

Technical Report for

XTO Energy

FRU 297-32A

1108-12A

Accutest Job Number: D32210

Sampling Date: 02/24/12

Report to:

dknudson@krwconsulting.com

Total number of pages in report: 26



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.



Brad Madadian
Laboratory Director

Client Service contact: Renea Jackson 303-425-6021

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: D32210

FRU 297-32A

Project No: 1108-12A

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
D32210-1	02/24/12	09:30 CH	02/27/12	SO	Soil	CUT #1 M/B: DAYS 8&10(2/24)
D32210-2	02/24/12	09:40 CH	02/27/12	SO	Soil	CUT #1 M/B: DAY 9(2/23)

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

CASE NARRATIVE / CONFORMANCE SUMMARY

Client: XTO Energy

Job No D32210

Site: FRU 297-32A

Report Date 3/1/2012 1:47:20 PM

On 02/27/2012, 2 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 D32210 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 GCMS By Method SW846 8260B

Matrix AQ **Batch ID:** V5V1180

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

Matrix SO **Batch ID:** V5V1180

- Sample(s) D32186-2MS, D32186-2MSD were used as the QC samples indicated.
- Sample(s) D32210-1 have surrogates outside control limits. Probable cause due to matrix interference.
- D32210-1 for 1,2-Dichloroethane-D4: Outside control limits. Since the bias is high and the sample is ND, no further action is required.

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.

Extractables by GC By Method SW846-8015B

Matrix SO **Batch ID:** OP5440

- All samples were extracted and 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.

Wet Chemistry By Method SM19 2540B M

Matrix SO **Batch ID:** GN13861

- 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.

Thursday, March 01, 2012

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Sample Results

Report of Analysis

Report of Analysis

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Client Sample ID: CUT #1 M/B: DAYS 8&10(2/24) Lab Sample ID: D32210-1 Matrix: SO - Soil Method: SW846 8260B Project: FRU 297-32A	Date Sampled: 02/24/12 Date Received: 02/27/12 Percent Solids: 86.9
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Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5V19658.D	1	02/27/12	KV	n/a	n/a	V5V1180
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.01 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.065	0.029	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
2037-26-5	Toluene-D8	96%		61-130%		
460-00-4	4-Bromofluorobenzene	102%		53-131%		
17060-07-0	1,2-Dichloroethane-D4	133% ^a		62-130%		

(a) Outside control limits. Since the bias is high and the sample is ND, no further action is required.

ND = Not detected RL = Reporting Limit E = Indicates value exceeds calibration range	MDL - Method Detection Limit J = Indicates an estimated value B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound
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Report of Analysis

3.1
3

Client Sample ID: CUT #1 M/B: DAYS 8&10(2/24) Lab Sample ID: D32210-1 Matrix: SO - Soil Method: SW846 8015B Project: FRU 297-32A	Date Sampled: 02/24/12 Date Received: 02/27/12 Percent Solids: 86.9
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Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GB15098.D	1	02/27/12	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)	9.39	13	6.5	mg/kg	J
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

3.1
3

Client Sample ID: CUT #1 M/B: DAYS 8&10(2/24) Lab Sample ID: D32210-1 Matrix: SO - Soil Method: SW846-8015B SW846 3546 Project: FRU 297-32A	Date Sampled: 02/24/12 Date Received: 02/27/12 Percent Solids: 86.9
--	--

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FH001749.D	1	02/28/12	TR	02/27/12	OP5440	GFH90
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)	178	15	10	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	68%		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

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Client Sample ID: CUT #1 M/B:DAY 9(2/23) Lab Sample ID: D32210-2 Matrix: SO - Soil Method: SW846 8260B Project: FRU 297-32A	Date Sampled: 02/24/12 Date Received: 02/27/12 Percent Solids: 91.5
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Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5V19659.D	1	02/27/12	KV	n/a	n/a	V5V1180
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.01 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.059	0.026	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
2037-26-5	Toluene-D8	89%		61-130%		
460-00-4	4-Bromofluorobenzene	96%		53-131%		
17060-07-0	1,2-Dichloroethane-D4	126%		62-130%		

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

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3

Client Sample ID: CUT #1 M/B:DAY 9(2/23) Lab Sample ID: D32210-2 Matrix: SO - Soil Method: SW846 8015B Project: FRU 297-32A	Date Sampled: 02/24/12 Date Received: 02/27/12 Percent Solids: 91.5
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Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GB15099.D	1	02/27/12	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)	10.3	12	5.9	mg/kg	J
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
120-82-1	1,2,4-Trichlorobenzene	97%		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

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3

Client Sample ID: CUT #1 M/B:DAY 9(2/23) Lab Sample ID: D32210-2 Matrix: SO - Soil Method: SW846-8015B SW846 3546 Project: FRU 297-32A	Date Sampled: 02/24/12 Date Received: 02/27/12 Percent Solids: 91.5
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Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FH001751.D	1	02/28/12	TR	02/27/12	OP5440	GFH90
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)	169	15	9.5	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

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 # D32210

Client / Reporting Information		Project Information		Requested Analysis (see TEST CODE sheet)										Matrix Codes				
Company Name <u>KRW Consulting</u>		Project Name <u>XTO-FRU-297-32A</u>		<p style="text-align: center;">TPH (Gr+Dk) Benzene</p>										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				
Street Address <u>8000 W. 14th Ave. Ste. 200</u>		Street																
City, State, Zip <u>Lakewood, Co 80214</u>		Billing Information (If different from Report to) Company Name <u>XTO Energy</u>																
Project Contact <u>Dwayne Knudson</u>		Project # <u>1108-12 A</u>																
Phone # <u>970-498-1098</u>		Street Address <u>21459 CR5</u>																
Sample(s) Name(s) <u>C. Hallister. 303.565.9365</u>		Project Manager <u>Joe Hess</u>		City, State, Zip <u>Rifle, Co 81650</u>		Attention <u>Jessica Deuling</u>		PO#										
Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection		Sampled by	Matrix	# of bottles	Number of preserved bottles										LAB USE ONLY
			Date	Time				HCl	NepH	HN03	H2SO4	NONE	DI Water	MEDH	BKCODE	Blankline		
	<u>Cut #1 m/b: Days 8/10 (2/24)</u>		<u>2/24/12</u>	<u>9:30</u>	<u>CH 90</u>	<u>3</u>												<u>01</u>
	<u>Cut #1 m/b: Day 9 (2/23)</u>		<u>2/24/12</u>	<u>9:40</u>	<u>CH 50</u>	<u>3</u>												<u>02</u>

Turnaround Time (Business days)		Approved By (Accutest PM) / Date:		Data Deliverable Information				Comments / Special Instructions	
<input type="checkbox"/> Std. 10 Business Days <input type="checkbox"/> Std. 5 Business Days (By Contract only) <input type="checkbox"/> 5 Day R/SH <input checked="" type="checkbox"/> 2 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	<p style="text-align: center;">Please email results to KRW Piceance Creek Team</p>			
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: <u>C. Hallister</u>	Date Time: <u>2/24/12</u>	Received By: <u>Jacob Daw</u>	Date Time: <u>2:00</u>	Relinquished By:	Received By:
Relinquished by Sampler:	Date Time:	Received By:	Date Time:	Relinquished By:	Received By:
Relinquished by:	Date Time:	Received By:	Date Time:	Relinquished By:	Received By:
Custody Seal # <u>EX</u>		<input checked="" type="checkbox"/> Intact <input type="checkbox"/> Not Intact		Preserved where applicable <input checked="" type="checkbox"/> On Ice <input checked="" type="checkbox"/> Cooler Temp. <u>4.5</u>	

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: D32210

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 FRU 297-32A

Airbill #'s: Fedex

<u>Cooler Security</u>	<u>Y or N</u>		<u>Y or N</u>	
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"/>

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

<u>Quality Control Preservation</u>	<u>Y or N</u>		<u>N/A</u>
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"/>

<u>Sample Integrity - Documentation</u>	<u>Y or N</u>	
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"/>

<u>Sample Integrity - Condition</u>	<u>Y or N</u>	
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	

<u>Sample Integrity - Instructions</u>	<u>Y or N</u>		<u>N/A</u>
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

4.1
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GC/MS Volatiles

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QC Data Summaries

Includes the following where applicable:

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

Method Blank Summary

Job Number: D32210
Account: XTOKRWR XTO Energy
Project: FRU 297-32A

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5V1180-MB	5V19649.D	1	02/27/12	KV	n/a	n/a	V5V1180

The QC reported here applies to the following samples:

Method: SW846 8260B

D32210-1, D32210-2

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Limits
17060-07-0	1,2-Dichloroethane-D4	128% 67-131%
2037-26-5	Toluene-D8	89% 65-130%
460-00-4	4-Bromofluorobenzene	84% 65-130%

Blank Spike Summary

Job Number: D32210
Account: XTOKRWR XTO Energy
Project: FRU 297-32A

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5V1180-BS	5V19650.D	1	02/27/12	KV	n/a	n/a	V5V1180

The QC reported here applies to the following samples:

Method: SW846 8260B

D32210-1, D32210-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	50	55.0	110	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
17060-07-0	1,2-Dichloroethane-D4	129%	67-131%
2037-26-5	Toluene-D8	93%	65-130%
460-00-4	4-Bromofluorobenzene	106%	65-130%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: D32210
 Account: XTOKRWR XTO Energy
 Project: FRU 297-32A

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
D32186-2MS	5V19655.D	1	02/27/12	KV	n/a	n/a	V5V1180
D32186-2MSD	5V19656.D	1	02/27/12	KV	n/a	n/a	V5V1180
D32186-2	5V19652.D	1	02/27/12	KV	n/a	n/a	V5V1180

The QC reported here applies to the following samples:

Method: SW846 8260B

D32210-1, D32210-2

CAS No.	Compound	D32186-2 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND	2960	3150	107	3250	110	3	70-134/30

CAS No.	Surrogate Recoveries	MS	MSD	D32186-2	Limits
2037-26-5	Toluene-D8	91%	90%	91%	61-130%
460-00-4	4-Bromofluorobenzene	112%	110%	97%	53-131%
17060-07-0	1,2-Dichloroethane-D4	121%	119%	128%	62-130%

5.3.1
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GC Volatiles

QC Data Summaries

Includes the following where applicable:

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

Method Blank Summary

Job Number: D32210
Account: XTOKRWR XTO Energy
Project: FRU 297-32A

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

D32210-1, D32210-2

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%

Blank Spike Summary

Job Number: D32210
Account: XTOKRWR XTO Energy
Project: FRU 297-32A

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

D32210-1, D32210-2

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%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: D32210
 Account: XTOKRWR XTO Energy
 Project: FRU 297-32A

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

D32210-1, D32210-2

CAS No.	Compound	D32208-1 mg/kg	Spike Q mg/kg	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%

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

Job Number: D32210
Account: XTOKRWR XTO Energy
Project: FRU 297-32A

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP5440-MB	FH001733.D	1	02/28/12	TR	02/27/12	OP5440	GFH90

The QC reported here applies to the following samples:

Method: SW846-8015B

D32210-1, D32210-2

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	81% 43-136%

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Blank Spike Summary

Job Number: D32210
Account: XTOKRWR XTO Energy
Project: FRU 297-32A

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP5440-BS	FH001735.D	1	02/28/12	TR	02/27/12	OP5440	GFH90

The QC reported here applies to the following samples:

Method: SW846-8015B

D32210-1, D32210-2

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-DRO (C10-C28)	667	533	80	58-130

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	80%	43-136%

7.2.1

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Matrix Spike/Matrix Spike Duplicate Summary

Job Number: D32210
 Account: XTOKRWR XTO Energy
 Project: FRU 297-32A

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP5440-MS	FH001737.D	1	02/28/12	TR	02/27/12	OP5440	GFH90
OP5440-MSD	FH001739.D	1	02/28/12	TR	02/27/12	OP5440	GFH90
D32208-1	FH001741.D	1	02/28/12	TR	02/27/12	OP5440	GFH90

The QC reported here applies to the following samples:

Method: SW846-8015B

D32210-1, D32210-2

CAS No.	Compound	D32208-1 mg/kg	Spike Q	mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-DRO (C10-C28)	29.4	765	432	53	495	61	14	20-183/43	

CAS No.	Surrogate Recoveries	MS	MSD	D32208-1	Limits
84-15-1	o-Terphenyl	54%	60%	70%	43-136%

7.3.1
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