

R02595



GETTLER-RYAN INC.

May 23, 2005

Mr. Jerry Wickham
Alameda County Environmental Health
1131 Harbor Bay Parkway, Ste. 250
Alameda, CA 94502-6577

Alameda County
Environmental Health
MAY 24 2005


**Subject: Letter Report, Groundwater Monitoring and Sampling Event of April 26, 2005
Schwieckert Property, 515 S. Livermore Avenue, Livermore, California**

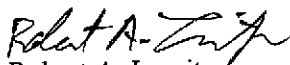
Mr. Wickham:

On behalf of Mrs. Marie Schwieckert, Gettler-Ryan-Inc (GR) is submitting a report summarizing the groundwater monitoring and sampling event of April 26, 2005 performed by GR at the above referenced site. Static groundwater levels were measured and the piezometers were checked for the presence of separate-phase hydrocarbons. Static water level data, groundwater elevations, and separate-phase hydrocarbon thickness (if any) are presented in attached Table 1. A potentiometric map for this event is included as Figure 1. Groundwater samples were collected from the piezometers and submitted to Kiff Analytical (ELAP #2236) for analyses. The field data sheets for this event are attached. A concentration map for this event is included as Figure 7b. The chain of custody document and laboratory analytical report are also attached.

If you have any questions, please feel free call us at (916) 631-1300

Sincerely,
Gettler-Ryan Inc.


Geoffrey B. Risse
Project Geologist


Robert A. Lauritzen
Senior Geologist, PG #7504



Attachments: Table 1. Grab Groundwater Monitoring Data
Figure 1. Potentiometric Map
Figure 7b. Concentration Map
Field Data Sheets
Laboratory Analytical Report and Chain of Custody

CC: Mrs. Marie Schwieckert, 3834 Inverness Way, Livermore, California, 94550
Ms. Julie Rose, McNichols, Randick, O'Dea, & Tooliatos LLP, 5000 Hopyard Rd, Ste. 400,
Pleasanton, California 94588

Table 1
 Grab Groundwater Monitoring Data⁺
 Schwieckert Residence
 515 S. Livermore Avenue
 Livermore, California

Sample ID	Sample Date	TOC (feet)	DTW (feet)	SPH Thickness (feet)	GWE (feet)	TPHd (ppb)	Screen Interval (feet)
PZ-1	1/28/05	504.29	28.15	0.00	476.14	1,800	30-40
	4/26/05	504.29	22.49	0.00	481.80	7,700	
PZ-2	1/28/05	503.40	27.58	0.00	475.82	93	25-35
	4/26/05	503.40	21.83	0.00	481.57	<50	
PZ-3	1/28/05	503.44	27.77	0.00	475.67	83	25-35
	4/26/05	503.44	21.93	0.00	481.51	76 ¹	
PZ-4	1/28/05	504.00	28.52	0.00	475.48	76	25-35
	4/26/05	504.00	22.69	0.00	481.31	<50	
PZ-5	1/28/05	502.98	27.13	0.00	475.85	210	25-35
	4/26/05	502.98	21.32	0.00	481.66	<50	
PZ-6	1/28/05	504.23	27.57	0.00	476.66	250	25-35
	4/26/05	504.23	21.80	0.00	482.43	<50	

Explanations

+ = no purge groundwater sampling

ppb = parts per billion

TPHd = Total Petroleum Hydrocarbons as diesel

* GWE corrected due to the presence of free product;
 correction factor: $[(\text{TOC}-\text{DTW})+(\text{product thickness} \times 0.75)]$

-- = Not measured

SPH = Separate Phase Hydrocarbon

TOC = Top of Casing elevation measured relative to mean sea level

DTW = Depth to Water

TOC surveyed by Morrow Surveying (PLS 5161) on February 7, 2005

¹Hydrocarbons reported as TPHd in this sample do not exhibit a typical Diesel chromatographic pattern. There are discrete peaks which may or may not be petroleum related.

