McCampbell An "When Ouality		Web: www.mc	low Pass Road, Pittsburg, campbell.com E-mail: m one: 877-252-9262 Fax:	ain@mccampbell.com
Edd Clark & Associates, Inc.	Client Project ID: #0585, 0 Solano Ave.	002; 1530- 1540	Date Sampled:	12/12/07
320 Professional Center Ste. 215	Solano Ave.		Date Received:	12/13/07
Rohnert Park, CA 94928	Client Contact: Etta Jon V	Vanden Bosch	Date Reported:	12/20/07
	Client P.O.:		Date Completed:	12/20/07

### WorkOrder: 0712431

December 20, 2007

Dear Etta:

Enclosed within are:

- 1) The results of the 14 analyzed samples from your project: #0585, 002; 1530-1540 Solano Ave.,
- 2) A QC report for the above samples,
- 3) A copy of the chain of custody, and
- 4) An invoice for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions or concerns, please feel free to give me a call. Thank you for choosing

McCampbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius Laboratory Manager McCampbell Analytical, Inc.

€		Assoc	Clark & tiates, In nmental tants		124	31	Tel: (	P.O. B	ox 3039, Rol	stody Rep mert Park, C 474-1448 Fa		9504	E-mail in E Yes □	DF for Upload to Geotracker No X Initials STVB
Samp	lers S	ignatu	re: Al	Jon Va	nde	nbo	sch				Analysis			P.10+2
EC&.			585,00	153		40 5	E Location		(BTEX)	TPHM0	ICE	1. 3.4	, yes	Remarks
Field Poin Nam	t	Date	Time	Sample I (depth)		ample Type		# of Items	etty MTR	PHdL	HEA	D CONDITION D SPACE ABS HLORINATED	ENTC IN LABF VDAS 0 & G M	CONTAINERS
8-2	2 7	12/07	09.45	B-226.	o di	screte	5	1					<	-HOLD
			0950	B-2010,				1	X	X				HOLDED
			1000	B-2015	0			1	×	×				
			1015	B-2220	.0	+	4	1	X	×				
V			1340	B-24		rab	W	4/2	X	$\times$				
B-34	1		0830	B-3Adle.	o di	screte		1	×	×				
+	_		0840	B-3Ad 10	.0	1	S	1	×	X				
B-L	ł		6730	B-46.0				(					6	HOLD
	_		0740	B-4211.	0			1	¥	×				1
4				B-42 15.		1	A		X	×	/			
Reling	In	land	enbosa	$L \frac{\frac{12}{13}}{0}$		0 -	Received		H	inquished by	NI.	Date:	Time:	Received by: K, BURK
Relinq	uish	ed by:		Date:	Tim	e: F	Received b	oy:	Rel	inquished by	y: //	Date:	Time:	Received by:

€	Asso	Clark & ciates, In onmental	с.	Chain of Custody Report E-mail in El   P.O. Box 3039, Rohnert Park, CA 94927 Yes □   Tel: (707) 792-9500 (800) 474-1448 Fax: (707) 792-9504									
Samplers			InVande	nbose	L				Analysis	8		P. 2. 7 Z	
	ob # 💋	585,00	2 Facility 1530 -	Name & -1540 S MY, C	alano,		BTEX BE (SUZIR)	Hd TPHME SOISC)				Remarks	
Field Point Name	Date	Time	Sample ID (depth)	Sample Type	Media	# of Items	1011/ 1012/	PHUL (30)					
8-4	12/2/07	0800	B-4220.0	discrete	5	1	×	×					
4		1330	B-4W	grab	$\mathbb{W}$	6(4/2	$) \times$	×					
B-5		1100	8-526.0	discrete	5	1	×	×					
1			B-5210.0			t	×	×					
			B-5215.0	A	a	1	×	Y			÷		
4	Y	1350	B-5W	grat	W	4/2	×	¥					
				Č.									
							-						
								-					
Relinqui	ished by	y:	Date:	Time: I	Received b		Rel	inquished h	Y:	Date:	Time:	Received by:	
Relinqui	shed by	y:		Time: F	Received b	y:	Rel	inquished b	y:	Date:	Time:	Received by:	

## McCampbell Analytical, Inc.



1534 Willow Pass Rd

## CHAIN-OF-CUSTODY RECORD

Page 1 of 1

Pittsburg, CA (925) 252-92					_			: 07124				D: ECA					
				EDF		Excel		Fax		✓ Email		Hard	Copy	Ihi	rdParty		
Report to:							Bill to:						Req	uested	TAT:	5 (	days
Etta Jon Vanden Edd Clark & Ass 320 Professiona Rohnert Park, C	ociates, Inc. Il Center Ste. 215	Email: TEL: ProjectNo: PO:	corpmail@eca (707) 792-9500 #0585, 002; 1				Ed 32	counts ld Clark 0 Profe hnert P	& Ass ssiona	ociates, I Cente	r Ste.2	15		e Rece e Prin		12/13/ 12/14/	
									Req	uested	Tests	(See le	gend b	elow)			
Sample ID	ClientSampID	1	Matrix	<b>Collection Date</b>	Hold	1	2	3	4	5	6	7	8	9	10	11	12
0712431-002	B-2d 10.0		Soil	12/12/2007		А		Α									1
0712431-003	B-2d 15.0		Soil	12/12/2007		А		Α									
0712431-004	B-2d 20.0		Soil	12/12/2007		А		Α									
0712431-005	B-2 W		Water	12/12/2007			Α		В				1				
0712431-006	B-3Ad 6.0		Soil	12/12/2007		А		Α					1				
0712431-007	B-3Ad 10.0		Soil	12/12/2007		А		Α					1				
0712431-009	B-4d 11.0		Soil	12/12/2007		А		Α									
0712431-010	B-4d 15.0		Soil	12/12/2007		А		Α									
0712431-011	B-4d 20.0		Soil	12/12/2007		А		Α									
0712431-012	B-4W		Water	12/12/2007			Α		В								
0712431-013	B-5d 6.0		Soil	12/12/2007		А		Α									
0712431-014	B-5d 10.0		Soil	12/12/2007		А		Α									
0712431-015	B-5d 15.0		Soil	12/12/2007		А		Α									
0712431-016	B-5W		Water	12/12/2007			Α		В								

#### Test Legend:

1	G-MBTEX_S	2
6		7
11		12

2	G-MBTEX_W	
7		
2		

3 TPH(DMO)\_S 8

4

9

TPH(DMO)\_W

5					
10					

#### Prepared by: Rosa Venegas

#### **Comments:**

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.



# McCampbell Analytical, Inc. "When Ouality Counts"

## Sample Receipt Checklist

Client Name:	Edd Clark & Ass	ociates, Inc.			Date a	ind Time Received:	12/13/2007	5:25:43 PM
Project Name:	#0585,002;1530	)- 1540 Solano Av	e.		Check	list completed and re	eviewed by:	Rosa Venegas
WorkOrder N°:	0712431	Matrix <u>Soil/Water</u>			Carrie	r: <u>Rob Pringle (M</u>	AI Courier)	
		Chain	of Cu	stody (C	OC) Informa	tion		
		<u>onum</u>						
Chain of custody	/ present?		Yes		No 🗌			
Chain of custody	/ signed when relinqui	ished and received?	Yes	$\checkmark$	No 🗆			
Chain of custody	agrees with sample	labels?	Yes	$\checkmark$	No 🗌			
Sample IDs noted	d by Client on COC?		Yes	$\checkmark$	No 🗆			
Date and Time of	f collection noted by Cl	ient on COC?	Yes	✓	No 🗆			
Sampler's name	noted on COC?		Yes	✓	No 🗆			
		e	amplo	Pacaint	Information			
		<u></u>	ampie	<u>Neceipi</u>			_	
Custody seals in	tact on shipping conta	ainer/cooler?	Yes		No 🗆		NA 🔽	
Shipping contain	er/cooler in good cond	dition?	Yes	$\checkmark$	No 🗆			
Samples in prop	er containers/bottles?		Yes	✓	No 🗆			
Sample containe	ers intact?		Yes	$\checkmark$	No 🗆			
Sufficient sample	e volume for indicated	test?	Yes	✓	No 🗌			
		Sample Prese	wation	and Ho	ld Time (HT)	Information		
		Sample Frese	valioi			mormation		
All samples rece	ived within holding tim	ie?	Yes	$\checkmark$	No 🗌			
Container/Temp	Blank temperature		Coole	er Temp:	3.4°C		NA 🗆	
Water - VOA via	ls have zero headspa	ice / no bubbles?	Yes	$\checkmark$	No 🗆	No VOA vials subm	itted	
Sample labels cl	hecked for correct pre	servation?	Yes	✓	No 🗌			
TTLC Metal - pH	acceptable upon rece	ipt (pH<2)?	Yes		No 🗆		NA 🗹	

Client contacted:

Date contacted:

Contacted by:

Comments:

	McCampbell	Analy		:	Web: www.m		Pittsburg, CA 94565 E-mail: main@mcca 52 Fax: 925-252-5	umpbell.com				
Edd Cl	ark & Associates, Inc.		Client Proj	ect ID: #058	5, 002; 1530- 1	540 Solano	Date Sample	ed: 12/12/07	,			
320 Pro	ofessional Center Ste. 21	5	Ave.				Date Received: 12/13/07					
				tact: Etta Jo	on Vanden Bos	ch	Date Extract	Date Extracted: 12/13/07-12/18/07				
Rohner	t Park, CA 94928		Client P.O.	:			Date Analyzed 12/14/07-12/18/0					
	Gasolir	ne Range (1	C6-C12) Vola	tile Hydroca	rbons as Gaso	line with BTH	EX and MTBE	/*				
Extractio	n method SW5030B			•	W8021B/8015Cm			Work Order	r: 071	2431		
Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS		
002A	B-2d 10.0	S	ND	ND	ND	ND	ND	ND	1	89		
003A	B-2d 15.0	S	ND	ND	ND	0.011	ND	0.0065	1	91		
004A	B-2d 20.0	S	1.3,a	ND	0.0058	0.019	ND	0.016	1	96		
005A	B-2 W	W	ND,i	ND	0.54	0.67	ND	ND	1	104		
006A	B-3Ad 6.0	S	ND	ND	ND	ND	ND	ND	1	89		
007A	B-3Ad 10.0	S	ND	ND	ND	ND	ND	ND	1	91		
009A	B-4d 11.0	S	ND	ND	ND	ND	ND	ND	1	90		
010A	B-4d 15.0	S	ND	ND	ND	ND	ND	ND	1	98		
011A	B-4d 20.0	S	ND	ND	ND	ND	ND	ND	1	71		
012A	B-4W	W	ND,i	ND	ND	ND	ND	ND	1	104		
013A	B-5d 6.0	S	ND	ND	ND	ND	ND	ND	1	89		
014A	B-5d 10.0	S	2.6,g	ND	ND	ND	ND	ND	1	93		
015A	B-5d 15.0	S	2.3,g	ND	ND	ND	ND	ND	1	93		
016A	B-5W	W	ND,i	ND	0.59	0.52	ND	ND	1	86		
İ												
	orting Limit for DF =1;	W	50	5.0	0.5	0.5	0.5	0.5	1	μg/L		
	neans not detected at or ove the reporting limit	S	1.0	0.05	0.005	0.005	0.005	0.005	1	mg/Kg		

\* water and vapor samples and all TCLP & SPLP extracts are reported in µg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples in mg/L.

# cluttered chromatogram; sample peak coelutes with surrogate peak.

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (stoddard solvent / mineral spirit?); f) one to a few isolated non-target peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to high organic / MTBE content; k) TPH pattern that does not appear to be derived from gasoline (aviation gas). m) no recognizable pattern; n) TPH(g) value derived using a client specified carbon range; o) results are reported on a dry weight basis; p) see attached narrative.



<u> </u>	Campbell Analyti	ical,	Inc.	1534 Willow Web: www.mcca Telephone		I					
Edd Clark & Ass			•	#0585, 002; 1530- Date Sampled: 12/12/07							
320 Professional	Center Ste. 215	1540	) Solano Ave.		Date Received: 12/	Date Received: 12/13/07					
Rohnert Park, CA	94928	Clier	nt Contact: E	tta Jon Vanden Bosch	Date Extracted: 12/	Date Extracted: 12/13/07					
Romert Funk, er		Clier	Client P.O.: Date Analyzed 12/16/07-12/17/07								
Extraction method: SW3	<b>Diesel (C10-23) and Oil (</b> 3510C/SW3550C	C18+)	-	ctable Hydrocarbons a ods: SW8015C		k Order: 07	712431				
Lab ID	Client ID		Matrix	TPH(d)	TPH(mo)	DF	% SS				
0712431-002A	B-2d 10.0		S	ND	ND	1	103				
0712431-003A	B-2d 15.0		S	ND	ND	1	104				
0712431-004A	B-2d 20.0		S	ND	ND	1	103				
0712431-005B	B-2 W		W	ND,i	ND	1	94				
0712431-006A	B-3Ad 6.0	S		ND	ND	1	93				
0712431-007A	B-3Ad 10.0	B-3Ad 10.0 S		1.9,b	ND	1	103				
0712431-009A	B-4d 11.0		S	ND	ND	1	119				
0712431-010A	B-4d 15.0		S	ND	ND	1	108				
0712431-011A	B-4d 20.0		S	ND	ND	1	117				
0712431-012B	B-4W		W	ND,i	ND	1	80				
0712431-013A	B-5d 6.0		S	ND	ND	1	81				
0712431-014A	B-5d 10.0		S	6.8,g,k	9.1	1	97				
0712431-015A	B-5d 15.0		S	5.9,k	ND	1	83				
0712431-016B	B-5W		W	200,k,b,i	ND	1	85				
	Reporting Limit for DF =1;			50	250	μg	/L				
	ans not detected at or e the reporting limit	Ī	S	1.0	5.0 mg/Kg						

\* water samples are reported in  $\mu$ g/L, wipe samples in  $\mu$ g/wipe, soil/solid/sludge samples in mg/kg, product/oil/non-aqueous liquid samples in mg/L, and all DISTLC / STLC / SPLP / TCLP extracts are reported in  $\mu$ g/L.

# cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract.

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified diesel is significant; b) diesel range compounds are significant; no recognizable pattern; c) aged diesel? is significant); d) gasoline range compounds are significant; e) unknown medium boiling point pattern that does not appear to be derived from diesel; f) one to a few isolated peaks present; g) oil range compounds are significant (cooking oil?); h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; k) kerosene/kerosene range; l) bunker oil range (?); no recognizable pattern; m) fuel oil; n) stoddard solvent/mineral spirits; p) see attached narrative.



1534 Willow Pass Road, Pittsburg, CA 94565-1701 Web: www.mccampbell.com E-mail: main@mccampbell.com Telephone: 877-252-9262 Fax: 925-252-9269

## QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Soil

QC Matrix: Soil

WorkOrder 0712431

EPA Method SW8021B/8015Cm	Extra	ction SW	5030B		BatchID: 32538 Spiked Sample ID: 0712402							2A
Analyte	Sample	Spiked	Spiked MS		MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
Analyte	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex <sup>f</sup>	ND	0.60	107	112	4.31	114	117	2.36	70 - 130	30	70 - 130	30
MTBE	ND	0.10	112	117	4.03	104	121	15.5	70 - 130	30	70 - 130	30
Benzene	ND	0.10	99.6	101	1.63	102	111	8.09	70 - 130	30	70 - 130	30
Toluene	ND	0.10	89.7	91.6	2.10	92.9	98.9	6.20	70 - 130	30	70 - 130	30
Ethylbenzene	ND	0.10	101	105	3.55	104	107	3.04	70 - 130	30	70 - 130	30
Xylenes	ND	0.30	96.3	100	3.74	103	103	0	70 - 130	30	70 - 130	30
%SS:	86	0.10	103	101	1.17	89	95	6.14	70 - 130	30	70 - 130	30

NONE

#### BATCH 32538 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0712431-002A	12/12/07 9:50 AM	12/13/07	12/14/07 11:55 PM	0712431-003A	12/12/07 10:00 AM	12/13/07	12/15/07 2:27 AM
0712431-004A	12/12/07 10:15 AM	12/13/07	12/15/07 2:58 AM	0712431-006A	12/12/07 8:30 AM	12/13/07	12/18/07 5:58 PM
0712431-007A	12/12/07 8:40 AM	12/13/07	12/15/07 3:28 AM	0712431-009A	12/12/07 7:40 AM	12/13/07	12/14/07 5:46 PM
0712431-010A	12/12/07 7:50 AM	12/13/07	12/18/07 6:29 PM	0712431-011A	12/12/07 8:00 AM	12/13/07	12/15/07 5:30 AM
0712431-013A	12/12/07 11:00 AM	12/13/07	12/14/07 4:13 PM	0712431-014A	12/12/07 11:15 AM	12/13/07	12/15/07 6:00 AM
0712431-015A	12/12/07 12:10 PM	12/13/07	12/14/07 3:11 PM				

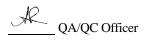
MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

 $\pounds$  TPH(btex) = sum of BTEX areas from the FID.

# cluttered chromatogram; sample peak coelutes with surrogate peak.





1534 Willow Pass Road, Pittsburg, CA 94565-1701Web: www.mccampbell.comE-mail: main@mccampbell.comTelephone: 877-252-9262Fax: 925-252-9269

## QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder 0712431

EPA Method SW8021B/8015Cm	Extra	ction SW	5030B		Bat	chID: 32	521	Sp	Spiked Sample ID: 0712404-				
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acce	eptance	Criteria (%)		
, may to	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD	
TPH(btex) <sup>£</sup>	ND	60	102	98.5	3.31	92.1	92	0.140	70 - 130	30	70 - 130	30	
MTBE	ND	10	112	105	6.21	102	101	0.586	70 - 130	30	70 - 130	30	
Benzene	ND	10	94	92.8	1.29	95.6	90.4	5.68	70 - 130	30	70 - 130	30	
Toluene	ND	10	93.5	91.6	2.01	94.5	84.2	11.5	70 - 130	30	70 - 130	30	
Ethylbenzene	ND	10	104	102	1.63	105	99.7	5.30	70 - 130	30	70 - 130	30	
Xylenes	ND	30	103	100	3.28	103	100	3.28	70 - 130	30	70 - 130	30	
%SS:	90	10	96	96	0	100	99	0.549	70 - 130	30	70 - 130	30	

#### BATCH 32521 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0712431-005A	12/12/07 1:40 PM	I 12/16/07	12/16/07 9:09 PM				

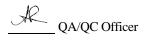
MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

 $\pounds$  TPH(btex) = sum of BTEX areas from the FID.

# cluttered chromatogram; sample peak coelutes with surrogate peak.





1534 Willow Pass Road, Pittsburg, CA 94565-1701 Web: www.mccampbell.com E-mail: main@mccampbell.com Telephone: 877-252-9262 Fax: 925-252-9269

## QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder 0712431

EPA Method SW8021B/8015Cm	Extra	ction SW	5030B		Bat	chID: 32	532	Sp	Spiked Sample ID: 0712441-0010				
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acc	eptance	Criteria (%)	1	
, individ	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD	
TPH(btex <sup>f</sup>	ND	60	98.4	86.7	12.6	94	101	6.78	70 - 130	30	70 - 130	30	
MTBE	ND	10	102	104	2.67	93	98.8	6.01	70 - 130	30	70 - 130	30	
Benzene	ND	10	92	83.6	9.54	90.1	91.8	1.90	70 - 130	30	70 - 130	30	
Toluene	ND	10	90.6	80.9	11.2	89.6	90.1	0.565	70 - 130	30	70 - 130	30	
Ethylbenzene	ND	10	100	81.5	20.7	103	102	1.74	70 - 130	30	70 - 130	30	
Xylenes	ND	30	96.7	96.7	0	100	100	0	70 - 130	30	70 - 130	30	
%SS:	99	10	97	88	9.64	95	95	0	70 - 130	30	70 - 130	30	
All target compounds in the Method E NONE	Blank of this	extraction	batch we	ere ND les	ss than the	method F	RL with th	ne following	exceptions:				

#### BATCH 32532 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0712431-012A	12/12/07 11:00 AM	12/16/07	12/16/07 10:10 PM	0712431-016A	12/12/07 1:50 PM	12/16/07	12/16/07 10:40 PM

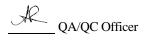
MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

 $\pounds$  TPH(btex) = sum of BTEX areas from the FID.

# cluttered chromatogram; sample peak coelutes with surrogate peak.





"When Ouality Counts"

## QC SUMMARY REPORT FOR SW8015C

W.O. Sample Matrix: Soil

QC Matrix: Soil

WorkOrder 0712431

EPA Method SW8015C	Extra	ction SW	3550C		Bat	chID: 32	514	Sp	piked Sample ID: 0712380-003			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acce	eptance	Criteria (%)	
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(d)	3800	20	NR	NR	NR	112	110	1.73	70 - 130	30	70 - 130	30
%SS:	109	50	116	120	2.93	118	117	1.17	70 - 130	30	70 - 130	30
All target compounds in the Method E NONE	Blank of this	All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:										

#### BATCH 32514 SUMMARY Sample ID **Date Sampled** Date Extracted Date Analyzed Sample ID **Date Sampled** Date Extracted Date Analyzed 0712431-002A 12/12/07 9:50 AM 12/13/07 12/17/07 3:45 AM 0712431-003A 12/12/07 10:00 AM 12/13/07 12/17/07 4:55 AM 0712431-004A 12/17/07 6:06 AM 0712431-006A 12/12/07 8:30 AM 12/17/07 4:07 PM 12/12/07 10:15 AM 12/13/07 12/13/07 0712431-007A 12/12/07 8:40 AM 12/13/07 12/17/07 7:17 AM 0712431-009A 12/12/07 7:40 AM 12/13/07 12/17/07 11:50 AM 0712431-010A 0712431-011A 12/17/07 12:58 PM 12/12/07 7:50 AM 12/13/07 12/16/07 8:51 AM 12/12/07 8:00 AM 12/13/07 0712431-013A 12/12/07 11:00 AM 12/13/07 12/16/07 8:39 PM 0712431-014A 12/12/07 11:15 AM 12/13/07 12/17/07 10:23 PM 0712431-015A 12/12/07 12:10 PM 12/13/07 12/17/07 7:17 AM

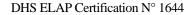
MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



QA/QC Officer



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## QC SUMMARY REPORT FOR SW8015C

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder: 0712431

EPA Method SW8015C	Extra	ction SW	3510C		Bat	tchID: 32	515	Sp	iked Samp	ole ID:	N/A	
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acce	eptance	Criteria (%)	
· · · · · · · · · · · · · · · · · · ·	μg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	N/A 70 - 130	RPD	
TPH(d)	N/A	1000	N/A	N/A	N/A	111	110	0.901	N/A	N/A	70 - 130	30
%SS:	N/A	2500	N/A	N/A	N/A	116	115	0.855	N/A	N/A	70 - 130	30

			<u>BATCH 32515 SL</u>	<u>JMMARY</u>			
Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0712431-005B	12/12/07 1:40 PM	I 12/13/07	12/17/07 2:55 PM	0712431-012B	12/12/07 11:00 AM	12/13/07	12/16/07 7:28 PM
0712431-016B	12/12/07 1:50 PM	I 12/13/07	12/17/07 6:06 AM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

