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Alameda County
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Environmental Health Services
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1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

SUBJECT: Perjury Statement

To Whom It May Concern:

I declare, under penalty of perjury, that the information and/or recommendations contained in the requested attached reports in your letter dated August 8, 2011 are true and correct to the best of my knowledge.

Signed: Jane Anne Allen

JANE A. ALLEN

March 31, 2008

GROUNDWATER MONITORING REPORT
First Quarter, 2008

325 Martin Luther King Jr. Way
Oakland, California

Project No. 270308

Prepared For

Jane and Kimball Allen
2 Lone Tree Avenue
Mill Valley, CA 94941

Prepared By

AEI Consultants
2500 Camino Diablo, Suite 200
Walnut Creek, CA 94597
(925) 283-6000

AEI

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March 31, 2008

Jane and Kimball Allen
2 Lone Tree Avenue
Mill Valley, California 94941

Subject: **Quarterly Groundwater Monitoring Report**
First Quarter, 2008
325 Martin Luther King Jr. Way
Oakland, California
Project No. 270308

Dear Mr. and Mrs. Allen:

AEI Consultants (AEI) has prepared this report on behalf of Jane and Kimball Allen to document the ongoing groundwater investigation at the above referenced site (Figure 1, Site Location Map). The groundwater investigation is being performed in accordance with the requirements of the Alameda County Health Care Services Agency (ACHCSA). The purpose of these activities is to monitor groundwater quality in the vicinity of the identified release of fuel products at the site. This report presents the findings of the third episode (First Quarter, 2008) of groundwater monitoring and sampling conducted on February 26, 2008.

I Background

The subject property is located on the western corner of the intersection of Martin Luther King Jr. Way and 4th Street in a mixed commercial and industrial area of Oakland. The property measures approximately 100 feet along Martin Luther King and approximately 150 feet along 4th Street with the property building covering essentially 100% of the land area. The northwestern portion of the building along 4th Street has also had the address 671 4th Street. The building is currently vacant, but was previously occupied by Pucci Enterprises as warehouse space and cold storage freezers.

Touchstone Developments completed a Phase I Environmental Site Assessment (ESA) of the property dated November 1, 1993 and identified a 10,000-gallon former fuel UST that currently exists below the north side of the building. The fuel UST was used to provide fuel for the Pucci Enterprises truck fleet. Marvin Busby Company, Inc. decommissioned the tank on October 20, 1993 by steam cleaning the tank, pumping remaining sludge out of the tank, and filling the tank with concrete slurry. At the time of the UST closure, the eastern section of the building had not yet been built. The tank could not be removed because of its proximity to the footing of the 671 4th Street building. After tank closure,

the eastern portion of the building (325 Martin Luther King) was constructed. Although records show that the UST was abandoned following proper procedures applicable at that time, no documentation was available of sampling around the tank prior to abandonment. A number of site investigations were performed by several environmental consultants during 2005 and 2006.

AEI performed a Phase II Subsurface Investigation in May 2005. A total two borings (SB-2 and SB-4) were completed with soil and groundwater samples collected (SB-1 and SB-3 encountered refusal at 4 feet bgs, possibly the top of the concrete filled UST). A release was discovered during the investigation, which indicated an impact to groundwater. Total petroleum hydrocarbon (TPH) as gasoline (TPH-g), TPH as diesel (TPH-d), and benzene were detected in groundwater up to 780 micrograms per liter (µg/L), 420 µg/L, and 53 µg/L, respectively.

In September 2005, an additional investigation was performed by Terra Firma. Groundwater samples were reportedly collected from four (4) soil borings (labeled 50901-1 to 50901-4). Details on the methods, field observations (including soil conditions), or analytical reports were not made available to AEI. Based on the information provided, groundwater sample analyses revealed the highest concentrations of TPH-g, TPH-d, and benzene at 20,000 µg/l, 3600 µg/l, and 990 µg/l, from the two borings to the south of the UST. Two borings southwest of the UST contained lower, but still detectable, concentrations fuel contaminants.

In June 2006, Ceres Associated performed another subsurface investigation. The project included the analyses of soil and groundwater from an additional five soil borings (labeled SB-5 to SB-9). Significant concentrations of fuel contaminants were detected in both soil and groundwater, particularly in SB-7, located southeast of the UST. Logs of the borings were not made available to AEI.

A fourth consultant, LRM Consulting, prepared release notification documentation and a workplan for the ACHCSA in August 2006. The workplan included additional research into possible additional source locations (dispenser, piping, offsite releases, etc) and the installation of three (3) monitoring wells. The wells were proposed as 2" PVC wells with a screen interval of approximately 5 to 20 feet bgs.

The ACHCSA had several comments relating to the previous assessments, following which AEI was retained to prepare a comprehensive workplan. The workplan, titled *Site Characterization Workplan*, prepared in March of 2007, detailed soil boring investigation and well installation activities to effectively characterize the release.

In May of 2007, AEI performed a soil and groundwater investigation by advancing an additional twelve (12) soil borings at the property. The soil boring locations were chosen to help determine the magnitude and extent of the petroleum release. Low to moderate concentrations of petroleum hydrocarbons were detected in the soil adjacent to the abandoned UST and in groundwater. Contaminant distributions in groundwater

suggested that the release of hydrocarbons is limited in extent; confined to the 325 Martin Luther King Jr. Way unit. On August 10, 2007, AEI installed three (3) groundwater monitoring wells in the area of the release. Elevated petroleum hydrocarbons were detected in well MW-3, adjacent to the abandoned UST, during the initial monitoring event. Please refer to AEI's *Monitoring Well Installation Report*, dated September 21, 2008, for the well construction details and a comprehensive history of the subject site.

II Summary of Monitoring Activities

AEI measured the depth to groundwater in the three (3) monitoring wells (labeled MW-1 through MW-3) on February 26, 2008. The well locations are shown on Figure 3. The depth to static groundwater from the top of the well casings was measured with an electric water level indicator prior to sampling.

The wells were purged with a battery-powered submersible pump. Temperature, pH, specific conductivity, dissolved oxygen (DO), and the oxidation-reduction potential (ORP) were measured and the turbidity was visually noted during purging of the wells. At least three (3) well volumes of water were purged from each well. The wells were allowed to recharge to at least 90% of their original level prior to sample collection.

Groundwater samples were collected with new disposable plastic bailers into 40 ml volatile organic analysis (VOA) vials and 1-liter amber bottles. VOAs were capped so that no head space or air bubbles were visible within the sample containers. Samples were transported on ice under proper chain of custody protocol to McCampbell Analytical, Inc. of Pittsburgh, California (Department of Health Services Certification #1644).

Three (3) samples were analyzed for total petroleum hydrocarbons as gasoline (TPH-g), methyl tertiary-butyl ether (MTBE), benzene, toluene, ethylbenzene, and xylenes (BTEX) by EPA methods 8021B/8015Cm and total petroleum hydrocarbons as diesel (TPH-d) by EPA method 8015C. In addition, the three samples were analyzed for MTBE, 1,2-Dibromoethane (EDB), and 1,2-dichloroethane (1,2-DCA) by EPA Method 8260B.

III Field Results

Groundwater levels for the current monitoring episode ranged from 6.90 (MW-2) to 7.15 (MW-3) feet above mean sea level (amsl). These groundwater elevations were an average of 0.39 feet higher than the previous episode. Based on these measurements, groundwater flows in a southerly direction at a gradient of approximately 0.005 ft/ft, which is consistent with previous episodes.

Groundwater elevation data, flow direction, and hydraulic gradient are summarized in Table 2: Groundwater Elevation Data. The water table elevations and the estimated groundwater flow direction are presented on Figure 3: Water Table Elevations. Please

refer to Appendix A for the Groundwater Monitoring Well Field Sampling Forms, which include water quality data and other parameters collected during well purging.

IV Groundwater Quality

No detectable concentrations of petroleum hydrocarbons were reported in the groundwater samples collected from monitoring wells MW-1 and MW-2, with the exception of MTBE and 1,2-DCA detected in MW-1 at concentrations of 16 µg/L and 6.9 µg/L, respectively. In MW-3, concentrations of TPH-g decreased to 31,000 µg/L and TPH-d increased to 5,400 µg/L. Benzene and total xylenes concentrations in MW-3 decreased to 4,200 µg/L and 2,200 µg/L, respectively; while concentrations of toluene and ethylbenzene increased to 1,900 µg/L and 590 µg/L, respectively. In addition, EBD and 1,2-DCA were detected in well MW-3 at concentrations of 31 µg/L and 220 µg/L, respectively.

A summary of groundwater analytical data is presented in Tables 3 and 4: Groundwater Sample Analytical Data and illustrated on Figure 4, Dissolved Phase Hydrocarbon Concentrations. Laboratory analytical reports and chain of custody documentation are included in Appendix B.

V Summary

This report documents the findings of the 1st Quarter 2008 groundwater monitoring event, the third event at the site. Overall, the findings of this event are generally consistent with the previous two monitoring events. Elevated concentrations of fuel hydrocarbons were detected in the source area well, MW-3, while no contaminants were detected in the down-gradient wells, MW-1 and MW-2, which the exception of comparatively low concentrations of MTBE and 1,2-DCA in MW-1.

A work plan for pilot testing and implementation of in-situ chemical oxidation (ISCO) as a method of corrective action is being submitted concurrently with this report for review and approval by the ACHCSA.

The next groundwater monitoring event is tentatively scheduled for the 2nd quarter 2008, in late May of 2008.

VI Report Limitations

This report presents a summary of work completed by AEI Consultants. The completed work includes observations and descriptions of site conditions encountered. Where appropriate, it includes analytical results for samples taken during the course of the work. The number and location of samples are chosen to provide the requested information, but it cannot be assumed that they are representative of areas not sampled. All conclusions and/or recommendations are based on these analyses and observations, and the governing

regulations. Conclusions beyond those stated and reported herein should not be inferred from this document.
These services were performed in accordance with generally accepted practices, in the environmental engineering field, which existed at the time and location of the work.

If you have any questions regarding our investigation, please do not hesitate to contact either of the undersigned at (925) 283-6000.

Sincerely,
AEI Consultants

Adrian M. Angel
Project Geologist

Peter McIntyre, PG, REA
Senior Project Manager

REGISTERED GEOLOGIST
PETER J. MCINTYRE
Exp. 5/31/10
No. 7702
STATE OF CALIFORNIA

Russell Bartlett
Staff Scientist

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Figure 1: Site Location Map
Figure 2: Site Plan
Figure 3: Water Table Elevations (2/26/08)
Figure 4: Dissolved Phase Hydrocarbon Concentrations (2/26/08)

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Table 1: Monitoring Well Construction Details
Table 2: Groundwater Elevation Data
Table 3: Groundwater Monitoring Sample Analytical Data
Table 4: Groundwater Monitoring Sample Analytical Data – Fuel Additives

Appendix A: *Groundwater Monitoring Well Field Sampling Forms*

Appendix B: *Laboratory Analyses With Chain of Custody Documentation*

Previous Documentation

AEI Consultants, *Soil and Groundwater Investigation Report*, September 21, 2007

AEI Consultants, *Site Characterization Workplan*, March 8, 2007

AEI Consultants, *Phase II Subsurface Investigation Report*, May 18, 2005

Alameda County Health Care Services Agency, *Fuel Leak Case No. RO0002930, 325 Martin Luther King Jr. Way, Oakland, CA 94607,* December 22, 2006

Ceres Associates, *Soil and Groundwater Investigation Report,* June 8, 2006

Helley, E.J., et al, *Quaternary Geology of Alameda County and Surrounding Areas, California*, 1997

LRM Consulting, Inc., *Notice of Unauthorized Release* and *Supplemental Investigation Workplan,* August 29, 2006

Norfleet Consultants, *Groundwater Study and Water Supply History of the East Bay Plain, Alameda and Contra Costa Counties, CA*, June 19, 1998

Terra Firma, *Findings of Environmental Subsurface Investigation,* September 16, 2005

Touchstone Developments, *Phase I Investigation*, November 1, 1993

Distribution:

Jane and Kimball Allen (2 hard copies)
2 Lone Tree Way
Mill Valley, CA 94549

Alameda County Environmental Health Services (ACEHS) (electronic)
Attn: Mr. Jerry Wickham
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502

GeoTracker (electronic)