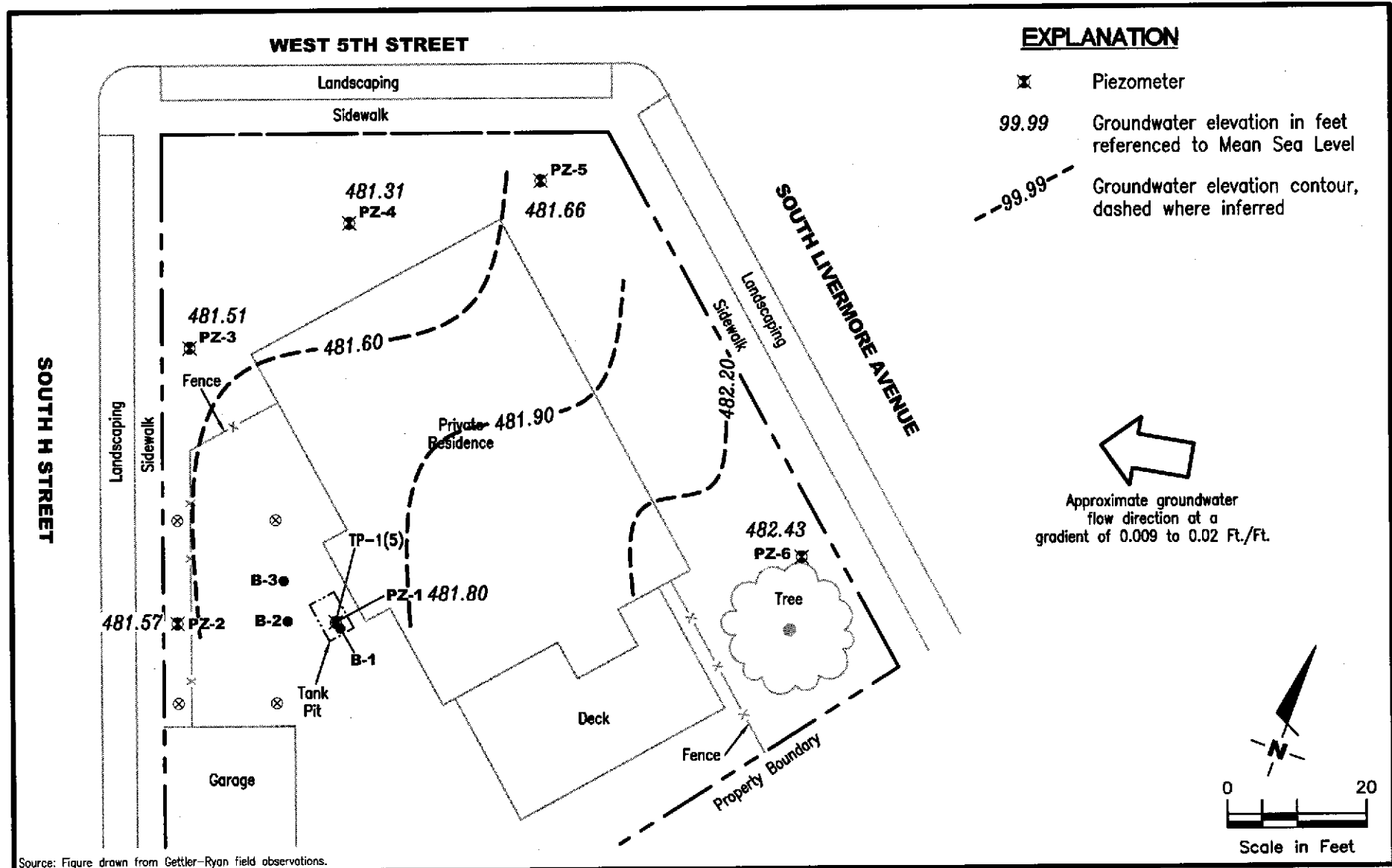
Alameda County
 MAY 2 2005
 Environmental Health

Analytical Laboratory:

Kiff Analytical (ELAP# 2236)

Analytical Methods:

TPHg by EPA Method 8015M



GETTLER - RYAN INC.
6747 Sierra Court, Suite J
Dublin, CA 94568 (925) 551-7555

POTENTIOMETRIC MAP
Marie Schweickert Property
515 South Livermore Avenue
Livermore, California

