



03/07/12

Technical Report for

XTO Energy

PCU 296-7A

1007-02

Accutest Job Number: D32216

Sampling Date: 02/23/12

Report to:

dknudson@krwconsulting.com

Total number of pages in report: 49



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


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Laboratory Director

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Certifications: CO, ID, NE, NM, ND (R-027) (PW) UT (NELAP CO00049)

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Test results relate only to samples analyzed.

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Sample Summary

XTO Energy

Job No: D32216

PCU 296-7A

Project No: 1007-02

Sample Number	Collected			Received	Matrix		Client Sample ID
	Date	Time	By		Code	Type	
D32216-1	02/23/12	10:20	DS	02/27/12	SO	Soil	RP TP-1:(-8')-(-10')
D32216-2	02/23/12	11:45	DS	02/27/12	SO	Soil	RP TP-2:(0')-(-2')
D32216-3	02/23/12	12:00	DS	02/27/12	SO	Soil	RP TP-2:(-4')-(-6')
D32216-4	02/23/12	12:20	DS	02/27/12	SO	Soil	RP TP-2:(-6')-(-8')
D32216-5	02/23/12	12:30	DS	02/27/12	SO	Soil	RP TP-2:(-8')-(-10')
D32216-6	02/23/12	12:45	DS	02/27/12	SO	Soil	RP TP-3:(0')-(-2')
D32216-7	02/23/12	12:55	DS	02/27/12	SO	Soil	RP TP-3:(-2')-(-4')
D32216-8	02/23/12	13:00	DS	02/27/12	SO	Soil	RP TP-3:(-4')-(-6')
D32216-9	02/23/12	13:15	DS	02/27/12	SO	Soil	RP TP-4:(0')-(-2')
D32216-10	02/23/12	13:25	DS	02/27/12	SO	Soil	RP TP-4:(-2')-(-4')
D32216-11	02/23/12	13:35	DS	02/27/12	SO	Soil	RP TP-4:(-4')-(-6')
D32216-12	02/23/12	13:45	DS	02/27/12	SO	Soil	RP TP-5:(0')-(-2')
D32216-13	02/23/12	14:00	DS	02/27/12	SO	Soil	RP TP-5:(-2')-(-4')

Soil samples reported on a dry weight basis unless otherwise indicated on result page.



Sample Summary
(continued)

XTO Energy

Job No: D32216

PCU 296-7A
Project No: 1007-02

Sample Number	Collected		Time By	Received	Matrix		Client Sample ID
	Date				Code	Type	
D32216-14	02/23/12	14:15	DS	02/27/12	SO	Soil	RP TP-5:(-4')-(-6')

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

CASE NARRATIVE / CONFORMANCE SUMMARY

Client: XTO Energy

Job No D32216

Site: PCU 296-7A

Report Date 3/5/2012 11:12:20 AM

On 02/27/2012, 14 sample(s), 0 Trip Blank(s), and 0 Field Blank(s) were received at Accutest Mountain States (AMS) at a temperature of 4.5 °C. The samples were intact and properly preserved, unless noted below. An AMS Job Number of D32216 was assigned to the project. The lab sample IDs, client sample IDs, and date of sample collection are detailed in the report's Results Summary.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Volatiles by GC By Method SW846 8015B

Matrix SO

Batch ID: GGB848

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D32208-1MS, D32208-1MSD were used as the QC samples indicated.

Matrix SO

Batch ID: GGB849

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D32234-1MS, D32234-1MSD were used as the QC samples indicated.

Extractables by GC By Method SW846-8015B

Matrix SO

Batch ID: OP5459

- All samples were extracted and analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D32298-1MS, D32298-1MSD were used as the QC samples indicated.

Wet Chemistry By Method SM19 2540B M

Matrix SO

Batch ID: GN13861

- The data for SM19 2540B M meets quality control requirements.

Matrix SO

Batch ID: GN13866

- The data for SM19 2540B M meets quality control requirements.

