### RWL Investments Inc. 4919 Tidewater Ave., Unit B Oakland, CA 94601

Date:

3/27/2012

From:

**Bob Lawlor** 

To;

Haz. Materials Specialist, Alameda Co. Environmental Health

Subject:

4919 Tidewater Ave., Oakland, CA R00107

#### **Perjury Statement**

I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge.

**Bob Lawlor** 

General Partner

#### **RECEIVED**

9:41 am, Apr 02, 2012

Alameda County Environmental Health

## **Environmental Restoration Services**

Site Investigations \* Fuel Tank Closures and Installations \* Site Remediation \* Regulatory Reporting

Alameda County Health Care Services Department of Environmental Health 1131 Harbor Bay Parkway, Second Floor Alameda, CA 94502 March 27, 2012

Attn: Mr. Mark Detterman; Haz Mat. Specialist for: DiSalvo Trucking

4919 Tidewater Ave., Oakland

Re: Groundwater Monitoring Event

Dear Mr. Chan,

This report has been prepared by Environmental Restoration Services, (ERS) to address requirements by the Alameda County Department of Environmental Health (ACDEH) to analyze the groundwater from existing monitoring wells for contaminate level and to determine the groundwater gradient direction, at a Leaking Underground Fuel Tank (LUST) site, 4919 Tidewater Ave., Oakland, California.

#### MONITORING WELL SAMPLING

On March 16, 2012 a single round of groundwater samples were obtained from monitoring wells MW1 through MW4.

Groundwater samples were collected from the wells by bailing each well until the volume of water withdrawn was equal to at least three casing volumes. To assure that a representative groundwater sample was collected, periodic measurements of the temperature, pH and specific conductance were made. The sample was collected only when the temperature, pH, and specific conductance reached relatively constant values.

A hand operated bailer was used for evacuating the well casing (purging) of each monitor well. Water samples were collected using a new disposable bailer. An effort was made to minimize exposure of the sample to air.

Subsequent to collection, the samples were immediately stored on ice in an appropriate ice chest. Samples were transported under Chain-of-Custody procedures to Accutest Labs (Accutest) of San Jose, CA.

Sampling equipment was cleaned after its use at each sampling location. Thermometers, pH electrodes, and conductivity probes were also cleaned after sampling of each well. Cleaning procedures were accomplished by scrubbing with a detergent-potable water solution and rinsing with potable water. Care was taken to collect all excess water resulting from the sampling and cleaning procedures. The excess water is contained in a 55-gallon drum on-site.

PO Box 2006 \* Menlo Park California 94025 \* Phone 408/655-9434 \* Fax 650/325-3238

#### **Laboratory Analyses**

The following analyses were performed by Accutest on groundwater samples obtained from the monitor wells:

TPH-diesel (EPA Method 8015B); TPH-Gasoline BTEX, Fuel Oxygenates (Method 8260B)

The results of the analysis were as follows; Results in ug/L.

Sample#	TPH/g	Benzene	Toluene	EthylBenz.	<b>Xylenes</b>	MTBE	TBA	TPH/d
MW1	ND<50		ND<1	ND<1	ND<2		6	1580
MW2	ND<500	ND<10	ND<10	ND<10	ND<20	ND<10	ND<100	8730
MW3	ND<250	ND<5	ND<5	ND<5	ND<10	ND<5	ND< 50	5940
MW4	48.9	ND<1	ND<1	ND<1	ND<2	ND<1	ND<10	4890

Chains-of-Custody and laboratory results are contained in the appendix.

## Historical Monitoring Well Analytical Results Results in ug/L

		TDII/	<b>D</b>	Taluana	E Denwo	oo Vidonoo	MTBE	TPH/d	DTG GE
	Sample#	TPH/g	Benzene		<0.5	ne Xylenes <0.5	WITDL	<50	5.68 9.65
4/14/94	MVV1	<50	< 0.5	<0.5	<0.5 <0.5	<0.5 <0.5	1,100		5.68 9.65
	MW1	<50	< 0.5	<0.5		<0.5	1,100	<50	5.68 9.65
8/13/95	MW1	<50	< 0.5	<0.5	<0.5		<0.5	<50	5.68 9.65
5/26/99	MW1	60	0.6	<0.5	0.8	1.9		<50 <50	5.19 10.14
8/23/99	MW1		<0.5	<0.5	<0.5	< 0.5			
10/16/00	MW1	<50	<0.5	<0.5	< 0.5	<0.5		150	
4/26/01	MW1	<50	<0.5	<0.5	<0.5	< 0.5		1300	5.68 9.65 5.19 10.14
9/5/02	MW1		< 0.5	<0.5	< 0.5	<1	9.8	<50	
8/18/05	MW1	<50	<1	<1	<1	<1	6.0	410	5.19 10.14
1/25/06	MW1	<50	2.3	<0.5	<0.5	1.2	11.0	3600	5.68 9.65
7/12/06	MW1	<50	<0.5	<0.5	<0.5	<1	6.2	100	5.68 9.65
6/27/07	MW1	<50	<0.5	<0.5	<0.5	<0.5	4.4	<50	5.68 9.65
11/26/07	MW1	<50	<0.5	<0.5	<0.5	<0.5	5.0	<50	5.68 9.65
6/9/08	MW1	<50	< 0.5	<0.5	<0.5	<0.5	5.0	<50	5.68 9.65
12/11/08	MW1	<50	< 0.5	<0.5	<0.5	<0.5	6.3	<50	5.68 9.65
3/16/12	MW1	<50	<1	<1	<1	<1	8.9	1580	5.19 10.14
									5.00 0.05
4/14/94	MW2	Not S		ue to Free					5.68 9.65
11/17/94	MW2	<50	<0.5	<0.5	<0.5	<0.5		28,000	5.68 9.65
8/13/95	MW2	<50	<0.5	<0.5	<0.5	<0.5		180	5.68 9.65
5/26/99	MW2	<50	< 0.5	<0.5	8.0	<0.5	<50	120	5.68 9.65
8/23/99	MW2		< 0.5	<0.5	< 0.5	<0.5		61	5.19 10.14
10/16/00	MW2	570	<0.5	<0.5	<0.5	<0.5		3400	5.68 9.65
4/26/01	MW2	2400	< 0.5	<0.5	<0.5	<0.5		57,000	5.68 9.65
9/5/02	MW2		< 0.5	< 0.5	< 0.5	<1	5.1	27,100	5.19 10.14
8/18/05	MW2	<50	<10	<10	<10	<10	<30	13,300	5.19 10.14
1/25/06	MW2	1200	<10	<10	<10	<20	<10	110,000	5.68 9.65
7/12/06	MW2	330	< 0.5	< 0.5	< 0.5	<1	3.6	5900	5.68 9.65
6/27/07	MW2	200	< 0.5	< 0.5	< 0.5	<0.5	1.8	10,000	5.68 9.65
11/26/07		330	<0.5	<0.5	<0.5	<0.5	2.4	25,000	5.68 9.65
6/9/08	MW2	230	<0.5	<0.5	< 0.5	<0.5	1.5	13,000	5.68 9.65
	10 VEW 11 11 11 11 11 11 11 11 11 11 11 11 11	200	<0.5	<0.5	<0.5	< 0.5	2.7	3700	5.68 9.65
12/11/08	\$15	<500	<10	<10	<10	<20	<10	8730	5.19 10.14
3/16/12	MW2	~300	>10	- 10	- 10				

Date Samp	le# TPH/g	Benzene	Toluene	E-Benzer	ne Xylenes	MTBE	TPH/d	DTG	GE
4/14/94 MW	3 250	< 0.5	< 0.5	<0.5	1.2		7700	5.68	9.65
11/17/94 MW	3 <50	< 0.5	< 0.5	< 0.5	<0.5		160,000	5.68	9.65
8/13/95 MW	3 <50	< 0.5	<0.5	< 0.5	<0.5		1500	5.68	9.65
5/26/99 MW	3 160	< 0.5	< 0.5	0.8	<0.5	< 0.5	1100	5.68	9.65
8/23/99 MW	3	< 0.5	< 0.5	< 0.5	< 0.5		84	5.19	10.14
10/16/00 MW	3 130	0.52	<0.5	<0.5	<0.5		42,000	5.68	9.65
4/26/01 MW	3 310	<0.5	<0.5	<0.5	< 0.5		21,000	5.68	9.65
9/5/02 MW	3	<0.5	<0.5	< 0.5	<1	31.1	1990	5.19	10.14
8/18/05 MW	3 Not Sa	ampled Du	e to Free	Product				5.19	10.14
1/25/06 MW	3 440	<2.5	<2.5	<2.5	<5	29	21,000	5.68	9.65
7/12/06 MW	3 280	< 0.5	<0.5	< 0.5	<1	47	16,000	5.68	9.65
6/27/07 MW	3 140	<0.5	<0.5	<0.5	<0.5	25	2600	5.68	9.65
11/26/07 MW	3 160	< 0.5	<0.5	< 0.5	<0.5	27	690	5.68	9.65
6/9/08 MW	Not Sa	ampled Di	ue to Free	Product				5.68	9.65
12/11/08 MW	3 250	< 0.5	<0.5	<0.5	< 0.5	25	14,000	5.68	9.65
3/16/12 MW	3 <250	<5	<5	<5	<10	<5	5940	5.19	10.14
8/13/95 MW	4 450	2.1	0.7	4.1	13		<50	5.68	9.65
5/26/99 MW	4 600	0.7	<0.5	< 0.5	5.8	<0.5	100	5.68	9.65
8/23/99 MW	4	<0.5	< 0.5	< 0.5	< 0.5	()	180		10.14
10/16/00 MW	4 890	<0.5	<0.5	< 0.5	11		75,000	5.68	9.65
4/26/01 MW	4 2100	<0.5	<0.5	< 0.5	<0.5		24,000	5.68	9.65
9/5/02 MW	4	<0.5	<0.5	<0.5	<1	1.2	17,000		10.14
8/18/05 MW		<1	<1	<1	<1	<3	6200		10.14
1/25/06 MW	110	2.0	0.87	<0.5	2.3	4.5	8200	5.68	9.65
7/12/06 MW	4 250	<0.5	<0.5	< 0.5	<1	0.93	5200	5.68	9.65
6/27/07 MW	4 <50	<0.5	<0.5	<0.5	<0.5	<0.5	320	5.68	9.65
11/26/07 MW	4 <50	<0.5	<0.5	< 0.5	<0.5	<0.5	1400	5.68	9.65
6/9/08 MW		< 0.5	<0.5	<0.5	<0.5	<0.5	22,000	5.68	9.65
12/11/08 MW		< 0.5	<0.5	<0.5	<0.5	<0.5	4000	5.68	9.65
3/16/12 MW	48.9	<1	<1	<1	<2	<1	4890	5.19	10.14

DTG

Depth to Groundwater

GE

Groundwater Elevation

#### **Determination of Horizontal Groundwater Gradient**

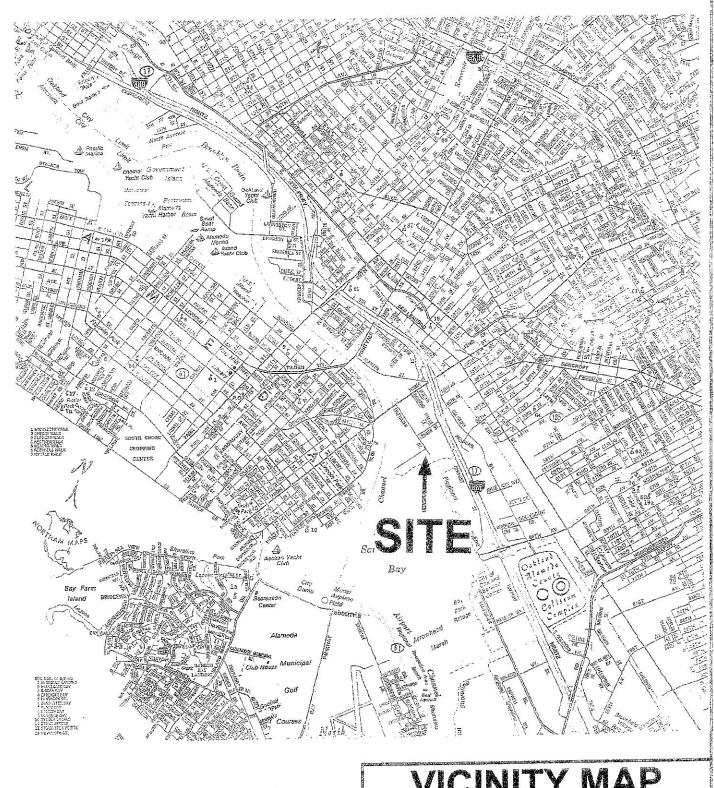
On March 16, 2012 the water levels in monitor wells MW1 through MW4 were measured within a one hour period. The water surface elevations in the wells were calculated using the survey data. Then, the horizontal hydraulic gradient was calculated based on accurately determined well locations. The gradient calculated indicated a northwestern direction at a magnitude of approximately 0.0028. These groundwater elevation contours are depicted in Figure 2.

