DOCUMENT #2232184

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

RECEIVED 2/25/2013

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.)

location ID #398836

Pit Facility ID #302059

1. OGCC Operator Number: 100264
2. Name of Operator: XTO Energy Inc.
3. Address: PO Box 6501
   City: Englewood State: CO Zip: 80155
4. Contact Name: Jessica Dooling
   Phone: 970-675-4122
   Fax: 970-675-4150
5. API Number: 05-103-11468-00 OGCC Facility ID Number:
6. Well/Facility Name: Piceance Creek Unit 7. Well/Facility Number: 297-11C
8. Location (QtrQtr, Sec, Twp, Rng, Meridian): NWNW, Sec11, T2S, Rng97W, 6th PM
9. County: Rio Blanco 10. Field Name: Piceance Creek
11. Federal, Indian or State Lease Number:

Complete the Attachment Checklist

	OP	OGCC
Survey Plat		
Directional Survey		
Surface Eqpmt Diagram		
Technical Info Page		
Other		

General Notice

☐ **CHANGE OF LOCATION:** Attach New Survey Plat (a change of surface qtr/qtr is substantive and requires a new permit)

	FNL/FSL		FEL/FWL	
Change of Surface Footage from Exterior Section Lines:				
Change of Surface Footage to Exterior Section Lines:				
Change of Bottomhole Footage from Exterior Section Lines:				
Change of Bottomhole Footage to Exterior Section Lines:				attach directional survey

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.)

☐ Intent to Recomplete (submit form 2)	☐ Request to Vent or Flare	☐ E&P Waste Disposal
☐ Change Drilling Plans	☐ Repair Well	☐ Beneficial Reuse of E&P Waste
☐ Gross Interval Changed?	☐ Rule 502 variance requested	☐ Status Update/Change of Remediation Plans for Spills and Releases
☐ Casing/Cementing Program Change	☒ Other: See Page 2	

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

Signed: Date: 2/21/2013 Email: jessica_dooling@xtoenergy.com

Print Name: Jessica Dooling Title: Lead EH&S Coordinator

COGCC Approved: Title: FOR Date: 02/27/2013

CONDITIONS OF APPROVAL, IF ANY: Chris Canfield

FORM 4 Rev 12/05

TECHNICAL INFORMATION PAGE

FOR OGCC USE ONLY

1. OGCC Operator Number: 100264 API Number: 05-103-11468-00
2. Name of Operator: XTO Energy Inc. OGCC Facility ID #
3. Well/Facility Name: Piceance Creek Unit Well/Facility Number: 297-11C
4. Location (QtrQtr, Sec, Twp, Rng, Meridian): NWNW, Sec 11, 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 297-11C 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. Arsen concentrations in those samples ranged from 2.0 mg/kg to 4.5 mg/kg. Applying the 10% variability factor to the highest concentration detected results in an allowable Arsenic concentration level of 5.0 mg/kg.

The Freshwater and Cuttings Pit #3 subliner Arsenic concentrations of 3.3 mg/kg and 4.2 mg/kg respectively are below the allowable background Arsenic concentration of 5.0 mg/kg.

The Reserve and Cuttings Pits #1 and #2 subliner Arsenic concentrations of 9.2 mg/kg, 7.2 mg/kg and 10.1 mg/kg respectively are above the allowable background Arsenic concentration of 5.0 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.

The initial Cuttings Pit #1 contents Arsenic concentration of 14.7 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 and result in a range of 6.6 mg/kg to 10.0 mg/kg (see Table 2). It is our interpretation that the discrete Arsenic samples demonstrate that there were no anthropogenic affects to the Cuttings Pit material and that the elevated Arsenic levels reflect contributions due to drilling through the Mancos formation.

The initial Cuttings Pit #2 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 Cuttings Pit #2 contents including, in part, material from the Mancos formation were analyzed for Arsenic and result in a range of 12.1 mg/kg to 16.1 mg/kg (see Table 2). It is our interpretation that the discrete Arsenic samples demonstrate that there were no anthropogenic affects to the Cuttings Pit 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 297-11C
Lab Summary

Last update 2/7/2013

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 9/6/12*	*RP Contents Post Solid. 8/21/12*	*RP Subliner[5] 9/13/12*	*Cut #1 Contents Post Solid.[6] 8/8/12*	*Cut #1 Pit Subliner 8/28/12*	*Cut #2 Contents Post Solid. 8/8/12*	*Cut #2 Pit Subliner 9/19/12*	*Cut #3 Post Solid. 7/23/12*	*Cut #3 Pit Subliner 9/25/12*	*#1*	*#2*	*#3*	*#4*	*#5*	*#6*	*#7*	*#8*	*Table 910-1 Concentration Levels*	
Accutest Job #		D38513	D37810	D38795	D37385	D38207	D37386	D39010	D36747	D39195	D20679 (1/24/11)					D37466 (8/13/12)			-	-
Sample type (**C**omposite/**D**iscrete)		C	C	C	C	C	C	C	C	C	D	D	D	D	D	D	D	D	-	-
TPH (GRO) (mg/Kg)		ND	2380	21.4	67.3	ND	20.1	ND	23.8	ND	-	-	-	-	-	-	-	-	-	-
TPH (DRO) (mg/Kg)		33.2	25400	756	475	50.4	178	61.8	639	ND	-	-	-	-	-	-	-	-	-	-
TPH (GRO + DRO) (mg/Kg)		33.2	27780	777	542	50.4	198	61.8	663	ND	-	-	-	-	-	-	-	-	500	-
Benzene (mg/Kg)		ND	1.39	ND	0.129	ND	0.0901	ND	0.902	ND	-	-	-	-	-	-	-	-	0.170	-
Toluene (mg/Kg)		ND	18.0	ND	1.65	ND	0.567	0.0719	1.980	ND	-	-	-	-	-	-	-	-	85	-
Ethylbenzene (mg/Kg)		ND	9.24	ND	0.46	ND	0.167	0.0307	0.138	ND	-	-	-	-	-	-	-	-	100	-
Xylenes (total) (mg/Kg)		ND	216	ND	2.1	ND	0.788	0.146	1.670	ND	-	-	-	-	-	-	-	-	175	-
Acenaphthene (mg/Kg)		ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	-	-	-	-	-	-	1000	-
Anthracene (mg/Kg)		ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	-	-	-	-	-	-	1000	-
Benzo(A)anthracene (mg/Kg)		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	-	-	-	-	-	-	-	-	0.22	-
Benzo(K)fluoranthene (mg/Kg)		ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	-	-	-	-	-	-	2.2	-
Benzo(A)pyrene (mg/Kg)		ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	-	-	-	-	-	-	0.022	-
Chrysene (mg/Kg)		ND	0.148	0.0075	0.0224	ND	0.0065	ND	ND	ND	-	-	-	-	-	-	-	-	22	-
Dibenzo(A,H)anthracene (mg/Kg)		ND	ND	ND	ND	ND	ND	ND	0.115	ND	-	-	-	-	-	-	-	-	0.022	-
Fluoranthene (mg/Kg)		ND	0.167	ND	ND	ND	ND	ND	ND	ND	-	-	-	-	-	-	-	-	1000	-
Fluorene (mg/Kg)		ND	4.02	ND	ND	ND	ND	0.0054	ND	ND	-	-	-	-	-	-	-	-	1000	-
Indeno(1,2,3,C,D)pyrene (mg/Kg)		ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	-	-	-	-	-	-	0.22	-
Naphthalene (mg/Kg)		ND	21.6	0.208	0.365	ND	0.137	0.0365	0.547	ND	-	-	-	-	-	-	-	-	23	-
Pyrene (mg/Kg)		ND	0.244	ND	0.015	ND	0.0060	ND	ND	ND	-	-	-	-	-	-	-	-	1000	-
Electrical Conductivity (mmhos/cm)		0.909	11.900	2.65	6.890	0.742	6.340	1.490	8.820	3.380	-	-	-	-	-	-	-	-	4	-
Sodium Adsorption Ratio (SAR)		11.1	22.1	22.6	20.7	10.8	15.0	22.7	28.2	19.6	-	-	-	-	-	-	-	-	12	-
pH		10.24	12.40	10.67	12.44	9.79	12.30	9.31	12.23	10.1	-	-	-	-	-	-	-	-	6-9	-
Arsenic (mg/kg)		3.3	3.6	9.2	14.7	7.2	10.2	10.1	5.0	4.2	2.0	4.5	3.6	2.6	4.2	3.3	3.7	3.1	0.39	5.0
Barium (mg/kg)		1890	16400	424	2970	957	3200	572	13200	871	-	-	-	-	-	-	-	-	15000	-
Cadmium (mg/kg)		<1.1	<1.7	<1.1	<1.3	<1.1	<1.3	<1.1	<1.3	<1.2	-	-	-	-	-	-	-	-	70	-
Chromium (III) (mg/Kg)		33.9	11.6	53	11.7	48.2	9.5	44.0	7.4	34.6	-	-	-	-	-	-	-	-	120000	-
Chromium (VI) (mg/Kg)		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	23	-
Copper (mg/kg)		11.0	23.4	13.9	30.8	8.3	23.5	10.3	19.7	10.4	-	-	-	-	-	-	-	-	3100	-
Lead (inorganic) (mg/kg)		11.3	<8.3	16.3	16.8	11.1	18.5	13.7	18.7	12.3	-	-	-	-	-	-	-	-	400	-
Mercury (mg/kg)		<0.11	0.27	<0.12	<0.15	<0.12	<0.13	<0.11	<0.12	<0.11	-	-	-	-	-	-	-	-	23	-
Nickel (mg/kg)		19.5	5.7	21.4	15.3	20.7	13.0	18.0	11.3	13.5	-	-	-	-	-	-	-	-	1600	-
Selenium (mg/kg)		<5.7	<8.3	<5.6	<6.5	<5.7	<6.6	<5.6	<6.4	<5.8	-	-	-	-	-	-	-	-	390	-
Silver (mg/kg)		<3.4	<5.0	<3.4	<3.9	<3.4	<3.9	<3.3	<3.8	<3.5	-	-	-	-	-	-	-	-	390	-
Zinc (mg/kg)		47.1	19.6	54.2	43.5	47.4	43.6	41.0	38.4	40.9	-	-	-	-	-	-	-	-	23000	-
% Solids		89.9	60.9	86.6	72.3	86.6	72.7	90.8	76.0	85.7	71.5	85.9	83.5	75.7	89.7	90.3	92.0	90.3	-	-

Pit Contents De Minimis

Notes:

1) ND = not detectible 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 4 for additional information.
6) See Table 3 for additional information.

Table 2
Location: PCU 297-11C
Lab Summary - Discrete Arsenic Summary

Last update 2/7/2013

Analytical Parameter	Cut #1 Arsenic					Cut #2 Arsenic					COGCC	
(with units)	#1	#2	#3	#4	#5	#1	#2	#3	#4	#5	*Table 910-1 Concentration Levels*	*Maximum based on Background*
Accutest Job #	D40538 (11/1/12)					D39555 (10/3/12)					-	-
Sample type (**C**omposite/**D**iscrete)	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)	6.6	7.9	9.4	8.4	10.0	12.1	13.7	13.5	14.7	16.1	0.39	5.0
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	87.5	87.3	88.0	87.4	86.2	84.1	80.7	83.7	82.6	83.2	-	-

Notes:
1) ND = not detectible 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.

Table 3
Location: PCU 297-11C
Lab Summary - Cuttings #1 Mix/blend (MB) Summary

Last update 2/7/2013

Analytical Parameter	Cuttings #1 Mix Blend													COGCC
(with units)	*Cut #1 Post Solid. 8/8/12*	*Cut 1 Mix/Blend 2:1 Trial 9/4/12*	*Cut 1 MB Day 1 (10/3) 10/4/12*	*Cut 1 MB Day 2 (10/4) 10/8/12*	*Cut 1 MB Day 3 (10/8) 10/9/12*	*Cut 1 MB Day 4 (10/9) 10/10/12*	*Cut 1 MB Day 5 (10/10) 10/11/12*	*Cut 1 MB Day 6 (10/11) 10/16/12*	*Cut 1 MB Day 7 (10/15) 10/16/12*	*Cut 1 MB Day 8 (10/16) 10/17/12*	*Cut 1 MB Day 9 (10/17) 10/18/12*	*Cut 1 MB Day 10 (10/18) 10/22/12*	*Cut 1 MB Day 11 (10/22) 10/23/12*	*Table 910-1 Concentration Levels*
Accutest Job #	D37385	D38451	D39591	D39687	D39738	D39783	D39808	D40001		D40079	D40115	D40213	D40314	-
Sample type (**C**omposite/**D**iscrete)	C	C	C	C	C	C	C	C	C	C	C	C	C	-
TPH (GRO) (mg/Kg)	67.3	48.4	8.48	ND	6.62	ND	ND	ND	ND	ND	ND	23.2	29.6	-
TPH (DRO) (mg/Kg)	475	350	269	261	212	169	269	290	212	242	220	222	309	-
TPH (GRO + DRO) (mg/Kg)	542	398	277	261	219	169	269	290	212	242	220	245	339	500
Benzene (mg/Kg)	0.129	-	-	-	-	-	-	-	-	-	-	-	-	0.170
Toluene (mg/Kg)	1.65	-	-	-	-	-	-	-	-	-	-	-	-	85
Ethylbenzene (mg/Kg)	0.46	-	-	-	-	-	-	-	-	-	-	-	-	100
Xylenes (total) (mg/Kg)	2.1	-	-	-	-	-	-	-	-	-	-	-	-	175
Acenaphthene (mg/Kg)	ND	-	-	-	-	-	-	-	-	-	-	-	-	1000
Anthracene (mg/Kg)	ND	-	-	-	-	-	-	-	-	-	-	-	-	1000
Benzo(A)anthracene (mg/Kg)	ND	-	-	-	-	-	-	-	-	-	-	-	-	0.22
Benzo(B)fluoranthene (mg/Kg)	ND	-	-	-	-	-	-	-	-	-	-	-	-	0.22
Benzo(K)fluoranthene (mg/Kg)	ND	-	-	-	-	-	-	-	-	-	-	-	-	2.2
Benzo(A)pyrene (mg/Kg)	ND	-	-	-	-	-	-	-	-	-	-	-	-	0.022
Chrysene (mg/Kg)	0.0224	-	-	-	-	-	-	-	-	-	-	-	-	22
Dibenzo(A,H)anthracene (mg/Kg)	ND	-	-	-	-	-	-	-	-	-	-	-	-	0.022
Fluoranthene (mg/Kg)	ND	-	-	-	-	-	-	-	-	-	-	-	-	1000
Fluorene (mg/Kg)	ND	-	-	-	-	-	-	-	-	-	-	-	-	1000
Indeno(1,2,3,C,D)pyrene (mg/Kg)	ND	-	-	-	-	-	-	-	-	-	-	-	-	0.22
Naphthalene (mg/Kg)	0.365	-	-	-	-	-	-	-	-	-	-	-	-	23
Pyrene (mg/Kg)	0.015	-	-	-	-	-	-	-	-	-	-	-	-	1000
Electrical Conductivity (mmhos/cm)	6.890	-	-	-	-	-	-	-	-	-	-	-	-	4
Sodium Adsorption Ratio (SAR)	20.7	-	-	-	-	-	-	-	-	-	-	-	-	12
pH	12.44	-	-	-	-	-	-	-	-	-	-	-	-	6-9
Arsenic (mg/kg)	14.7	-	-	-	-	-	-	-	-	-	-	-	-	0.39
Barium (mg/kg)	2970	-	-	-	-	-	-	-	-	-	-	-	-	15000
Cadmium (mg/kg)	<1.3	-	-	-	-	-	-	-	-	-	-	-	-	70
Chromium (III) (mg/Kg)	11.7	-	-	-	-	-	-	-	-	-	-	-	-	120000
Chromium (VI) (mg/Kg)	<1.0	-	-	-	-	-	-	-	-	-	-	-	-	23
Copper (mg/kg)	30.8	-	-	-	-	-	-	-	-	-	-	-	-	3100
Lead (inorganic) (mg/kg)	16.8	-	-	-	-	-	-	-	-	-	-	-	-	400
Mercury (mg/kg)	<0.15	-	-	-	-	-	-	-	-	-	-	-	-	23
Nickel (mg/kg)	15.3	-	-	-	-	-	-	-	-	-	-	-	-	1600
Selenium (mg/kg)	<6.5	-	-	-	-	-	-	-	-	-	-	-	-	390
Silver (mg/kg)	<3.9	-	-	-	-	-	-	-	-	-	-	-	-	390
Zinc (mg/kg)	43.5	-	-	-	-	-	-	-	-	-	-	-	-	23000
% Solids	72.3	90.7	88.4	88.7	88.2	88.3	87.4	87.0	86.8	87.1	88.5	91.4	92.3	-

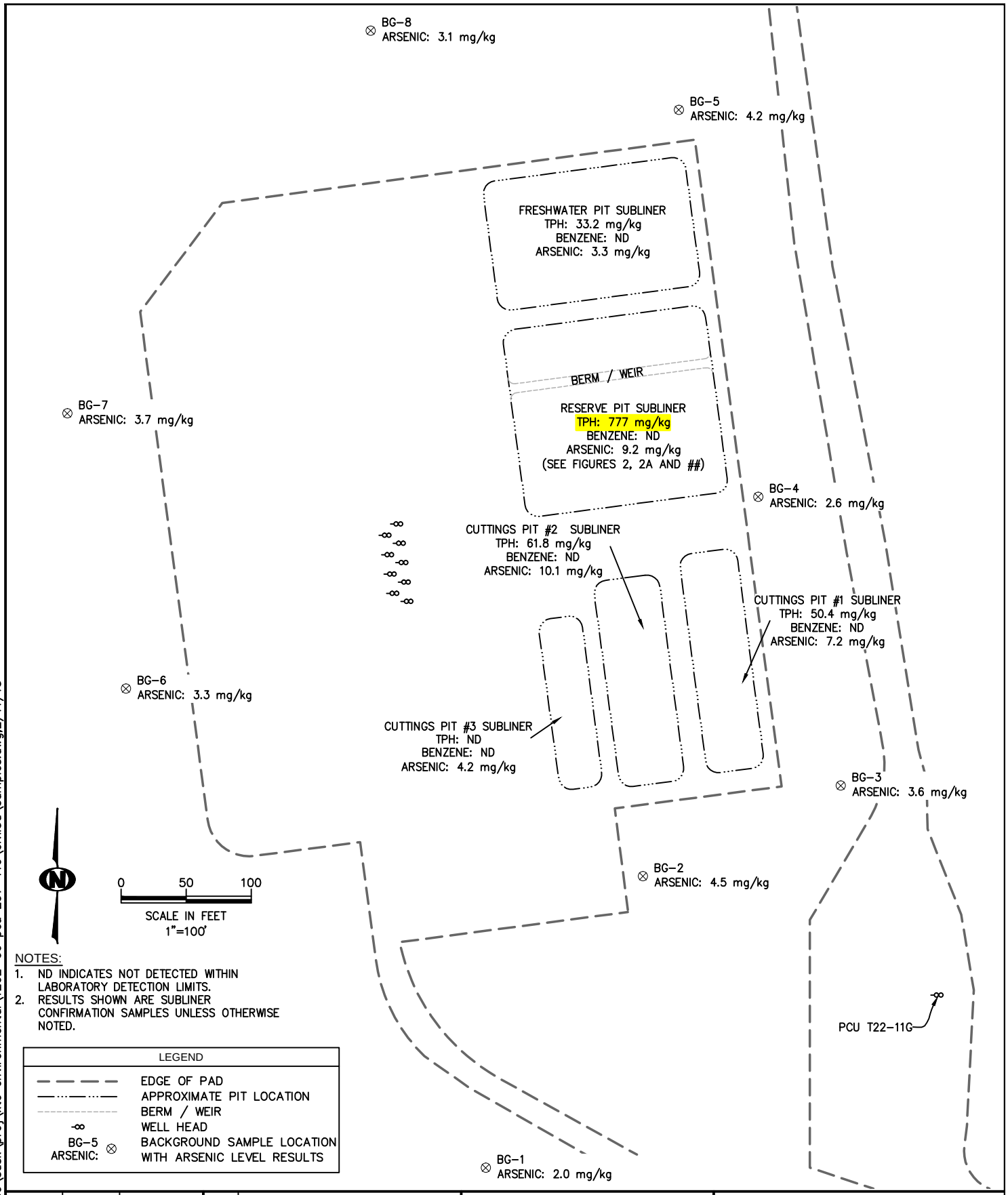
Notes:
1) ND = not detectible to the laboratory detection limit.
2) Results highlighted in yellow exceed Table 910-1 concentration levels. Results highlighted in Gray exceed Table 910-1, but are below background levels.
3) "-" indicates no analysis.

Table 4
Location: PCU 297-11C
Lab Summary - RP Subliner Assessment

2/21/2013

Analytical Parameter	Reserve Pit		RP Subliner Discrete Samples								RP Ex Material		COGCC
(with units)	*RP Solid. Contents 8/21/12*	*RP Subliner 9/13/12*	*RP - 1*	*RP - 2*	*RP - 3*	*RP - 4*	*RP - 4 (-1') 10/3/12*	*RP - 5 9/13/12*	*RP - 5 (-2') 10/3/12*	*RP - 6 9/13/12*	*RP Ex. MTRL 10/16/12*	*RP Ex. MTRL MB 1/25/13*	*Table 910-1 Concentration Levels*
Accutest Job #	D37810	D38795	D38799 (9/13/12)				D39560	D38799	D39560	D38799	D39999	D42916	-
Sample type (**C**omposite/**D**iscrete)	C	C	D	D	D	D	D	D	D	D	C	C	-
TPH (GRO) (mg/Kg)	2380	21.4	ND	ND	ND	ND	ND	108	ND	ND	ND	ND	-
TPH (DRO) (mg/Kg)	25400	756	258	54	27.7	517	56.8	3720	15.3	37.9	753	140	-
TPH (GRO + DRO) (mg/Kg)	27780	777	258	54	27.7	517	56.8	3828	15.3	37.9	753	140	500
Benzene (mg/Kg)	1.39	ND	-	-	-	-	-	-	-	-	-	-	0.170
Toluene (mg/Kg)	18.0	ND	-	-	-	-	-	-	-	-	-	-	85
Ethylbenzene (mg/Kg)	9.24	ND	-	-	-	-	-	-	-	-	-	-	100
Xylenes (total) (mg/Kg)	216	ND	-	-	-	-	-	-	-	-	-	-	175
Acenaphthene (mg/Kg)	ND	ND	-	-	-	-	-	-	-	-	-	-	1000
Anthracene (mg/Kg)	ND	ND	-	-	-	-	-	-	-	-	-	-	1000
Benzo(A)anthracene (mg/Kg)	ND	ND	-	-	-	-	-	-	-	-	-	-	0.22
Benzo(B)fluoranthene (mg/Kg)	ND	ND	-	-	-	-	-	-	-	-	-	-	0.22
Benzo(K)fluoranthene (mg/Kg)	ND	ND	-	-	-	-	-	-	-	-	-	-	2.2
Benzo(A)pyrene (mg/Kg)	ND	ND	-	-	-	-	-	-	-	-	-	-	0.022
Chrysene (mg/Kg)	0.148	0.0075	-	-	-	-	-	-	-	-	-	-	22
Dibenzo(A,H)anthracene (mg/Kg)	ND	ND	-	-	-	-	-	-	-	-	-	-	0.022
Fluoranthene (mg/Kg)	0.167	ND	-	-	-	-	-	-	-	-	-	-	1000
Fluorene (mg/Kg)	4.02	ND	-	-	-	-	-	-	-	-	-	-	1000
Indeno(1,2,3,C,D)pyrene (mg/Kg)	ND	ND	-	-	-	-	-	-	-	-	-	-	0.22
Naphthalene (mg/Kg)	21.6	0.208	-	-	-	-	-	-	-	-	-	-	23
Pyrene (mg/Kg)	0.244	ND	-	-	-	-	-	-	-	-	-	-	1000
Electrical Conductivity (mmhos/cm)	11.900	2.65	-	-	-	-	-	-	-	-	-	-	4
Sodium Adsorption Ratio (SAR)	22.1	22.6	-	-	-	-	-	-	-	-	-	-	12
pH	12.40	10.67	-	-	-	-	-	-	-	-	-	-	6-9
Arsenic (mg/kg)	3.6	9.2	-	-	-	-	-	-	-	-	-	-	0.39
Barium (mg/kg)	16400	424	-	-	-	-	-	-	-	-	-	-	15000
Cadmium (mg/kg)	<1.7	<1.1	-	-	-	-	-	-	-	-	-	-	70
Chromium (III) (mg/Kg)	11.6	53	-	-	-	-	-	-	-	-	-	-	120000
Chromium (VI) (mg/Kg)	<1.0	<1.0	-	-	-	-	-	-	-	-	-	-	23
Copper (mg/kg)	23.4	13.9	-	-	-	-	-	-	-	-	-	-	3100
Lead (inorganic) (mg/kg)	<8.3	16.3	-	-	-	-	-	-	-	-	-	-	400
Mercury (mg/kg)	0.27	<0.12	-	-	-	-	-	-	-	-	-	-	23
Nickel (mg/kg)	5.7	21.4	-	-	-	-	-	-	-	-	-	-	1600
Selenium (mg/kg)	<8.3	<5.6	-	-	-	-	-	-	-	-	-	-	390
Silver (mg/kg)	<5.0	<3.4	-	-	-	-	-	-	-	-	-	-	390
Zinc (mg/kg)	19.6	54.2	-	-	-	-	-	-	-	-	-	-	23000
% Solids	60.9	86.6	87.5	83.2	87.1	85.4	89.3	85.3	91.8	90.1	94.1	84.0	-

Notes:
1) ND = not detectible 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.



NOTES:

1. ND INDICATES NOT DETECTED WITHIN LABORATORY DETECTION LIMITS.
2. RESULTS SHOWN ARE SUBLINER CONFIRMATION SAMPLES UNLESS OTHERWISE NOTED.

LEGEND	
	EDGE OF PAD
	APPROXIMATE PIT LOCATION
	BERM / WEIR
-∞	WELL HEAD
BG-5 ARSENIC: ⊗	BACKGROUND SAMPLE LOCATION WITH ARSENIC LEVEL RESULTS

DESIGNED: –	CHECKED: DK	FIGURE 1	
DATE: 2/11/13	DRAWN: DF		
FILE NAME: samples		SHEET NO. 1 of 3	
PROJECT NO. 1202-06		SCALE: 1"=100'	

DATE	REVISIONS

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

FIGURE 1
PICEANCE CREEK
PCU 297-11C
SAMPLE LOCATIONS WITH ARSENIC LEVELS

PREPARED FOR XTO ENERGY

\\hyper-v03\lkwd-co\sdsk\proj\xto environmental\1202-06 pcu 297-11c\civil3d\samples.dwg,2/11/13