

**LETTER OF TRANSMITTAL**

NOV 27 2001

**TO:** Susan Hugo  
Alameda County Health Agency  
Department of Environmental Health  
1131 Harbor Bay Parkway, 2<sup>nd</sup> Floor  
Alameda, California 94502

**DATE:** 20 November 2001  
**PROJ. NO.** 990016.04  
**PROJECT:** Simeon  
64<sup>th</sup> Street Properties  
Emeryville, California

**WE ARE SENDING YOU THE FOLLOWING:**

One Copy of the Quarterly Groundwater Monitoring Report for October to December 2001 for the 64<sup>th</sup> Street Properties located in Emeryville, California.

Please call Derby Davidson or myself at 650-292-9100 if you have any questions or need additional information.

Very truly yours,

**ERLER & KALINOWSKI, INC.**



Christopher Kubacki

*If enclosures are not as noted,  
please advise us at once.*

NOV 27 2001

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**Quarterly Groundwater Monitoring Report  
October to December 2001**

**64<sup>th</sup> Street Properties  
Emeryville, California**

Prepared for:

Simeon Commercial Properties  
San Francisco, California

Prepared by:

Erler & Kalinowski, Inc.  
(EKI 990016.04)

20 November 2001

**Erler &  
Kalinowski, Inc.**

---

Consulting Engineers and Scientists  
1870 Ogden Drive  
Burlingame, California 94010  
(650) 292-9100  
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20 November 2001

Ravi Arulanantham, Ph.D.  
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, 2<sup>nd</sup> Floor  
Alameda, California 94502

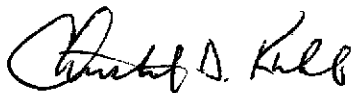
Subject: Quarterly Groundwater Monitoring Report  
October to December 2001  
64<sup>th</sup> Street Properties, Emeryville, California  
(EKI 990016.04)

Dear Dr. Arulanantham and Ms. Hugo:


On behalf of Simeon Commercial Properties, Erler & Kalinowski, Inc., is pleased to present this report summarizing results of quarterly groundwater monitoring activities conducted at the 64<sup>th</sup> Street Properties located at 1480 64<sup>th</sup> Street, Emeryville, California from October to December 2001. If you have any questions, please call.

Very truly yours,

ERLER & KALINOWSKI, INC.



Christopher D. Kubacki  
Staff Engineer



Derby Davidson, P.E.  
Project Engineer

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

**Quarterly Groundwater Monitoring Report  
 October to December 2001  
 64<sup>th</sup> Street Properties  
 Emeryville, California**

**1.0 INTRODUCTION..... 1**

**2.0 GROUNDWATER MONITORING ..... 1**

    2.1 Water Level Monitoring ..... 1

    2.2 Groundwater Sampling and Laboratory Analyses ..... 2

**3.0 EVALUATION OF HYDRAULIC GRADIENT AND GROUNDWATER SAMPLING RESULTS ..... 2**

    3.1 Hydraulic Gradient..... 2

    3.2 Groundwater Analytical Results ..... 2

    3.3 Quality Control Results ..... 3

**TABLES**

Table 1           Summary of Groundwater Elevation Data

Table 2           Summary of Groundwater Chemical Analytical Data

**FIGURES**

Figure 1           Site Location

Figure 2           Estimated Groundwater Potentiometric Surface Contour Map

Figure 3           Concentrations of Total Extractable Petroleum Hydrocarbons in Groundwater



**Quarterly Groundwater Monitoring Report  
October to December 2001  
64<sup>th</sup> Street Properties  
Emeryville, California**

**APPENDICES**

- Appendix A     Groundwater Purge Sample Forms for November 2001
- Appendix B     Laboratory Analytical Reports and Chain of Custody Documents for  
November 2001

## 1.0 INTRODUCTION

On behalf of Simeon Commercial Properties ("Simeon"), Erler & Kalinowski, Inc. ("EKI") is pleased to present this report summarizing the results of quarterly groundwater monitoring activities conducted at the 64<sup>th</sup> Street Properties located at 1480 64<sup>th</sup> Street in Emeryville, California ("Site") from October to December 2001. The location of the Site is shown on Figure 1.

Groundwater monitoring at the Site for this quarter was conducted in November 2001 and in accordance with the *Final Risk Management Plan for the 64<sup>th</sup> 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 installing four monitoring wells on the Site (i.e., SMW-1, SMW-2, SMW-3, and SMW-4), measuring water levels quarterly in these four monitoring wells, collecting groundwater samples quarterly from these wells, and analyzing the groundwater samples for total extractable petroleum hydrocarbons as diesel ("TEPH") quarterly and volatile organic compounds ("VOCs") annually. The approximate locations of these wells are shown on Figure 2. Data from these monitoring events are reported quarterly to the RWQCB and the ACDEH.

