FORM
27
Rev 6/99

Click here to reset form

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 #7725 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: 05-103-11428-00 County: Rio Blanco
Facility Name: Freedom Unit Facility Number:
Well Name: Freedom Unit Well Number: 197-33B
Location: (QtrQtr, Sec, Twp, Rng, Meridian): SWNE, Sec. 33, T1S, R97W, 6th P.M. Latitude: 39.921453 Longitude: -108.282474

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

Soil type, if not previously identified on Form 2A or Federal Surface Use Plan: Rentsac Channery Loam, 5 - 50% slopes

Potential receptors (water wells within 1/4 mi, surface waters, etc.): Closest water well is within 1 mile; closest surface water ~1200'

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

Impacted Media (check):	Extent of Impact:	How Determined:
☑ Soils	TPH, Benzene and Arsenic	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 #7725, DOC #2232728. Please see Attachment I, Tables 1 through 6 (6 total), and Figures 1 through 3A (5 total). Refer to COGCC Approved Form 4 Background Arsenic Sundry (DOC #2232730) for details regarding background Arsenic.

Describe how source is to be removed:

Reserve Pit and Cuttings Pit #2 contents, a portion of Cuttings Pit #3 contents, and synthetic liners from all pits have been removed and transported for offsite disposal at Wray Gulch Landfill in Meeker, CO. Freshwater, Reserve and Cuttings Pit #2 subliner material, Cuttings Pits #1 and the balance Cuttings Pit #3 contents have been mix/blend processed to below Table 910-1 concentration levels and used onsite for backfill (see Tables 3 and 4).

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.:

Soils assessment and remediation have been completed. All impacted soils have been either mix/blend processed to below Table 910-1 concentration levels or removed to a permitted disposal/recycling facility (see Tables 3 through 6).

Submit Page 2 with Page 1

FORM 27 Rev 6/99

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 greater than 250 feet below the ground surface. Soil samples were collected for laboratory analysis of subliner material to confirm no groundwater impact potential exists (see Tables 1, 3 and 4).

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 I

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 sample results no additional assessment will be necessary beneath the Freshwater, Reserve and Cuttings Pits (see Tables 1, 3 and 4).

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

Freshwater Pit contents, part of the Reserve Pit contents, and synthetic liners from each of the pits were removed and have been transported for offsite disposal at Wray Gulch Landfill in Meeker, CO. The balance of the Reserve Pit contents have been mix/blend processed to below Table 910-1 concentration levels and used onsite for backfill. Cuttings Pit spoils piles, Mix/Blend processed material, and Reserve Pit subliner material below Table 910-1 concentration levels were used onsite for backfill (see Table 5).

IMPLEMENTATION SCHEDULE

Date Site Investigation Began: 6/19/12	Date Site Investigation Completed: 4/22/2013	Date Remediation Plan Submitted: 4/22/2013
Remediation Start Date: 9/11/2012	Anticipated Completion Date: 6/3/2013	Actual Completion Date: 6/3/2013

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: Lead EH&S Coordinator Date: 12/17/2015

OGCC Approved: _____ Title: _____ Date: _____

ATTACHMENT I

PCU 297-10A Pit Closure Workplan, Form 27 Page 1

Describe initial action taken:

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

1. **Freshwater Pit**
    - Freshwater Pit contents (de minimis) and all associated synthetic liners were removed and transported offsite to a permitted disposal/recycling facility.
    - Freshwater Pit subliner composite samples were collected and analyzed for Table 910-1 parameters. Results exceeded Table 910-1 concentration levels for TPH (6669 mg/kg), EC (4.16 mmhos/cm), SAR (35.0), pH (10.68) and Arsenic (5.5 mg/kg).
    - Freshwater Pit subliner impacted soils were removed and transported to an offsite permitted disposal/recycling facility. Subliner confirmation samples were collected and analyzed for TPH at -2' through -8' below the subliner and ranged from 309 mg/kg to 434 mg/kg (see Table 3).

2. **Reserve Pit**
    - Reserve Pit contents were solidified and sampled for Table 910-1 parameters. Results exceeded Table 910-1 concentration levels for TPH (2456 mg/kg), EC (14.0 mmhos/cm), SAR (13.5), pH (12.48) and Arsenic (10.5 mg/kg).
    - Reserve Pit subliner composite samples were collected and analyzed for Table 910-1 parameters. Results exceeded Table 910-1 concentration levels for TPH (5859 mg/kg), SAR (34.2), pH (10.24) and Arsenic (5.2 mg/kg).
    - Reserve Pit subliner impacted soils were removed, treated onsite and sampled to ensure Table 910-1 concentration levels. Subliner confirmation samples were collected and analyzed for TPH at -2' through -6' below the subliner and ranged from 27.1 mg/kg to 450 mg/kg (see Table 4).

3. **Cuttings Pit**
    - Cuttings Pit contents were sampled for Table 910-1 parameters. Results exceeded Table 910-1 concentration levels for EC (4.850 mmhos/cm), SAR (35.2), pH (11.19) and Arsenic (10.5 mg/kg).

- Cuttings Pit subliner composite samples were collected and analyzed for Table 910-1 parameters. Results exceeded Table 910-1 concentration levels for EC (4.430 mmhos/cm), SAR (16.4), pH (10.12) and Arsenic (4.6 mg/kg).

4. Cuttings Spoil Piles

- Cuttings material on location was found in three spoil piles. These three spoil piles were sampled for Table 910-1 parameters. Results exceeded Table 910-1 concentration levels for pH and Arsenic. The data ranged from 9.68 to 9.81 for pH and 7.1 mg/kg to 17 mg/kg for Arsenic (See Table 1).

- Freshwater Pit contents, a portion of Reserve Pit contents above Table 910-1, all associated Freshwater, Reserve and Cuttings Pit synthetic liners and the Freshwater Pit subliner impacted material were removed and transported to Wray Gulch Landfill in Meeker, CO. Disposal manifests available upon request.

- The balance of the Reserve Pit contents were mix/blend processed to below Table 910-1 concentration levels and used onsite as backfill (see Table 5).

- The Freshwater, Reserve and Cuttings Pits were backfilled with pit contents and subliner excavated material that met Table 910-1 concentration levels and/or native on-site material.

- Soil samples were collected by 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.

- Refer to Tables 1 through 5 (5 total) for a summary of the laboratory results and Figures 1 through 3A (5 total) for layout of the pits and sample locations.

- Elevated Arsenic levels above Table 910-1 concentration were detected beneath the Freshwater, Reserve, and Cuttings Pits. Please refer to COGCC approved Form 4, DOC #2232854 establishing acceptable background Arsenic levels.

- Any remaining elevated levels of Electrical Conductivity (EC), SAR and pH detected beneath the pit area as well as any backfill material were covered with a minimum 3 feet of clean, native soils per COGCC guidance. No additional treatment of these soils was required.

- Reclamation activities will be 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: PCU 297-10A
Lab Summary

Last update 9/8/2015

Analytical Parameter	Fresh Water Pit		Reserve Pit		Cuttings Pit		Cuttings Spoil Piles			Background Arsenic								COGCC	Maximum
(with units)	FW Pit Contents	FW Pit Subliner[5]	RP Post Solid.	RP Subliner[6]	Cut Contents	Cut Subliner	Spoil Pile #1	Spoil Pile #2	Spoil Pile #3 (small)	#1	#2	#3	#4	#5	#6	#7	#8	Table 910-1 Concentration Levels	based on Background
Accutest Job #		D38941 (9/18/12)	D39260 (9/24/12)	D39145 (9/24/12)	D38707 (9/11/12)	D39441 (10/1/12)	D38770 (9/12/12)		D38706 (9/11/12)	D35712 (6/19/12)								-	-
Sample type (**C**omposite/**D**iscrete)		C	C	C	C	C	C	C	C	D	D	D	D	D	D	D	D	-	-
TPH (GRO) (mg/Kg)		8.8	95.9	49.2	11.3	ND	ND	ND	ND	-	-	-	-	-	-	-	-	-	-
TPH (DRO) (mg/Kg)		6660	2360	5810	213	28.8	65.8	38	78.4	-	-	-	-	-	-	-	-	-	-
TPH (GRO + DRO) (mg/Kg)		6669	2456	5859	224	28.8	65.8	38	78.4	-	-	-	-	-	-	-	-	500	-
Benzene (mg/Kg)		ND	ND	ND	0.121	ND	ND	ND	ND	-	-	-	-	-	-	-	-	0.170	-
Toluene (mg/Kg)		ND	0.128	ND	0.474	0.105	ND	ND	ND	-	-	-	-	-	-	-	-	85	-
Ethylbenzene (mg/Kg)		ND	0.0841	0.0442	0.0810	ND	ND	ND	ND	-	-	-	-	-	-	-	-	100	-
Xylenes (total) (mg/Kg)		ND	1.64	1.08	0.620	ND	ND	ND	ND	-	-	-	-	-	-	-	-	175	-
Acenaphthene (mg/Kg)		ND	ND	ND	ND	ND	ND	ND	ND	-	-	-	-	-	-	-	-	1000	-
Anthracene (mg/Kg)		ND	ND	ND	ND	ND	ND	ND	ND	-	-	-	-	-	-	-	-	1000	-
Benzo(A)anthracene (mg/Kg)		ND	ND	ND	ND	ND	ND	ND	ND	-	-	-	-	-	-	-	-	0.22	-
Benzo(B)fluoranthene (mg/Kg)		ND	ND	ND	ND	ND	ND	ND	ND	-	-	-	-	-	-	-	-	0.22	-
Benzo(K)fluoranthene (mg/Kg)		ND	ND	ND	ND	ND	ND	ND	ND	-	-	-	-	-	-	-	-	2.2	-
Benzo(A)pyrene (mg/Kg)		ND	ND	ND	ND	ND	ND	ND	ND	-	-	-	-	-	-	-	-	0.022	-
Chrysene (mg/Kg)		0.0694	0.0206	0.0287	0.0616	ND	0.0072	ND	ND	-	-	-	-	-	-	-	-	22	-
Dibenzo(A,H)anthracene (mg/Kg)		ND	ND	ND	ND	ND	ND	ND	ND	-	-	-	-	-	-	-	-	0.022	-
Fluoranthene (mg/Kg)		ND	0.0221	0.0331	ND	ND	ND	ND	ND	-	-	-	-	-	-	-	-	1000	-
Fluorene (mg/Kg)		ND	0.281	1.11	0.0767	0.0062	0.0056	ND	ND	-	-	-	-	-	-	-	-	1000	-
Indeno(1,2,3,C,D)pyrene (mg/Kg)		ND	ND	ND	ND	ND	ND	ND	ND	-	-	-	-	-	-	-	-	0.22	-
Naphthalene (mg/Kg)		ND	0.571	1.03	0.424	0.0350	0.0457	ND	ND	-	-	-	-	-	-	-	-	23	-
Pyrene (mg/Kg)		ND	0.0283	0.0341	0.0325	ND	ND	ND	ND	-	-	-	-	-	-	-	-	1000	-
Electrical Conductivity (mmhos/cm)		4.16	14.0	2.38	4.850	4.430	0.841	0.233	2.73	-	-	-	-	-	-	-	-	4	-
Sodium Adsorption Ratio (SAR)		35.0	13.5	34.2	35.2	16.4	5.54	3.35	9.14	-	-	-	-	-	-	-	-	12	-
pH		10.68	12.48	10.24	11.19	10.12	9.7	9.81	9.68	-	-	-	-	-	-	-	-	6-9	-
Arsenic (mg/kg)		5.5	10.5	5.2	10.5	4.6	8.6	17	7.1	2.8	5.6	4.3	4.4	4.2	3.8	4.0	5.1	0.39	6.2
Barium (mg/kg)		437	6640	2320	3540	1930	4640	3080	1930	-	-	-	-	-	-	-	-	15000	-
Cadmium (mg/kg)		<1.1	<1.6	<1.1	<1.3	<1.1	<1.2	<1.2	<1.1	-	-	-	-	-	-	-	-	70	-
Chromium (III) (mg/Kg)		40.7	<12	41.8	14.7	37.4	40.5	41.9	39.7	-	-	-	-	-	-	-	-	120000	-
Chromium (VI) (mg/Kg)		<1.0	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-	-	-	-	-	-	23	-
Copper (mg/kg)		10.7	13.9	9.8	28.6	11.4	13.5	12.5	13.0	-	-	-	-	-	-	-	-	3100	-
Lead (inorganic) (mg/kg)		12.6	13.1	11.9	26.3	13.2	16.8	15.4	12.6	-	-	-	-	-	-	-	-	400	-
Mercury (mg/kg)		<0.11	<0.15	<0.12	<0.13	<0.10	<0.13	<0.11	<0.11	-	-	-	-	-	-	-	-	23	-
Nickel (mg/kg)		16.0	100	16.1	14.0	15.5	17.7	17.5	18.0	-	-	-	-	-	-	-	-	1600	-
Selenium (mg/kg)		<5.5	<7.9	<5.6	<6.4	<5.3	<6.2	<6.0	<5.3	-	-	-	-	-	-	-	-	390	-
Silver (mg/kg)		<3.3	<4.7	<3.4	<3.8	<3.2	<3.7	<3.6	<3.2	-	-	-	-	-	-	-	-	390	-
Zinc (mg/kg)		43.7	27.7	39.8	53.3	45.6	47.1	47.5	42.8	-	-	-	-	-	-	-	-	23000	-
% Solids		89.3	63.6	86.4	76.4	92.9	82.8	84.6	94.6	96.7	96.6	97.3	97.8	98.3	98.5	98.6	98.0	-	-

