Erler & Kalinowski, Inc.

Consulting Engineers and Scientists

3 February 1997

1730 So. Amphlett Blvd., Suite 320 San Mateo, California 94402 (415) 578-1172 Fax (415) 578-9131

Susan Hugo Senior Hazardous Materials Specialist Alameda County Department of Environmental Health 1131 Harbor Bay Parkway Alameda, California 94502

RECEIVED

By lopprojectop at 8:15 am, Jun 12, 2006

Subject:

Additional Groundwater Monitoring Report, First Round 6601 and 6603 Bay Street, Emeryville, California

(EKI 950074.00)

Dear Ms. Hugo:

This letter report presents groundwater monitoring results for the first round of additional groundwater monitoring being performed on behalf of Sybase, Inc. This monitoring is associated with the three former underground storage tanks ("USTs") at the 6601 and 6603 Bay Street properties in Emeryville, California (the "Site") (Figure 1). This report is submitted in accordance with Erler & Kalinowski, Inc.'s letter, dated 18 December 1997.

Groundwater samples were collected from groundwater monitoring wells MW-5 and MW-7 (Figure 2) on 27 December 1997. Copies of the field notes are included in Attachment A. The samples were labeled, placed in a cooler with ice, and transported under chain-of-custody procedures to Sequoia Analytical Laboratory in Redwood City, California, for analysis. The samples were analyzed for total extractable petroleum hydrocarbons quantified as diesel using EPA Method 8015 Modified; total purgeable petroleum hydrocarbons using EPA Method 8015 Modified; and benzene, toluene, ethylbenzene, xylenes, and methyl tertiary butyl ether using EPA Method 8020. Copies of the analytical data sheets and chain-of-custody forms are also included in Attachment A.

The analytical results from the first additional sampling round are summarized in Table 1, along with historical analytical data for wells MW-5 and MW-7. Analytical results from this sampling round are consistent with past analytical results for these two wells.

The second additional sampling round is scheduled for June 1997. Assuming the June 1997 sampling results continue to show a stable or decreasing trend in petroleum hydrocarbon concentrations, the report for that sampling round will include (1) a discussion to show that the Site is of low risk and (2) a request for closure of the former USTs.

Erler & Letter to Ms. Hugo (Alameda County Department of Environmental Health) Kalinowski, Inc. 3 February 1997

Page 2 of 2

Please call me or Dave Tricaso at Sybase, Inc. with any questions.

Very truly yours,

ERLER & KALINOWSKI, INC.

Michelle Kriegman-King, Ph.D.

Project Manager

cc: David Tricaso (Sybase, Inc.)

Table 1

Analytical Results for Groundwater Samples Collected Downgradient of the Former Underground Storage Tanks (a)
6601 and 6603 Bay Street
Sybase, Inc.

Emeryville, California (EKI 950074.00)

www			(Chemical C	oncentratio	on (ug/L) (b)	· · · · · · · · · · · · · · · · · · ·
Well	Sample					Ethyl-	Total	
Number	Date	TPPH	TEPH	Benzene	Toluene	benzene	Xylenes	MTBE
MW-5	Nov 89	ND (c)	NA (d)	74	ND	ND	4.2	NA
	Feb 90	ND	NA	200	ND	ND	ND	NA
	May 90	ND	ND	110	ND	ND	ND	NA
	Aug 90	ND	700	66	2.2	ND	3.8	NA
	Nov 90	600	900	69	ND	ND	ND	NA
	Mar 91	ND	1,100	66	2.3	ND	ND	NA
	May 91	ND	ND	110	ND	ND	ND	NA
	Aug 91	ND	ND	78	2.1	ND	ND	NA
	29 Jan 92	190	NA	90	0.5	<0.3 (e)	0.6	NA
	28 Feb 92	230	NA	110	0.9	<0.3	0.5	NA
	28 May 92	130	NA	100	<0.5	<0.5	<0.5	NA
	27 Aug 92	520	NA	83	2.0	<0.5	<0.5	NA
	10 Nov 92	240	<100	74	1.0	<0.3	<0.6	NA
	18 Feb 93	190	NA	56	0.6	<0.5	<0.5	NA
	20 May 93	<200	NA	56	<2	<2	<2	NA
	19 Aug 93	170	NA	50	0.7	<0.5	<0.5	NA
	15 Nov 93	220	NA	49	1.0	<1	<1	NA
	14 Feb 94	140	NA	62	<0.5	<0.5	<0.5	NA
	16 May 94	310	NA	140	3.0	<3	<3	NA
	12 Aug 94	500	NA	95	34	4.0	14	NA
	3 Nov 94	400	NA	79	0.6	<0.5	<2	NA
	9 Feb 95	300	NA	74	0.8	<0.5	<.2	NA
	9 May 95	200	NA	47	0.5	<0.5	<2	NA NA
	10 Aug 95	200	NA	46	0.5	<0.5	<2	NA
	13 Nov 95	300	NA	48	0.7	<0.5	<2	NA
	15 Jun 96	180	<40,000	39	<0.5	<0.5	<0.5	8.1
	27 Dec 96	220	4,500	54	0.5	<0.5	<0.5	15