Respectfully submittled this 27th day of March, 2012,

Bennett T Halsted Project Manager

Samuel H Halsted P.E

CE 14095



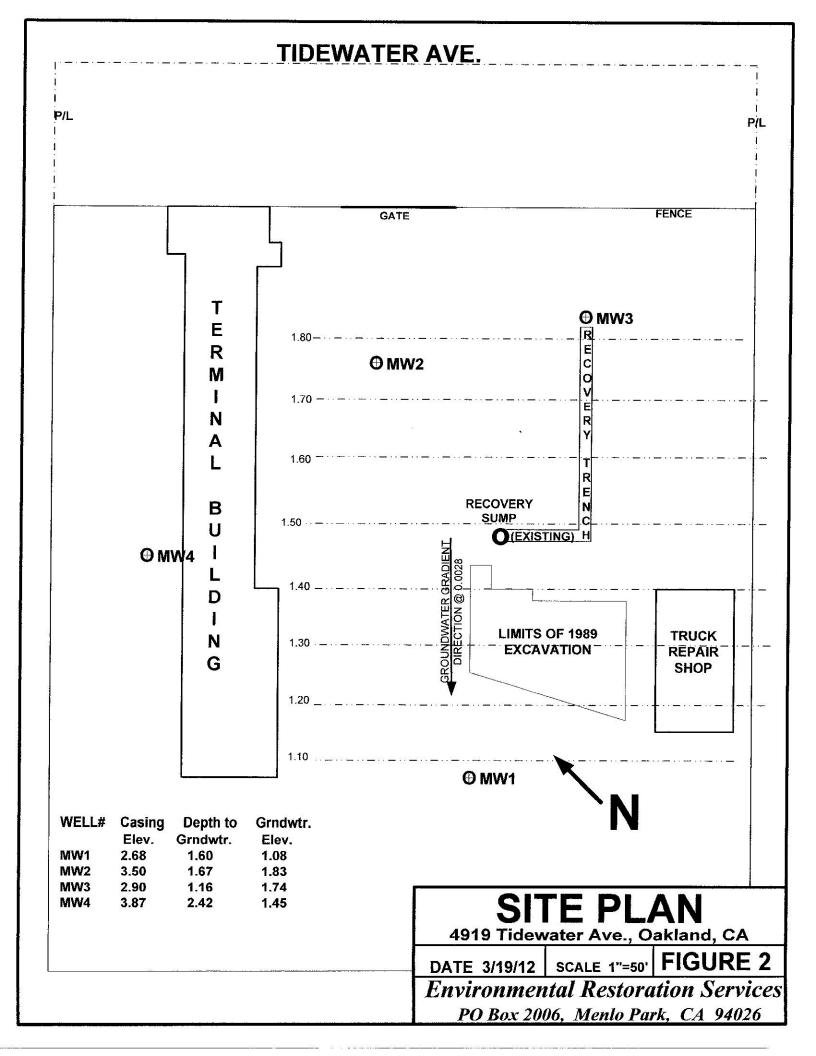


## VICINITY MAP

4919 Tidewater Ave., Oakland, CA

DATE 3/19/12 SCALE 1"=0.6 Miles FIGURE 1

Environmental Restoration Services PO Box 2006, Menlo Park, CA 94026



WELL	_ID: MW-	1		Site Name: RWI	_ Investme	nts
Site Address: 4919 Tidewater Ave. Oakland						
Proje	ct No.:			Date: 3/16/12		
Samp	lers Nam	e: Ben Hals	ted			
Meas	uring met	hod: Soun	der			
Purge	e Equipme	ent: Dispos	able ba	ailer		
Wate	r in Well E	Box? No	Inside	diameter of we	II: 2"	000 000 00 00 00 00 00 00 00 00 00 00 0
Conv	ersion fac	tors (CF):	2-inc	h well = 0.16 ga	llons/ft.,	
4-	inch well	= 0.65 gallon	s/ft.,	6	-inch well =	1.47 gailons/ft.,
Depth	to water	from top of	casing	: 1.6		
Total	Well Dept	th: 6.75				
Water	r Volume i	in Well: .825	gallon	ıe.		
	Will wanted	ailed dry?				
-		8015M 8260				
1000 Maria		ALCOHOL III II I	di di	s (1) 1 liter amb	er	
800		nent: Dispo			· · · · · · · · · · · · · · · · · · ·	1
-		-		MEASUREMEN	NTS	
Time	Gallons	Temp. (C)	рН	Conductivity	Other:	Comments
10:16	1.5	23.5	6.71	1067		
11:45	2	23.8	6.92	996		
13:15	3	24.2	6.87	1053		
14:06						Sampled
	A222442.000000 - 96.3600000 - 955	900 907 - 500 - G0000000-0000000000000000000000				2000 000 000
COM	MENTS: H	ydrocarbon (	Odor			is the state of th

WELL	_iD: MW-	2		Site Name: RWI	_ Investmen	ts
Site Address: 4919 Tidewater Ave. Oakland						
Proje	ct No.:			Date: 3/16/12		NOTE OF THE PROPERTY OF THE PR
Samp	lers Nam	e: Ben Hals	ted		Dieta German	
Meas	uring met	hod: Soun	der			
Purge	Equipme	ent: Dispos	able ba	ailer		
Water	r in Well E	Box? No	Inside	diameter of we	li: 2"	,
Conv	ersion fac	tors (CF):	2-inc	h well = 0.16 ga	llons/ft.,	
4-	inch well	= 0.65 gallon	ıs/ft.,	6	-inch well =	1.47 gallons/ft.,
70 - 50 - 50 - 5	OF BOOMS SOURCE PROPERTY.	from top of	casing	: 1.67		
Total	Well Dept	th: 7.25				
Water	Water Volume in Well: .89 gallons					
5 2 5	3 NH N 3 E	ailed dry? _	E 001 1	x No	2 104110 11 107011	
Lab A	nalysis:	8015M 8260	)B			
Samp	le Contail	ners: (2) 40n	nl VOA	s (1) 1 liter amb	er	
Samp	le Equipn	nent: Dispo	sable b	pailer		
			FIELD	MEASUREMEN	NTS	
Time	Gallons	Temp. (C)	рН	Conductivity	Other:	Comments
11:15	11	23.3	6.51	567		
11:27	2	23.4	6.62	576		
11:40	3	23.2	6.67	583		
11:45						Sampled
		· · · · · · · · · · · · · · · · · · ·				
COM	MENTS: H	ydrocarbon	Odor			

WELL	.ID: MW-	3	S	ite Name: RWL	Investment	ts
Site Address: 4919 Tidewater Ave. Oakland						
Proje	ct No.:			Date: 3/16/12		
Samp	lers Name	e: Ben Hals	ted			
Meas	uring met	hod: Sound	der			
Purge	Equipme	nt: Disposa	able ba	iler		
Water	in Well B	ox? No	Inside	diameter of we	ll: 2"	
Conv	ersion fac	tors (CF):	2-incl	n well = 0.16 ga	llons/ft.,	
4-	inch well	= 0.65 gallon	s/ft.,	6-	inch well =	1.47 gallons/ft.,
Depth	to water	from top of c	asing:	1.16		
Total	Well Dept	h: 7.05				
···········		86 3	021			
	<del>-</del>	<b>n Well:</b> .94 g				
Well p	oumped/b	ailed dry? _	_Yes _	x No		
Lab A	nalysis:	8015M 8260	В			
				(1) 1 liter amb	<u>er</u>	
Samp	le Equipn	nent: Dispo	sable b	ailer		
			FIELD	MEASUREMEN	NTS .	
Time	Gallons	Temp. (C)	рН	Conductivity	Other:	Comments
11:46	11	23.8	6.89	513		
11:52	2	23.9	6.91	496		
11:59	3	24.2	6.87	488		
12:01		·	ļ			Sampled
				·		
	post of					
COM	MENTS: H	ydrocarbon (	Odor			

WELL	ID: MW-	4	S	ite Name: RWL	. Investments	
Site A	ddress: 4	1919 Tidewa	ter Ave	. Oakland	3023-303-303-4-33	
Projec	ct No.:		<u> </u>	)ate: 3/16/12		
Samp	lers Name	e: Ben Hals	ted			
Meası	uring met	hod: Sound	der			
Purge	Equipme	nt: Disposa	able ba	iler		
Water	in Well B	ox? No	Inside	diameter of we	ll: 2"	N. N. 10 1011
Conve	ersion fac	tors (CF):	2-inch	n well = 0.16 ga	llons/ft.,	
<b>4</b> -i	nch well	= 0.65 gallon	s/ft.,	6-	inch well = 1.47	gallons/ft.,
Depth	to water	from top of o	casing:	2.42		
Total	Well Dept	h: 7.75				
		W II 05 -				
		n Well: .85 g		<b>N8</b>		a normal
		ailed dry? _		XNo		
		8015M 8260	<del></del>			
<u> </u>		• 100 to 1000 1 1 1000		(1) 1 liter ambe	er	
Samp	le Equipn	nent: Dispo	***************************************			
			FIELD	MEASUREMEN		
Time	Gallons	Temp. (C)	рН	Conductivity	Other:	Comments
12:51	11	23.8	6.96	1182		
12:58	2	23.9	6.95	1194	<u> </u>	
13:09	3	24.2	6.99	1186		
13:14						Sampled
COM	MENTS: H	ydrocarbon	Odor			



03/28/12



#### **Technical Report for**

**Environmental Restoration Services** 

RWL Investments - 4919 Tidewater Ave, Oakland, CA

Accutest Job Number: C20909

**Sampling Date: 03/16/12** 

#### Report to:

Environmental Restoration Services 500 Santa Cruz Avenue Menlo Park, CA 94025 envirest@aol.com

**ATTN: Ben Halsted** 

Total number of pages in report: 24



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Kesavalu M. Bagawandoss, Ph.D., J.D., Lab Director

- James 1

Client Service contact: Diane Theesen 408-588-0200

Certifications: CA (08258CA) AZ (AZ0762) DoD/ISO/IEC 17025:2005 (L2242)

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

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### **Sample Summary**

**Environmental Restoration Services** 

RWL Investments - 4919 Tidewater Ave, Oakland, CA

**Job No:** C20909

Sample Number	Collected Date	Time By	Received	Matr Code		Client Sample ID
C20909-1	03/16/12	11:45 BH	03/16/12	AQ	Ground Water	MW-2
C20909-2	03/16/12	12:01 BH	03/16/12	AQ	Ground Water	MW-3
C20909-3	03/16/12	11:45 BH	03/16/12	AQ	Ground Water	MW-4
C20909-4	03/16/12	14:00 BH	03/16/12	AQ	Ground Water	MW-1





Sample Results	
Report of Analysis	
report of Tillarysis	



Page 1 of 1

Client Sample ID: MW-2

 Lab Sample ID:
 C20909-1
 Date Sampled:
 03/16/12

 Matrix:
 AQ - Ground Water
 Date Received:
 03/16/12

 Method:
 SW846 8260B
 Percent Solids:
 n/a

Project: RWL Investments - 4919 Tidewater Ave, Oakland, CA

**Analytical Batch** File ID DF Analyzed By **Prep Date Prep Batch** Run #1 a N29605.D 10 03/27/12 TF VN964 n/a n/a Run #2

