

#### RECEIVED

9:08 am, Feb 10, 2010

Alameda County
Environmental Health

February 4, 2010

Alameda County Department of Environmental Health 1131 Harbor Bay Parkway, 2<sup>nd</sup> Floor Alameda, CA 94502

Attention: Barbara Jakub

Subject: Fourth Quarter 2009 Groundwater Monitoring Report

1125 67<sup>th</sup> Street Oakland, Ca

**ACDEH Site No. RO2602, Global ID: T0600109444** 

### Ladies and Gentlemen:

Gribi Associates is pleased to submit this Fourth Quarter 2009 Groundwater Monitoring Report on behalf of St. Francis Pie Shop for the underground storage tank (UST) site located at 1125 67<sup>th</sup> Street in Oakland, California (see Figure 1 and Figure 2). This letter report documents the monitoring and sampling of five site wells on December 4, 2009.

### DESCRIPTION OF SAMPLING ACTIVITIES

- 1. Gribi Associates personnel conducted groundwater monitoring and sampling activities for 5 of site wells (MW-1, MW-2, MW-3, MW-4, and MW-5) on December 4, 2009.
- 2. Groundwater monitoring and sampling was conducted in accordance with California LUFT Field Manual, including the following:
  - a. measuring static water levels;
  - b. checking for presence of free-product;
  - c. and purging of approximately three well volumes while recording of temperature, pH, conductivity, and clarity.
- 3. Collected groundwater samples were placed in an ice-chilled cooler and submitted to a state-certified laboratory for analyses.
- 4. Copies of groundwater sampling field data sheets are provided as Attachment A.

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### RESULTS OF GROUNDWATER MONITORING

### **Hydrologic Conditions**

- 1. Groundwater depths ranged from approximately 6.35 feet (MW-2) to 8.68 feet (MW-5).
- 2. Groundwater elevations ranged from 35.07 feet above means sea level (msl) (MW-5) to 37.28 feet msl (MW-1).
- 3. Groundwater flow direction is variable, generally trending to the west-southwest.
- 4. Groundwater elevations and gradient contours are shown on Figure 3.

### **Laboratory Analytical Results**

- 1. Groundwater samples from the five sampled wells were analyzed for the following parameters with standard method turn around time on results:
  - a. USEPA 8260B Total Petroleum Hydrocarbons as Gasoline (TPH-G)
  - b. USEPA 8260B Benzene, Toluene, Ethylbenzene, Xylenes (BTEX)
  - c. USEPA 8260B Oxygenates (TBA, MTBE, DIPE, ETBE, and TAME)
- 2. Groundwater hydrocarbon results for this monitoring event are summarized in Table 1.
- 3. Groundwater hydrocarbon results for this monitoring event are summarized on Figure 4.
- 4. The laboratory analytical data report and chain-of custody are provided as Attachment B.

### **CONCLUSIONS**

- 1. Results of this monitoring event indicate primarily a single groundwater MTBE/TBA plume located in the vicinity of MW-1 and MW-2.
  - a. The MTBE/TBA groundwater plume is concentrated below the former underground storage tank, fuel dispenser, and conveyance piping locations.
  - b. The groundwater MTBE/TBA groundwater plume does not appear to be migrating significantly in a downgradient direction.
  - c. Groundwater MTBE concentrations in source area well MW-1 seem to be trending downward over time, indicating natural attenuation of the MTBE.

### RECOMMENDATIONS

- 1. We believe that this site should be reviewed for regulatory closure as a "low risk" commercial property, based on the following criteria:
  - a. The source (UST, piping, and soil/groundwater overexcavation) has been removed.
  - b. The site has been adequately characterized, essentially to nondetect in all directions.
  - c. The contaminant plume is not migrating, and chemical concentrations in groundwater are expected to meet water quality objectives in the future.
  - d. No other waters of the State, water supply wells, or other sensitive receptors are likely to be impacted.



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e. The site does not pose a significant risk to human health or safety.

### PLANNED ACTIVITIES

1. Gribi Associates plans to conduct semi-annual groundwater monitoring during the second quarter of 2010.

We appreciate this opportunity to provide this report for your review. Please contact us if there are questions or if additional information is required.

