

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)854-2100 Fax: (303)854-2109



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
3/28/2013

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: 05-103-11428	OGCC Facility ID Number:	Survey Plat
6. Well/Facility Name: Freedom Unit	7. Well/Facility Number: 197-33B	Directional Survey
8. Location (Qtr/Qtr, Sec, Twp, Rng, Meridian): SWNE, Sec 33, T1S, R97W, 6th PM		Surface Eqpt Diagram
9. County: Rio Blanco	10. Field Name: Piceance Creek	Technical Info Page
11. Federal, Indian or State Lease Number:		Other

General Notice

☐ **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"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Change of Surface Footage to Exterior Section Lines.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Change of Bottomhole Footage from Exterior Section Lines.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Change of Bottomhole Footage to Exterior Section Lines.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Bottomhole location Qtr/Qtr, Sec, Twp, Rng, Mer: _____

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: _____

☐ **CHANGE SPACING UNIT**

Formation: _____ Formation Code: _____ Spacing order number: _____ Unit Acreage: _____ Unit configuration: _____

☐ **Remove from surface bond**

Signed surface use agreement attached

☐ **CHANGE OF OPERATOR (prior to drilling):**Effective Date: _____
Plugging Bond: ☐ Blanket ☐ Individual☐ **CHANGE WELL NAME**

NUMBER

From: _____
To: _____
Effective Date: _____☐ **ABANDONED LOCATION:**Was location ever built? ☐ Yes ☐ No
Is site ready for inspection? ☐ Yes ☐ No
Date Ready for Inspection: _____☐ **NOTICE OF CONTINUED SHUT IN STATUS**Date well shut in or temporarily abandoned: _____
Has Production Equipment been removed from site? ☐ Yes ☐ No
MIT required if shut in longer than two years. Date of last MIT: _____☐ **SPUD DATE:**☐ **REQUEST FOR CONFIDENTIAL STATUS** (6 mos from date casing set)☐ **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: _____

☐ **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

☐ **Notice of Intent**

Approximate Start Date: _____

☐ **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 Recombine (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: _____

Date: 3/27/2013 Email: jessica_dooling@xtoenergy.com

Print Name: Jessica Dooling

Title: Piceance EH&S Supervisor

COGCC Approved: _____

Title: EPS NW Region Date: 04/16/2013

CONDITIONS OF APPROVAL IF ANY

TECHNICAL INFORMATION PAGE



FOR OGCC USE ONLY

1. OGCC Operator Number:	100264	API Number:	05-103-11428
2. Name of Operator:	XTO Energy Inc.		OGCC Facility ID #
3. Well/Facility Name:	Freedom Unit	Well/Facility Number:	197-33B
4. Location (QtrQtr, Sec, Twp, Rng, Meridian):	SWNE, Sec 33, T1S, 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 FRU 197-33B 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 5.5 mg/kg to 8.9 mg/kg. Applying the 10% variability factor to the highest concentration detected results in an allowable Arsenic concentration level of 9.8 mg/kg.

Subliner Arsenic samples were collected from the Reserve (9.3 mg/kg) Cuttings Pit #1 (8.7 mg/kg), Cuttings Pit #2 (8.0 mg/kg) and Cuttings Pit #3 (8.9 mg/kg). The subliner Arsenic concentrations are within the allowable background Arsenic concentration of 9.8 mg/kg.

The Freshwater Pit subliner Arsenic concentration of 10.4 mg/kg is above the allowable background Arsenic concentration of 9.8 mg/kg. XTO Energy believes the subliner Arsenic value reflects the heterogeneous nature of the substrate and does not indicate subliner impacts due to operations.

Initial Cuttings Pit #1 contents Arsenic concentration of 14.0 mg/kg is presumed to be the result of material from the Mancos formation. Five additional discrete samples representing the Cuttings Pit #1 contents, including, in part, material from the Mancos formation were analyzed for Arsenic. Cuttings Pit #1 analysis resulted in a range of 10.4 mg/kg to 13.8 mg/kg. It is our interpretation that the discrete Arsenic samples demonstrate that there were no anthropogenic affects to the Cuttings Pit #1 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: FRU 197-33B
Lab Summary

Last update 3/14/2013

Analytical Parameter	Fresh Water Pit	Reserve Pit	Cuttings #1		Cuttings #2		Cuttings #3		Background								COGCC	Maximum based on Background			
(with units)	FW Pit Contents	FW Pit Subliner ⁵ 11/7/12	RP Contents 2/9/12	RP Subliner ⁶ 9/13/12	Cut #1 Pit Contents ⁷ 2/9/12	Cut #1 Pit Subliner 6/12/12	Cut #2 Pit Contents 2/9/12	Cut #2 Pit Subliner 6/4/12	Cut #3 Pit Contents ⁸ 2/9/12	Cut #3 Pit Subliner 6/4/12	#1	#2	#3	#4	#5	#6	#7		#8	Table 910-1 Concentration Levels	
Accutest Job #	De Minimis Contents	D40778	D31789	D38796	D31789	D35488	D31789	D35144	D31789	D35145	D33518 (4/9/12)								-	-	
Sample type (Composite/Discrete)		C	C	C	C	C	C	C	C	C	C	D	D	D	D	D	D	D	D	-	-
TPH (GRO) (mg/Kg)		ND	133	22	189	ND	116	ND	155	ND	ND	-	-	-	-	-	-	-	-	-	-
TPH (DRO) (mg/Kg)		780	8940	2210	1090	56.4	1090	150	1060	59.6	59.6	-	-	-	-	-	-	-	-	-	-
TPH (GRO + DRO) (mg/Kg)		780	9073	2232	1279	56.4	1206	150	1215	59.6	59.6	-	-	-	-	-	-	-	-	500	-
Benzene (mg/Kg)		0.0321	0.728	0.14	0.655	ND	0.793	ND	1.57	0.0268	0.0268	-	-	-	-	-	-	-	-	0.170	-
Toluene (mg/Kg)		0.172	3.47	0.548	8.69	ND	9.22	0.0773	9.20	0.0716	0.0716	-	-	-	-	-	-	-	-	85	-
Ethylbenzene (mg/Kg)		0.0257	0.570	0.1	1.84	ND	1.91	ND	1.83	ND	ND	-	-	-	-	-	-	-	-	100	-
Xylenes (total) (mg/Kg)		0.337	9.69	0.926	8.19	ND	8.50	ND	8.99	ND	ND	-	-	-	-	-	-	-	-	175	-
Acenaphthene (mg/Kg)		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	-	-	-	-	-	-	1000	-
Anthracene (mg/Kg)		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	-	-	-	-	-	-	1000	-
Benzo(A)anthracene (mg/Kg)		ND	ND	ND	ND	ND	ND	0.0062	ND	ND	ND	-	-	-	-	-	-	-	-	0.22	-
Benzo(A)pyrene (mg/Kg)		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	-	-	-	-	-	-	0.22	-
Benzo(B)fluoranthene (mg/Kg)		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	-	-	-	-	-	-	2.2	-
Benzo(K)fluoranthene (mg/Kg)		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	-	-	-	-	-	-	0.022	-
Chrysene (mg/Kg)		0.0102	ND	0.0574	ND	ND	ND	0.0180	ND	0.0096	0.0096	-	-	-	-	-	-	-	-	22	-
Dibenzo(A,H)anthracene (mg/Kg)		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	-	-	-	-	-	-	0.022	-
Fluoranthene (mg/Kg)		0.0102	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	-	-	-	-	-	-	1000	-
Fluorene (mg/Kg)		ND	ND	ND	ND	0.0055	ND	ND	ND	ND	ND	-	-	-	-	-	-	-	-	1000	-
Indeno(1,2,3,C,D)pyrene (mg/Kg)		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	-	-	-	-	-	-	0.22	-
Naphthalene (mg/Kg)		0.120	2.42	0.20	ND	0.0320	ND	0.144	0.850	0.101	0.101	-	-	-	-	-	-	-	-	23	-
Pyrene (mg/Kg)		0.0116	ND	0.0656	ND	ND	ND	0.0136	ND	0.0070	0.0070	-	-	-	-	-	-	-	-	1000	-
Electrical Conductivity (mmhos/cm)		1.520	4.940	2.13	5.450	0.736	3.410	2.310	1.380	1.440	1.440	-	-	-	-	-	-	-	-	4	-
Sodium Adsorption Ratio (SAR)		27.6	51.5	17	110	9.42	37.7	21.9	24.7	16.9	16.9	-	-	-	-	-	-	-	-	12	-
pH		11.45	9.07	10.48	8.71	10.14	8.88	10.02	9.28	9.91	9.91	-	-	-	-	-	-	-	-	6-9	-
Arsenic (mg/kg)		10.4	2.6	9.3	14.0	8.7	12.9	8.0	8.6	8.9	8.9	6.5	8.9	7.1	6.0	5.8	8.3	5.5	7.7	0.39	9.8
Barium (mg/kg)		3150	13900	5290	4040	2760	5840	6490	5900	6030	6030	-	-	-	-	-	-	-	-	15000	-
Cadmium (mg/kg)		<1.2	< 1.6	<1.1	< 1.3	<1.1	< 1.3	<1.1	< 1.4	<1.1	<1.1	-	-	-	-	-	-	-	-	70	-
Chromium (III) (mg/Kg)		65.8	5.9	60.1	13.3	43.8	15.4	35.4	17.2	48.2	48.2	-	-	-	-	-	-	-	-	120000	-
Chromium (VI) (mg/Kg)		<1.0	1.0	<1.0	< 0.53	<1.0	< 0.52	<1.0	< 0.55	<1.0	<1.0	-	-	-	-	-	-	-	-	23	-
Copper (mg/kg)		14.3	17.8	18.9	34.9	19.3	33.3	22.5	29.1	14.7	14.7	-	-	-	-	-	-	-	-	3100	-
Lead (inorganic) (mg/kg)		10.3	< 7.9	13.2	17.5	12.4	18.3	14.3	16.2	14.1	14.1	-	-	-	-	-	-	-	-	400	-
Mercury (mg/kg)		<0.092	< 0.15	<0.11	< 0.13	<0.12	< 0.13	<0.12	< 0.14	<0.11	<0.11	-	-	-	-	-	-	-	-	23	-
Nickel (mg/kg)	23.9	7.5	26.6	18.9	21.5	18.4	19.9	14.3	22.6	22.6	-	-	-	-	-	-	-	-	1600	-	
Selenium (mg/kg)	<5.8	< 7.9	<5.7	< 6.5	<5.7	< 6.7	<5.4	<6.8	<5.7	<5.7	-	-	-	-	-	-	-	-	390	-	
Silver (mg/kg)	<3.5	< 4.7	<3.4	< 3.9	<3.4	< 4.0	<3.3	< 4.1	<3.4	<3.4	-	-	-	-	-	-	-	-	390	-	
Zinc (mg/kg)	52.2	19.8	52.8	58.2	52.8	42.4	51.2	43.9	51.8	51.8	-	-	-	-	-	-	-	-	23000	-	
% Solids	87.7	63.4	86.4	75.1	87.4	75.7	90.4	71.7	88.8	88.8	89.5	86.9	89.7	87.0	86.8	91.2	88.1	89.0	-	-	

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 6 for additional information.

6) See Table 5 for additional information.

7) See Table 3 for additional information.

8) See Table 4 for additional information.

Table 2
Location: FRU 197-33B
Lab Summary - Arsenic Summary

Last update 3/14/2013

Analytical Parameter (with units)	Cuttings #1 Discrete Arsenic					Background								COGCC	Maximum based on Background
	#1	#2	#3	#4	#5	#1	#2	#3	#4	#5	#6	#7	#8	Table 910-1 Concentration Levels	
Accutest Job #	D39586 (10/4/12)					D33518 (4/9/12)								-	-
Sample type (Composite/Discrete)	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)	-	-	-	-	-	-	-	-	-	-	-	-	-	0.22	-
Benzo(B)fluoranthene (mg/Kg)	-	-	-	-	-	-	-	-	-	-	-	-	-	2.2	-
Benzo(K)fluoranthene (mg/Kg)	-	-	-	-	-	-	-	-	-	-	-	-	-	0.022	-
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)	10.4	12.1	10.6	13.8	10.4	6.5	8.9	7.1	6.0	5.8	8.3	5.5	7.7	0.39	9.8
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	90.7	89.5	88.7	88.8	89.2	89.5	86.9	89.7	87.0	86.8	91.2	88.1	89.0	-	-

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.

