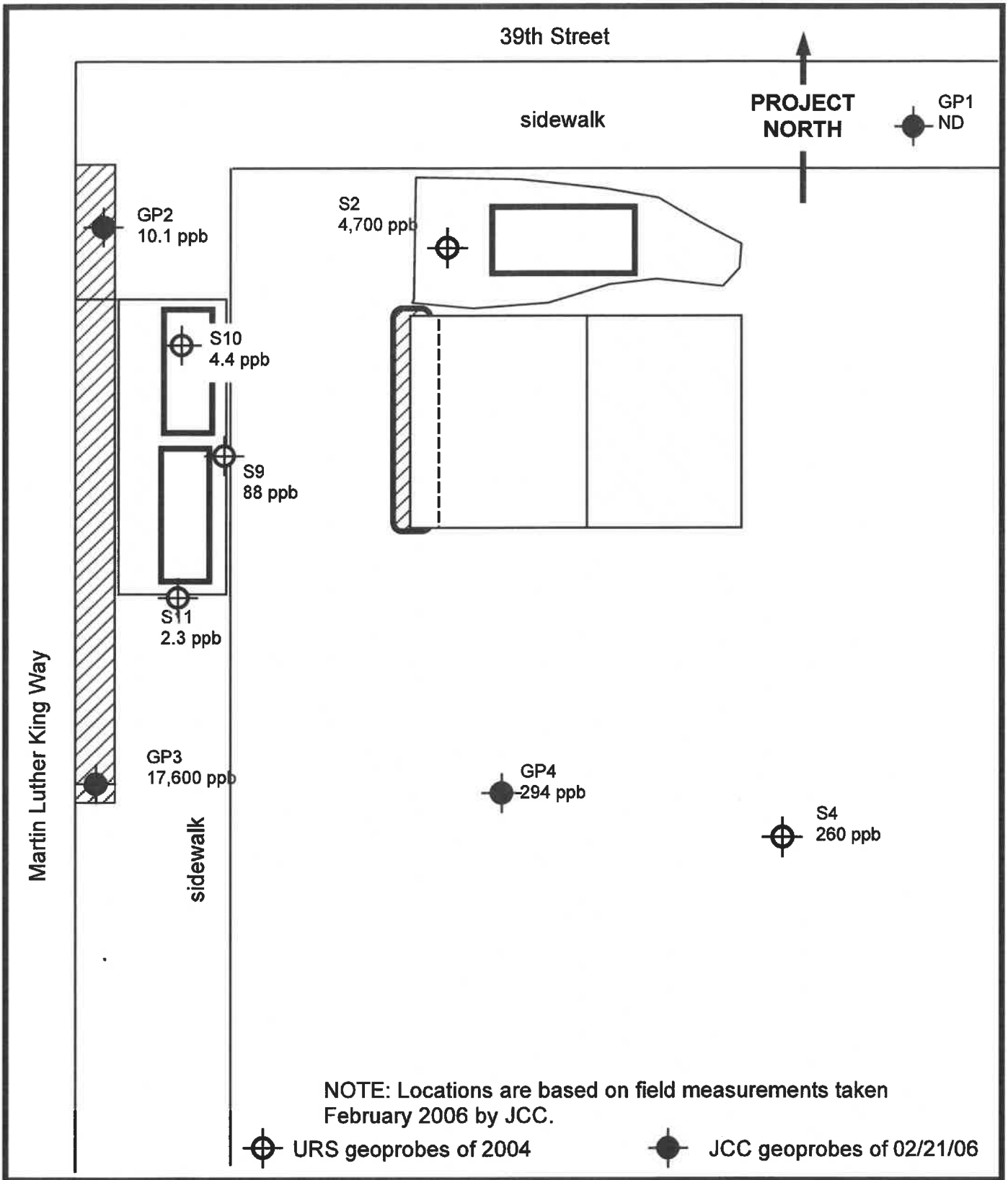
Environmental Resources Management
www.erm.com



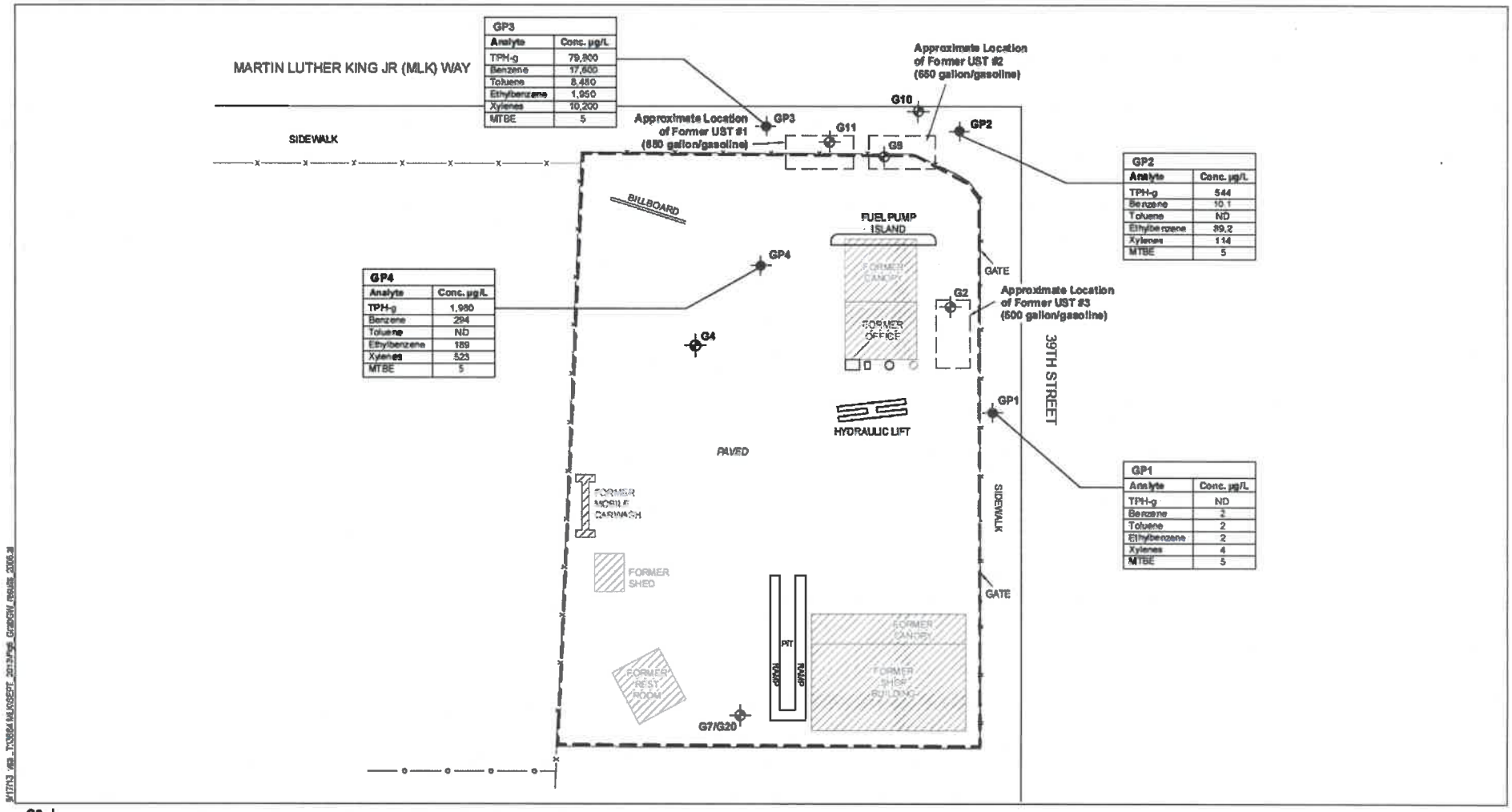
JOHN CARVER CONSULTING 415 235 4648	SITE PLAN 3884 Martin Luther King Way Oakland, CA			
Project 9795	by: jnc	Scale 1" = 10'	March 2006	Figure 3



JOHN CARVER CONSULTING 415 235 4648	TPH-G in GROUNDWATER 3884 Martin Luther King Way Oakland, CA			
Project 9795	by: jnc	Scale 1" = 10'	March 2006	Figure 10



JOHN CARVER CONSULTING 415 235 4648	BENZENE in GROUNDWATER 3884 Martin Luther King Way Oakland, CA			
Project 9795	by: jnc	Scale 1" = 10'	March 2006	Figure 11



G2 Grab Groundwater Sample Location, URS 2004
GP1 JCC Geoprobe (Feb 21, 2006)
G7/G20 Duplicate Sample
Site Boundary
Chain Link Fence
Wood Fence

TPH-g Total Petroleum Hydrocarbon - Gasoline
ND Non-detect. Reporting limits were not available for TPH-g. Reporting limit is assumed to be between 500 and 1,000 µg/L

Note:
All concentrations in micrograms per liter (µg/L)

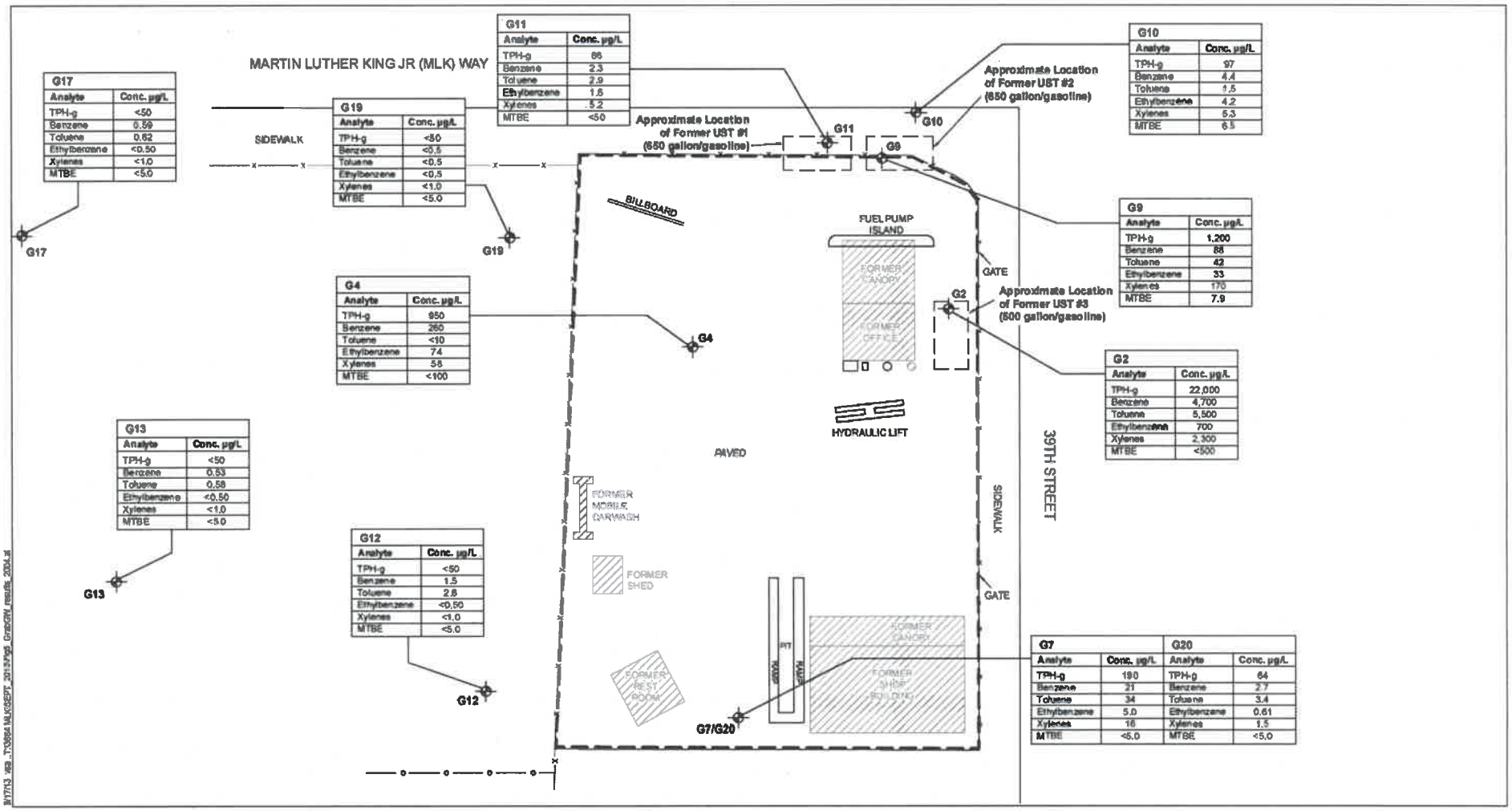
0 10 20 FEET

GRAB GROUNDWATER SAMPLE RESULTS (µg/L) – 2006 (JCC)

September 2013 | 3884 Martin Luther King, Jr. Way
28068161 | Oakland, California

URS

FIGURE 6



G17	
Analyte	Conc. µg/L
TPH-g	<50
Benzene	0.59
Toluene	0.62
Ethylbenzene	<0.50
Xylenes	<1.0
MTBE	<5.0

G19	
Analyte	Conc. µg/L
TPH-g	<50
Benzene	<0.5
Toluene	<0.5
Ethylbenzene	<0.5
Xylenes	<1.0
MTBE	<5.0

G11	
Analyte	Conc. µg/L
TPH-g	66
Benzene	2.3
Toluene	2.9
Ethylbenzene	1.5
Xylenes	5.2
MTBE	<50

G10	
Analyte	Conc. µg/L
TPH-g	97
Benzene	4.4
Toluene	1.5
Ethylbenzene	4.2
Xylenes	5.3
MTBE	6.5

G9	
Analyte	Conc. µg/L
TPH-g	1,200
Benzene	88
Toluene	42
Ethylbenzene	33
Xylenes	170
MTBE	7.9

G4	
Analyte	Conc. µg/L
TPH-g	950
Benzene	260
Toluene	<10
Ethylbenzene	74
Xylenes	58
MTBE	<100

G2	
Analyte	Conc. µg/L
TPH-g	22,000
Benzene	4,700
Toluene	5,500
Ethylbenzene	700
Xylenes	2,300
MTBE	<500

G13	
Analyte	Conc. µg/L
TPH-g	<50
Benzene	0.53
Toluene	0.58
Ethylbenzene	<0.50
Xylenes	<1.0
MTBE	<5.0

G12	
Analyte	Conc. µg/L
TPH-g	<50
Benzene	1.5
Toluene	2.8
Ethylbenzene	<0.50
Xylenes	<1.0
MTBE	<5.0

G7		G20	
Analyte	Conc. µg/L	Analyte	Conc. µg/L
TPH-g	190	TPH-g	64
Benzene	21	Benzene	2.7
Toluene	34	Toluene	3.4
Ethylbenzene	5.0	Ethylbenzene	0.61
Xylenes	16	Xylenes	1.5
MTBE	<5.0	MTBE	<5.0

G2 Grab Groundwater Sample Location, URS 2004
G7/G20 Duplicate Sample
Site Boundary
Chain Link Fence
Wood Fence

TPH-g Total Petroleum Hydrocarbon - Gasoline

Note:
All concentrations in micrograms per liter (µg/L)

0 10 20 FEET

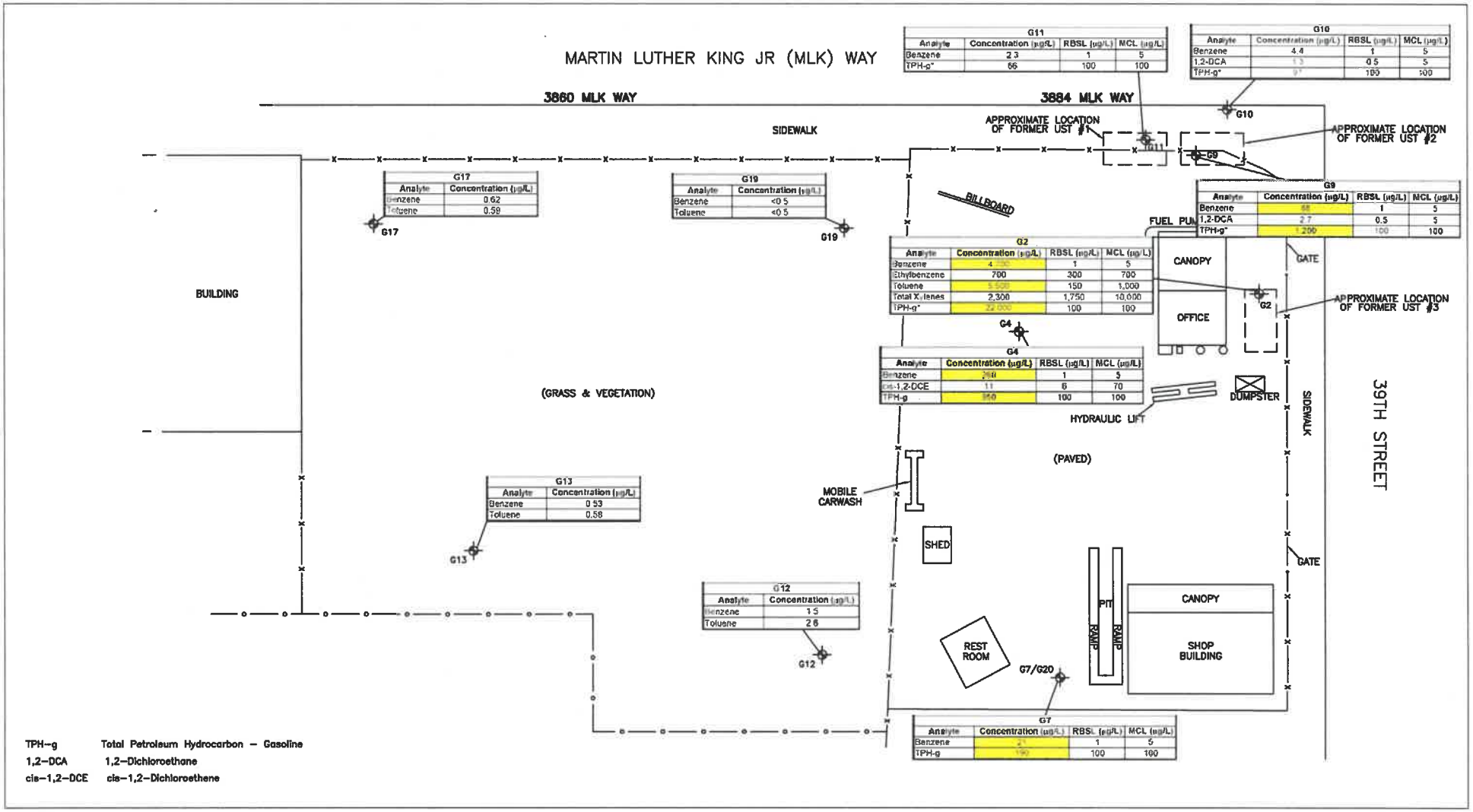
GRAB GROUNDWATER SAMPLE RESULTS (µg/L) -- 2004 (URS)

September 2013
28068161

3884 Martin Luther King, Jr. Way
Oakland, California

URS

FIGURE 5



TPH-g Total Petroleum Hydrocarbon – Gasoline
1,2-DCA 1,2-Dichloroethane
cis-1,2-DCE cis-1,2-Dichloroethene

LEGEND

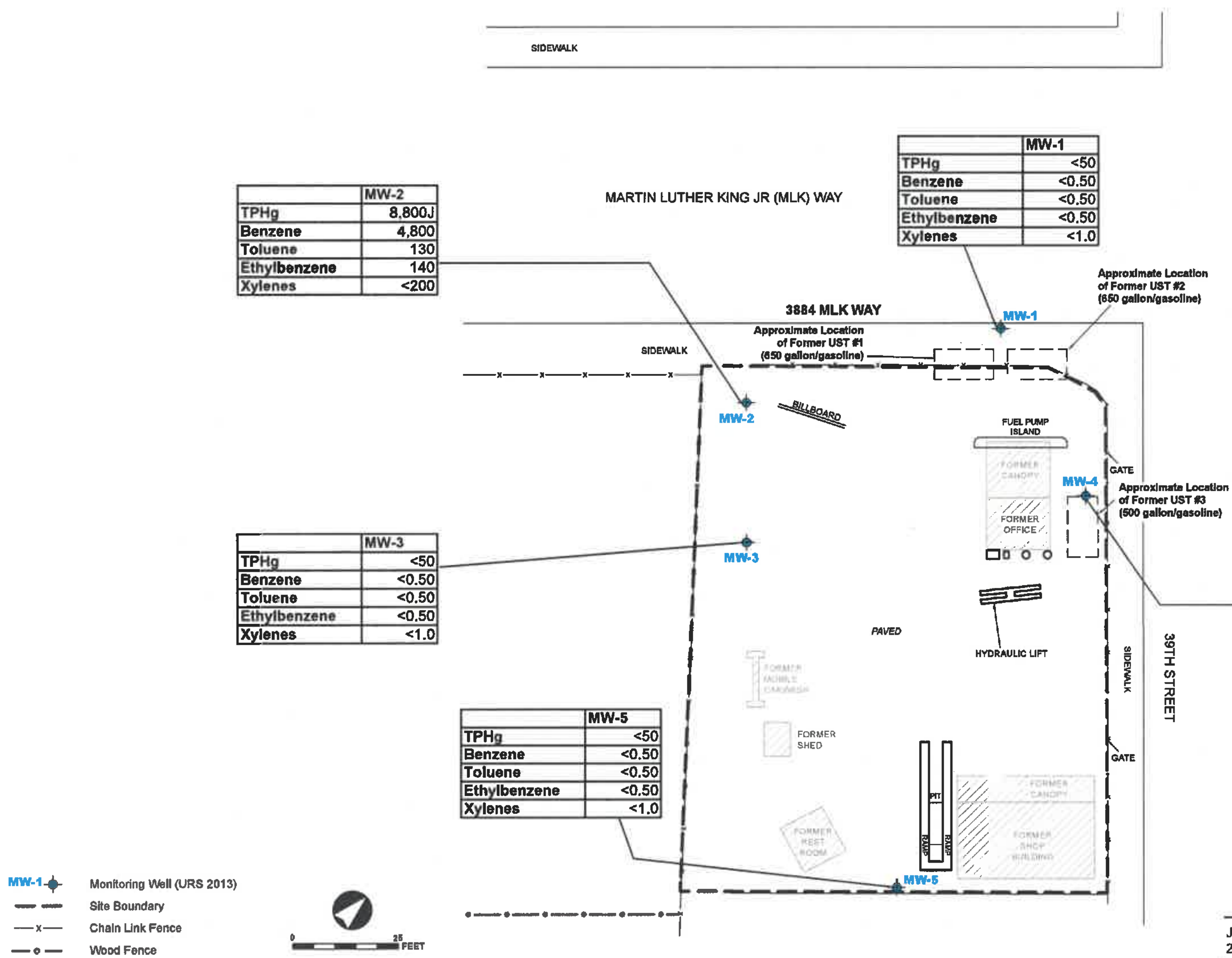
- G2 GROUNDWATER SAMPLE LOCATION
- —x— CHAIN-LINK FENCE
- —o— WOOD FENCE
- MCL THE U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA) REGION IX, MAXIMUM CONTAMINANT LEVELS (MCLs)
- RBSL CITY OF OAKLAND RISK-BASED SCREENING LEVEL (RBSL)
- * TPH-g RBSL IS THE CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD (RWQCB) RISK-BASED SCREENING LEVEL (RBSL)
- EXCEEDS EPA MCL
- G7/G20 DUPLICATE SAMPLE

NOTE:
* TPH-g RBSL IS THE CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD (RWQCB) RISK-BASED SCREENING LEVEL (RBSL)

N

SCALE
0 10 20 40
(1 inch = 20 feet)

VOCs AND TPH IN GROUNDWATER
Environmental Investigation Report
Lucky's Auto Body
August 2004 Department of Toxic Substances Control
28066607 Oakland, CA
URS FIGURE 6



	MW-1
TPHg	<50
Benzene	<0.50
Toluene	<0.50
Ethylbenzene	<0.50
Xylenes	<1.0

	MW-2
TPHg	8,800J
Benzene	4,800
Toluene	130
Ethylbenzene	140
Xylenes	<200

	MW-3
TPHg	<50
Benzene	<0.50
Toluene	<0.50
Ethylbenzene	<0.50
Xylenes	<1.0

	MW-4	MW-40
TPHg	25,000J	32,000J
Benzene	2,500J	3,100J
Toluene	950	1,100
Ethylbenzene	1,800J	2,400J
Xylenes	6,100	6,100

	MW-5
TPHg	<50
Benzene	<0.50
Toluene	<0.50
Ethylbenzene	<0.50
Xylenes	<1.0

GROUNDWATER ANALYTICAL RESULTS – MONITORING WELLS (µg/L) – JULY 2014

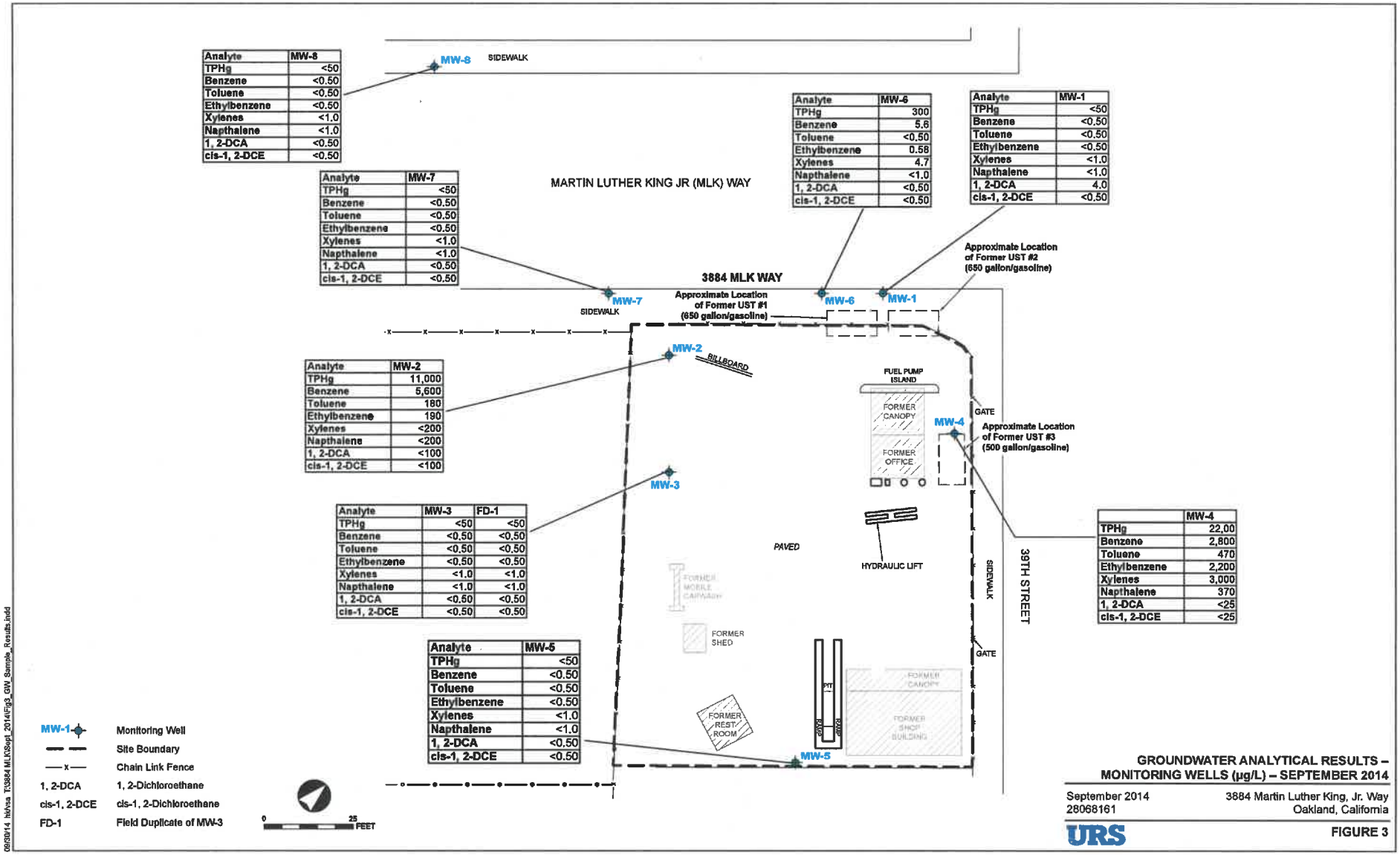
July 2014
28068161

3884 Martin Luther King, Jr. Way
Oakland, California

URS

FIGURE 3

07/30/14 hk/vsa T:\3884 MLK\Jul_2014\Figs2&3_GW_Sample_Results.indd



Analyte	MW-8
TPHg	<50
Benzene	<0.50
Toluene	<0.50
Ethylbenzene	<0.50
Xylenes	<1.0
Napthalene	<1.0
1, 2-DCA	<0.50
cis-1, 2-DCE	<0.50

Analyte	MW-6
TPHg	300
Benzene	5.6
Toluene	<0.50
Ethylbenzene	0.58
Xylenes	4.7
Napthalene	<1.0
1, 2-DCA	<0.50
cis-1, 2-DCE	<0.50

Analyte	MW-1
TPHg	<50
Benzene	<0.50
Toluene	<0.50
Ethylbenzene	<0.50
Xylenes	<1.0
Napthalene	<1.0
1, 2-DCA	4.0
cis-1, 2-DCE	<0.50

Analyte	MW-7
TPHg	<50
Benzene	<0.50
Toluene	<0.50
Ethylbenzene	<0.50
Xylenes	<1.0
Napthalene	<1.0
1, 2-DCA	<0.50
cis-1, 2-DCE	<0.50

Analyte	MW-2
TPHg	11,000
Benzene	5,600
Toluene	180
Ethylbenzene	190
Xylenes	<200
Napthalene	<200
1, 2-DCA	<100
cis-1, 2-DCE	<100

Analyte	MW-3	FD-1
TPHg	<50	<50
Benzene	<0.50	<0.50
Toluene	<0.50	<0.50
Ethylbenzene	<0.50	<0.50
Xylenes	<1.0	<1.0
Napthalene	<1.0	<1.0
1, 2-DCA	<0.50	<0.50
cis-1, 2-DCE	<0.50	<0.50

	MW-4
TPHg	22,00
Benzene	2,800
Toluene	470
Ethylbenzene	2,200
Xylenes	3,000
Napthalene	370
1, 2-DCA	<25
cis-1, 2-DCE	<25

Analyte	MW-5
TPHg	<50
Benzene	<0.50
Toluene	<0.50
Ethylbenzene	<0.50
Xylenes	<1.0
Napthalene	<1.0
1, 2-DCA	<0.50
cis-1, 2-DCE	<0.50

GROUNDWATER ANALYTICAL RESULTS – MONITORING WELLS (µg/L) – SEPTEMBER 2014

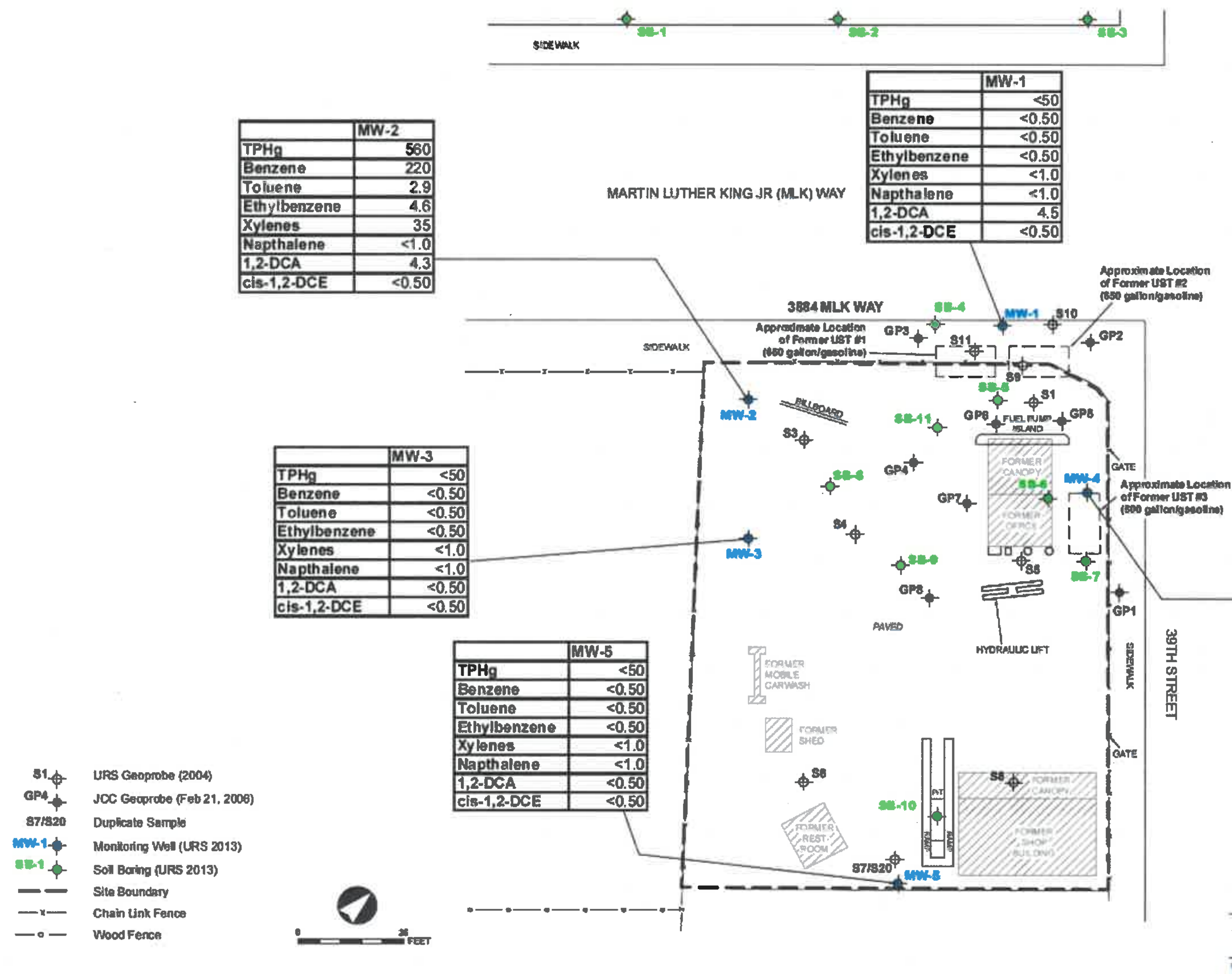
September 2014
28068161

3884 Martin Luther King, Jr. Way
Oakland, California

URS

FIGURE 3

09/30/14 hlvsa T:\3884 MLK\Sept_2014\Fig3_GW_Sample_Results.indd



	MW-1
TPHg	<50
Benzene	<0.50
Toluene	<0.50
Ethylbenzene	<0.50
Xylenes	<1.0
Napthalene	<1.0
1,2-DCA	4.5
cis-1,2-DCE	<0.50

	MW-2
TPHg	560
Benzene	220
Toluene	2.9
Ethylbenzene	4.6
Xylenes	35
Napthalene	<1.0
1,2-DCA	4.3
cis-1,2-DCE	<0.50

	MW-3
TPHg	<50
Benzene	<0.50
Toluene	<0.50
Ethylbenzene	<0.50
Xylenes	<1.0
Napthalene	<1.0
1,2-DCA	<0.50
cis-1,2-DCE	<0.50

	MW-4	MW-40*
TPHg	9500	13000
Benzene	980	1100
Toluene	510	930
Ethylbenzene	270	800
Xylenes	2600	3500
Napthalene	180	180
1,2-DCA	0.71	0.61
cis-1,2-DCE	<0.50	<0.50

	MW-5
TPHg	<50
Benzene	<0.50
Toluene	<0.50
Ethylbenzene	<0.50
Xylenes	<1.0
Napthalene	<1.0
1,2-DCA	<0.50
cis-1,2-DCE	<0.50

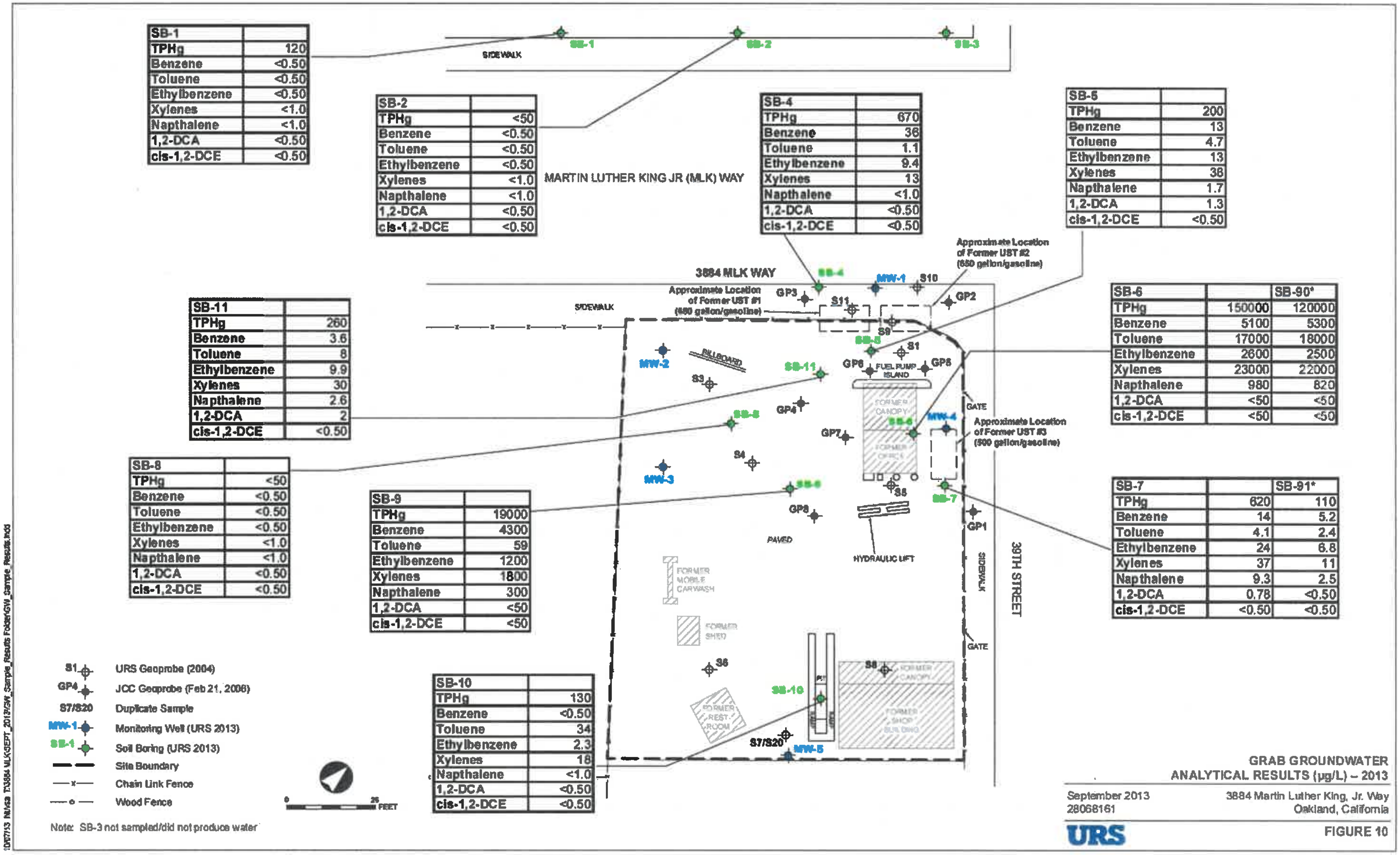
GROUNDWATER RESULTS – MONITORING WELLS (µg/L) – 2013

September 2013
28068161

3884 Martin Luther King, Jr. Way
Oakland, California

URS

FIGURE 9



SB-1	
TPHg	120
Benzene	<0.50
Toluene	<0.50
Ethylbenzene	<0.50
Xylenes	<1.0
Napthalene	<1.0
1,2-DCA	<0.50
cis-1,2-DCE	<0.50

SB-2	
TPHg	<50
Benzene	<0.50
Toluene	<0.50
Ethylbenzene	<0.50
Xylenes	<1.0
Napthalene	<1.0
1,2-DCA	<0.50
cis-1,2-DCE	<0.50

SB-4	
TPHg	670
Benzene	36
Toluene	1.1
Ethylbenzene	9.4
Xylenes	13
Napthalene	<1.0
1,2-DCA	<0.50
cis-1,2-DCE	<0.50

SB-5	
TPHg	200
Benzene	13
Toluene	4.7
Ethylbenzene	13
Xylenes	38
Napthalene	1.7
1,2-DCA	1.3
cis-1,2-DCE	<0.50

SB-6		SB-90*
TPHg	150000	120000
Benzene	5100	5300
Toluene	17000	18000
Ethylbenzene	2600	2500
Xylenes	23000	22000
Napthalene	980	820
1,2-DCA	<50	<50
cis-1,2-DCE	<50	<50

SB-11	
TPHg	260
Benzene	3.6
Toluene	8
Ethylbenzene	9.9
Xylenes	30
Napthalene	2.6
1,2-DCA	2
cis-1,2-DCE	<0.50

SB-8	
TPHg	<50
Benzene	<0.50
Toluene	<0.50
Ethylbenzene	<0.50
Xylenes	<1.0
Napthalene	<1.0
1,2-DCA	<0.50
cis-1,2-DCE	<0.50

SB-9	
TPHg	19000
Benzene	4300
Toluene	59
Ethylbenzene	1200
Xylenes	1800
Napthalene	300
1,2-DCA	<50
cis-1,2-DCE	<50

SB-7		SB-91*
TPHg	620	110
Benzene	14	5.2
Toluene	4.1	2.4
Ethylbenzene	24	6.8
Xylenes	37	11
Napthalene	9.3	2.5
1,2-DCA	0.78	<0.50
cis-1,2-DCE	<0.50	<0.50

SB-10	
TPHg	130
Benzene	<0.50
Toluene	34
Ethylbenzene	2.3
Xylenes	18
Napthalene	<1.0
1,2-DCA	<0.50
cis-1,2-DCE	<0.50

Note: SB-3 not sampled/did not produce water

GRAB GROUNDWATER ANALYTICAL RESULTS (µg/L) – 2013

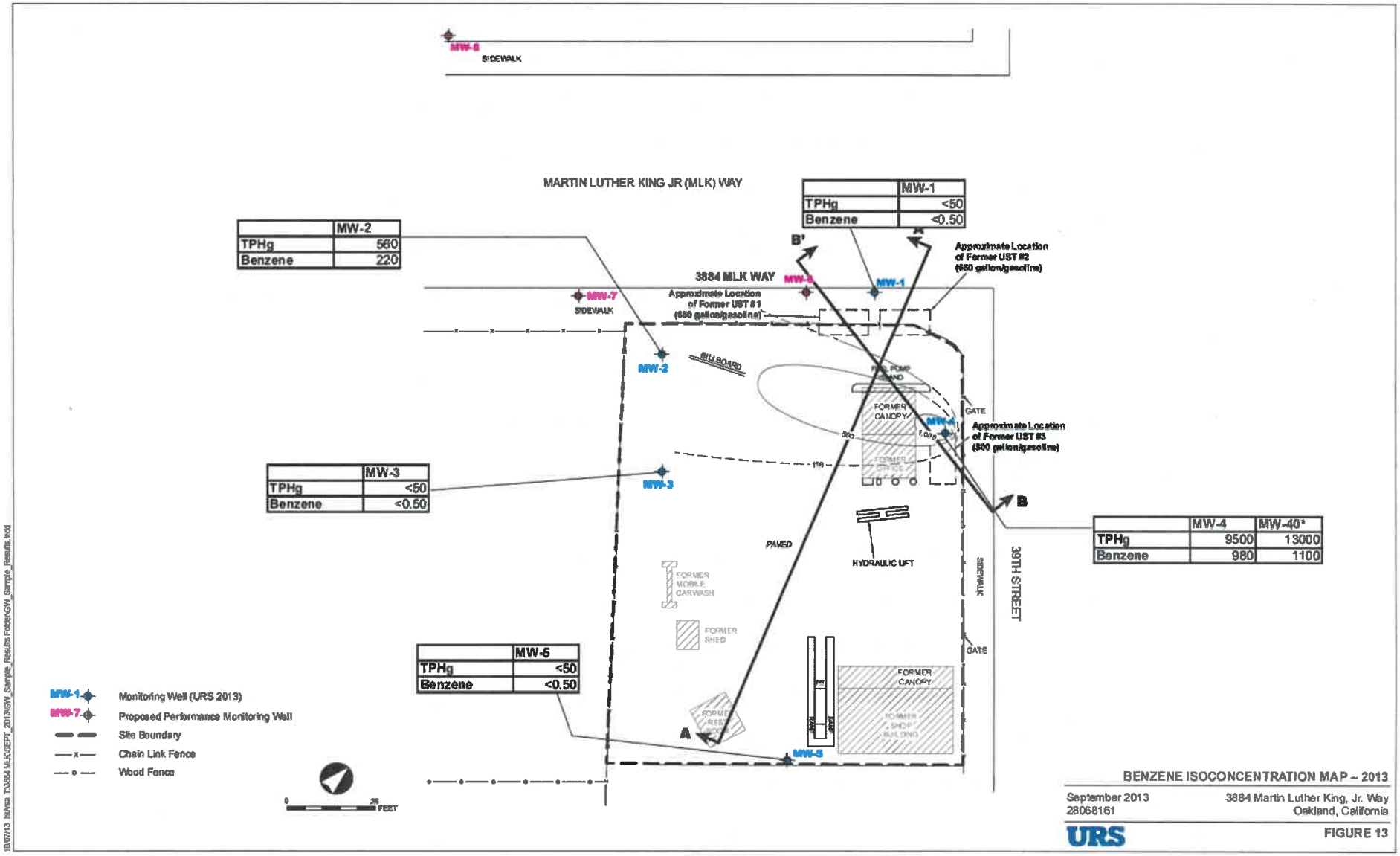
September 2013
28068161

3884 Martin Luther King, Jr. Way
Oakland, California

URS

FIGURE 10

10/07/13 NM/sa T:\3884 MLK\SEPT_2013\GW_Sample_Results Folder\GW_Sample_Results.indd



BENZENE ISOCONCENTRATION MAP – 2013

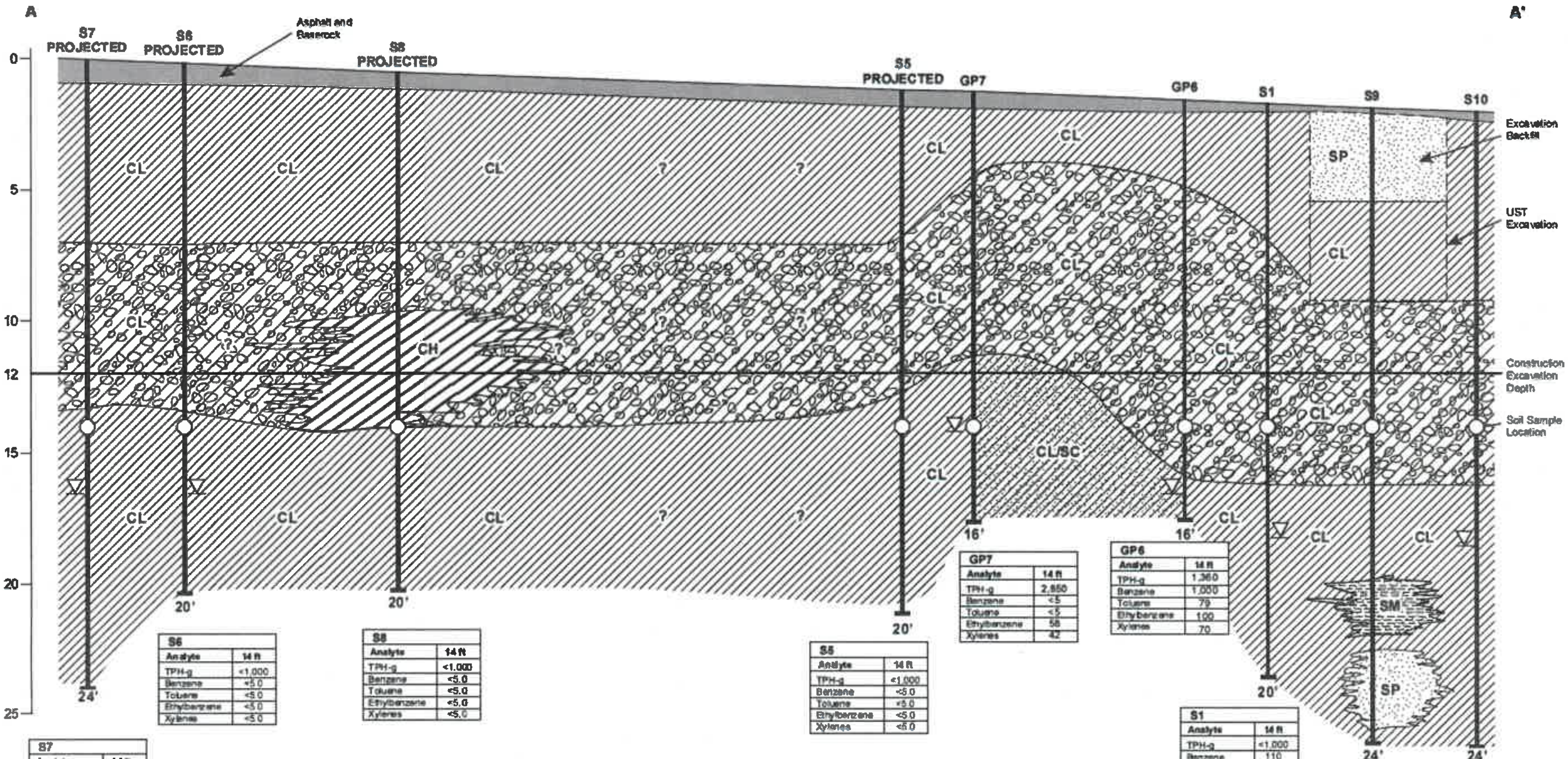
September 2013
28068161

3884 Martin Luther King, Jr. Way
Oakland, California

URS

FIGURE 13

10/07/13 hlvesa T:\3884 MLK\DEPT_2013\GW_Sample_Results Folder\GW_Sample_Results.indd



S7	
Analyte	14 ft
TPH-g	<1,000
Benzene	<5.0
Toluene	<5.0
Ethylbenzene	<5.0
Xylenes	<5.0

S6	
Analyte	14 ft
TPH-g	<1,000
Benzene	<5.0
Toluene	<5.0
Ethylbenzene	<5.0
Xylenes	<5.0

S8	
Analyte	14 ft
TPH-g	<1,000
Benzene	<5.0
Toluene	<5.0
Ethylbenzene	<5.0
Xylenes	<5.0

S5	
Analyte	14 ft
TPH-g	<1,000
Benzene	<5.0
Toluene	<5.0
Ethylbenzene	<5.0
Xylenes	<5.0

GP7	
Analyte	14 ft
TPH-g	2,850
Benzene	<5
Toluene	<5
Ethylbenzene	58
Xylenes	42

GP6	
Analyte	14 ft
TPH-g	1,360
Benzene	1,000
Toluene	79
Ethylbenzene	100
Xylenes	70

S1	
Analyte	14 ft
TPH-g	<1,000
Benzene	110
Toluene	15
Ethylbenzene	38
Xylenes	95

S9	
Analyte	14 ft
TPH-g	20,000
Benzene	1,500
Toluene	280
Ethylbenzene	380
Xylenes	1,600

S10	
Analyte	14 ft
TPH-g	<1,000
Benzene	19
Toluene	8.2
Ethylbenzene	79
Xylenes	96

Asphalt and Baserock
Clay (CL)
Gravelly Clay (CL)
Silty Clay (CH)
Clay/Clayey Sand (CL/SC)
Sand (SM)
Sand (SP)
Soil Sample Location
First Encountered Groundwater

Note:
All concentrations in micrograms per kilogram (µg/kg)

CROSS SECTION A–A'

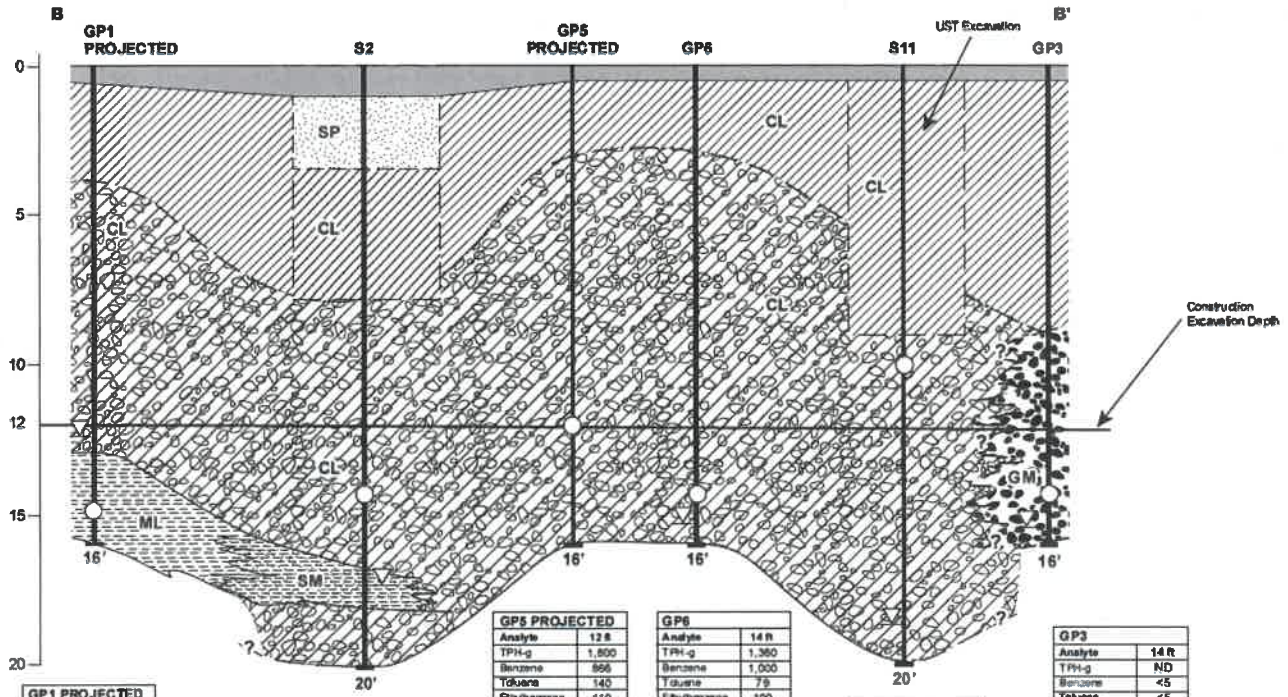
September 2013
28068161

3884 Martin Luther King, Jr. Way
Oakland, California

URS

FIGURE 14

9/05/13 nbvea ..T:\3884 MLK\SEPT_2013\Fig14_section_AA.ai



GP1 PROJECTED	
Analyte	16 ft
TPH-g	ND
Benzene	<5
Toluene	<5
Ethylbenzene	<5
Xylenes	<10

