

January 29, 2009

Bob Legallet
Telegraph Business Properties
1401 Griffith Street
San Francisco, CA 94214

RECEIVED

11:49 am, Feb 04, 2009

Alameda County
Environmental Health

I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document is true and correct to the best of my knowledge.



Sincerely

Bob Legallet
Manager
Telegraph Business Properties

ECM group

January 29, 2009

Bob Legallet
Telegraph Business Properties
1401 Griffith Street
San Francisco, CA 94124

Groundwater Monitoring Report
Fourth Quarter 2008
Telegraph Business Park
5427 Telegraph Avenue
Oakland, California
ECM Project #07-181-04

Dear Mr. Legallet:

This report provides the results of the quarterly groundwater monitoring at Telegraph Business Park, 5427 Telegraph Avenue, Oakland, California (Figure 1, Appendix A). On November 18, 2008, ECM personnel visited the site. All three site wells (MW-1 through MW-3) were redeveloped. Well development field data is included in Appendix D. The well locations are shown on Figure 2 (Appendix A). On November 24, 2008, well vaults on all three wells were replaced with new well vaults. Well coordinates were re-surveyed in accordance with California Electronic Submittal of Information (ESI) guidelines by Barry Kolstad, PLS 5677, on November 23 and December 7, 2008.

December 4, 2008, ECM personnel visited the site. Groundwater elevations were measured and groundwater samples were collected from the three monitoring wells. Well locations are shown on Figure 2 (Appendix A). Free-phase hydrocarbons were not measured or observed in any of the wells. Water level data and well construction details are tabulated in Table 1 (Appendix B). A groundwater elevation contour map is included as Figure 2 (Appendix A). Groundwater flow was to the west/southwest at an approximate gradient of 0.03 ft/ft.

The samples were forwarded under chain of custody record to Torrent Laboratory Inc., of Milpitas, California, for analysis. Analytical results for groundwater are presented in Tables 2 and 3 (Appendix B). Groundwater samples were collected in accordance with ECM Standard Operating Procedure - Groundwater Sampling (Appendix E). The chain of custody document and laboratory analytical reports are included in Appendix C. The water sampling data sheets are

p.o. box 802, benicia, ca. 94510-0802 707-751-0655 707-751-0653 (fax)

included in Appendix D. Purge water and decon rinseate are stored onsite in DOT-approved 50-gallon drums pending transportation and disposal at an appropriate disposal facility.

In accordance with a guidance letter from Alameda County dated October 27, 2008, samples from site wells were analyzed for Stoddard solvent, Total Petroleum Hydrocarbons as Gasoline (TPH[G]), benzene, toluene, ethylbenzene and xylenes (BTEX), for the oxygenates MTBE, ETBE, DIPE, TAME, and TBA, and for the lead scavengers EDB and EDC. Site wells were last sampled in October, 1996.

MW-2 is located near the former site USTs. Concentrations of TPH(G) and Stoddard solvent were highest (6,300 and 120,000 ppb respectively) in MW-2. Due to elevated concentrations of TPH(G) and Stoddard solvent, detection limits for BTEX constituents in MW-2 were elevated. No BTEX constituents were detected at the elevated detection limits. Detection limits for oxygenates and lead scavengers in MW-2 were also elevated. No oxygenates or lead scavengers were detected in MW-2 at the elevated detection limits.

MW-1 is located upgradient of the former site USTs. TPH(G) and Stoddard solvent were detected in MW-1 at 540 and 841 ppb respectively. Toluene was detected in MW-1 at 6.55 ppb. Other BTEX constituents were not detected in MW-1. Oxygenates and lead scavengers were not detected in MW-1.

MW-3 is located downgradient of the former site USTs. TPH(G) and Stoddard solvent were detected in MW-3 at 1,600 and 708 ppb respectively. Benzene and ethylbenzene were detected in MW-3 at 1.15 and 0.720 ppb respectively. Toluene and xylenes were not detected in MW-3. Oxygenates and lead scavengers were not detected in MW-3.

This site is currently scheduled for quarterly monitoring. The next monitoring event is scheduled for March 2009. Alameda County, in a guidance letter dated October 27, 2008, directed that a workplan be prepared to install groundwater monitoring wells to assess off-site contaminant concentrations downgradient of the site; to assess the vertical extent of soil contamination; and to collect in-situ soil vapor samples to evaluate vapor concentrations beneath the site building. The requested workplan will be submitted under separate cover.

Bob Legallet
ECM Group #07-181-04

Page 3

Thank you for allowing ECM to provide environmental services to you. Please contact us if you have questions or require additional information.

Sincerely,
ECM Group



Rachel Guptel
Staff Scientist



Jim Green
Professional Engineer # C058482



Appendices:

- A - Figures
- B - Tables
- C - Chain of Custody and Laboratory Analytical Report
- D - Water Sampling Data Sheets
- E - Standard Operating Procedures

cc: Barbara J. Jakub, Alameda County Health Care Services Agency
Leroy Griffin, Oakland Fire Department

p.o. box 802, benicia, ca. 94510-0802 707-751-0655 707-751-0653 (fax)

APPENDIX A

FIGURES

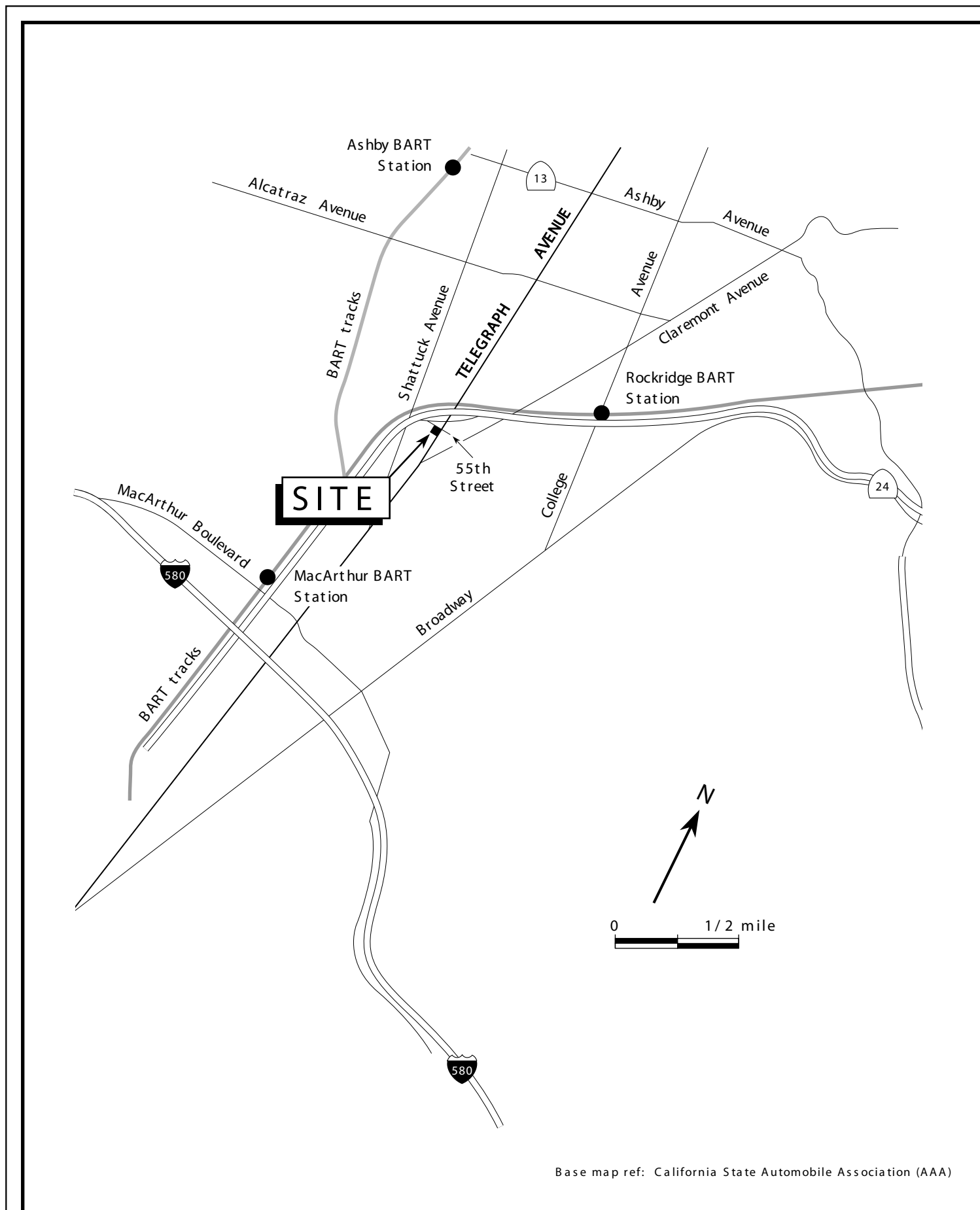


Figure 1. Site Location Map – Telegraph Business Park, 5427 Telegraph Avenue, Oakland, California