AMS certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting AMS's Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

AMS is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. This report is authorized by AMS indicated via signature on the report cover.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	RP TP-1:(-8')-(-10')	Date Sampled:	02/23/12
Lab Sample ID:	D32216-1	Date Received:	02/27/12
Matrix:	SO - Soil	Percent Solids:	85.2
Method:	SW846 8015B		
Project:	PCU 296-7A		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GB15107.D	1	02/28/12	SK	n/a	n/a	GGB848
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.0 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	13	6.7	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
120-82-1	1,2,4-Trichlorobenzene	98%		60-140%		

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RP TP-1:(-8')-(-10')	Date Sampled:	02/23/12
Lab Sample ID:	D32216-1	Date Received:	02/27/12
Matrix:	SO - Soil	Percent Solids:	85.2
Method:	SW846-8015B SW846 3546		
Project:	PCU 296-7A		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FH001899.D	1	03/03/12	TR	03/01/12	OP5459	GFH96
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.0 g	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	281	16	10	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	74%		43-136%		

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RP TP-2:(0')-(-2')	Date Sampled:	02/23/12
Lab Sample ID:	D32216-2	Date Received:	02/27/12
Matrix:	SO - Soil	Percent Solids:	83.7
Method:	SW846 8015B		
Project:	PCU 296-7A		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GB15108.D	1	02/28/12	SK	n/a	n/a	GGB848
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.0 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	14	6.9	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
120-82-1	1,2,4-Trichlorobenzene	102%		60-140%		

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RP TP-2:(0')-(-2')	Date Sampled:	02/23/12
Lab Sample ID:	D32216-2	Date Received:	02/27/12
Matrix:	SO - Soil	Percent Solids:	83.7
Method:	SW846-8015B SW846 3546		
Project:	PCU 296-7A		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FH001901.D	1	03/03/12	TR	03/01/12	OP5459	GFH96
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.1 g	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	113	16	10	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	75%		43-136%		

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: RP TP-2:(-4')-(-6')
 Lab Sample ID: D32216-3
 Matrix: SO - Soil
 Method: SW846 8015B
 Project: PCU 296-7A

Date Sampled: 02/23/12
 Date Received: 02/27/12
 Percent Solids: 85.2

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GB15109.D	1	02/28/12	SK	n/a	n/a	GGB848
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.0 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	13	6.7	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
120-82-1	1,2,4-Trichlorobenzene	102%		60-140%		

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RP TP-2:(-4')-(-6')	Date Sampled:	02/23/12
Lab Sample ID:	D32216-3	Date Received:	02/27/12
Matrix:	SO - Soil	Percent Solids:	85.2
Method:	SW846-8015B SW846 3546		
Project:	PCU 296-7A		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FH001903.D	1	03/03/12	TR	03/01/12	OP5459	GFH96
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.1 g	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	181	16	10	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	75%		43-136%		

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RP TP-2:(-6')-(-8')	Date Sampled:	02/23/12
Lab Sample ID:	D32216-4	Date Received:	02/27/12
Matrix:	SO - Soil	Percent Solids:	83.9
Method:	SW846 8015B		
Project:	PCU 296-7A		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GB15110.D	1	02/28/12	SK	n/a	n/a	GGB848
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.0 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	14	6.9	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
120-82-1	1,2,4-Trichlorobenzene	102%		60-140%		

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: RP TP-2:(-6')-(-8')
 Lab Sample ID: D32216-4
 Matrix: SO - Soil
 Method: SW846-8015B SW846 3546
 Project: PCU 296-7A

Date Sampled: 02/23/12
 Date Received: 02/27/12
 Percent Solids: 83.9

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FH001905.D	1	03/03/12	TR	03/01/12	OP5459	GFH96
Run #2							

	Initial Weight	Final Volume
Run #1	30.2 g	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	234	16	10	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	73%		43-136%		

