Groundwater Monitoring Report
July to December 2002

64th Street Properties
Emeryville, California

Prepared for:

SIMEON Commercial Properties
San Francisco, California

Prepared by:

Erler & Kalinowski, Inc.
(EKI 990016.05)

11 October 2002

Erler & Kalinowski, Inc.
Consulting Engineers and Scientists
1870 Ogden Drive
Burlingame, California 94010
(650) 292-9100
Fax: (650) 552-9012

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Betty Graham
California Regional Water Quality Control Board
San Francisco Bay Region
1515 Clay Street, Suite 1400
Oakland, California 94612

Susan Hugo
Alameda County Health Agency
Department of Environmental Health
1131 Harbor Bay Parkway, 2nd Floor
Alameda, California 94502

Subject: Groundwater Monitoring Report
July to December 2002
64th Street Properties, Emeryville, California
(EKI 990016.05)

Dear Ms. Graham and Ms. Hugo:

On behalf of SIMEON Commercial Properties, Erler & Kalinowski, Inc. is pleased to present this report summarizing results of groundwater monitoring activities conducted at the 64th Street Properties located at 1480 64th Street, Emeryville, California on 21 August 2002. If you have any questions, please call.

Very truly yours,

ERLER & KALINOWSKI, INC.

Hae Won Lee

Hae Won Lee
Staff Engineer

Derby Davidson

Derby Davidson, P.E.
Project Engineer

cc: Pierson Forbes, SIMEON Commercial Properties
Maurice Kaufman, City of Emeryville

Groundwater Monitoring Report
July to December 2002
64th Street Properties
Emeryville, California

TABLES

FIGURES

APPENDICES

1.0 INTRODUCTION

On behalf of SIMEON Commercial Properties ("SIMEON"), Erler & Kalinowski, Inc. ("EKI") is pleased to present this report summarizing the results of groundwater monitoring activities conducted at the 64th Street Properties located at 1480 64th Street in Emeryville, California ("Site") on 21 August 2002. The location of the Site is shown on Figure 1.

Groundwater monitoring at the Site was conducted in accordance with the *Final Risk Management Plan for the 64th Street Properties*, dated 30 August 1999 ("RMP"). The RMP was approved by the California Regional Water Quality Control Board, San Francisco Bay Region ("RWQCB"), and the Alameda County Department of Environmental Health ("ACDEH") in a letter dated 15 October 1999. The RMP requires the measurement of water levels and the collection of groundwater samples from four monitoring wells (i.e., SMW-1, SMW-2, SMW-3, and SMW-4) installed at the Site. The approximate locations of these wells are shown on Figure 2.

The groundwater monitoring specified in the RMP is required to be performed quarterly for the first year, semi-annually for the second year, and annually thereafter. All groundwater samples are required to be analyzed for total extractable petroleum hydrocarbons as diesel ("TEPH"). The groundwater samples are also required to be analyzed for volatile organic compounds ("VOCs") on an annual basis. Data from the monitoring events are reported to the RWQCB and the ACDEH.

The objectives of the groundwater monitoring program established in the RMP are to monitor TEPH and VOC concentrations in groundwater at the perimeter and downgradient of the Site and to verify the stability or decline of TEPH concentrations over time. Groundwater samples collected from the four monitoring wells on 21 August 2002 were analyzed for TEPH. VOC testing was not conducted for this report because VOC analyses were already conducted earlier this year on 5 February 2002, fulfilling the requirement that VOCs are to be analyzed on an annual basis. For VOC data for the 2002 year, please refer to the January to June 2002 Groundwater Monitoring Report prepared by EKI on behalf of SIMEON.

2.0 GROUNDWATER MONITORING

Per the RMP, monitoring at the Site includes measuring groundwater levels and collecting groundwater samples from Site monitoring wells SMW-1 through SMW-4 (Figure 2). EKI conducted monitoring activities at the Site on 21 August 2002 as described below.

2.1 Water Level Monitoring

Prior to sampling, EKI measured water levels in each well using a pre-cleaned electronic sounding tape. Water level data obtained by EKI were used to assess the magnitude and direction of the hydraulic gradient in the shallow water-bearing zone at the Site (see Section 3.1 below). Historic measured water level data and water level data collected on 21 August 2002 are summarized in Table 1.

2.2 Groundwater Sampling and Laboratory Analyses

Prior to sampling, groundwater was purged until at least three of four parameters (temperature, specific conductance, pH, and turbidity) stabilized. Approximately three well-casing volumes of groundwater were removed from each well. Groundwater samples were collected from wells SMW-1, SMW-2, SMW-3, and SMW-4. Copies of groundwater purge sample forms are included in Appendix A.

Groundwater samples from the wells were collected using PVC bailers suspended by nylon string. Separate disposable PVC bailers were used at each well. Well SMW-4, which contains a thin layer of floating product (i.e., less than 0.03 feet), was sampled through a stilling tube.

Rinsate from equipment cleaning and purged groundwater from the wells was contained and stored on-Site in 55-gallon drums. SIMEON will dispose of the rinse water and purged groundwater in accordance with applicable laws and regulations.

Groundwater samples were labeled, logged on a chain-of-custody document, and packed on ice in a chilled ice chest for transport to the laboratory. Samples were analyzed by Curtis & Tompkins, Ltd., of Emeryville, California, for TEPH with silica gel cleanup using EPA Method 8015M. Analytical results for the 21 August 2002 monitoring event are summarized in Table 2 and are shown on Figure 3. Copies of laboratory reports from these groundwater analyses are included in Appendix B. Groundwater analytical results are discussed in Section 3.2 below.

