Summary Report

Scott Branson SB Weed Control & Transport 213 S Mesa Carlsbad, NM, 88220

Report Date: November 12, 2007



Project Location:City of Carlsbad, NMProject Name:Violet St. & Center St.

			Date	Time	Date
\mathbf{Sample}	Description	Matrix	Taken	Taken	Received
142191	I35	soil	2007-11-03	08:00	2007-11-08
142192	I36	soil	2007 - 11 - 03	08:45	2007 - 11 - 08
142193	I39	soil	2007 - 11 - 03	09:30	2007 - 11 - 08
142194	I40	soil	2007 - 11 - 03	10:00	2007 - 11 - 08
142195	I43	soil	2007 - 11 - 03	10:20	2007 - 11 - 08
142196	I44	soil	2007-11-03	10:45	2007-11-08

	BTEX				MTBE	TPH DRO	TPH GRO
	Benzene	Toluene	Ethylbenzene	Xylene	MTBE	DRO	GRO
Sample - Field Code	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)
142191 - I35	< 0.0100	< 0.0100	< 0.0100	< 0.0100		< 50.0	<1.00
142192 - I36	< 0.0100	< 0.0100	< 0.0100	< 0.0100		$<\!50.0$	<1.00
142193 - I39					< 0.0100	$<\!50.0$	<1.00
142194 - I40	< 0.0100	< 0.0100	< 0.0100	< 0.0100		$<\!50.0$	<1.00
142195 - I43	< 0.0100	< 0.0100	< 0.0100	< 0.0100		$<\!50.0$	<1.00
142196 - I44	< 0.0100	< 0.0100	< 0.0100	< 0.0100		< 50.0	<1.00

Sample: 142191 - I35

Param	Flag	Result	\mathbf{Units}	RL
Chloride		274	mg/Kg	5.00
TCLP Silver		< 0.125	mg/L	0.125
TCLP Arsenic		< 0.100	m mg/L	0.100
TCLP Barium		2.38	mg/L	0.100
TCLP Cadmium		< 0.0500	mg/L	0.0500
TCLP Chromium		< 0.100	mg/L	0.100
TCLP Mercury		< 0.000500	mg/L	0.000500
TCLP Lead		< 0.100	mg/L	0.100
TCLP Selenium		< 0.500	$\mathrm{mg/L}$	0.500

Sample: 142192 - I36

continued ...

sample 142192 continued ...

Param	Flag	Result	Units	RL
Param	Flag	Result	Units	\mathbf{RL}
Chloride		421	mg/Kg	5.00
TCLP Silver		< 0.125	mg/L	0.125
TCLP Arsenic		< 0.100	mg/L	0.100
TCLP Barium		1.25	mg/L	0.100
TCLP Cadmium		< 0.0500	mg/L	0.0500
TCLP Chromium		< 0.100	mg/L	0.100
TCLP Mercury		< 0.000500	mg/L	0.000500
TCLP Lead		< 0.100	mg/L	0.100
TCLP Selenium		< 0.500	mg/L	0.500

Sample: 142193 - I39

Param	Flag	Result	Units	RL
Chloride		50.3	mg/Kg	5.00
TCLP Silver		< 0.125	mg/L	0.125
TCLP Arsenic		< 0.100	mg/L	0.100
TCLP Barium		0.853	mg/L	0.100
TCLP Cadmium		< 0.0500	mg/L	0.0500
TCLP Chromium		< 0.100	mg/L	0.100
TCLP Mercury		< 0.000500	mg/L	0.000500
TCLP Lead		< 0.100	mg/L	0.100
TCLP Selenium		< 0.500	mg/L	0.500

Sample: 142194 - I40

Param	Flag	Result	Units	RL
Chloride		234	mg/Kg	5.00
TCLP Silver		< 0.125	mg/L	0.125
TCLP Arsenic		< 0.100	mg/L	0.100
TCLP Barium		1.47	mg/L	0.100
TCLP Cadmium		< 0.0500	mg/L	0.0500
TCLP Chromium		< 0.100	mg/L	0.100
TCLP Mercury		< 0.000500	mg/L	0.000500
TCLP Lead		< 0.100	mg/L	0.100
TCLP Selenium		< 0.500	mg/L	0.500

Sample: 142195 - I43

Param	Flag	Result	Units	RL
Chloride		888	mg/Kg	5.00
TCLP Silver		< 0.125	mg/L	0.125
TCLP Arsenic		< 0.100	mg/L	0.100
TCLP Barium		2.38	mg/L	0.100
TCLP Cadmium		< 0.0500	mg/L	0.0500
TCLP Chromium		< 0.100	mg/L	0.100
TCLP Mercury		< 0.000500	mg/L	0.000500

continued ...

TraceAnalysis, Inc. • 6701 Aberdeen Ave., Suite 9 • Lubbock, TX 79424-1515 • (806) 794-1296 This is only a summary. Please, refer to the complete report package for quality control data.

Report Date: November 12, 2007	Work Order: 7110817	Page Number: 3 of 3
	Violet St. & Center St.	City of Carlsbad, NM

sample 142195 continued ...

Param	Flag	Result	Units	RL
TCLP Lead		< 0.100	mg/L	0.100
TCLP Selenium		< 0.500	m mg/L	0.500

Sample: 142196 - I44

Param	Flag	Result	Units	RL
Chloride		70.0	mg/Kg	5.00
TCLP Silver		< 0.125	mg/L	0.125
TCLP Arsenic		< 0.100	mg/L	0.100
TCLP Barium		1.61	mg/L	0.100
TCLP Cadmium		< 0.0500	mg/L	0.0500
TCLP Chromium		< 0.100	$\mathrm{mg/L}$	0.100
TCLP Mercury		< 0.000500	mg/L	0.000500
TCLP Lead		< 0.100	mg/L	0.100
TCLP Selenium		< 0.500	mg/L	0.500



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806+797+1296 985+585+34/23 412+639+6301 817+201+5260

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Analytical and Quality Control Report

Scott Branson SB Weed Control & Transport 213 S Mesa Carlsbad, NM, 88220

Report Date: November 12, 2007

7110817 Work Order:

Project Location: City of Carlsbad, NM **Project Name:** Violet St. & Center St. Violet St. & Center St. Project Number:

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

			Date	Time	Date
\mathbf{Sample}	Description	Matrix	Taken	Taken	Received
142191	I35	soil	2007-11-03	08:00	2007-11-08
142192	136	soil	2007-11-03	08:45	2007 - 11 - 08
142193	139	soil	2007-11-03	09:30	2007 - 11 - 08
142194	I40	soil	2007-11-03	10:00	2007 - 11 - 08
142195	$\mathbf{I43}$	soil	2007-11-03	10:20	2007 - 11 - 08
142196	I44	soil	2007 - 11 - 03	10:45	2007 - 11 - 08

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 24 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Standard Flags

 $\,B\,$ - The sample contains less than ten times the concentration found in the method blank.

Analytical Report

Sample: 142191 - I35

Analysis: QC Batch: Prep Batch:	BTEX 42910 37021		Analytical M Date Analyz Sample Prep	ed:	S 8021B 2007-11-09 2007-11-09		Prep Meth Analyzed Prepared	By: KB
			RL					
Parameter	Flag		Result		Units	D	ilution	RL
Benzene	~		< 0.0100		mg/Kg		1	0.0100
Toluene			< 0.0100		mg/Kg		1	0.0100
Ethylbenzene)		< 0.0100		mg/Kg		1	0.0100
Xylene			< 0.0100		mg/Kg		1	0.0100
						Spike	Percent	Recovery
Surrogate		Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotolu	ene (TFT)		1.00	mg/Kg	1	1.00	100	69.3 - 103
4-Bromofluor	obenzene (4-BFB)		1.19	mg/Kg	1	1.00	119	68.8 - 120

Sample: 142191 - I35

Analysis: QC Batch: Prep Batch:	Chloride (Titration) 42879 36998	Analytical Method: Date Analyzed: Sample Preparation:	SM 4500-Cl B 2007-11-08 2007-11-08	Prep Method: Analyzed By: Prepared By:	$\mathbf{E}\mathbf{R}$
Parameter	Flag	RL Result	Units	Dilution	RL
Chloride	riag		mg/Kg	10	5.00

Sample: 142191 - I35

Analysis:	TCLP Total 8 Metals	Analytical Method:	S 6010B	Prep Method:	TCLP 1311
QC Batch:	42931	Date Analyzed:	2007-11-12	Analyzed By:	$\mathbf{R}\mathbf{R}$
Prep Batch:	37041	TCLP Extraction:	2007-11-09	Prepared By:	KV
		Sample Preparation:	2007-11-12	Prepared By:	KV
Analysis:	TCLP Total 8 Metals	Analytical Method:	S 7470A	Prep Method:	TCLP 1311
QC Batch:	42960	Date Analyzed:	2007-11-12	Analyzed By:	TP
Prep Batch:	37051	TCLP Extraction:		Prepared By:	TP
		Sample Preparation:	2007-11-12	Prepared By:	TP
		RL			

Parameter	Flag	Result	Units	Dilution	RL
TCLP Silver		< 0.125	mg/L	1	0.125
TCLP Arsenic		< 0.100	mg/L	1	0.100
TCLP Barium		2.38	mg/L	1	0.100
TCLP Cadmium		< 0.0500	mg/L	1	0.0500
TCLP Chromium		< 0.100	mg/L	1	0.100
TCLP Mercury		< 0.000500	mg/L	1	0.000500
TCLP Lead		< 0.100	mg/L	1	0.100
TCLP Selenium		< 0.500	mg/L	1	0.500

Sample: 142191 - I35

Analysis: QC Batch: Prep Batch:	TPH DRO 42880 36999		Analytical Me Date Analyzed Sample Prepar	l: 20	od. 8015B 007-11-08 007-08-07	Analyz	Method:N/Azed By:RMred By:RM
			RL				
Parameter	Flag		Result		Units	Dilution	RL
DRO			<50.0		m mg/Kg	1	50.0
					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilutic	n Amount	Recovery	Limits
n-Triacontan	e	216	m mg/Kg	1	150	144	62.5 - 164

Sample: 142191 - I35

Analysis: QC Batch: Prep Batch:	TPH GRO 42874 36993		Analytical Date Anal Sample Pr		S 8015B 2007-11-08 2007-11-08		Prep Meth Analyzed Prepared	By: KB
			\mathbf{RL}					
Parameter	Flag		Result		Units	D	ilution	RL
GRO			<1.00		m mg/Kg		1	1.00
Surrogate		Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	$egin{array}{c} { m Recovery} \\ { m Limits} \end{array}$
Trifluorotolu	ene (TFT)		0.489	mg/Kg	1	1.00	49	34.1 - 161
	robenzene (4-BFB)		0.448	mg/Kg	1	1.00	45	31.8 - 159

Sample: 142192 - I36

Analysis: QC Batch: Prep Batch:	BTEX 42873 36993			Analytical M Date Analyz Sample Prep	ed:	S 8021B 2007-11-08 2007-11-08		Prep Met Analyzed Prepared	By: KB
				RL					
Parameter		Flag		Result		Units		Dilution	RL
Benzene				< 0.0100	I	mg/Kg		1	0.0100
Toluene				< 0.0100		mg/Kg		1	0.0100
Ethylbenzene	<u>)</u>			< 0.0100		mg/Kg		1	0.0100
Xylene				< 0.0100		mg/Kg		1	0.0100
							Spike	Percent	Recovery
Surrogate			Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotolue	ene (TFT)			0.778	mg/Kg	g 1	1.00	78	65.4 - 124
4-Bromofluor	obenzene (4-B	FB)		0.738	mg/Kg	g 1	1.00	74	73.9 - 138

Sample: 142192 - I36

Analysis: QC Batch: Prep Batch:	Chloride (Titration) 42879 36998	Analytical Method: Date Analyzed: Sample Preparation	2007 - 11 - 08	Prep Method: Analyzed By: Prepared By:	$\dot{\mathbf{ER}}$
		RL			
Parameter	Flag	Result	Units	Dilution	RL
Chloride		421	mg/Kg	10	5.00

Sample: 142192 - I36

Analysis:	TCLP Total 8 Metals	Analytical Method:	S 6010B	Prep Method:	
QC Batch:	42931	Date Analyzed:	2007-11-12	Analyzed By:	\mathbf{RR}
Prep Batch:	37041	TCLP Extraction:	2007-11-09	Prepared By:	\mathbf{KV}
		Sample Preparation:	2007-11-12	Prepared By:	KV
Analysis:	TCLP Total 8 Metals	Analytical Method:	S 7470A	Prep Method:	TCLP 1311
QC Batch:	42960	Date Analyzed:	2007-11-12	Analyzed By:	TP
Prep Batch:	37051	TCLP Extraction:		Prepared By:	TP
		Sample Preparation:	2007-11-12	Prepared By:	TP

		RL			
Parameter	Flag	Result	Units	Dilution	RL
TCLP Silver		< 0.125	mg/L	1	0.125
TCLP Arsenic		< 0.100	m mg/L	1	0.100
TCLP Barium		1.25	mg/L	1	0.100
TCLP Cadmium		< 0.0500	mg/L	1	0.0500
TCLP Chromium		< 0.100	mg/L	1	0.100
TCLP Mercury		< 0.000500	mg/L	1	0.000500
TCLP Lead		< 0.100	mg/L	1	0.100
TCLP Selenium		< 0.500	$\mathrm{mg/L}$	1	0.500

Sample: 142192 - I36

Analysis: QC Batch: Prep Batch:	TPH DRO 42880 36999		Analytical Me Date Analyze Sample Prepa	d: 2	fod. 8015B 007-11-08 007-08-07	Analy	Method: N/A zed By: RM red By: RM
			\mathbf{RL}				
Parameter	Flag	5	Result		Units	Dilution	RL
DRO			< 50.0		mg/Kg	1	50.0
Course met e	Flor	Descult	TI::to	D:1	Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilutio	on Amount		Limits
n-Triacontan	e ¹	260	m mg/Kg	1	150	173	62.5 - 164

Sample: 142192 - I36

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	42874	Date Analyzed:	2007-11-08	Analyzed By:	\mathbf{KB}
Prep Batch:	36993	Sample Preparation:	2007-11-08	Prepared By:	\mathbf{KB}

¹High surrogate recovery. Sample non-detect, result bias high.

		RL						
Parameter	Flag	Result		Units	Γ	Dilution	R	RL
GRO		<1.00	r	ng/Kg		1	1.(.00
					<i>a</i>			
a			TT T .	D.I.	Spike	Percent	Recover	
Surrogate		ag Result		Dilution	Amount	Recovery	Limits	
Trifluorotolu			mg/Kg	1	1.00	96	34.1 - 10	
4-Bromofluor	cobenzene (4-BFB)	0.852	mg/Kg	1	1.00	85	31.8 - 13	<u>59</u>
Sample: 14	2193 - I39							
Analysis:	BTEX	Analytical Met	hod: S 802	01 D		Prep Metl	hod: S 50 :	25
QC Batch:	42873			-11-08				55
•		Date Analyzed				Analyzed		
Prep Batch:	36993	Sample Prepar	ation: 2007	-11-08		Prepared	By: KB	
		RL						
Parameter	Flag	Result		Units	Dil	lution		RL
MTBE		< 0.0100	n	ng/Kg		1	0.01	00
Sample: 14	2193 - I39							
Analysis:	Chloride (Titration)	Analytic	al Method:	SM 4500-C	B	Prep M	ethod: N/	/Δ
QC Batch:	42879	Date An		2007-11-08	пD	Analyze		
Prep Batch:	36998		Preparation:	2007-11-08		Prepare		
riep batch.	20330	Sample I	reparation.	2007-11-08		гтерате	а by: En	.l
		RL						
Parameter	Flag	Result		Units	Γ	Dilution	R	RL
Chloride		50.3	r	ng/Kg		10	5.0	.00
Sample: 14	2193 - I39							
Analysis:	TCLP Total 8 Metals	Analytica	Mathady	S 6010B		Prep Method:	TCLP 13	11
QC Batch:	42931	Date Ana		2007-11-12		Analyzed By:	RR RR	11
Prep Batch:	37041	TCLP Ex		2007-11-12		Prepared By:	KV	
Flep Datch.	37041		reparation:	2007-11-09		Prepared By: Prepared By:	KV	
Analysis:	TCLP Total 8 Metals	Analytica		S 7470A		Prep Method:	TCLP 13	11
QC Batch:	42960	Date Ana		2007-11-12		Analyzed By:	TP TP	TT
Prep Batch:	37051	TCLP Ex		2007-11-12		Prepared By:	TP	
i iep baten.	31031			2007-11-12		Prepared By:	TP	
		bampie 1	reparation.	2007-11-12		r repared by.	11	
		R						
Parameter	Flag	Resul		Units	Dil	ution		RL
TCLP Silver		< 0.12		$\mathrm{mg/L}$		1	0.12	
TCLP Arsen		< 0.10		mg/L		1	0.10	
TCLP Bariu		0.85		mg/L		1	0.10	
TCLP Cadm		< 0.050		m mg/L		1	0.05(
TCLP Chron		< 0.10		m mg/L		1	0.10	
TCLP Mercu	ıry	< 0.00050		m mg/L		1	0.0005(
TCLP Lead		< 0.10		$\mathrm{mg/L}$		1	0.10	
TCLP Seleni	um	< 0.50	0	$\mathrm{mg/L}$		1	0.50	-00

Sample: 142193 - I39

Analysis: QC Batch: Prep Batch:	TPH DRO 42880 36999		Analytical Me Date Analyzec Sample Prepar	1:	Mod. 8 2007-11 2007-08	-08	1	fethod: ed By: ed By:	N/A RM RM
			\mathbf{RL}						
Parameter	Flag	5	Result		Unit	.8	Dilution		RL
DRO			<50.0		mg/K	g	1		50.0
						Spike	Percent	Rec	overy
Surrogate	\mathbf{Flag}	Result	Units	Dilut	ion	Amount	Recovery	Lin	mits
n-Triacontan	e	183	m mg/Kg	1		150	122	62.5	- 164

Sample: 142193 - I39

Analysis: QC Batch: Prep Batch:	TPH GRO 42874 36993		Analytical Date Anal Sample Pr		S 8015B 2007-11-08 2007-11-08		Prep Meth Analyzed Prepared	By: KB
D			RL		T .T. •,	D	•••	DI
Parameter	Flag		Result		Units	D	ilution	RL
GRO			<1.00		m mg/Kg		1	1.00
Surrogate		Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotolu	ene (TFT)		1.02	mg/Kg	1	1.00	102	34.1 - 161
	cobenzene (4-BFB)		0.922	mg/Kg	1	1.00	92	31.8 - 159

Sample: 142194 - I40

Analysis: QC Batch: Prep Batch:	BTEX 42873 36993			Analytical M Date Analyz Sample Prep	ed:	S 8021B 2007-11-08 2007-11-08		Prep Met Analyzed Prepared	By: KB
				RL					
Parameter		Flag		Result		Units		Dilution	RL
Benzene				< 0.0100		mg/Kg		1	0.0100
Toluene				< 0.0100		mg/Kg		1	0.0100
Ethylbenzene	<u>)</u>			< 0.0100		mg/Kg		1	0.0100
Xylene				< 0.0100		m mg/Kg		1	0.0100
							Spike	Percent	Recovery
Surrogate			Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotolue	ene (TFT)			0.851	mg/Kg	g 1	1.00	85	65.4 - 124
4-Bromofluor	obenzene (4-B	FB)		0.836	mg/Kg	g 1	1.00	84	73.9 - 138

Sample: 142194 - I40

Analysis: QC Batch: Prep Batch:	Chloride (Titration) 42879 36998	Analytical Method: Date Analyzed: Sample Preparation	2007 - 11 - 08	Prep Method: Analyzed By: Prepared By:	$\dot{\mathbf{ER}}$
		RL			
Parameter	Flag	Result	Units	Dilution	RL
Chloride		234	mg/Kg	10	5.00

Sample: 142194 - I40

Analysis:	TCLP Total 8 Metals	Analytical Method:	S 6010B	Prep Method:	
QC Batch:	42931	Date Analyzed:	2007-11-12	Analyzed By:	\mathbf{RR}
Prep Batch:	37041	TCLP Extraction:	2007-11-09	Prepared By:	\mathbf{KV}
		Sample Preparation:	2007-11-12	Prepared By:	KV
Analysis:	TCLP Total 8 Metals	Analytical Method:	S 7470A	Prep Method:	TCLP 1311
QC Batch:	42960	Date Analyzed:	2007-11-12	Analyzed By:	TP
Prep Batch:	37051	TCLP Extraction:		Prepared By:	TP
		Sample Preparation:	2007-11-12	Prepared By:	TP

		RL			
Parameter	Flag	Result	Units	Dilution	RL
TCLP Silver		< 0.125	mg/L	1	0.125
TCLP Arsenic		< 0.100	m mg/L	1	0.100
TCLP Barium		1.47	m mg/L	1	0.100
TCLP Cadmium		< 0.0500	mg/L	1	0.0500
TCLP Chromium		< 0.100	mg/L	1	0.100
TCLP Mercury		< 0.000500	mg/L	1	0.000500
TCLP Lead		< 0.100	mg/L	1	0.100
TCLP Selenium		< 0.500	$\mathrm{mg/L}$	1	0.500

Sample: 142194 - I40

Analysis: QC Batch: Prep Batch:	TPH DRO 42880 36999		Analytical Me Date Analyze Sample Prepa	d:	Mod. 80 2007-11- 2007-08-	08	Prep M Analyz Prepar	0
			\mathbf{RL}					
Parameter	Flag	r	Result		Units	3	Dilution	RL
DRO			<50.0		mg/K§	r 5	1	50.0
Surrogate	Flag	Result	Units	Dilut	ion	${ m Spike} \ { m Amount}$	Percent Recovery	Recovery Limits
n-Triacontan	e	206	m mg/Kg	1		150	137	62.5 - 164

Sample: 142194 - I40

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	42874	Date Analyzed:	2007-11-08	Analyzed By:	\mathbf{KB}
Prep Batch:	36993	Sample Preparation:	2007-11-08	Prepared By:	\mathbf{KB}

			RL					
Parameter	Flag		Result		Units	D	ilution	RL
GRO			<1.00		mg/Kg		1	1.00
						Spike	Percent	Recovery
Surrogate		Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TF	T)		1.02	mg/Kg	1	1.00	102	34.1 - 161

Sample: 142195 - I43

Analysis: QC Batch: Prep Batch:	BTEX 42873 36993		Analytical M Date Analyz Sample Prep	ed:	S 8021B 2007-11-08 2007-11-08		Prep Metl Analyzed Prepared	By: KB
			RL					
Parameter	Fla	<u>r</u>	Result		Units]	Dilution	RL
Benzene			< 0.0100		mg/Kg		1	0.0100
Toluene			< 0.0100		mg/Kg		1	0.0100
Ethylbenzene			< 0.0100		mg/Kg		1	0.0100
Xylene			< 0.0100		mg/Kg		1	0.0100
						Spike	Percent	Recovery
Surrogate		Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotolue	ene (TFT)		0.872	mg/Kg	g 1	1.00	87	65.4 - 124
4-Bromofluor	obenzene (4-BFB)		0.831	mg/Kg	g 1	1.00	83	73.9 - 138

Sample: 142195 - I43

Analysis: QC Batch: Prep Batch:	Chloride (Titration) 42879 36998	Analytical Met Date Analyzed Sample Prepar	: 2007-11-08	Prep Method: Analyzed By: Prepared By:	$\dot{\mathbf{ER}}$
		\mathbf{RL}			
Parameter	Flag	Result	Units	Dilution	RL
Chloride		888	m mg/Kg	10	5.00

Sample: 142195 - I43

Analysis:	TCLP Total 8 Metals	Analytical Method:	S 6010B	Prep Method:	TCLP 1311
QC Batch:	42931	Date Analyzed:	2007-11-12	Analyzed By:	\mathbf{RR}
Prep Batch:	37041	TCLP Extraction:	2007-11-09	Prepared By:	KV
		Sample Preparation:	2007 - 11 - 12	Prepared By:	\mathbf{KV}
Analysis:	TCLP Total 8 Metals	Analytical Method:	S 7470A	Prep Method:	TCLP 1311
QC Batch:	42960	Date Analyzed:	2007-11-12	Analyzed By:	TP
Prep Batch:	37051	TCLP Extraction:		Prepared By:	TP
		Sample Preparation:	2007-11-12	Prepared By:	TP

continued ...

sample 142195 continued ...

		RL			
Parameter	Flag	Result	Units	Dilution	RL
		RL			
Parameter	Flag	Result	Units	Dilution	RL
TCLP Silver		< 0.125	mg/L	1	0.125
TCLP Arsenic		< 0.100	mg/L	1	0.100
TCLP Barium		2.38	mg/L	1	0.100
TCLP Cadmium		< 0.0500	mg/L	1	0.0500
TCLP Chromium		< 0.100	mg/L	1	0.100
TCLP Mercury		< 0.000500	mg/L	1	0.000500
TCLP Lead		< 0.100	mg/L	1	0.100
TCLP Selenium		< 0.500	mg/L	1	0.500

Sample: 142195 - I43

Analysis: QC Batch: Prep Batch:	TPH DRO 42880 36999		Analytical Me Date Analyze Sample Prepa	d: 2007-		Analyz	fethod: N/A ed By: RM ed By: RM
D	171		RL	TT	•.		DI
Parameter	Flag	5	\mathbf{Result}	Ui	nits	Dilution	RL
DRO			<50.0	mg/	'Kg	1	50.0
Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontan	0	204	m mg/Kg	1	150	136	62.5 - 164

Sample: 142195 - I43

Analysis: QC Batch: Prep Batch:	TPH GRO 42874 36993		Analytical Date Anal Sample Pr		S 8015B 2007-11-08 2007-11-08		Prep Meth Analyzed Prepared	By: KB
			RL					
Parameter	Flag		Result		Units	D	vilution	\mathbf{RL}
GRO			<1.00		m mg/Kg		1	1.00
Gumomete		El a m	Decult	II:to	Dilution	Spike	Percent	Recovery
Surrogate	(yestern allered bedreid)	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotolu	· /		1.07	m mg/Kg	1	1.00	107	34.1 - 161
4-Bromofluor	robenzene (4-BFB)		0.959	m mg/Kg	1	1.00	96	31.8 - 159

Sample: 142196 - I44

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	42873	Date Analyzed:	2007-11-08	Analyzed By:	KB
Prep Batch:	36993	Sample Preparation:	2007-11-08	Prepared By:	\mathbf{KB}

		RI	L				
Parameter	Flag	Result	t	Units	Di	lution	RL
Benzene		< 0.0100)	mg/Kg		1	0.0100
Toluene		< 0.0100)	mg/Kg		1	0.0100
Ethylbenzene		< 0.0100)	mg/Kg		1	0.0100
Xylene		< 0.0100)	mg/Kg		1	0.0100
					Spike	Percent	Recovery
Surrogate	Fla	g Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		0.827	mg/Kg	1	1.00	83	65.4 - 124
4-Bromofluorobenzene (4-BF	B)	0.770	mg/Kg	1	1.00	77	73.9 - 138

Sample: 142196 - I44

Analysis: QC Batch: Prep Batch:	Chloride (Titration) 42901 37015	Analytical Method: Date Analyzed: Sample Preparation	2007 - 11 - 09	Prep Method: Analyzed By: Prepared By:	$\dot{\mathbf{ER}}$
		RL			
Parameter	Flag	Result	Units	Dilution	RL
Chloride		70.0	mg/Kg	10	5.00

Sample: 142196 - I44

Analysis:	TCLP Total 8 Metals	Analytical Method:	S 6010B	Prep Method:	
QC Batch:	42931	Date Analyzed:	2007 - 11 - 12	Analyzed By:	RR
Prep Batch:	37041	TCLP Extraction:	2007-11-09	Prepared By:	\mathbf{KV}
		Sample Preparation:	2007-11-12	Prepared By:	\mathbf{KV}
Analysis:	TCLP Total 8 Metals	Analytical Method:	S 7470A	Prep Method:	TCLP 1311
QC Batch:	42960	Date Analyzed:	2007-11-12	Analyzed By:	TP
Prep Batch:	37051	TCLP Extraction:		Prepared By:	TP
		Sample Preparation:	2007-11-12	Prepared By:	TP

		RL			
Parameter	Flag	Result	Units	Dilution	RL
TCLP Silver		< 0.125	mg/L	1	0.125
TCLP Arsenic		< 0.100	mg/L	1	0.100
TCLP Barium		1.61	mg/L	1	0.100
TCLP Cadmium		< 0.0500	mg/L	1	0.0500
TCLP Chromium		< 0.100	mg/L	1	0.100
TCLP Mercury		< 0.000500	mg/L	1	0.000500
TCLP Lead		< 0.100	mg/L	1	0.100
TCLP Selenium		< 0.500	$\mathrm{mg/L}$	1	0.500

Sample: 142196 - I44

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	42880	Date Analyzed:	2007-11-08	Analyzed By:	$\mathbf{R}\mathbf{M}$
Prep Batch:	36999	Sample Preparation:	2007-08-07	Prepared By:	$\mathbf{R}\mathbf{M}$

Parameter	Flag		RL Result	Uni	ts	Dilution	\mathbf{RL}
DRO	0		<50.0	mg/k	Kg	1	50.0
Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontan	0	195	mg/Kg	1	150	130	62.5 - 164
Sample: 14	2196 - I44						
Analysis:	TPH GRO		Analytical Me		_	Prep Me	
Analysis: QC Batch:	TPH GRO 42874		Date Analyze	d: 2007-11		Analyzed	l By: KB
Analysis: QC Batch:	TPH GRO 42874		Date Analyze Sample Prepa	d: 2007-11		-	l By: KB
Analysis:	TPH GRO 42874		Date Analyze	d: 2007-11	1-08 1-08	Analyzed	l By: KB

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.01	mg/Kg	1	1.00	101	34.1 - 161
4-Bromofluorobenzene (4-BFB)		0.884	mg/Kg	1	1.00	88	31.8 - 159

Method Blank (1) QC Batch: 42873

QC Batch: 42873 Prep Batch: 36993		Date Ana QC Prep	v	07-11-08 07-11-08			yzed By: KB ared By: KB
			MD	L			
Parameter	Flag		Resul	lt	Uni	ts	RL
MTBE			< 0.0013	6	mg/l	Kg	0.01
Benzene			< 0.0033	3	mg/l	Kg	0.01
Toluene			< 0.0037	2	mg/l	0.01	
Ethylbenzene			< 0.0020	6	mg/l	Kg	0.01
Xylene			< 0.0025	9	mg/l	0.01	
					Spike	Percent	Recovery
Surrogate	\mathbf{Flag}	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		0.804	mg/Kg	1	1.00	80	74.3 - 112
4-Bromofluorobenzene (4-BFB)		0.483	$\mathrm{mg/Kg}$	1	1.00	48	43.1 - 98.8

Method Blank (1) QC Batch: 42874

QC Batch: Prep Batch:		Date Analyzed: QC Preparation:		Analyzed By: KB Prepared By: KB
		MD	L	
Parameter	Flag	Resu	lt Units	\mathbf{RL}
GRO		<0.45	59 mg/Kg	1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT			ng/Kg	1	1.00	97	96 - 115
4-Bromofluorobenzene	e (4-BFB)	0.556 n	ng/Kg	1	1.00	56	51.6 - 105
Method Blank (1)	QC Batch: 42879						
QC Batch: 42879 Prep Batch: 36998		Date Analyze QC Preparat		007-11-08 007-11-08			vzed By: ER ared By: ER
Parameter	Flag		MDL Result		U	nits	RI
Chloride			<3.25		mg	/Kg	5
Method Blank (1)	QC Batch: 42880						
QC Batch: 42880 Prep Batch: 36999		Date Analyze QC Preparat		07-11-08 07-11-08			zed By: RM red By: RM
Parameter	Flag		MDL Result		U	nits	RI
DRO			<10.7			/Kg	50
					Spike	Percent	Recovery
	Flag Result	Units	Dilu		Amount	Recovery	Limits 62.5 - 164
n-Triacontane	204	mg/Kg		L	150	136	02.3 - 10-
Method Blank (1)	QC Batch: 42901						
QC Batch: 42901 Prep Batch: 37015		Date Analyze QC Preparat		07-11-09 07-11-09			vzed By: ER ared By: ER
			MDL				
Parameter	Flag		Result			nits	RI
Chloride			<3.25		mg	/Kg	õ
Method Blank (1)	QC Batch: 42910						
QC Batch: 42910 Prep Batch: 37021		Date Analyze QC Preparat		07-11-09 07-11-09			vzed By: KB ured By: KB
			MI			* •	
D			-				
	Flag		Rest			Jnits	RL
Benzene	Flag		< 0.0008	60	m	g/Kg	0.03
Parameter Benzene Toluene Ethylbenzene	Flag			60 10	m m		

Surrogate	Flag	Result	Units	Dilution	${ m Spike} \ { m Amount}$	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.908	mg/Kg	1	1.00	91	72.9 - 113
4-Bromofluorobenzene (4-BFB)		0.741	mg/Kg	1	1.00	74	62.6 - 112

Method Blank (1) QC Batch: 42931

QC Batch: 42931	Dat	te Analyzed: 2007-11-12		Analyzed By: RR
Prep Batch: 37041	QC	Preparation: 2007-11-12		Prepared By: KV
		MDL		
Parameter	Flag	Result	Units	RL
TCLP Silver		< 0.00780	mg/L	0.125
TCLP Arsenic		< 0.0590	$\mathrm{mg/L}$	0.1
TCLP Barium		< 0.00340	mg/L	0.1
TCLP Cadmium		< 0.00270	mg/L	0.05
TCLP Chromium		< 0.00660	mg/L	0.1
TCLP Lead		< 0.0370	mg/L	0.1
TCLP Selenium		< 0.100	mg/L	0.5

Method Blank (1) QC Batch: 42960

QC Batch: Prep Batch:	$42960 \\ 37051$		Date Analyzed: QC Preparation:			Analyzed By: Prepared By:	
				MDL			
Parameter		Flag		Result	Units]	\mathbf{RL}
TCLP Mercu	ry		<0.0	000610	$\mathrm{mg/L}$	0.0	0005

Laboratory Control Spike (LCS-1)

QC Batch: Prep Batch:	42873 36993		Date Analyzed: QC Preparation		2007-11-08 2007-11-08			Analyzed By: KB Prepared By: KB		
Param		$\begin{array}{c} \mathrm{LCS} \\ \mathrm{Result} \end{array}$	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit		
MTBE		0.942	mg/Kg	1	1.00	< 0.00136	94	71.9 - 108		
Benzene		0.908	mg/Kg	1	1.00	< 0.00333	91	79.4 - 109		
Toluene		0.891	$\mathrm{mg/Kg}$	1	1.00	< 0.00372	89	80.4 - 109		

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

mg/Kg

mg/Kg

0.816

2.50

	LCSD			Spike	Matrix		Rec.		RPD
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
MTBE	0.942	mg/Kg	1	1.00	< 0.00136	94	71.9 - 108	0	20
Benzene	0.906	m mg/Kg	1	1.00	< 0.00333	91	79.4 - 109	0	20
Toluene	0.890	mg/Kg	1	1.00	< 0.00372	89	80.4 - 109	0	20

1

1

1.00

3.00

< 0.00206

< 0.00259

82

83

81.3 - 107

81.4 - 108

continued ...

Ethylbenzene

Xylene

-	LCSD			Spike	Matrix		Rec.		RPD
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Ethylbenzene	0.815	mg/Kg	1	1.00	< 0.00206	82	81.3 - 107	0	20
Xylene	2.50	m mg/Kg	1	3.00	< 0.00259	83	81.4 - 108	0	20
		0/ 0						-	

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCS	LCSD			Spike	LCS	LCSD	Rec.
Surrogate	Result	Result	Units	Dil.	Amount	Rec .	Rec.	Limit
Trifluorotoluene (TFT)	0.851	0.857	mg/Kg	1	1.00	85	86	75.8 - 111
4-Bromofluorobenzene (4-BFB)	0.751	0.747	m mg/Kg	1	1.00	75	75	69.8 - 117

Laboratory Control Spike (LCS-1)

QC Batch:	42874	Date Analyzed:	2007-11-08	Analyzed By:	\mathbf{KB}
Prep Batch:	36993	QC Preparation:	2007-11-08	Prepared By:	\mathbf{KB}

	LCS			Spike	Matrix		Rec.
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit
GRO	8.58	m mg/Kg	1	10.0	< 0.459	86	78.7 - 108

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			Spike	Matrix		Rec.		RPD
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
GRO	9.12	m mg/Kg	1	10.0	< 0.459	91	78.7 - 108	6	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCS	LCSD			Spike	LCS	LCSD	Rec.
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
Trifluorotoluene (TFT)	0.919	0.904	mg/Kg	1	1.00	92	90	83.7 - 110
4-Bromofluorobenzene (4-BFB)	0.779	0.765	m mg/Kg	1	1.00	78	76	74.4 - 107

Laboratory Control Spike (LCS-1)

QC Batch: Prep Batch:	Date Analyzed: QC Preparation:	Analyzed By: Prepared By:	

				LCS			Spike	Matrix		$\operatorname{Rec.}$
Param				Result	Units	Dil.	Amount	Result	Rec.	Limit
Chloride				102	mg/Kg	1	100	<3.25	102	96.1 - 103
D	• 1	1 .1	• 1			. 1 . 1	1 +1 1	1 1.		

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			Spike	Matrix		Rec.		RPD
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Chloride	100	m mg/Kg	1	100	<3.25	100	96.1 - 103	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch:	42880	Date Analyzed:	2007-11-08	Analyzed By:	$\mathbf{R}\mathbf{M}$
Prep Batch:	36999	QC Preparation:	2007-11-08	Prepared By:	RM

	LCS			Spike	Matrix		Rec.
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit
DRO	264	mg/Kg	1	250	<10.7	106	64.1 - 124

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			Spike	Matrix		Rec.		RPD
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
DRO	290	m mg/Kg	1	250	$<\!10.7$	116	64.1 - 124	9	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	\mathbf{LCS}	LCSD			\mathbf{Spike}	LCS	LCSD	Rec.
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
n-Triacontane	214	216	m mg/Kg	1	150	143	144	62.5 - 164

Laboratory Control Spike (LCS-1)

QC Batch:	42901	Date Analyzed:	2007-11-09	Analyzed By:	\mathbf{ER}
Prep Batch:	37015	QC Preparation:	2007-11-09	Prepared By:	\mathbf{ER}

	LCS			Spike	Matrix		Rec.
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit
Chloride	100	m mg/Kg	1	100	<3.25	100	96.1 - 103

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			\mathbf{Spike}	Matrix		Rec.		RPD
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Chloride	100	$\mathrm{mg/Kg}$	1	100	<3.25	100	96.1 - 103	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: Prep Batch:	42910 37021	Date Analyzed: QC Preparation:			Analyzed By: KB Prepared By: KB
		LCS	Spile	Motrix	Dog

	LCS			Spike	Matrix		Rec.
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit
Benzene	0.940	mg/Kg	1	1.00	< 0.000860	94	79.9 - 113
Toluene	0.963	m mg/Kg	1	1.00	< 0.00211	96	80.2 - 113
Ethylbenzene	0.967	m mg/Kg	1	1.00	< 0.000988	97	80 - 113
Xylene	2.94	m mg/Kg	1	3.00	< 0.00163	98	79 - 111

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result. continued ... control spikes continued ...

Param	$\begin{array}{c} \mathrm{LCSD} \\ \mathrm{Result} \end{array}$	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
	LCSD			Spike	Matrix		Rec.		RPD
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Benzene	0.931	mg/Kg	1	1.00	< 0.000860	93	79.9 - 113	1	20
Toluene	0.949	mg/Kg	1	1.00	< 0.00211	95	80.2 - 113	1	20
Ethylbenzene	0.960	mg/Kg	1	1.00	< 0.000988	96	80 - 113	1	20
Xylene	2.92	mg/Kg	1	3.00	< 0.00163	97	79 - 111	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCS	LCSD			Spike	LCS	LCSD	Rec.
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
Trifluorotoluene (TFT)	1.02	1.01	mg/Kg	1	1.00	102	101	81.3 - 116
4-Bromofluorobenzene (4-BFB)	1.10	1.09	m mg/Kg	1	1.00	110	109	85.8 - 119

Laboratory Control Spike (LCS-1)

QC Batch:	42931	Date Analyzed:	2007-11-12	Analyzed By:	\mathbf{RR}
Prep Batch:	37041	QC Preparation:	2007-11-12	Prepared By:	\mathbf{KV}

	LCS			\mathbf{Spike}	Matrix		Rec.
Param	\mathbf{Result}	Units	Dil.	Amount	Result	Rec.	Limit
TCLP Silver	1.19	mg/L	1	1.25	< 0.00780	95	82.5 - 112
TCLP Arsenic	4.68	$\mathrm{mg/L}$	1	5.00	< 0.0590	94	81.2 - 113
TCLP Barium	9.30	$\mathrm{mg/L}$	1	10.0	< 0.00340	93	80.1 - 113
TCLP Cadmium	2.37	$\mathrm{mg/L}$	1	2.50	< 0.00270	95	82 - 111
TCLP Chromium	0.955	mg/L	1	1.00	< 0.00660	96	89.5 - 112
TCLP Lead	4.82	mg/L	1	5.00	< 0.0370	96	84.9 - 107
TCLP Selenium	4.44	$\mathrm{mg/L}$	1	5.00	< 0.100	89	80.2 - 98.7

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			Spike	Matrix		Rec.		RPD
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
TCLP Silver	1.20	$\mathrm{mg/L}$	1	1.25	< 0.00780	96	82.5 - 112	1	20
TCLP Arsenic	4.86	mg/L	1	5.00	< 0.0590	97	81.2 - 113	4	20
TCLP Barium	9.67	mg/L	1	10.0	< 0.00340	97	80.1 - 113	4	20
TCLP Cadmium	2.41	mg/L	1	2.50	< 0.00270	96	82 - 111	2	20
TCLP Chromium	0.975	mg/L	1	1.00	< 0.00660	98	89.5 - 112	2	20
TCLP Lead	4.84	mg/L	1	5.00	< 0.0370	97	84.9 - 107	0	20
TCLP Selenium	4.52	$\mathrm{mg/L}$	1	5.00	< 0.100	90	80.2 - 98.7	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch:	42960	Date Analyzed:	2007-11-12	Analyzed By:	TP
Prep Batch:	37051	QC Preparation:	2007-11-12	Prepared By:	TP

	LCS			Spike	Matrix	x		Rec.		
Param	Result	Units	Dil.	Amount	Result	t Ree		Limit		
TCLP Mercury	0.00532	mg/L	1	0.00500	< 0.0000	610 100	5 91	.9 - 123		
Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.										
Percent recovery is based or	n the spike result. RI	PD is based	on the spik	e and spike du	plicate re	esult.				
Percent recovery is based or	n the spike result. RI LCSD	PD is based	on the spik Spike	e and spike du Matrix	plicate re	esult. Rec.		RPD		
Percent recovery is based of Param	LCSD	PD is based nits Dil.	1	1	plicate re Rec.		RPD	RPD Limit		

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 142191

QC Batch:	42873	Date Analyzed:	2007-11-08	Analyzed By:	\mathbf{KB}
Prep Batch:	36993	QC Preparation:	2007-11-08	Prepared By:	KB

	${ m MS}$			Spike	Matrix		Rec.
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit
MTBE	0.650	mg/Kg	1	1.00	< 0.00136	65	34.2 - 95.4
Benzene	0.698	$\mathrm{mg/Kg}$	1	1.00	< 0.00333	70	43.2 - 116
Toluene	0.737	mg/Kg	1	1.00	< 0.00372	74	46.3 - 121
Ethylbenzene	0.758	mg/Kg	1	1.00	< 0.00206	76	54.2 - 127
Xylene	2.30	$\mathrm{mg/Kg}$	1	3.00	< 0.00259	77	49.9 - 131

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			\mathbf{Spike}	Matrix		Rec.		RPD
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
MTBE	0.695	mg/Kg	1	1.00	< 0.00136	70	34.2 - 95.4	7	20
Benzene	0.739	$\mathrm{mg/Kg}$	1	1.00	< 0.00333	74	43.2 - 116	6	20
Toluene	0.776	m mg/Kg	1	1.00	< 0.00372	78	46.3 - 121	5	20
Ethylbenzene	0.799	mg/Kg	1	1.00	< 0.00206	80	54.2 - 127	5	20
Xylene	2.43	mg/Kg	1	3.00	< 0.00259	81	49.9 - 131	6	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MS	MSD			Spike	${ m MS}$	MSD	Rec.
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
Trifluorotoluene (TFT)	0.722	0.748	mg/Kg	1	1	72	75	68 - 127
4-Bromofluorobenzene (4-BFB)	0.747	0.791	m mg/Kg	1	1	75	79	68.6 - 144

Matrix Spike (MS-1) Spiked Sample: 142194

QC Batch: Prep Batch:	42874 36993		e Analyzed: Preparation:	2007-11 2007-11			0	ed By: KB ed By: KB
		${ m MS}$			Spike	Matrix		Rec.
Param		Result	Units	Dil.	Amount	Result	Rec.	Limit
GRO		12.7	m mg/Kg	1	10.0	< 0.459	127	51.3 - 130

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result. continued ...

matrix spikes continued												
inder to optition contributed		MSD			Spike	Ma	trix		Re	ec.		RPD
Param		Result	Units	Dil.	Amount		sult	Rec.	Lir		RPD	Limi
		MSD			Spike	Ma	trix		\mathbf{R}			RPE
Param		Result	Units		Amount		sult	Rec.	Lir		RPD	Limi
GRO		7.90	mg/K	g 1	10.0	<0.	.459	79	51.3	- 130	47	19.6
Percent recovery is base	d on the spi	ike result.	RPD is	s based or	n the spike	and sp	ike dı	plicate	result.			
		MS		MSD			\mathbf{Sp}	oike	MS	MSI)	Rec.
Surrogate		Resu	lt R	tesult	Units	Dil.	Am	ount	Rec.	Rec		Limit
Trifluorotoluene (TFT)		0.61			mg/Kg	1		1	62	69	56	5.1 - 12
4-Bromofluorobenzene (4	4-BFB)	0.77	2 ().851	mg/Kg	1		1	77	85	67	7.1 - 140
Matrix Spike (MS-1) QC Batch: 42879 Prep Batch: 36998	Spiked	Sample: 14	Date A	Analyzed: reparation							yzed B ared B	-
		M	3			S	pike	М	atrix			Rec.
Param		Res		Units	Dil.	-	iount		esult	Re	г.	Limit
Chloride	2			mg/Kg	10		500		16.92	71		80 - 12
Percent recovery is base	d on the sni			0, 0	n the spile						-	
reicent recovery is base	a on the sp.	ike resuit.		based of	n the spike	and sp	nice of	ipicate	resuit.			
		MSD			\mathbf{Spike}	М	atrix		R	.ec.		RPE
		Result	Units		Amount	t R	esult	Rec.	Li	mit	RPD	
Chloride	3	Result 5220	mg/K	lg 10	Amount 500	t R 50	esult 16.92	41	Li 80 -		RPD 3	RPD Limit 20
Chloride Percent recovery is base	d on the spi	Result 5220 ike result.	mg/K RPD is	lg 10	Amount 500	t R 50	esult 16.92	41	Li 80 -	mit		Limi
Param Chloride Percent recovery is base Matrix Spike (MS-1)	d on the spi	Result 5220	mg/K RPD is \$2192	s based of	Amount 500 n the spike	$\frac{t R}{50}$ and sp	esult 16.92	41	Li 80 -	mit - 120	3	Limi 20
Chloride Percent recovery is base Matrix Spike (MS-1) QC Batch: 42880	d on the spi	Result 5220 ike result.	mg/K RPD is 42192 Date A	s based of analyzed:	Amount 500 n the spike 2007-11-	t R 50 and sp -08	esult 16.92	41	Li 80 -	mit - 120 Anal	3 yzed By	Limi 20 7: RM
Chloride Percent recovery is base Matrix Spike (MS-1) QC Batch: 42880	d on the spi	Result 5220 ike result.	mg/K RPD is 42192 Date A	s based of	Amount 500 n the spike 2007-11-	t R 50 and sp -08	esult 16.92	41	Li 80 -	mit - 120 Anal	3	Limi 20 7: RM
Chloride Percent recovery is base Matrix Spike (MS-1) QC Batch: 42880	d on the spi	Result 5220 ike result. Sample: 14	mg/K RPD is 42192 Date A QC Pr	s based of analyzed:	Amount 500 n the spike 2007-11-	t R 50 and sp -08 -08	esult 16.92 ike du	41 iplicate	Li 80 - result.	mit - 120 Anal	3 yzed By	Limi 20 7: RM 7: RM
Chloride Percent recovery is base Matrix Spike (MS-1) QC Batch: 42880 Prep Batch: 36999	d on the spi	Result 5220 ike result. Sample: 14 MS	mg/K RPD is 42192 Date A QC Pr	g 10 s based or analyzed: eparation	Amount 500 n the spike 2007-11- n: 2007-11-	t R/ 50 and sp -08 -08 Sp	esult 16.92 ike du ike	41 iplicate Ma	Li 80 - result. trix	mit - 120 Anal; Prep.	3 yzed By	Limi 20 7: RM 7: RM Rec.
Chloride Percent recovery is base Matrix Spike (MS-1) QC Batch: 42880 Prep Batch: 36999 Param	d on the spi	Result 5220 ike result. Sample: 14 MS Resu	mg/K RPD is 42192 Date A QC Pr S dlt	ig 10 s based or analyzed: eparation Units	Amount 500 n the spike 2007-11- n: 2007-11- Dil.	t R 50 and sp -08 -08 Sp Amo	esult 16.92 ike du ike ount	41 pplicate Ma Res	Li 80 - result. trix sult	mit - 120 Analy Prep. Rec.	3 yzed By ared By	Limir 20 7: RM 7: RM r: RM Rec. Limit
Chloride Percent recovery is base Matrix Spike (MS-1) QC Batch: 42880 Prep Batch: 36999 Param DRO	d on the spi	Result 5220 ike result. Sample: 14 MS Resu 196	mg/K RPD is 42192 Date A QC Pr 3 	fg 10 s based or analyzed: eparation Units mg/Kg	Amount 500 n the spike 2007-11- n: 2007-11- Dil. 1	t R 50 and sp -08 -08 Sp Am 23	esult 16.92 ike du ike ount 50	41 aplicate Ma Rea <1	Li 80 result. trix sult 0.7	mit - 120 Anal; Prep.	3 yzed By ared By	Limi 20 7: RM 7: RM Rec. Limit
Chloride Percent recovery is base Matrix Spike (MS-1) QC Batch: 42880 Prep Batch: 36999 Param DRO	d on the spi	Result 5220 ike result. Sample: 14 MS Resu 190 ike result.	mg/K RPD is 42192 Date A QC Pr 3 	fg 10 s based or analyzed: eparation Units mg/Kg	Amount 500 n the spike 2007-11- n: 2007-11- Dil. 1 n the spike	t R 50 and sp -08 -08 -08 Sp Amo 22 and sp	esult 16.92 ike du ike ount 50 ike du	41 aplicate Ma Rea <1	Li 80 - result. trix sult 0.7 result.	mit - 120 Analy Prep. Rec. 78	3 yzed By ared By	Limi 20 7: RM 7: RM Rec. Limit 7.5 - 12
Chloride Percent recovery is base Matrix Spike (MS-1) QC Batch: 42880 Prep Batch: 36999 Param DRO Percent recovery is base	d on the spi	Result 5220 ike result. Sample: 14 MS Resu 196 ike result. MSD	mg/K RPD is 42192 Date A QC Pr 3 alt 5 RPD is	ig 10 s based on analyzed: eparation Units mg/Kg s based on	Amount 500 n the spike 2007-11- n: 2007-11- Dil. 1 n the spike Spike	t R. 50 and sp -08 -08 -08 -08 -08 -08 -08 -08 -08 -08	esult 16.92 ike du ike du 50 ike du trix	41 aplicate Ma Res <1 aplicate	Li 80 result. trix sult 0.7	mit - 120 Analy Prep. Rec. 78	3 yzed By ared By 47	Limit 20 7: RM 7: RM Rec. Limit 7.5 - 127 RPD
Chloride Percent recovery is base Matrix Spike (MS-1) QC Batch: 42880 Prep Batch: 36999 Param DRO Percent recovery is base Param	d on the spi	Result 5220 ike result. Sample: 14 MSD Result	mg/K RPD is 42192 Date A QC Pr 3 alt 5 RPD is Units	ig 10 s based or analyzed: eparation Units mg/Kg s based or Dil.	Amount 500 n the spike 2007-11- n: 2007-11- Dil. 1 n the spike Spike Amount	t R 50 and sp -08 -08 -08 Sp Ame 23 and sp Ma Res	esult 16.92 ike du ike du 50 ike du trix sult	41 aplicate Ma Res <1 aplicate Rec.	Li 80 result. trix sult 0.7 result. Re Lir	mit - 120 Analy Prep. Rec. 78 ec. nit	3 yzed By ared By	Limi 20 7: RM 7: RM Rec. Limit 7.5 - 12 RPD Limi
Chloride Percent recovery is base Matrix Spike (MS-1) QC Batch: 42880 Prep Batch: 36999 Param DRO Percent recovery is base Param DRO	d on the spi Spiked i d on the spi	Result 5220 ike result. Sample: 14 MSD Result MSD Result 199	mg/K RPD is 42192 Date A QC Pr S dlt RPD is mg/K	$\frac{10}{10}$ s based on analyzed: eparation Units mg/Kg s based on Dil. g 1	Amount 500 n the spike 2007-11- n: 2007-11- Dil. 1 n the spike Spike Amount 250	t R. 50 and sp -08 -08 -08 Sp Amo 23 and sp Ma Res -1 -1	ike du ike du ike du ike du trix sult .0.7	41 plicate Ma Res <1 plicate Rec. 80	Li 80 result. trix sult 0.7 result. Re Lir 47.5	mit - 120 Analy Prep. Rec. 78 ec. nit	3 yzed By ared By 47 RPD	Limi 20 7: RM 7: RM Rec. Limit 7.5 - 12 RPE
Chloride Percent recovery is base Matrix Spike (MS-1) QC Batch: 42880	d on the spi Spiked i d on the spi d on the spi	Result 5220 ike result. Sample: 14 MSD Result MSD Result 199 ike result.	mg/K RPD is 42192 Date A QC Pr S alt B RPD is mg/K RPD is	$\frac{10}{10}$ s based on analyzed: eparation Units mg/Kg s based on Dil. g 1	Amount 500 n the spike 2007-11- n: 2007-11- Dil. 1 n the spike Spike Amount 250	$\frac{\text{R}}{50}$ and sp -08 $-$	esult 16.92 ike du ike du 50 ike du trix sult .0.7 ike du	41 plicate Ma Res <1 plicate Rec. 80 plicate	Li 80 result. trix sult 0.7 result. Lin 47.5 result.	mit - 120 Anal- Prep- Rec. 78 ec. nit - 127	3 yzed By ared By 47 RPD	Limi 20 7: RM 7: RM Rec. Limit 7.5 - 12 RPI Limi 20
Chloride Percent recovery is base Matrix Spike (MS-1) QC Batch: 42880 Prep Batch: 36999 Param DRO Percent recovery is base Param DRO	d on the spi Spiked i d on the spi	Result 5220 ike result. Sample: 14 MSD Result MSD Result 199	mg/K RPD is 42192 Date A QC Pr 3 dlt RPD is mg/K RPD is	$\frac{10}{10}$ s based on analyzed: eparation Units mg/Kg s based on Dil. g 1	Amount 500 n the spike 2007-11- n: 2007-11- Dil. 1 n the spike Spike Amount 250	$\begin{array}{c c} t & R \\ \hline 50 \\ \hline 300 \\ and sp \\ \hline -08 \\ \hline -08$	ike du ike du ike du ike du trix sult .0.7	41 plicate Ma Res <1 plicate Rec. 80	$ \begin{array}{r} \text{Li} \\ \hline 80 \\ \hline \\ \text{result.} \\ \hline \\ \text{result.} \\ \hline \\ 0.7 \\ \hline \\ \text{result.} \\ \hline \\ \hline \\ 47.5 \\ \hline \\ \text{result.} \\ \\ \text{S} \\ \end{array} $	mit - 120 Analy Prep. Rec. 78 ec. nit	3 yzed By ared By 47 <u>RPD</u> 2	Limi 20 7: RM 7: RM Rec. Limit 7.5 - 12 RPI Limi

Work Order: 7110817 Violet St. & Center St.

Matrix Spike (MS-1) Spiked Sample: 142196

QC Batch:	42901	Date Analyzed:	2007-11-09	Analyzed By:	\mathbf{ER}
Prep Batch:	37015	QC Preparation:	2007-11-09	Prepared By:	\mathbf{ER}

		${ m MS}$			Spike	Matrix		Rec.
Param		Result	Units	Dil.	Amount	Result	Rec.	Limit
Chloride	4	1090	m mg/Kg	10	500	70.058	204	80 - 120

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

		MSD			Spike	Matrix		Rec.		RPD
Param		Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Chloride	5	1080	$\mathrm{mg/Kg}$	10	500	70.058	202	80 - 120	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 142446

QC Batch:	42910	Date Analyzed:	2007-11-09	Analyzed By:	\mathbf{KB}
Prep Batch:	37021	QC Preparation:	2007-11-09	Prepared By:	\mathbf{KB}

Param	${f MS} {f Result}$	Units	Dil.	Spike Amount	${ m Matrix} { m Result}$	Rec.	Rec. Limit
Benzene	0.698	mg/Kg	1	1.00	< 0.000860	70	35 - 116
Toluene	0.766	mg/Kg	1	1.00	< 0.000211	77	36.4 - 122
Ethylbenzene	0.824	mg/Kg	1	1.00	< 0.000988	82	41.2 - 124
Xylene	2.54	mg/Kg	1	3.00	< 0.00163	85	40.6 - 123

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			\mathbf{Spike}	Matrix		Rec.		RPD
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Benzene	0.724	mg/Kg	1	1.00	< 0.000860	72	35 - 116	4	20
Toluene	0.791	$\mathrm{mg/Kg}$	1	1.00	< 0.000211	79	36.4 - 122	3	20
Ethylbenzene	0.854	mg/Kg	1	1.00	< 0.000988	85	41.2 - 124	4	20
Xylene	2.63	$\mathrm{mg/Kg}$	1	3.00	< 0.00163	88	40.6 - 123	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MS	MSD			Spike	\mathbf{MS}	MSD	Rec.
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
Trifluorotoluene (TFT)	1.07	1.07	mg/Kg	1	1	107	107	72.3 - 137
4-Bromofluorobenzene (4-BFB)	1.23	1.29	mg/Kg	1	1	123	129	67.8 - 146

Matrix Spike (MS-1) Spiked Sample: 142191

QC Batch:	42931	Date Analyzed:	2007-11-12	Analyzed By:	\mathbf{RR}
Prep Batch:	37041	QC Preparation:	2007-11-12	Prepared By:	\mathbf{KV}

⁴Matrix spike recovery out of control limits due to peak interference. Use LCS/LCSD to demonstrate analysis is under control.

⁵Matrix spike recovery out of control limits due to peak interference. Use LCS/LCSD to demonstrate analysis is under control.

-	MS		25 4 1	Spike	Matrix		Rec.
Param	Result	Units	Dil.	Amount	Result	$\operatorname{Rec.}$	Limit
TCLP Silver	1.30	$\rm mg/L$	1	1.25	< 0.00780	104	86.6 - 106
TCLP Arsenic	5.20	$\mathrm{mg/L}$	1	5.00	< 0.0590	104	85.6 - 111
TCLP Barium	12.6	$\mathrm{mg/L}$	1	10.0	2.38	102	82.3 - 109
TCLP Cadmium	2.57	$\mathrm{mg/L}$	1	2.50	< 0.00270	103	80.1 - 108
TCLP Chromium	1.04	mg/L	1	1.00	< 0.00660	104	85.1 - 113
TCLP Lead	4.98	mg/L	1	5.00	< 0.0370	100	80.9 - 105
TCLP Selenium	4.83	$\mathrm{mg/L}$	1	5.00	< 0.100	97	77 - 102

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			\mathbf{Spike}	Matrix		Rec.		RPD
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
TCLP Silver	1.17	$\mathrm{mg/L}$	1	1.25	< 0.00780	94	86.6 - 106	10	20
TCLP Arsenic	4.61	$\mathrm{mg/L}$	1	5.00	< 0.0590	92	85.6 - 111	12	20
TCLP Barium	11.2	$\mathrm{mg/L}$	1	10.0	2.38	88	82.3 - 109	12	20
TCLP Cadmium	2.30	mg/L	1	2.50	< 0.00270	92	80.1 - 108	11	20
TCLP Chromium	0.907	mg/L	1	1.00	< 0.00660	91	85.1 - 113	14	20
TCLP Lead	4.57	mg/L	1	5.00	< 0.0370	91	80.9 - 105	9	20
TCLP Selenium	4.10	mg/L	1	5.00	< 0.100	82	77 - 102	16	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 142191

QC Batch:	42960	Date Analyzed:	2007-11-12	Analyzed By:	TP
Prep Batch:	37051	QC Preparation:	2007-11-12	Prepared By:	TP

	MS			\mathbf{Spike}	Matrix		Rec.
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit
TCLP Mercury	0.00511	m mg/L	1	0.00500	< 0.0000610	102	89.7 - 124

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			Spike	Matrix		$\operatorname{Rec.}$		RPD
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
TCLP Mercury	0.00512	$\mathrm{mg/L}$	1	0.00500	< 0.0000610	102	89.7 - 124	0	20
TCLP Mercury	0.00512	mg/L	1	0.00500	< 0.0000610	102		89.7 - 124	89.7 - 124 0

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Standard (ICV-1)

QC Batch: 42873			Date Analyz	ed: 2007-11-0	Analyzed By: KB		
			ICVs	ICVs	ICVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
MTBE		mg/Kg	0.100	0.0951	95	85 - 115	2007-11-08
Benzene		mg/Kg	0.100	0.0914	91	85 - 115	2007 - 11 - 08
Toluene		mg/Kg	0.100	0.0898	90	85 - 115	2007 - 11 - 08
Ethylbenzene	6	mg/Kg	0.100	0.0823	82	85 - 115	2007 - 11 - 08
							continued

⁶Ethylbenzene outside of control limits on CCV(ICV). CCV(ICV) component average is 86 which is within acceptable range. This is acceptable by Method 8000.

standard continued ...

			ICVs	ICVs	ICVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Xylene	7	mg/Kg	0.300	0.252	84	85 - 115	2007-11-08

Standard (CCV-1)

QC Batch: 42873		Date Analyzed: 2007-11-08			Analyzed By: KB		
			CCVs	$\rm CCVs$	CCVs	Percent	
			True	Found	Percent	Recovery	Date
Param	\mathbf{Flag}	Units	Conc.	Conc.	Recovery	Limits	Analyzed
MTBE		mg/Kg	0.100	0.0900	90	85 - 115	2007-11-08
Benzene		m mg/Kg	0.100	0.0894	89	85 - 115	2007 - 11 - 08
Toluene		m mg/Kg	0.100	0.0890	89	85 - 115	2007 - 11 - 08
Ethylbenzene	8	m mg/Kg	0.100	0.0831	83	85 - 115	2007 - 11 - 08
Xylene		m mg/Kg	0.300	0.255	85	85 - 115	2007-11-08

Standard (ICV-1)

QC Batch:	42874		Date Ana	alyzed: 2007-1	Anal	yzed By: KB	
			ICVs	ICVs	ICVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
GRO		m mg/Kg	1.00	0.852	85	85 - 115	2007-11-08

Standard (CCV-1)

QC Batch:	42874	Date Analyzed: 2007-11-08				Anal	yzed By: KB
			CCVs	CCVs	CCVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
GRO		m mg/Kg	1.00	0.895	90	85 - 115	2007-11-08

Standard (ICV-1)

QC Batch: 42879			Date Anal	yzed: 2007-11	-08	Analyzed By: ER		
			$egin{array}{c} { m ICVs} \\ { m True} \end{array}$	ICVs Found	ICVs Percent	Percent Recovery	Date	
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed	
Chloride		m mg/Kg	100	101	101	85 - 115	2007-11-08	

 7 Xylene outside of control limits on CCV(ICV). CCV(ICV) component average is 86 which is within acceptable range. This is acceptable by Method 8000.

 8 Ethylbenzene outside of control limits on CCV(ICV). CCV(ICV) component average is 85 which is within acceptable range. This is acceptable by Method 8000.

Standard (CCV-1)

QC Batch:	42879		Date Ana	lyzed: 2007-1	1-08	Ana	lyzed By: ER
			CCVs	CCVs	CCVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Chloride	•	m mg/Kg	100	99.2	99	85 - 115	2007-11-08
Standard (ICV-1)						
QC Batch:	42880		Date Ana	lyzed: 2007-11	-08	Anal	yzed By: RM
			ICVs	ICVs	ICVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
DRO		m mg/Kg	250	260	104	85 - 115	2007-11-08
Standard (QC Batch:			Date Ana	lyzed: 2007-11	08	Anal	yzed By: RM
.				-			J J
			CCVs	CCVs	CCVs	Percent	a
*	were a	W	True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
DRO		mg/Kg	250	286	114	85 - 115	2007-11-08
Standard (ICV-1)						
QC Batch:	42901		Date Ana	lyzed: 2007-1	1-09	Ana	lyzed By: ER
			ICVs	ICVs	ICVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Chloride		m mg/Kg	100	101	101	85 - 115	2007-11-09
Standard (CCV-1)						
QC Batch:	42901		Date Ana	lyzed: 2007-1	1-09	Ana	lyzed By: ER
			CCVs	CCVs	CCVs	Percent	
			True	Found	Percent	Recovery	Date
Danam	131	TT	Cons	Conta	Dest	Timite	And

Standard (ICV-1)

Flag

Units

mg/Kg

QC Batch: 42910

Param

Chloride

Date Analyzed: 2007-11-09

Conc.

99.0

Recovery

99

Conc.

100

Analyzed By: KB

Analyzed

2007-11-09

Limits

85 - 115

Work Order: 7110817 Violet St. & Center St.

			ICVs True	ICVs Found	ICVs Percent	Percent Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Benzene		mg/Kg	0.100	0.0958	96	85 - 115	2007-11-09
Toluene		mg/Kg	0.100	0.0978	98	85 - 115	2007 - 11 - 09
Ethylbenzene		mg/Kg	0.100	0.0988	99	85 - 115	2007 - 11 - 09
Xylene		mg/Kg	0.300	0.301	100	85 - 115	2007 - 11 - 09

Standard (CCV-1)

QC Batch: 42910		Date Analyzed: 2007-11-09			Analyzed By: KB		
			CCVs	CCVs	CCVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Benzene		mg/Kg	0.100	0.0924	92	85 - 115	2007-11-09
Toluene		m mg/Kg	0.100	0.0948	95	85 - 115	2007 - 11 - 09
Ethylbenzene		m mg/Kg	0.100	0.0961	96	85 - 115	2007 - 11 - 09
Xylene		$\mathrm{mg/Kg}$	0.300	0.293	98	85 - 115	2007 - 11 - 09

Standard (ICV-1)

QC Batch: 42931		Date Analyzed:	2007-11-12		Analyzed By: RR		
			ICVs	ICVs	ICVs	Percent	
			True	Found	Percent	Recovery	Date
Param	$\mathbf{F}\mathbf{lag}$	Units	Conc.	Conc.	Recovery	Limits	Analyzed
TCLP Silver		mg/L	0.125	0.127	102	90 - 110	2007-11-12
TCLP Arsenic		mg/L	1.00	0.994	99	90 - 110	2007 - 11 - 12
TCLP Barium		mg/L	1.00	1.02	102	90 - 110	2007 - 11 - 12
TCLP Cadmium		mg/L	1.00	1.01	101	90 - 110	2007 - 11 - 12
TCLP Chromium		$\mathrm{mg/L}$	1.00	1.00	100	90 - 110	2007 - 11 - 12
TCLP Lead		$\mathrm{mg/L}$	1.00	1.03	103	90 - 110	2007 - 11 - 12
TCLP Selenium		$\mathrm{mg/L}$	1.00	1.02	102	90 - 110	2007 - 11 - 12

Standard (CCV-1)

QC Batch: 42931		Date Analyzed:	2007-11-12	11-12 Analyzed By: RR			
			CCVs	CCVs	CCVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
TCLP Silver		mg/L	0.125	0.123	98	90 - 110	2007-11-12
TCLP Arsenic		mg/L	1.00	0.994	99	90 - 110	2007 - 11 - 12
TCLP Barium		$\mathrm{mg/L}$	1.00	0.977	98	90 - 110	2007 - 11 - 12
TCLP Cadmium		mg/L	1.00	1.00	100	90 - 110	2007 - 11 - 12
TCLP Chromium		mg/L	1.00	0.979	98	90 - 110	2007 - 11 - 12
TCLP Lead		mg/L	1.00	0.980	98	90 - 110	2007 - 11 - 12
TCLP Selenium		mg/L	1.00	1.01	101	90 - 110	2007-11-12

Work Order: 7110817 Violet St. & Center St.

Standard (ICV-1)

QC Batch: 42960			Date Analyzed: 2007-11-12			Analyzed By: TP		
			ICVs	ICVs	ICVs	Percent		
			True	Found	Percent	Recovery	Date	
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed	
TCLP Mercury		mg/L	0.00500	0.00488	98	90 - 110	2007-11-12	
Standard (CCV- QC Batch: 42960	,		Date Analyze	d: 2007-11-12		Anal	yzed By: TP	
			CCVs	CCVs	$\rm CCVs$	Percent		
			True	Found	Percent	Recovery	Date	
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed	
TCLP Mercury		m mg/L	0.00500	0.00508	102	80 - 120	2007-11-12	

Summary Report

Scott Branson SB Weed Control & Transport 213 S Mesa Carlsbad, NM, 88220

Report Date: November 14, 2007



Project Location:City of Carlsbad, NMProject Name:Violet St. & Center St.

			Date	Time	Date
Sample	Description	Matrix	Taken	Taken	Received
142241	B34	soil	2007-10-11	11:30	2007-11-08
142242	B37	soil	2007 - 10 - 11	12:00	2007 - 11 - 08
142243	B38	soil	2007 - 10 - 11	12:30	2007-11-08
142244	B41	soil	2007 - 10 - 11	13:00	2007 - 11 - 08
142245	B42	soil	2007 - 10 - 11	13:30	2007 - 11 - 08
142246	B45	soil	2007 - 10 - 12	15:00	2007 - 11 - 08
142247	B46	soil	2007 - 10 - 12	15:30	2007 - 11 - 08
142248	Background	soil	2007 - 10 - 12	16:00	2007 - 11 - 08

	TPH DRO	TPH GRO
	DRO	GRO
Sample - Field Code	(mg/Kg)	(mg/Kg)
142241 - B34	< 50.0	<1.00
142242 - B37	< 50.0	<1.00
142243 - B38	< 50.0	<1.00
142244 - B41	< 50.0	<1.00
142245 - B42	<50.0	<1.00
142246 - B45	< 50.0	<1.00
142247 - B46	< 50.0	<1.00
142248 - Background	< 50.0	1.38

Sample: 142241 - B34

Param	\mathbf{Flag}	Result	Units	RL
Chloride		<50.0	mg/Kg	5.00

Sample: 142242 - B37

Param	Flag	Result	Units	RL
Chloride		< 50.0	m mg/Kg	5.00

Sample: 142243 - B38

TraceAnalysis, Inc. • 6701 Aberdeen Ave., Suite 9 • Lubbock, TX 79424-1515 • (806) 794-1296 This is only a summary. Please, refer to the complete report package for quality control data.

Report Date: November 14, 2007		Work Order: 7110824 Violet St. & Center St.		Page Number: 2 of 2 City of Carlsbad, NM	
Param	Flag	Result	Units	RL	
Chloride		<30.0	mg/Kg	5.00	
Sample: 142244 -	- B41				
Param	Flag	Result	Units	RL	
Chloride		976	mg/Kg	5.00	
Sample: 142245 -	- B42				
Param	Flag	Result	Units	\mathbf{RL}	
Chloride		923	m mg/Kg	5.00	
Sample: 142246 -	- B45				
Param	Flag	Result	Units	RL	
Chloride		<50.0	mg/Kg	5.00	
Sample: 142247 -	- B46				
Param	Flag	Result	Units	RL	
Chloride		<50.0	m mg/Kg	5.00	
Sample: 142248 ·	- Background				
Param	Flag	Result	Units	\mathbf{RL}	
Chloride		<50.0	m mg/Kg	5.00	



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168,915+636+49/2 ·AX 230+385+6313

Analytical and Quality Control Report

Scott Branson SB Weed Control & Transport 213 S Mesa Carlsbad, NM, 88220

Report Date: November 14, 2007

Work Order: 7110824

Project Location: City of Carlsbad, NM **Project Name:** Violet St. & Center St. Violet St. & Center St. Project Number:

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

			Date	Time	Date
Sample	Description	Matrix	Taken	Taken	Received
142241	B34	soil	2007-10-11	11:30	2007-11-08
142242	B37	soil	2007 - 10 - 11	12:00	2007 - 11 - 08
142243	B38	soil	2007 - 10 - 11	12:30	2007 - 11 - 08
142244	B41	soil	2007 - 10 - 11	13:00	2007 - 11 - 08
142245	B42	soil	2007 - 10 - 11	13:30	2007 - 11 - 08
142246	B45	soil	2007 - 10 - 12	15:00	2007 - 11 - 08
142247	B46	soil	2007 - 10 - 12	15:30	2007 - 11 - 08
142248	Background	soil	2007 - 10 - 12	16:00	2007 - 11 - 08

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 14 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Michael Al

Dr. Blair Leftwich, Director

Standard Flags

 $\,B\,$ - The sample contains less than ten times the concentration found in the method blank.

Analytical Report

Sample: 142241 - B34

Analysis: QC Batch: Prep Batch:	Chloride (Titration) 43038 37136	Analytical Method: Date Analyzed: Sample Preparation	2007-11-10	Prep Method: Analyzed By: Prepared By:	1
	T.T.I	RL	T T •,		DT
Parameter	Flag	Result	Units	Dilution	RL
Chloride		<50.0	mg/Kg	10	5.00

Sample: 142241 - B34

Analysis: QC Batch:	TPH DRO 42923		Analytical Me Date Analyze	d: 2007-	. 8015B -11-09	Analyz	dethod: N/A zed By: RM
Prep Batch:	37035		Sample Prepa	ration: 2007	-11-09	Prepar	ed By: RM
			RL				
Parameter	Flag	5	Result	U	nits	Dilution	RL
DRO	1		<50.0	${ m mg}$	/Kg	1	50.0
					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontan	e	163	m mg/Kg	1	150	109	62.5 - 164

Sample: 142241 - B34

Analysis: QC Batch: Prep Batch:	TPH GRO 42877 36996		Analytical Date Anal Sample Pr		S 8015B 2007-11-08 2007-11-08		Prep Meth Analyzed Prepared I	By: KB
			RL					
Parameter	Flag		Result		Units	D	ilution	RL
GRO	2		<1.00		m mg/Kg		1	1.00
Surrogate		Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	$egin{array}{c} { m Recovery} \\ { m Limits} \end{array}$
Trifluorotolu	ene (TFT)		1.14	mg/Kg	1	1.00	114	34.1 - 161
4-Bromofluor	robenzene (4-BFB)		1.08	mg/Kg	1	1.00	108	31.8 - 159

Sample: 142242 - B37

Analysis: QC Batch: Prep Batch:	Chloride (Titration) 43038 37136	Analytical Method: Date Analyzed: Sample Preparation:	2007-11-10	Prep Method: Analyzed By: Prepared By:	\dot{MM}
		RL			
Parameter	Flag	Result	Units	Dilution	RL
Chloride		<50.0	mg/Kg	10	5.00

 $^1 \, {\rm Sample}$ received out of hold time $^2 \, {\rm Sample}$ ran out of hold time per client's request. \bullet

Sample: 142242 - B37

Analysis: QC Batch: Prep Batch:	TPH DRO 42923 37035		Analytical Me Date Analyze Sample Prepa	d: 20	od. 8015B 007-11-09 007-11-09	Analyz	Method:N/Azed By:RMred By:RM
			\mathbf{RL}				
Parameter	Flag	5	Result		Units	Dilution	RL
DRO	3		< 50.0		mg/Kg	1	50.0
					Spike	Percent	Recovery
Surrogate	\mathbf{Flag}	Result	Units	Dilutio	n Amount	Recovery	Limits
n-Triacontan	e	188	m mg/Kg	1	150	125	62.5 - 164

Sample: 142242 - B37

Analysis: QC Batch: Prep Batch:	TPH GRO 42877 36996		Analytical Date Anal Sample Pr		S 8015B 2007-11-08 2007-11-08		Prep Meth Analyzed Prepared 1	By: KB
			\mathbf{RL}					
Parameter	Flag		Result		Units	D	ilution	RL
GRO	4		<1.00		m mg/Kg		1	1.00
Surrogate		Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotolu	ene (TFT)		1.11	mg/Kg	1	1.00	111	34.1 - 161
4-Bromofluor	robenzene (4-BFB)		1.00	mg/Kg	1	1.00	100	31.8 - 159

Sample: 142243 - B38

Analysis: QC Batch: Prep Batch:	Chloride (Titration) 43038 37136	Analytical Metl Date Analyzed: Sample Prepara	2007-11-10	Prep Method Analyzed By Prepared By	: MM
		RL			
Parameter	Flag	Result	Units	Dilution	RL
Chloride		<50.0	m mg/Kg	10	5.00

Sample: 142243 - B38

Analysis: QC Batch: Prep Batch:	TPH DRO 42923 37035	Analytical Method: Date Analyzed: Sample Preparation:	Mod. 8015B 2007-11-09 2007-11-09	Prep Method: Analyzed By: Prepared By:	,
Parameter	Flag	RL Result	Units	Dilution	\mathbf{RL}
DRO	5	<50.0	mg/Kg	1	50.0

³Sample received out of hold time

⁴Sample ran out of hold time per client's request. • ⁵Sample received out of hold time

					\mathbf{Spike}	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		143	mg/Kg	1	150	95	62.5 - 164

Sample: 142243 - B38

Analysis: QC Batch: Prep Batch:	TPH GRO 42877 36996		Analytical Date Anal Sample Pr		S 8015B 2007-11-08 2007-11-08		Prep Met Analyzed Prepared	By: 1	S 5035 KB KB
Parameter GRO	Flag 6		RL Result		Units		Dilution		RL
GRO			<1.00		mg/Kg		1		1.00
Surrogate		Flag	Result	Units	Dilution	${ m Spike} \ { m Amount}$	Percent Recovery		covery mits
Trifluorotolue	ene (TFT)		1.16	mg/Kg	1	1.00	116		- 161
4-Bromofluor	cobenzene (4-BFB)		1.06	m mg/Kg	1	1.00	106	31.8	3 - 159
Sample: 14 Analysis: QC Batch: Prep Batch:	2244 - B41 Chloride (Titratio 43038 37136	n)	Date	tical Metho Analyzed: e Preparati	2007-11	-10	Prep M Analyz Prepare	ed By:	N/A MM MM
Parameter	Flag		Result		Units		Dilution		\mathbf{RL}
Chloride			976		m mg/Kg		10		5.00
Sample: 14 Analysis: QC Batch: Prep Batch:	2244 - B41 TPH DRO 42923 37035		Analytica Date Anal Sample Pr		Mod. 8015 2007-11-09 2007-11-09	3	Prep M Analyz Prepare	ed By:	N/A RM RM
			RL						
Parameter	Flag		Result		Units		Dilution		\mathbf{RL}
DRO	7		<50.0		m mg/Kg		1		50.0
Surrogate n-Triacontan	Flag	Result 175	Units mg/Kg		ition . 1	Spike Amount 150	Percent Recovery 117	${ m Li}$	covery mits 5 - 164

Sample: 142244 - B41

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	42877	Date Analyzed:	2007-11-08	Analyzed By:	KB
Prep Batch:	36996	Sample Preparation:	2007-11-08	Prepared By:	KB

⁶Sample ran out of hold time per client's request. • ⁷Sample received out of hold time

			\mathbf{RL}						
Parameter	Fla	g	Result		Units		Dilution		RI
GRO	8		<1.00		mg/Kg		1		1.00
						Spike	Percent	Rec	covery
Surrogate		\mathbf{Flag}	Result	Units	Dilution	n Amoun	c Recovery		imits
Trifluorotolu			1.02	mg/Kg	1	1.00	102	34.1	1 - 16
4-Bromofluo	robenzene (4-BFB	5)	1.18	m mg/Kg	1	1.00	118	31.8	8 - 15
Sample: 14	2245 - B42								
Analysis:	Chloride (Titrat	tion)	Analyt	ical Metho	d: SM 43	500-Cl B	$\operatorname{Prep} M$	lethod:	N/A
QC Batch:	43038		Date A	analyzed:	2007-1	11-10	Analyz	ed By:	- MN
Prep Batch:	37136		Sample	e Preparati	on: 2007-1	11-09	Prepare	ed By:	MM
			RL						
Parameter	Fla	g	Result		Units		Dilution		Rl
Chloride			923		mg/Kg		10		5.00
Sample: 14 Analysis: QC Batch: Prep Batch:	2245 - B42 TPH DRO 42923 37035		Analytical Date Analy Sample Pr	yzed:	Mod. 801 2007-11-0 2007-11-0	9	Prep M Analyz Prepare	ed By:	N/A RM RM
Top Dates.	0.000		-	opulation		•	I Topar	ou 29.	10111
Parameter	Fla_i	σ	RL Result		Units		Dilution		RI
DRO	9	5	<50.0		mg/Kg		1		50.0
						Spike	Percent	Rec	covery
Surrogate	Flag	Result	Units	Dil	ution	Amount	Recovery		imits
n-Triacontan		135	mg/Kg		1	150	90	62.3	5 - 16
Sample: 14	2245 - B42								
Analysis:	TPH GRO		Analytical	Method:	S 8015B		Prep Met	hod:	S 503
QC Batch:	42877		Date Anal	vzed	2007-11-0	8	Analyzed	Bv	KB

v v		yzea:	2007-11-08		Analyzed By: KB		
Prep Batch: 36996 Sample Prep		eparation:	2007 - 11 - 08		Prepared By: KB		
	BL						
	Result		Units	D	ilution	\mathbf{RL}	
	<1.00		m mg/Kg		1	1.00	
				Spike	Percent	Recovery	
Flag	Result	Units	Dilution	Amount	Recovery	Limits	
	1.16	mg/Kg	1	1.00	116	34.1 - 161	
	1.04	mg/Kg	1	1.00	104	31.8 - 159	
	Flag	Sample Pr RL Result <1.00 Flag Result 1.16	Result <1.00	Sample Preparation: 2007-11-08 RL Units <1.00	Sample Preparation: 2007-11-08 RL Units D <1.00	Sample Preparation: 2007-11-08 Prepared I RL Dilution Result Units Dilution <1.00	

⁸Sample ran out of hold time per client's request. • ⁹Sample received out of hold time ¹⁰Sample ran out of hold time per client's request. •

Sample: 142246 - B45

Analysis: QC Batch: Prep Batch:	Chloride (Titration) 43038 37136	Analytical Metho Date Analyzed: Sample Preparat	2007-11-10	Prep Method: Analyzed By: Prepared By:	MM
		\mathbf{RL}			
Parameter	Flag	Result	Units	Dilution	RL
Chloride		<50.0	m mg/Kg	10	5.00

Sample: 142246 - B45

Analysis: QC Batch: Prep Batch:	TPH DRO 42923 37035		Analytical Me Date Analyze Sample Prepa	d:	Mod. 80 2007-11-(2007-11-(09	Prep M Analyz Prepar	C C
			\mathbf{RL}					
Parameter	Flag		Result		Units		Dilution	RL
DRO	11		< 50.0		mg/Kg		1	50.0
				1		Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilut	on	Amount	Recovery	Limits
n-Triacontan	e	207	m mg/Kg	1		150	138	62.5 - 164

Sample: 142246 - B45

Analysis: QC Batch: Prep Batch:	TPH GRO 42877 36996		Analytical Date Anal Sample Pr		S 8015B 2007-11-08 2007-11-08		Prep Meth Analyzed Prepared I	By: KB
			RL					
Parameter	Flag		Result		Units	D	vilution	RL
GRO	12		<1.00		m mg/Kg		1	1.00
Surrogate		Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotolu	ene (TFT)	i nag	1.18	mg/Kg	1	1.00	118	34.1 - 161
	robenzene (4-BFB)		1.10	mg/Kg	1	1.00	110	31.8 - 159

Sample: 142247 - B46

Analysis: QC Batch: Prep Batch:	Chloride (Titration) 43038 37136	Analytical Method: Date Analyzed: Sample Preparation:	2007-11-10	Prep Method: Analyzed By: Prepared By:	\dot{MM}
D	1-1	RL	TT *)		DI
Parameter	Flag	Result	Units	Dilution	RL
Chloride		<50.0	mg/Kg	10	5.00

 $^{11} {\rm Sample}$ received out of hold time $^{12} {\rm Sample}$ ran out of hold time per client's request. \bullet

Sample: 142247 - B46

Analysis: QC Batch: Prep Batch:	TPH DRO 42923 37035		Analytical Me Date Analyze Sample Prepa	d:	Mod. 8 2007-11 2007-11	-09	1	fethod: N/A ed By: RM ed By: RM
			\mathbf{RL}					
Parameter	Flag	r 5	Result		Uni	ts	Dilution	\mathbf{RL}
DRO	13		< 50.0		mg/K	g	1	50.0
						Spike	Percent	Recovery
Surrogate	\mathbf{Flag}	Result	Units	Dilu	tion	Amount	Recovery	Limits
n-Triacontan	e	188	m mg/Kg	1	L	150	125	62.5 - 164

Sample: 142247 - B46

Analysis: QC Batch: Prep Batch:	TPH GRO 42877 36996		Analytical Date Anal Sample Pr		S 8015B 2007-11-08 2007-11-08		Prep Meth Analyzed Prepared 1	By: KB
			\mathbf{RL}					
Parameter	Flag		Result		Units	D	ilution	RL
GRO	14		<1.00		m mg/Kg		1	1.00
Surrogate		Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotolu	ene (TFT)		1.08	mg/Kg	1	1.00	108	34.1 - 161
4-Bromofluor	robenzene (4-BFB)		1.02	$\mathrm{mg/Kg}$	1	1.00	102	31.8 - 159

Sample: 142248 - Background

Analysis: QC Batch: Prep Batch:	Chloride (Titration) 43038 37136	Analytical Method: Date Analyzed: Sample Preparatior	2007-11-10	Prep Method: Analyzed By: Prepared By:	MM
		\mathbf{RL}			
Parameter	Flag	\mathbf{Result}	Units	Dilution	RL
Chloride		<50.0	mg/Kg	10	5.00

Sample: 142248 - Background

Analysis: QC Batch: Prep Batch:	TPH DRO 42923 37035	Analytical Method: Date Analyzed: Sample Preparation:	Mod. 8015B 2007-11-09 2007-11-09	Prep Method: Analyzed By: Prepared By:	N/A RM RM
		RL			
Parameter	Flag	Result	Units	Dilution	RL
DRO	15	<50.0	m mg/Kg	1	50.0

¹³Sample received out of hold time

¹⁴Sample ran out of hold time per client's request.
 ¹⁵Sample received out of hold time

					\mathbf{Spike}	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		193	mg/Kg	1	150	129	62.5 - 164

