

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
12/3/2012

1. OGCC Operator Number: 100264	4. Contact Name: Jessica Dooling
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: 05-103-10441-00	OGCC Facility ID Number:
6. Well/Facility Name: Piceance Creek Unit	7. Well/Facility Number: T78X-12G
8. Location (Qtr/Qtr, Sec, Twp, Rng, Meridian): SESE, Sec 12, T2S, Rng 97W, 6th PM	
9. County: Rio Blanco	10. Field Name: Piceance Creek Unit
11. Federal, Indian or State Lease Number:	

Survey Plat	
Directional Survey	
Surface Eqpmt Diagram	
Technical Info Page	
Other	

Complete the Attachment
Checklist

OP OGCC

Location ID
335878Pit ID #s
{ 272560
272879 }

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:	<input type="checkbox"/> FNL/FSL <input type="checkbox"/> FEL/FWL
Change of Surface Footage to Exterior Section Lines:	<input type="checkbox"/>
Change of Bottomhole Footage from Exterior Section Lines:	<input type="checkbox"/>
Change of Bottomhole Footage to Exterior Section Lines:	<input type="checkbox"/>
Bottomhole location Qtr/Qtr, Sec, Twp, Rng, Mer	<input type="checkbox"/> attach directional survey
Latitude: _____ Distance to nearest property line: _____ Distance to nearest bldg, public rd, utility or RR: _____	
Longitude: _____ Distance to nearest lease line: _____ Is location in a High Density Area (rule 603b)? Yes/No: _____	
Ground Elevation: _____ 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/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: _____ 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"/> E&P Waste Disposal
<input type="checkbox"/> Change Drilling Plans	<input type="checkbox"/> Repair Well	<input type="checkbox"/> Beneficial Reuse of E&P Waste
<input type="checkbox"/> Gross Interval Changed?	<input type="checkbox"/> Rule 502 variance requested	<input type="checkbox"/> Status Update/Change of Remediation Plans
<input type="checkbox"/> Casing/Cementing Program Change	<input checked="" type="checkbox"/> Other: See Page 2	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: Jessica Dooling Date: 12/3/2012 Email: jessica_dooling@xtoenergy.com
Print Name: Jessica Dooling Title: Environmental CoordinatorCOGCC Approved: Chris Canfield Title: FOR Date: 12/18/2012
CONDITIONS OF APPROVAL IF ANY:Chris Canfield
EPS NW RegionHigh alumina conc.
from Mancos Formation

cals.

TECHNICAL INFORMATION PAGE



FOR OGCC USE ONLY

1. OGCC Operator Number: 100264 API Number: 05-103-10441-00
 2. Name of Operator: XTO Energy Inc. OGCC Facility ID #
 3. Well/Facility Name: Piceance Creek Unit Well/Facility Number: T78X-12G
 4. Location (QtrQtr, Sec, Twp, Rng, Meridian): SESE, Sec 12, T2S, R97W, 6th PM

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 T78X-12G 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 4.4 mg/kg to 6.3 mg/kg. Applying the 10% variability factor to the highest concentration detected results in an allowable Arsenic concentration level of 6.9 mg/kg.

Subliner Arsenic samples were collected from the Freshwater (4.7 mg/kg), Reserve (6.6 mg/kg), Cuttings Pit #1 (6.8 mg/kg) and Cuttings Pit #2 (6.5 mg/kg). The subliner Arsenic concentrations are within the allowable background Arsenic concentration of 6.9 mg/kg.

The initial Reserve Pit contents Arsenic concentration of 10.2 mg/kg is presumed to be the result of material from the Mancos formation. Five additional discrete samples representing the Reserve Pit contents including, in part, material from the Mancos formation were analyzed for Arsenic and result in a range of 6.3 mg/kg to 7.4 mg/kg and a mean of 6.8 mg/kg. The mean of the Reserve Pit Contents is within the allowable background Arsenic concentration of 6.9 mg/kg.

The initial Cuttings Pits #1 and #2 contents Arsenic concentrations of 10.9 mg/kg (Cuttings Pit #1) and 14.2 mg/kg (Cuttings Pit #2) are presumed to be the result of material from the Mancos formation. Ten additional discrete samples representing the Cuttings Pits contents, including, in part, material from the Mancos formation were analyzed for Arsenic and result in a range of 8.6 mg/kg to 16.4 mg/kg (see Table 2). It is our interpretation that the discrete Arsenic samples demonstrate that there were no anthropogenic affects to the Cuttings Pits #1 and #2 material and that the elevated Arsenic levels reflect contributions due to drilling through the Mancos formation.

Please find the Lab Data Summary Tables and the Site Map indicating Arsenic sampling locations attached.

Table 1
Location: PCU T78X-12G
Lab Summary

Last update 10/19/2012

Analytical Parameter		Fresh Water Pit		Reserve Pit		Cuttings #1		Cuttings #2		Background (8/28/12)								COGCC		Maximum based on Background
(with units)	FW Pit Contents	FW Pit Subliner 9/10/12	RP Post Solid. 9/18/12	RP Subliner 9/18/12	Cut #1 Post Solid. 9/6/12	Cut #1 Subliner 9/7/12	Cut #2 Post Solid. 9/6/12	Cut #2 Subliner 9/7/12	BG-1	BG-2	BG-3	BG-4	BG-5	BG-6	BG-7	BG-8	Table 910-1 Concentration Levels			
Accutest Job #	Freshwater Pit Contents De Minimis	D38644	D38940	D38939	D38518	D38599	D38518	D38605	D38124								-	-		
Sample type (Composite/Discrete)		C	C	C	C	C	C	C	D	D	D	D	D	D	D	D	-	-		
TPH (GRO) (mg/Kg)		ND	ND	ND	46.7	ND	77.6	ND	-	-	-	-	-	-	-	-	-	-		
TPH (DRO) (mg/Kg)		141	301	29.9	310	32.4	523	18.4	-	-	-	-	-	-	-	-	-	-		
TPH (GRO + DRO) (mg/Kg)		141	301	29.9	357	32.4	601	18.4	-	-	-	-	-	-	-	-	-	500		
Benzene (mg/Kg)		ND	ND	ND	0.744	ND	0.419	ND	-	-	-	-	-	-	-	-	-	0.170		
Toluene (mg/Kg)		ND	ND	ND	1.78	ND	1.93	ND	-	-	-	-	-	-	-	-	-	85		
Ethylbenzene (mg/Kg)		ND	ND	ND	0.277	ND	0.370	ND	-	-	-	-	-	-	-	-	-	100		
Xylenes (total) (mg/Kg)		ND	ND	ND	1.56	ND	1.95	ND	-	-	-	-	-	-	-	-	-	175		
Acenaphthene (mg/Kg)		ND	ND	ND	ND	ND	ND	ND	-	-	-	-	-	-	-	-	-	1000		
Anthracene (mg/Kg)		ND	ND	ND	ND	ND	ND	ND	-	-	-	-	-	-	-	-	-	1000		
Benzo(A)anthracene (mg/Kg)		ND	ND	ND	ND	ND	ND	ND	-	-	-	-	-	-	-	-	-	0.22		
Benzo(B)fluoranthene (mg/Kg)		ND	ND	ND	ND	ND	ND	ND	-	-	-	-	-	-	-	-	-	0.22		
Benzo(K)fluoranthene (mg/Kg)		ND	ND	ND	ND	ND	ND	ND	-	-	-	-	-	-	-	-	-	2.2		
Benzo(A)pyrene (mg/Kg)		ND	ND	ND	ND	ND	ND	ND	-	-	-	-	-	-	-	-	-	0.022		
Chrysene (mg/Kg)		0.0076	ND	ND	0.0621	ND	0.0280	ND	-	-	-	-	-	-	-	-	-	22		
Dibenzo(A,H)anthracene (mg/Kg)		ND	ND	ND	ND	ND	ND	ND	-	-	-	-	-	-	-	-	-	0.022		
Fluoranthene (mg/Kg)		ND	ND	ND	0.0165	ND	ND	ND	-	-	-	-	-	-	-	-	-	1000		
Fluorene (mg/Kg)		ND	ND	ND	0.102	ND	ND	ND	-	-	-	-	-	-	-	-	-	1000		
Indeno(1,2,3,C,D)pyrene (mg/Kg)		ND	ND	ND	ND	ND	ND	ND	-	-	-	-	-	-	-	-	-	0.22		
Naphthalene (mg/Kg)		0.0248	0.0354	ND	0.519	0.0201	0.336	0.0178	-	-	-	-	-	-	-	-	-	23		
Pyrene (mg/Kg)		0.0257	ND	ND	0.0380	ND	0.0389	ND	-	-	-	-	-	-	-	-	-	1000		
Electrical Conductivity (mmhos/cm)		8.52	12.100	0.835	8.560	0.851	13.500	0.477	-	-	-	-	-	-	-	-	-	4		
Sodium Adsorption Ratio (SAR)		12.9	6.94	5.56	14.7	5.35	62.7	2.89	-	-	-	-	-	-	-	-	-	12		
pH		9.08	12.53	9.73	12.49	9.65	12.35	9.58	-	-	-	-	-	-	-	-	-	6-9		
Arsenic (mg/kg)		4.7	10.2	6.6	10.9	6.8	14.2	6.5	5.5	5.5	5.8	5.3	4.8	4.4	4.8	6.3	0.39	6.9		
Barium (mg/kg)		1780	4220	914	2020	1340	2100	1530	-	-	-	-	-	-	-	-	-	15000		
Cadmium (mg/kg)		<1.2	<1.6	<1.1	<1.2	<1.2	<1.2	<1.2	-	-	-	-	-	-	-	-	-	70		
Chromium (III) (mg/Kg)		39.3	<22	41.4	12.1	49.1	17.4	56.2	-	-	-	-	-	-	-	-	-	120000		
Chromium (VI) (mg/Kg)		<1.0	<20	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	-	23		
Copper (mg/kg)		15.7	18.2	10.3	28.2	11.4	31.6	10.3	-	-	-	-	-	-	-	-	-	3100		
Lead (inorganic) (mg/kg)		15.5	19.8	11.1	20.4	12.8	15.5	12.6	-	-	-	-	-	-	-	-	-	400		
Mercury (mg/kg)		<0.12	<0.16	<0.11	<0.12	<0.11	<0.12	<0.11	-	-	-	-	-	-	-	-	-	23		
Nickel (mg/kg)		19.6	130	18.5	85.9	19.5	52.8	19.6	-	-	-	-	-	-	-	-	-	1600		
Selenium (mg/kg)	<6.2	<7.9	<5.4	<6.0	<5.9	<6.1	<5.8	-	-	-	-	-	-	-	-	-	390			
Silver (mg/kg)	<3.7	<4.7	<3.3	<3.6	<3.5	<3.7	<3.5	-	-	-	-	-	-	-	-	-	390			
Zinc (mg/kg)	50.1	54.3	39.2	40.5	47.1	49.4	46.2	-	-	-	-	-	-	-	-	-	23000			
% Solids	82.7	62.8	92.8	81.3	86.4	79.9	85.6	93.4	96.9	94.8	95.5	95.5	96.0	95.9	95.6	-	-			
Notes:																				

- Notes:
- 1) ND = not detectable to the laboratory detection limit.
 - 2) Results highlighted in yellow exceed Table 910-1 concentration levels. Results highlighted in Gray exceed Table 910-1, but are below background levels.
 - 3) "-" indicates no analysis.
 - 4) See site map for sample locations.

Table 2
Location: PCU T78X-12G
Lab Summary - Arsenic Summary

Last update 11/14/2012

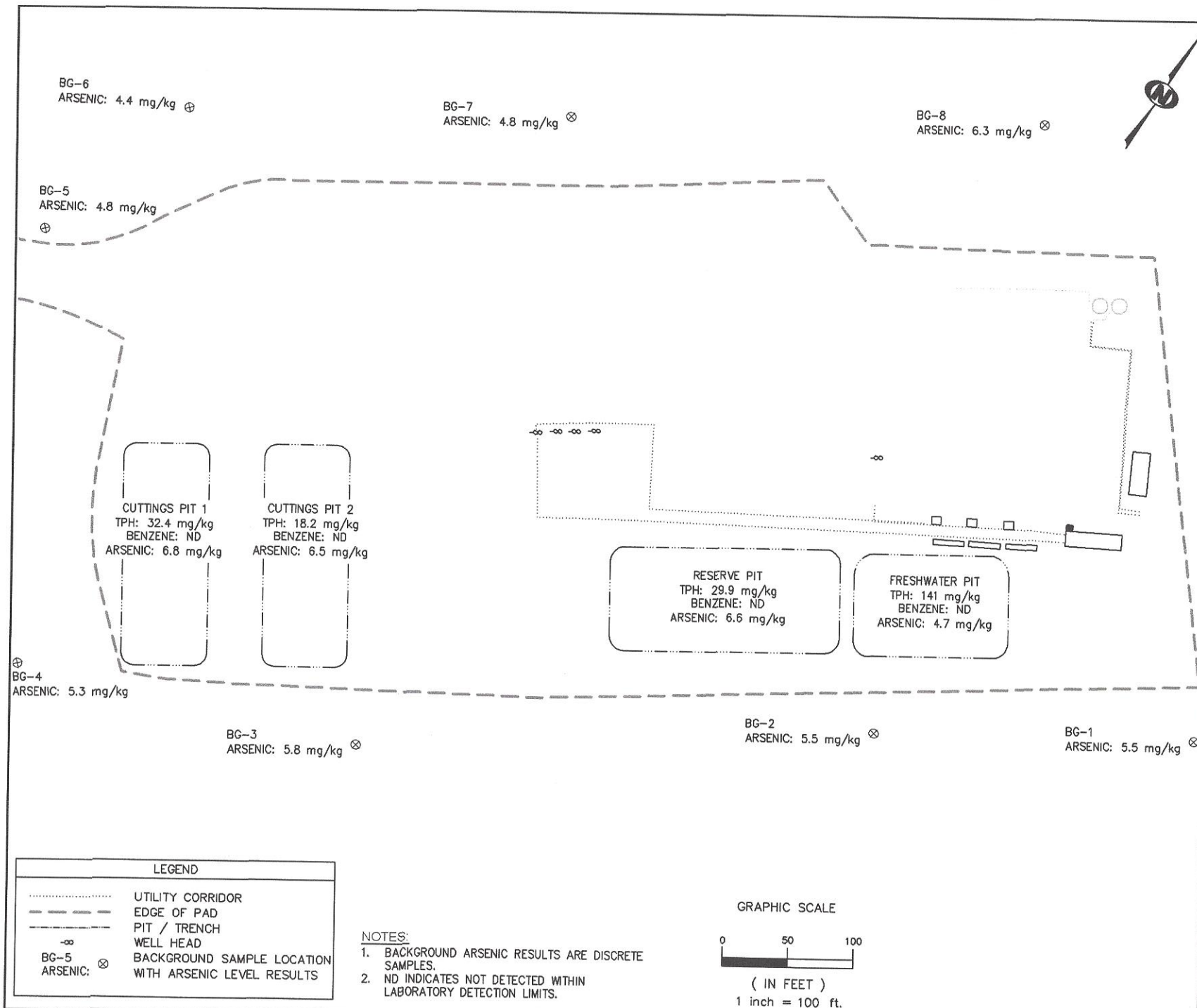
Analytical Parameter	Reserve Pit Discrete Arsenic					Cuttings #1 Discrete Arsenic					Cuttings #2 Discrete Arsenic					Background (8/28/12)								Last update	
(with units)	#1	#2	#3	#4	#5	#1	#2	#3	#4	#5	#1	#2	#3	#4	#5	BG-1	BG-2	BG-3	BG-4	BG-5	BG-6	BG-7	BG-8	COGCC Table 910-1 Concentration Levels	Maximum based on Background
Accutest Job #	D40650 (11/5/12)					D40648 (11/6/12)					D40649 (11/6/12)					D38124								-	-
Sample type (Composite/Discrete)	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	-	-
TPH (GRO) (mg/Kg)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TPH (DRO) (mg/Kg)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TPH (GRO + DRO) (mg/Kg)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzene (mg/Kg)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	500	-
Toluene (mg/Kg)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.170	-
Ethylbenzene (mg/Kg)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	85	-
Xylenes (total) (mg/Kg)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100	-
Acenaphthene (mg/Kg)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	175	-
Anthracene (mg/Kg)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1000	-
Benzo(A)anthracene (mg/Kg)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1000	-
Benzo(B)fluoranthene (mg/Kg)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.22	-
Benzo(K)fluoranthene (mg/Kg)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.22	-
Benzo(A)pyrene (mg/Kg)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.2	-
Chrysene (mg/Kg)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.022	-
Dibenzo(A,H)anthracene (mg/Kg)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22	-
Fluoranthene (mg/Kg)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.022	-
Fluorene (mg/Kg)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1000	-
Indeno(1,2,3,C,D)pyrene (mg/Kg)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1000	-
Naphthalene (mg/Kg)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.22	-
Pyrene (mg/Kg)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23	-
Electrical Conductivity (mmhos/cm)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1000	-
Sodium Adsorption Ratio (SAR)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	-
pH	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	-
Arsenic (mg/kg)	6.7	7.3	6.3	7.4	6.4	12.5	9.8	16.4	9.0	8.6	13.2	14.2	12.6	12.4	9.0	5.5	5.5	5.8	5.3	4.8	4.4	4.8	6.3	0.39	6.9
Barium (mg/kg)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15000	-
Cadmium (mg/kg)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	70	-
Chromium (III) (mg/Kg)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	120000	-
Chromium (VI) (mg/Kg)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23	-
Copper (mg/kg)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3100	-
Lead (inorganic) (mg/kg)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	400	-
Mercury (mg/kg)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23	-
Nickel (mg/kg)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1600	-
Selenium (mg/kg)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	390	-
Silver (mg/kg)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	390	-
Zinc (mg/kg)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23000	-
% Solids	65.3	63.8	66.2	66.9	65.6	93.0	97.8	96.5	96.6	94.9	92.3	93.5	96.7	89.6	85.2	93.4	96.9	94.8	95.5	95.5	96.0	95.9	95.6	-	-
Notes:																								-	-

Notes:

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

2) Results highlighted in yellow exceed Table 910-1 concentration levels. Results highlighted in Gray exceed Table 910-1, but are below background levels.

3) "-" indicates no analysis.



NOTES:

FIGURE 1

CHECKED: DK

DATE: 11/12/12

FILE NAME: S01mp

PROJECT NO. 1007-06

SHEET NO. 1 of 1

SCALE: 1"=100'

DATE

REVISIONS

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

FIGURE 1

PICEANCE CREEK
PCU T78X-12G
SAMPLE LOCATIONS WITH
BACKGROUND ARSENIC
PREPARED FOR XTO ENERGY