S2	
Analyte	14 ft
TPH-g	170 J
Benzene	3,200
Toluene	14,000
Ethylbenzene	4,100
Xylenes	20,000

GP5 PROJECTED	
Analyte	12 ft
TPH-g	1,800
Benzene	956
Toluene	140
Ethylbenzene	110
Xylenes	260

GP6	
Analyte	14 ft
TPH-g	1,360
Benzene	1,000
Toluene	79
Ethylbenzene	100
Xylenes	70

S11	
Analyte	20 ft
TPH-g	<1,000
Benzene	940
Toluene	670
Ethylbenzene	8,500
Xylenes	8,900

GP3	
Analyte	14 ft
TPH-g	ND
Benzene	<5
Toluene	<5
Ethylbenzene	<5
Xylenes	<10

Asphalt and Baserock
Clay (CL)
Gravelly Clay (CL)
Silty Clay (CH)
Clay/Clayey Sand (CL/SC)
Sand (SM)
Sand (SP)
Soil Sample Location
First Encountered Groundwater

Note:
All concentrations in micrograms per kilogram (µg/kg)

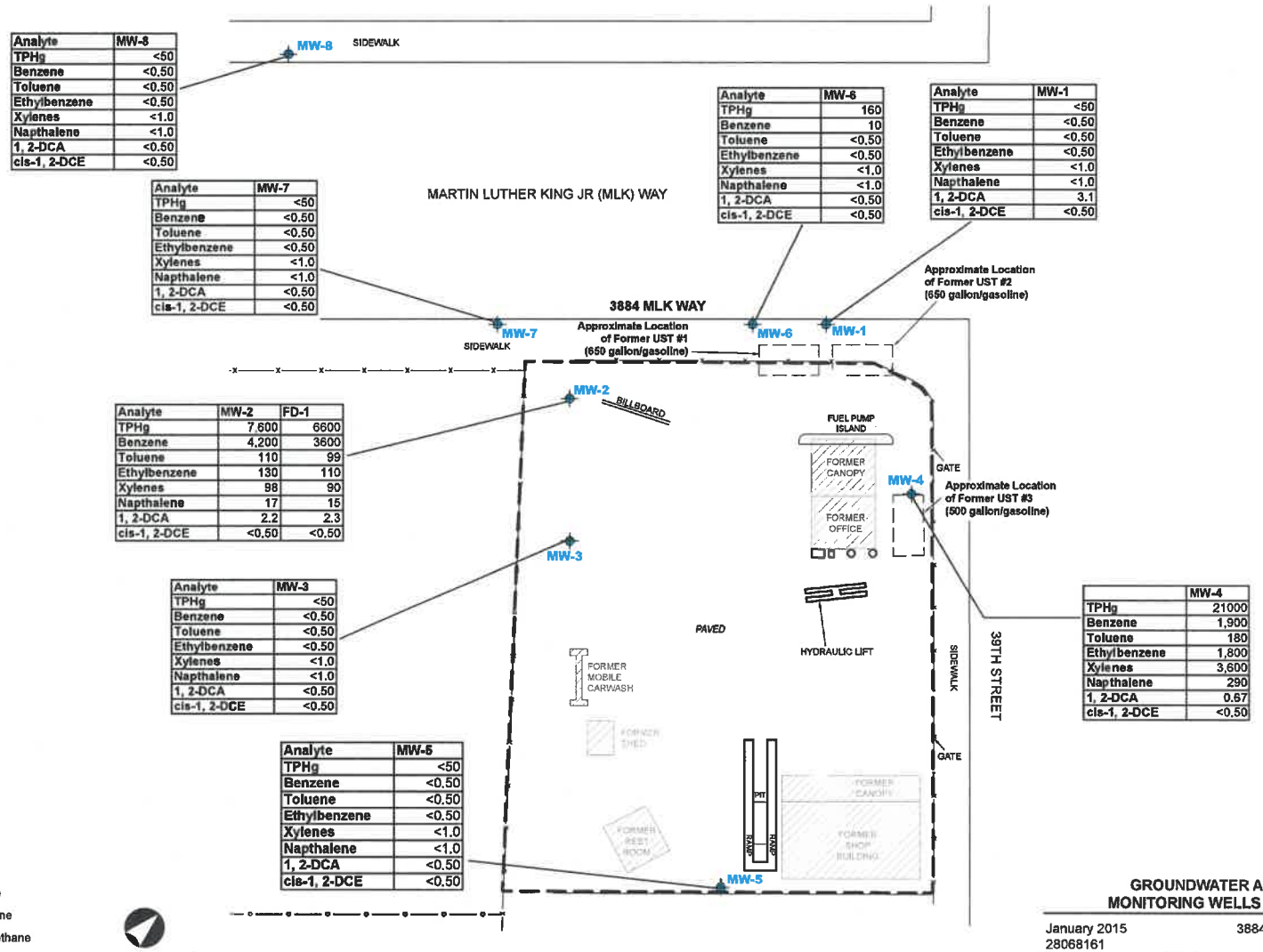
CROSS SECTION B–B'

September 2013
28068161

3884 Martin Luther King, Jr. Way
Oakland, California

URS

FIGURE 15



Analyte	MW-8
TPHg	<50
Benzene	<0.50
Toluene	<0.50
Ethylbenzene	<0.50
Xylenes	<1.0
Napthalene	<1.0
1, 2-DCA	<0.50
cis-1, 2-DCE	<0.50

Analyte	MW-7
TPHg	<50
Benzene	<0.50
Toluene	<0.50
Ethylbenzene	<0.50
Xylenes	<1.0
Napthalene	<1.0
1, 2-DCA	<0.50
cis-1, 2-DCE	<0.50

Analyte	MW-6
TPHg	160
Benzene	10
Toluene	<0.50
Ethylbenzene	<0.50
Xylenes	<1.0
Napthalene	<1.0
1, 2-DCA	<0.50
cis-1, 2-DCE	<0.50

Analyte	MW-1
TPHg	<50
Benzene	<0.50
Toluene	<0.50
Ethylbenzene	<0.50
Xylenes	<1.0
Napthalene	<1.0
1, 2-DCA	3.1
cis-1, 2-DCE	<0.50

Analyte	MW-2	FD-1
TPHg	7,600	6600
Benzene	4,200	3600
Toluene	110	99
Ethylbenzene	130	110
Xylenes	98	90
Napthalene	17	15
1, 2-DCA	2.2	2.3
cis-1, 2-DCE	<0.50	<0.50

Analyte	MW-3
TPHg	<50
Benzene	<0.50
Toluene	<0.50
Ethylbenzene	<0.50
Xylenes	<1.0
Napthalene	<1.0
1, 2-DCA	<0.50
cis-1, 2-DCE	<0.50

Analyte	MW-5
TPHg	<50
Benzene	<0.50
Toluene	<0.50
Ethylbenzene	<0.50
Xylenes	<1.0
Napthalene	<1.0
1, 2-DCA	<0.50
cis-1, 2-DCE	<0.50

Analyte	MW-4
TPHg	21000
Benzene	1,900
Toluene	180
Ethylbenzene	1,800
Xylenes	3,600
Napthalene	290
1, 2-DCA	0.67
cis-1, 2-DCE	<0.50

MW-1 Monitoring Well
Site Boundary
Chain Link Fence
1, 2-DCA 1, 2-Dichloroethane
cis-1, 2-DCE cis-1, 2-Dichloroethane
FD-1 Field Duplicate of MW-2

0 25 FEET

GROUNDWATER ANALYTICAL RESULTS – MONITORING WELLS (µg/L) – JANUARY 2015

January 2015
28068161

3884 Martin Luther King, Jr. Way
Oakland, California

URS

FIGURE 3

01/30/15 hkrosa T:\3884 MLK\January 2015\Figs2&3_GW_Sample_Results Folder\Figs2&3_GW_Sample_Results.indd

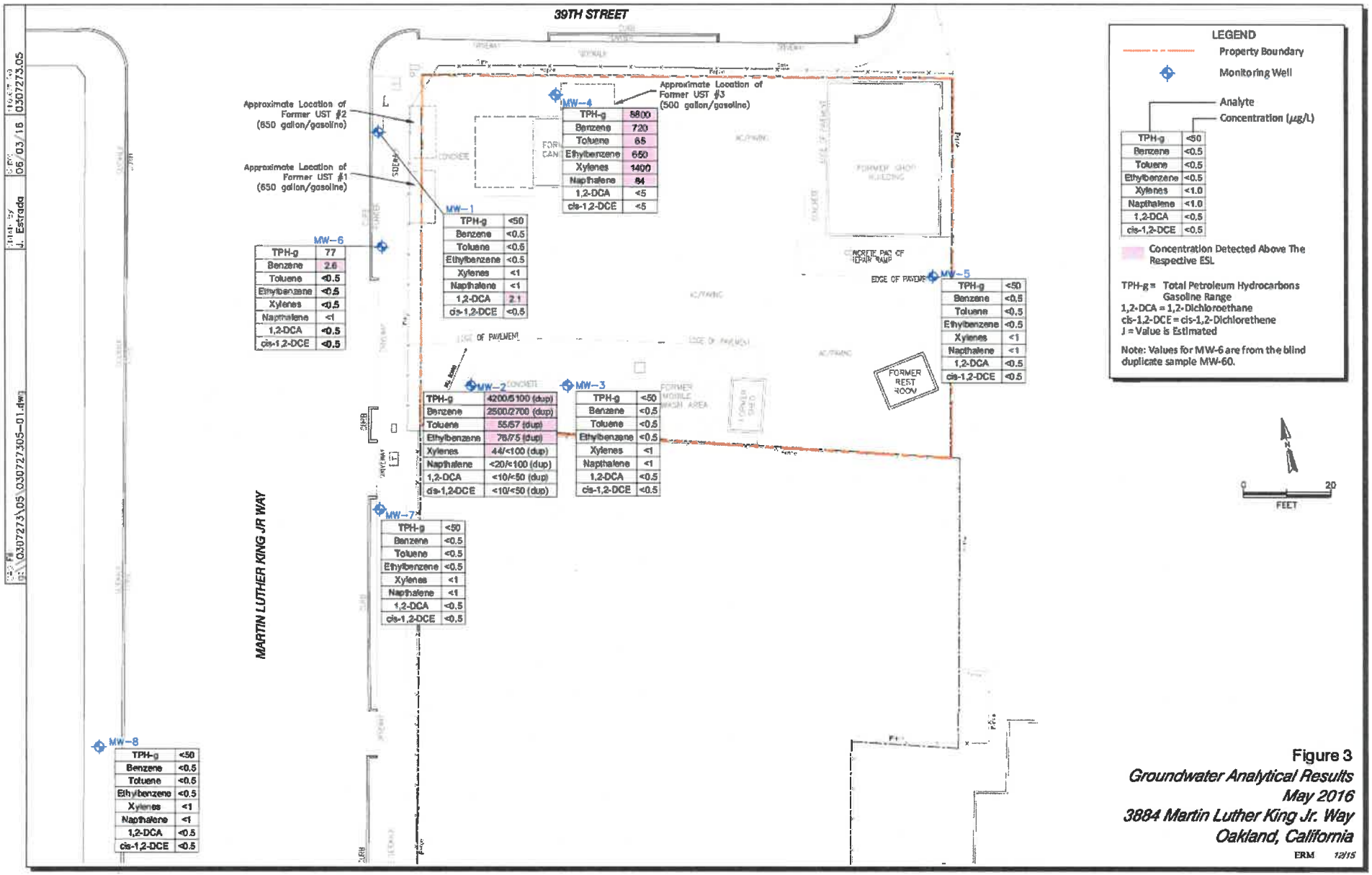
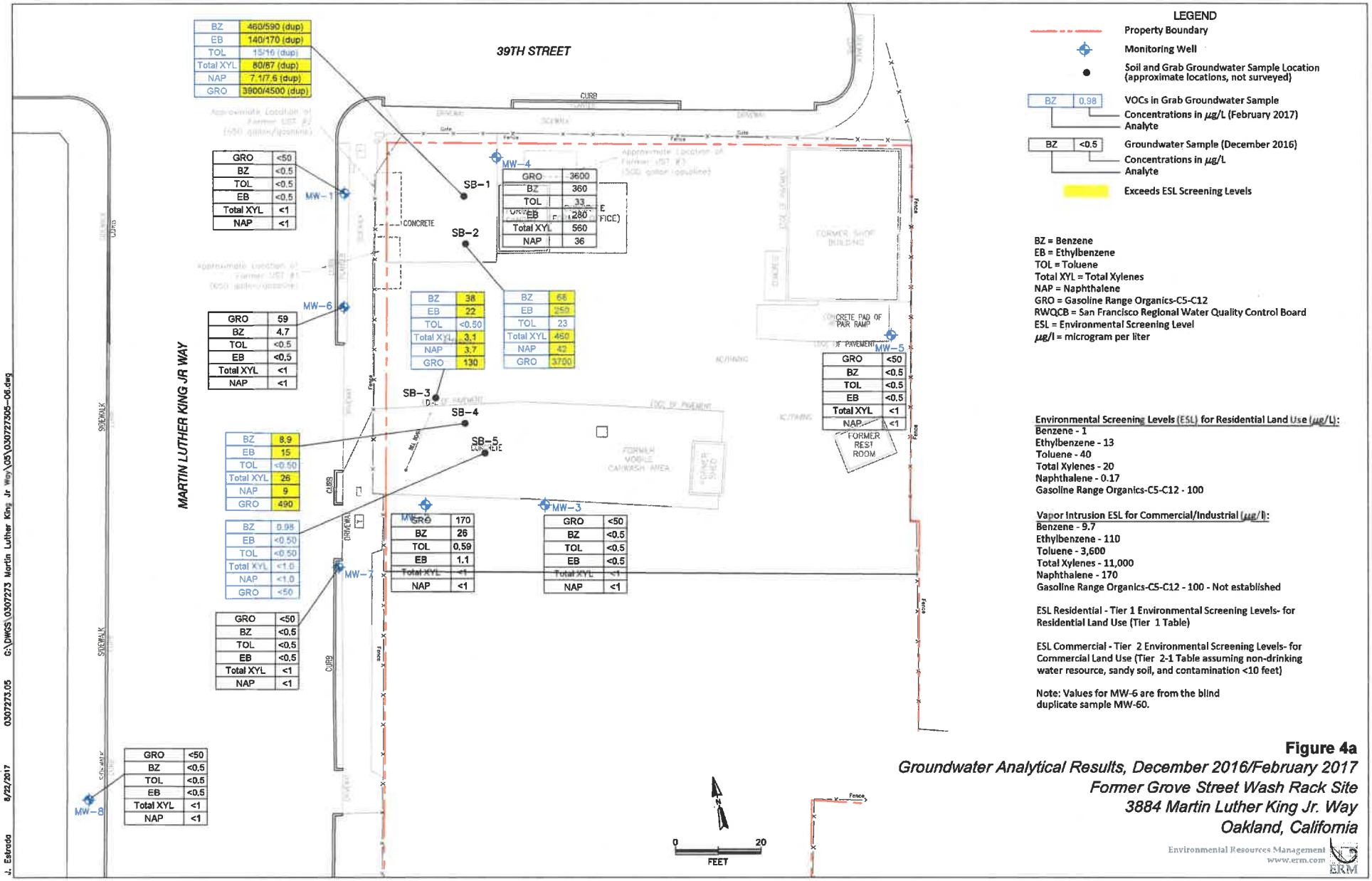


Figure 3
Groundwater Analytical Results
May 2016
3884 Martin Luther King Jr. Way
Oakland, California
ERM 12/15



LEGEND

- Property Boundary
- Monitoring Well
- Soil and Grab Groundwater Sample Location (approximate locations, not surveyed)
- BZ 0.98 — VOCs in Grab Groundwater Sample; Concentrations in µg/L (February 2017); Analyte
- BZ <0.5 — Groundwater Sample (December 2016); Concentrations in µg/L; Analyte
- Exceeds ESL Screening Levels

BZ = Benzene
EB = Ethylbenzene
TOL = Toluene
Total XYL = Total Xylenes
NAP = Naphthalene
GRO = Gasoline Range Organics-C5-C12
RWQCB = San Francisco Regional Water Quality Control Board
ESL = Environmental Screening Level
µg/l = microgram per liter

Environmental Screening Levels (ESL) for Residential Land Use (µg/L):
Benzene - 1
Ethylbenzene - 13
Toluene - 40
Total Xylenes - 20
Naphthalene - 0.17
Gasoline Range Organics-C5-C12 - 100

Vapor Intrusion ESL for Commercial/Industrial (µg/l):
Benzene - 9.7
Ethylbenzene - 110
Toluene - 3,600
Total Xylenes - 11,000
Naphthalene - 170
Gasoline Range Organics-C5-C12 - 100 - Not established

ESL Residential - Tier 1 Environmental Screening Levels- for Residential Land Use (Tier 1 Table)

ESL Commercial - Tier 2 Environmental Screening Levels- for Commercial Land Use (Tier 2-1 Table assuming non-drinking water resource, sandy soil, and contamination <10 feet)

Note: Values for MW-6 are from the blind duplicate sample MW-60.

Figure 4a

Groundwater Analytical Results, December 2016/February 2017
Former Grove Street Wash Rack Site
3884 Martin Luther King Jr. Way
Oakland, California

Environmental Resources Management
www.erm.com

J. Estrada 8/22/2017 0307273.05 G:\DWGS\0307273 Martin Luther King Jr Way\05\0307273005-06.dwg

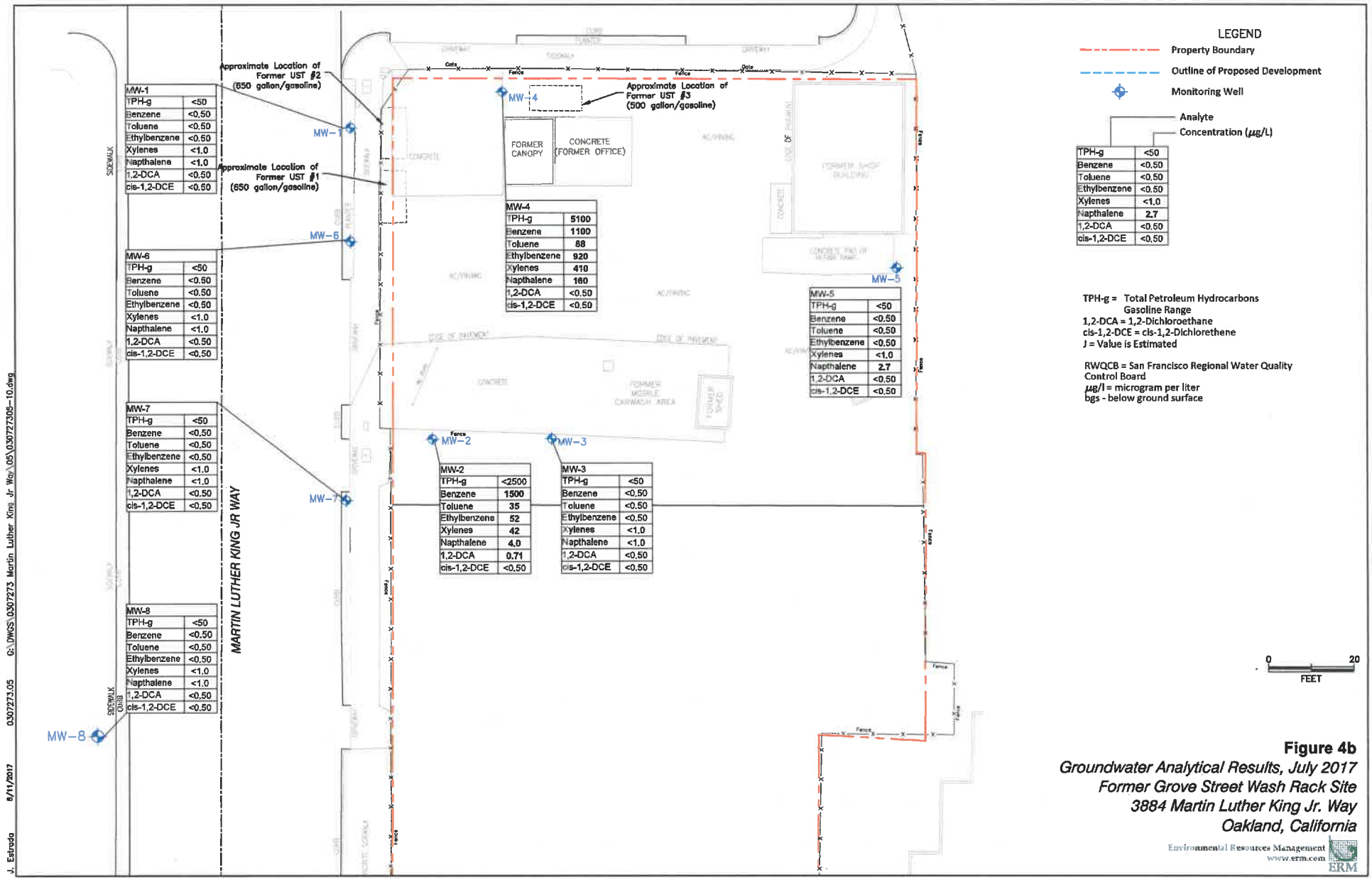
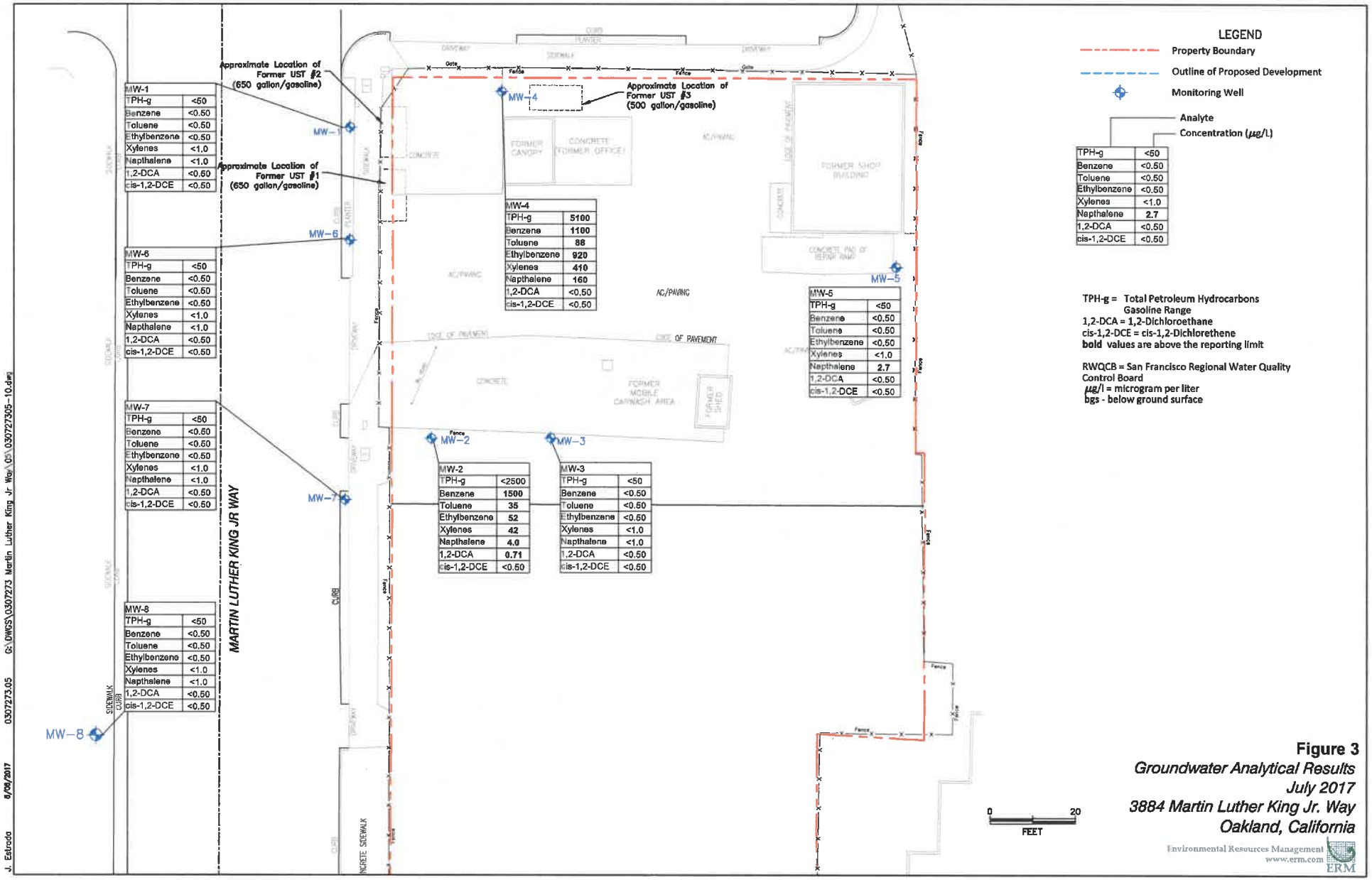


Figure 4b
Groundwater Analytical Results, July 2017
Former Grove Street Wash Rack Site
3884 Martin Luther King Jr. Way
Oakland, California

Environmental Resources Management
www.erm.com
ERM



MW-1	
TPH-g	<50
Benzene	<0.50
Toluene	<0.50
Ethylbenzene	<0.50
Xylenes	<1.0
Napthalene	<1.0
1,2-DCA	<0.50
cis-1,2-DCE	<0.50

MW-2	
TPH-g	<2500
Benzene	**1500**
Toluene	**35**
Ethylbenzene	**52**
Xylenes	**42**
Napthalene	**4.0**
1,2-DCA	**0.71**
cis-1,2-DCE	<0.50

MW-3	
TPH-g	<50
Benzene	<0.50
Toluene	<0.50
Ethylbenzene	<0.50
Xylenes	<1.0
Napthalene	<1.0
1,2-DCA	<0.50
cis-1,2-DCE	<0.50

MW-4	
TPH-g	**5100**
Benzene	**1100**
Toluene	**88**
Ethylbenzene	**920**
Xylenes	**410**
Napthalene	**160**
1,2-DCA	<0.50
cis-1,2-DCE	<0.50

MW-5	
TPH-g	<50
Benzene	<0.50
Toluene	<0.50
Ethylbenzene	<0.50
Xylenes	<1.0
Napthalene	**2.7**
1,2-DCA	<0.50
cis-1,2-DCE	<0.50

MW-6	
TPH-g	<50
Benzene	<0.50
Toluene	<0.50
Ethylbenzene	<0.50
Xylenes	<1.0
Napthalene	<1.0
1,2-DCA	<0.50
cis-1,2-DCE	<0.50

MW-7	
TPH-g	<50
Benzene	<0.50
Toluene	<0.50
Ethylbenzene	<0.50
Xylenes	<1.0
Napthalene	<1.0
1,2-DCA	<0.50
cis-1,2-DCE	<0.50

MW-8	
TPH-g	<50
Benzene	<0.50
Toluene	<0.50
Ethylbenzene	<0.50
Xylenes	<1.0
Napthalene	<1.0
1,2-DCA	<0.50
cis-1,2-DCE	<0.50

Figure 3
Groundwater Analytical Results
July 2017
3884 Martin Luther King Jr. Way
Oakland, California

Environmental Resources Management
www.erm.com

J. Estrada 8/08/2017 0307273.05 G:\DWGS\0307273 Martin Luther King Jr Way\05\0307273O5-10.dwg

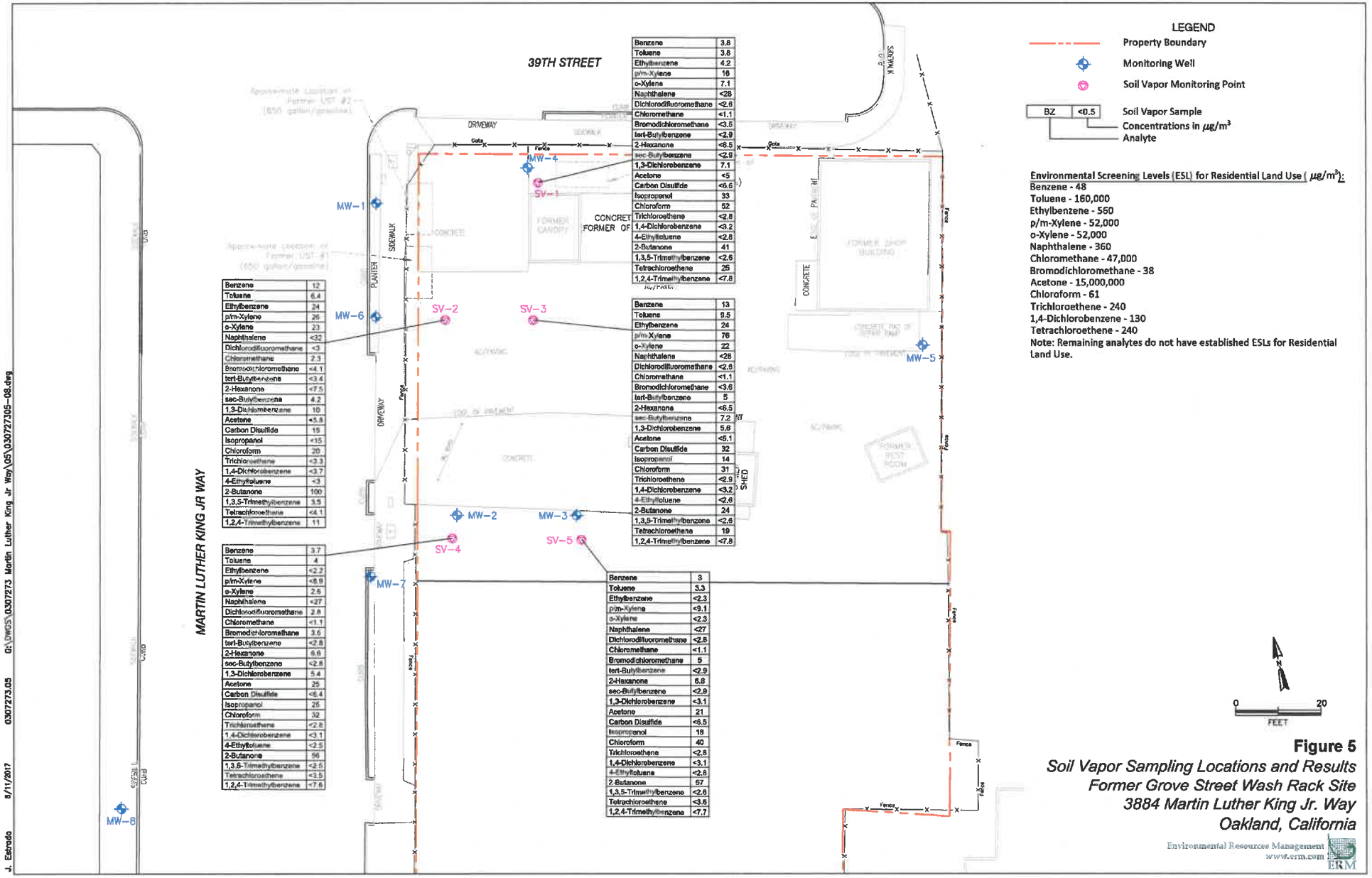
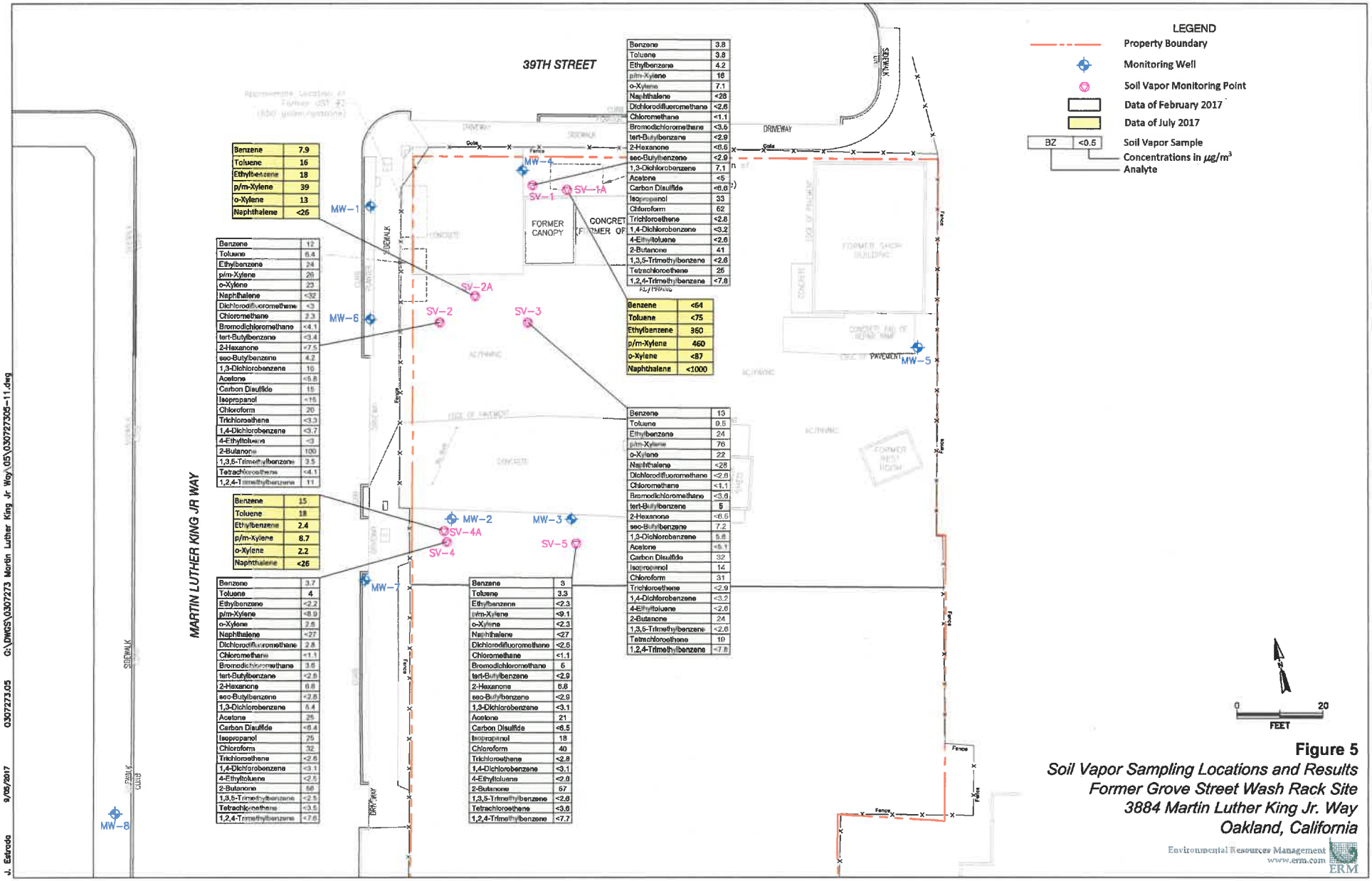


Figure 5

Soil Vapor Sampling Locations and Results
Former Grove Street Wash Rack Site
3884 Martin Luther King Jr. Way
Oakland, California

Environmental Resources Management
www.erm.com

J. Estrada 8/11/2017 0307273.05 G:\DWGS\0307273 Martin Luther King Jr Way\GIS\0307273G05-08.dwg



Benzene	7.9
Toluene	16
Ethylbenzene	18
p/m-Xylene	39
o-Xylene	13
Naphthalene	<26

Benzene	12
Toluene	6.4
Ethylbenzene	24
p/m-Xylene	26
o-Xylene	23
Naphthalene	<32
Dichlorodifluoromethane	<3
Chloromethane	2.3
Bromodichloromethane	<4.1
tert-Butylbenzene	<3.4
2-Hexanone	<7.5
sec-Butylbenzene	4.2
1,3-Dichlorobenzene	10
Acetone	<5.8
Carbon Disulfide	15
Isopropanol	<15
Chloroform	20
Trichloroethene	<3.3
1,4-Dichlorobenzene	<3.7
4-Ethyltoluene	<3
2-Butanone	100
1,3,5-Trimethylbenzene	3.5
Tetrachloroethene	<4.1
1,2,4-Trimethylbenzene	11

Benzene	15
Toluene	18
Ethylbenzene	2.4
p/m-Xylene	8.7
o-Xylene	2.2
Naphthalene	<26

Benzene	3.7
Toluene	4
Ethylbenzene	<2.2
p/m-Xylene	<8.9
o-Xylene	2.6
Naphthalene	<27
Dichlorodifluoromethane	2.8
Chloromethane	<1.1
Bromodichloromethane	3.8
tert-Butylbenzene	<2.8
2-Hexanone	6.8
sec-Butylbenzene	<2.8
1,3-Dichlorobenzene	6.4
Acetone	25
Carbon Disulfide	<6.4
Isopropanol	25
Chloroform	32
Trichloroethene	<2.6
1,4-Dichlorobenzene	<3.1
4-Ethyltoluene	<2.6
2-Butanone	56
1,3,5-Trimethylbenzene	<2.6
Tetrachloroethene	<3.6
1,2,4-Trimethylbenzene	<7.6

Benzene	3
Toluene	3.3
Ethylbenzene	<2.3
p/m-Xylene	<9.1
o-Xylene	<2.3
Naphthalene	<27
Dichlorodifluoromethane	<2.6
Chloromethane	<1.1
Bromodichloromethane	6
tert-Butylbenzene	<2.9
2-Hexanone	6.8
sec-Butylbenzene	<2.9
1,3-Dichlorobenzene	<3.1
Acetone	21
Carbon Disulfide	<6.5
Isopropanol	18
Chloroform	40
Trichloroethene	<2.8
1,4-Dichlorobenzene	<3.1
4-Ethyltoluene	<2.6
2-Butanone	57
1,3,5-Trimethylbenzene	<2.6
Tetrachloroethene	<3.6
1,2,4-Trimethylbenzene	<7.7

Benzene	3.8
Toluene	3.8
Ethylbenzene	4.2
p/m-Xylene	16
o-Xylene	7.1
Naphthalene	<26
Dichlorodifluoromethane	<2.6
Chloromethane	<1.1
Bromodichloromethane	<3.6
tert-Butylbenzene	<2.9
2-Hexanone	<6.6
sec-Butylbenzene	<2.9
1,3-Dichlorobenzene	7.1
Acetone	<5
Carbon Disulfide	<6.6
Isopropanol	33
Chloroform	62
Trichloroethene	<2.6
1,4-Dichlorobenzene	<3.2
4-Ethyltoluene	<2.6
2-Butanone	41
1,3,5-Trimethylbenzene	<2.6
Tetrachloroethene	25
1,2,4-Trimethylbenzene	<7.6

Benzene	<64
Toluene	<75
Ethylbenzene	360
p/m-Xylene	460
o-Xylene	<87
Naphthalene	<1000

Benzene	13
Toluene	9.5
Ethylbenzene	24
p/m-Xylene	76
o-Xylene	22
Naphthalene	<28
Dichlorodifluoromethane	<2.6
Chloromethane	<1.1
Bromodichloromethane	<3.6
tert-Butylbenzene	5
2-Hexanone	<6.6
sec-Butylbenzene	7.2
1,3-Dichlorobenzene	5.6
Acetone	<5.1
Carbon Disulfide	32
Isopropanol	14
Chloroform	31
Trichloroethene	<2.9
1,4-Dichlorobenzene	<3.2
4-Ethyltoluene	<2.6
2-Butanone	24
1,3,5-Trimethylbenzene	<2.6
Tetrachloroethene	19
1,2,4-Trimethylbenzene	<7.6

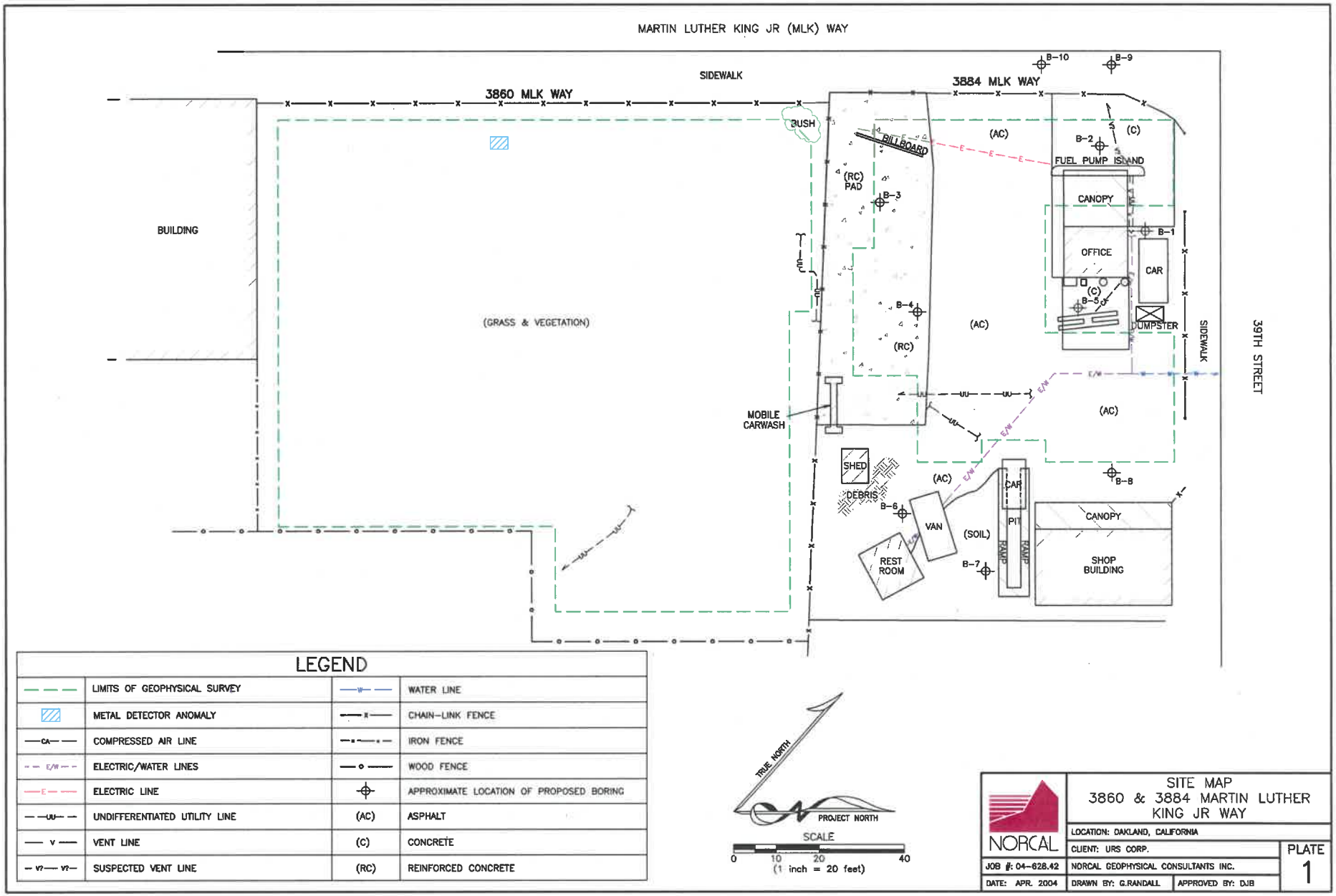
Figure 5
Soil Vapor Sampling Locations and Results
Former Grove Street Wash Rack Site
3884 Martin Luther King Jr. Way
Oakland, California

Environmental Resources Management
www.erm.com
ERM

J. Estrada 9/05/2017 0307273.05 G:\DWGS\0307273 Martin Luther King Jr Way\05\0307273O5-11.dwg

ATTACHMENT B-2

Preferential Pathways & Sensitive Receptor Survey Data



LEGEND

— — —	LIMITS OF GEOPHYSICAL SURVEY	—W—	WATER LINE
▨	METAL DETECTOR ANOMALY	—x—	CHAIN-LINK FENCE
—CA—	COMPRESSED AIR LINE	—▪—▪—	IRON FENCE
- - E/W - -	ELECTRIC/WATER LINES	—o—	WOOD FENCE
—E—	ELECTRIC LINE	⊕	APPROXIMATE LOCATION OF PROPOSED BORING
—UU—	UNDIFFERENTIATED UTILITY LINE	(AC)	ASPHALT
— V —	VENT LINE	(C)	CONCRETE
— V? — V? —	SUSPECTED VENT LINE	(RC)	REINFORCED CONCRETE

NORCAL

SITE MAP
3860 & 3884 MARTIN LUTHER KING JR WAY

LOCATION: OAKLAND, CALIFORNIA
CLIENT: URS CORP.
JOB #: 04-628.42
NORCAL GEOPHYSICAL CONSULTANTS INC.
DATE: APR. 2004
DRAWN BY: G.RANDALL
APPROVED BY: DJB

PLATE 1

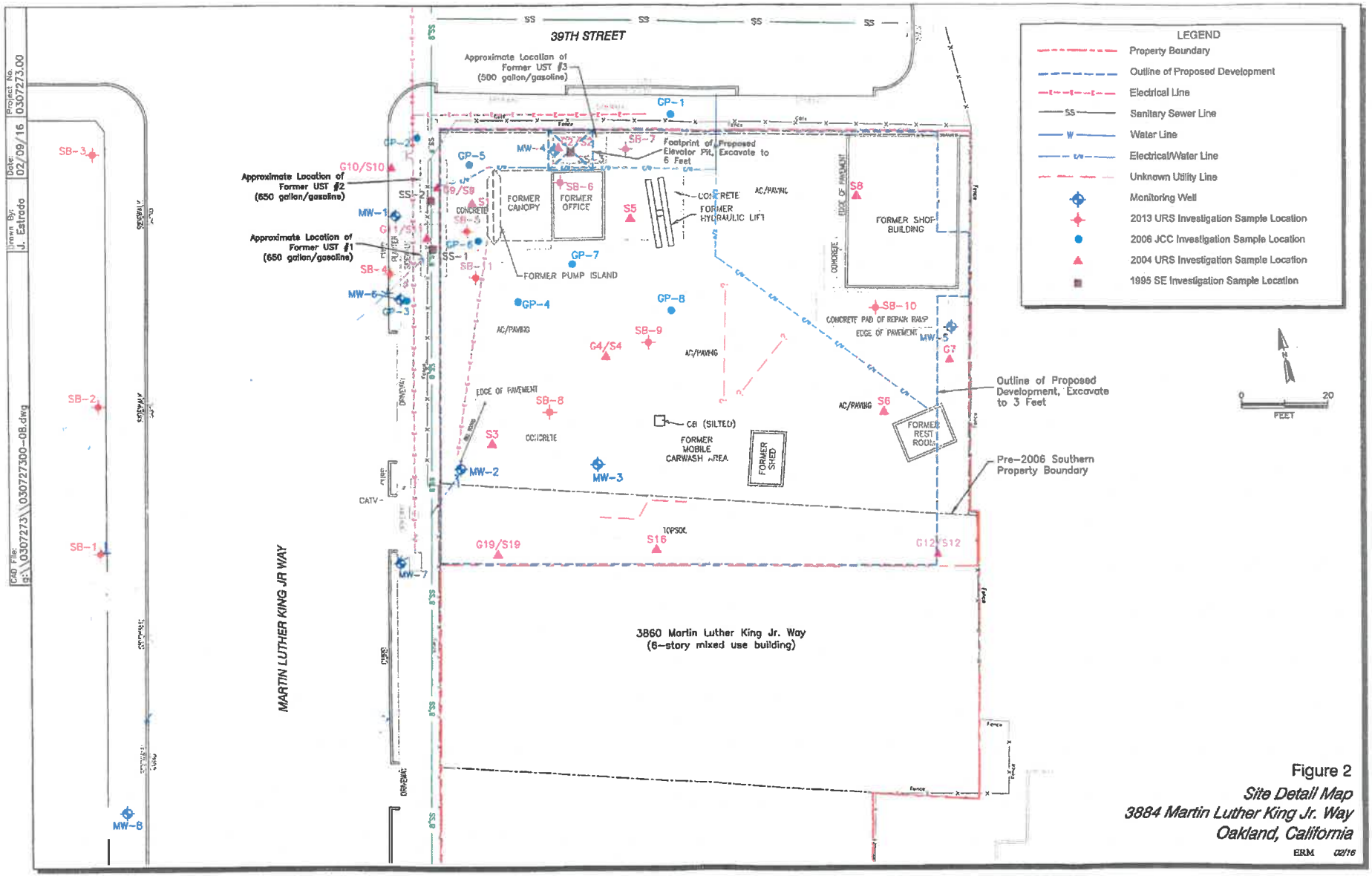


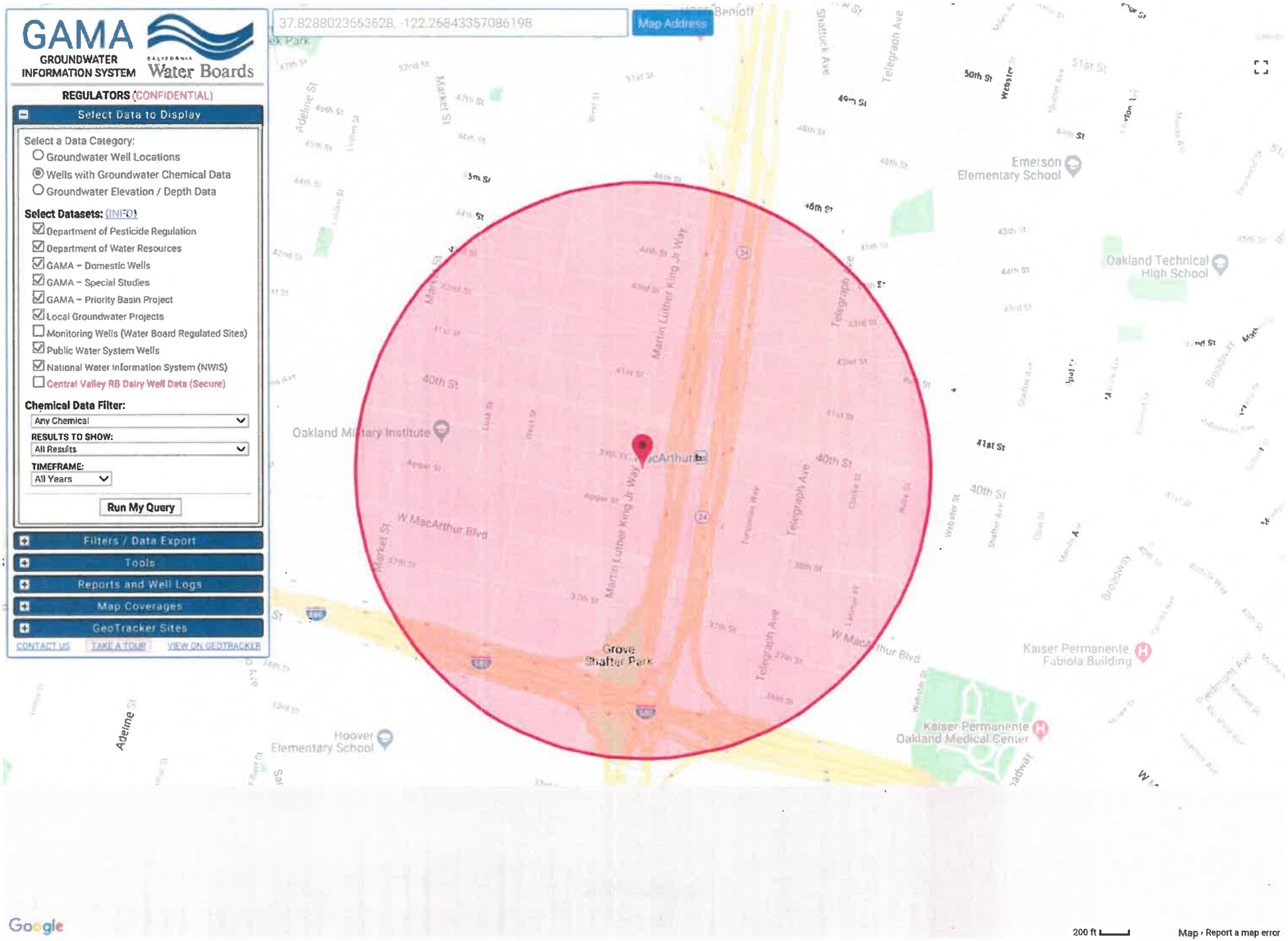
Figure 2

Site Detail Map

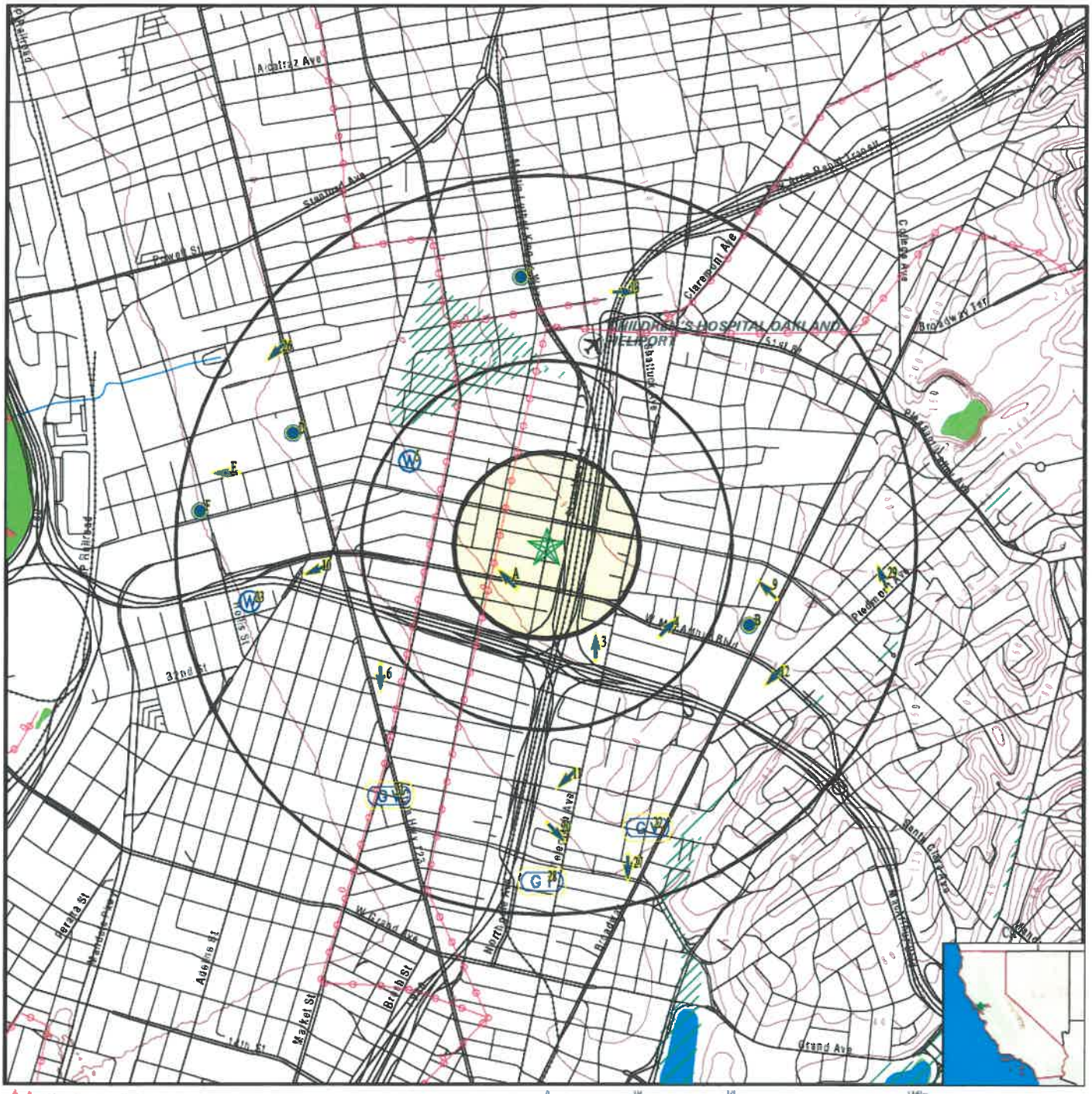
3884 Martin Luther King Jr. Way

Oakland, California

ERM 02/16


GAMA
GROUNDWATER INFORMATION SYSTEM
Water Boards
REGULATORS (CONFIDENTIAL)
Select Data to Display
Select a Data Category:
Groundwater Well Locations
Wells with Groundwater Chemical Data
Groundwater Elevation / Depth Data
Select Datasets: (INFO)
Department of Pesticide Regulation
Department of Water Resources
GAMA – Domestic Wells
GAMA – Special Studies
GAMA – Priority Basin Project
Local Groundwater Projects
Monitoring Wells (Water Board Regulated Sites)
Public Water System Wells
National Water Information System (NWIS)
Central Valley RB Dairy Well Data (Secure)
Chemical Data Filter:
Any Chemical
RESULTS TO SHOW:
All Results
TIMEFRAME:
All Years
Run My Query
Filters / Data Export
Tools
Reports and Well Logs
Map Coverages
GeoTracker Sites
CONTACT US
TAKE A TOUR
VIEW ON GEOTRACKER
37.8288023663628, -122.26843357086198
Map Address
Emerson Elementary School
Oakland Technical High School
Oakland Military Institute
W MacArthur Blvd
Grove Shafter Park
Kaiser Permanente Fabiola Building
Kaiser Permanente Oakland Medical Center
Hoover Elementary School
Google
200 ft
Map data
Report a map error