Very truly yours,

Matthew A. Rosman Project Engineer

James E. Gribi Professional Geologist California No. 5843

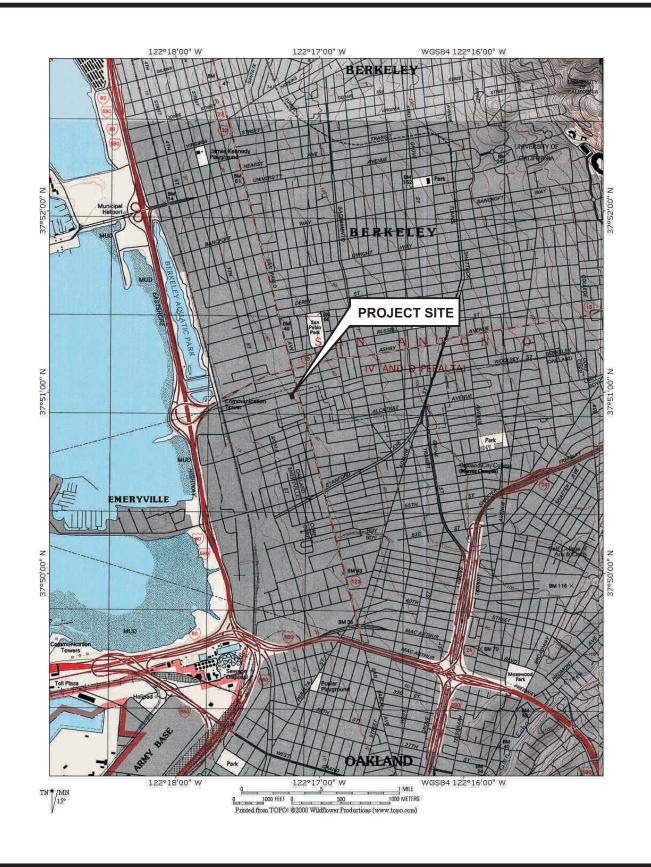
Enclosure

cc: Mr. John Buschini, Jr.



### **FIGURES**





DESIGNED BY:	CHECKED BY: JEG	
DRAWN BY: JEG	SCALE:	_

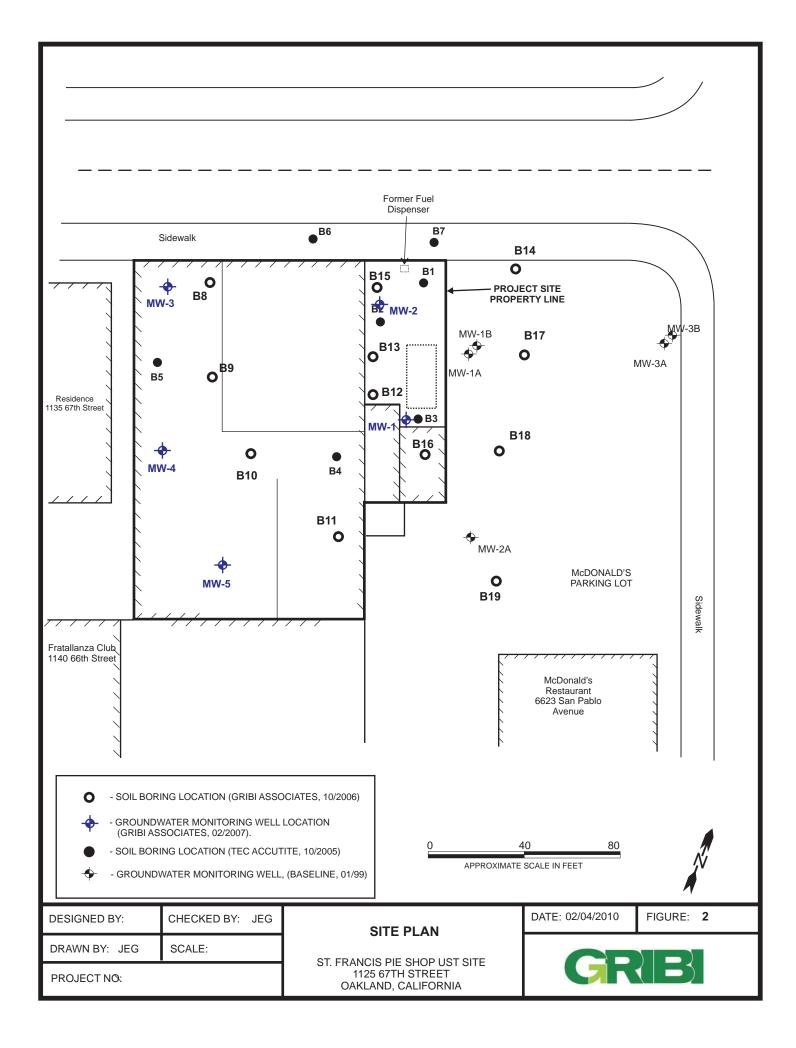
PROJECT NO:

