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**WICKLAND
Corporation**

February 13, 2009

Mr. Jerry Wickham, P.G.
Alameda County Health Care Services Agency
Environmental Health Services
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502

Subject: Submittal of *Fourth Quarter 2008 Groundwater Monitoring Report*
Former Regal Station #120, LOP Case No. RO0002875
3875 Telegraph Avenue, Oakland, California

Dear Mr. Wickham:

Pursuant to your request, please find attached the *Fourth Quarter 2008 Groundwater Monitoring Report* ("Quarterly Report"), prepared by West Environmental Services & Technology, Inc. (WEST) on behalf of Wickland Corporation (Wickland) for the former Regal Station #120 (Local Oversight Program Case No. RO0002875), located at 3875 Telegraph Avenue in Oakland, California.

In accordance with the Alameda County Health Care Services Agency, Environmental Health Services requirements, I declare under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge.

Please contact me at 916/978-2460, if you have any questions or wish to discuss this further.

Sincerely,

A handwritten signature in blue ink that reads "Dan Hall".

Daniel E. Hall
President

Attachment

cc: Lori J. Gualco, Attorney-at-Law

**FOURTH QUARTER 2008
GROUNDWATER MONITORING
REPORT
Former Regal Station #120
LOP Case No. RO0002875
3875 Telegraph Avenue
Oakland, California**

February 2009

Prepared for
Wickland Corporation
P.O. Box 13648
Sacramento, California 95853

Prepared by
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TABLE OF CONTENTS

SECTION	PAGE
1.0 INTRODUCTION.....	1
1.1 BACKGROUND.....	1
2.0 GROUNDWATER MONITORING	4
2.1 PREVIOUS GROUNDWATER INVESTIGATIONS	4
2.2 FOURTH QUARTER 2008 ACTIVITIES	4
2.2.1 <i>Depth to Groundwater Measurement</i>	4
2.2.2 <i>Groundwater Sampling</i>	5
2.2.3 <i>Analytical Results</i>	6
2.2.4 <i>Waste Management</i>	7
3.0 CONCLUSIONS AND RECOMMENDATIONS.....	8
4.0 ANTICIPATED ACTIVITIES FOR THE FIRST QUARTER 2009	9
5.0 REFERENCES.....	10
6.0 DISTRIBUTION LIST	12

TABLES

FIGURES

APPENDICES

LIST OF TABLES

Table 1-1	Summary of Soil Sample Analytical Results
Table 1-2	Summary of Groundwater Sample Analytical Results
Table 1-3	Summary of Soil Gas Sample Analytical Results
Table 2-1	Summary of Well Construction Details
Table 2-2	Summary of Groundwater Elevation Data
Table 2-3	Summary of Groundwater Monitoring Well Analytical Results

LIST OF FIGURES

Figure 1-1	Site Location
Figure 2-1	Site Plan and Monitoring Well Locations
Figure 2-2	Groundwater Elevations – December 2008
Figure 2-3	Summary of Groundwater Monitoring Well Data – December 2008
Figure 2-4	Groundwater Benzene Iso-Contour – December 2008

LIST OF APPENDICES

Appendix A	Groundwater Monitoring Well Sampling Field Sheets
Appendix B	Laboratory Data Certificates and Chain-of-Custody Forms

FOURTH QUARTER 2008
GROUNDWATER MONITORING REPORT
FORMER REGAL STATION #120, LOP NO. RO0002875
3875 TELEGRAPH AVENUE
OAKLAND, CALIFORNIA

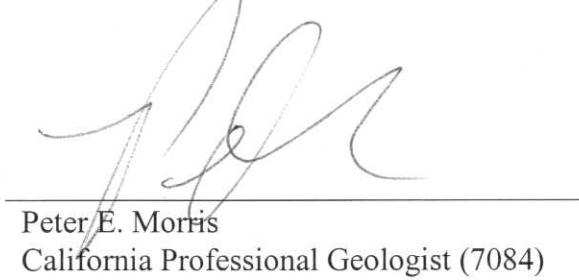


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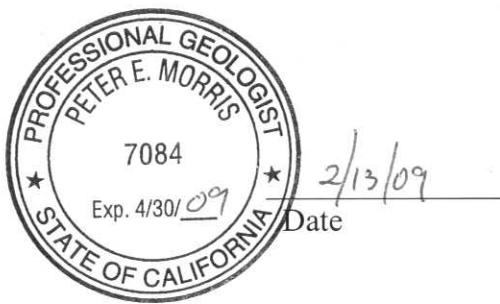
All engineering information, conclusions and recommendations contained in this report have been prepared by a California Professional Engineer. All hydrogeologic and geologic information, conclusions and recommendations contained in this report have been prepared by a California Professional Geologist.



Peter M. Krasnoff
California Registered Civil Engineer (44031)



Peter E. Morris
California Professional Geologist (7084)



1.0 INTRODUCTION

This *Fourth Quarter 2008 Groundwater Monitoring Report* (“*Quarterly Report*”) has been prepared by West Environmental Services & Technology, Inc., (WEST) for the former Regal Station #120, located at 3875 Telegraph Avenue in Oakland, California (“the Site;” Figure 1-1). This *Quarterly Report* presents the results of groundwater monitoring activities performed at the Site during the Fourth Quarter 2008, i.e., October to December 2008.

Groundwater monitoring was conducted during the Fourth Quarter 2008 in accordance with the procedures outlined in the *Preliminary Site Assessment/Soil, Soil Gas and Groundwater Investigation Work Plan* (WEST, 2007a) and *Addendum* (WEST, 2007b; “*Work Plan*”), as requested by the Alameda County Health Care Services Agency (ACEH, 2008). This *Quarterly Report* also presents a summary of the work to be performed during the First Quarter 2009.

1.1 BACKGROUND

The approximately 0.9-acre Site is located at 3875 Telegraph Avenue in Oakland, California to the east of the Bay Area Rapid Transit District (BART) MacArthur Station parking lot. Between 1928 and 1935, Associated Oil Company was a tenant on the Site (Fidelity, 2007). In the 1930s, the Site was used for: an automobile parking lot; and two gasoline stations near the southwest corner (3855 Telegraph Avenue) and the northern portion (3881 Telegraph Avenue) of the Site (Figure 2-1; HLA, 1992). By the 1940s, the two gasoline stations had been removed.

In the 1950s, the southern portion of the Site was occupied by a tamale factory and restaurant; and the northern portion was occupied by another gasoline service station. Features of the gasoline service station included: a service station building; pump islands; a cashier’s office; and two 200-gallon underground storage tanks (USTs) and one 400-gallon UST. Between 1961 and 1971, Regal Petroleum Corporation leased the northern portion of the Site and operated the gasoline service station. Between approximately 1971 and 1984, Wickland operated the gasoline service station on the northern portion of the Site. In the mid-1970s, permits were issued for:

one 8,000-gallon UST; one 5,000-gallon UST; one 2,500-gallon UST; and one 10,000-gallon UST, at the Site.

In June 1984, as part of pre-construction evaluations, Harding Lawson Associates (HLA) drilled four borings for collection of soil samples for geotechnical testing. HLA noted the soil cores collected from approximately 15 feet below ground surface contained “gasoline odor.” In December 1984, the four USTs, associated service station buildings and pump islands were removed (HLA, 1992). Prior to their removal, the four USTs were reportedly pressure tested (HLA, 1992). The findings of the pressure testing indicated that the USTs were integral, i.e., capable of handling the applied pressure without indication of leakage. Following removal of the USTs, the excavation was backfilled with imported material.

In early 1985, the Site was purchased by East Bay Outpatient Surgery for development as a surgery center. In May 1985, as part of the surgery center construction, the UST excavation backfill material was removed. The former UST excavation was subsequently over-excavated to a depth of approximately 15 feet below ground surface with approximately 1,070 cubic yards of soil removed for offsite disposal.

Investigations have been conducted at and near the Site since 2001. The investigations revealed indications of separate releases of petroleum hydrocarbons downgradient and upgradient of the Site (WEST, 2008). Soil investigations reported the presence of total petroleum hydrocarbons (TPH) up to 90 milligrams per kilogram (mg/kg) onsite (boring B-4) and up to 2,700 mg/kg in samples collected offsite in the BART parking lot (boring B-16; Table 1-1). Groundwater samples collected from temporary wells revealed the presence of TPH as gasoline (TPHg) up to 140,000 micrograms per liter ($\mu\text{g/l}$) in samples from onsite boring B-4 and offsite up to 280,000 $\mu\text{g/l}$ in samples collected from the BART parking lot boring B-16 (Table 1-2). The investigations also revealed the presence of TPH as diesel (TPHd) up to 530,000 $\mu\text{g/l}$ in the sample collected upgradient of the Site within 39th Street.

In March and April of 2008, WEST conducted soil, soil gas and groundwater investigations. The investigations revealed: the presence of benzene and methyl tertiary butyl ether (MTBE) in groundwater downgradient of the former USTs excavation; contributions of TPH to groundwater attributable to upgradient and offsite sources; and contributions of chlorinated volatile organic compounds (CVOCs) attributed to upgradient offsite sources (Tables 1-1 to 1-3).

Pursuant to a request from the ACEH, quarterly groundwater monitoring activities were conducted during the Fourth Quarter 2008 in accordance with the *Work Plan* and will be conducted in the First Quarter 2009 (ACEH, 2008).

2.0 GROUNDWATER MONITORING

2.1 PREVIOUS GROUNDWATER INVESTIGATIONS

Groundwater investigations were conducted at the Site in March, April and October 2008. Four permanent groundwater monitoring wells, MW-1, MW-2, MW-3 and MW-4, were installed at the Site in March 2008 (Figure 2-1). A summary of the groundwater monitoring well construction details and the groundwater elevations are presented in Tables 2-1 and 2-2. Sampling of the four groundwater monitoring wells was conducted at the Site on April 24, 2008 and October 2, 2008 in accordance with the *Work Plan*. A summary of the groundwater analytical results is presented in Table 2-3.

2.2 FOURTH QUARTER 2008 ACTIVITIES

Groundwater monitoring activities were conducted during the Fourth Quarter 2008 in accordance with the procedures outlined in the *Work Plan*. The Fourth Quarter 2008 activities included:

- Measurement of depth to groundwater in monitoring wells MW-1, MW-2, MW-3 and MW-4; and
- Collection of groundwater samples from monitoring wells MW-1, MW-2, MW-3 and MW-4.

2.2.1 Depth to Groundwater Measurement

Prior to groundwater sampling, depth to groundwater measurements were collected from monitoring wells MW-1, MW-2, MW-3 and MW-4. The depth to groundwater was measured in the monitoring wells in accordance with the procedures outlined in the *Work Plan*.

The depths to groundwater measurements are summarized in Table 2-2. During the Fourth Quarter 2008, the depth to groundwater measurements in the monitoring wells ranged from 12.93 feet below ground surface (MW-3) to 14.08 feet below ground surface (MW-2). Groundwater elevations in the monitoring wells ranged from 65.14 feet above Mean Sea Level (MW-2) to 67.38 feet above Mean Sea Level (MW-4). Based on the Fourth Quarter 2008 groundwater elevations, the groundwater flow direction was estimated to the southeast with a hydraulic gradient of approximately 0.011 feet per foot (Figure 2-2). Due to the hydrostatic pressure conditions observed, the groundwater elevation measured in monitoring MW-1 was not used in the determination of groundwater flow direction for the Fourth Quarter 2008.

2.2.2 Groundwater Sampling

Groundwater samples were collected from monitoring wells MW-1, MW-2, MW-3 and MW-4 on December 23, 2008 using low-flow sampling techniques (USEPA, 1996). Prior to sampling, water within the well casings was purged for a minimum of 15 minutes. Groundwater parameter data including: temperature; pH; electrical conductivity; turbidity; and dissolved oxygen (DO) were measured during well purging to monitor stability of parameters and recorded on groundwater sampling field data sheets. Copies of the groundwater sampling field data sheets are included in Appendix A.

Groundwater samples were collected once the indicator parameters collected during purging had stabilized for three consecutive readings, as follows: plus/minus 0.1 Standard Units (S.U.) for pH; plus/minus three percent for specific conductance; and plus/minus 10 percent for turbidity and DO (USEPA, 1996).

Following purging, the groundwater samples were collected into laboratory supplied zero headspace 40-milliliter glass volatile organic analysis (VOA) vials preserved with hydrochloric acid and an unpreserved one-liter amber glass bottle. Following sample collection, the samples were labeled, placed in a chilled cooler and transported to K Prime, Inc, a California Department of Public Health (CDPH), Environmental Laboratory Accreditation Program (ELAP) certified

laboratory pursuant to ASTM D4840 chain-of-custody protocols. The groundwater samples and a laboratory-prepared travel blank were submitted to K Prime, Inc. of Santa Rosa, California. The groundwater samples were analyzed for: TPHg and TPHd by United States Environmental Protection Agency (USEPA) Method 8015M; petroleum related VOCs, including MTBE and CVOCs by USEPA Method 8260B. The analytical results for the groundwater samples are summarized in Table 2-3 and depicted on Figure 2-3. Copies of laboratory data certificates and chain-of-custody forms are included in Appendix B.

2.2.3 Analytical Results

Laboratory analysis of groundwater samples collected from monitoring wells MW-1, MW-2, MW-3 and MW-4 did not reveal the presence of MTBE above the laboratory-reporting limit ranging from 0.500 µg/l to 4.00 µg/l. Laboratory analysis of the groundwater samples revealed the highest concentrations in the sample collected from monitoring well MW-4 with: TPHg at 5,470 µg/l; TPHd at 1,220 µg/l; ethyl benzene at 157 µg/l; and xylenes at 3.40 µg/l.. Laboratory analysis of groundwater samples collected from the upgradient monitoring well, MW-1, revealed: tetrachloroethene (PCE) at 18.1 µg/l; trichloroethene (TCE) at 6.20 µg/l; cis-1,2-dichloroethene (DCE) at 24.5 µg/l; and perchloromethane (PCM) at 0.660 µg/l.

Laboratory analysis of groundwater samples collected from the downgradient monitoring well, MW-2, revealed: TPHg at 4,490 µg/l; TPHd at 694 µg/l; benzene at 336 µg/l; toluene at 27.6 µg/l; ethyl benzene at 148 µg/l; and xylenes at 88.06 µg/l. Laboratory analysis of groundwater samples collected from the cross-gradient monitoring well, MW-3, revealed: TPHg at 620 µg/l; TPHd at 554 µg/l; benzene at 1.36 µg/l; ethyl benzene at 80.5 µg/l; and DCE at 1.26 µg/l. A summary of the groundwater sample analytical results is presented in Table 2-3 and depicted on Figure 2-3. An iso-concentration plot of benzene in groundwater is depicted on Figure 2-4.