3.0 EVALUATION OF HYDRAULIC GRADIENT AND GROUNDWATER SAMPLING RESULTS

This section summarizes (a) hydraulic groundwater gradient information obtained at the Site on 21 August 2002, (b) groundwater analytical results from on-Site groundwater monitoring conducted on 21 August 2002, and (c) quality control results.

3.1 Hydraulic Gradient

The groundwater potentiometric surface contour map for the Site shallow water-bearing zone shown on Figure 2 is based on water levels measured in wells SMW-1, SMW-2, SMW-3, and SMW-4 on 21 August 2002. As shown on Figure 2, the direction of the hydraulic gradient in the shallow water-bearing zone is westerly across the southwestern portion of the Site. The estimated magnitude of the hydraulic gradient across the Site is 0.009 ft/ft.

3.2 Groundwater Analytical Results

Current and historic TEPH data detected in groundwater samples collected from wells SMW-1, SMW-2, SMW-3, and SMW-4 are summarized in Table 2 and on Figure 3.

TEPH was not detected at a concentration above 50 micrograms per liter ("ug/L") in the groundwater samples collected on 21 August 2002 from downgradient monitoring wells SMW-1 and SMW-3. TEPH was detected at concentrations of 69 ug/L and 8,000 ug/L in the groundwater samples collected from monitoring wells SMW-2 and SMW-4, respectively. As indicated above, the groundwater sample from monitoring well SMW-4 was collected through a stilling tube because of the presence of a thin layer of floating product. Although the measured TEPH concentrations from well SMW-4 should represent levels dissolved in groundwater on the southern property boundary, it is possible that free-phase hydrocarbons became entrained in the sample collected from well SMW-4.

As shown in Table 2 and on Figure 3, the TEPH data from the 21 August 2002 monitoring event for monitoring wells SMW-1, SMW-2, and SMW-3 are generally consistent with historic Site data. The TEPH concentration that was detected in groundwater from well SMW-4 was similar to the concentration detected in February 2002, but an order of magnitude greater than concentrations found in the previous four groundwater sampling events. Although the concentrations detected in samples collected from well SMW-4 in 2002 are significantly elevated compared to 2001 data, they are consistent with concentrations detected in site groundwater samples collected prior to redevelopment (see Figure 3). Thus, 2001 data may reflect transient conditions, while 2002 data may reflect long-term norms. As noted above, the apparent increase in TEPH concentrations at well SMW-4 have not resulted in an increase in TEPH concentrations downgradient of the site (i.e. in wells SMW-1 through SMW-3).

Although the RMP allows the groundwater monitoring schedule to proceed from semi-annual to annual sampling events after the second year of monitoring, EKI recommends that monitoring continue on a semi-annual basis to verify that downgradient well concentrations remain stable.

3.3 Quality Control Results

All QA/QC analytical results, including laboratory blanks, blank spikes, and surrogates were within (a) generally accepted laboratory QA/QC protocols and (b) requirements of the laboratory's internal quality control procedures. The data collected during the 21 August 2002 monitoring event are considered acceptable and useable for their intended purpose.

TABLE 1
SUMMARY OF GROUNDWATER ELEVATION DATA

64th Street Properties, Emeryville, California

Well Number	Date	Well Elevation (1) (Feet Above MSL)	Depth to Water (Feet)	Groundwater Elevation (Feet Above MSL)
SMW-1	1-Feb-01	12.21	5.68	6.53
	24-May-01	12.21	5.67	6.54
	7-Aug-01	12.21	5.92	6.29
	2-Nov-01	12.21	5.78	6.43
	5-Feb-02	12.21	6.12	6.09
	21-Aug-02	12.21	5.95	6.26
SMW-2	1-Feb-01	11.54	4.67	6.87
	24-May-01	11.54	4.92	6.62
	7-Aug-01	11.54	5.35	6.19
	2-Nov-01	11.54	5.08	6.46
	5-Feb-02	11.54	5.25	6.29
	21-Aug-02	11.54	5.23	6.31
SMW-3	1-Feb-01	12.31	5.60	6.71
	24-May-01	12.31	5.63	6.68
	7-Aug-01	12.31	6.10	6.21
	2-Nov-01	12.31	5.95	6.36
	5-Feb-02	12.31	6.11	6.20
	21-Aug-02	12.31	6.05	6.26
SMW-4	1-Feb-01	12.25	2.41 (2)	9.84 (2)
	24-May-01	12.25	2.43 (2)	9.82 (2)
	7-Aug-01	12.25	2.20 (2)	10.05 (2)
	2-Nov-01	12.25	2.10 (2)	10.15 (2)
	5-Feb-02	12.25	2.43 (2)	9.82 (2)
	21-Aug-02	12.25	2.23 (2)	10.02 (2)

Notes:

(1) Surveyed elevation from mark on the top of the PVC casing; feet above mean sea level.

(2) A thin layer of floating product was observed in this well. The floating product thickness was less than 0.03 feet.