Purge Volume Run #1 10.0 ml

Run #2

#### BTEX, Oxygenates

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	10	2.0	ug/l	
108-88-3	Toluene	ND	10	2.0	ug/l	
100-41-4	Ethylbenzene	ND	10	2.0	ug/l	
1330-20-7	Xylene (total)	ND	20	4.6	ug/l	
106-93-4	1,2-Dibromoethane	ND	10	2.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	10	2.0	ug/l	
108-20-3	Di-Isopropyl ether	ND	20	2.2	ug/l	
637-92-3	Ethyl Tert Butyl Ether	ND	20	2.2	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	10	2.0	ug/l	
994-05-8	Tert-Amyl Methyl Ether	ND	20	4.0	ug/l	
75-65-0	Tert-Butyl Alcohol	ND	100	24	ug/l	
	TPH-GRO (C6-C10)	ND	500	250	ug/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Lim	its	
1868-53-7	Dibromofluoromethane	96%		60-1	30%	
2037-26-5	Toluene-D8	100%		60-1	30%	
460-00-4	4-Bromofluorobenzene	96%		60-1	30%	

<sup>(</sup>a) Sample was not preserved to a pH < 2. Dilution required due to high concentration of non-target hydrocarbons.

ND = Not detected MDL - Method Detection Limit J = Indicential Indicenti

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value



Page 1 of 1

Client Sample ID: MW-2

Lab Sample ID: C20909-1 **Date Sampled:** 03/16/12 Matrix: AQ - Ground Water **Date Received:** 03/16/12 Method: Percent Solids: SW846 8015B M SW846 3510C n/a

**Project:** RWL Investments - 4919 Tidewater Ave, Oakland, CA

File ID **Analytical Batch** DF Analyzed By **Prep Date Prep Batch** Run #1 HH021076.D 10 03/20/12 JH 03/19/12 OP5599 **GHH697** 

Run #2

**Final Volume Initial Volume** 

Run #1 970 ml 1.0 ml

Run #2

#### **TPH Extractable**

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	8.73	1.0	0.26	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Lim	Limits	
630-01-3	Hexacosane	74%		45-1	40%	

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value

RL = Reporting Limit

E = Indicates value exceeds calibration range



#### 1 of 1

#### **Report of Analysis**

Analysis Page 1 of 1

Client Sample ID: MW-3 Lab Sample ID: C20909-2

 Lab Sample ID:
 C20909-2
 Date Sampled:
 03/16/12

 Matrix:
 AQ - Ground Water
 Date Received:
 03/16/12

 Method:
 SW846 8260B
 Percent Solids:
 n/a

Project: RWL Investments - 4919 Tidewater Ave, Oakland, CA

File ID DF Analyzed By Prep Date Prep Batch Analytical Batch Run #1 a N29604.D 5 03/27/12 TF n/a n/a VN964

Run #2

**Purge Volume** 

Run #1 10.0 ml

Run #2

#### BTEX, Oxygenates

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	5.0	1.0	ug/l	
108-88-3	Toluene	ND	5.0	1.0	ug/l	
100-41-4	Ethylbenzene	ND	5.0	1.0	ug/l	
1330-20-7	Xylene (total)	ND	10	2.3	ug/l	
106-93-4	1,2-Dibromoethane	ND	5.0	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	1.0	ug/l	
108-20-3	Di-Isopropyl ether	ND	10	1.1	ug/l	
637-92-3	Ethyl Tert Butyl Ether	ND	10	1.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	35.7	5.0	1.0	ug/l	
994-05-8	Tert-Amyl Methyl Ether	ND	10	2.0	ug/l	
75-65-0	Tert-Butyl Alcohol	ND	50	12	ug/l	
	TPH-GRO (C6-C10)	ND	250	130	ug/l	
CAS No.	<b>Surrogate Recoveries</b>	Run# 1	Run# 2	Limi	ts	
1868-53-7	Dibromofluoromethane	97%		60-13	80%	
2037-26-5	Toluene-D8	99%		60-13	80%	
460-00-4	4-Bromofluorobenzene	95%		60-13	80%	

<sup>(</sup>a) Dilution required due to high concentration of non-target hydrocarbons.

ND = Not detected

MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



Client Sample ID: MW-3 Lab Sample ID: C20909-2

**Date Sampled:** 03/16/12 Matrix: AQ - Ground Water **Date Received:** 03/16/12 Method: Percent Solids: SW846 8015B M SW846 3510C n/a

**Project:** RWL Investments - 4919 Tidewater Ave, Oakland, CA

File ID DF **Analytical Batch** Analyzed By **Prep Date Prep Batch** Run #1 HH021074.D 5 03/20/12 JH 03/19/12 OP5599 **GHH697** 

Run #2

**Final Volume Initial Volume** 

Run #1 850 ml 1.0 ml

Run #2

#### **TPH Extractable**

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	5.94	0.59	0.15	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Lim	its	
630-01-3	Hexacosane	73%		45-1	40%	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value



Page 1 of 1

Client Sample ID: MW-4

 Lab Sample ID:
 C20909-3
 Date Sampled:
 03/16/12

 Matrix:
 AQ - Ground Water
 Date Received:
 03/16/12

 Method:
 SW846 8260B
 Percent Solids:
 n/a

Project: RWL Investments - 4919 Tidewater Ave, Oakland, CA

File IDDFAnalyzedByPrep DatePrep BatchAnalytical BatchRun #1 aN29603.D103/27/12TFn/an/aVN964

Run #2

**Purge Volume** 

Run #1 10.0 ml

Run #2

#### BTEX, Oxygenates

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	ND	2.0	0.46	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
108-20-3	Di-Isopropyl ether	ND	2.0	0.22	ug/l	
637-92-3	Ethyl Tert Butyl Ether	ND	2.0	0.22	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
994-05-8	Tert-Amyl Methyl Ether	ND	2.0	0.40	ug/l	
75-65-0	Tert-Butyl Alcohol	ND	10	2.4	ug/l	
	TPH-GRO (C6-C10)	48.9	50	25	ug/l	J
CAS No.	Surrogate Recoveries	Run# 1	Run# 2 Limits		its	
1868-53-7	Dibromofluoromethane	94%		60-1	30%	
2037-26-5	Toluene-D8	100%		60-1	30%	
460-00-4	4-Bromofluorobenzene	99%		60-1	30%	

<sup>(</sup>a) Sample was not preserved to a pH < 2.