De Minimis Contents

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

Table 2
Location: PCU 297-10A
Lab Summary - Arsenic Summary

Last update 9/8/2015

Analytical Parameter	Cuttings Pit Contents					Spoil Pile					Reserve Pit Contents					COGCC	Maximum based on Background
(with units)	#1	#2	#3	#4	#5	#1	#2	#3	#4	#5	#1	#2	#3	#4	#5	Table 910-1 Concentration Levels	
Accutest Job #	D39805 (10/10/12)					D39804 (10/10/12)					D45357 (4/16/13)					-	-
Sample type (**C**omposite/**D**iscrete)	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)	6.5	9.4	13.2	12.6	24.2	7.4	7.3	8.0	7.3	6.8	7.1	6.7	7.5	7.6	6.1	0.39	6.2
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	81.3	83.3	80.6	78.8	84.7	90.7	93.3	90.1	91.7	96.1	90.8	84.4	84.3	82.8	85.4	-	-

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.

Table 3
Location: PCU 297-10A
Lab Summary - FW Subliner Assessment

Last Update: 9/8/2015

Analytical Parameter	FW Subliner	Subliner Discrete					Post -1' to -2' Excavation						Post 4' Ex.		Post 6' Ex		Post 8'	Post Ex	COGCC	Maximum based on Background
(with units)	FW Pit Subliner	FW-1	FW-2	FW-3	FW-4	FW-5	Subliner (-1' to -2')	FW-1 (-2')	FW-2 (-2')	FW-3 (-1')	FW-4 (-2')	FW-5 (-2')	FW-1 (-4')	FW-5 (-4')	FW-1 (-6')	FW-5 (-6')	FW-5 (-8')	FW Ex MTRL[5]	Table 910-1 Concentration Levels	
Accutest Job #	D38941 (9/18/12)	D38943 (9/18/13)					D39807 (10/11/12)	D39810 (10/11/12)					D41018 (11/14/12)		D41660 (12/6/12)		D42678 (1/15/13)	D42992 (1/29/13)	-	-
Sample type (**C**omposite/**D**iscrete)	C	D	D	D	D	D	C	D	D	D	D	D	D	D	D	D	D	C	-	-
TPH (GRO) (mg/Kg)	8.8	29.4	ND	ND	ND	9.97	ND	14.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-
TPH (DRO) (mg/Kg)	6660	7480	2030	894	5250	4490	3650	19200	367	356	345	1150	1660	1120	434	915	309	1100	-	-
TPH (GRO + DRO) (mg/Kg)	6669	7509	2030	894	5250	4500	3650	19214	367	356	345	1150	1660	1120	434	915	309	1100	500	-
Benzene (mg/Kg)	ND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.170	-
Toluene (mg/Kg)	ND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	85	-
Ethylbenzene (mg/Kg)	ND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100	-
Xylenes (total) (mg/Kg)	ND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	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)	0.0694	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	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)	ND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23	-
Pyrene (mg/Kg)	ND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1000	-
Electrical Conductivity (mmhos/cm)	4.16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	-
Sodium Adsorption Ratio (SAR)	35.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	-
pH	10.68	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6-9	-
Arsenic (mg/kg)	5.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.39	6.2
Barium (mg/kg)	437	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15000	-
Cadmium (mg/kg)	<1.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	70	-
Chromium (III) (mg/Kg)	40.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	120000	-
Chromium (VI) (mg/Kg)	<1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23	-
Copper (mg/kg)	10.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3100	-
Lead (inorganic) (mg/kg)	12.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	400	-
Mercury (mg/kg)	<0.11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23	-
Nickel (mg/kg)	16.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1600	-
Selenium (mg/kg)	<5.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	390	-
Silver (mg/kg)	<3.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	390	-
Zinc (mg/kg)	43.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23000	-
% Solids	89.3	85.9	89.9	86.8	94.1	88.9	88.3	86.8	86.9	90.8	88.6	87.3	86.5	85.1	86.8	87.0	82.2	84.6	-	-

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) FW excavated material will be transported offsite to a permitted disposal facility.

Table 4
Location: PCU 297-10A
Lab Summary - Reserve Pit Subliner Assessment

Last Updated:

Analytical Parameter	Reserve Pit	Discrete Samples					Post 2' Excavation					Post 4' Excavation			Post 6' Ex.	Ex. MTRL	COGCC
(with units)	RP Subliner	RP-1	RP-2	RP-3	RP-4	RP-5	RP Subliner - 2'	RP-1	RP-2	RP-3	RP-4	RP-1	RP-2	RP-4	RP-4	RP Ex. MTRL	Table 910-1 Concentration Levels
Accutest Job #	D39145 (9/24/12)	D39146 (9/24/12)					D40087 (10/17/12)	D40082 (10/17/12)				D41017 (11/14/12)			D41665 (12/6/12)	D42111 (12/18/12)	-
Sample type (**C**omposite/**D**iscrete)	C	D	D	D	D	D	C	D	D	D	D	D	D	D	D	C	-
TPH (GRO) (mg/Kg)	49.2	150	38.1	87	25.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
TPH (DRO) (mg/Kg)	5810	11700	3570	13100	2550	336	675	1220	1320	450	896	187	27.1	574	75.6	407	-
TPH (GRO + DRO) (mg/Kg)	5859	11850	3608	13187	2576	336	675	1220	1320	450	896	187	27.1	574	75.6	407	500
Benzene (mg/Kg)	ND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.170
Toluene (mg/Kg)	ND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	85
Ethylbenzene (mg/Kg)	0.0442	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100
Xylenes (total) (mg/Kg)	1.08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	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)	0.0287	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22
Dibenzo(A,H)anthracene (mg/Kg)	ND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.022
Fluoranthene (mg/Kg)	0.0331	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1000
Fluorene (mg/Kg)	1.11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1000
Indeno(1,2,3,C,D)pyrene (mg/Kg)	ND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.22
Naphthalene (mg/Kg)	1.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23
Pyrene (mg/Kg)	0.0341	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1000
Electrical Conductivity (mmhos/cm)	2.38	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4
Sodium Adsorption Ratio (SAR)	34.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12
pH	10.24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6-9
Arsenic (mg/kg)	5.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.39
Barium (mg/kg)	2320	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15000
Cadmium (mg/kg)	<1.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	70
Chromium (III) (mg/Kg)	41.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	120000
Chromium (VI) (mg/Kg)	<1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23
Copper (mg/kg)	9.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3100
Lead (inorganic) (mg/kg)	11.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	400
Mercury (mg/kg)	<0.12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23
Nickel (mg/kg)	16.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1600
Selenium (mg/kg)	<5.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	390
Silver (mg/kg)	<3.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	390
Zinc (mg/kg)	39.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23000
% Solids	86.4	84.9	87.6	88.4	85.7	86.2	90.2	90.4	91.0	88.9	89.5	87.8	87.2	86.9	87.0	89.9	-

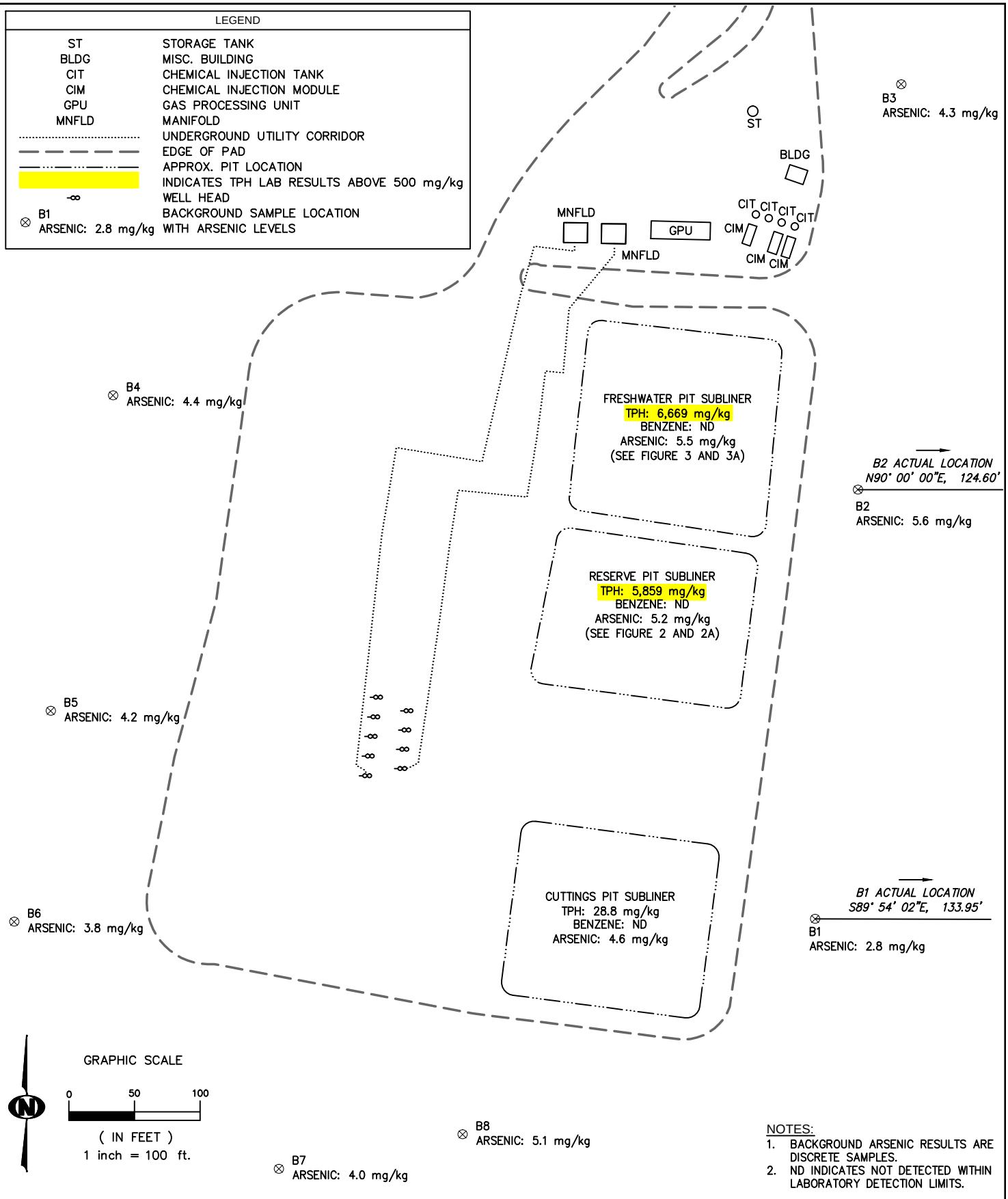
Notes:
1) ND = not detectible to the laboratory detection limit.
2) Results highlighted in yellow exceed Table 910-1 concentration levels. Results highlighted in Gray exceed Table 910-1, but are below background levels.
3) "-" indicates no analysis.
4) See site map for sample locations.

