

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



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## 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  
3/10/2013

1. OGCC Operator Number: 100264	4. Contact Name: Jessica Dooling	Complete the Attachment Checklist OP OGCC
2. Name of Operator: XTO Energy Inc.	Phone: 970-675-4122	
3. Address: PO Box 6501 City: Englewood State: CO Zip: 80155	Fax: 970-675-4150	
5. API Number: 05-103-10947	OGCC Facility ID Number	Survey Plat
6. Well/Facility Name: Piceance Creek Unit 7	Well/Facility Number: 296-17A	Directional Survey
8. Location (Qtr/Sec, Twp, Rng, Meridian): SWSE, Sec 17, T2S, R96W, 6th PM		Surface Equipmt Diagram
9. County: Rio Blanco	10. Field Name: Piceance Creek Unit	Technical Info Page
11. Federal, Indian or State Lease Number:		Other

Fit Facility ID #287190  
Location ID #335706

## 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"/> FNU/FSL <input type="checkbox"/> FEL/FWL
Change of Surface Footage to Exterior Section Lines:	<input type="checkbox"/> <input type="checkbox"/>
Change of Bottomhole Footage from Exterior Section Lines:	<input type="checkbox"/> <input type="checkbox"/>
Change of Bottomhole Footage to Exterior Section Lines:	<input type="checkbox"/> <input type="checkbox"/> attach directional survey
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 NUMBER From: 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: Jessica Dooling Date: 3/10/2013 Email:   
Print Name: Jessica Dooling Title: Piceance EH&S Supervisor

COGCC Approved: Chris Canfield Title: FOR Date: 03/13/2013

CONDITIONS OF APPROVAL IF ANY

Chris Canfield  
EPS NW Region

## TECHNICAL INFORMATION PAGE



FOR OGCC USE ONLY

1. OGCC Operator Number:	100264	API Number:	05-103-10947
2. Name of Operator:	XTO Energy Inc.		OGCC Facility ID #
3. Well/Facility Name:	Piceance Creek Unit	Well/Facility Number:	296-17A
4. Location (QtrQtr, Sec, Twp, Rng, Meridian):	SWSE, Sec 17, T2S, R96W, 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 296-17A 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 7.8 mg/kg. Applying the 10% variability factor to the highest concentration detected results in an allowable Arsenic concentration level of 8.6 mg/kg.

Subliner Arsenic samples were collected from the Freshwater (5.5 mg/kg), Reserve (4.8 mg/kg) Cuttings Pit #2 (7.7 mg/kg) and Cuttings Pit #3 (6.4 mg/kg). The subliner Arsenic concentrations are within the allowable background Arsenic concentration of 8.6 mg/kg.

Initial Reserve Pit and Cuttings Pit #3 contents Arsenic concentration of 9.8 mg/kg and 17.9 mg/kg, respectively are presumed to be the result of material from the Mancos formation. Ten additional discrete samples representing the Reserve Pit and Cuttings Pit #3 Contents, including, in part, material from the Mancos formation were analyzed for Arsenic. Reserve Pit analysis resulted in a range of 8.1 mg/kg to 13.0 mg/kg, Cuttings Pit #3 analysis resulted in a range of 8.1 mg/kg to 12.9 mg/kg. It is our interpretation that the discrete Arsenic samples demonstrate that there were no anthropogenic affects to the Reserve pit and Cuttings Pit #3 material and that the elevated Arsenic levels reflect contributions due to drilling through the Mancos formation (see Tables 1 & 2).

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

**Table 1**  
**Location: PCU 296-17A**  
**Lab Summary**

Last update 3/7/2013

Analytical Parameter	Fresh Water Pit		Reserve Pit		Cuttings #2		Cuttings #3		Background								COGCC		Maximum based on Background
(with units)	FW Pit Contents	FW Pit Subliner <sup>5</sup> 10/2/12	RP Post Solid. 10/9/12	RP Subliner <sup>6</sup> 10/9/12	Cut #2 Contents (10/1/12)	Cut #2 Subliner 10/18/12	Cut #3 Contents 9/26/12	Cut #3 Subliner 3/1/13	#1	#2	#3	#4	#5	#6	#7	#8	Table 910-1 Concentration Levels		
Accutest Job #	Pit Contents De Minimis	D39513	D39735	D39736	D39514	D40112	D39256	D43950	D39264 (9/26/12)								-	-	
Sample type (Composite/Discrete)		C	C	C	C	C	C	C	D	D	D	D	D	D	D	D	-	-	
TPH (GRO) (mg/Kg)		ND	49.4	ND	ND	ND	ND	16.4	ND	-	-	-	-	-	-	-	-	-	
TPH (DRO) (mg/Kg)		1600	4050	594	339	82.3	362	108	108	-	-	-	-	-	-	-	-	-	
TPH (GRO + DRO) (mg/Kg)		1600	4099	594	339	82.3	378	108	108	-	-	-	-	-	-	-	-	500	
Benzene (mg/Kg)		ND	ND	ND	0.222	0.113	0.945	ND	ND	-	-	-	-	-	-	-	-	0.170	
Toluene (mg/Kg)		ND	0.109	ND	0.923	0.308	2.18	ND	ND	-	-	-	-	-	-	-	-	85	
Ethylbenzene (mg/Kg)		ND	0.0449	ND	0.215	0.0474	0.355	ND	ND	-	-	-	-	-	-	-	-	100	
Xylenes (total) (mg/Kg)		ND	0.745	ND	1.14	0.283	1.87	ND	ND	-	-	-	-	-	-	-	-	175	
Acenaphthene (mg/Kg)		ND	ND	ND	ND	ND	0.0071	ND	ND	-	-	-	-	-	-	-	-	1000	
Anthracene (mg/Kg)		ND	ND	ND	ND	ND	ND	ND	ND	-	-	-	-	-	-	-	-	1000	
Benzo(A)anthracene (mg/Kg)		ND	ND	ND	0.0190	0.0204	0.0108	ND	ND	-	-	-	-	-	-	-	-	0.22	
Benzo(A)pyrene (mg/Kg)		ND	ND	ND	ND	0.0096	ND	ND	ND	-	-	-	-	-	-	-	-	0.022	
Benzo(B)fluoranthene (mg/Kg)		ND	ND	ND	ND	0.0293	0.0189	ND	ND	-	-	-	-	-	-	-	-	0.22	
Benzo(K)fluoranthene (mg/Kg)		ND	ND	ND	ND	0.010	0.0103	ND	ND	-	-	-	-	-	-	-	-	2.2	
Chrysene (mg/Kg)		0.0321	0.0558	0.0114	0.0510	0.0295	0.0338	ND	ND	-	-	-	-	-	-	-	-	22	
Dibenzo(A,H)anthracene (mg/Kg)		ND	ND	ND	ND	ND	ND	ND	ND	-	-	-	-	-	-	-	-	0.022	
Fluoranthene (mg/Kg)		0.0251	ND	0.0110	ND	0.0327	0.0127	ND	ND	-	-	-	-	-	-	-	-	1000	
Fluorene (mg/Kg)		0.354	0.382	0.0914	0.0502	0.0126	0.0735	ND	ND	-	-	-	-	-	-	-	-	1000	
Indeno(1,2,3,C,D)pyrene (mg/Kg)		ND	ND	ND	ND	0.0082	ND	ND	ND	-	-	-	-	-	-	-	-	0.22	
Naphthalene (mg/Kg)		0.0974	1.06	0.0308	0.403	0.0726	0.349	0.118	0.118	-	-	-	-	-	-	-	-	23	
Pyrene (mg/Kg)		0.0362	0.0740	0.0123	0.0440	0.0202	0.0267	ND	ND	-	-	-	-	-	-	-	-	1000	
Electrical Conductivity (mmhos/cm)		2.460	7.420	4.590	8.370	3.600	13.600	7.030	7.030	-	-	-	-	-	-	-	-	4	
Sodium Adsorption Ratio (SAR)		9.57	11.0	10.5	105	12.9	29.4	8.27	8.27	-	-	-	-	-	-	-	-	12	
pH		9.72	12.46	9.72	11.94	9.88	11.94	9.77	9.77	-	-	-	-	-	-	-	-	6-9	
Arsenic (mg/kg)		5.5	9.8	4.8	8.6	7.7	17.9	6.4	6.4	5.5	4.4	5.6	6.7	4.6	6.5	4.8	7.8	0.39	
Barium (mg/kg)		1250	5510	3010	4540	3990	5540	5260	5260	-	-	-	-	-	-	-	-	15000	
Cadmium (mg/kg)		<1.0	<1.5	<1.0	<1.2	<1.1	<1.3	<1.4	<1.4	-	-	-	-	-	-	-	-	70	
Chromium (III) (mg/Kg)		37.0	17.4	32.1	26.7	42.1	18.1	36.4	36.4	-	-	-	-	-	-	-	-	120000	
Chromium (VI) (mg/Kg)		<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	23	
Copper (mg/kg)		16.9	15.8	19.7	25.4	11.8	34.0	17.6	17.6	-	-	-	-	-	-	-	-	3100	
Lead (inorganic) (mg/kg)		15.7	13.0	15.8	44.4	12.5	33.7	22.4	22.4	-	-	-	-	-	-	-	-	400	
Mercury (mg/kg)		<0.10	<0.14	<0.097	<0.13	<0.095	<0.13	<0.12	<0.12	-	-	-	-	-	-	-	-	23	
Nickel (mg/kg)		19.3	83.9	19.8	16.1	16.2	15.8	23.2	23.2	-	-	-	-	-	-	-	-	1600	
Selenium (mg/kg)	<5.2	<7.4	<5.2	<6.2	<5.7	<6.3	<7.1	<7.1	-	-	-	-	-	-	-	-	390		
Silver (mg/kg)	<3.1	<4.5	<3.1	<3.7	<3.4	<3.8	<4.3	<4.3	-	-	-	-	-	-	-	-	390		
Zinc (mg/kg)	52.8	29.7	55.5	75.7	42.3	75.8	63.1	63.1	-	-	-	-	-	-	-	-	23000		
% Solids	94.2	67.2	96.9	80.1	84.5	78.2	73.1	73.1	86.3	90.1	87.3	91.4	89.8	93.9	90.4	90.6	-		

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.
- 5) See Table 3 for FW subliner assessment.
- 6) See Table 4 for RP subliner assessment.

**Table 2**  
**Location: PCU 296-17A**  
**Lab Summary - Arsenic Summary**

Last update 3/6/2013

Analytical Parameter	Reserve Pit					Cuttings #3					Background								COGCC	Maximum based on Background
(with units)	Discrete #1	Discrete #2	Discrete #3	Discrete #4	Discrete #5	Discrete #1	Discrete #2	Discrete #3	Discrete #4	Discrete #5	#1	#2	#3	#4	#5	#6	#7	#8	Table 910-1 Concentration Levels	
Accutest Job #	D43936 (2/28/13)					D43937 (2/28/13)					D39264 (9/26/12)								-	-
Sample type (Composite/Discrete)	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)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	500	-
Benzene (mg/Kg)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.170	-
Toluene (mg/Kg)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	85	-
Ethylbenzene (mg/Kg)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100	-
Xylenes (total) (mg/Kg)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	175	-
Acenaphthene (mg/Kg)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1000	-
Anthracene (mg/Kg)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1000	-
Benzo(A)anthracene (mg/Kg)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.22	-
Benzo(A)pyrene (mg/Kg)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.022	-
Benzo(B)fluoranthene (mg/Kg)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.22	-
Benzo(K)fluoranthene (mg/Kg)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.2	-
Chrysene (mg/Kg)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22	-
Dibenzo(A,H)anthracene (mg/Kg)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.022	-
Fluoranthene (mg/Kg)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1000	-
Fluorene (mg/Kg)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1000	-
Indeno(1,2,3,C,D)pyrene (mg/Kg)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.22	-
Naphthalene (mg/Kg)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23	-
Pyrene (mg/Kg)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1000	-
Electrical Conductivity (mmhos/cm)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	-
Sodium Adsorption Ratio (SAR)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	-
pH	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6-9	-
Arsenic (mg/kg)	8.1	9.2	12.7	13.0	9.4	12.9	12.7	8.1	11.7	9.5	5.5	4.4	5.6	6.7	4.6	6.5	4.8	7.8	0.39	8.6
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	83.8	82.4	65.2	78.9	70.2	82.5	75.1	86.7	89.4	76.5	86.3	90.1	87.3	91.4	89.8	93.9	90.4	90.6	-	-

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.

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