Table 1

Analytical Results for Groundwater Samples Collected Downgradient of the Former Underground Storage Tanks (a) 6601 and 6603 Bay Street

Sybase, Inc. Emeryville, California (EKI 950074.00)

				Chemical C	oncentratio	on (ug/L) (b)	
Well	Sample					Ethyl-	Total	
Number	Date	TPPH	TEPH	Benzene	Toluene	benzene	Xylenes	MTBE
MW-7	May 90	NA	600	240	ND	ND	ND	NA
	Aug 90	ND	ND	81	1.8	ND	ND	NA
	Nov 90	ND	800	54	ND	ND	ND	NA
	Mar 91	ND	ND	100	3.6	ND	ND	NA
	May 91	ND	ND	120	2.7	ND	ND	NA
	Aug 91	ND	ND	74	3.3	ND	ND	NA
	29 Jan 92	270	NA	25	0.5	<0.3	0.8	NA
	28 Feb 92	100	NA	33	0.7	<0.3	0.7	NA
	28 May 92	150	NA	21	<0.5	<0.5	<0.5	NA
	27 Aug 92	440	NA	11	1.0	<0.5	<0.5	NA
	10 Nov 92	370	<100	31	1.2	<0.3	1.2	NA
	18 Feb 93	270	NA	77	1.3	<0.5	1.4	NA
	20 May 93	300	NA	150	3.0	<2	3.0	NA
	19 Aug 93	110	NA	40	1.0	<0.5	1.1	NA
	15 Nov 93	120	NA	15	0.6	<0.5	2.3	NA
	14 Feb 94	120	NA	38	<0.5	<0.5	<0.5	NA
	17 May 94	<300	NA	61	<3	<3	<3	NA
	10 Aug 94	100	NA	9.0	<0.5	<0.5	<2	NA
	3 Nov 94	100	NA	3.0	<0.5	<0.5	<2	NA
	9 Feb 95	200	NA	50	0.6	<0.5	<2	NA
	9 May 95	300	NA	120	1.0	<0.5	<2	NA
	10 Aug 95	<50	NA	7.0	<0.5	<0.5	<2	NA
•	13 Nov 95	90	NA	3.0	<0.5	<0.5	<2	- NA
	16 Jun 96	<50	1,000	47	0.87	<0.5	0.8	6.5
	27 Dec 96	110	2,300	35	0.88	<0.5	0.79	5.0

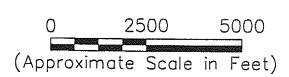
Notes:

- (a) Samples in 1996 were collected by Erler & Kalinowski, Inc. Samples prior to 1992 were collected by Engineering Science. All other data from PES Environmental, Inc. (December 1995).
- (b) TPPH = Total Purgeable Petroleum Hydrocarbons quantified as Gasoline TEPH = Total Extractable Petroleum Hydrocarbons quantified as Diesel MTBE = Methyl Tertiary Butyl Ether
- (c) ND = Not Detected

Note that detection limits were not available in the summary tables in PES, December 1995.

- (d) NA = Not Analyzed
- (e) Less than symbol ("<") indicated that the compound was not present above the detection limit indicated.







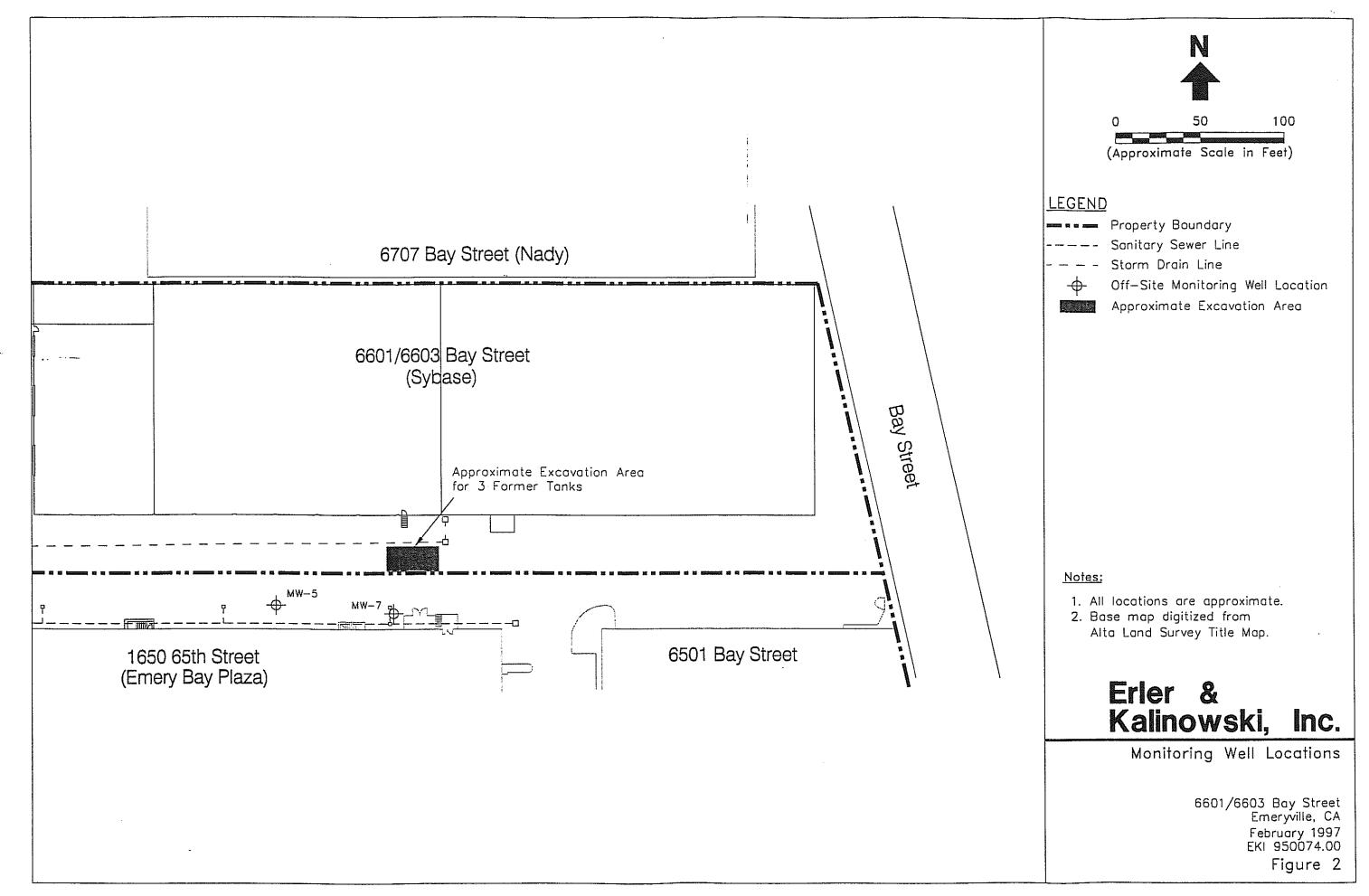
Erler & Kalinowski, Inc.

Site Location

<u>Notes:</u>

1. All locations are approximate.

6601/6603 Bay Street Emeryville, CA February 1997 EKI 950074.00 Figure 1





Erler & Kalinowski, Inc.

Daily Inspection Report Job Name: Bay Street		Consulting Engineers and Scientists 1730 So. Amphlett Blvd., Suite 320 San Mateo, California 94402 (415) 578-1172 Fax (415) 578-9131
Date: 12/27/96 EKI Job No.: 950079.02	Sheet: _	1 of
Supt. on Job Site: Mark Greninger and C	gail Cla	-k
Weather. Cloudy n/rain sprinkles	5	
Contractors / Visitors to Site:	·	
Work Hours: From 10 to M	iemos Issued	1:
Sampling, Testing: Testing for TEPH /		
Attached Field Forms (C-o-C's, Purge Forms):(-		
Work Report Work done Personnel / Equipment work	cion in .	
10:10 Dened wells MWS and	Mw-7	
Deconnect Interface Drube	[D] wa-	ter and Liquinox
10:15 - Measured water level m Mw-		
10.20 - Measing Water level in MV	N-5	
Calibrated equipment		
10:49 Start purging MW.		
1.1 1 /	·wait .	for recharge
11:28 start up again at/MU		
11:31 Stop purging - allow recha	rge-m	ove to MW-5
11:37 - Deconned Submersible pump		
11:40 begin purging MW-5		
12:02 completed MW-5 parge		gallons
12'12 collected 2 ambers + 3	voa.s	from MW-5
12:23 closed MW-5 (locked)		
12:28 collected sample at MW-		
12:50 closed MW-9 (locked) 10	ett 5	ite.
		
	···	
•		

Sail L Clarke

GROUNDWATER

LEVEL

SURVEY

Job Name: Bay Street

EKI Job No.: 950074.02

COMMENTS:

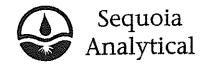
Date: <u>Dec. 27, 1996</u>

Personnel: <u>G. Clark</u>, M. Greninger

					1
Well Number:	MW-7	MW-5			
Condition of well:	OK	oK			·
Covered?	465	yes			
Locked?	Ye5	yes		1	
Sealed?	Ye5	NO			
Standing water?	yes	yes			
Dia. of casing	4"	4"			
Measuring point	rim	black			
Elevation of well					
Time opened	10.05	10:00			
Time of measurement	10:33	10:24	•		
Depth to water	5.94	6.53			
Depth of well	_				·

Ray Strai	e+	wi la /	. <		DATE:	127/96	
PROJECT NAME: Bay Street		MW-					:
PROJECT NUMBER: 95007		MEIT NO	JMBER:		PERSONN	ED- MURCO	reninger Gail Gla
WELL VOLUME CALCULATION	N:		**		Man The inst	iar Cas	ing Vol
Depth of Depth	. to		water	/e= \	Murcipi	.ee tea.	callone)
Well (ft.) Water	(ft.)		CoTimu	(IT.)	(Detow)	· · · · · · · · · · · · · · · · · · ·	24
18.0 -	6.53		11.44		, 64	- /. 	<i>2</i> 4
/g,U - Mult. for casing diam.	= 2-in	ch=0.16	; 4-1nch	1=0.64;	6-inch=	CALTERA	TITON
					TKOREMI		Standard
No. of bailers prior t	o start	or bord	Je:		t-ment		e measure
non amoran alasta a	ما داده سیدا			7112	<u>crumenc</u>	111 (- (
PURGE METHOD: <u>electric su</u>	nmers 1018	pomp		Con	ductivii	tond v-	<i>ken</i>
Direct Departs 10 Cast				DH		4	4
PURGE DEPTH: 10 feet				DH DH	ductivi	10	/0
start time: <u> ;40</u>	ביות מואים	ng 17.7	2	4114-	bidity perature th Probe & Pres amber (1)	,02	50.
START TIME: 11,40	ENT TI	<u> </u>		Tom	i neratur:	, - 2	-
TOTAL GALLONS PURGED: 6	24			Den	th Probe	- - Lindonefaco	ande
TOTAL GALLONS PURGED: 2	Mino Co	1100+00	Cor	tainere	£ Pres	ervation	7
SAMPLES: <u>Field I.D.</u> MW-5	17 17	7. Aa	5 <u>201</u>	2 0	imber li	ter5	-
, , , ,	12,1.	~ (2)	, ⁴ 6 ₁	3 1	1085		
COMMENTE.		CK 1/4	0				
COMMENTS:		276	à				
COMMENTS: NO Sheen Framing and odor		(%)	ζ ^r				
10.00	<i>₹</i> 0	1. ,	χ. Ji				
Time	1	11.117	111.57	11:52	12:02		
	11;43	11.77	11.54	11:57	12.02		
Volume Purged	14	9	14	19	24	^	
(gallons) Temperature	 ' 						
(degrees F or C)	17.2	17.2	17:3	17.3	17.4		
pH	7.6	7.6	7.6	7.6	7.6		
	7.0	1.0	, ,	1.0	7.0	ļ	
Specific Conductivity (millimhos)							
Turbidity/Color		217	14 22	13 7 2	5 -7		
(NTU)	18.05	3,17	14,32	13.65	5.52		
Odor	ye5	ye5	yes	Yes	yes		
Depth to Water	 	<u> </u>			19		
during purge (feet)	6.83	6.60	6.63	6.5	6,9		
Number of Casing		1.2	1.9	2.6	3,2		
Volumes removed		1	' '	1 × · V	リッニ		
Purge Rate		—				 	
(gallons/minute)		<u> </u>		<u> </u>	<u> </u>	<u> </u>	

PROJECT NAME: Bay Street PROJECT NUMBER: 950074.02 WELL NUMBER: PERSONNEL: Gail Clark WELL VOLUME CALCULATION: Depth of 18.81 Depth to 5.94 Water Multiplier Casing Volume
PROJECT NUMBER: 950074.02 WELL NUMBER: PERSONNEL: Gail Clark WELL VOLUME CALCULATION:
WELL VOLUME CALCULATION:
Depth of 10 81 Depth to 5,94 Water Multiplier Casing Vo
intary (st.) Water (ft.) (Column (ft.) (Delow) (Gallor
= 12.87 * .64 = 8.24
Mult. for casing diam. = 2-inch=0.16; 4-inch=0.64; 6-inch=1.44 gals/ft.
INSTRUMENT CALIBRATION
No. of bailers prior to start of purge: Field Stands
<u>Instrument measure measu</u>
PURGE METHOD: electric pump
Conductivity
PURGE DEPTH: 10 feet and down ph see MW-5
pH form
START TIME: 10:49 END TIME: 11:31 Turbidity .02
Temperature
TOTAL GALLONS PURGED: 25 Depth Probe
SAMPLES: Field I.D. Time Collected Containers & Preservation
SAMPLES: Field I.D. Time Collected Containers & Preservation age MW-7 12:28 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
3 voas
COMMENTS:
no sheen visible
petroleum odor (strong) purpuirs
comments: no sheen visible petroleum odor (strong) turbuirs Clear but foamy Uslavirs Uslavirs
Time Inc. The Inc. Th
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Time 10:50 10:55 10:58 11:02 11:05 11:31
Volume Purged 2 1 12 11 25
Volume Purged (gallons) 2 7 12 17 21 25 Temperature 12 12 17 8 18.1
(gallons) 2 7 12 17 21 25 Temperature (degrees F or c) 17.1 17.05 17.8 17.8 18.1
(gallons) 2 7 12 17 21 25 Temperature (degrees F or c) 17.1 17.1 17.05 17.8 17.8 18.1
Volume Furged (gallons) Q T 12 17 Q 25 Temperature (degrees F or c) 17.1 17.1 17.05 17.8 17.8 18.1 PH 7.9 8.2 8.2 8.2 8.4 8.1 9.1
Volume Purged (gallons) 2 7 12 17 21 25 Temperature (degrees F or c) 17.1 17.1 17.05 17.8 17.8 18.1 ph 7.9 8.2 8.2 8.4 8.1 9.1
(gallons) 2 7 12 17 21 25 Temperature (degrees F or c) 17.1 17.1 17.05 17.8 17.8 18.1 PH 7.9 8.2 8.2 8.4 8.1 9.1 Specific Conductivity (millimhos) Turbidity/Color 7.75 6.0 14.96 6.33 14.29 8.59
(gallons) 2 7 12 17 21 25 Temperature (degrees F or C) 17.1 17.1 17.05 17.8 17.8 18.1 pH 7.9 8.2 8.2 8.4 8.1 9.1 Specific Conductivity (millimhos) 7.75 6.0 14.96 6.33 14.29 8.59
(gallons) 2 7 12 17 21 25 Temperature (degrees F or C) 17.1 17.1 17.05 17.8 17.8 18.1 PH 7.9 8.2 8.2 8.4 8.1 9.1 Specific Conductivity (millimhos) Turbidity/Color (NTU) 7.75 6.0 14.96 6.33 14.29 8.59 Odor Yes Yes Yes Yes Yes Yes Yes
(gallons) 2 7 12 17 21 25 Temperature (degrees F or C) 17.1 17.1 17.05 17.8 17.8 18.1 pH 7.9 8.2 8.2 8.4 8.1 9.1 Specific Conductivity (millimhos) Turbidity/Color (NTU) 7.75 6.0 14.96 6.33 14.29 8.59 Odor Yes Yes Yes Yes Yes Yes Yes Depth to Water 9.49 10.20 17.55 19.07 18.8 18.11
(gallons) 2 7 12 17 21 25 Temperature (degrees F or C) 17.1 17.1 17.05 17.8 17.8 18.1 pH 7.9 8.2 8.2 8.4 8.1 9.1 Specific Conductivity (millimhos) Turbidity/Color (NTU) 7.75 6.0 14.96 6.33 14.29 8.59 Odor Ye5 YeS YeS YeS YeS YeS Depth to Water during purge (feet) 9.49 12.70 1545 19.02 18.8 18.11
(gallons) 2 7 12 17 21 25 Temperature (degrees F or C) 17.1 17.1 17.05 17.8 17.8 18.1 pH 7.9 8.2 8.2 8.4 8.1 9.1 Specific Conductivity (millimhos) Turbidity/Color (NTU) 7.75 6.0 14.96 6.33 14.29 8.59 Odor yes yes yes yes yes yes Depth to Water during purge (feet) 9.49 2.70 545 19.02 18.8 18.11 Number of Casing 6 8 1.45 2.06 2.5 3.03
(gallons) 2 7 12 17 21 25 Temperature (degrees F or C) 17.1 17.1 17.05 17.8 17.8 18.1 pH 7.9 8.2 8.2 8.4 8.1 9.1 Specific Conductivity (millimhos) Turbidity/Color (NTU) 7.75 6.0 14.96 6.33 14.29 8.59 Odor Ye5 YeS YeS YeS YeS YeS YeS Depth to Water during purge (feet) 9.49 12.70 15.45 19.02 18.8 18.11



680 Chesapeake Drive 404 N. Wiget Lane

Redwood City, CA 94063 Walnut Creek, CA 94598 819 Striker Avenue, Suite 8 Sacramento, CA 95834

(415) 364-9600 (510) 988-9600 (916) 921-9600 FAX (415) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100



Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402

Client Proj. ID: 950074.02/6603 Bay Street Sample Descript: MW-5

Sampled: 12/27/96 Received: 12/27/96

Attention: Michelle King

Matrix: LIQUID

Extracted: 01/02/97 Analyzed: 01/06/97

Analysis Method: EPA 8015 Mod Lab Number: 9612G41-01

Reported: 01/09/97

QC Batch Number: GC0102970HBPEXZ Instrument ID: GCHP4A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	S	ample Results ug/L
TEPH as Diesel Chromatogram Pattern: Unidentified HC	100		C9-C24
Surrogates n-Pentacosane (C25)	Control Limits % 50	% 150	Recovery 163 Q

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL -ELAP #1210

Mike Gregory Project Manager

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Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402

Client Proj. ID: 950074.02/6603 Bay Street

Sample Descript: MW-5 Matrix: LIQUID

Analysis Method: 8015Mod/8020 Lab Number: 9612G41-01

Sampled: 12/27/96 Received: 12/27/96

Analyzed: 01/02/97 Reported: 01/09/97

QC Batch Number: GC010297BTEX21A

Instrument ID: GCHP21

Attention: Michelle King

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection L ug/L	imit	Sample Results ug/L
TPPH as Gas Methyl t-Butyl Ether Benzene Toluene Ethyl Benzene Xylenes (Total) Chromatogram Pattern:			15
Weathered Gas	•••••••••••••••••••••••••••••••••••••••	**********	C6-C12
Surrogates Trifluorotoluene	Control Limi 70	ts % %	6 Recovery 93

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory Project Manager

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Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402 Client Proj. ID: 950074.02/6603 Bay Street Sample Descript: MW-7

Sampled: 12/27/96 Received: 12/27/96 Extracted: 01/02/97

Attention: Michelle King

Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9612G41-02

Analyzed: 01/03/97 Reported: 01/09/97

QC Batch Number: GC0102970HBPEXZ

Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	\$	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern: Unidentified HC	50	******************	C0-C34
Office Haife a Fig.	***************************************	*,.,,	
Surrogates n-Pentacosane (C25)	Control Limits % 50	150	Recovery 178 Q

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory Project Manager

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680 Chesapeake Drive 404 N. Wiget Lane 819 Striker Avenue, Suite 8 Sacramento, CA 95834

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FAX (415) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100

Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402

Client Proj. ID: 950074.02/6603 Bay Street

Sample Descript: MW-7

Matrix: LIQUID

Analysis Method: 8015Mod/8020 Lab Number: 9612G41-02

Sampled: 12/27/96 Received: 12/27/96

Analyzed: 01/02/97 Reported: 01/09/97

Attention: Michelle King

QC Batch Number: GC010297BTEX21A Instrument ID: GCHP21

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Det	ection Limit ug/L		Sample Results ug/L
TPPH as Gas Methyl t-Butyl Ether Benzene Toluene Ethyl Benzene Xylenes (Total) Chromatogram Pattern:		50 2.5 0.50 0.50 0.50 0.50		5.0 35
Surrogates Trifluorotoluene	Con 70	trol Limits %	130	% Recovery 85

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory Project Manager

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Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834 (415) 364-9600 (510) 988-9600 (916) 921-9600 FAX (415) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100

Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402

Client Proj. ID: 950074.02/6603 Bay Street

Sample Descript: Method Blank

Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9612G41-03 Sampled: Received: 12/27/96 Extracted: 01/02/97 Analyzed: 01/03/97 Reported: 01/09/97

QC Batch Number: GC0102970HBPEXZ

Instrument ID: GCHP5A

Attention: Michelle King

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte **Detection Limit** Sample Results ug/L ug/L 50 N.D. TEPH as Diesel Chromatogram Pattern: **Control Limits %** % Recovery Surrogates 150 50 n-Pentacosane (C25) 107

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory Project Manager

Page:





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FAX (415) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100

Erler & Kalinowski, Inc.

Attention: Michelle King

1730 South Amphlett, Ste 320 San Mateo, CA 94402

950074.02/6603 Bay Street Client Proj. ID:

Sample Descript: Method Blank Matrix: LIQUID

Analysis Method: 8015Mod/8020 Lab Number: 9612G41-03

Sampled:

Received: 12/27/96

Analyzed: 01/02/97 Reported: 01/09/97

QC Batch Number: GC010297BTEX21A

Instrument ID: GCHP21

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas Methyl t-Butyl Ether Benzene Toluene Ethyl Benzene Xylenes (Total) Chromatogram Pattern:	50 2.5 0.50 0.50 0.50 0.50	N.D. N.D. N.D. N.D. N.D. N.D.
Surrogates Trifluorotoluene	Control Limits % 130	% Recovery 87

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Mike Grégory Project Manager

Page:

Chromatogram

Sample Name : DW9612G41-1 (500:1*2) RS1 FileName

: S:\GHP_04\0105\105A006.raw

: TPHO4A Method

Start Time : 0.00 min

Scale Factor: 0.0 End Time : 33.65 min

Plot Offset: 0 mV

Sample #: MW5

Date : 1/6/97 07:36

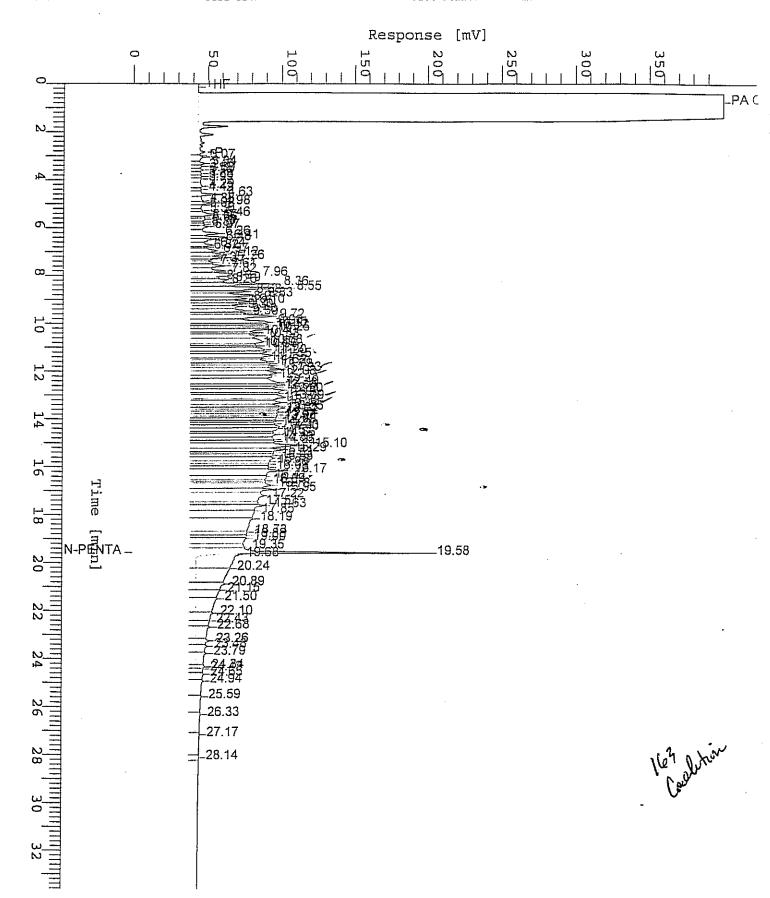
Time of Injection: 1/6/97 06:59

Low Point : 0.00 mV

High Point : 400.00 mV

Page 1 of 1

Plot Scale: 400.0 mV



Chromatogram

Sample Name : DW9612G41-2 (500:1)

FileName : S:\GHP_05\0105\103A023.raw

Method

Start Time : 0.00 min Scale Factor: 0.0

: TPH05A

End Time : 33.65 min Plot Offset: 0 mV

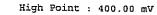
Sample #: MW7

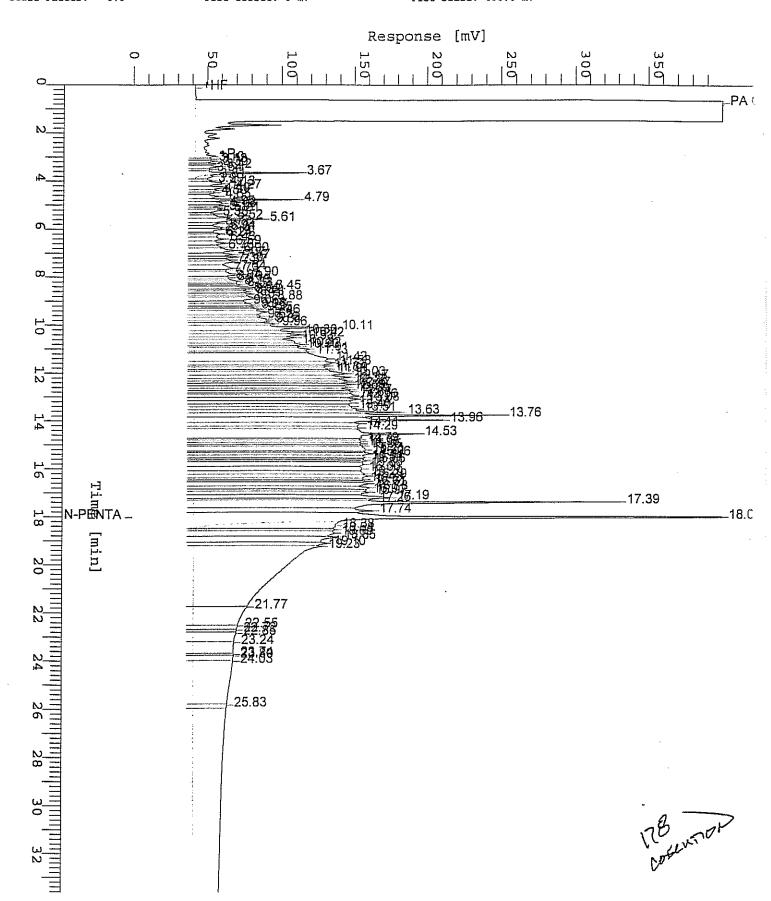
Page 1 of 1

Date: 1/6/97 10:28

Time of Injection: 1/3/97 23:58 Low Point : 0.00 mV

Plot Scale: 400.0 mV







Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834

(415) 364-9600 (510) 988-9600 (916) 921-9600 FAX (415) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100

Erler & Kalinowski, Inc.

Client Project ID:

950074.02/6603 Bay Street

1730 So. Amphlett Blvd., Suite 320 San Mateo, CA 94402

Matrix: Sample Descript: LIQUID

Attention: Michelle King

Work Order #:

MW-5 9612G41

01-03

Reported:

Jan 9, 1997

QUALITY CONTROL DATA REPORT

Anaiyte:

Diesel

QC Batch#: GC0102970HBPEXZ Analy. Method:

EPA 8015M

Prep. Method:

EPA 3520

Analyst:

J. Minkel

MS/MSD #: 9612G41-01-MSD

Sample Conc.:

4500

Prepared Date:

Analyzed Date:

01/02/97 01/06/97

Instrument I.D.#:

GCHP4A

Conc. Spiked:

1000 ug/L

Result:

5400

MS % Recovery:

90

Dup. Result:

5100

MSD % Recov.:

RPD:

5.7

RPD Limit:

0-50

LCS #:

LCS010297-LCS

Prepared Date:

01/02/97

Analyzed Date:

01/03/97 GCHP5A

Instrument I.D.#: Conc. Spiked:

1000 ug/L

LCS Result:

710

LCS % Recov.:

71

MS/MSD

50-150

LCS

60-140

Control Limits

SEQUOIA ANALYTICAL

Mike **E**regory Project Manager Please Note:

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

9612G41.ERL <1>





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Erler & Kalinowski, Inc.

Client Project ID: 950074.02/6603 Bay Street

1730 So. Amphlett Blvd., Suite 320

Matrix: LIQUID

San Mateo, CA 94402 Attention: Michelle King Sample Descript: XSD Work Order #:

9612G41

01-03

Reported:

Jan 9, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl	Xylenes	
			Benzene		
	GC010297BTEX21A	GC010297BTEX21A	GC010297BTEX21A	GC010297BTEX21A	
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	
Analyst:		G. Fish	G. Fish	G. Fish	
MS/MSD #:		9612F29-11-XSD	9612F29-11-XSD	9612F29-11-XSD	
Sample Conc.:		N.D.	N.D.	N.D.	
Prepared Date:	• •	01/02/97	01/02/97	01/02/97	
Analyzed Date:	01/02/97	01/02/97	01/02/97	01/02/97	
Instrument I.D.#:	GCHP21	GCHP21	GCHP21	GCHP21	
Conc. Spiked:	10 ug/L	10 ug/L	10 ug/L	30 ug/L	
Result:	9.9	9.8	10	30	
MS % Recovery:	99	98	100	100	
Dup. Result:	10	10	10	31	
MSD % Recov.:	100	100	100	103	
Mad % necov	100	100	100	103	
RPD:	1.0	2.0	0.0	3.3	
RPD Limit:	0-25	0-25	0-25	0-25	
LCS #:	LCS010297-LCS	LCS010297-LCS	LCS010297-LCS	LCS010297-LCS	
Prepared Date:	01/02/97	01/02/97	01/02/97	01/02/97	
Analyzed Date:	01/02/97	01/02/97	01/02/97	01/02/97	
Instrument I.D.#:	GCHP21	GCHP21	GCHP21	GCHP21	
Conc. Spiked:	10 ug/L	10 ug/L	10 ug/L	30 ug/L	
LCS Result:	10	10	11	31	
LCS % Recov.:	100	100	110	103	
20 /0 1 COO VI.	100				
MS/MSD	60-140	60-140	60-140	60-140	<u></u>
		· ·-			

SEQUOIA ANALYTICAL

Mike Gregory Project Manager

LCS

Control Limits

Please Note:

70-130

70-130

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

70-130

** MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

70-130

9612G41.ERL <2>





680 Chesapeake Drive 404 N. Wiget Lane 819 Striker Avenue, Suite 8 Sacramento, CA 95834

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FAX (415) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100

Erler & Kalinowski, Inc. 1730 South Amphlett, Ste 320 San Mateo, CA 94402 Attention: Michelle King

Client Proj. ID: 950074.02/6603 Bay Street

Received: 12/27/96

Lab Proj. ID: 9612G41

Reported: 01/09/97

LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 12 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

#Q - Surrogate coelution was confirmd.

SEQUOIA ANALYTICAL

Mike Gregory Project Manager

Page: 1

CHAIN OF CUSTODY / SAMPLE ANALYSIS REQUEST

Erler & Kalinowski, Inc.				_	Analytical Laboratory: Sque	ia Analytica
Project Number: 950074.02				_	Date Sampled: 12/27/96	7
Project Number: 950074.02 Project Name: 6603 Bay Street					Sampled By: Mark Greninger/ G	Sail Chrk
source of samples: Monitoring Wells				Report Results To: Michelle King		
Location: Emery ville					Phone Number: 415) 578-1172	
Lab Sample I D	Field Sample I D	Sample Type	Number and Type of Containers	76/2(94) —Time Collected	Analyses Requested (EPA Method Number)	Results Required By (Date/Time)
MW I A,B	MW-5	Water	2 Amber Liters	12:12 pm	TPHd	Standard
1, C-€	MW-5	Wuter	3 40ml VOA	12:12 pm		13
	MW-7	11	2 Amber Litas	D:28pm	201	()
↓ C-E	MW-7	"	3 40m1 YOA	12:28pm	TPHq/BTEX/MTBE	l,
Special In	structions					·

Relinquished By:
Name / Signature / Affiliation

Date Time Name / Signature / Affiliation

Mark Grainse / IEKI D/27 / IA6

| 12/22/AL | 1346 | Seq 200 82