PHYSICAL SETTING SOURCE MAP - 3685707.1s



- County Boundary
- Major Roads
- Contour Lines
- Power transmission lines
- Earthquake Fault Lines
- Airports
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location
- Closest Hydrogeological Data
- Oil, gas or related wells
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory

SITE NAME: 3884 Martin Luther King Jr Way	CLIENT: URS Corporation
ADDRESS: 3884 Martin Luther King Jr Way Oakland CA 94609	CONTACT: Suzanne Nase
LAT/LONG: 37.8288 / 122.2687	INQUIRY #: 3685707.1s DATE: August 05, 2013 3:17 pm

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation			Database	EDR ID Number
A1 **SW** **1/8 - 1/4 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-0118 NW Not Reported Not Reported 8-11 09/16/1991	**AQUIFLOW**	**51860**
A2 **SW** **1/8 - 1/4 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-0118 NW Not Reported Not Reported 18 bg 07/22/1994	**AQUIFLOW**	**51861**
3 **SSE** **1/4 - 1/2 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-0264 N Not Reported Not Reported 8 04/25/1996	**AQUIFLOW**	**63712**
4 **ESE** **1/4 - 1/2 Mile** **Higher**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-1597 NE Not Reported Not Reported 15 08/05/1995	**AQUIFLOW**	**63784**
5 **WNW** **1/4 - 1/2 Mile** **Lower**			**CA WELLS**	**CADW50000030634**

Latitude :	37.8321		
Longitude :	122.2755		
Site code:	378321N1222755W001	Casgem sta:	01S04W23E001M
Local well:	Not Reported	Casgem s 1:	Industrial
County id:	1		
Basin cd:	2-9.04	Basin desc:	East Bay Plain
Org unit n:	North Central Region Office	Site id:	CADW50000030634

6 **SW** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-0924 S Not Reported Not Reported 5 ft. 05/10/1988	**AQUIFLOW**	**66595**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation			Database	EDR ID Number
B7 ESE 1/2 - 1 Mile Higher	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-0638 NW Not Reported Not Reported 21 11/17/1988	AQUIFLOW	63720
B8 ESE 1/2 - 1 Mile Higher	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-2279 W Not Reported Not Reported 20 09/29/1997	AQUIFLOW	63727
9 ESE 1/2 - 1 Mile Higher	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-1596 NW Not Reported Not Reported 15 09/06/1995	AQUIFLOW	63753
10 West 1/2 - 1 Mile Lower	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-2120 WSW Not Reported Not Reported 5.25 08/31/1995	AQUIFLOW	67880
11 South 1/2 - 1 Mile Lower	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-0886 SW 8.67 14.02 Not Reported 04/07/1997	AQUIFLOW	63803
12 ESE 1/2 - 1 Mile Higher	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-1345 SW 13.82 14.30 Not Reported 01/19/1995	AQUIFLOW	63931
13 NNE 1/2 - 1 Mile Higher	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-0111 E Not Reported Not Reported 20 09/07/1994	AQUIFLOW	67912

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation			Database	EDR ID Number
C14 North 1/2 - 1 Mile Higher	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-1005 N Not Reported Not Reported Not Reported 07/28/1997	AQUIFLOW	66295
D15 WNW 1/2 - 1 Mile Lower	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-0394 Varies 3.21 10.66 Not Reported 01/03/1996	AQUIFLOW	51585
D16 WNW 1/2 - 1 Mile Lower	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-0394 W Not Reported Not Reported Not Reported 12/04/1989	AQUIFLOW	51586
C17 North 1/2 - 1 Mile Higher	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-0220 NE Not Reported Not Reported Not Reported 12/03/1987	AQUIFLOW	52371
D18 WNW 1/2 - 1 Mile Lower	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-2274 SW 4.57 10.27 Not Reported 03/16/1998	AQUIFLOW	51587
D19 WNW 1/2 - 1 Mile Lower	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-2274 SW 4.57 6.74 Not Reported 12/16/1997	AQUIFLOW	51588
20 South 1/2 - 1 Mile Lower	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-1349 SE 9.00 10.39 Not Reported 10/11/1988	AQUIFLOW	63626

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation			Database	EDR ID Number
21 **SSW** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-2181 Varies 1.2 7.8 Not Reported 05/28/1996	AQUIFLOW	63628
22 **SSE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-0575 Varies 10.40 14.49 Not Reported 08/20/1992	AQUIFLOW	64091
23 **West** **1/2 - 1 Mile** **Lower**			CA WELLS	CADW50000030621

Latitude :	37.8266		
Longitude :	122.2833		
Site code:	378266N1222833W001	Casgem sta:	01S04W22J001M
Local well:	Not Reported	Casgem s 1:	Industrial
County id:	1		
Basin cd:	2-9.04	Basin desc:	East Bay Plain
Org unit n:	North Central Region Office	Site id:	CADW50000030621

E24 **WNW** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-2142 W Not Reported Not Reported 8 ft. 12/21/1996	AQUIFLOW	51574
E25 **WNW** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-2142 W Not Reported Not Reported 28ft. 03/04/1996	AQUIFLOW	51575
26 **NW** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-1987 SW 8.5 10.5 Not Reported 11/17/1993	AQUIFLOW	67882

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation			Database	EDR ID Number
27 SSE 1/2 - 1 Mile Lower	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-0241 S Not Reported Not Reported 7.9 11/28/1988	AQUIFLOW	63622
28 South 1/2 - 1 Mile Lower	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-1313 Not Reported Not Reported Not Reported 25-30 02/22/1999	AQUIFLOW	64106
29 East 1/2 - 1 Mile Higher	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-1690 NNW Not Reported Not Reported 18 10/11/1994	AQUIFLOW	63786

E30
West
1/2 - 1 Mile
Lower

FRDS PWS **CA1009246**

PWS ID: CA1009246
Date Initiated: 7706 Date Deactivated: Not Reported
PWS Name: BERKELEY LAND COMPANY
BERKELEY LAND COMPANY
13310 EAGLEFIELD RD
FIREBAUGH, CA 93622

Addressee / Facility: System Owner/Responsible Party
BERKELEY LAND COMPANY
1211 NEWALL AVENUE 1
WALNUT CREEK, CA 94596

Facility Latitude: 37 49 53 Facility Longitude: 122 17 03
City Served: Not Reported
Treatment Class: Untreated Population: 00000060

Violations information not reported.

ENFORCEMENT INFORMATION:

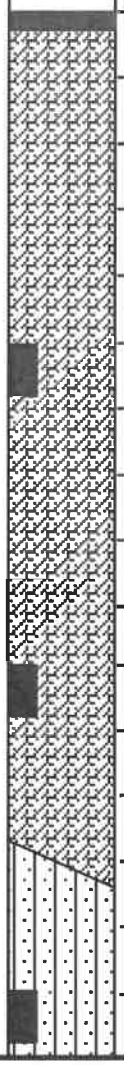
System Name: BERKELEY LAND COMPANY
Violation Type: Initial Tap Sampling for Pb and Cu
Contaminant: LEAD & COPPER RULE
Compliance Period: 1993-07-01 - 2015-12-31
Violation ID: 95V0001
Enforcement Date: Not Reported Enf. Action: Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation			Database	EDR ID Number
F31 West 1/2 - 1 Mile Lower	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-0155 Varies Not Reported Not Reported 4.5 12/01/1991	AQUIFLOW	52363
F32 West 1/2 - 1 Mile Lower	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-1223 WSW 6.13 18.91 Not Reported 07/31/1996	AQUIFLOW	52360
F33 West 1/2 - 1 Mile Lower	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	01-1223 W 10 20 Not Reported 10/30/1989	AQUIFLOW	52361

ATTACHMENT B-3

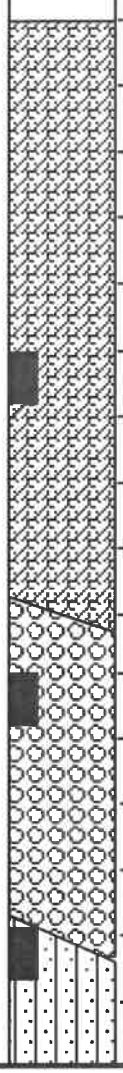
Boring Logs

Sample Number	Blows per foot	Soil Type	Time	Log	Depth in feet	DESCRIPTION
					0	2 inches sidewalk concrete 4 inches sidewalk sub-grade gravel
		Terrace Deposits to 13 ft				brown silty clay with some angular gravel
						alternating layers of fine grained silts and clays with layers of coarser grained clayey, sandy gravels and gravelly sandy clays. Layers range from inches to about 0.5 feet
9795-GP1-5.0			0807		5	
9795-GP1-10.0			0813		10	
						Highest unstabilized Groundwater depth at 12.41 feet bgs
		ML				brown fine sandy silt, wet, to saturated.
9795-GP1-15.0			0822			

Drilled February 21, 2006 using Geoprobe percussion technology. No groundwater indications during drilling. Casing installed and highest GW level was 12.41 ft bgs. Boring terminated at 16 feet. Groundwater sample 9795-GP1-W taken at 1400. Casing removed and GP grouted with neat cement.

JOHN CARVER CONSULTING 415 235 4648	BORING LOG GP1 3884 Martin Luther King Way Oakland, California

Project No. 9795	By: jnc	Not To Scale	March 2006	Figure 12

Sample Number	Blows per foot	Soil Type	Time	Log	Depth in feet	DESCRIPTION
					0	soil in planter area
		Terrace Deposits to 9 ft				brown silty clay with some angular gravel
						alternating layers of fine grained silts and clays with layers of coarser grained clayey, sandy gravels and gravelly sandy clays. Layers range from inches to about 0.5 feet
9795-GP2-5.0			0900		5	
9795-GP2-10.0		GC	0904		10	brown silty clayey sandy GRAVEL
						Highest unstabilized Groundwater depth at 13.36 feet bgs
9795-GP2-14.0		ML	0910		15	brown clayey silt, wet, to saturated.

Drilled February 21, 2006 using Geoprobe percussion technology. No groundwater indications during drilling. Casing installed and highest GW level was 13.36 ft bgs. Boring terminated at 16 feet. Groundwater sample 9795-GP2-W taken at 1410. Casing removed and GP grouted with neat cement.

JOHN CARVER CONSULTING 415 235 4648	BORING LOG GP2 3884 Martin Luther King Way Oakland, California

Project No. 9795	By: jnc	Not To Scale	March 2006	Figure 13

Sample Number	Blows per foot	Soil Type	Time	Log	Depth in feet	DESCRIPTION
		CL			0	soil in planter area brown silty clay with some minor gravel various inclusions of sands and gravels . Inclusions rance from less than one ince to 3 or 4 inches.
9795-GP3-5.0			0954		5	
9795-GP3-10.0		GM	0956		10	brown silty clayey sandy GRAVEL
9795-GP3-14.0			1003		15	Highest unstabilized Groundwater depth at 15.54 feet bgs

Drilled February 21, 2006 using Geoprobe percussion technology. No groundwater indications during drilling. Casing installed and highest GW level was 15.44 ft bgs. Boring terminated at 16 feet. Groundwater sample 9795-GP3-W taken at 1420. Casing removed and GP grouted with neat cement.

JOHN CARVER CONSULTING 415 235 4648	BORING LOG GP3 3884 Martin Luther King Way Oakland, California

Project No. 9795	By: jnc	Not To Scale	March 2006	Figure 14

Sample Number	Blows per foot	Soil Type	Time	Log	Depth in feet	DESCRIPTION
					0	2 inches of asphalt over 4 inches of base rock
		CL				brown silty clay with some minor gravel various inclusions of sands and gravels . Inclusions rance from less than one ince to 3 or 4 inches.
9795-GP4-5.0			1028		5	
						Highest unstabilized Groundwater depth at 10.60 feet bgs
9795-GP4-10.0			1035		10	
		GM				brown silty clay to sandy clay with gravel inclusions
9795-GP4-14.0			1040		15	

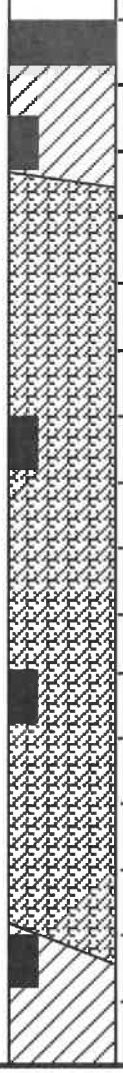
Drilled February 21, 2006 using Geoprobe percussion technology. No groundwater indications during drilling. Casing installed and highest GW level was 10.60 ft bgs. Boring terminated at 16 feet. Groundwater sample 9795-GP4-W taken at 1430. Casing removed and GP grouted with neat cement.

JOHN CARVER CONSULTING 415 235 4648	BORING LOG GP4 3884 Martin Luther King Way Oakland, California			
Project No. 9795	By: jnc	Not To Scale	March 2006	Figure 15

Sample Number	Blows per foot	Soil Type	Time	Log	Depth in feet	DESCRIPTION
					0	2 inches of asphalt over 4 inches of base rock
9795-GP5-2.0		Terrace Deposits to 16 feet	1102			grey silty clay with many inclusions and layers of gravel. Appears to be Terrace deposits extending to the full depth. Gravel size ranges up to 2 inches.
					5	
9795-GP5-8.0			1120			
					10	
9795-GP5-12.0			1130			
					15	

Drilled February 21, 2006 using Geoprobe percussion technology. No groundwater indications during drilling. Boring terminated at 16 feet and grouted with neat cement.

JOHN CARVER CONSULTING 415 235 4648	BORING LOG GP5 3884 Martin Luther King Way Oakland, California			
Project No. 9795	By: jnc	Not To Scale	March 2006	Figure 16

Sample Number	Blows per foot	Soil Type	Time	Log	Depth in feet	DESCRIPTION
					0	2 inches of asphalt over 4 inches of base rock
9795-GP6-1.5		CL	1140			dark brown silty clay
		Terrace Deposits to 16 feet			5	
9795-GP6-6.0			1145			brown silty clay with layers of gravel. Appear to be Terrace deposits. Gravel size ranges up to 1 inch.
9795-GP6-10.0			1150		10	
9795-GP6-14.0		CL	1155		15	brown silty clay, wet to saturated

Drilled February 21, 2006 using Geoprobe percussion technology. No groundwater indications during drilling. Boring terminated at 16 feet and grouted with neat cement.

JOHN CARVER CONSULTING
415 235 4648

BORING LOG GP6
3884 Martin Luther King Way
Oakland, California

Project No. 9795	By: jnc	Not To Scale	March 2006	Figure 17

Sample Number	Blows per foot	Soil Type	Time	Log	Depth in feet	DESCRIPTION
					0	2 inches of asphalt over 4 inches of base rock
		CL				
					5	
9795- GP7-5.0			1235			brown and grey silty clay with minor amounts of gravel. Gravel to 1/2 inch.
9795- GP7-10.0			1240		10	
						brown sandy silty clay, to clayey silty fine sand, wet to saturated
9795- GP7-14.0			1245			
		CL/SC			15	

Drilled February 21, 2006 using Geoprobe percussion technology. No groundwater indications during drilling. Boring terminated at 16 feet and grouted with neat cement.

JOHN CARVER CONSULTING 415 235 4648	BORING LOG GP7 3884 Martin Luther King Way Oakland, California			
Project No. 9795	By: jnc	Not To Scale	March 2006	Figure 18

Boring Log GP-8

Not included in the

March 10, 2006

Report of Soil and Groundwater Investigation

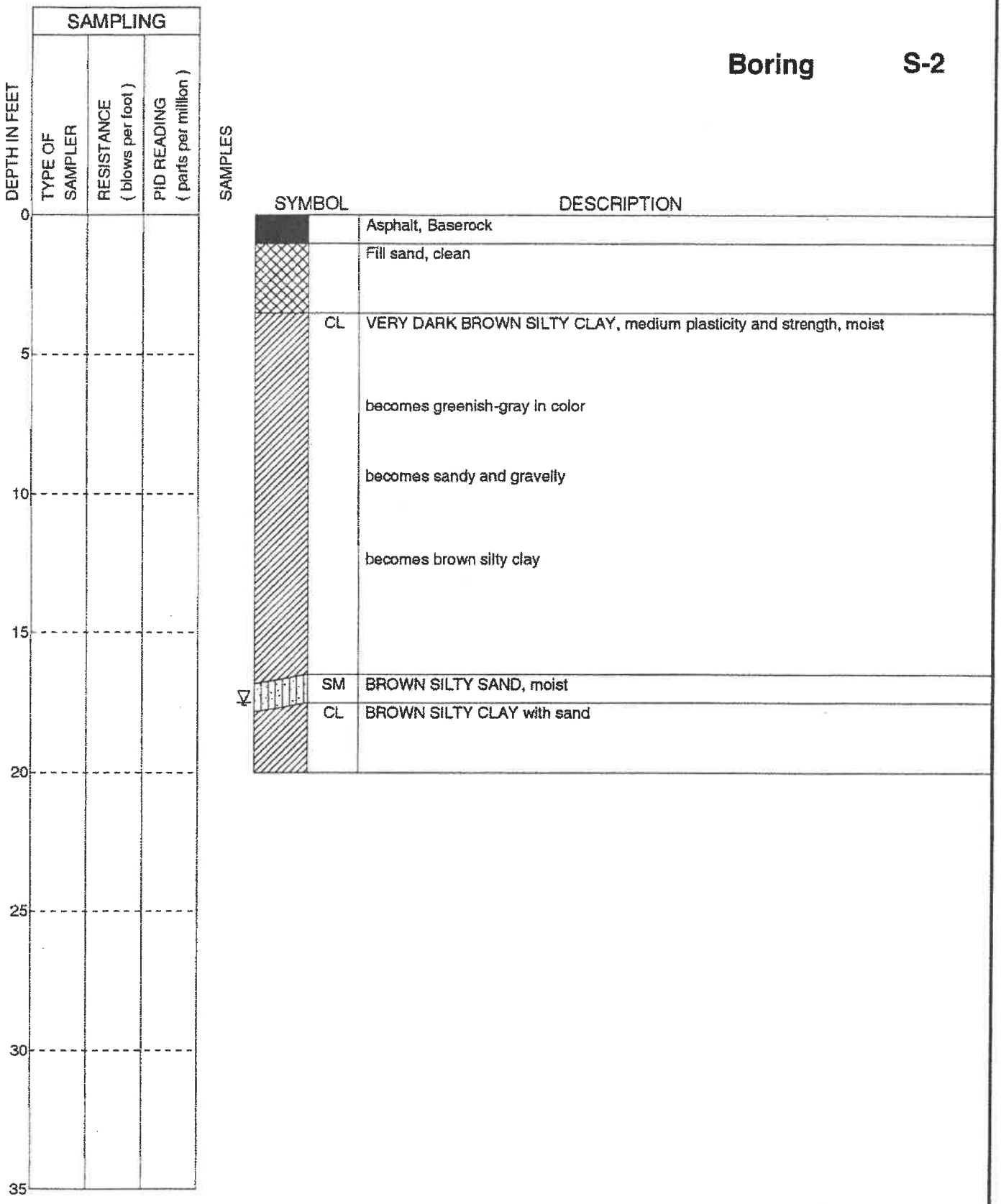
Prepared by John Carver Consulting

Boring S-1

DEPTH IN FEET	SAMPLING: TYPE OF SAMPLER	SAMPLING: RESISTANCE (blows per foot)	SAMPLING: PID READING (parts per million)	SAMPLES	SYMBOL	DESCRIPTION
0						Asphalt, Baserock
					CL	BROWN SILTY CLAY, medium plasticity and strength, moist
						becomes gravelly
5						becomes olive gray in color, with gravel
						hydrocarbon odor
10						becomes brown in color, less gravel
						clean brown silty clay
15				▽		water at 16.5' bgs
20						
25						
30						
35						

Job No: 28066716.30000 Pt. ID: LUCKYA~1.GPJ / S-1	URS		Log of Boring
Date Completed: 4/21/04 Boring Depth: 22.0 ft.	Driller: Gregg Drilling Logged by: S. McKnight	Drilling Method: HSA Continuous Core	Location: Oakland, California

Boring S-2



Job No: 28066716.30000 Pt. ID: LUCKYA~1.GPJ / S-2	URS		**Log of Boring**
Date Completed: 4/21/04 Boring Depth: 20.0 ft.	Driller: Gregg Drilling Logged by: S. McKnight	Drilling Method: HSA Continuous Core	Location: Oakland, California

Boring S-3

DEPTH IN FEET	SAMPLING: TYPE OF SAMPLER	SAMPLING: RESISTANCE (blows per foot)	SAMPLING: PID READING (parts per million)	SAMPLES	SYMBOL	DESCRIPTION
0						Asphalt, Baserock
					CL	VERY DARK BROWN SILTY CALY, medium plaicity, medium strength, moist
5						
					CH	LIGHT GRAY/OLIVE GRAY SILTY CLAY, high plasticity, medium strength, moist
10						
					CL	BROWN SILTY CLAY, medium plasticity and strength, moist
15						Groundwater assumed at 16.5' bgs from S-1 becomes very gravelly, >2" diamater
20						
25						
30						
35						

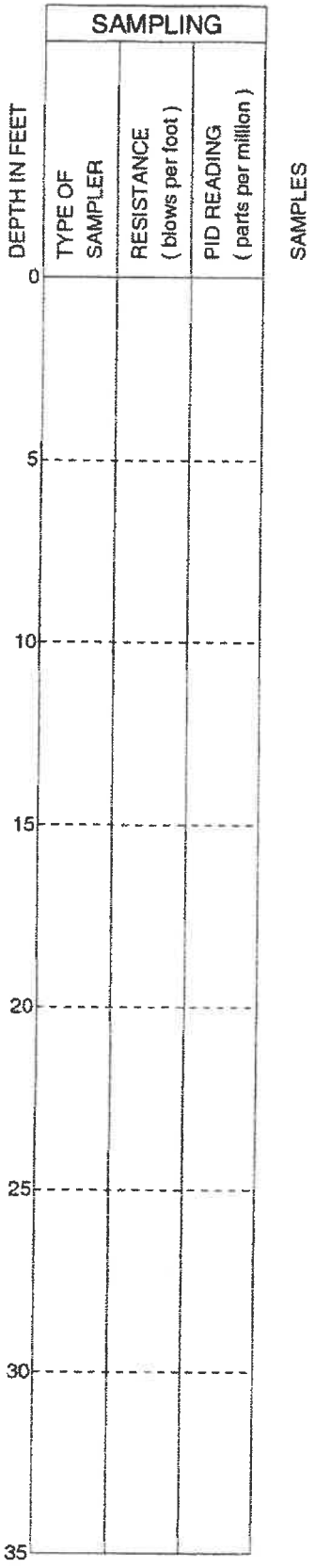
Job No: 28066716.30000 Pt. ID: LUCKYA~1.GPJ / S-3	URS	**Log of Boring**
Date Completed: 4/21/04 Boring Depth: 20.0 ft.	Driller: Gregg Drilling Drilling Method: HSA Continuous Core Logged by: S. McKnight	Location: Oakland, California

Boring S-4

DEPTH IN FEET	SAMPLING: TYPE OF SAMPLER	SAMPLING: RESISTANCE (blows per foot)	SAMPLING: PID READING (parts per million)	SAMPLES	SYMBOL	DESCRIPTION
0						Asphalt, Baserock
					CL	VERY DARK BROWN SILTY CLAY, medium plasticity and strength, moist
5						becomes light gray in color
						olive gray in color, less gravel
10						becomes olive gray, sandy, gravelly, silty clay
15						becomes brown silty, sandy clay
20						
25						
30						
35						

Job No: 28066716.30000 Pt. ID: LUCKYA~1.GPJ / S-4	URS	Log of Boring
Date Completed: 4/21/04 Boring Depth: 20.0 ft.	Driller: Gregg Drilling Drilling Method: HSA Continuous Core Logged by: S. McKnight	Location: Oakland, California

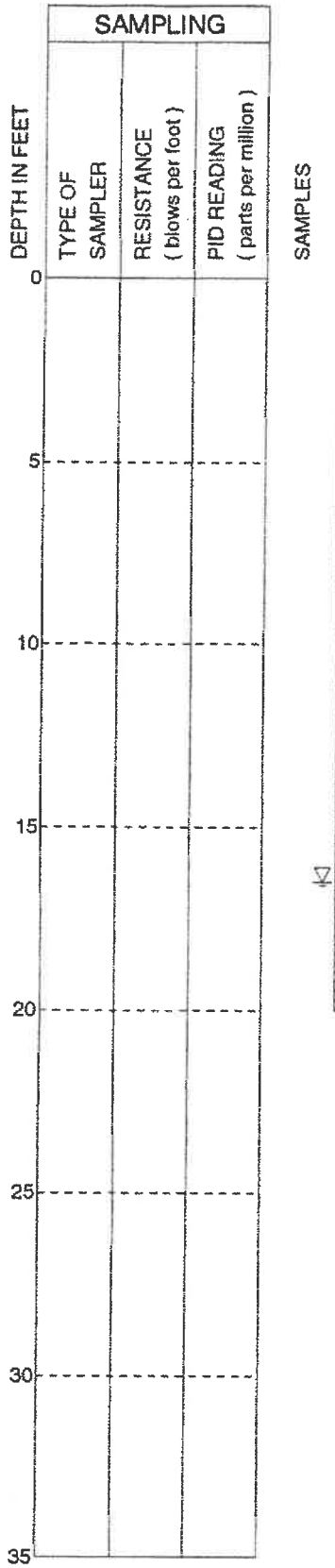
Boring S-5



SYMBOL		DESCRIPTION
		Rock and Asphalt
	CL	VERY DARK BROWN SILTY CLAY, medium plasticity and strength, moist
		becomes olive gray in color
		becomes sandy, gravelly, silty clay
		becomes greenish gray, brownish red mottled color
		becomes brown silty clay, moist to wet

Job No: 28066716.30000 Pt. ID: LUCKYA-1.GPJ / S-5	URS	**Log of Boring**
Date Completed: 4/21/04 Boring Depth: 20.0 ft.	Driller: Gregg Drilling Drilling Method: HSA Continuous Core Logged by: S. McKnight	Location: Oakland, California

Boring S-6



SYMBOL		DESCRIPTION
		Asphalt, baserock
	CL	VERY DARK BROWN SILTY CLAY,with rootlets, medium plasticity and strength, moist
		becomes yellowish brown
		becomes gravelly
		dry adn gravelly
	CL	BROWN SITLY CLAY, moist
▽		water at 16.5' bgs

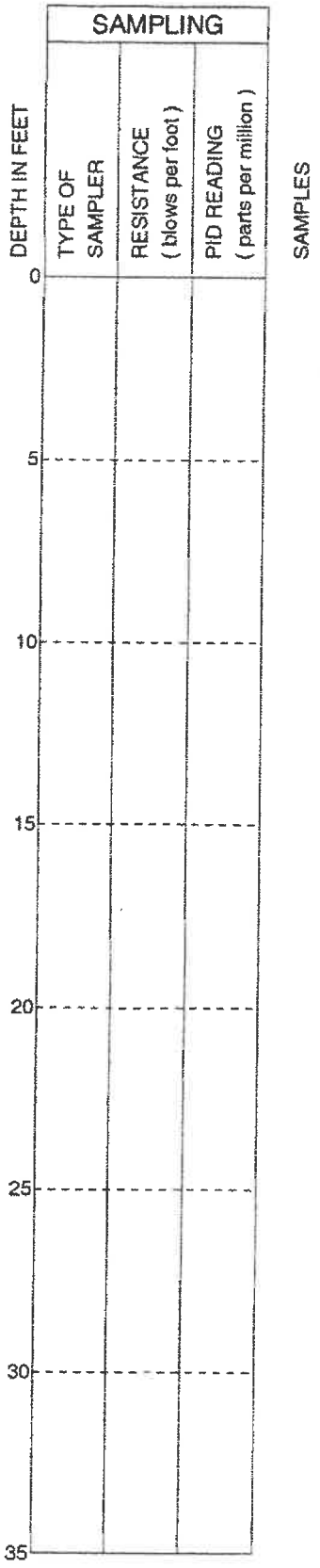
Job No: 28066716.30000 Pt. ID: LUCKYA-1.GPJ / S-6	URS		Log of Boring
Date Completed: 4/21/04 Boring Depth: 20.0 ft.	Driller: Gregg Drilling Logged by: S. McKnight	Drilling Method: HSA Continuous Core	Location: Oakland, California

Boring S-7

DEPTH IN FEET	SAMPLING: TYPE OF SAMPLER	SAMPLING: RESISTANCE (blows per foot)	SAMPLING: PID READING (parts per million)	SAMPLES	SYMBOL	DESCRIPTION
0						Asphalt, baserock
					CL	VERY DARK BROWN SILTY CLAY, medium plasticity and strength, moist
						becomes yellowish brown
5						becomes gravelly, dry
10						becomes yellowish brown-olive grey mottled, silty, clay, moist
15						water at 16.5' bgs
						becomes gravelly
20						
25						
30						
35						

Job No: 28066716.30000 Pt. ID: LUCKYA-1.GPJ / S-7	URS	**Log of Boring**
Date Completed: 4/21/04 Boring Depth: 24.0 ft.	Driller: Gregg Drilling Drilling Method: HSA Continuous Core Logged by: S. McKnight	Location: Oakland, California

Boring S-8



SYMBOL	DESCRIPTION
	Asphalt
CL	VERY DARK BROWN SILTY CLAY, medium plasticity and strength, moist becomes yellowish brown in color brown sandy, gravelly clay, dry
CH	BROWN SILTY CLAY with gravel, high plasticity and strength, dry
CL	YELLOWISH BROWN SILTY CLAY, medium plasticity and strength, moist

Job No: 28066716.30000
Pt. ID: LUCKYA~1.GPJ / S-8

URS

Log of Boring

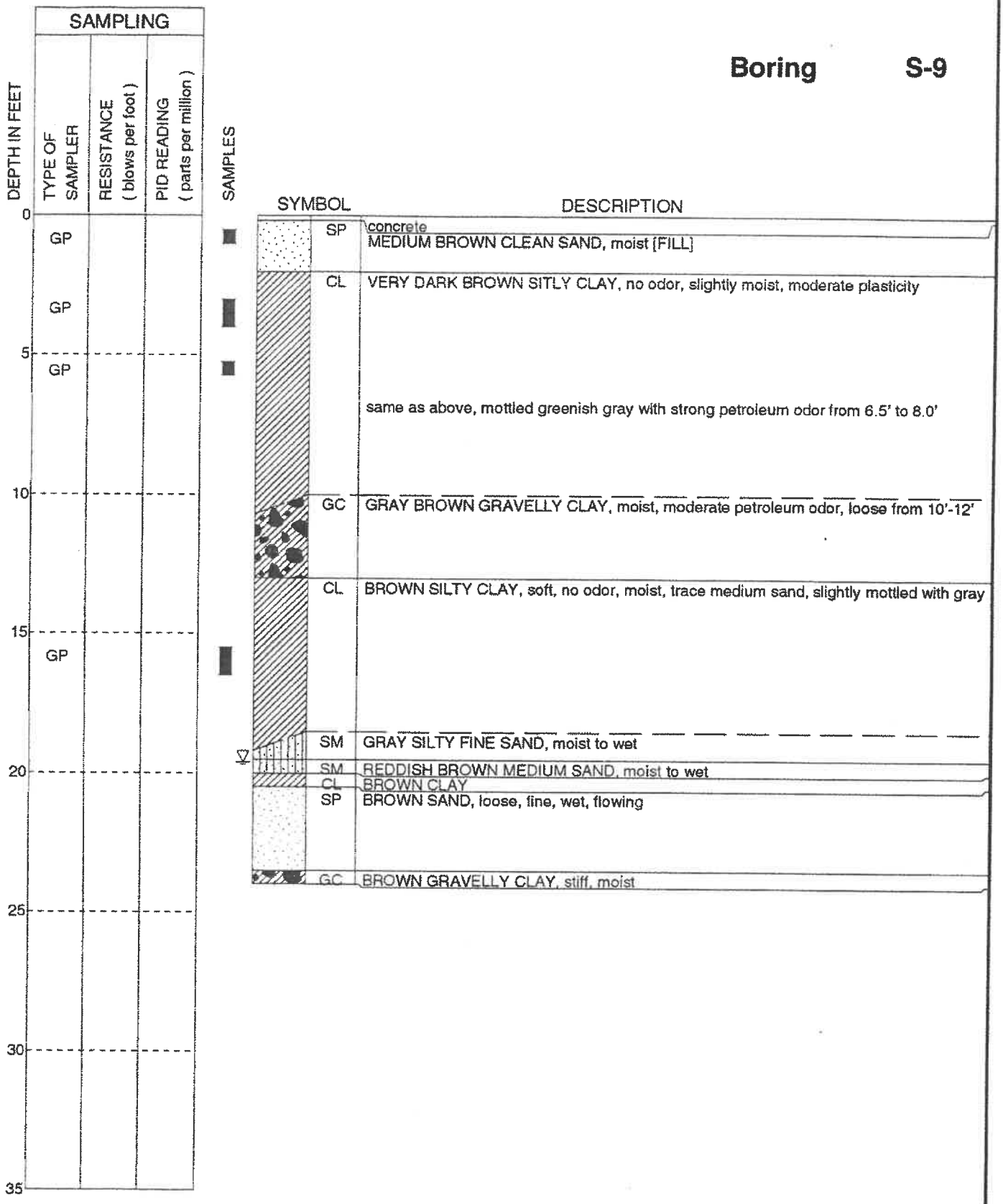
Date Completed: 4/22/04
Boring Depth: 20.0 ft.

Driller: Gregg Drilling
Logged by: S. McKnight

Drilling Method: HSA Continuous Core

Location:
Oakland, California

Boring S-9



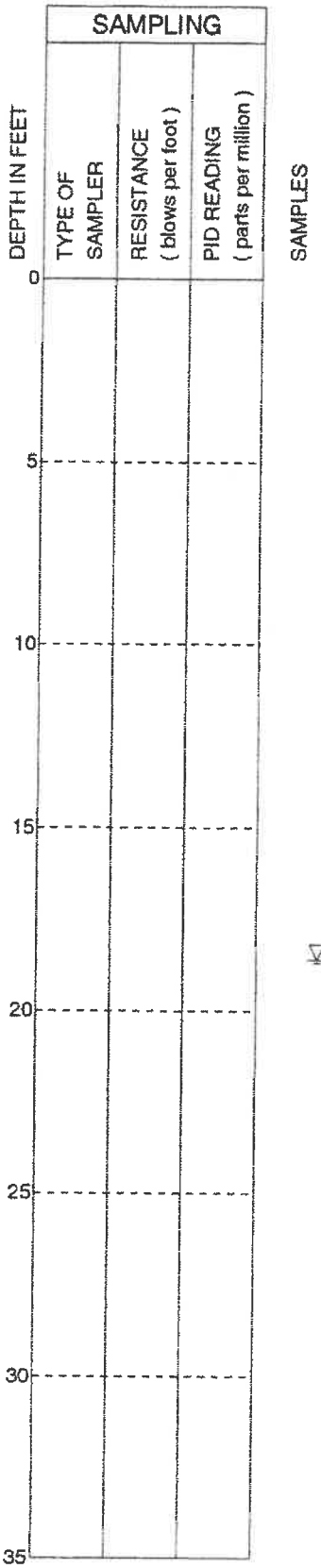
Job No: 28066716.30000 Pt. ID: LUCKYA~1.GPJ / S-9	URS		**Log of Boring**
Date Completed: 4/22/04 Boring Depth: 24.0 ft.	Driller: Gregg Drilling Logged by: S. McKnight	Drilling Method: HSA Continuous Core	Location: Oakland, California

Boring S-10

DEPTH IN FEET	SAMPLING: TYPE OF SAMPLER	SAMPLING: RESISTANCE (blows per foot)	SAMPLING: PID READING (parts per million)	SAMPLES	SYMBOL	DESCRIPTION
0						Asphalt
					CL	VERY DARK BROWN SILTY, SANDY CLAY, medium plasticity, and strength, moist
5						becomes yellowish brown in color and gravelly, dry
10						becomes greenish gray, gravelly clay, moist
15						becomes silty, brown clay, moist to wet
				▽		Groundwater, becomes sandier
20						gravelly
25						
30						
35						

Job No: 28066716.30000 Pt. ID: LUCKYA-1.GPJ / S-10	URS		**Log of Boring**
Date Completed: 4/22/04 Boring Depth: 24.0 ft.	Driller: Gregg Drilling Logged by: S. McKnight	Drilling Method: HSA Continuous Core	Location: Oakland, California

Boring S-11



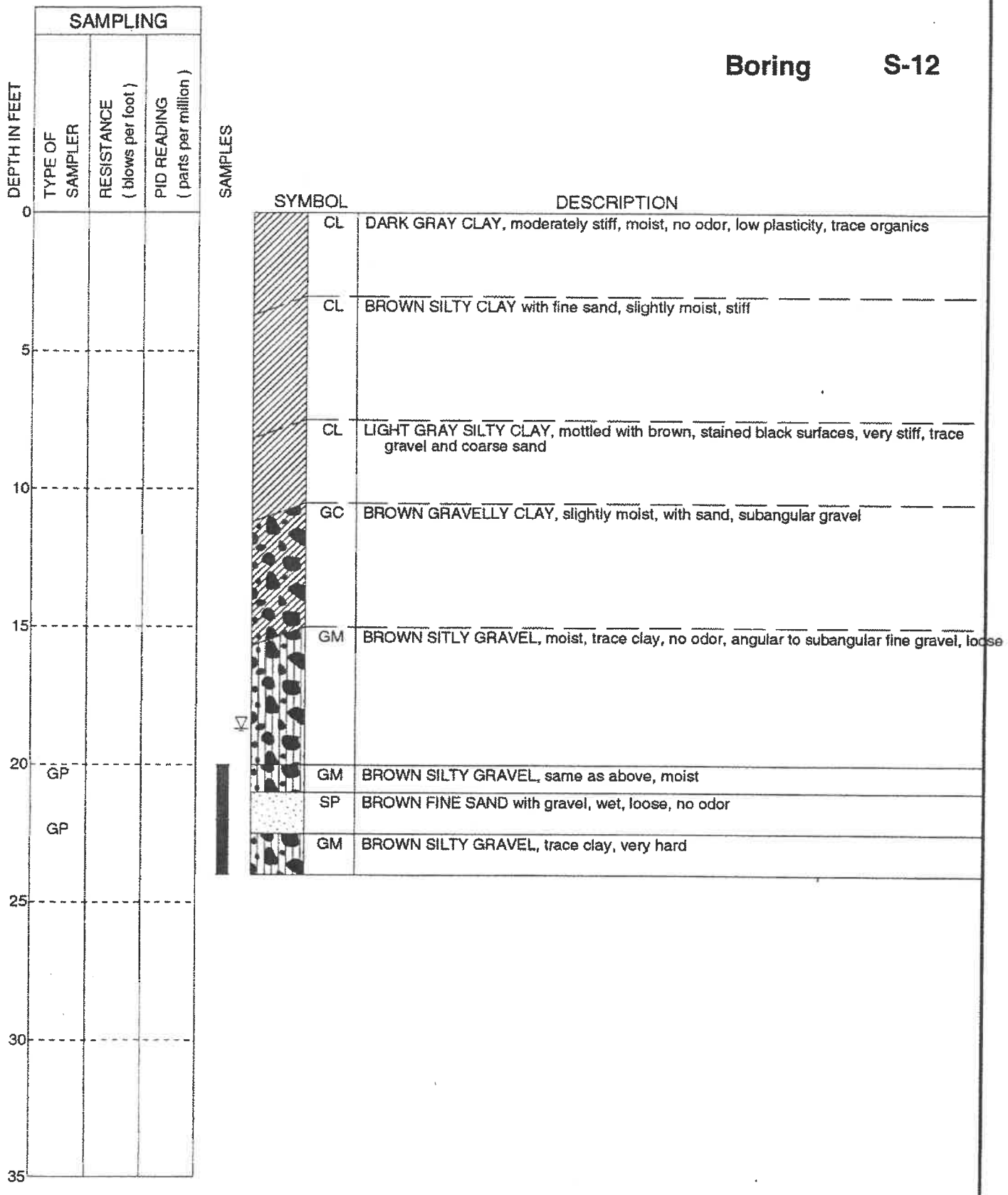
SYMBOL		DESCRIPTION
		concrete
	CL	VERY DARK BROWN SILTY CLAY, with gravel, medium plasticity and strength, moist
		becomes very gravelly, yellowish brown, dry
		at 8.0' bgs, greenish gray color, hydrocarbon odor
		green layer with hydrocarbon
		Brown silty clay, moist
		becomes gravelly with sand
▽		water at 18.6' bgs

Job No: 28066716.30000 Pt. ID: LUCKYA~1.GPJ / S-11	URS	Log of Boring
Date Completed: 4/22/04 Boring Depth: 24.0 ft.	Driller: Gregg Drilling Drilling Method: HSA Continuous Core Logged by: S. McKnight	Location: Oakland, California

Log Template: 14B

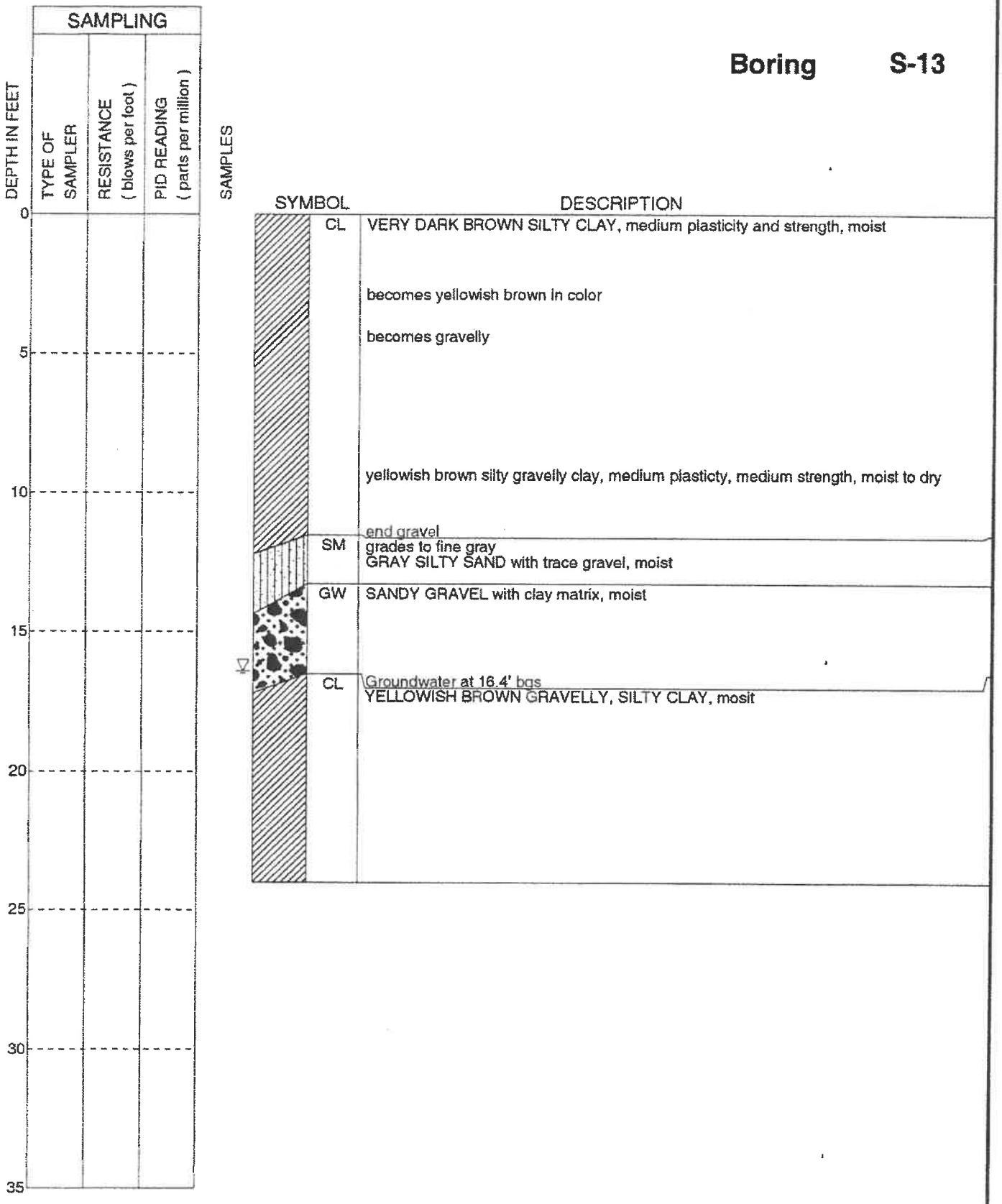
June 15, 2004

Boring S-12



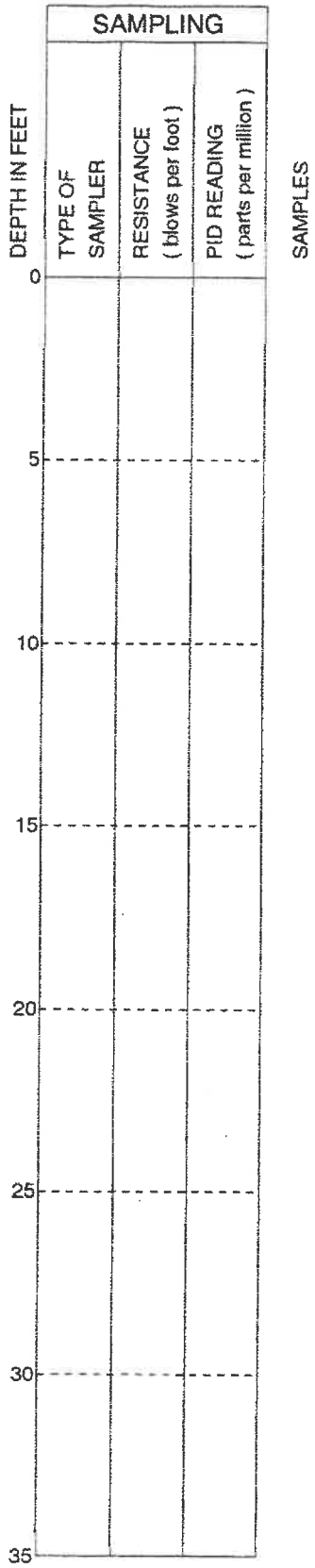
Job No: 28066716.30000 Pt. ID: LUCKYA~1.GPJ / S-12	URS		Log of Boring
Date Completed: 4/22/04 Boring Depth: 24.0 ft.	Driller: Gregg Drilling Logged by: S. McKnight	Drilling Method: HSA Continuous Core	Location: Oakland, California

Boring S-13



Job No: 28066716.30000 Pt. ID: LUCKYA-1.GPJ / S-13	URS		Log of Boring
Date Completed: 4/22/04 Boring Depth: 24.0 ft.	Driller: Gregg Drilling Logged by: S. McKnight	Drilling Method: HSA Continuous Core	Location: Oakland, California

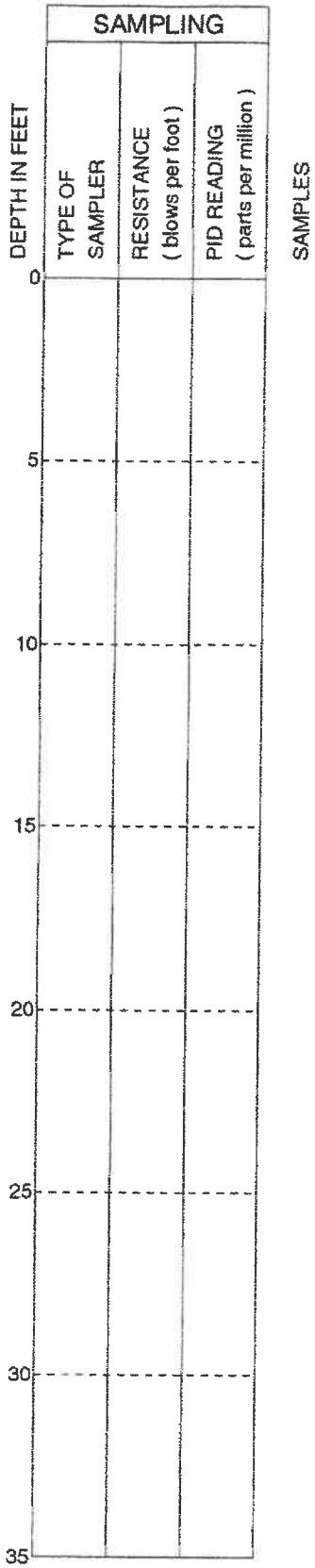
Boring S-14



SYMBOL		DESCRIPTION
		Grass
	CL	DARK BROWN CLAY, slightly moist, trace angular grave, trace organics, moderately stiff, no odor, trace man-made debris
	CL	BROWN SILTY CLAY, with medium sand, stiff to very stiff, trace fine angular gravel
	GC	BROWN GRAVELLY CLAY with medium and, moist, stiff, subangular gravel, no odor
	GC	YELLOWISH-RED GRAVELLY SAND with clay, rounded to subrounded gravel, loose, moderately hard, no odor moist to wet at 17'

Job No: 28066716.30000 Pt. ID: LUCKYA~1.GPJ / S-14	URS		Log of Boring
Date Completed: 4/23/04 Boring Depth: 20.0 ft.	Driller: Gregg Drilling Logged by: S. McKnight	Drilling Method: HSA Continuous Core	Location: Oakland, California

Boring S-15



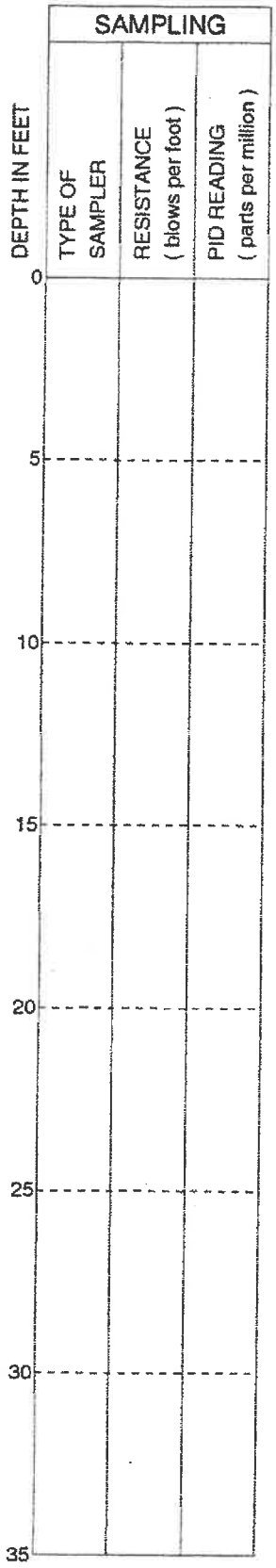
SYMBOL		DESCRIPTION
	CL	DARK BROWN CLAY, slightly mottled with brownish yellow, moderate plasticity, slightly moist, moderate organics
		same as above
	CL	BROWN COARSE SANDY CLAY, trace fine gravel, very stiff, slightly moist, angular grave, earthy odor
	GC	BROWN GRAVELLY CLAY with sand, moist, fine angular gravel, trace coarse gravel, stiff
		same as above
		same as above
		wet at 19.5'