The objectives of the groundwater monitoring program are to monitor TEPH and VOC concentrations in groundwater at the perimeter and downgradient of the Site and verify the stability or decline of TEPH concentrations over time. During the October to December 2001 groundwater monitoring event, groundwater samples collected from the four monitoring wells were analyzed for TEPH. Groundwater samples were not analyzed for VOCs, as the RMP requires annual VOC analysis, which was performed in February 2001.

## 2.0 GROUNDWATER MONITORING

Quarterly 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 2 November 2001.

### 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 was 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 in November 2001 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 were 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., for TEPH with silica gel cleanup using EPA Method 8015M. Analytical results for the 2 November 2001 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 2 November 2001, (b) groundwater analytical results from on-Site groundwater monitoring conducted on 2 November 2001, 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 2 November 2001. 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 for November 2001.

### 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. Data presented on Figure 3 also include analytical results of grab groundwater samples

collected in 1995 and 1999, as presented in *Phase I and Phase II Environmental Site Assessment for 64<sup>th</sup> Street Properties*, dated 20 May 1999 ("ESA").

In November 2001, individual TEPH concentrations were not detected above 50 micrograms per liter ("ug/L") in groundwater samples collected from downgradient monitoring wells SMW-1, SMW-2, and SMW-3. TEPH was detected at 260 ug/L in the groundwater sample collected from monitoring well SMW-4 in November 2001. 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. The measured TEPH concentrations should represent levels dissolved in groundwater on the southern property boundary.

As shown on Figure 3, TEPH data from November 2001 are generally consistent with or have decreased in comparison to prior Site data. Significant off-site migration of TEPH from the former refinery does not appear to have occurred.

### 3.3 Quality Control Results

All QA/QC analytical results, including matrix spike/matrix spike duplicates, laboratory blanks, 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 November 2001 monitoring event are considered acceptable and useable for their intended use.



**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	01-Feb-01	12.21	5.68	6.53
	24-May-01	12.21	5.67	6.54
	07-Aug-01	12.21	5.92	6.29
	02-Nov-01	12.21	5.78	6.43
SMW-2	01-Feb-01	11.54	4.67	6.87
	24-May-01	11.54	4.92	6.62
	07-Aug-01	11.54	5.35	6.19
	02-Nov-01	11.54	5.08	6.46
SMW-3	01-Feb-01	12.31	5.60	6.71
	24-May-01	12.31	5.63	6.68
	07-Aug-01	12.31	6.10	6.21
	02-Nov-01	12.31	5.95	6.36
SMW-4	01-Feb-01	12.25	2.41 (2)	9.84 (2)
	24-May-01	12.25	2.43 (2)	9.82 (2)
	07-Aug-01	12.25	2.20 (2)	10.05 (2)
	02-Nov-01	12.25	2.10 (2)	10.15 (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.