TABLES

Table 1 - AEI Project # 270308
Groundwater Elevation Data

Well ID (Screen Interval)	Date Collected	Well Elevation *(ft amsl)*	Depth to Water *(ft)*	Groundwater Elevation *(ft amsl)*
MW-1	8/21/2007	14.92	8.38	6.54
(8 - 18)	11/21/2007	14.92	8.37	6.55
	2/26/2008	**14.92**	**7.98**	**6.94**
MW-2	8/21/2007	15.27	8.78	6.49
(7 - 17)	11/21/2007	15.27	8.72	6.55
	2/26/2008	**15.27**	**8.37**	**6.90**
MW-3	8/21/2007	15.26	8.59	6.67
(8 - 18)	11/21/2007	15.26	8.55	6.71
	2/26/2008	**15.26**	**8.11**	**7.15**

Event #	Date	Average Water Table Elevation (ft amsl)	Change from Previous Episode (ft)	Flow Direction (gradient) (ft/ft)
1	8/21/2007	8.58	NA	0.003 / S
2	11/21/2007	8.55	-0.04	0.005 S
3	**2/26/2008**	**8.15**	**-0.39**	**0.005/SW**

ft amsl = feet above mean sea level
All water level depths are measured from the top of casing

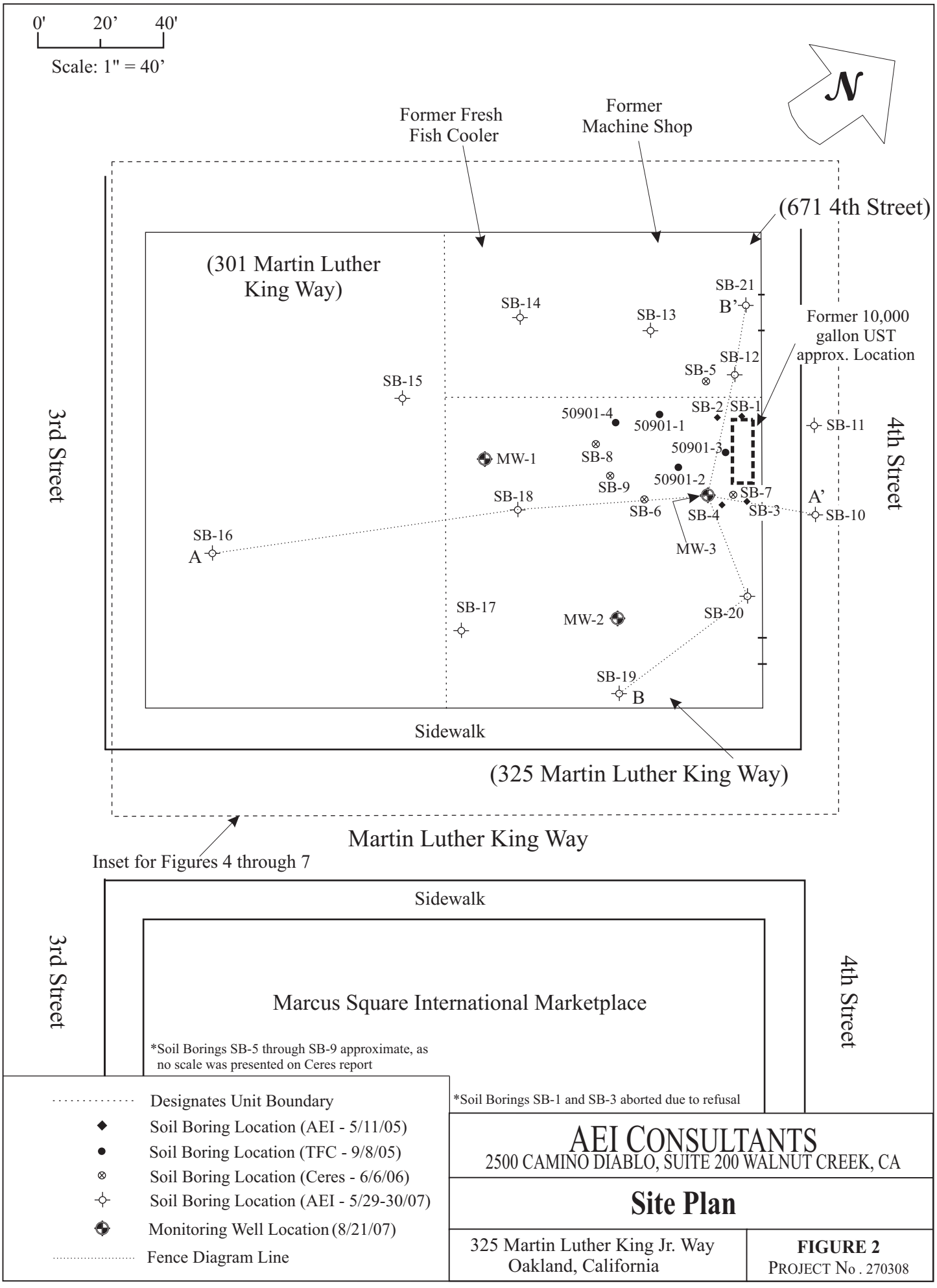
Table 2 - AEI Project # 270308

Groundwater Monitoring Sample Analytical Data

Sample ID	Date	TPHg µg/L	TPHd µg/L	MTBE µg/L	1,2 Dichloroethane µg/L	1,2 Dibromoethane µg/L	Benzene µg/L	Ethylbenzene µg/L	Toluene µg/L	Xylenes µg/L	Lead µg/L
MW-1	8/21/2007	<50	<50	15	-	-	<0.5	<0.5	<0.5	<0.5	<0.5
	11/21/2007	<50	<50	12	-	-	<0.5	<0.5	<0.5	<0.5	-
	2/26/2008	**<50**	**<50**	**16**	**6.9**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**-**
MW-2	8/21/2007	<50	<50	<5.0	-	-	<0.5	<0.5	<0.5	<0.5	<0.5
	11/21/2007	<50	<50	<5.0	-	-	<0.5	<0.5	<0.5	<0.5	-
	2/26/2008	**<50**	**<50**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**-**
MW-3	8/21/2007	24,000	2,100	<180	-	-	2,600	450	3,500	2,400	8.6
	11/21/2007	36,000	3,800	<500	-	-	4,900	230	1,200	2,700	-
	2/26/2008	**31,000**	**5,400**	**<12**	**220**	**31**	**4,200**	**590**	**1,900**	**2,200**	**-**