Job No: 28066716.30000 Pt. ID: LUCKYA~1.GPJ / S-15	URS	**Log of Boring**
Date Completed: 4/23/04 Boring Depth: 20.0 ft.	Driller: Gregg Drilling Drilling Method: HSA Continuous Core Logged by: S. McKnight	Location: Oakland, California

Log Template: 14B

June 15, 2004

Boring S-16



SYMBOL		DESCRIPTION
		Grass
	CL	DARK BROWN CLAY, slightly mottled with dark gray, trace organics, moist, stiff, trace medium sand, no odor
	CL	BROWN SILTY CLAY, very stiff with sand, slightly mottled with black, slightly moist, no odor
		same as above, with coarse sand, trace angular fine gravel, moist
	ML	BROWN SANDY SILT, moist, moderately stiff, no odor
	GC	BROWN GRAVELLY CLAY with medium sand, moist, stiff, subangular to subrounded gravel no odor
		very moist to wet at 18'

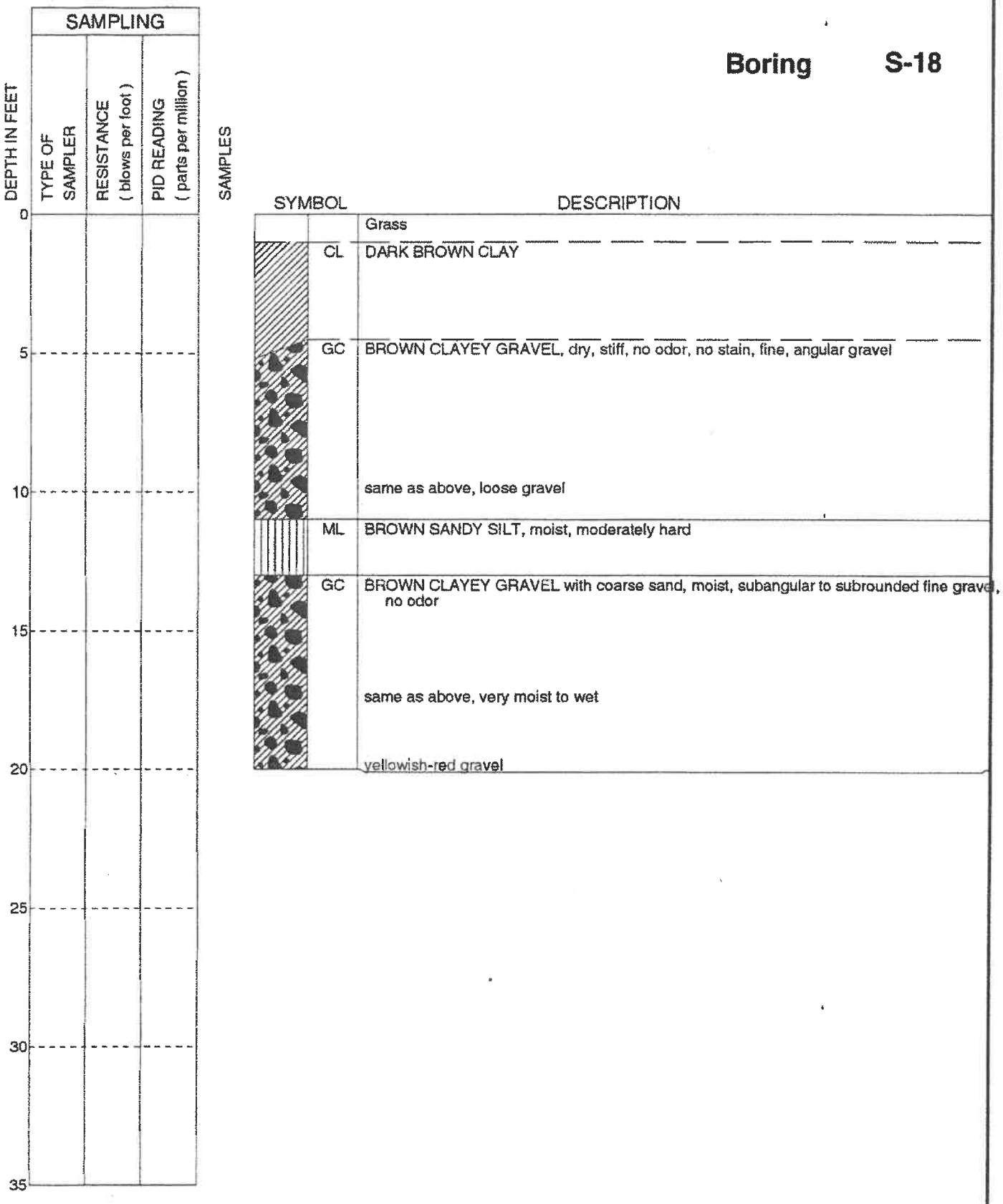
Job No: 28066716.30000 Pt. ID: LUCKYA~1.GPJ / S-16	URS	**Log of Boring**
Date Completed: 4/23/04 Boring Depth: 20.0 ft.	Driller: Gregg Drilling Logged by: S. McKnight Drilling Method: HSA Continuous Core	Location: Oakland, California

Boring S-17

DEPTH IN FEET	SAMPLING: TYPE OF SAMPLER	SAMPLING: RESISTANCE (blows per foot)	SAMPLING: PID READING (parts per million)	SAMPLES	SYMBOL	DESCRIPTION
0					CL	VERY DARK BROWN SILTY CLAY, medium plasticity and strength, moist
						becomes yellowish brown color with gravel
5						mottled with greenish gray
10						becomes very gravelly and sandier
15				▽		gravelly, sandy clay, wet at 17'bgs
						yellowsh brown, sandy, gravelly clay, moist
20						
25						
30						
35						

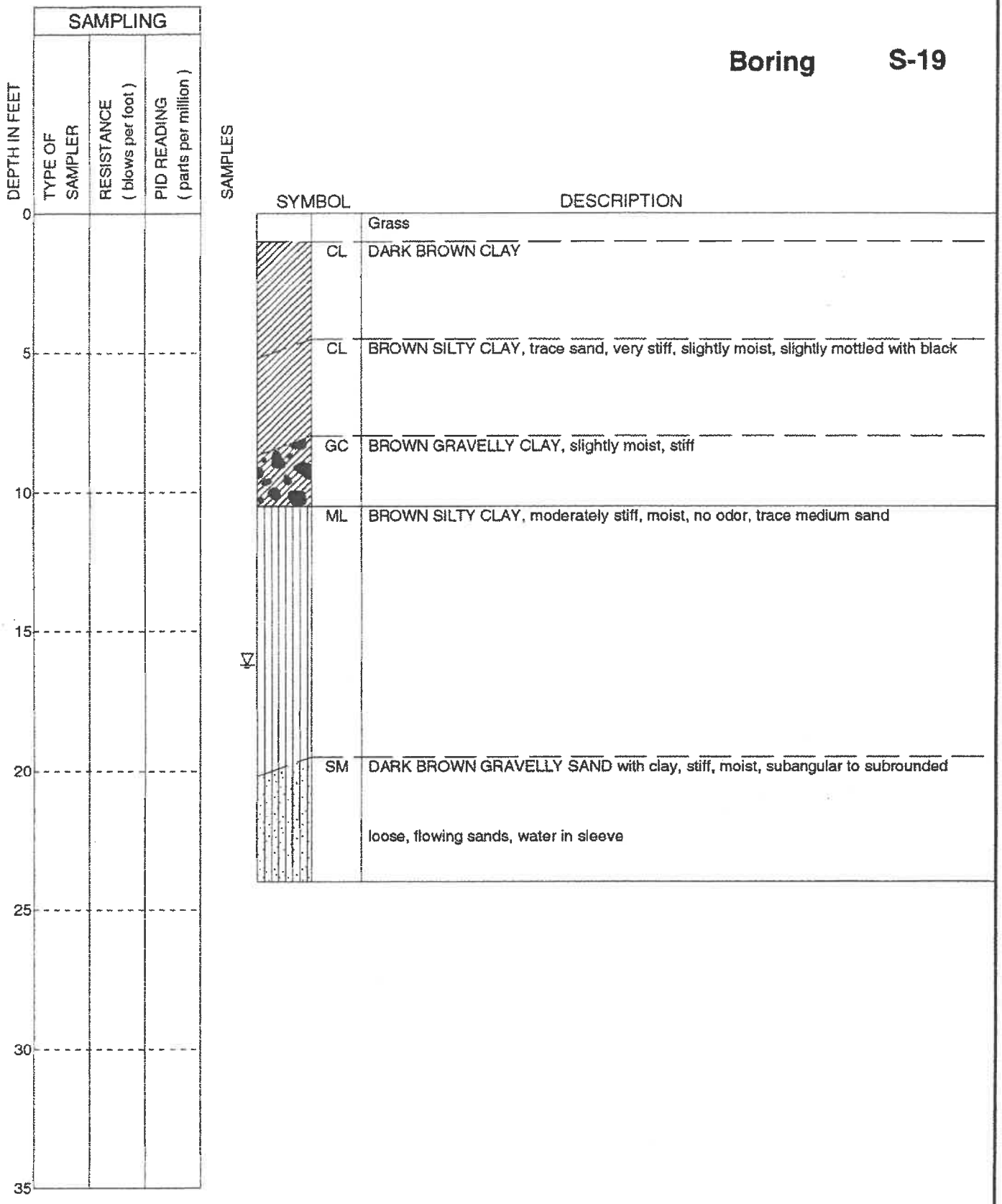
Job No: 28066716.30000 Pt. ID: LUCKYA~1.GPJ / S-17	URS		Log of Boring
Date Completed: 4/22/04 Boring Depth: 24.0 ft.	Driller: Gregg Drilling Logged by: S. McKnight	Drilling Method: HSA Continuous Core	Location: Oakland, California

Boring S-18



Job No: 28066716.30000 Pt. ID: LUCKYA~1.GPJ / S-18	URS		Log of Boring
Date Completed: 4/23/04 Boring Depth: 20.0 ft.	Driller: Gregg Drilling Logged by: S. McKnight	Drilling Method: HSA Continuous Core	Location: Oakland, California

Boring S-19



Job No: 28066716.30000 Pt. ID: LUCKYA~1.GPJ / S-19	URS		**Log of Boring**
Date Completed: 4/22/04 Boring Depth: 24.0 ft.	Driller: Gregg Drilling Logged by: S. McKnight	Drilling Method: HSA Continuous Core	Location: Oakland, California

BORING SB- 1

DEPTH IN FEET	SAMPLING: TYPE OF SAMPLER	SAMPLING: PID READING (parts per million)	SAMPLING: INCHES DRIVEN/ RECOVERED	SAMPLES	SYMBOL	DESCRIPTION
0						Hand Auger 0-6 ft. Top 6 ft. not logged.
5			48/48		ML	Greenish Gray (10GY 5/1) SILT WITH GRAVEL AND CLAY, slightly plastic, moist
						Grades to Dark Yellowish Brown (10YR 4/6) GRAVELLY SILT, moist
10			42/42		CL	Mottled Yellowish Brown (10YR 5/6) and Light Gray (N 7/1) SILTY CLAY, soft, moist to wet
				▽		Grades to Gravelly Clay, wet
15			42/42		SC	Grades to Mottled Yellowish Brown (10YR 5/6) and Light Gray (N 7/1) SILTY CLAY, soft, wet
			36/36		SM	Grades to SILTY SAND at 17.5 ft.
20					SM	Grades to Dark Reddish Brown (5YR 3/4) SILTY SAND WITH GRAVEL AND CLAY
25						

Note:
End of boring at 20 ft. bgs.

Job No: 28068161 Pt. ID: 3884_MLK_JUL13.GPJ	URS 3884 MLK	Log of Boring
Date Completed: 7/12/13 Boring Depth: 20 ft.	Driller: Vapor Tech Services Drilling Method: Direct Push Technology	Location: Oakland, CA

BORING SB- 2

DEPTH IN FEET	SAMPLING: TYPE OF SAMPLER	SAMPLING: PID READING (parts per million)	SAMPLING: INCHES DRIVEN/ RECOVERED	SAMPLES	SYMBOL	DESCRIPTION
0						Hand Auger 0-6 ft. Top 6 ft. not logged.
5			48/48		ML	Dark Yellowish Brown (10YR 4/6) SILT WITH GRAVEL AND CLAY, slightly plastic, moist
10			42/42		SM	Mottled Yellowish Brown (10YR 5/6) and Light Gray (N 7/1) SILTY SAND, loose to medium dense, moist to wet
			42/42	▽	SC	Grades to CLAYEY SAND, soft, wet
15						Grades to CLAYEY SAND WITH GRAVEL
			36/36		SM	Mottled Yellowish Brown (10YR 5/6) and Light Gray (N 7/1) SILTY SAND WITH CLAY, soft, wet, trace gravel
20						
25						

Note:
End of boring at 20 ft. bgs.

Job No: 28068181 Pt. ID: 3884_MLK_JUL13.GPJ	URS 3884 MLK	Log of Boring
Date Completed: 7/12/13 Boring Depth: 20 ft.	Driller: Vapor Tech Services Drilling Method: Direct Push Technology	Location: Oakland, CA

BORING SB- 3

DEPTH IN FEET	SAMPLING: TYPE OF SAMPLER	SAMPLING: PID READING (parts per million)	SAMPLING: INCHES DRIVEN/ RECOVERED	SAMPLES	SYMBOL	DESCRIPTION
0						Hand Auger 0-6 ft. Top 6 ft. not logged.
5			48/48		ML	Dark Yellowish Brown (10YR 4/6) CLAYEY SILT WITH GRAVEL, slightly plastic, moist
10			42/42		CL	Grades to Mottled Yellowish Brown (10YR 5/6) and Light Gray (N 7/1) SILTY CLAY, medium stiff, moist
					ML	Grades to CLAYEY SILT, stiff
			42/42		CL	Grades to SILTY CLAY, medium stiff
15						Grades to GRAVELLY CLAY, very stiff, moist to dry
			36/36			
20						
25						

Note:
End of boring at 20 ft. bgs.

Job No: 28068181 Pt. ID: 3884_MLK_JUL13.GPJ	URS 3884 MLK	Log of Boring
Date Completed: 7/12/13 Boring Depth: 20 ft.	Driller: Vapor Tech Services Drilling Method: Direct Push Technology	Location: Oakland, CA

BORING SB- 4

DEPTH IN FEET	SAMPLING: TYPE OF SAMPLER	SAMPLING: PID READING (parts per million)	SAMPLING: INCHES DRIVEN/ RECOVERED	SAMPLES	SYMBOL	DESCRIPTION
0						Hand Auger 0-6 ft.
						Top Soil to 2 ft.
					SW	Yellowish Brown (10YR 5/6) WELL GRADED SAND WITH GRAVEL, dry
5			48/48			
					ML	Light Brownish Gray (10YR 6/2) SILT, very low plasticity, moist
						Grades Greenish Gray (10GY 6/1), with CLAY AND GRAVEL
					CL	Dark Yellowish Brown (10YR 4/6) SILTY CLAY WITH GRAVEL, stiff, moist
						Grades to Brownish Yellow (10YR 6/6) SILTY CLAY, medium stiff, moist
10			42/42			
			42/42			Grades to Mottle Yellowish Brown (10YR 5/6) and Light Gray (N 7/1), SILTY CLAY, meium stiff, moist
15						
				▽		Grades to GRAVELLY CLAY, moist to wet
						Grades to SILTY CLAY, wet
			36/36		CL	Brown (10YR 4/3) GRAVELLY CLAY, medium stiff, wet, gravels up to 1-inch
20						
25						

Note:
End of boring at 20 ft. bgs.

Job No: 28068161 Pt. ID: 3884_MLK_JUL13.GPJ	URS 3884 MLK	Log of Boring
Date Completed: 7/11/13 Boring Depth: 20 ft.	Driller: Vapor Tech Services Drilling Method: Direct Push Technology	Location: Oakland, CA

BORING SB- 5

DEPTH IN FEET	SAMPLING: TYPE OF SAMPLER	SAMPLING: PID READING (parts per million)	SAMPLING: INCHES DRIVEN/ RECOVERED	SAMPLES	SYMBOL	DESCRIPTION
0						Concrete 4"
			60/36		CL	Very Dark Brown (7.5YR 2.5/2) SILTY CLAY, stiff, dry
					CL	Yellowish Brown (10YR 5/8) SILTY CLAY, trace very fine sand, stiff, dry
5						Grades to GRAVELLY SANDY CLAY, gravels are angular to subangular Hydrocarbon odor at 6.5 ft. Grades Greenish Gray (Gley 5/1)
			48/48			
					CL	Grades to Mottled Yellowish Brown (10YR 5/6) and Gley (7/1) SILTY CLAY, medium stiff, moist
10			36/36			
		0				Grades Yellowish Brown (10YR 5/8)
			36/36			
15		0			GC	Small 6-inch CLAYEY GRAVEL lens at 15 ft., wet
					SC	Yellowish Brown (10YR 5/8) CLAYEY SAND, medium dense, wet
						Grades GLEY (5/1)
20		0				
25						

Note:
End of boring at 20 ft. bgs.

Job No: 28068161 Pt. ID: 3884_MLK_JUL13.GPJ	URS 3884 MLK	Log of Boring
Date Completed: 7/9/13 Boring Depth: 20 ft.	Driller: Vapor Tech Services Drilling Method: Direct Push Technology	Location: Oakland, CA

BORING SB- 6

DEPTH IN FEET	TYPE OF SAMPLER	PID READING (parts per million)	INCHES DRIVEN/ RECOVERED	SAMPLES	SYMBOL	DESCRIPTION
0			60/36			Concrete 4"
					CL	Very Dark Brown (7.5YR 2.5/2) SILTY CLAY, stiff, dry
					CL	Yellowish Brown (10YR 5/8) SILTY CLAY WITH SAND, stiff, moist
5			48/48		CL	Grades to GRAVELLY CLAY WITH SAND, Greenish Gray Gley (5/1), hydrocarbon odor Gravels are angular to subangular
10			36/36			Grades to Yellowish Brown (10YR 5/6)
			36/36		CL	Grades to Mottled Yellowish Brown (10YR 5/6) and GLEY (7/1) SILTY CLAY, soft, moist
15		0				
		600	36/36		GC	Small 6-inch CLAYEY GRAVEL lens at 15.5 ft.
					SC	Yellowish Brown (10YR 5/6) and Greenish Gray (GLEY 4/1) CLAYEY SAND WITH SILT, loose, wet
					SM	Strong hydrocarbon odor (gasoline) at 16 ft. Grades to SILTY SAND at 17 ft.
			24/24		ML	Grades to CLAYEY SILT at 19 ft.
20		0				
25						

Note:
End of boring at 20 ft. bgs.

Job No: 28068161 Pt. ID: 3884_MLK_JUL13.GPJ	URS 3884 MLK	Log of Boring
Date Completed: 7/9/13 Boring Depth: 20 ft.	Driller: Vapor Tech Services Drilling Method: Direct Push Technology	Location: Oakland, CA

BORING SB-7

DEPTH IN FEET	TYPE OF SAMPLER	PID READING (parts per million)	INCHES DRIVEN/ RECOVERED	SAMPLES	SYMBOL		DESCRIPTION
0							Concrete 4"
			60/36			CL	Very Dark Brown (7.5YR 2.5/2) SILTY CLAY, stiff, dry
						CL	Yellowish Brown (10YR 5/8) GRAVELLY SILTY CLAY, stiff, moist Gravels up to 1/2-inch
5						CL	Hydrocarbon odor at 6.5 ft. Grades Greenish Gray (5BG 5/1)
			48/48				
		80					
10			36/36				
			36/36			CL	Grades to Mottled Yellowish Brown (10YR 5/6) and Light Greenish Gray (N 7/1) SILTY CLAY, medium stiff, moist Grades stiff at 14 ft.
15					▽	SM	Yellowish Brown (10YR 5/6) and Greenish Gray (N 4/1) SILTY SAND WITH CLAY, medium dense, moist to wet
			36/36				
			24/24			SC	Grades to CLAYEY SAND
20							
25							

Note:
End of boring at 20 ft. bgs.

Job No: 28068161 Pt. ID: 3884_MLK_JUL13.GPJ	URS 3884 MLK	Log of Boring
Date Completed: 7/9/13 Boring Depth: 20 ft.	Driller: Vapor Tech Services Drilling Method: Direct Push Technology	Location: Oakland, CA

BORING SB- 8

DEPTH IN FEET	SAMPLING: TYPE OF SAMPLER	SAMPLING: PID READING (parts per million)	SAMPLING: INCHES DRIVEN/ RECOVERED	SAMPLES	SYMBOL	DESCRIPTION
0			60/36			Concrete 5"
					CL	Very Dark Brown (7.5YR 2.5/2) SILTY CLAY, soft, moist
5			48/48		CL	Brown (7.5YR 5/3) SILTY CLAY, medium stiff to stiff, moist Slight hydrocarbon odor at 6.5 ft.
10		0	36/36 48/48		CL	Grades to Mottled Yellowish Brown (10YR 5/6) and Greenish Gray (5GY 6/1) SILTY CLAY, stiff to very stiff, moist, trace gravel Small lens of GRAVELLY CLAY from 9-9.5 ft.
					CL	Grades to Yellowish Brown (10YR 6/6) SILTY CLAY, stiff, moist
15		0	48/48		CL	Grades to Mottled Yellowish Brown (10YR 5/6) and Light Greenish Gray (N 7/1) SILTY CLAY, medium stiff, moist Small lens of GRAVELLY CLAY from 14 to 14.25 ft.
		327		▽	CL	Grades to SANDY CLAY, soft, wet. Sand is very fine grained.
20		0				
25						

Note:
End of boring at 20 ft. bgs.

Job No: 28068161 Pt. ID; 3884_MLK_JUL13.GPJ	URS 3884 MLK	Log of Boring
Date Completed: 7/10/13 Boring Depth: 20 ft.	Driller: Vapor Tech Services Drilling Method: Direct Push Technology	Location: Oakland, CA

BORING SB- 9

DEPTH IN FEET	SAMPLING: TYPE OF SAMPLER	SAMPLING: PID READING (parts per million)	SAMPLING: INCHES DRIVEN/ RECOVERED	SAMPLES	SYMBOL	DESCRIPTION
0			60/36		CL	Concrete 3" Very Dark Brown (7.5YR 2.5/2) SILTY CLAY, stiff to very stiff, moist
5			48/48		CL	Yellowish Brown (10YR 5/6) SILTY CLAY, trace fine sand, stiff to very stiff, moist Grades with slight hydrocarbon odor at 7.0 ft. Greenish Gray (5GUY 5/1), trace gravel Grades to GRAVELLY CLAY at 9 ft.
10			48/48		CL	Grades to Dark Yellowish Brown (10YR 4/6) at 10.5 ft.
			48/48		CL	Grades to Mottled Yellowish Brown (10YR 5/6) and Light Greenish Gray (N 7/1) SILTY CLAY, medium stiff, moist
15					GC	Small 6-inch Clayey Gravel lens at 15.5 ft.
				▽	SM	Grades to SILTY SAND, wet at 16.5 ft.
		8	36/36		ML	Grades to SILT WITH CLAY at 18.5 ft.
20						
25						

Note:
End of boring at 20 ft. bgs.

Job No: 28068161 Pt. ID: 3884_MLK_JUL13.GPJ	URS 3884 MLK	Log of Boring
Date Completed: 7/9/13 Boring Depth: 20 ft.	Driller: Vapor Tech Services Drilling Method: Direct Push Technology	Location: Oakland, CA

BORING SB-10

DEPTH IN FEET	SAMPLING: TYPE OF SAMPLER	SAMPLING: PID READING (parts per million)	SAMPLING: INCHES DRIVEN/ RECOVERED	SAMPLES	SYMBOL	DESCRIPTION
0			60/48		CL	Very Dark Brown (7.5YR 2.5/2) SITLY CLAY, very stiff, moist
					CL	Yellowish Brown (10YR 5/6) SILTY CLAY, trace sand and gravel, very stiff, moist
5			48/48		CL	Grades to GRAVELLY CLAY at 9 ft.
10			48/48			
			48/48			
15					CL	Grades to Mottled Yellowish Brown (10YR 5/6) and Light Greenish Gray (N 7/1) SILTY CLAY WITH SAND, stiff, moist
			36/36		SM	Grades to SILTY SAND at 17 ft.
					ML	Grades to SILT WITH CLAY at 18.5 ft.
20						
25						

Note:
End of boring at 20 ft. bgs.

Job No: 28068181 Pt. ID: 3884_MLK_JUL13.GPJ	URS 3884 MLK	Log of Boring
Date Completed: 7/9/13 Boring Depth: 20 ft.	Driller: Vapor Tech Services Drilling Method: Direct Push Technology	Location: Oakland, CA

BORING SB-11

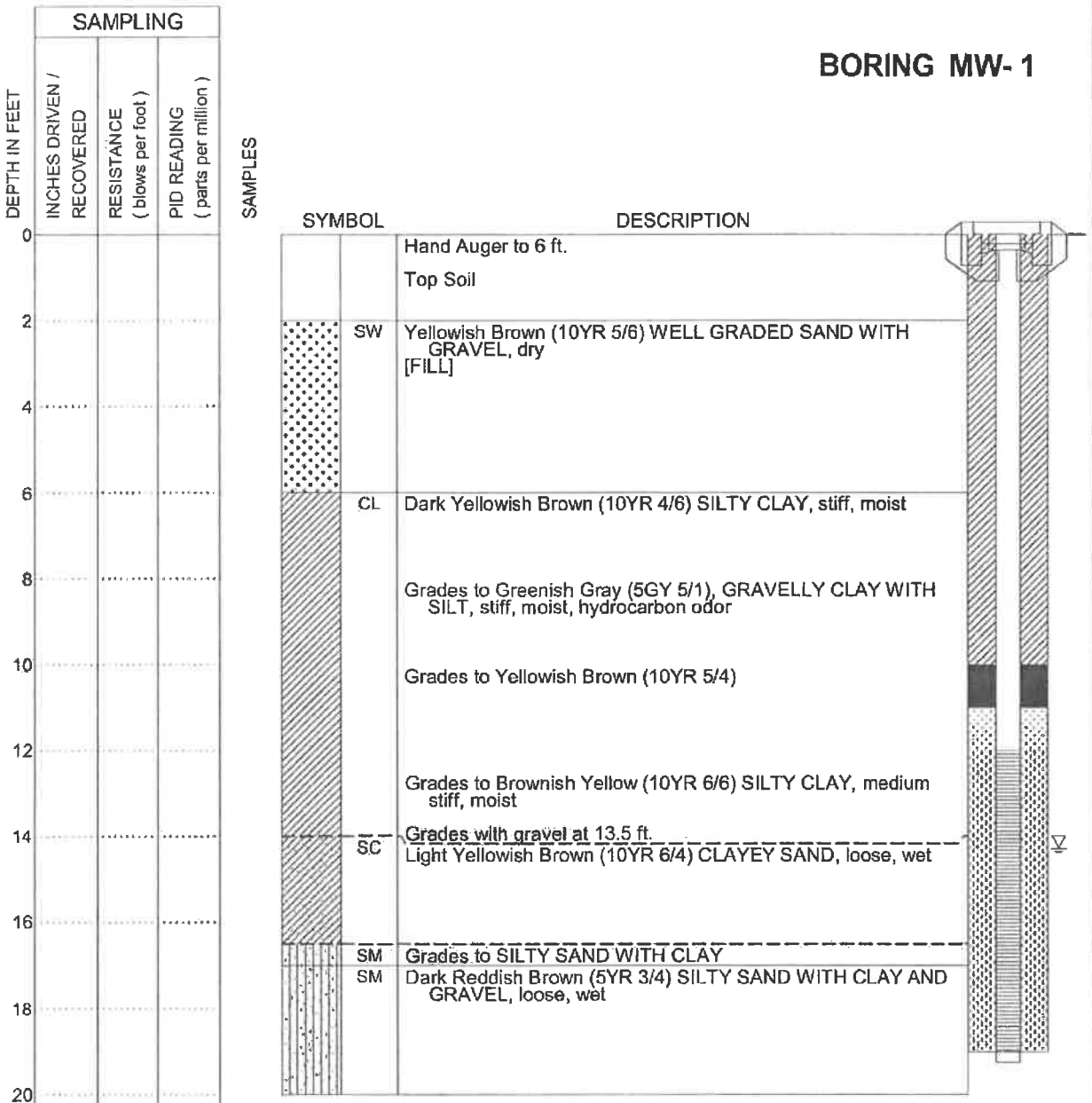
DEPTH IN FEET	SAMPLING: TYPE OF SAMPLER	SAMPLING: PID READING (parts per million)	SAMPLING: INCHES DRIVEN/ RECOVERED	SAMPLES	SYMBOL	DESCRIPTION
0						Asphalt
			60/42		CL	Very Dark Brown (7.5YR 2.5/2) SITLY CLAY, stiff, dry to moist
5					CL	Yellowish Brown (10YR 5/8) SILTY CLAY WITH FINE SAND, stiff, dry
			48/48			Grades to Greenish Gray (GLEY 5/1) at 6.5 ft., hydrocarbon odor
					SW	Greenish Gray (GLEY 5/1) GRAVELLY SAND WITH SILT AND CLAY, medium dense, moist
10			36/36		CL	Grades to Mottled Yellowish Brown (10YR 5/6) and GLEY (7/1) SILTY CLAY, trace gravel, medium stiff, moist
			36/36		CL	
15				▽		Grades wet at 15 ft.
			36/36		SC	Yellowish Brown (10YR 5/8) CLAYEY SAND, loose, wet
			24/24		SM	Grades to Brown (10YR 4/3) SILTY SAND WITH CLAY
20						
25						

Note:
End of boring at 20 ft. bgs.

Job No: 28068181 Pt. ID: 3884_MLK_JUL13.GPJ	URS 3884 MLK	Log of Boring
Date Completed: 7/9/13 Boring Depth: 20 ft.	Driller: Vapor Tech Services Drilling Method: Direct Push Technology	Location: Oakland, CA

12-19

BORING MW-1



Note:
1. End of boring at 20 ft. bgs.

Job No: 28068161 Pt. ID: 3884_MLK_JUL13.GPJ	URS 3884 MLK	**Log of Boring**
Date Completed: 7/11/13 Boring Depth: 20 ft.	Driller: Vapor Tech Services Drilling Method: Direct Push Technology	Location: Oakland, CA
Top of Casing Elev: ft. Casing Depth: ft.	Casing Type: Casing Diam: in.	Screened Interval: - ft.
		Slot Size: in. Sand Pack:

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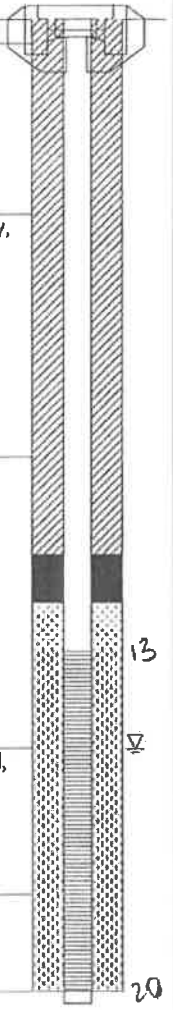
BORING MW- 2

DEPTH IN FEET	SAMPLING: INCHES DRIVEN / RECOVERED	SAMPLING: RESISTANCE (blows per foot)	SAMPLING: PID READING (parts per million)	SAMPLES	SYMBOL	DESCRIPTION
0						Soil at surface
					CL	Very Dark Brown (7YR 2.5/2) SILTY CLAY, very stiff, moist to dry
2						
4					CL	Brownish Yellow (10YR 6/6) SILTY CAY, very stiff, moist to dry, trace gravel
6						Grades Light Yellowish Brown (10YR 6/2)
8						Grades with gravel at 8.5 ft.
10					CL	Mottled Yellowish Brown (10YR 5/6) and Light Gray (N 7/1) SILTY CLAY, trace gravel, medium stiff, moist
12						Grades soft
14					SC	Dark Reddish Brown (2.5YR 3/3) CLAYEY SAND, trace gravel, loose, wet
16						Grades to GRAVELLY CLAYEY SAND
18					SC	Grades to Greenish Gray (5G 6/1) CLAYEY SAND, soft, wet, slight hydrocarbon odor
20						Grades to GRAVELLY CLAY
22						
24						



Note:
1. End of boring at 20 ft. bgs.

Job No: 28068161 Pt. ID: 3884_MLK_JUL13.GPJ	URS	3884 MLK	**Log of Boring**
Date Completed: 7/11/13 Boring Depth: 20 ft	Driller: Vapor Tech Services Drilling Method: Direct Push Technology		Location: Oakland, CA
Top of Casing Elev: ft. Casing Depth: ft.	Casing Type: Casing Diam: in.	Screened Interval: - ft.	Slot Size: in. Sand Pack:

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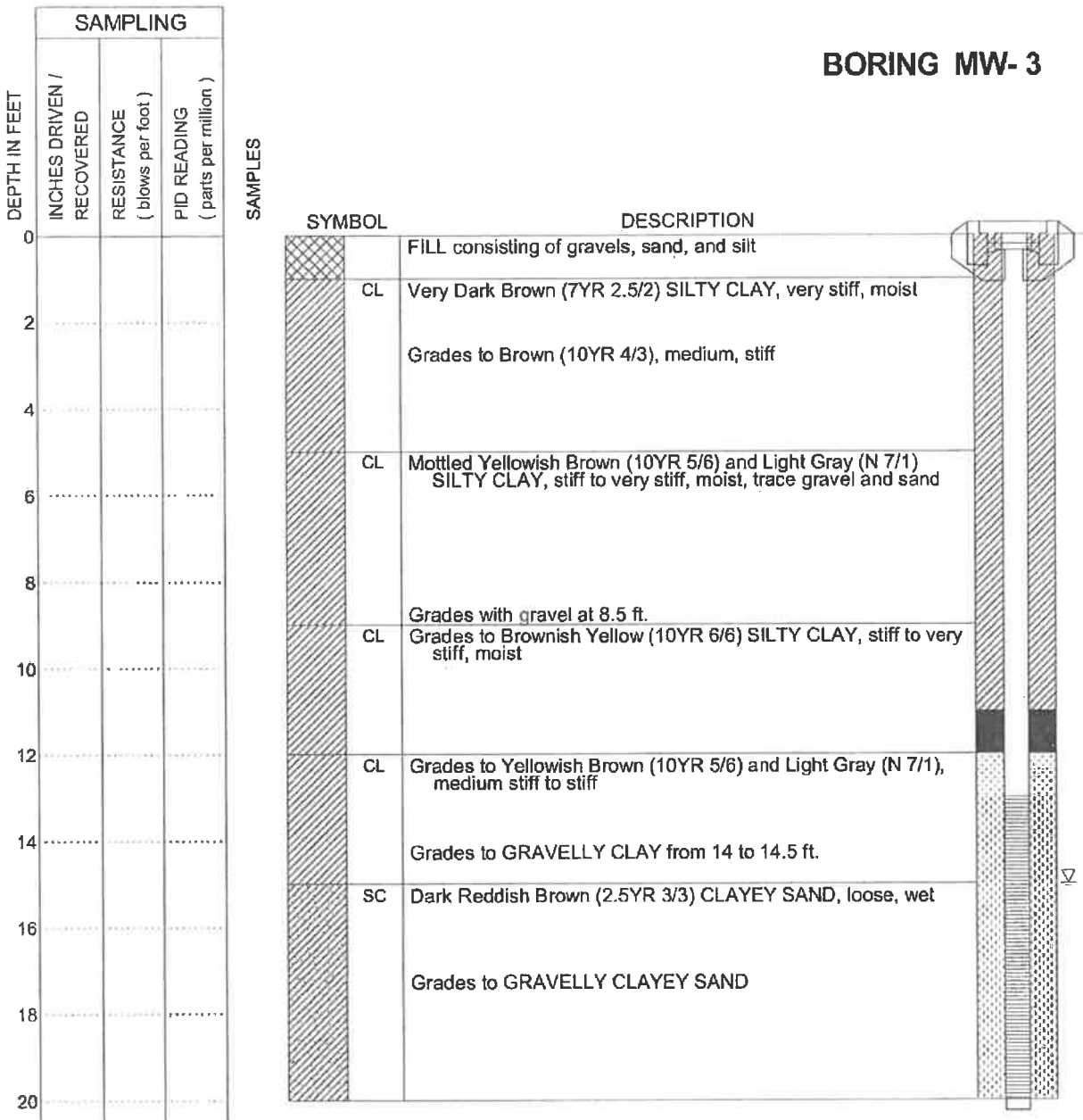
BORING MW- 3



Note:
1. End of boring at 20 ft. bgs.

Job No: 28068161 Pt. ID: 3884_MLK_JUL13.GPJ	URS 3884 MLK	**Log of Boring**
Date Completed: 7/11/13 Boring Depth: 20 ft.	Driller: Vapor Tech Services Drilling Method: Direct Push Technology	Location: Oakland, CA
Top of Casing Elev: ft. Casing Depth: ft.	Casing Type: Casing Diam: in.	Screened Interval: - ft.
		Slot Size: in. Sand Pack:

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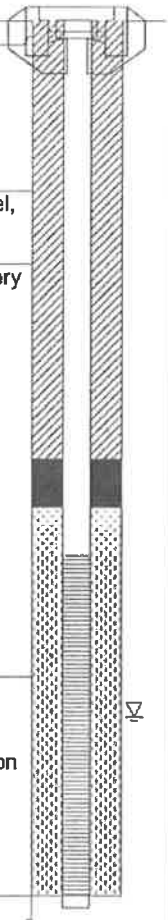
BORING MW- 4

DEPTH IN FEET	SAMPLING: INCHES DRIVEN / RECOVERED	SAMPLING: RESISTANCE (blows per foot)	SAMPLING: PID READING (parts per million)	SAMPLES	SYMBOL	DESCRIPTION
0						Concrete 4 inches
					CL	Very Dark Brown (7.5YR 2.5/2) SILTY CLAY, very stiff, moist
2						
4					CL	Dark Brown (10YR 3/3) SILTY CLAY WITH SAND, trace gravel, stiff, moist
					CL	Greenish Gray (10GY 5.1) GRAVELLY SILTY CLAY, stiff to very stiff, moist
6						Slight hydrocarbon odor at 6.5 ft.
8						
10						Grades to Dark Yellowish Bronw (10YR 3/6)
12						
14					CL	Mottled Brownish Yellow (10YR 6/6) and Light Gray (N 7/1) SILTY CLAY, trace fine sand, soft, moist to wet
						Small lens of GRAVELLY CLAY from 15.5 to 16 ft., hydrocarbon (gasoline) odor
16						
18					SM	Dark Yellowish Brown (10YR 3/4) SILTY SAND WITH CLAY, loose, wet
					CL	Mottled Brownish Yellow (10YR 6/6) and Light Gray (N 7/1) SILTY CLAY, stiff to medium stiff, moist to wet
20						
22						
24						



Note:
1. End of boring at 20 ft. bgs.

Job No: 28068161 Pt. ID: 3884_MLK_JUL13.GPJ	URS	3884 MLK	**Log of Boring**
Date Completed: 7/10/13 Boring Depth: 20 ft.	Driller: Vapor Tech Services Drilling Method: Direct Push Technology		Location: Oakland, CA
Top of Casing Elev: ft. Casing Depth: ft.	Casing Type: Casing Diam: in.	Screened Interval: - ft.	Slot Size: in. Sand Pack:

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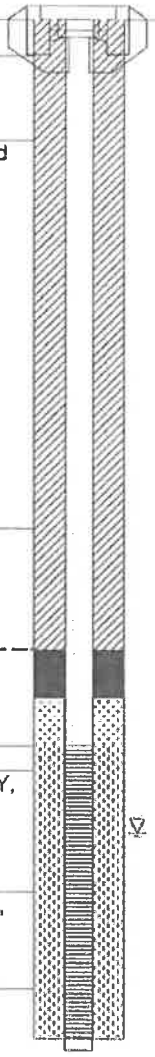
BORING MW- 5

DEPTH IN FEET	SAMPLING: INCHES DRIVEN / RECOVERED	SAMPLING: RESISTANCE (blows per foot)	SAMPLING: PID READING (parts per million)	SAMPLES	SYMBOL	DESCRIPTION
0						FILL consisting of gravel and brick
2					CL	Very Dark Grayish Brown (10YR 3/2) SILTY CLAY, stiff, dry
4					CL	Light Yellowish Brown (10YR 6/4) SILTY CLAY, trace sand and gravel, very stiff, dry to moist
6						
8						
10						Grades to GRAVELLY CLAY at 9 ft., gravels up to 1/2-inch
12					CL	Yellowish Brown (10YR 5/6) SILTY CLAY, stiff, moist
14					ML	Yellowish Brown (10YR 5/6) SILT WITH TRACE CLAY, slight plasticity, moist
16					CL	GRAVELLY CLAY lens from 15 to 15.5 ft.
18					SM	Yellowish Brown (10YR 5/6) SILTY SAND WITH TRACE CLAY, loose, wet
20					ML	Grades to Light Gray (N 7/1) SILT WITH CLAY, slightly plastic, moist to wet
22						
24						



Job No: 28068161
Pt. ID: 3884_MLK_JUL13.GPJ

URS

3884 MLK

Log of Boring

Date Completed: 7/10/13
Boring Depth: 20 ft.

Driller: Vapor Tech Services
Drilling Method: Direct Push Technology

Location: Oakland, CA

Top of Casing Elev: ft.
Casing Depth: ft.

Casing Type:
Casing Diam: in.

Screened Interval: - ft.

Slot Size: in.
Sand Pack:

Log Template: 11A

September 13, 2013

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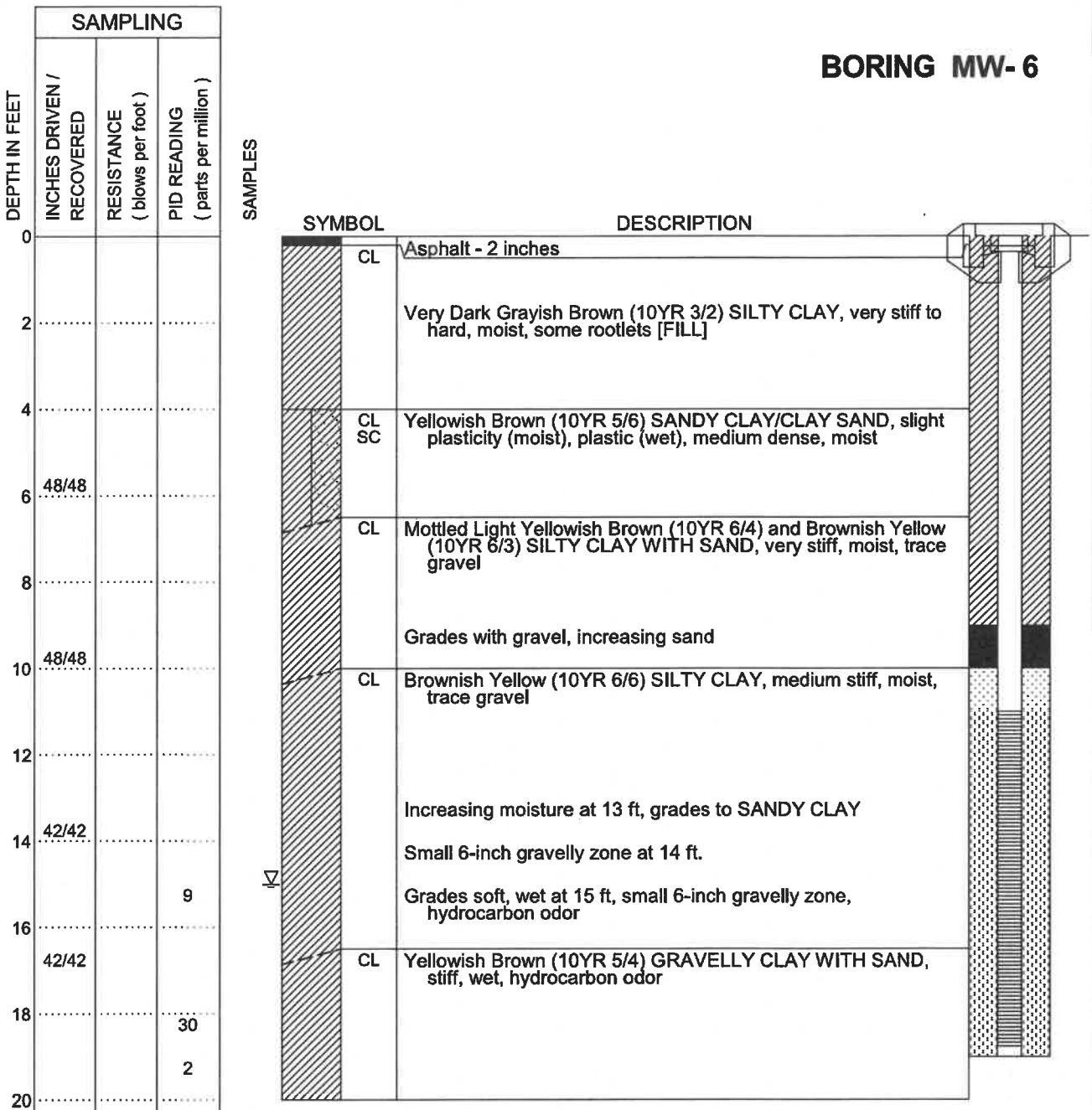
BORING MW-6



Note:
1. End of boring at 20 ft. bgs.

Job No: 28068161 Pt. ID: 3884_MLK_JUL13.GPJ	URS	3884 MLK	**Log of Boring**
Date Completed: 9/4/14 Boring Depth: 20 ft.	Driller: Vapor Tech Services Drilling Method: Direct Push Technology		Location: Oakland, CA
Top of Casing Elev: ft. Casing Depth: 19.0 ft.	Casing Type: 40 PVC Casing Diam: 2.0 in.	Screened Interval: 11-19 ft.	Slot Size: 0.010 in. Sand Pack: 2/12

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BORING MW-7

DEPTH IN FEET	SAMPLING: INCHES DRIVEN / RECOVERED	SAMPLING: RESISTANCE (blows per foot)	SAMPLING: PID READING (parts per million)	SAMPLES	SYMBOL	DESCRIPTION
0						Concrete - 4 inches
					CL	Very Dark Grayish Brown (10YR 3/2) SILTY CLAY, very stiff, moist
2						
4					CL SC	Yellowish Brown (10YR 5/6) SANDY CLAY/CLAYEY SAND, slightly plastaic (moist), plastic (wet), medium dense, moist
6	48/48				CL	Very Pale Brown (10YR 7/3) SILTY CLAY WITH SAND, very stiff, moist
						Grades with gravel, increasing sand
8						
10	48/48				CL	Mottled Light Yellowish Brown (10YR 6/4) and Brownish Yellow (10YR 4/8) SILTY CLAY WITH SAND, stiff, moist
12						
						Grades moist to wet, soft
14	42/42				CL	Dark Yellowish Brown (10YR 4/4) GRAVELLY CLAY WITH SAND, very stiff to hard, wet Gravels are subangular to angular, up to 1-inch
						Grades with gravel at 15.5 ft
16						Grades back to GRAVELLY CLAY at 16.5 ft
18						
20						
22						
24						

Note:
1. End of boring at 20 ft. bgs.

Job No: 28068161 Pt. ID: 3884_MLK_JUL13.GPJ	URS 3884 MLK	Log of Boring
Date Completed: 9/4/14 Boring Depth: 20 ft.	Driller: Vapor Tech Services Drilling Method: Direct Push Technology	Location: Oakland, CA
Top of Casing Elev: ft. Casing Depth: 19.0 ft.	Casing Type: 40 PVC Casing Diam: 2.0 in.	Screened Interval: 11-19 ft.
		Slot Size: 0.010 in. Sand Pack: 2/12

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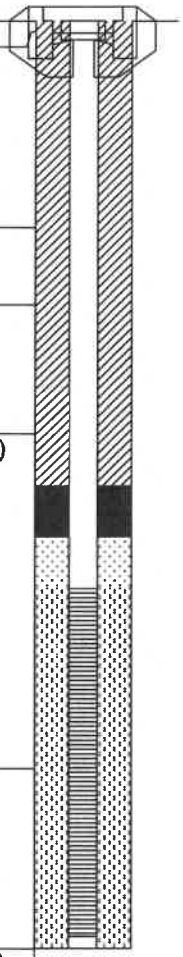
BORING MW- 8

DEPTH IN FEET	SAMPLING: INCHES DRIVEN / RECOVERED	SAMPLING: RESISTANCE (blows per foot)	SAMPLING: PID READING (parts per million)	SAMPLES	SYMBOL	DESCRIPTION
0					CL	Concrete - 2 inches Brown (10YR 5/3) SILTY CLAY, very stiff, moist, minor roots [FILL]
2						
4					SC CL	Mottle Light Gray (10YR 7/2) and Brownish Yellow (10YR 6/8) CLAYEY SAND/SANDY CLAY, moist
6	48/48				CL	Grayish Green (5G 4/2) GRAVELLY CLAYEY SAND, dense, moist
8					CL	Mottled Light Gray (10YR 7/2) and Brownish Yellow (10YR 6/8) SANDY CLAY WITH SILT, stiff to very stiff, moist
10	48/43					Grades with gravel
12						6-inch gravelly zone at 12.5 ft.
14	42/38					Grades soft at 13 ft.
16					SC	Yellowish Brown (10YR 5/4) CLAYEY SAND WITH GRAVEL, very dense, wet
	42/42					
18					CL	Mottled Brownish Yellow (10YR 6/8) and Light Gray (10YR 7/4) SILTY CLAY, trace sand, very stiff to hard, moist
20						
22						
24						



Note:
1. End of boring at 20 ft. bgs.

Job No: 28068161 Pt. ID: 3884_MLK_JUL13.GPJ	URS 3884 MLK	Log of Boring
Date Completed: 9/5/14 Boring Depth: 20 ft.	Driller: Vapor Tech Services Drilling Method: Direct Push Technology	Location: Oakland, CA
Top of Casing Elev: ft. Casing Depth: 18.0 ft.	Casing Type: 40 PVC Casing Diam: 2.0 in. Screened Interval: 11-18 ft.	Slot Size: 0.010 in. Sand Pack: 2/12

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ERM
1277 Treat Blvd., Suite 500
Walnut Creek, CA 94597
Phone: (925) 946-0455
Fax: (925) 946-9968

LOG OF BOREHOLE: SB-1

Project Number: 0307273
Project Name: Former Grove Street Wash Rack Site
Client Name: Cotter & Coyle
Location: Oakland, California
Contractor: Penecore
Drilling Method: Direct Push
Logged By: S. Martin

Date Started: 2/23/2017
Date Completed: 2/23/2017
Total Depth: 20 feet
Borehole Diameter: 2"
Initial Water Level: 9.2'

Notes: Hand augered to 5' bgs. Installed temporary PVC casing at bottom of borehole screened 15-20' bgs and collected grab groundwater sample.

Depth (ft)	Sample Interval	Blow Count	PID (ppm)	USCS Code	GRAPHIC LOG	Soil Descriptions and Observations
						Concrete slab.
						Gravel fill.
			0.9	CL		CLAY (CL): dark brown with some light brown mottling, trace fine gravel, high plasticity, stiff, moist.
			0.4	ML		SILT (ML): light brown, 10% clay, trace fine sand, cohesive, soft, moist.
						AS ABOVE EXCEPT: 10% clay, 10% fine sand, trace fine gravel.
5			1.3	SM		SILTY SAND (SM): light brown, fine sand, trace clay, loose, moist, slight hydrocarbon-like odor, grades to greenish gray at 5' bgs.
						SB-1-5
						SILT WITH SAND AND CLAY (ML): greenish gray, 15% fine to coarse sand, 15% clay, trace fine gravel, stiff, moist, hydrocarbon-like odor.
			712.4	ML		
			861			
			156.6			AS ABOVE EXCEPT: 10% fine gravel.
10						SB-1-10
			1742			CLAY WITH GRAVEL (CL): reddish brown, 20% fine gravel, stiff, moist.
			115.1	CL		AS ABOVE EXCEPT: 30% fine gravel, some wet pockets.
						CLAY WITH SAND (CL): reddish brown, 20% fine sand, very soft, moist-increase in moisture from above, slight hydrocarbon-like odor.
15			46.2			SAND WITH SILT (SP-SM): brown with greenish gray mottling, fine sand, 30-40% fines, interbedded sand with silt lenses, medium dense, wet.
			7.8			SB-1-15.5
			15.3	SP-SM		
			4.3			
20			4.5			Total Depth - 20 feet bgs

ERM
1277 Treat Blvd., Suite 500
Walnut Creek, CA 94597
Phone: (925) 946-0455
Fax: (925) 946-9968

LOG OF BOREHOLE: SB-2

Project Number: 0307273
Project Name: Former Grove Street Wash Rack Site
Client Name: Cotter & Coyle
Location: Oakland, California
Contractor: Penecore
Drilling Method: Direct Push
Logged By: S. Martin

Date Started: 2/23/2017
Date Completed: 2/23/2017
Total Depth: 20 feet
Borehole Diameter: 2"
Initial Water Level: 9.45'

Notes: Hand augered to 5' bgs. Installed temporary PVC casing at bottom of borehole screened 15-20' bgs and collected grab groundwater sample.