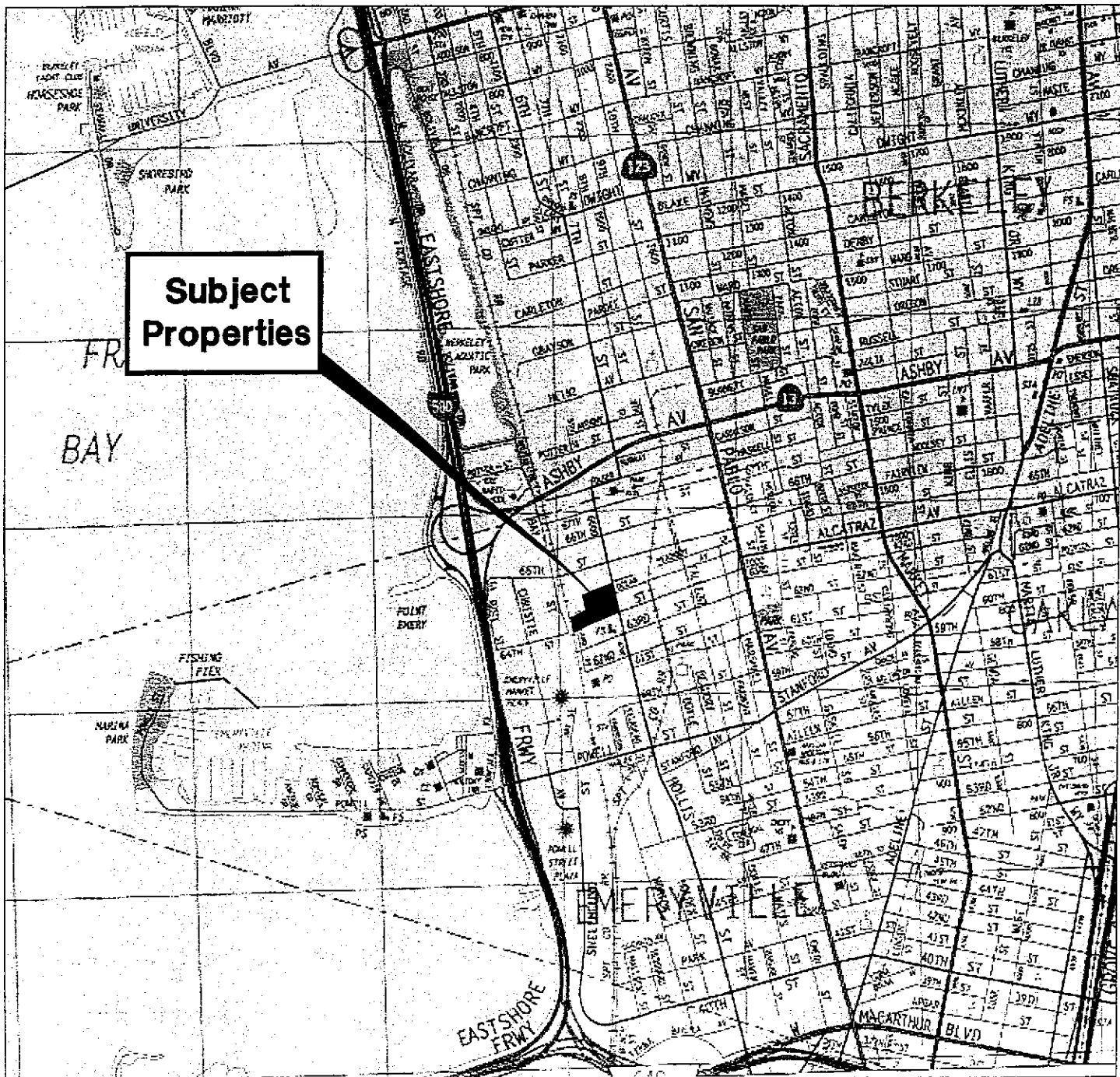
**TABLE 2**  
**SUMMARY OF GROUNDWATER**  
**CHEMICAL ANALYTICAL DATA**

64th Street Properties, Emeryville, California

Date	TEPH (ug/L) (1) (2)			
	SMW-1	SMW-2	SMW-3	SMW-4
01-Feb-01	<50 (3)	<50	140	360
24-May-01	<50	<50	74	300
07-Aug-01	<50	<50	140	280
02-Nov-01	<50	<50	<50	260

Notes and abbreviations:

- (1) TEPH = total extractable hydrocarbons (quantified as diesel). Samples were analyzed after performance of a silica gel cleanup in the laboratory.
- (2) ug/L = micrograms per liter (ppb)
- (3) <50 = not detected at laboratory detection limit of 50 ug/L



Basemap Source: Thomas Guide Maps.



0 2000 4000

(Approximate Scale in Feet)