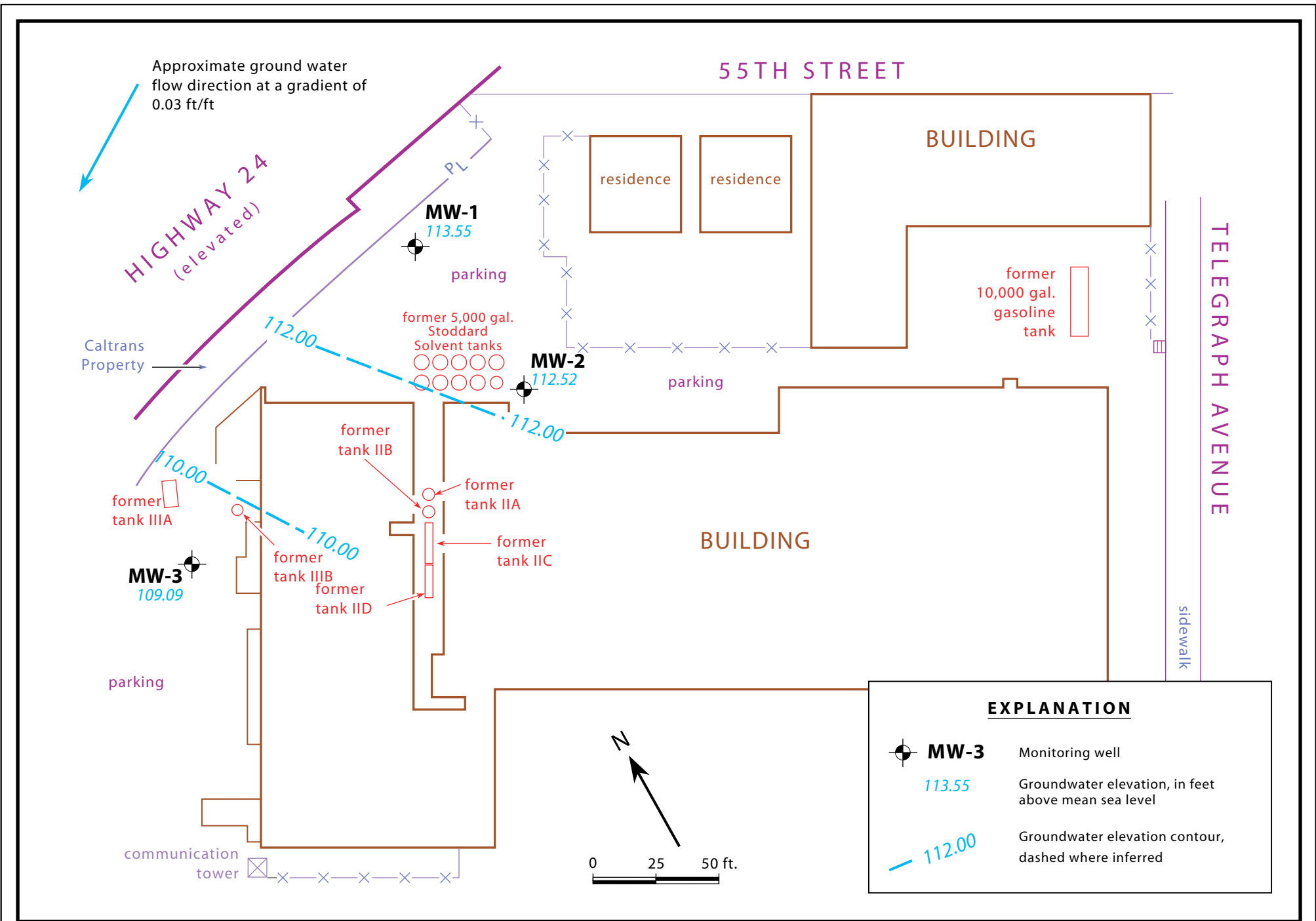


Figure 2. Monitoring Well Location and Ground Water Elevation Contour Map - December 4, 2008 - Telegraph Business Park, 5427 Telegraph Avenue, Oakland, California

APPENDIX B

TABLES

Table 1. Monitoring Well Survey Data, Well Construction Details, and Depth to Groundwater - 5427 Telegraph Avenue, Oakland, California.

Well ID	Date	DTW (Ft)	TOC (Ft, msl)	GWE (Ft, msl)	Screen Interval	Sand Pack Interval	Bentonite/ Grout Interval	Notes
MW-1	1/5/1994	6.40	115.05	108.65	5 - 20	4 - 20	0 - 4	
	2/1/1994	5.93		109.12				
	3/2/1994	5.09		109.96				
	4/6/1994	5.85		109.20				
	5/4/1994	6.37		108.68				
	6/3/1994	6.95		108.10				
	7/7/1994	7.00		108.05				
	8/3/1994	7.30		107.75				
	9/7/1994	7.70		107.35				
	10/11/1994	7.62		107.43				
	1/20/1995	4.78		110.27				
	4/7/1995	5.96		109.09				
	7/26/1995	7.19		107.86				
	10/25/1995	7.74		107.31				
	1/29/1996	4.67		110.38				
	4/26/1996	5.92		109.13				
	7/25/1996	7.10		107.95				
10/28/1996	7.41	107.64						
12/4/2008	7.10	120.65	113.55				Note 1: Wells resurveyed on 11/23/08 and 12/7/08 by Barry Kolstad, pls 5677	
MW-2	1/5/1994	9.42	117.60	108.18	7 - 27	6 - 27	0 - 6	
	2/1/1994	9.15		108.45				
	3/2/1994	9.55		108.05				
	4/6/1994	9.09		108.51				
	5/4/1994	9.18		108.42				
	6/3/1994	9.44		108.16				
	7/7/1994	10.21		107.39				
	8/3/1994	10.96		106.64				
	9/7/1994	10.20		107.40				
	10/11/1994	10.18		107.42				
	1/20/1995	8.64		108.96				
	4/7/1995	9.84		107.76				
	7/26/1995	10.55		107.05				

Table 1. Monitoring Well Survey Data, Well Construction Details, and Depth to Groundwater - 5427 Telegraph Avenue, Oakland, California.

