

State of Colorado
Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80203 Phone (303) 854-2103 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
3/12/2012

1. OGCC Operator Number 100264	4. Contact Name Jessica Dooling	Complete the Attachment Checklist
2. Name of Operator XTO Energy, Inc.	Phone 970-675-4122	
3. Address 9127 S Jamacia Drive	Fax 970-625-4150	OP OGCC
City Englewood State CO Zip 80112		
5. API Number 05-103-11255-00	OGCC Facility ID Number	Survey Plat
6. Well/Facility Name Freedom Unit	7. Well/Facility Number FRU 297-20A	Directional Survey
8. Location (Qtr/Sec Twp Rng Meridian) SE/NE 20 2S 97W 6th		Surface Eqmpt Diagram
9. County Rio Blanco	10. Field Name Freedom Unit	Technical Info Page
11. Federal Indian or State Lease Number COC60724		Other

General Notice

<input type="checkbox"/> CHANGE OF LOCATION: Attach New Survey Plat (a change of surface qtr/qr is substantive and requires a new permit)	
Change of Surface Footage from Exterior Section Lines	<input type="checkbox"/> FULF SL <input type="checkbox"/> FEL/FW
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"/> 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)?
	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	<input type="checkbox"/> Remove from surface bond
Formation Formation Code Spacing order number Unit Acreage Unit configuration	Signed surface use agreement attached
<input type="checkbox"/> CHANGE OF OPERATOR (prior to drilling):	<input type="checkbox"/> CHANGE WELL NAME
Effective Date	From
Plugging Bond: <input type="checkbox"/> Blanket <input type="checkbox"/> Individual	To
	Effective Date
<input type="checkbox"/> ABANDONED LOCATION:	<input type="checkbox"/> NOTICE OF CONTINUED SHUT IN STATUS
Was location ever built? <input type="checkbox"/> Yes <input type="checkbox"/> No	Date well shut in or temporarily abandoned
Is site ready for inspection? <input type="checkbox"/> Yes <input type="checkbox"/> No	Has Production Equipment been removed from site? <input type="checkbox"/> Yes <input type="checkbox"/> No
Date Ready for inspection	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 cbj 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	
<input type="checkbox"/> Final reclamation is completed and site is ready for inspection.	

Technical Engineering/Environmental Notice

<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Report of Work Done
Approximate Start Date	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 3/12/2012 Email jessica.dooling@xtoenergy.com
Print Name Jessica Dooling Title Environmental Coordinator

COGCC Approved

Title

FOR

Date

03/21/2012

CONDITIONS OF APPROVAL IF ANY

Chris Canfield
EPS NW Region

TECHNICAL INFORMATION PAGE



FOR OGCC USE ONLY

1. OGCC Operator Number: 100264 API Number: 05-103-11255-00
 2. Name of Operator: XTO Energy Inc. OGCC Facility ID #
 3. Well/Facility Name: Freedom Unit Well/Facility Number: FRU 297-20A
 4. Location (QtrQtr, Sec, Twp, Rng, Meridian): SE/NE, 20, 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.

5. 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 297-20A 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.

Ten representative background samples were collected from undisturbed areas adjacent to the subject location. Arsenic concentrations in those samples ranged from 3.2 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 9.35 mg/kg.

Subliner Arsenic samples were collected from the Freshwater (6.4 mg/kg), Reserve (6.9 mg/kg) and Cuttings (8.5 mg/kg) pits. The subliner Arsenic concentrations are within the allowable background Arsenic concentration of 9.35 mg/kg.

The initial Cuttings Pit contents Arsenic concentration of 17.4 mg/kg is presumed to be the result of material from the Mancos formation. Ten additional discrete samples representing the Cuttings Pit contents including, in part, material from the Mancos formation were analyzed for Arsenic and result in a range of 6.0 mg/kg to 17.1 mg/kg and a mean of 9.07 mg/kg. The mean of the Cuttings Pit material is within the allowable background Arsenic concentration of 9.35 mg/kg.

Attached please find the Lab Data Summary Tables (Table 1 and Table 2), Lab Report D20762, Lab Report D29648, Lab Report D31571, Lab Report D31864 and the Figure 1 indicating Arsenic sampling locations attached.

Table 1
Location: FRU 297-20A
Lab Summary

Last update: 2/20/2012

Last update: 2/20/2012																									
Analytical Parameter	Fresh Water Pit	Reserve Pit									Cuttings #1		Backfill	Background 01/26/11					Background 11/18/11					COGCC	Maximum based on Background
(with units)	FW Pit Subliner 12/5/11 ¹	RP Contents 11/4/11	Solidified RP Contents 11/30/11	RP Mix Blend (1/24) 1/25/12	RP Mix Blend (1/25) 1/25/12	RP Mix Blend (1/25) Reworked and Resampled 2/9/12	RP Mix Blend (1/26) 1/30/12	RP Mix Blend (1/27) 1/30/12	RP Subliner 1/30/12	Cut #1 Pit Contents 11/10/11 ⁶	Cut #1 Pit Subliner 01/04/12	Pit Backfill Material 11/18/11 ⁷											Table 910-1 Concentration Levels		
Accutest Job #	D29982	D29208	D29894	D31354	D31354	D31782	D31468	D31468	D31467	D29403	D30800	D29643	D20762					D29648					-	-	
Sample type (Composite/Discrete)	C	C	C	C	C	C	C	C	C	C	C	C	D	D	D	D	D	D	D	D	D	D	-	-	
TPH (GRO) (mg/Kg)	ND	48.7	49.6	-	-	-	-	-	ND	34.4	ND	ND											-	-	
TPH (DRO) (mg/Kg)	86.5	785	37.3	-	-	-	-	-	22.1	281	44.4	ND											-	-	
TPH (GRO + DRO) (mg/Kg)	86.5	834	86.9	-	-	-	-	-	22.1	315	44.4	ND											-	-	
Benzene (mg/Kg)	ND	ND	ND	-	-	-	-	-	ND	0.130	0.0522	ND											500	-	
Toluene (mg/Kg)	ND	ND	ND	-	-	-	-	-	ND	0.652	0.235	ND											0.170	-	
Ethylbenzene (mg/Kg)	ND	0.165	ND	-	-	-	-	-	ND	0.142	0.0540	ND											85	-	
Xylenes (total) (mg/Kg)	ND	0.764	0.668	-	-	-	-	-	ND	0.733	0.299	ND											100	-	
Acenaphthene (mg/Kg)	ND	ND	ND	-	-	-	-	-	ND	ND	ND	-											175	-	
Anthracene (mg/Kg)	ND	ND	ND	-	-	-	-	-	ND	ND	ND	-											1000	-	
Benzo(A)anthracene (mg/Kg)	ND	ND	0.0101	-	-	-	-	-	ND	ND	ND	-											0.22	-	
Benzo(B)fluoranthene (mg/Kg)	ND	ND	0.0122	-	-	-	-	-	ND	ND	ND	-											0.22	-	
Benzo(K)fluoranthene (mg/Kg)	ND	ND	0.0053	-	-	-	-	-	ND	ND	ND	-											2.2	-	
Benzo(A)pyrene (mg/Kg)	ND	ND	0.0067	-	-	-	-	-	ND	ND	ND	-											0.022	-	
Chrysene (mg/Kg)	ND	ND	0.0265	-	-	-	-	-	ND	ND	ND	-											22	-	
Dibenzo(A,H)anthracene (mg/Kg)	ND	ND	ND	-	-	-	-	-	ND	ND	ND	-											0.022	-	
Fluoranthene (mg/Kg)	ND	ND	0.0142	-	-	-	-	-	ND	ND	ND	-											1000	-	
Fluorene (mg/Kg)	ND	ND	0.0982	-	-	-	-	-	ND	ND	ND	-											1000	-	
Indeno(1,2,3-cd)pyrene (mg/Kg)	ND	ND	0.0064	-	-	-	-	-	ND	ND	ND	-											0.22	-	
Naphthalene (mg/Kg)	ND	ND	0.228	-	-	-	-	-	ND	0.307	0.0207	-											23	-	
Pyrene (mg/Kg)	ND	ND	0.0344	-	-	-	-	-	ND	ND	ND	-											1000	-	
Electrical Conductivity (mmhos/cm)	1.830	3.08	11.200	-	-	-	-	-	2.100	16.5	3.650	-											4	-	
Sodium Adsorption Ratio (SAR)	3.12	40.8	17.1	-	-	-	-	-	16.5	138	9.39	-											12	-	
pH	8.51	10.52	12.87	10.05	12.43	-	11.48	11.23	10.45	12.04	9.12	-											6-9	-	
Arsenic (mg/kg)	6.4	8.2	4.3	-	-	-	-	-	6.9	17.4	8.5	-	3.8	4.0	4.1	6.8	7.6	7.3	3.2	3.9	5.5	8.5	0.39	9.4	
Barium (mg/kg)	360	29300	17800	13300	15400	9170	12500	10000	2540	4290	1350	-											15000	-	
Cadmium (mg/kg)	<1.2	<3.2	<3.0	-	-	-	-	-	<1.2	2	<1.0	-											70	-	
Chromium (III) (mg/Kg)	29.9	30.9	23.2	-	-	-	-	-	24.2	19.7	22.7	-											120000	-	
Chromium (VI) (mg/Kg)	<0.47	<1.4	<1.2	-	-	-	-	-	<0.45	0.69	<0.43	-											23	-	
Copper (mg/kg)	13.4	35.2	15.7	-	-	-	-	-	16.1	26.9	16.8	-											3100	-	
Lead (inorganic) (mg/kg)	12.4	<16	<15	-	-	-	-	-	12.0	32.5	11.0	-											400	-	
Mercury (mg/kg)	<0.12	<0.35	<0.27	-	-	-	-	-	<0.11	<0.15	<0.11	-											23	-	
Nickel (mg/kg)	16.3	17.9	9.3	-	-	-	-	-	14.6	16.1	16.8	-											1600	-	
Selenium (mg/kg)	<6.0	<160	<150	-	-	-	-	-	<5.8	<7.7	<5.2	-											390	-	
Silver (mg/kg)	<3.6	<9.6	<8.9	-	-	-	-	-	<3.5	<4.6	<3.1	-											390	-	
Zinc (mg/kg)	42.4	60.6	24.0	-	-	-	-	-	42.0	88.4	45.6	-											23000	-	
% Solids	84.6	29.2	33.8	55.8	55.9	69.3	71.6	64.8	86.5	65.7	92.0	93.0	81.2	70.1	78.1	81.0	87.4	80.4	87.4	91.0	92.8	91.3	-	-	

Notes:

1. Freshwater pit contained de minimus contents - properly disposed of with liner/felt material at the Wray Gulch Landfill.
2. ND = not detectable to the laboratory detection limit.
3. Results highlighted in yellow exceed Table 910-1 concentration levels. Results highlighted in gray exceed Table 910-1, but are below background levels.
4. "-" indicates no analysis.
5. See site map for sample locations.
6. Cuttings #1 pit content additional arsenic results summarized on Table 2.
7. Plans include backfill of a portion of the freshwater pit with mix blended soils from the reserve pit.

Table 2
Location: FRU 297-20A
Arsenic Sampling Summary
(Cutting Pit #1 and Background Samples)

Last update: 3/12/2012

Analytical Parameter (with units)	Cuttings #1										Mean Cut #1 (Contents # 1 thru #10)	Background 1/26/11					Background 11/18/11					COGCC Table 910-1 Concentration Levels	Maximum based on Background
	Cut #1 Contents #1 (2/1/12)	Cut #1 Contents #2 (2/1/12)	Cut #1 Contents #3 (2/1/12)	Cut #1 Contents #4 (2/1/12)	Cut #1 Contents #5 (2/1/12)	Cut #1 Contents #6 (2/13/12)	Cut #1 Contents #7 (2/13/12)	Cut #1 Contents #8 (2/13/12)	Cut #1 Contents #9 (2/13/12)	Cut #1 Contents #10 (2/13/12)		#1	#2	#3	#4	#5	#1	#2	#3	#4	#5		
Accutest Job #	D31571					D31864						D20762					D29648					-	-
Sample type (Composite/Discrete)	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)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	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(B)fluoranthene (mg/Kg)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.22	-
Benzo(K)fluoranthene (mg/Kg)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.2	-
Benzo(A)pyrene (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)	7.2	8.4	6.8	17.1	8	9.6	8	6	9.9	9.7	9.07	3.8	4.0	4.1	6.8	7.6	7.3	3.2	3.9	5.5	8.5	0.39	9.35
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	82.8	78.7	92.7	96.8	86.6	73.0	78.5	81.3	89.2	69.9		81.2	70.1	78.1	81.0	87.4	80.4	87.4	91.0	92.8	91.3	-	-

- 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) Per Schlumberger drill logs, Mancos Shale was encountered during well installation at approximately 10,500 feet below ground surface.