# Erler & Kalinowski, Inc.

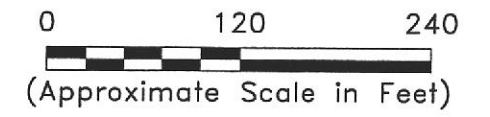
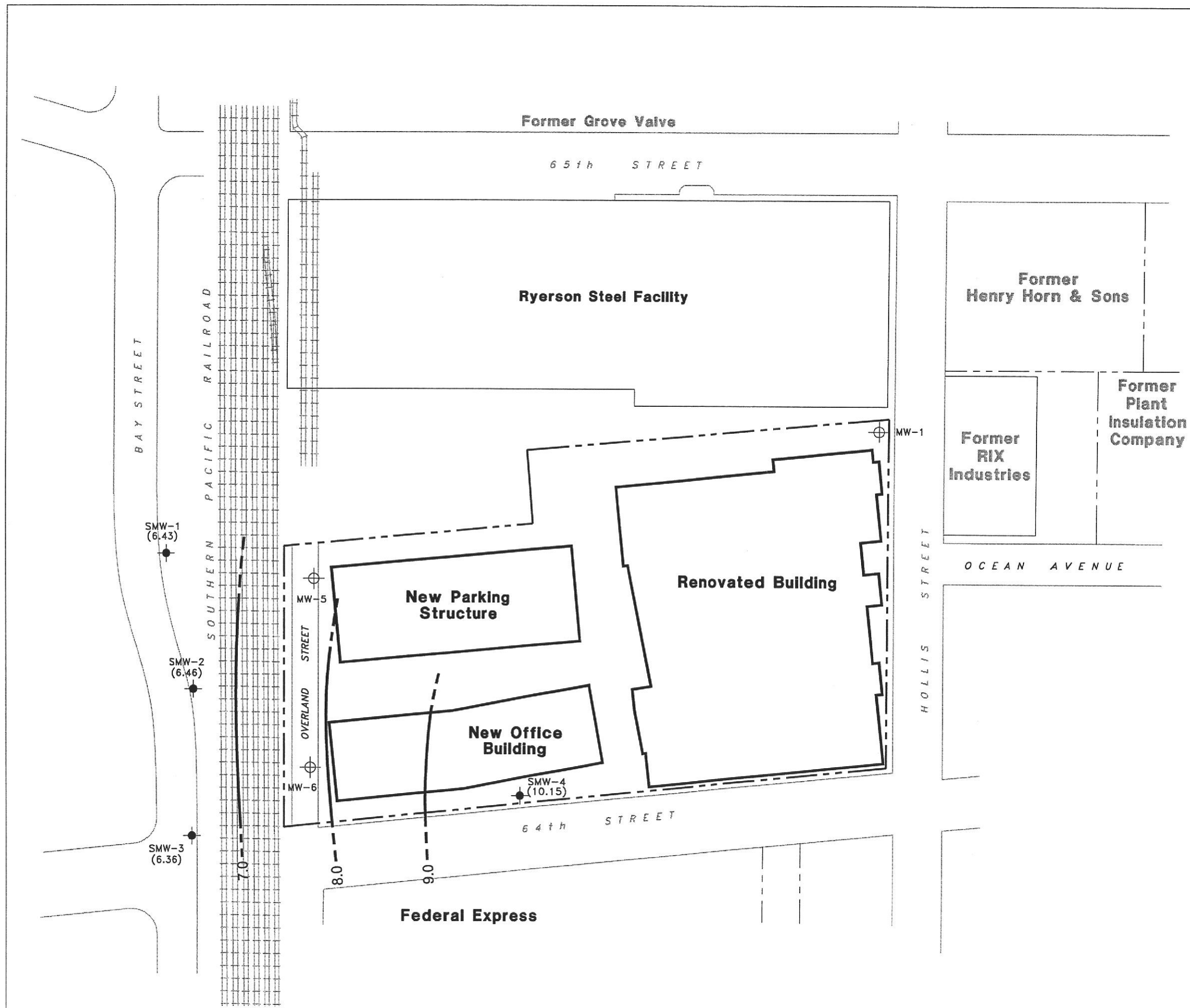
Site Location

64th Street Properties  
 Emeryville, CA  
 November 2001  
 EKI 990016.04

Figure 1

**Notes:**

1. All locations are approximate.



**LEGEND**

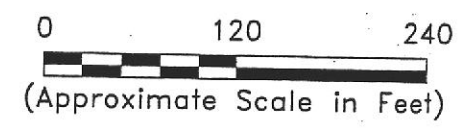
- Railroad Tracks
- Approximate Property Boundary
- Boundary of 64th Street Properties
- Monitoring Well Destroyed Prior to Redevelopment
- Monitoring Well Constructed After Redevelopment
- 7.0 Estimated Groundwater Potentiometric Surface, in Feet Above Mean Sea Level
- (10.15) Water Level in Feet Above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

**Notes:**

1. All locations are approximate.
2. Basemap taken from Sanborn maps dated 1911 and 1967.
3. Groundwater elevations measured 2 November 2001.

**Erler & Kalinowski, Inc.**

Estimated Groundwater Potentiometric Surface Contour Map  
 64th Street Properties  
 Emeryville, CA  
 November 2001  
 EKI 990016.04  
 Figure 2



**LEGEND**

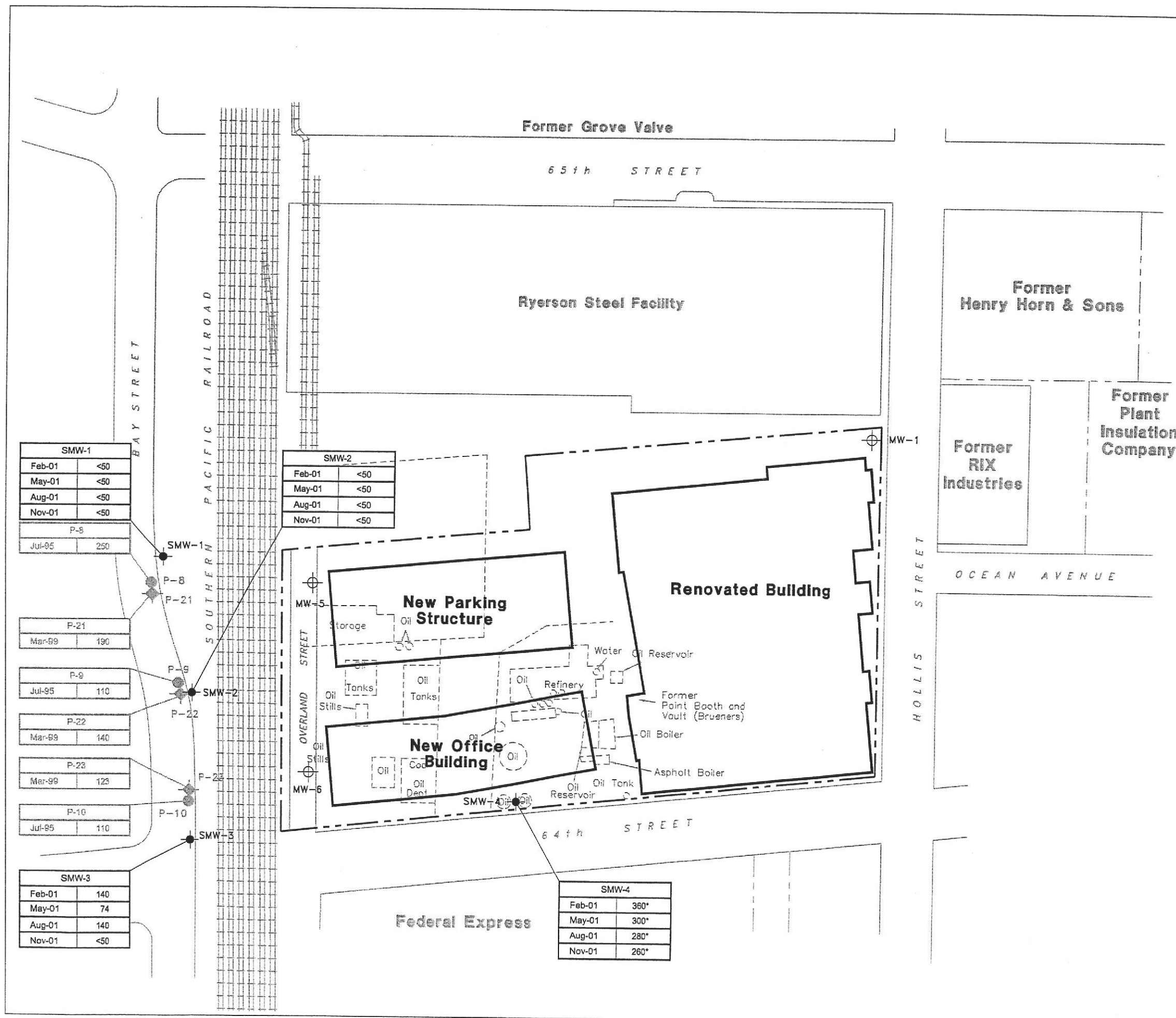
- Railroad Tracks
- Approximate Property Boundary
- Boundary of 64th Street Properties
- Historical Site Features (1911 Sanborn Map)
- Monitoring Well Destroyed Prior to Redevelopment
- Grab Groundwater Sampling Location Collected by EKI, 1995
- Grab Groundwater Sampling Location Collected by EKI, 1999
- 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  
 November 2001  
 EKI 990016.04  
 Figure 3



SMW-1	
Feb-01	<50
May-01	<50
Aug-01	<50
Nov-01	<50
P-3	
Jul-95	250

SMW-2	
Feb-01	<50
May-01	<50
Aug-01	<50
Nov-01	<50

P-21	
Mar-99	190

P-9	
Jul-95	110

P-22	
Mar-99	140

P-23	
Mar-99	123

P-10	
Jul-95	110

SMW-3	
Feb-01	140
May-01	74
Aug-01	140
Nov-01	<50

SMW-4	
Feb-01	360*
May-01	300*
Aug-01	280*
Nov-01	260*

**APPENDIX A**

Groundwater Purge Sample Forms for November 2001











**APPENDIX B**

Laboratory Analytical Reports and Chain of Custody Documents  
for November 2001



COPY

ANALYTICAL REPORT

Prepared for:

Erler & Kalinowski, Inc.  
1870 Ogden Drive  
Burlingame, CA 94010-5306

Date: 16-NOV-01  
Lab Job Number: 155232  
Project ID: 990016.04  
Location: Simeon. 64th street prop.

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis.