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RP TP-2:(-8')-(-10')	Date Sampled:	02/23/12
Lab Sample ID:	D32216-5	Date Received:	02/27/12
Matrix:	SO - Soil	Percent Solids:	85.0
Method:	SW846 8015B		
Project:	PCU 296-7A		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GB15111.D	1	02/28/12	SK	n/a	n/a	GGB848
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.0 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	13	6.7	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
120-82-1	1,2,4-Trichlorobenzene	111%		60-140%		

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: RP TP-2:(-8')-(-10')

Lab Sample ID: D32216-5

Date Sampled: 02/23/12

Matrix: SO - Soil

Date Received: 02/27/12

Method: SW846-8015B SW846 3546

Percent Solids: 85.0

Project: PCU 296-7A

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FH001939.D	1	03/04/12	TR	03/01/12	OP5459	GFH98
Run #2							

	Initial Weight	Final Volume
Run #1	30.0 g	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	385	16	10	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	74%		43-136%		

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RP TP-3:(0')-(-2')	Date Sampled:	02/23/12
Lab Sample ID:	D32216-6	Date Received:	02/27/12
Matrix:	SO - Soil	Percent Solids:	85.0
Method:	SW846 8015B		
Project:	PCU 296-7A		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GB15112.D	1	02/28/12	SK	n/a	n/a	GGB848
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.1 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	13	6.7	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
120-82-1	1,2,4-Trichlorobenzene	91%		60-140%		

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RP TP-3:(0')-(-2')	Date Sampled:	02/23/12
Lab Sample ID:	D32216-6	Date Received:	02/27/12
Matrix:	SO - Soil	Percent Solids:	85.0
Method:	SW846-8015B SW846 3546		
Project:	PCU 296-7A		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FH001941.D	1	03/05/12	TR	03/01/12	OP5459	GFH98
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.1 g	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	12.2	16	10	mg/kg	J
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	79%		43-136%		

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: RP TP-3:(-2')-(-4')
 Lab Sample ID: D32216-7
 Matrix: SO - Soil
 Method: SW846 8015B
 Project: PCU 296-7A

Date Sampled: 02/23/12
 Date Received: 02/27/12
 Percent Solids: 85.2

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GB15113.D	1	02/28/12	SK	n/a	n/a	GGB848
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.1 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	13	6.6	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
120-82-1	1,2,4-Trichlorobenzene	99%		60-140%		

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: RP TP-3:(-2')-(-4')
 Lab Sample ID: D32216-7
 Matrix: SO - Soil
 Method: SW846-8015B SW846 3546
 Project: PCU 296-7A

Date Sampled: 02/23/12
 Date Received: 02/27/12
 Percent Solids: 85.2

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FH001943.D	1	03/05/12	TR	03/01/12	OP5459	GFH98
Run #2							

	Initial Weight	Final Volume
Run #1	30.1 g	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	21.0	16	10	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	71%		43-136%		

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: RP TP-3:(-4')-(-6')
 Lab Sample ID: D32216-8
 Matrix: SO - Soil
 Method: SW846 8015B
 Project: PCU 296-7A

Date Sampled: 02/23/12
 Date Received: 02/27/12
 Percent Solids: 85.7

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GB15125.D	1	02/28/12	SK	n/a	n/a	GGB849
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.0 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	13	6.7	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
120-82-1	1,2,4-Trichlorobenzene	98%		60-140%		

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RP TP-3:(-4')-(-6')	Date Sampled:	02/23/12
Lab Sample ID:	D32216-8	Date Received:	02/27/12
Matrix:	SO - Soil	Percent Solids:	85.7
Method:	SW846-8015B SW846 3546		
Project:	PCU 296-7A		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FH001945.D	1	03/05/12	TR	03/01/12	OP5459	GFH98
Run #2							

	Initial Weight	Final Volume
Run #1	30.0 g	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	ND	16	10	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	74%		43-136%		

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RP TP-4:(0')-(-2')	Date Sampled:	02/23/12
Lab Sample ID:	D32216-9	Date Received:	02/27/12
Matrix:	SO - Soil	Percent Solids:	85.7
Method:	SW846 8015B		
Project:	PCU 296-7A		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GB15126.D	1	02/28/12	SK	n/a	n/a	GGB849
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.1 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	13	6.6	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
120-82-1	1,2,4-Trichlorobenzene	98%		60-140%		

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RP TP-4:(0')-(-2')	Date Sampled:	02/23/12
Lab Sample ID:	D32216-9	Date Received:	02/27/12
Matrix:	SO - Soil	Percent Solids:	85.7
Method:	SW846-8015B SW846 3546		
Project:	PCU 296-7A		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FH001947.D	1	03/05/12	TR	03/01/12	OP5459	GFH98
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.0 g	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	41.7	16	10	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	86%		43-136%		

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RP TP-4:(-2')-(-4')	Date Sampled:	02/23/12
Lab Sample ID:	D32216-10	Date Received:	02/27/12
Matrix:	SO - Soil	Percent Solids:	86.1
Method:	SW846 8015B		
Project:	PCU 296-7A		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GB15127.D	1	02/28/12	SK	n/a	n/a	GGB849
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.0 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	13	6.6	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
120-82-1	1,2,4-Trichlorobenzene	98%		60-140%		

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	RP TP-4:(-2')-(-4')	Date Sampled:	02/23/12
Lab Sample ID:	D32216-10	Date Received:	02/27/12
Matrix:	SO - Soil	Percent Solids:	86.1
Method:	SW846-8015B SW846 3546		
Project:	PCU 296-7A		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FH001949.D	1	03/05/12	TR	03/01/12	OP5459	GFH98
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.1 g	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	29.9	15	10	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	79%		43-136%		

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RP TP-4:(-4')-(-6')	Date Sampled:	02/23/12
Lab Sample ID:	D32216-11	Date Received:	02/27/12
Matrix:	SO - Soil	Percent Solids:	85.6
Method:	SW846 8015B		
Project:	PCU 296-7A		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GB15129.D	1	02/28/12	SK	n/a	n/a	GGB849
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.1 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	13	6.6	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
120-82-1	1,2,4-Trichlorobenzene	96%		60-140%		

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RP TP-4:(-4')-(-6')	Date Sampled:	02/23/12
Lab Sample ID:	D32216-11	Date Received:	02/27/12
Matrix:	SO - Soil	Percent Solids:	85.6
Method:	SW846-8015B SW846 3546		
Project:	PCU 296-7A		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FH001951.D	1	03/05/12	TR	03/01/12	OP5459	GFH98
Run #2							

	Initial Weight	Final Volume
Run #1	30.0 g	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	47.7	16	10	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	78%		43-136%		

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RP TP-5:(0')-(-2')	Date Sampled:	02/23/12
Lab Sample ID:	D32216-12	Date Received:	02/27/12
Matrix:	SO - Soil	Percent Solids:	82.8
Method:	SW846 8015B		
Project:	PCU 296-7A		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GB15130.D	1	02/28/12	SK	n/a	n/a	GGB849
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.0 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	7.63	14	7.0	mg/kg	J
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
120-82-1	1,2,4-Trichlorobenzene	101%		60-140%		

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RP TP-5:(0')-(-2')	Date Sampled:	02/23/12
Lab Sample ID:	D32216-12	Date Received:	02/27/12
Matrix:	SO - Soil	Percent Solids:	82.8
Method:	SW846-8015B SW846 3546		
Project:	PCU 296-7A		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FH001953.D	1	03/05/12	TR	03/01/12	OP5459	GFH98
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.0 g	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	781	16	10	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	76%		43-136%		

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RP TP-5:(-2')-(-4')	Date Sampled:	02/23/12
Lab Sample ID:	D32216-13	Date Received:	02/27/12
Matrix:	SO - Soil	Percent Solids:	84.4
Method:	SW846 8015B		
Project:	PCU 296-7A		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GB15131.D	1	02/28/12	SK	n/a	n/a	GGB849
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.0 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	14	6.8	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
120-82-1	1,2,4-Trichlorobenzene	99%		60-140%		

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RP TP-5:(-2')-(-4')	Date Sampled:	02/23/12
Lab Sample ID:	D32216-13	Date Received:	02/27/12
Matrix:	SO - Soil	Percent Solids:	84.4
Method:	SW846-8015B SW846 3546		
Project:	PCU 296-7A		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FH001955.D	1	03/05/12	TR	03/01/12	OP5459	GFH98
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.0 g	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	483	16	10	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	78%		43-136%		

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RP TP-5:(-4')-(-6')	Date Sampled:	02/23/12
Lab Sample ID:	D32216-14	Date Received:	02/27/12
Matrix:	SO - Soil	Percent Solids:	83.8
Method:	SW846 8015B		
Project:	PCU 296-7A		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GB15132.D	1	02/28/12	SK	n/a	n/a	GGB849
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.1 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	6.87	14	6.8	mg/kg	J
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
120-82-1	1,2,4-Trichlorobenzene	101%		60-140%		

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RP TP-5:(-4')-(-6')	Date Sampled:	02/23/12
Lab Sample ID:	D32216-14	Date Received:	02/27/12
Matrix:	SO - Soil	Percent Solids:	83.8
Method:	SW846-8015B SW846 3546		
Project:	PCU 296-7A		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FH001957.D	1	03/05/12	TR	03/01/12	OP5459	GFH98
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.0 g	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	733	16	10	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	75%		43-136%		

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

Accutest Laboratories Mountain States
4036 Youngfield Street Wheat Ridge, Co 80033
TEL: 303-425-6021 877-737-4521
FAX: 303-425-6021

FED-EX Tracking #	Bottle Order Control #
Accutest Quote #	Accutest Job # D32216
Requested Analysis (see TEST CODE sheet)	
Matrix Codes	
DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment OI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB - Field Blank EB - Equipment Blank RB - Rinse Blank TB - Trip Blank	
LAB USE ONLY	

Client / Reporting Information		Project Information	
Company Name KRW CONSULTING	Project Name XTO PCU 296-7A	Billing Information (if different from Report to)	
Street Address 9000 W 14TH AVE STE 200	Street:	Company Name XTO ENERGY	
City LAKEWOOD CO 80214	City:	Street Address 21459 CR5	
Project Contact DWAYNE KNAUSSEN	Project # 1007-02	City RIFLE CO 81650	
Phone # 970 488 1098	Client PO#	State CO	
Fax #	Project Manager JOE HESS	Zip 81650	
Sample(s) Name(s) DAVID SANDERS	Phone # 970 488 1098	Attention: JESSICA DOOLING	
Field ID / Point of Collection	MEQ/ID / Vial #	Date	Time
RP TP-1: (-8')-(-10')		2/23/12	10:20
RP TP-2: (0')-(-2')		2/23/12	11:45
RP TP-2: (-4')-(-6')		2/23/12	12:00
RP TP-2: (-6')-(-8')		2/23/12	12:20
RP TP-2: (-8')-(-10')		2/23/12	12:30
RP TP-3: (0')-(-2')		2/23/12	12:45
RP TP-3: (-2')-(-4')		2/23/12	12:55
RP TP-3: (-4')-(-6')		2/23/12	13:00
RP TP-4: (0')-(-2')		2/23/12	13:15
RP TP-4: (-2')-(-4')		2/23/12	13:25
RP TP-4: (-4')-(-6')		2/23/12	13:35
RP TP-5: (0')-(-2')		2/23/12	13:45

Turnaround Time (Business days)	Approved By (Accutest PM): / Date:	Data Deliverable Information	Comments / Special Instructions
<input type="checkbox"/> Std. 10 Business Days <input checked="" type="checkbox"/> Std. 5 Business Days (By Contract only) <input type="checkbox"/> 5 Day /# SH <input type="checkbox"/> 3 Day EMERGENCY <input type="checkbox"/> 2 Day EMERGENCY <input type="checkbox"/> 1 Day EMERGENCY		<input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> Commercial "B" - Narrative <input type="checkbox"/> FULLT1 (Level 3-4) Commercial "A" = Results Only Commercial "B" = Results + QC Summary	PLEASE EMAIL RESULTS TO KRW PLCEANCE TEAM

Sample Custody must be documented below each time samples change possession, including courier delivery.			
Relinquished by Sampler:	Date Time:	Received By:	Date Time:
1 D. Sanders	2/24/12	1 Jacob Post	
Relinquished by Sampler:	Date Time:	Received By:	Date Time:
3		3	
Relinquished by:	Date Time:	Received By:	Date Time:
5		5	
Custody Seal # FX		<input checked="" type="checkbox"/> Intact <input type="checkbox"/> Not Intact	
Preserved where applicable		<input checked="" type="checkbox"/> On Ice <input type="checkbox"/> Cooler Temp. 4.5	

D32216: Chain of Custody

Page 1 of 3

Accutest Laboratories Mountain States
4036 Youngfield Street, Wheat Ridge, Co 80033
TEL: 303-425-6021 877-737-4521
FAX: 303-425-6021

FED-EX Tracking #	Accutest Quote #	Accutest Job #	Matrix Codes
		D32216	DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment OL - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB - Field Blank EB - Equipment Blank RB - Rinse Blank TB - Trip Blank
Requested Analysis (see TEST CODE sheet)		LAB USE ONLY	
		13 14 2/27/12	

Client / Reporting Information		Project Information	
Company Name KRW CONSULTING	Project Name XTO PCU 246-7A	Billing Information (If different from Report to)	
Street Address 8000 W 14TH AVE STE 200	City LAKEWOOD CO 80214	Company Name XTO ENERGY	
City LAKEWOOD CO 80214	State CO	Street Address 21459 CR5	
Project Contact DWAYNE KRAMERSON	Project# 1007-02	City RIFLE	State CO
Phone # 970 488 1098	Fax #	Zip 81650	
Sample(s) Name(s) DAVID SANDERS 970 488 1098	Phone #	Project Manager JOE HESS	Attention: JESSICA DRAHNE
Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection
	RP TP-5: (-2') - (-4')		Date: 2/23/12 Time: 14:00
	RP TP-5: (-4') - (-6')		Date: 2/23/12 Time: 14:15

Turnaround Time (Business days)		Approved By (Accutest PM): / Date:		Data Deliverable Information		Comments / Special Instructions	
<input type="checkbox"/> Std. 10 Business Days <input checked="" type="checkbox"/> Std. 5 Business Days (By Contract only) <input type="checkbox"/> 5 Day R/SH <input type="checkbox"/> 3 Day EMERGENCY <input type="checkbox"/> 2 Day EMERGENCY <input type="checkbox"/> 1 Day EMERGENCY				<input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> Commercial "B" + Narrative <input type="checkbox"/> FULLT1 (Level 3-4)	<input type="checkbox"/> State Forms <input type="checkbox"/> EDD Format <input checked="" type="checkbox"/> PDF	PLEASE EMAIL RESULTS TO KRW PICEANCE TEAM	
Emergency & Rush T/A data available VIA Lablink				Commercial "A" = Results Only Commercial "B" = Results + QC Summary			

Sample Custody must be documented below each time samples change possession, including courier delivery.			
Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:
1 Dil...	2/24/12	1 Jacob...	2
Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:
3		3	4
Relinquished by:	Date Time:	Received By:	Custody Seal #
5		5	FX

D32216: Chain of Custody

Page 2 of 3

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: D32216

Client: KRW CONSULTING

Immediate Client Services Action Required: No

Date / Time Received: 2/27/2012 12:00:00 PM

No. Coolers: 1

Client Service Action Required at Login: No

Project: XTO PCU 296-7A

Airbill #'s: Fedex

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	3. COC Present:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. Custody Seals Intact:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	4. Smpl Dates/Time OK	<input checked="" type="checkbox"/>		<input type="checkbox"/>

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. Cooler temp verification:			Infrared gun
3. Cooler media:			Ice (bag)

Quality Control Preservation	Y	or	N	N/A
1. Trip Blank present / cooler:	<input type="checkbox"/>		<input type="checkbox"/>	
2. Trip Blank listed on COC:	<input type="checkbox"/>		<input type="checkbox"/>	
3. Samples preserved properly:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
4. VOCs headspace free:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. Container labeling complete:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
3. Sample container label / COC agree:	<input checked="" type="checkbox"/>		<input type="checkbox"/>

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. All containers accounted for:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
3. Condition of sample:			Intact

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
2. Bottles received for unspecified tests	<input type="checkbox"/>		<input checked="" type="checkbox"/>	
3. Sufficient volume rec'd for analysis:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
4. Compositing instructions clear:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Filtering instructions clear:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

Comments

Accutest Laboratories
V:(303) 425-6021

4036 Youngfield Street
F: (303) 425-6854

Wheat Ridge, CO
www.accutest.com

GC Volatiles

5

QC Data Summaries

Includes the following where applicable:

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

Method Blank Summary

Page 1 of 1

Job Number: D32216
Account: XTOKRWR XTO Energy
Project: PCU 296-7A

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GGB848-MB	GB15089.D	1	02/27/12	SK	n/a	n/a	GGB848

The QC reported here applies to the following samples:

Method: SW846 8015B

D32216-1, D32216-2, D32216-3, D32216-4, D32216-5, D32216-6, D32216-7

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	10	5.0	mg/kg	

CAS No.	Surrogate Recoveries	Limits
120-82-1	1,2,4-Trichlorobenzene	101% 60-140%

Method Blank Summary

Page 1 of 1

Job Number: D32216
Account: XTOKRWR XTO Energy
Project: PCU 296-7A

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GGB849-MB	GB15116.D	1	02/28/12	SK	n/a	n/a	GGB849

The QC reported here applies to the following samples:

Method: SW846 8015B

D32216-8, D32216-9, D32216-10, D32216-11, D32216-12, D32216-13, D32216-14

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	10	5.0	mg/kg	

CAS No.	Surrogate Recoveries	Limits
120-82-1	1,2,4-Trichlorobenzene	99% 60-140%

Blank Spike Summary

Page 1 of 1

Job Number: D32216
Account: XTOKRWR XTO Energy
Project: PCU 296-7A

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GGB848-BS	GB15090.D	1	02/27/12	SK	n/a	n/a	GGB848

The QC reported here applies to the following samples:

Method: SW846 8015B

D32216-1, D32216-2, D32216-3, D32216-4, D32216-5, D32216-6, D32216-7

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-GRO (C6-C10)	110	108	98	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
120-82-1	1,2,4-Trichlorobenzene	110%	60-140%

Blank Spike Summary

Page 1 of 1

Job Number: D32216

Account: XTOKRWR XTO Energy

Project: PCU 296-7A

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GGB849-BS	GB15117.D	1	02/28/12	SK	n/a	n/a	GGB849

The QC reported here applies to the following samples:

Method: SW846 8015B

D32216-8, D32216-9, D32216-10, D32216-11, D32216-12, D32216-13, D32216-14

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-GRO (C6-C10)	110	110	100	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
120-82-1	1,2,4-Trichlorobenzene	106%	60-140%

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: D32216
Account: XTOKRWR XTO Energy
Project: PCU 296-7A

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
D32208-1MS	GB15092.D	1	02/27/12	SK	n/a	n/a	GGB848
D32208-1MSD	GB15093.D	1	02/27/12	SK	n/a	n/a	GGB848
D32208-1	GB15091.D	1	02/27/12	SK	n/a	n/a	GGB848

The QC reported here applies to the following samples:

Method: SW846 8015B

D32216-1, D32216-2, D32216-3, D32216-4, D32216-5, D32216-6, D32216-7

CAS No.	Compound	D32208-1 mg/kg	Spike Q	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	ND	142	139	98	141	99	1	70-130/30

CAS No.	Surrogate Recoveries	MS	MSD	D32208-1	Limits
120-82-1	1,2,4-Trichlorobenzene	102%	106%	96%	60-140%

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: D32216
Account: XTOKRWR XTO Energy
Project: PCU 296-7A

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
D32234-1MS	GB15119.D	1	02/28/12	SK	n/a	n/a	GGB849
D32234-1MSD	GB15120.D	1	02/28/12	SK	n/a	n/a	GGB849
D32234-1	GB15118.D	1	02/28/12	SK	n/a	n/a	GGB849

The QC reported here applies to the following samples:

Method: SW846 8015B

D32216-8, D32216-9, D32216-10, D32216-11, D32216-12, D32216-13, D32216-14

CAS No.	Compound	D32234-1 mg/kg	Q	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	8.92	J	140	139	93	141	95	1	70-130/30

CAS No.	Surrogate Recoveries	MS	MSD	D32234-1	Limits
120-82-1	1,2,4-Trichlorobenzene	109%	108%	101%	60-140%

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

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

Method Blank Summary

Page 1 of 1

Job Number: D32216
Account: XTOKRWR XTO Energy
Project: PCU 296-7A

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP5459-MB	FH001854.D	1	03/01/12	TR	03/01/12	OP5459	GFH94

The QC reported here applies to the following samples:

Method: SW846-8015B

D32216-1, D32216-2, D32216-3, D32216-4, D32216-5, D32216-6, D32216-7, D32216-8, D32216-9, D32216-10, D32216-11, D32216-12, D32216-13, D32216-14

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	ND	13	8.7	mg/kg	

CAS No.	Surrogate Recoveries	Limits
84-15-1	o-Terphenyl	89% 43-136%

Blank Spike Summary

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Job Number: D32216
Account: XTOKRWR XTO Energy
Project: PCU 296-7A

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP5459-BS	FH001856.D	1	03/02/12	TR	03/01/12	OP5459	GFH94

The QC reported here applies to the following samples:

Method: SW846-8015B

D32216-1, D32216-2, D32216-3, D32216-4, D32216-5, D32216-6, D32216-7, D32216-8, D32216-9, D32216-10, D32216-11, D32216-12, D32216-13, D32216-14

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-DRO (C10-C28)	667	580	87	58-130

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	90%	43-136%

6.2.1

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Matrix Spike/Matrix Spike Duplicate Summary

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Job Number: D32216
Account: XTOKRWR XTO Energy
Project: PCU 296-7A

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP5459-MS	FH001858.D	1	03/02/12	TR	03/01/12	OP5459	GFH94
OP5459-MSD	FH001860.D	1	03/02/12	TR	03/01/12	OP5459	GFH94
D32298-1	FH001862.D	1	03/02/12	TR	03/01/12	OP5459	GFH94

The QC reported here applies to the following samples:

Method: SW846-8015B

D32216-1, D32216-2, D32216-3, D32216-4, D32216-5, D32216-6, D32216-7, D32216-8, D32216-9, D32216-10, D32216-11, D32216-12, D32216-13, D32216-14

CAS No.	Compound	D32298-1 mg/kg	Q	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-DRO (C10-C28)	173		804	807	79	772	75	4	20-183/43

CAS No.	Surrogate Recoveries	MS	MSD	D32298-1	Limits
84-15-1	o-Terphenyl	72%	70%	74%	43-136%