2.2.4 Waste Management

Purge water generated during the groundwater monitoring activities was containerized in a United States Department of Transportation-approved, United Nations-tested 1A2 open-top steel drum and stored in a secure area at the Site. The purge water will be transported offsite under a bill-of-lading for disposal pending waste profile acceptance from an appropriate disposal facility.

3.0 CONCLUSIONS AND RECOMMENDATIONS

The Fourth Quarter 2008 groundwater monitoring results revealed the presence of petroleum hydrocarbons in groundwater downgradient of the former USTs and fuel islands. Based on the findings from the Fourth Quarter 2008 groundwater monitoring event, it appears that the downgradient extent of petroleum hydrocarbons in groundwater has not been delineated. Therefore, the offsite delineation activities proposed in the *Work Plan* should be conducted to complete the downgradient delineation of petroleum hydrocarbons in groundwater.

4.0 ANTICIPATED ACTIVITIES FOR THE FIRST QUARTER 2009

Activities for the First Quarter 2009 will include sampling of the four existing groundwater monitoring wells, MW-1, MW-2, MW-3 and MW-4. The groundwater monitoring well sampling will include: depth to groundwater measurements; and collection of groundwater samples from monitoring wells MW-1, MW-2, MW-3 and MW-4. The First Quarter 2009 Groundwater Monitoring Report will be submitted to the ACEH by May 8, 2009 (ACEH, 2008). WEST, pending approval of the access permit from BART, also anticipates completion of the offsite soil and groundwater investigation within BART MacArthur Station parking lot, as outlined in the *Work Plan*, during the First Quarter 2009.

5.0 REFERENCES

- Alameda County Health Care Services Agency (ACEH), *Fuel Leak Case No. RO0002875 and Geotracker Global ID T06019716388, Regal #120/East Bay Surgery Center, 3875 Telegraph Avenue, Oakland, CA 94609*, July 12, 2008 (ACEH, 2008).
- ASTM, *Standard Guide for Sample Chain-of-Custody Procedures D 4840-99* (ASTM D 4840).
- Cambria Environmental Technology, Inc., *Site Conceptual Model, Former Shell Service Station, 500 40th Street, Oakland, California*, November 21, 2005 (Cambria, 2005).
- Fidelity Title Company, Title Search for 3875 Telegraph Avenue, Oakland, California, 2007 (Fidelity, 2007).
- Gribi Associates, *Report of Phase II Environmental Site Assessment, The Surgery Center, 3875 Telegraph Avenue, Oakland, California*, February 7, 2005 (Gribi, 2005).
- Harding Lawson Associates (HLA), *Soil Investigation, Outpatient Medical Clinic, Oakland, California*, June 28, 1984 (HLA, 1984).
- HLA, *Phase I Preliminary Hazardous Materials Site Assessment, The Surgery Center, 3875 Telegraph Avenue, Oakland, California*, January 22, 1992 (HLA, 1992).
- Ninyo & Moore (N&M), *Limited Phase II Environmental Site Assessment, MacArthur BART Transit Station, Oakland, California*, July 20, 2005 (N&M, 2005).
- San Francisco Bay Area Rapid Transit District, Letter to Ms. Kathy Kuhlman, City of Oakland, *Request for Additional Investigation at MacArthur BART Station*, February 2, 2006 (BART, 2006a).
- San Francisco Bay Area Rapid Transit District, Letter to Mr. Don Hwang, Alameda County Environmental Health, *Surgery Center Site at 3875 Telegraph Avenue, Oakland, California*, October 4, 2006 (BART, 2006b).
- Terracon, *Contamination Investigation, East Bay Surgery Center, 3875 Telegraph Avenue, Oakland, California*, September 19, 2001 (Terracon, 2001).
- USEPA, *Low-Flow (Minimal Drawdown) Ground-water Sampling Procedures*, Office of Research and Development, Washington D.C., EPA/540/S-95/504, April 1996 (USEPA, 1996).
- West Environmental Services & Technology, Inc. (WEST), *Preliminary Site Assessment/Soil, Soil Gas and Groundwater Investigation Work Plan, Former Regal Station #120, 3875 Telegraph Avenue, Oakland, California*, August 2007 (WEST, 2007a).

FOURTH QUARTER 2008
GROUNDWATER MONITORING REPORT
FORMER REGAL STATION #120, LOP NO. RO0002875
3875 TELEGRAPH AVENUE
OAKLAND, CALIFORNIA



WEST, *Addendum to Preliminary Site Assessment/Soil, Soil Gas and Groundwater Investigation Work Plan, Former Regal Station #120, 3875 Telegraph Avenue, Oakland, California, October 2007* (WEST, 2007b).

WEST, *Preliminary Investigation and Evaluation Report, Former Regal Station #120, 3875 Telegraph Avenue, Oakland, California, May 2008* (WEST, 2008).

6.0 DISTRIBUTION LIST

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TABLE 1-1
SUMMARY OF SOIL SAMPLE ANALYTICAL RESULTS
3875 Telegraph Avenue
Oakland, California

Location	Sample ID	Date	Depth (ft)	Petroleum Hydrocarbons			Volatile Organic Compounds																
				TPHg	TPHd	TPHmo	Benzene	Toluene	Ethyl benzene	Xylenes	MTBE	1,2,4-TMB	1,3,5-TMB	n-Butyl benzene	sec-Butyl benzene	tert-Butyl benzene	Isopropyl benzene	p-Isopropyl toluene	Naphthalene	n-Propyl benzene	1,2,3-TCB	1,2,4-TCB	
				(mg/kg)	(mg/kg)	(mg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)		
<i>Terracon</i>																							
Onsite	B-1	8/28/01	15	--	--	--	420	86	4,700	16,500	--	10,000	3,500	1,400	350	ND	630	160	1,700	2,300	ND	ND	
	B-2		19.5	--	--	--	ND	ND	9,600	2,000	--	22,000	12,000	6,800	2,000	ND	3,800	1,000	4,200	14,000	ND	ND	
	B-3		15.5	--	--	--	ND	ND	ND	ND	--	ND	ND	23	10	ND	8.2	ND	ND	32	6.6	7.3	
	B-4		14.5	--	--	--	ND	ND	45	320	--	ND	ND	370	870	61	1,500	41	ND	5,400	ND	ND	
	B-5		21.5	--	--	--	ND	ND	ND	ND	--	ND	ND	22	19	ND	ND	ND	ND	15	ND	ND	
	B-6		11.5	--	--	--	ND	ND	ND	ND	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
<i>Gribi</i>																							
BART Parking Lot	B-1	1/8/05	7.5	<0.5	--	--	<5.0	<5.0	<5.0	<10	<20	--	--	--	--	--	--	--	--	--	--	--	
			11.5	<0.5	--	--	<5.0	<5.0	<5.0	<10	<20	--	--	--	--	--	--	--	--	--	--	--	
			13	18.0	--	--	<5.0	14	120	27	120	--	--	--	--	--	--	--	--	--	--	--	
			15	0.77	--	--	<5.0	<5.0	<5.0	<10	<20	--	--	--	--	--	--	--	--	--	--	--	
			16	4.4	--	--	<5.0	13	26	<10	30	--	--	--	--	--	--	--	--	--	--	--	
			7	190	--	--	<5.0	710	4,100	7,800	200	--	--	--	--	--	--	--	--	--	--	--	
	B-2		14	670	190	--	440	<5.0	140	410	200	--	--	--	--	--	--	--	--	--	--	--	
			7.5	65	--	--	75	52	500	212	220	--	--	--	--	--	--	--	--	--	--	--	
			11.5	170	--	--	<5.0	1,800	2,800	14,800	370	--	--	--	--	--	--	--	--	--	--	--	
			15	5	--	--	130	8.4	20	78	<20	--	--	--	--	--	--	--	--	--	--	--	
Onsite	B-4		7.5	<0.5	--	--	<5.0	<5.0	<5.0	<10	<20	--	--	--	--	--	--	--	--	--	--	--	
			11.5	<0.5	<10	--	<5.0	<5.0	<5.0	<10	<20	--	--	--	--	--	--	--	--	--	--	--	
			15	39.0	--	--	630	<5.0	1,500	3,600	58	--	--	--	--	--	--	--	--	--	--	--	
			19.5	90.0	--	--	1,400	1,100	2,000	9,300	180	--	--	--	--	--	--	--	--	--	--	--	
			7.5	1.4	<10	--	<5.0	<5.0	<5.0	<10	<20	--	--	--	--	--	--	--	--	--	--	--	
			11.5	<0.5	--	--	<5.0	<5.0	<5.0	<10	<20	--	--	--	--	--	--	--	--	--	--	--	
	B-5		15.5	16.0	--	--	<5.0	<5.0	54	<10	<20	--	--	--	--	--	--	--	--	--	--	--	
			19.5	1.1	--	--	<5.0	<5.0	13	20	<20	--	--	--	--	--	--	--	--	--	--	--	
<i>BART</i>																							
3901 Telegraph	B-4	2/05	5	<1.1	9.3	55	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	
			10	<1.1	1.0	<5.0	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	
Apgar Street	B-5	2/05	5	<1.1	33	210	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	
			10	<1.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
			17	<1.0	51	5.3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
3801 Telegraph	B-6	2/05	5	<0.99	1.8	<5.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
			10	<1.0	1.1	<5.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
BART Central Parking	B-16	2/05	2	<1.0	19	140	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	
			5	2,700	240	<25	5,700	26,000	49,000	150,000	<1,000	--	--	--	--	--	--	--	--	--	--	--	
	B-20		2	--	10	110	--	--	--	--													

TABLE 1-1
SUMMARY OF SOIL SAMPLE ANALYTICAL RESULTS
3875 Telegraph Avenue
Oakland, California

Location	Sample ID	Date	Depth (ft)	Petroleum Hydrocarbons			Volatile Organic Compounds													
				TPHg	TPHd	TPHmo	Benzene	Toluene	Ethyl benzene	Xylenes	MTBE	1,2,4-TMB	1,3,5-TMB	n-Butyl benzene	sec-Butyl benzene	tert-Butyl benzene	Isopropyl benzene	p-Isopropyl toluene	Naphthalene	n-Propyl benzene
				(mg/kg)	(mg/kg)	(mg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)
<i>WEST</i>																				
Onsite	W-1	3/29/08	6	<1.00	<10.0	--	<1.49	<1.49	<1.49	<1.49	<1.49	--	--	--	--	--	--	--	--	
			10	<1.00	<10.0	--	<1.49	<1.49	<1.49	<1.49	<1.49	--	--	--	--	--	--	--	--	
			17	40.0	<10.0	--	337	<200	<200	<200	<200	--	--	--	--	--	--	--	--	
	W-2	3/29/08	8	<1.00	<10.0	--	<1.50	<1.50	<1.50	<1.50	<1.50	--	--	--	--	--	--	--	--	
			14	286	<10.0	--	<500	<500	<500	<500	<500	--	--	--	--	--	--	--	--	
	W-3	3/29/08	7	<1.00	<10.0	--	<1.50	<1.50	<1.50	<1.50	<1.50	--	--	--	--	--	--	--	--	
			15	2.79	<10.0	--	<1.50	<1.50	<1.50	<1.50	<1.50	--	--	--	--	--	--	--	--	
	W-5	3/29/08	6	<1.00	<10.0	--	<1.49	<1.49	<1.49	<1.49	<1.49	--	--	--	--	--	--	--	--	
			9.5	<1.00	<10.0	--	<1.51	<1.51	<1.51	<1.51	<1.51	--	--	--	--	--	--	--	--	
			15	99.6	<10.0	--	<200	<200	<200	<200	<200	--	--	--	--	--	--	--	--	
	W-9/ MW4	3/29/08	7	<1.00	<10.0	--	<1.50	<1.50	<1.50	<1.50	<1.50	--	--	--	--	--	--	--	--	
			10	<1.00	<10.0	--	<1.50	<1.50	<1.50	<1.50	<1.50	--	--	--	--	--	--	--	--	
			13	<1.00	<10.0	--	<200	<200	<200	<200	<200	--	--	--	--	--	--	--	--	
	W-10	5/1/08	5	<1.00	<10.0	--	<1.49	<1.49	<1.49	<1.49	<1.49	--	--	--	--	--	--	--	--	
			10	<1.00	<10.0	--	<1.51	<1.51	<1.51	<1.51	<1.51	--	--	--	--	--	--	--	--	
			15	5.23	<10.0	--	<200	993	1560	<200	<200	--	--	--	--	--	--	--	--	
	W-11	5/1/08	4	<1.00	<10.0	--	<1.49	<1.49	<1.49	<1.49	<1.49	--	--	--	--	--	--	--	--	
			10	<1.00	<10.0	--	<1.51	<1.51	<1.51	<1.51	<1.51	--	--	--	--	--	--	--	--	
			16	<1.00	<10.0	--	<1.51	<1.51	<1.51	<1.51	<1.51	--	--	--	--	--	--	--	--	
MW1	3/29/08	14	6.10	41.6	--	<200	<200	<200	<200	<200	--	--	--	--	--	--	--	--	--	

Notes:

mg/kg: Milligrams per kilogram

µg/kg: Micrograms per kilogram

<1.0: Less than the method detection limit

-- not analyzed

TPHg: Total Petroleum Hydrocarbons as Gasoline

TPHd: Total Petroleum Hydrocarbons as Diesel

TPHmo: Total Petroleum Hydrocarbons as Motor Oil

MTBE: Methyl Tertiary Butyl Ether

PCE: Tetrachloroethene

TCE: Trichloroethene

DCE: Dichloroethene

TABLE 1-2
SUMMARY OF GROUNDWATER SAMPLE ANALYTICAL RESULTS
3875 Telegraph Avenue
Oakland, California