Reviewed by:

  
Project Manager

Reviewed by:

  
Operations Manager

This package may be reproduced only in its entirety.

155232

**Erlar & Kalinowski, Inc.**

**CHAIN OF CUSTODY RECORD**

CONSULTING ENGINEERS AND SCIENTISTS

1870 Ogden Drive, Burlingame, California 94010

PHONE: (650) 292-9100

FAX: (650) 552-9012

Project Name <i>Simon 64<sup>th</sup> Street Prop</i>		Project No. <i>990016-04</i>				ANALYSES REQUESTED						EKI COC No.	
Project Location <i>Emeryville, CA</i>		Laboratory <i>Curtis &amp; Tompkins</i>				<i>TPH/diesel w/ Silica Gel Cleanup EPA 8215M</i>						REQUESTED TURNAROUND	Remarks
Report Results to: <i>Perby Davidson</i>		Sampled By: <i>Chris Kubacki</i>											
Field Sample Identification	Lab Sample No.	Date	Time	Type of Sample	No. of Containers / Preservative								
<i>SMW-1</i>		<i>11/2/01</i>	<i>8:02</i>	<i>2 Ambient Water</i>	<i>2 Ambient liters</i>	<i>X</i>							<i>Stored w/ ice 10 days</i>
<i>SMW-2</i>		<i>"</i>	<i>9:12</i>	<i>"</i>	<i>2 Ambient liters</i>	<i>X</i>							<i>"</i>
<i>SMW-3</i>		<i>"</i>	<i>10:25</i>	<i>"</i>	<i>2 Ambient liters</i>	<i>X</i>							<i>"</i>
<i>SMW-4</i>		<i>"</i>	<i>12:38</i>	<i>"</i>	<i>2 Ambient liters</i>	<i>X</i>							<i>"</i>
<div style="border: 1px solid black; padding: 5px; display: inline-block; margin: 10px;"> <p>Received <input checked="" type="checkbox"/> Cold <input type="checkbox"/> Ambient <input type="checkbox"/> On Ice <input checked="" type="checkbox"/> Start</p> </div> <div style="border: 1px solid black; padding: 5px; display: inline-block; margin: 10px;"> <p>Preservation Correct? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p> </div>													
<b>Special Instructions:</b> <i>Analyze samples for TPH/diesel w/ Silica Gel Cleanup EPA 8215M</i>													
Relinquished by: (Signature) <i>Christine O'Keeffe</i>		Date <i>11/2/01</i>	Time <i>13:15</i>	Received by: (Signature) <i>Perby Davidson</i>									
Relinquished by: (Signature)		Date	Time	Received by: (Signature)									
Relinquished by: (Signature)		Date	Time	Received by: (Signature)									

**Total Extractable Hydrocarbons**

Lab #:	155232	Location:	Simeon. 64th street prop.
Client:	Erler & Kalinowski, Inc.	Prep:	EPA 3520C
Project#:	990016.04	Analysis:	8015B(M)
Matrix:	Water	Sampled:	11/02/01
Units:	ug/L	Received:	11/02/01
Diln Fac:	1.000	Prepared:	11/12/01
Batch#:	67919	Analyzed:	11/14/01

Field ID:	SMW-1	Lab ID:	155232-001
Type:	SAMPLE	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C10-C24	ND	50

Surrogate	%REC	Limits
Hexacosane	74	44-121

Field ID:	SMW-2	Lab ID:	155232-002
Type:	SAMPLE	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C10-C24	ND	50

Surrogate	%REC	Limits
Hexacosane	74	44-121

Field ID:	SMW-3	Lab ID:	155232-003
Type:	SAMPLE	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C10-C24	ND	50

Surrogate	%REC	Limits
Hexacosane	71	44-121

Field ID:	SMW-4	Lab ID:	155232-004
Type:	SAMPLE	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C10-C24	260 Y	50