Well ID	Date	DTW (Ft)	TOC (Ft, msl)	GWE (Ft, msl)	Screen Interval	Sand Pack Interval	Bentonite/ Grout Interval	Notes
MW-2 cont.	10/25/1995	10.15	117.60	107.45	7 - 27	6 - 27	0 - 6	
	1/29/1996	9.35		108.25				
	4/26/1996	8.57		109.03				
	7/25/1996	10.73		106.87				
	10/28/1996	10.16		107.44				
	12/4/2008	10.84	123.36	112.52				See Note 1
MW-3	1/5/1994	10.14	115.33	105.19	5 - 20	4 - 20	0 - 4	
	2/1/1994	8.92		106.41				
	3/2/1994	7.56	115.14	107.58				Note 2: Wells resurveyed on 3/4/94 by Ronald C. Miller, pls 15816
	4/6/1994	10.24		104.90				
	5/4/1994	9.67		105.47				
	6/3/1994	10.38		104.76				
	7/7/1994	11.55		103.59				
	8/3/1994	11.76		103.38				
	9/7/1994	12.20		102.94				
	10/11/1994	12.02		103.12				
	1/20/1995	6.47		108.67				
	4/7/1995	7.98		107.16				
	7/26/1995	11.33		103.81				
	10/25/1995	12.29		102.85				
	1/29/1996	6.28		108.86				
	4/26/1996	9.09		106.05				
	7/25/1996	12.06		103.08				
	10/28/1996	12.32		102.82				
12/4/2008	11.82	120.91	109.09	See Note 1				

Explanation:

DTW = Depth to Water
 ft = feet
 msl = Mean Sea Level
 TOC = Top of Casing
 GWE = Ground Water Elevation

Table 2. Analytic Results for Groundwater - Hydrocarbons - 5427 Telegraph Avenue, Oakland, California

Sample ID	Sample Date	TPH-G	Stoddard Solvent	Benzene	Toluene	Ethyl-benzene	Xylenes	Notes
MW-1	1/5/1994	---	1,000	3.3	1.6	<0.3	6	
	4/6/1994	---	1,400	5.6	4.5	<0.3	11	
	7/7/1994	---	1,200	1.5	0.80	<0.3	1.9	
	10/11/1994	---	700	<0.3	<0.3	<0.3	<0.3	
	1/20/1995	---	1,500	3.9	2	<0.3	3.9	
	4/7/1995	---	500	3.2	1.1	<0.3	1.7	
	7/26/1995	---	1,500	3.1	3.2	12	16	
	10/25/1995	---	660	0.6	1.4	20	14	
	1/29/1996	---	2,500	1.8	0.7	8.0	13	
	4/26/1996	---	4,600	<2.5	<2.5	9.5	21	
	7/25/1996	---	2,200	1.6	1.6	11	51	
	10/28/1996	---	1,300	1.5	1.3	3.6	11	
	12/4/2008	540	841	<0.50	6.55	<0.50	<1.50	1
MW-2	1/5/1994	---	35,000	12	38	<3.0	150	
	4/6/1994	---	94,000	21	22	<6.0	110	
	7/7/1994	---	---	16	16	<1.5	1,510	
	7/11/1994	---	43,000	---	---	---	---	
	10/11/1994	---	31,000	17	13	14	0.3	
	1/20/1995	---	26,000	18	13	12	50	
	4/7/1995	---	70,000	17.5	11	<0.6	74.6	
	7/26/1995	---	21,000	17	<0.5	26	94	
	10/25/1995	---	38,000	63	70	440	1,100	
	1/29/1996	---	74,000	7.4	8.6	66	330	
	4/26/1996	---	81,000	<250	<250	3,100	15,000	
	7/25/1996	---	48,000	17	9.4	59	200	
	10/28/1996	---	6,200	19	30	58	310	
	12/4/2008	6,300	120,000	<22.0	<22.0	<22.0	<66.0	1
MW-3	1/5/1994	---	1,100	180	20	85	10	
	4/6/1994	---	1,000	140	13	60	<12	
	7/7/1994	---	---	120	7.5	8.0	<3.0	
	7/11/1994	---	1,000	---	---	---	---	
	10/11/1994	---	1,100	200	11	23	<0.3	
	1/20/1995	---	2,100	36	3.5	4.8	<0.3	

Table 2. Analytic Results for Groundwater - Hydrocarbons - 5427 Telegraph Avenue, Oakland, California

Sample ID	Sample Date	TPH-G	Stoddard Solvent	Benzene	Toluene	Ethyl-benzene	Xylenes	Notes
MW-3 cont.	4/7/1995	---	600	32.7	1.7	4.7	1.9	
	7/26/1995	---	1,200	98	3.2	12	16	
	10/25/1995	---	2,300	32	3.4	4.7	9.6	
	1/29/1996	---	1,100	22	1.2	6.4	12	
	4/26/1996	---	1,300	5.6	0.6	4.6	14	
	7/25/1996	---	2,900	120	6.4	23	36	
	10/28/1996	---	2,000	170	6.6	16	26	
	12/4/2008	1,600	708	1.15	<0.50	0.720	<1.50	1

Explanation:

TPH-G = Gasoline

--- = not analyzed

Notes:

1

TPH(G) was not reported prior to 2008. Samples were analyzed for TPH(D) and Oil&Grease prior to 2008. See report: Sierra Environmental Services, 1996, Quarterly Monitoring Report, Telegraph Business Park, 5427 Telegraph Avenue, Oakland, California, December 26, 1996.

Table 3. Analytic Results for Groundwater - Oxygenates - 5427 Telegraph Avenue, Oakland, California

Sample ID	Sample Date	MTBE	DIPE	ETBE	TAME	TBA	EDB	EDC (1,2 DCA)	Notes
		<----- parts per billion ----->							
MW-1	1/5/1994	---	---	---	---	---	---	<0.2	
	4/6/1994	---	---	---	---	---	---	<0.2	
	7/7/1994	---	---	---	---	---	---	<0.5	
	10/11/1994	---	---	---	---	---	---	<2	
	1/20/1995	---	---	---	---	---	---	<2	
	4/7/1995	---	---	---	---	---	---	0.5	
	7/26/1995	---	---	---	---	---	---	<0.5	
	10/25/1995	---	---	---	---	---	---	<0.5	
	1/29/1996	---	---	---	---	---	---	<0.5	
	4/26/1996	---	---	---	---	---	---	<0.5	
	7/25/1996	---	---	---	---	---	---	<0.5	
	10/28/1996	---	---	---	---	---	---	<0.5	
12/4/2008	<0.50	<0.50	<0.50	<0.50	<10.0	<0.50	<0.50	1	
MW-2	1/5/1994	---	---	---	---	---	---	2.7	
	4/6/1994	---	---	---	---	---	---	<0.2	
	7/7/1994	---	---	---	---	---	---	0.60	
	10/11/1994	---	---	---	---	---	---	<2	
	1/20/1995	---	---	---	---	---	---	<2	
	4/7/1995	---	---	---	---	---	---	1.4	
	7/26/1995	---	---	---	---	---	---	<0.5	
	10/25/1995	---	---	---	---	---	---	<0.5	
	1/29/1996	---	---	---	---	---	---	<0.5	
	4/26/1996	---	---	---	---	---	---	<0.5	
	7/25/1996	---	---	---	---	---	---	<0.5	
	10/28/1996	---	---	---	---	---	---	<2.5	
12/4/2008	<22.0	<22.0	<22.0	<22.0	<440	<22.0	<22.0	1	
MW-3	1/5/1994	---	---	---	---	---	---	0.20	
	4/6/1994	---	---	---	---	---	---	<0.2	
	7/7/1994	---	---	---	---	---	---	<0.5	
	10/11/1994	---	---	---	---	---	---	<2	
	1/20/1995	---	---	---	---	---	---	<2	
	4/7/1995	---	---	---	---	---	---	0.7	
	7/26/1995	---	---	---	---	---	---	<0.5	

Table 3. Analytic Results for Groundwater - Oxygenates - 5427 Telegraph Avenue, Oakland, California

Sample ID	Sample Date	MTBE	DIPE	ETBE	TAME	TBA	EDB	EDC (1,2 DCA)	Notes
		<----- parts per billion ----->							
MW-3 cont.	10/25/1995	---	---	---	---	---	---	<0.5	
	1/29/1996	---	---	---	---	---	---	<0.5	
	4/26/1996	---	---	---	---	---	---	<0.5	
	7/25/1996	---	---	---	---	---	---	<0.5	
	10/28/1996	---	---	---	---	---	---	<0.5	
	12/4/2008	<0.50	<0.50	<0.50	<0.50	<10.0	<0.50	<0.50	1

Explanation:

- MTBE = Methyl tertiary butyl ether
- DIPE = Di-isopropyl ether
- ETBE = Ethyl tertiary butyl ether
- TAME = Tertiary amyl methyl ether
- TBA = Tertiary butyl alcohol
- EDB = 1,2-Dibromoethane
- EDC = 1,2-Dichloroethane

Notes:

1 MTBE, DIPE, ETBE, TAME, TBA and EDB were not reported prior to 2008. Samples were analyzed for Halogenated Volatile Organic Compounds (HVOCs) and Volatile Organic Compounds (VOCs) prior to 2008. See report: Sierra Environmental Services, 1996, Quarterly Monitoring Report, Telegraph Business Park, 5427 Telegraph Avenue, Oakland, California, December 26, 1996.

APPENDIX C

CHAIN OF CUSTODY
AND
LABORATORY ANALYTICAL REPORTS



483 Sinclair Frontage Road
 Milpitas, CA 95035
 Phone: 408.263.5258
 FAX: 408.263.8293
 www.torrentlab.com

CHAIN OF CUSTODY

LAB WORK ORDER NO

0812044

• NOTE: SHADED AREAS ARE FOR TORRENT LAB USE ONLY •

RESET

Company Name: ECM Group Location of Sampling: Telegraph Business Park
 Address: PO Box 802 Purpose:
 City: Benicia State: CA Zip Code: 94110 Special Instructions / Comments: Bill to Telegraph Business Properties
 Telephone: 707 751-0655 FAX: 707 751-0653
 REPORT TO: D. Hazard SAMPLER: D. Hazard / R. Gupta P.O. #: 07-181-04 EMAIL: ecmgrp@ad.com

TURNAROUND TIME:

- 10 Work Days 3 Work Days Noon - Nxt Day
 7 Work Days 2 Work Days 2 - 8 Hours
 5 Work Days 1 Work Day Other

SAMPLE TYPE:

- Storm Water Air
 Waste Water Other
 Ground Water
 Soil

REPORT FORMAT:

- QC Level IV
 EDF
 Excel / EDD

ANALYSIS REQUESTED

LAB ID	CLIENT'S SAMPLE I.D.	DATE / TIME SAMPLED	MATRIX	# OF CONT	CONT TYPE	TPH-9	BTEX	S oxygenates	standard solvents	EDB	EDC	REMARKS
001A	MW-1	12/4/08 13:20	W	6	5 40ml 1 liter	X	X	X	X	X	X	
002A	MW-2	12/4/08 14:30	↓	↓	↓	↓	↓	↓	↓	↓	↓	
003A	MW-3	12/4/08 13:55	↓	↓	↓	↓	↓	↓	↓	↓	↓	

1 Relinquished By: [Signature] Print: David Hazard Date: 12/8 Time: 8:35 Received By: [Signature] Print: C Moore Date: 12/8 Time: 08:35
 2 Relinquished By: [Signature] Print: C Moore Date: 12/8 Time: 9:45 Received By: [Signature] Print: H. S. [Signature] Date: 12/10/08 Time: 9:45

Were Samples Received in Good Condition? Yes NO Samples on Ice? Yes NO Method of Shipment Hi Speed Sample seals intact? Yes NO N/A

NOTE: Samples are discarded by the laboratory 30 days from date of receipt unless other arrangements are made.

Page _____ of _____

Log In By: _____ Date: _____ Log In Reviewed By: _____ Date: _____



December 29, 2008

Dave Hazard
ECM
290 W Channel Rd
Benicia, CA 94510

TEL: (707) 751-0655

FAX

RE: 07-181-04/Telegraph Business Park

Order No.: 0812044

Dear Dave Hazard:

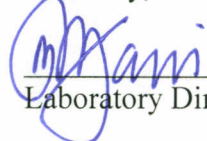
Torrent Laboratory, Inc. received 3 samples on 12/8/2008 for the analyses presented in the following report.

All data for associated QC met EPA or laboratory specification(s) except where noted in the case narrative.

Reported data is applicable for only the samples received as part of the order number referenced above.

Torrent Laboratory, Inc. is certified by the State of California, ELAP #1991. If you have any questions regarding these tests results, please feel free to contact the Project Management Team at (408)263-5258;ext: 204.

Sincerely,


Laboratory Director

12/29/08
Date

Nkabir



TORRENT LABORATORY, INC.

483 Sinclair Frontage Road • Milpitas, CA • Phone: (408) 263-5258 • Fax: (408) 263-8293

Visit us at www.torrentlab.com email: analysis@torrentlab.com

Report prepared for: Dave Hazard
ECM

Date Received: 12/8/2008
Date Reported: 12/29/2008

Client Sample ID: MW-1
Sample Location: Telegraph Business Park
Sample Matrix: GROUNDWATER
Date/Time Sampled 12/4/2008 1:20:00 PM

Lab Sample ID: 0812044-001
Date Prepared: 12/20/2008

Parameters	Analysis Method	Date Analyzed	RL	Dilution Factor	MRL	Result	Units	Analytical Batch
Stoddard Solvent	SW8015B	12/19/2008	0.1	1	0.100	0.841x	mg/L	R18210
Surr: Pentacosane	SW8015B	12/19/2008	0	1	57.9-125	88.0	%REC	R18210
Note:x-Sample chromatogram does not resemble typical stoddard pattern.								
Benzene	SW8260B	12/20/2008	0.5	1	0.500	ND	µg/L	R18243
Toluene	SW8260B	12/20/2008	0.5	1	0.500	6.55	µg/L	R18243
Ethylbenzene	SW8260B	12/20/2008	0.5	1	0.500	ND	µg/L	R18243
Methyl tert-butyl ether (MTBE)	SW8260B	12/20/2008	0.5	1	0.500	ND	µg/L	R18243
Diisopropyl ether (DIPE)	SW8260B	12/20/2008	0.5	1	0.500	ND	µg/L	R18243
Ethyl tert-butyl ether (ETBE)	SW8260B	12/20/2008	0.5	1	0.500	ND	µg/L	R18243
tert-Amyl methyl ether (TAME)	SW8260B	12/20/2008	0.5	1	0.500	ND	µg/L	R18243
t-Butyl alcohol (t-Butanol)	SW8260B	12/20/2008	10	1	10.0	ND	µg/L	R18243
1,2-Dibromoethane (EDB)	SW8260B	12/20/2008	0.5	1	0.500	ND	µg/L	R18243
1,2-Dichloroethane (EDC)	SW8260B	12/20/2008	0.5	1	0.500	ND	µg/L	R18243
Xylenes, Total	SW8260B	12/20/2008	1.5	1	1.50	ND	µg/L	R18243
Surr: Dibromofluoromethane	SW8260B	12/20/2008	0	1	61.2-131	117	%REC	R18243
Surr: 4-Bromofluorobenzene	SW8260B	12/20/2008	0	1	64.1-120	106	%REC	R18243
Surr: Toluene-d8	SW8260B	12/20/2008	0	1	75.1-127	110	%REC	R18243
TPH (Gasoline)	SW8260B(TPH)	12/22/2008	50	1	50	540x	µg/L	G18244
Surr: 4-Bromofluorobenzene	SW8260B(TPH)	12/22/2008	0	1	58.4-133	92.6	%REC	G18244

Note: x- Sample chromatogram does not resemble gasoline standard pattern. Reported TPH value due to the presence of non-target heavy end hydrocarbons within range of C5-C12 quantified as gasoline.

Report prepared for: Dave Hazard
ECM

Date Received: 12/8/2008
Date Reported: 12/29/2008

Client Sample ID: MW-2	Lab Sample ID: 0812044-002
Sample Location: Telegraph Business Park	Date Prepared: 12/18/2008
Sample Matrix: GROUNDWATER	
Date/Time Sampled 12/4/2008 2:30:00 PM	

Parameters	Analysis Method	Date Analyzed	RL	Dilution Factor	MRL	Result	Units	Analytical Batch
Stoddard Solvent	SW8015B	12/19/2008	0.1	100	10.0	120	mg/L	R18210
Surr: Pentacosane	SW8015B	12/19/2008	0	100	57.9-125	100	%REC	R18210
Benzene	SW8260B	12/18/2008	0.5	44	22.0	ND	µg/L	R18200
Toluene	SW8260B	12/18/2008	0.5	44	22.0	ND	µg/L	R18200
Ethylbenzene	SW8260B	12/18/2008	0.5	44	22.0	ND	µg/L	R18200
Methyl tert-butyl ether (MTBE)	SW8260B	12/18/2008	0.5	44	22.0	ND	µg/L	R18200
Diisopropyl ether (DIPE)	SW8260B	12/18/2008	0.5	44	22.0	ND	µg/L	R18200
Ethyl tert-butyl ether (ETBE)	SW8260B	12/18/2008	0.5	44	22.0	ND	µg/L	R18200
tert-Amyl methyl ether (TAME)	SW8260B	12/18/2008	0.5	44	22.0	ND	µg/L	R18200
t-Butyl alcohol (t-Butanol)	SW8260B	12/18/2008	10	44	440	ND	µg/L	R18200
1,2-Dibromoethane (EDB)	SW8260B	12/18/2008	0.5	44	22.0	ND	µg/L	R18200
1,2-Dichloroethane (EDC)	SW8260B	12/18/2008	0.5	44	22.0	ND	µg/L	R18200
Xylenes, Total	SW8260B	12/18/2008	1.5	44	66.0	ND	µg/L	R18200
Surr: Dibromofluoromethane	SW8260B	12/18/2008	0	44	61.2-131	114	%REC	R18200
Surr: 4-Bromofluorobenzene	SW8260B	12/18/2008	0	44	64.1-120	94.0	%REC	R18200
Surr: Toluene-d8	SW8260B	12/18/2008	0	44	75.1-127	105	%REC	R18200

Note: Reporting limits were raised due to the significant amount of heavy hydrocarbons.

TPH (Gasoline)	SW8260B(TPH)	12/18/2008	50	44	2200	6300x	µg/L	G18200
Surr: 4-Bromofluorobenzene	SW8260B(TPH)	12/18/2008	0	44	58.4-133	86.8	%REC	G18200

Note: x- Sample chromatogram does not resemble gasoline standard pattern. Reported TPH value due to the presence of significant amount of heavy hydrocarbons.

Report prepared for: Dave Hazard
ECM

Date Received: 12/8/2008
Date Reported: 12/29/2008

Client Sample ID: MW-3
Sample Location: Telegraph Business Park
Sample Matrix: GROUNDWATER
Date/Time Sampled 12/4/2008 1:55:00 PM

Lab Sample ID: 0812044-003
Date Prepared: 12/20/2008

Parameters	Analysis Method	Date Analyzed	RL	Dilution Factor	MRL	Result	Units	Analytical Batch
Stoddard Solvent	SW8015B	12/19/2008	0.1	1	0.100	0.708x	mg/L	R18210
Surr: Pentacosane	SW8015B	12/19/2008	0	1	57.9-125	106	%REC	R18210
Note:x-Sample chromatogram does not resemble typical stoddard pattern.								
Benzene	SW8260B	12/20/2008	0.5	1	0.500	1.15	µg/L	R18243
Toluene	SW8260B	12/20/2008	0.5	1	0.500	ND	µg/L	R18243
Ethylbenzene	SW8260B	12/20/2008	0.5	1	0.500	0.720	µg/L	R18243
Methyl tert-butyl ether (MTBE)	SW8260B	12/20/2008	0.5	1	0.500	ND	µg/L	R18243
Diisopropyl ether (DIPE)	SW8260B	12/20/2008	0.5	1	0.500	ND	µg/L	R18243
Ethyl tert-butyl ether (ETBE)	SW8260B	12/20/2008	0.5	1	0.500	ND	µg/L	R18243
tert-Amyl methyl ether (TAME)	SW8260B	12/20/2008	0.5	1	0.500	ND	µg/L	R18243
t-Butyl alcohol (t-Butanol)	SW8260B	12/20/2008	10	1	10.0	ND	µg/L	R18243
1,2-Dibromoethane (EDB)	SW8260B	12/20/2008	0.5	1	0.500	ND	µg/L	R18243
1,2-Dichloroethane (EDC)	SW8260B	12/20/2008	0.5	1	0.500	ND	µg/L	R18243
Xylenes, Total	SW8260B	12/20/2008	1.5	1	1.50	ND	µg/L	R18243
Surr: Dibromofluoromethane	SW8260B	12/20/2008	0	1	61.2-131	102	%REC	R18243
Surr: 4-Bromofluorobenzene	SW8260B	12/20/2008	0	1	64.1-120	107	%REC	R18243
Surr: Toluene-d8	SW8260B	12/20/2008	0	1	75.1-127	108	%REC	R18243
TPH (Gasoline)	SW8260B(TPH)	12/22/2008	50	1	50	1600x	µg/L	G18244
Surr: 4-Bromofluorobenzene	SW8260B(TPH)	12/22/2008	0	1	58.4-133	86.1	%REC	G18244

Note: x- Sample chromatogram does not resemble gasoline standard pattern. Reported TPH value due to the presence of significant amount of non-target gasoline compounds within range of C5-C12 quantified as gasoline.

Definitions, legends and Notes

Note	Description
ug/kg	Microgram per kilogram (ppb, part per billion).
ug/L	Microgram per liter (ppb, part per billion).
mg/kg	Milligram per kilogram (ppm, part per million).
mg/L	Milligram per liter (ppm, part per million).
LCS/LCSD	Laboratory control sample/laboratory control sample duplicate.
MDL	Method detection limit.
MRL	Modified reporting limit. When sample is subject to dilution, reporting limit times dilution factor yields MRL.
MS/MSD	Matrix spike/matrix spike duplicate.
N/A	Not applicable.
ND	Not detected at or above detection limit.
NR	Not reported.
QC	Quality Control.
RL	Reporting limit.
% RPD	Percent relative difference.
a	pH was measured immediately upon the receipt of the sample, but it was still done outside the holding time.
sub	Analyzed by subcontracting laboratory, Lab Certificate #

CLIENT: ECM
Work Order: 0812044
Project: 07-181-04/Telegraph Business Park

ANALYTICAL QC SUMMARY REPORT

BatchID: G18200

Sample ID MB_G18200	SampType: MBLK	TestCode: TPH_GAS_W	Units: µg/L	Prep Date: 12/18/2008	RunNo: 18200						
Client ID: ZZZZZ	Batch ID: G18200	TestNo: SW8260B(TP)	Analysis Date: 12/18/2008	SeqNo: 261578							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH (Gasoline)	ND	50									
Surr: 4-Bromofllurobenzene	12.81	0	11.36	0	113	58.4	133				

Sample ID LCS_G18200	SampType: LCS	TestCode: TPH_GAS_W	Units: µg/L	Prep Date: 12/18/2008	RunNo: 18200						
Client ID: ZZZZZ	Batch ID: G18200	TestNo: SW8260B(TP)	Analysis Date: 12/18/2008	SeqNo: 261579							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH (Gasoline)	193.0	50	227	32	70.9	52.4	127				
Surr: 4-Bromofllurobenzene	9.360	0	11.36	0	82.4	58.4	133				

Sample ID LCSD_G18200	SampType: LCSD	TestCode: TPH_GAS_W	Units: µg/L	Prep Date: 12/19/2008	RunNo: 18200						
Client ID: ZZZZZ	Batch ID: G18200	TestNo: SW8260B(TP)	Analysis Date: 12/19/2008	SeqNo: 261580							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH (Gasoline)	199.0	50	227	32	73.6	52.4	127	193	3.06	20	
Surr: 4-Bromofllurobenzene	10.20	0	11.36	0	89.8	58.4	133	0	0	0	

Qualifiers: E Value above quantitation range H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits
 ND Not Detected at the Reporting Limit R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits

CLIENT: ECM
Work Order: 0812044
Project: 07-181-04/Telegraph Business Park

ANALYTICAL QC SUMMARY REPORT

BatchID: G18244

Sample ID MB_G18244	SampType: MBLK	TestCode: TPH_GAS_W	Units: µg/L	Prep Date: 12/22/2008	RunNo: 18244						
Client ID: ZZZZZ	Batch ID: G18244	TestNo: SW8260B(TP)	Analysis Date: 12/22/2008	SeqNo: 262202							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