Depth (ft)	Sample Interval	Blow Count	PID (ppm)	USCS Code	GRAPHIC LOG	Soil Descriptions and Observations
						Fill.
			1.7	CL		CLAY (CL): dark brown, 10-15% fine sand, medium stiff, high plasticity, moist.
			0.4			AS ABOVE EXCEPT: grades to light brown.
				ML		SANDY SILT WITH CLAY (ML): light brown, 15% plastic fines, soft, moist.
5			0.3			SB-2-5
			0.6			CLAY WITH GRAVEL AND SAND (CL): brown with greenish gray, 20% fine gravel, fine sand lenses from 5 to 10' bgs, stiff, dry.
			14.6			
			43			
10			39	CL		AS ABOVE EXCEPT: very stiff.
						SB-2-10
						CLAY (CL): reddish brown, stiff, high plasticity, moist, slight hydrocarbon-like odor.
			3			
						AS ABOVE EXCEPT: trace fine sand, very soft.
15			0.5			SB-2-15 AS ABOVE EXCEPT: 10-15% fine sand, 5% fine gravel, increase in moisture.
			0.4	SP-SC		SAND WITH CLAY (SP-SC): reddish brown, fine sand, 30% plastic fines, cohesive, wet, no dor.
			0.3	SM		SILTY SAND (SM): brown with some gray mottling, fine sand, 20-30% fines, slow dilatancy, medium dense, wet.
20			0.3			Total Depth - 20 feet bgs

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LOG OF BOREHOLE: SB-3

Project Number: 0307273
Project Name: Former Grove Street Wash Rack Site
Client Name: Cotter & Coyle
Location: Oakland, California
Contractor: Penecore
Drilling Method: Direct Push
Logged By: S. Martin

Date Started: 2/23/2017
Date Completed: 2/23/2017
Total Depth: 20 feet
Borehole Diameter: 2"
Initial Water Level: 16.45'

Notes: Hand augered to 5' bgs. Installed temporary PVC casing at bottom of borehole screened 15-20' bgs and collected grab groundwater sample.

Depth (ft)	Sample Interval	Blow Count	PID (ppm)	USCS Code	GRAPHIC LOG	Soil Descriptions and Observations
						Fill.
			0.5	CL		CLAY (CL): dark brown, very stiff, medium plasticity, moist.
			1.0			AS ABOVE EXCEPT: grades to brown, high plasticity.
5			0.2	CL-ML		SILTY CLAY (CL-ML): light brown, some fine sand, medium stiff, medium plasticity. SB-3-5
			0.3			
			44.1	SM		SANDY SILT (SM): greenish gray, 5-10% fine gravel, stiff, low plasticity.
10			2.5			SB-3-10 CLAY (CL): brown, high plasticity, stiff, moist.
			10.5	CL		
			5.2			CLAY WITH GRAVEL (CL): brown, 25% fine gravel, medium stiff, medium plasticity, some mottling, moist.
15			1.6	CL		
			0.6	GC		CLAYEY GRAVEL (GC): black, 30% fine gravel, 25% fine sand and silt, stiff, low plasticity, moist. SB-3-17
						No recovery.
20						Total Depth - 20 feet bgs

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LOG OF BOREHOLE: SB-4

Project Number: 0307273
Project Name: Former Grove Street Wash Rack Site
Client Name: Cotter & Coyle
Location: Oakland, California
Contractor: Penecore
Drilling Method: Direct Push
Logged By: S. Martin

Date Started: 2/23/2017
Date Completed: 2/23/2017
Total Depth: 20 feet
Borehole Diameter: 2"
Initial Water Level: 16.95'

Notes: Hand augered to 5' bgs. Installed temporary PVC casing at bottom of borehole screened 15-20' bgs and collected grab groundwater sample.

Depth (ft)	Sample Interval	Blow Count	PID (ppm)	USCS Code	GRAPHIC LOG	Soil Descriptions and Observations
						Fill.
			0.8	CL		CLAY (CL): dark brown, medium stiff, medium plasticity, moist.
			0.1			AS ABOVE EXCEPT: brown, stiff, high plasticity.
				CL-ML		SILTY CLAY (CL-ML): light brown, medium plasticity, medium stiff, moist.
5						SB-4-5
			0.3	CL		CLAY (CL): brown with gray mottling, 5% coarse sand, trace fine gravel, stiff, hard, dry, slight hydrocarbon-like odor.
			0.0			
			7.3	SM		SILTY SAND (SM): greenish gray, fine sand, moist, hydrocarbon-like odor.
10			14.1	CL		SILTY CLAY (CL): brown, 30% silt, trace fine sand, medium stiff, high plasticity, moist. SB-4-10
			19.5			
				CL		CLAY WITH GRAVEL (CL): brown with gray gravel, 20% fine gravel, trace fine sand, stiff, low plasticity, moist.
15						SB-4-15
			0.5	SP		GRAVELLY SAND WITH CLAY (SP): dark brown, coarse sand, 25% angular fine gravel, 15% plastic fines, dense, wet at 15.5 ' bgs.
			0.0			AS ABOVE EXCEPT: grades to reddish brown.
			0.1			
20						Total Depth - 20 feet bgs

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LOG OF BOREHOLE: SB-5

Project Number: 0307273
Project Name: Former Grove Street Wash Rack Site
Client Name: Cotter & Coyle
Location: Oakland, California
Contractor: Penecore
Drilling Method: Direct Push
Logged By: S. Martin

Date Started: 2/23/2017
Date Completed: 2/23/2017
Total Depth: 20 feet
Borehole Diameter: 2"
Initial Water Level: 16.42'

Notes: Hand augered to 5' bgs. Installed temporary PVC casing at bottom of borehole screened 15-20' bgs and collected grab groundwater sample.

Depth (ft)	Sample Interval	Blow Count	PID (ppm)	USCS Code	GRAPHIC LOG	Soil Descriptions and Observations
			0.3	CL		CLAY (CL): dark brown, 30% gray gravel fill material, medium stiff, medium plasticity, moist.
						AS ABOVE EXCEPT: no fill material, stiff, high plasticity.
			0.1			AS ABOVE EXCEPT: brown, very stiff.
				CL-ML		CLAY (CL-ML): light brown low plasticity, soft, moist.
5			0.2			SB-5-5
				CL		CLAY (CL): brown, stiff, high plasticity, moist.
			0.3			
			0.8	CL		GRAVELLY CLAY (CL): greenish gray, 20-30% fine gravel, 5% fine sand, stiff, moist, hydrocarbon-like odor.
10			0.6			SB-5-10
				CL		CLAY (CL): brown, stiff, high plasticity, moist, no odor.
			0.0			AS ABOVE EXCEPT: trace fine gravel, increase in moisture.
				CL		GRAVELLY CLAY (CL): brown, 30% fine gravel, 5-10% coarse sand, stiff, low plasticity, moist.
15			0.0			SB-5-15
			0.0	SP		GRAVELLY SAND WITH CLAY (SP): brown to reddish brown, coarse sand, 30% angular fine gravel, 20% fines, dense, wet.
			0.0	CL		GRAVELLY CLAY (CL): brown, 30% fine subrounded gravel, stiff, hard, moist.
20						Total Depth - 20 feet bgs

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LOG OF BOREHOLE: SV-1

Project Number: 0307273
Project Name: Former Grove Street Wash Rack Site
Client Name: Cotter & Coyle
Location: Oakland, California
Contractor: Penecore
Drilling Method: Hand Auger
Logged By: K. Almestead

Date Started: 2/23/2017
Date Completed: 2/23/2017
Total Depth: 4 feet
Borehole Diameter: 3.25"
Initial Water Level: No groundwater encountered
Notes: Completed as soil vapor probe. Probe inlet set at 2.5' bgs.

Depth (ft)	Sample Interval	PID (ppm)	USCS Code	GRAPHIC LOG	Soil Descriptions and Observations
					Concrete slab.
					Fill.
		0.4	CL		SANDY CLAY (CL): light brown, high plasticity, stiff, moist.
		0.3			AS ABOVE EXCEPT: brown, medium stiff.
		0.0	CL-ML		SILTY CLAY (CL-ML): light brown, 30% fine sand, soft, moist.
					Wet at 4' bgs, possibly perched groundwater, set soil vapor probe inlet above saturated zone at 2.5' bgs.
		0.1			Total Depth - 4 feet bgs
5					
10					

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LOG OF BOREHOLE: SV-2

Project Number: 0307273
Project Name: Former Grove Street Wash Rack Site
Client Name: Cotter & Coyle
Location: Oakland, California
Contractor: Penecore
Drilling Method: Hand Auger
Logged By: S. Martin

Date Started: 2/23/2017
Date Completed: 2/23/2017
Total Depth: 5.5 feet
Borehole Diameter: 3.25"
Initial Water Level: No groundwater encountered
Notes: Completed as soil vapor probe. Probe inlet set at 5' bgs.

Depth (ft)	Sample Interval	PID (ppm)	USCS Code	GRAPHIC LOG	Soil Descriptions and Observations
					Asphalt.
		0.7	CL		CLAY (CL): dark brown, high plasticity, medium stiff, moist.
		0.5			AS ABOVE EXCEPT: 30% silt, grades to light brown.
		0.5	ML		SILT (ML): light brown, 15-20% clay, trace fine sand, soft, moist.
5					
					Total Depth - 5.5 feet bgs
10					

BOREHOLE TO 15 WC NO GW - - 2/28/17 12:28 - \\WDWALFS01\CAD\GINT BORING LOGS\MLK -0307273\AIR LIQUIDE GINT LOGS.GPJ

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LOG OF BOREHOLE: SV-3

Project Number: 0307273
Project Name: Former Grove Street Wash Rack Site
Client Name: Cotter & Coyle
Location: Oakland, California
Contractor: Penecore
Drilling Method: Hand Auger
Logged By: S. Martin

Date Started: 2/23/2017
Date Completed: 2/23/2017
Total Depth: 5.5 feet
Borehole Diameter: 3.25"
Initial Water Level: No groundwater encountered
Notes: Completed as soil vapor probe. Probe inlet set at 5' bgs.

Depth (ft)	Sample Interval	PID (ppm)	USCS Code	GRAPHIC LOG	Soil Descriptions and Observations
					Fill.
		0.6	CL		CLAY (CL): dark brown, medium stiff, high plasticity, moist.
		0.1			
					SANDY CLAY (CL): light brown, 30% fine sand, trace fine gravel, soft, moist.
		0.0	ML		SANDY SILT (ML): light brown, 30% fine sand, trace clay, soft, moist.
		0.1			
5		0.3			AS ABOVE EXCEPT: grades to greenish gray, 10% clay, slight hydrocarbon-like odor.
					Total Depth - 5.5 feet bgs
10					

BOREHOLE TO 15 WC NO GW - - 2/28/17 12:28 - \\WDWALFS01\CAD\GINT BORING LOGS\MLK -0307273\AIR LIQUIDE GINT LOGS.GPJ

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LOG OF BOREHOLE: SV-4

Project Number: 0307273
Project Name: Former Grove Street Wash Rack Site
Client Name: Cotter & Coyle
Location: Oakland, California
Contractor: Penecore
Drilling Method: Hand Auger
Logged By: S. Martin

Date Started: 2/23/2017
Date Completed: 2/23/2017
Total Depth: 5.5 feet
Borehole Diameter: 3.25"
Initial Water Level: No groundwater encountered
Notes: Completed as soil vapor probe. Probe inlet set at 5' bgs.

Depth (ft)	Sample Interval	PID (ppm)	USCS Code	GRAPHIC LOG	Soil Descriptions and Observations
			CL		CLAY (CL): dark brown, stiff, high plasticity, moist, contains roots and organic matter.
			SC		CLAYEY SAND (SC): light brown, loose, moist.
		0.0	CL		CLAY (CL): black, stiff, high plasticity, moist.
		0.0			
		0.0			
		0.0			AS ABOVE EXCEPT: dark brown.
5		0.0			
					Total Depth - 5.5 feet bgs
10					

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LOG OF BOREHOLE: SV-5

Project Number: 0307273
Project Name: Former Grove Street Wash Rack Site
Client Name: Cotter & Coyle
Location: Oakland, California
Contractor: Penecore
Drilling Method: Hand Auger
Logged By: S. Martin

Date Started: 2/23/2017
Date Completed: 2/23/2017
Total Depth: 5.5 feet
Borehole Diameter: 3.25"
Initial Water Level: No groundwater encountered
Notes: Completed as soil vapor probe. Probe inlet set at 5' bgs.

Depth (ft)	Sample Interval	PID (ppm)	USCS Code	GRAPHIC LOG	Soil Descriptions and Observations
		0.1			Fill with coarse gravel and sand.
		0.2			
			ML		SILT WITH GRAVEL (ML): light brown, 20% fine gravel, soft, moist.
		0.5	CL		CLAY (CL): brown, high plasticity, medium stiff, moist.
5					AS ABOVE EXCEPT: trace fine sand and gravel.
					Total Depth - 5.5 feet bgs
10					

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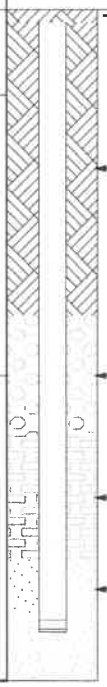
LOG OF SOIL VAPOR PROBE: SV-1A

Project Number: 0307273
Project Name: Former Grove Street Wash Rack Site
Location: Oakland, California
Contractor: Penecore
Drilling Method: Hand Auger
Logged By: S. Martin

Date Started: 7/11/2017
Date Completed: 7/11/2017
Total Depth: 5.5 feet
Borehole Diameter: 3.25"
Initial Water Level: NA
Notes:

Depth (ft)	PID (ppm)	USCS Code	GRAPHIC LOG	Soil Descriptions and Observations
				0-8": concrete
	0.0	CL		SILTY CLAY (CL): dark brown, medium plasticity, medium stiff, moist.
	0.0			AS ABOVE EXCEPT: grades to light brown.
				AS ABOVE EXCEPT: light brown, some grey/geen soil, hydrocarbon-like odor.
	0.7	CL		SANDY CLAY (CL): light brown, medium sand 30%, medium plasticity, some grey/green soil, hydrocarbon-like odor, moist, grades to greenish-grey with brown mottling.
	33.8			
5	67.7			AS ABOVE EXCEPT: hydrocarbon-like odor, sand 40%.
				Total Depth - 5.5 feet bgs
10				

SOIL VAPOR PROBE CONSTRUCTION



- Flush Mounted EMCO Box
- Cement Grout
- Hydrated Granular Bentonite
- Dry Granular Bentonite
- Sand Pack
- Probe Inlet

SOIL VAPOR 10FT WC - - 5/4/18 14:44 - \\USWALVMFS011\CAD\GINT BORING LOGS\MLK -0307273\AIR LIQUIDE GINT LOGS.GPJ

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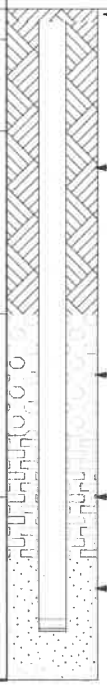
LOG OF SOIL VAPOR PROBE: SV-2A

Project Number: 0307273
Project Name: Former Grove Street Wash Rack Site
Location: Oakland, California
Contractor: Penecore
Drilling Method: Hand Auger
Logged By: S. Martin

Date Started: 7/11/2018
Date Completed: 7/11/2018
Total Depth: 5.5 feet
Borehole Diameter: 3.25"
Initial Water Level: NA
Notes:

Depth (ft)	PID (ppm)	USCS Code	GRAPHIC LOG	Soil Descriptions and Observations
				ASPHALT 0-3"
				FILL: coarse gravel
	15.3	ML		SILT (ML): light brown, soft, some plastic fines, moist.
	4.7			
	1.2	CL		CLAY (CL): mottled light greyish-brown, medium siffness, low plasticity, trace fine sand, moist.
	0.2	ML		SILT (ML): light brown, soft, some plastic fines, moist
5	0.8			AS ABOVE EXCEPT: 10% fine sand, trace fine gravel.
				Total Depth - 5.5 feet bgs
10				

SOIL VAPOR PROBE CONSTRUCTION



SOIL VAPOR 10FT WC - - 5/4/18 14:44 - \\USWALVMFS01\CAD\GINT BORING LOGS\MLK -0307273\AIR LIQUIDE GINT LOGS.GPJ

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LOG OF SOIL VAPOR PROBE: SV-4A

Project Number: 0307273
Project Name: Former Grove Street Wash Rack Site
Location: Oakland, California
Contractor: Penecore
Drilling Method: Hand Auger
Logged By: S. Martin

Date Started: 7/11/2017
Date Completed: 7/11/2017
Total Depth: 5.5 feet
Borehole Diameter: 3.25
Initial Water Level: NA
Notes:

Depth (ft)	PID (ppm)	USCS Code	GRAPHIC LOG	Soil Descriptions and Observations	SOIL VAPOR PROBE CONSTRUCTION
				FILL: compacted gravel	Flush Mounted EMCO Box
	0	ML		SILT (ML): dark brown, medium stiff, 10-20% plastic fines, moist.	Cement Grout
	0	CL		CLAY (CL): dark brown, medium plasticity, stiff, moist.	
	0	CL		SILTY CLAY (CL): dark brown, some light brown mottling, stiff, moist, medium plasticity.	Hydrated Bentonite
	0	CL		CLAY (CL): greyish brown, medium stiff, high plasticity, moist.	Dry Granular Bentonite
5					Sand Pack
					Probe Inlet
				Total Depth - 5.5 feet bgs	
10					

ATTACHMENT B-4

Groundwater Data

JOHN CARVER CONSULTING
ENVIRONMENTAL -- CIVIL -- GEOTECHNICAL

Soil Analytical Results 3884 Martin Luther King Junior Way
JCC INVESTIGATION OF FEBRUARY 2006
URS INVESTIGATION OF SEPTEMBER 2004

GROUNDWATER

Analyte	TPH-G	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Other Oxygenates
		JCC INVESTIGATION OF 2006					
9795-GP1-W	ND	ND	ND	ND	ND	ND	ND
9795-GP2-W	554 ppb	10.1 ppb	ND	89.2 ppb	114 ppb	ND	ND
9795-GP3-W	79,800 ppb	17,600 ppb	8,480 ppb	1,950 ppb	10,200 ppb	ND	ND
9795-GP4-W	1,980 ppb	294 ppb	ND	189 ppb	523 ppb	ND	ND
		URS INVESTIGATION OF 2004					
G2	22,000 ppb	4,700 ppb	5,500 ppb	700 ppb	2,300 ppb	ND	
G4	950 ppb	260 ppb	ND	74 ppb	58 ppb	ND	
G7	190 ppb	21 ppb	34 ppb	5.0 ppb	10 ppb	ND	
G9	1,200 ppb	88 ppb	42 ppb	33 ppb	170 ppb	7.9 ppb	
G10	97 ppb	4.4 ppb	1.5 ppb	4.2 ppb	5.3 ppb	6.5 ppb	
G11	66 ppb	2.3 ppb	2.9 ppb	1.6 ppb	5.2 ppb	ND	
G12	ND	1.5 ppb	2.6 ppb	ND	ND	ND	
G13	ND	0.53 ppb	0.58 ppb	ND	ND	ND	
G17	ND	0.59 ppb	0.62 ppb	ND	ND	ND	
G19	ND	ND	ND	ND	ND	ND	
G20	64 ppb	ND	ND	ND	ND	ND	

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Table 5-6
TPH as gasoline and motor oil - Groundwater Analytical Results
Lucky's Auto Body Site

Sample ID (Groundwater Sample Location)	Units	Analytical Results Total Petroleum Hydrocarbons (TPH)	
		Gasoline (C6-C12) TPH-gasoline	Residual fuels (C24-C40) TPH-motor oil
G2	µg/L	**22,000**	NA
G4	µg/L	**950**	NA
G7	µg/L	**190**	NA
G9	µg/L	**1,200**	NA
G10	µg/L	97	NA
G11	µg/L	66	NA
G12	µg/L	<50	NA
G13	µg/L	<50	NA
G17	µg/L	<50	NA
G19	µg/L	<50	<500
*G20	µg/L	64	NA
Regulatory Guideline			
ESL	µg/L	100	100

Notes:

*Groundwater Sample G20 is a Field Duplicate of Groundwater Sample G7
ESL - San Francisco Bay Regional Water Quality Control Board (RWQCB) Environmental Screening Levels (ESLs) - for groundwater that is a potential drinking water source (2003)
(C6-C12) -petroleum mixtures with a carbon ranges of C6 to C12
Groundwater analytical results reported as TSI-G9 (Targeted Site Investigation-groundwater sample boring location 9)
All analyses completed by Severn Trent Laboratory (STL) unless otherwise noted.
<50 - less than the laboratory reporting limit of 50 µg/L
NA - Not analyzed
Shaded values exceed their respective RWQCB ESLs

Table 5-8
VOCs, Dissolved Metals, and pH - Groundwater Analytical Results
Lucky's Auto Body Site

Analyte	Units	CA MCL	Analytical Results (Groundwater Boring ID)					
			G2	G4	G7	G9	G10	G11
Volatile Organic Compounds by EPA 8260B								
MTBE	µg/L	13	<500	<100	<5.0	7.9	6.5	<5.0
Acetone	µg/L	NV	<5,000	<1,000	110	<50	<50	<50
Benzene	µg/L	1.0	**4,700**	**260**	**21**	**88**	**4.4**	**2.3**
1,2-Dichloroethane	µg/L	0.5	<50	<10	<0.50	**2.7**	**1.3**	<0.50
cis-1,2-Dichloroethene	µg/L	6	<50	**11**	<0.50	<0.50	<0.50	<0.50
Ethylbenzene	µg/L	300	**700**	74	5.0	33	4.2	1.6
Naphthalene	µg/L	NV	<100	<20	<1.0	9.3	<1.0	<1.0
Toluene	µg/L	150	**5,500**	<10	34	42	1.5	2.9
Isopropylbenzene	µg/L	NV	<50	<10	<0.50	1.7	<0.50	<0.50
n-Propylbenzene	µg/L	NV	<100	<20	<1.0	6.6	1.2	<1.0
p-Isopropyltoluene	µg/L	NV	<100	<20	<1.0	1.1	<1.0	<1.0
n-Butylbenzene	µg/L	NV	<100	<20	<1.0	4.8	<1.0	<1.0
1,2,4-Trimethylbenzene	µg/L	NV	230	72	1.6	32	3.1	1.3
1,3,5-Trimethylbenzene	µg/L	NV	82	21	0.61	13	0.88	<0.50
Total xylenes	µg/L	1,750	**2,300**	58	16	170	5.3	5.2
Carbon disulfide	µg/L	NV	<500	<100	<5.0	<5.0	<5.0	<5.0
tert-Butylbenzene	µg/L	NV	<100	<20	<1.0	<1.0	<1.0	<1.0
sec-Butylbenzene	µg/L	NV	<100	<20	<1.0	<1.0	<1.0	<1.0
Dissolved Metals by EPA 6010B								
Lead	µg/L	15	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
pH by EPA 9040B/150.1								
pH	SU	NV	6.4	6.5	6.4	6.2	NA	6.4

Notes:

*Groundwater Sample G20 is a Field Duplicate of Groundwater Sample G7

MCL - California Maximum Contaminant Levels - primary drinking water (2003)

Groundwater analytical results reported as TSI-G9 (Targeted Site Investigation-groundwater sample boring location 9)

All analyses completed by Severn Trent Laboratory (STL) unless otherwise noted.

<20 - less than the laboratory reporting limit of 20 µg/L

NV - No Listed Value

NA - Not Analyzed

Shaded values are above the respective MCL

Table 5-8
VOCs, Dissolved Metals, and pH - Groundwater Analytical Results
Lucky's Auto Body Site

Analyte	Units	CA MCL	Analytical Results (Groundwater Boring ID)				
			G12	G13	G17	G19	*G20
Volatile Organic Compounds by EPA 8260B							
MTBE	µg/L	13	<5.0	<5.0	<5.0	<5.0	<5.0
Acetone	µg/L	NV	<50	<50	<50	<50	<50
Benzene	µg/L	1.0	**1.5**	0.53	0.59	<0.50	**2.7**
1,2-Dichloroethane	µg/L	0.5	<0.50	<0.50	<0.50	<0.50	<0.50
cis-1,2-Dichloroethene	µg/L	6	<0.50	<0.50	<0.50	<0.50	<0.50
Ethylbenzene	µg/L	300	<0.50	<0.50	<0.50	<0.50	0.61
Naphthalene	µg/L	NV	<1.0	<1.0	<1.0	<1.0	<1.0
Toluene	µg/L	150	2.6	0.58	0.62	<0.50	3.4
Isopropylbenzene	µg/L	NV	<0.50	<0.50	<0.50	<0.50	<0.50
n-Propylbenzene	µg/L	NV	<1.0	<1.0	<1.0	<1.0	<1.0
p-Isopropyltoluene	µg/L	NV	<1.0	<1.0	<1.0	<1.0	<1.0
n-Butylbenzene	µg/L	NV	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,4-Trimethylbenzene	µg/L	NV	<0.50	<0.50	<0.50	<0.50	<0.50
1,3,5-Trimethylbenzene	µg/L	NV	<0.50	<0.50	<0.50	<0.50	<0.50
Total xylenes	µg/L	1,750	<1.0	<1.0	<1.0	<1.0	1.5
Carbon disulfide	µg/L	NV	<5.0	<5.0	<5.0	<5.0	<5.0
tert-Butylbenzene	µg/L	NV	<1.0	<1.0	<1.0	<1.0	<1.0
sec-Butylbenzene	µg/L	NV	<1.0	<1.0	<1.0	<1.0	<1.0
Dissolved Metals by EPA 6010B							
Lead	µg/L	15	NA	NA	NA	NA	<0.005
pH by EPA 9040B/150.1							
pH	SU	NV	6.7	6.7	7.0	6.7	6.4

Notes:

*Groundwater Sample G20 is a Field Duplicate of Groundwater Sample G7

MCL - California Maximum Contaminant Levels - primary drinking water (2003)

Groundwater analytical results reported as TSI-G9 (Targeted Site Investigation-groundwater sample boring location 9)

All analyses completed by Severn Trent Laboratory (STL) unless otherwise noted.

<20 - less than the laboratory reporting limit of 20 µg/L

NV - No Listed Value

NA - Not Analyzed

Shaded values are above the respective MCL

Table 2-3
Grab Groundwater Results - 2013

	TPH-g	Benzene	Toluene	Ethylbenzene	Xylenes	Napthalene	1,2-DCA	cis-1,2-DCE
				µg/L				
SB-1	120	<0.50	<0.50	<0.50	<1.0	<1.0	<0.50	<0.50
SB-2	<50	<0.50	<0.50	<0.50	<1.0	<1.0	<0.50	<0.50
SB-3								
SB-4	670	36	1.1	9.4	13	<1.0	<0.50	<0.50
SB-5	200	13	4.7	13	38	1.7	1.3	<0.50
SB-6	150,000	5100	17,000	2600	23,000	980	<50	<50
SB-90*	120,000	5300	18,000	2500	22,000	820	<50	<50
SB-7	620	14	4.1	24	37	9.3	0.78	<0.50
SB-91**	110	5.2	2.4	6.8	11	2.5	<0.50	<0.50
SB-8	<50	<0.50	<0.50	<0.50	<1.0	<1.0	<0.50	<0.50
SB-9	19000	4300	59	1200	1800	300	<50	<50
SB-10	130	<0.50	34	2.3	18	<1.0	<0.50	<0.50
SB-11	260	3.6	8.0	9.9	30	2.6	2	<0.50

* dup of SB-6

** dup of SB-7

not sampled, boring did not produce water

Table 1
Groundwater Elevation Data
3884 Martin Luther King Jr. Way
Oakland, California

Well	Date	Well Screen (ft-bmp)	Depth to Groundwater (ft-bmp)	Measuring Point Elevation (ft-msl)	Water Elevation (ft-amsl)
MW-1	7/18/2013	12-19	14.43	72.83	58.40
MW-1	10/23/2013	12-19	14.99	72.83	57.84
MW-1	7/10/2014	12-19	14.41	72.83	58.42
MW-1	9/15/2014	12-19	15.16	72.83	57.67
MW-1	1/9/2015	12-19	12.14	72.83	60.69
MW-1	3/31/2015	12-19	13.57	72.83	59.26
MW-1	10/14/15	12-19	15.43	72.83	57.40
MW-1	5/3/2016	12-19	14.11	72.83	58.72
MW-1	12/29/2016	12-19	11.07	72.83	61.76
MW-1	07/11/17	12-19	14.66	72.83	58.17
MW-2	7/18/2013	13-20	14.90	73.16	58.26
MW-2	10/23/2013	13-20	15.07	73.16	58.09
MW-2	7/10/2014	13-20	14.69	73.16	58.47
MW-2	9/15/2014	13-20	15.45	73.16	57.71
MW-2	1/9/2015	13-20	13.82	73.16	59.34
MW-2	3/31/2015	13-20	14.08	73.16	59.08
MW-2	10/14/15	13-20	15.75	73.16	57.41
MW-2	5/3/2016	13-20	15.20	73.16	57.96
MW-2	12/29/2016	13-20	11.20	73.16	61.96
MW-2	6/16/2017	13-20	13.85	73.16	59.31
MW-2	07/11/17	13-20	14.50	73.16	58.66
MW-3	7/18/2013	13-20	15.08	73.54	58.46
MW-3	10/23/2013	13-20	15.45	73.54	58.09
MW-3	7/10/2014	13-20	14.68	73.54	58.86
MW-3	9/15/2014	13-20	15.56	73.54	57.98
MW-3	1/9/2015	13-20	13.32	73.54	60.22
MW-3	3/31/2015	13-20	14.25	73.54	59.29
MW-3	10/14/2015	13-20	15.74	73.54	57.80
MW-3	5/3/2016	13-20	12.82	73.54	60.72
MW-3	12/29/2016	13-20	11.59	73.54	61.95
MW-3	6/16/2017	13-20	14.29	73.54	59.25
MW-3	07/11/17	13-20	14.92	73.54	58.62
MW-4	7/18/2013	11-18	14.42	73.18	58.76
MW-4	10/23/2013	11-18	15.15	73.18	58.03
MW-4	7/10/2014	11-18	14.43	73.18	58.75
MW-4	9/15/2014	11-18	15.25	73.18	57.93
MW-4	1/9/2015	11-18	12.91	73.18	60.27
MW-4	3/31/2015	11-18	13.68	73.18	59.50
MW-4	10/14/2015	11-18	15.48	73.18	57.70
MW-4	5/3/2016	11-18	12.50	73.18	60.68
MW-4	12/29/2016	11-18	11.07	73.18	62.11
MW-4	6/16/2017	11-18	14.93	73.18	58.25
MW-4	07/11/17	11-18	14.55	73.18	58.63

Table 1
Groundwater Elevation Data
3884 Martin Luther King Jr. Way
Oakland, California

Well	Date	Well Screen (ft-bmp)	Depth to Groundwater (ft-bmp)	Measuring Point Elevation (ft-msl)	Water Elevation (ft-amsl)
MW-5	7/18/2013	15-21	16.89	74.92	58.03
MW-5	10/23/2013	15-21	17.65	74.92	57.27
MW-5	7/10/2014	15-21	16.79	74.92	58.13
MW-5	9/15/2014	15-21	17.82	74.92	57.10
MW-5	1/9/2015	15-21	14.78	74.91	60.13
MW-5	3/31/2015	15-21	15.48	74.91	59.43
MW-5	10/14/2015	15-21	18.24	74.91	56.67
MW-5	5/3/2016	15-21	14.36	74.91	60.55
MW-5	12/29/2016	15-21	13.94	74.91	60.97
MW-5	07/11/17	15-21	15.98	74.91	58.93
MW-6	9/15/2014	11-19	14.86	72.43	57.57
MW-6	1/9/2015	11-19	11.39	72.43	61.04
MW-6	3/31/2015	11-19	13.26	72.43	59.17
MW-6	10/14/2015	11-19	14.66	72.43	57.77
MW-6	5/3/2016	11-19	12.00	72.43	60.43
MW-6	12/29/2016	11-19	10.75	72.43	61.68
MW-6	07/11/17	11-19	13.96	72.43	58.47
MW-7	9/15/2014	11-19	13.61	71.46	57.85
MW-7	1/9/2015	11-19	11.27	71.46	60.19
MW-7	3/31/2015	11-19	11.93	71.46	59.53
MW-7	10/14/2015	11-19	13.84	71.46	57.62
MW-7	5/3/2016	11-19	10.86	71.46	60.60
MW-7	12/29/2016	11-19	9.34	71.46	62.12
MW-7	07/11/17	11-19	12.84	71.46	58.62
MW-8	9/15/2014	11-18	14.23	70.75	56.52
MW-8	1/9/2015	11-18	10.3	70.75	60.45
MW-8	3/31/2015	11-18	12.31	70.75	58.44
MW-8	10/14/2015	11-18	13.22	70.75	57.53
MW-8	5/3/2016	11-18	10.5	70.75	60.25
MW-8	12/29/2016	11-18	8.6	70.75	62.15
MW-8	07/11/17	11-18	12.53	70.75	58.22

Abbreviations:

ft-msl - Feet relative to mean sea level
ft-amsl - Feet above mean sea level
ft-bmp - Feet below measuring point

Table 2
Groundwater Physical Parameters
3884 Martin Luther King Jr. Way
Oakland, California

Well	Date	Temperature (°Celsius)	Conductivity (mS/cm)	DO (mg/L)	pH	ORP (mV)
well	Date	Temperature	Conductivity	DO	pH	ORP
MW-1	7/18/2013	20.0	1.129	5.74	6.35	63.4
MW-1	10/23/2013	19.2	1.189	1.45	6.42	-55.4
MW-1	7/10/2014	20.0	1.100	0.81	6.42	33.2
MW-1	9/15/2014	20.5	1.100	0.13	6.15	74.9
MW-1	1/9/2015	20.3	1.077	0.27	6.55	-24.9
MW-1	3/31/2015	19.5	1.021	0.91	6.12	61.9
MW-1	10/14/15	21.5	0.765	0.30	6.20	82.6
MW-1	5/3/2016	18.7	0.945	0.53	6.32	-106.0
MW-1	12/29/2016	15.3	0.897	1.14	6.61	84.8
MW-1	7/11/2017	19.1	0.925	4.53	6.34	-89.8
MW-2	7/18/2013	18.7	0.901	3.63	6.62	51.2
MW-2	10/23/2013	18.3	0.852	0.57	6.59	-93.4
MW-2	7/10/2014	19.3	0.878	0.51	6.72	-160.3
MW-2	9/15/2014	19.0	0.936	0.07	6.35	-49.3
MW-2	1/9/2015	19.1	0.959	0.47	6.79	-59.5
MW-2	3/31/2015	18.2	0.934	0.13	6.38	-113.4
MW-2	10/14/15	19.85	0.673	0.40	6.64	-87.3
MW-2	5/3/2016	18.9	0.888	0.35	6.66	-151.0
MW-2	12/29/2016	15	0.825	0.92	6.87	-19.8
MW-2	7/11/2017	19.5	0.866	0.81	6.66	-221.3
MW-3	7/18/2013	18.7	0.799	5.36	6.52	71.9
MW-3	10/23/2013	18.3	1.133	1.84	6.94	213.6
MW-3	7/10/2014	19.6	1.121	1.99	7.10	54.3
MW-3	9/15/2014	18.9	1.162	0.28	6.73	97.4
MW-3	1/9/2015	18.9	1.147	5.30	7.11	334.8
MW-3	3/31/2015	18.2	1.113	3.48	6.71	435.5
MW-3	10/14/2015	19.76	0.773	0.79	6.80	136.0
MW-3	5/3/2016	17.9	1.033	2.39	6.95	-59.0
MW-3	12/29/2016	15.2	0.798	3.84	7.00	-1.9
MW-3	7/11/2017	20.3	0.927	3.10	6.87	-130.5
MW-4	7/18/2013	20.5	1.438	4.21	6.44	25.1
MW-4	10/23/2013	20.6	1.271	0.92	6.34	-85.3
MW-4	7/10/2014	21.5	1.379	0.65	6.50	-47.9
MW-4	9/15/2014	21.2	1.463	0.05	6.25	-20.0
MW-4	1/9/2015	20.1	1.424	0.17	6.74	-59.3
MW-4	3/31/2015	19.6	1.386	0.14	6.29	-48.5
MW-4	10/14/2015	23.48	1.137	0.31	6.44	-31.1
MW-4	5/3/2016	18.9	1.249	0.58	6.57	-146.0
MW-4	12/29/2016	15.9	1.072	0.94	6.73	-71.1
MW-4	7/11/2017	21.8	1.223	1.06	6.59	-112.8

Table 2
Groundwater Physical Parameters
3884 Martin Luther King Jr. Way
Oakland, California

Well	Date	Temperature (°Celsius)	Conductivity (mS/cm)	DO (mg/L)	pH	ORP (mV)
MW-5	7/18/2013	17.1	0.845	6.17	6.63	78.2
MW-5	10/23/2013	17.0	0.841	0.81	6.56	205.2
MW-5	7/10/2014	17.5	0.795	0.53	6.48	73.8
MW-5	9/15/2014	17.4	0.861	0.08	6.20	103.5
MW-5	1/9/2015	17.6	0.864	0.30	6.49	256.4
MW-5	3/31/2015	17.3	0.842	0.12	6.12	460.5
MW-5	10/14/2015	18.38	0.611	0.30	6.20	123.1
MW-5	5/3/2016	18.8	0.757	0.37	6.40	-110.0
MW-5	12/29/2016	14.7	0.690	0.96	6.48	-33.2
MW-5	7/11/2017	18.8	1.232	3.01	6.57	-188.2
MW-6	9/15/2014	21.3	1.757	2.56	6.51	98.4
MW-6	1/9/2015	20.1	1.716	0.77	7.01	-7.9
MW-6	3/31/2015	19.8	1.569	0.07	6.47	-72.6
MW-6	10/14/2015	22.94	0.977	0.14	6.56	-18.1
MW-6	5/3/2016	19.9	1.24	0.28	6.79	-143.0
MW-6	12/29/2016	16.3	1.083	1.24	6.88	-35.7
MW-6	7/11/2017	19.0	0.859	3.41	6.70	-159.8
MW-7	9/15/2014	20.5	1.508	4.95	6.66	104.3
MW-7	1/9/2015	19.5	1.377	3.14	7.26	115.5
MW-7	3/31/2015	19.2	1.277	0.85	6.74	118.6
MW-7	10/14/2015	22.04	0.899	0.19	6.74	146.0
MW-7	5/3/2016	17.4	1.035	4.04	7.05	-51.0
MW-7	12/29/2016	15.1	0.834	4.27	7.01	31.9
MW-7	7/11/2017	19.9	0.876	2.58	6.88	-45.3
MW-8	9/15/2014	20.4	1.055	5.87	6.81	106.1
MW-8	1/9/2015	19.9	0.813	2.39	9.20	92.9
MW-8	3/31/2015	19.4	0.723	1.03	6.89	155.7
MW-8	10/14/2015	21.75	0.568	0.18	6.87	136.3
MW-8	5/3/2016	18.4	0.826	2.37	7.12	-74.0
MW-8	12/29/2016	13.2	0.776	3.06	7.11	93.7
MW-8	7/11/2017	18.6	0.823	4.62	6.68	-84.1

Abbreviations:

DO = Dissolved Oxygen
mg/L = milligrams per liter
mS/cm = milliSiemens per centimeter
mV = millivolt
ORP = Oxidation-Reduction Potential

Table 3
Petroleum Hydrocarbons and Volatile Organic Compounds
3884 Martin Luther King Jr. Way
Oakland, California

Well	Date	Analyte							
		TPH as Gasoline	Benzene	Toluene	Ethylbenzene	Xylenes	Naphthalene	1,2-DCA	cis-1,2-DCE
Commercial/Industrial Groundwater ESL		*NE*	*30*	*100,000*	*370*	*38,000*	*180*	*90*	*15,400*
LTCP		*NE*	*3000*	*NE*	*NE*	*NE*	*NE*	*NE*	*NE*
MW-1	7/18/2013	<50	<0.5	<0.5	<0.5	<1.0	<1.0	4.5	<0.5
MW-1	10/23/2013	<50	<0.5	<0.5	<0.5	<1.0	NA	NA	NA
MW-10[1]	10/23/2013	<50	<0.5	<0.5	<0.5	<1.0	NA	NA	NA
MW-1	7/10/2014	<50	<0.5	<0.5	<0.5	<1.0	NA	NA	NA
MW-1	9/15/2014	<50	<0.5	<0.5	<0.5	<1.0	<1.0	4.0	<0.5
MW-1	1/9/2015	<50	<0.5	<0.5	<0.5	<1.0	<1.0	3.1	<0.5
MW-1	3/31/2015	<50	<0.5	<0.5	<0.5	<1.0	<1.0	1.8	<0.5
MW-1	10/14/15	<50 UJ	<0.5 UJ	<0.5	<0.5	<1.0	<1.0	2.1	<0.5
MW-1	05/03/16	<50	<0.5	<0.5	<0.5	<1	<1	2.1	<0.5
MW-1	12/29/16	<50	<0.5	<0.5	<0.5	<1	<1	1.6	<0.5
MW-1	07/11/17	<50	<0.5	<0.5	<0.5	<1.0	<1.0	<0.5	<0.5
MW-2	7/18/2013	560	220	2.9	4.6	35	<1.0	4.3	<0.5
MW-2	10/23/2013	9,400	8,200	200	120	380	NA	NA	NA
MW-2	7/10/2014	8,800 J	4,800	130	140	<200	NA	NA	NA
MW-2	9/15/2014	11,000	5,600	180	190	<200	<200	<100	<100
MW-2	1/9/2015	7,600	4,200	110	130	98	17	2.2	<0.5
FD-1[2]	1/9/2015	6,600	3,600	99	110	90	15	2.3	<0.5
MW-2	3/31/2015	10,000	5,900	160	230	150	<100	<50	<0.5
MW-2	10/14/15	6,900 J	3,600 J	130	180	140	7.8	0.74	<0.5
MW-2	05/03/16	4,200	2,500	55	76	44	<20	<10	<10
DUP-05032016	05/03/16	5,100	2,700	57	75	<100	<100	<50	<50
MW-2	12/29/16	170	26	0.59	1.1	<1	<1	<0.5	<0.5
MW-20[2]	07/11/17	<2500	1,400	35	52	42	4.2	0.65	<0.5
MW-2	07/11/17	<2500	1,500	35	52	42	4.0	0.71	<0.5
MW-3	7/18/2013	<50	<0.5	<0.5	<0.5	<1.0	<1.0	<0.5	<0.5
MW-3	10/23/2013	<50	<0.5	<0.5	<0.5	<1.0	NA	NA	NA
MW-3	7/10/2014	<50	<0.5	<0.5	<0.5	<1.0	NA	NA	NA
MW-3	9/15/2014	<50	<0.5	<0.5	<0.5	<1.0	<1.0	<0.5	<0.5
FD-1[3]	9/15/2014	<50	<0.5	<0.5	<0.5	<1.0	<1.0	<0.5	<0.5
MW-3	1/9/2015	<50	<0.5	<0.5	<0.5	<1.0	<1.0	<0.5	<0.5
MW-3	3/31/2015	<50	<0.5	<0.5	<0.5	<1.0	<1.0	<0.5	<0.5
MW-3	10/14/15	<50 UJ	<0.5 UJ	<0.5	<0.5	<1.0	<1.0	<0.5	<0.5
MW-3	05/03/16	<50	<0.5	<0.5	<0.5	<1	<1	<0.5	<0.5
MW-3	12/29/16	<50	<0.5	<0.5	<0.5	<1	<1	<0.5	<0.5
MW-3	07/11/17	<50	<0.5	<0.5	<0.5	<1.0	<1.0	<0.5	<0.5
MW-4	7/18/2013	9,500	980	510	270	2,600	180	0.7	<0.5
MW-40[4]	7/18/2013	13,000	1,100	930	800	3,500	180	0.6	<0.5
MW-4	10/23/2013	15,000	1,800	480	1,500	3,100	NA	NA	NA
MW-4	7/10/2014	25,000 J	2,500 J	950	1,800 J	6,400	NA	NA	NA
MW-40[4]	7/10/2014	32,000 J	3,100 J	1,100	2,400 J	6,100	NA	NA	NA
MW-4	9/15/2014	22,000	2,800	470	2,200	3,000	370	<25	<25
MW-4	1/9/2015	21,000	1,900	180	1,800	3,600	290	0.67	<0.5
MW-4	3/31/2015	32,000	3,100	730	2,900	8,100	530	<50	<50
MW-4	10/14/15	14,000 J	2,200 J	170	1,600	1,600	150	<50	<50
MW-4	05/03/16	8,800	720	65	650	1,400	84	<5	<5
MW-4	12/29/16	3,600	360	33	280	560	36	<5	<5
MW-40[4]	12/29/16	3,800	370	35	290	570	41	<5	<5
MW-4	07/11/17	5,100	1,100	88	920	410	160	<0.5	<0.5
MW-5	7/18/2013	<50	<0.5	<0.5	<0.5	<1.0	<1.0	<0.5	<0.5
MW-5	10/23/2013	<50	<0.5	<0.5	<0.5	<1.0	NA	NA	NA
MW-5	7/10/2014	<50	<0.5	<0.5	<0.5	<1.0	NA	NA	NA
MW-5	9/15/2014	<50	<0.5	<0.5	<0.5	<1.0	<1.0	<0.5	<0.5
MW-5	1/9/2015	<50	<0.5	<0.5	<0.5	<1.0	<1.0	<0.5	<0.5
MW-5	3/31/2015	<50	<0.5	<0.5	<0.5	<1.0	<1.0	<0.5	<0.5
MW-5	10/14/15	<50 UJ	<0.5 UJ	<0.5	<0.5	<1.0	<1.0	<0.5	<0.5
MW-5	05/03/16	<50	<0.5	<0.5	<0.5	<1	<1	<0.5	<0.5
MW-5	12/29/16	<50	<0.5	<0.5	<0.5	<1	<1	<0.5	<0.5
MW-5	07/11/17	<50	<0.5	<0.5	<0.5	<1.0	2.7	<0.5	<0.5

Table 3
Petroleum Hydrocarbons and Volatile Organic Compounds
3884 Martin Luther King Jr. Way
Oakland, California

Well	Date	Analyte							
		TPH as Gasoline	Benzene	Toluene	Ethylbenzene	Xylenes	Naphthalene	1,2-DCA	cis-1,2-DCE
Commercial/Industrial Groundwater ESL		*NE*	*30*	*100,000*	*370*	*38,000*	*180*	*90*	*15,400*
LTCP		*NE*	*3000*	*NE*	*NE*	*NE*	*NE*	*NE*	*NE*
MW-6	9/15/2014	**300**	**5.6**	<0.5	**0.6**	**4.7**	<1.0	<0.5	<0.5
MW-6	1/9/2015	**160**	**10**	<0.5	<0.5	<1.0	<1.0	<0.5	<0.5
MW-6	3/31/2015	**2000**	**150**	**1.4**	**48**	**2.9**	<1.0	<0.5	<0.5
MW-60[5]	3/31/2015	**2100**	**160**	**1.5**	**53**	**3.5**	<1.0	<0.5	<0.5
MW-6	10/14/15	**1300 J**	**40 J**	**0.55**	**1.1**	**2.6**	<1.0	<0.5	<0.5
MW-60[5]	10/14/15	**1700 J**	**72 J**	**0.75**	**2.7**	**3.6**	<1.0	<0.5	<0.5
MW-6	05/03/16	**77**	**2.6**	<0.5	<0.5	<1	<1	<0.5	<0.5
MW-6	12/29/16	**59**	**4.7**	<0.5	<0.5	<1	<1	<0.5	<0.5
MW-6	07/11/17	<50	<0.5	<0.5	<0.5	<1.0	<1.0	<0.5	<0.5
MW-7	9/15/2014	<50	<0.5	<0.5	<0.5	<1.0	<1.0	<0.5	<0.5
MW-7	1/9/2015	<50	<0.5	<0.5	<0.5	<1.0	<1.0	<0.5	<0.5
MW-7	3/31/2015	<50	<0.5	<0.5	<0.5	<1.0	<1.0	<0.5	<0.5
MW-7	10/14/15	<50 UJ	<0.5 UJ	<0.5	<0.5	<1.0	<1.0	<0.5	<0.5
MW-7	05/03/16	<50	<0.5	<0.5	<0.5	<1	<1	<0.5	<0.5
MW-7	05/03/16	<50	<0.5	<0.5	<0.5	<1	<1	<0.5	<0.5
MW-7	12/29/16	<50	<0.5	<0.5	<0.5	<1	<1	<0.5	<0.5
MW-7	07/11/17	<50	<0.5	<0.5	<0.5	<1.0	<1.0	<0.5	<0.5
MW-8	9/15/2014	<50	<0.5	<0.5	<0.5	<1.0	<1.0	<0.5	<0.5
MW-8	1/9/2015	<50	<0.5	<0.5	<0.5	<1.0	<1.0	<0.5	<0.5
MW-8	3/31/2015	<50	<0.5	<0.5	<0.5	<1.0	<1.0	<0.5	<0.5
MW-8	10/14/15	<50 UJ	<0.5 UJ	<0.5	<0.5	<1.0	<1.0	<0.5	<0.5
MW-8	05/03/16	<50	<0.5	<0.5	<0.5	<1	<1	<0.5	<0.5
MW-8	12/29/16	<50	<0.5	<0.5	<0.5	<1	<1	<0.5	<0.5
MW-8	07/11/17	<50	<0.5	<0.5	<0.5	<1.0	<1.0	<0.5	<0.5
Trip Blank	7/18/2013	<50	<0.5	<0.5	<0.5	<1.0	NA	NA	NA
Trip Blank	10/23/2013	<50	<0.5	<0.5	<0.5	<1.0	NA	NA	NA
Trip Blank	7/10/2014	<50	<0.5	<0.5	<0.5	<1.0	NA	NA	NA
Trip Blank	9/15/2014	<50	<0.5	<0.5	<0.5	<1.0	<1.0	<0.5	<0.5
Trip Blank	1/9/2015	<50	<0.5	<0.5	<0.5	<1.0	<1.0	<0.5	<0.5
Trip Blank	3/31/2015	<50	<0.5	<0.5	<0.5	<1.0	<1.0	<0.5	<0.5
Trip Blank	10/14/15	<50	<0.5	<0.5	<0.5	<1.0	<1.0	<0.5	<0.5
Trip Blank	05/03/16	<50	<0.5	<0.5	<0.5	<1.0	<1.0	<0.5	<0.5
Trip Blank	12/29/16	<50	<0.5	<0.5	<0.5	<1.0	<1.0	<0.5	<0.5
Trip Blank	07/11/17	<50	<0.5	<0.5	<0.5	<1.0	<1.0	<0.5	<0.5

Notes:

Sample concentrations reported in micrograms per liter (µg/L)

Commercial/Industrial Soil Vapor Intrusion Groundwater ESL = Environmental Screening Level in groundwater for commercial/industrial properties (RWQCB ESL Workbook, [2]Shallow Groundwater, Table GW-3 Soil Vapor Intrusion Commercial/Industrial, updated February

Bold values indicate concentrations detected above the laboratory reporting limit

#	Indicates a concentration detected above the LTCP criteria
#	Indicates a concentration detected above the Soil Vapor Intrusion Water ESL
< 0.5	Compound not detected at or above the laboratory reporting limit

[1] Field duplicate of MW-1

[2] Field duplicate of MW-2

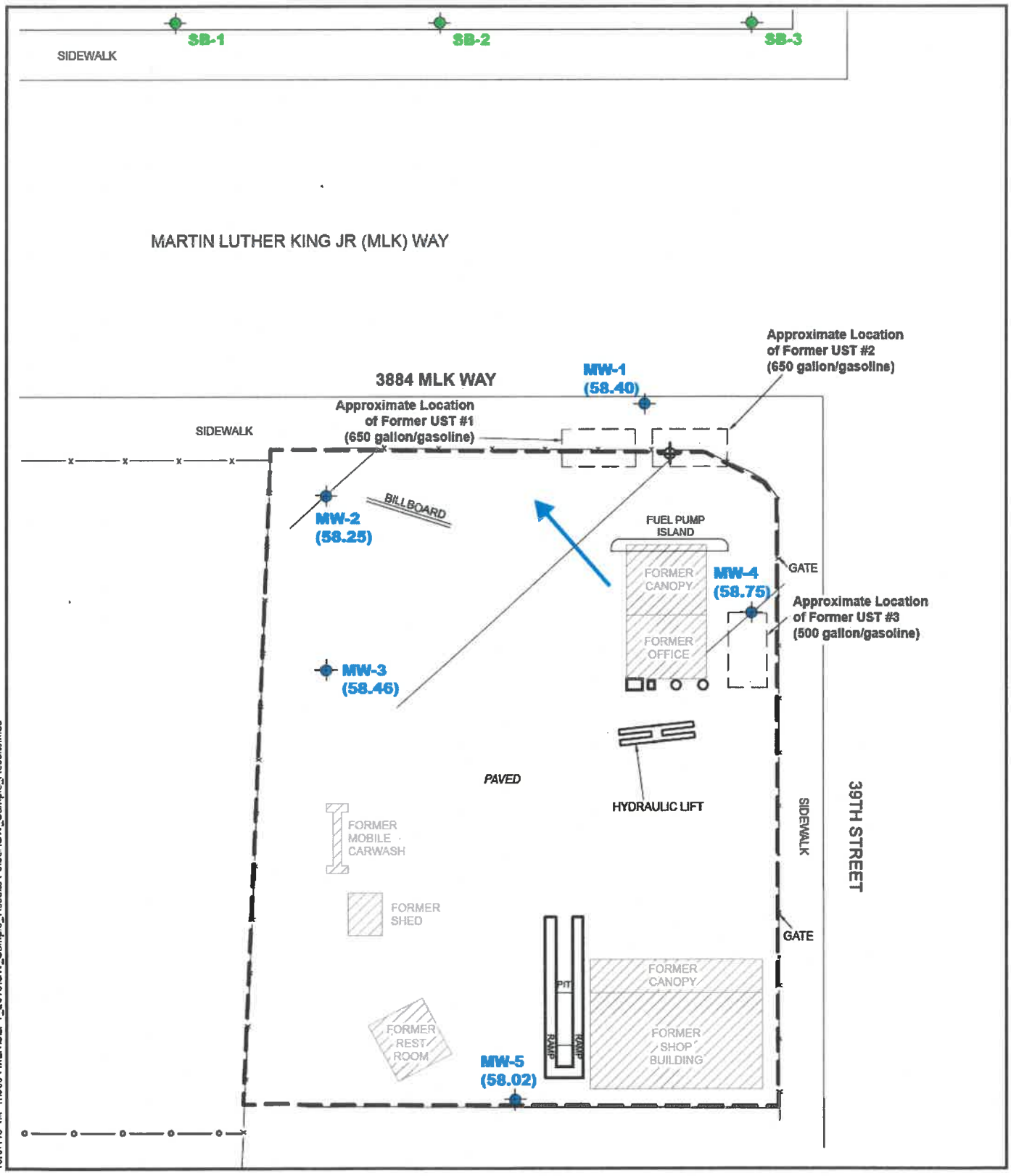
[3] Field duplicate of MW-3

[4] Field duplicate of MW-4

[5] Field duplicate of MW-6

Abbreviations:

TPH = Total Petroleum Hydrocarbons
1,2-DCA = 1,2-Dichloroethane
cis-1,2-DCE = cis-1,2-Dichloroethene
NA Not analyzed
J Value is Estimated
UJ Non-detected, Estimated



MW-1 (58.40) Proposed Monitoring Well and Groundwater Elevation

SB-1 Soil Boring (URS 2013)

Interpreted Groundwater Flow Direction
Approximate Gradient = 0.02

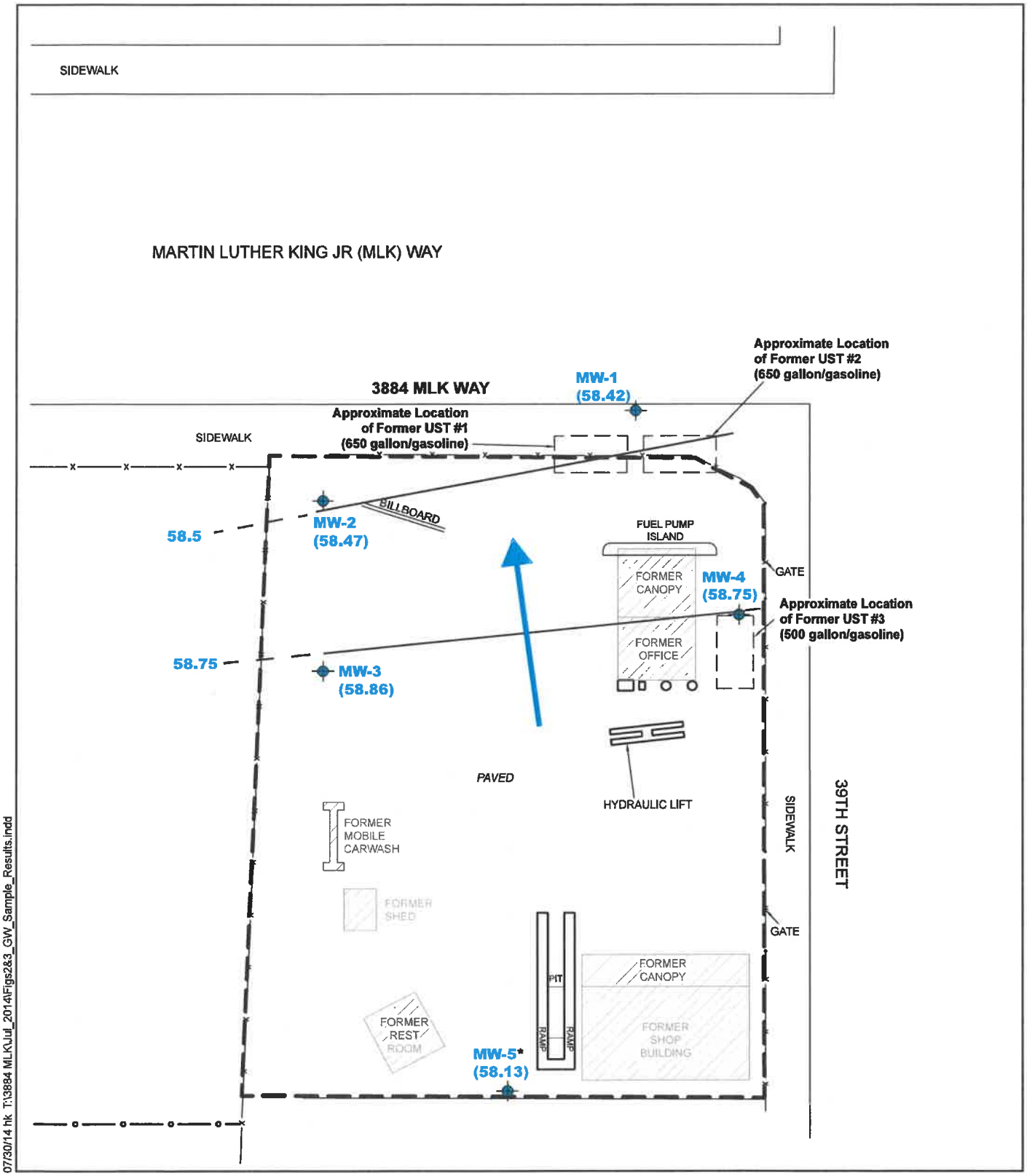
0 25 FEET

GROUNDWATER ELEVATION CONTOUR MAP

September 2013 3884 Martin Luther King, Jr. Way
28068161 Oakland, California

URS

FIGURE 11



MW-1 (57.42) Proposed Monitoring Well and Groundwater Elevation

Interpreted Groundwater Flow Direction
Approximate Average Gradient = 0.008

*Elevation data not used for contouring.