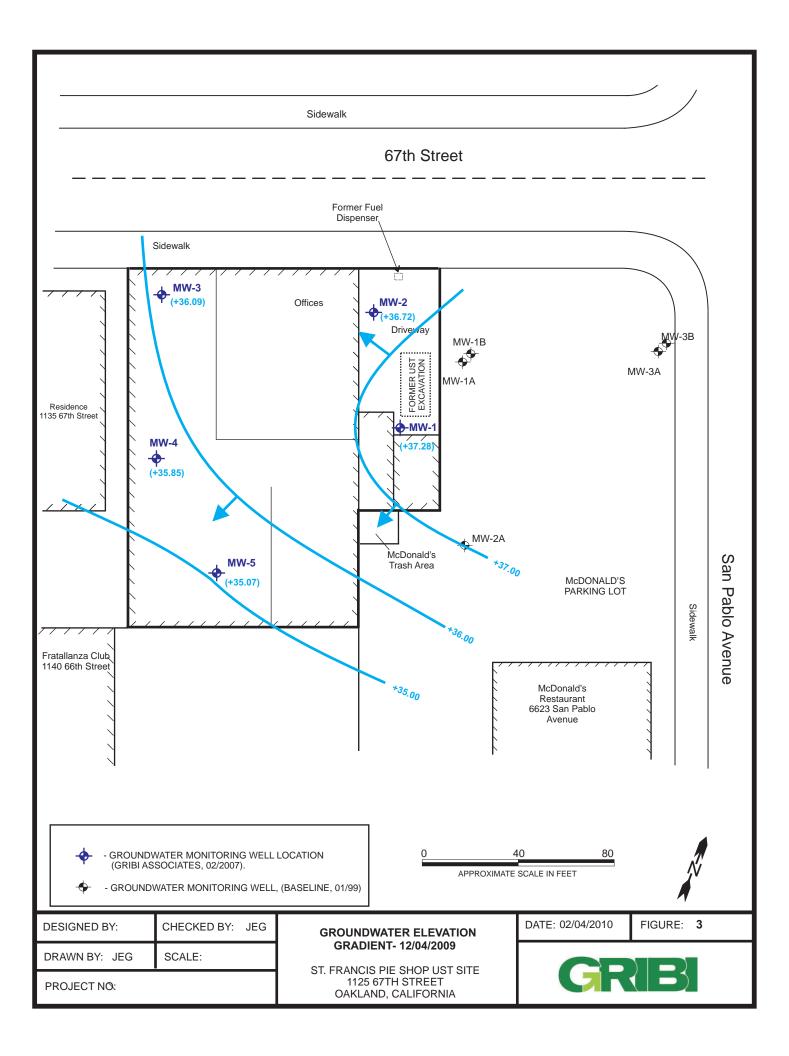
### SITE VICINITY MAP

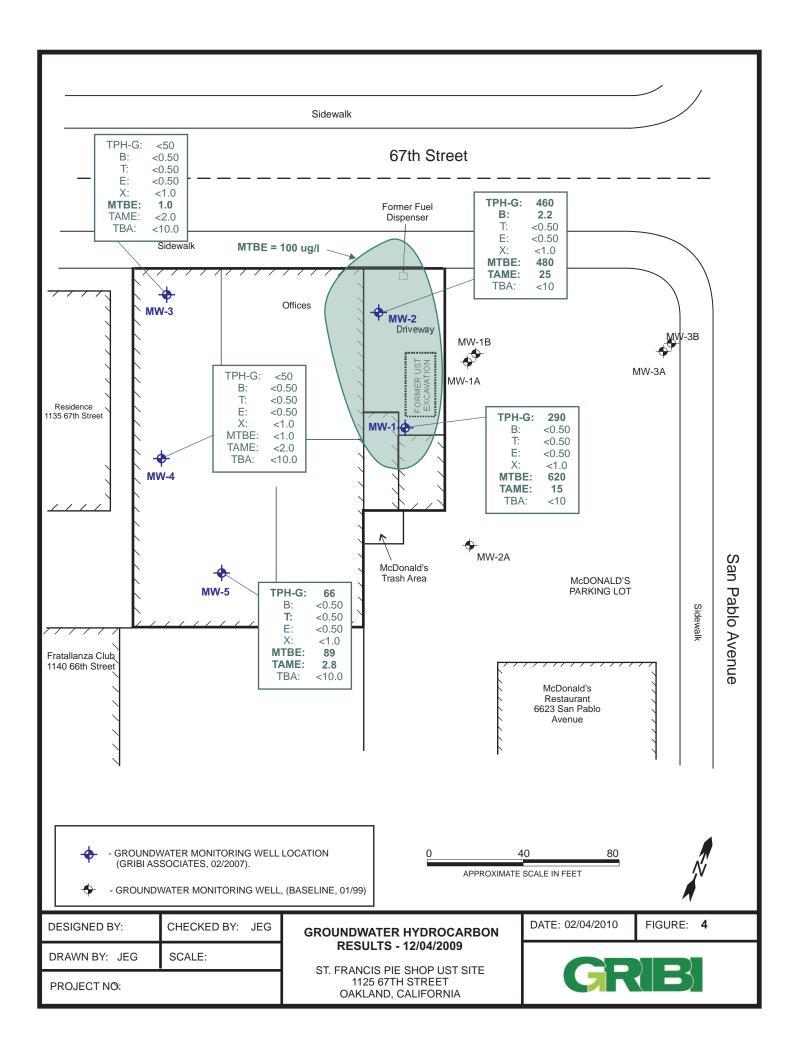
ST. FRANCIS PIE SHOP UST SITE 1125 67TH STREET OAKLAND, CALIFORNIA DATE: 02/04/2010

