

FORM
4
Rev 12/05

Page 1

State of Colorado
Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80203 Phone: (303)894-2100 Fax: (303)894-2109



SUNDRY NOTICE

Submit original plus one copy. This form is to be used for general, technical and environmental sundry information. For proposed or completed operations, describe in full on Technical Information Page (Page 2 of this form.) Identify well or other facility by API Number or by OGCC Facility ID. Operator shall send an informational copy of all sundry notices for wells located in High Density Areas to the Local Government Designee (Rule 603b)

RECEIVED
12/13/2012

1. OGCC Operator Number: 100264	4. Contact Name: Jessica Doding
2. Name of Operator: XTO Energy Inc.	Phone: 970-675-4122
3. Address: PO Box 6501	Fax: 970-675-4150
City: Englewood State: CO Zip: 80155	
5. API Number: 05-103-08182-00	OGCC Facility ID Number: 315261
6. Well/Facility Name: Piceance Creek Unit	7. Well/Facility Number: T18-13G
8. Location (Qtr/Sec, Twp, Rng, Meridian): SWSW, 13, 2S, 97W, 6th	
9. County: Rio Blanco	10. Field Name: Piceance Creek Unit
11. Federal, Indian or State Lease Number: COD035677	

Survey Plat	
Directional Survey	
Surface Eqpm Diagram	
Technical Info Page	
Other	

Complete the Attachment
Checklist

OP OGCC

Location ID #

General Notice

<input type="checkbox"/> CHANGE OF LOCATION: Attach New Survey Plat (a change of surface qtr/qtr is substantive and requires a new permit)					
Change of Surface Footage from Exterior Section Lines:	<table border="1"><tr><td>FNLFSL</td><td>FEUFWL</td></tr><tr><td></td><td></td></tr></table>	FNLFSL	FEUFWL		
FNLFSL	FEUFWL				
Change of Surface Footage to Exterior Section Lines:	<table border="1"><tr><td></td><td></td></tr></table>				
Change of Bottomhole Footage from Exterior Section Lines:	<table border="1"><tr><td></td><td></td></tr></table>				
Change of Bottomhole Footage to Exterior Section Lines:	<table border="1"><tr><td></td><td></td></tr></table>				
Bottomhole location Qtr/Sec, Twp, Rng, Mer					
Latitude	Distance to nearest property line				
Longitude	Distance to nearest bldg, public rd, utility or RR				
Ground Elevation	Distance to nearest lease line				
	Is location in a High Density Area (rule 603b)? Yes/No				
	Distance to nearest well same formation				
	Surface owner consultation date:				
GPS DATA:					
Date of Measurement	PDOP Reading				
	Instrument Operator's Name				
<input type="checkbox"/> CHANGE SPACING UNIT					
Formation	Formation Code				
Spacing order number	Unit Acreage				
	Unit configuration				
<input type="checkbox"/> Remove from surface bond					
Signed surface use agreement attached					
<input type="checkbox"/> CHANGE OF OPERATOR (prior to drilling):					
Effective Date:					
Plugging Bond: <input type="checkbox"/> Blanket <input type="checkbox"/> Individual					
<input type="checkbox"/> CHANGE WELL NAME					
From:	NUMBER				
To:					
Effective Date:					
<input type="checkbox"/> ABANDONED LOCATION:					
Was location ever built?	<input type="checkbox"/> Yes <input type="checkbox"/> No				
Is site ready for inspection?	<input type="checkbox"/> Yes <input type="checkbox"/> No				
Date Ready for Inspection:					
<input type="checkbox"/> NOTICE OF CONTINUED SHUT IN STATUS					
Date well shut in or temporarily abandoned:					
Has Production Equipment been removed from site? <input type="checkbox"/> Yes <input type="checkbox"/> No					
MIT required if shut in longer than two years Date of last MIT					
<input type="checkbox"/> SPUD DATE:					
<input type="checkbox"/> REQUEST FOR CONFIDENTIAL STATUS (6 mos from date casing set)					
<input type="checkbox"/> SUBSEQUENT REPORT OF STAGE, SQUEEZE OR REMEDIAL CEMENT WORK *submit cbl and cement job summaries					
Method used	Cementing tool setting/perf depth				
Cement volume	Cement top				
Cement bottom	Date				
<input type="checkbox"/> RECLAMATION: Attach technical page describing final reclamation procedures per Rule 1004					
Final reclamation will commence on approximately					
<input type="checkbox"/> Final reclamation is completed and site is ready for inspection.					

Technical Engineering/Environmental Notice

<input type="checkbox"/> Notice of Intent	
Approximate Start Date:	<input type="checkbox"/> Report of Work Done
	Date Work Completed:
Details of work must be described in full on Technical Information Page (Page 2 must be submitted)	
<input type="checkbox"/> Intent to Recomplete (submit form 2)	<input type="checkbox"/> Request to Vent or Flare
<input type="checkbox"/> Change Drilling Plans	<input type="checkbox"/> Repair Well
<input type="checkbox"/> Gross Interval Changed?	<input type="checkbox"/> Rule 502 variance requested
<input type="checkbox"/> Casing/Cementing Program Change	<input checked="" type="checkbox"/> Other See Page 2
<input type="checkbox"/> E&P Waste Disposal	
<input type="checkbox"/> Beneficial Reuse of E&P Waste	
<input type="checkbox"/> Status Update/Change of Remediation Plans for Spills and Releases	

I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct and complete

Signed: Date: 12/13/2012 Email: jessica_doding@xtoenergy.com
Print Name: Jessica Doding Title: Environmental Coordinator

COGCC Approved:

Title: FOR

Date: 01/22/2013

CONDITIONS OF APPROVAL, IF ANY

Chris Canfield
ERS NW Region

TECHNICAL INFORMATION PAGE



FOR OGCC USE ONLY

1. OGCC Operator Number: 100264 API Number: 05-103-08182-00
2. Name of Operator: XTO Energy Inc. OGCC Facility ID #
3. Well/Facility Name: Piceance Creek Unit Well/Facility Number: T18-13G
4. Location (QtrQtr, Sec, Twp, Rng, Meridian): SWSW, 13, 2S, 97W, 6th

This form is to be completed whenever a Sundry Notice is submitted requiring detailed report of work to be performed or completed. This form shall be transmitted within 30 days of work completed as a "subsequent" report and must accompany Form 4, page 1.

DESCRIBE PROPOSED OR COMPLETED OPERATIONS

XTO Energy herin requests consideration of site-specific background Arsenic levels as an alternative to the Table 910-1 value for the PCU T18-13G location. COGCC Table 910-1 Concentration Levels list the allowable concentration level for arsenic in soil at 0.39 mg/kg. Footnote 1 of Table 910-1 states "Consideration shall be given to background levels in native soils and ground water." At other locations COGCC has allowed the determination of allowable levels based upon a 10 % variability factor applied to background soil concentration values where the maximum allowable level is computed by multiplying the highest detected background concentration by 1.1.

Eight representative background samples were collected from undisturbed areas adjacent to the subject location. Arsenic concentrations in those samples ranged from 3.8 mg/kg to 8.5 mg/kg. Applying the 10% variability factor to the highest concentration detected results in an allowable arsenic concentration level of 9.4 mg/kg.

Attached please find the Lab Data Summary Table and the Site Map indicating arsenic sampling locations attached.

Table 1
Location: PCU T18-13G
Lab Summary

Analytical Parameter (with units)	Bottom of Excavation (11/29/12)	BACKGROUND SAMPLES (11/29/12)								Updated: COGCC Table 910-1 Concentration Levels	12/12/2012 Maximum based on Background
		BG #1	BG #2	BG #3	BG #4	BG #5	BG #6	BG #7	BG #8		
Accutest Job #	D41381	D41379								-	-
Sample Type (Composite/Discrete)	D	D	D	D	D	D	D	D	D	-	-
TPH (GRO) (mg/kg)	ND	-	-	-	-	-	-	-	-	-	-
TPH (DRO) (mg/kg)	18.0	-	-	-	-	-	-	-	-	-	-
TPH (GRO+DRO) (mg/kg)	18.0	-	-	-	-	-	-	-	-	500	-
Benzene (mg/kg)	ND	-	-	-	-	-	-	-	-	0.17	-
Toluene (mg/kg)	ND	-	-	-	-	-	-	-	-	85	-
Ethylbenzene (mg/kg)	ND	-	-	-	-	-	-	-	-	100	-
Xylenes (total) (mg/kg)	ND	-	-	-	-	-	-	-	-	175	-
Acenaphthene (mg/kg)	ND	-	-	-	-	-	-	-	-	1,000	-
Anthracene (mg/kg)	ND	-	-	-	-	-	-	-	-	1,000	-
Benzo(A)anthracene (mg/kg)	ND	-	-	-	-	-	-	-	-	0.22	-
Benzo(B)fluoranthene (mg/kg)	ND	-	-	-	-	-	-	-	-	0.22	-
Benzo(K)fuoranthene (mg/kg)	ND	-	-	-	-	-	-	-	-	2.2	-
Benzo(A)pyrene (mg/kg)	ND	-	-	-	-	-	-	-	-	0.022	-
Chrysene (mg/kg)	ND	-	-	-	-	-	-	-	-	22	-
Dibenzo(A,H)anthracene (mg/kg)	ND	-	-	-	-	-	-	-	-	0.022	-
Fluoranthene (mg/kg)	ND	-	-	-	-	-	-	-	-	1,000	-
Fluorene (mg/kg)	ND	-	-	-	-	-	-	-	-	1,000	-
Indeno(1,2,3,C,D)pyrene (mg/kg)	ND	-	-	-	-	-	-	-	-	0.22	-
Naphthalene (mg/kg)	ND	-	-	-	-	-	-	-	-	23	-
Pyrene (mg/kg)	ND	-	-	-	-	-	-	-	-	1,000	-
Electrical Conductivity (mmhos/cm)	0.392	-	-	-	-	-	-	-	-	<4or 2X BG	-
Sodium Adsorption Ratio (SAR)	1.42	-	-	-	-	-	-	-	-	<12	-
pH	8.89	-	-	-	-	-	-	-	-	6-9	-
Arsenic (mg/kg)	4.8	5.5	5.6	4.9	4.3	5.0	8.5	3.8	5.9	0.39	9.4
Barium (mg/kg)	228	-	-	-	-	-	-	-	-	15,000	-
Cadmium (mg/kg)	<1.1	-	-	-	-	-	-	-	-	70	-
Chromium (III) (mg/kg)	25.2	-	-	-	-	-	-	-	-	120,000	-
Chromium (VI) (mg/kg)	<1.0	-	-	-	-	-	-	-	-	23	-
Copper (mg/kg)	14.9	-	-	-	-	-	-	-	-	3,100	-
Lead (inorganic) (mg/kg)	12.5	-	-	-	-	-	-	-	-	400	-
Mercury (mg/kg)	<0.094	-	-	-	-	-	-	-	-	23	-
Nickel (mg/kg)	15.9	-	-	-	-	-	-	-	-	1,600	-
Selenium (mg/kg)	<5.6	-	-	-	-	-	-	-	-	390	-
Silver (mg/kg)	<3.4	-	-	-	-	-	-	-	-	390	-
Zinc (mg/kg)	41.4	-	-	-	-	-	-	-	-	23,000	-
% Solids	88.6	89.9	91.0	89.5	86.7	90.3	93.4	88.8	88.5	-	-
Notes:											

1) ND = not detectable to the laboratory detection limit.

2) Results highlighted in yellow exceed Table 910-1 parameters; results highlighted in gray exceed Table 910-1, but are within background.

3) "-" indicates no analysis was performed.

4) Refer to Figure 1 for sample locations.

GRAPHIC SCALE



(IN FEET)

1 inch = 30 ft.



⊗ BG-2
ARSENIC: 5.6 mg/kg

⊗ BG-1
ARSENIC: 5.5 mg/kg

PARTIALLY BURIED TANK
TPH: 18.0 mg/kg
BENZENE: ND
ARSENIC: 4.8 mg/kg

⊗ BG-3
ARSENIC: 4.9 mg/kg

⊗ BG-4
ARSENIC: 4.3 mg/kg

⊗ BG-5
ARSENIC: 5.0 mg/kg

⊗ BG-6
ARSENIC: 8.5 mg/kg

⊗ BG-7
ARSENIC: 3.8 mg/kg

⊗ BG-8
ARSENIC: 5.9 mg/kg

LEGEND	
GPU	GAS PROCESSING UNIT
SEP	SEPARATOR
---	EDGE OF PAD
---	UNDERGROUND UTILITY
—	WELL HEAD
⊗	BACKGROUND TEST LOCATION
ARSENIC: mg/kg	WITH LAB RESULTS

NOTES:

1. BACKGROUND ARSENIC RESULTS ARE DISCRETE SAMPLES.
2. ND INDICATES NOT DETECTED WITHIN LABORATORY DETECTION LIMITS.

GPS:	CHECKED:	FIGURE 1	DATE	REVISIONS
TRIMBLE	DK			
DATE:	DRAWN:			
12/12/12	DRF			
FILE NAME:	SHEET NO.			
tsamp	1 of 1			
PROJECT NO.	SCALE:			
1211-14	1" = 40'			

KRW CONSULTING, INC.
8000 W. 14TH AVENUE, SUITE 200
LAKEWOOD, COLORADO
(303) 239-9011

FIGURE 1
PICEANCE CREEK
PCU T18-13G
SAMPLE LOCATIONS MAP
WITH ARSENIC LEVELS
PREPARED FOR XTO ENERGY



12/07/12

Technical Report for

XTO Energy

PCU T18-13G

1211-14

Accutest Job Number: D41379

Sampling Date: 11/29/12


Report to:

KRW Consulting, Inc.
8000 West 14th Avenue
Lakewood, CO 80214
dknudson@krwconsulting.com; jhess@krwconsulting.com;
crachak@krwconsulting.com; rrasnic@krwconsulting.com;
ATTN: Dwayne Knudson

Total number of pages in report: 23



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), TX (T104704511-12-1)

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.
Test results relate only to samples analyzed.

Table of Contents

-1-

Section 1: Sample Summary	3
Section 2: Case Narrative/Conformance Summary	4
Section 3: Summary of Hits	5
Section 4: Sample Results	6
4.1: D41379-1: BACKGROUND AS (1)	7
4.2: D41379-2: BACKGROUND AS (2)	8
4.3: D41379-3: BACKGROUND AS (3)	9
4.4: D41379-4: BACKGROUND AS (4)	10
4.5: D41379-5: BACKGROUND AS (5)	11
4.6: D41379-6: BACKGROUND AS (6)	12
4.7: D41379-7: BACKGROUND AS (7)	13
4.8: D41379-8: BACKGROUND AS (8)	14
Section 5: Misc. Forms	15
5.1: Chain of Custody	16
Section 6: Metals Analysis - QC Data Summaries	18
6.1: Prep QC MP9007: As	19

Sample Summary

XTO Energy

Job No: D41379

PCU T18-13G

Project No: 1211-14

Sample Number	Collected			Received	Matrix		Client Sample ID
	Date	Time	By		Code	Type	
D41379-1	11/29/12	13:50	DS	12/01/12	SO	Soil	BACKGROUND AS (1)
D41379-2	11/29/12	13:55	DS	12/01/12	SO	Soil	BACKGROUND AS (2)
D41379-3	11/29/12	14:00	DS	12/01/12	SO	Soil	BACKGROUND AS (3)
D41379-4	11/29/12	14:05	DS	12/01/12	SO	Soil	BACKGROUND AS (4)
D41379-5	11/29/12	14:10	DS	12/01/12	SO	Soil	BACKGROUND AS (5)
D41379-6	11/29/12	14:15	DS	12/01/12	SO	Soil	BACKGROUND AS (6)
D41379-7	11/29/12	14:20	DS	12/01/12	SO	Soil	BACKGROUND AS (7)
D41379-8	11/29/12	14:25	DS	12/01/12	SO	Soil	BACKGROUND AS (8)

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



CASE NARRATIVE / CONFORMANCE SUMMARY

Client: XTO Energy

Job No D41379

Site: PCU T18-13G

Report Date 12/7/2012 3:21:19 PM

On 12/01/2012, 8 sample(s), 0 Trip Blank(s), and 0 Field Blank(s) were received at Accutest Mountain States (AMS) at a temperature of 2.7 °C. The samples were intact and properly preserved, unless noted below. An AMS Job Number of D41379 was assigned to the project. The lab sample ID, client sample ID, 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.

Metals By Method SW846 6020A

Matrix SO

Batch ID: MP9007

- All samples were digested within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D41381-1MS, D41381-1MSD, D41381-1SDL were used as the QC samples for the metals analysis.

Wet Chemistry By Method SM19 2540B M

Matrix SO

Batch ID: GN17914

- 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.

Summary of Hits

Page 1 of 1

Job Number: D41379
Account: XTO Energy
Project: PCU T18-13G
Collected: 11/29/12



Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
D41379-1	BACKGROUND AS (1)					
Arsenic		5.5	0.11		mg/kg	SW846 6020A
D41379-2	BACKGROUND AS (2)					
Arsenic		5.6	0.11		mg/kg	SW846 6020A
D41379-3	BACKGROUND AS (3)					
Arsenic		4.9	0.11		mg/kg	SW846 6020A
D41379-4	BACKGROUND AS (4)					
Arsenic		4.3	0.12		mg/kg	SW846 6020A
D41379-5	BACKGROUND AS (5)					
Arsenic		5.0	0.11		mg/kg	SW846 6020A
D41379-6	BACKGROUND AS (6)					
Arsenic		8.5	0.11		mg/kg	SW846 6020A
D41379-7	BACKGROUND AS (7)					
Arsenic		3.8	0.11		mg/kg	SW846 6020A
D41379-8	BACKGROUND AS (8)					
Arsenic		5.9	0.11		mg/kg	SW846 6020A

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	BACKGROUND AS (1)	Date Sampled:	11/29/12
Lab Sample ID:	D41379-1	Date Received:	12/01/12
Matrix:	SO - Soil	Percent Solids:	89.9
Project:	PCU T18-13G		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	5.5	0.11	mg/kg	5	12/05/12	12/07/12 JM	SW846 6020A ¹	SW846 3050B ²

(1) Instrument QC Batch: MA3061
(2) Prep QC Batch: MP9007

RL = Reporting Limit

Report of Analysis

Client Sample ID:	BACKGROUND AS (2)	Date Sampled:	11/29/12
Lab Sample ID:	D41379-2	Date Received:	12/01/12
Matrix:	SO - Soil	Percent Solids:	91.0
Project:	PCU T18-13G		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	5.6	0.11	mg/kg	5	12/05/12	12/07/12 JM	SW846 6020A ¹	SW846 3050B ²

(1) Instrument QC Batch: MA3061
(2) Prep QC Batch: MP9007

RL = Reporting Limit

Report of Analysis

Client Sample ID:	BACKGROUND AS (3)	Date Sampled:	11/29/12
Lab Sample ID:	D41379-3	Date Received:	12/01/12
Matrix:	SO - Soil	Percent Solids:	89.5
Project:	PCU T18-13G		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	4.9	0.11	mg/kg	5	12/05/12	12/07/12 JM	SW846 6020A ¹	SW846 3050B ²

(1) Instrument QC Batch: MA3061
(2) Prep QC Batch: MP9007

RL = Reporting Limit

Report of Analysis

Client Sample ID: BACKGROUND AS (4)
Lab Sample ID: D41379-4
Matrix: SO - Soil
Project: PCU T18-13G

Date Sampled: 11/29/12
Date Received: 12/01/12
Percent Solids: 86.7

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	4.3	0.12	mg/kg	5	12/05/12	12/07/12 JM	SW846 6020A ¹	SW846 3050B ²

(1) Instrument QC Batch: MA3061
(2) Prep QC Batch: MP9007

RL = Reporting Limit

Report of Analysis

Client Sample ID:	BACKGROUND AS (5)	Date Sampled:	11/29/12
Lab Sample ID:	D41379-5	Date Received:	12/01/12
Matrix:	SO - Soil	Percent Solids:	90.3
Project:	PCU T18-13G		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	5.0	0.11	mg/kg	5	12/05/12	12/07/12 JM	SW846 6020A ¹	SW846 3050B ²

(1) Instrument QC Batch: MA3061
(2) Prep QC Batch: MP9007

RL = Reporting Limit

4.5
4

Report of Analysis

Client Sample ID:	BACKGROUND AS (6)	Date Sampled:	11/29/12
Lab Sample ID:	D41379-6	Date Received:	12/01/12
Matrix:	SO - Soil	Percent Solids:	93.4
Project:	PCU T18-13G		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	8.5	0.11	mg/kg	5	12/05/12	12/07/12 JM	SW846 6020A ¹	SW846 3050B ²

(1) Instrument QC Batch: MA3061
(2) Prep QC Batch: MP9007

RL = Reporting Limit

Report of Analysis

Client Sample ID: BACKGROUND AS (7)
Lab Sample ID: D41379-7
Matrix: SO - Soil
Project: PCU T18-13G

Date Sampled: 11/29/12
Date Received: 12/01/12
Percent Solids: 88.8

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	3.8	0.11	mg/kg	5	12/05/12	12/07/12 JM	SW846 6020A ¹	SW846 3050B ²

(1) Instrument QC Batch: MA3061
(2) Prep QC Batch: MP9007

RL = Reporting Limit

4.7
4

Report of Analysis

Client Sample ID:	BACKGROUND AS (8)	Date Sampled:	11/29/12
Lab Sample ID:	D41379-8	Date Received:	12/01/12
Matrix:	SO - Soil	Percent Solids:	88.5
Project:	PCU T18-13G		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	5.9	0.11	mg/kg	5	12/05/12	12/07/12 JM	SW846 6020A ¹	SW846 3050B ²

(1) Instrument QC Batch: MA3061
(2) Prep QC Batch: MP9007

RL = Reporting Limit

Misc. Forms

5

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody



CHAIN OF CUSTODY

PAGE 1 OF 1

4036 Youngfield Street, Wheat Ridge, CO 80033
TEL: 303-425-6021 FAX: 303-425-6854
www.accutest.com

FED-EX Tracking #	Bottle Order Control #
Accutest Quote #	Accutest Job # D41379
Client / Reporting Information	
Project Information	
Requested Analysis (see TEST CODE sheet)	
Matrix Codes	
LAB USE ONLY	

Company Name: **KRW Consulting**
Street Address: **8000 West 14th Street; Suite 200**
City: **Lakewood, CO 80214**
Project Contact: **Dwayne Knudson**
Phone #: **970-488-1098**
Sampler(s) Name(s): **DAVID SANDERS** 970-488-1098

Project Name: **XTO PCUT 18-13G**
Street: _____
City: _____ State: _____
Billing Information (if different from Report to):
Company Name: **XTO Energy**
Street Address: **21459 CR 5**
City: **Rifle, CO 81650**
Project #: **1211-14**
Client Purchase Order #: _____
Project Manager: **Joe Hesse**
Attention: **Jessica Dooling**

Number of preserved bottles: _____

Field ID / Point of Collection: **BACKGROUND AS (1)** MECH/DI Val # _____ Date: **11-29-12** Time: **13:50** Sampled by: **DS** Matrix: **SO** # of bottles: **1**

Field ID / Point of Collection: **AS (2)** MECH/DI Val # _____ Date: _____ Time: **13:55** Sampled by: _____ Matrix: **SO** # of bottles: **1**

Field ID / Point of Collection: **AS (3)** MECH/DI Val # _____ Date: _____ Time: **14:00** Sampled by: _____ Matrix: **SO** # of bottles: **1**

Field ID / Point of Collection: **AS (4)** MECH/DI Val # _____ Date: _____ Time: **14:05** Sampled by: _____ Matrix: **SO** # of bottles: **1**

Field ID / Point of Collection: **AS (5)** MECH/DI Val # _____ Date: _____ Time: **14:10** Sampled by: _____ Matrix: **SO** # of bottles: **1**

Field ID / Point of Collection: **AS (6)** MECH/DI Val # _____ Date: _____ Time: **14:15** Sampled by: _____ Matrix: **SO** # of bottles: **1**

Field ID / Point of Collection: **AS (7)** MECH/DI Val # _____ Date: _____ Time: **14:20** Sampled by: _____ Matrix: **SO** # of bottles: **1**

Field ID / Point of Collection: **BACKGROUND AS (8)** MECH/DI Val # _____ Date: **11-29-12** Time: **14:25** Sampled by: **DS** Matrix: **SO** # of bottles: **1**

Turnaround Time (Business days): _____

Approved By (Accutest PM): / Date: _____

Commercial "A" (Level 1) ☐ Commercial "B" (Level 2) ☐ COMM BN ☐ COMM BN+ ☐

State Forms Required ☐ Send Forms to State ☐ Report by Fax ☐ Report by PDF ☒ ONLY ☐ EDD Format ☐

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary
Commercial BN = Results/QC/Narrative (+ chromatograms)

Please email to: **KRW Piceance Team**

Comments / Special Instructions: _____

Relinquished by Sampler: **1/12/13** Date Time: **11/30/12 17:00** Received By: **1/12/13** Date Time: **12/17/12 8:45**

Relinquished by Sampler: **3** Date Time: _____ Received By: **3** Date Time: _____

Relinquished by: **5** Date Time: _____ Received By: **5** Date Time: _____

Custody Seal # **FX** Intact ☐ Not Intact ☐ Preserved where applicable ☐ Cooler Temp: **2.7**

D41379: Chain of Custody

Page 1 of 2

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: D41379

Client: KRW

Immediate Client Services Action Required: No

Date / Time Received: 12/1/2012 8:45:00 AM

No. Coolers: 1

Client Service Action Required at Login: No

Project: XTO PCU T18-13G

Airbill #'s: FX

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

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: D41379
Account: XTOKRWR - XTO Energy
Project: PCU T18-13G

QC Batch ID: MP9007
Matrix Type: SOLID

Methods: SW846 6020A
Units: mg/kg

Prep Date: 12/05/12

Metal	RL	IDL	MDL	MB raw	final
Aluminum	25	.22	.31		
Antimony	0.20	.0018	.0075		
Arsenic	0.10	.006	.06	-0.0047	<0.10
Barium	1.0	.0065	.037		
Beryllium	0.10	.016	.09		
Boron	20	1.2	1.2		
Cadmium	0.050	.014	.021		
Calcium	200	7.9	8		
Chromium	1.0	.033	.19		
Cobalt	0.10	.0012	.015		
Copper	1.0	.017	.065		
Iron	20	.8	5		
Lead	0.25	.0011	.024		
Magnesium	50	.44	.85		
Manganese	0.50	.0043	.02		
Molybdenum	0.50	.018	.018		
Nickel	1.0	.0049	.011		
Phosphorus	30	1.4	3.6		
Potassium	100	9.8	10		
Selenium	0.20	.029	.14		
Silver	0.050	.0009	.0065		
Sodium	250	1.5	2.3		
Strontium	10	.036	.036		
Thallium	0.10	.00095	.0095		
Tin	5.0	.023	.34		
Titanium	1.0	.044	.1		
Uranium	0.25	.00085	.001		
Vanadium	2.0	.12	.21		
Zinc	5.0	.033	.35		

Associated samples MP9007: D41379-1, D41379-2, D41379-3, D41379-4, D41379-5, D41379-6, D41379-7, D41379-8

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D41379
Account: XTOKRWR - XTO Energy
Project: PCU T18-13G

QC Batch ID: MP9007
Matrix Type: SOLID

Methods: SW846 6020A
Units: mg/kg

Prep Date: 12/05/12

Metal	D41381-1 Original MS	Spikelot ICPALL2	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic	4.8	51.6	56.4	82.9
Barium				75-125
Beryllium				
Boron				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Magnesium				
Manganese				
Molybdenum				
Nickel				
Phosphorus				
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Uranium				
Vanadium				
Zinc				

Associated samples MP9007: D41379-1, D41379-2, D41379-3, D41379-4, D41379-5, D41379-6, D41379-7, D41379-8

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D41379
Account: XTOKRWR - XTO Energy
Project: PCU T18-13G

QC Batch ID: MP9007
Matrix Type: SOLID

Methods: SW846 6020A
Units: mg/kg

Prep Date: 12/05/12

Metal	D41381-1 Original	MSD	Spikelot ICPALL2	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony						
Arsenic	4.8	51.7	56.4	83.1	0.2	20
Barium						
Beryllium						
Boron						
Cadmium						
Calcium						
Chromium						
Cobalt						
Copper						
Iron						
Lead						
Magnesium						
Manganese						
Molybdenum						
Nickel						
Phosphorus						
Potassium						
Selenium						
Silver						
Sodium						
Strontium						
Thallium						
Tin						
Titanium						
Uranium						
Vanadium						
Zinc						

Associated samples MP9007: D41379-1, D41379-2, D41379-3, D41379-4, D41379-5, D41379-6, D41379-7, D41379-8

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: D41379
Account: XTOKRWR - XTO Energy
Project: PCU T18-13G

QC Batch ID: MP9007
Matrix Type: SOLID

Methods: SW846 6020A
Units: mg/kg

Prep Date: 12/05/12

Metal	BSP Result	Spikelot ICPALL2	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic	46.7	50	93.4	80-120
Barium				
Beryllium				
Boron				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Magnesium				
Manganese				
Molybdenum				
Nickel				
Phosphorus				
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Uranium				
Vanadium				
Zinc				

Associated samples MP9007: D41379-1, D41379-2, D41379-3, D41379-4, D41379-5, D41379-6, D41379-7, D41379-8

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: D41379
 Account: XTOKRWR - XTO Energy
 Project: PCU T18-13G

QC Batch ID: MP9007
 Matrix Type: SOLID

Methods: SW846 6020A
 Units: ug/l

Prep Date: 12/05/12

Metal	D41381-1 Original	SDL	5:25 %DIF	QC Limits
Aluminum				
Antimony				
Arsenic	42.2	40.8	3.1	0-10
Barium				
Beryllium				
Boron				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Magnesium				
Manganese				
Molybdenum				
Nickel				
Phosphorus				
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Uranium				
Vanadium				
Zinc				

Associated samples MP9007: D41379-1, D41379-2, D41379-3, D41379-4, D41379-5, D41379-6, D41379-7, D41379-8

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested