

Summary Report

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Report Date: November 3, 2006

Work Order: 6110205



30-015-33906

Project Number: Moore Fed. Com No.4

35-24-26

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
107464	Background N. Side	soil	2006-11-01	08:50	2006-11-02
107465	Pit Bottom Insitu SW Comp	soil	2006-11-01	09:20	2006-11-02
107466	Insitu Pit Bottom NW Comp	soil	2006-11-01	09:10	2006-11-02
107467	Backgrd Behind Backfill S	soil	2006-11-01	08:30	2006-11-02
107468	Backgrd Stockpile Center	soil	2006-11-01	08:40	2006-11-02
107469	Backgrnd E Side Comp.	soil	2006-11-01	09:30	2006-11-02

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)
107464 - Background N. Side	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
107465 - Pit Bottom Insitu SW Comp	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
107466 - Insitu Pit Bottom NW Comp	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
107467 - Backgrd Behind Backfill S	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
107468 - Backgrd Stockpile Center	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00
107469 - Backgrnd E Side Comp.	<0.0100	<0.0100	<0.0100	<0.0100		<50.0	<1.00

Sample: 107464 - Background N. Side

Param	Flag	Result	Units	RL
Chloride		6.73	mg/Kg	1.00

Sample: 107465 - Pit Bottom Insitu SW Comp

Param	Flag	Result	Units	RL
Chloride		43500	mg/Kg	1.00

Sample: 107466 - Insitu Pit Bottom NW Comp

Param	Flag	Result	Units	RL
Chloride		10000	mg/Kg	1.00

Sample: 107467 - Backgrd Behind Backfill S

Param	Flag	Result	Units	RL
Chloride		12.1	mg/Kg	1.00

Sample: 107468 - Backgrd Stockpile Center

Param	Flag	Result	Units	RL
Chloride		10.4	mg/Kg	1.00

Sample: 107469 - Backgrnd E Side Comp.

Param	Flag	Result	Units	RL
Chloride		6.93	mg/Kg	1.00



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Analytical and Quality Control Report

Tommy Folsom
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P.O. Box 627
Carlsbad, NM, 88220

Report Date: November 3, 2006

Work Order: 6110205



Project Number: Moore Fed. Com No.4

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
107464	Background N. Side	soil	2006-11-01	08:50	2006-11-02
107465	Pit Bottom Insitu SW Comp	soil	2006-11-01	09:20	2006-11-02
107466	Insitu Pit Bottom NW Comp	soil	2006-11-01	09:10	2006-11-02
107467	Backgrd Behind Backfill S	soil	2006-11-01	08:30	2006-11-02
107468	Backgrd Stockpile Center	soil	2006-11-01	08:40	2006-11-02
107469	Backgrnd E Side Comp.	soil	2006-11-01	09:30	2006-11-02

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 16 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 107464 - Background N. Side

Analysis: BTEX
QC Batch: 31463
Prep Batch: 27401

Analytical Method: S 8021B
Date Analyzed: 2006-11-02
Sample Preparation: 2006-11-02

Prep Method: S 5035
Analyzed By: KB
Prepared By: KB

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	1.32	mg/Kg	1	1.00	132	53.5 - 125
4-Bromofluorobenzene (4-BFB)		1.20	mg/Kg	1	1.00	120	43.2 - 146

Sample: 107464 - Background N. Side

Analysis: Chloride (IC)
QC Batch: 31488
Prep Batch: 27423

Analytical Method: E 300.0
Date Analyzed: 2006-11-02
Sample Preparation: 2006-11-02

Prep Method: N/A
Analyzed By: WB
Prepared By: WB

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		6.73	mg/Kg	5	1.00

Sample: 107464 - Background N. Side

Analysis: TPH DRO
QC Batch: 31472
Prep Batch: 27409

Analytical Method: Mod. 8015B
Date Analyzed: 2006-11-02
Sample Preparation: 2006-11-02

Prep Method: N/A
Analyzed By: SP
Prepared By: SP

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		138	mg/Kg	1	150	92	50 - 150

Sample: 107464 - Background N. Side

Analysis: TPH GRO
QC Batch: 31464
Prep Batch: 27401

Analytical Method: S 8015B
Date Analyzed: 2006-11-02
Sample Preparation: 2006-11-02

Prep Method: S 5035
Analyzed By: KB
Prepared By: KB

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

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)		1.13	mg/Kg	1	1.00	113	1.5 - 182
4-Bromofluorobenzene (4-BFB)		1.08	mg/Kg	1	1.00	108	21.8 - 188

Sample: 107465 - Pit Bottom Insitu SW Comp

Analysis: BTEX	Analytical Method: S 8021B	Prep Method: S 5035
QC Batch: 31463	Date Analyzed: 2006-11-02	Analyzed By: KB
Prep Batch: 27401	Sample Preparation: 2006-11-02	Prepared By: KB

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)		0.928	mg/Kg	1	1.00	93	53.5 - 125
4-Bromofluorobenzene (4-BFB)		0.869	mg/Kg	1	1.00	87	43.2 - 146

Sample: 107465 - Pit Bottom Insitu SW Comp

Analysis: Chloride (IC)	Analytical Method: E 300.0	Prep Method: N/A
QC Batch: 31488	Date Analyzed: 2006-11-02	Analyzed By: WB
Prep Batch: 27423	Sample Preparation: 2006-11-02	Prepared By: WB

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		43500	mg/Kg	5000	1.00

Sample: 107465 - Pit Bottom Insitu SW Comp

Analysis: TPH DRO	Analytical Method: Mod. 8015B	Prep Method: N/A
QC Batch: 31472	Date Analyzed: 2006-11-02	Analyzed By: SP
Prep Batch: 27409	Sample Preparation: 2006-11-02	Prepared By: SP

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		151	mg/Kg	1	150	101	50 - 150

Sample: 107465 - Pit Bottom Insitu SW Comp

Analysis: TPH GRO Analytical Method: S 8015B Prep Method: S 5035
QC Batch: 31464 Date Analyzed: 2006-11-02 Analyzed By: KB
Prep Batch: 27401 Sample Preparation: 2006-11-02 Prepared By: KB

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)		0.954	mg/Kg	1	1.00	95	1.5 - 182
4-Bromofluorobenzene (4-BFB)		0.999	mg/Kg	1	1.00	100	21.8 - 188

Sample: 107466 - Insitu Pit Bottom NW Comp

Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5035
QC Batch: 31463 Date Analyzed: 2006-11-02 Analyzed By: KB
Prep Batch: 27401 Sample Preparation: 2006-11-02 Prepared By: KB

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)		0.921	mg/Kg	1	1.00	92	53.5 - 125
4-Bromofluorobenzene (4-BFB)		0.859	mg/Kg	1	1.00	86	43.2 - 146

Sample: 107466 - Insitu Pit Bottom NW Comp

Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A
QC Batch: 31488 Date Analyzed: 2006-11-02 Analyzed By: WB
Prep Batch: 27423 Sample Preparation: 2006-11-02 Prepared By: WB

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		10000	mg/Kg	500	1.00

Sample: 107466 - Insitu Pit Bottom NW Comp

Analysis: TPH DRO Analytical Method: Mod. 8015B Prep Method: N/A
QC Batch: 31472 Date Analyzed: 2006-11-02 Analyzed By: SP
Prep Batch: 27409 Sample Preparation: 2006-11-02 Prepared By: SP

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		147	mg/Kg	1	150	98	50 - 150

Sample: 107466 - Insitu Pit Bottom NW Comp

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	31464	Date Analyzed:	2006-11-02	Analyzed By:	KB
Prep Batch:	27401	Sample Preparation:	2006-11-02	Prepared By:	KB

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)		0.953	mg/Kg	1	1.00	95	1.5 - 182
4-Bromofluorobenzene (4-BFB)		0.989	mg/Kg	1	1.00	99	21.8 - 188

Sample: 107467 - Backgrd Behind Backfill S

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	31463	Date Analyzed:	2006-11-02	Analyzed By:	KB
Prep Batch:	27401	Sample Preparation:	2006-11-02	Prepared By:	KB

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)		0.914	mg/Kg	1	1.00	91	53.5 - 125
4-Bromofluorobenzene (4-BFB)		0.861	mg/Kg	1	1.00	86	43.2 - 146

Sample: 107467 - Backgrd Behind Backfill S

Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	31488	Date Analyzed:	2006-11-02	Analyzed By:	WB
Prep Batch:	27423	Sample Preparation:	2006-11-02	Prepared By:	WB

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		12.1	mg/Kg	5	1.00

Sample: 107467 - Backgrd Behind Backfill S

Analysis: TPH DRO Analytical Method: Mod. 8015B Prep Method: N/A
QC Batch: 31472 Date Analyzed: 2006-11-02 Analyzed By: SP
Prep Batch: 27409 Sample Preparation: 2006-11-02 Prepared By: SP

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		158	mg/Kg	1	150	105	50 - 150

Sample: 107467 - Backgrd Behind Backfill S

Analysis: TPH GRO Analytical Method: S 8015B Prep Method: S 5035
QC Batch: 31464 Date Analyzed: 2006-11-02 Analyzed By: KB
Prep Batch: 27401 Sample Preparation: 2006-11-02 Prepared By: KB

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)		0.944	mg/Kg	1	1.00	94	1.5 - 182
4-Bromofluorobenzene (4-BFB)		0.988	mg/Kg	1	1.00	99	21.8 - 188

Sample: 107468 - Backgrd Stockpile Center

Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5035
QC Batch: 31463 Date Analyzed: 2006-11-02 Analyzed By: KB
Prep Batch: 27401 Sample Preparation: 2006-11-02 Prepared By: KB

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)		1.08	mg/Kg	1	1.00	108	53.5 - 125
4-Bromofluorobenzene (4-BFB)		1.00	mg/Kg	1	1.00	100	43.2 - 146

Sample: 107468 - Backgrd Stockpile Center

Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A
QC Batch: 31488 Date Analyzed: 2006-11-02 Analyzed By: WB
Prep Batch: 27423 Sample Preparation: 2006-11-02 Prepared By: WB

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		10.4	mg/Kg	5	1.00

Sample: 107468 - Backgrd Stockpile Center

Analysis: TPH DRO Analytical Method: Mod. 8015B Prep Method: N/A
QC Batch: 31472 Date Analyzed: 2006-11-02 Analyzed By: SP
Prep Batch: 27409 Sample Preparation: 2006-11-02 Prepared By: SP

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		130	mg/Kg	1	150	87	50 - 150

Sample: 107468 - Backgrd Stockpile Center

Analysis: TPH GRO Analytical Method: S 8015B Prep Method: S 5035
QC Batch: 31464 Date Analyzed: 2006-11-02 Analyzed By: KB
Prep Batch: 27401 Sample Preparation: 2006-11-02 Prepared By: KB

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)		1.10	mg/Kg	1	1.00	110	1.5 - 182
4-Bromofluorobenzene (4-BFB)		1.14	mg/Kg	1	1.00	114	21.8 - 188

Sample: 107469 - Backgrnd E Side Comp.

Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5035
QC Batch: 31463 Date Analyzed: 2006-11-02 Analyzed By: KB
Prep Batch: 27401 Sample Preparation: 2006-11-02 Prepared By: KB

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

continued ...

sample 107469 continued ...

Parameter	Flag	RL Result	Units	Dilution	RL
Xylene		<0.0100	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.989	mg/Kg	1	1.00	99	53.5 - 125
4-Bromofluorobenzene (4-BFB)		0.932	mg/Kg	1	1.00	93	43.2 - 146

Sample: 107469 - Backgrnd E Side Comp.

Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	31488	Date Analyzed:	2006-11-02	Analyzed By:	WB
Prep Batch:	27423	Sample Preparation:	2006-11-02	Prepared By:	WB

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		6.93	mg/Kg	5	1.00

Sample: 107469 - Backgrnd E Side Comp.

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	31472	Date Analyzed:	2006-11-02	Analyzed By:	SP
Prep Batch:	27409	Sample Preparation:	2006-11-02	Prepared By:	SP

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		124	mg/Kg	1	150	83	50 - 150

Sample: 107469 - Backgrnd E Side Comp.

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	31464	Date Analyzed:	2006-11-02	Analyzed By:	KB
Prep Batch:	27401	Sample Preparation:	2006-11-02	Prepared By:	KB

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)		1.02	mg/Kg	1	1.00	102	1.5 - 182
4-Bromofluorobenzene (4-BFB)		1.07	mg/Kg	1	1.00	107	21.8 - 188

Method Blank (1) QC Batch: 31463

QC Batch: 31463
Prep Batch: 27401

Date Analyzed: 2006-11-02
QC Preparation: 2006-11-02

Analyzed By: KB
Prepared By: KB

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.00159	mg/Kg	0.01
Toluene		<0.00220	mg/Kg	0.01
Ethylbenzene		<0.00201	mg/Kg	0.01
Xylene		<0.00176	mg/Kg	0.01

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.960	mg/Kg	1	1.00	96	72 - 112
4-Bromofluorobenzene (4-BFB)		0.708	mg/Kg	1	1.00	71	50.6 - 106.2

Method Blank (1) QC Batch: 31464

QC Batch: 31464
Prep Batch: 27401

Date Analyzed: 2006-11-02
QC Preparation: 2006-11-02

Analyzed By: KB
Prepared By: KB

Parameter	Flag	MDL Result	Units	RL
GRO		2.33	mg/Kg	1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.02	mg/Kg	1	1.00	102	75.4 - 125
4-Bromofluorobenzene (4-BFB)		0.887	mg/Kg	1	1.00	89	60.8 - 113

Method Blank (1) QC Batch: 31472

QC Batch: 31472
Prep Batch: 27409

Date Analyzed: 2006-11-02
QC Preparation: 2006-11-02

Analyzed By: SP
Prepared By: SP

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		150	mg/Kg	1	150	100	50 - 150

Matrix Blank (1) QC Batch: 31488

QC Batch: 31488
Prep Batch: 27423

Date Analyzed: 2006-11-02
QC Preparation: 2006-11-02

Analyzed By: WB
Prepared By: WB

Parameter	Flag	MDL Result	Units	RL
Chloride		<0.0222	mg/Kg	1

Laboratory Control Spike (LCS-1)

QC Batch: 31463
Prep Batch: 27401

Date Analyzed: 2006-11-02
QC Preparation: 2006-11-02

Analyzed By: KB
Prepared By: KB

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.943	mg/Kg	1	1.00	<0.00159	94	79.2 - 111
Toluene	1.00	mg/Kg	1	1.00	<0.00220	100	79.9 - 108
Ethylbenzene	0.971	mg/Kg	1	1.00	<0.00201	97	75.6 - 112
Xylene	2.82	mg/Kg	1	3.00	<0.00176	94	73.8 - 111

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	0.974	mg/Kg	1	1.00	<0.00159	97	79.2 - 111	3	20
Toluene	0.978	mg/Kg	1	1.00	<0.00220	98	79.9 - 108	2	20
Ethylbenzene	0.994	mg/Kg	1	1.00	<0.00201	99	75.6 - 112	2	20
Xylene	2.90	mg/Kg	1	3.00	<0.00176	97	73.8 - 111	3	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.974	0.987	mg/Kg	1	1.00	97	99	74.7 - 112
4-Bromofluorobenzene (4-BFB)	0.871	0.900	mg/Kg	1	1.00	87	90	65.6 - 119.2

Laboratory Control Spike (LCS-1)

QC Batch: 31464
Prep Batch: 27401

Date Analyzed: 2006-11-02
QC Preparation: 2006-11-02

Analyzed By: KB
Prepared By: KB

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	9.89	mg/Kg	1	10.0	<0.121	99	79.4 - 114

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
GRO	10.2	mg/Kg	1	10.0	<0.121	102	79.4 - 114	3	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.975	0.944	mg/Kg	1	1.00	98	94	75.6 - 120
4-Bromofluorobenzene (4-BFB)	1.04	1.00	mg/Kg	1	1.00	104	100	77.4 - 117

Laboratory Control Spike (LCS-1)

QC Batch: 31472
Prep Batch: 27409

Date Analyzed: 2006-11-02
QC Preparation: 2006-11-02

Analyzed By: SP
Prepared By: SP

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	222	mg/Kg	1	250	<10.7	89	62.4 - 111

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
DRO	185	mg/Kg	1	250	<10.7	74	62.4 - 111	18	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Triacontane	139	128	mg/Kg	1	150	93	85	50 - 150

Laboratory Control Spike (LCS-1)

QC Batch: 31488
Prep Batch: 27423

Date Analyzed: 2006-11-02
QC Preparation: 2006-11-02

Analyzed By: WB
Prepared By: WB

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	13.4	mg/Kg	1	12.5	<0.0222	107	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	13.3	mg/Kg	1	12.5	<0.0222	106	90 - 110	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: 107464

QC Batch: 31463
Prep Batch: 27401

Date Analyzed: 2006-11-02
QC Preparation: 2006-11-02

Analyzed By: KB
Prepared By: KB

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.813	mg/Kg	1	1.00	<0.00159	81	46.5 - 126
Toluene	0.792	mg/Kg	1	1.00	<0.00220	79	47.9 - 134
Ethylbenzene	0.811	mg/Kg	1	1.00	<0.00201	81	53.1 - 140
Xylene	2.42	mg/Kg	1	3.00	<0.00176	81	51.2 - 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	1.16	mg/Kg	1	1.00	<0.00159	116	46.5 - 126	35	20

continued ...

matrix spikes continued ...

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Toluene	1.12	mg/Kg	1	1.00	<0.00220	112	47.9 - 134	34	20
Ethylbenzene	1.16	mg/Kg	1	1.00	<0.00201	116	53.1 - 140	35	20
Xylene	3.51	mg/Kg	1	3.00	<0.00176	117	51.2 - 142	37	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)	1.05	1.13	mg/Kg	1	1	105	113	66.3 - 122
4-Bromofluorobenzene (4-BFB)	1.01	1.08	mg/Kg	1	1	101	108	56.2 - 138

Matrix Spike (MS-1) Spiked Sample: 107464

QC Batch: 31464
Prep Batch: 27401

Date Analyzed: 2006-11-02
QC Preparation: 2006-11-02

Analyzed By: KB
Prepared By: KB

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	11.6	mg/Kg	1	10.0	<0.121	116	36.4 - 166

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	10.6	mg/Kg	1	10.0	<0.121	106	36.4 - 166	9	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)	1.02	0.976	mg/Kg	1	1	102	98	39.2 - 148
4-Bromofluorobenzene (4-BFB)	1.23	1.18	mg/Kg	1	1	123	118	62.8 - 153

Matrix Spike (MS-1) Spiked Sample: 107467

QC Batch: 31472
Prep Batch: 27409

Date Analyzed: 2006-11-02
QC Preparation: 2006-11-02

Analyzed By: SP
Prepared By: SP

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	166	mg/Kg	1	250	<10.7	66	60.1 - 107

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	170	mg/Kg	1	250	<10.7	68	60.1 - 107	2	20

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

continued ...

matrix spikes continued ...

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
n-Triacontane	123	128	mg/Kg	1	150	82	85	50 - 150

Matrix Spike (MS-1) Spiked Sample: 107469

QC Batch: 31488
Prep Batch: 27423

Date Analyzed: 2006-11-02
QC Preparation: 2006-11-02

Analyzed By: WB
Prepared By: WB

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	66.6	mg/Kg	5	62.5	6.93	95	15.3 - 175

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	66.5	mg/Kg	5	62.5	6.93	95	15.3 - 175	0	20

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

Standard (ICV-1)

QC Batch: 31463

Date Analyzed: 2006-11-02

Analyzed By: KB

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0983	98	85 - 115	2006-11-02
Toluene		mg/Kg	0.100	0.102	102	85 - 115	2006-11-02
Ethylbenzene		mg/Kg	0.100	0.104	104	85 - 115	2006-11-02
Xylene		mg/Kg	0.300	0.305	102	85 - 115	2006-11-02

Standard (CCV-1)

QC Batch: 31463

Date Analyzed: 2006-11-02

Analyzed By: KB

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.102	102	85 - 115	2006-11-02
Toluene		mg/Kg	0.100	0.0983	98	85 - 115	2006-11-02
Ethylbenzene		mg/Kg	0.100	0.100	100	85 - 115	2006-11-02
Xylene		mg/Kg	0.300	0.294	98	85 - 115	2006-11-02

Standard (ICV-1)

QC Batch: 31464

Date Analyzed: 2006-11-02

Analyzed By: KB

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	1.01	101	85 - 115	2006-11-02

Standard (CCV-1)

QC Batch: 31464

Date Analyzed: 2006-11-02

Analyzed By: KB

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	0.995	100	85 - 115	2006-11-02

Standard (ICV-1)

QC Batch: 31472

Date Analyzed: 2006-11-02

Analyzed By: SP

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	236	94	85 - 115	2006-11-02

Standard (CCV-1)

QC Batch: 31472

Date Analyzed: 2006-11-02

Analyzed By: SP

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	232	93	85 - 115	2006-11-02

Standard (CCV-2)

QC Batch: 31472

Date Analyzed: 2006-11-02

Analyzed By: SP

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	222	89	85 - 115	2006-11-02

Standard (ICV-1)

QC Batch: 31488

Date Analyzed: 2006-11-02

Analyzed By: WB

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	12.5	<0.0222	0	90 - 110	2006-11-02

Standard (CCV-1)

QC Batch: 31488

Date Analyzed: 2006-11-02

Analyzed By: WB

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	12.5	12.3	98	90 - 110	2006-11-02

TraceAnalysis, Inc. 6701 Aberdeen Avenue, Ste. 9 Lubbock, Texas 79424 Tel (806) 794-1296 Fax (806) 794-1298 1 (800) 378-1296 email: lab@traceanalysis.com		155 McCutcheon, Suite H El Paso, Texas 79932 Tel (915) 585-4443 Fax (915) 585-4944 1 (888) 588-3443																																																									
Company Name: Murchison Oil & Gas, Inc. Address: PO Box 627, Clarksville, NM 88301 Contact Person: Tommy Tolson Invoice to: Tommy Tolson (If different from above) Project #: Moore Fed. Com. No. 4 Project Location (including state):		Phone #: 505-766-0667 Fax #: 505-766-0667 E-mail: tommytolson@valnet.com Project Name: Moore Fed. Com. No. 4 Sampler Signature:																																																									
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LAB USE ONLY Initial: Q/N Headspace: Y/N Temp: RT Log-in-Review: NO																																																											
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Received at Laboratory by: Moore Fed. Com. No. 4 Date: 11-20-06 Time: 9:10																																																											
Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.																																																											

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