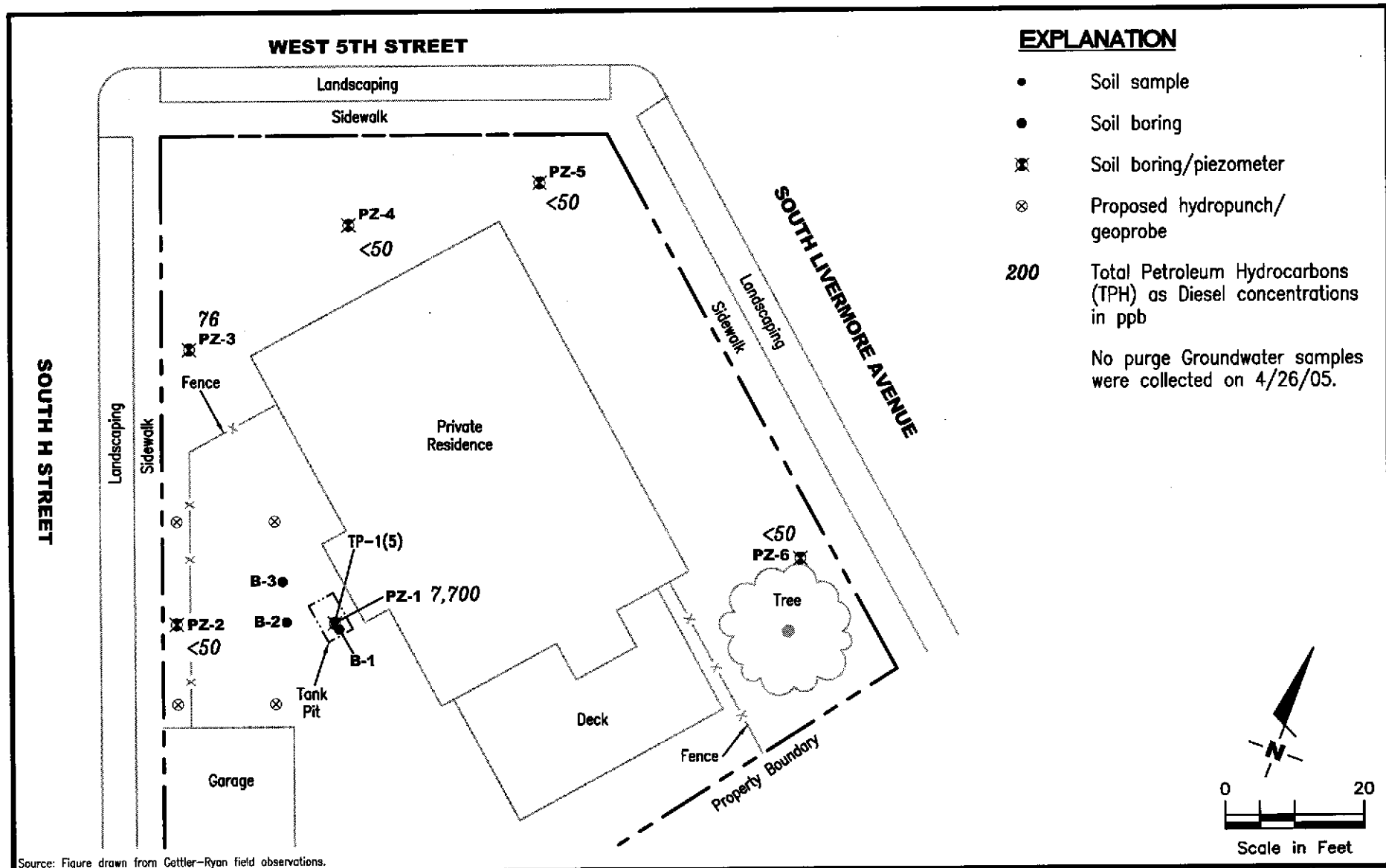
FIGURE
1

PROJECT NUMBER
948209

REVIEWED BY

DATE
April 26, 2005

REVISED DATE



EXPLANATION

- Soil sample
 - Soil boring
 - ⊗ Soil boring/piezometer
 - ⊗ Proposed hydropunch/geoprobe
- 200** Total Petroleum Hydrocarbons (TPH) as Diesel concentrations in ppb
- No purge Groundwater samples were collected on 4/26/05.

Source: Figure drawn from Gettler-Ryan field observations.

GR GETTLER - RYAN INC.
 6747 Sierra Court, Suite J
 Dublin, CA 94568 (925) 551-7555

CONCENTRATION MAP
 Marie Schweickert Property
 515 South Livermore Avenue
 Livermore, California

FIGURE

7b

PROJECT NUMBER
948209

REVIEWED BY

DATE
 April 26, 2005

REVISED DATE

**WELL MONITORING/DEVELOPMENT
FIELD DATA SHEET**

Client/Facility: Schwieckert Property Job#: 948209,04
 Address: 519 S. Livermore Ave Date: 4/26/05
 City: Livermore, CA Sampler: Geoffrey V. Risse

Well ID: PZ-1
 Well Diameter: 3/4 in.
 Total Depth: _____ ft.
 Depth to Water: 22.49 ft.

Well Condition: _____
 Hydrocarbon Thickness: _____ Ft. Amount Bailed (product/water): _____ (gal.)

Volume	2" = 0.17	3" = 0.38	4" = 0.66
Factor (VF)	6" = 1.50	12" = 5.80	

_____ X VF _____ = _____ X 10 (case volume) = Estimated Purge Volume: _____ (gal.)

Purge Equipment: Disposable Bailer
 Bailer
 Stack
 Suction
 Grundfos
 Other: _____

Sampling Equipment: Disposable Bailer
 Bailer
 Pressure Bailer
 Grab Sample
 Other: _____

Starting Time: _____
 Sampling Time: 1242
 Purging Flow Rate: _____ gpm.
 Did well de-water? _____

Weather Conditions: partly cloudy
 Water Color: grey Odor: None
 Sediment Description: silt
 If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity μ mhos/cm	Temperature $^{\circ}$ C	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>PZ-1</u>	<u>3</u>	<u>VOA</u>	<u>ICE</u>	<u>HCL</u>	<u>KIFF</u>

COMMENTS: _____

**WELL MONITORING/DEVELOPMENT
FIELD DATA SHEET**

Client/Facility: Schwieckert Property Job#: 948209.04
 Address: 515 S. Livermore Ave Date: 4/26/05
 City: Livermore, CA Sampler: Geoffrey V. Risse

Well ID: PZ-2 Well Condition: _____
 Well Diameter: 3/4 in. Hydrocarbon Thickness: _____ Ft. Amount Bailed (product/water): _____ (gal.)
 Total Depth: _____ ft.
 Depth to Water: 21.83 ft.

Volume Factor (VF)	2" = 0.17	3" = 0.38	4" = 0.66
	6" = 1.50	12" = 5.80	

_____ X VF _____ = _____ X 10 (case volume) = Estimated Purge Volume: _____ (gal.)

Purge Equipment: Disposable Bailer Bailer Stack Suction Grundfos Other: _____
 Sampling Equipment: Disposable Bailer Bailer Pressure Bailer Grab Sample Other: _____

Starting Time: _____ Weather Conditions: partly cloudy
 Sampling Time: 1129 Water Color: clear Odor: NONE
 Purging Flow Rate: _____ gpm. Sediment Description: NONE
 Did well de-water? _____ If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity μ mhos/cm	Temperature $^{\circ}$ C	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>PZ-2</u>	<u>3 VOA</u>	<u>ICE</u>	<u>HCL</u>	<u>KIFF</u>	<u>TPHd</u>

COMMENTS: _____

**WELL MONITORING/DEVELOPMENT
FIELD DATA SHEET**

Client/Facility: Schwieckert Property Job#: 948209.04
 Address: 515 S. Livermore Ave Date: 4/26/05
 City: Livermore, CA Sampler: Geoffrey P. Risse

Well ID: PZ-3
 Well Diameter: 3/4 in.
 Total Depth: 1 ft.
 Depth to Water: 21.93 ft.

Well Condition: _____
 Hydrocarbon Thickness: _____ Ft. Amount Bailed (product/water): _____ (gal.)

Volume	2" = 0.17	3" = 0.38	4" = 0.66
Factor (VF)	6" = 1.50	12" = 5.80	

_____ X VF _____ = _____ X 10 (case volume) = Estimated Purge Volume: _____ (gal.)

Purge Equipment: Disposable Bailer
 Bailer
 Stack
 Suction
 Grundfos
 Other: _____

Sampling Equipment: Disposable Bailer
 Bailer
 Pressure Bailer
 Grab Sample
 Other: _____

Starting Time: _____
 Sampling Time: 1114
 Purging Flow Rate: _____ gpm.
 Did well de-water? _____

Weather Conditions: Partly cloudy
 Water Color: clear Odor: None
 Sediment Description: None
 If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity μ mhos/cm	Temperature $^{\circ}$ C	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>PZ-3</u>	<u>3 VOA</u>	<u>ICE</u>	<u>HCL</u>	<u>KIFF</u>	<u>TPHd</u>

COMMENTS: _____

**WELL MONITORING/DEVELOPMENT
FIELD DATA SHEET**

Client/Facility: Schwieckert Property Job#: 948209, 04
 Address: 515 S. Livermore Ave Date: 4/26/05
 City: Livermore, CA Sampler: Geoffrey V. Risse

Well ID: PZ-4
 Well Diameter: 3/4' in.
 Total Depth: _____ ft.
 Depth to Water: 22.69 ft.

Well Condition: _____

Hydrocarbon Thickness:	Ft.	Amount Bailed (product/water):	(gal.)
Volume	2" = 0.17	3" = 0.38	4" = 0.66
Factor (VF)	6" = 1.50	12" = 5.80	

_____ X VF _____ = _____ X 10 (case volume) = Estimated Purge Volume: _____ (gal.)

Purge Equipment: Disposable Bailer
 Bailer
 Stack
 Suction
 Grundfos
 Other: _____

Sampling Equipment: Disposable Bailer
 Bailer
 Pressure Bailer
 Grab Sample
 Other: _____

Starting Time: _____
 Sampling Time: 1059
 Purging Flow Rate: _____ gpm.
 Did well de-water? NO

Weather Conditions: Partly Cloudy
 Water Color: Clear Odor: None
 Sediment Description: None
 If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity μ mhos/cm	Temperature $^{\circ}$ C	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>PZ-4</u>	<u>3 VOA</u>	<u>ICE</u>	<u>HCL</u>	<u>KIFF</u>	<u>TPHd</u>

COMMENTS: _____

**WELL MONITORING/DEVELOPMENT
FIELD DATA SHEET**

Client/Facility: Schwieckert Property Job#: 948209, 04
 Address: 515 S. Livermore Ave Date: 4/26/05
 City: Livermore, CA Sampler: Geoffrey V. Risse

Well ID: PZ-5
 Well Diameter: 3/4 in.
 Total Depth: _____ ft.
 Depth to Water: 21.32 ft.

Well Condition: _____

Hydrocarbon Thickness:	Amount Bailed (product/water):		
	Ft.		(gal.)
Volume Factor (VF)	2" = 0.17	3" = 0.38	4" = 0.66
	6" = 1.50	12" = 5.80	

_____ X VF _____ = _____ X 10 (case volume) = Estimated Purge Volume: _____ (gal.)

Purge Equipment: Disposable Bailer
 Bailer
 Stack
 Suction
 Grundfos
 Other: _____

Sampling Equipment: Disposable Bailer
 Bailer
 Pressure Bailer
 Grab Sample
 Other: _____

Starting Time: _____
 Sampling Time: 1155
 Purging Flow Rate: _____ gpm.
 Did well de-water? _____

Weather Conditions: Partly Cloudy
 Water Color: Clear Odor: None
 Sediment Description: None
 If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity μ mhos/cm	Temperature $^{\circ}$ C	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>PZ-5</u>	<u>3 VOA</u>	<u>ICE</u>	<u>HCL</u>	<u>KIFF</u>	<u>TPHd</u>

COMMENTS: _____

**WELL MONITORING/DEVELOPMENT
FIELD DATA SHEET**

Client/Facility: Schwieckert Property Job#: 948209, 04
 Address: 515 S. Livermore Ave Date: 4/26/05
 City: Livermore, CA Sampler: Geoffrey D. Risse

Well ID: PZ-6
 Well Diameter: 3/4 in.
 Total Depth: _____ ft.
 Depth to Water: 21.80 ft.

Well Condition: _____

Hydrocarbon Thickness:	Amount Bailed (product/water):		
	2" = 0.17	3" = 0.38	4" = 0.66
Factor (VF)	6" = 1.50	12" = 5.80	

_____ X VF _____ = _____ X 10 (case volume) = Estimated Purge Volume: _____ (gal.)

Purge Equipment: Disposable Bailer
 Bailer
 Stack
 Suction
 Grundfos
 Other: _____

Sampling Equipment: Disposable Bailer
 Bailer
 Pressure Bailer
 Grab Sample
 Other: _____

Starting Time: _____
 Sampling Time: 12:16
 Purging Flow Rate: _____ gpm.
 Did well de-water? _____

Weather Conditions: Partly cloudy
 Water Color: BROWN Odor: NONE
 Sediment Description: SILT
 If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity μ mhos/cm	Temperature $^{\circ}$ C	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>PZ-6</u>	<u>3 VOA</u>	<u>ICE</u>	<u>HCL</u>	<u>KIFF</u>	<u>TPHd</u>

COMMENTS: _____



Report Number : 43425

Date : 5/3/2005

Geoffrey Risse
Gettler-Ryan Inc.
3140 Gold Camp Dr. Suite 170
Rancho Cordova, CA 95670

Subject : 6 Water Samples
Project Name : Schwieckert Property
Project Number : 948209.04
P.O. Number : 948209.04

Dear Mr. Risse,

Chemical analysis of the samples referenced above has been completed. Summaries of the data are contained on the following pages. Sample(s) were received under documented chain-of-custody. US EPA protocols for sample storage and preservation were followed.

Kiff Analytical is certified by the State of California (# 2236). If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,

A handwritten signature in black ink, appearing to read "Joel Kiff".

Joel Kiff



Report Number : 43425

Date : 5/3/2005

Subject : 6 Water Samples
Project Name : Schwieckert Property
Project Number : 948209.04
P.O. Number : 948209.04

Case Narrative

Hydrocarbons reported as TPH as Diesel do not exhibit a typical Diesel chromatographic pattern for sample PZ-3. There are discrete peaks which may or may not be petroleum related.

Approved By:

A handwritten signature in black ink, appearing to read "Joe Kiff", is written over the printed name "Joe Kiff".



Report Number : 43425

Date : 5/3/2005

Project Name : **Schwieckert Property**Project Number : **948209.04**Sample : **PZ-1**

Matrix : Water

Lab Number : 43425-01

Sample Date :4/26/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
TPH as Diesel	7700	50	ug/L	M EPA 8015	4/30/2005
Octacosane (Diesel Surrogate)	100		% Recovery	M EPA 8015	4/30/2005

Sample : **PZ-2**

Matrix : Water

Lab Number : 43425-02

Sample Date :4/26/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
TPH as Diesel	< 50	50	ug/L	M EPA 8015	4/30/2005
Octacosane (Diesel Surrogate)	99.8		% Recovery	M EPA 8015	4/30/2005

Sample : **PZ-3**

Matrix : Water

Lab Number : 43425-03

Sample Date :4/26/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
TPH as Diesel	76	50	ug/L	M EPA 8015	5/2/2005
Octacosane (Diesel Surrogate)	108		% Recovery	M EPA 8015	5/2/2005

Approved By:


 Joel Kiff



Report Number : 43425

Date : 5/3/2005

Project Name : **Schwieckert Property**Project Number : **948209.04**Sample : **PZ-4**

Matrix : Water

Lab Number : 43425-04

Sample Date :4/26/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
TPH as Diesel	< 50	50	ug/L	M EPA 8015	5/2/2005
Octacosane (Diesel Surrogate)	102		% Recovery	M EPA 8015	5/2/2005

Sample : **PZ-5**

Matrix : Water

Lab Number : 43425-05

Sample Date :4/26/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
TPH as Diesel	< 50	50	ug/L	M EPA 8015	5/2/2005
Octacosane (Diesel Surrogate)	102		% Recovery	M EPA 8015	5/2/2005

Sample : **PZ-6**

Matrix : Water

Lab Number : 43425-06

Sample Date :4/26/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
TPH as Diesel	< 50	50	ug/L	M EPA 8015	5/2/2005
Octacosane (Diesel Surrogate)	94.4		% Recovery	M EPA 8015	5/2/2005

Approved By:


 Joel Kiff

QC Report : Method Blank Data

Project Name : **Schwieckert Property**

Project Number : **948209.04**

Report Number : 43425

Date : 5/3/2005

<u>Parameter</u>	<u>Measured Value</u>	<u>Method Reporting Limit</u>	<u>Units</u>	<u>Analysis Method</u>	<u>Date Analyzed</u>
TPH as Diesel	< 50	50	ug/L	M EPA 8015	4/29/2005
Octacosane (Diesel Surrogate)	97.8		%	M EPA 8015	4/29/2005
TPH as Diesel	< 50	50	ug/L	M EPA 8015	5/2/2005
Octacosane (Diesel Surrogate)	81.2		%	M EPA 8015	5/2/2005

<u>Parameter</u>	<u>Measured Value</u>	<u>Method Reporting Limit</u>	<u>Units</u>	<u>Analysis Method</u>	<u>Date Analyzed</u>
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KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Approved By: Joel Kiff



QC Report : Matrix Spike/ Matrix Spike Duplicate

Report Number : 43425

Date : 5/3/2005


Project Name : **Schwieckert Property**

Project Number : **948209.04**

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
TPH as Diesel	Blank	<50	1000	1000	1030	1070	ug/L	M EPA 8015	4/29/05	103	107	4.09	70-130	25
TPH as Diesel	Blank	<50	1000	1000	1070	1080	ug/L	M EPA 8015	5/2/05	107	108	1.04	70-130	25

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Approved By:  _____
 Joe Kiff

05/03/2005 13:54

5302974808

KIFF ANALYTICAL

PAGE 07



2795 2nd Street, Suite 300
 Davis, CA 95616
 Lab: 530.297.4800
 Fax: 530.297.4808

Lab No. 43425 Page of

Project Contact (Hardcopy or PDF To):
Geoffrey D. Risse

Company/Address: **Gether-Ryan Inc.**
3140 Gold Camp Dr. Ste 170
Rancho Cordova, CA 95670

Phone No.: **(916) 631-1300** FAX No.: **(916) 631-1317**

Project Number: **948209,04** P.O. No.: **948209,04**

Project Name: **Schwieckert Property**

Project Address: **515 S. Livermore Ave**
Livermore, CA

California EDF Report? Yes No

Recommended but not mandatory to complete this section:
 Sampling Company Log Code:

Global ID:

EDF Deliverable To (Email Address): **grisse@grinc.com**

Sampler Signature: *Geoffrey D. Risse*

Chain-of-Custody Record and Analysis Request

Analysis Request													TAT	For Lab Use Only
BTEX (8021B)	BTEX/TPH Gas/MTBE (8021B/M8016)	TPH as Diesel (M8016)	TPH as Motor Oil (M8015)	TPH Gas/BTEX/MTBE (8260B)	5 Oxygenates/TPH Gas/BTEX (8260B)	7 Oxygenates/TPH Gas/BTEX (8260B)	5 Oxygenates (8260B)	7 Oxygenates (8260B)	Lead Scav. (1,2 DCA & 1,2 EDB - 8260B)	EPA 8260B (Full List)	Volatiles Halocarbons (EPA 8260B)	Lead (7421/289.2) TOTAL (X) W.E.T. (X)	12 hr/24 hr/48 hr/72 hr/1 wk	
													X	01
													X	02
													X	03
													X	04
													X	05
													X	06

Sample Designation	Sampling		40 ml VOA	SLEEVE	Container				Preservative				Matrix	
	Date	Time			HCl	HNO ₃	ICE	NONE	WATER	SOIL				
PZ-1	12/2/05	1242	3		X					X				
PZ-2	4/26/05	1121	3		X					X				
PZ-3	4/26/05	1114	3		X					X				
PZ-4	4/26/05	1059	3		X					X				
PZ-5	4/26/05	1155	3		X					X				
PZ-6	4/26/05	1216	3		X					X				

Relinquished by: <i>Geoffrey D. Risse</i>	Date: <u>4/26/05</u>	Time: <u>500</u>	Received by: _____	Remarks:
Relinquished by: _____	Date: _____	Time: _____	Received by: _____	
Relinquished by: _____	Date: <u>04/26/05</u>	Time: <u>1500</u>	Received by Laboratory: <i>DW 14-KIFF Analytical</i>	
Bill to: _____				

Distribution: White - Lab, Yellow - File, Pink - Originator

03/03/2005 13:54 5302974808 KIFF ANALYTICAL PAGE 08