0 25 FEET

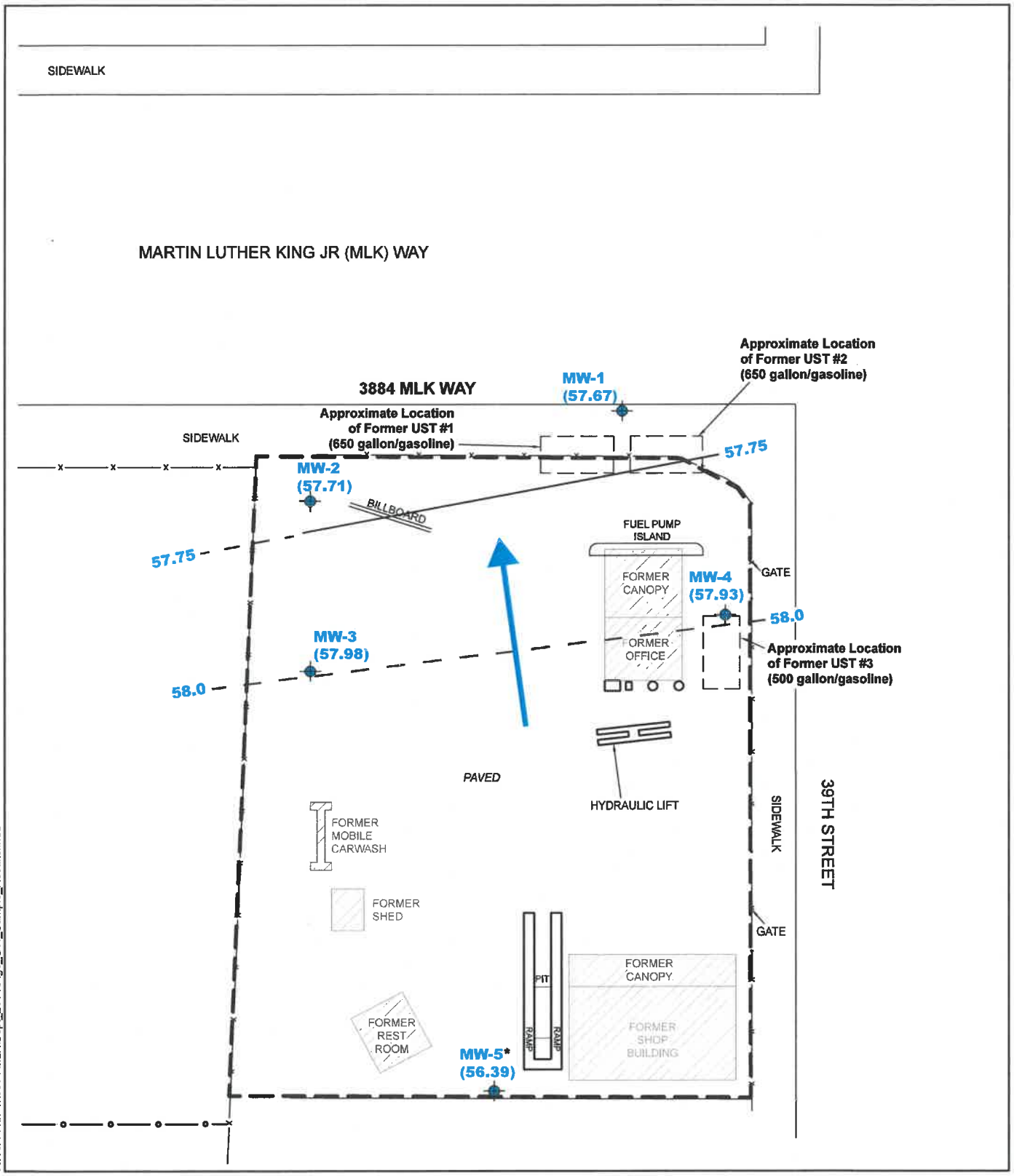
GROUNDWATER ELEVATION

July 2014
28068161

3884 Martin Luther King, Jr. Way
Oakland, California

URS

FIGURE 2



09/30/14 hk T:\3884 MLK\Sept_2014\Fig3_GW_Sample_Results.indd

MW-1 (57.67) Proposed Monitoring Well and Groundwater Elevation

Interpreted Groundwater Flow Direction
Approximate Average Gradient = 0.01

*Elevation data not used for contouring.

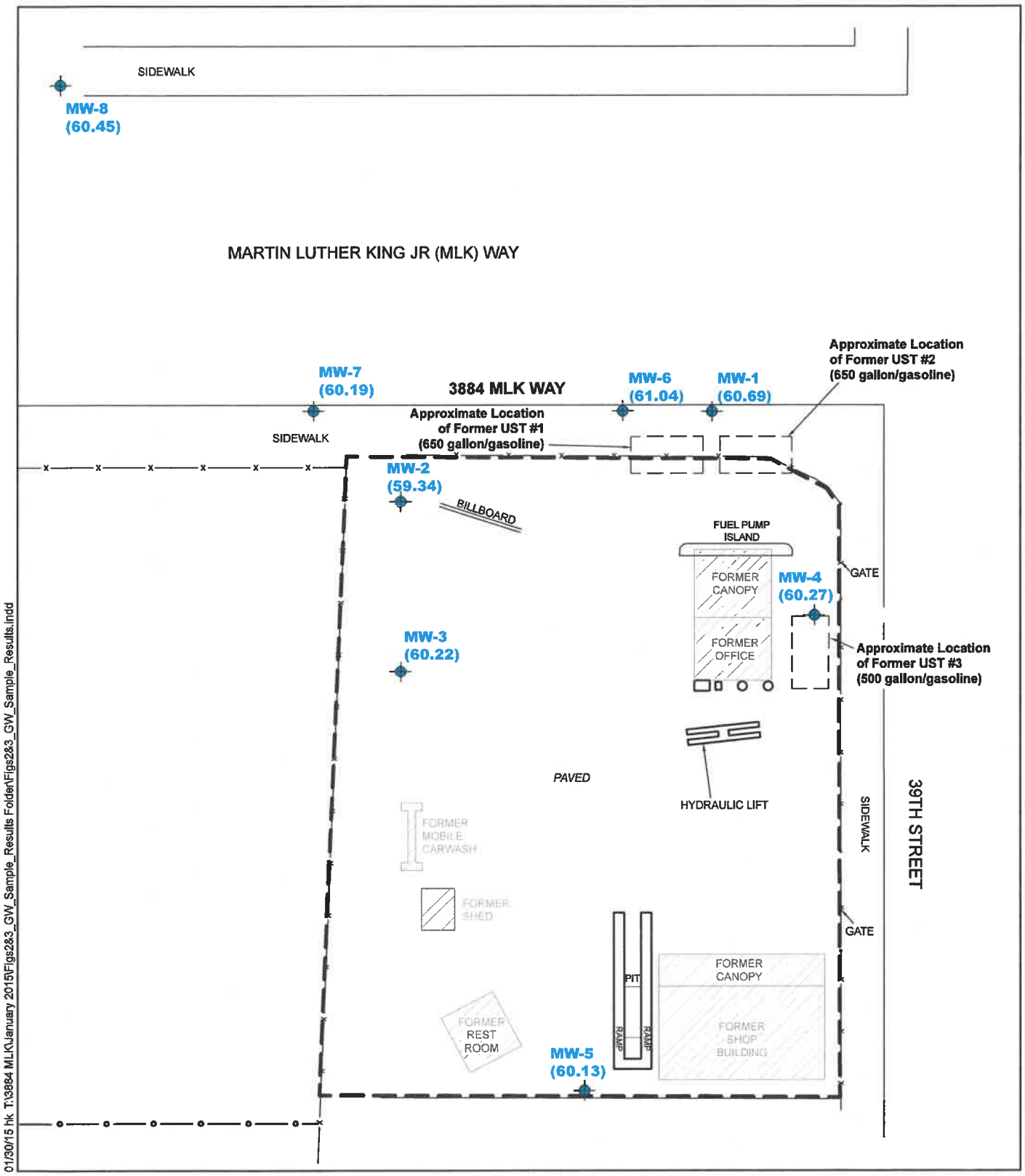
0 26 FEET

GROUNDWATER ELEVATION

September 2014 — 3884 Martin Luther King, Jr. Way
28068161 — Oakland, California

URS

FIGURE 2



MW-1 (60.69) Monitoring Well and Groundwater Elevation – January 2015

0 25 FEET

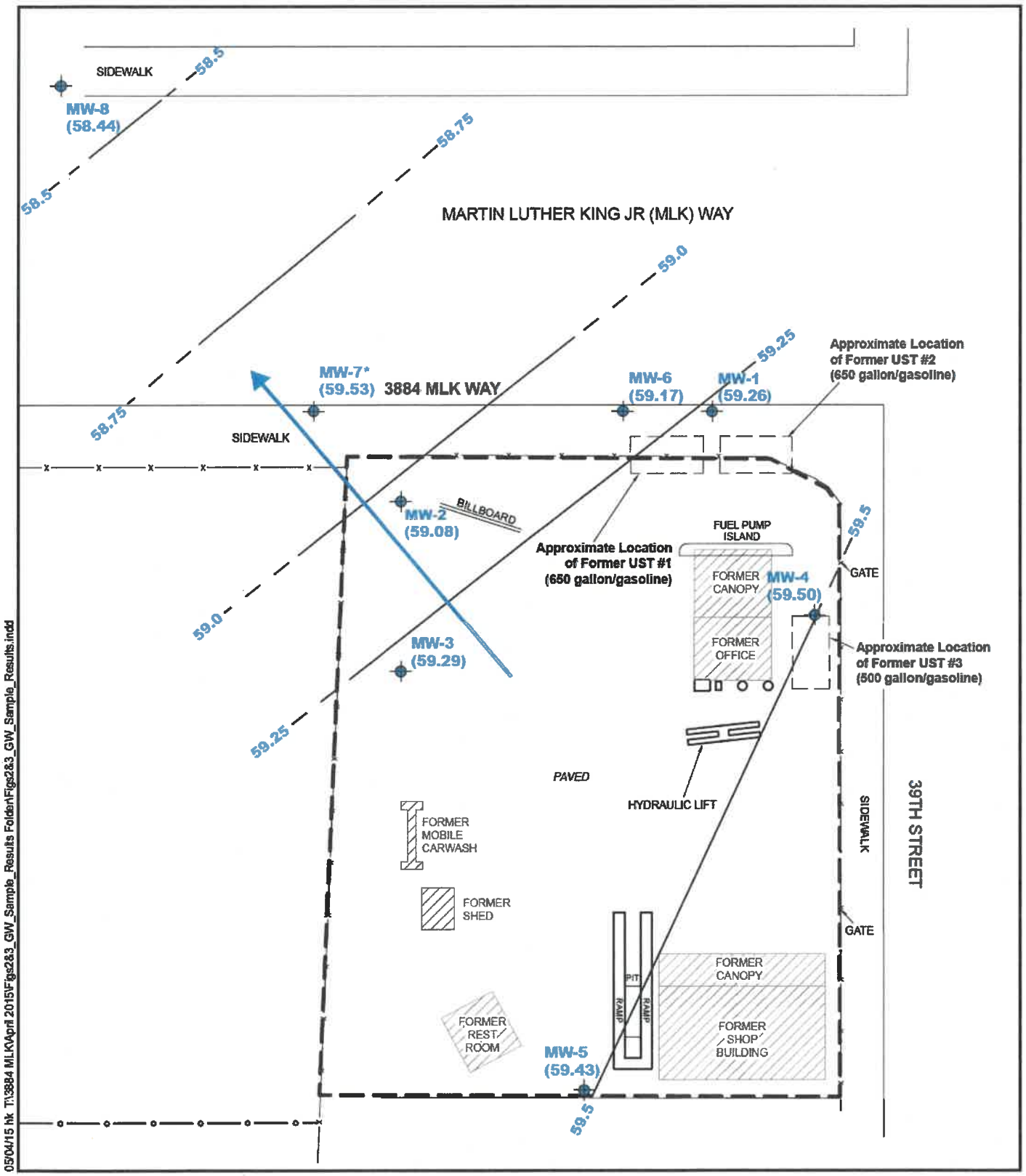
GROUNDWATER ELEVATION

January 2015
28068161

3884 Martin Luther King, Jr. Way
Oakland, California

URS

FIGURE 2



MW-1 (59.26) Monitoring Well and Groundwater Elevation – January 2015

Interpreted Groundwater Flow Direction
Approximate Average Gradient = 0.007

*Well data not used for contouring.

0 25 FEET

GROUNDWATER ELEVATION

April 2015
28068161

3884 Martin Luther King, Jr. Way
Oakland, California

URS

FIGURE 2

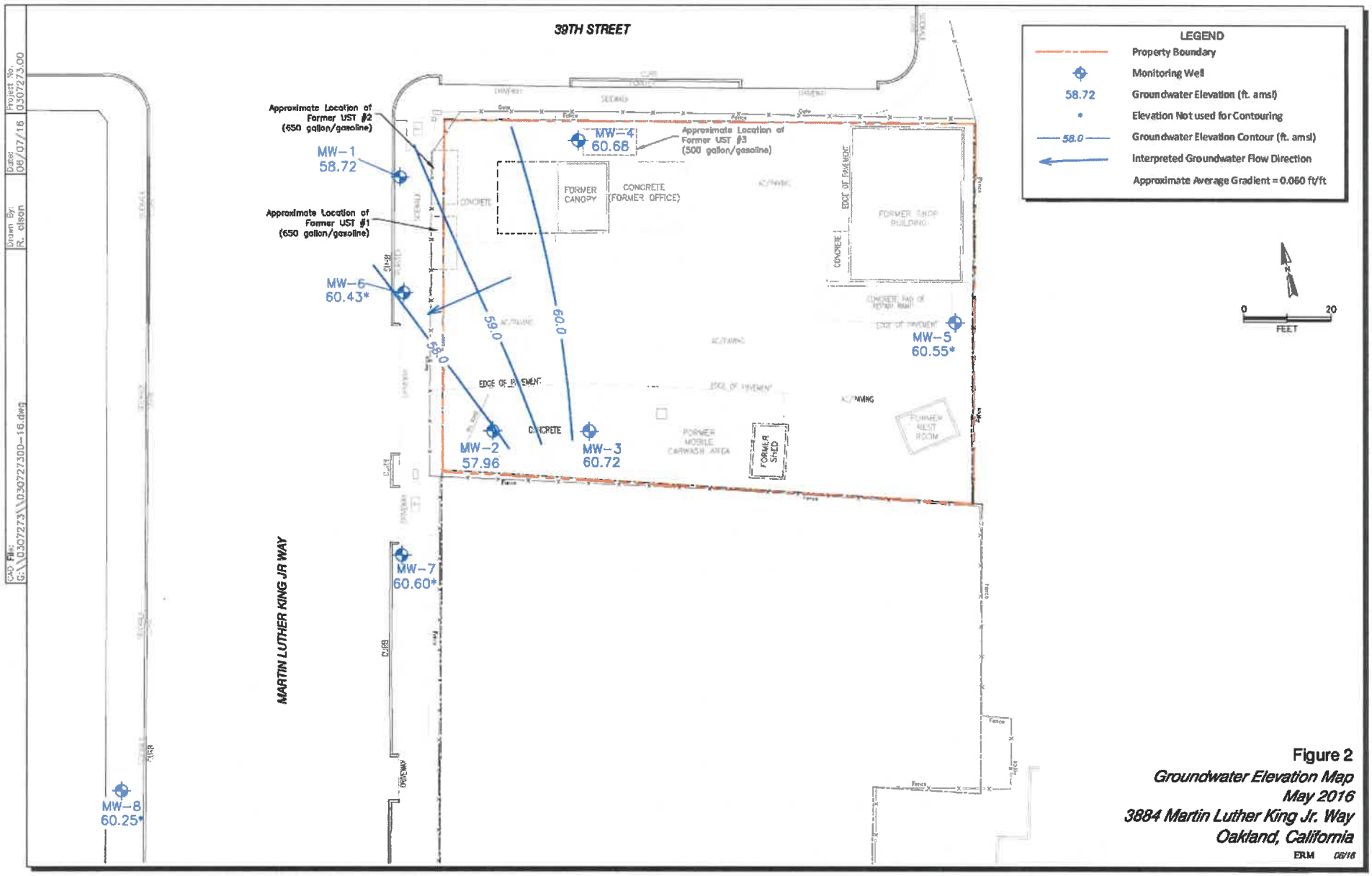


Figure 2
Groundwater Elevation Map
May 2016
3884 Martin Luther King Jr. Way
Oakland, California
ERM 08/16

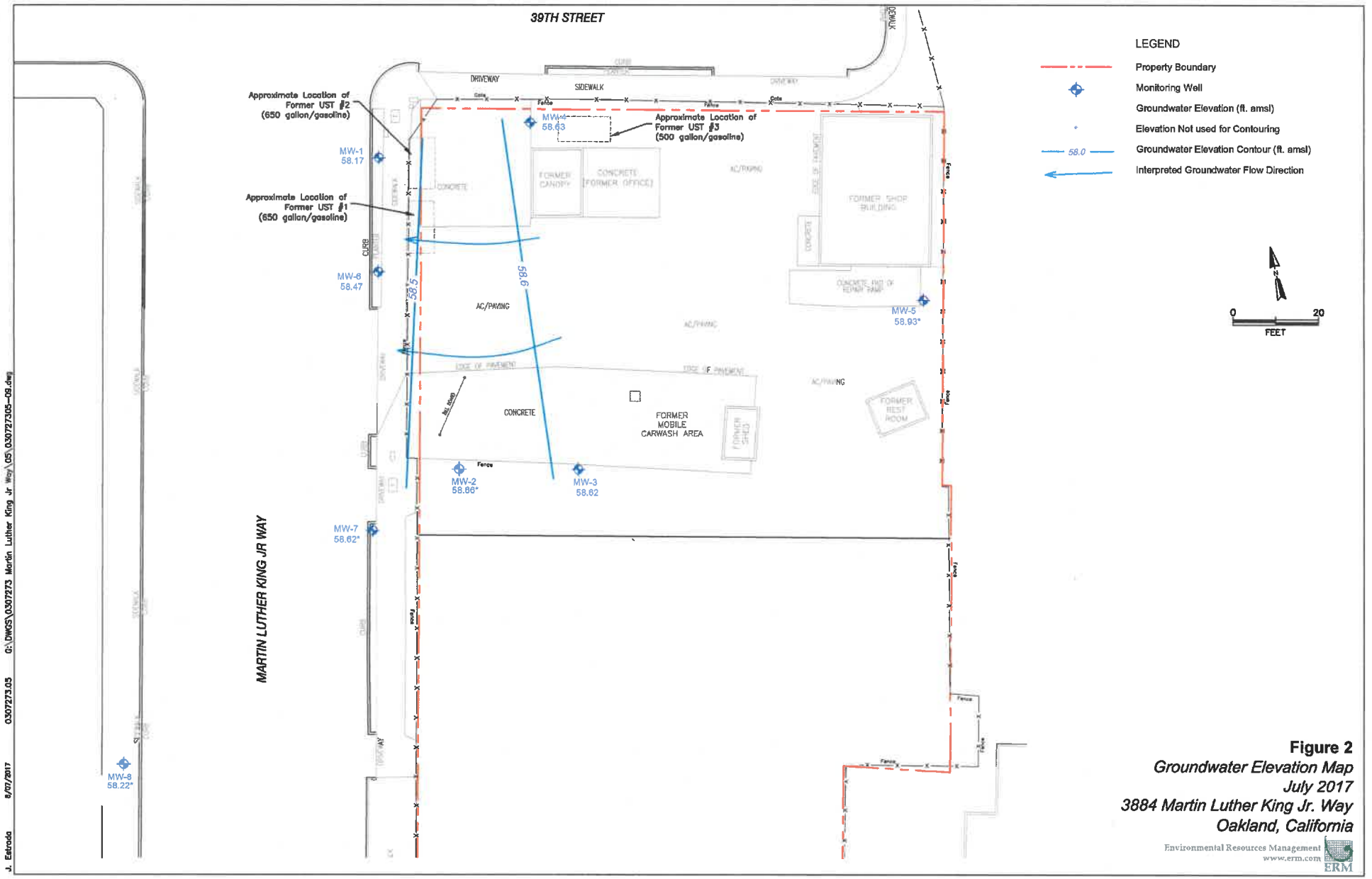


Figure 2
Groundwater Elevation Map
July 2017
3884 Martin Luther King Jr. Way
Oakland, California

Environmental Resources Management
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ATTACHMENT B-5

Soil Data

TABLE 1

Summary of Soil Sampling Results

SAMPLE I.D.	TPH-G (mg/Kg)	BENZENE (ug/Kg)	TOLUENE (ug/Kg)	ETHYL BENZENE (ug/Kg)	TOTAL XYLENE (ug/Kg)	LEAD (mg/Kg)
SS-1	35	590	570	1300	5400	2.6
SS-2	140	610	960	580	9700	7.9
SS-3	18	340	400	850	4600	3.4

TPH-G: EPA Method 5030/8015; Detection Limit 1.0 mg/kg
BTEX : EPA Method 8020; Detection Limit 5.0 ug/kg
Lead: EPA Method 7420; Detection Limit 1.0 mg/kg

Table 2-2
Soil Results - 2013

	TPH-g	Benzene	Toluene	Ethylbenzene	Xylenes	Napthalene	<460	cis-1,2-DCE
MW-1-7	750,000	<460	<460	<460	<910	<910	<460	<460
MW-1-12	<230	<4.5	<4.5	<4.5	<9.1	<9.1	<4.5	<4.5
MW-1-15	<210	<4.1	<4.1	<4.1	<8.3	<8.3	<4.1	<4.1
MW-1-20	<210	<4.1	<4.1	<4.1	<8.2	<8.2	<4.1	<4.1
FD-5-20****	<240	<3.6	<3.6	<3.6	<7.1	<7.1	<3.6	<3.6
MW-2-12	<200	<3.6	<3.6	<3.6	<8.0	<7.1	<3.6	<3.6
MW-2-15	<190	<3.8	<3.8	<3.8	<8.1	<7.7	<3.8	<3.8
MW-2-18.5	<20000	1700	<400	<400	<800	<800	<400	<400
MW-2-20	<190	<3.8	<3.8	<3.8	<7.6	<7.6	<3.8	<3.8
MW-3-12	<210	<4.2	<4.2	<4.2	<8.4	<8.4	<4.2	<4.2
MW-3-15	<200	<4.1	<4.1	<4.1	<8.4	<8.4	<4.1	<4.1
MW-3-20	<210	<4.1	<4.1	<4.1	<8.3	<8.3	<4.1	<4.1
MW-4-12	2200	240	22	220	88	31	<5.0	<5.0
MW-4-15	400,000	1300	1800	9000	38000	2400	<800	<800
MW-4-16	2,700,000	2700	3900	48000	110000	12000	<380	<380
MW-4-20	<21000	<420	<420	<420	<830	<830	<420	<420
MW-5-12	<220	<4.5	<4.5	<4.5	<8.9	<8.9	<4.5	<4.5
MW-5-15	<200	<4.1	<4.1	<4.1	<8.2	<8.2	<4.1	<4.1
MW-5-20	<220	<4.3	<4.3	<4.3	<8.6	<8.6	<4.3	<4.3
SB-4-12	<220	<4.3	<4.3	<4.3	<8.6	<8.6	<4.3	<4.3
SB-4-15	<200	<4.0	<4.0	<4.0	<7.9	<7.9	<4.0	<4.0
SB-4-20	680	<3.7	<3.7	<3.7	<7.4	<7.4	<3.7	<3.7
SB-5-12	2600	1000	13	560	<8.3	<8.3	<4.2	<4.2
SB-5-15	<200	<4.1	<4.1	<4.1	<8.1	<8.1	<4.1	<4.1
SB-5-20	<210	<4.2	<4.2	<4.2	<8.4	<8.4	<4.2	<4.2
SB-6-12	780	<4.3	<4.3	7.6	9.2	<8.7	<4.3	<4.3
SB-6-15	4800	180	7.6	330	29	13	<4.1	<4.1
SB-6-16	1,400,000	4600	70000	32000	180000	10000	<3900	<3900
SB-6-20	650	6.6	34	14	78	<7.6	<3.8	<3.8
SB-7-12	<190	<3.9	<3.9	<3.9	<7.8	<7.8	<3.9	<3.9
FD-1-12*	<210	<4.3	<4.3	<4.3	<8.6	<8.6	<4.3	<4.3
SB-7-15	77,000	420	<390	1300	2800	<790	<390	<390
SB-7-20	<200	<4.0	<4.0	<4.0	<8.1	<8.1	<4.0	<4.0
SB-8-12	<210	7.5	<4.2	<4.2	<8.4	11	<4.2	<4.2
SB-8-15	<200	<4.1	<4.1	<4.1	<8.2	<8.2	<4.1	<4.1
SB-8-20	<210	<4.2	<4.2	<4.2	<8.4	<8.4	<4.2	<4.2
FD-3-20**	<210	<4.2	<4.2	<4.2	<8.5	<8.5	<4.2	<4.2
SB-9-12	230	<4.5	<4.5	<4.5	<8.9	<8.9	<4.5	<4.5
SB-9-15	<21,000	130	7.6	48	340	110	<4.1	<4.1
SB-9-18	27000	1400	<400	790	<800	<800	<400	<400
SB-9-20	<200	<4.0	<4.0	<4.0	<8.0	<8.0	<4.0	<4.0
FD-2-20***	<210	<4.2	<4.2	<4.2	<8.4	<8.4	<4.2	<4.2
SB-10-12	<210	<4.2	<4.2	<4.2	<8.4	<8.4	<4.2	<4.2
SB-10-15	<200	<4.1	<4.1	<4.1	<8.1	<8.1	<4.1	<4.1
SB-10-20	<150	<3.1	<3.1	<3.1	<6.2	<6.2	<3.1	<3.1
SB-11-12	790	80	<4.2	55	<8.5	8.9	<4.2	<4.2
SB-11-15	<170	<3.3	<3.3	<3.3	<6.6	<6.6	<3.3	<3.3
SB-11-20	<180	<3.7	<3.7	<3.7	<7.4	<7.4	<3.7	<3.7

TPH-g = Total Petroleum Hydrocarbons as Gasoline Range Organics (GRO)-C5-C12

*dup of SB-7-12
**dup of SB-8-20
*** dup of SB-9-20
****dup of MW-1-20

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Soil Analytical Results 3884 Martin Luther King Junior Way
JCC INVESTIGATION OF FEBRUARY 2006

Analyte	TPH-G	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Other Oxygenates			TTLC	STLC	PRG resid	RBSL
9795-GP1-5.0	ND	ND	ND	ND	ND	ND	ND			--	--	NE	100
9795-GP1-10.0	ND	ND	ND	ND	ND	ND	ND			--	--	NE	100
9795-GP1-15.0	ND	ND	ND	ND	ND	ND	ND			--	--	NE	500
										--	--	NE	NE
9795-GP2-5.0	ND	ND	ND	ND	ND	ND	ND			--	--	varies	varies
9795-GP2-10.0	23.6 ppm	ND	ND	0.315 ppm	0.243 ppm	ND	ND			--	--	6.2	0.028
9795-GP2-14.0	ND	ND	ND	ND	ND	ND	ND						
										500	15.0	310	6.3
9795-GP3-5.0	ND	ND	ND	ND	ND	ND	ND			500	5.	220	0.39
9795-GP3-10.0	ND	ND	ND	ND	ND	ND	ND			10,000	100	5,400	750
9795-GP3-14.0	ND	ND	ND	ND	ND	ND	ND			75	0.75	150	4.0
										100	1.0	37	1.7
9795-GP4-5.0	ND	ND	ND	ND	ND	ND	ND			2500	560	210	750
9795-GP4-10.0	30.7 ppm	ND	ND	1.38 ppm	4.60 ppm	ND	ND			8,000	80	900	40
9795-GP4-14.0	1.31 ppm	ND	ND	0.083 ppm	0.057 ppm	ND	ND			2,500	25	3,100	225
										1,000	5.0	150	200
9795-GP5-2.0	ND	ND	ND	ND	ND	ND	ND			20	0.2	23	4.7
9795-GP5-8.0	176	ND	ND	3.19 ppm	15.5 ppm	ND	ND			3,500	350	390	40
9795-GP5-12.0	1.80	0.86 ppm	0.14 ppm	0.11 ppm	0.26 ppm	ND	ND			2,000	20	1,600	150
										100	1.0	390	10
9795-GP6-1.5	ND	ND	ND	ND	ND	ND	ND			500	5.0	390	20
9795-GP6-6.0	ND	ND	ND	ND	ND	ND	ND			700	7.0	5.2	1.0
9795-GP6-10.0	18.3 ppm	ND	ND	0.48 ppm	0.57 ppm	ND	ND						
9795-GP6-14.0	1.36 ppm	0.60 ppm	0.079 ppm	0.10 ppm	0.07 ppm	ND	ND						

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Soil Analytical Results 3884 Martin Luther King Junior Way
JCC INVESTIGATION OF FEBRUARY 2006

Analyte	TPH-G	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Other Oxygenates
9795-GP7-5.0	ND	0.007 ppm	ND	ND	ND	ND	ND
9795-GP7-10.0	19.1 ppm	ND	ND	0.23 ppm	ND	ND	ND
9795-GP7-14.0	2.85 ppm	ND	ND	0.058 ppm	0.042 ppm	ND	ND
9795-GP8-5.0	ND	ND	ND	ND	ND	ND	ND
9795-GP8-10.0	ND	ND	ND	ND	ND	ND	ND
9795-GP8-12.0	ND	ND	ND	ND	ND	ND	ND

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Soil Analytical Results 3884 Martin Luther King Junior Way
URS INVESTIGATION OF SEPTEMBER 2004

Analyte	TPH-G	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Other Oxygenates
S1-1.0	ND	ND	ND	ND	ND	ND	
S1-3.5	ND	ND	ND	ND	ND	ND	
S1-14.0	ND	110 ppb	15 ppb	38 ppb	95 ppb	18 ppb	
S2-1.0	ND	ND	ND	ND	ND	ND	
S2-3.5	ND	ND	ND	ND	ND	ND	
S2-14.0	170 ppm	3,200 ppb	14,000 ppb	4,100 ppb	20,000 ppb	ND	
S3-1.0	ND	ND	ND	ND	ND	ND	
S3-3.5	ND	ND	ND	ND	ND	ND	
S3-14.0	ND	22 ppb	ND	ND	ND	ND	
S4-1.0	ND	ND	ND	ND	ND	ND	
S4-3.5	ND	ND	ND	ND	ND	ND	
S4-14.0	6.2 ppm	250 ppb	ND	ND	ND	ND	
S5-1.0	ND	ND	ND	ND	ND	ND	
S5-3.5	ND	ND	ND	ND	ND	ND	
S5-14.0	ND	ND	ND	ND	ND	ND	
S6-1.0	ND	ND	ND	ND	ND	ND	
S6-3.5	ND	ND	ND	ND	ND	ND	
S6-14.0	ND	ND	ND	ND	ND	ND	

670 Vernon Street #401
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JOHN CARVER CONSULTING
ENVIRONMENTAL -- CIVIL -- GEOTECHNICAL

Soil Analytical Results 3884 Martin Luther King Junior Way
URS INVESTIGATION OF SEPTEMBER 2004

Analyte	TPH-G	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Other Oxygenates
S7-1.0	ND	ND	ND	ND	ND	ND	
S7-3.5	ND	ND	ND	ND	ND	ND	
S7-14.0	ND	ND	ND	ND	ND	ND	
S8-1.0	ND	ND	ND	ND	ND	ND	
S8-3.5	ND	ND	ND	ND	ND	ND	
S8-14.0	ND	ND	ND	ND	ND	ND	
S9-1.0	ND	ND	ND	ND	ND	ND	
S9-3.5	ND	11 ppb	ND	22 ppb	37 ppb		
S9-14.0	20 ppm	1,500 ppb	280 ppb	380 ppb	1,600 ppb	ND	
S10-1.0	ND	ND	ND	ND	ND	ND	
S10-3.5	ND	ND	ND	ND	ND	ND	
S10-14.0	ND	19 ppb	6.2 ppb	79 ppb ppb	96 ppb	ND	
S11-1.0	ND	ND	ND	ND	ND	ND	
S11-3.5	ND	ND	ND	ND	ND	ND	
S11-10.0	220 ppm	940 ppb	670 ppb	8,500 ppb	8,000 ppb	ND	

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Table 2
Soil Analytical Results
Grove Street Wash Rack
3884 Martin Luther King Jr Way
Oakland, California

Analyte	LTCP Residential	LTCP Commercial/ Industrial	SB-1-5	SB-1-10	SB-1-15.5	SB-2-5	SB-2-10	SB-2-15	SB-3-5	SB-3-10	SB-3-17	SB-4-5	SB-4-10	SB-4-15	SB-5-5	SB-5-10	SB-5-15
Depth (feet bgs)			5	10	15.5	5	10	15	5	10	17	5	10	15	5	10	15
Benzene	1,900/2,800	28,000/810,000	<4.0	570	570	<3.7	1,700	<3.7	<2.0	610	<4.1	<4.1	<380	<3.7	<3.4	<4.0	<4.4
Ethylbenzene	21,000/32,000	250,000/9,400,000	<4.0	3,700	490	<3.7	740	<3.7	<2.0	1,100	<4.1	<4.1	1,100	<3.7	<3.4	<4.0	<4.4
Toluene	NE	NE	<4.0	890	<380	<3.7	<370	<3.7	<2.0	<400	<4.1	<4.1	<380	<3.7	<3.4	<4.0	<4.4
Xylenes, Total	NE	NE	<8.0	17,000	<760	<7.5	2,200	<7.4	<4.0	<810	<8.1	<8.2	<770	<7.4	<6.8	<8.0	<8.8
Naphthalene	9,700/9,700	10,0000/160,000,0(	<8.0	1,300	<760	<7.5	<740	<7.4	<4.0	<810	<8.1	<8.2	2,400	<7.8	<6.8	<8.0	<8.8
Gasoline Range Organics (GRO)-C5-C12	NE*	NE*	<200	140,000	91,000	<190	<19,000	<180	240	<20,000	<200	<210	490,000	<200	<170	370	<220

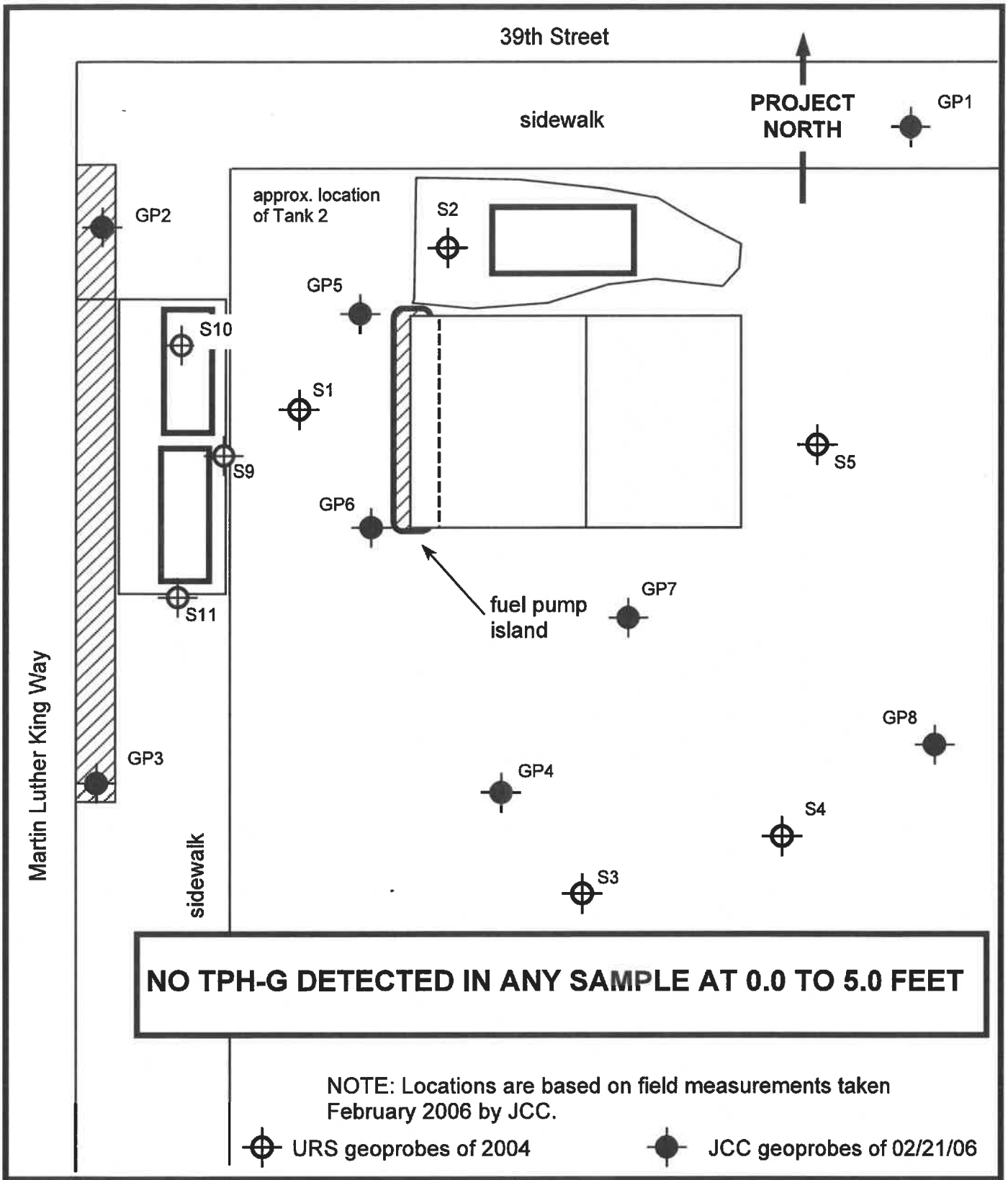
Notes: All results in ug/Kg
LTCP Residential - Low Threat Closure Policy screening level (Table 1 - Soil 0 to 5' bgs / 5 to 10' bgs)
LTCP Commercial - Low Threat Closure Policy screening level (Table 1 - Soil 0 to 5' bgs / 5 to 10' bgs)
*LTCP criteria for 10-foot bioattenuation zone is 100 mg/kg.
NE = Not Established

Table 1
Soil Analytical Results
Former Grove Street Wash Rack Site
3884 Martin Luther King Junior Way
Oakland, California

		Analyte							
Sample ID	**Date**	**TPH-g**	**Benzene**	**Toluene**	**Ethylbenzene**	**Xylenes**	**Naphthalene**	**1,2-DCA**	**cis-1,2- DCE**
MW-6-9'	9/4/2014	<180	<3.6	<3.6	<3.6	<7.1	<7.1	<3.6	<3.6
MW-6-14'	9/4/2014	**520**	<3.8	<3.8	<3.8	<7.6	<7.6	<3.8	<3.8
MW-7-9'	9/4/2014	<180	<3.6	<3.6	<3.6	<7.3	<7.3	<3.6	<3.6
MW-7-14'	9/4/2014	<180	<3.6	<3.6	<3.6	<7.2	<7.2	<3.6	<3.6
MW-8-9'	9/5/2014	<180	<3.6	<3.6	<3.6	<7.2	<7.2	<3.6	<3.6
MW-8-14'	9/5/2014	<180	<3.5	<3.5	<3.5	<7.1	<7.1	<3.5	<3.5

NOTES
All Results Reported in µg/Kg (ppb) unless otherwise stated

Values in bold are detections above the laboratory reporting limit
1,2-DCA = 1,2-Dichloroethane
cis-1,2-DCE = cis-1,2-Dichloroethene
"<" indicates analyte not detected above the laboratory reporting limit



NO TPH-G DETECTED IN ANY SAMPLE AT 0.0 TO 5.0 FEET

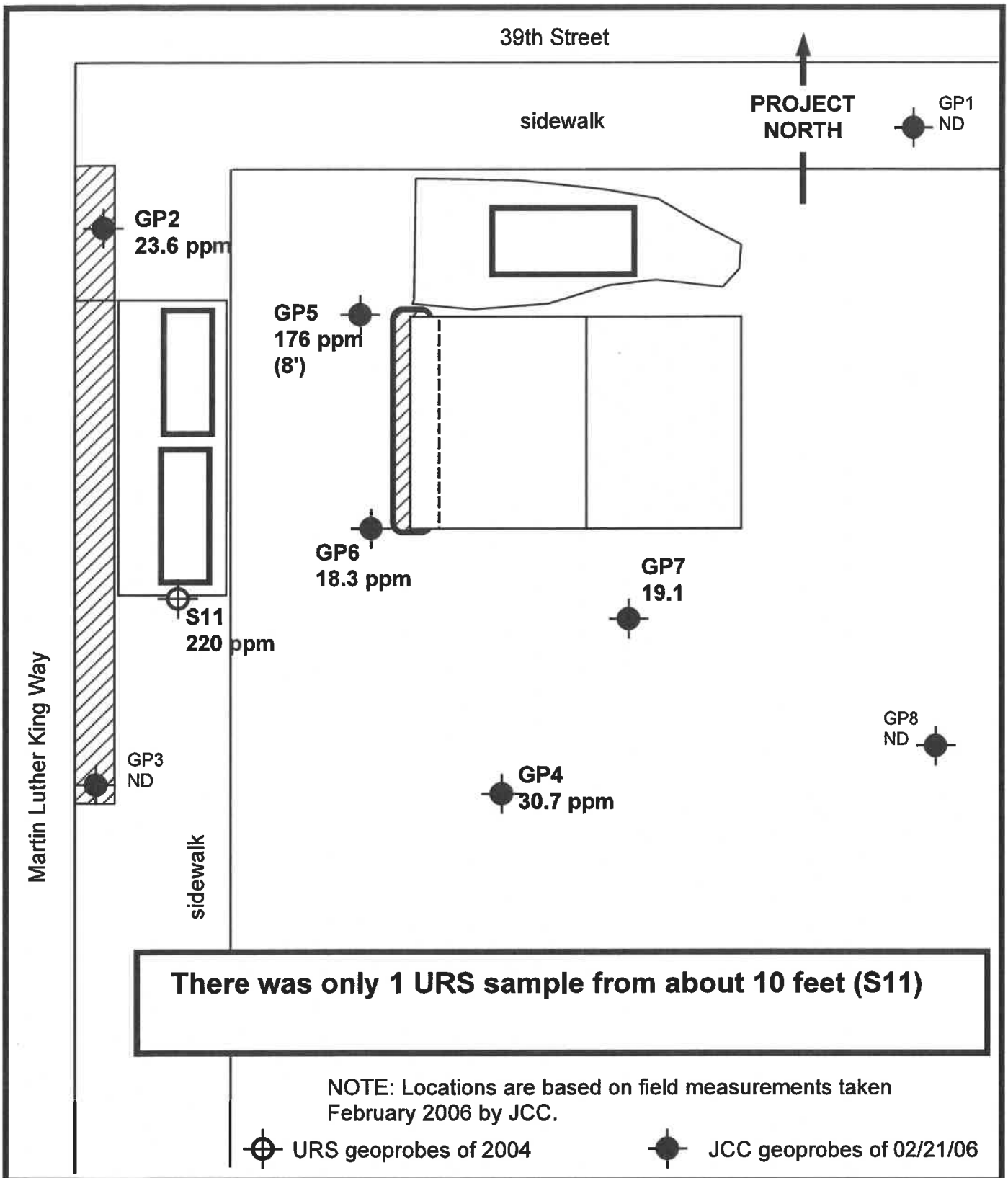
NOTE: Locations are based on field measurements taken February 2006 by JCC.

URS geoprobes of 2004

JCC geoprobes of 02/21/06

JOHN CARVER CONSULTING 415 235 4648	**TPH-G 0.0 TO 5.0 FEET** 3884 Martin Luther King Way Oakland, CA

Project 9795	by: jnc	Scale 1" = 10'	March 2006	Figure 4



There was only 1 URS sample from about 10 feet (S11)

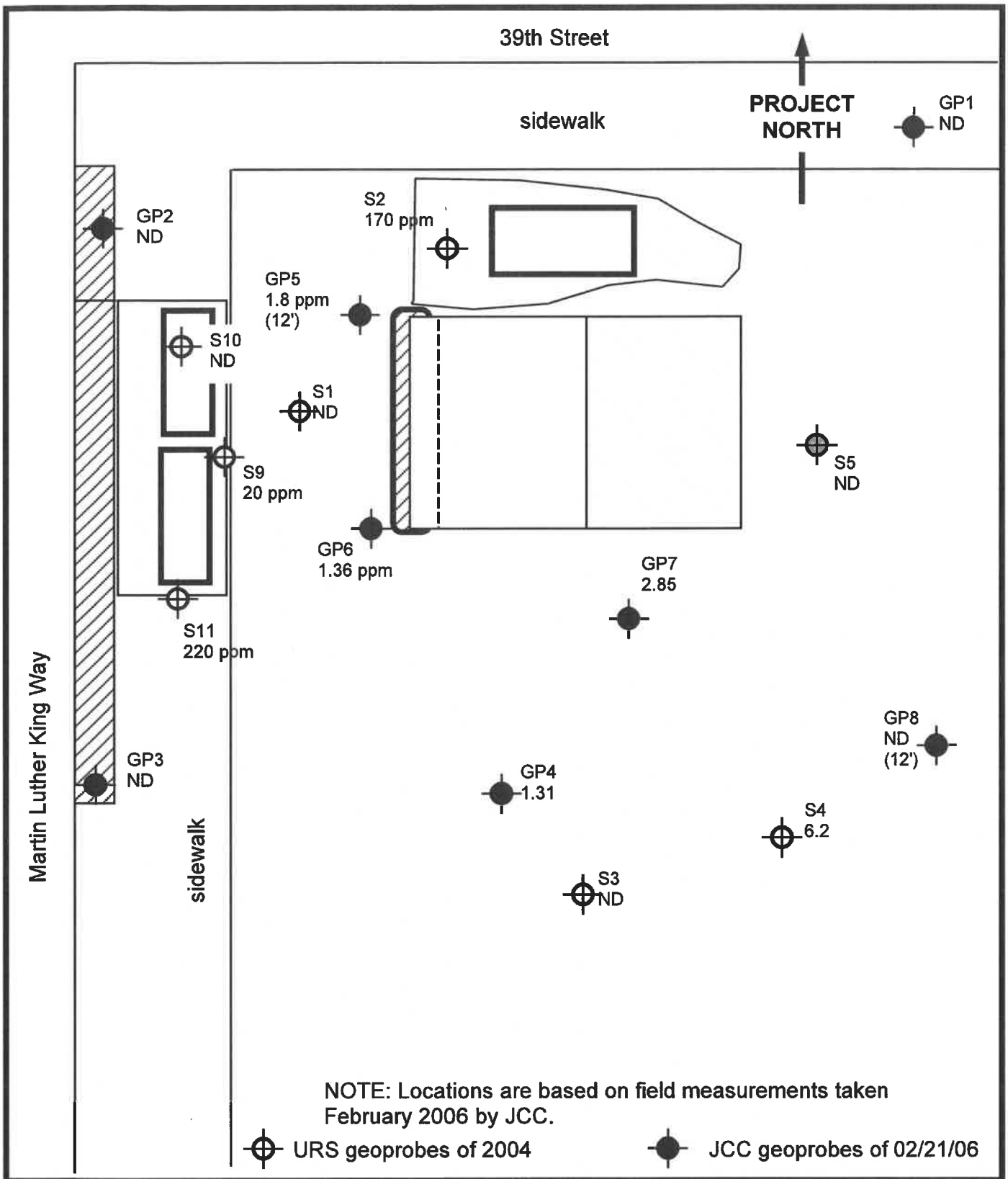
NOTE: Locations are based on field measurements taken February 2006 by JCC.