Surrogate	%REC	Limits
Hexacosane	70	44-121

Type:	BLANK	Cleanup Method:	EPA 3630C
Lab ID:	QC161972		

Analyte	Result	RL
Diesel C10-C24	ND	50

Surrogate	%REC	Limits
Hexacosane	86	44-121

Y= Sample exhibits fuel pattern which does not resemble standard

ND= Not Detected

RL= Reporting Limit

# Chromatogram

Sample Name : 155232-004sg, 67919

Sample #: 67919

Page 1 of 1

FileName : G:\GC15\CHB\316B076.RAW

Date : 11/14/2001 06:32 PM

Method : BTEH309.MTH

Time of Injection: 11/14/2001 05:53 PM

Start Time : 0.01 min

End Time : 31.91 min

Low Point : 31.62 mV

High Point : 184.75 mV

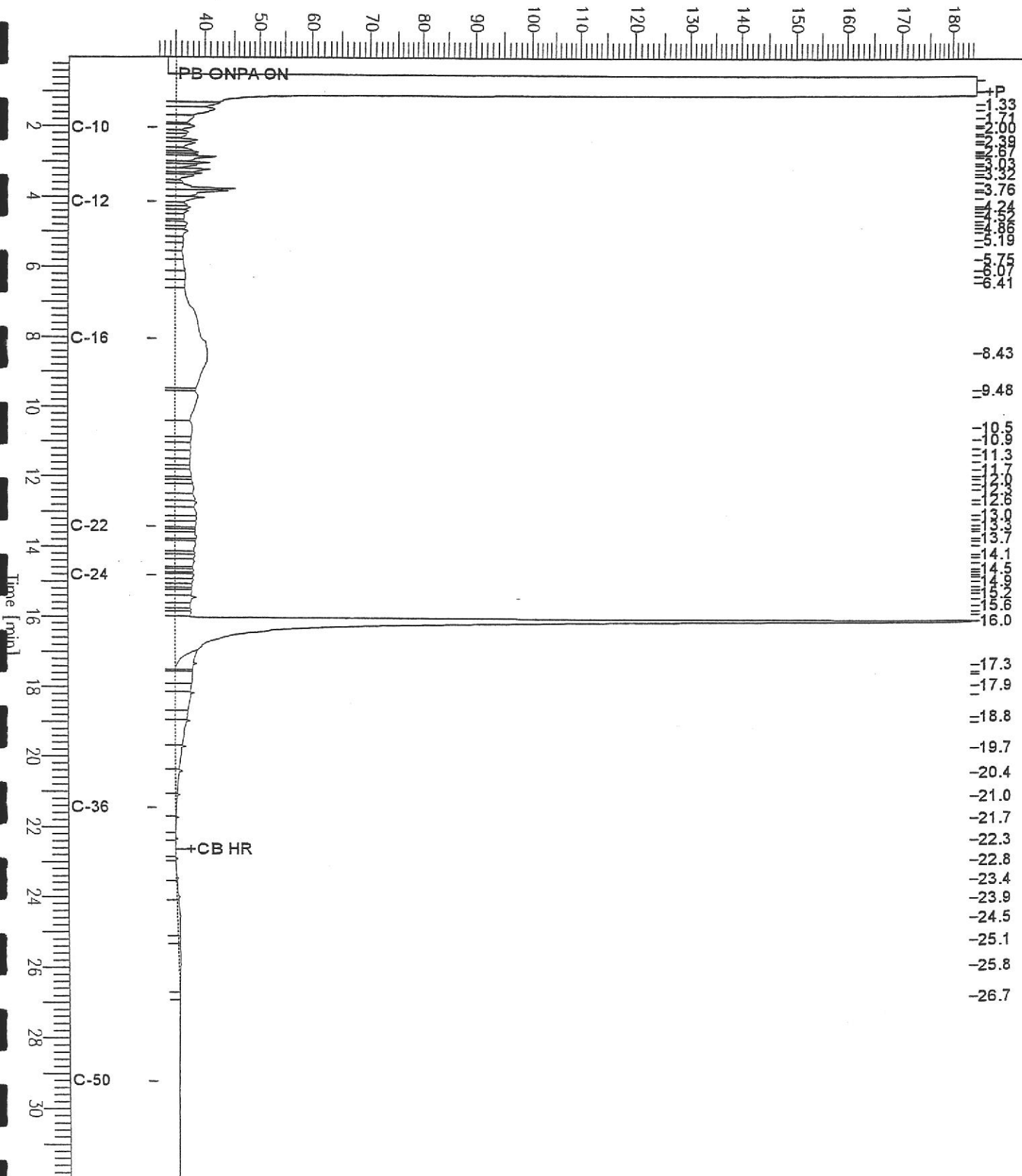
Scale Factor: 0.0

Plot Offset: 32 mV

Plot Scale: 153.1 mV

SMW-4

Response [mV]



# Chromatogram

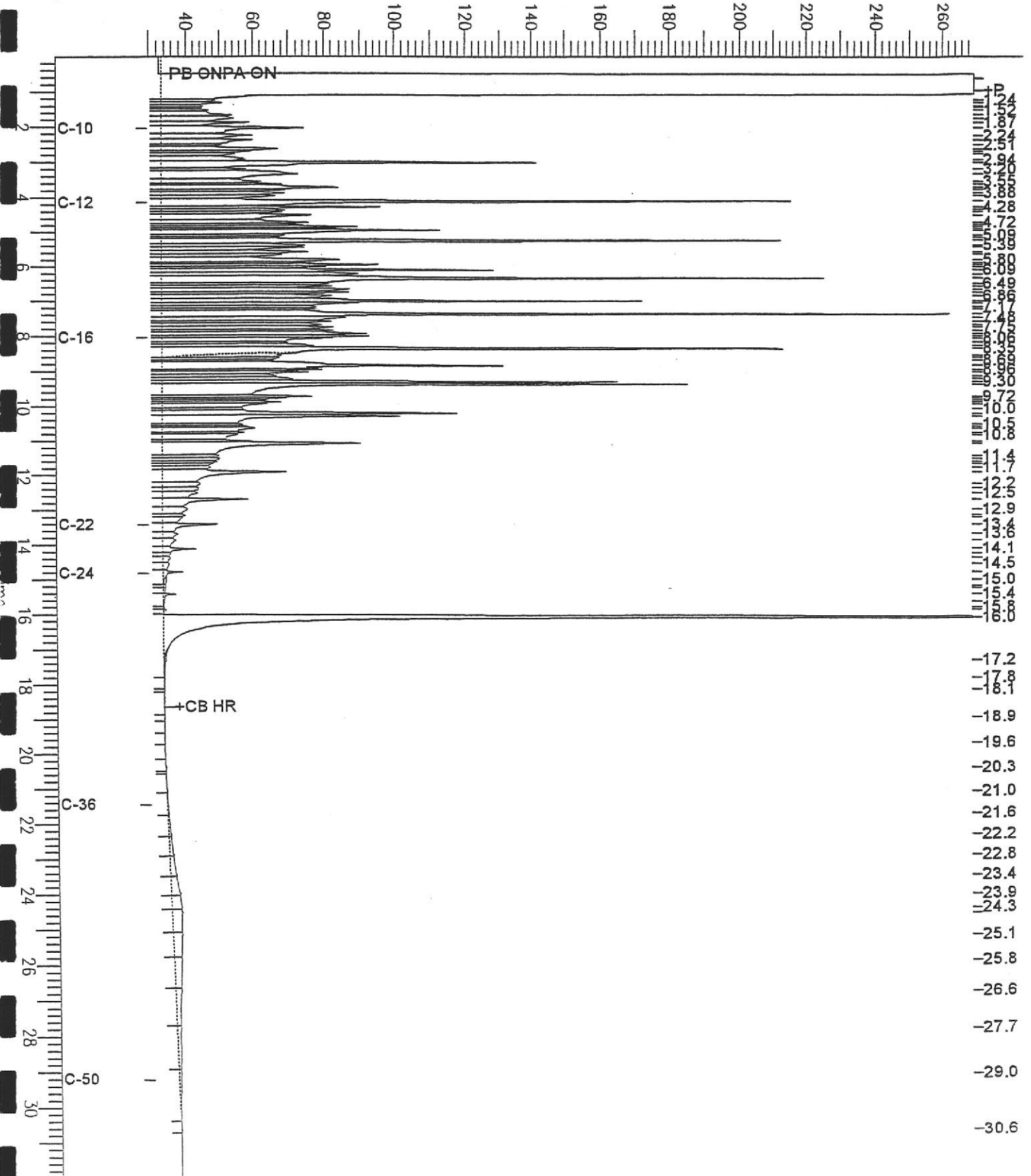
File Name : ccv\_01ws2062.dsl  
Sample Name : G:\GC15\CHB\316B003.RAW  
Method : BTEH309.MTH  
Start Time : 0.01 min  
Scale Factor : 0.0

End Time : 31.91 min  
Plot Offset : 30 mV

Sample #: 500mg/L  
Date : 11/12/2001 12:59 PM  
Time of Injection: 11/12/2001 12:19 PM  
Low Point : 29.63 mV  
High Point : 269.46 mV  
Plot Scale: 239.8 mV

*Diesel*

Response [mV]







Total Extractable Hydrocarbons

Lab #:	155232	Location:	Simeon. 64th street prop.
Client:	Erler & Kalinowski, Inc.	Prep:	EPA 3520C
Project#:	990016.04	Analysis:	8015B(M)
Matrix:	Water	Batch#:	67919
Units:	ug/L	Prepared:	11/12/01
Diln Fac:	1.000	Analyzed:	11/14/01

Type: BS Cleanup Method: EPA 3630C  
 Lab ID: QC161973

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	2,500	1,665	67	45-110

Surrogate	%REC	Limits
Hexacosane	72	44-121

Type: BSD Cleanup Method: EPA 3630C  
 Lab ID: QC161974

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	2,500	1,694	68	45-110	2	22

Surrogate	%REC	Limits
Hexacosane	72	44-121