Location	Sample ID	Date	Depth (ft)	Petroleum Hydrocarbons			Petroleum-Related VOCs												Chlorinated VOCs					
				TPHg	TPHd	TPHmo	Benzene	Toluene	Ethyl benzene	Xylenes	MTBE	1,2,4-TMB	1,3,5-TMB	n-Butyl benzene	sec-Butyl benzene	Isopropyl benzene	4-Isopropyl toluene	Naphthalene	n-Propyl benzene	PCE	TCE	cis-1,2-DCE	1,2-DCA	
				(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	
<i>Terracon</i>																								
Onsite	B-1	8/28/01	--	--	--	--	11,000	760	2,600	9,300	--	2,300	600	ND	ND	ND	ND	640	560	ND	--	--	--	
	B-2	8/28/01	--	--	--	--	30	ND	100	162	--	57	10	ND	ND	ND	21	20	39	ND	--	--	--	
	B-3	8/28/01	--	--	--	--	ND	ND	310	74	--	100	120	ND	23	74	ND	90	230	ND	--	--	--	
	B-4	8/28/01	--	--	--	--	ND	ND	ND	ND	--	ND	ND	ND	ND	ND	ND	ND	6.4	ND	--	--	--	
	B-5	8/28/01	--	--	--	--	ND	ND	ND	ND	--	ND	ND	ND	ND	ND	6.2	ND	7.3	ND	--	--	--	
	B-6	8/28/01	--	--	--	--	ND	ND	ND	ND	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	--	--	--	
<i>Gribi</i>																								
BART Parking Lot	B-1	1/8/05	--	240	--	--	<1.0	<1.0	9.1	<2.0	<4.0	--	--	--	--	--	--	--	--	--	--	--	--	
	B-2	1/8/05	--	14,000	--	--	220	<1.0	380	540	34	--	--	--	--	--	--	--	--	--	--	--	--	
	B-3	1/8/05	--	80,000	--	--	3,800	1,700	5,400	21,800	<100	--	--	--	--	--	--	--	--	--	--	--	--	
Onsite	B-4	1/8/05	--	140,000	--	--	21,000	1,700	8,500	33,600	<4.0	--	--	--	--	--	--	--	--	--	--	--	--	
	B-5	1/8/05	--	130,000	--	--	<1.0	<1.0	8,000	6,680	390	--	--	--	--	--	--	--	--	--	--	--	--	
<i>BART</i>																								
3931 Telegraph	B-1	2/05	--	--	--	--	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
3915 Telegraph	B-3	2/05	--	--	--	--	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
3901 Telegraph	B-4	2/05	--	33,000	--	39,000	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
Apgar Street	B-5	2/05	--	23,000	4,800	<300	340	78	940	2,540	<71	980	320	<71	<71	72	<71	160	250	<71	<71	<71	<71	
3801 Telegraph	B-6	2/05	--	2,200	680	<300	11	<5.0	56	129	<5.0	91	21	13	6.7	14	<5.0	24	44	<5.0	<5.0	<5.0	<5.0	
	B-8	2/05	--	5,300	2,400	<300	69	<0.5	100	10	<2.0	--	--	--	--	--	--	--	--	<2.0	<2.0	<2.0	<2.0	
MacArthur Blvd	B-9	2/05	--	920	2,500	<300	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
	B-10	2/05	--	270	260	<300	<5.0	<5.0	<5.0	<5.0	<5.0	9.5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	B-11	6/05	--	--	<300	--	<5.0	2700	--	<5.0	--	--	--	--	--	--	--	--	<5.0	<5.0	<5.0	<5.0	<5.0	
BART South Parking	B-12	2/05	--	<50	<50	<300	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
	B-13	2/05	--	--	620	670	20	<5.0	65	42	<5.0	78	22	<5.0	<5.0	11	<5.0	29	30	<5.0	<5.0	<5.0	<5.0	<5.0
	B-15	2/05	--	--	2,900	12,000	9.8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
BART Central Parking	B-16	2/05	--	280,000	--	<15,000	47,000	48,000	6,500	34,300	<4,200	6,200	<4,200	<4,200	<4,200	<4,200	<4,200	<4,200	<4,200	<4,200	<4,200	<4,200	<4,200	
	B-16A	6/05	--	4,300	--	--	19	25	170	400	--	--	--	--	--	--	--	--	--	--	--	--	--	
	B-16B	6/05	--	20,000	--	--	560	21	800	1,500	--	--	--	--	--	--	--	--	--	--	--	--	--	
	B-17	2/05	--	3,500	900	--	20	<10	150	190	<10	180	61	12	<10	18	<10	24	58	<10	<10	<10	<10	
	B-18	2/05	--	54	2,200	20,000	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
	B-20	2/05	--	680	<300	290	<20	40	<20	<20	50	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	
	B-21	2/05	--	4,600	2,600	<300	<10	<10	40	33	<10	40	21	60	29	28	<10	22	150	<10	<10	<10	<10	
	B-22	2/05	--	2,600	970	<300	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
	B-24	2/05	--	--	--	--	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
	B-25	2/05	--	700	2,500	5,300	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	8.2	6.2	<5.0	<5.0	14	<5.0	<5.0	
3501 MacArthur	B-33	2/05	--	<50	710	<300	<5.0	<5.0	70	266	<5.0	190	56	16	6	11	<5.0	52	40	<5.0	<5.0	<5.0	<5.0	

TABLE 1-2
SUMMARY OF GROUNDWATER SAMPLE ANALYTICAL RESULTS
3875 Telegraph Avenue
Oakland, California

Location	Sample ID	Date	Depth (ft)	Petroleum Hydrocarbons			Petroleum-Related VOCs												Chlorinated VOCs					
				TPHg	TPHd	TPHmo	Benzene	Toluene	Ethyl benzene	Xylenes	MTBE	1,2,4-TMB	1,3,5-TMB	n-Butyl benzene	sec-Butyl benzene	Isopropyl benzene	4-Isopropyl toluene	Naphthalene	n-Propyl benzene	PCE	TCE	cis-1,2-DCE	1,2-DCA	
				(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	
<i>WEST</i>																								
Onsite	W-1	3/29/08	20	759	585	--	70.2	<1.00	9.74	<1.00	5.91	<1.00	<1.00	4.70	2.58	9.45	<1.00	<2.00	28.1	<1.00	<1.00	1.05	<1.00	
			30	636	109	--	20.2	<1.00	4.28	<1.00	5.72	<1.00	<1.00	4.72	2.43	5.90	<1.00	<2.00	20.2	<1.00	<1.00	1.19	<1.00	
	W-2	3/29/08	30	2,430	1,120	--	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	4.51	<2.00	
	W-3	3/29/08	29	82	<50	--	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	0.610	1.68	0.720	2.05	<0.500
	W-5	3/29/08	22	36,800	2,780	--	<25.0	<25.0	393	<25.0	<25.0	<25.0	<25.0	30.3	<25.0	73.9	<25.0	116	227	<25.0	<25.0	<25.0	<25.0	
	W-9	3/29/08	22	24,000	630	--	<20.0	<20.0	517	62.8	<20.0	960	97.5	294	<20.0	194	29.6	283	776	<20.0	<20.0	<20.0	<20.0	
	W-10	5/1/08	25	440	95	--	<1.00	<1.00	49.2	<1.00	<1.00	14.5	3.79	5.50	<1.00	6.63	<1.00	23.0	24.7	1.90	2.26	6.48	<1.00	
	W-11	5/1/08	25	<50	<50	--	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	0.510	0.550	1.99	1.48	

Notes:

µg/l: micrograms per liter

TPHg: Total Petroleum Hydrocarbons as Gasoline

TPHd: Total Petroleum Hydrocarbons as Diesel

TPHmo: Total Petroleum Hydrocarbons as Motor Oil

MTBE: Methyl Tertiary Butyl Ether

TMB: Trimethylbenzene

PCE: Tetrachloroethene

TCE: Trichloroethene

DCE: Dichloroethene

<1.0: Less than the method detection limit

-- not analyzed

TABLE 1-3
SUMMARY OF SOIL GAS SAMPLE ANALYTICAL RESULTS
3875 Telegraph Avenue
Oakland, California

Sample ID	Date	Depth (ft)	Volatile Organic Compounds						
			Benzene	Toluene	Ethyl benzene	Xylenes	PCE	TCE	TCM
			($\mu\text{g}/\text{m}^3$)						
W-1	3/29/08	7	<16.0	<18.8	<21.7	<21.7	<33.9	<26.9	<24.4
W-3	3/29/08	5	<6.39	<7.54	<8.68	<8.68	<13.6	144	179
W-4	3/29/08	5	<16.0	<18.8	<21.7	<21.7	<33.9	<26.9	150
W-5	3/29/08	5	<63.9	<75.4	<86.8	<86.8	<136	<107	<97.7
W-6	3/29/08	5	<16.0	<18.8	24.3	<21.7	<33.9	<26.9	<24.4
W-7	3/29/08	5	<319	<377	<434	<434	<678	<537	<488
W-9	3/29/08	5	<6.39	<7.54	<8.68	<8.68	<13.6	<10.7	<9.77

Notes:

$\mu\text{g}/\text{m}^3$: micrograms per cubic meter

CHHSLs: California Human Health Screening Levels (January 2005)

ESLs: Environmental Screening Levels (November 2007)

TPHg: Total Petroleum Hydrocarbons as Gasoline

TPHd: Total Petroleum Hydrocarbons as Diesel

TPHmo: Total Petroleum Hydrocarbons as Motor Oil

PCE: Tetrachloroethene

TCE: Trichloroethene

TCM: Trichloromethene

<1.0: Less than the method detection limit

TABLE 2-1
SUMMARY OF GROUNDWATER MONITORING WELL CONSTRUCTION DETAILS
3875 Telegraph Avenue
Oakland, California

Well ID	Date Installed	Monitoring Well Construction Details					
		Well Diameter	Total Depth	Screen Interval	Sand Pack Interval	Bentonite Seal	Grout Seal
		(inches)	(ft bgs)	(ft bgs)	(ft bgs)	(ft bgs)	(ft bgs)
MW-1	3/29/08	1	30	15 to 30	13 to 30	11 to 13	0 to 11
MW-2	3/29/08	1	23	13 to 23	11 to 25	9 to 11	0 to 9
MW-3	3/29/08	1	22	12 to 22	10 to 25	8 to 10	0 to 8
MW-4	3/29/08	0.75	22	12 to 22	10 to 22	2 to 10	0 to 2

Notes:

ft bgs: feet below ground surface

TABLE 2-2
SUMMARY OF GROUNDWATER ELEVATION DATA
3875 Telegraph Avenue
Oakland, California

Well ID	Date	Top of Casing Elevation	Depth to Water	Groundwater Elevation
		(ft MSL)	(ft bgs)	(ft MSL)
MW-1	4/24/08	81.22	14.70	66.52
	5/20/08		14.67	66.55
	10/2/08		15.45	65.77
	12/23/08		16.75	64.47
MW-2	4/24/08	79.22	15.00	64.22
	5/20/08		15.21	64.01
	10/2/08		15.79	63.43
	12/23/08		14.08	65.14
MW-3	4/24/08	78.45	13.85	64.60
	5/20/08		14.11	64.34
	10/2/08		14.66	63.79
	12/23/08		12.93	65.52
MW-4	4/24/08	80.54	13.82	66.72
	5/20/08		14.18	66.36
	10/2/08		15.09	65.45
	12/23/08		13.16	67.38

Notes:

ft MSL: feet above Mean Sea Level using North American Vertical Datum of 1988

ft bgs: feet below ground surface

TABLE 2-3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL RESULTS
3875 Telegraph Avenue
Oakland, California

Well ID	Date	Depth (ft)	Petroleum Hydrocarbons		Petroleum-Related VOCs												CVOCs					
			TPHg	TPHd	Benzene	Toluene	Ethyl benzene	Xylenes	MTBE	tert-Butyl benzene	1,2,4-TMB	1,3,5-TMB	n-Butyl benzene	sec-Butyl benzene	Isopropyl benzene	4-Isopropyl toluene	Naphthalene	n-Propyl benzene	PCE	TCE	cis-1,2-DCE	PCM
			(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)
MW-1	4/24/08	15-30	<50	<50	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00	<0.500	8.49	2.55	10.3	<0.500
	10/2/08		<50	65	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00	<0.500	14.9	6.44	20.4	0.540
	12/23/08		<50	<50	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00	<0.500	18.1	6.20	24.5	0.660
MW-2	4/24/08	13-23	6,140	1,270	391	31.5	366	334.3	<20.0	<20.0	144	31.2	<20.0	118	<20.0	64.0	198	<20.0	<20.0	<20.0	<20.0	<20.0
	10/2/08		4,210	573	423	16.0	137	91.70	<5.00	<5.00	53.8	14.1	15.9	12.6	77.8	<5.00	37.8	133	<5.00	<5.00	<5.00	<5.00
	12/23/08		4,490	694	336	27.6	148	88.06	<4.00	<4.00	33.8	14.1	27.4	18.0	123	<4.00	48.4	197	<4.00	<4.00	<4.00	<4.00
MW-3	4/24/08	12-22	1,730	506	<4.00	<4.00	229	<4.00	<4.00	<4.00	10.1	7.27	7.59	6.02	31.8	<4.00	75.0	88.7	<4.00	<4.00	<4.00	<4.00
	10/2/08		627	620	1.68	<0.500	67.8	<0.500	<0.500	0.710	2.33	<0.500	2.60	3.54	19.2	<0.500	21.6	36.6	0.510	0.600	2.14	<0.500
	12/23/08		620	554	1.36	<0.500	80.5	<0.500	<0.500	1.03	0.870	6.63	4.75	5.36	28.1	<0.500	11.0	56.9	<0.500	<0.500	1.26	<0.500
MW-4	4/24/08	12-22	7,290	2,390	<10.0	<10.0	656	27.7	<10.0	<10.0	101	<10.0	64.1	30.4	123	<10.0	341	433	<10.0	<10.0	<10.0	<10.0
	10/2/08		5,800	958	<5.00	<5.00	106	<5.00	<5.00	<5.00	15.3	<5.00	58.5	26.0	95.0	<5.00	59.9	306	<5.00	<5.00	<5.00	<5.00
	12/23/08		5,470	1,220	<2.50	<2.50	157	3.40	<2.50	<2.50	34.7	7.29	104	34.8	120	5.60	139	397	<2.50	<2.50	<2.50	<2.50