Notes:
TPHd = total petroleum hydrocarbons as diesel (C10-C23) using EPA Method 8015
TPHg = total petroleum hydrocarbons as gasoline (C6-C12) using EPA Method 8015
Benzene, toluene, ethylbenzene, and xylenes using EPA Method 8021B
MTBE = methyl-tertiary butyl ether using EPA Method 8021B
1,2 Dichloroethane, 1,2 Dibromoethane using EPA Method 8260B
Lead using EPA Method E200.8
µg/L= micrograms per liter
ND<50 = non detect at respective reporting limit

FIGURES

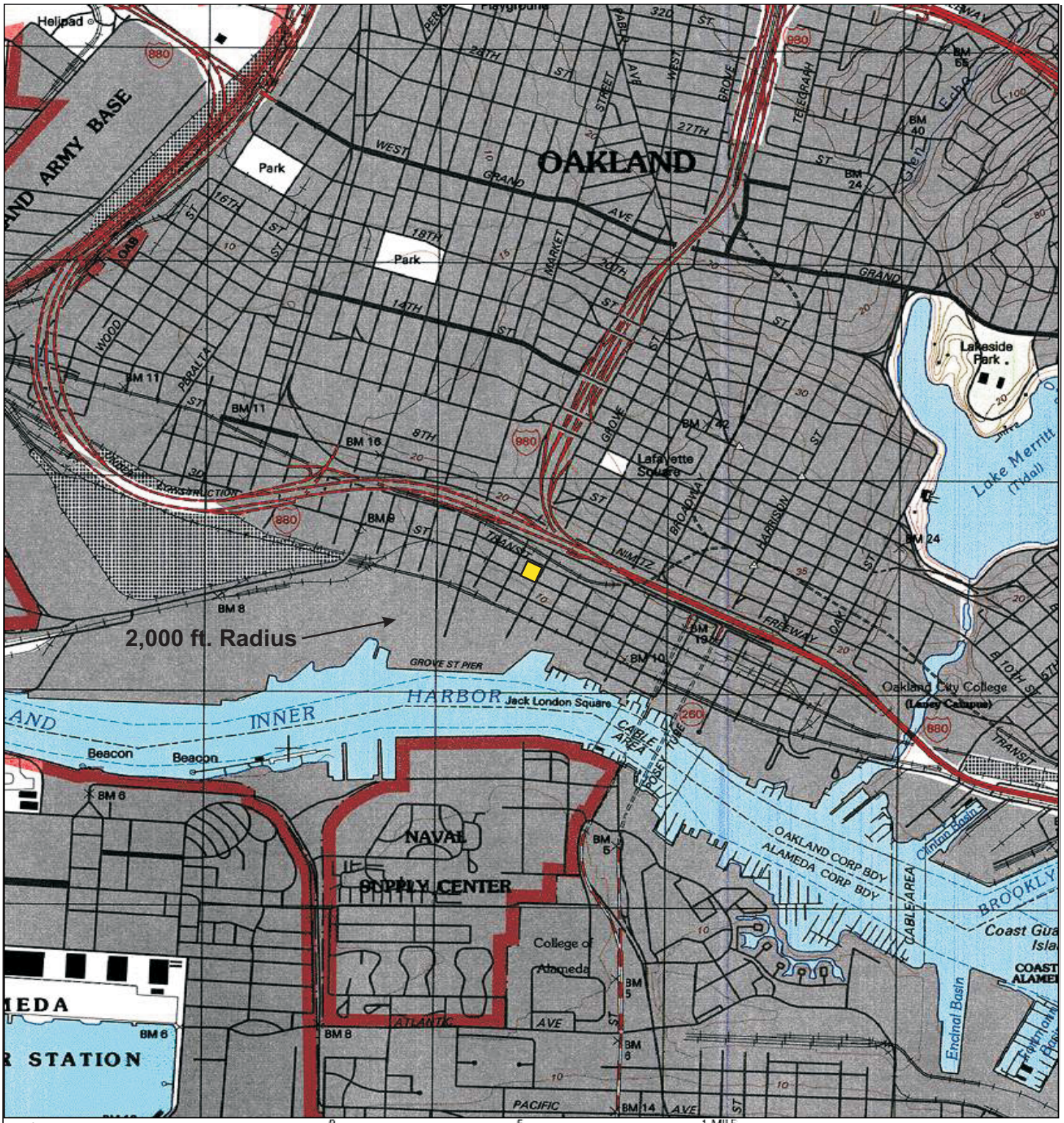


AEI CONSULTANTS
2500 CAMINO DIABLO, SUITE 200 WALNUT CREEK, CA

Site Plan

325 Martin Luther King Jr. Way
Oakland, California

FIGURE 2
PROJECT No . 270308



Map created with TOPO!® ©2003 National Geographic (www.nationalgeographic.com/topo)

