

Summary Report

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Report Date: July 26, 2007

Work Order: 7072519



Project Name: Ranch Hand Federal #1
Project Number: NMNM25336

30-015-30691

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
130890	N Floor & Wall Comp	soil	2007-07-24	15:00	2007-07-25
130891	S Floor & Wall Comp	soil	2007-07-24	15:30	2007-07-25
130892	E Floor & Wall Comp	soil	2007-07-24	15:55	2007-07-25
130893	W Floor & Wall Comp	soil	2007-07-24	16:00	2007-07-25

Sample - Field Code	BTEX				MTBE	TPH DRO	TPH GRO
	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Xylene (mg/Kg)	MTBE (mg/Kg)	DRO (mg/Kg)	GRO (mg/Kg)
130890 - N Floor & Wall Comp	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
130891 - S Floor & Wall Comp	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	1.09
130892 - E Floor & Wall Comp	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
130893 - W Floor & Wall Comp	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00

Sample: 130890 - N Floor & Wall Comp

Param	Flag	Result	Units	RL
Chloride		83.5	mg/Kg	5.00

Sample: 130891 - S Floor & Wall Comp

Param	Flag	Result	Units	RL
Chloride		441	mg/Kg	5.00

Sample: 130892 - E Floor & Wall Comp

Param	Flag	Result	Units	RL
Chloride		349	mg/Kg	5.00

Sample: 130893 - W Floor & Wall Comp

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Param	Flag	Result	Units	RL
Chloride		108	mg/Kg	5.00



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Analytical and Quality Control Report

Kem McCready
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601 N. Marienfeld
Suite 508
Midland, TX, 79701

Report Date: July 26, 2007

Work Order: 7072519



Project Name: Ranch Hand Federal #1
Project Number: NMNM25336

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	Date Received
130890	N Floor & Wall Comp	soil	2007-07-24	15:00	2007-07-25
130891	S Floor & Wall Comp	soil	2007-07-24	15:30	2007-07-25
130892	E Floor & Wall Comp	soil	2007-07-24	15:55	2007-07-25
130893	W Floor & Wall Comp	soil	2007-07-24	16:00	2007-07-25

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 13 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.

Case Narrative

Samples for project Ranch Hand Federal #1 were received by TraceAnalysis, Inc. on 2007-07-25 and assigned to work order 7072519. Samples for work order 7072519 were received intact at a temperature of 22.0 deg C.

Samples were analyzed for the following tests using their respective methods.

Test	Method
BTEX	S 8021B
Chloride (Titration)	SM 4500-Cl B
TPH DRO	Mod. 8015B
TPH GRO	S 8015B

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 7072519 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

Analytical Report

Sample: 130890 - N Floor & Wall Comp

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	39402	Date Analyzed:	2007-07-25	Analyzed By:	MT
Prep Batch:	34112	Sample Preparation:	2007-07-25	Prepared By:	MT

Parameter	Flag	RL 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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.22	mg/Kg	1	1.00	122	52.1 - 131
4-Bromofluorobenzene (4-BFB)		1.11	mg/Kg	1	1.00	111	48.7 - 146

Sample: 130890 - N Floor & Wall Comp

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	39426	Date Analyzed:	2007-07-25	Analyzed By:	ER
Prep Batch:	34133	Sample Preparation:	2007-07-25	Prepared By:	JS

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		83.5	mg/Kg	10	5.00

Sample: 130890 - N Floor & Wall Comp

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	39407	Date Analyzed:	2007-07-25	Analyzed By:	TG
Prep Batch:	34117	Sample Preparation:	2007-07-25	Prepared By:	TG

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		169	mg/Kg	1	150	113	62.5 - 164

Sample: 130890 - N Floor & Wall Comp

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	39403	Date Analyzed:	2007-07-25	Analyzed By:	MT
Prep Batch:	34112	Sample Preparation:	2007-07-25	Prepared By:	MT

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.20	mg/Kg	1	1.00	120	33.2 - 160
4-Bromofluorobenzene (4-BFB)		1.13	mg/Kg	1	1.00	113	10 - 227

Sample: 130891 - S Floor & Wall Comp

Analysis: BTEX	Analytical Method: S 8021B	Prep Method: S 5035
QC Batch: 39402	Date Analyzed: 2007-07-25	Analyzed By: MT
Prep Batch: 34112	Sample Preparation: 2007-07-25	Prepared By: MT

Parameter	Flag	RL 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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.06	mg/Kg	1	1.00	106	52.1 - 131
4-Bromofluorobenzene (4-BFB)		1.01	mg/Kg	1	1.00	101	48.7 - 146

Sample: 130891 - S Floor & Wall Comp

Analysis: Chloride (Titration)	Analytical Method: SM 4500-Cl B	Prep Method: N/A
QC Batch: 39426	Date Analyzed: 2007-07-25	Analyzed By: ER
Prep Batch: 34133	Sample Preparation: 2007-07-25	Prepared By: JS

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		441	mg/Kg	10	5.00

Sample: 130891 - S Floor & Wall Comp

Analysis: TPH DRO	Analytical Method: Mod. 8015B	Prep Method: N/A
QC Batch: 39407	Date Analyzed: 2007-07-25	Analyzed By: TG
Prep Batch: 34117	Sample Preparation: 2007-07-25	Prepared By: TG

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		171	mg/Kg	1	150	114	62.5 - 164

Sample: 130891 - S Floor & Wall Comp

Analysis: TPH GRO Analytical Method: S 8015B Prep Method: S 5035
QC Batch: 39403 Date Analyzed: 2007-07-25 Analyzed By: MT
Prep Batch: 34112 Sample Preparation: 2007-07-25 Prepared By: MT

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		1.09	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.04	mg/Kg	1	1.00	104	33.2 - 160
4-Bromofluorobenzene (4-BFB)		1.02	mg/Kg	1	1.00	102	10 - 227

Sample: 130892 - E Floor & Wall Comp

Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5035
QC Batch: 39402 Date Analyzed: 2007-07-25 Analyzed By: MT
Prep Batch: 34112 Sample Preparation: 2007-07-25 Prepared By: MT

Parameter	Flag	RL 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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.09	mg/Kg	1	1.00	109	52.1 - 131
4-Bromofluorobenzene (4-BFB)		0.997	mg/Kg	1	1.00	100	48.7 - 146

Sample: 130892 - E Floor & Wall Comp

Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 39426 Date Analyzed: 2007-07-25 Analyzed By: ER
Prep Batch: 34133 Sample Preparation: 2007-07-25 Prepared By: JS

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		349	mg/Kg	10	5.00

Sample: 130892 - E Floor & Wall Comp

Analysis: TPH DRO Analytical Method: Mod. 8015B Prep Method: N/A
QC Batch: 39407 Date Analyzed: 2007-07-25 Analyzed By: TG
Prep Batch: 34117 Sample Preparation: 2007-07-25 Prepared By: TG

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		176	mg/Kg	1	150	117	62.5 - 164

Sample: 130892 - E Floor & Wall Comp

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	39403	Date Analyzed:	2007-07-25	Analyzed By:	MT
Prep Batch:	34112	Sample Preparation:	2007-07-25	Prepared By:	MT

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.09	mg/Kg	1	1.00	109	33.2 - 160
4-Bromofluorobenzene (4-BFB)		1.00	mg/Kg	1	1.00	100	10 - 227

Sample: 130893 - W Floor & Wall Comp

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	39402	Date Analyzed:	2007-07-25	Analyzed By:	MT
Prep Batch:	34112	Sample Preparation:	2007-07-25	Prepared By:	MT

Parameter	Flag	RL 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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.958	mg/Kg	1	1.00	96	52.1 - 131
4-Bromofluorobenzene (4-BFB)		0.864	mg/Kg	1	1.00	86	48.7 - 146

Sample: 130893 - W Floor & Wall Comp

Analysis:	Chloride (Titration)	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
QC Batch:	39426	Date Analyzed:	2007-07-25	Analyzed By:	ER
Prep Batch:	34133	Sample Preparation:	2007-07-25	Prepared By:	JS

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		108	mg/Kg	4	5.00

Sample: 130893 - W Floor & Wall Comp

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	39407	Date Analyzed:	2007-07-25	Analyzed By:	TG
Prep Batch:	34117	Sample Preparation:	2007-07-25	Prepared By:	TG

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		169	mg/Kg	1	150	113	62.5 - 164

Sample: 130893 - W Floor & Wall Comp

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	39403	Date Analyzed:	2007-07-25	Analyzed By:	MT
Prep Batch:	34112	Sample Preparation:	2007-07-25	Prepared By:	MT

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.950	mg/Kg	1	1.00	95	33.2 - 160
4-Bromofluorobenzene (4-BFB)		0.878	mg/Kg	1	1.00	88	10 - 227

Method Blank (1) QC Batch: 39402

QC Batch:	39402	Date Analyzed:	2007-07-25	Analyzed By:	MT
Prep Batch:	34112	QC Preparation:	2007-07-25	Prepared By:	MT

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.00333	mg/Kg	0.01
Toluene		<0.00372	mg/Kg	0.01
Ethylbenzene		<0.00206	mg/Kg	0.01
Xylene		<0.00259	mg/Kg	0.01

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.04	mg/Kg	1	1.00	104	73.2 - 113
4-Bromofluorobenzene (4-BFB)		0.711	mg/Kg	1	1.00	71	54 - 102

Method Blank (1) QC Batch: 39403

QC Batch:	39403	Date Analyzed:	2007-07-25	Analyzed By:	MT
Prep Batch:	34112	QC Preparation:	2007-07-25	Prepared By:	MT

Parameter	Flag	MDL Result	Units	RL
GRO		<0.459	mg/Kg	1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.06	mg/Kg	1	1.00	106	73.2 - 125
4-Bromofluorobenzene (4-BFB)		0.722	mg/Kg	1	1.00	72	51.9 - 110

Method Blank (1) QC Batch: 39407

QC Batch: 39407
Prep Batch: 34117

Date Analyzed: 2007-07-25
QC Preparation: 2007-07-25

Analyzed By: TG
Prepared By: TG

Parameter	Flag	MDL Result	Units	RL
DRO		<10.7	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		196	mg/Kg	1	150	131	62.5 - 164

Method Blank (1) QC Batch: 39426

QC Batch: 39426
Prep Batch: 34133

Date Analyzed: 2007-07-25
QC Preparation: 2007-07-25

Analyzed By: ER
Prepared By: TS

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

Laboratory Control Spike (LCS-1)

QC Batch: 39402
Prep Batch: 34112

Date Analyzed: 2007-07-25
QC Preparation: 2007-07-25

Analyzed By: MT
Prepared By: MT

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.997	mg/Kg	1	1.00	<0.00333	100	76.3 - 117
Toluene	0.986	mg/Kg	1	1.00	<0.00372	99	77.3 - 114
Ethylbenzene	0.965	mg/Kg	1	1.00	<0.00206	96	75.4 - 115
Xylene	2.90	mg/Kg	1	3.00	<0.00259	97	73.2 - 112

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	1.00	mg/Kg	1	1.00	<0.00333	100	76.3 - 117	0	20
Toluene	0.983	mg/Kg	1	1.00	<0.00372	98	77.3 - 114	0	20

continued ...

control spikes continued ...

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Ethylbenzene	0.960	mg/Kg	1	1.00	<0.00206	96	75.4 - 115	0	20
Xylene	2.89	mg/Kg	1	3.00	<0.00259	96	73.2 - 112	0	20

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

Surrogate	LCS Result	LCS Result	Units	Dil.	Spike Amount	LCS Rec.	LCS Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.992	0.934	mg/Kg	1	1.00	99	93	74.5 - 113
4-Bromofluorobenzene (4-BFB)	0.896	0.860	mg/Kg	1	1.00	90	86	68.3 - 110

Laboratory Control Spike (LCS-1)

QC Batch: 39403
Prep Batch: 34112

Date Analyzed: 2007-07-25
QC Preparation: 2007-07-25

Analyzed By: MT
Prepared By: MT

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	8.93	mg/Kg	1	10.0	<0.459	89	79.6 - 113

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

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	10.2	mg/Kg	1	10.0	<0.459	102	79.6 - 113	13	20

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

Surrogate	LCS Result	LCS Result	Units	Dil.	Spike Amount	LCS Rec.	LCS Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.888	1.06	mg/Kg	1	1.00	89	106	77.1 - 117
4-Bromofluorobenzene (4-BFB)	0.820	0.839	mg/Kg	1	1.00	82	84	78.1 - 118

Laboratory Control Spike (LCS-1)

QC Batch: 39407
Prep Batch: 34117

Date Analyzed: 2007-07-25
QC Preparation: 2007-07-25

Analyzed By: TG
Prepared By: TG

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	266	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.

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO	303	mg/Kg	1	250	<10.7	121	64.1 - 124	13	20

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

Surrogate	LCS Result	LCS Result	Units	Dil.	Spike Amount	LCS Rec.	LCS Rec.	Rec. Limit
n-Triacontane	190	190	mg/Kg	1	150	127	127	62.5 - 164

Laboratory Control Spike (LCS-1)

QC Batch: 39426
Prep Batch: 34133

Date Analyzed: 2007-07-25
QC Preparation: 2007-07-25

Analyzed By: ER
Prepared By: TS

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	101	mg/Kg	1	100	<3.25	101	90 - 110

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

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	105	mg/Kg	1	100	<3.25	105	90 - 110	4	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: 130891

QC Batch: 39402
Prep Batch: 34112

Date Analyzed: 2007-07-25
QC Preparation: 2007-07-25

Analyzed By: MT
Prepared By: MT

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.801	mg/Kg	1	1.00	<0.00333	80	39.6 - 141
Toluene	0.855	mg/Kg	1	1.00	<0.00372	86	45.4 - 138
Ethylbenzene	0.887	mg/Kg	1	1.00	<0.00206	89	48 - 141
Xylene	2.68	mg/Kg	1	3.00	<0.00259	89	45.3 - 142

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	0.720	mg/Kg	1	1.00	<0.00333	72	39.6 - 141	11	20
Toluene	0.758	mg/Kg	1	1.00	<0.00372	76	45.4 - 138	12	20
Ethylbenzene	0.799	mg/Kg	1	1.00	<0.00206	80	48 - 141	10	20
Xylene	2.42	mg/Kg	1	3.00	<0.00259	81	45.3 - 142	10	20

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.03	0.940	mg/Kg	1	1	103	94	51.5 - 138
4-Bromofluorobenzene (4-BFB)	1.04	0.930	mg/Kg	1	1	104	93	52.2 - 139

Matrix Spike (MS-1) Spiked Sample: 130892

QC Batch: 39403
Prep Batch: 34112

Date Analyzed: 2007-07-25
QC Preparation: 2007-07-25

Analyzed By: MT
Prepared By: MT

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	9.32	mg/Kg	1	10.0	<0.459	93	40.7 - 157

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	9.80	mg/Kg	1	10.0	<0.459	98	40.7 - 157	5	19.6

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.00	0.930	mg/Kg	1	1	100	93	34.9 - 155
4-Bromofluorobenzene (4-BFB)	1.06	1.00	mg/Kg	1	1	106	100	58.5 - 153

Matrix Spike (MS-1) Spiked Sample: 130891

QC Batch: 39407
Prep Batch: 34117

Date Analyzed: 2007-07-25
QC Preparation: 2007-07-25

Analyzed By: TG
Prepared By: TG

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	205	mg/Kg	1	250	<10.7	82	47.5 - 127

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO	208	mg/Kg	1	250	<10.7	83	47.5 - 127	1	20

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

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
n-Triacontane	168	169	mg/Kg	1	150	112	113	62.5 - 164

Matrix Spike (MS-1) Spiked Sample: 130887

QC Batch: 39426
Prep Batch: 34133

Date Analyzed: 2007-07-25
QC Preparation: 2007-07-25

Analyzed By: ER
Prepared By: TS

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	¹ 293	mg/Kg	4	400	84.6	52	84.6 - 117

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

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	² 299	mg/Kg	4	400	84.6	54	84.6 - 117	2	20

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

Standard (ICV-1)

QC Batch: 39402

Date Analyzed: 2007-07-25

Analyzed By: MT

¹Matrix spike recoveries out of control limits due to matrix spike being diluted out. Use LCS/LCSD to demonstrate analysis is under control

²Matrix spike recoveries out of control limits due to matrix spike being diluted out. Use LCS/LCSD to demonstrate analysis is under control

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0977	98	85 - 115	2007-07-25
Toluene		mg/Kg	0.100	0.0973	97	85 - 115	2007-07-25
Ethylbenzene		mg/Kg	0.100	0.0954	95	85 - 115	2007-07-25
Xylene		mg/Kg	0.300	0.287	96	85 - 115	2007-07-25

Standard (CCV-1)

QC Batch: 39402

Date Analyzed: 2007-07-25

Analyzed By: MT

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0987	99	85 - 115	2007-07-25
Toluene		mg/Kg	0.100	0.0974	97	85 - 115	2007-07-25
Ethylbenzene		mg/Kg	0.100	0.0942	94	85 - 115	2007-07-25
Xylene		mg/Kg	0.300	0.282	94	85 - 115	2007-07-25

Standard (ICV-1)

QC Batch: 39403

Date Analyzed: 2007-07-25

Analyzed By: MT

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	0.924	92	85 - 115	2007-07-25

Standard (CCV-1)

QC Batch: 39403

Date Analyzed: 2007-07-25

Analyzed By: MT

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	0.848	85	85 - 115	2007-07-25

Standard (ICV-1)

QC Batch: 39407

Date Analyzed: 2007-07-25

Analyzed By: TG

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	252	101	85 - 115	2007-07-25

Standard (CCV-1)

QC Batch: 39407

Date Analyzed: 2007-07-25

Analyzed By: TG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	264	106	85 - 115	2007-07-25

Standard (ICV-1)

QC Batch: 39426

Date Analyzed: 2007-07-25

Analyzed By: ER

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	100	100	85 - 115	2007-07-25

Standard (CCV-1)

QC Batch: 39426

Date Analyzed: 2007-07-25

Analyzed By: ER

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	99.7	100	85 - 115	2007-07-25