Notes:

ft.: feet

µg/l: micrograms per liter

CVOCs: Chlorinated Volatile Organic Compounds

TPHg: Total Petroleum Hydrocarbons as Gasoline

TPHd: Total Petroleum Hydrocarbons as Diesel

MTBE: Methyl Tertiary Butyl Ether

TMB: Trimethylbenzene

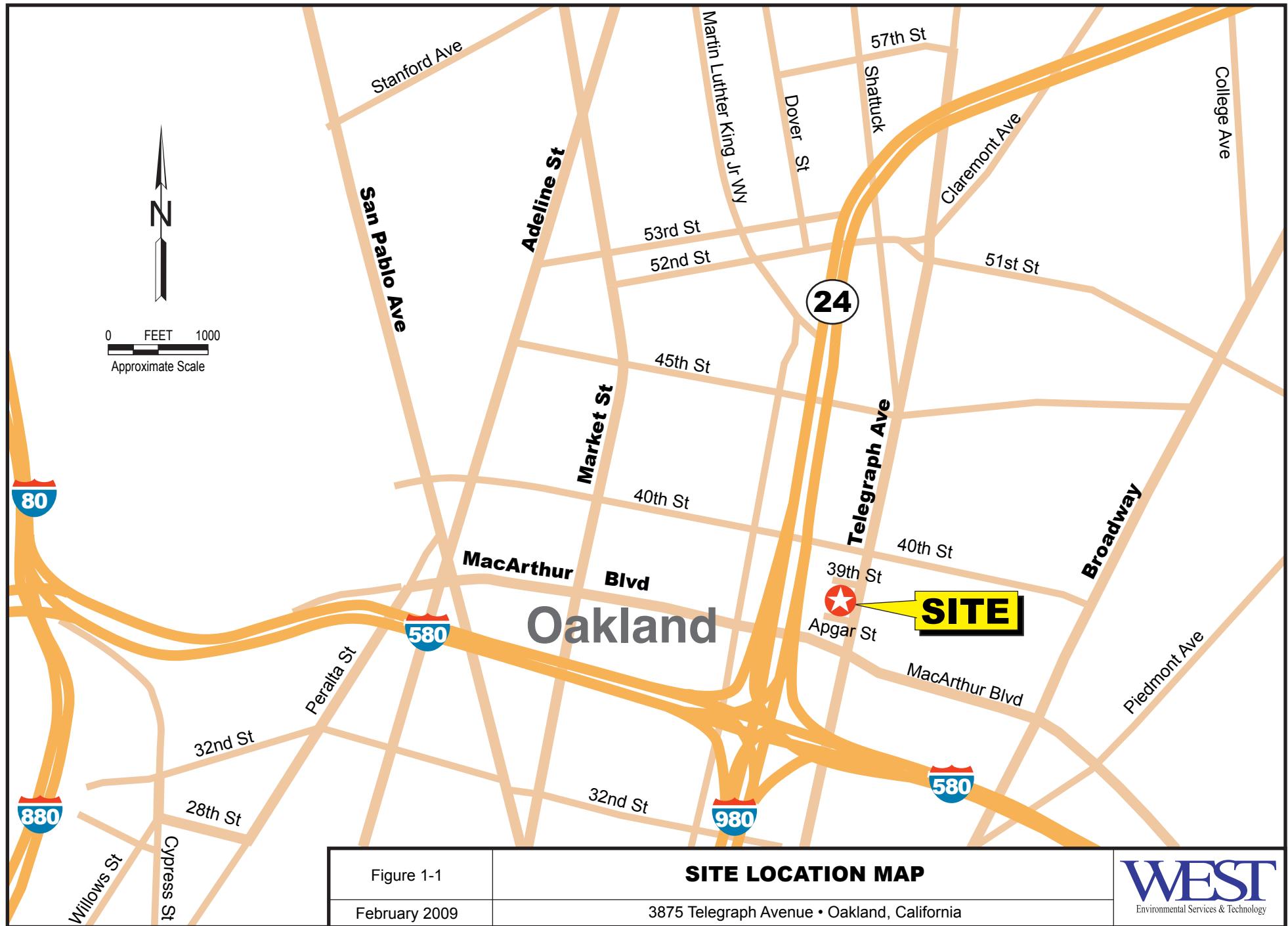
PCE: Tetrachloroethene

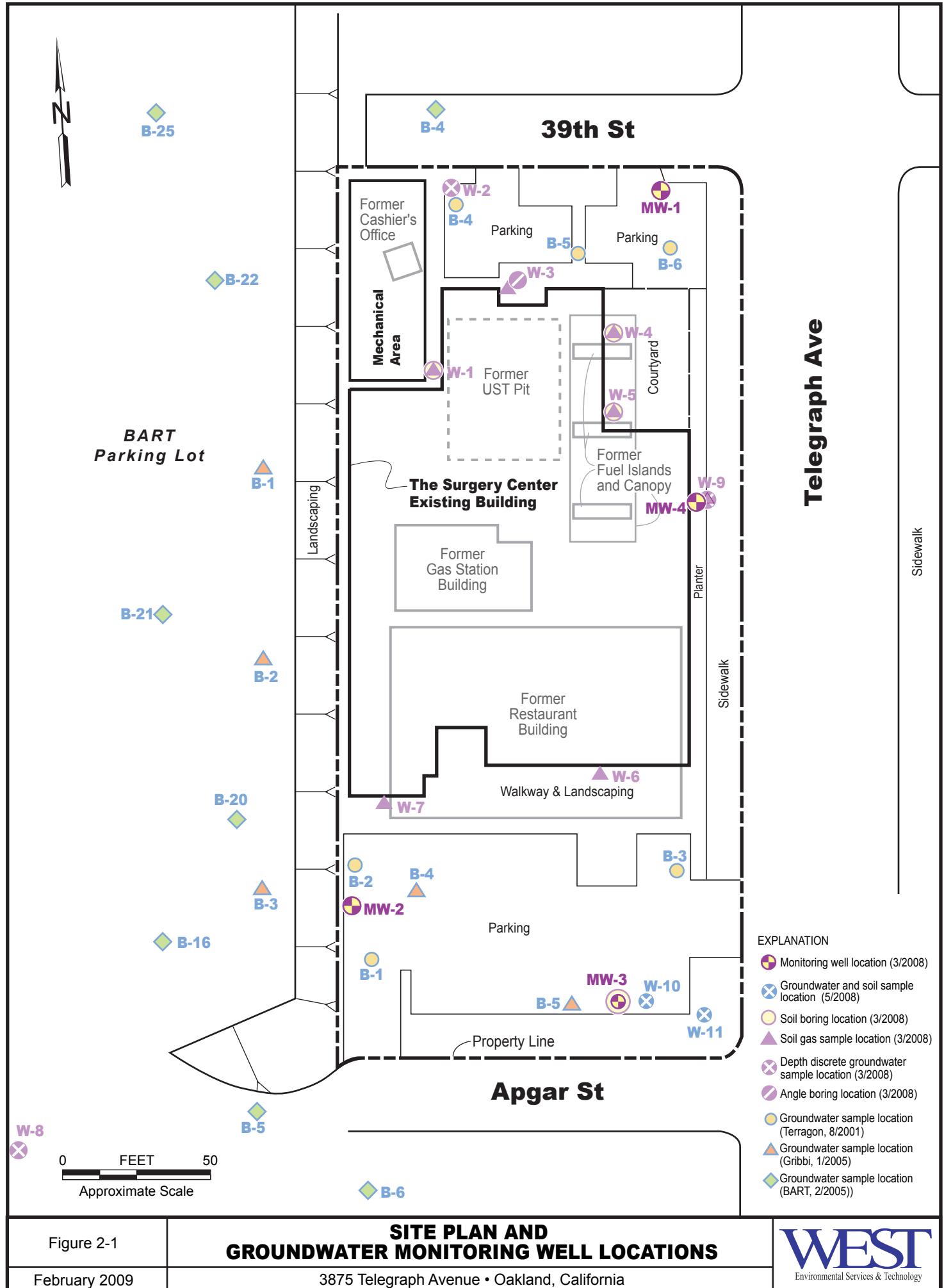
TCE: Trichloroethene

PCM: Perchloromethane

cis-1,2-DCE: Dichloroethene

<1.0: Less than the method detection limit





EXPLANATION

Monitoring well location (3/2008)

65.38

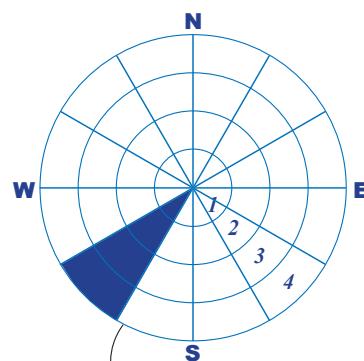
Groundwater elevation
(feet above Mean Sea Level)

66.0

Groundwater elevation contour
(feet above Mean Sea Level).
Dashed where inferred

Hydraulic
Gradient of
0.011 ft/ft

Groundwater Flow Direction
Hydraulic gradient (ft per foot)



Rose diagram depicting
historical groundwater flow
direction and frequency

EXPLANATION

Monitoring well location (3/2008)

Groundwater and soil sample
location (5/2008)

Soil boring location (3/2008)

Soil gas sample location (3/2008)

Depth discrete groundwater
sample location (3/2008)

Angle boring location (3/2008)

Groundwater sample location
(Terragon, 8/2001)

Groundwater sample location
(Gribbi, 1/2005)

Groundwater sample location
(BART, 2/2005)

39th St**Telegraph A**

Sidewalk

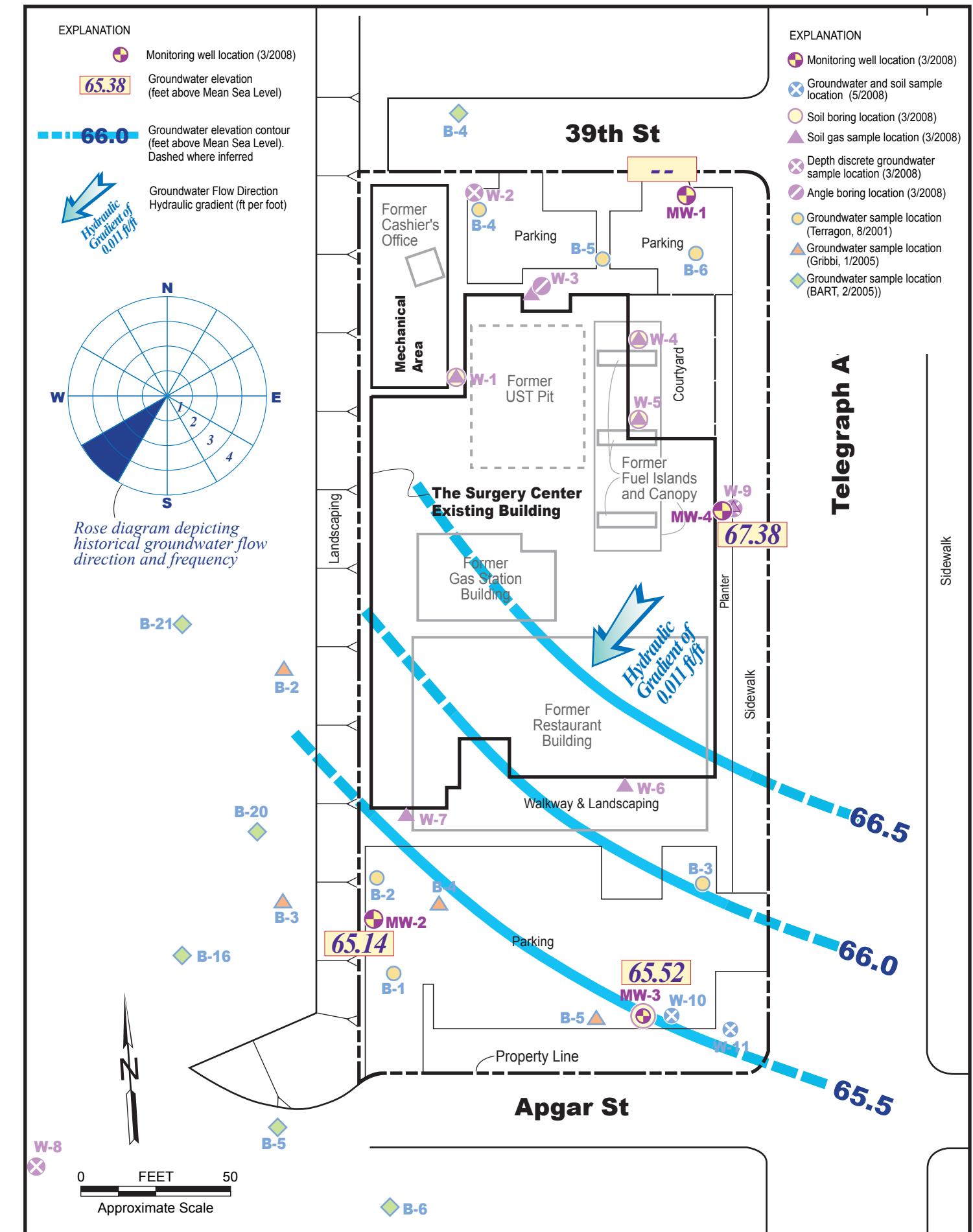
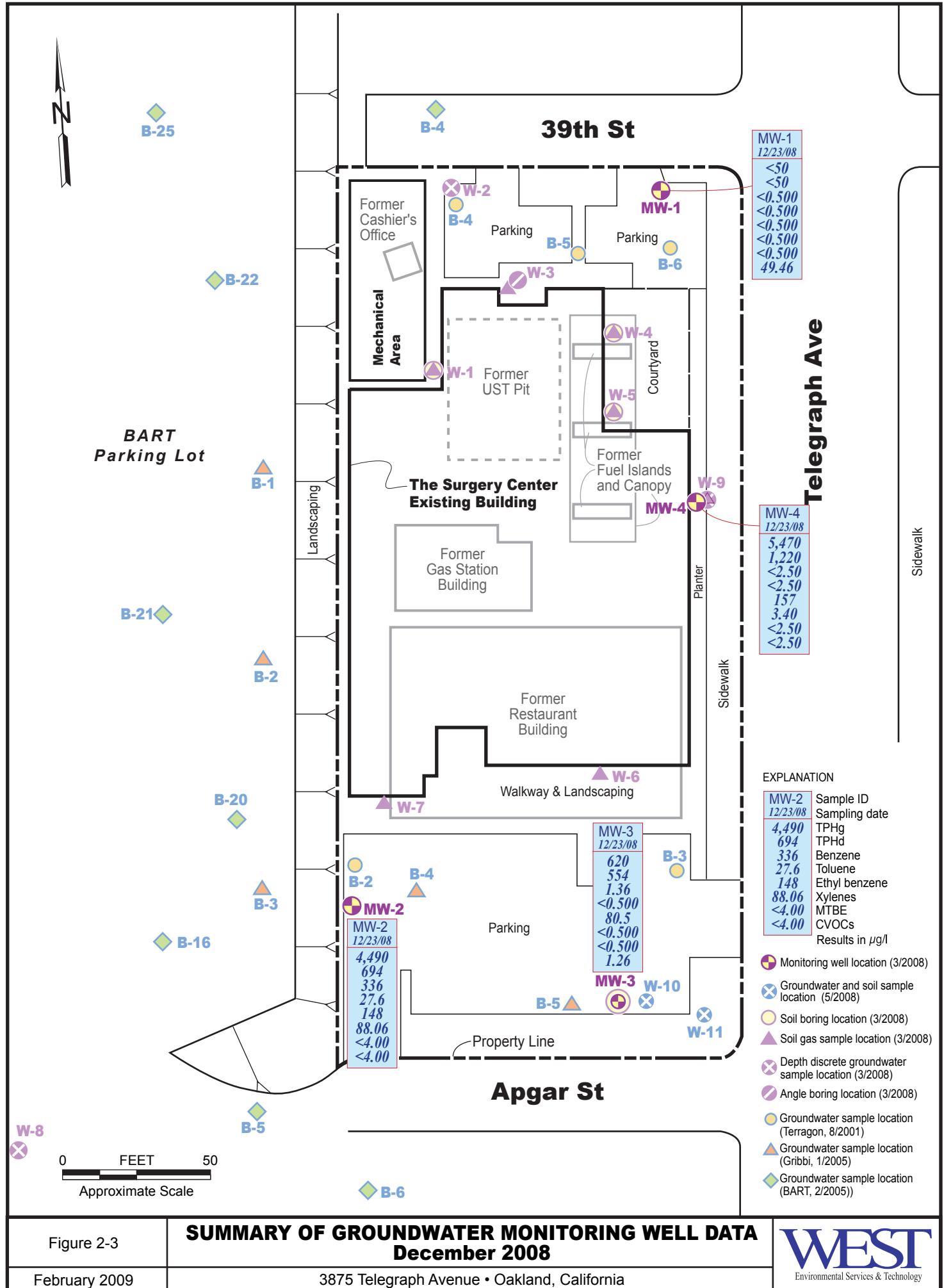
**GROUNDWATER ELEVATIONS**
December 2008

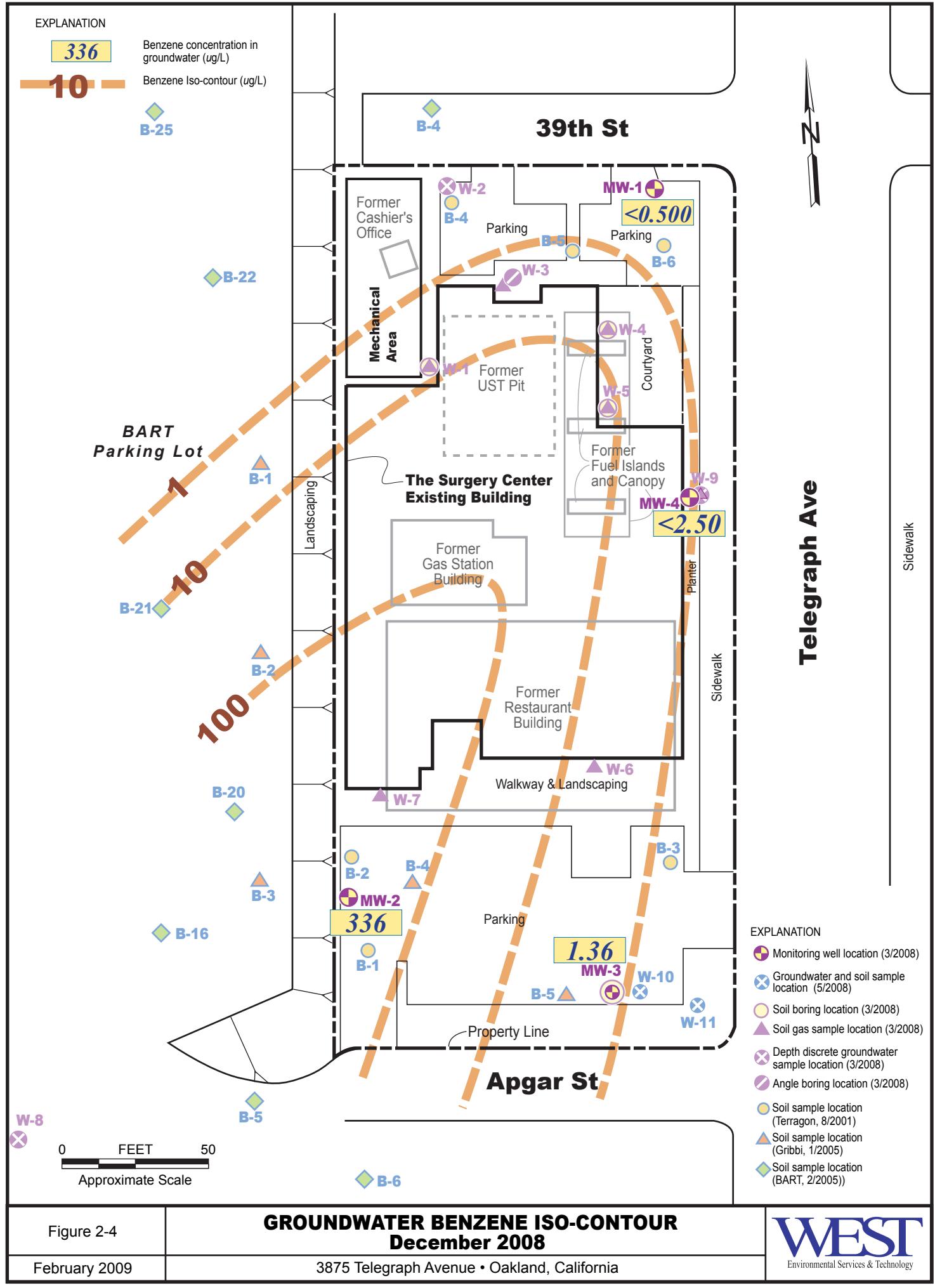
Figure 2-2

WEST
Environmental Services & Technology

February 2009

3875 Telegraph Avenue • Oakland, California





FOURTH QUARTER 2008
GROUNDWATER MONITORING REPORT
FORMER REGAL STATION #120, LOP NO. RO0002875
3875 TELEGRAPH AVENUE
OAKLAND, CALIFORNIA



APPENDIX A

GROUNDWATER MONITORING WELL SAMPLING FIELD SHEETS

GROUND WATER QUALITY SAMPLE COLLECTION FIELD DATA SHEET

Location ID: MW-1

Date: 12/23/07

Sampled By: JZ

Sampling Time: 12:52.

Project/Site Name: Wickland . Oakland Project No: 3875 Telegraph Ave

Location type: monitoring well, supply well, soil boring, other _____

Sampling Method: Peristaltic Low flow

Weather (Skies, temperature, wind): Cloudy cool, light breeze

Well Diameter (in) 1"

Well Elevation (ft) _____

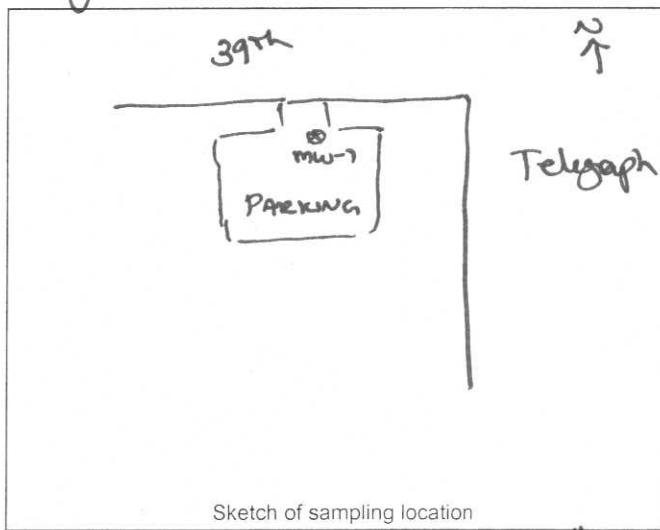
Well Casing Depth (ft) 29.4

Depth to Water (ft) 16.75

Standing Water Volume (gal) _____

Purge Rate: (gal/min) _____

Purge Method: Low Flow



Observations/Comments: 410ggs + 1 Amber. Took cup 122308 Time 12:00"

Measurements of Water Levels and Field Parameters:

Time (24 hr)	Depth to Water (ft)	Purge Volume (gal)	Temp (°C)	PH (S.U.)	E. Cond. (μS/cm)	Turbidity (NTUs)	Dissolved Oxygen (%)	Dissolved Oxygen (mg/L)	Remarks
12:33	17.04	0.01	17.4	4.99	738	7.22	38.7	3.77	
12:36	19.14	0.1	20.6	5.07	719		36.7	3.55	turn pump down
12:39	20.5	0.2	19.4	5.61	671		35.7	3.46	pump off lowest
12:42	20.85	0.3	19.6	5.62	667		34.5	3.34	
12:45	21.05	0.4	19.6	5.70	658		33.6	3.24	
12:48	21.2	0.5	19.5	5.75	653		33.4	3.62	
12:51	21.4	0.6	19.3	5.76		1.29	37.7	3.85	

2-inch casing = 0.16 gallons/foot
7.48 gallons per cubic foot

4-inch casing = 0.65 gallons/foot

6 inch casing = 1.47 gallons/foot
GW-Field Data Sht-1_revised.doc

GROUND WATER QUALITY SAMPLE COLLECTION FIELD DATA SHEET

Location ID: MW-2

Date: 12/23/08

Sampled By: JZ

Sampling Time: 15:42

Project/Site Name: Wickland. Oaklawn

Project No: 3875 Telegraph Ave

Location type: monitoring well, supply well, soil boring, other

Sampling Method: Peristaltic low flow

Weather (Skies, temperature, wind): Clear

Well Diameter (in) 1"

Well Elevation (ft) _____

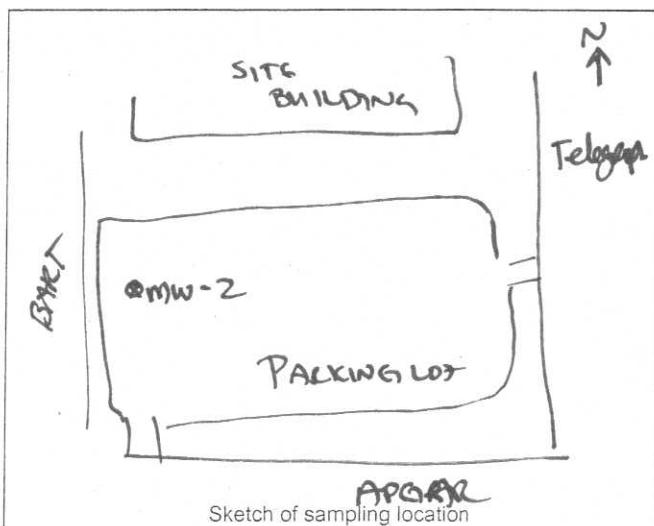
Well Casing Depth (ft) 22.8

Depth to Water (ft) 14.08

Standing Water Volume (gal) _____

Purge Rate: (gal/min) _____

Purge Method: Peristaltic low fw



Observations/Comments: _____

Measurements of Water Levels and Field Parameters:

Time (24 hr)	Depth to Water (ft)	Purge Volume (gal)	Temp (°C)	PH (S.U.)	E. Cond. (μS/cm)	Turbidity (NTUs)	Dissolved Oxygen (%)	Dissolved Oxygen (mg/L)	Remarks
13:26	14.46	0.01	20.2	5.85	793	8.91	18.0	1.69	H/C odor.
13:29	14.56	0.1	20.2	5.97	786		18.3	1.70	
13:32	14.60	0.2	20.1	5.97	788	2.43	18.4	1.70	turn pump down
13:35	14.46	0.3	19.9	6.09	787		18.6	1.73	
13:38	14.47	0.4	19.9	6.09	790		17.6	1.72	
13:41	14.48	0.5	19.9	5.94	790	1.52	18.2		

2-inch casing = 0.16 gallons/foot
7.48 gallons per cubic foot

4-inch casing = 0.65 gallons/foot

6 inch casing = 1.47 gallons/foot
GW-Field Data Sht-1_revised.doc

GROUND WATER QUALITY SAMPLE COLLECTION FIELD DATA SHEET

Location ID: MW-3

Date: 12/23/09

Sampled By: JZ

Sampling Time: 15:00

Project/Site Name: Wickland Oakland Project No: 3875 Telegraph Ave

Location type: monitoring well, supply well, soil boring, other _____

Sampling Method: Peristaltic low flow

Weather (Skies, temperature, wind): Clear

Well Diameter (in) 1"

Well Elevation (ft) _____

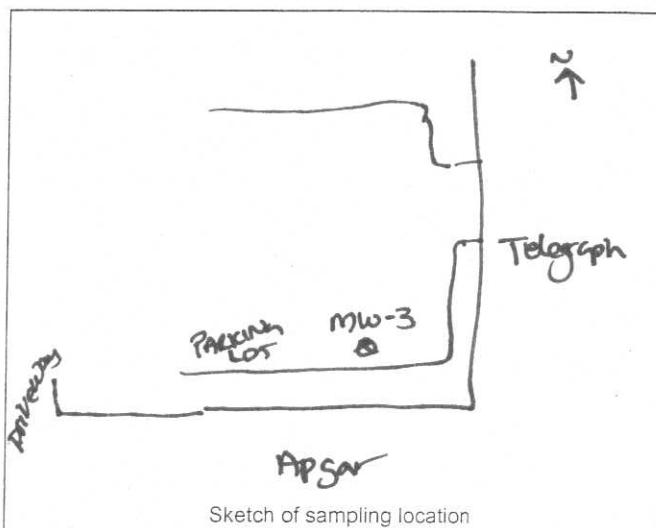
Well Casing Depth (ft) 21.5'

Depth to Water (ft) 12.93'

Standing Water Volume (gal) _____

Purge Rate: (gal/min) _____

Purge Method: Peristaltic



Observations/Comments: 4 VOAs + 1 amber

Measurements of Water Levels and Field Parameters:

Time (24 hr)	Depth to Water (ft)	Purge Volume (gal)	Temp (°C)	PH (S.U.)	E. Cond. (μS/cm)	Turbidity (NTUs)	Dissolved Oxygen (%)	Dissolved Oxygen (mg/L)	Remarks
14:40	13.98	0.01	19.2	5.96	805	7.44	30.4	2.82	
14:43	15.85	0.1	19.9	5.93	801		22.9	2.13	turn pump down.
14:46	16.9	0.2	19.8	6.05	914	1.58	24.2	2.27	
14:49	17.65	0.3	19.6	6.11	812		22.9	2.17	
14:52	18.0	0.4	19.5	6.14	788		22.4	2.14	
14:55	18.5	0.5	19.2	6.18	788	4.05	23.4	2.23	
14:58	19.5	0.6	19.5	6.21	784	2.48	21.9	2.07	

2-inch casing = 0.16 gallons/foot
7.48 gallons per cubic foot

4-inch casing = 0.65 gallons/foot

6 inch casing = 1.47 gallons/foot
GW-Field Data Sht-1_revised.doc

GROUND WATER QUALITY SAMPLE COLLECTION FIELD DATA SHEET

Location ID: MW-4

Date: 12/23/08

Sampled By: JZ

Sampling Time: 13:47

Project/Site Name: Wickland, Oakland

Project No: 3875 Telegraph Ave

Location type: monitoring well, supply well, soil boring, other _____

Sampling Method: Pen-Static low flow

Weather (Skies, temperature, wind): _____

Well Diameter (in) 1"

Well Elevation (ft) _____

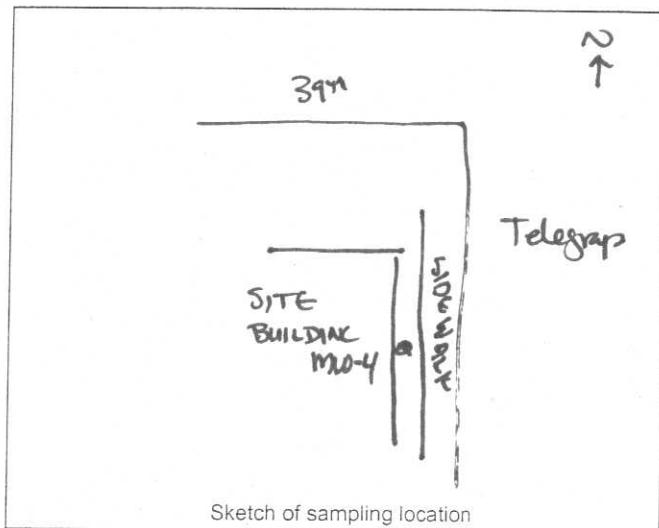
Well Casing Depth (ft) 21.5'

Depth to Water (ft) 13.16

Standing Water Volume (gal) _____

Purge Rate: (gal/min) _____

Purge Method: low flow Penstatis



Observations/Comments: 1 Ambar in 400m

Measurements of Water Levels and Field Parameters:

Time (24 hr)	Depth to Water (ft)	Purge Volume (gal)	Temp (°C)	PH (S.U.)	E. Cond. (µS/cm)	Turbidity (NTUs)	Dissolved Oxygen (%)	Dissolved Oxygen (mg/L)	Remarks
13:30	13.38	0.0	5.06	5.37	19.3	76.5	70.0	5.63	Strong HCl odor
13:35	13.55	0.1	19.9	5.42	516	74.8	47.7	4.76	turn pump down
13:36	13.51	0.2	19.1	5.63	513	40.7	46.1	4.37	
13:39	13.51	0.3	19.6	5.66	508	25	44.5	4.27	
13:42	13.52	0.4	19.6	5.71	502	25.7	43.4	4.13	
13:45	13.52	0.5	19.5	5.82	502	18.6	41.3	3.92	

2-inch casing = 0.16 gallons/foot
7.48 gallons per cubic foot

4-inch casing = 0.65 gallons/foot

6 inch casing = 1.47 gallons/foot
GW-Field Data Sht-1 revised.doc

FOURTH QUARTER 2008
GROUNDWATER MONITORING REPORT
FORMER REGAL STATION #120, LOP NO. RO0002875
3875 TELEGRAPH AVENUE
OAKLAND, CALIFORNIA



APPENDIX B
LABORATORY DATA CERTIFICATES
AND CHAIN-OF-CUSTODY FORMS

K PRIME, Inc.

CONSULTING ANALYTICAL CHEMISTS

3621 Westwind Blvd.
Santa Rosa CA 95403
Phone: 707 527 7574
FAX: 707 527 7879

TRANSMITTAL

DATE: 01/14/09

TO: MR. PETER MORRIS
WEST ENVIRONMENTAL S&T
711 GRAND AVENUE, SUITE 220
SAN RAFAEL, CA 94901

ACCT: 9946
PROJ: WICKLAND.OAKLAND

Phone: 415-460-6770
Fax: 415-460-6771
Email: main@w-e-s-t.com

FROM: Richard A. Kigel, Ph.D.
Laboratory Director *RAK/mch
1/14/09*

SUBJECT: LABORATORY RESULTS FOR YOUR PROJECT WICKLAND.OAKLAND

Enclosed please find K Prime's laboratory reports for the following samples:

SAMPLE ID	TYPE	DATE	TIME	KPI LAB #
MW-1	WATER	12/23/08	12:52	73293
MW-2	WATER	12/23/08	15:42	73294
MW-3	WATER	12/23/08	15:00	73295
MW-4	WATER	12/23/08	13:47	73296
122308	WATER	12/23/08	12:00	73297
TRIP BLANK	WATER	12/23/08	NA	73298

The above listed sample group was received on 12/24/08 and tested as requested on the chain of custody document.

Please call me if you have any questions or need further information.
Thank you for this opportunity to be of service.

K PRIME, INC.
LABORATORY REPORT

K PRIME PROJECT: 9946
CLIENT PROJECT: WICKLAND.OAKLAND

METHOD: GRO-GASOLINE RANGE ORGANICS
REFERENCE: EPA 8015C

SAMPLE TYPE: WATER
UNITS: mg/L

SAMPLE ID	LAB NO.	DATE SAMPLED	TIME SAMPLED	BATCH ID	DATE ANALYZED	MRL	SAMPLE CONC	GRO PATTERN
MW-1	73293	12/23/08	12:52	122208W1	01/05/09	0.050	ND	
MW-2	73294	12/23/08	15:42	122208W1	01/05/09	0.050	4.49	
MW-3	73295	12/23/08	15:00	122208W1	01/05/09	0.050	0.620	
MW-4	73296	12/23/08	13:47	122208W1	01/05/09	0.050	5.47	

NOTES:

ND - NOT DETECTED AT OR ABOVE THE STATED METHOD REPORTING LIMIT

NA - NOT APPLICABLE OR AVAILABLE

MRL - METHOD REPORTING LIMIT

AE - UNKNOWN HYDROCARBON WITH A SINGLE PEAK

AN - UNKNOWN HYDROCARBON WITH SEVERAL PEAKS

AS - HEAVIER HYDROCARBON THAN GASOLINE CONTRIBUTING TO GRO VALUE

CO - HYDROCARBON RESPONSE IN GASOLINE RANGE BUT DOES NOT RESEMBLE GASOLINE

APPROVED BY:

DATE:

TJ
1/12/09

K PRIME, INC.
LABORATORY QUALITY CONTROL REPORT

METHOD BLANK ID: B122208W1
SAMPLE TYPE: WATER

METHOD: GRO-GASOLINE RANGE ORGANICS
REFERENCE: EPA 8015C

BATCH #: 122208W1
DATE EXTRACTED: 12/22/08
DATE ANALYZED: 12/22/08

UNITS: mg/L

COMPOUND NAME	REPORTING LIMIT	SAMPLE CONC
TPH-G	0.050	ND

SAMPLE ID: L122208W1
DUPLICATE ID: D122208W1
BATCH #: 122208W1
SAMPLE TYPE: WATER
UNITS: mg/L

DATE EXTRACTED: 12/22/08
DATE ANALYZED: 12/22/08

ACCURACY (MATRIX SPIKE)

PARAMETER	SPIKE ADDED	SAMPLE RESULT	SPIKE RESULT	RECOVERY (%)	LIMITS (%)
TPH-G	0.250	ND	0.223	89	60-140

PRECISION (SPIKE DUPLICATE)

COMPOUND NAME	REPORTING LIMIT	SPIKE RESULT	DUPLICATE RESULT	RPD (%)	LIMITS (%)
TPH-G	0.050	0.223	0.228	2.2	±20

NOTES:

ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT

NA - NOT APPLICABLE

K PRIME, INC.
LABORATORY REPORT

K PRIME PROJECT: 9946
CLIENT PROJECT: WICKLAND.OAKLAND

SAMPLE ID: MW-1
LAB NO: 73293
DATE SAMPLED: 12/23/08
TIME SAMPLED: 12:52
BATCH #: 122408W1
DATE ANALYZED: 1/6/09

METHOD: VOLATILE ORGANIC COMPOUNDS
REFERENCE: EPA 5030/8260

SAMPLE TYPE: WATER
UNITS: ug/L

COMPOUND NAME	CAS NO.	REPORTING LIMIT	SAMPLE CONC
DICHLORODIFLUOROMETHANE	75-71-8	0.500	ND
CHLOROMETHANE	74-87-3	0.500	ND
VINYL CHLORIDE	75-01-4	0.500	ND
BROMOMETHANE	74-83-9	0.500	ND
CHLOROETHANE	75-00-3	0.500	ND
TRICHLORODIFLUOROMETHANE	75-69-4	0.500	ND
1,1-DICHLOROETHENE	75-35-4	0.500	ND
TRICHLOROTRIFLUOROETHANE	76-13-1	0.500	ND
METHYLENE CHLORIDE	75-09-2	2.50	ND
TRANS-1,2-DICHLOROETHENE	156-60-5	0.500	ND
1,1-DICHLOROETHANE	75-34-3	0.500	ND
CIS-1,2-DICHLOROETHENE	156-59-2	0.500	24.5
2,2-DICHLOROPROPANE	594-20-7	0.500	ND
BROMOCHLOROMETHANE	74-97-5	0.500	ND
CHLOROFORM	67-66-3	0.500	ND
1,1,1-TRICHLOROETHANE	71-55-6	0.500	ND
CARBON TETRACHLORIDE	56-23-5	0.500	0.660
1,1-DICHLOROPROPENE	563-58-6	0.500	ND
BENZENE	71-43-2	0.500	ND
1,2-DICHLOROETHANE	107-06-2	0.500	ND
TRICHLOROETHENE	79-01-6	0.500	6.20
1,2-DICHLOROPROPANE	78-87-5	0.500	ND
DIBROMOMETHANE	74-95-3	0.500	ND
BROMODICHLOROMETHANE	75-27-4	0.500	ND
TRANS-1,3-DICHLOROPROPENE	10061-02-6	0.500	ND
TOLUENE	108-88-3	0.500	ND
CIS-1,3-DICHLOROPROPENE	10061-01-5	0.500	ND
1,1,2-TRICHLOROETHANE	79-00-5	0.500	ND
TETRACHLOROETHENE	127-18-4	0.500	18.1
1,3-DICHLOROPROPANE	142-28-9	0.500	ND
DIBROMOCHLOROMETHANE	124-48-1	0.500	ND
1,2-DIBROMOETHANE	106-93-4	0.500	ND
CHLOROBENZENE	108-90-7	0.500	ND
1,1,2-TETRACHLOROETHANE	630-20-6	0.500	ND
ETHYLBENZENE	100-41-4	0.500	ND
XYLENE (M+P)	1330-20-7	0.500	ND
XYLENE (O)	1330-20-7	0.500	ND
STYRENE	100-42-5	0.500	ND
BROMOFORM	75-25-2	0.500	ND
ISOPROPYLBENZENE	98-82-8	0.500	ND
1,1,2,2-TETRACHLOROETHANE	79-34-5	0.500	ND
BROMOBENZENE	108-86-1	0.500	ND
1,2,3-TRICHLOROPROPANE	96-18-4	0.500	ND
N-PROPYLBENZENE	103-65-1	0.500	ND
2-CHLOROTOLUENE	95-49-8	0.500	ND

K PRIME, INC.
LABORATORY REPORT

K PRIME PROJECT: 9946
CLIENT PROJECT: WICKLAND.OAKLAND

SAMPLE ID: MW-1
LAB NO: 73293
DATE SAMPLED: 12/23/08
TIME SAMPLED: 12:52
BATCH #: 122408W1
DATE ANALYZED: 1/6/09

METHOD: VOLATILE ORGANIC COMPOUNDS
REFERENCE: EPA 5030/8260

SAMPLE TYPE: WATER
UNITS: ug/L

COMPOUND NAME	CAS NO.	REPORTING LIMIT	SAMPLE CONC
1,3,5-TRIMETHYLBENZENE	108-67-8	0.500	ND
4-CHLOROTOLUENE	106-43-4	0.500	ND
TERT-BUTYLBENZENE	98-06-6	0.500	ND
1,2,4-TRIMETHYLBENZENE	95-63-6	0.500	ND
SEC-BUTYLBENZENE	135-98-8	0.500	ND
1,3-DICHLOROBENZENE	541-73-1	0.500	ND
4-ISOPROPYLtolUENE	99-87-6	0.500	ND
1,4-DICHLOROBENZENE	106-46-7	0.500	ND
N-BUTYLBENZENE	104-51-8	0.500	ND
1,2-DICHLOROBENZENE	95-50-1	0.500	ND
1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	0.500	ND
1,2,4-TRICHLOROBENZENE	120-82-1	1.00	ND
HEXACHLOROBUTADIENE	87-68-3	1.00	ND
NAPHTHALENE	91-20-3	1.00	ND
1,2,3-TRICHLOROBENZENE	87-61-6	1.00	ND
METHYL TERT-BUTYL ETHER (MTBE)	1634-04-4	0.500	ND

SURROGATE RECOVERY

%

DIBROMOFLUOROMETHANE	79
TOLUENE-D8	96
4-BROMOFLUOROBENZENE	88

NOTES:

ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT

NA -NOT APPLICABLE OR AVAILABLE

APPROVED BY:

TJ

DATE:

1/12/09

K PRIME, INC.
LABORATORY REPORT

K PRIME PROJECT: 9946
CLIENT PROJECT: WICKLAND.OAKLAND

SAMPLE ID: MW-2
LAB NO: 73294
DATE SAMPLED: 12/23/08
TIME SAMPLED: 15:42
BATCH #: 122408W1
DATE ANALYZED: 1/6/09

METHOD: VOLATILE ORGANIC COMPOUNDS
REFERENCE: EPA 5030/8260

SAMPLE TYPE: WATER
UNITS: ug/L

COMPOUND NAME	CAS NO.	REPORTING LIMIT	SAMPLE CONC
DICHLORODIFLUOROMETHANE	75-71-8	4.00	ND
CHLOROMETHANE	74-87-3	4.00	ND
VINYL CHLORIDE	75-01-4	4.00	ND
BROMOMETHANE	74-83-9	4.00	ND
CHLOROETHANE	75-00-3	4.00	ND
TRICHLORODIFLUOROMETHANE	75-69-4	4.00	ND
1,1-DICHLOROETHENE	75-35-4	4.00	ND
TRICHLOROTRIFLUOROETHANE	76-13-1	4.00	ND
METHYLENE CHLORIDE	75-09-2	20.0	ND
TRANS-1,2-DICHLOROETHENE	156-60-5	4.00	ND
1,1-DICHLOROETHANE	75-34-3	4.00	ND
CIS-1,2-DICHLOROETHENE	156-59-2	4.00	ND
2,2-DICHLOROPROPANE	594-20-7	4.00	ND
BROMOCHLOROMETHANE	74-97-5	4.00	ND
CHLOROFORM	67-66-3	4.00	ND
1,1,1-TRICHLOROETHANE	71-55-6	4.00	ND
CARBON TETRACHLORIDE	56-23-5	4.00	ND
1,1-DICHLOROPROPENE	563-58-6	4.00	ND
BENZENE	71-43-2	4.00	336
1,2-DICHLOROETHANE	107-06-2	4.00	ND
TRICHLOROETHENE	79-01-6	4.00	ND
1,2-DICHLOROPROPANE	78-87-5	4.00	ND
DIBROMOMETHANE	74-95-3	4.00	ND
BROMODICHLOROMETHANE	75-27-4	4.00	ND
TRANS-1,3-DICHLOROPROPENE	10061-02-6	4.00	ND
TOLUENE	108-88-3	4.00	27.6
CIS-1,3-DICHLOROPROPENE	10061-01-5	4.00	ND
1,1,2-TRICHLOROETHANE	79-00-5	4.00	ND
TETRACHLOROETHENE	127-18-4	4.00	ND
1,3-DICHLOROPROPANE	142-28-9	4.00	ND
DIBROMOCHLOROMETHANE	124-48-1	4.00	ND
1,2-DIBROMOETHANE	106-93-4	4.00	ND
CHLOROBENZENE	108-90-7	4.00	ND
1,1,1,2-TETRACHLOROETHANE	630-20-6	4.00	ND
ETHYLBENZENE	100-41-4	4.00	148
XYLENE (M+P)	1330-20-7	4.00	78.9
XYLENE (O)	1330-20-7	4.00	9.16
STYRENE	100-42-5	4.00	ND
BROMOFORM	75-25-2	4.00	ND
ISOPROPYLBENZENE	98-82-8	4.00	123
1,1,2,2-TETRACHLOROETHANE	79-34-5	4.00	ND
BROMOBENZENE	108-86-1	4.00	ND
1,2,3-TRICHLOROPROPANE	96-18-4	4.00	ND
N-PROPYLBENZENE	103-65-1	4.00	197
2-CHLOROTOLUENE	95-49-8	4.00	ND
1,3,5-TRIMETHYLBENZENE	108-67-8	4.00	14.1

K PRIME, INC.
LABORATORY REPORT

K PRIME PROJECT: 9946
CLIENT PROJECT: WICKLAND.OAKLAND

SAMPLE ID: MW-2
LAB NO: 73294
DATE SAMPLED: 12/23/08
TIME SAMPLED: 15:42
BATCH #: 122408W1
DATE ANALYZED: 1/6/09

METHOD: VOLATILE ORGANIC COMPOUNDS
REFERENCE: EPA 5030/8260

SAMPLE TYPE: WATER
UNITS: ug/L

COMPOUND NAME	CAS NO.	REPORTING LIMIT	SAMPLE CONC
4-CHLOROTOLUENE	106-43-4	4.00	ND
TERT-BUTYLBENZENE	98-06-6	4.00	ND
1,2,4-TRIMETHYLBENZENE	95-63-6	4.00	33.8
SEC-BUTYLBENZENE	135-98-8	4.00	18.0
1,3-DICHLOROBENZENE	541-73-1	4.00	ND
4-ISOPROPYLtolUENE	99-87-6	4.00	ND
1,4-DICHLOROBENZENE	106-46-7	4.00	ND
N-BUTYLBENZENE	104-51-8	4.00	27.4
1,2-DICHLOROBENZENE	95-50-1	4.00	ND
1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	4.00	ND
1,2,4-TRICHLOROBENZENE	120-82-1	8.00	ND
HEXACHLOROBUTADIENE	87-68-3	8.00	ND
NAPHTHALENE	91-20-3	8.00	48.4
1,2,3-TRICHLOROBENZENE	87-61-6	8.00	ND
METHYL TERT-BUTYL ETHER (MTBE)	1634-04-4	4.00	ND

SURROGATE RECOVERY

%

DIBROMOFLUOROMETHANE	75
TOLUENE-D8	96
4-BROMOFLUOROBENZENE	93

NOTES:

ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT

NA -NOT APPLICABLE OR AVAILABLE

APPROVED BY: 78
DATE: 1/12/09

K PRIME, INC.
LABORATORY REPORT

K PRIME PROJECT: 9946
CLIENT PROJECT: WICKLAND.OAKLAND

SAMPLE ID: MW-3
LAB NO: 73295
DATE SAMPLED: 12/23/08
TIME SAMPLED: 15:00
BATCH #: 122408W1
DATE ANALYZED: 1/6/09

METHOD: VOLATILE ORGANIC COMPOUNDS
REFERENCE: EPA 5030/8260

SAMPLE TYPE: WATER
UNITS: ug/L

COMPOUND NAME	CAS NO.	REPORTING LIMIT	SAMPLE CONC
DICHLORODIFLUOROMETHANE	75-71-8	0.500	ND
CHLOROMETHANE	74-87-3	0.500	ND
VINYL CHLORIDE	75-01-4	0.500	ND
BROMOMETHANE	74-83-9	0.500	ND
CHLOROETHANE	75-00-3	0.500	ND
TRICHLORODIFLUOROMETHANE	75-69-4	0.500	ND
1,1-DICHLOROETHENE	75-35-4	0.500	ND
TRICHLOROTRIFLUOROETHANE	76-13-1	0.500	ND
METHYLENE CHLORIDE	75-09-2	2.50	ND
TRANS-1,2-DICHLOROETHENE	156-60-5	0.500	ND
1,1-DICHLOROETHANE	75-34-3	0.500	ND
CIS-1,2-DICHLOROETHENE	156-59-2	0.500	1.26
2,2-DICHLOROPROPANE	594-20-7	0.500	ND
BROMOCHLOROMETHANE	74-97-5	0.500	ND
CHLOROFORM	67-66-3	0.500	ND
1,1,1-TRICHLOROETHANE	71-55-6	0.500	ND
CARBON TETRACHLORIDE	56-23-5	0.500	ND
1,1-DICHLOROPROPENE	563-58-6	0.500	ND
BENZENE	71-43-2	0.500	1.36
1,2-DICHLOROETHANE	107-06-2	0.500	ND
TRICHLOROETHENE	79-01-6	0.500	ND
1,2-DICHLOROPROPANE	78-87-5	0.500	ND
DIBROMOMETHANE	74-95-3	0.500	ND
BROMODICHLOROMETHANE	75-27-4	0.500	ND
TRANS-1,3-DICHLOROPROPENE	10061-02-6	0.500	ND
TOLUENE	108-88-3	0.500	ND
CIS-1,3-DICHLOROPROPENE	10061-01-5	0.500	ND
1,1,2-TRICHLOROETHANE	79-00-5	0.500	ND
TETRACHLOROETHENE	127-18-4	0.500	ND
1,3-DICHLOROPROPANE	142-28-9	0.500	ND
DIBROMOCHLOROMETHANE	124-48-1	0.500	ND
1,2-DIBROMOETHANE	106-93-4	0.500	ND
CHLOROBENZENE	108-90-7	0.500	ND
1,1,1,2-TETRACHLOROETHANE	630-20-6	0.500	ND
ETHYLBENZENE	100-41-4	0.500	80.5
XYLENE (M+P)	1330-20-7	0.500	ND
XYLENE (O)	1330-20-7	0.500	ND
STYRENE	100-42-5	0.500	ND
BROMOFORM	75-25-2	0.500	ND
ISOPROPYLBENZENE	98-82-8	0.500	28.1
1,1,2,2-TETRACHLOROETHANE	79-34-5	0.500	ND
BROMOBENZENE	108-86-1	0.500	ND
1,2,3-TRICHLOROPROPANE	96-18-4	0.500	ND
N-PROPYLBENZENE	103-65-1	0.500	56.9
2-CHLOROTOLUENE	95-49-8	0.500	ND

K PRIME, INC.
LABORATORY REPORT

K PRIME PROJECT: 9946
CLIENT PROJECT: WICKLAND.OAKLAND

SAMPLE ID: MW-3
LAB NO: 73295
DATE SAMPLED: 12/23/08
TIME SAMPLED: 15:00
BATCH #: 122408W1
DATE ANALYZED: 1/6/09

METHOD: VOLATILE ORGANIC COMPOUNDS
REFERENCE: EPA 5030/8260

SAMPLE TYPE: WATER
UNITS: ug/L

COMPOUND NAME	CAS NO.	REPORTING LIMIT	SAMPLE CONC
1,3,5-TRIMETHYLBENZENE	108-67-8	0.500	6.63
4-CHLOROTOLUENE	106-43-4	0.500	ND
TERT-BUTYLBENZENE	98-06-6	0.500	1.03
1,2,4-TRIMETHYLBENZENE	95-63-6	0.500	0.870
SEC-BUTYLBENZENE	135-98-8	0.500	5.36
1,3-DICHLOROBENZENE	541-73-1	0.500	ND
4-ISOPROPYLtolUENE	99-87-6	0.500	ND
1,4-DICHLOROBENZENE	106-46-7	0.500	ND
N-BUTYLBENZENE	104-51-8	0.500	4.75
1,2-DICHLOROBENZENE	95-50-1	0.500	ND
1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	0.500	ND
1,2,4-TRICHLOROBENZENE	120-82-1	1.00	ND
HEXACHLOROBUTADIENE	87-68-3	1.00	ND
NAPHTHALENE	91-20-3	1.00	11.0
1,2,3-TRICHLOROBENZENE	87-61-6	1.00	ND
METHYL TERT-BUTYL ETHER (MTBE)	1634-04-4	0.500	ND

SURROGATE RECOVERY

%

DIBROMOFLUOROMETHANE	77
TOLUENE-D8	96
4-BROMOFLUOROBENZENE	94

NOTES:

ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT

NA -NOT APPLICABLE OR AVAILABLE

APPROVED BY:

TJ

DATE:

1/12/09

K PRIME, INC.
LABORATORY REPORT

K PRIME PROJECT: 9946
CLIENT PROJECT: WICKLAND.OAKLAND

SAMPLE ID: MW-4
LAB NO: 73296
DATE SAMPLED: 12/23/08
TIME SAMPLED: 13:47
BATCH #: 122408W1
DATE ANALYZED: 1/6/09

METHOD: VOLATILE ORGANIC COMPOUNDS
REFERENCE: EPA 5030/8260

SAMPLE TYPE: WATER
UNITS: ug/L

COMPOUND NAME	CAS NO.	REPORTING LIMIT	SAMPLE CONC
DICHLORODIFLUOROMETHANE	75-71-8	2.50	ND
CHLOROMETHANE	74-87-3	2.50	ND
VINYL CHLORIDE	75-01-4	2.50	ND
BROMOMETHANE	74-83-9	2.50	ND
CHLOROETHANE	75-00-3	2.50	ND
TRICHLORODIFLUOROMETHANE	75-69-4	2.50	ND
1,1-DICHLOROETHENE	75-35-4	2.50	ND
TRICHLOROTRIFLUOROETHANE	76-13-1	2.50	ND
METHYLENE CHLORIDE	75-09-2	12.5	ND
TRANS-1,2-DICHLOROETHENE	156-60-5	2.50	ND
1,1-DICHLOROETHANE	75-34-3	2.50	ND
CIS-1,2-DICHLOROETHENE	156-59-2	2.50	ND
2,2-DICHLOROPROPANE	594-20-7	2.50	ND
BROMOCHLOROMETHANE	74-97-5	2.50	ND
CHLOROFORM	67-66-3	2.50	ND
1,1,1-TRICHLOROETHANE	71-55-6	2.50	ND
CARBON TETRACHLORIDE	56-23-5	2.50	ND
1,1-DICHLOROPROPENE	563-58-6	2.50	ND
BENZENE	71-43-2	2.50	ND
1,2-DICHLOROETHANE	107-06-2	2.50	ND
TRICHLOROETHENE	79-01-6	2.50	ND
1,2-DICHLOROPROPANE	78-87-5	2.50	ND
DIBROMOMETHANE	74-95-3	2.50	ND
BROMODICHLOROMETHANE	75-27-4	2.50	ND
TRANS-1,3-DICHLOROPROPENE	10061-02-6	2.50	ND
TOLUENE	108-88-3	2.50	ND
CIS-1,3-DICHLOROPROPENE	10061-01-5	2.50	ND
1,1,2-TRICHLOROETHANE	79-00-5	2.50	ND
TETRACHLOROETHENE	127-18-4	2.50	ND
1,3-DICHLOROPROPANE	142-28-9	2.50	ND
DIBROMOCHLOROMETHANE	124-48-1	2.50	ND
1,2-DIBROMOETHANE	106-93-4	2.50	ND
CHLOROBENZENE	108-90-7	2.50	ND
1,1,1,2-TETRACHLOROETHANE	630-20-6	2.50	ND
ETHYLBENZENE	100-41-4	2.50	157
XYLENE (M+P)	1330-20-7	2.50	3.40
XYLENE (O)	1330-20-7	2.50	ND
STYRENE	100-42-5	2.50	ND
BROMOFORM	75-25-2	2.50	ND
ISOPROPYLBENZENE	98-82-8	2.50	120
1,1,2,2-TETRACHLOROETHANE	79-34-5	2.50	ND
BROMOBENZENE	108-86-1	2.50	ND
1,2,3-TRICHLOROPROPANE	96-18-4	2.50	ND
N-PROPYLBENZENE	103-65-1	2.50	397
2-CHLOROTOLUENE	95-49-8	2.50	ND

K PRIME, INC.
LABORATORY REPORT

K PRIME PROJECT: 9946
CLIENT PROJECT: WICKLAND.OAKLAND

SAMPLE ID: MW-4
LAB NO: 73296
DATE SAMPLED: 12/23/08
TIME SAMPLED: 13:47
BATCH #: 122408W1
DATE ANALYZED: 1/6/09

METHOD: VOLATILE ORGANIC COMPOUNDS
REFERENCE: EPA 5030/8260

SAMPLE TYPE: WATER
UNITS: ug/L

COMPOUND NAME	CAS NO.	REPORTING LIMIT	SAMPLE CONC
1,3,5-TRIMETHYLBENZENE	108-67-8	2.50	7.29
4-CHLOROTOLUENE	106-43-4	2.50	ND
TERT-BUTYLBENZENE	98-06-6	2.50	ND
1,2,4-TRIMETHYLBENZENE	95-63-6	2.50	34.7
SEC-BUTYLBENZENE	135-98-8	2.50	34.8
1,3-DICHLOROBENZENE	541-73-1	2.50	ND
4-ISOPROPYLtolUENE	99-87-6	2.50	5.60
1,4-DICHLOROBENZENE	106-46-7	2.50	ND
N-BUTYLBENZENE	104-51-8	2.50	104
1,2-DICHLOROBENZENE	95-50-1	2.50	ND
1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	2.50	ND
1,2,4-TRICHLOROBENZENE	120-82-1	5.00	ND
HEXACHLOROBUTADIENE	87-68-3	5.00	ND
NAPHTHALENE	91-20-3	5.00	139
1,2,3-TRICHLOROBENZENE	87-61-6	5.00	ND
METHYL TERT-BUTYL ETHER (MTBE)	1634-04-4	2.50	ND

SURROGATE RECOVERY

	%
DIBROMOFLUOROMETHANE	77
TOLUENE-D8	96
4-BROMOFLUOROBENZENE	92

NOTES:

ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT

NA -NOT APPLICABLE OR AVAILABLE

APPROVED BY: TJ
DATE: 1/12/09

K PRIME, INC.
LABORATORY METHOD BLANK REPORT

METHOD BLANK ID: B122408W1

BATCH #: 122408W1
 DATE ANALYZED: 12/25/08

METHOD: VOLATILE ORGANIC COMPOUNDS
 REFERENCE: EPA 5030/8260

SAMPLE TYPE: WATER
 UNITS: ug/L

COMPOUND NAME	CAS NO.	REPORTING LIMIT	SAMPLE CONC
DICHLORODIFLUOROMETHANE	75-71-8	0.500	ND
CHLOROMETHANE	74-87-3	0.500	ND
VINYL CHLORIDE	75-01-4	0.500	ND
BROMOMETHANE	74-83-9	0.500	ND
CHLOROETHANE	75-00-3	0.500	ND
TRICHLORODIFLUOROMETHANE	75-69-4	0.500	ND
1,1-DICHLOROETHENE	75-35-4	0.500	ND
TRICHLOROTRIFLUOROETHANE	76-13-1	0.500	ND
METHYLENE CHLORIDE	75-09-2	2.50	ND
TRANS-1,2-DICHLOROETHENE	156-60-5	0.500	ND
1,1-DICHLOROETHANE	75-34-3	0.500	ND
CIS-1,2-DICHLOROETHENE	156-59-2	0.500	ND
2,2-DICHLOROPROPANE	594-20-7	0.500	ND
BROMOCHLOROMETHANE	74-97-5	0.500	ND
CHLOROFORM	67-66-3	0.500	ND
1,1,1-TRICHLOROETHANE	71-55-6	0.500	ND
CARBON TETRACHLORIDE	56-23-5	0.500	ND
1,1-DICHLOROPROPENE	563-58-6	0.500	ND
BENZENE	71-43-2	0.500	ND
1,2-DICHLOROETHANE	107-06-2	0.500	ND
TRICHLOROETHENE	79-01-6	0.500	ND
1,2-DICHLOROPROPANE	78-87-5	0.500	ND
DIBROMOMETHANE	74-95-3	0.500	ND
BROMODICHLOROMETHANE	75-27-4	0.500	ND
TRANS-1,3-DICHLOROPROPENE	10061-02-6	0.500	ND
TOLUENE	108-88-3	0.500	ND
CIS-1,3-DICHLOROPROPENE	10061-01-5	0.500	ND
1,1,2-TRICHLOROETHANE	79-00-5	0.500	ND
TETRACHLOROETHENE	127-18-4	0.500	ND
1,3-DICHLOROPROPANE	142-28-9	0.500	ND
DIBROMOCHLOROMETHANE	124-48-1	0.500	ND
1,2-DIBROMOETHANE	106-93-4	0.500	ND
CHLOROBENZENE	108-90-7	0.500	ND
1,1,2-TETRACHLOROETHANE	630-20-6	0.500	ND
ETHYLBENZENE	100-41-4	0.500	ND
XYLENE (M+P)	1330-20-7	0.500	ND
XYLENE (O)	1330-20-7	0.500	ND
STYRENE	100-42-5	0.500	ND
BROMOFORM	75-25-2	0.500	ND
ISOPROPYLBENZENE	98-82-8	0.500	ND
1,1,2,2-TETRACHLOROETHANE	79-34-5	0.500	ND
BROMOBENZENE	108-86-1	0.500	ND
1,2,3-TRICHLOROPROPANE	96-18-4	0.500	ND
N-PROPYLBENZENE	103-65-1	0.500	ND
2-CHLOROTOLUENE	95-49-8	0.500	ND

K PRIME, INC.
LABORATORY METHOD BLANK REPORT

METHOD BLANK ID: B122408W1

BATCH #: 122408W1
DATE ANALYZED: 12/25/08

METHOD: VOLATILE ORGANIC COMPOUNDS
REFERENCE: EPA 5030/8260

SAMPLE TYPE: WATER
UNITS: ug/L

COMPOUND NAME	CAS NO.	REPORTING LIMIT	SAMPLE CONC
1,3,5-TRIMETHYLBENZENE	108-67-8	0.500	ND
4-CHLOROTOLUENE	106-43-4	0.500	ND
TERT-BUTYLBENZENE	98-06-6	0.500	ND
1,2,4-TRIMETHYLBENZENE	95-63-6	0.500	ND
SEC-BUTYLBENZENE	135-98-8	0.500	ND
1,3-DICHLOROBENZENE	541-73-1	0.500	ND
4-ISOPROPYLtolUENE	99-87-6	0.500	ND
1,4-DICHLOROBENZENE	106-46-7	0.500	ND
N-BUTYLBENZENE	104-51-8	0.500	ND
1,2-DICHLOROBENZENE	95-50-1	0.500	ND
1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	0.500	ND
1,2,4-TRICHLOROBENZENE	120-82-1	1.00	ND
HEXACHLOROBUTADIENE	87-68-3	1.00	ND
NAPHTHALENE	91-20-3	1.00	ND
1,2,3-TRICHLOROBENZENE	87-61-6	1.00	ND
METHYL TERT-BUTYL ETHER (MTBE)	1634-04-4	0.500	ND

SURROGATE RECOVERY

%

DIBROMOFLUOROMETHANE	84
TOLUENE-D8	103
4-BROMOFLUOROBENZENE	99

NOTES:

ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT

NA -NOT APPLICABLE OR AVAILABLE

K PRIME, INC.
LABORATORY QC REPORT

METHOD: VOLATILE ORGANIC COMPOUNDS
REFERENCE: EPA 5030/8260

SAMPLE ID: B122408W1
SPIKE ID: L122408W1
DUPLICATE ID: D122408W1
BATCH #: 122408W1
SAMPLE TYPE: WATER
UNITS: µg/L

ACCURACY (MATRIX SPIKE)

PARAMETER	SPIKE	SAMPLE	SPIKE	RECOVERY	LIMITS
	ADDED	RESULT	RESULT	(%)	(%)
1,1 DICHLOROETHENE	10.0	ND	11.1	111	60-140
BENZENE	10.0	ND	11.4	114	60-140
TRICHLOROETHENE	10.0	ND	9.90	99	60-140
TOLUENE	10.0	ND	11.4	114	60-140
CHLOROBENZENE	10.0	ND	11.1	111	60-140

PRECISION (SPIKE DUPLICATE)

COMPOUND NAME	REPORTING	SPIKE	DUPLICATE	RPD	LIMITS
	LIMIT	RESULT	RESULT	(%)	(%)
1,1 DICHLOROETHENE	0.500	11.1	10.8	2.5	±20
BENZENE	0.500	11.4	11.1	2.8	±20
TRICHLOROETHENE	0.500	9.90	9.23	7.0	±20
TOLUENE	0.500	11.4	10.9	4.5	±20
CHLOROBENZENE	0.500	11.1	10.8	2.8	±20

NOTES:

ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT

NA - NOT AVAILABLE OR APPLICABLE

K PRIME, INC.
LABORATORY REPORT

K PRIME PROJECT: 9946
CLIENT PROJECT: WICKLAND.OAKLAND

METHOD: DRO
REFERENCE: EPA 8015C

UNITS: mg/L

SAMPLE ID	LAB NO.	SAMPLE TYPE	DATE SAMPLED	BATCH ID	EXTRACT DATE	DATE ANALYZED	MRL	SAMPLE CONC	TPH D PATTERN*
MW-1	73293	WATER	12/23/08	123008W01	12/31/08	01/05/09	0.050	ND	
MW-2	73294	WATER	12/23/08	123008W01	12/31/08	01/05/09	0.050	0.694	AK
MW-3	73295	WATER	12/23/08	123008W01	12/31/08	01/05/09	0.050	0.554	AK
MW-4	73296	WATER	12/23/08	123008W01	12/31/08	01/05/09	0.050	1.22	AK

NOTES:

- DRO DIESEL RANGE ORGANICS (C12-C34)
ND Not Detected at or above the stated MRL
NA Not Applicable or Available
MRL Method Reporting Limit
AD Typical pattern for diesel
AM Hydrocarbon response is in the C12-C22 range
AC Heavier hydrocarbons contributing to diesel range quantitation
AJ Heavier hydrocarbon than diesel
AK Lighter hydrocarbon than diesel
AE Unknown hydrocarbon with a single peak
AN Unknown hydrocarbon with several peaks

APPROVED BY: TJ
DATE: 1/12/09

K PRIME, INC.
LABORATORY QC REPORT

METHOD: DRO
REFERENCE: EPA 8015C

SAMPLE ID: L123008W01
DUPLICATE ID: D123008W01
BATCH #: 123008W01
SAMPLE TYPE: WATER
UNITS: mg/L

DATE EXTRACTED: 12/30/08
DATE ANALYZED: 12/31/08

ACCURACY (MATRIX SPIKE)

PARAMETER	SPIKE	SAMPLE	SPIKE	RECOVERY	LIMITS
	ADDED	RESULT	RESULT	(%)	(%)
TPH-D	1.00	ND	0.793	79	60-140

PRECISION (SPIKE DUPLICATE)

COMPOUND NAME	REPORTING	SPIKE	DUPLICATE	RPD	LIMITS
	LIMIT	RESULT	RESULT	(%)	(%)
TPH-D	0.050	0.793	0.715	10.3	±20

NOTES:

ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT
NA - NOT AVAILABLE OR APPLICABLE

K PRIME, INC.
LABORATORY METHOD BLANK REPORT

METHOD BLANK ID: B12300801
SAMPLE TYPE: WATER

METHOD: DRO
REFERENCE: EPA 8015C

BATCH #: 123008W01
DATE EXTRACTED: 12/30/08
DATE ANALYZED: 12/31/08

UNITS: mg/L

COMPOUND NAME	REPORTING LIMIT	SAMPLE CONC
DRO	0.050	ND

NOTES:

DRO - DIESEL RANGE ORGANICS (C12-C34)

ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT

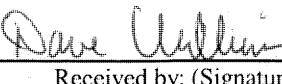
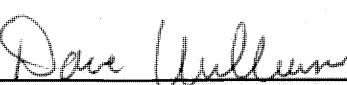
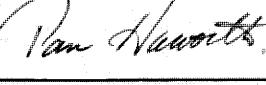
NA - NOT APPLICABLE OR AVAILABLE

SAMPLE ANALYSIS/COMPOSITE REQUEST FORM

CHAIN-OF-CUSTODY

Invoice to: WEST, Inc.			Date: 12/24/08		Page 1 of 1									
Project: Wickland.Oakland			Location: 3875 Telegraph Ave											
Project Manager: Peter Morris			Phone: 415/460-6770					Fax: 415/460-6771						
Laboratory: KPrime, Inc, Santa Rosa, CA			Turnaround time		1	2	3	5	7	10	Std.			
Sampler Signature:			(days)								X			
Analyses Requested														
Sample ID	Date	Time	Type	# Containers	Composite	VOCs (USEPA8260B)	TPHd/TPHg (USEPA 8015M)	BTEX/MTBE (USEPA 8021/8260B)					KPI#	HOLD
MW-1	12/23/08	12:52	W	5	1	X	X	X					73293	
MW-2	12/23/08	15:42	W	5	1	X	X	X					73294	
MW-3	12/23/08	15:00	W	5	1	X	X	X					73295	
MW-4	12/23/08	13:47	W	5	1	X	X	X					73296	
122308	12/23/08	12:00	W	5	1								73297	X
Trip Blank	12/23/08	—	W	2	1								73298	X

NOTES: *Please provide EDF for all data

Relinquished by: (Signature) 	Date/Time 12/24/08 10:52	Received by: (Signature) 	Date/Time 12/24/08 10:52
Relinquished by: (Signature) 	Date/Time 12/24/08 12:50	Received by: (Signature) 	Date/Time 12/24/08 12:50