URS geoprobes of 2004

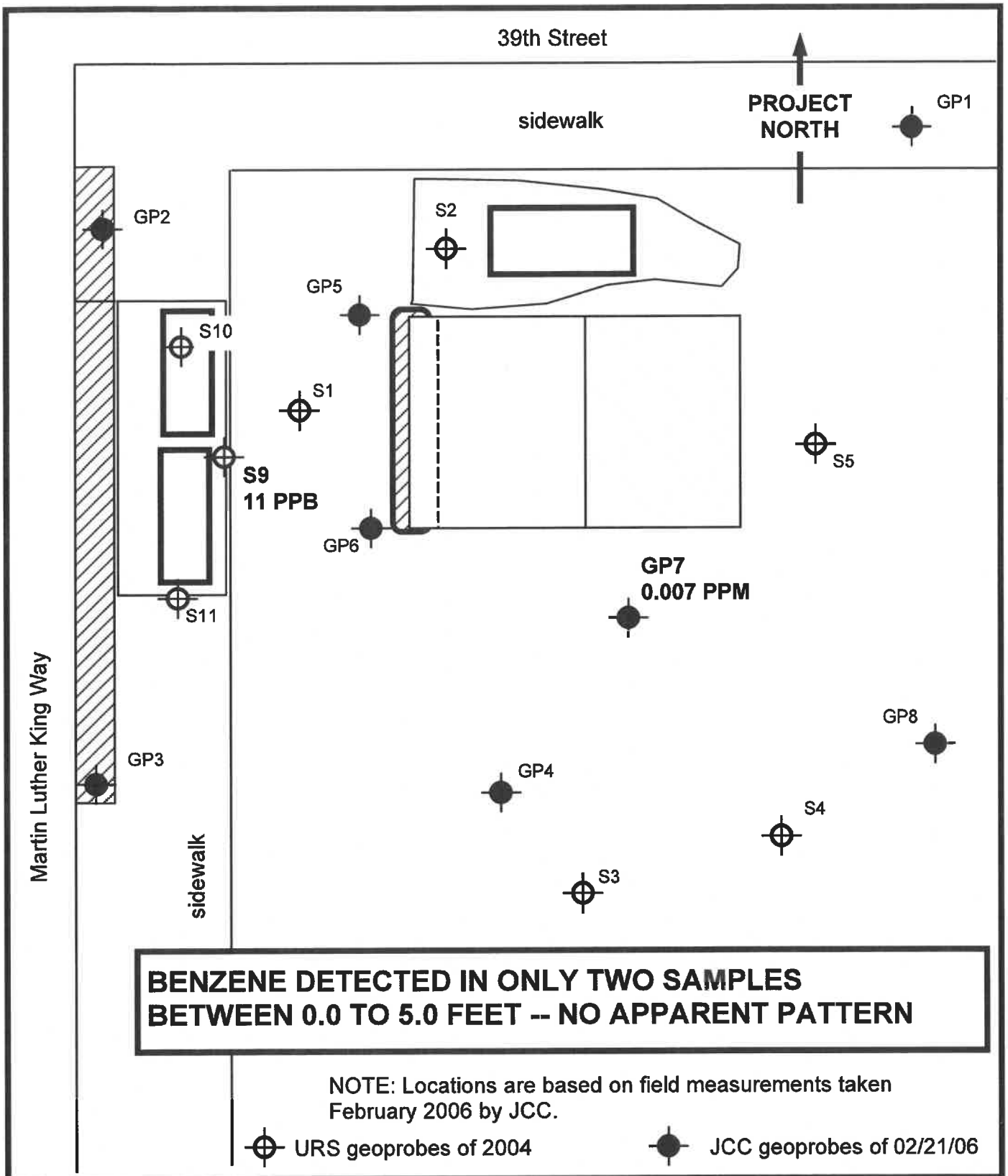
JCC geoprobes of 02/21/06

JOHN CARVER CONSULTING 415 235 4648	**TPH-G at 10.0 FEET** 3884 Martin Luther King Way Oakland, CA

Project 9795	by: jnc	Scale 1" = 10'	March 2006	Figure 5



JOHN CARVER CONSULTING 415 235 4648	TPH-G at 14.0 FEET 3884 Martin Luther King Way Oakland, CA			
Project 9795	by: jnc	Scale 1" = 10'	March 2006	Figure 6



BENZENE DETECTED IN ONLY TWO SAMPLES BETWEEN 0.0 TO 5.0 FEET -- NO APPARENT PATTERN

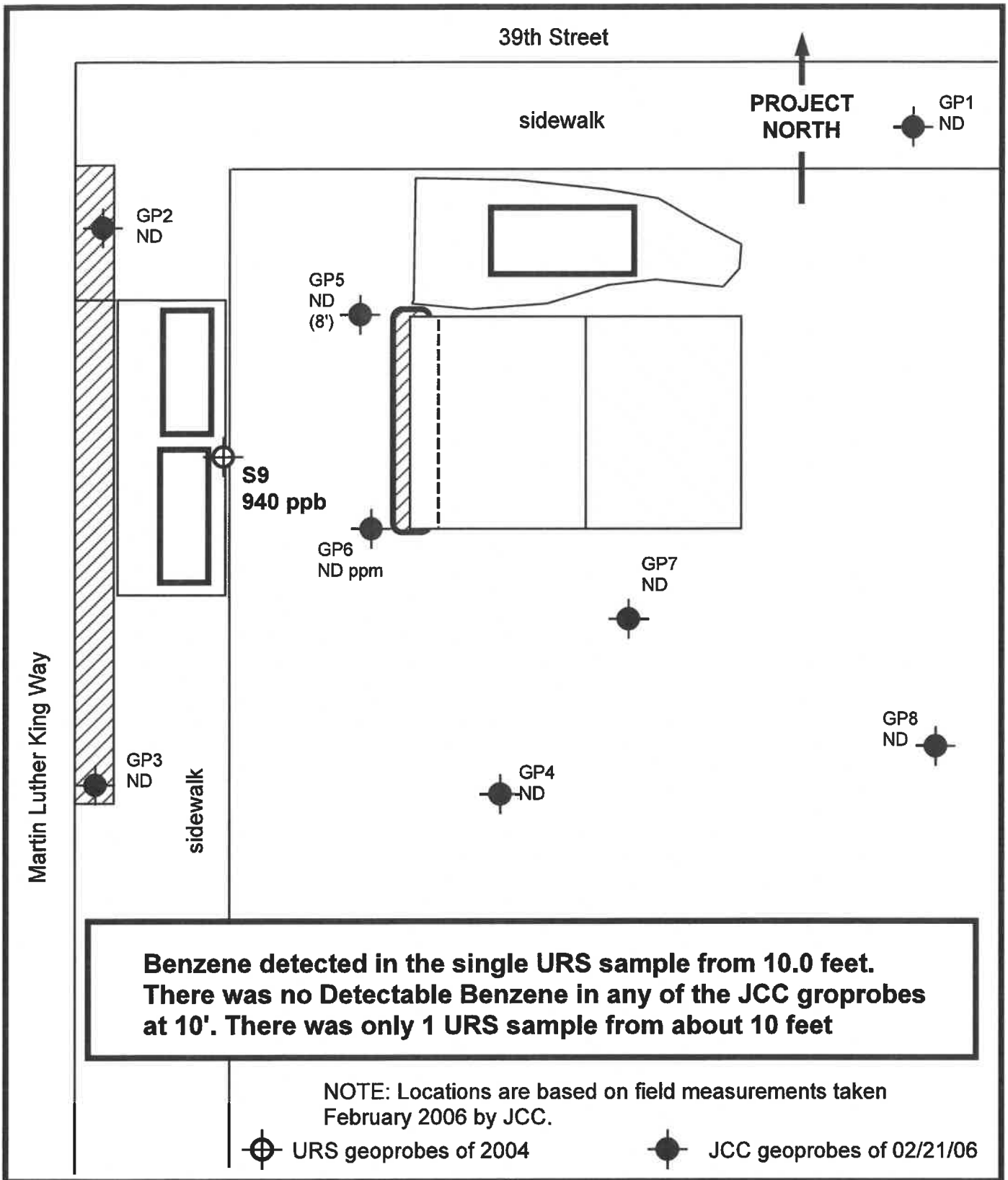
NOTE: Locations are based on field measurements taken February 2006 by JCC.

URS geoprobes of 2004

JCC geoprobes of 02/21/06

JOHN CARVER CONSULTING 415 235 4648	**BENZENE 0.0 TO 5.0 FEET** 3884 Martin Luther King Way Oakland, CA

Project 9795	by: jnc	Scale 1" = 10'	March 2006	Figure 7



Benzene detected in the single URS sample from 10.0 feet. There was no Detectable Benzene in any of the JCC groprobes at 10'. There was only 1 URS sample from about 10 feet

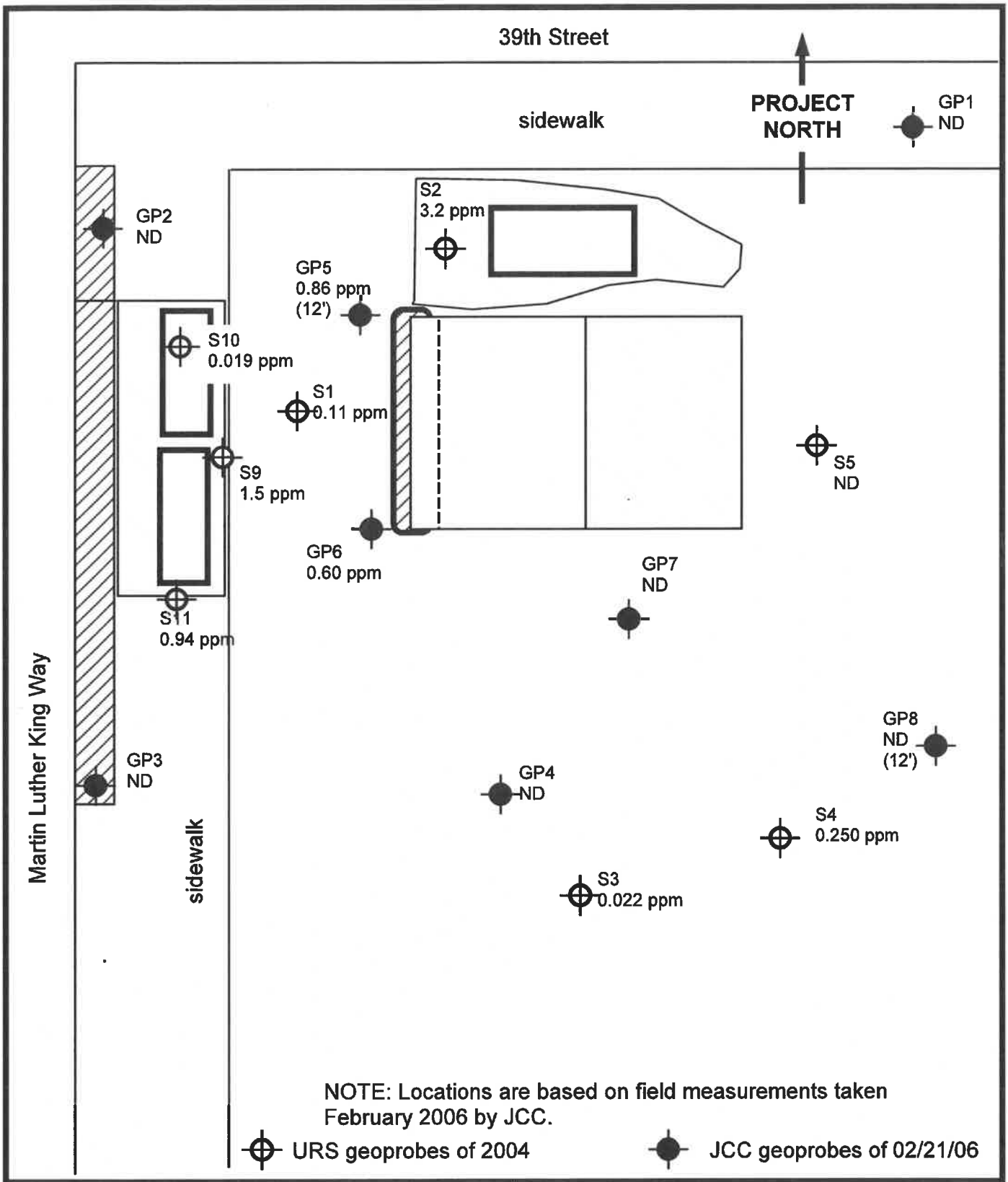
NOTE: Locations are based on field measurements taken February 2006 by JCC.

⊕ URS geoprobes of 2004

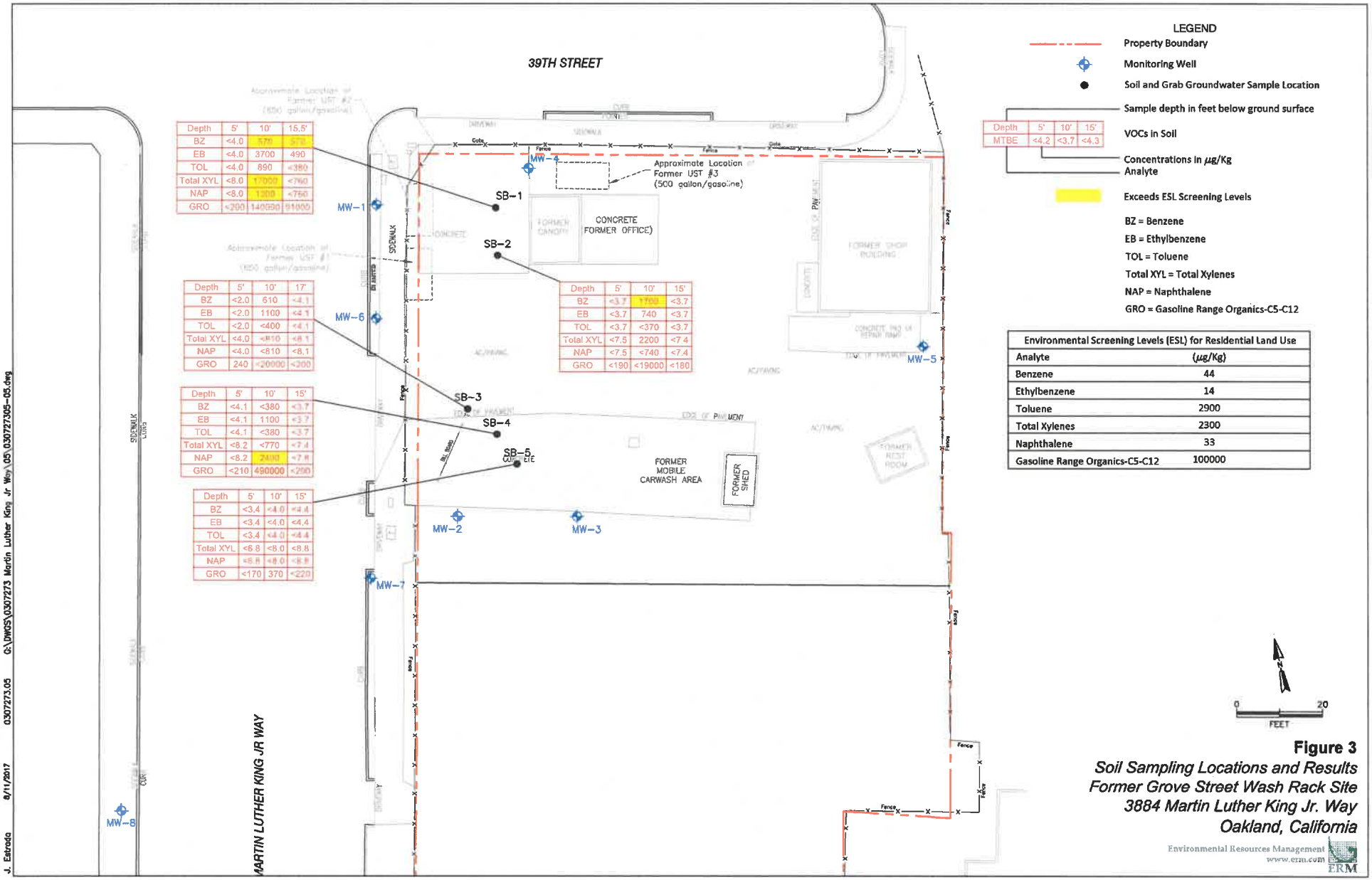
✦ JCC geoprobes of 02/21/06

JOHN CARVER CONSULTING 415 235 4648	**BENZENE at 10.0 FEET** 3884 Martin Luther King Way Oakland, CA

Project 9795	by: jnc	Scale 1" = 10'	March 2006	Figure 8



JOHN CARVER CONSULTING 415 235 4648	BENZENE at 14.0 FEET 3884 Martin Luther King Way Oakland, CA			
Project 9795	by: jnc	Scale 1" = 10'	March 2006	Figure 9



Depth	5'	10'	15.5'
BZ	<4.0	570	570
EB	<4.0	3700	490
TOL	<4.0	890	<380
Total XYL	<8.0	17000	<760
NAP	<8.0	1300	<760
GRO	<200	140000	91000

Depth	5'	10'	17'
BZ	<2.0	610	<4.1
EB	<2.0	1100	<4.1
TOL	<2.0	<400	<4.1
Total XYL	<4.0	<810	<8.1
NAP	<4.0	<810	<8.1
GRO	240	<20000	<200

Depth	5'	10'	15'
BZ	<4.1	<380	<3.7
EB	<4.1	1100	<3.7
TOL	<4.1	<380	<3.7
Total XYL	<8.2	<770	<7.4
NAP	<8.2	2400	<7.4
GRO	<210	490000	<200

Depth	5'	10'	15'
BZ	<3.4	<4.0	<4.4
EB	<3.4	<4.0	<4.4
TOL	<3.4	<4.0	<4.4
Total XYL	<6.8	<8.0	<8.8
NAP	<6.8	<8.0	<8.8
GRO	<170	370	<220

Depth	5'	10'	15'
BZ	<3.7	1700	<3.7
EB	<3.7	740	<3.7
TOL	<3.7	<370	<3.7
Total XYL	<7.5	2200	<7.4
NAP	<7.5	<740	<7.4
GRO	<190	<19000	<180

Depth	5'	10'	15'
MTBE	<4.2	<3.7	<4.3

Environmental Screening Levels (ESL) for Residential Land Use	
Analyte	(µg/Kg)
Benzene	44
Ethylbenzene	14
Toluene	2900
Total Xylenes	2300
Naphthalene	33
Gasoline Range Organics-C5-C12	100000

Figure 3

Soil Sampling Locations and Results
Former Grove Street Wash Rack Site
3884 Martin Luther King Jr. Way
Oakland, California

Environmental Resources Management
www.erm.com

J. Estrada 8/11/2017 0307273.05 G:\DWGS\0307273 Martin Luther King Jr Way\05\0307273005-05.dwg

	TPH-g	Benzene	Toluene	Ethylbenzene	Xylenes	Napthalene	1,2-DCA	cis-1,2-DCE
SB-4-12	<220	<4.3	<4.3	<4.3	<8.6	<8.6	<4.3	<4.3
SB-4-15	<200	<4.0	<4.0	<4.0	<7.9	<7.9	<4.0	<4.0
SB-4-20	680	<3.7	<3.7	<3.7	<7.4	<7.4	<3.7	<3.7

	TPH-g	Benzene	Toluene	Ethylbenzene	Xylenes	Napthalene	1,2-DCA	cis-1,2-DCE
SB-5-12	2600	1000	13	560	<8.3	<8.3	<4.2	<4.2
SB-5-15	<200	<4.1	<4.1	<4.1	<8.1	<8.1	<4.1	<4.1
SB-5-20	<210	<4.2	<4.2	<4.2	<8.4	<8.4	<4.2	<4.2

	TPH-g	Benzene	Toluene	Ethylbenzene	Xylenes	Napthalene	1,2-DCA	cis-1,2-DCE
SB-6-12	780	<4.3	<4.3	7.6	9.2	<8.7	<4.3	<4.3
SB-6-15	4800	180	7.8	330	29	13	<4.1	<4.1
SB-6-16	1,400,000	4600	70000	32000	180000	10000	<3900	<3900
SB-6-20	650	6.6	34	14	78	<7.6	<3.8	<3.8

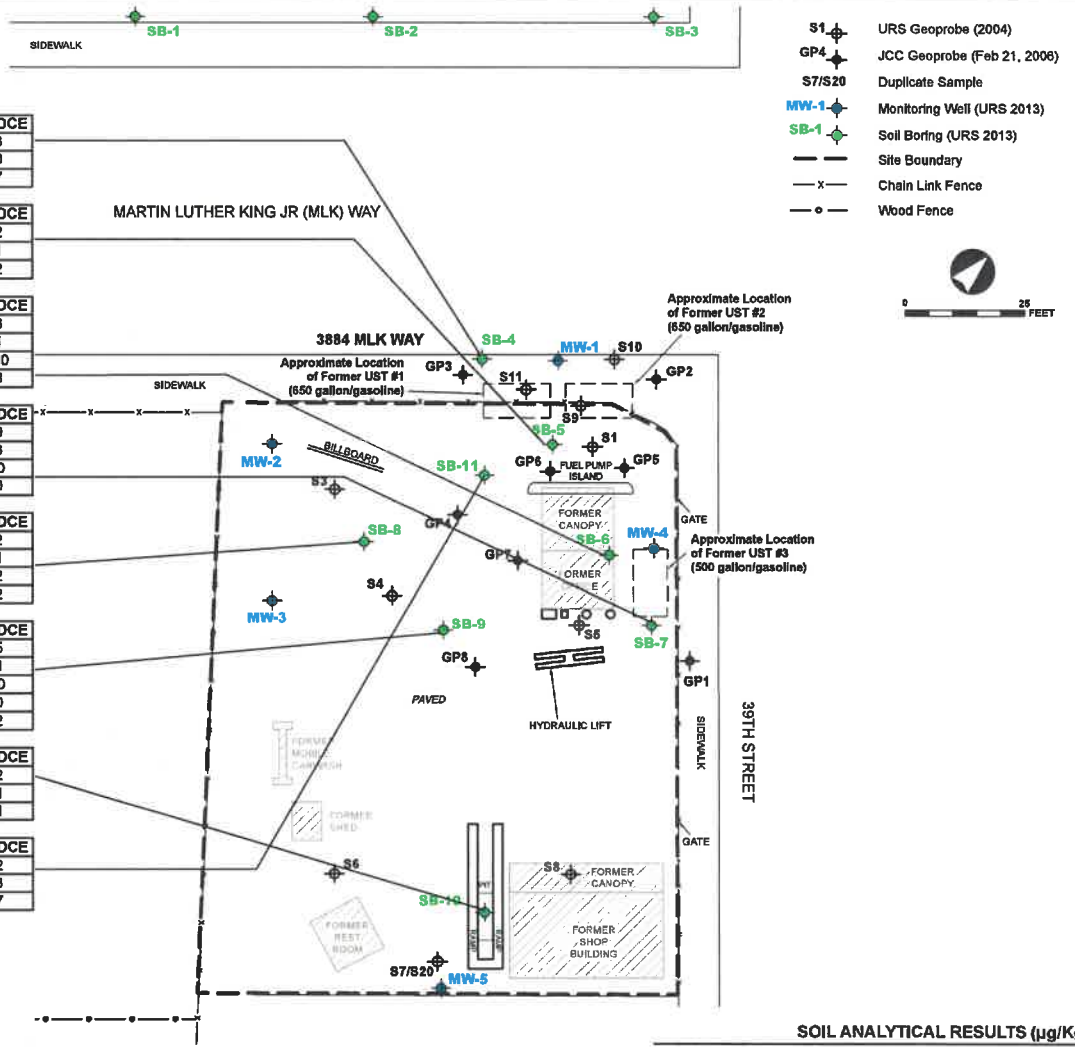
	TPH-g	Benzene	Toluene	Ethylbenzene	Xylenes	Napthalene	1,2-DCA	cis-1,2-DCE
SB-7-12	<190	<3.9	<3.9	<3.9	<7.8	<7.8	<3.9	<3.9
FD-1-12*	<210	<4.3	<4.3	<4.3	<8.6	<8.6	<4.3	<4.3
SB-7-15	77,000	420	<390	1300	2800	<790	<390	<390
SB-7-20	<200	<4.0	<4.0	<4.0	<8.1	<8.1	<4.0	<4.0

	TPH-g	Benzene	Toluene	Ethylbenzene	Xylenes	Napthalene	1,2-DCA	cis-1,2-DCE
SB-8-12	<210	7.5	<4.2	<4.2	<8.4	11	<4.2	<4.2
SB-8-15	<200	<4.1	<4.1	<4.1	<8.2	<8.2	<4.1	<4.1
SB-8-20	<210	<4.2	<4.2	<4.2	<8.4	<8.4	<4.2	<4.2
FD-3-20**	<210	<4.2	<4.2	<4.2	<8.5	<8.5	<4.2	<4.2

	TPH-g	Benzene	Toluene	Ethylbenzene	Xylenes	Napthalene	1,2-DCA	cis-1,2-DCE
SB-9-12	230	<4.5	<4.5	<4.5	<8.9	<8.9	<4.5	<4.5
SB-9-15	<21,000	130	7.8	48	340	110	<4.1	<4.1
SB-9-18	27000	1400	<400	790	<800	<800	<400	<400
SB-9-20	<200	<4.0	<4.0	<4.0	<8.0	<8.0	<4.0	<4.0
FD-2-20***	<210	<4.2	<4.2	<4.2	<8.4	<8.4	<4.2	<4.2

	TPH-g	Benzene	Toluene	Ethylbenzene	Xylenes	Napthalene	1,2-DCA	cis-1,2-DCE
SB-10-12	<210	<4.2	<4.2	<4.2	<8.4	<8.4	<4.2	<4.2
SB-10-15	<200	<4.1	<4.1	<4.1	<8.1	<8.1	<4.1	<4.1
SB-10-20	<150	<3.1	<3.1	<3.1	<6.2	<6.2	<3.1	<3.1

	TPH-g	Benzene	Toluene	Ethylbenzene	Xylenes	Napthalene	1,2-DCA	cis-1,2-DCE
SB-11-12	790	80	<4.2	55	<8.5	8.9	<4.2	<4.2
SB-11-15	<170	<3.3	<3.3	<3.3	<6.6	<6.6	<3.3	<3.3
SB-11-20	<180	<3.7	<3.7	<3.7	<7.4	<7.4	<3.7	<3.7



SOIL ANALYTICAL RESULTS (µg/Kg)

28068161

3884 Martin Luther King, Jr. Way
Oakland, California

URS

FIGURE 2

09/05/13 hkhasa T:\3884 MLK\SEPT_2013\GW_Sample_Results Folder\GW_Sample_Results.indd

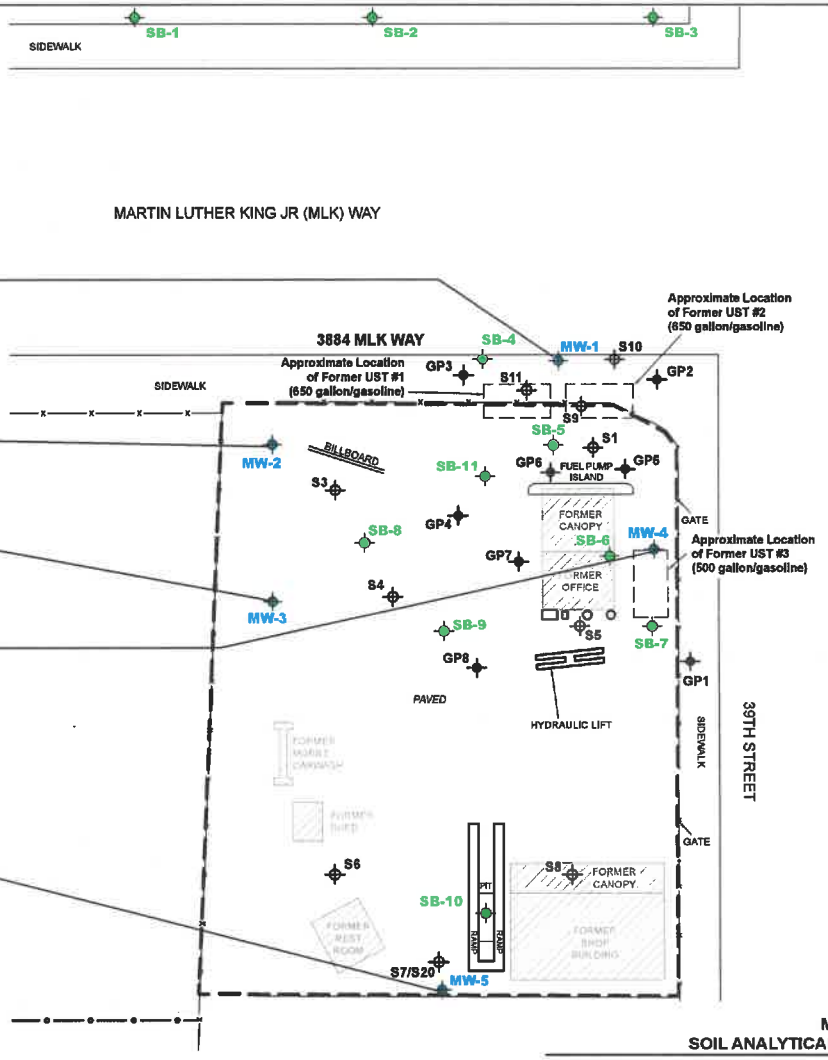
	TPH-g	Benzene	Toluene	Ethylbenzene	Xylenes	Napthalene	1,2-DCA	cis-1,2-DCE
MW-1-7	750,000	<460	<460	<460	<910	<910	<460	<460
MW-1-12	<230	<4.5	<4.5	<4.5	<9.1	<9.1	<4.5	<4.5
MW-1-15	<210	<4.1	<4.1	<4.1	<8.3	<8.3	<4.1	<4.1
MW-1-20	<210	<4.1	<4.1	<4.1	<8.2	<8.2	<4.1	<4.1
FD-5-20****	<240	<3.6	<3.6	<3.6	<7.1	<7.1	<3.6	<3.6

	TPH-g	Benzene	Toluene	Ethylbenzene	Xylenes	Napthalene	1,2-DCA	cis-1,2-DCE
MW-2-12	<200	<3.6	<3.6	<3.6	<8.0	<7.1	<3.6	<3.6
MW-2-15	<190	<3.8	<3.8	<3.8	<8.1	<7.7	<3.8	<3.8
MW-2-18.5	<20000	1700	<400	<400	<800	<800	<400	<400
MW-2-20	<190	<3.8	<3.8	<3.8	<7.6	<7.6	<3.8	<3.8

	TPH-g	Benzene	Toluene	Ethylbenzene	Xylenes	Napthalene	1,2-DCA	cis-1,2-DCE
MW-3-12	<210	<4.2	<4.2	<4.2	<8.4	<8.4	<4.2	<4.2
MW-3-15	<200	<4.1	<4.1	<4.1	<8.4	<8.4	<4.1	<4.1
MW-3-20	<210	<4.1	<4.1	<4.1	<8.3	<8.3	<4.1	<4.1

	TPH-g	Benzene	Toluene	Ethylbenzene	Xylenes	Napthalene	1,2-DCA	cis-1,2-DCE
MW-4-12	2200	240	22	220	88	31	<5.0	<5.0
MW-4-15	400,000	1300	1800	9000	38000	2400	<800	<800
MW-4-16	2,700,000	2700	3900	48000	110000	12000	<380	<380
MW-4-20	<21000	<420	<420	<420	<830	<830	<420	<420

	TPH-g	Benzene	Toluene	Ethylbenzene	Xylenes	Napthalene	1,2-DCA	cis-1,2-DCE
MW-5-12	<220	<4.5	<4.5	<4.5	<8.9	<8.9	<4.5	<4.5
MW-5-15	<200	<4.1	<4.1	<4.1	<8.2	<8.2	<4.1	<4.1
MW-5-20	<220	<4.3	<4.3	<4.3	<8.6	<8.6	<4.3	<4.3



MONITORING WELL SOIL ANALYTICAL RESULTS (µg/Kg)

3884 Martin Luther King, Jr. Way
Oakland, California

28068161

URS

FIGURE 3

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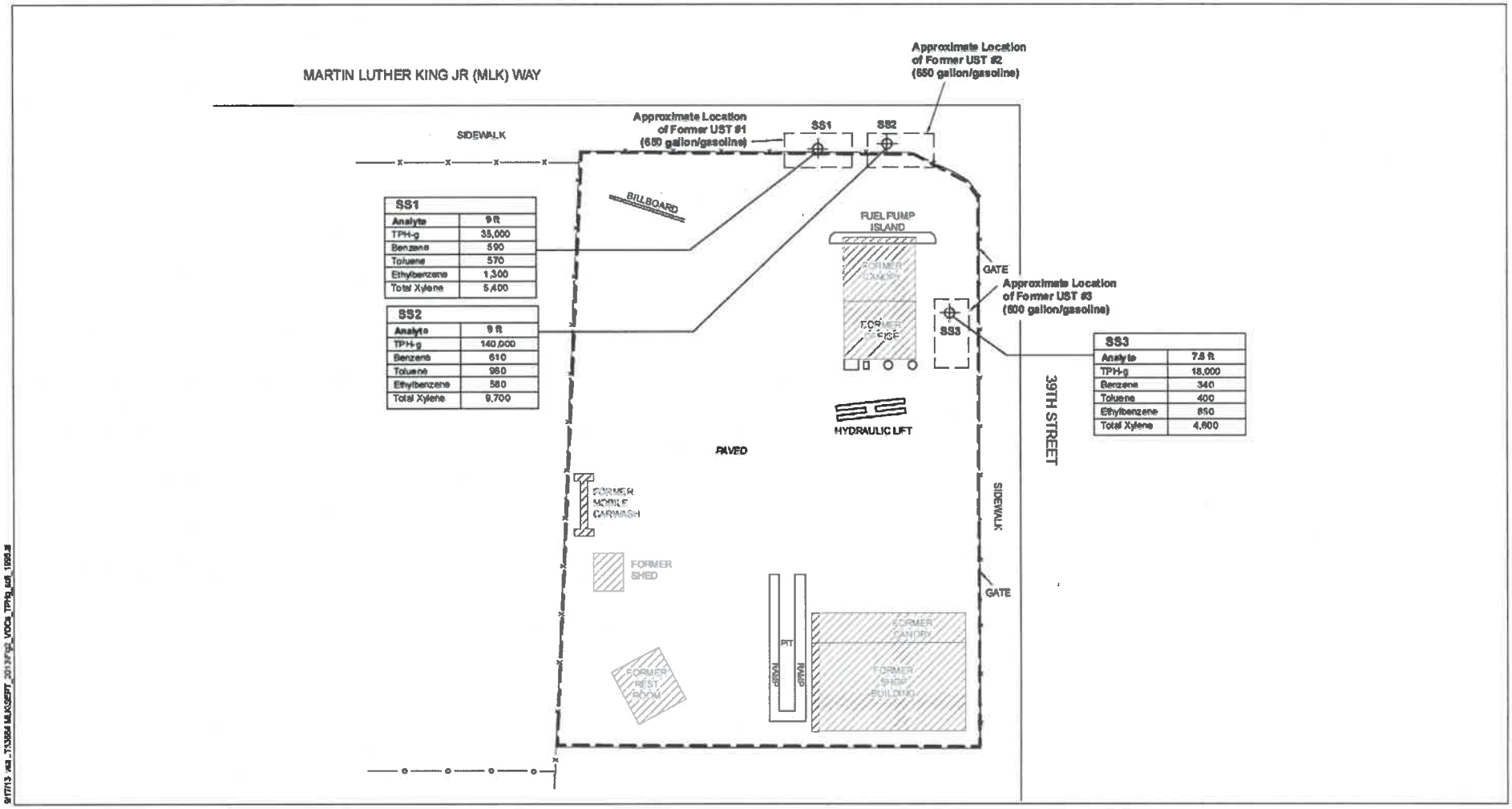


SS1 Soil Boring Location, URS Geoprobe (2004)

Site Boundary

Chain Link Fence

Wood Fence

TPH-g Total Petroleum Hydrocarbon - Gasoline

Note:
All concentrations in micrograms per kilogram (µg/kg)

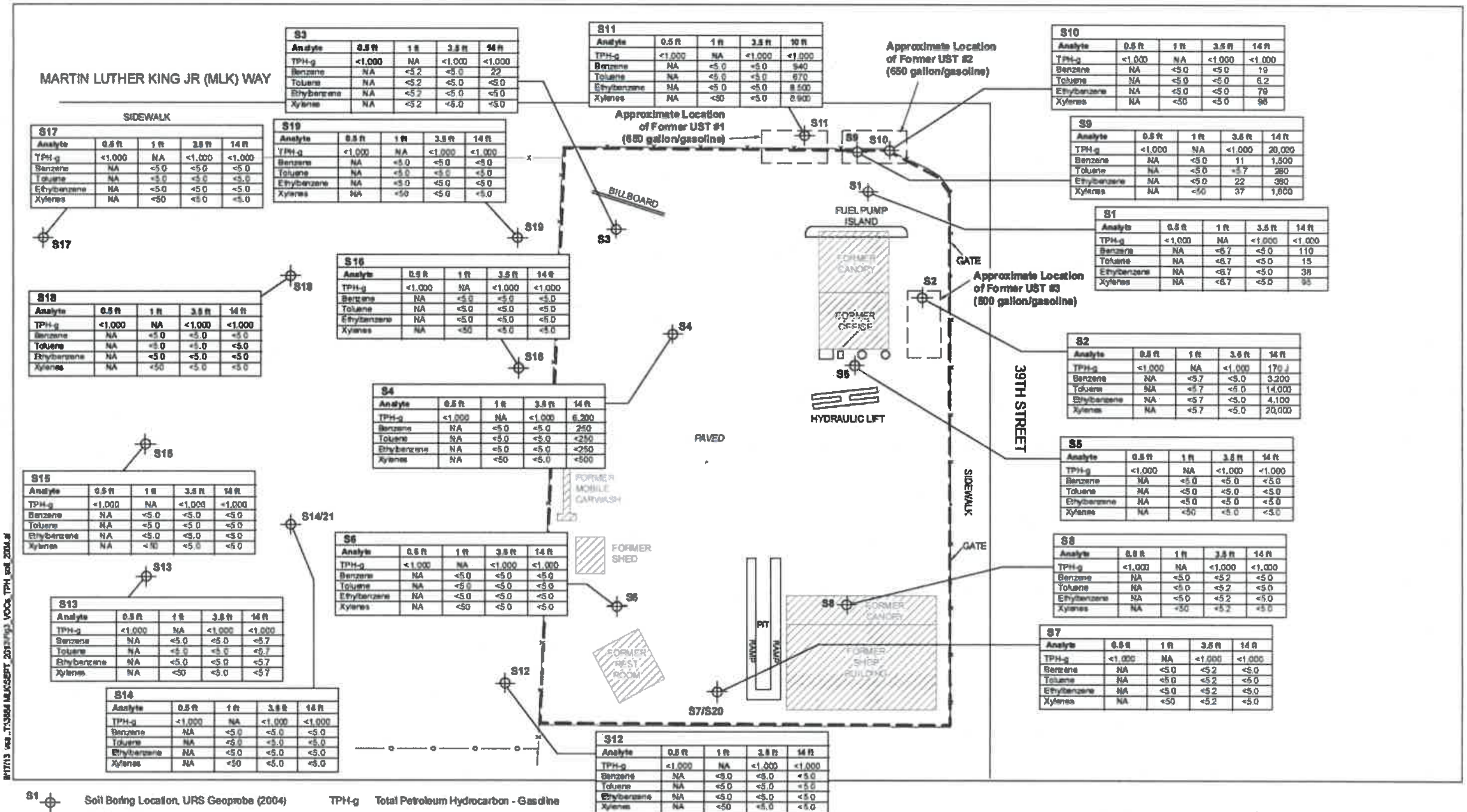
0 10 20 FEET

VOCs AND TPH-g IN SOIL (µg/kg) – 1995

September 2013 3884 Martin Luther King, Jr. Way
28068161 Oakland, California

URS

FIGURE 2



S3

Analyte	0.5 ft	1 ft	3.5 ft	14 ft
TPH-g	<1,000	NA	<1,000	<1,000
Benzene	NA	<5.2	<5.0	22
Toluene	NA	<5.2	<5.0	<5.0
Ethylbenzene	NA	<5.2	<5.0	<5.0
Xylenes	NA	<5.2	<5.0	<5.0

S11

Analyte	0.5 ft	1 ft	3.5 ft	10 ft
TPH-g	<1,000	NA	<1,000	<1,000
Benzene	NA	<5.0	<5.0	940
Toluene	NA	<5.0	<5.0	670
Ethylbenzene	NA	<5.0	<5.0	8,500
Xylenes	NA	<50	<5.0	2,900

S10

Analyte	0.5 ft	1 ft	3.5 ft	14 ft
TPH-g	<1,000	NA	<1,000	<1,000
Benzene	NA	<5.0	<5.0	19
Toluene	NA	<5.0	<5.0	6.2
Ethylbenzene	NA	<5.0	<5.0	79
Xylenes	NA	<50	<5.0	98

S9

Analyte	0.5 ft	1 ft	3.5 ft	14 ft
TPH-g	<1,000	NA	<1,000	20,000
Benzene	NA	<5.0	11	1,500
Toluene	NA	<5.0	<5.7	280
Ethylbenzene	NA	<5.0	22	380
Xylenes	NA	<50	37	1,600

S17

Analyte	0.5 ft	1 ft	3.5 ft	14 ft
TPH-g	<1,000	NA	<1,000	<1,000
Benzene	NA	<5.0	<5.0	<5.0
Toluene	NA	<5.0	<5.0	<5.0
Ethylbenzene	NA	<5.0	<5.0	<5.0
Xylenes	NA	<50	<5.0	<5.0

S19

Analyte	0.5 ft	1 ft	3.5 ft	14 ft
TPH-g	<1,000	NA	<1,000	<1,000
Benzene	NA	<5.0	<5.0	<5.0
Toluene	NA	<5.0	<5.0	<5.0
Ethylbenzene	NA	<5.0	<5.0	<5.0
Xylenes	NA	<50	<5.0	<5.0

S1

Analyte	0.5 ft	1 ft	3.5 ft	14 ft
TPH-g	<1,000	NA	<1,000	<1,000
Benzene	NA	<6.7	<5.0	110
Toluene	NA	<6.7	<5.0	15
Ethylbenzene	NA	<6.7	<5.0	38
Xylenes	NA	<6.7	<5.0	95

S16

Analyte	0.5 ft	1 ft	3.5 ft	14 ft
TPH-g	<1,000	NA	<1,000	<1,000
Benzene	NA	<5.0	<5.0	<5.0
Toluene	NA	<5.0	<5.0	<5.0
Ethylbenzene	NA	<5.0	<5.0	<5.0
Xylenes	NA	<50	<5.0	<5.0

S18

Analyte	0.5 ft	1 ft	3.5 ft	14 ft
TPH-g	<1,000	NA	<1,000	<1,000
Benzene	NA	<5.0	<5.0	<5.0
Toluene	NA	<5.0	<5.0	<5.0
Ethylbenzene	NA	<5.0	<5.0	<5.0
Xylenes	NA	<50	<5.0	<5.0

S2

Analyte	0.5 ft	1 ft	3.5 ft	14 ft
TPH-g	<1,000	NA	<1,000	170 J
Benzene	NA	<5.7	<5.0	3,200
Toluene	NA	<5.7	<5.0	14,000
Ethylbenzene	NA	<5.7	<5.0	4,100
Xylenes	NA	<5.7	<5.0	20,000

S4

Analyte	0.5 ft	1 ft	3.5 ft	14 ft
TPH-g	<1,000	NA	<1,000	6,200
Benzene	NA	<5.0	<5.0	250
Toluene	NA	<5.0	<5.0	<250
Ethylbenzene	NA	<5.0	<5.0	<250
Xylenes	NA	<50	<5.0	<500

S5

Analyte	0.5 ft	1 ft	3.5 ft	14 ft
TPH-g	<1,000	NA	<1,000	<1,000
Benzene	NA	<5.0	<5.0	<5.0
Toluene	NA	<5.0	<5.0	<5.0
Ethylbenzene	NA	<5.0	<5.0	<5.0
Xylenes	NA	<50	<5.0	<5.0

S15

Analyte	0.5 ft	1 ft	3.5 ft	14 ft
TPH-g	<1,000	NA	<1,000	<1,000
Benzene	NA	<5.0	<5.0	<5.0
Toluene	NA	<5.0	<5.0	<5.0
Ethylbenzene	NA	<5.0	<5.0	<5.0
Xylenes	NA	<50	<5.0	<5.0

S6

Analyte	0.5 ft	1 ft	3.5 ft	14 ft
TPH-g	<1,000	NA	<1,000	<1,000
Benzene	NA	<5.0	<5.0	<5.0
Toluene	NA	<5.0	<5.0	<5.0
Ethylbenzene	NA	<5.0	<5.0	<5.0
Xylenes	NA	<50	<5.0	<5.0

S8

Analyte	0.5 ft	1 ft	3.5 ft	14 ft
TPH-g	<1,000	NA	<1,000	<1,000
Benzene	NA	<5.0	<5.2	<5.0
Toluene	NA	<5.0	<5.2	<5.0
Ethylbenzene	NA	<5.0	<5.2	<5.0
Xylenes	NA	<50	<5.2	<5.0

S13

Analyte	0.5 ft	1 ft	3.5 ft	14 ft
TPH-g	<1,000	NA	<1,000	<1,000
Benzene	NA	<5.0	<5.0	<5.7
Toluene	NA	<5.0	<5.0	<5.7
Ethylbenzene	NA	<5.0	<5.0	<5.7
Xylenes	NA	<50	<5.0	<5.7

S7

Analyte	0.5 ft	1 ft	3.5 ft	14 ft
TPH-g	<1,000	NA	<1,000	<1,000
Benzene	NA	<5.0	<5.2	<5.0
Toluene	NA	<5.0	<5.2	<5.0
Ethylbenzene	NA	<5.0	<5.2	<5.0
Xylenes	NA	<50	<5.2	<5.0

S14

Analyte	0.5 ft	1 ft	3.5 ft	14 ft
TPH-g	<1,000	NA	<1,000	<1,000
Benzene	NA	<5.0	<5.0	<5.0
Toluene	NA	<5.0	<5.0	<5.0
Ethylbenzene	NA	<5.0	<5.0	<5.0
Xylenes	NA	<50	<5.0	<5.0

S12

Analyte	0.5 ft	1 ft	3.5 ft	14 ft
TPH-g	<1,000	NA	<1,000	<1,000
Benzene	NA	<5.0	<5.0	<5.0
Toluene	NA	<5.0	<5.0	<5.0
Ethylbenzene	NA	<5.0	<5.0	<5.0
Xylenes	NA	<50	<5.0	<5.0

S1 — Soil Boring Location, URS Geoprobe (2004)
S7/S20 — Duplicate Sample
Site Boundary
Chain Link Fence
Wood Fence

TPH-g — Total Petroleum Hydrocarbon - Gasoline

Note:
All concentrations in micrograms per kilogram (µg/kg)

VOCs AND TPH-g IN SOIL (µg/kg) – 2004

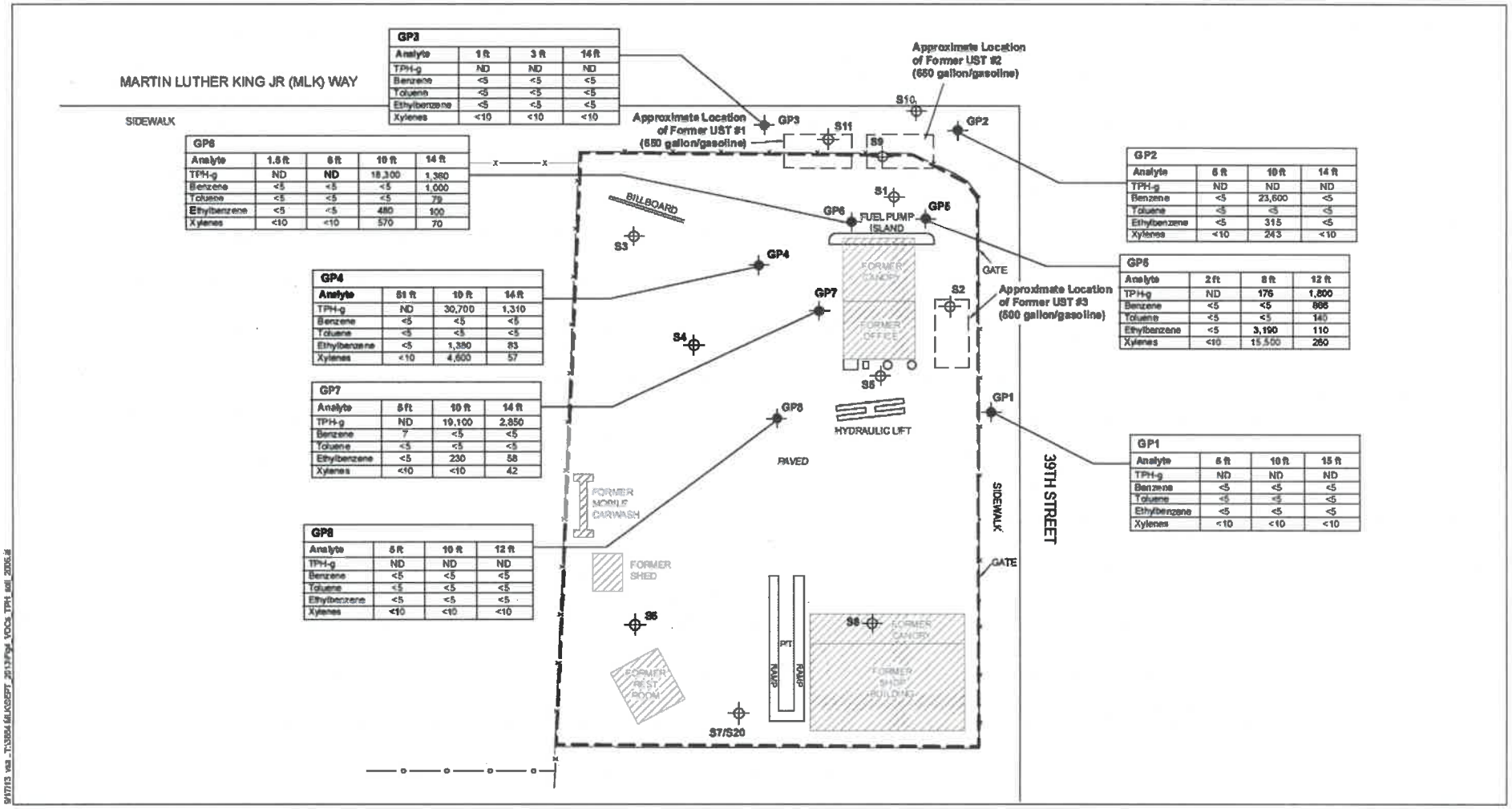
September 2013
28068181

3884 Martin Luther King, Jr. Way
Oakland, California

URS

FIGURE 3

8/17/13 vsa ..T:3884 MLK\SEPT 2013\Fig3_VOCs_TPH_soil_2004.ai



GP3

Analyte	1 ft	3 ft	14 ft
TPH-g	ND	ND	ND
Benzene	<5	<5	<5
Toluene	<5	<5	<5
Ethylbenzene	<5	<5	<5
Xylenes	<10	<10	<10

GP8

Analyte	1.5 ft	5 ft	10 ft	14 ft
TPH-g	ND	ND	18,300	1,360
Benzene	<5	<5	<5	1,000
Toluene	<5	<5	<5	79
Ethylbenzene	<5	<5	480	100
Xylenes	<10	<10	570	70

GP4

Analyte	5 ft	10 ft	14 ft
TPH-g	ND	30,700	1,310
Benzene	<5	<5	<5
Toluene	<5	<5	<5
Ethylbenzene	<5	1,380	83
Xylenes	<10	4,600	57

GP7

Analyte	5 ft	10 ft	14 ft
TPH-g	ND	19,100	2,850
Benzene	7	<5	<5
Toluene	<5	<5	<5
Ethylbenzene	<5	230	58
Xylenes	<10	<10	42

GP8

Analyte	5 ft	10 ft	12 ft
TPH-g	ND	ND	ND
Benzene	<5	<5	<5
Toluene	<5	<5	<5
Ethylbenzene	<5	<5	<5
Xylenes	<10	<10	<10

GP2

Analyte	5 ft	10 ft	14 ft
TPH-g	ND	ND	ND
Benzene	<5	23,600	<5
Toluene	<5	<5	<5
Ethylbenzene	<5	315	<5
Xylenes	<10	243	<10

GP5

Analyte	2 ft	8 ft	12 ft
TPH-g	ND	176	1,600
Benzene	<5	<5	885
Toluene	<5	<5	140
Ethylbenzene	<5	3,190	110
Xylenes	<10	15,500	260

GP1

Analyte	5 ft	10 ft	15 ft
TPH-g	ND	ND	ND
Benzene	<5	<5	<5
Toluene	<5	<5	<5
Ethylbenzene	<5	<5	<5
Xylenes	<10	<10	<10

S1 Soil Boring Location, URS Geoprobe (2004)
GP1 JCC Geoprobe (Feb 21, 2006)
S7/S20 Duplicate Sample
Site Boundary
Chain Link Fence
Wood Fence

TPH-g Total Petroleum Hydrocarbon - Gasoline
ND Non-detect (reporting limits not available); reporting limit expected to be between 500 µg/kg and 1,000 µg/kg.

Note:
All concentrations in micrograms per kilogram (µg/kg)

0 10 20 FEET

VOCs AND TPHg IN SOIL (µg/kg) – 2006

September 2013 3884 Martin Luther King, Jr. Way
28068161 Oakland, California

URS

FIGURE 4

9/17/13 vas - T:\3884 MLK\GIS\T_2013\Fig4_VOCs_TPH_soil_2006.ai

	TPH-g	Benzene	Toluene	Ethylbenzene	Xylenes	Napthalene	1,2-DCA	cis-1,2-DCE
SB-4-12	<220	<4.3	<4.3	<4.3	<8.6	<8.6	<4.3	<4.3
SB-4-15	<200	<4.0	<4.0	<4.0	<7.9	<7.9	<4.0	<4.0
SB-4-20	680	<3.7	<3.7	<3.7	<7.4	<7.4	<3.7	<3.7

	TPH-g	Benzene	Toluene	Ethylbenzene	Xylenes	Napthalene	1,2-DCA	cis-1,2-DCE
SB-5-12	2600	1000	13	560	<8.3	<8.3	<4.2	<4.2
SB-5-15	<200	<4.1	<4.1	<4.1	<8.1	<8.1	<4.1	<4.1
SB-5-20	<210	<4.2	<4.2	<4.2	<8.4	<8.4	<4.2	<4.2

	TPH-g	Benzene	Toluene	Ethylbenzene	Xylenes	Napthalene	1,2-DCA	cis-1,2-DCE
SB-6-12	780	<4.3	<4.3	7.6	9.2	<8.7	<4.3	<4.3
SB-6-15	4600	180	7.6	330	29	13	<4.1	<4.1
SB-6-18	1,400,000	4600	70000	32000	180000	10000	<3900	<3900
SB-6-20	650	6.6	34	14	78	<7.6	<3.8	<3.8

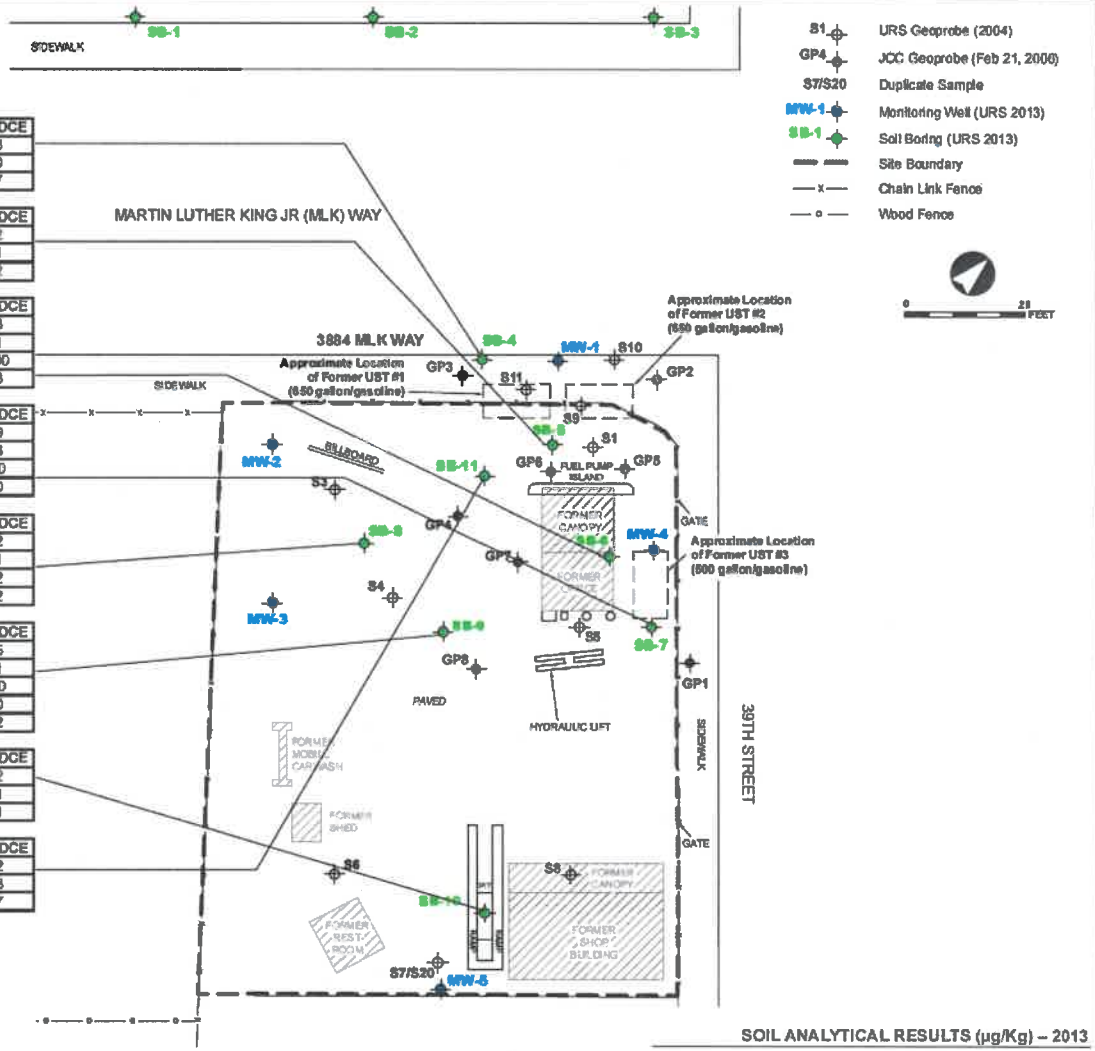
	TPH-g	Benzene	Toluene	Ethylbenzene	Xylenes	Napthalene	1,2-DCA	cis-1,2-DCE
SB-7-12	<190	<3.9	<3.9	<3.9	<7.8	<7.8	<3.9	<3.9
FD-1-12*	<210	<4.3	<4.3	<4.3	<8.6	<8.6	<4.3	<4.3
SB-7-15	77,000	420	<390	1300	2800	<790	<390	<390
SB-7-20	<200	<4.0	<4.0	<4.0	<8.1	<8.1	<4.0	<4.0

	TPH-g	Benzene	Toluene	Ethylbenzene	Xylenes	Napthalene	1,2-DCA	cis-1,2-DCE
SB-8-12	<210	7.5	<4.2	<4.2	<8.4	11	<4.2	<4.2
SB-8-15	<200	<4.1	<4.1	<4.1	<8.2	<8.2	<4.1	<4.1
SB-8-20	<210	<4.2	<4.2	<4.2	<8.4	<8.4	<4.2	<4.2
FD-3-20**	<210	<4.2	<4.2	<4.2	<8.5	<8.5	<4.2	<4.2

	TPH-g	Benzene	Toluene	Ethylbenzene	Xylenes	Napthalene	1,2-DCA	cis-1,2-DCE
SB-9-12	230	<4.5	<4.5	<4.5	<8.9	<8.9	<4.5	<4.5
SB-9-15	<21,000	130	7.6	48	340	110	<4.1	<4.1
SB-9-18	27000	1400	<400	790	<800	<800	<400	<400
SB-9-20	<200	<4.0	<4.0	<4.0	<8.0	<8.0	<4.0	<4.0
FD-2-20**	<210	<4.2	<4.2	<4.2	<8.4	<8.4	<4.2	<4.2

	TPH-g	Benzene	Toluene	Ethylbenzene	Xylenes	Napthalene	1,2-DCA	cis-1,2-DCE
SB-10-12	<210	<4.2	<4.2	<4.2	<8.4	<8.4	<4.2	<4.2
SB-10-15	<200	<4.1	<4.1	<4.1	<8.1	<8.1	<4.1	<4.1
SB-10-20	<150	<3.1	<3.1	<3.1	<6.2	<6.2	<3.1	<3.1

	TPH-g	Benzene	Toluene	Ethylbenzene	Xylenes	Napthalene	1,2-DCA	cis-1,2-DCE
SB-11-12	790	80	<4.2	55	<8.5	8.9	<4.2	<4.2
SB-11-15	<170	<3.3	<3.3	<3.3	<6.6	<6.6	<3.3	<3.3
SB-11-20	<180	<3.7	<3.7	<3.7	<7.4	<7.4	<3.7	<3.7



SOIL ANALYTICAL RESULTS (µg/Kg) – 2013

September 2013
28068161

3884 Martin Luther King, Jr. Way
Oakland, California

URS

FIGURE 7

10/27/13 hlvasa T:\3884 MLK\GEPT_2013\GW_Sample_Results Folder\GW_Sample_Results.indd

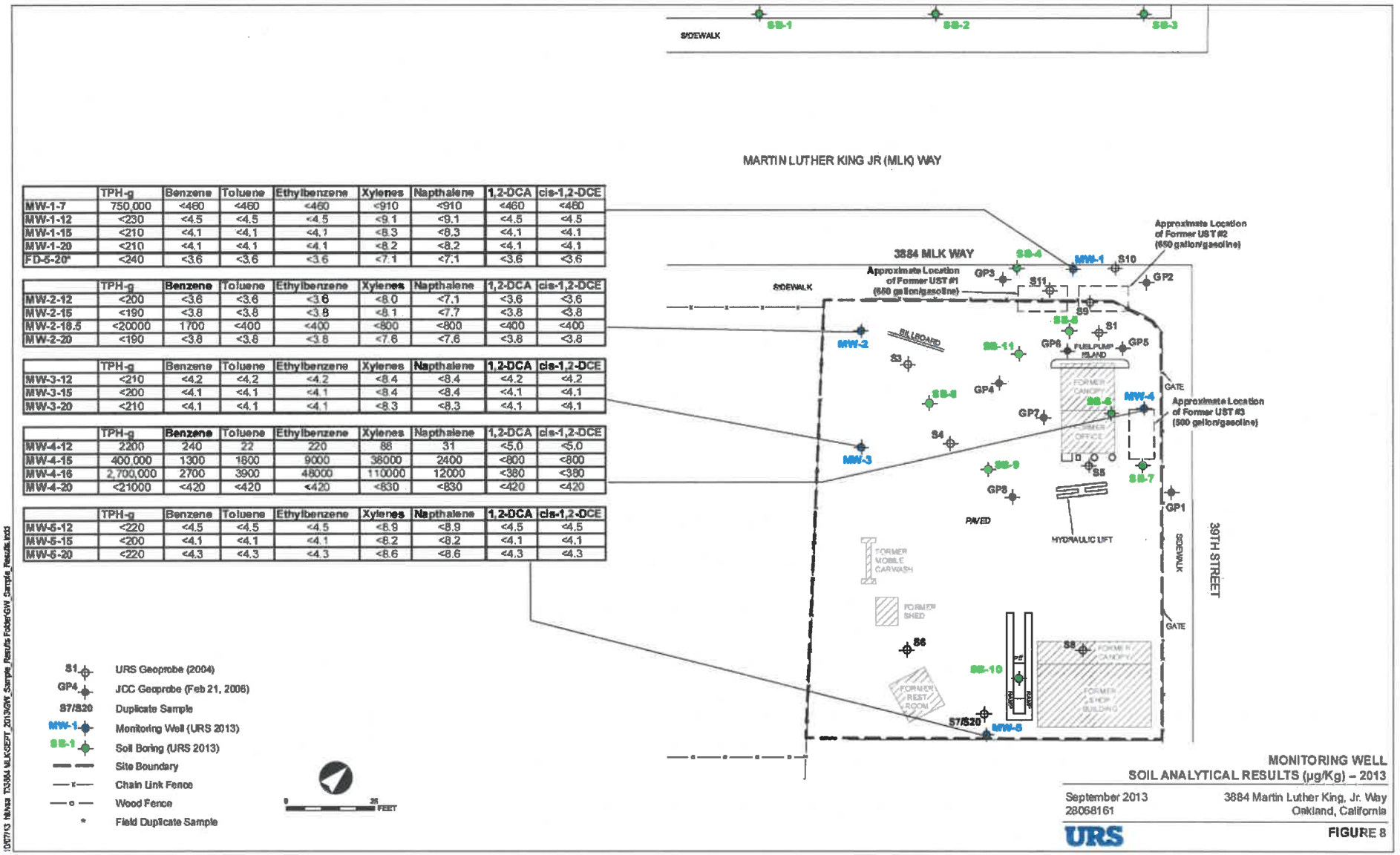
	TPH-g	Benzene	Toluene	Ethylbenzene	Xylenes	Napthalene	1,2-DCA	cis-1,2-DCE
MW-1-7	750,000	<460	<460	<460	<910	<910	<460	<460
MW-1-12	<230	<4.5	<4.5	<4.5	<9.1	<9.1	<4.5	<4.5
MW-1-15	<210	<4.1	<4.1	<4.1	<8.3	<8.3	<4.1	<4.1
MW-1-20	<210	<4.1	<4.1	<4.1	<8.2	<8.2	<4.1	<4.1
FD-5-20*	<240	<3.6	<3.6	<3.6	<7.1	<7.1	<3.6	<3.6

	TPH-g	Benzene	Toluene	Ethylbenzene	Xylenes	Napthalene	1,2-DCA	cis-1,2-DCE
MW-2-12	<200	<3.6	<3.6	<3.6	<8.0	<7.1	<3.6	<3.6
MW-2-15	<190	<3.8	<3.8	<3.8	<8.1	<7.7	<3.8	<3.8
MW-2-18.5	<20000	1700	<400	<400	<800	<800	<400	<400
MW-2-20	<190	<3.8	<3.8	<3.8	<7.6	<7.6	<3.8	<3.8

	TPH-g	Benzene	Toluene	Ethylbenzene	Xylenes	Napthalene	1,2-DCA	cis-1,2-DCE
MW-3-12	<210	<4.2	<4.2	<4.2	<8.4	<8.4	<4.2	<4.2
MW-3-15	<200	<4.1	<4.1	<4.1	<8.4	<8.4	<4.1	<4.1
MW-3-20	<210	<4.1	<4.1	<4.1	<8.3	<8.3	<4.1	<4.1

	TPH-g	Benzene	Toluene	Ethylbenzene	Xylenes	Napthalene	1,2-DCA	cis-1,2-DCE
MW-4-12	2200	240	22	220	88	31	<5.0	<5.0
MW-4-15	400,000	1300	1800	9000	38000	2400	<800	<800
MW-4-16	2,700,000	2700	3900	48000	110000	12000	<380	<380
MW-4-20	<21000	<420	<420	<420	<830	<830	<420	<420

	TPH-g	Benzene	Toluene	Ethylbenzene	Xylenes	Napthalene	1,2-DCA	cis-1,2-DCE
MW-5-12	<220	<4.5	<4.5	<4.5	<8.9	<8.9	<4.5	<4.5
MW-5-15	<200	<4.1	<4.1	<4.1	<8.2	<8.2	<4.1	<4.1
MW-5-20	<220	<4.3	<4.3	<4.3	<8.6	<8.6	<4.3	<4.3



MONITORING WELL
SOIL ANALYTICAL RESULTS (µg/Kg) – 2013

September 2013
28068161

3884 Martin Luther King, Jr. Way
Oakland, California

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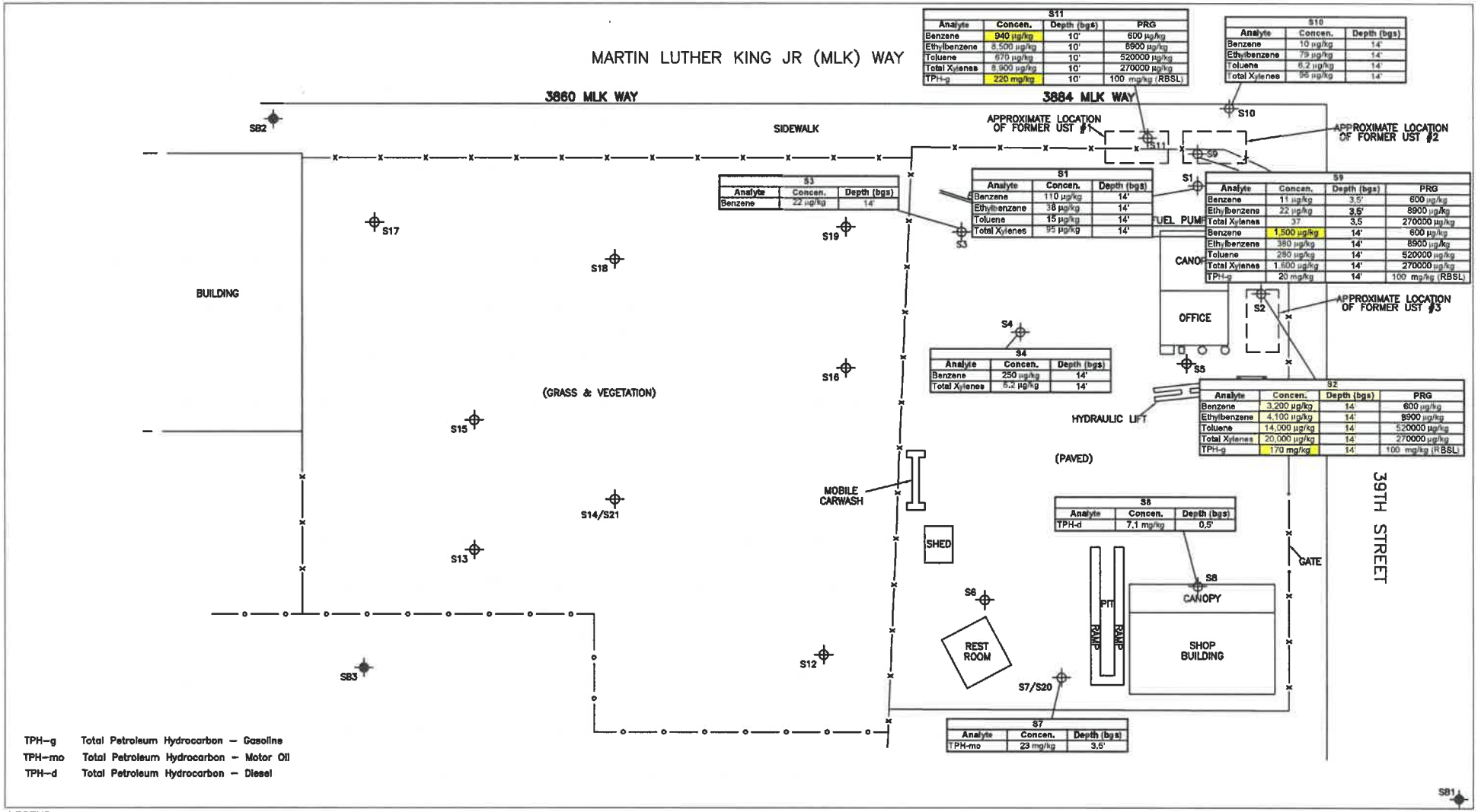
FIGURE 8

10/7/13 hlwa T:\3884 MLK\GE\PT_2013\GW_Sample_Results Folder\GW_Sample_Results.mxd



TPH–g Total Petroleum Hydrocarbon – Gasoline
TPH–mo Total Petroleum Hydrocarbon – Motor Oil
TPH–d Total Petroleum Hydrocarbon – Diesel

LEGEND

- S1 — SOIL BORING LOCATION
- SB1 — APPROXIMATE BACKGROUND SURFACE SOIL BORING LOCATION
- —x— CHAIN–LINK FENCE
- —o— WOOD FENCE
- PRG — THE U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA) REGION IX, PRELIMINARY REMEDIATION GOALS (PRGs) FOR RESIDENTIAL SOILS
- RBSL — THE CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD (RWQCB) RISK–BASED SCREENING LEVEL (RBSL) FOR RESIDENTIAL SOILS
- shaded — EXCEEDS PRG
- S7/S20 — DUPLICATE SAMPLE

SCALE
0 10 20 40
(1 inch = 20 feet)

BETX AND TPH IN SOIL
Envrionmental Investigation Report
Lucky's Auto Body
July 2004 — Department of Toxic Substances Control
28066607 — Oakland, CA
URS
FIGURE 4

ATTACHMENT B-6

Soil Vapor Data

Table 5
Soil Gas Analytical Results
Grove Street Wash Rack
3884 Martin Luther King Jr Way
Oakland, California

Analyte	ESL Residential	Residential LTCP	Commercial LTCP	SV-1	SV-1A	Dup 20170714	SV-2	SV-2A	SV-3	SV-4	SV-4A	SV-5
Date				Feb-17	Jul-17	Jul-17	Feb-17	Jul-17	Feb-17	Feb-17	Jul-17	Feb-17
Benzene	*48*	*85*	*280*	3.8 J	<64	<64	12	7.9	13	3.7	15	3
Toluene	*160,000*	*NE*	*NE*	3.8J	<75	<75	6.4	16	9.5	4	18	3.3
Ethylbenzene	*560*	*1100*	*3600*	4.2 J	360	370	24	18	24	<2.2	2.4	<2.3
p/m-Xylene	*52,000*	*NE*	*NE*	16 J	460	470	26	39	76	<8.9	8.7	<9.1
o-Xylene	*52,000*	*NE*	*NE*	7.1 J	<87	<87	23	13	22	2.6	2.2	<2.3
Naphthalene	*41*	*93*	*310*	<28 UJ	<1000	<1000	<32	<26	<28	<27	<26	<27
Dichlorodifluoromethane	*NE*	*NE*	*NE*	<2.6	NA	NA	<3	NA	<2.6	2.8	NA	<2.6
Chloromethane	*47,000*	*NE*	*NE*	<1.1	NA	NA	2.3	NA	<1.1	<1.1	NA	<1.1
Bromodichloromethane	*38*	*NE*	*NE*	<3.5	NA	NA	<4.1	NA	<3.6	3.6	NA	5
tert-Butylbenzene	*NE*	*NE*	*NE*	<2.9 UJ	NA	NA	<3.4	NA	5	<2.8	NA	<2.9
2-Hexanone	*NE*	*NE*	*NE*	<6.5	NA	NA	<7.5	NA	<6.5	6.6	NA	6.8
sec-Butylbenzene	*NE*	*NE*	*NE*	<2.9	NA	NA	4.2	NA	7.2	<2.8	NA	<2.9
1,3-Dichlorobenzene	*NE*	*NE*	*NE*	7.1 J	NA	NA	10	NA	5.6	5.4	NA	<3.1
Acetone	*15,000,000*	*NE*	*NE*	<5	NA	NA	<5.8	NA	<5.1	25	NA	21
Carbon Disulfide	*NE*	*NE*	*NE*	<6.6	NA	NA	15	NA	32	<6.4	NA	<6.5
Isopropanol*	*NE*	*NE*	*NE*	33	NA	NA	<15	NA	14	25	NA	18
Chloroform	*61*	*NE*	*NE*	52	NA	NA	20	NA	31	32	NA	40
Trichloroethene	*240*	*NE*	*NE*	<2.8	NA	NA	<3.3	NA	<2.9	<2.8	NA	<2.8
1,4-Dichlorobenzene	*130*	*NE*	*NE*	<3.2	NA	NA	<3.7	NA	<3.2	<3.1	NA	<3.1
4-Ethyltoluene	*NE*	*NE*	*NE*	<2.6	NA	NA	<3	NA	<2.6	<2.5	NA	<2.6
2-Butanone	*NE*	*NE*	*NE*	41	NA	NA	100	NA	24	56	NA	57
1,3,5-Trimethylbenzene	*NE*	*NE*	*NE*	<2.6	NA	NA	3.5	NA	<2.6	<2.5	NA	<2.6
Tetrachloroethene	*240*	*NE*	*NE*	25	NA	NA	<4.1	NA	19	<3.5	NA	<3.6
1,2,4-Trimethylbenzene	*NE*	*NE*	*NE*	<7.8	NA	NA	11	NA	<7.8	<7.6	NA	<7.7

Notes:

All results in µg/m3
ESL Residential - Tier 1 Environmental Screening Levels- for Residential Land Use (Tier 1 Table)
ESL Commercial - Tier 2 Environmental Screening Levels- for Commercial Land Use (Tier 2-1 Table assuming sandy soil and contamination <10 feet)
LTCP - Low Threat Closure Policy screening levels assuming no bioattenuation zone.
NE = Not Established
NA= Not analyzed

* Isopropanol was used as a leak check compound. Results were within 10X the reporting limit, therefore, sample leakage was not a significant issue.
J = result is estimated (see report narrative)

Table 6
Fixed Gas Analytical Results
Grove Street Wash Rack
3884 Martin Luther King Jr Way
Oakland, California

Analyte	BZL	SV-1A	Dup 20170714	SV-2A	SV-4A
Date		Jul-17	Jul-17	Jul-17	Jul-17
Methane	*NE*	**0.533**	**0.573**	<0.5	<0.5
Carbon Dioxide	*NE*	**5.7**	**5.91**	**9.46**	**1.46**
Oxygen	*4*	**5.51**	**5.06**	**11.4**	**19.6**

Notes: All results in Percentage by Volume (%V)
BZL = Bioattenuation Zone Limit from the Low Threat Closure Policy
NE = Not Established

ATTACHMENT C-1

Responsible Party & Assessor's Office Information

COUNTY OF ALAMEDA
Assessor's Office

Help

New Query

Property Value System

History | Value | Transfer | Map | Glossary

Parcel Number:**12-968-31** Inactive:**N** Lien Date:**01/01/2018** Owner:**COTTER NEIL & MARY ETAL**
Property Address: **3884 M L KING JR WAY, OAKLAND, CA 94609-2342**

Mailing Name		Historical Mailing Address	Document Date	Document Number	Value From Trans Tax	Parcel Count	Use
COTTER NEIL & MARY ETAL	List Owners	2847 ARGUELLO ST , BURLINGAME, CA 94010-5817	12/13/2005	2005-530197		1	7000
COTTER MARY & NEIL ETAL	List Owners	2847 ARGUELLO ST , BURLINGAME, CA 94010-5817	08/10/2005	2005-340406	$500,000	1	7000
LUCKETT HILLARY & LILLIE V	List Owners	4102 LUSK ST , OAKLAND, CA 94608-3726	12/09/2004	2004-546775		1	7000
LUCKETT LILLIE & HILLARY c/o DELOUIS CLEMON	List Owners	3884 M L KING JR WAY , OAKLAND, CA 94609	04/23/2002	2002-179193		1	7000
LUCKETT HILLARY & LILLIE V c/o JOHN W. HOLMDAHL	List Owners	4102 LUSK ST , EMERYVILLE, CA 94608-3726	03/18/1964	AW-43279		1	7000

ASSESSOR'S MAP 12

968

Page 2

Map of the Montgomery Tract No. 1. (Bk. 3 - Pg. 2)

Map of the Luning Tract No. 2. (Bk. 22 - Pg. 37)

Map of the Ranchos of Vicente and Domingo Peralta.
- Plat No. 11 - 37 (Bk. 17 Pg. 12)

Code Area No. 17-042

2

Scale 1 in = 40 ft.

968

Key
5-25-78 AM
10-29-84 ST
5-5-89 JT
5-30-01 LL
11-26-02 EB

GROVE-SHAFTER (Street.)

(- Geary -)

FREEWAY (R-137A)

(Street.)

Apgar

449.5 Fm GROVE

555 Fm TELEGRAPH AVE.

240 Fm GROVE

969

967

630

Plot 11

Plot 37

State of Calif

Martin Luther King, Jr. Way

Ind 1

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

F

Certified Mail #: 7002 2030 0006 9574 1327

April 15, 2008

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

NOTICE OF RESPONSIBILITY

Site Name & Address:
GROVE STREET WASH RACK
3884 MARTIN LUTHER KING JR WAY
Oakland, CA 94609

Local ID: RO0000027
Related ID: 4371
RWQCB ID: 01-2290
Global ID: T0600102106

Responsible Party:

NEIL & MARY COTTER, ETAL
COTTER & COYLE
2847 ARGUELLO STREET
BURLINGAME CA 94010-5817

Date First Reported: 1/19/1995
Substance: 8006619 Gasoline-Automotive (motor gasoline and additives), leaded & unleaded
Funding for Oversight: LOPS - LOP State Fund
Multiple RPs?: Yes

Pursuant to sections 25297.1 and 25297.15 of the Health and Safety Code, you are hereby notified that the above site has been placed in the Local Oversight Program and the individual(s) or entity(ies) shown above, or on the attached list, has (have) been identified as the party(ies) responsible for investigation and cleanup of the above site. Section 25297.15 further requires the primary or active Responsible Party to notify all current record owners of fee title before the local agency considers cleanup or site closure proposals or issues a closure letter. For purposes of implementing section 25297.15, this agency has identified GROVE STREET WASH RACK as the primary or active Responsible Party. It is the responsibility of the primary or active Responsible Party to submit a letter to this agency, within 20 calendar days of receipt of this notice that identifies all current record owners of fee title. It is also the responsibility of the primary or active Responsible Party to certify to the local agency that the required notifications have been made at the time a cleanup or site closure proposal is made or before the local agency makes a determination that no further action is required. If property ownership changes in the future, you must notify this local agency within 20 calendar days from when you are informed of the change.

Any action or inaction by this local agency associated with corrective action, including responsible party identification, is subject to petition to the State Water Resources Control Board. Petitions must be filed within 30 days from the date of the action/inaction. To obtain petition procedures, please FAX your request to the State Water Board at (916) 341-5808 or telephone (916) 341-5650.

Pursuant to section 25296.10(c)(6) of the Health and Safety Code, a responsible party may request the designation of an administering agency when required to conduct corrective action. Please contact this office for further information about the designation process.

Please contact your caseworker KHATRI, PARESH, at this office at (510)777-2478 if you have questions regarding your site.

Date: 4/15/08

ARIU LEVI, Director
Contract Project Director

Action: Add
Reason:

Attachment A: Responsible Parties Data Sheet
cc: Jenniffer Jordan, SWRCB, D. Drogos, File

ALAMEDA COUNTY ENVIRONMENTAL HEALTH
LUFT LOCAL OVERSIGHT PROGRAM

ATTACHMENT A - RESPONSIBLE PARTIES DATA SHEET

April 08, 2008

Site Name & Address:
GROVE STREET WASH RACK
3884 MARTIN LUTHER KING JR WAY
Oakland, CA 94609

Local ID: RO0000027
Related ID: 4371
RWQCB ID: 01-2290
Global ID: T0600102106

All Responsible Parties

RP has been named a Primary RP - LILLIE & HILLARY LUCKETT
GROVE STREET WASH RACK
PO BOX 2973 | OAKLAND, CA 94609 | Phone (510) 652-4510

RP has been named a RP - NEIL & MARY COTTER, ETAL
COTTER & COYLE
2847 ARGUELLO STREET | BURLINGAME, CA 94010-5817 | Phone (415) 215-5805

Responsible Party Identification Background

Alameda County Environmental Health (ACEH) names a "Responsible Party," as defined under 23 C.C.R Sec. 2720. Section 2720 defines a responsible party 4 ways. An RP can be:

1. "Any person who owns or operates an underground storage tank used for the storage of any hazardous substance."
2. "In the case of any underground storage tank no longer in use, any person who owned or operated the underground storage tank immediately before the discontinuation of its use."
3. "Any owner of property where an unauthorized release of a hazardous substance from an underground storage tank has occurred."
4. "Any person who had or has control over an underground storage tank at the time of or following an unauthorized release of a hazardous substance."

ACEH has named the responsible parties for this site as detailed below.

ATTACHMENT A - RESPONSIBLE PARTIES DATA SHEET (Continued)

April 15, 2008

Responsible Party Identification

Responsible Party Identification

Existence of Unauthorized Release

One 500-gallon and two 650-gallon underground storage tanks (USTs) that stored gasoline were excavated and removed on January 5, 1995. A total of three confirmation soil samples were collected from the excavations. Elevated concentrations of TPH as gasoline (140 mg/kg) and benzene (0.610 mg/kg) were detected in the soil indicating than an unauthorized release has occurred.

Responsible Party Identification

H & L Luckett (Hillary and Lillie Luckett) was the business owner, tank owner, and property owner at the time of and following the release(s). H & L Luckett is a responsible party for the site because they owned and operated the underground storage tanks (Definition 1), formerly owned the property where an unauthorized release occurred (Definition 3), and had control of underground storage tanks at the time of an unauthorized release (Definition 4).

Neil & Mary Cotter purchased the property in August 2005. Neil and Mary Cotter are responsible parties because they are the current owners of a property where an unauthorized release occurred (Definition 3).

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

RAFAT A. SHAHID, ASST. AGENCY DIRECTOR

DEPARTMENT OF ENVIRONMENTAL HEALTH
State Water Resources Control Board
Division of Clean Water Programs
UST Local Oversight Program
80 Swan Way, Rm 200
Oakland, CA 94621
(510) 271-4530

Certified Mail # Z 196 176 777

01/06/95
STID# 4371

Notice of Requirement to Reimburse

Lillie Luckett
N/a
4102 Lusk Street
Oakland, C A 94608

Responsible Party
Property Owner

Lillie Luckett
3884 Martin L King Way
Oakland , CA 94609

SITE

Date First Reported 01/05/95
Substance: Gasoline
Petroleum: (X)Yes

The federal Petroleum Leaking Underground Storage Tank Trust Fund (Federal Trust Fund) provides funding to pay the local and state agency administrative and oversight costs associated with the cleanup of releases from underground storage tanks. The legislature has authorized funds to pay the local and state agency administrative and oversight costs associated with the cleanup of releases from underground storage tanks. The direct and indirect costs of site investigation or remedial action at the above site are funded, in whole or in part, from the Federal Trust Fund. The above individual(s) or entity(ies) have been identified as the party or parties responsible for investigation and cleanup of the above site. **YOU ARE HEREBY NOTIFIED** that pursuant to Title 42 of the United States Code, Section 6991b(h)(6) and Sections 25297.1 and 25360 of the California Health and Safety Code, the above Responsible Party or Parties must reimburse the State Water Resources Control Board not more than 150 percent of the total amount of site specific oversight costs actually incurred while overseeing the cleanup of the above underground storage tank site, and the above Responsible Party or Parties must make full payment of such costs within 30 days of receipt of a detailed invoice from the State Water Resources Control Board.

Please contact Eva CHU, Hazardous Materials Specialist at this office if you have any questions concerning this matter.

Edgar B. Howell, III, Chief
Contract Project Director

cc: Mike Harper, SWRCB

SWRCB Use: ADD : X Reason: New Case

#4371
E. Chu

Z 196 176 777

Receipt for Certified Mail

No Insurance Coverage Provided
Do not use for International Mail
(See Reverse)

PS Form 3800, March 1993

Sent to Lillie Luckett	
Street and No. 4102 Lusk Street	
P.O., State and ZIP Code Oakland CA 94608	
Postage	$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	$
Postmark or Date	

RO 27

Is your RETURN ADDRESS completed on the reverse side?

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to: E. Chu RO 27

Lillie Luckett
4102 Lusk Street
Oakland CA 94608

4a. Article Number
Z 196 176 777

4b. Service Type
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail ☐ Return Receipt for Merchandise

5. Signature (Addressee)

6. Signature (Agent)

7. Date of Delivery

8. Addressee's Address (Only if requested and fee is paid)

Thank you for using Return Receipt Service.

PS Form 3811, December 1991 ☆U.S. GPO: 1993—352-714 **DOMESTIC RETURN RECEIPT**

ATTACHMENT C-2

Site Configuration at Time of Closure

Google Maps 3898 Martin Luther King Jr Way

Image capture: Jan 2018 © 2018 Google

Oakland, California

Google, Inc.

Street View - Jan 2018

Google Maps 632 39th St

Image capture: Jan 2018 © 2018 Google

Oakland, California

Google, Inc.

Street View - Jan 2018

ATTACHMENT D-1

Public Notification Fact Sheet & Distribution List

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
COLLEEN CHAWLA, Agency Director

DEPARTMENT OF ENVIRONMENTAL HEALTH
LOCAL OVERSIGHT PROGRAM (LOP)
For Hazardous Materials Releases
1131 HARBOR BAY PARKWAY, SUITE 250
ALAMEDA, CA 94502
(510) 567-6700
FAX (510) 337-9335

INVITATION TO COMMENT – POTENTIAL CASE CLOSURE

Grove Street Wash Rack
3884 Martin Luther King, Jr. Way
Oakland, CA 94609
FUEL LEAK CASE RO0000027
GEOTRACKER GLOBAL ID T06000102106

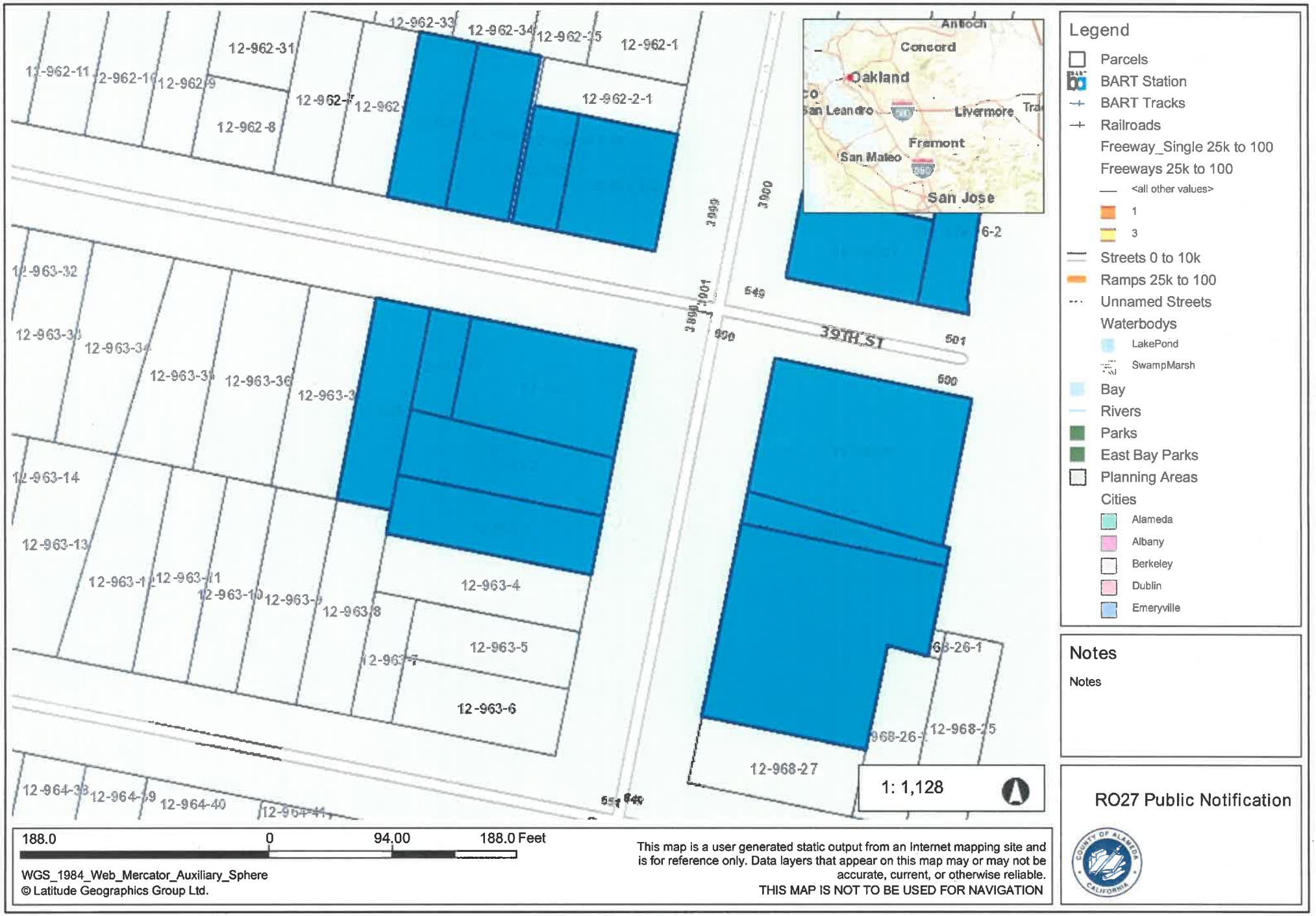
January 30, 2018

The above referenced site is a fuel leak case that is under the regulatory oversight of the Alameda County Department of Environmental Health (ACDEH) Local Oversight Program for the investigation and cleanup of a release of petroleum hydrocarbons from an underground storage tank system. Site investigation and cleanup activities have been completed and the site has been evaluated in accordance with the State Water Resources Control Board Low-Threat Closure Policy. The site appears to meet all of the criteria in the Low-Threat Closure Policy. Therefore, ACDEH is considering closure of the fuel leak case. Due to the residual contamination on site, the site would be closed to existing use as an empty lot with site management requirements that require further evaluation if the site is to be redeveloped in the future.

This notice is being sent to the current landowner in compliance with Health and Safety Code Section 25295.40. It is also being sent to the current occupants and landowners of adjacent properties and known interested parties for this site.

The public is invited to review and comment on the potential closure of the fuel leak case. The entire case file can be viewed over the Internet on the ACDEH 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). Please send written comments to Ms. Karel Detterman at the address below; all comments will be forwarded to the responsible parties. Comments **received by March 31, 2018** will be considered and responded to prior to a final determination on the proposed case closure.

If you have comments or questions regarding this site, please contact the ACDEH caseworker, Karel Detterman at 510-567-6708 or by email at karel.detterman@acgov.org. Please refer to ACDEH case RO0000027 in any correspondence.



Legend

- Parcels
- BART Station
- BART Tracks
- Railroads
- Freeway_Single 25k to 100
- Freeways 25k to 100
  - <all other values>
  - 1
  - 3
- Streets 0 to 10k
- Ramps 25k to 100
- Unnamed Streets
- Waterbodys
  - LakePond
  - SwampMarsh
- Bay
- Rivers
- Parks
- East Bay Parks
- Planning Areas
- Cities
  - Alameda
  - Albany
  - Berkeley
  - Dublin
  - Emeryville

Notes

Notes

RO27 Public Notification

Sort_APN	Parcel_APN	Name	StreetAddress	Unit	City	Zip	Zip_4
012 096200202	12-962-2-2	SAWYER LAVERNE R TR	2137 HAVENSCOURT BLVD		OAKLAND CA	94621	3641
012 096200202	12-962-2-2	OCCUPANT	3901 M L KING JR WAY		OAKLAND CA	94609	
012 096200300	12-962-3	BINDER MAX A	656 39TH ST		OAKLAND CA	94609	2375
012 096200400	12-962-4	SEIDMAN JENNIFER	660 39TH ST		OAKLAND CA	94609	2375
012 096200500	12-962-5	REO HOMES 2 LLC	510 3RD ST	102	OAKLAND CA	94607	3528
012 096200500	12-962-5	OCCUPANT	664 39TH ST		OAKLAND CA	94609	
012 096300100	12-963-1	PHILIPOS YOSIEF & GHEBRMICAEL ASMEROM	1825 POGGI ST	311A	ALAMEDA CA	94501	1872
012 096300100	12-963-1	OCCUPANT	3881 M L KING JR WAY		OAKLAND CA	94609	
012 096300200	12-963-2	CLEMENTS LILLIE M & JOSEPH A TRS	3869 M L KING JR WAY		OAKLAND CA	94609	2343
012 096300300	12-963-3	GHEBREMICAEL ASMEROM	1538 HAIGHT ST		SAN FRANCISCO CA	94117	2913
012 096300300	12-963-3	OCCUPANT	3867 M L KING JR WAY		OAKLAND CA	94609	
012 096303800	12-963-38	BERNSTEIN MICHAEL	2865 CLAY ST	2	SAN FRANCISCO CA	94115	1716
012 096303800	12-963-38	OCCUPANT	665 39TH ST		OAKLAND CA	94609	
012 096303900	12-963-39	NEMARIAM FRIE	13315 TWILIGHT TRAIL PL N		ALBUQUERQUE NM	87111	8247
012 096303900	12-963-39	OCCUPANT	659 39TH ST		OAKLAND CA	94609	
012 096803003	12-968-30-3	COTTER & COYLE LLC	2847 ARGUELLO DR		BURLINGAME CA	94010	5817
012 096803003	12-968-30-3	OCCUPANT	3860 M L KING JR WAY		OAKLAND CA	94609	
012 096803100	12-968-31	COTTER NEIL & MARY ETAL	2847 ARGUELLO ST		BURLINGAME CA	94010	5817
012 096803100	12-968-31	OCCUPANT	3884 M L KING JR WAY		OAKLAND CA	94609	
012 096902602	12-969-26-2	RICHARDSON BLANCHE A	3900 M L KING JR WAY		OAKLAND CA	94609	2316
012 096902602	12-969-26-2	OCCUPANT	632 39TH ST		OAKLAND CA	94609	
012 096902700	12-969-27	RICHARDSON BLANCHE A	3900 M L KING JR WAY		OAKLAND CA	94609	2316
012 102600100	12-1026-1	COTTER & COYLE LLC	2847 ARGUELLO DR		BURLINGAME CA	94010	5817
012 102600100	12-1026-1	OCCUPANT	3860 M L KING JR WAY		OAKLAND CA	94609	
012 102600200	12-1026-2	COTTER & COYLE LLC	2847 ARGUELLO DR		BURLINGAME CA	94010	5817
012 102600200	12-1026-2	OCCUPANT	3860 M L KING JR WAY		OAKLAND CA	94609	
012 102600300	12-1026-3	COTTER & COYLE LLC	2847 ARGUELLO DR		BURLINGAME CA	94010	5817
012 102600300	12-1026-3	OCCUPANT	3860 M L KING JR WAY		OAKLAND CA	94609	
012 102600400	12-1026-4	COTTER & COYLE LLC	2847 ARGUELLO DR		BURLINGAME CA	94010	5817
012 102600400	12-1026-4	OCCUPANT	3860 M L KING JR WAY		OAKLAND CA	94609	
012 102600500	12-1026-5	COTTER & COYLE LLC	2847 ARGUELLO DR		BURLINGAME CA	94010	5817
012 102600500	12-1026-5	OCCUPANT	3860 M L KING JR WAY		OAKLAND CA	94609	
012 102600600	12-1026-6	COTTER & COYLE LLC	2847 ARGUELLO DR		BURLINGAME CA	94010	5817
012 102600600	12-1026-6	OCCUPANT	3860 M L KING JR WAY		OAKLAND CA	94609	
012 102600700	12-1026-7	COTTER & COYLE LLC	2847 ARGUELLO DR		BURLINGAME CA	94010	5817
012 102600700	12-1026-7	OCCUPANT	3860 M L KING JR WAY		OAKLAND CA	94609	
012 102600800	12-1026-8	COTTER & COYLE LLC	2847 ARGUELLO DR		BURLINGAME CA	94010	5817
012 102600800	12-1026-8	OCCUPANT	3860 M L KING JR WAY		OAKLAND CA	94609	
012 102600900	12-1026-9	COTTER & COYLE LLC	2847 ARGUELLO DR		BURLINGAME CA	94010	5817
012 102600900	12-1026-9	OCCUPANT	3860 M L KING JR WAY		OAKLAND CA	94609	
012 102601000	12-1026-10	COTTER & COYLE LLC	2847 ARGUELLO DR		BURLINGAME CA	94010	5817
012 102601000	12-1026-10	OCCUPANT	3860 M L KING JR WAY		OAKLAND CA	94609	
012 102601100	12-1026-11	COTTER & COYLE LLC	2847 ARGUELLO DR		BURLINGAME CA	94010	5817
012 102601100	12-1026-11	OCCUPANT	3860 M L KING JR WAY		OAKLAND CA	94609	
012 102601200	12-1026-12	COTTER & COYLE LLC	2847 ARGUELLO DR		BURLINGAME CA	94010	5817
012 102601200	12-1026-12	OCCUPANT	3860 M L KING JR WAY		OAKLAND CA	94609	
012 102601300	12-1026-13	COTTER & COYLE LLC	2847 ARGUELLO DR		BURLINGAME CA	94010	5817
012 102601300	12-1026-13	OCCUPANT	3860 M L KING JR WAY		OAKLAND CA	94609	
012 102601400	12-1026-14	COTTER & COYLE LLC	2847 ARGUELLO DR		BURLINGAME CA	94010	5817
012 102601400	12-1026-14	OCCUPANT	3860 M L KING JR WAY		OAKLAND CA	94609	
012 102601500	12-1026-15	COTTER & COYLE LLC	2847 ARGUELLO DR		BURLINGAME CA	94010	5817
012 102601500	12-1026-15	OCCUPANT	3860 M L KING JR WAY		OAKLAND CA	94609	
012 102601600	12-1026-16	COTTER & COYLE LLC	2847 ARGUELLO DR		BURLINGAME CA	94010	5817
012 102601600	12-1026-16	OCCUPANT	3860 M L KING JR WAY		OAKLAND CA	94609	
012 102601700	12-1026-17	COTTER & COYLE LLC	2847 ARGUELLO DR		BURLINGAME CA	94010	5817
012 102601700	12-1026-17	OCCUPANT	3860 M L KING JR WAY		OAKLAND CA	94609	
012 102601800	12-1026-18	COTTER & COYLE LLC	2847 ARGUELLO DR		BURLINGAME CA	94010	5817
012 102601800	12-1026-18	OCCUPANT	3860 M L KING JR WAY		OAKLAND CA	94609	
012 102601900	12-1026-19	COTTER & COYLE LLC	2847 ARGUELLO DR		BURLINGAME CA	94010	5817
012 102601900	12-1026-19	OCCUPANT	3860 M L KING JR WAY		OAKLAND CA	94609	
012 102602000	12-1026-20	COTTER & COYLE LLC	2847 ARGUELLO DR		BURLINGAME CA	94010	5817
012 102602000	12-1026-20	OCCUPANT	3860 M L KING JR WAY		OAKLAND CA	94609	
012 102602100	12-1026-21	COTTER & COYLE LLC	2847 ARGUELLO DR		BURLINGAME CA	94010	5817
012 102602100	12-1026-21	OCCUPANT	3860 M L KING JR WAY		OAKLAND CA	94609	
012 102602200	12-1026-22	COTTER & COYLE LLC	2847 ARGUELLO DR		BURLINGAME CA	94010	5817
012 102602200	12-1026-22	OCCUPANT	3860 M L KING JR WAY		OAKLAND CA	94609	
012 102602300	12-1026-23	COTTER & COYLE LLC	2847 ARGUELLO DR		BURLINGAME CA	94010	5817
012 102602300	12-1026-23	OCCUPANT	3860 M L KING JR WAY		OAKLAND CA	94609	
012 102602400	12-1026-24	COTTER & COYLE LLC	2847 ARGUELLO DR		BURLINGAME CA	94010	5817
012 102602400	12-1026-24	OCCUPANT	3860 M L KING JR WAY		OAKLAND CA	94609	
012 102602500	12-1026-25	COTTER & COYLE LLC	2847 ARGUELLO DR		BURLINGAME CA	94010	5817

012 102602500	12-1026-25	OCCUPANT	3860 M L KING JR WAY		OAKLAND CA	94609	
012 102602600	12-1026-26	COTTER & COYLE LLC	2847 ARGUELLO DR		BURLINGAME CA	94010	5817
012 102602600	12-1026-26	OCCUPANT	3860 M L KING JR WAY		OAKLAND CA	94609	
012 102602700	12-1026-27	COTTER & COYLE LLC	2847 ARGUELLO DR		BURLINGAME CA	94010	5817
012 102602700	12-1026-27	OCCUPANT	3860 M L KING JR WAY		OAKLAND CA	94609	
012 102602800	12-1026-28	COTTER & COYLE LLC	2847 ARGUELLO DR		BURLINGAME CA	94010	5817
012 102602800	12-1026-28	OCCUPANT	3860 M L KING JR WAY		OAKLAND CA	94609	
012 102602900	12-1026-29	COTTER & COYLE LLC	2847 ARGUELLO DR		BURLINGAME CA	94010	5817
012 102602900	12-1026-29	OCCUPANT	3860 M L KING JR WAY		OAKLAND CA	94609	
012 102603000	12-1026-30	COTTER & COYLE LLC	2847 ARGUELLO DR		BURLINGAME CA	94010	5817
012 102603000	12-1026-30	OCCUPANT	3860 M L KING JR WAY		OAKLAND CA	94609	
012 102603100	12-1026-31	COTTER & COYLE LLC	2847 ARGUELLO DR		BURLINGAME CA	94010	5817
012 102603100	12-1026-31	OCCUPANT	3860 M L KING JR WAY		OAKLAND CA	94609	
012 102603200	12-1026-32	COTTER & COYLE LLC	2847 ARGUELLO DR		BURLINGAME CA	94010	5817
012 102603200	12-1026-32	OCCUPANT	3860 M L KING JR WAY		OAKLAND CA	94609	
012 102603300	12-1026-33	COTTER & COYLE LLC	2847 ARGUELLO DR		BURLINGAME CA	94010	5817
012 102603300	12-1026-33	OCCUPANT	3860 M L KING JR WAY		OAKLAND CA	94609	
012 102603400	12-1026-34	COTTER & COYLE LLC	2847 ARGUELLO DR		BURLINGAME CA	94010	5817
012 102603400	12-1026-34	OCCUPANT	3860 M L KING JR WAY		OAKLAND CA	94609	
012 102603500	12-1026-35	COTTER & COYLE LLC	2847 ARGUELLO DR		BURLINGAME CA	94010	5817
012 102603500	12-1026-35	OCCUPANT	3860 M L KING JR WAY		OAKLAND CA	94609	
012 102603600	12-1026-36	COMMON AREA PM 9791	2847 ARGUELLO DR		BURLINGAME CA	94010	5817
012 102603600	12-1026-36	OCCUPANT	3860 M L KING JR WAY		OAKLAND CA	94609	

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EAST BAY MUNICIPAL UTILITY DISTRICT INDUSTRIAL DISCHARGE SECTION	P.O. BOX 24055	MS 702	OAKLAND CA	94623 1055	CHANDRA JOHANNESSON	ciohanne@ebmud.com
CITY OF OAKLAND PUBLIC WORKS ENVIRONMENTAL SERVICES	250 FRANK H. OGAWA PLAZA	SUITE 5301	OAKLAND CA	94612	MARK JOHANNES ARNIOLA	MArniola@oaklandnet.com
ALAMEDA COUNTY DEPT OF ENVIRONMENTAL HEALTH CUPA	SUSAN.HUGO@ACGOV.ORG				SUSAN HUGO	

ATTACHMENT E

Attachment E-1: List of Attachments

Attachment E-2: List of Acronyms & Symbols

ATTACHMENT E-1

LIST OF ATTACHMENTS

A	**LTCP Evaluation**
A-1	Geotracker LTCP Evaluation Checklist
A-2	Site Conceptual Model Summary
A-3	LTCP Media Specific Evaluation for Groundwater
A-4	LTCP Media Specific Evaluation for Vapor Intrusion
A-5	LTCP Media Specific Evaluation for Direct Contact and Outdoor Air Exposure
B	**Site Investigation Data**
B-1	Site Vicinity & Site Maps with Sampling Locations,
B-2	Preferential Pathways & Sensitive Receptor Survey Data
B-3	Boring Logs
B-4	Groundwater Data
B-5	Soil Data
B-6	Soil Vapor Data
C	**Responsible Party and Property Information**
C-1	Responsible Party & Assessor's Office Property Information, Site Configuration at Time of Case Closure
C-2	Site Configuration at Time of Case Closure
D	**Case Closure Public Notification Information**
D-1	Public Notification Fact Sheet & Distribution List
E	**Closure Form Keys**
E-1	List of Attachments
E-2	List of Acronyms & Symbols

ATTACHMENT E-2

Acronym or Symbol	Description
ACDEH	Alameda County Department of Environmental Health
APN	Assessor Parcel Number
bgs	below ground surface
BTEX	benzene, toluene, ethylbenzene, xylenes
EDB	ethylene dibromide or 1,2-dichloroethane (1,2-DCA)
EDC	ethylene dichloride
CEG	Certified Engineering Geologist
Cd	cadmium
Cr	chromium
c/o	care of
DIPE	di-isopropyl ether
DTSC	California Department of Toxic Substances Control
ECs	engineering controls
EPA	Environmental Protection Agency
ETBE	ethyl tert butyl ether
EtOC	ethanol
ft bgs	feet below ground surface
GW	groundwater
IA	indoor air
ICs	institutional controls
ID	Identification
K	1,000
LNAPL	Light Non-Aqueous Phase Liquid
LOP	Local Oversight Program
LTCP	State Water Resources Control Board's Low Threat Closure Policy
LUST	Leaking Underground Storage Tank
MTBE/TBA	methyl tertiary-butyl ether/tert-Butyl alcohol
N	naphthalene
Ni	nickel
NA	not analyzed
NR	not required
OA	outdoor air

ATTACHMENT E-2

LIST OF ACRONYMS & SYMBOLS (CONTINUED)

Acronym or Symbol	Description
Pb	lead
PCBs	polychlorinated biphenyls
PE	California Professional Engineer
PG	California Professional Geologist
S	soil
SCP	Site Cleanup Program
SS	sub-slab vapor
SV	soil vapor
SVOCs	semi volatile organic compounds
SW	surface water
TAME	tert amyl methyl ether
TPHbo	total petroleum hydrocarbons as bunker oil
TPHd	total petroleum hydrocarbons as diesel
TPHg	total petroleum hydrocarbons as gasoline
TPHho	total petroleum hydrocarbons as hydraulic oil
TPHjf	total petroleum hydrocarbons as jet fuel
TPHk	total petroleum hydrocarbons as kerosene
TPHmo	total petroleum hydrocarbons as motor oil
TPHss	total petroleum hydrocarbons as stoddard solvent
UST	underground storage tank
VOCs	volatile organic compounds
Zn	zinc
mg/kg	milligrams per kilogram
µg/L	microgram per liter
µg/m^3	microgram per cubic meter
>, <, ≥	greater than, less than, or greater than or equal to
%	percent