TABLE 2
SUMMARY OF GROUNDWATER CHEMICAL ANALYTICAL DATA - TEPH

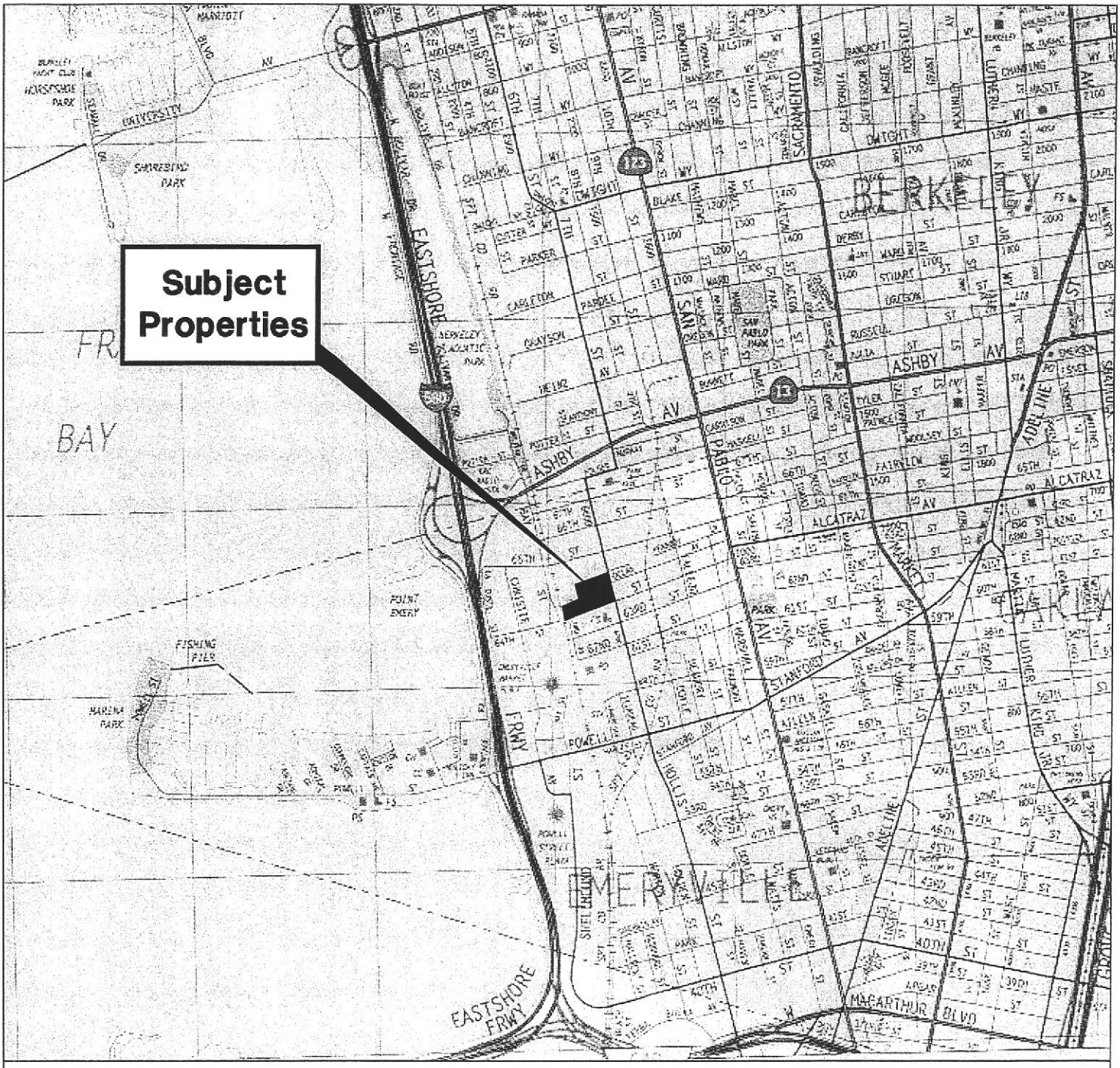
64th Street Properties, Emeryville, California

Date	TEPH (ug/L) (1)			
	SMW-1	SMW-2	SMW-3	SMW-4
1-Feb-01	<50	<50	**140**	**360**
24-May-01	<50	<50	**74**	**300**
7-Aug-01	<50	<50	**140**	**280**
2-Nov-01	<50	<50	<50	**260**
5-Feb-02	<50	**84**	**100**	**3,600**
21-Aug-02	<50	**69**	<50	**8,000**

Notes and abbreviations:

(1) TEPH is quantified as diesel. Samples were analyzed by EPA Method 8015M after performance of a silica gel cleanup in the laboratory.

TEPH = total extractable petroleum hydrocarbons
ug/L = micrograms per liter (ppb)
<50 = not detected at laboratory detection limit of 50 ug/L



Basemap Source: Thomas Guide Maps.

N

0 2000 4000

(Approximate Scale in Feet)

Notes:

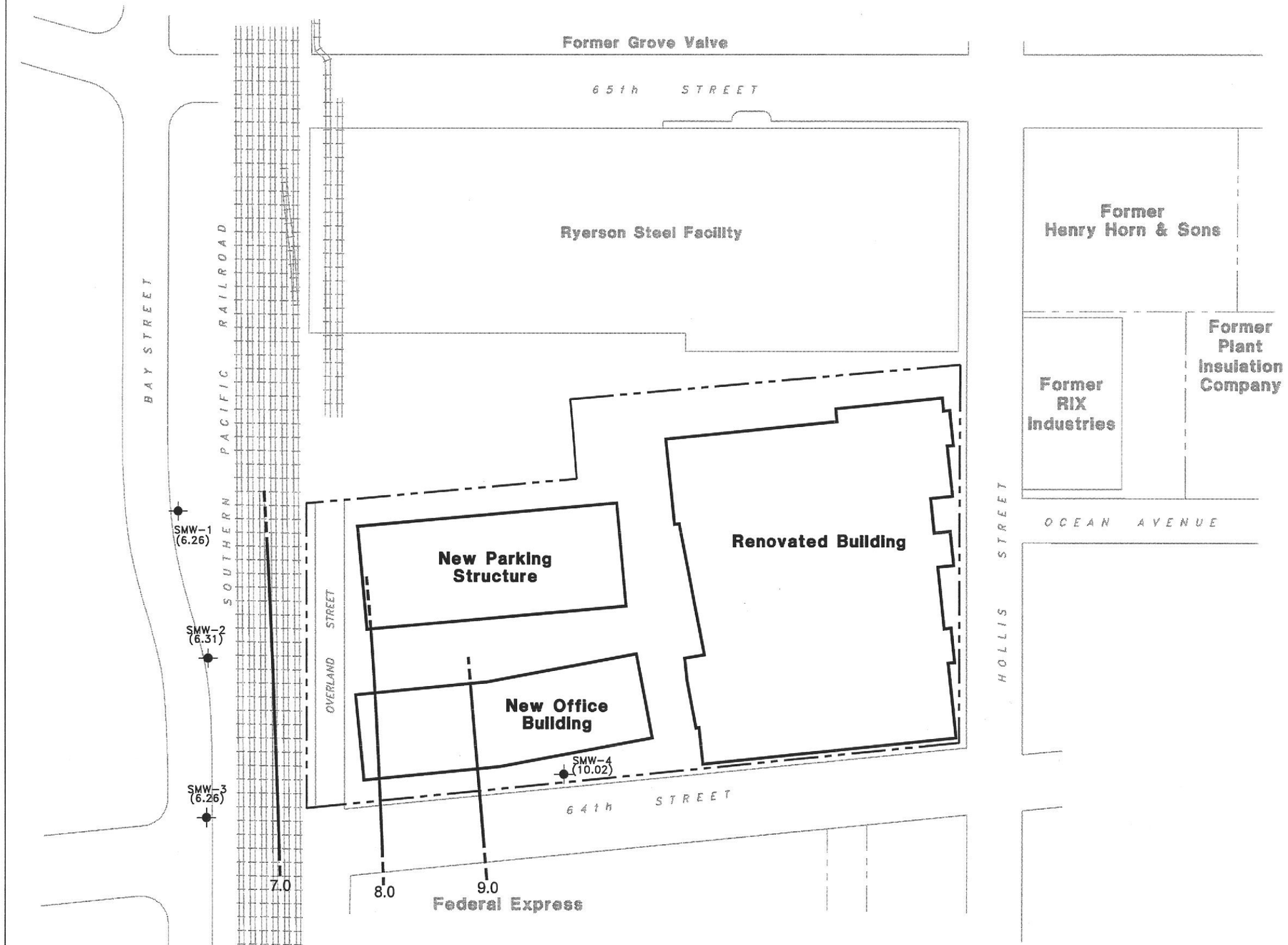
1. All locations are approximate.

Erler & Kalinowski, Inc.

Site Location

64th Street Properties
Emeryville, CA
October 2002
EKI 990016.05
Figure 1

G:\990016.05\Oct02\Fig-1 Site Location.dwg



N

0 120 240

(Approximate Scale in Feet)

LEGEND

- Railroad Tracks
- Approximate Property Boundary
- Boundary of 64th Street Properties
- 7.0 — Estimated Groundwater Potentiometric Surface, in Feet Above Mean Sea Level
- Monitoring Well Constructed After Redevelopment
- (6.31) Water Level in Feet Above Mean Sea Level

Notes:

1. All locations are approximate.
2. Basemap taken from Sanborn maps dated 1911 and 1967.
3. Groundwater elevations measured 21 August 2002.

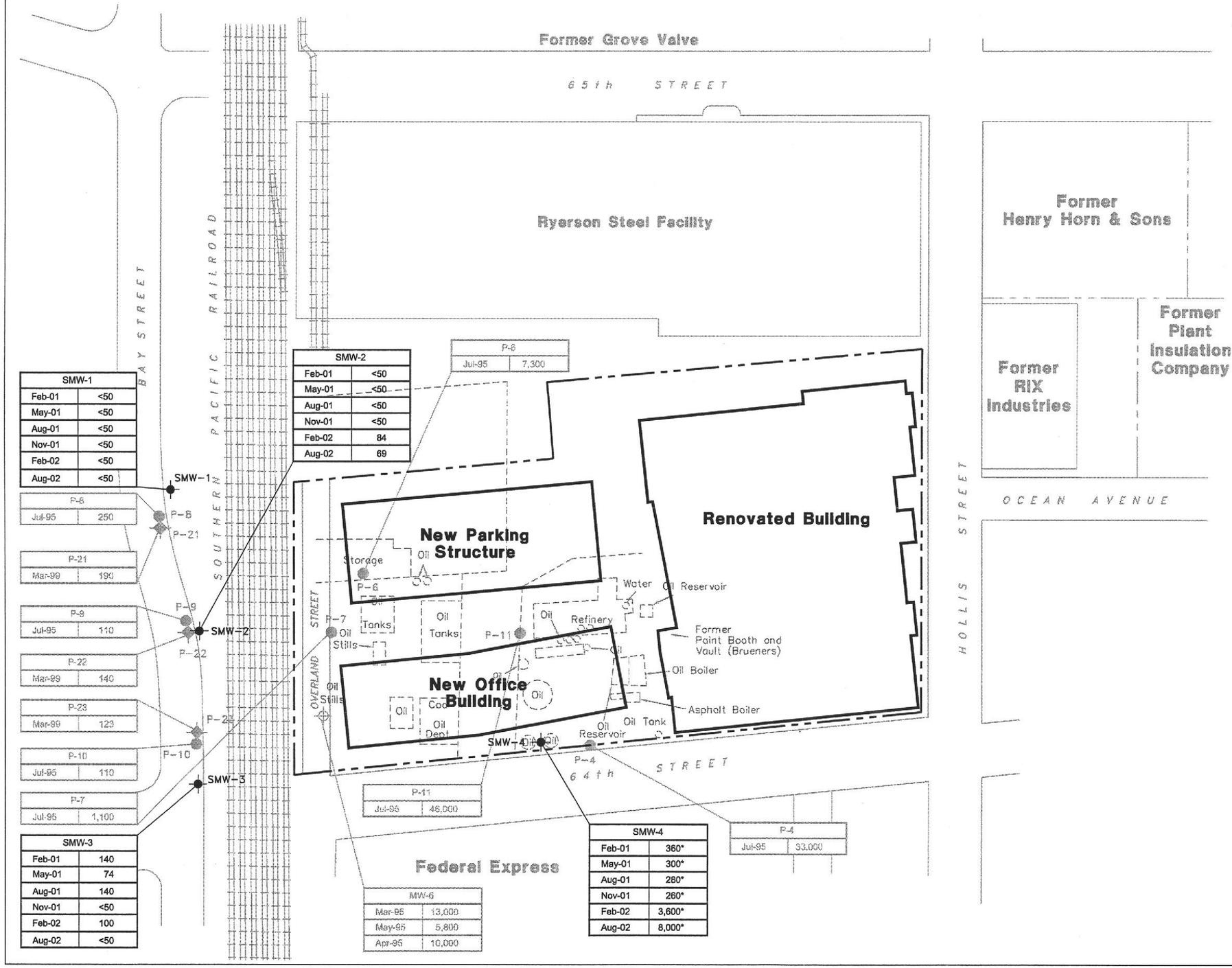
Erler & Kalinowski, Inc.

Estimated Groundwater Potentiometric Surface Contour Map

64th Street Properties
Emeryville, CA
October 2002
EKI 990016.05

Figure 2

G:\990016.05\Oct02\Fig-2 Estimated Groundwater.dwg



N

0 120 240

(Approximate Scale in Feet)

LEGEND

- Railroad Tracks
- Approximate Property Boundary
- Boundary of 64th Street Properties
- Historical Site Features (1911 Sanborn Map)
- Grab Groundwater Sampling Location Collected by EKI, 1995
- Grab Groundwater Sampling Location Collected by EKI, 1999
- Monitoring Well Destroyed Prior to Redevelopment
- Monitoring Well Constructed After Redevelopment

Notes:

1. All locations are approximate.
2. Basemap taken from Sanborn maps dated 1911 and 1967.
3. Concentrations are in ug/L.
4. "*" Indicates that a sheen was observed in this well. Groundwater sample was collected through a stilling tube.

Erler & Kalinowski, Inc.

Concentrations of Total Extractable Petroleum Hydrocarbons in Groundwater

64th Street Properties
Emeryville, CA
October 2002
EKI 990016.05

Figure 3

G:\990016.05\Oct02\Fig-3 Concentration Total Extractable.dwg

APPENDIX A

Groundwater Purge Sample Forms for 21 August 2002

Daily Inspection Report No. COPY

Erler & Kalinowski, Inc.

Sheet: 1 of

Date: 8/21/12

Project: Simeon Emeryville

EKI Job No.: 990016.04

Contractor:

EKI Staff On-site: Roger Lin

Weather: CLEAR

Temperature: F Max F Min

Work Hours: 08:50 to 16:00 Memos Issued:

Photos: 0

Special Conditions, Delays, Changes: LIMITED ACCESS TO DRUM STORAGE AREA

Accidents, Damage: —

Sampling, Testing: PURGE & SAMPLE SMW-1, -2, -3, -4

Visitors to Site: —

Work Report (Work done, Personnel/Equipment working):

08:50 ARRIVED ON SITE, OPENED WELLS AND MEASURED WELLS SMW-1 → 3

09:20 PURGED & SAMPLED SMW-1. SAMPLE PLACED IN COOLER W/ ICE.

10:38 PURGED & SAMPLED SMW-2.

11:43 PURGED & SAMPLED SMW-3.

12:30 TRANSFERRED PURGED WATER TO A DRUM IN THE GARAGE STORAGE ROOM USING BUCKETS, AS ACCESS WAS RESTRICTED

14:08 STARTED PURGING SMW-4. THERE WAS A STRONG PETROLEUM ODOR, SLIGHT SHEEN AND A BLACK FLOATING SLIME (BIO SLIME?). AFTER ENDING THE PURGE I PLACED A 2-INCH X 5-FT PVC PIPE, WRAPPED AND TAPED WITH A LAYER OF ALUMINUM FOIL ON ONE END INTO THE WELL. I DROPPED A NEW DISPOSABLE BAILER THROUGH THE FOIL LAYER AND COLLECTED A SAMPLE.

15:40 ADDITIONAL PURGED WATER WAS PLACED IN A SECOND DRUM IN THE STORAGE AREA IN THE PARKING GARAGE.

15:48 I SECURED THE STORAGE AREA.

16:53 SAMPLES WERE LOGGED IN TO CURTIS & TOMPKINS LAB.