LEGEND

N

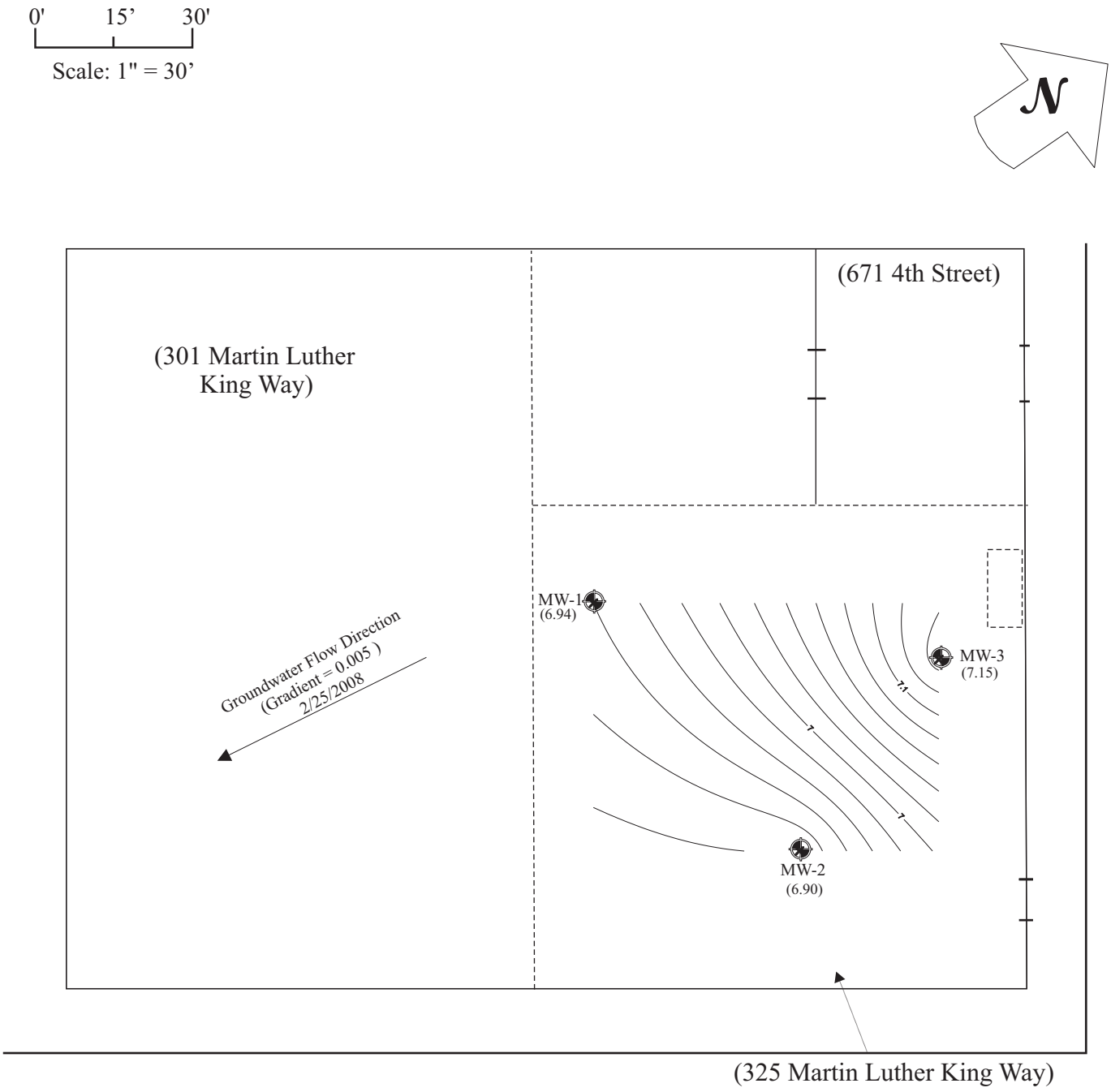
SITE LOCATION

AEI CONSULTANTS
2500 Camino Diablo, Suite 200, Walnut Creek, CA 94597

Site Map

325 Martin Luther King Jr. Way
Oakland, CA 94607

FIGURE 1
Job No: 270308



Contour Interval = 0.02 feet

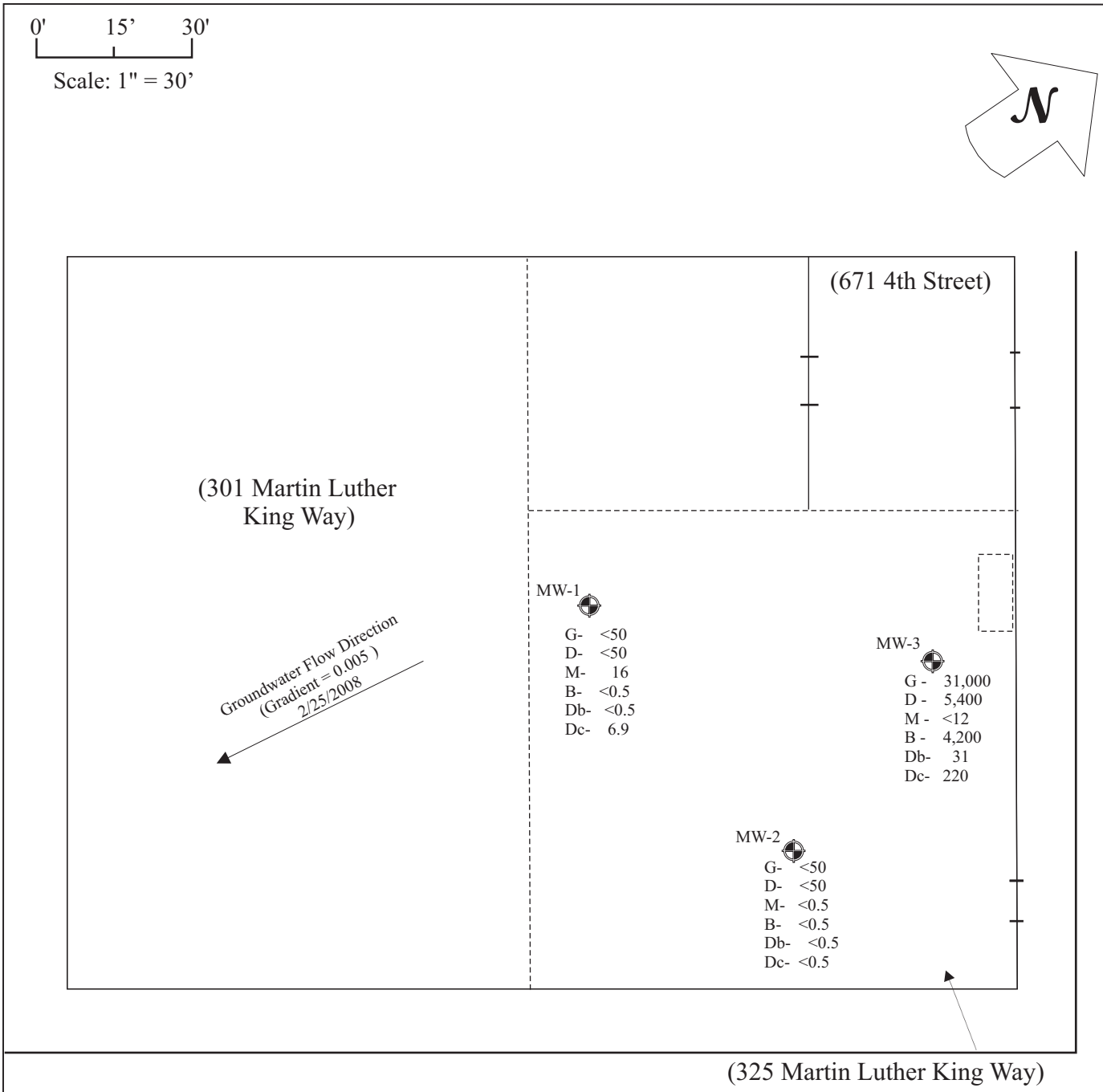
Monitoring Well Location (8/21/07)