Sample: 142248 - Background

Analysis: QC Batch: Prep Batch:	TPH GRO 42874 36993		Analytical Date Analy Sample Pr	yzed:	S 8015B 2007-11-08 2007-11-08		Prep Meth Analyzed Prepared 1	By: KB
			RL					
Parameter		Flag	Result		Units	D	ilution	RL
GRO			1.38		m mg/Kg		1	1.00
						Spike	Percent	Recovery
Surrogate		Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotolue	ene (TFT)	1 100	1.14	mg/Kg	1	1.00	114	34.1 - 161
4-Bromofluor		-BFB)	1.01	mg/Kg	1	1.00	101	31.8 - 159
Method Bla QC Batch: Prep Batch:	ank (1) 42874 36993	QC Batch: 42874	Date Ana QC Prepa	0	00 7-11- 08 00 7-11- 08		Analyze Prepare	
				MDL				
Parameter		Flag		MDL Result		Units	3	RL
Parameter GRO		Flag		MDL Result <0.459		Units mg/K		RL 1
		Flag		Result		mg/K	g	1
GRO				Result <0.459		mg/K Spike	g Percent	1 Recovery
GRO Surrogate	(70.077)	Flag Flag	Result	Result <0.459 Units	Dilution	mg/K Spike Amount	g Percent Recovery	1 Recovery Limits
GRO Surrogate Trifluorotolue		Flag	0.968	Result <0.459 Units mg/Kg	1	mg/K Spike Amount 1.00	g Percent Recovery 97	1 Recovery Limits 96 - 115
GRO Surrogate		Flag		Result <0.459 Units		mg/K Spike Amount	g Percent Recovery	1 Recovery Limits
GRO Surrogate Trifluorotolue	cobenzene (4-	Flag	0.968	Result <0.459 Units mg/Kg	1	mg/K Spike Amount 1.00	g Percent Recovery 97	1 Recovery Limits 96 - 115
GRO Surrogate Trifluorotoluo 4-Bromofluor Method Bla	cobenzene (4- ank (1)	Flag BFB)	0.968 0.556	Result <0.459 Units mg/Kg mg/Kg	1 1	mg/K Spike Amount 1.00	Percent Recovery 97 56	1 Recovery Limits 96 - 115 51.6 - 103
GRO Surrogate Trifluorotolue 4-Bromofluor Method Bla QC Batch:	eobenzene (4- ank (1) 42877	Flag BFB)	0.968 0.556 Date Ana	Result <0.459 Units mg/Kg mg/Kg	1 1 007-11-08	mg/K Spike Amount 1.00	g Percent Recovery 97 56 Analyze	1 Recovery Limits 96 - 115 51.6 - 103 ed By: KB
GRO Surrogate Trifluorotoluo 4-Bromofluor Method Bla	cobenzene (4- ank (1)	Flag BFB)	0.968 0.556	Result <0.459 Units mg/Kg mg/Kg	1 1	mg/K Spike Amount 1.00	Percent Recovery 97 56	1 Recovery Limits 96 - 115 51.6 - 103 ed By: KB
GRO Surrogate Trifluorotolue 4-Bromofluor Method Bla QC Batch:	eobenzene (4- ank (1) 42877	Flag BFB) QC Batch: 42877	0.968 0.556 Date Ana	Result <0.459 Units mg/Kg mg/Kg lyzed: 20 uration: 20 MDL	1 1 007-11-08	mg/K Spike Amount 1.00	g Percent Recovery 97 56 Analyze	1 Recovery Limits 96 - 115 51.6 - 103 ed By: KB
GRO Surrogate Trifluorotolue 4-Bromofluor Method Bla QC Batch:	eobenzene (4- ank (1) 42877	Flag BFB)	0.968 0.556 Date Ana	Result <0.459 Units mg/Kg mg/Kg lyzed: 20 uration: 20	1 1 007-11-08	mg/K Spike Amount 1.00	g Percent Recovery 97 56 Analyz Prepare	1 Recovery Limits 96 - 115 51.6 - 103 ed By: KB

Surrogate	Flag	Result	Units	Dilution	${ m Spike} { m Amount}$	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	16	0.921	mg/Kg	1	1.00	92	96 - 115
4-Bromofluorobenzene (4-BFB)		0.580	mg/Kg	1	1.00	58	51.6 - 103

 $^{16}\mathrm{Spike}$ recovery outside control limits but within method limits. \bullet

Method Blank (1)	QC Batch: 429	923						
QC Batch: 42923		Date Analyz					zed By:	
Prep Batch: 37035		QC Prepara	tion: 2007-11-	09		Prepa	red By:	RM
			MDL					
Parameter	Flag		Result		Units			RL
DRO			<10.7		m mg/Kg			50
				Spike	Pe	rcent	Ree	covery
Surrogate Fl	lag Result	Units	Dilution	Amour		covery		imits
n-Triacontane	213	m mg/Kg	1	150]	142	62.3	5 - 164
Method Blank (1)	QC Batch: 430)38						
QC Batch: 43038		Date Analyz	red: 2007-11-1	10		Analyz	zed By:	MM
Prep Batch: 37136		QC Prepara		09			ed By:	MM
			MDI					
Parameter	Flag		$egin{array}{c} \mathrm{MDL} \ \mathrm{Result} \end{array}$		Units			RL
Chloride	riag		<3.25		mg/Kg			 5
Laboratory Control	Spike (LCS-1)							
Laboratory Control QC Batch: 42874 Prep Batch: 36993	Spike (LCS-1)	Date Analy QC Prepara					zed By: red By:	
QC Batch: 42874	Spike (LCS-1)	0		08	Matrix		red By:	
QC Batch: 42874 Prep Batch: 36993	Spike (LCS-1)	QC Prepara	ation: 2007-11-		Matrix Result		red By: I	KB
QC Batch: 42874 Prep Batch: 36993 Param	Spike (LCS-1)	QC Prepara	tion: 2007-11- ts Dil.	08 Spike		Prepa	red By: I L	KB Rec.
QC Batch: 42874 Prep Batch: 36993 Param GRO		QC Prepara LCS Result Uni 8.58 mg/l	tion: 2007-11- ts Dil. Kg 1	08 Spike Amount 10.0	Result <0.459	Prepa Rec. 86	red By: I L	KB Rec.
QC Batch: 42874 Prep Batch: 36993 Param GRO	ed on the spike re	QC PreparaLCSResult 8.58 mg/lsult.RPD is base	ttion: 2007-11- ts Dil. Kg 1 d on the spike a	08 Spike Amount 10.0 and spike dup	Result <0.459 plicate result	Prepa <u>Rec.</u> 86	red By: I L	KB Rec.
QC Batch: 42874 Prep Batch: 36993 Param GRO Percent recovery is base		QC Prepara LCS Result Uni 8.58 mg/l sult. RPD is base	tion: 2007-11- ts Dil. Kg 1	08 Spike Amount 10.0	Result <0.459 plicate result R	Prepa Rec. 86	red By: I L	KB Rec. .imit 7 - 108
QC Batch: 42874 Prep Batch: 36993 Param GRO Percent recovery is base Param	ed on the spike re	QC Prepara LCS Result Uni 8.58 mg/l sult. RPD is base SD ult Units I	ttion: 2007-11- ts Dil. Kg 1 d on the spike a Spike	08 Spike Amount 10.0 and spike dup Matrix	Result <0.459 plicate result Rec. Li	Prepa Rec. 86	red By: I L 78.7	KB Rec. .imit 7 - 108 RPD
QC Batch: 42874 Prep Batch: 36993 Param GRO Percent recovery is base Param GRO	ed on the spike re LCS Res 9.1	QC Prepara LCS Result Uni 8.58 mg/l sult. RPD is base SD ult Units 1 2 mg/Kg	tion: 2007-11- ts Dil. Kg 1 d on the spike a Spike Dil. Amount 1 10.0	08 Spike Amount 10.0 and spike dup Matrix Result <0.459	Result <0.459 plicate result R Rec. Li 91 78.7	Prepa <u>Rec.</u> <u>86</u>	red By: I L 78.1 RPD	KB Rec. <u>.imit</u> 7 - 108 RPD Limit
QC Batch: 42874	ed on the spike re LCS Res 9.1	QC Prepara LCS Result Uni 8.58 mg/l sult. RPD is base SD ult Units 1 2 mg/Kg sult. RPD is base	tion: 2007-11- ts Dil. Kg 1 d on the spike a Spike Dil. Amount 1 10.0	Spike Amount 10.0 and spike dup Matrix Result <0.459 and spike dup	Result <0.459 plicate result R Rec. Li 91 78.7 plicate result	Prepa <u>Rec.</u> <u>86</u>	red By: I L 78.7 RPD 6	KB Rec. .imit 7 - 108 RPD Limit 20
QC Batch: 42874 Prep Batch: 36993 Param GRO Percent recovery is base Param GRO Percent recovery is base Surrogate	ed on the spike re LCS Rest 9.1 ed on the spike re	QC Prepara LCS Result Uni 8.58 mg/l sult. RPD is base SD ult Units 1 2 mg/Kg	ttion: 2007-11-	08 Spike Amount 10.0 and spike dup Matrix Result <0.459	Result <0.459 plicate result R Rec. Li 91 78.7 plicate result ce LCS	Prepa <u>Rec.</u> <u>86</u>	red By: I L 78.7 RPD 6	KB Rec. <u>.imit</u> 7 - 108 RPD Limit
QC Batch: 42874 Prep Batch: 36993 Param GRO Percent recovery is base Param GRO Percent recovery is base Surrogate Frifluorotoluene (TFT)	ed on the spike re LCS Ress 9.1 ed on the spike re	QC Prepara LCS Result Uni 8.58 mg/l sult. RPD is base SD ult Units 1 2 mg/Kg sult. RPD is base LCS LCSD Result Result 0.919 0.904	tion: 2007-11- $\frac{Kg}{Kg}$ 1 $\frac{Kg}{Kg}$ 1 $\frac{Spike}{1}$ Dil. Amount 1 10.0 $\frac{1}{Kg}$ 0 the spike a $\frac{Units}{Kg}$	08 Spike Amount 10.0 and spike dup Matrix Result <0.459 and spike dup Spil Dil. Amou 1 1.0	Result <0.459	Prepa Rec. 86 tec. imit ' - 108 LCSD Rec. 90	red By: I 1 78.7 RPD 6 I 83.7	KB Rec. <u>imit</u> 7 - 108 RPD Limit 20 Rec. <u>imit</u> 7 - 110
QC Batch: 42874 Prep Batch: 36993 Param GRO Percent recovery is base Param GRO	ed on the spike re LCS Ress 9.1 ed on the spike re	QC Prepara LCS Result Uni 8.58 mg/l sult. RPD is base SD ult Units 1 2 mg/Kg sult. RPD is base LCS LCSD Result Result	ttion: 2007-11-	08 Spike Amount 10.0 and spike dup Matrix Result <0.459 and spike dup Spik Dil. Amou	Result <0.459	Prepa Rec. 86 tec. imit '- 108 LCSD Rec.	red By: I 1 78.7 RPD 6 I 83.7	KB Rec. <u>imit</u> 7 - 108 <u>RPD</u> Limit 20 Rec. imit
QC Batch: 42874 Prep Batch: 36993 Param GRO Percent recovery is base Param GRO Percent recovery is base Surrogate Trifluorotoluene (TFT)	ed on the spike re LCS Ress 9.1 ed on the spike re (4-BFB)	QC Prepara LCS Result Uni 8.58 mg/l sult. RPD is base SD ult Units 1 2 mg/Kg sult. RPD is base LCS LCSD Result Result 0.919 0.904	tion: 2007-11- $\frac{Kg}{Kg}$ 1 $\frac{Kg}{Kg}$ 1 $\frac{Spike}{1}$ Dil. Amount 1 10.0 $\frac{1}{Kg}$ 0 the spike a $\frac{Units}{Kg}$	08 Spike Amount 10.0 and spike dup Matrix Result <0.459 and spike dup Spik Dil. Amou 1 1.0	Result <0.459	Prepa Rec. 86 tec. imit ' - 108 LCSD Rec. 90	red By: I 1 78.7 RPD 6 I 83.7	KB Rec. <u>iimit</u> 7 - 108 RPD Limit 20 Rec. <u>iimit</u> 7 - 110
QC Batch: 42874 Prep Batch: 36993 Param GRO Percent recovery is base Param GRO Percent recovery is base Surrogate Trifluorotoluene (TFT) 4-Bromofluorobenzene (Laboratory Control	ed on the spike re LCS Ress 9.1 ed on the spike re (4-BFB)	QC Prepara LCS Result Uni 8.58 mg/l sult. RPD is base SD ult Units 1 2 mg/Kg sult. RPD is base LCS LCSD Result Result 0.919 0.904 0.779 0.765	ttion: 2007-11- <u>Kg 1</u> d on the spike a Spike Dil. Amount <u>1 10.0</u> d on the spike a <u>Units 1</u> <u>mg/Kg</u> <u>mg/Kg</u>	08 Spike Amount 10.0 and spike dup Matrix Result <0.459 and spike dup Spil Dil. Amou 1 1.0 1 1.0	Result <0.459	Prepa <u>Rec.</u> 86 LCSD <u>Rec.</u> 90 76	red By: I 78.7 RPD 6 I 83.7 74.4	KB Rec. $imit$ $7 - 108$ RPD $Limit$ 20 Rec. $imit$ $7 - 110$ $4 - 107$
QC Batch: 42874 Prep Batch: 36993 Param GRO Percent recovery is base Param GRO Percent recovery is base Surrogate Trifluorotoluene (TFT) 4-Bromofluorobenzene (ed on the spike re LCS Ress 9.1 ed on the spike re (4-BFB)	QC Prepara LCS Result Uni 8.58 mg/l sult. RPD is base SD ult Units 1 2 mg/Kg sult. RPD is base LCS LCSD Result Result 0.919 0.904	ttion: 2007-11-	08 Spike Amount 10.0 and spike dup Matrix Result <0.459 and spike dup Spil Dil. Amou 1 1.0 1 1.0 1 1.0 1 0.0	Result <0.459	Prepa Rec. 86 tec. imit - 108 LCSD Rec. 90 76 Analy	red By: I 1 78.7 RPD 6 I 83.7	KB Rec. <u>imit</u> 7 - 108 RPD Limit 20 Rec. <u>imit</u> 7 - 110 4 - 107 KB

Danana		LC		II	D:1	Spike		atrix	D		Rec.
Param		Rest		Units	Dil.	Amount		esult	Rec.		Limit
GRO		7.8		ng/Kg	1	10.0).459	79	78	8.7 - 108
Percent recovery is bas	sed on the sp	oike result.	RPD is	based or	the spike a	and spike d	luplicate	e result.			
		LCSD			Spike	Matrix		R	ec.		RPD
Param		Result	Units	Dil.	Amount	Result	Rec.	Liı	mit	RPD	Limi
GRO		8.68	mg/Kg	1	10.0	< 0.459	87	78.7	- 108	10	20
Percent recovery is bas	sed on the sp	oike result.	RPD is	based or	the spike a	and spike d	luplicate	e result.			
		LCS	5 LC	SD		S	pike	LCS	LCSI)	Rec.
Surrogate		Resu		sult	Units		iount	Rec.	Rec.		Limit
Trifluorotoluene (TFT)	0.89			ng/Kg		.00	90	90		3.7 - 110
4-Bromofluorobenzene		0.76			ng/Kg		.00	76	76		4.4 - 10'
Laboratory Control	Spike (LC	S_1)									
Laboratory Control	spike (LC	5-1)									
QC Batch: 42923			Date Ar		2007-11-					yzed By	
Prep Batch: 37035			QC Pre	paration	: 2007-11-	09			Prepa	ared By	: RM
		LC	\mathbf{S}			Spike	Ma	atrix			Rec.
Param		Rest	ult	Units	Dil.	Amount	Re	esult	Rec.		Limit
DRO		25	4 r	$\rm ng/Kg$	1	250	<	10.7	102	64	1.1 - 12
Percent recovery is bas	sed on the sp	oike result.	RPD is	based or	the spike a	and spike d	luplicate	e result.			
		LCSD			Spike	Matrix		B	ec.		RPD
Param		Result	Units	Dil.	Amount	Result	Rec.		nit	RPD	Limi
DRO		255	mg/Kg		250	<10.7	102		- 124	$\frac{10}{0}$	20
Percent recovery is bas	sed on the sr									-	
I creent recovery is ba	_			based of	t the spine t	_	-				
	LCS	LCSE				Spike	LC		LCSD		Rec.
Surrogate	Result	Resul		Jnits	Dil.	Amount	Re		Rec.		Limit
n-Triacontane	196	199	m	g/Kg	1	150	13	51	133	62	2.5 - 16
Laboratory Control	Spike (LC	S-1)									
QC Batch: 43038			Date An	alvzed:	2007-11-	10			Analy	zed By	· MM
Prep Batch: 37136					2007-11-					red By:	
1										v	
		τc	C			Colleo	М	. +			Dee
		LC		Units	Dil.	Spike Amount		atrix esult	Rec.		Rec. Limit
Param			աւ		<u> </u>	$\frac{100}{100}$		3.25	101		$\frac{11111}{5.1 - 103}$
		Rest 10	1 r	ng/Kg –		¥00	~	··•·	TOT	50	
Chloride	sed on the sr	10		ng/Kg based or		and spike d	luplicate	result			
Chloride	sed on the sp	10 bike result.			the spike a	-	luplicate				_
Percent recovery is bas	sed on the sp	10 bike result. LCSD	RPD is	based or	the spike a Spike	Matrix	-	R	ec.		
Chloride	sed on the sp	10 bike result.		based or Dil.	the spike a	-	luplicate Rec. 98	R/ Lii		RPD 3	RPE Limi 20

Matrix Spike (MS-1) Spiked Sample: 142194 QC Batch: 42874 Date Analyzed: 2007-11-08 Analyzed By: KB Prep Batch: 36993 QC Preparation: 2007-11-08 Prepared By: KB MS Spike Matrix Rec. Param Result Units Dil. Amount Result Rec. Limit < 0.45912751.3 - 130 GRO 12.710.0 mg/Kg 1 Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result. RPD MSD Spike Matrix Rec. Param Result Units Dil. Amount Result Rec. Limit RPD Limit GRO 7.90 mg/Kg 10.0< 0.4597951.3 - 130 47 19.61 Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result. MS MSD MSD Spike MSRec. Dil. Surrogate Result Result Units Amount Rec. Rec. Limit Trifluorotoluene (TFT) 56.1 - 124 0.6150.690 mg/Kg 1 1 62 69 4-Bromofluorobenzene (4-BFB) 0.77277 85 67.1 - 146 0.851mg/Kg 1 1 Matrix Spike (MS-1) Spiked Sample: 142228 QC Batch: 42877 Date Analyzed: 2007-11-08 Analyzed By: KB 2007-11-08 Prep Batch: 36996 QC Preparation: Prepared By: KBMS Spike Matrix Rec. Param Result Units Dil. Amount Result Rec. Limit GRO 10.110.0 < 0.459101 51.3 - 130 mg/Kg 1 Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result. MSD Spike Matrix Rec. RPD Param RPD Result Units Dil. Amount Result Rec. Limit Limit 16.251.3 - 130GRO mg/Kg 1 12.5< 0.4591304619.6Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result. Spike MSD MSMSD MSRec. Surrogate Result Result Units Dil. Amount Rec. Rec. Limit Trifluorotoluene (TFT) 0.937 1.22mg/Kg 1 1 9412256.1 - 124 4-Bromofluorobenzene (4-BFB) 1.041.43mg/Kg 1 1 10414367.1 - 146Matrix Spike (MS-1) Spiked Sample: 142240 QC Batch: Analyzed By: 42923 Date Analyzed: 2007-11-09 RM Prep Batch: 37035 2007-11-09 Prepared By: RMQC Preparation: MS Spike Matrix Rec. Param Result Units Dil. Amount Result Rec. Limit 17 DRO 211mg/Kg 1 250< 10.784 47.5 - 127

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

¹⁷Sample received out of hold time

			MSD			\mathbf{Spike}	Matrix		$\operatorname{Rec.}$		RPD
Param		18	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
DRO			201	mg/Kg	1	250	< 10.7	80	47.5 - 127	5	20
Percent recove	ery is based	-		RPD is b	ased on t	the spike ar	-	-			
_		MS	MSD				Spike	MS			Rec.
Surrogate		Result	Result		nits	Dil.	Amount	Rec			Limit
n-Triacontane		175	170	mg	g/Kg	1	150	117	<u> </u>	6	2.5 - 164
Matrix Spike	e (MS-1)	Spiked S	Sample: 14	2250							
QC Batch:	43038			Date Ana	lyzed:	2007-11-10)		Ana	lyzed By	·: MM
	37136			QC Prepa		2007-11-09)			pared By	
			MS				\mathbf{Spike}	Ma	trix		Rec.
Param			Resu		Units	Dil.	Amount			ec.	Limit
Chloride			474	1 n	ng/Kg	10	500	49.	642 8	35	80 - 120
Percent recove	ery is based	on the spi	ke result.	RPD is b	ased on t	the spike ar	nd spike du	plicate r	esult.		
							Martin		Dar		DDD
			MSD			\mathbf{Spike}	Matrix		Rec.		RPD
	-		Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Param Chloride Percent recove	erv is based	on the spi	Result 514	mg/Kg	10	Amount 500	Result 49.642	93	Limit 80 - 120	RPD 8	
Chloride Percent recove Standard (IO	CV-1)	on the spi	Result 514 ke result.	mg/Kg RPD is b	10 ased on t	Amount 500	Result 49.642 ad spike du	93	Limit 80 - 120 esult.		Limit 20
Chloride Percent recove Standard (IC	CV-1)	on the spi	Result 514 ke result.	mg/Kg RPD is b Date Ana	10 ased on r alyzed:	Amount 500 the spike ar 2007-11-08	Result 49.642 ad spike du	93 plicate r	Limit 80 - 120 esult. An	8	Limit 20
Chloride Percent recove Standard (IO	CV-1)	on the spi	Result 514 ke result.	mg/Kg RPD is b Date Ana ICVs	10 ased on r alyzed: ICV	Amount 500 the spike ar 2007-11-08 Vs	Result 49.642 ad spike du ICVs	93 plicate r	Limit 80 - 120 esult. An Percent	8	Limit 20 y: KB
Chloride Percent recove Standard (IC QC Batch: 4	C V-1) 12874	-	Result 514 ke result.	mg/Kg RPD is b Date Ana ICVs True	10 ased on t alyzed: ICV Fou	Amount 500 the spike ar 2007-11-08 Vs nd	Result 49.642 ad spike du ICVs Percent	93 plicate r	Limit 80 - 120 esult. An Percent Recovery	8 alyzed B	Limit 20 y: KB Date
	CV-1)	on the spi Units mg/Kg	Result 514 ke result.	mg/Kg RPD is b Date Ana ICVs	10 ased on r alyzed: ICV	Amount 500 the spike ar 2007-11-08 Vs nd nc.	Result 49.642 ad spike du ICVs	93 plicate r	Limit 80 - 120 esult. An Percent	8 alyzed B A	Limit 20 y: KB
Chloride Percent recove Standard (IC QC Batch: 4 Param GRO Standard (C	CV-1) 12874 Flag CCV-1)	Units	Result 514 ke result.	mg/Kg RPD is b Date Ana ICVs True Conc. 1.00	10 ased on t alyzed: ICV Fou Cor 0.8	Amount 500 the spike ar 2007-11-08 Vs nd nc.	Result 49.642 ad spike du ICVs Percent Recovery 85	93 plicate r	Limit 80 - 120 esult. An Percent Recovery Limits 85 - 115	8 alyzed B A	Limit 20 y: KB Date nalyzed 07-11-08
Chloride Percent recove Standard (IC QC Batch: 4 Param	CV-1) 12874 Flag CCV-1)	Units	Result 514 ke result.	mg/Kg RPD is b Date Ana ICVs True Conc. 1.00 Date Ana	10 ased on t alyzed: ICV Fou Cor 0.8 alyzed:	Amount 500 the spike ar 2007-11-08 Vs nd nc. 52 2007-11-08	Result 49.642 ad spike du ICVs Percent Recovery 85	93 plicate r	Limit 80 - 120 esult. An Percent Recovery Limits 85 - 115 An	8 alyzed B A 20	Limit 20 y: KB Date nalyzed 07-11-08
Chloride Percent recove Standard (IC QC Batch: 4 Param GRO Standard (C	CV-1) 12874 Flag CCV-1)	Units	Result 514 ke result.	mg/Kg RPD is b Date Ana ICVs True Conc. 1.00 Date Ana CCVs	10 ased on t alyzed: ICV Fou Cor 0.8 alyzed: CC	Amount 500 the spike ar 2007-11-08 Vs nd nc. 52 2007-11-08 Vs	Result 49.642 ad spike du ICVs Percent Recovery 85	93 plicate r	Limit 80 - 120 esult. An Percent Recovery Limits 85 - 115 An Percent	8 alyzed B A 20	Limit 20 y: KB Date nalyzed 07-11-08 y: KB
Chloride Percent recove Standard (IC QC Batch: 4 Param GRO Standard (C	CV-1) 12874 Flag CCV-1)	Units	Result 514 ke result.	mg/Kg RPD is b Date Ana ICVs True Conc. 1.00 Date Ana	10 ased on t alyzed: ICV Fou Cor 0.8 alyzed:	Amount 500 the spike ar 2007-11-08 Vs nd nc. 52 2007-11-08 Vs nd Ns nd nc. 52	Result 49.642 ad spike du ICVs Percent Recovery 85	93 plicate r	Limit 80 - 120 esult. An Percent Recovery Limits 85 - 115 An	8 alyzed B A 20 alyzed B	Limit 20 y: KB Date nalyzed 07-11-08

QC Batch: 42877

Date Analyzed: 2007-11-08

Analyzed By: KB

¹⁸Sample received out of hold time

			ICVs True	ICVs Found	ICVs Percent	Percent Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
GRO	Flag	mg/Kg	1.00	0.882	88	85 - 115	2007-11-08
			1.00	0.002		00 110	200. 11 00
Standard	(CCV-1)						
QC Batch:	42877		Date Ana	alyzed: 2007-1	1-08	Anal	yzed By: KB
			CCVs	CCVs	CCVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
GRO		m mg/Kg	1.00	0.876	88	85 - 115	2007-11-08
Standard	(ICV-1)						
QC Batch:	42923		Date Ana	lyzed: 2007-11	1-09	Anal	yzed By: RM
			ICVs	ICVs	ICVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
DRO		m mg/Kg	250	253	101	85 - 115	2007-11-09
Standard	(CCV-1)						
QC Batch:	42923		Date Ana	lyzed: 2007-11	1-09	Anal	yzed By: RM
			CCVs	CCVs	CCVs	Percent	
			2000 B				
Damama			True	Found	Percent	Recovery	Date
	Flag	Units	Conc.	Conc.	Percent Recovery	Limits	Analyzed
Param DRO	Flag	Units mg/Kg				0	
DRO			Conc.	Conc.	Recovery	Limits	Analyzed
DRO Standard	(CCV-2)		Conc. 250	Conc.	Recovery 102	Limits 85 - 115	Analyzed
DRO Standard	(CCV-2)		Conc. 250	Conc. 254	Recovery 102	Limits 85 - 115	Analyzed 2007-11-09
	(CCV-2)		Conc. 250 Date Ana	Conc. 254 llyzed: 2007-11	Recovery 102	Limits 85 - 115 Anal	Analyzed 2007-11-09
DRO Standard QC Batch:	(CCV-2)		Conc. 250 Date Ana CCVs	Conc. 254 dyzed: 2007-1: CCVs	Recovery 102 1-09 CCVs	Limits 85 - 115 Anal Percent	Analyzed 2007-11-09 yzed By: RM
DRO Standard	(CCV-2) 42923	mg/Kg	Conc. 250 Date Ana CCVs True	Conc. 254 lyzed: 2007-1: CCVs Found	Recovery 102 1-09 CCVs Percent	Limits 85 - 115 Anal Percent Recovery	Analyzed 2007-11-09 yzed By: RM Date
DRO Standard QC Batch: Param DRO	(CCV-2) 42923 Flag	mg/Kg Units	Conc. 250 Date Ana CCVs True Conc.	Conc. 254 lyzed: 2007-1: CCVs Found Conc.	Recovery 102 1-09 CCVs Percent Recovery	Limits 85 - 115 Analy Percent Recovery Limits	Analyzed 2007-11-09 yzed By: RM Date Analyzed
DRO Standard QC Batch: Param	(CCV-2) 42923 Flag (ICV-1)	mg/Kg Units	Conc. 250 Date Ana CCVs True Conc. 250	Conc. 254 lyzed: 2007-1: CCVs Found Conc.	Recovery 102 1-09 CCVs Percent Recovery 98	Limits 85 - 115 Anal Percent Recovery Limits 85 - 115	Analyzed 2007-11-09 yzed By: RM Date Analyzed
DRO Standard QC Batch: Param DRO Standard	(CCV-2) 42923 Flag (ICV-1)	mg/Kg Units	Conc. 250 Date Ana CCVs True Conc. 250 Date Ana	Conc. 254 alyzed: 2007-11 CCVs Found Conc. 244 alyzed: 2007-11	Recovery 102 1-09 CCVs Percent Recovery 98	Limits 85 - 115 Analy Percent Recovery Limits 85 - 115 Analy	Analyzed 2007-11-09 yzed By: RM Date Analyzed 2007-11-09
DRO Standard QC Batch: Param DRO Standard	(CCV-2) 42923 Flag (ICV-1)	mg/Kg Units	Conc. 250 Date Ana CCVs True Conc. 250 Date Ana ICVs	Conc. 254 alyzed: 2007-11 CCVs Found Conc. 244 lyzed: 2007-11 ICVs	Recovery 102 1-09 CCVs Percent Recovery 98 1-10 ICVs	Limits 85 - 115 Analy Percent Recovery Limits 85 - 115 Analy Percent	Analyzed 2007-11-09 yzed By: RM Date Analyzed 2007-11-09
DRO Standard QC Batch: Param DRO Standard	(CCV-2) 42923 Flag (ICV-1)	mg/Kg Units	Conc. 250 Date Ana CCVs True Conc. 250 Date Ana	Conc. 254 alyzed: 2007-11 CCVs Found Conc. 244 alyzed: 2007-11	Recovery 102 1-09 CCVs Percent Recovery 98	Limits 85 - 115 Analy Percent Recovery Limits 85 - 115 Analy	Analyzed 2007-11-09 yzed By: RM Date Analyzed 2007-11-09

Work Order: 7110824 Violet St. & Center St.

Standard (CCV-1)

QC Batch: 43038			Date Analy	yzed: 2007-11-	Analyzed By: MM		
			CCVs	CCVs	CCVs	Percent	_
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Chloride		mg/Kg	100	100	100	85 - 115	2007-11-10

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8808 Camp Bowie Blvd. West, Suite 189 Ft. Worth, Taxas 76116 Tel (817) 201-5260 Fax (817) 560-4336 Turn Around Time if different from standard Circle or Specify Method No. Dry Weight Basis Required Check If Special Reporting Limits Are Needed Source to the X X TRRP Report Required ANALYSIS REQUEST Instruce Content Page Hq ,887 ,008 Pesticides 808 \ A1808 sebicitze9 ш 200 East Sunset Rd., Suite E El Paso, Texas 79922 Tel (015) 555-3443 Fax (015) 555-4944 1 (888) 588-3443 PCB's 8082 / 608 GC/MS Semi. Vol. 8270C / 625 REMARKS 8260B / 624 GC/MS AN ____ . IJЯ **TCLP Pesticides** TCLP Semi Volatiles 1 leadspace Y/N/MA sellteloV **LCLP** LAB USE TCLP Metals Ag As Ba Cd Cr Pb Se Hg ONLY Total Metals Ag As Ba Cd Cr Pb Se Hg 60108/200.7 Log-In Review 2 Intact X/ N 5002 Basin Street, Suite A1 Midhand, Texas 79703 Tel (432) 589-6301 Fax (432) 689-6313 PAH 8270C / 625 200 1 TPH 80196302020108 H9T \sim \geq TPH 418.1 / TX1005 / TX1005 Ext(C35) Carrier # 80218 / 602 / 82608 / 624 X3T8 82 ö Temp'c: Temp°c: 80218 / 602 / 82608 / 624 Temp **BBTM** (SS) U OFIL 130 Caf XIMAII 520 M-Jord Broch Makale 30 SAMPLING JIME (JC) 610 NI ICH , Q I D D/c/M KWIK1 Qlin/07 Time: Time: Time: 6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 Tel (806) 794-1296 Fax (806) 794-1298 1 (800) 378-1298 03 **BTA**O 10801 × 4 + 2 × NUX CI Date: Date: Date: PRESERVATIVE NONE Ο <u>ي</u>در. - \mathbf{x} 21 METHOD ICE ~~ -iv Ó 'n VIDIA V V * HOBN Submittat of samples constitutes agreement to Terms and Conditients listed on reverse side of C. -+7 Ploject Name: 20.22 , Company: Company: Company: PULS °OS²H . P.L. [©]ONH E-mail: ÷ KEN Fax #: IOH Phone i? Ķte¢eive¢ by౫ Received by: SLUDGE Received by MATRIX TraceAnalysis, Inc. ЯA . <u>~</u>~ چرک 201 5 \sim 24 **MATER** NIU. emeil: lab@traceanalysis.com 8 ta innomA / emuloV Time: Time: Time: (D3DO) # CONTAINERS RUPI Part ser Date: Date: Dafe: ŝ ju S 7 1281121121 FIELD CODE Dr Ka<u>vour</u>d Name: 1 Drn 101 Anthol Tortal Company Company Company C.K. Project Location (including state) 1 11220 Put n 63.1 576 RA (if different from above) for. Burnys Relinquished by: Relinquished by Relinquished by Company₁Name: Contact Person $\langle \circ \rangle$ 248 342 246 247 243 35 2 पद AB USE) Invoice to: 142241 Project #: Address: ONLY LAB # l

PIOH

THORAY * LAB Order ID

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Path Aller See Avenue, Suite 9. 200 Just Starret Rood, Suite E 1. d.: Rash Steat, Suite Al-RETE Han's Parkway Suit: THE THE Volume Texas 77,102

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10月#376#1296 806+794+1296 86.0*386*0.40

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168,915+636+49/2 ·AX 230+385+6313

Analytical and Quality Control Report

Scott Branson SB Weed Control & Transport 213 S Mesa Carlsbad, NM, 88220

Report Date: November 14, 2007

Work Order: 7110824

Project Location: City of Carlsbad, NM **Project Name:** Violet St. & Center St. Violet St. & Center St. Project Number:

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

			Date	Time	Date
Sample	Description	Matrix	Taken	Taken	Received
142241	B34	soil	2007-10-11	11:30	2007-11-08
142242	B37	soil	2007 - 10 - 11	12:00	2007 - 11 - 08
142243	B38	soil	2007 - 10 - 11	12:30	2007 - 11 - 08
142244	B41	soil	2007 - 10 - 11	13:00	2007 - 11 - 08
142245	B42	soil	2007 - 10 - 11	13:30	2007 - 11 - 08
142246	B45	soil	2007 - 10 - 12	15:00	2007 - 11 - 08
142247	B46	soil	2007 - 10 - 12	15:30	2007 - 11 - 08
142248	Background	soil	2007 - 10 - 12	16:00	2007 - 11 - 08

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 14 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Michael Al

Dr. Blair Leftwich, Director

Standard Flags

 $\,B\,$ - The sample contains less than ten times the concentration found in the method blank.

Analytical Report

Sample: 142241 - B34

Analysis: QC Batch: Prep Batch:	Chloride (Titration) 43038 37136	Analytical Method: Date Analyzed: Sample Preparation	2007-11-10	Prep Method: Analyzed By: Prepared By:	1
	T.T.I	RL	T T •,		DT
Parameter	Flag	Result	Units	Dilution	RL
Chloride		<50.0	mg/Kg	10	5.00

Sample: 142241 - B34

Analysis: QC Batch:	TPH DRO 42923		Analytical Me Date Analyze	d: 2007-	. 8015B -11-09	Analyz	dethod: N/A zed By: RM
Prep Batch:	37035		Sample Prepa	ration: 2007	-11-09	Prepar	ed By: RM
			RL				
Parameter	Flag	5	Result	U	nits	Dilution	RL
DRO	1		<50.0	${ m mg}$	/Kg	1	50.0
					Spike	Percent	Recovery
Surrogate	\mathbf{Flag}	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontan	e	163	m mg/Kg	1	150	109	62.5 - 164

Sample: 142241 - B34

Analysis: QC Batch: Prep Batch:	TPH GRO 42877 36996		Analytical Date Anal Sample Pr		S 8015B 2007-11-08 2007-11-08		Prep Meth Analyzed Prepared I	By: KB
			RL					
Parameter	Flag		Result		Units	D	ilution	RL
GRO	2		<1.00		m mg/Kg		1	1.00
Surrogate		Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	$egin{array}{c} { m Recovery} \\ { m Limits} \end{array}$
Trifluorotolu	ene (TFT)		1.14	mg/Kg	1	1.00	114	34.1 - 161
4-Bromofluor	robenzene (4-BFB)		1.08	mg/Kg	1	1.00	108	31.8 - 159

Sample: 142242 - B37

Analysis: QC Batch: Prep Batch:	Chloride (Titration) 43038 37136	Analytical Method: Date Analyzed: Sample Preparation:	2007-11-10	Prep Method: Analyzed By: Prepared By:	\dot{MM}
		\mathbf{RL}			
Parameter	Flag	Result	Units	Dilution	RL
Chloride		<50.0	mg/Kg	10	5.00

 $^1 \, {\rm Sample}$ received out of hold time $^2 \, {\rm Sample}$ ran out of hold time per client's request. \bullet

Sample: 142242 - B37

Analysis: QC Batch: Prep Batch:	TPH DRO 42923 37035		Analytical Me Date Analyze Sample Prepa	d: 20	od. 8015B 007-11-09 007-11-09	Analyz	Method:N/Azed By:RMred By:RM
			\mathbf{RL}				
Parameter	Flag	5	Result		Units	Dilution	RL
DRO	3		< 50.0		mg/Kg	1	50.0
					Spike	Percent	Recovery
Surrogate	\mathbf{Flag}	Result	Units	Dilutio	n Amount	Recovery	Limits
n-Triacontan	e	188	m mg/Kg	1	150	125	62.5 - 164

Sample: 142242 - B37

Analysis: QC Batch: Prep Batch:	TPH GRO 42877 36996		Analytical Date Anal Sample Pr		S 8015B 2007-11-08 2007-11-08		Prep Meth Analyzed Prepared 1	By: KB
			\mathbf{RL}					
Parameter	Flag		Result		Units	D	ilution	RL
GRO	4		<1.00		m mg/Kg		1	1.00
Surrogate		Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotolu	ene (TFT)		1.11	mg/Kg	1	1.00	111	34.1 - 161
4-Bromofluor	robenzene (4-BFB)		1.00	mg/Kg	1	1.00	100	31.8 - 159

Sample: 142243 - B38

Analysis: QC Batch: Prep Batch:	Chloride (Titration) 43038 37136	Analytical Metl Date Analyzed: Sample Prepara	2007-11-10	Prep Method Analyzed By Prepared By	: MM
		RL			
Parameter	Flag	Result	Units	Dilution	RL
Chloride		<50.0	m mg/Kg	10	5.00

Sample: 142243 - B38

Analysis: QC Batch: Prep Batch:	TPH DRO 42923 37035	Analytical Method: Date Analyzed: Sample Preparation:	Mod. 8015B 2007-11-09 2007-11-09	Prep Method: Analyzed By: Prepared By:	,
Parameter	Flag	RL Result	Units	Dilution	\mathbf{RL}
DRO	5	<50.0	mg/Kg	1	50.0

³Sample received out of hold time

⁴Sample ran out of hold time per client's request. • ⁵Sample received out of hold time

					\mathbf{Spike}	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		143	mg/Kg	1	150	95	62.5 - 164

Sample: 142243 - B38

Analysis: QC Batch: Prep Batch:	TPH GRO 42877 36996		Analytical Date Anal Sample Pr		S 8015B 2007-11-08 2007-11-08		Prep Met Analyzed Prepared	By: 1	S 5035 KB KB
Parameter GRO	Flag 6		RL Result		Units		Dilution		RL
GRO			<1.00		mg/Kg		1		1.00
Surrogate		Flag	Result	Units	Dilution	${ m Spike} \ { m Amount}$	Percent Recovery		covery mits
Trifluorotolue	ene (TFT)		1.16	mg/Kg	1	1.00	116		- 161
4-Bromofluor	cobenzene (4-BFB)		1.06	m mg/Kg	1	1.00	106	31.8	3 - 159
Sample: 14 Analysis: QC Batch: Prep Batch:	2244 - B41 Chloride (Titratio 43038 37136	n)	Date	tical Metho Analyzed: e Preparati	2007-11	-10	Prep M Analyz Prepare	ed By:	N/A MM MM
Parameter	Flag		Result		Units		Dilution		\mathbf{RL}
Chloride			976		m mg/Kg		10		5.00
Sample: 14 Analysis: QC Batch: Prep Batch:	2244 - B41 TPH DRO 42923 37035		Analytica Date Anal Sample Pr		Mod. 8015 2007-11-09 2007-11-09	3	Prep M Analyz Prepare	ed By:	N/A RM RM
			RL						
Parameter	Flag		Result		Units		Dilution		\mathbf{RL}
DRO	7		<50.0		m mg/Kg		1		50.0
Surrogate n-Triacontan	Flag	Result 175	Units mg/Kg		ition . 1	Spike Amount 150	Percent Recovery 117	${ m Li}$	covery mits 5 - 164

Sample: 142244 - B41

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	42877	Date Analyzed:	2007-11-08	Analyzed By:	KB
Prep Batch:	36996	Sample Preparation:	2007-11-08	Prepared By:	KB

⁶Sample ran out of hold time per client's request. • ⁷Sample received out of hold time

			\mathbf{RL}						
Parameter	Fla	g	Result		Units		Dilution		RI
GRO	8		<1.00		mg/Kg		1		1.00
						Spike	Percent	Rec	covery
Surrogate		Flag	Result	Units	Dilution	n Amoun	c Recovery		imits
Trifluorotolu			1.02	mg/Kg	1	1.00	102	34.1	1 - 16
4-Bromofluo	robenzene (4-BFB	5)	1.18	m mg/Kg	1	1.00	118	31.8	8 - 15
Sample: 14	2245 - B42								
Analysis:	Chloride (Titrat	tion)	Analyt	ical Metho	d: SM 43	500-Cl B	$\operatorname{Prep} M$	lethod:	N/A
QC Batch:	43038		Date A	analyzed:	2007-1	11-10	Analyz	ed By:	- MN
Prep Batch:	37136		Sample	e Preparati	on: 2007-1	11-09	Prepare	ed By:	MM
			RL						
Parameter	Fla	g	Result		Units		Dilution		Rl
Chloride			923		mg/Kg		10		5.00
Sample: 14 Analysis: QC Batch: Prep Batch:	2245 - B42 TPH DRO 42923 37035		Analytical Date Analy Sample Pr	yzed:	Mod. 801 2007-11-0 2007-11-0	9	Prep M Analyz Prepare	ed By:	N/A RM RM
Top Dates.	0.000		-	opulation		•	I Topar	ou 29.	10111
Parameter	Fla_i	σ	RL Result		Units		Dilution		RI
DRO	9	5	<50.0		mg/Kg		1		50.0
						Spike	Percent	Rec	covery
Surrogate	Flag	Result	Units	Dil	ution	Amount	Recovery		imits
n-Triacontan		135	mg/Kg		1	150	90	62.3	5 - 16
Sample: 14	2245 - B42								
Analysis:	TPH GRO		Analytical	Method:	S 8015B		Prep Met	hod:	S 503
QC Batch:	42877		Date Anal	vzed	2007-11-0	8	Analyzed	Bv	KB

v v		yzea:	2007-11-08		Analyzed By: KB		
Prep Batch: 36996 Sample Prep		eparation:	2007 - 11 - 08		Prepared By: KB		
	BL						
	Result		Units	D	ilution	\mathbf{RL}	
	<1.00		m mg/Kg		1	1.00	
				Spike	Percent	Recovery	
Flag	Result	Units	Dilution	Amount	Recovery	Limits	
	1.16	mg/Kg	1	1.00	116	34.1 - 161	
	1.04	mg/Kg	1	1.00	104	31.8 - 159	
	Flag	Sample Pr RL Result <1.00 Flag Result 1.16	Result <1.00	Sample Preparation: 2007-11-08 RL Units <1.00	Sample Preparation: 2007-11-08 RL Units D <1.00	Sample Preparation: 2007-11-08 Prepared I RL Dilution Result Units Dilution <1.00	

⁸Sample ran out of hold time per client's request. • ⁹Sample received out of hold time ¹⁰Sample ran out of hold time per client's request. •

Sample: 142246 - B45

Analysis: QC Batch: Prep Batch:	Chloride (Titration) 43038 37136	Analytical Metho Date Analyzed: Sample Preparat	2007-11-10	Prep Method: Analyzed By: Prepared By:	MM
		\mathbf{RL}			
Parameter	Flag	Result	Units	Dilution	RL
Chloride		<50.0	m mg/Kg	10	5.00

Sample: 142246 - B45

Analysis: QC Batch: Prep Batch:	TPH DRO 42923 37035		Analytical Me Date Analyze Sample Prepa	d:	Mod. 80 2007-11- 2007-11-	-09	Prep M Analyz Prepar	C C
			\mathbf{RL}					
Parameter	Flag		Result		Unit	s	Dilution	RL
DRO	11		<50.0		mg/Kg	g	1	50.0
			** •			Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilut	tion	Amount	Recovery	Limits
n-Triacontan	e	207	m mg/Kg	1		150	138	62.5 - 164

Sample: 142246 - B45

Analysis: QC Batch: Prep Batch:	TPH GRO 42877 36996		Analytical Date Anal Sample Pr		S 8015B 2007-11-08 2007-11-08		Prep Meth Analyzed Prepared I	By: KB
			RL					
Parameter	Flag		Result		Units	D	vilution	RL
GRO	12		<1.00		m mg/Kg		1	1.00
Surrogate		Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotolu	ene (TFT)	i nag	1.18	mg/Kg	1	1.00	118	34.1 - 161
	robenzene (4-BFB)		1.10	mg/Kg	1	1.00	110	31.8 - 159

Sample: 142247 - B46

Analysis: QC Batch: Prep Batch:	Chloride (Titration) 43038 37136	Analytical Method: Date Analyzed: Sample Preparation:	2007-11-10	Prep Method: Analyzed By: Prepared By:	\dot{MM}
		RL			
Parameter	Flag	Result	Units	Dilution	RL
Chloride		<50.0	mg/Kg	10	5.00

 $^{11} {\rm Sample}$ received out of hold time $^{12} {\rm Sample}$ ran out of hold time per client's request. \bullet

Sample: 142247 - B46

Analysis: QC Batch: Prep Batch:	TPH DRO 42923 37035		Analytical Me Date Analyze Sample Prepa	d:	Mod. 8 2007-11 2007-11	-09	1	fethod: N/A ed By: RM ed By: RM
			\mathbf{RL}					
Parameter	Flag	r 5	Result		Uni	ts	Dilution	\mathbf{RL}
DRO	13		< 50.0		mg/K	g	1	50.0
						Spike	Percent	Recovery
Surrogate	\mathbf{Flag}	Result	Units	Dilu	tion	Amount	Recovery	Limits
n-Triacontan	e	188	m mg/Kg	1	L	150	125	62.5 - 164

Sample: 142247 - B46

Analysis: QC Batch: Prep Batch:	TPH GRO 42877 36996		Analytical Date Anal Sample Pr		S 8015B 2007-11-08 2007-11-08		Prep Meth Analyzed Prepared	By: KB
			\mathbf{RL}					
Parameter	Flag		Result		Units	D	ilution	RL
GRO	14		<1.00		m mg/Kg		1	1.00
Surrogate		Flag	Result	Units	Dilution	${ m Spike} { m Amount}$	Percent Recovery	Recovery Limits
Trifluorotolu	ene (TFT)		1.08	mg/Kg	1	1.00	108	34.1 - 161
4-Bromofluor	robenzene (4-BFB)		1.02	m mg/Kg	1	1.00	102	31.8 - 159

Sample: 142248 - Background

Analysis: QC Batch: Prep Batch:	Chloride (Titration) 43038 37136	Analytical Method: Date Analyzed: Sample Preparatior	2007-11-10	Prep Method: Analyzed By: Prepared By:	MM
		\mathbf{RL}			
Parameter	Flag	\mathbf{Result}	Units	Dilution	RL
Chloride		<50.0	mg/Kg	10	5.00

Sample: 142248 - Background

Analysis: QC Batch: Prep Batch:	TPH DRO 42923 37035	Analytical Method: Date Analyzed: Sample Preparation:	Mod. 8015B 2007-11-09 2007-11-09	Prep Method: Analyzed By: Prepared By:	N/A RM RM
		RL			
Parameter	Flag	Result	Units	Dilution	RL
DRO	15	<50.0	m mg/Kg	1	50.0

¹³Sample received out of hold time

¹⁴Sample ran out of hold time per client's request.
 ¹⁵Sample received out of hold time

					\mathbf{Spike}	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		193	mg/Kg	1	150	129	62.5 - 164

Sample: 142248 - Background

Analysis: QC Batch: Prep Batch:	TPH GRO 42874 36993		Analytical Date Analy Sample Pr	yzed:	S 8015B 2007-11-08 2007-11-08		Prep Meth Analyzed Prepared 1	By: KB
			RL					
Parameter		Flag	Result		Units	D	ilution	RL
GRO			1.38		m mg/Kg		1	1.00
						Spike	Percent	Recovery
Surrogate		Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotolue	ene (TFT)	1 100	1.14	mg/Kg	1	1.00	114	34.1 - 161
4-Bromofluor		-BFB)	1.01	mg/Kg	1	1.00	101	31.8 - 159
Method Bla QC Batch: Prep Batch:	ank (1) 42874 36993	QC Batch: 42874	Date Ana QC Prepa	0	00 7-11- 08 00 7-11- 08		Analyz Prepare	
				MDL				
Parameter		Flag		MDL Result		Units	3	RL
Parameter GRO		Flag		MDL Result <0.459		Units mg/K		RL 1
		Flag		Result		mg/K	g	1
GRO				Result <0.459		mg/K Spike	g Percent	1 Recovery
GRO Surrogate	(70.077)	Flag Flag	Result	Result <0.459 Units	Dilution	mg/K Spike Amount	g Percent Recovery	1 Recovery Limits
GRO Surrogate Trifluorotolue		Flag	0.968	Result <0.459 Units mg/Kg	1	mg/K Spike Amount 1.00	g Percent Recovery 97	1 Recovery Limits 96 - 115
GRO Surrogate		Flag		Result <0.459 Units		mg/K Spike Amount	g Percent Recovery	1 Recovery Limits
GRO Surrogate Trifluorotolue	cobenzene (4-	Flag	0.968	Result <0.459 Units mg/Kg	1	mg/K Spike Amount 1.00	g Percent Recovery 97	1 Recovery Limits 96 - 115
GRO Surrogate Trifluorotoluo 4-Bromofluor Method Bla	cobenzene (4- ank (1)	Flag BFB)	0.968 0.556	Result <0.459 Units mg/Kg mg/Kg	1 1	mg/K Spike Amount 1.00	Percent Recovery 97 56	1 Recovery Limits 96 - 115 51.6 - 103
GRO Surrogate Trifluorotoluo 4-Bromofluor Method Bla QC Batch:	eobenzene (4- ank (1) 42877	Flag BFB)	0.968 0.556 Date Ana	Result <0.459 Units mg/Kg mg/Kg	1 1 007-11-08	mg/K Spike Amount 1.00	g Percent Recovery 97 56 Analyze	1 Recovery Limits 96 - 115 51.6 - 103 ed By: KB
GRO Surrogate Trifluorotoluo 4-Bromofluor Method Bla	cobenzene (4- ank (1)	Flag BFB)	0.968 0.556	Result <0.459 Units mg/Kg mg/Kg	1 1	mg/K Spike Amount 1.00	Percent Recovery 97 56	1 Recovery Limits 96 - 115 51.6 - 103 ed By: KB
GRO Surrogate Trifluorotoluo 4-Bromofluor Method Bla QC Batch:	eobenzene (4- ank (1) 42877	Flag BFB) QC Batch: 42877	0.968 0.556 Date Ana	Result <0.459 Units mg/Kg mg/Kg lyzed: 20 uration: 20 MDL	1 1 007-11-08	mg/K Spike Amount 1.00	g Percent Recovery 97 56 Analyze	1 Recovery Limits 96 - 115 51.6 - 103 ed By: KB
GRO Surrogate Trifluorotoluo 4-Bromofluor Method Bla QC Batch:	eobenzene (4- ank (1) 42877	Flag BFB)	0.968 0.556 Date Ana	Result <0.459 Units mg/Kg mg/Kg lyzed: 20 uration: 20	1 1 007-11-08	mg/K Spike Amount 1.00	g Percent Recovery 97 56 Analyz Prepare	1 Recovery Limits 96 - 115 51.6 - 103 ed By: KB

Surrogate	Flag	Result	Units	Dilution	${ m Spike} { m Amount}$	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	16	0.921	mg/Kg	1	1.00	92	96 - 115
4-Bromofluorobenzene (4-BFB)		0.580	mg/Kg	1	1.00	58	51.6 - 103

 $^{16}\mathrm{Spike}$ recovery outside control limits but within method limits. \bullet

Method Blank (1)	QC Batch: 429	923						
QC Batch: 42923		Date Analyz					zed By:	
Prep Batch: 37035		QC Prepara	tion: 2007-11-	09		Prepa	red By:	RM
			MDL					
Parameter	Flag		Result		Units			RL
DRO			<10.7		m mg/Kg			50
				Spike	Pe	rcent	Ree	covery
Surrogate Fl	lag Result	Units	Dilution	Amour		covery		imits
n-Triacontane	213	m mg/Kg	1	150]	142	62.3	5 - 164
Method Blank (1)	QC Batch: 430)38						
QC Batch: 43038		Date Analyz	red: 2007-11-1	10		Analyz	zed By:	MM
Prep Batch: 37136		QC Prepara		09			ed By:	MM
			MDI					
Parameter	Flag		$egin{array}{c} \mathrm{MDL} \ \mathrm{Result} \end{array}$		Units			RL
Chloride	riag		<3.25		mg/Kg			 5
Laboratory Control	Spike (LCS-1)							
Laboratory Control QC Batch: 42874 Prep Batch: 36993	Spike (LCS-1)	Date Analy QC Prepara					zed By: red By:	
QC Batch: 42874	Spike (LCS-1)	0		08	Matrix		red By:	
QC Batch: 42874 Prep Batch: 36993	Spike (LCS-1)	QC Prepara	ation: 2007-11-		Matrix Result		red By: I	KB
QC Batch: 42874 Prep Batch: 36993 Param	Spike (LCS-1)	QC Prepara	tion: 2007-11- ts Dil.	08 Spike		Prepa	red By: I L	KB Rec.
QC Batch: 42874 Prep Batch: 36993 Param GRO		QC Prepara LCS Result Uni 8.58 mg/l	tion: 2007-11- ts Dil. Kg 1	08 Spike Amount 10.0	Result <0.459	Prepa Rec. 86	red By: I L	KB Rec.
QC Batch: 42874 Prep Batch: 36993 Param GRO	ed on the spike re	QC PreparaLCSResult 8.58 mg/lsult.RPD is base	ttion: 2007-11- ts Dil. Kg 1 d on the spike a	08 Spike Amount 10.0 and spike dup	Result <0.459 plicate result	Prepa <u>Rec.</u> 86	red By: I L	KB Rec.
QC Batch: 42874 Prep Batch: 36993 Param GRO Percent recovery is base		QC Prepara LCS Result Uni 8.58 mg/l sult. RPD is base	tion: 2007-11- ts Dil. Kg 1	08 Spike Amount 10.0	Result <0.459 plicate result R	Prepa Rec. 86	red By: I L	KB Rec. .imit 7 - 108
QC Batch: 42874 Prep Batch: 36993 Param GRO Percent recovery is base Param	ed on the spike re	QC Prepara LCS Result Uni 8.58 mg/l sult. RPD is base SD ult Units I	ttion: 2007-11- ts Dil. Kg 1 d on the spike a Spike	08 Spike Amount 10.0 and spike dup Matrix	Result <0.459 plicate result Rec. Li	Prepa Rec. 86	red By: I L 78.7	KB Rec. .imit 7 - 108 RPD
QC Batch: 42874 Prep Batch: 36993 Param GRO Percent recovery is base Param GRO	ed on the spike re LCS Res 9.1	QC Prepara LCS Result Uni 8.58 mg/l sult. RPD is base SD ult Units 1 2 mg/Kg	tion: 2007-11- ts Dil. Kg 1 ed on the spike a Spike Dil. Amount 1 10.0	08 Spike Amount 10.0 and spike dup Matrix Result <0.459	Result <0.459 plicate result R Rec. Li 91 78.7	Prepa <u>Rec.</u> <u>86</u>	red By: I L 78.1 RPD	KB Rec. <u>.imit</u> 7 - 108 RPD Limit
QC Batch: 42874	ed on the spike re LCS Res 9.1	QC Prepara LCS Result Uni 8.58 mg/l sult. RPD is base SD ult Units 1 2 mg/Kg sult. RPD is base	tion: 2007-11- ts Dil. Kg 1 ed on the spike a Spike Dil. Amount 1 10.0	Spike Amount 10.0 and spike dup Matrix Result <0.459 and spike dup	Result <0.459 plicate result R Rec. Li 91 78.7 plicate result	Prepa <u>Rec.</u> <u>86</u>	red By: I L 78.7 RPD 6	KB Rec. .imit 7 - 108 RPD Limit 20
QC Batch: 42874 Prep Batch: 36993 Param GRO Percent recovery is base Param GRO Percent recovery is base Surrogate	ed on the spike re LCS Rest 9.1 ed on the spike re	QC Prepara LCS Result Uni 8.58 mg/l sult. RPD is base SD ult Units 1 2 mg/Kg	ttion: 2007-11-	08 Spike Amount 10.0 and spike dup Matrix Result <0.459	Result <0.459 plicate result R Rec. Li 91 78.7 plicate result ce LCS	Prepa <u>Rec.</u> <u>86</u>	red By: I L 78.7 RPD 6	KB Rec. <u>.imit</u> 7 - 108 RPD Limit
QC Batch: 42874 Prep Batch: 36993 Param GRO Percent recovery is base Param GRO Percent recovery is base Surrogate Frifluorotoluene (TFT)	ed on the spike re LCS Ress 9.1 ed on the spike re	QC Prepara LCS Result Uni 8.58 mg/l sult. RPD is base SD ult Units 1 2 mg/Kg sult. RPD is base LCS LCSD Result Result 0.919 0.904	tion: 2007-11- $\frac{Kg}{Kg}$ 1 $\frac{Kg}{Kg}$ 1 $\frac{Spike}{1}$ Dil. Amount 1 10.0 $\frac{1}{Kg}$ 0 the spike a $\frac{Units}{Kg}$	08 Spike Amount 10.0 and spike dup Matrix Result <0.459 and spike dup Spil Dil. Amou 1 1.0	Result <0.459	Prepa Rec. 86 tec. imit ' - 108 LCSD Rec. 90	red By: I 1 78.7 RPD 6 I 83.7	KB Rec. <u>imit</u> 7 - 108 RPD Limit 20 Rec. <u>imit</u> 7 - 110
QC Batch: 42874 Prep Batch: 36993 Param GRO Percent recovery is base Param GRO	ed on the spike re LCS Ress 9.1 ed on the spike re	QC Prepara LCS Result Uni 8.58 mg/l sult. RPD is base SD ult Units 1 2 mg/Kg sult. RPD is base LCS LCSD Result Result	ttion: 2007-11-	08 Spike Amount 10.0 and spike dup Matrix Result <0.459 and spike dup Spik Dil. Amou	Result <0.459	Prepa Rec. 86 tec. imit '- 108 LCSD Rec.	red By: I 1 78.7 RPD 6 I 83.7	KB Rec. <u>imit</u> 7 - 108 <u>RPD</u> Limit 20 Rec. imit
QC Batch: 42874 Prep Batch: 36993 Param GRO Percent recovery is base Param GRO Percent recovery is base Surrogate Trifluorotoluene (TFT)	ed on the spike re LCS Ress 9.1 ed on the spike re (4-BFB)	QC Prepara LCS Result Uni 8.58 mg/l sult. RPD is base SD ult Units 1 2 mg/Kg sult. RPD is base LCS LCSD Result Result 0.919 0.904	tion: 2007-11- $\frac{Kg}{Kg}$ 1 $\frac{Kg}{Kg}$ 1 $\frac{Spike}{1}$ Dil. Amount 1 10.0 $\frac{1}{Kg}$ 0 the spike a $\frac{Units}{Kg}$	08 Spike Amount 10.0 and spike dup Matrix Result <0.459 and spike dup Spik Dil. Amou 1 1.0	Result <0.459	Prepa Rec. 86 tec. imit ' - 108 LCSD Rec. 90	red By: I 1 78.7 RPD 6 I 83.7	KB Rec. <u>iimit</u> 7 - 108 RPD Limit 20 Rec. <u>iimit</u> 7 - 110
QC Batch: 42874 Prep Batch: 36993 Param GRO Percent recovery is base Param GRO Percent recovery is base Surrogate Trifluorotoluene (TFT) 4-Bromofluorobenzene (Laboratory Control	ed on the spike re LCS Ress 9.1 ed on the spike re (4-BFB)	QC Prepara LCS Result Uni 8.58 mg/l sult. RPD is base SD ult Units 1 2 mg/Kg sult. RPD is base LCS LCSD Result Result 0.919 0.904 0.779 0.765	ttion: 2007-11- <u>Kg 1</u> d on the spike a Spike Dil. Amount <u>1 10.0</u> d on the spike a <u>Units 1</u> <u>mg/Kg</u> <u>mg/Kg</u>	08 Spike Amount 10.0 and spike dup Matrix Result <0.459 and spike dup Spil Dil. Amou 1 1.0 1 1.0	Result <0.459	Prepa <u>Rec.</u> 86 LCSD <u>Rec.</u> 90 76	red By: I 78.7 RPD 6 I 83.7 74.4	KB Rec. $imit$ $7 - 108$ RPD $Limit$ 20 Rec. $imit$ $7 - 110$ $4 - 107$
QC Batch: 42874 Prep Batch: 36993 Param GRO Percent recovery is base Param GRO Percent recovery is base Surrogate Trifluorotoluene (TFT) 4-Bromofluorobenzene (ed on the spike re LCS Ress 9.1 ed on the spike re (4-BFB)	QC Prepara LCS Result Uni 8.58 mg/l sult. RPD is base SD ult Units 1 2 mg/Kg sult. RPD is base LCS LCSD Result Result 0.919 0.904	ttion: 2007-11-	08 Spike Amount 10.0 and spike dup Matrix Result <0.459 and spike dup Spil Dil. Amou 1 1.0 1 1.0 1 1.0 1 0.0	Result <0.459	Prepa Rec. 86 tec. imit - 108 LCSD Rec. 90 76 Analy	red By: I 1 78.7 RPD 6 I 83.7	KB Rec. <u>imit</u> 7 - 108 RPD Limit 20 Rec. <u>imit</u> 7 - 110 4 - 107 KB

Danana		LC		II	D:1	Spike		atrix	D		Rec.
Param		Rest		Units	Dil.	Amount		esult	Rec.		Limit
GRO		7.8		ng/Kg	1	10.0).459	79	78	8.7 - 108
Percent recovery is bas	sed on the sp	oike result.	RPD is	based or	the spike a	and spike d	luplicate	e result.			
		LCSD			Spike	Matrix		R	ec.		RPD
Param		Result	Units	Dil.	Amount	Result	Rec.	Liı	mit	RPD	Limi
GRO		8.68	mg/Kg	1	10.0	< 0.459	87	78.7	- 108	10	20
Percent recovery is bas	sed on the sp	oike result.	RPD is	based or	the spike a	and spike d	luplicate	e result.			
		LCS	5 LC	SD		S	pike	LCS	LCSI)	Rec.
Surrogate		Resu		sult	Units		iount	Rec.	Rec.		Limit
Trifluorotoluene (TFT)	0.89			ng/Kg		.00	90	90		3.7 - 110
4-Bromofluorobenzene		0.76			ng/Kg		.00	76	76		4.4 - 10'
Laboratory Control	Spike (LC	S_1)									
Laboratory Control	spike (LC	5-1)									
QC Batch: 42923			Date Ar		2007-11-					yzed By	
Prep Batch: 37035			QC Pre	paration	: 2007-11-	09			Prepa	ared By	: RM
		LC	\mathbf{S}			Spike	Ma	atrix			Rec.
Param		Rest	ult	Units	Dil.	Amount	Re	esult	Rec.		Limit
DRO		25	4 r	$\rm ng/Kg$	1	250	<	10.7	102	64	1.1 - 12
Percent recovery is bas	sed on the sp	oike result.	RPD is	based or	the spike a	and spike d	luplicate	e result.			
		LCSD			Spike	Matrix		B	ec.		RPD
Param		Result	Units	Dil.	Amount	Result	Rec.		nit	RPD	Limi
DRO		255	mg/Kg		250	<10.7	102		- 124	$\frac{10}{0}$	20
Percent recovery is bas	sed on the sr									-	
I creent recovery is ba	_			based of	t the spine t	_	-				
	LCS	LCSE				Spike	LC		LCSD		Rec.
Surrogate	Result	Resul		Jnits	Dil.	Amount	Re		Rec.		Limit
n-Triacontane	196	199	m	g/Kg	1	150	13	51	133	62	2.5 - 16
Laboratory Control	Spike (LC	S-1)									
QC Batch: 43038			Date An	alvzed:	2007-11-	10			Analy	zed By	· MM
Prep Batch: 37136					2007-11-					red By:	
1										v	
		τc	C			Colleo	М	. +			Dee
		LC		Units	Dil.	Spike Amount		atrix esult	Rec.		Rec. Limit
Param			աւ		<u> </u>	$\frac{100}{100}$		3.25	101		$\frac{11111}{5.1 - 103}$
		Rest 10	1 r	ng/Kg –		¥00	~	··•·	TOT	50	
Chloride	sed on the sr	10		ng/Kg based or		and spike d	luplicate	result			
Chloride	sed on the sp	10 bike result.			the spike a	-	luplicate				_
Percent recovery is bas	sed on the sp	10 bike result. LCSD	RPD is	based or	the spike a Spike	Matrix	-	R	ec.		
Chloride	sed on the sp	10 bike result.		based or Dil.	the spike a	-	luplicate Rec. 98	R/ Lii		RPD 3	RPE Limi 20

Matrix Spike (MS-1) Spiked Sample: 142194 QC Batch: 42874 Date Analyzed: 2007-11-08 Analyzed By: KB Prep Batch: 36993 QC Preparation: 2007-11-08 Prepared By: KB MS Spike Matrix Rec. Param Result Units Dil. Amount Result Rec. Limit < 0.45912751.3 - 130 GRO 12.710.0 mg/Kg 1 Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result. RPD MSD Spike Matrix Rec. Param Result Units Dil. Amount Result Rec. Limit RPD Limit GRO 7.90 mg/Kg 10.0< 0.4597951.3 - 130 47 19.61 Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result. MS MSD MSD Spike MSRec. Dil. Surrogate Result Result Units Amount Rec. Rec. Limit Trifluorotoluene (TFT) 56.1 - 124 0.6150.690 mg/Kg 1 1 62 69 4-Bromofluorobenzene (4-BFB) 0.77277 85 67.1 - 146 0.851mg/Kg 1 1 Matrix Spike (MS-1) Spiked Sample: 142228 QC Batch: 42877 Date Analyzed: 2007-11-08 Analyzed By: KB 2007-11-08 Prep Batch: 36996 QC Preparation: Prepared By: KBMS Spike Matrix Rec. Param Result Units Dil. Amount Result Rec. Limit GRO 10.110.0 < 0.459101 51.3 - 130 mg/Kg 1 Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result. MSD Spike Matrix Rec. RPD Param RPD Result Units Dil. Amount Result Rec. Limit Limit 16.251.3 - 130GRO mg/Kg 1 12.5< 0.4591304619.6Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result. Spike MSD MSMSD MSRec. Surrogate Result Result Units Dil. Amount Rec. Rec. Limit Trifluorotoluene (TFT) 0.937 1.22mg/Kg 1 1 9412256.1 - 124 4-Bromofluorobenzene (4-BFB) 1.041.43mg/Kg 1 1 10414367.1 - 146Matrix Spike (MS-1) Spiked Sample: 142240 QC Batch: Analyzed By: 42923 Date Analyzed: 2007-11-09 RM Prep Batch: 37035 2007-11-09 Prepared By: RMQC Preparation: MS Spike Matrix Rec. Param Result Units Dil. Amount Result Rec. Limit 17 DRO 211mg/Kg 1 250< 10.784 47.5 - 127

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

¹⁷Sample received out of hold time

			MSD			\mathbf{Spike}	Matrix		$\operatorname{Rec.}$		RPD
Param		18	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
DRO			201	mg/Kg	1	250	< 10.7	80	47.5 - 127	5	20
Percent recove	ery is based	-		RPD is b	ased on t	the spike ar	-	-			
_		MS	MSD				Spike	MS			Rec.
Surrogate		Result	Result		nits	Dil.	Amount	Rec			Limit
n-Triacontane		175	170	mg	g/Kg	1	150	117	<u> </u>	6	2.5 - 164
Matrix Spike	e (MS-1)	Spiked S	Sample: 14	2250							
QC Batch:	43038			Date Ana	lyzed:	2007-11-10)		Ana	lyzed By	·: MM
	37136			QC Prepa		2007-11-09)			pared By	
			MS				\mathbf{Spike}	Ma	trix		Rec.
Param			Resu		Units	Dil.	Amount			ec.	Limit
Chloride			474	1 n	ng/Kg	10	500	49.	642 8	35	80 - 120
Percent recove	ery is based	on the spi	ke result.	RPD is b	ased on t	the spike ar	nd spike du	plicate r	esult.		
							Martin		Dar		DDD
			MSD			\mathbf{Spike}	Matrix		Rec.		RPD
	-		Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Param Chloride Percent recove	erv is based	on the spi	Result 514	mg/Kg	10	Amount 500	Result 49.642	93	Limit 80 - 120	RPD 8	
Chloride Percent recove Standard (IO	CV-1)	on the spi	Result 514 ke result.	mg/Kg RPD is b	10 ased on t	Amount 500	Result 49.642 ad spike du	93	Limit 80 - 120 esult.		Limit 20
Chloride Percent recove Standard (IC	CV-1)	on the spi	Result 514 ke result.	mg/Kg RPD is b Date Ana	10 ased on r alyzed:	Amount 500 the spike ar 2007-11-08	Result 49.642 ad spike du	93 plicate r	Limit 80 - 120 esult. An	8	Limit 20
Chloride Percent recove Standard (IO	CV-1)	on the spi	Result 514 ke result.	mg/Kg RPD is b Date Ana ICVs	10 ased on r alyzed: ICV	Amount 500 the spike ar 2007-11-08 Vs	Result 49.642 ad spike du ICVs	93 plicate r	Limit 80 - 120 esult. An Percent	8	Limit 20 y: KB
Chloride Percent recove Standard (IC QC Batch: 4	C V-1) 12874	-	Result 514 ke result.	mg/Kg RPD is b Date Ana ICVs True	10 ased on t alyzed: ICV Fou	Amount 500 the spike ar 2007-11-08 Vs nd	Result 49.642 ad spike du ICVs Percent	93 plicate r	Limit 80 - 120 esult. An Percent Recovery	8 alyzed B	Limit 20 y: KB Date
	CV-1)	on the spi Units mg/Kg	Result 514 ke result.	mg/Kg RPD is b Date Ana ICVs	10 ased on r alyzed: ICV	Amount 500 the spike ar 2007-11-08 Vs nd nc.	Result 49.642 ad spike du ICVs	93 plicate r	Limit 80 - 120 esult. An Percent	8 alyzed B A	Limit 20 y: KB
Chloride Percent recove Standard (IC QC Batch: 4 Param GRO Standard (C	CV-1) 12874 Flag CCV-1)	Units	Result 514 ke result.	mg/Kg RPD is b Date Ana ICVs True Conc. 1.00	10 ased on t alyzed: ICV Fou Cor 0.8	Amount 500 the spike ar 2007-11-08 Vs nd nc.	Result 49.642 ad spike du ICVs Percent Recovery 85	93 plicate r	Limit 80 - 120 esult. An Percent Recovery Limits 85 - 115	8 alyzed B A	Limit 20 y: KB Date nalyzed 07-11-08
Chloride Percent recove Standard (IC QC Batch: 4 Param	CV-1) 12874 Flag CCV-1)	Units	Result 514 ke result.	mg/Kg RPD is b Date Ana ICVs True Conc. 1.00 Date Ana	10 ased on t alyzed: ICV Fou Cor 0.8 alyzed:	Amount 500 the spike ar 2007-11-08 Vs nd nc. 52 2007-11-08	Result 49.642 ad spike du ICVs Percent Recovery 85	93 plicate r	Limit 80 - 120 esult. An Percent Recovery Limits 85 - 115 An	8 alyzed B A 20	Limit 20 y: KB Date nalyzed 07-11-08
Chloride Percent recove Standard (IC QC Batch: 4 Param GRO Standard (C	CV-1) 12874 Flag CCV-1)	Units	Result 514 ke result.	mg/Kg RPD is b Date Ana ICVs True Conc. 1.00 Date Ana CCVs	10 ased on t alyzed: ICV Fou Cor 0.8 alyzed: CC	Amount 500 the spike ar 2007-11-08 Vs nd nc. 52 2007-11-08 Vs	Result 49.642 ad spike du ICVs Percent Recovery 85	93 plicate r	Limit 80 - 120 esult. An Percent Recovery Limits 85 - 115 An Percent	8 alyzed B A 20	Limit 20 y: KB Date nalyzed 07-11-08 y: KB
Chloride Percent recove Standard (IC QC Batch: 4 Param GRO Standard (C	CV-1) 12874 Flag CCV-1)	Units	Result 514 ke result.	mg/Kg RPD is b Date Ana ICVs True Conc. 1.00 Date Ana	10 ased on t alyzed: ICV Fou Cor 0.8 alyzed:	Amount 500 the spike ar 2007-11-08 Vs nd nc. 52 2007-11-08 Vs nd Ns nd nc. 52	Result 49.642 ad spike du ICVs Percent Recovery 85	93 plicate r	Limit 80 - 120 esult. An Percent Recovery Limits 85 - 115 An	8 alyzed B A 20 alyzed B	Limit 20 y: KB Date nalyzed 07-11-08

QC Batch: 42877

Date Analyzed: 2007-11-08

Analyzed By: KB

¹⁸Sample received out of hold time

			ICVs True	ICVs Found	ICVs Percent	Percent Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
GRO	Flag	mg/Kg	1.00	0.882	88	85 - 115	2007-11-08
			1.00	0.002		00 110	200. 11 00
Standard	(CCV-1)						
QC Batch:	42877		Date Ana	alyzed: 2007-1	1-08	Anal	yzed By: KB
			CCVs	CCVs	CCVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
GRO		m mg/Kg	1.00	0.876	88	85 - 115	2007-11-08
Standard	(ICV-1)						
QC Batch:	Batch: 42923 Date Analyzed: 2007-11-09					Anal	yzed By: RM
			ICVs	ICVs	ICVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
DRO		m mg/Kg	250	253	101	85 - 115	2007-11-09
Standard	(CCV-1)						
QC Batch:	42923		Date Ana	lyzed: 2007-11	1-09	Anal	yzed By: RM
			CCVs	CCVs	CCVs	Percent	
			2000 B				
Damama			True	Found	Percent	Recovery	Date
	Flag	Units	Conc.	Conc.	Percent Recovery	Limits	Analyzed
Param DRO	Flag	Units mg/Kg				0	
DRO			Conc.	Conc.	Recovery	Limits	Analyzed
DRO Standard	(CCV-2)		Conc. 250	Conc.	Recovery 102	Limits 85 - 115	Analyzed
DRO Standard	(CCV-2)		Conc. 250	Conc. 254	Recovery 102	Limits 85 - 115	Analyzed 2007-11-09
	(CCV-2)		Conc. 250 Date Ana	Conc. 254 llyzed: 2007-11	Recovery 102	Limits 85 - 115 Anal	Analyzed 2007-11-09
DRO Standard QC Batch:	(CCV-2)		Conc. 250 Date Ana CCVs	Conc. 254 dyzed: 2007-1: CCVs	Recovery 102 1-09 CCVs	Limits 85 - 115 Anal Percent	Analyzed 2007-11-09 yzed By: RM
DRO Standard	(CCV-2) 42923	mg/Kg	Conc. 250 Date Ana CCVs True	Conc. 254 lyzed: 2007-1: CCVs Found	Recovery 102 1-09 CCVs Percent	Limits 85 - 115 Anal Percent Recovery	Analyzed 2007-11-09 yzed By: RM Date
DRO Standard QC Batch: Param DRO	(CCV-2) 42923 Flag	mg/Kg Units	Conc. 250 Date Ana CCVs True Conc.	Conc. 254 lyzed: 2007-1: CCVs Found Conc.	Recovery 102 1-09 CCVs Percent Recovery	Limits 85 - 115 Analy Percent Recovery Limits	Analyzed 2007-11-09 yzed By: RM Date Analyzed
DRO Standard QC Batch: Param	(CCV-2) 42923 Flag (ICV-1)	mg/Kg Units	Conc. 250 Date Ana CCVs True Conc. 250	Conc. 254 lyzed: 2007-1: CCVs Found Conc.	Recovery 102 1-09 CCVs Percent Recovery 98	Limits 85 - 115 Anal Percent Recovery Limits 85 - 115	Analyzed 2007-11-09 yzed By: RM Date Analyzed
DRO Standard QC Batch: Param DRO Standard	(CCV-2) 42923 Flag (ICV-1)	mg/Kg Units	Conc. 250 Date Ana CCVs True Conc. 250 Date Ana	Conc. 254 alyzed: 2007-11 CCVs Found Conc. 244 alyzed: 2007-11	Recovery 102 1-09 CCVs Percent Recovery 98	Limits 85 - 115 Analy Percent Recovery Limits 85 - 115 Analy	Analyzed 2007-11-09 yzed By: RM Date Analyzed 2007-11-09
DRO Standard QC Batch: Param DRO Standard	(CCV-2) 42923 Flag (ICV-1)	mg/Kg Units	Conc. 250 Date Ana CCVs True Conc. 250 Date Ana ICVs	Conc. 254 alyzed: 2007-11 CCVs Found Conc. 244 lyzed: 2007-11 ICVs	Recovery 102 1-09 CCVs Percent Recovery 98 1-10 ICVs	Limits 85 - 115 Analy Percent Recovery Limits 85 - 115 Analy Percent	Analyzed 2007-11-09 yzed By: RM Date Analyzed 2007-11-09
DRO Standard QC Batch: Param DRO Standard	(CCV-2) 42923 Flag (ICV-1)	mg/Kg Units	Conc. 250 Date Ana CCVs True Conc. 250 Date Ana	Conc. 254 alyzed: 2007-11 CCVs Found Conc. 244 alyzed: 2007-11	Recovery 102 1-09 CCVs Percent Recovery 98	Limits 85 - 115 Analy Percent Recovery Limits 85 - 115 Analy	Analyzed 2007-11-09 yzed By: RM Date Analyzed 2007-11-09

Work Order: 7110824 Violet St. & Center St.

Standard (CCV-1)

QC Batch: 43038			Date Analy	yzed: 2007-11-	-10	Analyzed By: MM		
			CCVs	CCVs	CCVs	Percent	_	
			True	Found	Percent	Recovery	Date	
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed	
Chloride		mg/Kg	100	100	100	85 - 115	2007-11-10	

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8808 Camp Bowie Blvd. West, Suite 189 Ft. Worth, Taxas 76116 Tel (817) 201-5260 Fax (817) 560-4336 Turn Around Time if different from standard Circle or Specify Method No. Dry Weight Basis Required Check If Special Reporting Limits Are Needed Source to the X X TRRP Report Required ANALYSIS REQUEST Instruce Content Page Hq ,887 ,008 Pesticides 808 \ A1808 sebicitze9 ш 200 East Sunset Rd., Suite E El Paso, Texas 79922 Tel (015) 555-3443 Fax (015) 555-4944 1 (888) 588-3443 PCB's 8082 / 608 GC/MS Semi. Vol. 8270C / 625 REMARKS 8260B / 624 GC/MS AN ____ . IJЯ **TCLP Pesticides** TCLP Semi Volatiles 1 leadspace Y/N/MA sellteloV **LCLP** LAB USE TCLP Metals Ag As Ba Cd Cr Pb Se Hg ONLY Total Metals Ag As Ba Cd Cr Pb Se Hg 60108/200.7 Log-In Review 2 Intact X/ N 5002 Basin Street, Suite A1 Midhand, Texas 79703 Tel (432) 689-6301 Fax (432) 689-6313 PAH 8270C / 625 200 1 TPH 80196302020108 H9T \sim \geq TPH 418.1 / TX1005 / TX1005 Ext(C35) Carrier # 80218 / 602 / 82608 / 624 X3T8 82 ö Temp'c: Temp°c: 80218 / 602 / 82608 / 624 Temp **BBTM** (SS) U OFIL 130 Caf XIMAII 520 M-Jord 1820 Makale 30 SAMPLING JIME (JC) 610 N. C , Q I D D/c/M KWIK1 Qlin/07 Time: Time: Time: 6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 Tel (806) 794-1296 Fax (806) 794-1298 1 (800) 378-1298 03 **BTA**O 10801 × 4 + 2 × NUX CI Date: Date: Date: PRESERVATIVE NONE Ο <u>ي</u>در - \mathbf{x} 21 METHOD ICE ~~ -iv Ó 'n VIDIA V V * HOBN Submittat of samples constitutes agreement to Terms and Conditients listed on reverse side of C. -+7 Ploject Name: 20.22 , Company: Company: Company: PULS °OS²H . P.L. [©]ONH E-mail: ÷ KEN Fax #: IOH Phone i? Ķte¢eive¢ by౫ Received by: SLUDGE Received by MATRIX TraceAnalysis, Inc. ЯA . <u>~</u>~ چرک 201 5 \sim 24 **MATER** NIU. emeil: lab@traceanalysis.com 8 ta innomA / emuloV Time: Time: Time: (D3DO) # CONTAINERS RUPI Part ser Date: Date: Dafe: ŝ ju S 7 1281121121 FIELD CODE Dr Ka<u>vour</u>d Name: 1 Drn 101 Anthol Tortal Company Company Company C.K. Project Location (including state) 1 11220 Put n 63.1 576 RA (if different from above) for. Burnys Relinquished by: Relinquished by Relinquished by Company₁Name: Contact Person 0 248 342 246 247 243 35 2 पद AB USE) (1) (1) (1) Invoice to: 142241 Project #: Address: ONLY LAB # l

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THORAY * LAB Order ID

j.



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10月#376#1296 806+794+1296 860*386*344C 915+585+3443 402+689+6301

-AX 806*791*1298 168,915+636+49/2 817+201+5260

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Analytical and Quality Control Report

Scott Branson SB Weed Control & Transport 213 S Mesa Carlsbad, NM, 88220

Report Date: November 14, 2007

7110823 Work Order:

Project Location: City of Carlsbad, NM **Project Name:** Violet St. & Center St. Violet St. & Center St. Project Number:

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

			Date	Time	Date
Sample	Description	Matrix	Taken	Taken	Received
142230	B23	soil	2007-10-10	17:00	2007-11-08
142231	B24	soil	2007-10-10	17:30	2007 - 11 - 08
142232	B25	soil	2007-10-10	10:00	2007 - 11 - 08
142233	B26	soil	2007-10-10	10:30	2007 - 11 - 08
142234	B27	soil	2007-10-10	11:00	2007 - 11 - 08
142235	B28	soil	2007-10-10	11:30	2007 - 11 - 08
142236	B29	soil	2007-10-10	12:00	2007-11-08
142237	B3 0	soil	2007-10-10	12:30	2007-11-08
142238	B31	soil	2007-10-10	13:00	2007 - 11 - 08
142239	B32	soil	2007-10-10	13:30	2007 - 11 - 08
142240	B33	soil	2007-10-10	11:00	2007 - 11 - 08

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 18 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Michael alm

Dr. Blair Leftwich, Director

Standard Flags

 $\,B\,$ - The sample contains less than ten times the concentration found in the method blank.

Analytical Report

Sample: 142230 - B23

Analysis: QC Batch: Prep Batch:	Chloride (Titration) 43036 37134	Analytical Method: Date Analyzed: Sample Preparation	2007 - 11 - 10	Prep Method: Analyzed By: Prepared By:	1
		RL			
Parameter	Flag	Result	Units	Dilution	RL
Chloride		<50.0	mg/Kg	10	5.00

Sample: 142230 - B23

Analysis: QC Batch:	TPH DRO 42922		Analytical Me Date Analyze		8015B 11-09	-	fethod: N/A ed By: RM
Prep Batch:	37034		Sample Prepa	ration: 2007-1	tion: 2007-11-09		ed By: RM
			\mathbf{RL}				
Parameter	Flag	5	Result	Ur	nits	Dilution	RL
DRO	1		< 50.0	mg/	Kg	1	50.0
Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontan	0	171	mg/Kg	1	150	114	62.5 - 164

Sample: 142230 - B23

Analysis: QC Batch: Prep Batch:	TPH GRO 42877 36996		Analytical Date Analy Sample Pr	yzed:	S 8015B 2007-11-08 2007-11-08		Prep Meth Analyzed Prepared 1	By: KB
			RL					
Parameter	Flag		Result		Units	D	vilution	RL
GRO	2		<1.00		m mg/Kg		1	1.00
						Spike	Percent	Recovery
Surrogate		Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotolu	ene (TFT)		1.02	mg/Kg	1	1.00	102	34.1 - 161
4-Bromofluor	cobenzene (4-BFB)		0.903	m mg/Kg	1	1.00	90	31.8 - 159

Sample: 142231 - B24

Analysis: QC Batch: Prep Batch:	Chloride (Titration) 43037 37135	Analytical Method: Date Analyzed: Sample Preparation	2007-11-10	Prep Method: Analyzed By: Prepared By:	$\dot{\mathrm{MM}}$
		RL			
Parameter	Flag	Result	Units	Dilution	\mathbf{RL}
Chloride		<50.0	mg/Kg	10	5.00

 $^1 \, {\rm Sample}$ received out of hold time $^2 \, {\rm Sample}$ ran out of hold time per client's request. \bullet

Sample: 142231 - B24

Analysis: QC Batch: Prep Batch:	TPH DRO 42922 37034		Analytical Me Date Analyze Sample Prepa	d: 20	od. 8015B 07-11-09 07-11-09	Analyz	fethod: N/A ed By: RM ed By: RM
			RL				
Parameter	Flag	r 5	Result		Units	Dilution	RL
DRO	3		< 50.0	r	ng/Kg	1	50.0
					\mathbf{Spike}	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	a Amount	Recovery	Limits
n-Triacontan	e	203	m mg/Kg	1	150	135	62.5 - 164

Sample: 142231 - B24

Analysis: QC Batch: Prep Batch:	TPH GRO 42877 36996		Analytical Date Anal Sample Pr		S 8015B 2007-11-08 2007-11-08	Prep Metho Analyzed B Prepared B		By: KB
			\mathbf{RL}					
Parameter	Flag		Result		Units	D	ilution	RL
GRO	4		<1.00		m mg/Kg		1	1.00
Surrogate		Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotolu	ene (TFT)		1.10	mg/Kg	1	1.00	110	34.1 - 161
4-Bromofluor	robenzene (4-BFB)		0.973	mg/Kg	1	1.00	97	31.8 - 159

Sample: 142232 - B25

Analysis: QC Batch: Prep Batch:	Chloride (Titration) 43037 37135	Analytical Met Date Analyzed Sample Prepar		Prep Metho Analyzed By Prepared By	r: MM
		RL			
Parameter	Flag	Result	Units	Dilution	RL
Chloride		<50.0	m mg/Kg	10	5.00

Sample: 142232 - B25

Analysis: QC Batch: Prep Batch:	TPH DRO 42922 37034	Analytical Method: Date Analyzed: Sample Preparation:	Mod. 8015B 2007-11-09 2007-11-09	Prep Method: Analyzed By: Prepared By:	,
		RL			
Parameter	Flag	Result	Units	Dilution	RL
DRO	5	<50.0	m mg/Kg	1	50.0

³Sample received out of hold time

⁴Sample ran out of hold time per client's request. • ⁵Sample received out of hold time

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		207	mg/Kg	1	150	138	62.5 - 164

Sample: 142232 - B25

Analysis: QC Batch: Prep Batch:	TPH GRO 42877 36996		Analytical Date Anal Sample Pr		S 8015B 2007-11-08 2007-11-08		Prep Met Analyzed Prepared	l By: F	5 5035 KB KB
Parameter GRO	Flag 6		RL Result <1.00		Units mg/Kg		Dilution 1		RL 1.00
Surrogate Trifluorotolu	ene (TFT)	Flag	Result 1.17	Units mg/Kg	Dilutior	Spike n Amount 1.00	Percent Recovery 117	Li	overy mits - 161
	robenzene (4-BFB)		1.05	mg/Kg	1	1.00	105	31.8	- 159
Sample: 14 Analysis:	Chloride (Titratio	n)	v	tical Metho		00-C1 B	Prep M		N/A
QC Batch: Prep Batch:	$43037 \\ 37135$			Analyzed: e Preparati	2007-1 on: 2007-1		Analyz Prepar		$\begin{array}{c} \mathrm{MM} \\ \mathrm{MM} \end{array}$
			RL						
Parameter	Flag		Result		Units		Dilution		RL
Chloride			<50.0		mg/Kg		10		5.00
Sample: 14	2233 - B26								
Analysis:	TPH DRO		Analytical		Mod. 801		${\rm Prep}~{\rm N}$		N/A
QC Batch:	42922		Date Anal		2007-11-09		Analyz		RM DM
Prep Batch:	37034		-	reparation:	2007-11-09	9	Prepar	ea By:	$\mathbf{R}\mathbf{M}$
Parameter	Flag		RL Result		Units		Dilution		RL
DRO	7		<50.0		mg/Kg		1		50.0
G	173	Dech	T7 •	17.11		Spike	Percent		overy
Surrogate n-Triacontan	Flag	Result 188	Units mg/Kg		ution 1	Amount 150	Recovery 125		mits - 164
n-1riacontan	e	199	mg/Kg		T	190	120	02.0	- 104

Sample: 142233 - B26

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	42877	Date Analyzed:	2007-11-08	Analyzed By:	KB
Prep Batch:	36996	Sample Preparation:	2007-11-08	Prepared By:	KB

⁶Sample ran out of hold time per client's request. • ⁷Sample received out of hold time

62.5 - 164

			RL						
Parameter	Flag		Result		Units		Dilution		RL
GRO	8		<1.00		m mg/Kg		1		1.00
						Spike	Percent	Rec	overy
Surrogate		Flag	Result	Units	Dilution	Amount	Recovery	Li	mits
Trifluorotolu	iene (TFT)		1.03	mg/Kg	1	1.00	103	34.1	- 161
4-Bromofluo	robenzene (4-BFB)		0.938	mg/Kg	1	1.00	94	31.8	3 - 159
Sample: 14	12234 - B27								
Analysis:	Chloride (Titration)		Analyt	ical Method	: SM 4500-	Cl B	Prep M	ethod:	N/A
QC Batch:	43037			analyzed:	2007-11-1	0	Analyze	d By:	ŃМ
Prep Batch:	37135		Sample	e Preparatio	n: 2007-11-0	9	Prepare	d By:	MM
			RL						
Parameter	Flag		Result		Units		Dilution		RL
Chloride			<50.0		m mg/Kg		10		5.00
Sample: 14	12234 - B27								
Analysis:	TPH DRO		Analytical	Method:	Mod. 8015B		$\operatorname{Prep}\mathrm{Me}$	ethod:	N/A
QC Batch:	42922		Date Anal	yzed:	2007-11-09		Analyze	d By:	RM
Prep Batch:	37034		Sample Pr	eparation:	2007-11-09		Prepare	d By:	RM
i iep baten.									
-			RL						
Parameter	Flag		Result		Units		Dilution		RL
-	Flag 9				Units mg/Kg		Dilution 1		RL 50.0
Parameter	9	Result	Result	Dilut	mg/Kg	pike nount			

Sample: 142234 - B27

n-Triacontane

Analysis: QC Batch: Prep Batch:	TPH GRO 42877 36996		Analytical Date Anal Sample Pr		S 8015B 2007-11-08 2007-11-08		Prep Meth Analyzed Prepared 1	By: KB
			RL					
Parameter	Flag		Result		Units	D	vilution	\mathbf{RL}
GRO	10		<1.00		m mg/Kg		1	1.00
Surrogate		Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotolu	ene (TFT)	1 105	1.06	mg/Kg	1	1.00	106	34.1 - 161
	cobenzene (4-BFB)		0.936	mg/Kg	1	1.00	94	31.8 - 159

1

150

125

⁸Sample ran out of hold time per client's request. •

188

 mg/Kg

⁹Sample received out of hold time ¹⁰Sample ran out of hold time per client's request. •

Sample: 142235 - B28

Analysis: QC Batch: Prep Batch:	Chloride (Titration) 43037 37135	Analytical Metho Date Analyzed: Sample Preparation	2007-11-10	Prep Method: Analyzed By: Prepared By:	MM
		RL			
Parameter	Flag	Result	Units	Dilution	RL
Chloride		< 50.0	m mg/Kg	10	5.00

Sample: 142235 - B28

Analysis: QC Batch: Prep Batch:	TPH DRO 42922 37034		Analytical Me Date Analyze Sample Prepa	d:	Mod. 8 2007-11 2007-11	-09	Prep M Analyz Prepar	0
			\mathbf{RL}					
Parameter	Flag	r 5	Result		Unit	s	Dilution	RL
DRO	11		<50.0		mg/K	g	1	50.0
						Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilu	tion	Amount	Recovery	Limits
n-Triacontan	e	215	m mg/Kg	1		150	143	62.5 - 164

Sample: 142235 - B28

Analysis: QC Batch: Prep Batch:	QC Batch: 42877		Date Analyzed:		S 8015B 2007-11-08 2007-11-08	Prep Metho Analyzed E Prepared B		By: KB
			RL					
Parameter	Flag		Result		Units	D	ilution	RL
GRO	12		<1.00		m mg/Kg		1	1.00
						Spike	Percent	Recovery
Surrogate		\mathbf{F} lag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotolu	ene (TFT)		1.07	mg/Kg	1	1.00	107	34.1 - 161
4-Bromofluor	cobenzene (4-BFB)		0.960	m mg/Kg	1	1.00	96	31.8 - 159

Sample: 142236 - B29

Analysis: QC Batch: Prep Batch:	Chloride (Titration) 43037 37135	Analytical Method: Date Analyzed: Sample Preparation:	2007-11-10	Prep Method: Analyzed By: Prepared By:	\dot{MM}
D	171	RL	TT • ,		DI
Parameter	Flag	Result	Units	Dilution	RL
Chloride		<50.0	mg/Kg	10	5.00

 $^{11} {\rm Sample}$ received out of hold time $^{12} {\rm Sample}$ ran out of hold time per client's request. \bullet

Sample: 142236 - B29

Analysis: QC Batch: Prep Batch:	TPH DRO 42922 37034		Analytical Me Date Analyzee Sample Prepa	d: 2	Mod. 8015B 2007-11-09 2007-11-09		Prep M Analyz Prepar	
			\mathbf{RL}					
Parameter	Flag		Result		Units		Dilution	\mathbf{RL}
DRO	13		< 50.0		m mg/Kg		1	50.0
Surrogate	Flag	Result	Units	Dilutio		Spike mount	Percent Recovery	Recovery Limits
$\frac{\text{Suffogate}}{\text{n-Triacontan}}$	<u>v</u>	194		1		$\frac{1100000}{150}$	129	62.5 - 164
n-macontan	e	194	m mg/Kg	T		190	129	02.0 - 104

Sample: 142236 - B29

Analysis: QC Batch: Prep Batch:	TPH GRO 42877 36996		Analytical Date Anal Sample Pr		S 8015B 2007-11-08 2007-11-08	Prep Metho Analyzed B Prepared B		By: KB
			\mathbf{RL}					
Parameter	Flag		Result		Units	D	ilution	RL
GRO	14		<1.00		m mg/Kg		1	1.00
Surrogate		Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotolu	ene (TFT)		1.09	mg/Kg	1	1.00	109	34.1 - 161
4-Bromofluor	obenzene (4-BFB)		0.997	mg/Kg	1	1.00	100	31.8 - 159

Sample: 142237 - B30

Analysis: QC Batch: Prep Batch:	Chloride (Titration) 43037 37135	Analytical Met Date Analyzed Sample Prepar		Prep Metho Analyzed By Prepared By	r: MM
		RL			
Parameter	Flag	Result	Units	Dilution	RL
Chloride		<50.0	m mg/Kg	10	5.00

Sample: 142237 - B30

Analysis: QC Batch: Prep Batch:	TPH DRO 42922 37034	Analytical Method: Date Analyzed: Sample Preparation:	Mod. 8015B 2007-11-09 2007-11-09	Prep Method: Analyzed By: Prepared By:	,
Parameter	Flag	$\operatorname{RL}_{\operatorname{Result}}$	Units	Dilution	RL
DRO	15	<50.0	mg/Kg	1	50.0

¹³Sample received out of hold time

¹⁴Sample ran out of hold time per client's request.
 ¹⁵Sample received out of hold time

					\mathbf{Spike}	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		198	mg/Kg	1	150	132	62.5 - 164

Sample: 142237 - B30

Analysis: QC Batch: Prep Batch:	TPH GRO 42877 36996		Analytical Date Anal Sample Pr		S 8015B 2007-11-08 2007-11-08		Prep Met Analyzed Prepared	By: 1	S 5035 KB KB
Parameter GRO	Flag 16		RL Result <1.00		Units mg/Kg		Dilution 1		RL 1.00
GRO			<1.00		mg/ Kg		L		1.00
Surrogate		Flag	Result	Units	Dilution	Spike Amount	Percent Recovery		covery mits
Trifluorotolu	ene (TFT)		1.09	mg/Kg	1	1.00	109		- 161
4-Bromofluor	robenzene (4-BFB)		0.995	mg/Kg	1	1.00	100	31.8	8 - 159
Sample: 14		,						r., 1. •	27/1
Analysis:	Chloride (Titratio	on)		tical Metho		00-Cl B	Prep M		N/A
QC Batch:	43037			Analyzed:	2007-1		Analyz		MM
Prep Batch:	37135		Sampi	e Preparati	on: 2007-1	1-09	Prepare	ea By:	MM
			RL						
Parameter	Flag		Result		Units		Dilution		RL
Chloride			<50.0		mg/Kg		10		5.00
Sample: 14 Analysis: QC Batch:	2238 - B31 TPH DRO 42922		Analytical Date Anal		Mod. 8015 2007-11-09		Prep M Analyz		N/A RM
Prep Batch:	37034			reparation:	2007-11-09		Prepare		RM
i tep Baten.	51051		-	ceparation.	2001-11-03		терач	cu by.	16101
Parameter	Flag		${ m RL} { m Result}$		Units		Dilution		RL
$\frac{1 \text{ arameter}}{\text{DRO}}$	17 Iag		<50.0		mg/Kg		1		50.0
			200.0		mg/ ng		T		00.0
Surrogate	Flag	Result	Units	Dir	ition	Spike Amount	Percent Recovery		covery mits
n-Triacontan		<u>194</u>	mg/Kg		1	150	129		$\frac{11115}{5 - 164}$
		194			-	100	123	02.0	, 101

Sample: 142238 - B31

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	42877	Date Analyzed:	2007-11-08	Analyzed By:	KB
Prep Batch:	36996	Sample Preparation:	2007-11-08	Prepared By:	KB

 $^{16}\mathrm{Sample}$ ran out of hold time per client's request. \bullet $^{17}\mathrm{Sample}$ received out of hold time

			RL					
Parameter	Flag		Result		Units		Dilution	RL
GRO	18	,	<1.00		mg/Kg		1	1.00
						<i>a</i>		
C I		151	D L	TT •	D.1.	Spike	Percent	Recovery
Surrogate		Flag	Result	Units	Dilution	Amount	v	Limits
Trifluorotolue		`	1.11	mg/Kg	1	1.00	111	34.1 - 161
4-Bromonuor	obenzene (4-BFB))	1.02	mg/Kg	1	1.00	102	31.8 - 159
Sample: 142	2239 - B32							
Analysis:	Chloride (Titrati	ion)	Analy	tical Metho	d: SM 450	00-Cl B	Prep M	lethod: N/A
QC Batch:	43037)		Analyzed:	2007-11		Analyz	,
Prep Batch:	37135			e Preparatio			Prepare	U U
			\mathbf{RL}					
Parameter	Flag		Result		Units		Dilution	RL
Chloride		·	<50.0		mg/Kg		10	5.00
Analysis: QC Batch: Prep Batch:	TPH DRO 42922 37034		Analytical Date Anal Sample Pr		Mod. 8015 2007-11-09 2007-11-09		Prep M Analyz Prepare	ed By: RM
i iep baten.	51054		-	cparación.	2001-11-05		1 Tepare	a by. Itti
Deveryon	171		RL		TT		D:1	DI
Parameter DRO	Flag	•	Result <50.0		Units		Dilution	RL 50.0
DRU			< 30.0		mg/Kg		1	50.0
						Spike	Percent	Recovery
Surrogate	\mathbf{Flag}	Result	Units	Dilu	tion	Amount	Recovery	Limits
n-Triacontane	9	204	mg/Kg]	1	150	136	62.5 - 164
Sample: 142	2239 - B32							
Applacia	TDU CDO		A nol-+:1	Moth - J.	C 2017D		Dron M-+	had. C TOPT
Analysis:	TPH GRO			Method:	S 8015B			hod: S 5035
QC Batch: Prep Batch:	42877 36996		Date Anal Sample Pr	yzed: reparation:	2007-11-08 2007-11-08		Analyzed Prepared	
r =			_	· T				J
D	T		RL		TT •-			БТ
Parameter CRO	Flag	· · · · · · · · · · · · · · · · · · ·	Result		Units		Dilution	RL
GRO	20		<1.00		mg/Kg		1	1.00
						Spike	Percent	Recovery

					Spike	Percent	$\operatorname{Recovery}$
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		1.14	mg/Kg	1	1.00	114	34.1 - 161
4-Bromofluorobenzene (4-BFB)		1.03	m mg/Kg	1	1.00	103	31.8 - 159

 $^{18}Sample$ ran out of hold time per client's request. \bullet $^{19}Sample$ received out of hold time $^{20}Sample$ ran out of hold time per client's request. \bullet

Sample: 142240 - B33

Analysis: QC Batch: Prep Batch:	Chloride (Titration) 43037 37135	Analytical Metho Date Analyzed: Sample Preparation	2007-11-10	Prep Method: Analyzed By: Prepared By:	MM
		RL			
Parameter	Flag	Result	Units	Dilution	RL
Chloride		< 50.0	m mg/Kg	10	5.00

Sample: 142240 - B33

TPH DRO 42923 37035		Date Analyze	d:	2007-11	-09	Analyz	C C
		\mathbf{RL}					
Flag		Result		Unit	s	Dilution	RL
21		<50.0		mg/K	g	1	50.0
Flag	Recult	Unite	Dilut	ion	Spike Amount	Percent	Recovery Limits
r tag			1	.1011	150	v	62.5 - 164
	42923 37035 Flag Flag	42923 37035 Flag 21 Flag Result	42923 Date Analyze 37035 Sample Prepa RL Result 21 <50.0	$\begin{array}{ccc} 42923 & & \text{Date Analyzed:} \\ 37035 & & \text{Sample Preparation:} \\ & & RL \\ \hline \\ Flag & Result \\ \hline \\ & & 21 \\ \hline \\ \hline \\ Flag & Result \\ \hline \\ & Units \\ \hline \end{array} \begin{array}{c} Dilut \\ Dilut \\ \hline \\ \end{array}$	$\begin{array}{cccc} 42923 & & Date Analyzed: & 2007-11 \\ 37035 & & Sample Preparation: & 2007-11 \\ & & RL \\ \hline \\ Flag & Result & Unit \\ \hline \\ Flag & Result & Units & Dilution \\ \end{array}$	$\begin{array}{cccc} 42923 & & Date Analyzed: & 2007-11-09 \\ 37035 & & Sample Preparation: & 2007-11-09 \\ \hline & RL & & & \\ \hline & Result & Units \\ \hline & & & & \\ \hline & & & & \\ \hline & & & & \\ \hline & & & &$	$\begin{array}{cccc} 42923 & {\rm Date \ Analyzed:} & 2007-11-09 & {\rm Analyz} \\ 37035 & {\rm Sample \ Preparation:} & 2007-11-09 & {\rm Preparation:} \\ & {\rm RL} & & \\ \hline & {\rm RL} & {\rm Units} & {\rm Dilution} \\ \hline & & & & \\ \hline & & & & \\ \hline & & & & \\ \hline & & & &$

Sample: 142240 - B33

Analysis: QC Batch: Prep Batch:	TPH GRO 42877 36996		Analytical Date Anal Sample Pr		S 8015B 2007-11-08 2007-11-08		Prep Meth Analyzed Prepared 1	By: KB
			RL					
Parameter	Flag		Result		Units	D	vilution	RL
GRO	22		<1.00		m mg/Kg		1	1.00
Surrogate		Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	$egin{array}{c} { m Recovery} \\ { m Limits} \end{array}$
Trifluorotolu	ene (TFT)	0	1.16	mg/Kg	1	1.00	116	34.1 - 161
	cobenzene (4-BFB)		1.08	mg/Kg	1	1.00	108	31.8 - 159

Method Blank (1) QC Batch: 42877

QC Batch: Prep Batch:		Date Analyzed: 2007 QC Preparation: 2007		Analyzed By: KB Prepared By: KB
		MDL		
Parameter	Flag	Result	Units	RL
GRO		< 0.459	mg/Kg	1

²¹Sample received out of hold time

 22 Sample ran out of hold time per client's request.

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	23		mg/Kg	1	1.00	<u>92</u>	96 - 115
4-Bromofluorobenzene (4-BFB)			mg/Kg	1	1.00	52 58	51.6 - 103
				-	1.00		01.0 100
Method Blank (1) QC Ba	atch: 42922						
QC Batch: 42922		Date Analyz		-11-09			zed By: RM
Prep Batch: 37034		QC Preparat	tion: 2007	-11-09		Prepa	red By: RM
			MDL				
Parameter	Flag		Result		Un		RL
DRO			<10.7		mg,	/Kg	50
					Spike	Percent	Recovery
Surrogate Flag	Result	Units	Dilutic	on	Amount	Recovery	Limits
n-Triacontane	195	m mg/Kg	1		150	130	62.5 - 164
Method Blank (1) QC Ba QC Batch: 42923 Prep Batch: 37035	atch: 42923	Date Analyz QC Preparat		-11-09 -11-09			zed By: RM ced By: RM
QC Batch: 42923 Prep Batch: 37035 Parameter	atch: 4 2923 Flag		tion: 2007- MDL Result		Un	Prepa	red By: RM RL
QC Batch: 42923 Prep Batch: 37035			tion: 2007- MDL		Un mg/	Prepa	red By: RM
QC Batch: 42923 Prep Batch: 37035 Parameter			tion: 2007- MDL Result	-11-09		Prepa	red By: RM RL 50 Recovery Limits
QC Batch: 42923 Prep Batch: 37035 Parameter DRO Surrogate Flag	Flag	QC Preparat	tion: 2007- MDL Result <10.7	-11-09	mg _/ Spike	Prepar its /Kg Percent	red By: RM RL <u>50</u> Recovery
QC Batch: 42923 Prep Batch: 37035 Parameter DRO Surrogate Flag n-Triacontane	Flag Result	QC Preparat Units	tion: 2007- MDL Result <10.7 Dilution 1 ed: 2007-	-11-09	mg, Spike Amount	Prepar its /Kg Percent Recovery 142	red By: RM RL 50 Recovery Limits 62.5 - 164 ed By: MM
QC Batch: 42923 Prep Batch: 37035 Parameter DRO Surrogate Flag n-Triacontane Method Blank (1) QC Batch: 43036 Prep Batch: 37134	Flag Result 213 atch: 43036	QC Preparat Units mg/Kg Date Analyze	tion: 2007- MDL Result <10.7 Dilutio 1 ed: 2007- ion: 2007- MDL	-11-09 on -11-10	mg, Spike Amount 150	Prepar its /Kg Percent Recovery 142 Analyz Prepar	red By: RM RL 50 Recovery Limits 62.5 - 164 ed By: MM ed By: MM
QC Batch: 42923 Prep Batch: 37035 Parameter DRO Surrogate Flag n-Triacontane Method Blank (1) QC Ba QC Batch: 43036	Flag Result 213	QC Preparat Units mg/Kg Date Analyze	tion: 2007- MDL Result <10.7 Dilution 1 ed: 2007- ion: 2007-	-11-09 on -11-10	mg, Spike Amount	Prepar its /Kg Percent Recovery 142 Analyz Prepar its	red By: RM RL 50 Recovery Limits 62.5 - 164 ed By: MM

QC Batch:	43037	Date Analyzed:	2007-11-10	Analyzed By:	$\mathbf{M}\mathbf{M}$
Prep Batch:	37135	QC Preparation:	2007-11-09	Prepared By:	MM

 23 Spike recovery outside control limits but within method limits. ullet

		MDL		
Parameter	Flag	Result	Units	RL
Chloride		<3.25	mg/Kg	5

Laboratory Control Spike (LCS-1)

QC Batch: Prep Batch:	$42877 \\ 36996$				L-08 L-08		ed By: KB ed By: KB	
-		·	-				-	v
		LCS			\mathbf{Spike}	Matrix		Rec.
\mathbf{Param}		Result	Units	Dil.	Amount	Result	Rec.	Limit
GRO		7.86	mg/Kg	1	10.0	< 0.459	79	78.7 - 108
Percent recov	very is based on th	he spike result. RPI) is based on	the spike	and spike dup	olicate result.		

	LCSD			Spike	Matrix		Rec.		RPD
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
GRO	8.68	m mg/Kg	1	10.0	< 0.459	87	78.7 - 108	10	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCS	LCSD			Spike	LCS	LCSD	Rec.
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
Trifluorotoluene (TFT)	0.895	0.900	mg/Kg	1	1.00	90	90	83.7 - 110
4-Bromofluorobenzene (4-BFB)	0.762	0.758	m mg/Kg	1	1.00	76	76	74.4 - 107

Laboratory Control Spike (LCS-1)

QC Batch:	42922	Date Analyzed:	2007-11-09	Analyzed By:	$\mathbf{R}\mathbf{M}$
Prep Batch:	37034	QC Preparation:	2007-11-09	Prepared By:	$\mathbf{R}\mathbf{M}$

	\mathbf{LCS}			Spike	Matrix		Rec.
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit
DRO	278	m mg/Kg	1	250	<10.7	111	64.1 - 124

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			Spike	Matrix		Rec.		RPD
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
DRO	266	m mg/Kg	1	250	< 10.7	106	64.1 - 124	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCS	LCSD			\mathbf{Spike}	LCS	LCSD	Rec.
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
n-Triacontane	188	195	mg/Kg	1	150	125	130	62.5 - 164

Laboratory Control Spike (LCS-1)

QC Batch:	42923	Date Analyzed:	2007-11-09	Analyzed By:	$\mathbf{R}\mathbf{M}$
Prep Batch:	37035	QC Preparation:	2007-11-09	Prepared By:	RM

		LCS	5			Spike	Mat	trix		Rec.
Param		Resu		Units	Dil.	Amount	Res		c.	Limit
DRO		254	r	ng/Kg	1	250	<1	0.7 10	2 64	1.1 - 124
Percent recovery is ba	ased on the sp	ike result.	RPD is	based on	the spike a	and spike du	plicate	result.		
		LCSD			Spike	Matrix		Rec.		RPD
Param		Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
DRO		255	mg/Kg		250	<10.7	102	64.1 - 124	0	20
Percent recovery is ba	ased on the sp	ike result.	RPD is	based on	the spike a	and spike du	iplicate	result.		
	LCS	LCSD				Spike	LCS			Rec.
Surrogate	Result	Result		Jnits	Dil.	Amount	Rec			Limit
n-Triacontane	196	199	m	g/Kg	1	150	131	. 133	62	2.5 - 164
Laboratory Contro QC Batch: 43036 Prep Batch: 37134	l Spike (LC		Date An QC Prej	alyzed: paration:	2007-11-1 2007-11-0				alyzed By pared By	
		LCS	3			Spike	Mat	trix		Rec.
Param		Resu		Units	Dil.	Amount	Res			Limit
Chloride		99.3	s r	ng/Kg	1	100	<3	.25 9) 90	5.1 - 103
Percent recovery is ba	ased on the sp	ike result.	RPD is	based on	the spike a	nd spike du	plicate	result.		
		LCSD			Spike	Matrix		Rec.		RPD
Param		Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Chloride		102	mg/Kg	1	100	<3.25	102	96.1 - 103	3	20
Laboratory Contro QC Batch: 43037 Prep Batch: 37135	l Spike (LC	,	Date An QC Prep	alyzed: paration:	2007-11-1 2007-11-0		-		alyzed By pared By	
		LCS	5			Spike	Mat	trix		Rec.
Param		Resu		Units	Dil.	Amount	Res		с.	Limit
Chloride		98.6	i r	ng/Kg	1	100	<3	.25 9) 90	5.1 - 103
Percent recovery is ba	ased on the sp	ike result.	RPD is	based on	the spike a	and spike du	plicate	result.		
		LCSD			Spike	Matrix		Rec.		RPD
Param		Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Chloride		100	mg/Kg	1	100	<3.25	100	96.1 - 103	1	20
Percent recovery is ba	ased on the sp	ike result.	RPD is	based on	the spike a	nd spike du	plicate	result.		
Matrix Spike (MS-	1) Spiked	Sample: 14	2228							
QC Batch: 42877			Date A	nalyzed:	2007-11-0	08		Ar	alyzed B.	y: KB
Prep Batch: 36996			QC Pre	paration:	2007-11-0	08		\Pr	epared B	: KB

		MS	3			Spil	e M	atrix			Rec.
Param		Rest	ılt	Units	Dil.	Amou		esult	Rec.		Limit
GRO		10.	1 1	m mg/Kg	1	10.0) <(0.459	101	51	.3 - 130
Percent recovery is based	on the spil	æ result.	RPD is	based or	n the spike a	and spil	e duplicat	e result.			
		MSD			Spike	Mati	ix	R	ec.		RPD
Param		Result	Units	Dil.	Amount	Resu	lt Rec.	Li	mit	RPD	Limit
GRO		16.2	mg/Kg	; 1	12.5	< 0.4	59 130	51.3	- 130	46	19.6
Percent recovery is based	on the spil	æ result.	RPD is	based or	n the spike a	and spil	e duplicat	e result.			
		MS	5 N	1SD			Spike	$_{\mathrm{MS}}$	MSI)	Rec.
Surrogate		Resu		esult	Units	Dil.	Amount	Rec.	Rec		Limit
Trifluorotoluene (TFT)		0.93	7 1		mg/Kg	1	1	94	122	56	.1 - 124
4-Bromofluorobenzene (4-	·BFB)	1.04			mg/Kg	1	1	104	143		.1 - 146
Matrix Spike (MS-1) QC Batch: 42922 Prep Batch: 37034	Spiked S	ample: 14	Date A	nalyzed: eparation	2007-11- : 2007-11-					yzed By ared By	
		М	C			Spil	70 M	latrix			Rec.
Param		Res		Units	Dil.	Amo		esult	Rec.		Limit
DRO	24	16		mg/Kg	1	25		(10.7	66		1.5 - 127
2100				-1 -							
Percent recovery is based	on the spik	te result.	NFD IS	based of	i the spike a	anu spn	le uuphcav	- -			
Percent recovery is based	on the spik		NFD 18	based of	-	-	-				RPD
	on the spil	MSD	Units		Spike	Mat	rix	R	ec. mit	RPD	RPD Limit
Param	on the spik		Units	Dil.	-	Mat	rix 1lt Rec.	R Li	.ec.	RPD 30	
Param DRO	25	MSD Result 222	Units mg/K	$\frac{1}{g}$ Dil.	Spike Amount 250	Mat Res <10	rix 1lt Rec. 0.7 89	R Li 47.5	ec. mit - 127		Limit
Param DRO	25 on the spik	MSD Result 222 æ result.	Units mg/K RPD is	$\frac{1}{g}$ Dil.	Spike Amount 250	$\frac{Mat}{Res}$ <10 and spil	rix <u>1lt Rec.</u> 0.7 89 æ duplicate	R Li 47.5 e result.	ec. mit - 127		Limit 20
Param DRO Percent recovery is based	25 on the spik MS	MSD Result 222 æ result. MSD	Units mg/K RPD is	$\frac{1}{g}$ Dil. $\frac{1}{based or}$	Spike Amount 250 n the spike a	Mat Res <10 and spil Spil	rix 11t Rec. 0.7 89 te duplicate te M	R Li 47.5 e result. MS	ec. mit - 127 MSD	30	Limit 20 Rec.
Percent recovery is based Param DRO Percent recovery is based Surrogate n-Triacontane	25 on the spik	MSD Result 222 æ result.	Units mg/K RPD is t	$\frac{1}{g}$ Dil.	Spike Amount 250	$\frac{Mat}{Res}$ <10 and spil	rix <u>ult Rec.</u> 0.7 89 ce duplicato ce M unt R	R Li 47.5 e result.	ec. mit - 127	30	Limit 20
Param DRO Percent recovery is based Surrogate	25 on the spik MS Result 129	MSD Result 222 æ result. MSD Resul	Units mg/K RPD is t n	g Dil. g 1 based or Units	Spike Amount 250 1 the spike a Dil.	Mat Res <10 and spil Spil Amo	rix <u>ult Rec.</u> 0.7 89 ce duplicato ce M unt R	R Li 47.5 e result. MS Lec.	ec. mit - 127 MSD Rec.	30	Limit 20 Rec. Limit
Param DRO Percent recovery is based Surrogate n-Triacontane Matrix Spike (MS-1)	25 on the spik MS Result 129	MSD Result 222 te result. MSD Resul 139	Units mg/K RPD is t 42240	g Dil. g 1 based or Units	Spike Amount 250 n the spike a Dil. 1	Mat Res <10 and spil Spil Amo 150	rix <u>ult Rec.</u> 0.7 89 ce duplicato ce M unt R	R Li 47.5 e result. MS Lec.	ec. mit - 127 MSD Rec. 93	30	Limit 20 Rec. Limit .5 - 164
Param DRO Percent recovery is based Surrogate n-Triacontane Matrix Spike (MS-1)	25 on the spik MS Result 129	MSD Result 222 te result. MSD Resul 139	Units mg/K RPD is t 42240 Date A	$\frac{5 \text{ Dil.}}{\text{g} 1}$ based or $\frac{\text{Units}}{\text{ng/Kg}}$ nalyzed:	Spike Amount 250 n the spike a Dil. 1	Mat Res <10 and spil Amo 150	rix <u>ult Rec.</u> 0.7 89 ce duplicato ce M unt R	R Li 47.5 e result. MS Lec.	ec. mit - 127 MSD Rec. 93 Analy	30 62	Limit 20 Rec. Limit .5 - 164
Param DRO Percent recovery is based Surrogate n-Triacontane Matrix Spike (MS-1) QC Batch: 42923	25 on the spik MS Result 129	MSD Result 222 te result. MSD Resul 139	Units mg/K RPD is t 42240 Date A QC Pre	$\frac{5 \text{ Dil.}}{\text{g} 1}$ based or $\frac{\text{Units}}{\text{ng/Kg}}$ nalyzed:	Spike Amount 250 n the spike a Dil. 1 2007-11-	Mat Res <10 and spil Amo 150 09 09	rix ult Rec. 0.7 89 ce duplicato ce N unt R	R Li 47.5 e result. MS Lec.	ec. mit - 127 MSD Rec. 93 Analy	30 62 yzed By	Limit 20 Rec. Limit .5 - 164
Param DRO Percent recovery is based Surrogate n-Triacontane Matrix Spike (MS-1) QC Batch: 42923	25 on the spik MS Result 129	MSD Result 222 & result. MSD Resul 139 ample: 14	Units mg/K RPD is t n 42240 Date A: QC Pre	$\frac{5 \text{ Dil.}}{\text{g} 1}$ based or $\frac{\text{Units}}{\text{ng/Kg}}$ nalyzed:	Spike Amount 250 n the spike a Dil. 1 2007-11-	Mat Res <10 and spil Amo 150	rix <u>ult Rec.</u> 0.7 89 ce duplicator ce M <u>unt R</u> 0 0	R Li 47.5 e result. MS Sec. 86	ec. mit - 127 MSD Rec. 93 Analy	30 62 yzed By ared By	Limit 20 Rec. Limit .5 - 164 : RM : RM

 $^{^{24}\}mathrm{MS/MSD}$ RPD out of RPD Limits. Use LCS/LCSD to demonstrate analysis is under control. Sample received out of hold time $^{25}\mathrm{MS/MSD}$ RPD out of RPD Limits. Use LCS/LCSD to demonstrate analysis is under control. Sample received out of hold time $^{26}\mathrm{Sample}$ received out of hold time

matrix spikes continued.	•									
D		MSD	TT	D.11	Spike	Matrix	D	Rec.	DDD	RPD
Param		Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
		MSD			Spike	Matrix		Rec.		RPD
Param		Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
ORO	27	201	mg/Kg	1	250	< 10.7	80	47.5 - 127	5	20
Percent recovery is based	on the spi	ke result.	RPD is b	based on	the spike a	nd spike du	plicate r	esult.		
	MS	MSD				Spike	MS	MSE)	Rec.
Surrogate	Result	Result	: U	Inits	Dil.	Amount	Rec			Limit
n-Triacontane	175	170	m	g/Kg	1	150	117	113	6	2.5 - 164
QC Batch: 43036 Prep Batch: 37134			Date Ana QC Prep		2007-11-10 2007-11-09				lyzed By bared By	
		MS	5			Spike	Ma	trix		Rec.
Param		Resu		Units	Dil.	Amount			ec.	Limit
Chloride		480) r	ng/Kg	10	500	<3	2.5 9	2	80 - 120
Percent recovery is based	on the spi	ke result.	RPD is b	pased on	the spike ar	nd spike du	plicate r	esult.		
		MSD			Spike	Matrix		Rec.		RPD
Param		Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Chloride		507	mg/Kg	10	500	$<\!32.5$	97	80 - 120	6	20
Percent recovery is based Matrix Spike (MS-1) QC Batch: 43037	-	Sample: 14			the spike ar 2007-11-1(-	plicate r		lyzed B	7: MM
Prep Batch: 37135			QC Prep		2007-11-0				pared By	
		MS	5			Spike	Ma	trix		Rec.
Param		Resu		Units	Dil.	Amount			ec.	Limit
Chloride		506	3 r	ng/Kg	10	500	<3	2.5 9)5	80 - 120
Percent recovery is based	on the spi	ke result.	RPD is b	based on	the spike a	nd spike du	plicate r	esult.		
		MSD			Spike	Matrix		Rec.		RPD
Param		Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Chloride		476	mg/Kg	10	500	<32.5	89	80 - 120	6	20
Percent recovery is based	on the spi	ke result.	RPD is b	pased on	the spike a	nd spike du	plicate r	esult.		

Standard (ICV-1)

QC Batch: 42877

Date Analyzed: 2007-11-08

Analyzed By: KB

²⁷Sample received out of hold time

			ICVs True	${ m ICVs}$ Found	ICVs Percent	Percent Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
GRO	Plag	mg/Kg	1.00	0.882	88	85 - 115	2007-11-08
9110		mg/ Kg	1.00	0.882	00	00 - 110	2007-11-03
Standard	(CCV-1)						
QC Batch:	42877		Date Ana	alyzed: 2007-1	1-08	Ana	yzed By: KB
			CCVs	CCVs	CCVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
GRO		mg/Kg	1.00	0.876	88	85 - 115	2007-11-08
Standard	(CCV-1)						
QC Batch:	42922		Date Ana	alyzed: 2007-1	1-09	Anal	yzed By: RM
			CCVs	CCVs	CCVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
DRO	0	m mg/Kg	250	269	108	85 - 115	2007-11-09
Standard	(CCV-2)						
QC Batch:	42922		Date Ana	alyzed: 2007-1	1-09	Anal	yzed By: RM
			CCVs	CCVs	CCVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
DRO		m mg/Kg	250	259	104	85 - 115	2007-11-09
Standard	(ICV-1)						
QC Batch:			Date Ana	alyzed: 2007-1	1-09	Anal	yzed By: RM
			ICVs	ICVs	ICVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
DRO		mg/Kg	250	253	101	85 - 115	2007-11-09
Standard	(CCV-1)						
QC Batch:	. ,		Date Ana	alyzed: 2007-1	1-09	Anal	yzed By: RM
•	-			U			v v -··-
			CCVs	CCVs Found	CCVs	Percent	
Damant	D 1 ~ · ·	TT-st-	True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
DRO		m mg/Kg	250	254	102	85 - 115	2007-11-09

Standard (ICV-1)

QC Batch:	43036		Date Anal	yzed: 2007-11	-10	Analy	zed By: MM
			ICVs	ICVs	ICVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Chloride		mg/Kg	100	98.4	98	85 - 115	2007-11-10
Standard	(CCV-1)						
QC Batch:	43036		Date Anal	yzed: 2007-11	-10	Analy	zed By: MM
			CCVs	CCVs	CCVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Chloride	-	mg/Kg	100	102	102	85 - 115	2007-11-10
	(ICV-1)						
Standard QC Batch:	. ,		Date Anal	yzed: 2007-11	-10	Analy	zed By: MM
Standard	. ,			,		•	zed By: MM
Standard	. ,		Date Anal ICVs True	yzed: 2007-11 ICVs Found	-10 ICVs Percent	Percent	zed By: MM Date
Standard	. ,	Units	ICVs	ICVs	ICVs	•	
Standard QC Batch:	43037	Units mg/Kg	ICVs True	ICVs Found	ICVs Percent	Percent Recovery	Date
Standard QC Batch: Param	43037 Flag		ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Standard QC Batch: Param Chloride	43037 Flag (CCV-1)		ICVs True Conc. 100	ICVs Found Conc.	ICVs Percent Recovery 100	Percent Recovery Limits 85 - 115	Date Analyzed
Standard QC Batch: Param Chloride Standard	43037 Flag (CCV-1)		ICVs True Conc. 100	ICVs Found Conc. 100	ICVs Percent Recovery 100	Percent Recovery Limits 85 - 115	Date Analyzed 2007-11-10
Standard QC Batch: Param Chloride Standard	43037 Flag (CCV-1)		ICVs True Conc. 100 Date Anal	ICVs Found Conc. 100 yzed: 2007-11	ICVs Percent Recovery 100	Percent Recovery Limits 85 - 115 Analy	Date Analyzed 2007-11-10
Standard QC Batch: Param Chloride Standard	43037 Flag (CCV-1)		ICVs True Conc. 100 Date Anal CCVs	ICVs Found Conc. 100 yzed: 2007-11 CCVs	ICVs Percent Recovery 100 -10 CCVs	Percent Recovery Limits 85 - 115 Analy Percent	Date Analyzed 2007-11-10

Summary Report

Scott Branson SB Weed Control & Transport 213 S Mesa Carlsbad, NM, 88220

Report Date: November 14, 2007



Project Location: City of Carlsbad, NM Project Name: Violet St. & Center St.

			Date	Time	Date
Sample	Description	Matrix	Taken	Taken	Received
142230	B23	soil	2007-10-10	17:00	2007-11-08
142231	$\mathbf{B24}$	soil	2007-10-10	17:30	2007-11-08
142232	B25	soil	2007-10-10	10:00	2007-11-08
142233	B26	soil	2007-10-10	10:30	2007-11-08
142234	B27	soil	2007-10-10	11:00	2007-11-08
142235	B28	soil	2007-10-10	11:30	2007-11-08
142236	B29	soil	2007-10-10	12:00	2007-11-08
142237	$\mathbf{B30}$	soil	2007-10-10	12:30	2007-11-08
142238	B31	soil	2007-10-10	13:00	2007-11-08
142239	B32	soil	2007-10-10	13:30	2007-11-08
142240	B33	soil	2007-10-10	11:00	2007-11-08

	TPH DRO	TPH GRO
	DRO	GRO
Sample - Field Code	(mg/Kg)	(mg/Kg)
142230 - B23	<50.0	<1.00
142231 - B24	<50.0	<1.00
142232 - B25	<50.0	<1.00
142233 - B26	<50.0	<1.00
142234 - B27	<50.0	<1.00
142235 - B28	<50.0	<1.00
142236 - B29	<50.0	<1.00
142237 - B30	<50.0	<1.00
142238 - B31	< 50.0	<1.00
142239 - B32	< 50.0	<1.00
142240 - B33	<50.0	<1.00

Sample: 142230 - B23

Param	Flag	Result	Units	\mathbf{RL}
Chloride		<50.0	mg/Kg	5.00

Sample: 142231 - B24

Report Date: Noveml	ber 14, 2007	Work Order: 7110823 Violet St. & Center St.		e Number: 2 of 3 of Carlsbad, NM
Param	Flag	Result	Units	RL
Chloride		<50.0	m mg/Kg	5.00
Sample: 142232 - I	325			
Param	Flag	Result	Units	\mathbf{RL}
Chloride		<50.0	mg/Kg	5.00
Sample: 142233 - I	326			
Param	Flag	Result	Units	RL
Chloride		<50.0	mg/Kg	5.00
Sample: 142234 - I	327			
Param	Flag	Result	Units	RL
Chloride		<50.0	m mg/Kg	5.00
Sample: 142235 - I	328			
Param	Flag	Result	Units	RL
Chloride		<50.0	mg/Kg	5.00
Sample: 142236 - I	329			
Param	Flag	Result	Units	\mathbf{RL}
Chloride		<50.0	m mg/Kg	5.00
Sample: 142237 - I	330			
Param	Flag	Result	Units	RL
Chloride		<50.0	m mg/Kg	5.00
Sample: 142238 - I	331			
Param	Flag	Result	Units	RL
Chloride	0	<50.0	mg/Kg	5.00
Sample: 142239 - I	332			
Param	Flag	Result	Units	RL
Chloride	0	<50.0		

Report Date: November 14, 2007		Work Order: 7110823 Violet St. & Center St.			
Sample: 142240 ·	- B33				
Param	Flag	Result	Units	RL	
Chloride		<50.0	m mg/Kg	5.00	

Summary Report

Scott Branson SB Weed Control & Transport 213 S Mesa Carlsbad, NM, 88220

Report Date: November 14, 2007



Project Location: City of Carlsbad, NM Project Name: Violet St. & Center St.

			Date	Time	Date
Sample	Description	Matrix	Taken	Taken	Received
142219	B12	soil	2007-10-08	18:30	2007-11-08
142220	B13	soil	2007-10-09	12:00	2007-11-08
142221	B14	soil	2007-10-09	12:30	2007-11-08
142222	B15	soil	2007-10-09	13:00	2007-11-08
142223	B16	soil	2007-10-09	13:30	2007-11-08
142224	B17	soil	2007-10-09	14:00	2007-11-08
142225	B18	soil	2007-10-09	14:30	2007-11-08
142226	B19	soil	2007-10-09	15:00	2007-11-08
142227	$\mathbf{B20}$	soil	2007-10-09	15:30	2007-11-08
142228	B21	soil	2007-10-09	16:00	2007 - 11 - 08
142229	B22	soil	2007-10-09	16:30	2007 - 11 - 08

	TPH DRO	TPH GRO
	DRO	GRO
Sample - Field Code	(mg/Kg)	(mg/Kg)
142219 - B12	<50.0	<1.00
142220 - B13	<50.0	<1.00
142221 - B14	<50.0	<1.00
142222 - B15	<50.0	<1.00
142223 - B16	<50.0	<1.00
142224 - B17	<50.0	<1.00
142225 - B18	<50.0	<1.00
142226 - B19	<50.0	<1.00
142227 - B20	< 50.0	<1.00
142228 - B21	<50.0	<1.00
142229 - B22	< 50.0	<1.00

Sample: 142219 - B12

Param	\mathbf{Flag}	Result	Units	RL
Chloride		<50.0	mg/Kg	5.00

Sample: 142220 - B13

Report Date: November 14, 2007		Work Order: 7110822 Violet St. & Center St.		Page Number: 2 of 3 City of Carlsbad, NM	
Param	Flag	Result	Units	RL	
Chloride		<50.0	m mg/Kg	5.00	
Sample: 142221 - B1	4				
Param	Flag	Result	Units	RL	
Chloride		<30.0	mg/Kg	5.00	
Sample: 142222 - B1	5				
Param	\mathbf{Flag}	Result	Units	RL	
Chloride		<50.0	mg/Kg	5.00	
Sample: 142223 - B1	6				
Param	Flag	Result	Units	RL	
Chloride		<30.0	m mg/Kg	5.00	
Sample: 142224 - B1	7				
Param	Flag	Result	Units	RL	
Chloride		<50.0	mg/Kg	5.00	
Sample: 142225 - B1	8				
Param	\mathbf{Flag}	Result	Units	RL	
Chloride		<30.0	m mg/Kg	5.00	
Sample: 142226 - B1	9				
Param	Flag	Result	Units	RL	
Chloride		<50.0	mg/Kg	5.00	
Sample: 142227 - B2	0				
Param	Flag	Result	Units	RL	
Chloride	0	<50.0	mg/Kg	5.00	
Sample: 142228 - B2	1				
Param	Flag	Result	Units	RL	
Chloride		<50.0	m mg/Kg	5.00	

Report Date: November 14, 2007		Work Order: 7110822 Violet St. & Center St.		
Sample: 142229 ·	- B22			
Param	Flag	Result	Units	RL
Chloride		<50.0	m mg/Kg	5.00



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Analytical and Quality Control Report

Scott Branson SB Weed Control & Transport 213 S Mesa Carlsbad, NM, 88220

Report Date: November 14, 2007

7110823 Work Order:

Project Location: City of Carlsbad, NM **Project Name:** Violet St. & Center St. Violet St. & Center St. Project Number:

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

			Date	Time	Date
Sample	Description	Matrix	Taken	Taken	Received
142230	B23	soil	2007-10-10	17:00	2007-11-08
142231	B24	soil	2007-10-10	17:30	2007 - 11 - 08
142232	B25	soil	2007-10-10	10:00	2007 - 11 - 08
142233	B26	soil	2007-10-10	10:30	2007 - 11 - 08
142234	B27	soil	2007-10-10	11:00	2007 - 11 - 08
142235	B28	soil	2007-10-10	11:30	2007 - 11 - 08
142236	B29	soil	2007-10-10	12:00	2007-11-08
142237	B3 0	soil	2007-10-10	12:30	2007-11-08
142238	B31	soil	2007-10-10	13:00	2007 - 11 - 08
142239	B32	soil	2007-10-10	13:30	2007 - 11 - 08
142240	B33	soil	2007-10-10	11:00	2007 - 11 - 08

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 18 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Michael alm

Dr. Blair Leftwich, Director

Standard Flags

 $\,B\,$ - The sample contains less than ten times the concentration found in the method blank.

Analytical Report

Sample: 142230 - B23

Analysis: QC Batch: Prep Batch:	Chloride (Titration) 43036 37134	Analytical Method: Date Analyzed: Sample Preparation	2007 - 11 - 10	Prep Method: Analyzed By: Prepared By:	1
		RL			
Parameter	Flag	Result	Units	Dilution	RL
Chloride		<50.0	mg/Kg	10	5.00

Sample: 142230 - B23

Analysis: QC Batch:	TPH DRO 42922		Analytical Me Date Analyze		8015B 11-09	-	fethod: N/A ed By: RM
Prep Batch:	37034		Sample Prepa	ration: 2007-1	11-09	Prepar	ed By: RM
			\mathbf{RL}				
Parameter	Flag	5	Result	Ur	nits	Dilution	RL
DRO	1		< 50.0	mg/	Kg	1	50.0
Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontan	0	171	mg/Kg	1	150	114	62.5 - 164

Sample: 142230 - B23

Analysis: QC Batch: Prep Batch:	TPH GRO 42877 36996		Analytical Date Analy Sample Pr	yzed:	S 8015B 2007-11-08 2007-11-08		Prep Meth Analyzed Prepared 1	By: KB
			RL					
Parameter	Flag		Result		Units	D	vilution	RL
GRO	2		<1.00		m mg/Kg		1	1.00
						Spike	Percent	Recovery
Surrogate		Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotolu	ene (TFT)		1.02	mg/Kg	1	1.00	102	34.1 - 161
4-Bromofluor	cobenzene (4-BFB)		0.903	m mg/Kg	1	1.00	90	31.8 - 159

Sample: 142231 - B24

Analysis: QC Batch: Prep Batch:	Chloride (Titration) 43037 37135	Analytical Method: Date Analyzed: Sample Preparation	2007-11-10	Prep Method: Analyzed By: Prepared By:	$\dot{\mathrm{MM}}$
		RL			
Parameter	Flag	Result	Units	Dilution	\mathbf{RL}
Chloride		<50.0	mg/Kg	10	5.00

 $^1 \, {\rm Sample}$ received out of hold time $^2 \, {\rm Sample}$ ran out of hold time per client's request. \bullet

Sample: 142231 - B24

Analysis: QC Batch: Prep Batch:	TPH DRO 42922 37034		Analytical Me Date Analyze Sample Prepa	d: 20	od. 8015B 07-11-09 07-11-09	Analyz	fethod: N/A ed By: RM ed By: RM
			RL				
Parameter	Flag	r 5	Result		Units	Dilution	RL
DRO	3		< 50.0	r	ng/Kg	1	50.0
					\mathbf{Spike}	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	a Amount	Recovery	Limits
n-Triacontan	e	203	m mg/Kg	1	150	135	62.5 - 164

Sample: 142231 - B24

Analysis: QC Batch: Prep Batch:	TPH GRO 42877 36996		Analytical Date Anal Sample Pr		S 8015B 2007-11-08 2007-11-08		Prep Meth Analyzed Prepared 1	By: KB
			\mathbf{RL}					
Parameter	Flag		Result		Units	D	ilution	RL
GRO	4		<1.00		m mg/Kg		1	1.00
Surrogate		Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotolu	ene (TFT)		1.10	mg/Kg	1	1.00	110	34.1 - 161
4-Bromofluor	robenzene (4-BFB)		0.973	mg/Kg	1	1.00	97	31.8 - 159

Sample: 142232 - B25

Analysis: QC Batch: Prep Batch:	Chloride (Titration) 43037 37135	Analytical Met Date Analyzed Sample Prepar		Prep Metho Analyzed By Prepared By	r: MM
		RL			
Parameter	Flag	Result	Units	Dilution	RL
Chloride		<50.0	m mg/Kg	10	5.00

Sample: 142232 - B25

Analysis: QC Batch: Prep Batch:	TPH DRO 42922 37034	Analytical Method: Date Analyzed: Sample Preparation:	Mod. 8015B 2007-11-09 2007-11-09	Prep Method: Analyzed By: Prepared By:	,
		RL			
Parameter	Flag	Result	Units	Dilution	RL
DRO	5	<50.0	m mg/Kg	1	50.0

³Sample received out of hold time

⁴Sample ran out of hold time per client's request. • ⁵Sample received out of hold time

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		207	mg/Kg	1	150	138	62.5 - 164

Sample: 142232 - B25

Analysis: QC Batch: Prep Batch:	TPH GRO 42877 36996		Analytical Date Anal Sample Pr		S 8015B 2007-11-08 2007-11-08		Prep Met Analyzed Prepared	l By: F	5 5035 KB KB
Parameter GRO	Flag 6		RL Result <1.00		Units mg/Kg		Dilution 1		RL 1.00
Surrogate Trifluorotolu	ene (TFT)	Flag	Result 1.17	Units mg/Kg	Dilutior	Spike n Amount 1.00	Percent Recovery 117	Li	overy mits - 161
	robenzene (4-BFB)		1.05	mg/Kg	1	1.00	105	31.8	- 159
Sample: 14 Analysis:	Chloride (Titratio	n)	v	tical Metho		00-C1 B	Prep M		N/A
QC Batch: Prep Batch:	$43037 \\ 37135$			Analyzed: e Preparati	2007-1 on: 2007-1		Analyz Prepar		$\begin{array}{c} \mathrm{MM} \\ \mathrm{MM} \end{array}$
			RL						
Parameter	Flag		Result		Units		Dilution		RL
Chloride			<50.0		mg/Kg		10		5.00
Sample: 14	2233 - B26								
Analysis:	TPH DRO		Analytical		Mod. 801		${\rm Prep}~{\rm N}$		N/A
QC Batch:	42922		Date Anal		2007-11-09		Analyz		RM DM
Prep Batch:	37034		-	reparation:	2007-11-09	9	Prepar	ea By:	$\mathbf{R}\mathbf{M}$
Parameter	Flag		RL Result		Units		Dilution		RL
DRO	7		<50.0		mg/Kg		1		50.0
G	173	Dech	T7 •	17.11		Spike	Percent		overy
Surrogate n-Triacontan	Flag	Result 188	Units mg/Kg		ution 1	Amount 150	Recovery 125		mits - 164
n-1riacontan	e	199	mg/Kg		T	190	120	02.0	- 104

Sample: 142233 - B26

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	42877	Date Analyzed:	2007-11-08	Analyzed By:	KB
Prep Batch:	36996	Sample Preparation:	2007-11-08	Prepared By:	KB

⁶Sample ran out of hold time per client's request. • ⁷Sample received out of hold time

62.5 - 164

			RL						
Parameter	Flag		Result		Units		Dilution		RL
GRO	8		<1.00		m mg/Kg		1		1.00
						Spike	Percent	Rec	overy
Surrogate		Flag	Result	Units	Dilution	Amount	Recovery	Li	mits
Trifluorotolu	iene (TFT)		1.03	mg/Kg	1	1.00	103	34.1	- 161
4-Bromofluo	robenzene (4-BFB)		0.938	mg/Kg	1	1.00	94	31.8	3 - 159
Sample: 14	12234 - B27								
Analysis:	Chloride (Titration)		Analyt	ical Method	: SM 4500-	Cl B	Prep M	ethod:	N/A
QC Batch:	43037			analyzed:	2007-11-1	0	Analyze	d By:	ŃМ
Prep Batch:	37135		Sample	e Preparatio	n: 2007-11-0	9	Prepare	d By:	MM
			RL						
Parameter	Flag		Result		Units		Dilution		RL
Chloride			<50.0		m mg/Kg		10		5.00
Sample: 14	12234 - B27								
Analysis:	TPH DRO		Analytical	Method:	Mod. 8015B		$\operatorname{Prep}\mathrm{Me}$	ethod:	N/A
QC Batch:	42922		Date Anal	yzed:	2007-11-09		Analyze	d By:	RM
Prep Batch:	37034		Sample Pr	eparation:	2007-11-09		Prepare	d By:	RM
i iep baten.									
-			RL						
Parameter	Flag		Result		Units		Dilution		RL
-	Flag 9				Units mg/Kg		Dilution 1		RL 50.0
Parameter	9	Result	Result	Dilut	mg/Kg	pike nount			

Sample: 142234 - B27

n-Triacontane

Analysis: QC Batch: Prep Batch:	TPH GRO 42877 36996		Analytical Date Anal Sample Pr		S 8015B 2007-11-08 2007-11-08		Prep Meth Analyzed Prepared 1	By: KB
			RL					
Parameter	Flag		Result		Units	D	vilution	\mathbf{RL}
GRO	10		<1.00		m mg/Kg		1	1.00
Surrogate		Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotolu	ene (TFT)	1 145	1.06	mg/Kg	1	1.00	106	34.1 - 161
	cobenzene (4-BFB)		0.936	mg/Kg	1	1.00	94	31.8 - 159

1

150

125

⁸Sample ran out of hold time per client's request. •

188

 mg/Kg

⁹Sample received out of hold time ¹⁰Sample ran out of hold time per client's request. •

Sample: 142235 - B28

Analysis: QC Batch: Prep Batch:	Chloride (Titration) 43037 37135	Analytical Metho Date Analyzed: Sample Preparation	2007-11-10	Prep Method: Analyzed By: Prepared By:	MM
		RL			
Parameter	Flag	Result	Units	Dilution	RL
Chloride		< 50.0	m mg/Kg	10	5.00

Sample: 142235 - B28

Analysis: QC Batch: Prep Batch:	TPH DRO 42922 37034		Analytical Me Date Analyze Sample Prepa	d:	Mod. 8 2007-11 2007-11	-09	Prep M Analyz Prepar	0
			\mathbf{RL}					
Parameter	Flag	r 5	Result		Unit	s	Dilution	RL
DRO	11		<50.0		mg/K	g	1	50.0
						Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilu	tion	Amount	Recovery	Limits
n-Triacontan	e	215	m mg/Kg	1		150	143	62.5 - 164

Sample: 142235 - B28

Analysis: QC Batch: Prep Batch:	TPH GRO 42877 36996		Analytical Date Anal Sample Pr		S 8015B 2007-11-08 2007-11-08		Prep Meth Analyzed Prepared I	By: KB
			RL					
Parameter	Flag		Result		Units	D	ilution	RL
GRO	12		<1.00		m mg/Kg		1	1.00
						Spike	Percent	Recovery
Surrogate		\mathbf{F} lag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotolu	ene (TFT)		1.07	mg/Kg	1	1.00	107	34.1 - 161
4-Bromofluor	cobenzene (4-BFB)		0.960	m mg/Kg	1	1.00	96	31.8 - 159

Sample: 142236 - B29

Analysis: QC Batch: Prep Batch:	Chloride (Titration) 43037 37135	Analytical Method: Date Analyzed: Sample Preparation:	2007-11-10	Prep Method: Analyzed By: Prepared By:	\dot{MM}
D	171	RL	TT • ,		DI
Parameter	Flag	Result	Units	Dilution	RL
Chloride		<50.0	mg/Kg	10	5.00

 $^{11} {\rm Sample}$ received out of hold time $^{12} {\rm Sample}$ ran out of hold time per client's request. \bullet

Sample: 142236 - B29

Analysis: QC Batch: Prep Batch:	TPH DRO 42922 37034		Analytical Me Date Analyzee Sample Prepa	d: 2	fod. 8015B 007-11-09 007-11-09	O9Analyzed By:		ed By: RM
			\mathbf{RL}					
Parameter	Flag		Result		Units		Dilution	\mathbf{RL}
DRO	13		< 50.0		m mg/Kg		1	50.0
Surrogate	Flag	Result	Units	Dilutio		Spike mount	Percent Recovery	Recovery Limits
$\frac{\text{Suffogate}}{\text{n-Triacontan}}$	<u>v</u>	194		1		$\frac{1100000}{150}$	129	62.5 - 164
n-macontan	e	194	m mg/Kg	T		190	129	02.0 - 104

Sample: 142236 - B29

Analysis: QC Batch: Prep Batch:	TPH GRO 42877 36996		Analytical Date Anal Sample Pr		S 8015B 2007-11-08 2007-11-08		Prep Meth Analyzed Prepared	By: KB
			\mathbf{RL}					
Parameter	Flag		Result		Units	D	ilution	RL
GRO	14		<1.00		m mg/Kg		1	1.00
Surrogate		Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotolu	ene (TFT)		1.09	mg/Kg	1	1.00	109	34.1 - 161
4-Bromofluor	obenzene (4-BFB)		0.997	mg/Kg	1	1.00	100	31.8 - 159

Sample: 142237 - B30

Analysis: QC Batch: Prep Batch:	Chloride (Titration) 43037 37135	Analytical Met Date Analyzed Sample Prepar		Prep Metho Analyzed By Prepared By	r: MM
		\mathbf{RL}			
Parameter	Flag	Result	Units	Dilution	RL
Chloride		<50.0	m mg/Kg	10	5.00

Sample: 142237 - B30

Analysis: QC Batch: Prep Batch:	TPH DRO 42922 37034	Analytical Method: Date Analyzed: Sample Preparation:	Mod. 8015B 2007-11-09 2007-11-09	Prep Method: Analyzed By: Prepared By:	,
Parameter	Flag	$\operatorname{RL}_{\operatorname{Result}}$	Units	Dilution	RL
DRO	15	<50.0	mg/Kg	1	50.0

¹³Sample received out of hold time

¹⁴Sample ran out of hold time per client's request.
 ¹⁵Sample received out of hold time

					\mathbf{Spike}	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		198	mg/Kg	1	150	132	62.5 - 164

Sample: 142237 - B30

Analysis: QC Batch: Prep Batch:	TPH GRO 42877 36996		Analytical Date Anal Sample Pr		S 8015B 2007-11-08 2007-11-08		Prep Met Analyzed Prepared	By: 1	S 5035 KB KB
Parameter GRO	Flag 16		RL Result <1.00		Units mg/Kg		Dilution 1		RL 1.00
GRO			<1.00		mg/ Kg		L		1.00
Surrogate		Flag	Result	Units	Dilution	Spike Amount	Percent Recovery		covery mits
Trifluorotolu	ene (TFT)		1.09	mg/Kg	1	1.00	109		- 161
4-Bromofluor	robenzene (4-BFB)		0.995	mg/Kg	1	1.00	100	31.8	8 - 159
Sample: 14		,						r., 1. •	27/1
Analysis:	Chloride (Titratio	on)		tical Metho		00-Cl B	Prep M		N/A
QC Batch:	43037			Analyzed:	2007-1		Analyz		MM
Prep Batch:	37135		Sampi	e Preparati	on: 2007-1	1-09	Prepare	ea By:	MM
			RL						
Parameter	Flag		Result		Units		Dilution		RL
Chloride			<50.0		mg/Kg		10		5.00
Sample: 14 Analysis: QC Batch:	2238 - B31 TPH DRO 42922		Analytical Date Anal		Mod. 8015 2007-11-09		Prep M Analyz		N/A RM
Prep Batch:	37034			reparation:	2007-11-09		Prepare		RM
i tep Baten.	51051		-	ceparation.	2001-11-03		терач	cu by.	16101
Parameter	Flag		${ m RL} { m Result}$		Units		Dilution		RL
$\frac{1 \text{ arameter}}{\text{DRO}}$	17 Iag		<50.0		mg/Kg		1		50.0
			200.0		mg/ ng		T		00.0
Surrogate	Flag	Result	Units	Dir	ition	Spike Amount	Percent Recovery		covery mits
n-Triacontan		<u>194</u>	mg/Kg		1	150	129		$\frac{11115}{5 - 164}$
		194			-	100	123	02.0	, 101

Sample: 142238 - B31

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	42877	Date Analyzed:	2007-11-08	Analyzed By:	KB
Prep Batch:	36996	Sample Preparation:	2007-11-08	Prepared By:	KB

 $^{16}\mathrm{Sample}$ ran out of hold time per client's request. \bullet $^{17}\mathrm{Sample}$ received out of hold time

			RL					
Parameter	Flag		Result		Units		Dilution	RL
GRO	18	,	<1.00		mg/Kg		1	1.00
						<i>a</i>		
C I		151	D L	TT •	D.1.	Spike	Percent	Recovery
Surrogate		Flag	Result	Units	Dilution	Amount	v	Limits
Trifluorotolue		`	1.11	mg/Kg	1	1.00	111	34.1 - 161
4-Bromonuor	obenzene (4-BFB))	1.02	mg/Kg	1	1.00	102	31.8 - 159
Sample: 142	2239 - B32							
Analysis:	Chloride (Titrati	ion)	Analy	tical Metho	d: SM 450	00-Cl B	Prep M	lethod: N/A
QC Batch:	43037)		Analyzed:	2007-11		Analyz	,
Prep Batch:	37135			e Preparatio			Prepare	U U
			\mathbf{RL}					
Parameter	Flag		Result		Units		Dilution	RL
Chloride		·	<50.0		mg/Kg		10	5.00
Analysis: QC Batch: Prep Batch:	TPH DRO 42922 37034		Analytical Date Anal Sample Pr		Mod. 8015 2007-11-09 2007-11-09		Prep M Analyz Prepare	ed By: RM
тер васен.	51054		-	cparación.	2001-11-05		1 Tepare	a by. Itti
Deveryon	171		RL		TT		D:1	DI
Parameter DRO	Flag	\$ }	Result <50.0		Units		Dilution	RL 50.0
DRU			< 30.0		mg/Kg		1	50.0
						Spike	Percent	Recovery
Surrogate	\mathbf{Flag}	Result	Units	Dilu	tion	Amount	Recovery	Limits
n-Triacontane	9	204	mg/Kg]	1	150	136	62.5 - 164
Sample: 142	2239 - B32							
Applacia	TDU CDO		A nol-+:1	Moth - J.	C 2017D		Dron M-+	had. C TOPT
Analysis:	TPH GRO			Method:	S 8015B			hod: S 5035
QC Batch: Prep Batch:	42877 36996		Date Anal Sample Pr	yzed: reparation:	2007-11-08 2007-11-08		Analyzed Prepared	
r =			_	· T				J
D	T		RL		TT •-			БТ
Parameter CRO	Flag	· · · · · · · · · · · · · · · · · · ·	Result		Units		Dilution	RL
GRO	20		<1.00		mg/Kg		1	1.00
						Spike	Percent	Recovery

					Spike	Percent	$\operatorname{Recovery}$
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		1.14	mg/Kg	1	1.00	114	34.1 - 161
4-Bromofluorobenzene (4-BFB)		1.03	m mg/Kg	1	1.00	103	31.8 - 159

 $^{18}Sample$ ran out of hold time per client's request. \bullet $^{19}Sample$ received out of hold time $^{20}Sample$ ran out of hold time per client's request. \bullet

Sample: 142240 - B33

Analysis: QC Batch: Prep Batch:	Chloride (Titration) 43037 37135	Analytical Metho Date Analyzed: Sample Preparation	2007-11-10	Prep Method: Analyzed By: Prepared By:	MM
		RL			
Parameter	Flag	Result	Units	Dilution	RL
Chloride		< 50.0	m mg/Kg	10	5.00

Sample: 142240 - B33

TPH DRO 42923 37035		Date Analyze	d:	2007-11	-09	Analyz	C C
		\mathbf{RL}					
Flag		Result		Unit	s	Dilution	RL
21		<50.0		mg/K	g	1	50.0
Flag	Recult	Unite	Dilut	ion	Spike Amount	Percent	Recovery Limits
r tag			1	.1011	150	v	62.5 - 164
	42923 37035 Flag Flag	42923 37035 Flag 21 Flag Result	42923 Date Analyze 37035 Sample Prepa RL Result 21 <50.0	$\begin{array}{ccc} 42923 & & \text{Date Analyzed:} \\ 37035 & & \text{Sample Preparation:} \\ & & RL \\ \hline \\ Flag & Result \\ \hline \\ & & 21 \\ \hline \\ \hline \\ Flag & Result \\ \hline \\ & Units \\ \hline \end{array} \begin{array}{c} Dilut \\ Dilut \\ \hline \\ \end{array}$	$\begin{array}{cccc} 42923 & & Date Analyzed: & 2007-11 \\ 37035 & & Sample Preparation: & 2007-11 \\ & & RL \\ \hline \\ Flag & Result & Unit \\ \hline \\ Flag & Result & Units & Dilution \\ \end{array}$	$\begin{array}{cccc} 42923 & & Date Analyzed: & 2007-11-09 \\ 37035 & & Sample Preparation: & 2007-11-09 \\ \hline & RL & & & \\ \hline & Result & Units \\ \hline & & & & \\ \hline & & & & \\ \hline & & & & \\ \hline & & & &$	$\begin{array}{cccc} 42923 & {\rm Date \ Analyzed:} & 2007-11-09 & {\rm Analyz} \\ 37035 & {\rm Sample \ Preparation:} & 2007-11-09 & {\rm Preparation:} \\ & {\rm RL} & & \\ \hline & {\rm RL} & {\rm Units} & {\rm Dilution} \\ \hline & & & & \\ \hline & & & & \\ \hline & & & & \\ \hline & & & &$

Sample: 142240 - B33

Analysis: QC Batch: Prep Batch:	TPH GRO 42877 36996		Analytical Date Anal Sample Pr		S 8015B 2007-11-08 2007-11-08		Prep Meth Analyzed Prepared 1	By: KB
			RL					
Parameter	Flag		Result		Units	D	vilution	RL
GRO	22		<1.00		m mg/Kg		1	1.00
Surrogate		Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	$egin{array}{c} { m Recovery} \\ { m Limits} \end{array}$
Trifluorotolu	ene (TFT)	0	1.16	mg/Kg	1	1.00	116	34.1 - 161
	cobenzene (4-BFB)		1.08	mg/Kg	1	1.00	108	31.8 - 159

Method Blank (1) QC Batch: 42877

QC Batch: Prep Batch:		Date Analyzed: 2007 QC Preparation: 2007		Analyzed By: KB Prepared By: KB
		MDL		
Parameter	Flag	Result	Units	RL
GRO		< 0.459	mg/Kg	1

²¹Sample received out of hold time

 22 Sample ran out of hold time per client's request.

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	23		ng/Kg	1	1.00	<u>92</u>	96 - 115
4-Bromofluorobenzene (4-BFB)			mg/Kg	1	1.00	52 58	51.6 - 103
				-	1.00		01.0 100
Method Blank (1) QC Ba	atch: 42922						
QC Batch: 42922		Date Analyz		-11-09			zed By: RM
Prep Batch: 37034		QC Preparat	tion: 2007	-11-09		Prepa	red By: RM
			MDL				
Parameter	Flag		Result		Un		RL
DRO			<10.7		mg,	/Kg	50
					Spike	Percent	Recovery
Surrogate Flag	Result	Units	Dilutic	on	Amount	Recovery	Limits
n-Triacontane	195	m mg/Kg	1		150	130	62.5 - 164
Method Blank (1) QC Ba QC Batch: 42923 Prep Batch: 37035	atch: 42923	Date Analyz QC Preparat		-11-09 -11-09			zed By: RM ced By: RM
QC Batch: 42923 Prep Batch: 37035 Parameter	atch: 4 2923 Flag		tion: 2007- MDL Result		Un	Prepa	red By: RM RL
QC Batch: 42923 Prep Batch: 37035			tion: 2007- MDL		Un mg/	Prepa	red By: RM
QC Batch: 42923 Prep Batch: 37035 Parameter			tion: 2007- MDL Result	-11-09		Prepa	red By: RM RL 50 Recovery Limits
QC Batch: 42923 Prep Batch: 37035 Parameter DRO Surrogate Flag	Flag	QC Preparat	tion: 2007- MDL Result <10.7	-11-09	mg _/ Spike	Prepar its /Kg Percent	red By: RM RL <u>50</u> Recovery
QC Batch: 42923 Prep Batch: 37035 Parameter DRO Surrogate Flag n-Triacontane	Flag Result	QC Preparat Units	tion: 2007- MDL Result <10.7 Dilution 1 ed: 2007-	-11-09	mg, Spike Amount	Prepar its /Kg Percent Recovery 142	red By: RM RL 50 Recovery Limits 62.5 - 164 ed By: MM
QC Batch: 42923 Prep Batch: 37035 Parameter DRO Surrogate Flag n-Triacontane Method Blank (1) QC Batch: 43036 Prep Batch: 37134	Flag Result 213 atch: 43036	QC Preparat Units mg/Kg Date Analyze	tion: 2007- MDL Result <10.7 Dilutio 1 ed: 2007- ion: 2007- MDL	-11-09 on -11-10	mg, Spike Amount 150	Prepar its /Kg Percent Recovery 142 Analyz Prepar	red By: RM RL 50 Recovery Limits 62.5 - 164 ed By: MM ed By: MM
QC Batch: 42923 Prep Batch: 37035 Parameter DRO Surrogate Flag n-Triacontane Method Blank (1) QC Ba QC Batch: 43036	Flag Result 213	QC Preparat Units mg/Kg Date Analyze	tion: 2007- MDL Result <10.7 Dilution 1 ed: 2007- ion: 2007-	-11-09 on -11-10	mg, Spike Amount	Prepar its /Kg Percent Recovery 142 Analyz Prepar its	red By: RM RL 50 Recovery Limits 62.5 - 164 ed By: MM

QC Batch:	43037	Date Analyzed:	2007-11-10	Analyzed By:	$\mathbf{M}\mathbf{M}$
Prep Batch:	37135	QC Preparation:	2007-11-09	Prepared By:	MM

 23 Spike recovery outside control limits but within method limits. ullet

		MDL		
Parameter	Flag	Result	Units	RL
Chloride		<3.25	mg/Kg	5

Laboratory Control Spike (LCS-1)

QC Batch: Prep Batch:	$42877 \\ 36996$		e Analyzed: Preparation:	2007-11 2007-11			ed By: KB ed By: KB	
-		·	-				-	v
		LCS			\mathbf{Spike}	Matrix		Rec.
\mathbf{Param}		Result	Units	Dil.	Amount	Result	Rec.	Limit
GRO		7.86	mg/Kg	1	10.0	< 0.459	79	78.7 - 108
Percent recov	very is based on th	he spike result. RPI) is based on	the spike	and spike dup	olicate result.		

	LCSD			Spike	Matrix		Rec.		RPD
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
GRO	8.68	m mg/Kg	1	10.0	< 0.459	87	78.7 - 108	10	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCS	LCSD			Spike	LCS	LCSD	Rec.
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
Trifluorotoluene (TFT)	0.895	0.900	mg/Kg	1	1.00	90	90	83.7 - 110
4-Bromofluorobenzene (4-BFB)	0.762	0.758	m mg/Kg	1	1.00	76	76	74.4 - 107

Laboratory Control Spike (LCS-1)

QC Batch:	42922	Date Analyzed:	2007-11-09	Analyzed By:	$\mathbf{R}\mathbf{M}$
Prep Batch:	37034	QC Preparation:	2007-11-09	Prepared By:	$\mathbf{R}\mathbf{M}$

	\mathbf{LCS}			Spike	Matrix		Rec.
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit
DRO	278	m mg/Kg	1	250	<10.7	111	64.1 - 124

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			Spike	Matrix		Rec.		RPD
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
DRO	266	m mg/Kg	1	250	< 10.7	106	64.1 - 124	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCS	LCSD			\mathbf{Spike}	LCS	LCSD	Rec.
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
n-Triacontane	188	195	mg/Kg	1	150	125	130	62.5 - 164

Laboratory Control Spike (LCS-1)

QC Batch:	42923	Date Analyzed:	2007-11-09	Analyzed By:	$\mathbf{R}\mathbf{M}$
Prep Batch:	37035	QC Preparation:	2007-11-09	Prepared By:	RM

		LCS	5			Spike	Mat	trix		Rec.
Param		Resu		Units	Dil.	Amount	Res		c.	Limit
DRO		254	r	ng/Kg	1	250	<1	0.7 10	2 64	1.1 - 124
Percent recovery is ba	ased on the sp	ike result.	RPD is	based on	the spike a	and spike du	plicate	result.		
		LCSD			Spike	Matrix		Rec.		RPD
Param		Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
DRO		255	mg/Kg		250	<10.7	102	64.1 - 124	0	20
Percent recovery is ba	ased on the sp	ike result.	RPD is	based on	the spike a	and spike du	iplicate	result.		
	LCS	LCSD				Spike	LCS			Rec.
Surrogate	Result	Result		Jnits	Dil.	Amount	Rec			Limit
n-Triacontane	196	199	m	g/Kg	1	150	131	. 133	62	2.5 - 164
Laboratory Contro QC Batch: 43036 Prep Batch: 37134	l Spike (LC		Date An QC Prej	alyzed: paration:	2007-11-1 2007-11-0				alyzed By pared By	
		LCS	3			Spike	Mat	trix		Rec.
Param		Resu		Units	Dil.	Amount	Res			Limit
Chloride		99.3	s r	ng/Kg	1	100	<3	.25 9) 90	5.1 - 103
Percent recovery is ba	ased on the sp	ike result.	RPD is	based on	the spike a	nd spike du	plicate	result.		
		LCSD			Spike	Matrix		Rec.		RPD
Param		Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Chloride		102	mg/Kg	1	100	<3.25	102	96.1 - 103	3	20
Laboratory Contro QC Batch: 43037 Prep Batch: 37135	l Spike (LC	,	Date An QC Prep	alyzed: paration:	2007-11-1 2007-11-0		-		alyzed By pared By	
		LCS	5			Spike	Mat	trix		Rec.
Param		Resu		Units	Dil.	Amount	Res		с.	Limit
Chloride		98.6	i r	ng/Kg	1	100	<3	.25 9) 90	5.1 - 103
Percent recovery is ba	ased on the sp	ike result.	RPD is	based on	the spike a	and spike du	plicate	result.		
		LCSD			Spike	Matrix		Rec.		RPD
Param		Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Chloride		100	mg/Kg	1	100	<3.25	100	96.1 - 103	1	20
Percent recovery is ba	ased on the sp	ike result.	RPD is	based on	the spike a	nd spike du	plicate	result.		
Matrix Spike (MS-	1) Spiked	Sample: 14	2228							
QC Batch: 42877			Date A	nalyzed:	2007-11-0	08		Ar	alyzed B.	y: KB
Prep Batch: 36996			QC Pre	paration:	2007-11-0	08		\Pr	epared B	: KB

		MS	3			Spil	e M	atrix			Rec.
Param		Rest	ılt	Units	Dil.	Amou		esult	Rec.		Limit
GRO		10.	1 1	m mg/Kg	1	10.0) <(0.459	101	51	.3 - 130
Percent recovery is based	on the spil	æ result.	RPD is	based or	n the spike a	and spil	e duplicat	e result.			
		MSD			Spike	Mati	ix	R	ec.		RPD
Param		Result	Units	Dil.	Amount	Resu	lt Rec.	Li	mit	RPD	Limit
GRO		16.2	mg/Kg	; 1	12.5	< 0.4	59 130	51.3	- 130	46	19.6
Percent recovery is based	on the spil	æ result.	RPD is	based or	n the spike a	and spil	e duplicat	e result.			
		MS	5 N	1SD			Spike	MS	MSI)	Rec.
Surrogate		Resu		esult	Units	Dil.	Amount	Rec.	Rec		Limit
Trifluorotoluene (TFT)		0.93	7 1		mg/Kg	1	1	94	122	56	.1 - 124
4-Bromofluorobenzene (4-	·BFB)	1.04			mg/Kg	1	1	104	143		.1 - 146
Matrix Spike (MS-1) QC Batch: 42922 Prep Batch: 37034	Spiked S	ample: 14	Date A	nalyzed: eparation	2007-11- : 2007-11-					yzed By ared By	
		Μ	C			Spil	70 M	latrix			Rec.
Param		Res		Units	Dil.	Amo		esult	Rec.		Limit
DRO	24	16		mg/Kg	1	25		(10.7	66		1.5 - 127
2100				-1 -							
Percent recovery is based	on the spik	te result.	NFD IS	based of	i the spike a	anu spn	le uuphcav	- -			
Percent recovery is based	on the spik		NFD 18	based of	-	-	-				RPD
	on the spil	MSD	Units		Spike	Mat	rix	R	ec. mit	RPD	RPD Limit
Param	on the spik		Units	Dil.	-	Mat	rix 1lt Rec.	R Li	.ec.	RPD 30	
Param DRO	25	MSD Result 222	Units mg/K	$\frac{1}{g}$ Dil.	Spike Amount 250	Mat Res <10	rix 1lt Rec. 0.7 89	R Li 47.5	ec. mit - 127		Limit
Param DRO	25 on the spik	MSD Result 222 æ result.	Units mg/K RPD is	$\frac{1}{g}$ Dil.	Spike Amount 250	$\frac{Mat}{Res}$ <10 and spil	rix <u>1lt Rec.</u> 0.7 89 æ duplicate	R Li 47.5 e result.	ec. mit - 127		Limit 20
Param DRO Percent recovery is based	25 on the spik MS	MSD Result 222 æ result. MSD	Units mg/K RPD is	$\frac{1}{g}$ Dil. $\frac{1}{based or}$	Spike Amount 250 n the spike a	Mat Res <10 and spil Spil	rix 11t Rec. 0.7 89 te duplicate te M	R Li 47.5 e result. MS	ec. mit - 127 MSD	30	Limit 20 Rec.
Percent recovery is based Param DRO Percent recovery is based Surrogate n-Triacontane	25 on the spik	MSD Result 222 æ result.	Units mg/K RPD is t	$\frac{1}{g}$ Dil.	Spike Amount 250	$\frac{Mat}{Res}$ <10 and spil	rix <u>ult Rec.</u> 0.7 89 ce duplicate ce M unt R	R Li 47.5 e result.	ec. mit - 127	30	Limit 20
Param DRO Percent recovery is based Surrogate	25 on the spik MS Result 129	MSD Result 222 æ result. MSD Resul	Units mg/K RPD is t n	g Dil. g 1 based or Units	Spike Amount 250 1 the spike a Dil.	Mat Res <10 and spil Spil Amo	rix <u>ult Rec.</u> 0.7 89 ce duplicate ce M unt R	R Li 47.5 e result. MS Lec.	ec. mit - 127 MSD Rec.	30	Limit 20 Rec. Limit
Param DRO Percent recovery is based Surrogate n-Triacontane Matrix Spike (MS-1)	25 on the spik MS Result 129	MSD Result 222 te result. MSD Resul 139	Units mg/K RPD is t 42240	g Dil. g 1 based or Units	Spike Amount 250 n the spike a Dil. 1	Mat Res <10 and spil Spil Amo 150	rix <u>ult Rec.</u> 0.7 89 ce duplicato ce M unt R	R Li 47.5 e result. MS Lec.	ec. mit - 127 MSD Rec. 93	30	Limit 20 Rec. Limit .5 - 164
Param DRO Percent recovery is based Surrogate n-Triacontane Matrix Spike (MS-1)	25 on the spik MS Result 129	MSD Result 222 te result. MSD Resul 139	Units mg/K RPD is t 42240 Date A	$\frac{5 \text{ Dil.}}{\text{g} 1}$ based or $\frac{\text{Units}}{\text{ng/Kg}}$ nalyzed:	Spike Amount 250 n the spike a Dil. 1	Mat Res <10 and spil Amo 150	rix <u>ult Rec.</u> 0.7 89 ce duplicato ce M unt R	R Li 47.5 e result. MS Lec.	ec. mit - 127 MSD Rec. 93 Analy	30 62	Limit 20 Rec. Limit .5 - 164
Param DRO Percent recovery is based Surrogate n-Triacontane Matrix Spike (MS-1) QC Batch: 42923	25 on the spik MS Result 129	MSD Result 222 te result. MSD Resul 139	Units mg/K RPD is t t 42240 Date A QC Pre	$\frac{5 \text{ Dil.}}{\text{g} 1}$ based or $\frac{\text{Units}}{\text{ng/Kg}}$ nalyzed:	Spike Amount 250 n the spike a Dil. 1 2007-11-	Mat Res <10 and spil Amo 150 09 09	rix ult Rec. 0.7 89 ce duplicato ce N unt R	R Li 47.5 e result. MS Lec.	ec. mit - 127 MSD Rec. 93 Analy	30 62 yzed By	Limit 20 Rec. Limit .5 - 164
Param DRO Percent recovery is based Surrogate n-Triacontane Matrix Spike (MS-1) QC Batch: 42923	25 on the spik MS Result 129	MSD Result 222 & result. MSD Resul 139 ample: 14	Units mg/K RPD is t n 42240 Date A: QC Pre	$\frac{5 \text{ Dil.}}{\text{g} 1}$ based or $\frac{\text{Units}}{\text{ng/Kg}}$ nalyzed:	Spike Amount 250 n the spike a Dil. 1 2007-11-	Mat Res <10 and spil Amo 150	rix <u>ult Rec.</u> 0.7 89 ce duplicator ce M <u>unt R</u> 0 0	R Li 47.5 e result. MS Sec. 86	ec. mit - 127 MSD Rec. 93 Analy	30 62 yzed By ared By	Limit 20 Rec. Limit .5 - 164 : RM : RM

 $^{^{24}\}mathrm{MS/MSD}$ RPD out of RPD Limits. Use LCS/LCSD to demonstrate analysis is under control. Sample received out of hold time $^{25}\mathrm{MS/MSD}$ RPD out of RPD Limits. Use LCS/LCSD to demonstrate analysis is under control. Sample received out of hold time $^{26}\mathrm{Sample}$ received out of hold time

matrix spikes continued.	•									
D		MSD	TT	D.11	Spike	Matrix	D	Rec.	DDD	RPD
Param		Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
		MSD			Spike	Matrix		Rec.		RPD
Param		Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
ORO	27	201	mg/Kg	1	250	< 10.7	80	47.5 - 127	5	20
Percent recovery is based	on the spi	ke result.	RPD is b	based on	the spike a	nd spike du	plicate r	esult.		
	MS	MSD				Spike	MS	MSE)	Rec.
Surrogate	Result	Result	: U	Inits	Dil.	Amount	Rec			Limit
n-Triacontane	175	170	m	g/Kg	1	150	117	113	6	2.5 - 164
QC Batch: 43036 Prep Batch: 37134			Date Ana QC Prep		2007-11-10 2007-11-09				lyzed By bared By	
		MS	5			Spike	Ma	trix		Rec.
Param		Resu		Units	Dil.	Amount			ec.	Limit
Chloride		480) r	ng/Kg	10	500	<3	2.5 9	2	80 - 120
Percent recovery is based	on the spi	ke result.	RPD is b	pased on	the spike ar	nd spike du	plicate r	esult.		
		MSD			Spike	Matrix		Rec.		RPD
Param		Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Chloride		507	mg/Kg	10	500	$<\!32.5$	97	80 - 120	6	20
Percent recovery is based Matrix Spike (MS-1) QC Batch: 43037	-	Sample: 14			the spike ar 2007-11-1(-	plicate r		lyzed B	7: MM
Prep Batch: 37135			QC Prep		2007-11-0				pared By	
		MS	5			Spike	Ma	trix		Rec.
Param		Resu		Units	Dil.	Amount			ec.	Limit
Chloride		506	3 r	ng/Kg	10	500	<3	2.5 9)5	80 - 120
Percent recovery is based	on the spi	ke result.	RPD is b	based on	the spike a	nd spike du	plicate r	esult.		
		MSD			Spike	Matrix		Rec.		RPD
Param		Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Chloride		476	mg/Kg	10	500	<32.5	89	80 - 120	6	20
Percent recovery is based	on the spi	ke result.	RPD is b	pased on	the spike a	nd spike du	plicate r	esult.		

Standard (ICV-1)

QC Batch: 42877

Date Analyzed: 2007-11-08

Analyzed By: KB

²⁷Sample received out of hold time

			ICVs True	${ m ICVs}$ Found	ICVs Percent	Percent Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
GRO	Plag	mg/Kg	1.00	0.882	88	85 - 115	2007-11-08
9110		mg/ Kg	1.00	0.882	00	00 - 110	2007-11-03
Standard	(CCV-1)						
QC Batch:	42877		Date Ana	alyzed: 2007-1	1-08	Ana	yzed By: KB
			CCVs	CCVs	CCVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
GRO		mg/Kg	1.00	0.876	88	85 - 115	2007-11-08
Standard	(CCV-1)						
QC Batch:	42922		Date Ana	alyzed: 2007-1	1-09	Anal	yzed By: RM
			CCVs	CCVs	CCVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
DRO	0	m mg/Kg	250	269	108	85 - 115	2007-11-09
Standard	(CCV-2)						
QC Batch:	42922		Date Ana	alyzed: 2007-1	1-09	Anal	yzed By: RM
			CCVs	CCVs	CCVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
DRO		m mg/Kg	250	259	104	85 - 115	2007-11-09
Standard	(ICV-1)						
QC Batch:			Date Ana	alyzed: 2007-1	1-09	Anal	yzed By: RM
			ICVs	ICVs	ICVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
DRO		mg/Kg	250	253	101	85 - 115	2007-11-09
Standard	(CCV-1)						
QC Batch:	. ,		Date Ana	alyzed: 2007-1	1-09	Anal	yzed By: RM
•	-			U			v v -··-
			CCVs	CCVs Found	CCVs	Percent	
Damant	D 1 ~ · ·	TT-st-	True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
DRO		m mg/Kg	250	254	102	85 - 115	2007-11-09

Standard (ICV-1)

QC Batch:	43036		Date Anal	yzed: 2007-11	-10	Analy	zed By: MM
			ICVs	ICVs	ICVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Chloride		mg/Kg	100	98.4	98	85 - 115	2007-11-10
Standard	(CCV-1)						
QC Batch:	43036		Date Anal	yzed: 2007-11	-10	Analy	zed By: MM
			CCVs	CCVs	CCVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Chloride	-	mg/Kg	100	102	102	85 - 115	2007-11-10
	(ICV-1)						
Standard QC Batch:	. ,		Date Anal	yzed: 2007-11	-10	Analy	zed By: MM
Standard	. ,			,		•	zed By: MM
Standard	. ,		Date Anal ICVs True	yzed: 2007-11 ICVs Found	-10 ICVs Percent	Percent	zed By: MM Date
Standard	. ,	Units	ICVs	ICVs	ICVs	•	
Standard QC Batch:	43037	Units mg/Kg	ICVs True	ICVs Found	ICVs Percent	Percent Recovery	Date
Standard QC Batch: Param	43037 Flag		ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Standard QC Batch: Param Chloride	43037 Flag (CCV-1)		ICVs True Conc. 100	ICVs Found Conc.	ICVs Percent Recovery 100	Percent Recovery Limits 85 - 115	Date Analyzed
Standard QC Batch: Param Chloride Standard	43037 Flag (CCV-1)		ICVs True Conc. 100	ICVs Found Conc. 100	ICVs Percent Recovery 100	Percent Recovery Limits 85 - 115	Date Analyzed 2007-11-10
Standard QC Batch: Param Chloride Standard	43037 Flag (CCV-1)		ICVs True Conc. 100 Date Anal	ICVs Found Conc. 100 yzed: 2007-11	ICVs Percent Recovery 100	Percent Recovery Limits 85 - 115 Analy	Date Analyzed 2007-11-10
Standard QC Batch: Param Chloride Standard	43037 Flag (CCV-1)		ICVs True Conc. 100 Date Anal CCVs	ICVs Found Conc. 100 yzed: 2007-11 CCVs	ICVs Percent Recovery 100 -10 CCVs	Percent Recovery Limits 85 - 115 Analy Percent	Date Analyzed 2007-11-10

Summary Report

Scott Branson SB Weed Control & Transport 213 S Mesa Carlsbad, NM, 88220

Report Date: November 14, 2007



Project Location: City of Carlsbad, NM Project Name: Violet St. & Center St.

			Date	Time	Date
Sample	Description	Matrix	Taken	Taken	Received
142230	B23	soil	2007-10-10	17:00	2007-11-08
142231	$\mathbf{B24}$	soil	2007-10-10	17:30	2007-11-08
142232	B25	soil	2007-10-10	10:00	2007-11-08
142233	B26	soil	2007-10-10	10:30	2007-11-08
142234	B27	soil	2007-10-10	11:00	2007-11-08
142235	B28	soil	2007-10-10	11:30	2007-11-08
142236	B29	soil	2007-10-10	12:00	2007-11-08
142237	$\mathbf{B30}$	soil	2007-10-10	12:30	2007-11-08
142238	B31	soil	2007-10-10	13:00	2007-11-08
142239	B32	soil	2007-10-10	13:30	2007-11-08
142240	B33	soil	2007-10-10	11:00	2007-11-08

	TPH DRO	TPH GRO
	DRO	GRO
Sample - Field Code	(mg/Kg)	(mg/Kg)
142230 - B23	<50.0	<1.00
142231 - B24	<50.0	<1.00
142232 - B25	<50.0	<1.00
142233 - B26	<50.0	<1.00
142234 - B27	<50.0	<1.00
142235 - B28	<50.0	<1.00
142236 - B29	<50.0	<1.00
142237 - B30	<50.0	<1.00
142238 - B31	< 50.0	<1.00
142239 - B32	< 50.0	<1.00
142240 - B33	<50.0	<1.00

Sample: 142230 - B23

Param	Flag	Result	Units	\mathbf{RL}
Chloride		<50.0	mg/Kg	5.00

Sample: 142231 - B24

Report Date: Noveml	ber 14, 2007	Work Order: 7110823 Violet St. & Center St.		e Number: 2 of 3 of Carlsbad, NM
Param	Flag	Result	Units	RL
Chloride		<50.0	m mg/Kg	5.00
Sample: 142232 - I	325			
Param	Flag	Result	Units	\mathbf{RL}
Chloride		<50.0	mg/Kg	5.00
Sample: 142233 - I	326			
Param	Flag	Result	Units	RL
Chloride		<50.0	mg/Kg	5.00
Sample: 142234 - I	327			
Param	Flag	Result	Units	RL
Chloride		<50.0	m mg/Kg	5.00
Sample: 142235 - I	328			
Param	Flag	Result	Units	RL
Chloride		<50.0	mg/Kg	5.00
Sample: 142236 - I	329			
Param	Flag	Result	Units	\mathbf{RL}
Chloride		<50.0	m mg/Kg	5.00
Sample: 142237 - I	330			
Param	Flag	Result	Units	RL
Chloride		<50.0	m mg/Kg	5.00
Sample: 142238 - I	331			
Param	Flag	Result	Units	RL
Chloride	0	<50.0	mg/Kg	5.00
Sample: 142239 - I	332			
Param	Flag	Result	Units	RL
Chloride	0	<50.0		

Report Date: November 14, 2007		Work Order: 7110823 Violet St. & Center St.		Page Number: 3 of 3 City of Carlsbad, NM	
Sample: 142240 ·	- B33				
Param	Flag	Result	Units	RL	
Chloride		<50.0	m mg/Kg	5.00	

Summary Report

Scott Branson SB Weed Control & Transport 213 S Mesa Carlsbad, NM, 88220

Report Date: November 14, 2007



Project Location: City of Carlsbad, NM Project Name: Violet St. & Center St.

			Date	Time	Date
Sample	Description	Matrix	Taken	Taken	Received
142219	B12	soil	2007-10-08	18:30	2007-11-08
142220	B13	soil	2007-10-09	12:00	2007-11-08
142221	B14	soil	2007-10-09	12:30	2007-11-08
142222	B15	soil	2007-10-09	13:00	2007-11-08
142223	B16	soil	2007-10-09	13:30	2007-11-08
142224	B17	soil	2007-10-09	14:00	2007-11-08
142225	B18	soil	2007-10-09	14:30	2007-11-08
142226	B19	soil	2007-10-09	15:00	2007-11-08
142227	$\mathbf{B20}$	soil	2007-10-09	15:30	2007-11-08
142228	B21	soil	2007-10-09	16:00	2007 - 11 - 08
142229	B22	soil	2007-10-09	16:30	2007 - 11 - 08

	TPH DRO	TPH GRO
	DRO	GRO
Sample - Field Code	(mg/Kg)	(mg/Kg)
142219 - B12	<50.0	<1.00
142220 - B13	<50.0	<1.00
142221 - B14	<50.0	<1.00
142222 - B15	<50.0	<1.00
142223 - B16	<50.0	<1.00
142224 - B17	<50.0	<1.00
142225 - B18	<50.0	<1.00
142226 - B19	<50.0	<1.00
142227 - B20	< 50.0	<1.00
142228 - B21	<50.0	<1.00
142229 - B22	< 50.0	<1.00

Sample: 142219 - B12

Param	\mathbf{Flag}	Result	Units	RL
Chloride		<50.0	mg/Kg	5.00

Sample: 142220 - B13

Report Date: November	14, 2007	Work Order: 7110822 Violet St. & Center St.		ge Number: 2 of 3 7 of Carlsbad, NM
Param	Flag	Result	Units	RL
Chloride		<50.0	m mg/Kg	5.00
Sample: 142221 - B1	4			
Param	Flag	Result	Units	RL
Chloride		<30.0	mg/Kg	5.00
Sample: 142222 - B1	5			
Param	\mathbf{Flag}	Result	Units	RL
Chloride		<50.0	mg/Kg	5.00
Sample: 142223 - B1	6			
Param	Flag	Result	Units	RL
Chloride		<30.0	m mg/Kg	5.00
Sample: 142224 - B1	7			
Param	Flag	Result	Units	RL
Chloride		<50.0	mg/Kg	5.00
Sample: 142225 - B1	8			
Param	\mathbf{Flag}	Result	Units	RL
Chloride		<30.0	m mg/Kg	5.00
Sample: 142226 - B1	9			
Param	Flag	Result	Units	RL
Chloride		<50.0	mg/Kg	5.00
Sample: 142227 - B2	0			
Param	Flag	Result	Units	RL
Chloride	0	<50.0	mg/Kg	5.00
Sample: 142228 - B2	1			
Param	Flag	Result	Units	RL
Chloride		<50.0	m mg/Kg	5.00

Report Date: November 14, 2007		Work Order: 7110822 Violet St. & Center St.		Page Number: 3 of 3 City of Carlsbad, NM	
Sample: 142229 ·	- B22				
Param	Flag	Result	Units	RL	
Chloride		<50.0	m mg/Kg	5.00	



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Analytical and Quality Control Report

Scott Branson SB Weed Control & Transport 213 S Mesa Carlsbad, NM, 88220

Report Date: November 14, 2007

7110822 Work Order:

Project Location: City of Carlsbad, NM **Project Name:** Violet St. & Center St. Violet St. & Center St. Project Number:

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	${f Date} {f Received}$
142220	B13	soil	2007-10-09	12:00	2007-11-08
142221	B14	soil	2007-10-09	12:30	2007 - 11 - 08
142222	B15	soil	2007-10-09	13:00	2007 - 11 - 08
142223	B16	soil	2007-10-09	13:30	2007 - 11 - 08
142224	B17	soil	2007-10-09	14:00	2007 - 11 - 08
142225	B18	soil	2007-10-09	14:30	2007-11-08
142226	B19	soil	2007-10-09	15:00	2007-11-08
142227	B2 0	soil	2007-10-09	15:30	2007-11-08
142228	B21	soil	2007-10-09	16:00	2007-11-08
142229	B22	soil	2007 - 10 - 09	16:30	2007-11-08

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 20 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Michael alm

Dr. Blair Leftwich, Director

Standard Flags

 $\,B\,$ - The sample contains less than ten times the concentration found in the method blank.

Analytical Report

Sample: 142219 - B12

Analysis: QC Batch: Prep Batch:	Chloride (Titration) 43035 37133	Analytical Method: Date Analyzed: Sample Preparation	2007-11-10	Prep Method: Analyzed By: Prepared By:	1
	1771	RL	TT • .		DT
Parameter	Flag	Result	Units	Dilution	RL
Chloride		<50.0	mg/Kg	10	5.00

Sample: 142219 - B12

Analysis: QC Batch:	TPH DRO 42921		Analytical Me Date Analyze			-	fethod: N/A ed By: RM
Prep Batch:	37033		Sample Prepa	ration: 2007-1	1-09	Prepar	ed By: RM
			\mathbf{RL}				
Parameter	Flag		Result	Un	its	Dilution	\mathbf{RL}
DRO	1		<50.0	mg/1	Kg	1	50.0
					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontan	e	196	m mg/Kg	1	150	131	62.5 - 164

Sample: 142219 - B12

Analysis: QC Batch: Prep Batch:	TPH GRO 42876 36995		Analytical Date Analy Sample Pr	yzed:	S 8015B 2007-11-08 2007-11-08		Prep Meth Analyzed Prepared 1	By: KB
			RL					
Parameter	Flag		Result		Units	D	vilution	RL
GRO	2		<1.00		m mg/Kg		1	1.00
						Spike	Percent	Recovery
Surrogate		\mathbf{F} lag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotolu	ene (TFT)		1.10	mg/Kg	1	1.00	110	34.1 - 161
4-Bromofluor	robenzene (4-BFB)		0.988	m mg/Kg	1	1.00	99	31.8 - 159

Sample: 142220 - B13

Analysis: QC Batch: Prep Batch:	Chloride (Titration) 43035 37133	Analytical Method: Date Analyzed: Sample Preparation	2007-11-10	Prep Method: Analyzed By: Prepared By:	\dot{MM}
		\mathbf{RL}			
Parameter	Flag	Result	Units	Dilution	RL
Chloride		<50.0	mg/Kg	10	5.00

 $^1 \, {\rm Sample}$ received out of hold time $^2 \, {\rm Sample}$ ran out of hold time per client's request. \bullet

Sample: 142220 - B13

Analysis: QC Batch: Prep Batch:	TPH DRO 42921 37033		Analytical Me Date Analyze Sample Prepa	d:	Mod. 8 2007-11 2007-11	-09	1	ed By: 1	N/A RM RM
			RL						
Parameter	Flag	5	Result		Unit	ts	Dilution		\mathbf{RL}
DRO	3		<50.0		mg/K	-g	1		50.0
						Spike	Percent	Recov	very
Surrogate	Flag	Result	Units	Dilu	tion	Amount	Recovery	Lim	its
n-Triacontan	e	201	m mg/Kg	1		150	134	62.5 -	164

Sample: 142220 - B13

Analysis: QC Batch: Prep Batch:	TPH GRO 42876 36995		Analytical Date Anal Sample Pr	yzed:	S 8015B 2007-11-08 2007-11-08		Prep Meth Analyzed Prepared 1	By: KB
			\mathbf{RL}					
Parameter	Flag		Result		Units	D	ilution	RL
GRO	4		<1.00		mg/Kg		1	1.00
Surrogate		Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotolu	ene (TFT)		1.06	mg/Kg	1	1.00	106	34.1 - 161
4-Bromofluor	obenzene (4-BFB)		0.947	mg/Kg	1	1.00	95	31.8 - 159

Sample: 142221 - B14

Analysis: QC Batch: Prep Batch:	Chloride (Titration) 43036 37134	Analytical Me Date Analyzed Sample Prepa	l: 2007-11-10	Prep Metho Analyzed By Prepared By	·: MM
		RL			
Parameter	Flag	Result	Units	Dilution	RL
Chloride		<50.0	m mg/Kg	10	5.00

Sample: 142221 - B14

Analysis: QC Batch: Prep Batch:	TPH DRO 42921 37033	Analytical Method: Date Analyzed: Sample Preparation:	Mod. 8015B 2007-11-09 2007-11-09	Prep Method: Analyzed By: Prepared By:	m RM
		RL			
Parameter	Fla	g Result	Units	Dilution	RL
DRO	5	<50.0	m mg/Kg	1	50.0

³Sample received out of hold time

⁴Sample ran out of hold time per client's request. • ⁵Sample received out of hold time

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		200	mg/Kg	1	150	133	62.5 - 164

Sample: 142221 - B14

Analysis: QC Batch: Prep Batch:	TPH GRO 42876 36995		Analytical Date Anal Sample Pr		S 8015B 2007-11-08 2007-11-08		Prep Met Analyzed Prepared	l By:	5 5035 KB KB
Parameter GRO	Flag 6		RL Result <1.00		Units mg/Kg		Dilution 1		RL 1.00
Surrogate Trifluorotolu 4-Bromofluor	ene (TFT) cobenzene (4-BFB)	Flag	Result 1.14 1.03	Units mg/Kg mg/Kg	Dilution 1 1	Spike Amount 1.00 1.00	Percent Recovery 114 103	Li 34.1	covery mits 1 - 161 3 - 159
Sample: 14 Analysis: QC Batch: Prep Batch:	2222 - B15 Chloride (Titratio 43036 37134	n)	Date	tical Metho Analyzed: e Preparati	2007-11	-10	Prep M Analyz Prepar		N/A MM MM
Parameter Chloride	Flag		RL Result <50.0		Units mg/Kg		Dilution 10		RL 5.00
Sample: 14 Analysis: QC Batch: Prep Batch:	2222 - B15 TPH DRO 42921 37033		Analytica Date Anal Sample Pr		Mod. 8015 2007-11-09 2007-11-09	В	Prep M Analyz Prepar		N/A RM RM
Parameter DRO	Flag 7		RL Result <50.0		Units mg/Kg		Dilution 1		RL 50.0
Surrogate n-Triacontan	Flag	Result 201	Units mg/Kg		ıtion 1	Spike Amount 150	Percent Recovery 134	${ m Li}$	covery mits 5 - 164

Sample: 142222 - B15

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	42876	Date Analyzed:	2007-11-08	Analyzed By:	\mathbf{KB}
Prep Batch:	36995	Sample Preparation:	2007-11-08	Prepared By:	KB

 $^6\mathrm{Sample}$ ran out of hold time per client's request. \bullet

⁷Sample received out of hold time

			RL						
Parameter	Flag		Result		Units		Dilution		RL
GRO	8		<1.00		mg/Kg		1		1.00
						Spike	Percent	Rec	eovery
Surrogate		Flag	Result	Units	Dilution	Amount	Recovery		mits
Trifluorotoluene	e (TFT)		1.14	mg/Kg	1	1.00	114	34.1	- 161
4-Bromofluorob	penzene (4-BFB)		1.02	mg/Kg	1	1.00	102	31.8	8 - 159
Sample: 1422	23 - B16								
Analysis: C	Chloride (Titration	1)	Analy	tical Method	: SM 4500	-Cl B	Prep M	lethod:	N/A
QC Batch: 4	3036	,	Date A	Analyzed:	2007-11-	10	Analyz	ed By:	\dot{MM}
Prep Batch: 3	57134		Sampl	e Preparatio	n: 2007-11-	09	Prepare	ed By:	MM
			\mathbf{RL}						
Parameter	Flag		Result		Units		Dilution		\mathbf{RL}
Chloride			<50.0		mg/Kg		10		5.00
Sample: 1422	23 - B16								
Analysis: 7	TPH DRO		Analytical	Method:	Mod. 8015B		Prep M	lethod:	N/A
QC Batch: 4	2921		Date Anal	yzed:	2007-11-09		Analyz	ed By:	$\mathbf{R}\mathbf{M}$
Prep Batch: 3	7033		Sample Pr	reparation:	2007-11-09		Prepare	ed By:	RM
			RL						
Parameter	Flag		Result		Units		Dilution		\mathbf{RL}
DRO	9		<50.0		m mg/Kg		1		50.0
						Spike	Percent	Rec	covery
Surrogate	Flag	Result	Units	Dilut	ion A	mount	Recovery		mits
n-Triacontane		178	mg/Kg	1		150	119	62.3	5 - 164

Sample: 142223 - B16

Analysis: QC Batch: Prep Batch:	TPH GRO 42876 36995		Analytical Date Anal Sample Pr		S 8015B 2007-11-08 2007-11-08		Prep Meth Analyzed Prepared I	By: KB
гтер васси:	20339		Sample FI	eparation:	2007-11-08		riepared	Dy: KD
			RL					
Parameter	Flag		Result		Units	D	ilution	\mathbf{RL}
GRO	10		<1.00		m mg/Kg		1	1.00
						Spike	Percent	Recovery
Surrogate		Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotolu	ene (TFT)		1.10	mg/Kg	1	1.00	110	34.1 - 161
4-Bromofluor	cobenzene (4-BFB)		0.996	$\mathrm{mg/Kg}$	1	1.00	100	31.8 - 159

⁸Sample ran out of hold time per client's request. • ⁹Sample received out of hold time ¹⁰Sample ran out of hold time per client's request. •

Sample: 142224 - B17

Analysis: QC Batch: Prep Batch:	Chloride (Titration) 43036 37134	Analytical Meth Date Analyzed: Sample Prepara	2007-11-10	Prep Method: Analyzed By: Prepared By:	MM
		RL			
Parameter	Flag	Result	Units	Dilution	RL
Chloride		< 50.0	m mg/Kg	10	5.00

Sample: 142224 - B17

Analysis: QC Batch: Prep Batch:	TPH DRO 42922 37034		Analytical Me Date Analyze Sample Prepa	d:	Mod. 8 2007-11 2007-11	-09	Prep M Analyz Prepar	
			\mathbf{RL}					
Parameter	Flag		Result		Unit	s	Dilution	RL
DRO	11		<50.0		mg/K	g	1	50.0
						Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilu	tion	Amount	Recovery	Limits
n-Triacontan	e	170	m mg/Kg]	L	150	113	62.5 - 164

Sample: 142224 - B17

Analysis: QC Batch: Prep Batch:	TPH GRO 42876 36995		Analytical Date Anal Sample Pr	yzed:	S 8015B 2007-11-08 2007-11-08		Prep Meth Analyzed Prepared I	By: KB
			RL					
Parameter	Flag		Result		Units	D	ilution	RL
GRO	12		<1.00		m mg/Kg		1	1.00
						Spike	Percent	Recovery
Surrogate		\mathbf{F} lag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotolu	ene (TFT)		1.21	mg/Kg	1	1.00	121	34.1 - 161
4-Bromofluor	cobenzene (4-BFB)		1.09	mg/Kg	1	1.00	109	31.8 - 159

Sample: 142225 - B18

Analysis: QC Batch: Prep Batch:	Chloride (Titration) 43036 37134	Analytical Method: Date Analyzed: Sample Preparation:	2007-11-10	Prep Method: Analyzed By: Prepared By:	\dot{MM}
		RL			
Parameter	Flag	Result	Units	Dilution	RL
Chloride		<50.0	mg/Kg	10	5.00

 $^{11} {\rm Sample}$ received out of hold time $^{12} {\rm Sample}$ ran out of hold time per client's request. \bullet

Sample: 142225 - B18

Analysis: QC Batch: Prep Batch:	TPH DRO 42922 37034		Analytical Me Date Analyze Sample Prepa	d: 2007-		Analyz	fethod: N/A ed By: RM ed By: RM
D	101			TT	•,		DI
Parameter	Flag	5	Result	Ui	nits	Dilution	RL
DRO	13		<50.0	mg/	Kg	1	50.0
					\mathbf{Spike}	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane	e	202	m mg/Kg	1	150	135	62.5 - 164

Sample: 142225 - B18

Analysis: QC Batch: Prep Batch:	TPH GRO 42876 36995		Analytical Date Anal Sample Pr		S 8015B 2007-11-08 2007-11-08	Prep Method Analyzed By Prepared By		By: KB
			\mathbf{RL}					
Parameter	Flag		Result		Units	D	ilution	RL
GRO	14		<1.00		m mg/Kg		1	1.00
Surrogate		Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotolu	ene (TFT)		1.22	mg/Kg	1	1.00	122	34.1 - 161
4-Bromofluor	robenzene (4-BFB)		1.08	mg/Kg	1	1.00	108	31.8 - 159

Sample: 142226 - B19

Analysis: QC Batch: Prep Batch:	Chloride (Titration) 43036 37134	Analytical Meth Date Analyzed: Sample Prepara	2007-11-10	Prep Method: Analyzed By: Prepared By:	MM
		RL			
Parameter	Flag	Result	Units	Dilution	RL
Chloride		<50.0	mg/Kg	10	5.00

Sample: 142226 - B19

Analysis: QC Batch: Prep Batch:	TPH DRO 42922 37034	Analytical Method: Date Analyzed: Sample Preparation:	Mod. 8015B 2007-11-09 2007-11-09	Prep Method: Analyzed By: Prepared By:	N/A RM RM
Dependenton	Elec	RL Bouilt	Unito	Dilution	DI
Parameter	Flag	Result	Units	Dilution	RL
DRO	13	<50.0	m mg/Kg	1	50.0

¹³Sample received out of hold time

¹⁴Sample ran out of hold time per client's request.
 ¹⁵Sample received out of hold time

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		107	mg/Kg	1	150	71	62.5 - 164

Sample: 142226 - B19

Analysis: QC Batch: Prep Batch:	TPH GRO 42876 36995		Analytical Date Anal Sample Pr		S 8015B 2007-11-03 2007-11-03		Prep Met Analyzed Prepared	By: K	5035 IB IB
Parameter GRO	Flag		RL Result <1.00		Units mg/Kg		Dilution 1		RL 1.00
			\1.00		mg/ R 5		1		1.00
Currogata		Flag	Result	Units	Dilution	Spike n Amount	Percent t Recovery		overy nits
Surrogate Trifluorotolu	one (TFT)	Flag	1.12	mg/Kg	1	$\frac{1}{1.00}$	112 Recovery		$\frac{1113}{-161}$
	cobenzene (4-BFB)		$1.12 \\ 1.05$	mg/Kg	1	1.00	105		- 151 - 159
Sample: 14 Analysis: QC Batch: Prep Batch:	2227 - B20 Chloride (Titratio: 43036 37134	n)	Date A	tical Metho Analyzed: e Preparati	2007-1		Prep M Analyz Prepar	ed By:	N/A MM MM
			RL						
Parameter	Flag		Result		Units		Dilution		RL
Chloride			<50.0		mg/Kg		10		5.00
Sample: 14			A	1 3 4 - 1 - 1	M. J. 201	~D	Dura	f.,1., 1	NT / A
Analysis: QC Batch:	TPH DRO 42922		Analytical Date Anal		Mod. 801 2007-11-0		Prep M Analyz		N/A RM
Prep Batch:	37034			reparation:	2007-11-0		Prepar		RM
			RL						
Parameter	Flag		Result		Units		Dilution		RL
DRO	17		<50.0		mg/Kg		1		50.0
Surrogate	Flag	Result	Units		ition	Spike Amount	Percent Recovery	Lir	overy nits
n-Triacontan	e	186	mg/Kg		1	150	124	62.5	- 164

Sample: 142227 - B20

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	42876	Date Analyzed:	2007-11-08	Analyzed By:	\mathbf{KB}
Prep Batch:	36995	Sample Preparation:	2007-11-08	Prepared By:	KB

 $^{16}\mathrm{Sample}$ ran out of hold time per client's request. \bullet $^{17}\mathrm{Sample}$ received out of hold time

			RL						
Parameter	Fla	g	Result		Units		Dilution		RI
GRO	18		<1.00		mg/Kg		1		1.00
						Spike	Percent	Rec	covery
Surrogate		Flag	Result	Units	Dilution	Amount		${ m Li}$	mits
Trifluorotolue	ene (TFT)		1.16	mg/Kg	1	1.00	116	34.1	l - 16
4-Bromofluor	obenzene (4-BFB)	1.04	mg/Kg	1	1.00	104	31.8	3 - 159
Sample: 14:	2228 - B21								
Analysis:	Chloride (Titrat	tion)	Analyt	tical Metho	d: SM 450	00-Cl B	$\operatorname{Prep} N$	fethod:	N/A
QC Batch:	43036	,		Analyzed:	2007-11	1-10		ed By:	М́М
Prep Batch:	37134		Sampl	e Preparati	on: 2007-11	1-09	Prepar	ed By:	MM
			\mathbf{RL}						
Parameter	Fla	g	Result		Units		Dilution		RI
Chloride		<u> </u>	<50.0		mg/Kg		10		5.00
Sample: 142 Analysis: QC Batch:	2 228 - B21 TPH DRO 42922		Analytical Date Anal		Mod. 8015 2007-11-09		-	1ethod: ed By:	N/A RM
Prep Batch:	37034			eparation:	2007-11-09		Prepar		RM
			RL						
Parameter	Fla_{i}	g 5	Result		Units		Dilution		RI
DRO	19	-	<50.0		m mg/Kg		1		50.0
Surrogate	Flag	Result	Units	Dilı	ition	Spike Amount	Percent Recovery		covery mits
n-Triacontane		181	mg/Kg		1	150	121		5 - 16
Sample: 142									
Analysis: OC Batch	TPH GRO		Analytical		S 8015B		Prep Met		S 503
JU Batch	42877		Date Anal	vzen'	-2007 - 11 - 08		Analyzed	1 HV'	nн

QC Batch: 4	•			yzed:	2007 - 11 - 08		By: KB	
Prep Batch: 36996			Sample Preparation:		2007 - 11 - 08		Prepared 2	By: KB
			RL					
Parameter	$\mathbf{F}\mathbf{lag}$		Result		Units	D	ilution	\mathbf{RL}
GRO	20		<1.00		m mg/Kg		1	1.00
						Spike	Percent	Recovery
Surrogate		Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluen	e (TFT)		1.04	mg/Kg	1	1.00	104	34.1 - 161
4-Bromofluorobenzene (4-BFB)			0.981	$\mathrm{mg/Kg}$	1	1.00	98	31.8 - 159
			0.001		1	1.00		51.0 100

 $^{18}Sample$ ran out of hold time per client's request. \bullet $^{19}Sample$ received out of hold time $^{20}Sample$ ran out of hold time per client's request. \bullet

Sample: 142229 - B22

Analysis: QC Batch: Prep Batch:	Chloride (Titration) 43036 37134	Analytical Metho Date Analyzed: Sample Preparation	2007-11-10	Prep Method: Analyzed By: Prepared By:	ŃМ
		RL			
Parameter	Flag	Result	Units	Dilution	RL
Chloride		< 50.0	m mg/Kg	10	5.00

Sample: 142229 - B22

Analysis: QC Batch: Prep Batch:	TPH DRO 42922 37034		Analytical Me Date Analyze Sample Prepa	d:	Mod. 80 2007-11 2007-11	-09	Prep M Analyz Prepar	ed By:	N/A RM RM
			\mathbf{RL}						
Parameter	Flag	r 5	Result		Unit	s	Dilution		\mathbf{RL}
DRO	21		<50.0		mg/K	g	1		50.0
_						Spike	Percent	Reco	~
Surrogate	Flag	Result	Units	Dilu	tion	Amount	Recovery	Lim	nits
n-Triacontan	e	200	m mg/Kg	1		150	133	62.5 -	- 164

Sample: 142229 - B22

Analysis: QC Batch: Prep Batch:	$\operatorname{QC}\operatorname{Batch}:$ 42877		Date Analyzed: 2007-		S 8015B 2007-11-08 2007-11-08		Prep Meth Analyzed Prepared 1	By: KB
Parameter GRO	Flag 22		RL Result <1.00		Units mg/Kg	D	ilution 1	RL 1.00
Surrogate Trifluorotolu 4-Bromofluor	ene (TFT) robenzene (4-BFB)	Flag	Result 0.805 0.767	Units mg/Kg mg/Kg	Dilution 1 1	Spike Amount 1.00 1.00	Percent Recovery 80 77	Recovery Limits 34.1 - 161 31.8 - 159

Method Blank (1) QC Batch: 42876

QC Batch: Prep Batch:		Date Analyzed: QC Preparation:			Analyzed By: Prepared By:	
		M	DL			
Parameter	Flag	Res	ult	Units		RL
GRO		<0.4	459	m mg/Kg		1

²¹Sample received out of hold time

 22 Sample ran out of hold time per client's request.

					Spike	Percent	Recovery
Surrogate	Flag 23	Result	Units	Dilution		Recovery	Limits
Trifluorotoluene (TFT)		0.911	mg/Kg	1	1.00	91 - 7	96 - 115
4-Bromofluorobenzene (4-BFB)	0.573	mg/Kg	1	1.00	57	51.6 - 103
Method Blank (1)	QC Batch: 42877						
QC Batch: 42877 Prep Batch: 36996		Date Ana QC Prepa		07-11-08 07-11-08		Analyz Prepar	ed By: KB ed By: KB
_			MDL				
Parameter	Flag		Result		Uni		RL
GRO			< 0.459		mg/	Kg	1
Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	24	0.921	mg/Kg	1	1.00	92	96 - 115
4-Bromofluorobenzene (4-BFB)	0.580	mg/Kg	1	1.00	58	51.6 - 103
Parameter	Flag		$egin{array}{c} \mathrm{MDL} \ \mathrm{Result} \end{array}$		Uni		RL
DRO			<10.7		mg/	Kg	50
Surrogate Fla	ag Result	Units	Dilut	tion	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	197	mg/Kg	1		150	131	62.5 - 164
Method Blank (1) QC Batch: 42922 Prep Batch: 37034	QC Batch: 42922	Date Ana	lyzed: 200 aration: 200)7-11-09)7-11-09			ed By: RM ed By: RM
			3 <i>5</i> 75 7				
Parameter	Flag		${ m MDL} { m Result}$		Uni	ts	RL
Parameter DRO	Flag		MDL Result <10.7		Uni mg/		RL 50
DRO		Unite	Result <10.7	tion	mg/	Kg Percent	50 Recovery
		Units mg/Kg	Result <10.7 Dilut		mg/	Kg	50

 $^{23}{\rm Spike}$ recovery outside control limits but within method limits. \bullet $^{24}{\rm Spike}$ recovery outside control limits but within method limits. \bullet

Work Order: 7110822 Violet St. & Center St.

Method Blank (1)	QC Batch: 43035							
QC Batch: 43035 Prep Batch: 37133		Date Analyzed: QC Preparation	2007-11: 2007-11-				zed By: red By:	MM MM
		I	MDL					
Parameter	Flag		esult		Units			\mathbf{RL}
Chloride		<	(3.25)		m mg/Kg			5
Method Blank (1)	QC Batch: 43036							
QC Batch: 43036		Date Analyzed:	2007-11-	-10		Analyz	zed By:	MM
Prep Batch: 37134		QC Preparation					red By:	MM
1						.1		
_			MDL					
Parameter	Flag		esult		Units			RL
Chloride		<	(3.25		mg/Kg			5
LaboratoryControl SpQC Batch:42876Prep Batch:36995	. ,	Date Analyzed: QC Preparation					zed By: ared By:	
	LC	CS		Spike	Matrix]	Rec.
Param	Res		Dil.	Amount	Result	Rec.		limit
GRO	8.5	0, 0	1	10.0	< 0.459	82	78.	7 - 108
Percent recovery is based	on the spike result	. RPD is based or	n the spike	and spike du	plicate result.			
	LCSD		Spike	Matrix	R	ec.		RPD
Param	Result	Units Dil.	Amount	Result			RPD	Limit
GRO	9.03	m mg/Kg 1	10.0	< 0.459	90 78.7	- 108	10	20
Percent recovery is based	on the spike result	. RPD is based or	n the spike	and spike du	plicate result.			
	\mathbf{LC}	S LCSD		Spi	ke LCS	LCSD	. 1	Rec.
Surrogate	Res		Units	Dil. Amo		Rec.		.imit
Trifluorotoluene (TFT)	0.80		mg/Kg	1 1.0		92		7 - 110
4-Bromofluorobenzene (4-	-BFB) 0.76	60 0.778	mg/Kg	1 1.(00 76	78	74.	4 - 107
Laboratory Control Sp QC Batch: 42877 Prep Batch: 36996	pike (LCS-1)	Date Analyzed: QC Preparatior				0	zed By: ared By:	
	LC	CS		Spike	Matrix			Rec.
Param GRO	LC Res 7.0	sult Units	Dil.	Spike Amount 10.0	Matrix Result <0.459	Rec. 79	I	Rec. Jimit 7 - 108

Param		$\begin{array}{c} \mathrm{LCSD} \\ \mathrm{Result} \end{array}$	Units	Dil.	Spike Amount		atrix sult	Rec.		ec. mit	RPD	RPD Limit
GRO			mg/Kg	1	10.0		.459	87		- 108	$\frac{10}{10}$	$\frac{11111}{20}$
Percent recovery is bas	ed on the sp									100		
		LCS	LCS	D			Sp	ike	\mathbf{LCS}	LCSI)	Rec.
Surrogate		Result			Units	Dil.	Ame		Rec.	Rec.		Limit
Trifluorotoluene (TFT)		0.895			ng/Kg	1	1.		90	90 52		.7 - 110
4-Bromofluorobenzene	(4-BFB)	0.762	0.75	<u>8 n</u>	ng/Kg	1	1.	00	76	76	74	.4 - 107
Laboratory Control	Spike (LC	S-1)										
QC Batch: 42921			Date Anal		2007-11						zed By	
Prep Batch: 37033		(QC Prepa	ration:	2007-11	-09				Prepa	ared By	: RM
		LCS				Sp	oike	Ma	trix			Rec.
Param		Resul		nits	Dil.	*	ount	Re	sult	Rec.		Limit
DRO		251	mg	g/Kg	1	2	50	<1	.0.7	100	64	.1 - 124
Percent recovery is bas	ed on the sp	ike result. I	RPD is ba	ised on	the spike	and sp	oike du	iplicate	result.			
Param		$\begin{array}{c} \mathrm{LCSD} \\ \mathrm{Result} \end{array}$	Units	Dil.	Spike Amount		atrix sult	Rec.	R/ Lii	ec. nit	RPD	RPD Limit
DRO			mg/Kg	1	250		10.7	109		- 124	8	20
Percent recovery is bas	ed on the sp		-1 -	used on	the spike	and sp	oike dı	iplicate				
	LCS	LCSD				$_{\rm Sp}$	ike	LC	s	LCSD		Rec.
Surrogate	Result	Result	Un	its	Dil.	-	ount	Rec		Rec.		Limit
n-Triacontane	194	201	mg/	Kg	1	1	50	129	9	134	62	.5 - 164
Laboratory Control	Spike (LC	S-1)										
QC Batch: 42922]	Date Anal	lvzed:	2007-11	-09				Analy	zed By	: RM
Prep Batch: 37034			QC Prepa	0	2007-11	-09					ared By	
		LCS				St	oike	Ma	trix			Rec.
Param		Resul		nits	Dil.	. *	ount	Re	sult	Rec.		Limit
DRO		278	mg	g/Kg	1	2	50	<1	.0.7	111	64	.1 - 124
Percent recovery is bas	ed on the sp	ike result. I	RPD is ba	ised on	the spike	and sp	oike dı	iplicate	result.			
		LCSD			Spike		atrix			ec.		RPD
Param		Result	Units	Dil.	Amount		sult	Rec.		nit	RPD	Limit
DRO		266	m mg/Kg	1	250	<]	10.7	106	64.1	- 124	4	20
Percent recovery is bas	ed on the sp	ike result. I	RPD is ba	ised on	the spike	and sp	oike du	iplicate	result.			
	LCS	LCSD					ike	\mathbf{LC}		LCSD		Rec.
Surrogate n-Triacontane	Result 188	Result 195	Uni mg/		Dil.		ount	Ree		Rec. 130		Limit .5 - 164
715 7 2					1		50	12				

Laboratory Control Spike (LCS-1)

QC Batch:	43035	Date Analyzed:	2007-11-10	Analyzed By:	MM
Prep Batch:	37133	QC Preparation:	2007-11-09	Prepared By:	MM

	LCS			\mathbf{Spike}	Matrix		Rec.
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit
Chloride	101	mg/Kg	1	100	<3.25	101	96.1 - 103

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			Spike	Matrix		Rec.		RPD
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Chloride	102	$\mathrm{mg/Kg}$	1	100	$<\!3.25$	102	96.1 - 103	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 430 Prep Batch: 371		v	2007-11-10 2007-11-09			Analyzed Prepared	0
Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	99.3	mg/Kg	1	100	<3.25	99	96.1 - 103

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			Spike	Matrix		Rec.		RPD
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Chloride	102	m mg/Kg	1	100	$<\!3.25$	102	96.1 - 103	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 142210

QC Batch:	42876	Date Analyzed:	2007-11-08	Analyzed By:	KB
Prep Batch:	36995	QC Preparation:	2007-11-08	Prepared By:	\mathbf{KB}

	MS			Spike	Matrix		Rec.
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit
GRO	10.3	m mg/Kg	1	10.0	< 0.459	103	51.3 - 130

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			Spike	Matrix		Rec.		RPD
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
GRO	11.9	$\mathrm{mg/Kg}$	1	10.0	< 0.459	119	51.3 - 130	14	19.6

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MS	MSD			Spike	MS	MSD	Rec.
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
Trifluorotoluene (TFT)	0.864	0.978	mg/Kg	1	1	86	98	56.1 - 124
4-Bromofluorobenzene (4-BFB)	0.995	1.13	m mg/Kg	1	1	100	113	67.1 - 146

Matrix Spike (MS-1) Spiked Sample: 142228 QC Batch: 42877 Date Analyzed: 2007-11-08 Analyzed By: KB Prep Batch: 36996 QC Preparation: 2007-11-08 Prepared By: KB MS Spike Matrix Rec. Param Result Units Dil. Amount Result Rec. Limit < 0.459GRO 10.110.0 101 51.3 - 130 mg/Kg 1 Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result. RPD MSD Spike Matrix Rec. Param Result Units Dil. Amount Result Rec. Limit RPD Limit GRO 16.2mg/Kg 12.5< 0.459130 51.3 - 130 4619.61 Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result. MS MSD MSD Spike MSRec. Dil. Surrogate Result Result Units Amount Rec. Rec. Limit Trifluorotoluene (TFT) 1.2212256.1 - 124 0.937mg/Kg 1 1 944-Bromofluorobenzene (4-BFB) 1041431.041.43mg/Kg 1 1 67.1 - 146 Matrix Spike (MS-1) Spiked Sample: 142209 QC Batch: Date Analyzed: 2007-11-09 Analyzed By: 42921 RM37033Prep Batch: QC Preparation: 2007-11-09 Prepared By: RMMS Spike Matrix Rec. Param Result Units Dil. Result Rec. Limit Amount 25 DRO 142250< 10.75747.5 - 127 mg/Kg Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result. MSD Spike Matrix Rec. RPD Param RPD Result Units Dil. Amount Result Rec. Limit Limit 2625047.5 - 127 $\mathbf{2}$ DRO 145mg/Kg < 10.75820Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result. MS MSD Spike MSMSD Rec. Surrogate Result Result Units Dil. Amount Rec. Rec. Limit n-Triacontane 153154mg/Kg 1 15010210362.5 - 164 Matrix Spike (MS-1) Spiked Sample: 142224 QC Batch: 42922 Date Analyzed: 2007-11-09 Analyzed By: RMPrep Batch: 37034 QC Preparation: 2007-11-09 Prepared By: RMMS Spike Matrix Rec. Param Result Units Dil. Amount Result Rec. Limit 27 DRO 164 mg/Kg 1 250< 10.766 47.5 - 127 ²⁵Sample received out of hold time

²⁶Sample received out of hold time

²⁷MS/MSD RPD out of RPD Limits. Use LCS/LCSD to demonstrate analysis is under control. Sample received out of hold time

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param		$\begin{array}{c} \mathrm{MSD} \\ \mathrm{Result} \end{array}$	Units	Dil.	Spike Amount	Matrix Result	Rec.	$\operatorname{Rec.}$ Limit	RPD	RPD Limit
DRO	28	222	mg/Kg	1	250	<10.7	89	47.5 - 127	$\frac{\operatorname{In} \mathbf{D}}{30}$	$\frac{111111}{20}$
Percent recovery is ba	sed on the spi	ke result. I	RPD is ba	sed or	n the spike a	nd spike du	iplicate i	result.		
	${ m MS}$	MSD				Spike	MS	5 MSD		Rec.
Surrogate	Result	Result	Un	its	Dil.	Amount	Rec	c. Rec.		Limit
n-Triacontane	129	139	mg/	Κg	1	150	86	93	62	2.5 - 164

Matrix Spike (MS-1) Spiked Sample: 142220

QC Batch:	43035	Date Analyzed:	2007-11-10	Analyzed By:	$\mathbf{M}\mathbf{M}$
Prep Batch:	37133	QC Preparation:	2007-11-09	Prepared By:	MM

	${ m MS}$			\mathbf{Spike}	Matrix		Rec.
Param	Result	Units	Dil.	Amount	\mathbf{Result}	Rec.	Limit
Chloride	541	m mg/Kg	10	5 00	$<\!32.5$	102	80 - 120

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			Spike	Matrix		Rec.		RPD
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Chloride	502	m mg/Kg	10	500	$<\!32.5$	94	80 - 120	8	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 142230

QC Batch:	43036	Date Analyzed:	2007-11-10	Analyzed By:	MM
Prep Batch:	37134	QC Preparation:	2007-11-09	Prepared By:	MM

	MS			\mathbf{Spike}	Matrix		Rec.
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit
Chloride	480	mg/Kg	10	500	$<\!32.5$	92	80 - 120

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			Spike	Matrix		Rec.		RPD
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Chloride	507	mg/Kg	10	500	$<\!32.5$	97	80 - 120	6	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Standard (ICV-1)

QC Batch: 42876

Date Analyzed: 2007-11-08

Analyzed By: KB

²⁸MS/MSD RPD out of RPD Limits. Use LCS/LCSD to demonstrate analysis is under control. Sample received out of hold time

			ICVs True	ICVs Found	ICVs Percent	Percent Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
GRO	1148	mg/Kg	1.00	0.889	89	85 - 115	2007-11-08
Standard	(CCV-1)						
QC Batch:	42876		Date Ana	alyzed: 2007-1	1-08	Ana	yzed By: KB
			CCVs	CCVs	CCVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
GRO		m mg/Kg	1.00	0.863	86	85 - 115	2007-11-08
Standard	(ICV-1)						
QC Batch:	42877		Date Ana	alyzed: 2007-1	1-08	Ana	yzed By: KB
			ICVs	ICVs	ICVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
		ma m / K m	1.00	0.882	88	85 - 115	2007-11-08
GRO		mg/Kg	1.00	0.002			
	(CCV-1)	ing/ Kg					
GRO	````	mg/ĸg		alyzed: 2007-1	1-08	Ana	lyzed By: KB
GRO Standard	````	mg/ Kg			1-08 CCVs	Ana Percent	
GRO Standard QC Batch:	42877	mg/ Kg	Date Ana	alyzed: 2007-1			lyzed By: KB Date
GRO Standard QC Batch: Param	````	Units	Date Ana CCVs True Conc.	alyzed: 2007-1 CCVs Found Conc.	CCVs	Percent Recovery Limits	lyzed By: KB Date Analyzed
GRO Standard QC Batch:	42877		Date Ana CCVs True	alyzed: 2007-1 CCVs Found	CCVs Percent	Percent Recovery	lyzed By: KB Date
GRO Standard QC Batch: Param	42877 Flag	Units	Date Ana CCVs True Conc.	alyzed: 2007-1 CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	lyzed By: KB Date Analyzed
GRO Standard QC Batch: Param GRO	42877 Flag (CCV-1)	Units	Date Ana CCVs True Conc. 1.00	alyzed: 2007-1 CCVs Found Conc.	CCVs Percent Recovery 88	Percent Recovery Limits 85 - 115	lyzed By: KB Date Analyzed
GRO Standard QC Batch: Param GRO Standard	42877 Flag (CCV-1)	Units	Date Ana CCVs True Conc. 1.00	alyzed: 2007-1 CCVs Found Conc. 0.876	CCVs Percent Recovery 88	Percent Recovery Limits 85 - 115	yzed By: KB Date Analyzed 2007-11-08
GRO Standard QC Batch: Param GRO Standard	42877 Flag (CCV-1)	Units	Date Ana CCVs True Conc. 1.00 Date Ana	alyzed: 2007-1 CCVs Found Conc. 0.876 alyzed: 2007-1	CCVs Percent Recovery 88	Percent Recovery Limits 85 - 115 Anal	yzed By: KB Date Analyzed 2007-11-08
GRO Standard QC Batch: Param GRO Standard	42877 Flag (CCV-1)	Units	Date Ana CCVs True Conc. 1.00 Date Ana CCVs	alyzed: 2007-1 CCVs Found Conc. 0.876 alyzed: 2007-1 CCVs	CCVs Percent Recovery 88 1-09 CCVs	Percent Recovery Limits 85 - 115 Anal Percent	lyzed By: KB Date <u>Analyzed</u> 2007-11-08 yzed By: RM
GRO Standard QC Batch: Param GRO Standard QC Batch:	42877 Flag (CCV-1) 42921	Units mg/Kg	Date Ana CCVs True Conc. 1.00 Date Ana CCVs True	alyzed: 2007-1 CCVs Found Conc. 0.876 alyzed: 2007-1 CCVs Found	CCVs Percent Recovery 88 1-09 CCVs Percent	Percent Recovery Limits 85 - 115 Anal Percent Recovery	lyzed By: KB Date <u>Analyzed</u> 2007-11-08 yzed By: RM Date
GRO Standard QC Batch: Param GRO Standard QC Batch: Param DRO	42877 Flag (CCV-1) 42921 Flag	Units mg/Kg Units	Date Ana CCVs True Conc. 1.00 Date Ana CCVs True Conc.	alyzed: 2007-1 CCVs Found Conc. 0.876 alyzed: 2007-1 CCVs Found Conc.	CCVs Percent Recovery 88 1-09 CCVs Percent Recovery	Percent Recovery Limits 85 - 115 Anal Percent Recovery Limits	lyzed By: KB Date <u>Analyzed</u> 2007-11-08 yzed By: RM Date Analyzed
GRO Standard QC Batch: Param GRO Standard QC Batch: Param DRO Standard	42877 Flag (CCV-1) 42921 Flag (CCV-2)	Units mg/Kg Units	Date Ana CCVs True Conc. 1.00 Date Ana CCVs True Conc. 250	alyzed: 2007-1 CCVs Found Conc. 0.876 alyzed: 2007-1 CCVs Found Conc.	CCVs Percent Recovery 88 1-09 CCVs Percent Recovery 108	Percent Recovery Limits 85 - 115 Anal Percent Recovery Limits 85 - 115	lyzed By: KB Date <u>Analyzed</u> 2007-11-08 yzed By: RM Date Analyzed
GRO Standard QC Batch: Param GRO Standard QC Batch: Param	42877 Flag (CCV-1) 42921 Flag (CCV-2)	Units mg/Kg Units	Date Ana CCVs True Conc. 1.00 Date Ana CCVs True Conc. 250	alyzed: 2007-1 CCVs Found Conc. 0.876 alyzed: 2007-1 CCVs Found Conc. 269	CCVs Percent Recovery 88 1-09 CCVs Percent Recovery 108	Percent Recovery Limits 85 - 115 Anal Percent Recovery Limits 85 - 115	lyzed By: KB Date Analyzed 2007-11-08 yzed By: RM Date Analyzed 2007-11-09
GRO Standard QC Batch: Param GRO Standard QC Batch: Param DRO Standard	42877 Flag (CCV-1) 42921 Flag (CCV-2)	Units mg/Kg Units	Date Ana CCVs True Conc. 1.00 Date Ana CCVs True Conc. 250 Date Ana	alyzed: 2007-1 CCVs Found Conc. 0.876 alyzed: 2007-1 CCVs Found Conc. 269 alyzed: 2007-1	CCVs Percent Recovery 88 1-09 CCVs Percent Recovery 108	Percent Recovery Limits 85 - 115 Anal Percent Recovery Limits 85 - 115 Anal	lyzed By: KB Date Analyzed 2007-11-08 yzed By: RM Date Analyzed 2007-11-09
GRO Standard QC Batch: Param GRO Standard QC Batch: Param DRO Standard	42877 Flag (CCV-1) 42921 Flag (CCV-2)	Units mg/Kg Units	Date Ana CCVs True Conc. 1.00 Date Ana CCVs True Conc. 250 Date Ana CCVs	alyzed: 2007-1 CCVs Found Conc. 0.876 alyzed: 2007-1 CCVs Found Conc. 269 alyzed: 2007-1 CCVs	CCVs Percent Recovery 88 1-09 CCVs Percent Recovery 108 1-09 CCVs	Percent Recovery Limits 85 - 115 Anal Percent Recovery Limits 85 - 115 Anal Percent	lyzed By: KB Date Analyzed 2007-11-08 yzed By: RM Date Analyzed 2007-11-09 yzed By: RM

Standard (ICV-1)

QC Batch:	42922		Date Ana	lyzed: 2007-11	-09	Analyzed By: RM			
			ICVs	ICVs	ICVs	Percent			
			True	Found	Percent	Recovery	Date		
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed		
DRO		m mg/Kg	250	275	110	85 - 115	2007-11-0		
Standard	(CCV-1)								
QC Batch:	42922		Date Ana	lyzed: 2007-11	-09	Anal	yzed By: RM		
			CCVs	CCVs	CCVs	Percent			
			True	Found	Percent	Recovery	Date		
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed		
DRO		mg/Kg	250	269	108	85 - 115	2007-11-09		
Standard	(ICV-1)								
QC Batch:	43035		Date Anal	lyzed: 2007-11	-10	Analy	zed By: MM		
			ICVs	ICVs	ICVs	Percent			
			True	Found	Percent	Recovery	Date		
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed		
Chloride		m mg/Kg	100	100	100	85 - 115	2007-11-1		
Standard	(CCV-1)								
QC Batch:	43035		Date Anal	lyzed: 2007-11	-10	Analy	zed By: MM		
			CCVs	CCVs	CCVs	Percent			
			True	Found	Percent	Recovery	Date		
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed		
Chloride		m mg/Kg	100	100	100	85 - 115	2007-11-1		
Standard	(ICV-1)								
QC Batch:	43036		Date Anal	lyzed: 2007-11	-10	Analy	zed By: MM		
			ICVs	ICVs	ICVs	Percent			
		.	True	Found	Percent	Recovery	Date		
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed		
Chloride		mg/Kg	100	98.4	98	85 - 115	2007-11-10		

QC Batch: 43036

Date Analyzed: 2007-11-10

Analyzed By: MM

Report Date: November 14, 2007 Violet St. & Center St.				Work Order: 71 iolet St. & Cer		Page Number: 20 of 20 City of Carlsbad, NM		
			CCVs True	CCVs Found	CCVs Percent	Percent Recovery	Date	
\mathbf{Param}	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed	
Chloride mg/Kg		100	102	102	85 - 115	2007-11-10		

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Analytical and Quality Control Report

Scott Branson SB Weed Control & Transport 213 S Mesa Carlsbad, NM, 88220

Report Date: November 14, 2007

7110821 Work Order:

Project Location: City of Carlsbad, NM **Project Name:** Violet St. & Center St. Violet St. & Center St. Project Number:

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

			Date	Time	Date
Sample	Description	Matrix	Taken	Taken	Received
142208	B1	soil	2007-10-08	13:00	2007-11-08
142209	$\mathbf{B2}$	soil	2007-10-08	13:30	2007 - 11 - 08
142210	B3	soil	2007-10-08	14:00	2007 - 11 - 08
142211	$\mathbf{B4}$	soil	2007-10-08	14:30	2007 - 11 - 08
142212	$\mathbf{B5}$	soil	2007-10-08	15:00	2007 - 11 - 08
142213	$\mathbf{B6}$	soil	2007-10-08	15:30	2007 - 11 - 08
142214	B7	soil	2007-10-08	16:00	2007 - 11 - 08
142215	B8	soil	2007-10-08	16:30	2007 - 11 - 08
142216	B9	soil	2007-10-08	17:00	2007 - 11 - 08
142217	B10	soil	2007-10-08	17:30	2007 - 11 - 08
142218	B11	soil	2007 - 10 - 08	18:00	2007 - 11 - 08

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 17 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Michael alm

Dr. Blair Leftwich, Director

Standard Flags

 $\,B\,$ - The sample contains less than ten times the concentration found in the method blank.

Analytical Report

Sample: 142208 - B1

Analysis: QC Batch: Prep Batch:	Chloride (Titration) 43034 37132	Analytical Method: Date Analyzed: Sample Preparation	2007-11-10	Prep Method: Analyzed By: Prepared By:	1
Parameter	Flag	RL Result	Units	Dilution	\mathbf{RL}
	Flag				-
Chloride		<50.0	mg/Kg	10	5.00

Sample: 142208 - B1

Analysis: QC Batch:	TPH DRO 42921 27022		Analytical Me Date Analyze	d: 2007-1		Analyz	Aethod: N/A zed By: RM wed Berg BM
Prep Batch:	37033		Sample Prepa	aration: 2007-1	.1-09	Prepar	ed By: RM
			RL				
Parameter	Flag		\mathbf{Result}	Un	its	Dilution	RL
DRO	1		<50.0	mg/	Kg	1	50.0
					\mathbf{Spike}	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontan	e	150	mg/Kg	1	150	100	62.5 - 164

Sample: 142208 - B1

Analysis: QC Batch: Prep Batch:	TPH GRO 42876 36995		Analytical Date Anal Sample Pr		S 8015B 2007-11-08 2007-11-08		Prep Meth Analyzed Prepared 1	By: KB
			\mathbf{RL}					
Parameter	Flag		Result		Units	D	vilution	RL
GRO	2		1.29		m mg/Kg		1	1.00
						Spike	Percent	Recovery
Surrogate		Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotolu	ene (TFT)		1.06	mg/Kg	1	1.00	106	34.1 - 161
4-Bromofluor	cobenzene (4-BFB)		1.08	m mg/Kg	1	1.00	108	31.8 - 159

Sample: 142209 - B2

Analysis: QC Batch: Prep Batch:	Chloride (Titration) 43034 37132	Analytical Method: Date Analyzed: Sample Preparation	2007-11-10	Prep Method: Analyzed By: Prepared By:	\dot{MM}
		RL			
Parameter	Flag	Result	Units	Dilution	RL
Chloride		59.4	mg/Kg	10	5.00

 $^1 \, {\rm Sample}$ received out of hold time $^2 \, {\rm Sample}$ ran out of hold time per client's request. \bullet

Sample: 142209 - B2

Analysis: QC Batch: Prep Batch:	TPH DRO 42921 37033		Analytical Me Date Analyze Sample Prepa	d: 2007-		Prep M Analyz Prepar	0
			\mathbf{RL}				
Parameter	Flag	5	Result	U	nits	Dilution	RL
DRO	3		< 50.0	mg/	/Kg	1	50.0
					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane	e	170	m mg/Kg	1	150	113	62.5 - 164

Sample: 142209 - B2

Analysis: QC Batch: Prep Batch:	TPH GRO 42876 36995		Analytical Date Anal Sample Pr		S 8015B 2007-11-08 2007-11-08		Prep Meth Analyzed Prepared	By: KB
			\mathbf{RL}					
Parameter	Flag		Result		Units	D	ilution	RL
GRO	4		1.31		m mg/Kg		1	1.00
Surrogate		Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotolu	ene (TFT)		1.12	mg/Kg	1	1.00	112	34.1 - 161
4-Bromofluor	cobenzene (4-BFB)		1.08	mg/Kg	1	1.00	108	31.8 - 159

Sample: 142210 - B3

Analysis: QC Batch: Prep Batch:	Chloride (Titration) 43034 37132	Analytical Me Date Analyzed Sample Prepa	l: 2007-11-10	Prep Metho Analyzed B Prepared B	y: MM
		\mathbf{RL}			
Parameter	Flag	Result	Units	Dilution	RL
Chloride		<50.0	m mg/Kg	10	5.00

Sample: 142210 - B3

Analysis: QC Batch: Prep Batch:	TPH DRO 42921 37033	Analytical Method: Date Analyzed: Sample Preparation:	Mod. 8015B 2007-11-09 2007-11-09	Prep Method: Analyzed By: Prepared By:	N/A RM RM
_		RL			
Parameter	Flag	Result	Units	Dilution	RL
DRO	5	<50.0	m mg/Kg	1	50.0

³Sample received out of hold time

⁴Sample ran out of hold time per client's request. • ⁵Sample received out of hold time

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		178	mg/Kg	1	150	119	62.5 - 164

Sample: 142210 - B3

Analysis: QC Batch: Prep Batch:	TPH GRO 42876 36995		Analytica Date Ana Sample Pr		S 8015B 2007-11-0 2007-11-0		Prep Met Analyzed Prepared	l By: 1	5 5035 KB KB
Parameter GRO	Flag 6		RL Result 1.23		Units mg/Kg		Dilution 1		RL 1.00
Surrogate Trifluorotolue	ene (TFT) robenzene (4-BFB)	Flag	Result 1.00 1.02	Units mg/Kg mg/Kg	Dilution	Spike n Amount 1.00 1.00	Percent Recovery 100 102	Li 34.1	covery mits - 161 3 - 159
Sample: 14 Analysis: QC Batch: Prep Batch:	2211 - B4 Chloride (Titratio 43035 37133	on)	Date .	tical Metho Analyzed: le Preparati	2007-1	-	Prep M Analyz Prepar		N/A MM MM
			RL		** •				
Parameter Chloride	Flag		Result <50.0		Units mg/Kg		Dilution 10		RL 5.00
Sample: 14 Analysis: QC Batch: Prep Batch:	2211 - B4 TPH DRO 42921 37033		Analytica Date Ana Sample P:		Mod. 801 2007-11-0 2007-11-0	9	Prep M Analyz Prepar	ed By:	N/A RM RM
Parameter DRO	Flag 7		RL Result <50.0		Units mg/Kg		Dilution 1		RL 50.0
Surrogate n-Triacontan	Flag	Result 181	Units mg/Kg		ution 1	Spike Amount 150	Percent Recovery 121	${ m Li}$	covery mits 5 - 164

Sample: 142211 - B4

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	42876	Date Analyzed:	2007-11-08	Analyzed By:	KB
Prep Batch:	36995	Sample Preparation:	2007-11-08	Prepared By:	KB

 6 Sample ran out of hold time per client's request. •

⁷Sample received out of hold time

		\mathbf{RL}					
Flag		Result		Units		Dilution	RL
8		1.32		m mg/Kg		1	1.00
					Spike	Percent	Recovery
	Flag	Result	Units	Dilution	Amount	Recovery	Limits
ene (TFT)		1.04	mg/Kg	1	1.00	104	34.1 - 161
robenzene (4-BFB)		1.02	m mg/Kg	1	1.00	102	31.8 - 159
2212 - B5 Chloride (Titration) 43035 37133		Date A	nalyzed:	2007-11-1	0	Analyzed	By: MM
Flag		Result		Units		Dilution	RL
		<50.0		mg/Kg		10	5.00
2 2212 - B5 TPH DRO 42921		0		Mod. 8015B 2007-11-09		-	'
	8 ene (TFT) robenzene (4-BFB) 22212 - B5 Chloride (Titration) 43035 37133 Flag 22212 - B5 TPH DRO	8 Flag ene (TFT) robenzene (4-BFB) E2212 - B5 Flag E2212 - B5 TPH DRO	8 1.32 Flag Result ene (TFT) 1.04 robenzene (4-BFB) 1.02 E2212 - B5 Chloride (Titration) Analyti 37133 RL Flag RL Flag RL Flag RL Flag RL Flag RL S TPH DRO Analytical	8 1.32 Flag Result Units ene (TFT) 1.04 mg/Kg robenzene (4-BFB) 1.02 mg/Kg E2212 - B5 Chloride (Titration) Analytical Method Analytical Method Analytical Method Analytical Method Sample Preparation RL Flag Result Analytical Method:	8 1.32 mg/Kg Flag Result Units Dilution ene (TFT) 1.04 mg/Kg 1 robenzene (4-BFB) 1.02 mg/Kg 1 22212 - B5 1.02 mg/Kg 1 Chloride (Titration) Analytical Method: SM 4500- 43035 Date Analyzed: 2007-11-1 37133 Sample Preparation: 2007-11-0 RL Flag Result Units <50.0	8 1.32 mg/Kg Flag Result Units Dilution Amount ene (TFT) 1.04 mg/Kg 1 1.00 robenzene (4-BFB) 1.02 mg/Kg 1 1.00 Hag Result Units 1.00 1.00 Hag Analytical Method: SM 4500-Cl B 1.00 Hag Date Analyzed: 2007-11-10 2007-11-09 RL Sample Preparation: 2007-11-09 RL Flag Result Units 2007-11-09 RL Flag Result Units Flag Result Units 2007-11-09 RL Flag Result Units Flag Result Units 2007-11-09 RL Flag Result Units 2007-11-09 RL Flag Result Units 2007-11-09 RL Flag Result Units 2007-000 Main E2212 - B5 TPH DRO Analytical Method: Mod. 8015B Main	8 1.32 mg/Kg 1 Spike Percent Flag Result Units Dilution Amount Recovery ene (TFT) 1.04 mg/Kg 1 1.00 104 robenzene (4-BFB) 1.02 mg/Kg 1 1.00 104 chloride (Titration) Analytical Method: SM 4500-Cl B Prep Meth 43035 Date Analyzed: 2007-11-10 Analyzed 37133 Sample Preparation: 2007-11-09 Prepared RL Flag Result Units Dilution <50.0

Prep Batch: 37033			Sample Prepa	ration: 2007-11	Prepar	ed By: RM	
			\mathbf{RL}				
Parameter	\mathbf{Fla}	g	Result	Uni	ts	Dilution	RL
DRO			<50.0	m mg/Kg		1	50.0
					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane	:	145	m mg/Kg	1	150	97	62.5 - 164

Sample: 142212 - B5

Analysis: QC Batch: Prep Batch:	TPH GRO 42876 36995		Analytical Date Anal Sample Pr		S 8015B 2007-11-08 2007-11-08		Prep Meth Analyzed Prepared I	By: KB
T Tep Daten.	30333		RL	cparation.	2007-11-00		Ticparcu	by. KD
Parameter	Flag		Result		Units	D	ilution	RL
GRO	10		<1.00		m mg/Kg		1	1.00
						Spike	Percent	Recovery
Surrogate		Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotolu	ene (TFT)		1.01	mg/Kg	1	1.00	101	34.1 - 161
4-Bromofluor	robenzene (4-BFB)		0.965	mg/Kg	1	1.00	96	31.8 - 159

⁸Sample ran out of hold time per client's request. • ⁹Sample received out of hold time ¹⁰Sample ran out of hold time per client's request. •

Sample: 142213 - B6

Analysis: QC Batch: Prep Batch:	Chloride (Titration) 43035 37133	Analytical Method: Date Analyzed: Sample Preparation	2007-11-10	Prep Method: Analyzed By: Prepared By:	MM
		RL			
Parameter	Flag	Result	Units	Dilution	RL
Chloride		<100	mg/Kg	20	5.00

Sample: 142213 - B6

Analysis: QC Batch: Prep Batch:	TPH DRO 42921 37033		Analytical Me Date Analyze Sample Prepa	d: ź	Mod. 8015B 2007-11-09 2007-11-09		Prep Method: Analyzed By: Prepared By:		N/A RM RM
			\mathbf{RL}						
Parameter	Flag		Result		Units	i	Dilution		RL
DRO	11		<50.0		mg/Kg	•	1		50.0
Surrogate	Flag	Result	Units	Diluti	on	Spike Amount	Percent Recovery		nits
n-Triacontan	e	160	m mg/Kg	1		150	107	62.5 \cdot	- 164

Sample: 142213 - B6

Analysis: QC Batch: Prep Batch:			yzed:	S 8015B 2007-11-08 2007-11-08	Prep Method: Analyzed By: Prepared By:		By: KB	
			RL					
Parameter	Flag		Result		Units	D	vilution	RL
GRO	12		<1.00		m mg/Kg		1	1.00
Surrogate		Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotolu	ene (TFT)		1.05	mg/Kg	1	1.00	105	34.1 - 161
4-Bromofluor	robenzene (4-BFB)		0.950	mg/Kg	1	1.00	95	31.8 - 159

Sample: 142214 - B7

Analysis: QC Batch:	Chloride (Titration) 43035	Analytical Method: Date Analyzed:	SM 4500-Cl B 2007-11-10	Prep Method: Analyzed By:	,
Prep Batch:		Sample Preparation:		Prepared By:	
		RL			
Parameter	Flag	Result	Units	Dilution	RL
Chloride		<50.0	mg/Kg	10	5.00

 $^{11} {\rm Sample}$ received out of hold time $^{12} {\rm Sample}$ ran out of hold time per client's request. \bullet

Sample: 142214 - B7

Analysis: QC Batch: Prep Batch:	C Batch: 42921		Analytical Method Date Analyzed: Sample Preparatio		Mod. 8 2007-11 2007-11	-09	1	ed By: R	/A M M
			\mathbf{RL}						
Parameter	Flag	r	\mathbf{Result}		Unit	ts -	Dilution]	RL
DRO	13		<50.0		mg/K	g	1	õ	0.0
						Spike	Percent	Recove	ery
Surrogate	Flag	Result	Units	Dilut	ion	Amount	Recovery	Limit	s
n-Triacontane	2	185	m mg/Kg	1		150	123	62.5 - 1	164

Sample: 142214 - B7

Analysis: QC Batch: Prep Batch:	TPH GRO 42876 36995		Analytical Date Anal Sample Pr		S 8015B 2007-11-08 2007-11-08		Prep Method Analyzed By Prepared By	
			\mathbf{RL}					
Parameter	Flag		Result		Units	D	ilution	RL
GRO	14		<1.00		m mg/Kg		1	1.00
Surrogate		Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotolu	ene (TFT)		1.22	mg/Kg	1	1.00	122	34.1 - 161
4-Bromofluor	obenzene (4-BFB)		1.08	mg/Kg	1	1.00	108	31.8 - 159

Sample: 142215 - B8

Analysis: QC Batch: Prep Batch:	Chloride (Titration) 43035 37133	Analytical Meth Date Analyzed: Sample Prepara	2007-11-10	Prep Method Analyzed By Prepared By	: MM
		RL			
Parameter	Flag	Result	Units	Dilution	RL
Chloride		<50.0	m mg/Kg	10	5.00

Sample: 142215 - B8

Analysis: QC Batch: Prep Batch:	TPH DRO 42921 37033	Analytical Method: Date Analyzed: Sample Preparation:	Mod. 8015B 2007-11-09 2007-11-09	Prep Method: Analyzed By: Prepared By:	m RM
		RL			
Parameter	Flag	Result	Units	Dilution	RL
DRO	15	<50.0	mg/Kg	1	50.0

¹³Sample received out of hold time

¹⁴Sample ran out of hold time per client's request.
 ¹⁵Sample received out of hold time

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		194	mg/Kg	1	150	129	62.5 - 164

Sample: 142215 - B8

Analysis: QC Batch: Prep Batch:	TPH GRO 42876 36995		Analytical Date Anal Sample Pr		S 8015B 2007-11-0 2007-11-0		Prep Me Analyzed Prepared	l By: 1	S 5035 KB KB
Parameter GRO	Flag 16		RL Result <1.00		Units mg/Kg		Dilution 1		$\frac{\text{RL}}{1.00}$
			<1.00		mg/ Kg		1		1.00
Surrogate		Flag	Result	Units	Dilutio	Spike n Amoun	Percent t Recovery		covery mits
Trifluorotolue			1.07	mg/Kg	1	1.00	107		- 161
4-Bromofluor	obenzene (4-BFB)		0.962	m mg/Kg	1	1.00	96	31.8	3 - 159
Sample: 14 Analysis: QC Batch: Prep Batch:	Chloride (Titratic 43035 37133	n)	Date A Sampl RL	tical Metho Analyzed: e Preparati	2007- on: 2007-		Analyz Prepar		N/A MM MM
Parameter	Flag		Result		Units		Dilution		RL
Chloride			<50.0		mg/Kg		10		5.00
Sample: 14 Analysis: QC Batch: Prep Batch:	2216 - B9 TPH DRO 42921 37033		Analytical Date Anal Sample Pr		Mod. 801 2007-11-0 2007-11-0	9	Prep M Analyz Prepar		N/A RM RM
			RL						
Parameter	Flag		Result		Units		Dilution		RL
DRO	17		<50.0		mg/Kg		1		50.0
Surrogate n-Triacontan	Flag	Result 203	Units mg/Kg		ition	Spike Amount 150	Percent Recovery 135	${ m Li}$	covery mits 5 - 164

Sample: 142216 - B9

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	42876	Date Analyzed:	2007-11-08	Analyzed By:	KB
Prep Batch:	36995	Sample Preparation:	2007-11-08	Prepared By:	\mathbf{KB}

 $^{16}\mathrm{Sample}$ ran out of hold time per client's request. \bullet $^{17}\mathrm{Sample}$ received out of hold time

Parameter	Flag		RL Result		Units		Dilution	RI
GRO	18		<1.00		mg/Kg		1	1.00
Surrogate		Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene	(TFT)	Thag	1.20	mg/Kg	1	1.00	120	34.1 - 161
4-Bromofluorobe	· /		1.06	mg/Kg	1	1.00	106	31.8 - 159
Sample: 14221			Analy	tical Method:	SM 4500-	Cl B	Prep M	ethod: N/A
-			Amalan	tion! Mathad	SM 4700		Duor M	othod. N/A
Analysis: Cł	7 - B10 nloride (Titration) 035			tical Method: Analyzed:	SM 4500- 2007-11-1		Prep Me Analyze	1
Analysis: Ch QC Batch: 43	nloride (Titration)		Date A		2007-11-1	.0	-	d By: MM
Analysis: Ch QC Batch: 43	nloride (Titration) 035		Date A	Analyzed:	2007-11-1	.0	Analyze	d By: MM
Analysis: Ch QC Batch: 43	nloride (Titration) 035		Date A Sampl	Analyzed:	2007-11-1	.0	Analyze	d By: MM

Sample: 142217 - B10

Analysis: QC Batch: Prep Batch:	TPH DRO 42921 37033		Analytical Me Date Analyze Sample Prepa	d: 2007-1	1-09	-	fethod: N/A ed By: RM ed By: RM
			RL				
Parameter	Flag	>	Result	Un	its	Dilution	RL
DRO	19		<50.0	mg/	Kg	1	50.0
					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontan	e	195	m mg/Kg	1	150	130	62.5 - 164

Sample: 142217 - B10

Analysis: QC Batch: Brop Batch:	TPH GRO 42876 36995		Analytical Date Anal	yzed:	S 8015B 2007-11-08 2007-11-08		Prep Method: Analyzed By: Prepared By:	
Prep Batch:	90999		Sample Pr	eparation:	2007-11-08		Prepared	By: KB
			RL					
Parameter	Flag		Result		Units	D	vilution	RL
GRO	20		<1.00		m mg/Kg		1	1.00
						Spike	Percent	Recovery
Surrogate		Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotolu	ene (TFT)		1.18	mg/Kg	1	1.00	118	34.1 - 161
4-Bromofluor	robenzene (4-BFB)		1.06	$\mathrm{mg/Kg}$	1	1.00	106	31.8 - 159

 $^{18}Sample$ ran out of hold time per client's request. \bullet $^{19}Sample$ received out of hold time $^{20}Sample$ ran out of hold time per client's request. \bullet

Sample: 142218 - B11

Analysis: QC Batch: Prep Batch:	Chloride (Titration) 43035 37133	Analytical Method Date Analyzed: Sample Preparatic	2007-11-10	Prep Method: Analyzed By: Prepared By:	\dot{MM}
		RL			
Parameter	Flag	Result	Units	Dilution	RL
Chloride		<50.0	m mg/Kg	10	5.00

Sample: 142218 - B11

Analysis: QC Batch: Prep Batch:	TPH DRO 42921 37033		Analytical Me Date Analyze Sample Prepa	d: 2	Aod. 801 2007-11-0 2007-11-0	9	1	fethod: N/ ed By: RM ed By: RM	${ m M}$
Danamatan	Ele		RL Result		Units		Dilution	r	рт
Parameter	Flag	,					Dilution		RL
DRO	21		<50.0		mg/Kg		1	5(0.0
Surrogate	Flag	Result	Units	Diluti	on	Spike Amount	Percent Recovery	Recove: Limits	
n-Triacontan	e	188	m mg/Kg	1		150	125	62.5 - 1	64

Sample: 142218 - B11

Analysis: QC Batch: Prep Batch:	TPH GRO 42876 36995		Analytical Date Anal Sample Pr	yzed:	S 8015B 2007-11-08 2007-11-08	Prep Meth Analyzed Prepared I		By: KB
Danamatan	Elar		RL		Units	D	ilution	DI
Parameter	Flag		Result			D	ilution	RL
GRO	22		<1.00		mg/Kg		1	1.00
Surrogate		Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotolu	ene (TFT)	0	1.11	mg/Kg	1	1.00	111	34.1 - 161
	robenzene (4-BFB)		1.04	mg/Kg	1	1.00	104	31.8 - 159

Method Blank (1) QC Batch: 42876

QC Batch: Prep Batch:		Date Analyzed: QC Preparation:			Analyzed By: Prepared By:	
		М	DL			
Parameter	Fla	g Res	sult	Units		\mathbf{RL}
GRO		<0.	459	mg/Kg		1

²¹Sample received out of hold time

 22 Sample ran out of hold time per client's request.

Surrogate	Flag	Result	Units	Dilution	Spike n Amoun	Percent t Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.911	mg/Kg	1	1.00	91	96 - 115
4-Bromofluorobenzene		0.573	mg/Kg	1	1.00	57	51.6 - 103
	<		0, 0				
Method Blank (1)	QC Batch: 42921						
QC Batch: 42921 Prep Batch: 37033		Date Anal QC Prepar	/)07-11-09)07-11-09			zed By: RM red By: RM
D			MDL		T		DI
Parameter DRO	Flag		Result			nits	RL
DRO			<10.7		mĮ	g/Kg	50
Surrogate F	ʻlag Result	Units	Dilı	ition	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	197	mg/Kg		1	150	131	62.5 - 164
QC Batch: 43034 Prep Batch: 37132		Date Analy QC Prepar	ration: 20	007-11-10 007-11-09			zed By: MM red By: MM
_			MDL				
Parameter	Flag		Result			nits	RL
Chloride			<3.25		mg	g/Kg	5
Method Blank (1)	QC Batch: 43035						
QC Batch: 43035 Prep Batch: 37133		Date Analy QC Prepar		007-11-10 007-11-09			zed By: MM red By: MM
1 lep Daten. 37133		QC I Tepar	ation. 20	07-11-03		пера	ieu Dy. Mim
			MDL				
Parameter	Flag		Result			nits	RL
Chloride			<3.25		mş	g/Kg	õ
Laboratory Control QC Batch: 42876 Prep Batch: 36995	Spike (LCS-1)	Date Anal QC Prepar		007-11-08 $007-11-08$			vzed By: KB vred By: KB
	T.	\mathbf{CS}		q	pike M	atrix	Rec.
Param			nits I			esult Rec.	Limit

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

 23 Spike recovery outside control limits but within method limits. ullet

Damana		LCSD	TT	D:1	Spike		atrix	D		lec.	חחח	RPD Linni
Param GRO		Result 9.03	Units mg/Kg	Dil.	Amount 10.0		esult).459	$\frac{\text{Rec.}}{90}$		imit ′ - 108	RPD 10	$\frac{\text{Limi}}{20}$
Percent recovery is ba	and on the cr										10	20
rendent recovery is ba	ised on the sp				i the spike	and sj	ріке а	uplicate	e resurt			
a				CSD		-	-	ike	LCS	LCSI		Rec.
Surrogate	יי)	Resu		esult	Units	Dil.		ount	Rec.	Rec.		Limit
Trifluorotoluene (TFT 4-Bromofluorobenzene		$0.86 \\ 0.76$			mg/Kg mg/Kg	$rac{1}{1}$		00 00	86 76	$\frac{92}{78}$		1.7 - 11 1.4 - 10
1 Dromonuorobenzen		0.10		110 .	mg/ m g	1	1.	00	10	10	17	
Laboratory Contro	l Spike (LC	S-1)										
QC Batch: 42921			Date A	nalyzed:	2007-11	-09				Analy	zed By	: RM
Prep Batch: 37033				paration	: 2007-11	-09					ared By	
		LC					pike		atrix			Rec.
Param		Res		Units	Dil.		nount		esult	Rec.		Limit
DRO		25		mg/Kg	1		250		10.7	100	6 4	.1 - 12
Percent recovery is ba	ased on the sp	pike result.	RPD is	based or	n the spike	and s	pike d	uplicate	result	•		
		LCSD			Spike	\mathbf{M}	atrix		F	lec.		RPI
Param		Result	Units	Dil.	Amount	Re	esult	Rec.	${ m Li}$	imit	RPD	Limi
DRO		273	mg/Kg	ç 1	250	<	10.7	109	64.1	- 124	8	20
Percent recovery is ba	ased on the sp	pike result.	RPD is	based or	n the spike	and s	pike d	uplicate	result	•		
	LCS	LCSE)			Su	oike	LC	S	LCSD		Rec.
Surrogate	Result	Resul	t U	Units	Dil.		ount	Re		Rec.		Limit
n-Triacontane	194	201	m	ıg/Kg	1	1	50	12	9	134	62	2.5 - 16
Laboratory Contro	l Spike (LC	S-1)										
QC Batch: 43034			Date Ar	halvzed:	2007-11-	-10				Analy	zed By	: MM
Prep Batch: 37132				paration							red By	
1			Ū į	-						1	v	
		LC	\mathbf{s}			$\mathbf{S}_{\mathbf{I}}$	pike	Ma	atrix			Rec.
Param		Res	ult	Units	Dil.	An	nount	$\mathbf{R}\epsilon$	esult	Rec.		Limit
Chloride		98.	.5 1	mg/Kg	1	1	100	<	3.25	98	96	5.1 - 10
Percent recovery is ba	ased on the sp	pike result.	RPD is	based or	n the spike	and sp	pike d	uplicate	result	•		
		LCSD			Spike	\mathbf{M}_{i}	atrix		F	lec.		RPI
Param		Result	Units	Dil.	Amount		esult	Rec.		imit	RPD	Limi
Chloride		99.2	mg/Kg	; 1	100	<	3.25	99	96.1	- 103	1	20
Percent recovery is ba	ased on the sp	pike result.	RPD is	based or	n the spike	and s	pike d	uplicate	result	•		
Laboratory Contro	l Spike (LC	S-1)										
	- 、	,	Data A-	alwood.	2007-11	10				Anol	and D-	, ълъя
QC Batch: 43035 Prep Batch: 37133			Date An	nalyzed: paration	2007-11- : 2007-11-						zed By red By	
r rep Daton: 5(155			QU FIE	paration	. 2007-11	-03				ттера	лец Бу	. 101101

Danana		LCS Resul		Units	Dil.	Spike	Ma Res		Rec.		Rec. Limit
Param Chloride		101		ng/Kg	$\frac{D11}{1}$	Amount 100		.25	101 Rec.		$\frac{11111}{.1 - 103}$
									101	90	.1 - 105
Percent recovery is based	on the spil	ke result. H	RPD is t	based on	the spike a	and spike du	iplicate	result.			
		LCSD			Spike	Matrix		Re	c.		RPD
Param		Result	Units	Dil.	Amount	Result	Rec.	Lin	nit	RPD	Limit
Chloride		102	mg/Kg	1	100	<3.25	102	96.1 -	103	1	20
Percent recovery is based	on the spil	ke result. H	RPD is l	based on	the spike a	and spike du	uplicate	result.			
Matrix Spike (MS-1)	Spiked S	ample: 142	210								
QC Batch: 42876]	Date An	nalyzed:	2007-11-	08			Anal	yzed By	: KB
Prep Batch: 36995				paration:						ared By	
		MS				Spike	Ma	trix			Rec.
Param		Resul	t 1	Units	Dil.	Amount	Res		Rec.		Limit
GRO		10.3	n	ng/Kg	1	10.0	<0.	459	103	51	.3 - 130
Percent recovery is based	on the spil	ke result. H	RPD is h	based on	the spike a	and spike du	plicate	result.			
v	1						-				DDD
D owowa		MSD Basselt	TI	D:1	Spike	Matrix	Daa	Re		DDD	RPD
Param GRO		Result	Units	Dil.	Amount	Result	Rec.	Lim 51.3 -		RPD 14	Limit
			mg/Kg	1	10.0	< 0.459	119		130	14	19.6
Percent recovery is based	on the spil	ke result. H	RPD is b	based on	the spike ε	and spike du	uplicate	result.			
		MS	M	SD		St	oike	MS	MSI)	Rec.
Surrogate		Result		sult	Units		ount	Rec.	Rec		Limit
Trifluorotoluene (TFT)		0.864			ng/Kg	1	1	86	98		.1 - 124
4-Bromofluorobenzene (4-	BFB)	0.995	1.		ng/Kg	1	1	100	113	67	.1 - 146
Matrix Spike (MS-1)	Spiked S	ample: 142	209								
QCI Datah. 49091		т	Data Am	م است ما ر	9007 11	00			A o 1-		. DM
QC Batch: 42921			Date An	-	2007-11-0					vzed By ared By	
Prep Batch: 37033		(ĮС Ртер	paration:	2007-11-0	09			Prepa	иеа Бу	: RM
		MS				Spike	Ma	trix			Rec.
Param		Resu		Units	Dil.	Amount		sult	Rec.		Limit
ORO	24			mg/Kg	1	250		0.7	57		.5 - 127
Percent recovery is based	on the spil				the spike a						
		MCD			с:І	N		D-			DDD
Param		$\begin{array}{c} \mathrm{MSD} \\ \mathrm{Result} \end{array}$	Units	Dil.	Spike Amount	Matrix Result	Rec.	Re Lin		RPD	RPD Limit
DRO	25	$\frac{145}{145}$	mg/Kg		250	<10.7	<u>58</u>	47.5 -		$\frac{\mathrm{RFD}}{2}$	$\frac{11111}{20}$
									141	2	20
Percent recovery is based	on the spil	ke result. H	14 N 18 L	based on	tne spike a	una spike di	ipiicate	result.			
	MS	MSD				Spike	Μ	\mathbf{S}	MSD		Rec.
	MD	MOD				· 1					
Surrogate	Result	Result	U	Jnits	Dil.	Amount	Re		Rec.		Limit

²⁴Sample received out of hold time ²⁵Sample received out of hold time

Matrix Spike (MS-1) Spiked Sample: 142210

QC Batch:	43034	Date Analyzed:	2007-11-10	Analyzed By:	MM
Prep Batch:	37132	QC Preparation:	2007-11-09	Prepared By:	MM

	${ m MS}$			\mathbf{Spike}	Matrix		Rec.
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit
Chloride	512	m mg/Kg	10	500	$<\!32.5$	97	80 - 120

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			Spike	Matrix		Rec.		RPD
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Chloride	470	m mg/Kg	10	500	$<\!32.5$	89	80 - 120	9	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 142220

QC Batch:	43035	Date Analyzed:	2007-11-10	Analyzed By:	MM
Prep Batch:	37133	QC Preparation:	2007-11-09	Prepared By:	MM

	${ m MS}$			\mathbf{Spike}	Matrix		Rec.
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit
Chloride	541	m mg/Kg	10	500	$<\!32.5$	102	80 - 120

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			\mathbf{Spike}	Matrix		Rec.		RPD
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Chloride	502	m mg/Kg	10	500	$<\!32.5$	94	80 - 120	8	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Standard (ICV-1)

QC Batch:	42876		Date Ana	alyzed: 2007-1	Analyzed By: KE			
			ICVs	ICVs	ICVs	Percent		
			True	Found	Percent	Recovery	Date	
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed	
GRO		m mg/Kg	1.00	0.889	89	85 - 115	2007-11-08	

Standard (CCV-1)

QC Batch:	42876		Date Ana	Analyzed By: KB					
			CCVs True	CCVs Found	CCVs Percent	Percent Recovery	Date		
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed		
GRO		m mg/Kg	1.00	0.863	86	85 - 115	2007-11-08		

Standard (ICV-1)

QC Batch:	42921		Date Ana	lyzed: 2007-11	Analyzed By: RM					
			ICVs	ICVs	ICVs	Percent				
			True	Found	Percent	Recovery	Date			
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed			
DRO		m mg/Kg	250	261	104	85 - 115	2007-11-09			
Standard	(CCV-1)									
QC Batch:	42921		Date Ana	lyzed: 2007-11	Analyzed By: RM					
			CCVs	CCVs	$\rm CCVs$	Percent				
			True	Found	Percent	Recovery	Date			
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed			
DRO		m mg/Kg	250	269	108	85 - 115	2007-11-09			
Standard	(CCV-2)									
QC Batch:	42921		Date Ana	lyzed: 2007-11	Analyzed By: RM					
			CCVs	CCVs	CCVs	Percent				
			True	Found	Percent	Recovery	Date			
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed			
DRO		m mg/Kg	250	240	96	85 - 115	2007-11-09			
Standard	(ICV-1)									
QC Batch:	43034		Date Ana	lyzed: 2007-11	-10	Analy	zed By: MM			
			ICVs	ICVs	ICVs	Percent				
			True	Found	Percent	Recovery	Date			
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed			
Chloride		m mg/Kg	100	98.8	99	85 - 115	2007-11-10			
Standard	(CCV-1)									
QC Batch: 43034			Date Ana	lyzed: 2007-11	Analyzed By: MM					
			\mathbf{CCVs}	CCVs	\mathbf{CCVs}	Percent				
			True	Found	Percent	Recovery	Date			
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed			
Chloride		m mg/Kg	100	101	101	85 - 115	2007-11-1			

QC Batch: 43035

Date Analyzed: 2007-11-10

Analyzed By: MM

Param Chloride	Flag	Units mg/Kg	ICVs True Conc. 100	ICVs Found Conc. 100	ICVs Percent Recovery 100	Percent Recovery Limits 85 - 115	Date Analyzed 2007-11-10
Standard ((CCV-1)						
QC Batch:	43035		Date Anal	yzed: 2007-11	-10	Analy	vzed By: MM
			CCVs True	CCVs Found	$\begin{array}{c} \mathrm{CCVs} \\ \mathrm{Percent} \end{array}$	Percent Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Chloride		mg/Kg	100	100	100	85 - 115	2007-11-10

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VALLEY ENERGY SERVICES, INC P.O. Box 207 Loving, New Mexico 88256-0207

505-706-9121 Cell

866-323-8533 Fax

valleyenergy@plateautel.net

November 26, 2007

SENT VIA E-MAIL: scottbranson@sbweedcontrol.com

Scott Branson SB Weed Control 213 S. Mesa Carlsbad, New Mexico 88220

Location: Center St & Violet St City of Carlsbad State of New Mexico

SENT VIA E-MAIL:gerry.guye@state.nm.us

Gerry Guy NMOCD District 2 Office 1301 W. Grand Artesia, New Mexico 88210

Dear Sirs:

Following is the final report for the aforementioned location.

On August 27, 2007 approximately 70bbls of fluid from a frac flowback was released on the lot near Center St and Violet St in Carlsbad, New Mexico. A vacuum truck was immediately brought in to recover as much fluid as possible. The following morning excavation equipment was brought in to remove material from the impacted area. Upon removal of the impacted soil, samples were obtained and infield analysis was performed per EPA SWA-846 sampling protocol. Field analyticals showed additional material would need to be removed from the impacted area to be within the New Mexico Oil Conservation Division (NMOCD) specified requirements. Additional material was removed and the area was retested per EPA SWA-846 protocol. Field analysis showed the area was still not within NMOCD acceptable parameters.

A meeting was held by representatives from the NMOCD, City of Carlsbad, New Mexico State Police and SB Weed Control to discuss options for proper clean up and closure of the site. An agreement was made and a work plan was implemented.

After reviewing the weather forecast, it was determined to remove an additional 1' (one foot) of soil prior to the rains to inhibit the chances of further migration of chlorides or any residual chemicals still in the impacted area. Once the area had dried from the rains, the lot was prepped to obtain official soil samples. Composite samples were obtained per EPA SWA-846 protocol. A grid of the sample area has been attached hereto. The samples were then properly gathered, prepared, packaged and sent to Trace Analysis in Lubbock, Texas for official analyticals. The area outside of the known impact site was tested for Chlorides and TPH (GRO & DRO) only. The area within the impact site was tested for Chlorides, TPH (GRO & DRO), BTEX, and TCLP metals. The official analyticals have also been attached hereto.

Upon reviewing the official analysis from Trace Analysis, it was determined further chloride delineation was needed in Sections B41, B42, I43, and I44. The BTEX and TPH (GRO & DRO) results were non-detectable and the only TCLP metal detected was Barium. The detection of Barium was discussed with the NMOCD and it was agreed it would not be of any consequence. This determination was backed up with the following statement by the USEPA:

"Human and animal data show that barium sulfate is essentially non-toxic to humans and other mammalian species. This is attributable to the very low solubility of the compound in water. Barium sulfate is not expected to be absorbed through the skin...Barium sulfate cannot reasonably be anticipated to cause acute or chronic toxicity in humans or adverse effects in the environment."

In Sections B41 and B42 an additional 1' (one foot) of material was removed. Infield analysis was performed and the Chloride levels were found to be within the parameters set forth by the NMOCD. Only 6" (six inches) of additional material could be removed from Sections I43 and I44. The remaining material encountered was solid rock. Due to the amount of rock in the area, it was agreed the impacted material left behind was minimal and no additional material would have to be removed.

A total of 336 cubic yards of material was removed from the site and 434 cubic yards of clean, native soil was returned to the area. To further the remediation of the spill site, it was replanted with a native seed mixture. The impacted material was disposed of at CRI, a NMOCD approved disposal facility.

Mike Bratcher of the NMOCD, Byron Wester of the NM State Police and Richard Aguilar of the City of Carlsbad were all contacted with the aforementioned results and approval for closure was granted on November 16, 2007.

Please accept this letter as final documentation for the closure of the Site Remediation for the spill located on the lot near Center St and Violet St in Carlsbad, New Mexico.

I want to thank you for giving me the opportunity to assist you in this matter. If you should have any questions or concerns, please do not hesitate to contact me at 505-706-9121.

Sincerely,

Shelly J. Tucker Environmental Consultant Valley Energy Services, Inc

/sjt

Attachment:	official analyticals site diagram
Cc mail:	Byron Wester – New Mexico State Police
Cc email:	Richard Aguilar – City of Carlsbad, Environmental Services Manager Mike Bratcher – New Mexico Oil Conservation Division Joel Longoria – SB Weed Control