ND = Not detected

MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value



Page 1 of 1

Client Sample ID: MW-4

 Lab Sample ID:
 C20909-3
 Date Sampled:
 03/16/12

 Matrix:
 AQ - Ground Water
 Date Received:
 03/16/12

 Method:
 SW846 8015B M SW846 3510C
 Percent Solids:
 n/a

Project: RWL Investments - 4919 Tidewater Ave, Oakland, CA

File ID DF Analyzed By Prep Date Prep Batch Analytical Batch
Run #1 HH021075.D 5 03/20/12 JH 03/19/12 OP5599 GHH697

Run #2

Initial Volume Final Volume

Run #1 1060 ml 1.0 ml

Run #2

#### **TPH Extractable**

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	4.89	0.47	0.12	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Lim	iits	
630-01-3	Hexacosane	53%		45-1	40%	

ND = Not detected MDL - Method Detection Limit J = Indicates and MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value



Page 1 of 1

Client Sample ID: MW-1

 Lab Sample ID:
 C20909-4
 Date Sampled:
 03/16/12

 Matrix:
 AQ - Ground Water
 Date Received:
 03/16/12

 Method:
 SW846 8260B
 Percent Solids:
 n/a

Project: RWL Investments - 4919 Tidewater Ave, Oakland, CA

**Analytical Batch** File ID DF Analyzed By **Prep Date Prep Batch** VN964 Run #1 a N29602.D 1 03/27/12 TF n/an/aRun #2

Purge Volume

Run #1 10.0 ml

Run #2

#### BTEX, Oxygenates

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	ND	2.0	0.46	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
108-20-3	Di-Isopropyl ether	ND	2.0	0.22	ug/l	
637-92-3	Ethyl Tert Butyl Ether	ND	2.0	0.22	ug/l	
1634-04-4	Methyl Tert Butyl Ether	8.9	1.0	0.20	ug/l	
994-05-8	Tert-Amyl Methyl Ether	ND	2.0	0.40	ug/l	
75-65-0	Tert-Butyl Alcohol	6.0	10	2.4	ug/l	J
	TPH-GRO (C6-C10)	ND	50	25	ug/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2 Limits		its	
1868-53-7	Dibromofluoromethane	95%		60-1	30%	
2037-26-5	Toluene-D8	98%		60-1	30%	
460-00-4	4-Bromofluorobenzene	99%		60-1	30%	

<sup>(</sup>a) Sample was not preserved to a pH < 2.

ND = Not detected

MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value



Page 1 of 1

Client Sample ID: MW-1

Lab Sample ID: C20909-4 **Date Sampled:** 03/16/12 Matrix: AQ - Ground Water **Date Received:** 03/16/12 Method: Percent Solids: SW846 8015B M SW846 3510C n/a

**Project:** RWL Investments - 4919 Tidewater Ave, Oakland, CA

File ID DF **Analytical Batch** Analyzed By **Prep Date Prep Batch** Run #1 HH021100.D 1 03/21/12 JH 03/19/12 OP5599 **GHH697** 

Run #2

**Final Volume Initial Volume** 

Run #1 995 ml 1.0 ml

Run #2

#### **TPH Extractable**

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	1.58	0.10	0.025	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Lim	its	
630-01-3	Hexacosane	78%		45-1	40%	

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value

RL = Reporting Limit

E = Indicates value exceeds calibration range





Misc.	Forms		

Custody Documents and Other Forms

Includes the following where applicable:

• Chain of Custody



		CHAIN OF CUS	TODY				
		2105 Lundy Ave, San Jose, CA 9		FEO-EX Tracking	, *	Bottle Order Control #	
ACCUTE	<b>:</b> 5T	(408) 588-0200 FAX: (408) 58		Accutest Quote		Accutest NC Job #: C	20909
LABORAT	ORIES		MP4240				
Client / Reporting Information  Company Name		Project Information	l l		Reque	ested Analysis	Matrix Codes WW- Wastewater
Environmental Kesterations	Street	ame: RWL Investor					GW- Ground Water SW- Surface Water
City State	Zip City	919 Tidewater 1	Ave	m TPH/q			SO- Soil
Mento Park (a 9402	-b 00	ilaland Ca		015 m			OI-OI WP-Wipe
Sen Halske	Project #						EIQ - Non-aqueous Elquid
Phone 408-655-9434	EMAIL:	envines to aplicom	`	10 1 6	1		AIR
Samplers's Name B. Halsted			preserved Bottles	1/2			DW- Drinking Water (Perchlorate Only)
Accutest Sample ID / Field Point / Point of Collection	Collection  Date Time	Sampled by Matrix bottles \$\frac{1}{2} \frac{2}{2} \frac{2}{2} \frac{2}{2}	PLESEIVED PORTIES	TPH/			LAB USE ONLY
	31612 1195	BH W3 K		XX			avials (wha)
a mws	1201	1 1 4		XX			,
3 mw4	阻	Y		* *			$\bot$
4 mw-1	V 200	V V V 4		XX			
·							
Turnaround Time ( Business days)		Data Deliverable Information		68355 - 655	Cor	nments / Remarks	
Standard TAT 15 Business Days Appro	oved By:/ Date:	Commercial "A" - Results only  Commercial "B" - Results with QC su	ımmaries				
5 Day (Workload dependent)		Commerical "B+" - Results, QC, and					
3 Day (125% markup)		FULT1 - Level 4 data package  EDF for Geotracker EDD Fo	ormat		· · ·		
1 Day (200% markup)		Provide EDF Global ID					
Same Day (300% markup) Emergency T/A data available VIA Lablink		Provide EDF Logcode:	AT THE				
Sample Custody m	ust be documente	d below each time samples change pos	ssession, including c	ourier deliver	y.  Date Time:	Received By:	
relinguished by Sampler:	Date Time: 1504 03-16-12	1 P	2			2	
Relinquished by:	Date Time:	Received By:	Relinquished By:		Date Time:	Received By:	
Relinguished by:	Date Time:	Received By:	Custody Seal #	Appropriate Bot			Cooler Temp.
5		5		Labels match Co	DO Y N Separate Receive	ing Check List used: YN 6	.2.0.4 = 5.8° 00