Distribution: Project Inspection File (orig)
Project Manager

By: Roger Lin

GROUNDWATER LEVEL SURVEY

Job Name: SIMEON ENERGYVILLE Date: 8/21/2

EKI Job No.: 990016.00 Personnel: RDL

Well Number: / Condition of well:	SMW-1	SMW-2	SMW-3		SMW-4					
Type of Cover	FLUSH BOLTED 15/16	FLUSH BOLTED 9/16	FLUSH BOLTED 9/16		FLUSH BOLTED 9/16					
Covered?	YES	YES	YES		YES					
Locked?	YES	YES	YES		YES					
Sealed?	YES	YES	YES		YES					
Standing water?	YES	YES	NO		YES					
Dia. of casing	4 INCH	4 INCH	4 INCH		4 INCH					
Measuring point	MARK, TOP OF CASING →				MARK TOP OF CASING					
Elevation of well										
Time opened	09:04	09:06	08:58		14:05					
Time of measurement	09:18	09:23	09:25		14:08					
Depth probe used	#5	#5	#5		#5					
Depth to water	5.95	5.23	6.05		2.23					
Depth of well										

COMMENTS:

EKI

GROUNDWATER PURGE SAMPLE FORM

PROJECT NAME: SMEDN, EMERYVILLE DATE: 8/21/12

PROJECT NUMBER: 990016.00 WELL NUMBER: SMW-1 PERSONNEL: RD. Lucia

WELL VOLUME CALCULATION:

Depth of Well (ft.)		Depth to Water (ft.)		Water Column (ft.)	Multiplier (below)	Casing Vol. (gallons)
15.23	-	5.95	=	9.28	* 0.64	= 5.94

Mult. for casing diam. = 1-inch = 0.041; 2-inch = 0.16; 4-inch = 0.64

PURGE METHOD:

Submersible pump ___ Dedicated Bailer X

Peristaltic pump X Other ___

PURGE DEPTH: ~7 ft

START TIME: 09:20 END TIME: 10:26

TOTAL GALLONS PURGED: 15.8

INSTRUMENT CALIBRATION

Instrument	Field measure	Standard measure
Conductivity, (millimhos/cm @ 25C)	1.092	1.000
pH	4.01	4.01
pH	7.01	7.01
Turbidity, NTU	0.02	0.02
Temperature Depth Probe#	EKI 5	

SAMPLES:

Field I.D.	Time Collected	Containers & Preservation
SMW-1	10:27	~~3 - 40 ml VOAs w/ HCL~~ 1 - 1-liter amber glass

SAMPLE METHOD: Dedicated Bailer X Peristaltic Pump ___ other ___

COMMENTS:

Time	09:29	09:40	09:53	09:58	10:07	10:26		
Volume Purged (gallons)	2.2	5.0	8.1	10.0	13.0	15.8		
Temperature (degrees C)	20.8	20.7	20.6	20.4	20.7	20.4		
pH	6.93	7.01	6.94	7.02	7.08	7.14		
Specific Conductivity @ 25 C (millimhos/cm)	0.882	0.894	0912	0.970	0.953	0.958		
Turbidity (NTU) /Appearance	8.15	4.85	1.82	53.8	15.7	6.04		
Depth to Water during purge (feet)	6.36	6.37	6.40	6.60	6.42	6.40		
Number of Casing Volumes removed	0.37	0.84	1.36	1.68	2.19	2.66		
Purge Rate (gallons/minute)	0.24	0.25	0.24	0.38	0.33	0.47		

2 BAILERS OF WATER REMOVED.

ekI

GROUNDWATER PURGE SAMPLE FORM

PROJECT NAME: Simeon, Emeryville — DATE: 8/21/12

PROJECT NUMBER: 990016.00 — WELL NUMBER: SMW-2 — PERSONNEL: R.D. Lloyd

WELL VOLUME CALCULATION:

Depth of Well (ft.)	Depth to Water (ft.)		Water Column (ft.)		Multiplier (below)		Casing Vol. (gallons)
15.13	5.23	=	9.9	*	0.64	=	6.64

Mult. for casing diam. = 1-inch = 0.041; 2-inch = 0.16; 4-inch = 0.64

PURGE METHOD:

Submersible pump ___ ~~Both~~ Dedicated Bailer X

Peristaltic pump X Other ___

PURGE DEPTH: VARIABLE, TO BOTTOM

START TIME: 10:38 END TIME: 11:24

TOTAL GALLONS PURGED: 17.1

INSTRUMENT CALIBRATION

Instrument	Field measure	Standard measure
Conductivity, (millimhos/cm @ 25C)		
pH		
pH		
Turbidity, NTU		
Temperature		
Depth Probe#		

(SEE SMW-1)

SAMPLES:

Field I.D.	Time Collected	Containers & Preservation
SMW-2	11:28	~~3 x 40 mL VOAs w/ HCl~~ 2 - 1-liter amber glass

SAMPLE METHOD: Dedicated Bailer X Peristaltic Pump ___ other ___

COMMENTS:

Time	10:45	10.55	11:08	11:17	11:24			
Volume Purged (gallons)	4.2	7.5	12.2	15.5	17.1			
Temperature (degrees C)	20.4	20.5	20.4	20.5	20.5			
pH	6.80	6.81	6.70	6.72	6.68			
Specific Conductivity @ 25 C (millimhos/cm)	0.749	0.742	0.761	0.747	0.745			
Turbidity (NTU) /Appearance	36.5	17.3	82.3	73.4	46.3			
Depth to Water during purge (feet)	5.92	5.76	5.72	6.05	5.72			
Number of Casing Volumes removed	0.66	1.18	1.93	2.45	2.70			
Purge Rate (gallons/minute)	0.60	0.33	0.36	0.37	0.23			

ekl

GROUNDWATER PURGE SAMPLE FORM

PROJECT NAME:

PROJECT NUMBER: 990016.00 WELL NUMBER: SMW-3

DATE: 8/21/12

PERSONNEL: R.D.Lion

WELL VOLUME CALCULATION:

Depth of Well (ft.)	Depth to Water (ft.)		Water Column (ft.)	Multiplier (below)		Casing Vol. (gallons)
15.21	- 6.04	=	9.17	* 0.64	=	5.87

Mult. for casing diam. = 1-inch = 0.041; 2-inch = 0.16; 4-inch = 0.64

PURGE METHOD: BOTH

Submersible pump ✓ Dedicated Bailer X

Peristaltic pump X Other _____

PURGE DEPTH: _____

START TIME: 11:43 END TIME: 12:38

TOTAL GALLONS PURGED: 15

INSTRUMENT CALIBRATION

Instrument	Field measure	Standard measure
Conductivity, (millimhos/cm @ 25C)		
pH		
pH	(SEE MW-1)	
Turbidity, NTU		
Temperature		
Depth Probe#		

SAMPLES:

Field I.D.	Time Collected	Containers & Preservation
SMW-3	12:40	~~3 - 40 ml VOAs w/ HCl~~ 1 - 1-liter amber glass

SAMPLE METHOD: Dedicated Bailer X Peristaltic Pump ___ other ___

COMMENTS:

Time	11:58	12:08	12:17	12:28	12:38			
Volume Purged (gallons)	5.5	8.0	10.0	13.0	15.			
Temperature (degrees C)	23.2	22.5	22.4	22.5	22.3			
pH	7.05	7.03	6.79	7.12	6.91			
Specific Conductivity @ 25 C (millimhos/cm)	1.007	1.012	0.915	0.766	0.812			
Turbidity (NTU) /Appearance	12.8 PETROLEUM ODOR	7.3	1.64	3.95	2.12			
Depth to Water during purge (feet)	8.4	8.45	8.52	8.81	8.77			
Number of Casing Volumes removed	0.94	1.36	1.70	2.22	2.56			
Purge Rate (gallons/minute)	0.37	0.25	0.22	0.27	0.20			

ekl

GROUNDWATER PURGE SAMPLE FORM

PROJECT NAME: Simeon, Emeryville DATE: 8/21/2
PROJECT NUMBER: 990016.00 WELL NUMBER: SMW-4 PERSONNEL: RDLyon

WELL VOLUME CALCULATION:

Depth of Well (ft.)		Depth to Water (ft.)		Water Column (ft.)		Multiplier (below)		Casing Vol. (gallons)
15	-	2.23	=	12.77	*	0.64	=	8.17

Mult. for casing diam. = 1-inch = 0.041; 2-inch = 0.16; 4-inch = 0.64

PURGE METHOD:
Submersible pump ___ Dedicated Bailer X (BOTH)
Peristaltic pump X Other ___

PURGE DEPTH: TO BOTTOM W/ BAILER, PERISTALTIC PUMP FROM TOP

START TIME: 14:08 END TIME: 14:58

TOTAL GALLONS PURGED: 12.0

INSTRUMENT CALIBRATION

Instrument	Field measure	Standard measure
Conductivity, (millimhos/cm @ 25C)		
pH		
pH		
Turbidity, NTU		
Temperature		
Depth Probe#		

(SEE MW-1)

SAMPLES:

Field I.D.	Time Collected	Containers & Preservation
SMW-4	15:04	~~3 - 40-ml VOAs w/ HCL~~ 1 - 1-liter amber glass

SAMPLE METHOD: ~~Dedicated~~ NEW Bailer X Peristaltic Pump ___ other X THROUGH STILLING TUBE

COMMENTS:

Time	14:25	1442	14:55					
Volume Purged (gallons)	4.0	8.0	11.0					
Temperature (degrees C)	20.8	20.6	20.6					
pH	6.70	6.71	6.49					
Specific Conductivity @ 25 C (millimhos/cm)	1.105	1.119	1.112					
Turbidity (NTU) /Appearance	SLIGHT SHEEN, BLACK BIOSLIME, PETROLEUM-LIKE ODOR							
Depth to Water during purge (feet)	2.62	—	—					
Number of Casing Volumes removed	0.49	0.98	1.35					
Purge Rate (gallons/minute)	0.24	0.24	0.23					

Erler & Kalinowski, Inc.

CHAIN OF CUSTODY RECORD

CONSULTING ENGINEERS AND SCIENTISTS
1730 South Amphlett Blvd. Suite 320 San Mateo CA 94402 PHONE: 650-578-1172 FAX: 650-578-9131

Project Name	Project No.	ANALYSES REQUESTED	EKI COC No.
Simeon	9900016.04		
Project Location: Emeryville, CA	Laboratory: Curtis & ~~Tholen~~ TOMPKINS		
Report Results to: DERBY DAVIDSON	Sampled By: ROGER LION		

Field Sample Identification	Lab Sample No.	Date	Time	Type of Sample	No. of Containers / Preservative	EPA 8021 - VOCs	EPA 3630-Silica Gel Cleanup	EPA 8015M TPH diesel	EXPECTED TURNAROUND	Remarks
SMW-1		8/21/2	10:27	WATER	1 - 1-L amber	-	X	X	10 day	
SMW-2		8/21/2	11:28		2 - 1-L amber	-	X	X		
SMW-3		8/21/2	12:40		1 - 1-L amber	-	X	X		MAY CONTAIN HIGH CONCENTRATION
SMW-4		8/21/2	15:04		1 - 1-L amber	-	X	X		

Received ☑ On Ice ☑ Cold ☐ Ambient ☑ Intact

Preservation Correct? ☑ Yes ☐ No ☐ N/A

Special Instructions:

	Date	Time	
Relinquished by: (Signature)	8/21/2	15:53	Received by: (Signature) 8-21-02 3:53
Relinquished by: (Signature)	Date	Time	Received by: (Signature)
Relinquished by: (Signature)	Date	Time	Received by: (Signature)

APPENDIX B

Laboratory Analytical Reports and Chain of Custody Documents
for 21 August 2002

Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

Total Extractable Hydrocarbons

Lab #:	160321	Location:	EMERYVILLE, CA
Client:	Erler & Kalinowski, Inc.	Prep:	EPA 3520C
Project#:	9900016.04	Analysis:	EPA 8015B(M)
Matrix:	Water	Sampled:	08/21/02
Units:	ug/L	Received:	08/21/02
Diln Fac:	1.000	Prepared:	08/26/02
Batch#:	74755	Analyzed:	08/27/02

Field ID: SMW-1 Lab ID: 160321-001
Type: SAMPLE Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C10-C24	ND	50

Surrogate	%REC	Limits
Hexacosane	81	39-137

Field ID: SMW-2 Lab ID: 160321-002
Type: SAMPLE Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C10-C24	69 Y	50

Surrogate	%REC	Limits
Hexacosane	90	39-137

Field ID: SMW-3 Lab ID: 160321-003
Type: SAMPLE Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C10-C24	ND	50

Surrogate	%REC	Limits
Hexacosane	92	39-137

Field ID: SMW-4 Lab ID: 160321-004
Type: SAMPLE Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C10-C24	8,000 H Y	50

Surrogate	%REC	Limits
Hexacosane	116	39-137

Type: BLANK Cleanup Method: EPA 3630C
Lab ID: QC187890

Analyte	Result	RL
Diesel C10-C24	ND	50

Surrogate	%REC	Limits
Hexacosane	85	39-137

H= Heavier hydrocarbons contributed to the quantitation
Y= Sample exhibits fuel pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

1.0

Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

Total Extractable Hydrocarbons

Lab #:	160321	Location:	EMERYVILLE, CA
Client:	Erler & Kalinowski, Inc.	Prep:	EPA 3520C
Project#:	9900016.04	Analysis:	EPA 8015B(M)
Matrix:	Water	Batch#:	74755
Units:	ug/L	Prepared:	08/26/02
Diln Fac:	1.000	Analyzed:	08/27/02

Type: BS
Lab ID: QC187891
Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	2,500	1,830	73	37-120

Surrogate	%REC	Limits
Hexacosane	89	39-137

Type: BSD
Lab ID: QC187892
Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	2,500	1,789	72	37-120	2	26

Surrogate	%REC	Limits
Hexacosane	90	39-137

RPD= Relative Percent Difference

X-Authentication-Warning: lims.ctberk.com: nobody set sender to anna@ctberk.com using -f
Date: Thu, 29 Aug 2002 19:31:59 UT
From: "Anna M. Pajarillo" <anna@ctberk.com>
To: ddavidson@ekiconsult.com
Subject: Results for C&T Job 160321

Content-Disposition: inline
Content-Length: 69
Content-Transfer-Encoding: binary
Content-Type: text/plain

Attached is a PDF version of the hardcopy reports for C&T job 160321.

160321.pdf

Erler & Kalinowski, Inc.

CHAIN OF CUSTODY RECORD

CONSULTING ENGINEERS AND SCIENTISTS
1730 South Amphlett Blvd. Suite 320 San Mateo CA 94402 PHONE: 650-578-1172 FAX: 650-578-9131

Project Name: Simeon	Project No.: 9900016.04
Project Location: Emeryville, CA	Laboratory: Curtis & ~~Tibbetts~~ Tompkins
Report Results to: DERBy DAVIDSON	Sampled By: ROGER LION

Field Sample Identification	Lab Sample No.	Date	Time	Type of Sample	No. of Containers / Preservative	EPA 8021 - VOCs	EPA 3630-Silica Gel Cleanup	EPA 8015M TPH diesel	EXPECTED TURNAROUND	Remarks
SMW-1		8/21/2	10:27	WATER	1 - 1-L amber	-	X	X	10 day	
SMW-2		8/21/2	11:28		2 - 1-L amber	-	X	X		
SMW-3		8/21/2	12:40		1 - 1-L amber	-	X	X		MAY CONTAIN HIGH CONCENTRATION
SMW-4		8/21/2	15:04		1 - 1-L amber	-	X	X		

ANALYSES REQUESTED

EKI COC No.

Received ☑ On Ice ☑ Cold ☐ Ambient ☑ Intact

Preservation Correct? ☑ Yes ☐ No ☐ N/A

Special Instructions:

	Date	Time	
Relinquished by: (Signature)	8/21/2	15:53	Received by: (Signature) 8-21-02 3:53
Relinquished by: (Signature)	Date	Time	Received by: (Signature)
Relinquished by: (Signature)	Date	Time	Received by: (Signature)