FIGURE: 1









### **TABLE**



# Table 1 Groundwater Laboratory Analytical Results St. Francis Pie Shop UST Site

Well		GW	GW	St. Francis	•			rams per lii	ter, ug/l)	
Well ID	Date	Depth	Elev.	TPH-G	В	T	E	X	MTBE	Oxy
MW-1	03/08/2007	4.86	39.54	130	<0.50	<0.50	< 0.50	<1.0	5,800	TAME=220 TBA=2,500
<44.40>	05/31/2007	6.38	38.02	250	< 0.50	< 0.50	< 0.50	<1.0	6,300	TAME=260 TBA=180
	09/07/2007	6.65	37.75	100	< 0.50	< 0.50	< 0.50	<1.0	3,100	TAME=140 TBA=84
	11/20/2007	6.28	38.12	380	3.0	1.4	2.6	9.4	1,400	TAME=42 TBA=24
	02/29/2008	4.89	39.51	270	< 0.50	< 0.50	< 0.50	<1.0	770	TAME=36 TBA=87
	05/29/2008	7.12	37.28	350	< 0.50	< 0.50	< 0.50	<1.0	1,900	TAME=88 TBA=390
	09/18/2008	7.20	37.20	< 50	< 0.50	< 0.50	0.87	1.5	2,600	TAME=37
	12/02/2008	6.81	37.59	840	< 0.50	< 0.50	< 0.50	<1.0	2,600	TAME=88
	02/27/2009	4.55	39.85	770	0.70	< 0.50	0.55	<1.0	760	TAME=51 TBA=590
	09/28/2009	7.11	37.29	470	< 0.50	< 0.50	< 0.50	<1.0	310	TAME=10 TBA=92
	12/04/2009	7.12	37.28	290	< 0.50	< 0.50	< 0.50	<1.0	620	TAME=15
MW-2	03/08/2007	4.99	38.08	210	5.6	< 0.50	4.8	<1.0	2,000	TAME=40 TBA=1,400
<43.07>	05/31/2007	6.58	36.49	240	14	< 0.50	5.2	<1.0	2,300	TAME=56 TBA=110
	09/07/2007	6.45	36.62	< 50	< 0.50	< 0.50	< 0.50	<1.0	<1.0	ND
	11/20/2007	5.95	37.12	1,500	15	0.63	10	3.76	2,100	TAME=43 TBA=47
	02/29/2008	4.39	38.68	510	4.4	< 0.50	2.8	<1.0	1,600	TAME=45 TBA=150
	05/29/2008	6.47	36.60	350	1.5	< 0.50	0.54	<1.0	2,600	TAME=55 TBA=110
	09/18/2008	6.80	36.27	<50	< 0.50	< 0.50	< 0.50	<1.0	2,400	TAME=60
	12/02/2008	6.26	36.81	1,500	5.6	< 0.50	2.0	1.6	4,900	TAME-=140
	02/27/2009	3.72	39.35	1,400	4.4	0.94	2.1	4.69	2,800	TAME=65 TBA=190
	09/28/2009	6.53	36.54	850	0.65	< 0.50	< 0.50	<1.0	3,400	TAME=82 TBA=280
	12/04/2009	6.35	36.72	460	2.2	< 0.50	< 0.50	<1.0	480	TAME=25
MW-3	03/08/2007	5.79	37.63	< 50	< 0.50	< 0.50	< 0.50	<1.0	11	ND
<43.42>	05/31/2007	7.14	36.28	< 50	< 0.50	< 0.50	< 0.50	<1.0	2.3	ND
	09/07/2007	7.71	35.71	< 50	< 0.50	< 0.50	< 0.50	<1.0	40	ND
	11/20/2007	7.05	36.37	< 50	< 0.50	< 0.50	< 0.50	<1.0	12	ND
	02/29/2008	5.48	37.94	< 50	< 0.50	< 0.50	< 0.50	<1.0	1.5	ND
	05/29/2008	7.78	35.64	< 50	< 0.50	< 0.50	< 0.50	<1.0	68	ND
	09/18/2008	8.14	35.28	< 50	< 0.50	< 0.50	0.59	<1.0	100	<b>TAME=2.6</b>
	12/02/2008	7.55	35.87	130	< 0.50	< 0.50	< 0.50	<1.0	410	ND
	02/27/2009	4.78	38.64	< 50	3.0	0.64	1.6	3.61	64	ND
	09/28/2009	8.02	35.40	100	< 0.50	< 0.50	< 0.50	<1.0	17	ND
	12/04/2009	7.33	36.09	< 50	< 0.50	< 0.50	< 0.50	<1.0	1.0	ND