C20909: Chain of Custody

Page 1 of 2



Accutest Laboratories Northern California Sample Rece	iving Check Lis	t Job#: C	20909	Initial:
Review Chain of Custody Chain of Custody is to be comp	lete and legible.			
Are these regulatory (NPDES) samples? CWA	(Yes) No	Client Sample ID	pH Check	Other Comments II
✓ Is pH requested?	Yes (NO)	Ottent Gample to	pri Greck	Other Comments/Issues
□ Was Client informed that hold time is 15 min? Yes / No Continue	Yes / No			
□ Was ortho-Phosphate filtered with in 15 min? Yes / No Continue	Yes / No			
√Are sample within hold time?	(Yes) / No			
Are sample in danger of exceeding hold-time	Yes (No)			
Existing Client? (Yes) No Existing Project?	Yes No			
If No: Is Report to info complete and legible, including;				
□ deliverable □ Name □ Address □ phone □ e-mail				
Is Bill to info complete and legible, including;				
□ PO# □ Credit card □ Contact □address □ phone □ e-mail				
Is Contact and/or Project Manager identified, including;				
□ phone □ e-mail				
□ Project name / number				
	Yes (No)			
Sample IDs / date & time of collection provided?	(Yes) No			
✓ Is Matrix listed and correct?	(Yes) No			
Analyses listed, we do, or client has authorized a subcontract?	(Yes)/ No			
Chain is signed and dated by both client and sample custodian?	(Yes) No			
TAT requested available? (Yes) / No Approved by PW				
9	-			
Review Coolers:				
√Were all Coolers temperatures measured at ≤6°C?	Yes DNo			
If cooler is outside the ≤6°C; note down the affected bottles in that cooler on the left	_			
✓Are samples on Ice?	YES DNo			
Note that ANC does NOT accept evidentiary samples. (We do not lock refrigerators)				
✓ Shipment Received Method	<u> </u>			
	Yes / No			
	-			
Review of Sample Bottles: If you answer no, explain to the side				
Chain matches bottle labels? Yes / No Sample bottle intact?	(Yes) No			
is there enough sample volume in proper bottle for requested analyses?	Yes) No			
Proper Preservatives? (es / No				
Check pH on preserved samples except 1664, 625, 8270 and VOAs; make notes on left.				
d Headspace-VOAs? Greater than 6mm in diameter List sample ID and affected container	Yes (No)			

Non-Compliance issues and discrepancies on the COC are forwarded to Project Management

 $\label{label:lab$ 

C20909: Chain of Custody

Page 2 of 2





#### GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries



#### **Method Blank Summary**

Job Number: C20909

Account: ERSCAMP Environmental Restoration Services
Project: RWL Investments - 4919 Tidewater Ave, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VN964-MB	N29588.D	1	03/27/12	TF	n/a	n/a	VN964

The QC reported here applies to the following samples:

C20909-1, C20909-2, C20909-3, C20909-4

CAS No.	Compound	Result	RL	MDL	Units Q
71-43-2	Benzene	ND	1.0	0.20	ug/l
106-93-4	1,2-Dibromoethane	ND	1.0	0.20	ug/l
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l
108-20-3	Di-Isopropyl ether	ND	2.0	0.22	ug/l
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l
637-92-3	Ethyl Tert Butyl Ether	ND	2.0	0.22	ug/l
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l
994-05-8	Tert-Amyl Methyl Ether	ND	2.0	0.40	ug/l
75-65-0	Tert-Butyl Alcohol	ND	10	2.4	ug/l
108-88-3	Toluene	ND	1.0	0.20	ug/l
1330-20-7	Xylene (total)	ND	2.0	0.46	ug/l
	TPH-GRO (C6-C10)	ND	50	25	ug/l

CAS No.	<b>Surrogate Recoveries</b>	Limits	
1868-53-7	Dibromofluoromethane	94%	60-130%
2037-26-5	Toluene-D8	99%	60-130%
460-00-4	4-Bromofluorobenzene	97%	60-130%



#### Blank Spike/Blank Spike Duplicate Summary

Job Number: C20909

Account: **ERSCAMP** Environmental Restoration Services **Project:** RWL Investments - 4919 Tidewater Ave, Oakland, CA

Sample	File ID	DF	Analyzed	Ву	Prep Date	Prep Batch	Analytical Batch
VN964-BS	N29589.D	1	03/27/12	TF	n/a	n/a	VN964
VN964-BSD	N29590.D	1	03/27/12	TF	n/a	n/a	VN964

The QC reported here applies to the following samples:

C20909-1, C20909-2, C20909-3, C20909-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	20	23.0	115	23.3	117	1	60-130/30
106-93-4	1,2-Dibromoethane	20	23.9	120	23.9	120	0	60-130/30
107-06-2	1,2-Dichloroethane	20	26.7	134*	27.1	136*	1	60-130/30
108-20-3	Di-Isopropyl ether	20	23.1	116	23.6	118	2	60-130/30
100-41-4	Ethylbenzene	20	23.1	116	23.4	117	1	60-130/30
637-92-3	Ethyl Tert Butyl Ether	20	24.8	124	25.4	127	2	60-130/30
1634-04-4	Methyl Tert Butyl Ether	20	23.1	116	23.6	118	2	60-130/30
994-05-8	Tert-Amyl Methyl Ether	20	24.3	122	24.8	124	2	60-130/30
75-65-0	Tert-Butyl Alcohol	100	108	108	120	120	11	60-130/30
108-88-3	Toluene	20	22.4	112	22.8	114	2	60-130/30
1330-20-7	Xylene (total)	60	69.3	116	70.5	118	2	60-130/30

CAS No.	<b>Surrogate Recoveries</b>	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	98%	100%	60-130%
2037-26-5	Toluene-D8	96%	97%	60-130%
460-00-4	4-Bromofluorobenzene	101%	100%	60-130%



## **Laboratory Control Sample Summary Job Number:** C20909

460-00-4

Account: **ERSCAMP** Environmental Restoration Services **Project:** RWL Investments - 4919 Tidewater Ave, Oakland, CA

Sample VN964-LCS	File ID N29591.D	<b>DF</b> 1	<b>Analyzed</b> 03/27/12	<b>By</b> TF	<b>Prep Date</b> n/a	<b>Prep Batch</b> n/a	<b>Analytical Batch</b> VN964
,11,501.202	1,2,0,1,2	•	00,27,12		12 W	11/ 41	11,501

60-130%

The QC reported here applies to the following samples:

C20909-1, C20909-2, C20909-3, C20909-4

4-Bromofluorobenzene

CAS No.	Compound	Spike ug/l	LCS ug/l	LCS %	Limits
	TPH-GRO (C6-C10)	125	147	118	60-130
CAS No.	Surrogate Recoveries	BSP	Lim	nits	
1868-53-7 2037-26-5	Dibromofluoromethane Toluene-D8	95% 99%		130% 130%	

98%



#### Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C20909

Account: **ERSCAMP** Environmental Restoration Services **Project:** RWL Investments - 4919 Tidewater Ave, Oakland, CA

Sample	File ID	DF	Analyzed	By	<b>Prep Date</b>	Prep Batch	<b>Analytical Batch</b>
C20905-4MS	N29606.D	1	03/27/12	TF	n/a	n/a	VN964
C20905-4MSD	N29607.D	1	03/27/12	TF	n/a	n/a	VN964
C20905-4	N29601.D	1	03/27/12	TF	n/a	n/a	VN964

The QC reported here applies to the following samples:

C20909-1, C20909-2, C20909-3, C20909-4

CAS No.	Compound	C20905 ug/l	5-4 Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	1.8		20	21.9	101	25.3	118	14	60-130/25
106-93-4	1,2-Dibromoethane	ND		20	20.3	102	23.2	116	13	60-130/25
107-06-2	1,2-Dichloroethane	ND		20	23.3	117	26.8	134*	14	60-130/25
108-20-3	Di-Isopropyl ether	ND		20	20.4	102	23.5	118	14	60-130/25
100-41-4	Ethylbenzene	ND		20	19.6	98	22.9	115	16	60-130/25
637-92-3	Ethyl Tert Butyl Ether	ND		20	22.1	111	25.3	127	14	60-130/25
1634-04-4	Methyl Tert Butyl Ether	7.2		20	26.9	99	30.6	117	13	60-130/25
994-05-8	Tert-Amyl Methyl Ether	ND		20	21.5	108	24.6	123	13	60-130/25
75-65-0	Tert-Butyl Alcohol	6.7	J	100	107	100	128	121	18	60-130/25
108-88-3	Toluene	0.25	J	20	19.3	95	22.3	110	14	60-130/25
1330-20-7	Xylene (total)	ND		60	58.6	98	68.3	114	15	60-130/25

CAS No.	<b>Surrogate Recoveries</b>	MS	MSD	C20905-4	Limits
	Dibromofluoromethane Toluene-D8	102%	101% 95%	95% 98%	60-130% 60-130%
460-00-4	4-Bromofluorobenzene	96% 99%	98%	98% 97%	60-130%





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QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries



**Method:** SW846 8015B M

#### **Method Blank Summary**

Job Number: C20909

Account: ERSCAMP Environmental Restoration Services
Project: RWL Investments - 4919 Tidewater Ave, Oakland, CA

Sample OP5599-MB	File ID	<b>DF</b>	Analyzed	By	Prep Date	Prep Batch	Analytical Batch GHH696
OP3399-MB	HH021009	.D1	03/19/12	JH	03/19/12	OP5599	GHH090

The QC reported here applies to the following samples:

C20909-1, C20909-2, C20909-3, C20909-4

CAS No. Compound Result RL MDL Units Q

TPH (C10-C28) ND 0.10 0.025 mg/l

CAS No. Surrogate Recoveries Limits

630-01-3 Hexacosane 86% 45-140%

## 5.2.1

Page 1 of 1

**Method:** SW846 8015B M

#### Blank Spike/Blank Spike Duplicate Summary

Job Number: C20909

Account: ERSCAMP Environmental Restoration Services
Project: RWL Investments - 4919 Tidewater Ave, Oakland, CA

Sample	File ID DF	Analyzed	Ву	Prep Date	Prep Batch	Analytical Batch
OP5599-BS	HH021010.D1	03/19/12	JH	03/19/12	OP5599	GHH696
OP5599-BSD	HH021011.D1	03/19/12	JH	03/19/12	OP5599	GHH696

The QC reported here applies to the following samples:

C20909-1, C20909-2, C20909-3, C20909-4

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	BSD mg/l	BSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	1	0.738	74	0.769	77	4	45-140/30
CAS No.	Surrogate Recoveries	BSP	BSI	D	Limits			
630-01-3	Hexacosane	83%	83%	6	45-140%	6		

## 5.3.1

### (J)

Page 1 of 1

**Method:** SW846 8015B M

#### Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C20909

Account: ERSCAMP Environmental Restoration Services
Project: RWL Investments - 4919 Tidewater Ave, Oakland, CA

Sample	File ID	DF	Analyzed	Ву	Prep Date	Prep Batch	Analytical Batch
OP5599-MS	HH021102.I	<b>D</b> 1	03/21/12	JH	03/19/12	OP5599	GHH697
OP5599-MSD	HH021103.I	<b>D</b> 1	03/21/12	JH	03/19/12	OP5599	GHH697
C20893-3	HH021033.I	<b>D</b> 1	03/19/12	JH	03/19/12	OP5599	GHH696

The QC reported here applies to the following samples:

C20909-1, C20909-2, C20909-3, C20909-4

CAS No.	Compound	C20893- mg/l	-3 Q	Spike mg/l	MS mg/l	MS %	MSD mg/l	MSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	0.0692	J	1.89	1.28	64	1.58	80	21	45-140/25
CAS No.	Surrogate Recoveries	MS		MSD	C20893-3		Limits			
630-01-3	Hexacosane	67%		82%	85%		45-140%	ó		