AEI CONSULTANTS
2500 CAMINO DIABLO, SUITE 200 WALNUT CREEK, CA

Water Table Elevations (2/25/08)

325 Martin Luther King Jr. Way
Oakland, California

FIGURE 3
PROJECT No . 270308



G- TPH-g
D- TPH-d
M- MTBE
B- Benzene
Db- 1,2 Dibromoethan
Dc- 1,2 Dichloroethane

Monitoring Well Location (8/21/07)

AEI CONSULTANTS
2500 CAMINO DIABLO, SUITE 200 WALNUT CREEK, CA

Dissolved Phase Hydrocarbon Concentrations (2/26/08)

325 Martin Luther King Jr. Way
Oakland, California

FIGURE 4
PROJECT No . 270308

APPENDIX A
Groundwater Monitoring Well Field Sampling Forms

AEI CONSULTANTS

GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: MW-1

Project Name:	ALLEN	Date of Sampling:	2/26/2008
Job Number:	270308	Name of Sampler:	A Nieto
Project Address:	235 Martin Luther King Jr way, Oakland Ca		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	2"		
Wellhead Condition	OK		
Elevation of Top of Casing (feet above msl)	14.92		
Depth of Well	18.00		
Depth to Water (from top of casing)	7.98		
Water Elevation (feet above msl)	6.94		
Well Volumes Purged	3		
Gallons Purged: formula valid only for casing sizes of 2" (.16 gal/ft), 4" (.65 gal/ft), and 6" (1.44 gal/ft)	**4.8**		
Actual Volume Purged (gallons)	5.0		
Appearance of Purge Water	Clear		
Free Product Present?	no	Thickness (ft):	

GROUNDWATER SAMPLES

Number of Samples/Container Size

Time	Vol Removed (gal)	Temperature (deg C)	pH	Conductivity (µ sec/cm)	DO (mg/L)	ORP (meV)	Comments
	1	15.99	6.44	2,193	3.69	191.0	
	2	15.94	6.68	2,248	1.83	113.0	
	3	16.08	6.71	2,279	1.46	86.2	
	4	16.21	6.72	2,214	1.14	75.7	
	5	16.38	6.7	2,139	0.87	72.5	
	6	16.62	6.74	2191	0.73	66.1	

COMMENTS (i.e., sample odor, well recharge time & percent, etc.)

Light brown with no hydrocarbon odors notes.

AEI CONSULTANTS

GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: MW-2

Project Name:	ALLEN	Date of Sampling:	2/26/2008
Job Number:	270308	Name of Sampler:	A Nieto
Project Address:	235 Martin Luther King Jr way, Oakland Ca		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	2"		
Wellhead Condition	OK		
Elevation of Top of Casing (feet above msl)	15.27		
Depth of Well	18.52		
Depth to Water (from top of casing)	8.37		
Water Elevation (feet above msl)	6.90		
Well Volumes Purged	3		
Gallons Purged: formula valid only for casing sizes of 2" (.16 gal/ft), 4" (.65 gal/ft), and 6" (1.44 gal/ft)	**4.7**		
Actual Volume Purged (gallons)	5.0		
Appearance of Purge Water	Clear		
Free Product Present?	no	Thickness (ft):	

GROUNDWATER SAMPLES

Number of Samples/Container Size

Time	Vol Removed (gal)	Temperature (deg C)	pH	Conductivity (µ sec/cm)	DO (mg/L)	ORP (meV)	Comments
	1	16.36	6.82	1,968	4.5	54.8	
	2	16.41	6.75	1,957	3.86	40.3	
	3	16.66	6.76	1,919	2.95	30.6	
	4	16.79	6.79	1,893	2.64	26	
	5	16.91	6.83	1,952	2.6	23.7	

COMMENTS (i.e., sample odor, well recharge time & percent, etc.)

Brown with no hydrocarbon odors noted.

AEI CONSULTANTS

GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: MW-3

Project Name:	ALLEN	Date of Sampling:	2/28/2008
Job Number:	270308	Name of Sampler:	A Nieto
Project Address:	235 Martin Luther King Jr way, Oakland Ca		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	2"		
Wellhead Condition	OK		
Elevation of Top of Casing (feet above msl)	15.26		
Depth of Well	17.56		
Depth to Water (from top of casing)	8.11		
Water Elevation (feet above msl)	7.15		
Well Volumes Purged	3		
Gallons Purged: formula valid only for casing sizes of 2" (.16 gal/ft), 4" (.65 gal/ft), and 6" (1.44 gal/ft)	**4.3**		
Actual Volume Purged (gallons)	5.0		
Appearance of Purge Water	Dark Grey and clears by 0.5 gallons		
Free Product Present?	Yes / No	Thickness (ft):	

GROUNDWATER SAMPLES

Number of Samples/Container Size

Time	Vol Removed (gal)	Temperature (deg C)	pH	Conductivity (µ sec/cm)	DO (mg/L)	ORP (meV)	Comments
	1	16.72	6.68	1,685	1.98	-56.9	
	2	16.35	6.66	1,698	0.73	-62.6	
	3	16.4	6.67	1,761	0.52	-66.6	
	4	16.6	6.68	1,733	0.48	-67.2	
	5	16.72	6.68	1,671	0.46	68.7	

COMMENTS (i.e., sample odor, well recharge time & percent, etc.)

Dark grey with strong petroleum odors.

APPENDIX B
Laboratory Analyses with Chain of Custody Documentation

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: 270308; Allen; 325 Martin Luther King Jr. Way	Date Sampled: 02/26/08
		Date Received: 02/26/08
	Client Contact: Adrian Angel	Date Reported: 03/03/08
	Client P.O.:	Date Completed: 03/03/08

WorkOrder: 0802619

March 03, 2008

Dear Adrian:

Enclosed within are:

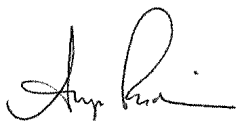
1) The results of the **3** analyzed samples from your project: **270308; Allen; 325 Martin Luther K**
2) A QC report for the above samples,
3) A copy of the chain of custody, and
4) An invoice for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions or concerns, please feel free to give me a call. Thank you for choosing

McCampbell Analytical Laboratories for your analytical needs.