#### Table 1 **Groundwater Laboratory Analytical Results** St. Francis Pie Shop UST Site Concentration (micrograms per liter, ug/l) Well GWGWDate ID Depth Elev. TPH-G $\boldsymbol{E}$ MTBE В X OxyMW-4 < 0.50 < 0.50 < 0.50 03/08/2007 5.42 38.10 < 50 <1.0 5.6 ND <43.52> 05/31/2007 7.01 36.51 < 50 < 0.50 < 0.50 < 0.50 <1.0 ND 6.6 09/07/2007 8.35 35.17 < 50 < 0.50 < 0.50 < 0.50 <1.0 24 ND 36.05 < 0.50 < 0.50 11/20/2007 7.47 < 50 < 0.50 <1.0 ND 26 02/29/2008 5.26 38.26 < 50 < 0.50 < 0.50 < 0.50 <1.0 12 ND 05/29/2008 8.73 34.79 < 50 < 0.50 < 0.50 < 0.50 <1.0 35 ND 09/18/2008 9.08 34.44 < 50 < 0.50 < 0.50 < 0.50 <1.0 16 ND 35.42 12/02/2008 8.10 < 50 < 0.50 < 0.50 < 0.50 <1.0 57 ND 02/27/2009 4.74 38.78 < 0.50 TAME=2.1 57 2.0 1.2 2.3 77 09/28/2009 8.75 34.77 < 50 < 0.50 0.67 < 0.50 <1.0 <1.0 ND 12/04/2009 7.67 35.85 < 50 < 0.50 < 0.50 < 0.50 <1.0 <1.0 ND MW-5 03/08/2007 6.98 36.77 < 50 < 0.50 < 0.50 < 0.50 <1.0 3.2 ND <43.75> 05/31/2007 7.02 36.73 < 50 < 0.50 < 0.50 < 0.50 <1.0 15 ND 09/07/2007 9.20 34.55 < 50 < 0.50 < 0.50 < 0.50 <1.0 42 ND 11/20/2007 8.04 35.71 < 50 < 0.50 < 0.50 < 0.50 <1.0 ND **17** 02/29/2008 7.27 36.48 < 50 < 0.50 < 0.50 < 0.50 <1.0 7.1 ND 05/29/2008 10.08 33.67 < 0.50 < 0.50 ND < 50 < 0.50 <1.0 **56** TAME=2.2 09/18/2008 10.35 33.40 < 50 < 0.50 < 0.50 < 0.50 <1.0 96

< 0.50

1.0

< 0.50

< 0.50

< 0.50

< 0.50

0.56

< 0.50

#### Notes:

GW Elev = Groundwater mean sea level elevation TPH-G = Total Petroleum Hydrocarbons as gasoline

12/02/2008

02/27/2009

09/28/2009

12/04/2009

9.67

5.86

10.09

8.68

34.08

37.89

33.66

35.07

< 50

< 50

200

66

B = Benzene

T = Toluene

E = Ethylbenzene

X = Xylenes

 $MTBE = Methyl \ Tertiary \ Butyl \ Ether$ 

Oxy = Oxygenates (except MTBE), including Ter-Butanol (TBA), Diisopropyl Ether (DIPE), Ethyl-t-butyl Ether (ETBE), and Tert-amyl Methyl Ether (TAME)

< 0.50

1.3

<1.0

<1.0

58

54

150

89

ND

ND

**TAME=4.8** 

**TAME=2.8** 

ND = Not detected above the expressed value

< 0.50

0.72

< 0.50

< 0.50

<44.40> = Top of casing mean sea level elevation (Virgil Chavez Land Survey 03/08/2007).

# ATTACHMENT A GROUNDWATER MONITORING FIELD DATA RECORDS



Site SFPS						Project	Nu	mber		
Sampling Personnel	A	JE	_			Date_	12	14/0	15	
Weather Conditions	SI	(11	,							
	1	V							7/.	1)
Well ID MW-		_			(	Casing :	Dia	meter (inc	hes)	<u> </u>
Depth to Water (ft)	7.1	1	-		7	Total D	epth	(ft) Z	2	
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3X Well Volume (g	al)	1	_					*		
Notes: One Well Volume is	s deterr	mine	d by m	ultinly	ino 'W	ater Co	ידור	in" hv		
* 0.059 for ¾ inch	well, 0.	.17 fd	or 2 inc	ch well	. 0.38 f	for 3 in	ch w	vell, 0.66	for 4 inch v	well, 1.50 for 6 inch well
Field Methods (	check	ap	propi	riate l	pox)					
Activity		Ba	iler		Pun	ıp	(	Comme		
Muse					X		1	PAR	ST. for	P
Field Paramete	rs									
Time Volum	ne .	Геш	ıp	E.C		D.0	,	pН	ORP	Comments
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3: de 1/4		18.	55	10	91	0:	71	8.15	58.2	
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	-				-	-		-		
								1		
Sample Observ	ation	5						20		
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Odor					-					
Turbidity	-									
Sheen	-									
Floating										
Particles										
Precipitate										
Sample Time_	7:	QQ			Sam	pler's	Si	gnature	M	1