Table 5
Location: PCU 297-10A
Lab Summary - Reserve Pit Contents Mix/blend (MB) Summary

Last update 9/8/2015

Analytical Parameter	RP Contents	MB Trial	Pug Mill Mix/blend																																		COGCC
(with units)	RP Post Solid.	RP MB Trial 3:1	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 8 Remix	Day 9	Day 9 Remix 1	Day 9 Remix 2	Day 10	Day 10 Remix 1	Day 10 Remix 2	Day 11	Day 11 Remix 1	Day 11 Remix 2	Day 11 Remix 3	Day 12	Day 13	Day 14	Day 15	Day 16	Day 17	Day 17 Remix 1	Day 17 Remix 2	Day 17 Remix 3	Day 17 Remix 4	Day 18[4]	Day 18 Remix 1	Day 18 Remix 2	Table 910-1 Concentration Levels
Accutest Job #	D39260 (9/24/12)	D40078 (10/17/12)	D42317 (1/3/13)	D42558 (1/10/13)					D42645 (1/11/13)		D42787 (1/22/13)	D42870 (1/22/13)	D43050 (1/30/13)	D43048 (1/31/13)	D42870 (1/23/13)	D43087 (2/1/13)	D43152 (2/4/13)	D42914 (1/25/13)	D43151 (2/5/13)	D43338 (2/6/13)	D43337 (2/6/13)	D42953 (1/28/13)	D43393 (2/8/13)		D43488 (2/12/13)	D43488 (2/13/13)	D43549 (2/14/13)	D46256 (5/14/13)	D46303 (5/15/13)	D46371 (5/17/13)	D46458 (5/21/13)	D43562 (2/15/13)	D46791 (5/31/13)	D46848 (6/3/13)	-
Sample type (Composite/Discrete)	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	-
TPH (GRO) (mg/Kg)	95.9	ND	ND	ND	6.87	ND	7.36	ND	7.53	8.78	ND	9.24	8.72	7.74	9.92	ND	ND	7.69	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.18	ND	ND	-
TPH (DRO) (mg/Kg)	2360	740	177	399	378	331	460	278	478	688	386	729	417	486	737	477	433	898	429	372	305	475	234	454	243	177	536	162	106	106	56.1	660	134	112	-
TPH (GRO + DRO) (mg/Kg)	2456	740	177	399	385	331	467	278	486	697	386	738	426	494	747	477	433	906	429	372	305	475	234	454	243	177	536	162	106	106	56.1	668	134	112	500
Benzene (mg/Kg)	ND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.170
Toluene (mg/Kg)	0.128	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	85
Ethylbenzene (mg/Kg)	0.0841	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100
Xylenes (total) (mg/Kg)	1.64	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	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)	0.0206	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22
Dibenzo(A,H)anthracene (mg/Kg)	ND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.022
Fluoranthene (mg/Kg)	0.0221	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1000
Fluorene (mg/Kg)	0.281	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1000
Indeno(1,2,3,C,D)pyrene (mg/Kg)	ND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.22
Naphthalene (mg/Kg)	0.571	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23
Pyrene (mg/Kg)	0.0283	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1000
Electrical Conductivity (mmhos/cm)	14.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4
Sodium Adsorption Ratio (SAR)	13.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12
pH	12.48	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6-9
Arsenic (mg/kg)	10.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.39
Barium (mg/kg)	6640	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15000
Cadmium (mg/kg)	<1.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	70
Chromium (III) (mg/Kg)	<12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	120000
Chromium (VI) (mg/Kg)	<10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23
Copper (mg/kg)	13.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3100
Lead (inorganic) (mg/kg)	13.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	400
Mercury (mg/kg)	<0.15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23
Nickel (mg/kg)	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1600
Selenium (mg/kg)	<7.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	390
Silver (mg/kg)	<4.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	390
Zinc (mg/kg)	27.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23000
% Solids	63.6	83.6	86.2	82.9	85.7	84.2	84.1	85.6	83.7	82.2	84.8	85.1	84.6	85.8	82.1	84.6	84.8	83.5	84.1	84.9	85.8	83.3	83.4	85.1	85.4	85.7	84.1	86.8	88.3	87.5	87.5	82.6	87.8	87.3	-

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.
4) Material will be treated onsite or transported to a permitted disposal facility.



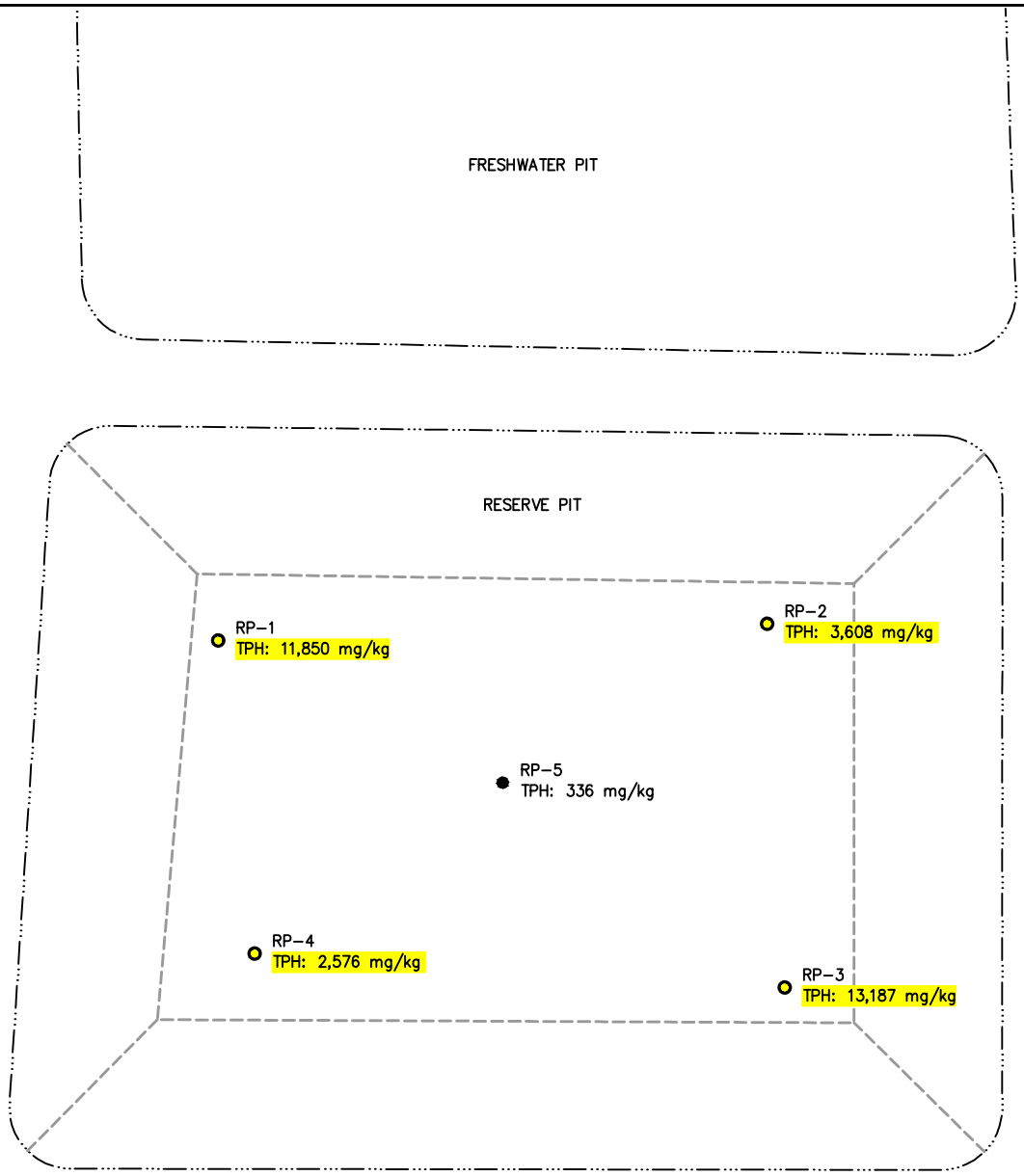
NOTES:
1. BACKGROUND ARSENIC RESULTS ARE DISCRETE SAMPLES.
2. ND INDICATES NOT DETECTED WITHIN LABORATORY DETECTION LIMITS.

DESIGNED: –	CHECKED: DK	FIGURE 1	NOTES:
DATE: 4/5/13	DRAWN: DRF		
FILE NAME: samples ars		SHEET NO. 1 of 5	DATE / REVISIONS
PROJECT NO. 1202-04		SCALE: 1"=100'	

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

FIGURE 1
PICEANCE CREEK
PCU 297-10A
SAMPLE LOCATIONS MAP
WITH ARSENIC LEVELS
PREPARED FOR XTO ENERGY

\\hyper-v03\lkwd-co\sdsk\proj\xto environmental\1202-04 pcu 297-10a\samples ars.dwg,4/5/13



LEGEND	
	EDGE OF PAD
	PIT TOP / TOE
	UNDERGROUND UTILITY CORRIDOR
D-0 TPH: mg/kg	DISCRETE SAMPLE LOCATION WITH TPH LAB RESULTS LESS THAN OR EQUAL TO 500 mg/kg
D-0 TPH: mg/kg	DISCRETE SAMPLE LOCATION WITH TPH LAB RESULTS GREATER THAN 500 mg/kg

GRAPHIC SCALE

0 15 30

(IN FEET)

1 inch = 30 ft.

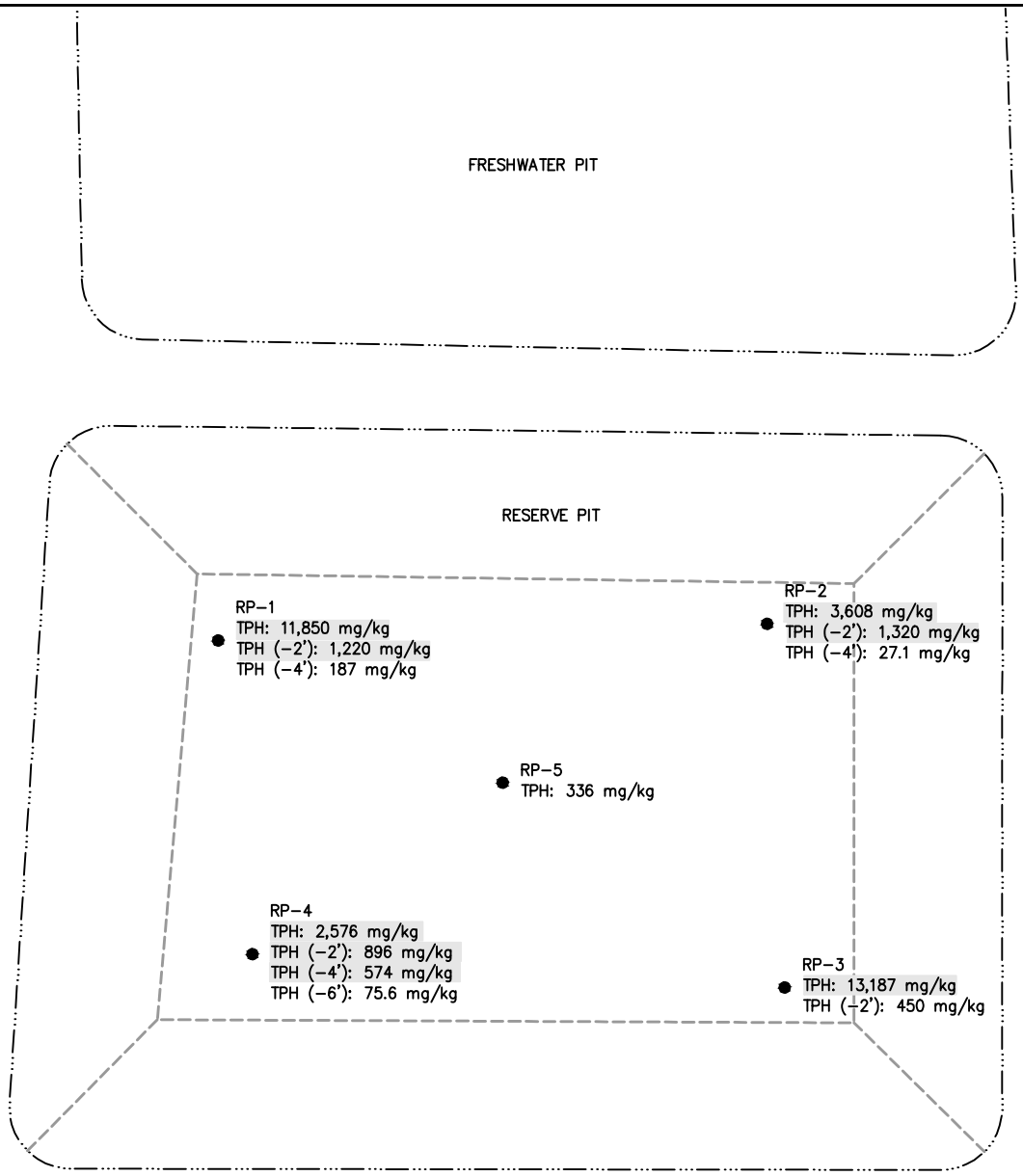
N

DESIGNED: –	CHECKED: DK	FIGURE 2	NOTES:
DATE: 4/5/13	DRAWN: DRF		
FILE NAME: reserve		SHEET NO. 2 of 5	DATE / REVISIONS
PROJECT NO. 1202-04		SCALE: 1"=30'	

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

FIGURE 2
PICEANCE CREEK
PCU 297-10A
RESERVE PIT SUBLINER
CONFIRMATION DATA
PREPARED FOR XTO ENERGY

\\hyper-v03\lkwd-co\sdsk\proj\xto environmental\1202-04 pcu 297-10a\reserve.dwg,4/5/13



LEGEND	
	EDGE OF PAD
	PIT TOP / TOE
	UNDERGROUND UTILITY CORRIDOR
	APPROX. TOE OF PIT
R-0 TPH: ≤ 500 mg/kg	DISCRETE SAMPLE LOCATION WITH TPH LAB RESULTS LESS THAN OR EQUAL TO 500 mg/kg
R-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

GRAPHIC SCALE

0 15 30

(IN FEET)

1 inch = 30 ft.

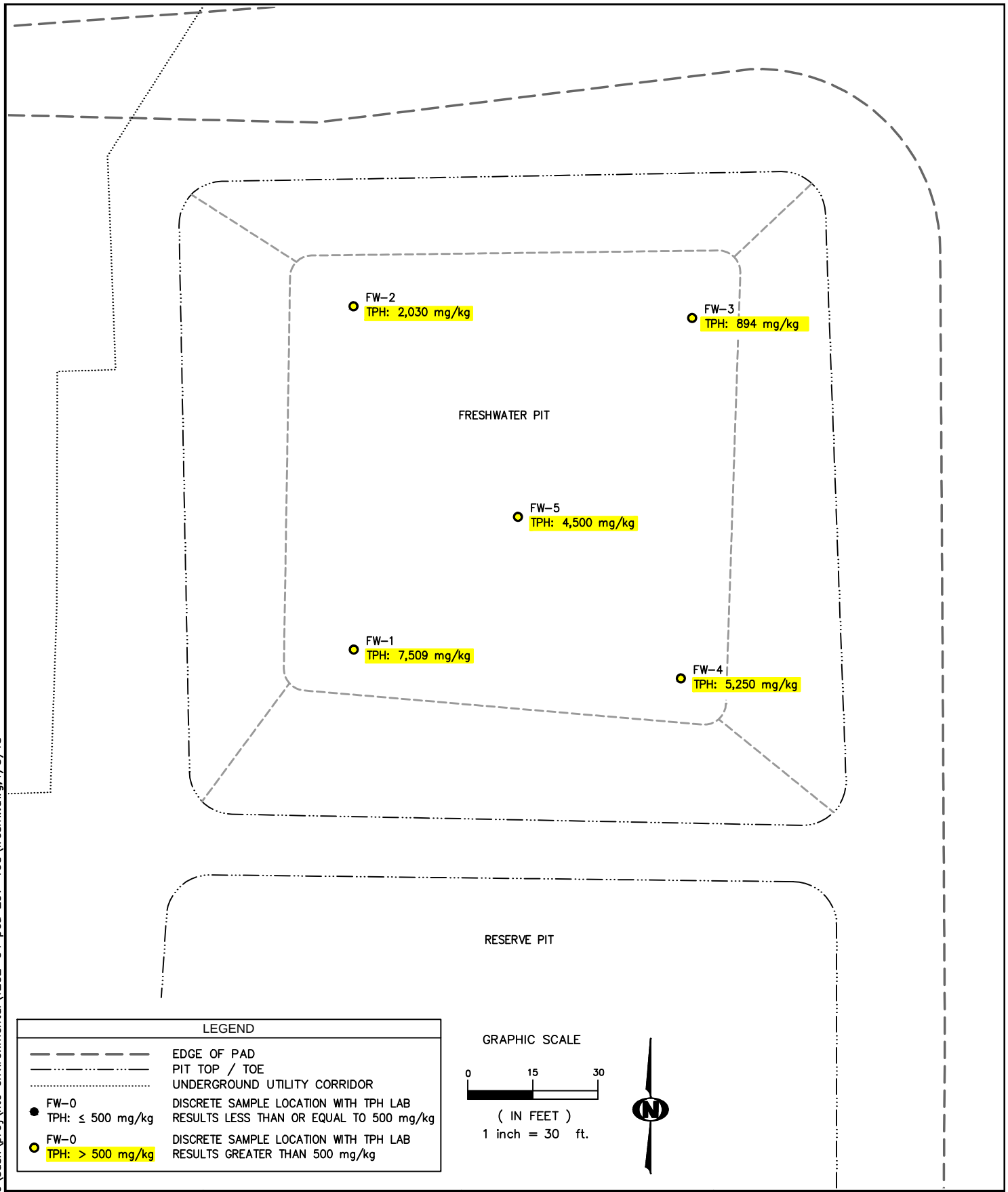
N

DESIGNED: –	CHECKED: DK	FIGURE 2A	NOTES:
DATE: 4/5/13	DRAWN: DRF		
FILE NAME: reserve cl		SHEET NO. 3 of 5	DATE / REVISIONS
PROJECT NO. 1202-04		SCALE: 1"=30'	

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

FIGURE 2A
PICEANCE CREEK
PCU 297-10A
RESERVE PIT SELECT
SAMPLE RESULTS
PREPARED FOR XTO ENERGY

\\hyper-v03\lkwd-co\sdsk\proj\xto environmental\1202-04 pcu 297-10a\reserve cl.dwg,4/5/13

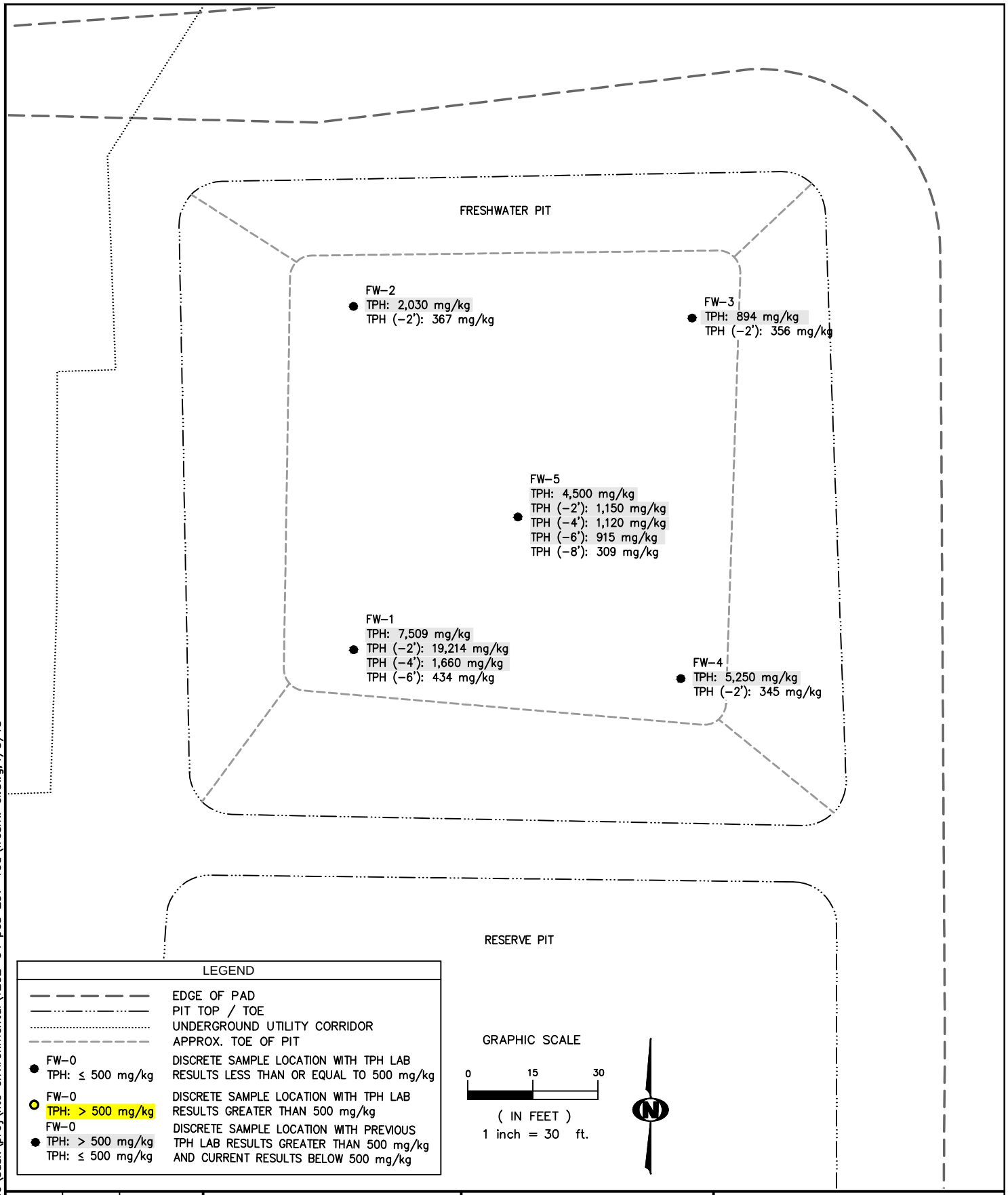


\\hyper-v03\lkwd-co\sdsk\proj\xto environmental\1202-04 pcu 297-10a\freshw.dwg,4/5/13

DESIGNED: –	CHECKED: DK	FIGURE 3	NOTES:
DATE: 4/5/13	DRAWN: DRF		
FILE NAME: freshw		SHEET NO. 4 of 5	DATE / REVISIONS
PROJECT NO. 1202-04		SCALE: 1"=30'	

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

FIGURE 3
PICEANCE CREEK
PCU 297-10A
FRESHWATER PIT SUBLINER
CONFIRMATION DATA
PREPARED FOR XTO ENERGY



DESIGNED: –	CHECKED: DK	FIGURE 3A	NOTES:
DATE: 4/5/13	DRAWN: DRF		
FILE NAME: freshw cl		SHEET NO. 5 of 5	DATE / REVISIONS
PROJECT NO. 1202-04		SCALE: 1"=30'	

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

FIGURE 3A
PICEANCE CREEK
PCU 297-10A
FRESHWATER PIT SELECT SAMPLE RESULTS
PREPARED FOR XTO ENERGY

\\hyper-v03\lkwd-co\sdsk\proj\xto environmental\1202-04 pcu 297-10a\freshw cl.dwg,4/5/13

PCU 297-10A Pit Closure

Photo #1-South side of pad looking north

Photo #1-North side of pad looking south

XTO ENERGY

PCU 297-10A
SESE, Sec 10, TWP 2S
Rng 97W, Nad 83, 6th PM
Lat: 39.884702
Long: -108.26242

Photos taken
6/27/2013