FORM
27
Rev 6/99

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State of Colorado
Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80203 (303)894-2100 Fax:(303)894-2109

FOR OGCC USE ONLY

OGCC Employee:
☐ Spill ☐ Complaint
☐ Inspection ☐ NOAV
Tracking No:

SITE INVESTIGATION AND REMEDIATION WORKPLAN

This form shall be submitted to the Director for approval prior to the initiation of site investigation and remediation activities. Form 27 is intended to be used whenever possible. Additional documentation will be required when large volumes of soil and groundwater have been impacted or involve large facilities with multiple source areas. See Rule 910. Attach as many pages as needed to fully describe the proposed work.

CAUSE OF CONDITION BEING INVESTIGATED AND REMEDIATED

☐ Spill or Release ☐ Plug & Abandon ☐ Central Facility Closure ☐ Site/Facility Closure ☑ Other (describe): Pit Closure REM #7996 Update

OGCC Operator Number: 100264
Name of Operator: XTO Energy Inc.
Address: PO Box 6501
City: Englewood State: CO Zip: 80155

Contact Name and Telephone:
Jessica Dooling
No: 970-675-4122
Fax: 970-675-4150

API Number: 05-103-11322
County: Rio Blanco
Facility Name: Freedom Unit
Facility Number: 297337 (Form 15)
Well Name: Freedom Unit
Well Number: 197-28A
Location: (QtrQtr, Sec, Twp, Rng, Meridian): NWSW, Sec. 28, T1S, R97W, 6th P.M. Latitude: 39.934437 Longitude: -108.29599

TECHNICAL CONDITIONS

Type of Waste Causing Impact (crude oil, condensate, produced water, etc): Drill Cuttings and Fluids

Site Conditions: Is location within a sensitive area (according to Rule 901e)? ☑ Y ☐ N If yes, attach evaluation.

Adjacent land use (cultivated, irrigated, dry land farming, industrial, residential, etc.): Non-Crop Land, Rangeland, Irrigated

Soil type, if not previously identified on Form 2A or Federal Surface Use Plan: Barcus Channery Loamy Sand

Potential receptors (water wells within 1/4 mi, surface waters, etc.): Closest surface water is ~500'; Closest water well ~350'; shallow groundwater (<15') and flood irrigation on adjacent property.

Description of Impact (if previously provided, refer to that form or document):

Impacted Media (check):	Extent of Impact:	How Determined:
☑ Soils	TPH, Benzene, Arsenic and Barium	laboratory analysis
☐ Vegetation		
☐ Groundwater		
☐ Surface Water		

REMEDIATION WORKPLAN

Describe initial action taken (if previously provided, refer to that form or document):

Initial impacts were identified and reported via Form 27 REM #7996, DOC # 2146380. Please see Attachments I and II, Tables 1 through 2A (3 total), and Figures 1 through 2A (3 total) for details regarding background Arsenic and initial action taken.

Describe how source is to be removed:

Freshwater Pit, Reserve Pit, Cuttings Pit #1 and #2 contents, Freshwater Pit and Reserve Pit Berm Subliner impacts above Table 910-1 concentration levels and synthetic liners have been removed and transported offsite to Wray Gulch Landfill near Meeker, CO.

Describe how remediation of existing impacts is to be accomplished, including removal and disposal at an injection well or licensed facility, land treatment on site, removal of impacted groundwater, insitu bioremediation, burning of oily vegetation, etc.:

Soil assessment and remediation have been completed. All impacted soils above Table 910-1 concentration levels have been removed and transported offsite to Wray Gulch Landfill near Meeker, CO.

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Page 2

State of Colorado
Oil and Gas Conservation Commission
1120 Lincoln Street, Suite 801, Denver, Colorado 80203
(303)894-2100 Fax:(303)894-2109

Tracking Number: _____
Name of Operator: _____
OGCC Operator No: _____
Received Date: _____
Well Name & No: _____
Facility Name & No: _____

REMEDIATION WORKPLAN (Cont.)

OGCC Employee:

If groundwater has been impacted, describe proposed monitoring plan (# of wells or sample points, sampling schedule, analytical methods, etc.):

Available information indicates that the uppermost groundwater bearing zone is approximately 15 feet below the ground surface. Impacted soils above Table 910-1 extended into the GW bearing zone. These impacted soils were subsequently removed with verification samples collected. One groundwater grab sample was collected from within the excavation bottom with results below Table 910-1 concentration levels (See Tables 2 and 2A).

Describe reclamation plan. Discuss existing and new grade recontouring; method and testing of compaction alleviation; and reseeding program, including location of new seed, seed mix and noxious weed prevention. Attach diagram or drawing. Use additional sheet for description if required.

Please see Attachment II

Attach samples and analytical results taken to verify remediation of impacts. Show locations of samples on an onsite schematic or drawing.