Site_ SFPS				Projec	et Nu:	mber		945 — 3
Sampling Personnel_	the	6		Date_	2	4/0	5	
Weather Conditions_	SUN					1.		
Well ID MW-	L		(	Casing	Diaz	meter (in	thes) 3/	1)
Depth to Water (ft) _	6.35					(ft) <u>1</u>		to see
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3X Well Volume (gal Notes: One Well Volume is * 0.059 for ¾ inch w Field Methods (c	determine	for 2 inch w	ell, 0.38 f	ater C	olum ich w	m" by: zell, 0.66	for 4 inch	well, 1.50 for 6 inch well
Activity	1.0000000	iler	Pum	ıp	(	Comme	nts	
Knows			X			DAM	BY. P.	900
							, ,	*
Field Parameter								
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						-		
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Odor	/							
Turbidity	/							
Sheen				,		22712-22746		
Floating								
Particles								
Precipitate								
Sample Time_/	1:00	<b>e</b> _	Sam	pler'	s Sig	gnature		

Site	FP.	5				3	Projec	t Nui	nber		
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Well ID	NM-	3				C	asing	Diar	neter (inc	hes)	1
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3X Well Vo Notes: One Well V * 0.059 for Field Me	olume is	dete well,	0.17 f	or 2 inc	h well	l, 0.38 f	ater Co	olum ich w	n" by: ell, 0.66 :	for 4 inch	well, 1.50 for 6 inch well
Activity			Ba	iler		Pum	p	(	Comme	nts	
Ko	me					X			PAGE	57. D	<b>2</b>
Field Par										677	
Time	Volun		Ten	-	E.C		D.C		PΗ	ORP	Comments
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Odor			_		-						
Turbidit	v		_		-					12	
Sheen		-									
Floating											
Precipit				-							
1 recipita	att										
Sample '	Time	7:	. Qu	2		Sam	pler'	s Si	gnature	14	1-9.

Site_SFF	95				Projec	t Nu	mber		
Sampling Personnel	Bo	6			Date	17	14]	109	_
Weather Conditions	SUN				_	-	111		
Well ID_MW-	1			{	Casino	Dia	meter (in	ches) 3)	H)
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Odor									
Turbidity	-								
Sheen	-								
Floating Particles									
Precipitate									
Sample Time_	8:3R			Som	nlori	- C:	gnatur	4	-6-

Site	FP	5					Projec	et Nu	mber		
Sampling Pa	ersonnel	F	5	6			Date	12	14/0	M	
Weather Co.	nditions	5	No	,			_		1		
Well ID_		1								3	hx 1)
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Even	16					X	-F		PALA		)
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Odor		-	/								
Turbidit	y	-	_								
Sheen											
Floating											
Particles											
Precipita	te										
Sample T	Time	10	1:0	0		Sam	nler;	s Sie	znatur	· //	

### ATTACHMENT B

# LABORATORY DATA REPORTS AND CHAIN-OF-CUSTODY RECORDS







11 December 2009

Jim Gribi Gribi Associates 1090 Adam Street, Suite K Benicia, CA 94510

RE: St Francis Pie Shop

Enclosed are the results of analyses for samples received by the laboratory on 12/08/09 14:16. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

John Shepler

**Laboratory Director** 

## **Chain of Custody Record**

SunStar Laboratories, Inc. 3002 Dow Ave, Suite 212 Tustin, CA 92780 1-800-781-6777

Client: GRIBI ASSOCIATE	S				_			Dat		1.	<u> 41</u>	<u> </u>	7.0	<u>0'A</u>				Page		0	f		_
Address: 1090 ADAMS ST	REET, SUITE	ΕK						Pro	ject	Nar	ne:	Sr.	·F	LAN	149	, P	ie	SHOS	7				
Phone: (707) 748-7743		Fax: (707	7) 748-776	3	_			Coll		or:	AA	No.	$\vec{n}$	(SA	RLi	A			t Project	#:			_
Project Manager: JAMES (	GRIBI		`		_			Bate	ch #		-	11	•					Propo	osal #:				_
	Date Sampled 12 14 00	Time 1:00 1:00 8:30 10:00	Sample Type NATION Received b	Container Type	BIEX/IPH Gas/MIBE (8021 B/M8015)	TPH as Gas (M8015)	Date Of Desci (W8015)		e TPH GGS/BIEX/MTBE (8260B) #	5 Oxygenates/TPH Gas/BTEX (8260B)	S C C C C C C C C C C C C C C C C C C C	o uiii	8 E C C R 1,2 DCA & 1,2 EDB (8260B)	what start is the	Halogenated VOCs (8260B) of col	0000	rs A	Propo	STI	D. 7	Notes	(BC)	Control # of
050 12/	8/09	416		Cha	m	1:	2/8	10	9			n ar	ound	l time	e:								
Sample disposal Instructions: Di	sposal @ \$2.00 ea	ach	Return to			Picku					•							•					



Gribi Associates Project: St Francis Pie Shop

1090 Adam Street, Suite KProject Number: 224-01-03Reported:Benicia CA, 94510Project Manager: Jim Gribi12/11/09 15:33

### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1	T901180-01	Water	12/04/09 14:00	12/08/09 14:16
MW-2	T901180-02	Water	12/04/09 12:00	12/08/09 14:16
MW-3	T901180-03	Water	12/04/09 07:00	12/08/09 14:16
MW-4	T901180-04	Water	12/04/09 08:30	12/08/09 14:16
MW-5	T901180-05	Water	12/04/09 10:00	12/08/09 14:16

SunStar Laboratories, Inc.



Gribi Associates Project: St Francis Pie Shop

1090 Adam Street, Suite KProject Number: 224-01-03Reported:Benicia CA, 94510Project Manager: Jim Gribi12/11/09 15:33

### MW-1 T901180-01 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		SunStar La	aborato	ries, Inc.					
<b>Volatile Organic Compounds by E</b>	EPA Method 8260	В							
Benzene	ND	0.50	ug/l	1	9120804	12/08/09	12/11/09	EPA 8260B	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	1.0	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
Tert-amyl methyl ether	15	2.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	10	"	"	"	"	"	"	
Di-isopropyl ether	ND	2.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	2.0	"	"	"	"	"	"	
Methyl tert-butyl ether	620	50	"	50	"	"	12/11/09	"	
C6-C12 (GRO)	290	50	"	1	"	"	12/11/09	"	
Surrogate: Toluene-d8		91.8 %	84.7	-109	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		93.0 %	83.5	-119	"	"	"	"	
Surrogate: Dibromofluoromethane		131 %	81.1	-136	"	"	"	"	

SunStar Laboratories, Inc.



Gribi Associates Project: St Francis Pie Shop

1090 Adam Street, Suite K Project Number: 224-01-03 Reported: Benicia CA, 94510 Project Manager: Jim Gribi 12/11/09 15:33

### **MW-2** T901180-02 (Water)

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Reporting							

		Suiistai La	iborator.	ies, inc.					
Volatile Organic Compounds by EPA Me	ethod 8260	B							
Benzene	2.2	0.50	ug/l	1	9120804	12/08/09	12/11/09	EPA 8260B	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	1.0	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
Tert-amyl methyl ether	25	2.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	10	"	"	"	"	"	"	
Di-isopropyl ether	ND	2.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	2.0	"	"	"	"	"	"	
Methyl tert-butyl ether	480	100	"	100	"	"	12/11/09	"	
C6-C12 (GRO)	460	50	"	1	"	"	12/11/09	"	
Surrogate: Toluene-d8		104 %	84.7-	109	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		104 %	83.5-	119	"	"	"	"	
Surrogate: Dibromofluoromethane		119 %	81.1-	136	"	"	"	n .	

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Gribi Associates Project: St Francis Pie Shop

1090 Adam Street, Suite K Project Number: 224-01-03 Reported: Benicia CA, 94510 Project Manager: Jim Gribi 12/11/09 15:33

### **MW-3** T901180-03 (Water)

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

		SunStar La	boratori	es, Inc.					
<b>Volatile Organic Compounds by E</b>	PA Method 8260	В							
Benzene	ND	0.50	ug/l	1	9120804	12/08/09	12/10/09	EPA 8260B	
Toluene	ND	0.50	"	"	"	"	"	n n	
Ethylbenzene	ND	0.50	"	"	"	"	"	n n	
m,p-Xylene	ND	1.0	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	2.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	10	"	"	"	"	"	"	
Di-isopropyl ether	ND	2.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	2.0	"	"	"	"	"	"	
Methyl tert-butyl ether	1.0	1.0	"	"	"	"	"	"	
C6-C12 (GRO)	ND	50	"	"	"	"	"	"	
Surrogate: Toluene-d8		98.2 %	84.7-	109	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		92.0 %	83.5-	119	"	"	"	"	
Surrogate: Dibromofluoromethane		115 %	81.1-	136	"	"	"	"	

SunStar Laboratories, Inc.



Gribi Associates Project: St Francis Pie Shop

1090 Adam Street, Suite KProject Number: 224-01-03Reported:Benicia CA, 94510Project Manager: Jim Gribi12/11/09 15:33

### MW-4 T901180-04 (Water)

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

### SunStar Laboratories, Inc.

Sunstai Laboratories, inc.									
<b>Volatile Organic Compounds by E</b>	PA Method 8260	В							
Benzene	ND	0.50	ug/l	1	9120804	12/08/09	12/10/09	EPA 8260B	
Toluene	ND	0.50	"	"	"	"	"	m .	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	1.0	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	2.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	10	"	"	"	"	"	"	
Di-isopropyl ether	ND	2.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	2.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	1.0	"	"	"	"	"	"	
C6-C12 (GRO)	ND	50	"	"	"	"	"	"	
Surrogate: Toluene-d8		101 %	84.7-	109	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		99.4 %	83.5-	119	"	"	"	"	
Surrogate: Dibromofluoromethane		122 %	81.1-	136	"	"	"	"	

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Gribi Associates Project: St Francis Pie Shop

1090 Adam Street, Suite K Project Number: 224-01-03 Reported: Benicia CA, 94510 Project Manager: Jim Gribi 12/11/09 15:33

### **MW-5** T901180-05 (Water)

	Reporting							
Analyte Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

		SunStar La	borator	ies, Inc.					
<b>Volatile Organic Compounds by E</b>	PA Method 8260	В							
Benzene	ND	0.50	ug/l	1	9120804	12/08/09	12/10/09	EPA 8260B	-
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	1.0	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
Tert-amyl methyl ether	2.8	2.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	10	"	"	"	"	"	"	
Di-isopropyl ether	ND	2.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	2.0	"	"	"	"	"	"	
Methyl tert-butyl ether	89	25	"	25	"	"	12/11/09	"	
C6-C12 (GRO)	66	50	"	1	"	"	12/10/09	"	
Surrogate: Toluene-d8		97.4 %	84.7-	109	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		93.6 %	83.5-	119	"	"	"	"	
Surrogate: Dibromofluoromethane		118 %	81.1-	136	"	"	"	"	

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RPD

Gribi Associates Project: St Francis Pie Shop

1090 Adam Street, Suite KProject Number: 224-01-03Reported:Benicia CA, 94510Project Manager: Jim Gribi12/11/09 15:33

Reporting

# Volatile Organic Compounds by EPA Method 8260B - Quality Control SunStar Laboratories, Inc.

Spike

Source

%REC

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 9120804 - EPA 5030 GCMS		<u> </u>								
Blank (9120804-BLK1)				Prepared:	12/08/09	Analyze	d: 12/10/09			
Benzene	ND	0.50	ug/l	_						
Γoluene	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
n,p-Xylene	ND	1.0	"							
o-Xylene	ND	0.50	"							
Tert-amyl methyl ether	ND	2.0	"							
Tert-butyl alcohol	ND	10	"							
Di-isopropyl ether	ND	2.0	"							
Ethyl tert-butyl ether	ND	2.0	"							
Methyl tert-butyl ether	ND	1.0	"							
C6-C12 (GRO)	ND	50	"							
Surrogate: Toluene-d8	8.13		"	8.00		102	84.7-109			
Surrogate: 4-Bromofluorobenzene	7.79		"	8.00		97.4	83.5-119			
Surrogate: Dibromofluoromethane	8.82		"	8.00		110	81.1-136			
LCS (9120804-BS1)				Prepared:	12/08/09	Analyze	d: 12/11/09			
Chlorobenzene	20.2	1.0	ug/l	20.0		101	75-125			
,1-Dichloroethene	20.3	1.0	"	20.0		101	75-125			
Γrichloroethene	16.7	1.0	"	20.0		83.4	75-125			
Benzene	17.7	0.50	"	20.0		88.6	75-125			
Гoluene	17.2	0.50	"	20.0		86.0	75-125			
Surrogate: Toluene-d8	7.65		"	8.00		95.6	84.7-109			
Surrogate: 4-Bromofluorobenzene	8.94		"	8.00		112	83.5-119			
Surrogate: Dibromofluoromethane	9.05		"	8.00		113	81.1-136			
LCS Dup (9120804-BSD1)				Prepared:	12/08/09	Analyze	d: 12/11/09			
Chlorobenzene	20.5	1.0	ug/l	20.0		103	75-125	1.77	20	
1,1-Dichloroethene	19.7	1.0	"	20.0		98.3	75-125	3.06	20	
Trichloroethene	16.5	1.0	"	20.0		82.4	75-125	1.21	20	
Benzene	18.0	0.50	"	20.0		90.2	75-125	1.73	20	
Гoluene	17.0	0.50	"	20.0		85.0	75-125	1.23	20	
Surrogate: Toluene-d8	7.56		"	8.00		94.5	84.7-109			
Surrogate: 4-Bromofluorobenzene	8.68		"	8.00		108	83.5-119			
Surrogate: Dibromofluoromethane	9.16		"	8.00		114	81.1-136			

SunStar Laboratories, Inc.



Gribi Associates Project: St Francis Pie Shop

1090 Adam Street, Suite KProject Number: 224-01-03Reported:Benicia CA, 94510Project Manager: Jim Gribi12/11/09 15:33

### **Notes and Definitions**

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

SunStar Laboratories, Inc.