TPH (Gasoline)	ND	50									
Surr: 4-Bromoflurobenzene	12.62	0	11.36	0	111	58.4	133				

Sample ID LCS_G18244	SampType: LCS	TestCode: TPH_GAS_W	Units: µg/L	Prep Date: 12/22/2008	RunNo: 18244						
Client ID: ZZZZZ	Batch ID: G18244	TestNo: SW8260B(TP)	Analysis Date: 12/22/2008	SeqNo: 262203							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

TPH (Gasoline)	213.0	50	227	31	80.2	52.4	127				
Surr: 4-Bromoflurobenzene	10.73	0	11.36	0	94.5	58.4	133				

Sample ID LCSD_G18244	SampType: LCSD	TestCode: TPH_GAS_W	Units: µg/L	Prep Date: 12/22/2008	RunNo: 18244						
Client ID: ZZZZZ	Batch ID: G18244	TestNo: SW8260B(TP)	Analysis Date: 12/22/2008	SeqNo: 262204							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

TPH (Gasoline)	256.0	50	227	31	99.1	52.4	127	213	18.3	20	
Surr: 4-Bromoflurobenzene	12.57	0	11.36	0	111	58.4	133	0	0	0	

Qualifiers:	E Value above quantitation range	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	R RPD outside accepted recovery limits	S Spike Recovery outside accepted recovery limits

CLIENT: ECM
Work Order: 0812044
Project: 07-181-04/Telegraph Business Park

ANALYTICAL QC SUMMARY REPORT

BatchID: R18200

Sample ID	SampType:	TestCode:	Units:	Prep Date:	RunNo:						
MB_R18200	MBLK	8260B_W_PE	µg/L	12/18/2008	18200						
Client ID: ZZZZZ	Batch ID: R18200	TestNo: SW8260B		Analysis Date: 12/18/2008	SeqNo: 261722						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.500									
Toluene	ND	0.500									
Ethylbenzene	ND	0.500									
Methyl tert-butyl ether (MTBE)	ND	0.500									
Diisopropyl ether (DIPE)	ND	0.500									
Ethyl tert-butyl ether (ETBE)	ND	0.500									
tert-Amyl methyl ether (TAME)	ND	0.500									
t-Butyl alcohol (t-Butanol)	ND	10.0									
1,2-Dibromoethane (EDB)	ND	0.500									
1,2-Dichloroethane (EDC)	ND	0.500									
Xylenes, Total	ND	1.50									
Surr: Dibromofluoromethane	11.84	0	11.36	0	104	61.2	131				
Surr: 4-Bromofluorobenzene	13.34	0	11.36	0	117	64.1	120				
Surr: Toluene-d8	12.99	0	11.36	0	114	75.1	127				

Sample ID	SampType:	TestCode:	Units:	Prep Date:	RunNo:						
LCS_R18200	LCS	8260B_W_PE	µg/L	12/18/2008	18200						
Client ID: ZZZZZ	Batch ID: R18200	TestNo: SW8260B		Analysis Date: 12/18/2008	SeqNo: 261723						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	15.34	0.500	17.04	0	90.0	66.9	140				
Toluene	17.38	0.500	17.04	0	102	76.6	123				
Surr: Dibromofluoromethane	11.44	0	11.36	0	101	61.2	131				
Surr: 4-Bromofluorobenzene	11.91	0	11.36	0	105	64.1	120				
Surr: Toluene-d8	9.350	0	11.36	0	82.3	75.1	127				

Sample ID	SampType:	TestCode:	Units:	Prep Date:	RunNo:						
LCSD_R18200	LCSD	8260B_W_PE	µg/L	12/18/2008	18200						
Client ID: ZZZZZ	Batch ID: R18200	TestNo: SW8260B		Analysis Date: 12/18/2008	SeqNo: 261724						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	16.19	0.500	17.04	0	95.0	66.9	140	15.34	5.39	20	
Toluene	18.15	0.500	17.04	0	107	76.6	123	17.38	4.33	20	

Qualifiers: E Value above quantitation range H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits
 ND Not Detected at the Reporting Limit R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits

CLIENT: ECM
Work Order: 0812044
Project: 07-181-04/Telegraph Business Park

ANALYTICAL QC SUMMARY REPORT

BatchID: R18200

Sample ID LCSD_R18200	SampType: LCSD	TestCode: 8260B_W_PE	Units: µg/L	Prep Date: 12/18/2008	RunNo: 18200						
Client ID: ZZZZZ	Batch ID: R18200	TestNo: SW8260B		Analysis Date: 12/18/2008	SeqNo: 261724						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	11.06	0	11.36	0	97.4	61.2	131	0	0	0	
Surr: 4-Bromofluorobenzene	13.02	0	11.36	0	115	64.1	120	0	0	0	
Surr: Toluene-d8	13.27	0	11.36	0	117	75.1	127	0	0	0	

Qualifiers: E Value above quantitation range H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits
 ND Not Detected at the Reporting Limit R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits

CLIENT: ECM
Work Order: 0812044
Project: 07-181-04/Telegraph Business Park

ANALYTICAL QC SUMMARY REPORT

BatchID: R18210

Sample ID WD081210A-MB	SampType: MBLK	TestCode: TPHSDO_W	Units: mg/L	Prep Date: 12/10/2008	RunNo: 18210						
Client ID: ZZZZZ	Batch ID: R18210	TestNo: SW8015B	Analysis Date: 12/10/2008	SeqNo: 261800							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Stoddard Solvent	ND	0.100									
Surr: Pentacosane	0.09400	0	0.1	0	94.0	57.9	125				

Sample ID WD081210A-LCS	SampType: LCS	TestCode: TPHSDO_W	Units: mg/L	Prep Date: 12/10/2008	RunNo: 18210						
Client ID: ZZZZZ	Batch ID: R18210	TestNo: SW8015B	Analysis Date: 12/10/2008	SeqNo: 261801							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Surr: Pentacosane	0.09200	0	0.1	0	92.0	57.9	125				
-------------------	---------	---	-----	---	------	------	-----	--	--	--	--

Sample ID WD081210A-LCSD	SampType: LCSD	TestCode: TPHSDO_W	Units: mg/L	Prep Date: 12/10/2008	RunNo: 18210						
Client ID: ZZZZZ	Batch ID: R18210	TestNo: SW8015B	Analysis Date: 12/10/2008	SeqNo: 261802							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Surr: Pentacosane	0.09100	0	0.1	0	91.0	57.9	125	0	0	0	
-------------------	---------	---	-----	---	------	------	-----	---	---	---	--

Qualifiers:	E Value above quantitation range	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	R RPD outside accepted recovery limits	S Spike Recovery outside accepted recovery limits

CLIENT: ECM
Work Order: 0812044
Project: 07-181-04/Telegraph Business Park

ANALYTICAL QC SUMMARY REPORT

BatchID: R18243

Sample ID	SampType:	TestCode:	Units:	Prep Date:	RunNo:						
MB_R18243	MBLK	8260B_W_PE	µg/L	12/20/2008	18243						
Client ID: ZZZZZ	Batch ID: R18243	TestNo: SW8260B		Analysis Date: 12/20/2008	SeqNo: 262190						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.500									
Toluene	ND	0.500									
Ethylbenzene	ND	0.500									
Methyl tert-butyl ether (MTBE)	ND	0.500									
Diisopropyl ether (DIPE)	ND	0.500									
Ethyl tert-butyl ether (ETBE)	ND	0.500									
tert-Amyl methyl ether (TAME)	ND	0.500									
t-Butyl alcohol (t-Butanol)	ND	10.0									
1,2-Dibromoethane (EDB)	ND	0.500									
1,2-Dichloroethane (EDC)	ND	0.500									
Xylenes, Total	ND	1.50									
Surr: Dibromofluoromethane	11.62	0	11.36	0	102	61.2	131				
Surr: 4-Bromofluorobenzene	11.91	0	11.36	0	105	64.1	120				
Surr: Toluene-d8	11.51	0	11.36	0	101	75.1	127				

Sample ID	SampType:	TestCode:	Units:	Prep Date:	RunNo:						
LCS_R18243	LCS	8260B_W_PE	µg/L	12/20/2008	18243						
Client ID: ZZZZZ	Batch ID: R18243	TestNo: SW8260B		Analysis Date: 12/20/2008	SeqNo: 262191						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	16.87	0.500	17.04	0	99.0	66.9	140				
Toluene	16.86	0.500	17.04	0	98.9	76.6	123				
Surr: Dibromofluoromethane	11.06	0	11.36	0	97.4	61.2	131				
Surr: 4-Bromofluorobenzene	13.41	0	11.36	0	118	64.1	120				
Surr: Toluene-d8	11.68	0	11.36	0	103	75.1	127				

Sample ID	SampType:	TestCode:	Units:	Prep Date:	RunNo:						
LCSD_R18243	LCSD	8260B_W_PE	µg/L	12/20/2008	18243						
Client ID: ZZZZZ	Batch ID: R18243	TestNo: SW8260B		Analysis Date: 12/20/2008	SeqNo: 262192						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	15.06	0.500	17.04	0	88.4	66.9	140	16.87	11.3	20	
Toluene	16.33	0.500	17.04	0	95.8	76.6	123	16.86	3.19	20	

Qualifiers: E Value above quantitation range H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits
 ND Not Detected at the Reporting Limit R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits

CLIENT: ECM
Work Order: 0812044
Project: 07-181-04/Telegraph Business Park

ANALYTICAL QC SUMMARY REPORT

BatchID: R18243

Sample ID	LCSD_R18243	SampType:	LCSD	TestCode:	8260B_W_PE	Units:	µg/L	Prep Date:	12/20/2008	RunNo:	18243
Client ID:	ZZZZZ	Batch ID:	R18243	TestNo:	SW8260B			Analysis Date:	12/20/2008	SeqNo:	262192
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	12.74	0	11.36	0	112	61.2	131	0	0	0	
Surr: 4-Bromofluorobenzene	12.89	0	11.36	0	113	64.1	120	0	0	0	
Surr: Toluene-d8	12.70	0	11.36	0	112	75.1	127	0	0	0	

Qualifiers:	E Value above quantitation range	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	R RPD outside accepted recovery limits	S Spike Recovery outside accepted recovery limits

Torrent Laboratory, Inc.

WORK ORDER Summary

10-Dec-08

Work Order 0812044

Client ID: ECM

Project: 07-181-04/Telegraph Business Park

QC Level:

Comments: 10 day TAT! Received 3 waters. Bill to Telegraph Business Properties. EDF requested.

Sample ID	Client Sample ID	Collection Date	Date Received	Date Due	Matrix	Test Code	Hld	MS	SEL	Sub	Storage
0812044-001A	MW-1	12/4/2008 1:20:00 PM	12/8/2008	12/19/2008	Groundwater	8260B_W_PETR OLEUM	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	SR/ORG
				12/19/2008		EDF	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	SR/ORG
				12/19/2008		TPH_GAS_W_GC MS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	SR/ORG
0812044-002A	MW-2	12/4/2008 2:30:00 PM	12/19/2008	12/19/2008		TPHSDO_W	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	SR/ORG
				12/19/2008		8260B_W_PETR OLEUM	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	SR/ORG
				12/19/2008		TPH_GAS_W_GC MS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	SR/ORG
0812044-003A	MW-3	12/4/2008 1:55:00 PM	12/19/2008	12/19/2008		8260B_W_PETR OLEUM	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	SR/ORG
				12/19/2008		TPH_GAS_W_GC MS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	SR/ORG
				12/19/2008		TPHSDO_W	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	SR/ORG

APPENDIX D

WATER SAMPLING DATA SHEETS

WELL DEVELOPMENT / WATER MONITORING DATA

DW

PROJECT NAME & NUMBER: Telegraph 07-181-04
By: _____

Well ID: MW-3
Date: 11/18/08

Time	Depth to Water (ft)	Depth to Product (ft)	Surged	Bailed	Pumped	Gallons removed	Temp. (F)	pH	EC (umhos)	Comments: (color, odor, product, est flow rate)
Start: 1255	11.06		X				68.0	6.54	913	
Stop: 1302			X				70.1	6.71		
Start: 1302				X						
Stop: 1308				X		6	70.1	6.71	1008	
Start: 1310			X							
Stop: 1320			X							
Start: 1320				X						
Stop: 1325				X		4.5	69.4	6.82	1037	
Start: 1325			X							
Stop: 1343			X							
Start: 1343				X						
Stop: 1348				X		4.5	68.8	6.77	1100	

WELL DEVELOPMENT SUMMARY

Depth to Water Before Development: 11.06 Development Method: Bail Average Pumping Rate (gpm): _____
 Depth to Water After Development: 12.26 Total Pumping Time (min): 16 Pumping Rate Range (gpm): _____
 Sounded Depth Before Development: 20.10 Total Amount Excavated (gals): 15 Total H2O Injected (gals): _____
 Sounded Depth After Development: 20.10

WELL DEVELOPMENT / WATER MONITORING DATA

PROJECT NAME & NUMBER: Telegraph 07-181-04
By: _____

Well ID: MW-2 DW
Date: 11/18/08

Time	Depth to Water (ft)	Depth to Product (ft)	Surged	Bailed	Pumped	Gallons removed	Temp. (F)	pH	EC (umhos)	Comments: (color, odor, product, est flow rate)
Start: 1115	9.68		X				67.6	6.76	1594	
Stop: 1125			X	X	4					
Start: 1125				X						
Stop: 1134				X		6gal	65.0	6.76	1412	
Start: 1140			X							
Stop: 1150			X							
Start: 1150				X						
Stop: 1157				X		4gal	64.0	6.79	1409	bailed dry
Start: 1204			X							
Stop: 1215			X							
Start: 1215				X			63.5	6.81	1393	
Stop: 1225				X		2gal	↓	↓	↓	bailed dry

WELL DEVELOPMENT SUMMARY

Depth to Water Before Development: 9.68 Development Method: bail Average Pumping Rate (gpm): _____
 Depth to Water After Development: 20.25 Total ^{bail} Pumping Time (min): 26 Pumping Rate Range (gpm): _____
 Sounded Depth Before Development: 26.80 Total Amount Excavated (gals): 12 Total H2O Injected (gals): _____
 Sounded Depth After Development: 26.83

WELL DEVELOPMENT / WATER MONITORING DATA

PROJECT NAME & NUMBER: Telegraph 07-181-04
By: _____

Well ID: MW-1 RG
Date: 11-18-08

Time	Depth to Water (ft)	Depth to Product (ft)	Surged	Bailed	Pumped	Gallons removed	Temp. (F)	pH	EC (umhos)	Comments: (color, odor, product, est flow rate)
Start: 11:15	7.22		X				74.1	6.52	1540	baseline: block
Stop: 11:25			X							
Start: 11:25				X						
Stop: 11:34				X		6	71.6	6.69	1281	
Start: 11:40			X							
Stop: 11:50			X							
Start: 11:50				X						
Stop: 11:57				X		6	73.4	6.87	1275	
Start: 12:04			X							
Stop: 12:15			X							
Start: 12:15				X						
Stop: 12:25				X		8	72.7	6.78	1267	

WELL DEVELOPMENT SUMMARY

Depth to Water Before Development: 7.22 Development Method: baill Average Pumping Rate (gpm): _____
 Depth to Water After Development: 7.50 Total Pumping Time (min): 26 Pumping Rate Range (gpm): _____
 Sounded Depth Before Development: 19.29 Total Amount Excavated (gals): 20 Total H2O Injected (gals): _____
 Sounded Depth After Development: 19.30

WATER SAMPLING DATA

Job Name Telegraph Business Park Job Number 07 181 04
 Well Number MW-1 Date 12/4/08 Time 13:20
 Well Diameter _____ Well Depth (spec.) 19.30 Well Depth (sounded) _____
 Depth to Water (static) 7.10 TOC elev. _____
 G.W. Elev. _____ Maximum Drawdown Limit (if applicable) _____

Initial height of water in casing 12.20 Volume 1.99 gallons
 Total to be evacuated = 3 x Initial Volume ≈ 6 gallons

Formulas/Conversions
 r = well radius in ft
 h = ht of water col. in ft
 vol. in cyl. = $\pi r^2 h$
 7.48 gal/ft³
 V_{2"} casing = 0.163 gal/ft
 V_{4"} casing = 0.267 gal/ft
 V_{6"} casing = 0.653 gal/ft
 V_{8"} casing = 1.826 gal/ft
 V_{10"} casing = 3.14 gal/ft

<u>Stop Time</u>	<u>Start Time</u>	<u>Bailed</u>	<u>Pumped</u>	<u>Cum. Gal.</u>

Pumped or Bailed Dry? Yes No After _____ gallons Recovery Rate _____
 Water color Clear Odor _____
 Description of sediments or material in sample: _____
 Additional Comments: _____

CHEMICAL DATA

Reading No.	1	2	3	4	5	6	7
Time							
Gallons	<u>2</u>	<u>4</u>	<u>6</u>				
Temp. (degree F)	<u>67.8</u>	<u>67.2</u>	<u>65.9</u>				
pH	<u>6.43</u>	<u>6.31</u>	<u>6.45</u>				
EC (umhos/cm)	<u>1143</u>	<u>1085</u>	<u>1069</u>				
Special Conditions							

SAMPLES COLLECTED

Sample ID ml	Bottle/cap	Filtered (size, u)	Preservative (type)	Refrig. (R, NR)	Lab (Init)	Analysis Requested

Bottles: P = Polyethylene; Pp = Polypropylene; C or B = Clear/Brown Glass; O = Other (describe)
 Cap Codes: Py = Polyseal; V = VOA/Teflon septa; M = Metal.

WATER SAMPLING DATA

Job Name Telegraph Business Park Job Number _____
 Well Number MW-2 Date 12/4/08 Time 14:30
 Well Diameter _____ Well Depth (spec.) 26.74 Well Depth (sounded) _____
 Depth to Water (static) 10.84 TOC elev. _____
 G.W. Elev. _____ Maximum Drawdown Limit (if applicable) _____

Formulas/Conversions
 r = well radius in ft
 h = ht of water col. in ft
 vol. in cyl. = $\pi r^2 h$
 7.48 gal/ft³
 V_{2"} casing = 0.163 gal/ft
 V_{1.5"} casing = 0.367 gal/ft
 V_{1"} casing = 0.653 gal/ft
 V_{0.75"} casing = 1.426 gal/ft
 V_{0.5"} casing = 1.47 gal/ft
 Cum. Gal.

Initial height of water in casing 15.90 Volume 2.6 gallons
 Total to be evacuated = 3 x Initial Volume 7.8 gallons

<u>Stop Time</u>	<u>Start Time</u>	<u>Bailed</u>	<u>Pumped</u>	<u>Cum. Gal.</u>

Pumped or Bailed Dry? Yes No After _____ gallons Recovery Rate _____
 Water color clear Odor solvent
 Description of sediments or material in sample: _____
 Additional Comments: _____

CHEMICAL DATA

Reading No.	1	2	3	4	5	6	7
Time							
Gallons	<u>2.6</u>	<u>5.2</u>	<u>7.8</u>				
Temp. (degree F)	<u>59.5</u>	<u>59.9</u>	<u>59.2</u>				
pH	<u>6.66</u>	<u>6.57</u>	<u>6.61</u>				
EC (umhos/cm)	<u>1177</u>	<u>1266</u>	<u>1231</u>				
Special Conditions							

SAMPLES COLLECTED

Sample ID ml	Bottle/cap	Filtered (size, u)	Preservative (type)	Refrig. (R, NR)	Lab (Init)	Analysis Requested

Bottles: P = Polyethylene; Pp = Polypropylene; C or B = Clear/Brown Glass; O = Other (describe)
 Cap Codes: Py = Polyseal; V = VOA/Teflon septa; M = Metal

WATER SAMPLING DATA

Job Name Telegraph Business Park Job Number 07 181 04
 Well Number MW-3 Date 12/04/08 Time _____
 Well Diameter _____ Well Depth (spec.) 20.05 Well Depth (sounded) 20.00
 Depth to Water (static) 11.82 TOC elev. _____
 G.W. Elev. 8.23 Maximum Drawdown Limit (if applicable) _____

Initial height of water in casing 8.23 Volume 1.34 gallons
 Total to be evacuated = 3 x Initial Volume 4.02 gallons

Formulas/Conversions
 r = well radius in ft
 h = ht of water col. in ft
 vol. in cyl. = $\pi r^2 h$
 7.48 gal/ft³
 V₁" casing = 0.163 gal/ft
 V₂" casing = 0.367 gal/ft
 V₃" casing = 0.653 gal/ft
 V₄" casing = 1.026 gal/ft
 V₅" casing = 1.47 gal/ft

<u>Stop Time</u>	<u>Start Time</u>	<u>Bailed</u>	<u>Pumped</u>	<u>Cum. Gal.</u>

Pumped or Bailed Dry? Yes No After _____ gallons Recovery Rate _____
 Water color Grayish Odor _____
 Description of sediments or material in sample: _____
 Additional Comments: _____

CHEMICAL DATA

Reading No.	1	2	3	4	5	6	7
Time							
Gallons	<u>1.5</u>	<u>1.5</u>	<u>1.5</u>				
Temp. (degree F)	<u>65.8</u>	<u>65.3</u>	<u>64.5</u>				
pH	<u>6.62</u>	<u>6.44</u>	<u>6.51</u>				
EC (umhos/cm)	<u>848</u>	<u>929</u>	<u>938</u>				
Special Conditions							

SAMPLES COLLECTED

Sample ID ml	Bottle/cap	Filtered (size, u)	Preservative (type)	Refrig. (R, NR)	Lab (Init)	Analysis Requested

Bottles: P = Polyethylene; Pp = Polypropylene; C or B = Clear/Brown Glass; O = Other (describe)
 Cap Codes: PY = Polyseal; V = VOA/Teflon septa; M = Metal.

APPENDIX E

ECM STANDARD OPERATING PROCEDURE

ECM STANDARD OPERATING PROCEDURE

GROUND WATER SAMPLING

The following describes sampling procedures used by ECM field personnel to collect and handle ground water samples. Before samples are collected, careful consideration is given to the type of analysis to be performed so that precautions are taken to prevent loss of volatile components or contamination of the sample, and to preserve the sample for subsequent analysis. Wells will be sampled no less than 24 hours after well development. Collection methods specific to ground water sampling are presented below.

Prior to sampling, each well is checked for the presence of free-phase hydrocarbons using an MMC flexi-dip interface probe. Product thickness (measured to the nearest 0.01 foot) is noted on the sampling form. Water level measurements are also made using either a water level meter or the interface probe. The water level measurements are also noted on the sampling form.

Prior to sampling, each well is purged of a minimum of three well casing volumes of water using a steam-cleaned PVC bailer, or a pre-cleaned pump. Temperature, pH and electrical conductivity are measured at least three times during purging. Purging is continued until these parameters have stabilized (i.e., changes in temperature, pH or conductivity do not exceed ± 0.5 F, 0.1 or 5%, respectively).

Ground water samples are collected from the wells with steam-cleaned or disposable Teflon bailers. The water samples are decanted into the appropriate container for the analysis to be performed. Pre-preserved sample containers may be used or the analytic laboratory may add preservative to the sample upon arrival. Duplicate samples are collected from each well as a back-up sample and/or to provide quality control. The samples are labeled to include the project number, sample ID, date, preservative, and the field person's initials. The samples are placed in polyethylene bags and in an ice chest (maintained at 4 C with blue ice or ice) for transport under chain of custody to the laboratory.

The chain of custody form includes the project number, analysis requested, sample ID, date analysis and the ECM field person's name. The form is signed and dated (with the transfer time) by each person who yields or receives the samples beginning with the field personnel and ending with the laboratory personnel.