Is further site investigation required? ☐ Y ☑ N If yes, describe:

Based on subliner excavation sample results no additional soil assessment will be necessary beneath the Freshwater, Reserve, Cuttings Pit #1 or #2 (see Tables 1 & 2). Based on the groundwater analytical data from within the excavation, additional groundwater assessment is not warranted at this time (see Table 2A).

Final disposition of E&P waste (landtreated and disposed onsite, name of licensed disposal facility, recycling, reuse, etc.):

Freshwater, Reserve, Cuttings Pit #1 and #2 contents/synthetic liners were removed and transported to Wray Gulch Landfill near Meeker, CO. Freshwater and Reserve Pit Subliner impacted materials above Table 910-1 concentration levels have been removed and transported to Wray Gulch Landfill (see Tables 1, 2 and 2A).

IMPLEMENTATION SCHEDULE

Date Site Investigation Began: 2/11/2010	Date Site Investigation Completed: 6/27/2013	Date Remediation Plan Submitted: 9/19/2013
Remediation Start Date: 6/28/2012	Anticipated Completion Date: 5/20/2014	Actual Completion Date: 5/20/2014

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

Print Name: Jessica Dooling Signed: _____

Title: Piceance EH&S Supervisor Date: 3/4/2016

OGCC Approved: _____ Title: _____ Date: _____

ATTACHMENT I

FRU 197-28A Pit Closure Workplan, Form 27 Page 1

Background Arsenic:

The site consists of a Freshwater, Reserve and Cuttings #1 and #2 Pits (see Figure 1).

See Form 27 (Rem #7996, Doc #2146380) COGCC approved on 9/20/2013 which established a background Arsenic level of 5.6 mg/kg (see Table 1 and Figure 1) and additional discussion.

ATTACHMENT II

FRU 197-28A Pit Closure Workplan, Form 27 Pages 1 and 2

Describe initial action taken:

The site consists of Freshwater, Reserve and Cuttings Pits #1 and #2 (see Figure 1).

1. **Freshwater Pit**
    - Freshwater Pit contents were solidified and sampled for Table 910-1 parameters. Results exceeded Table 910-1 concentration levels for TPH (61313 mg/kg), Benzene (2.17 mg/kg), SAR (38.3), pH (9.02), Arsenic (4.6 mg/kg) and Barium (16100 mg/kg) (see Table 1).
    - Freshwater Pit subliner composite samples were collected and analyzed for Table 910-1 parameters. Results exceeded Table 910-1 concentration levels for TPH (1247 mg/kg), EC (6.240 mmhos/cm), SAR (31.6), pH (10.36) and Arsenic (5.9 mg/kg) (see Table 1).
    - Freshwater Pit subliner impacted soils from 0' to 4' were removed and confirmation samples were collected for TPH. Results ranged from ND to 24.4 mg/kg (see Table 2 and Figures 2 and 2A).
    - Freshwater Pit subliner excavation area extended into the groundwater bearing zone. A groundwater sample was collected from the bottom of the excavation and sampled for Table 910-1 parameters; results were below Table 910-1 concentration levels (see Table 2A).

2. **Reserve Pit**
    - Reserve Pit contents were solidified and sampled for Table 910-1 parameters. Results exceeded Table 910-1 concentration levels for TPH (832 mg/kg), Benzene (0.215 mg/kg), EC (4.050 mmhos/cm), SAR (55.9), pH (10.42) and Arsenic (8.1 mg/kg) (see Table 1).
    - Reserve Pit subliner composite samples were collected and analyzed for Table 910-1 parameters. Results exceeded Table 910-1 concentration levels for SAR (29.0), pH (10.16) and Arsenic (4.8 mg/kg) (see Table 1).
    - Reserve Pit Berm/Weir composite samples were collected and analyzed for Table 910-1 parameters. Results exceeded Table 910-1 concentration levels for TPH (873 mg/kg), EC (8.930 mmhos/cm), SAR (24.3), pH (9.31) and Arsenic (5.2 mg/kg) (see Table 1).

3. **Cuttings Pit #1**

- Cuttings Pit #1 contents were solidified and composite samples were collected and analyzed for Table 910-1 parameters. Results exceeded Table 910-1 concentration levels for TPH (701 mg/kg), Benzene (0.303 mg/kg), EC (11.000 mmhos/cm), SAR (62.9), pH (12.20) and Arsenic (9.3 mg/kg) (see Table 1).
- Cuttings Pit #1 subliner composite samples were collected and analyzed for Table 910-1 parameters. Results were below Table 910-1 concentration levels with the exception of SAR (23.5), pH (10.45) and Arsenic (5.2 mg/kg) (see Table 1).

4. Cuttings Pit #2

- Cuttings Pit #2 contents were solidified and composite samples were collected and analyzed for Table 910-1 parameters. Results exceeded Table 910-1 concentration levels for Benzene (0.487 mg/kg), EC (17.400 mmhos/cm), SAR (107), pH (12.33) and Arsenic (9.9 mg/kg) (see Table 1).
- Cuttings Pit #2 subliner composite samples were collected and analyzed for Table 910-1 parameters. Results were below Table 910-1 concentration levels with the exception of EC (6.75 mmhos/cm), SAR (64.1), pH (11.89) and Arsenic (4.9 mg/kg) (see Table 1).

- Freshwater, Reserve, Cuttings #1 and #2 pit contents were removed from the respective pits and transported to Wray Gulch Landfill near Meeker, CO.

- Freshwater Subliner and Reserve Pit Berm/Weir Subliner impacted material was removed and transported to Wray Gulch Landfill near Meeker, CO (see Tables 1 and 2).

- All associated Freshwater, Reserve, Cuttings Pit #1 and #2 synthetic liners were removed and transported to Wray Gulch Landfill near Meeker, CO.

- Refer to Tables 1 – 2A (3 total) for a summary of the laboratory results and Figures 1 - 2A (3 total) for layout of the pits and sample locations.

- Elevated Arsenic levels above Table 910-1 concentration were detected in all Pit contents and beneath the Freshwater, Reserve, Cuttings Pit #1 and Cuttings Pit #2. Please refer to Form 27 Attachment I (REM #7996, Doc

#2146380) COGCC approved on 9/20/2013 establishing an acceptable Background Arsenic concentration of 5.6 mg/kg and additional discussion.

- Soil samples were collected by SMA (formerly KRW) following proper sampling and shipping protocol and submitted to Accutest Laboratories in Wheat Ridge, Colorado. QAQC of the laboratory results indicated no outstanding anomalies. The laboratory test results are summarized in the attached tables. Complete laboratory reports are available on request.

- Any remaining elevated levels of Electrical Conductivity, SAR and pH detected beneath the pits or in material used for backfill were covered with a minimum 3 feet of clean, native soils per COGCC guidance. No additional treatment of these soils was required.

- Reclamation activities were performed in accordance with applicable COGCC 900, 1000 Series rules and as specified in the Surface Use Plan and BLM Conditions of Approval.

Table 1
Location: FRU 197-28A
Lab Summary

Last update 9/18/2013

Analytical Parameter	Freshwater Pit		Reserve Pit				Cuttings #1		Cuttings #2		Background						COGCC	Maximum based on Background
(with units)	FW Pit Contents 6/28/12	FW Pit Subliner [5] 5/15/13	RP Contents 2/8/12	RP Subliner 7/13/12	Subliner Berm / Weir 7/25/12	RP Sub-Berm [6] 8/21/12	Cut #1 Post Solid. 8/7/12	Cut #1 Pit Subliner 8/7/12	Cut #2 Post Solid. 8/7/12	Cut #2 Pit Subliner 8/7/12	#1	#2	#3	#4	#5	#6 [8]	Table 910-1 Concentration Levels	
Accutest Job #	D36016	D46358	D31744	D36496	D36793	D37811	D37234	D37301	D37234	D37300	D19692 (12/10/10)					D11202 (2/11/10)	-	-
Sample type (**C**omposite/**D**iscrete)	C	C	C	C	C	C	C	C	C	C	D	D	D	D	D	D	-	-
TPH (GRO) (mg/Kg)	813	16.6	87.9	10.3	32.6	ND	36.1	ND	17.7	ND	-	-	-	-	-	-	-	-
TPH (DRO) (mg/Kg)	60500	1230	744	217	840	185	665	54.5	401	99.8	-	-	-	-	-	-	-	-
TPH (GRO + DRO) (mg/Kg)	61313	1247	832	227	873	185	701	54.5	419	99.8	-	-	-	-	-	-	500	-
Benzene (mg/Kg)	2.17	ND	0.215	ND	ND	ND	0.303	ND	0.487	0.152	-	-	-	-	-	-	0.170	-
Toluene (mg/Kg)	4.27	ND	0.441	ND	ND	ND	0.935	ND	1.81	0.479	-	-	-	-	-	-	85	-
Ethylbenzene (mg/Kg)	3.15	ND	0.101	ND	ND	ND	0.302	ND	0.417	0.0764	-	-	-	-	-	-	100	-
Xylenes (total) (mg/Kg)	69.2	ND	0.615	ND	ND	ND	1.50	0.146	1.74	0.521	-	-	-	-	-	-	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	ND	ND	ND	ND	-	-	-	-	-	-	0.22	-
Benzo(B)fluoranthene (mg/Kg)	ND	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	ND	-	-	-	-	-	-	2.2	-
Benzo(A)pyrene (mg/Kg)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	-	-	-	-	0.022	-
Chrysene (mg/Kg)	ND	0.0108	ND	ND	ND	ND	0.0495	ND	0.0407	0.0104	-	-	-	-	-	-	22	-
Dibenzo(A,H)anthracene (mg/Kg)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	-	-	-	-	0.022	-
Fluoranthene (mg/Kg)	ND	0.0119	ND	ND	ND	ND	ND	ND	ND	ND	-	-	-	-	-	-	1000	-
Fluorene (mg/Kg)	6.39	0.209	ND	0.0710	0.186	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)	12.9	0.0884	0.438	0.0467	ND	ND	0.674	0.0927	0.463	0.0779	-	-	-	-	-	-	23	-
Pyrene (mg/Kg)	ND	0.0107	ND	ND	ND	ND	0.0304	ND	0.0252	0.0063	-	-	-	-	-	-	1000	-
Electrical Conductivity (mmhos/cm)	3.29	6.240	4.050	2.180	8.930	15.700	11.000	1.430	17.400	6.75	0.532	0.538	0.399	5.160	0.233	6.240	4	-
Sodium Adsorption Ratio (SAR)	38.3	31.6	55.9	29.0	24.3	40.5	62.9	23.5	107	64.1	2.98	2.85	3.88	32.8	1.37	20.2	12	-
pH	9.02	10.36	10.42	10.16	9.31	9.50	12.20	10.45	12.33	11.89	9.43	9.31	9.76	9.94	9.48	9.80	6-9	-
Arsenic (mg/kg)	4.6	5.9	8.1	4.8	5.2	4.6	9.3	5.2	9.9	4.9	3.9	3.4	3.9	4.4	4.6	5.1	0.39	5.6
Barium (mg/kg)	16100	1560	6800	1130	1190	346	6750	3270	5100	5340	-	-	-	-	-	-	15000	-
Cadmium (mg/kg)	<2.8	<1.2	<1.5	<1.2	<1.2	<1.1	<1.3	<1.1	<1.2	<1.1	-	-	-	-	-	-	70	-
Chromium (III) (mg/Kg)	13.8	28.9	15.6	32.2	32	29.7	14.8	31.0	14.5	31.2	-	-	-	-	-	-	120000	-
Chromium (VI) (mg/Kg)	<1.0	<1.0	<0.60	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	23	-
Copper (mg/kg)	18.5	8.9	30.6	9.7	10.2	9.1	22.9	12.7	24.6	12.7	-	-	-	-	-	-	3100	-
Lead (inorganic) (mg/kg)	<14	9.4	26.2	8.2	9.0	8.0	24.6	10.7	17.0	10.5	-	-	-	-	-	-	400	-
Mercury (mg/kg)	<0.29	<0.10	<0.14	<0.11	<0.11	<0.11	<0.11	<0.10	<0.13	<0.11	-	-	-	-	-	-	23	-
Nickel (mg/kg)	9.9	13.2	18.4	13.0	14.0	12.8	13.6	14.9	13.6	14.9	-	-	-	-	-	-	1600	-
Selenium (mg/kg)	<14	<6.0	<7.6	<5.8	<5.9	<5.6	<6.5	<5.6	<6.2	<5.3	-	-	-	-	-	-	390	-
Silver (mg/kg)	<8.4	<3.6	<4.6	<3.5	<3.5	<3.3	<3.9	<3.4	<3.7	<3.2	-	-	-	-	-	-	390	-
Zinc (mg/kg)	32.2	38.1	55.5	36.0	37	34.2	41.7	37.8	40.6	38.1	-	-	-	-	-	-	23000	-
% Solids	35.8	83.4	66.4	85.1	86.6	91.4	76.7	88.8	76.6	86.4	91.1	95.3	88.2	93.5	87.5	82.2	-	-

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.
4) See site map for sample locations.
5) Subliner samples collected after the pit was temporarily relined to store Reserve Pit contents.
6) Collected after Berm/Weir material was removed.
7) Chain of Custody for D36530 is identified as "RP Contents Puggmilled".
8) Background #6 was sampled at the bottom of the Cuttings #2 pit after it was excavated and before it was used.

Table 2
Location: FRU 197-28A
Lab Summary - Freshwater Pit Subliner Assessment

Last update 9/18/2013

Analytical Parameter	Freshwater Pit		FW Subliner Discretes										COGCC	Maximum based on Background
(with units)	*FW Pit Contents 6/28/12*	*FW Pit Subliner[5] 5/15/13*	*FW #1*	*FW #2*	*FW #3*	*FW #4*	*FW #5*	*FW #1 (-2')*	*FW #2 (-2')*	*FW #4 (-2')*	*FW #5 (-2')*	*FW #5 (-4') 6/27/13*	*Table 910-1 Concentration Levels*	
Accutest Job #	D36016	D46358	D46359 (5/15/13)					D47360 (6/18/13)				D47694	-	-
Sample type (**C**omposite/**D**iscrete)	C	C	D	D	D	D	D	D	D	D	D	D	-	-
TPH (GRO) (mg/Kg)	813	16.6	41.7	55.7	ND	9.90	27.4	ND	ND	ND	55.6	ND	-	-
TPH (DRO) (mg/Kg)	60500	1230	1280	472	ND	1580	2330	24.4	10.5	ND	644	ND	-	-
TPH (GRO + DRO) (mg/Kg)	61313	1247	1322	528	ND	1590	2357	24.4	10.5	ND	700	ND	500	-
Benzene (mg/Kg)	2.17	ND	-	-	-	-	-	-	-	-	-	-	0.170	-
Toluene (mg/Kg)	4.27	ND	-	-	-	-	-	-	-	-	-	-	85	-
Ethylbenzene (mg/Kg)	3.15	ND	-	-	-	-	-	-	-	-	-	-	100	-
Xylenes (total) (mg/Kg)	69.2	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)	ND	0.0108	-	-	-	-	-	-	-	-	-	-	22	-
Dibenzo(A,H)anthracene (mg/Kg)	ND	ND	-	-	-	-	-	-	-	-	-	-	0.022	-
Fluoranthene (mg/Kg)	ND	0.0119	-	-	-	-	-	-	-	-	-	-	1000	-
Fluorene (mg/Kg)	6.39	0.209	-	-	-	-	-	-	-	-	-	-	1000	-
Indeno(1,2,3,C,D)pyrene (mg/Kg)	ND	ND	-	-	-	-	-	-	-	-	-	-	0.22	-
Naphthalene (mg/Kg)	12.9	0.0884	-	-	-	-	-	-	-	-	-	-	23	-
Pyrene (mg/Kg)	ND	0.0107	-	-	-	-	-	-	-	-	-	-	1000	-
Electrical Conductivity (mmhos/cm)	3.29	6.240	-	-	-	-	-	-	-	-	-	-	4	-
Sodium Adsorption Ratio (SAR)	38.3	31.6	-	-	-	-	-	-	-	-	-	-	12	-
pH	9.02	10.36	-	-	-	-	-	-	-	-	-	-	6-9	-
Arsenic (mg/kg)	4.6	5.9	-	-	-	-	-	-	-	-	-	-	0.39	5.6
Barium (mg/kg)	16100	1560	-	-	-	-	-	-	-	-	-	-	15000	-
Cadmium (mg/kg)	<2.8	<1.2	-	-	-	-	-	-	-	-	-	-	70	-
Chromium (III) (mg/Kg)	13.8	28.9	-	-	-	-	-	-	-	-	-	-	120000	-
Chromium (VI) (mg/Kg)	<1.0	<1.0	-	-	-	-	-	-	-	-	-	-	23	-
Copper (mg/kg)	18.5	8.9	-	-	-	-	-	-	-	-	-	-	3100	-
Lead (inorganic) (mg/kg)	<14	9.4	-	-	-	-	-	-	-	-	-	-	400	-
Mercury (mg/kg)	<0.29	<0.10	-	-	-	-	-	-	-	-	-	-	23	-
Nickel (mg/kg)	9.9	13.2	-	-	-	-	-	-	-	-	-	-	1600	-
Selenium (mg/kg)	<14	<6.0	-	-	-	-	-	-	-	-	-	-	390	-
Silver (mg/kg)	<8.4	<3.6	-	-	-	-	-	-	-	-	-	-	390	-
Zinc (mg/kg)	32.2	38.1	-	-	-	-	-	-	-	-	-	-	23000	-
% Solids	35.8	83.4	80.7	79.3	86.3	88.0	83.5	77.6	75.3	75.7	79.4	74.4	-	-

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) Subliner samples collected after the pit was temporarily relined to store Reserve Pit contents.

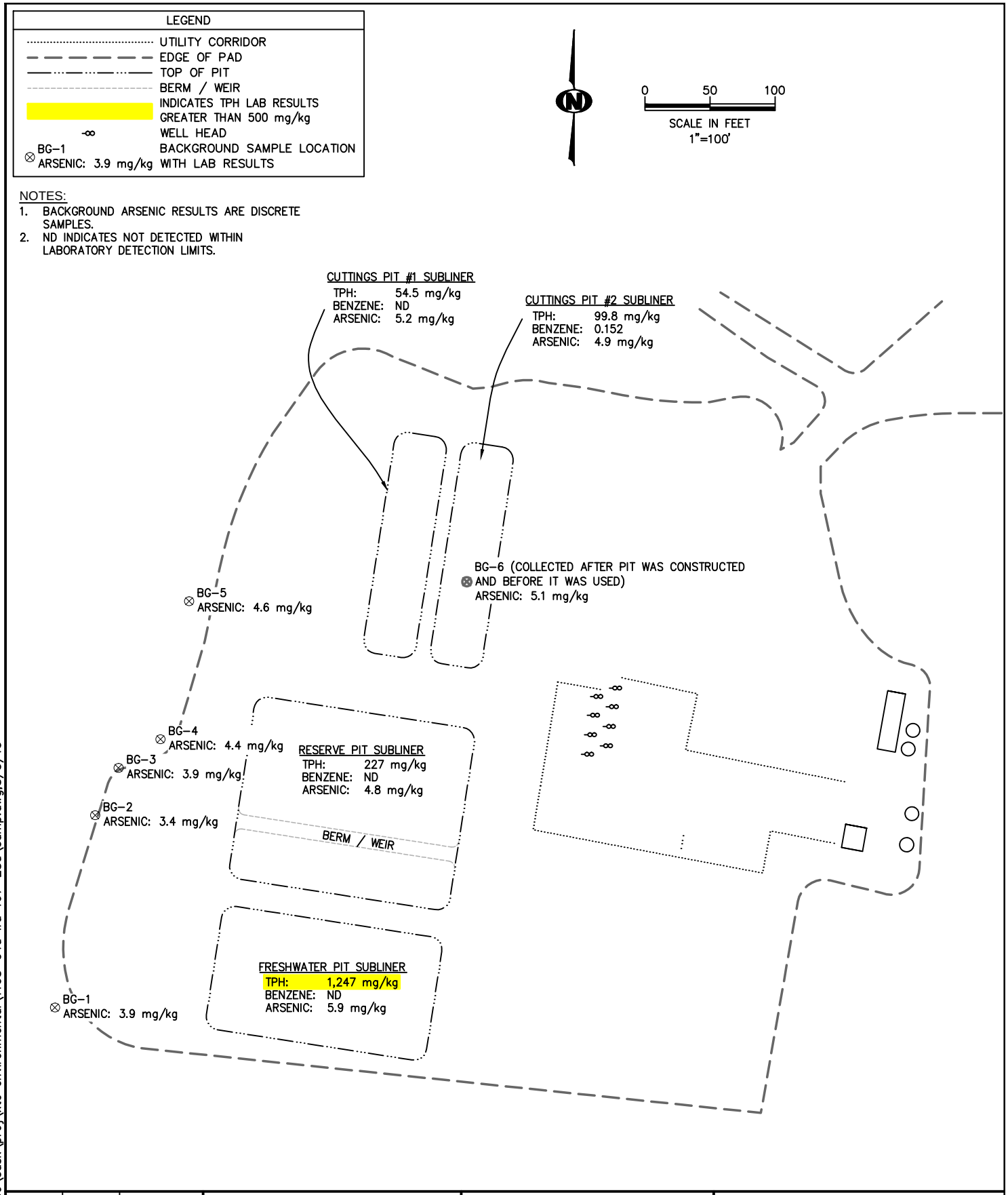
Table 2A
Location: FRU 197-28A
Lab Summary - Groundwater Sample from FW Pit

Last update 7/1/2013

Analytical Parameter	Groundwater	COGCC	*Maximum based on Background*
(with units)	***FW Subliner GW 6/18/13***	***Table 910-1 Concentration Levels***	
Accutest Job #	**D47361**	-	-
Sample type (**C**omposite/**D**iscrete)	**Grab**	-	-
Benzene (µg/l)	0.27	5	-
Toluene (µg/l)	ND	560 - 1000	-
Ethylbenzene (µg/l)	ND	700	-
Xylenes (total) (µg/l)	ND	1400 - 10000	-
Chlorides (mg/l)	324	<1.25xBG	-
Sulfates (mg/l)	4820	<1.25xBG	-
Total Dissolved Solids (mg/l)	9280	<1.25xBG	-

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.



\\hyper-v03\lkwd-co\sdsk\proj\xto environmental\1108-04a fru 197-28a\samp.dwg,8/5/13

DESIGNED: –	CHECKED: DK	FIGURE 1	NOTES:
DATE: 8/5/13	DRAWN: DRF		
FILE NAME: samp		SHEET NO. 1 of 3	DATE / REVISIONS
PROJECT NO. 1108-04A		SCALE: 1" = 100'	

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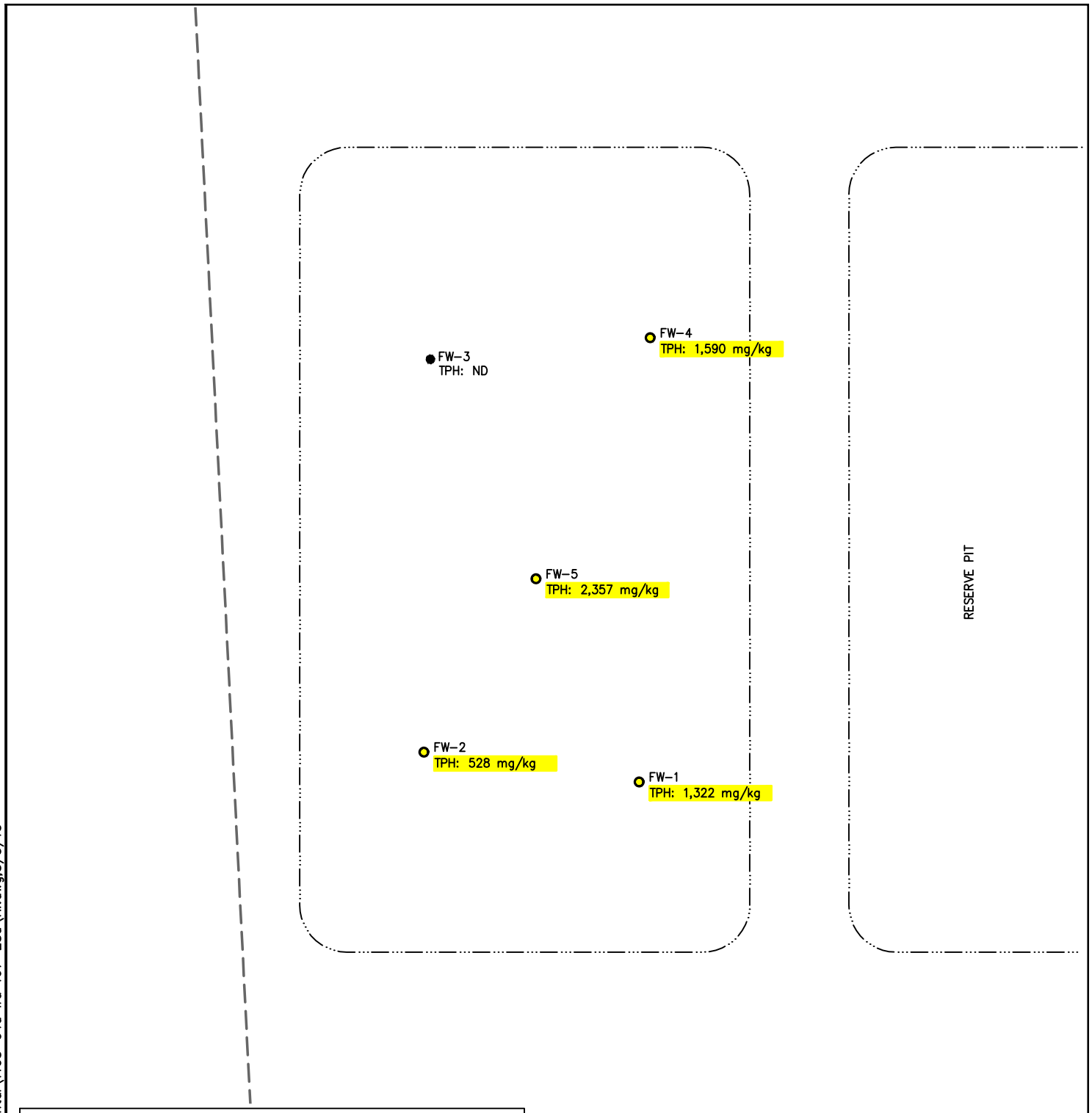
FIGURE 1
PICEANCE CREEK
FRU 197-28A
SAMPLE LOCATIONS WITH SELECT RESULTS
PREPARED FOR XTO ENERGY



LEGEND	
.....	UTILITY CORRIDOR
— — — —	EDGE OF PAD
—·—·—·—	TOP OF PIT
-∞	WELL HEAD
FW-0 TPH: ≤ 500 mg/kg	DISCRETE SAMPLE LOCATION WITH TPH LAB RESULTS LESS THAN OR EQUAL TO 500 mg/kg
FW-0 TPH: > 500 mg/kg	DISCRETE SAMPLE LOCATION WITH TPH LAB RESULTS GREATER THAN 500 mg/kg

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

N

0 30 60

SCALE IN FEET
1"=60 '

DESIGNED: –	CHECKED: DK	FIGURE 2	NOTES:
DATE: 8/5/13	DRAWN: DRF		
FILE NAME: fw		SHEET NO. 2 of 3	DATE / REVISIONS
PROJECT NO. 1108-04A		SCALE: 1" = 100'	

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FIGURE 2
PICEANCE CREEK
FRU 197-28A
FRESHWATER PIT SUBLINER

PREPARED FOR XTO ENERGY

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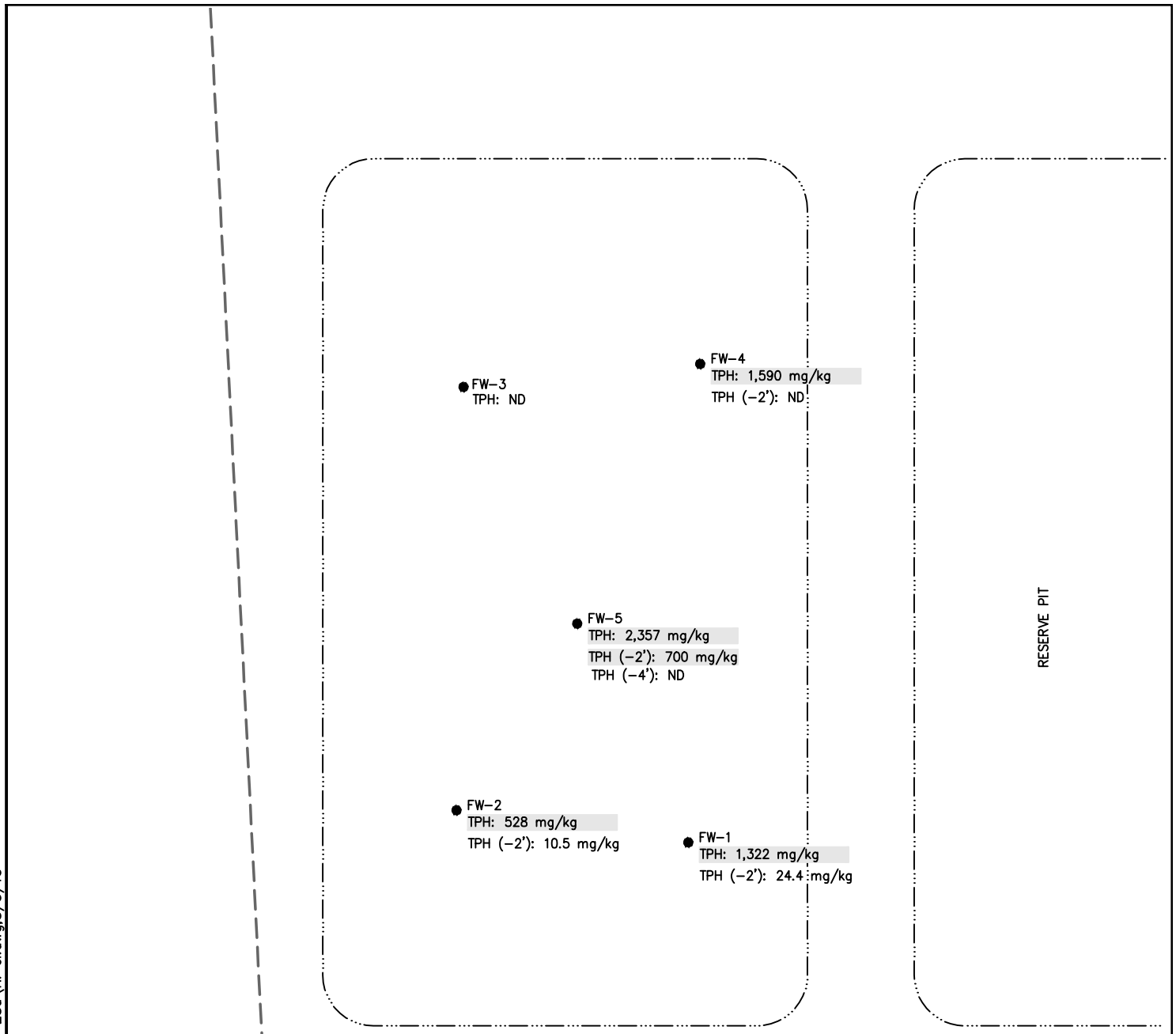

LEGEND

- UTILITY CORRIDOR
- EDGE OF PAD
- PIT / TRENCH
- WELL HEAD
- FW-0 TPH: ≤ 500 mg/kg — DISCRETE SAMPLE LOCATION WITH TPH LAB RESULTS LESS THAN OR EQUAL TO 500 mg/kg
- FW-0 TPH: > 500 mg/kg / TPH: ≤ 500 mg/kg — DISCRETE SAMPLE LOCATION WITH PREVIOUS TPH LAB RESULTS GREATER THAN 500 mg/kg AND CURRENT RESULTS BELOW 500 mg/kg

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

N

0 30 60

SCALE IN FEET
1"=60 '

DESIGNED: –	CHECKED: DK	FIGURE 2A	NOTES:
DATE: 8/5/13	DRAWN: DRF		
FILE NAME: fw cl		SHEET NO. 2A of 3	DATE / REVISIONS
PROJECT NO. 1108-04A		SCALE: 1" = 100'	

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FIGURE 2A
PICEANCE CREEK
FRU 197-28A
FRESHWATER PIT SUBLINER

PREPARED FOR XTO ENERGY

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COMPLETED PIT CLOSURE

Photograph #1 – south side of pad looking north

Photograph #2 – north side of pad looking south

XTO ENERGY

Freedom Unit 197-28A
NWSW, Sec 28 ,T1S, R97W, NAD 83, 6th PM
Lat. 39.934437
Long: -108.29599

SITE PHOTOGRAPHS
Photos Taken: 5/23/2014