Best regards,



Angela Rydelius
Laboratory Manager
McCampbell Analytical, Inc.

0802619

McCAMPBELL ANALYTICAL INC.

110 2nd AVENUE SOUTH, #D7
PACHECO, CA 94553-5560
Telephone: (925) 798-1620 Fax: (925) 798-1622

CHAIN OF CUSTODY RECORD

TURN AROUND TIME ☐ RUSH ☐ 24 HR ☐ 48 HR ☐ 72 HR ☒ 5 DAY

EDF Required? ☐ Yes ☐ No Email PDF Report: YES

Report To: Adrian Angel	Bill To: Same
Company: AEI Consultants	
2500 Camino Diablo, Suite 200	
Walnut Creek, CA 94597	E-Mail: aangel@aciconsultants.com
Tel: (925) 944-2899, extension 132	Fax: (925) 944-2895
Project #: 270308	Project Name: Allen
Project Location: 325 Martin Luther King Jr. Way, Oakland, CA	
Sampler Signature:	

SAMPLE ID (Field Point Name)	LOCATION	SAMPLING Date	SAMPLING Time	# Containers	Type Containers	MATRIX Water	Soil	Air	Sludge	Other	METHOD PRESERVED Ice	HCl	HNO_3	Other	BTEX & TPH as Gas (602/8020 + 8015)	TPH as Diesel (8015)	Total Petroleum Oil & Grease (5520 E&F/B&F)	Total Petroleum Hydrocarbons (418.1)	HVOCs EPA 8260 (8010 list)	BTEX ONLY (EPA 602 / 8020)	Pesticides EPA 608 / 8080	PCBs EPA 608 / 8080	VOCs EPA 624 / 8260	EPA 625 / 8270	PAH's / PNA's by EPA 625 / 8270 / 8310	CAM-17 Metals	LUFT 5 Metals	Lead (7240/7421/239.2/6010)	RCI	EDB, MTBE, and 1,2-DCA by 8260	Other	Other	Other	Other	Comments
MW-1		2/26/08	10:55	4	VL	X					X	X			X	X														X				
MW-2		"	10:05	"	"	X					X	X			X	X														X				
MW-3		"	11:10	"	"	X					X	X			X	X														X				

Relinquished By:	Date:	Time:	Received By:
	2/26/08	6:30	
Relinquished By:	Date:	Time:	Received By:
Relinquished By:	Date:	Time:	Received By:

ICE/t° 6.8
GOOD CONDITION____
HEAD SPACE ABSENT____
DECHLORINATED IN LAB____

PRESERVATION APPROPRIATE CONTAINERS	VOAS	O&G	METALS	OTHER
PRESERVED IN LAB____				

McCampbell Analytical, Inc.
1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0802619 **ClientCode: AEL**

☐ WriteOn ☑ EDF ☐ Excel ☐ Fax ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Report to:
Adrian Angel
AEI Consultants
2500 Camino Diablo, Ste. #200
Walnut Creek, CA 94597

Email: aangel@aeiconsultants.com
TEL: (408) 559-7600 FAX: (408) 559-7601
PO:
ProjectNo: 270308; Allen; 325 Martin Luther King Jr. Way

Bill to:
Denise Mockel
AEI Consultants
2500 Camino Diablo, Ste. #200
Walnut Creek, CA 94597
dmockel@aeiconsultants.com

Requested TAT: 5 days

Date Received: **02/26/2008**
Date Printed: **02/26/2008**

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
0802619-001	MW-1	Water	2/26/2008 10:55	☐	A	B	A	C								
0802619-002	MW-2	Water	2/26/2008 11:05	☐	A	B		C								
0802619-003	MW-3	Water	2/26/2008 11:10	☐	A	B		C								

Test Legend:

1	G-MBTEX_W	2	PBSCV_W	3	PREDF REPORT	4	TPH(D)_W	5	
6		7		8		9		10	
11		12							

Prepared by: Ana Venegas

Comments:

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.

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Sample Receipt Checklist

Client Name: **AEI Consultants**
Date and Time Received: **02/26/08 6:43:31 PM**
Project Name: **270308; Allen; 325 Martin Luther King Jr. Way**
Checklist completed and reviewed by: Ana Venegas
WorkOrder N°: **0802619** Matrix Water
Carrier: Client Drop-In

Chain of Custody (COC) Information

Chain of custody present?	Yes ☑	No ☐
Chain of custody signed when relinquished and received?	Yes ☑	No ☐
Chain of custody agrees with sample labels?	Yes ☑	No ☐
Sample IDs noted by Client on COC?	Yes ☑	No ☐
Date and Time of collection noted by Client on COC?	Yes ☑	No ☐
Sampler's name noted on COC?	Yes ☑	No ☐

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	NA ☑
Shipping container/cooler in good condition?	Yes ☑	No ☐	
Samples in proper containers/bottles?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature	Cooler Temp: 8.8°C		NA ☐
Water - VOA vials have zero headspace / no bubbles?	Yes ☑	No ☐	No VOA vials submitted ☐
Sample labels checked for correct preservation?	Yes ☑	No ☐	
TTLC Metal - pH acceptable upon receipt (pH<2)?	Yes ☐	No ☐	NA ☑

Client contacted: Date contacted: Contacted by:

Comments:

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AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: 270308; Allen; 325 Martin Luther King Jr. Way	Date Sampled: 02/26/08
		Date Received: 02/26/08
	Client Contact: Adrian Angel	Date Extracted: 02/28/08
	Client P.O.:	Date Analyzed 02/28/08

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE*

Extraction method SW5030B Analytical methods SW8021B/8015Cm Work Order: 0802619

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS
001A	MW-1	W	ND	---	ND	ND	ND	ND	1	99
002A	MW-2	W	ND	---	ND	ND	ND	ND	1	97
003A	MW-3	W	31,000,a	---	4200	1900	590	2200	50	97

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	5.0	0.5	0.5	0.5	0.5	1	µg/L
	S	NA	NA	NA	NA	NA	NA	1	mg/Kg

* water and vapor samples and all TCLP & SPLP extracts are reported in ug/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples in mg/L.

cluttered chromatogram; sample peak coelutes with surrogate peak.

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (stoddard solvent / mineral spirit?); f) one to a few isolated non-target peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to high MTBE content; k) TPH pattern that does not appear to be derived from gasoline (aviation gas). m) no recognizable pattern; n) TPH(g) range non-target isolated peaks subtracted out of the TPH(g) concentration at the client's request; p) see attached narrative.

DHS ELAP Certification N° 1644

Angela Rydelius, Lab Manager

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AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: 270308; Allen; 325 Martin Luther King Jr. Way	Date Sampled: 02/26/08
		Date Received: 02/26/08
	Client Contact: Adrian Angel	Date Extracted: 03/01/08
	Client P.O.:	Date Analyzed 03/01/08

Ethylene Dibromide (1,2-Dibromoethane), 1,2-Dichloroethane (1,2-DCA) and MTBE*

Extraction Method: SW5030B Analytical Method: SW8260B Work Order: 0802619

Lab ID	0802619-001B	0802619-002B	0802619-003B		Reporting Limit for DF =1	
Client ID	MW-1	MW-2	MW-3			
Matrix	W	W	W			
DF	1	1	25		S	W
Compound	**Concentration**				ug/kg	µg/L
1,2-Dibromoethane (EDB)	ND	ND	31		NA	0.5
1,2-Dichloroethane (1,2-DCA)	6.9	ND	220		NA	0.5
Methyl-t-butyl ether (MTBE)	16	ND	ND<12		NA	0.5
Surrogate Recoveries (%)						
%SS1:	103	102	99			
Comments						

* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or surrogate coelutes with another peak.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) sample diluted due to high organic content/matrix interference; k) reporting limit near, but not identical to our standard reporting limit due to variable Encore sample weight; m) reporting limit raised due to insufficient sample amount; n) results are reported on a dry weight basis; p) see attached narrative.

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AEI Consultants	Client Project ID: 270308; Allen; 325 Martin Luther King Jr. Way	Date Sampled: 02/26/08
2500 Camino Diablo, Ste. #200		Date Received: 02/26/08
Walnut Creek, CA 94597	Client Contact: Adrian Angel	Date Extracted: 02/26/08
	Client P.O.:	Date Analyzed 02/26/08

Diesel Range (C10-C23) Extractable Hydrocarbons as Diesel*

Extraction method SW3510C Analytical methods SW8015C Work Order: 0802619

Lab ID	Client ID	Matrix	TPH(d)	DF	% SS
0802619-001C	MW-1	W	ND	1	90
0802619-002C	MW-2	W	ND	1	89
0802619-003C	MW-3	W	5400,d	10	93

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	µg/L
	S	NA	NA

* water samples are reported in µg/L, wipe samples in µg/wipe, soil/solid/sludge samples in mg/kg, product/oil/non-aqueous liquid samples in mg/L, and all DISTLC / STLC / SPLP / TCLP extracts are reported in µg/L.

cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract.

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified diesel is significant; b) diesel range compounds are significant; no recognizable pattern; c) aged diesel? is significant); d) gasoline range compounds are significant; e) unknown medium boiling point pattern that does not appear to be derived from diesel; f) one to a few isolated peaks present; g) oil range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; k) kerosene/kerosene range/jet fuel range; l) bunker oil; m) fuel oil; n) stoddard solvent/mineral spirit.

DHS ELAP Certification N° 1644

Angela Rydelius, Lab Manager

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QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Water QC Matrix: Water WorkOrder 0802619

EPA Method SW8021B/8015Cm Extraction SW5030B BatchID: 33989 Spiked Sample ID: 0802437-003B

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex)£	ND	60	77	99.1	25.2	74.3	95	24.5	70 - 130	30	70 - 130	30
MTBE	ND	10	91.1	104	13.3	93.8	95.6	1.84	70 - 130	30	70 - 130	30
Benzene	ND	10	95.7	97.4	1.77	96.2	97.7	1.56	70 - 130	30	70 - 130	30
Toluene	ND	10	93.6	93.9	0.242	91.6	93.5	2.09	70 - 130	30	70 - 130	30
Ethylbenzene	ND	10	92.9	94.4	1.61	92.3	93.6	1.40	70 - 130	30	70 - 130	30
Xylenes	ND	30	86.2	87	0.924	84.7	86	1.45	70 - 130	30	70 - 130	30
%SS:	104	10	108	106	1.93	109	108	0.507	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

BATCH 33989 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0802619-001A	02/26/08 10:55 AM	02/28/08	02/28/08 4:23 AM	0802619-002A	02/26/08 11:05 AM	02/28/08	02/28/08 4:53 AM
0802619-003A	02/26/08 11:10 AM	02/28/08	02/28/08 5:23 AM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

cluttered chromatogram; sample peak coelutes with surrogate peak.

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QC SUMMARY REPORT FOR SW8015C

W.O. Sample Matrix: Water QC Matrix: Water WorkOrder 0802619

EPA Method SW8015C **Extraction SW3510C** **BatchID: 34003** **Spiked Sample ID: N/A**

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(d)	N/A	1000	N/A	N/A	N/A	104	103	1.50	N/A	N/A	70 - 130	30
%SS:	N/A	2500	N/A	N/A	N/A	100	100	0	N/A	N/A	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

BATCH 34003 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0802619-001C	02/26/08 10:55 AM	02/26/08	02/26/08 8:48 PM	0802619-002C	02/26/08 11:05 AM	02/26/08	02/26/08 10:00 PM
0802619-003C	02/26/08 11:10 AM	02/26/08	02/26/08 11:11 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

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QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Water QC Matrix: Water WorkOrder: 0802619

EPA Method: SW8260B	Extraction: SW5030B	BatchID: 34002	Spiked Sample ID: 0802619-002B

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
1,2-Dibromoethane (EDB)	ND	10	100	101	0.424	99.2	104	5.15	70 - 130	30	70 - 130	30
1,2-Dichloroethane (1,2-DCA)	ND	10	102	107	4.13	101	107	6.06	70 - 130	30	70 - 130	30
Methyl-t-butyl ether (MTBE)	ND	10	96.3	103	6.54	97.7	104	6.27	70 - 130	30	70 - 130	30
%SS1:	102	10	93	97	4.35	98	97	0.695	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

BATCH 34002 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0802619-001B	02/26/08 10:55 AM	03/01/08	03/01/08 1:43 PM	0802619-002B	02/26/08 11:05 AM	03/01/08	03/01/08 2:27 PM
0802619-003B	02/26/08 11:10 AM	03/01/08	03/01/08 3:11 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels.