

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources
Department
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-144
Revised June 6, 2013

For temporary pits, below-grade tanks, and multi-well fluid management pits, submit to the appropriate NMOCD District Office.
For permanent pits submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOCD District Office.

Pit, Below-Grade Tank, or
Proposed Alternative Method Permit or Closure Plan Application

Type of action: Below grade tank registration
 Permit of a pit or proposed alternative method
 Closure of a pit, below-grade tank, or proposed alternative method
 Modification to an existing permit/or registration
 Closure plan only submitted for an existing permitted or non-permitted pit, below-grade tank, or proposed alternative method

16284

Instructions: Please submit one application (Form C-144) per individual pit, below-grade tank or alternative request

Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances.

1.
Operator: WPX Energy Production, LLC OGRID #: 120782
Address: PO Box 640/721 S Main Aztec, NM 87410
Facility or well name: Logos 601H
API Number: 30-043-21182 OCD Permit Number: _____
U/L or Qtr/Qtr D Section 05 Township 22N Range 5W County: Sandoval
Center of Proposed Design: Latitude N36.172222 Longitude W107.391111 NAD: 1927 1983
Surface Owner: Federal State Private Tribal Trust or Indian Allotment

NMOCD

MAR 22 2018

DISTRICT III

2.
 Pit: Subsection F, G or J of 19.15.17.11 NMAC
Temporary: Drilling Completion Workover
 Permanent Emergency Cavitation P&A Multi-Well Fluid Management Low Chloride Drilling Fluid yes no
 Lined Unlined Liner type: Thickness _____ mil LLDPE HDPE PVC Other _____
 String-Reinforced
Liner Seams: Welded Factory Other _____ Volume: _____ bbl Dimensions: x W x D

3.
 Below-grade tank: Subsection I of 19.15.17.11 NMAC
Volume: 95 bbl Type of fluid: Produced Water
Tank Construction material: Metal
 Secondary containment with leak detection Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off
 Visible sidewalls and liner Visible sidewalls only Other _____
Liner type: Thickness 45 mil HDPE PVC Other LLDPE

4.
 Alternative Method:
Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

5.
Fencing: Subsection D of 19.15.17.11 NMAC (Applies to permanent pits, temporary pits, and below-grade tanks)
 Chain link, six feet in height, two strands of barbed wire at top (Required if located within 1000 feet of a permanent residence, school, hospital, institution or church)
 Four foot height, four strands of barbed wire evenly spaced between one and four feet
 Alternate. Please specify 4' hog wire with one strand of barbed wire on top

6.

Netting: Subsection E of 19.15.17.11 NMAC (*Applies to permanent pits and permanent open top tanks*)

- Screen Netting Other _____
- Monthly inspections (If netting or screening is not physically feasible)

7.

Signs: Subsection C of 19.15.17.11 NMAC

- 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers
- Signed in compliance with 19.15.16.8 NMAC

8.

Variations and Exceptions:

Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.

Please check a box if one or more of the following is requested, if not leave blank:

- Variance(s): Requests must be submitted to the appropriate division district for consideration of approval.
- Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

9.

Siting Criteria (regarding permitting): 19.15.17.10 NMAC

Instructions: *The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of acceptable source material are provided below. Siting criteria does not apply to drying pads or above-grade tanks.*

General siting

Ground water is less than 25 feet below the bottom of a low chloride temporary pit or below-grade tank.

- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells

- Yes No
- NA

Ground water is less than 50 feet below the bottom of a Temporary pit, permanent pit, or Multi-Well Fluid Management pit.

NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells

- Yes No
- NA

Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. **(Does not apply to below grade tanks)**

- Written confirmation or verification from the municipality; Written approval obtained from the municipality

- Yes No

Within the area overlying a subsurface mine. **(Does not apply to below grade tanks)**

- Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division

- Yes No

Within an unstable area. **(Does not apply to below grade tanks)**

- Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map

- Yes No

Within a 100-year floodplain. **(Does not apply to below grade tanks)**

- FEMA map

- Yes No

Below Grade Tanks

Within 100 feet of a continuously flowing watercourse, significant watercourse, lake bed, sinkhole, wetland or playa lake (measured from the ordinary high-water mark).

- Topographic map; Visual inspection (certification) of the proposed site

- Yes No

Within 200 horizontal feet of a spring or a fresh water well used for public or livestock consumption;

- NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site

- Yes No

Temporary Pit using Low Chloride Drilling Fluid (maximum chloride content 15,000 mg/liter)

Within 100 feet of a continuously flowing watercourse, or any other significant watercourse or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). (Applies to low chloride temporary pits.)

- Topographic map; Visual inspection (certification) of the proposed site

- Yes No

Within 300 feet from a occupied permanent residence, school, hospital, institution, or church in existence at the time of initial application.

- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image

- Yes No

Within 200 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 300feet of any other fresh water well or spring, in existence at the time of the initial application.

NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site

- Yes No

Within 100 feet of a wetland.

- US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site

Yes No

Temporary Pit Non-low chloride drilling fluid

Within 300 feet of a continuously flowing watercourse, or any other significant watercourse, or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).

- Topographic map; Visual inspection (certification) of the proposed site

Yes No

Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.

- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image

Yes No

Within 500 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 1000 feet of any other fresh water well or spring, in the existence at the time of the initial application;

- NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site

Yes No

Within 300 feet of a wetland.

- US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site

Yes No

Permanent Pit or Multi-Well Fluid Management Pit

Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).

- Topographic map; Visual inspection (certification) of the proposed site

Yes No

Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.

- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image

Yes No

Within 500 horizontal feet of a spring or a fresh water well used for domestic or stock watering purposes, in existence at the time of initial application.

- NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site

Yes No

Within 500 feet of a wetland.

- US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site

Yes No

10.

Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC

Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

- Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC
- Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 NMAC
- Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

- Previously Approved Design (attach copy of design) API Number: _____ or Permit Number: _____

11.

Multi-Well Fluid Management Pit Checklist: Subsection B of 19.15.17.9 NMAC

Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

- Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- A List of wells with approved application for permit to drill associated with the pit.
- Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC
- Hydrogeologic Data - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC
- Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC

- Previously Approved Design (attach copy of design) API Number: _____ or Permit Number: _____

12. **Permanent Pits Permit Application Checklist:** Subsection B of 19.15.17.9 NMAC

Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

- Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC
- Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- Climatological Factors Assessment
- Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC
- Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC
- Quality Control/Quality Assurance Construction and Installation Plan
- Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- Nuisance or Hazardous Odors, including H₂S, Prevention Plan
- Emergency Response Plan
- Oil Field Waste Stream Characterization
- Monitoring and Inspection Plan
- Erosion Control Plan
- Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

13. **Proposed Closure:** 19.15.17.13 NMAC

Instructions: Please complete the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan.

- Type: Drilling Completion Workover Emergency Cavitation P&A Permanent Pit Below-grade Tank Multi-well Fluid Management Pit
- Alternative
- Proposed Closure Method: Waste Excavation and Removal
- Waste Removal (Closed-loop systems only)
 - On-site Closure Method (Only for temporary pits and closed-loop systems)
 - In-place Burial On-site Trench Burial
 - Alternative Closure Method

14. **Waste Excavation and Removal Closure Plan Checklist:** (19.15.17.13 NMAC) **Instructions:** Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.

- Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC
- Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.13 NMAC
- Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings)
- Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
- Re-vegetation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
- Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC

15. **Siting Criteria (regarding on-site closure methods only):** 19.15.17.10 NMAC

Instructions: Each siting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria require justifications and/or demonstrations of equivalency. Please refer to 19.15.17.10 NMAC for guidance.

- | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| Ground water is less than 25 feet below the bottom of the buried waste.
- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells | <input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> NA |
| Ground water is between 25-50 feet below the bottom of the buried waste
- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells | <input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> NA |
| Ground water is more than 100 feet below the bottom of the buried waste.
- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells | <input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> NA |
| Within 100 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).
- Topographic map; Visual inspection (certification) of the proposed site | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.
- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Within 300 horizontal feet of a private, domestic fresh water well or spring used for domestic or stock watering purposes, in existence at the time of initial application.
- NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Written confirmation or verification from the municipality; Written approval obtained from the municipality | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Within 300 feet of a wetland.
US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site | <input type="checkbox"/> Yes <input type="checkbox"/> No |

Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended.

- Written confirmation or verification from the municipality; Written approval obtained from the municipality

Yes No

Within the area overlying a subsurface mine.

- Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division

Yes No

Within an unstable area.

- Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map

Yes No

Within a 100-year floodplain.

- FEMA map

Yes No

16.

On-Site Closure Plan Checklist: (19.15.17.13 NMAC) *Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.*

- Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection E of 19.15.17.13 NMAC
- Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of Subsection K of 19.15.17.11 NMAC
- Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19.15.17.11 NMAC
- Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC
- Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of 19.15.17.13 NMAC
- Waste Material Sampling Plan - based upon the appropriate requirements of 19.15.17.13 NMAC
- Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards cannot be achieved)
- Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
- Re-vegetation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
- Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC

17.

Operator Application Certification:

I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief.

Name (Print): _____ Title: _____

Signature: _____ Date: _____

e-mail address: _____ Telephone: _____

18.

OCD Approval: Permit Application (including closure plan) Closure Plan (only) OCD Conditions (see attachment)

OCD Representative Signature: [Signature] Approval Date: 3/26/2018

Title: Environmental Specialist OCD Permit Number: _____

19.

Closure Report (required within 60 days of closure completion): 19.15.17.13 NMAC

Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting the closure report. The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not complete this section of the form until an approved closure plan has been obtained and the closure activities have been completed.

Closure Completion Date February 16, 2015

20.

Closure Method:

- Waste Excavation and Removal On-Site Closure Method Alternative Closure Method Waste Removal (Closed-loop systems only)
- If different from approved plan, please explain.

21.

Closure Report Attachment Checklist: *Instructions: Each of the following items must be attached to the closure report. Please indicate, by a check mark in the box, that the documents are attached.*

- Proof of Closure Notice (surface owner and division)
- Proof of Deed Notice (required for on-site closure for private land only)
- Plot Plan (for on-site closures and temporary pits)
- Confirmation Sampling Analytical Results (if applicable)
- Waste Material Sampling Analytical Results (required for on-site closure)
- Disposal Facility Name and Permit Number
- Soil Backfilling and Cover Installation
- Re-vegetation Application Rates and Seeding Technique
- Site Reclamation (Photo Documentation)

On-site Closure Location: Latitude N36.172222 Longitude W107.391111 NAD: 1927 1983

22.

Operator Closure Certification:

I hereby certify that the information and attachments submitted with this closure report is true, accurate and complete to the best of my knowledge and belief. I also certify that the closure complies with all applicable closure requirements and conditions specified in the approved closure plan.

Name (Print): Deborah Watson Title: Environmental Specialist

Signature:  Date: March 19, 2018

e-mail address: deborah.watson@wpenergy.com Telephone: 505.333.1880

WPX Energy Production Co., LLC
San Juan Basin: New Mexico Assets
 Below-Grade Tank Removal Closure Report
 Logos #601H (30-043-21182)
 Unit Letter D, Section 08, T22N, R05W
 Sandoval County, NM

The closure of the Logos #601H BGT was completed February 2015. Due to turn over within the WPX EH&S Department, limited closure records/details are available. The facility was upgraded shortly after BGT closure and production equipment is in operation within lined secondary containment in the former BGT location.

Closure Notice:

1. The landowner of record will be notified of the intent to closure the BGT by certified mail and a copy of this notification will be included in the closure report. In the case of an emergency, the landowner of record will be notified as soon as practical.

No record available.

2. Notice of Closure will be given to the Aztec District office between 72 hours and one week of the scheduled closure via email or phone.

No record available.

Closure Method:

3. All liquids and sludge will be removed from the BGT within 60 days of cessation of operations. Fluids will be disposed of at a division approved facility.

All liquids from the BGT were vacuumed out for disposal at Basin Disposal (Permit Number NM-01-0005).

4. Within 6 months of cessation of operations, the operator will dispose, reuse/recycle, or reclaim in a division approved manner the BGT, and all unused equipment associated with the BGT.

The pit liner was disposed of at WCA Bondad facility as solid waste. The steel tank was removed from the location. All associated equipment no longer needed, was removed from the location.

5. The soils beneath the BGT will be tested as follows:
 - a) A five-point composite sample including any obvious staining or wet soils shall be taken under BGT and will be analyzed for constituents listed in Table I of 19.15.17.13 NMAC.

A sample was collected from beneath the BGT following BGT removal on February 16, 2015. The sample was submitted to Envirotech Analytical Laboratory, Farmington, NM, for analysis of benzene, BTEX, TPH, and chlorides. The laboratory analytical report is attached.

Table 1: Closure Criteria for BGTs

Components	Testing Methods	Closure Limits (mg/Kg)	Results (mg/kg)
Benzene	EPA SW-846 Method 8021B	10	<0.10
BTEX	EPA SW-846 Method 8021B	50	<0.10
GRO/DRO	EPA SW-846 Method 8015M	1,000	31
TPH	EPA SW-846 Method 418.1	2,500	76
Chlorides	EPA SW-846 Method 300.0	20,000	<9.88

6. Based on the results of the soil test, the operator will obtain NMOCD District approval prior to completing any necessary additional delineation for closure. If the soil tests are at or below the standards of closure, the operator will proceed with closure.

Sampling results were reported below the closure standards.

7. Upon completion of the BGT, the operator will reclaim the unused BGT location to a safe and stable condition that blends with the surrounding undisturbed area as provided in Paragraph 2 of subsection H of 19.15.17.13 as well as recontouring the area in accordance with paragraph 5 in subsection H of 19.15.17.13 NMAC. The soil cover will be constructed to prevent ponding of water and erosion of cover material.

The BGT location was backfilled with clean soil and compacted. The facility was upgraded shortly after BGT closure and production equipment is in operation within lined secondary containment in the former BGT location.

8. The reclamation of the BGT area will contain a uniform vegetative cover that reflects a total percent plant cover of at least 70 percent of pre-disturbance levels, excluding noxious weeds. The re-vegetation and reclamation

obligations imposed by other applicable federal or tribal agencies that manage the lands will supersede these provisions and govern the obligations.

The BGT location was backfilled with clean soil and compacted. The facility was upgraded shortly after BGT closure and production equipment is in operation within lined secondary containment in the former BGT location. The BGT location will be reclaimed when it is no longer needed for production operations.

9. For those portions of the former pit area required for production activities, reseeding will be done at well abandonment, and following the procedure noted above.

The BGT location was backfilled with clean soil and compacted. The facility was upgraded shortly after BGT closure and production equipment is in operation within lined secondary containment in the former BGT location. The BGT location will be reclaimed when it is no longer needed for production operations.

Closure Report:

All closure activities will include proper documentation and will be submitted to OCD within 60 days of the BGT closure on a Closure Report using Division Form C-144. **(Operator Closure Certification has been completed.)** The Report will include the following:

- Proof of Closure Notice-Not available,
- Confirmation Sampling Results,
- Disposal Facility Name and Permit Number,
- Site Map, and
- Photo Documentation of Reclamation

Attachments:

Figure 1. Topographic Map

Figure 2. Aerial Site Map

Laboratory Analytical Report (WO Number P502051)

Photograph Documentation

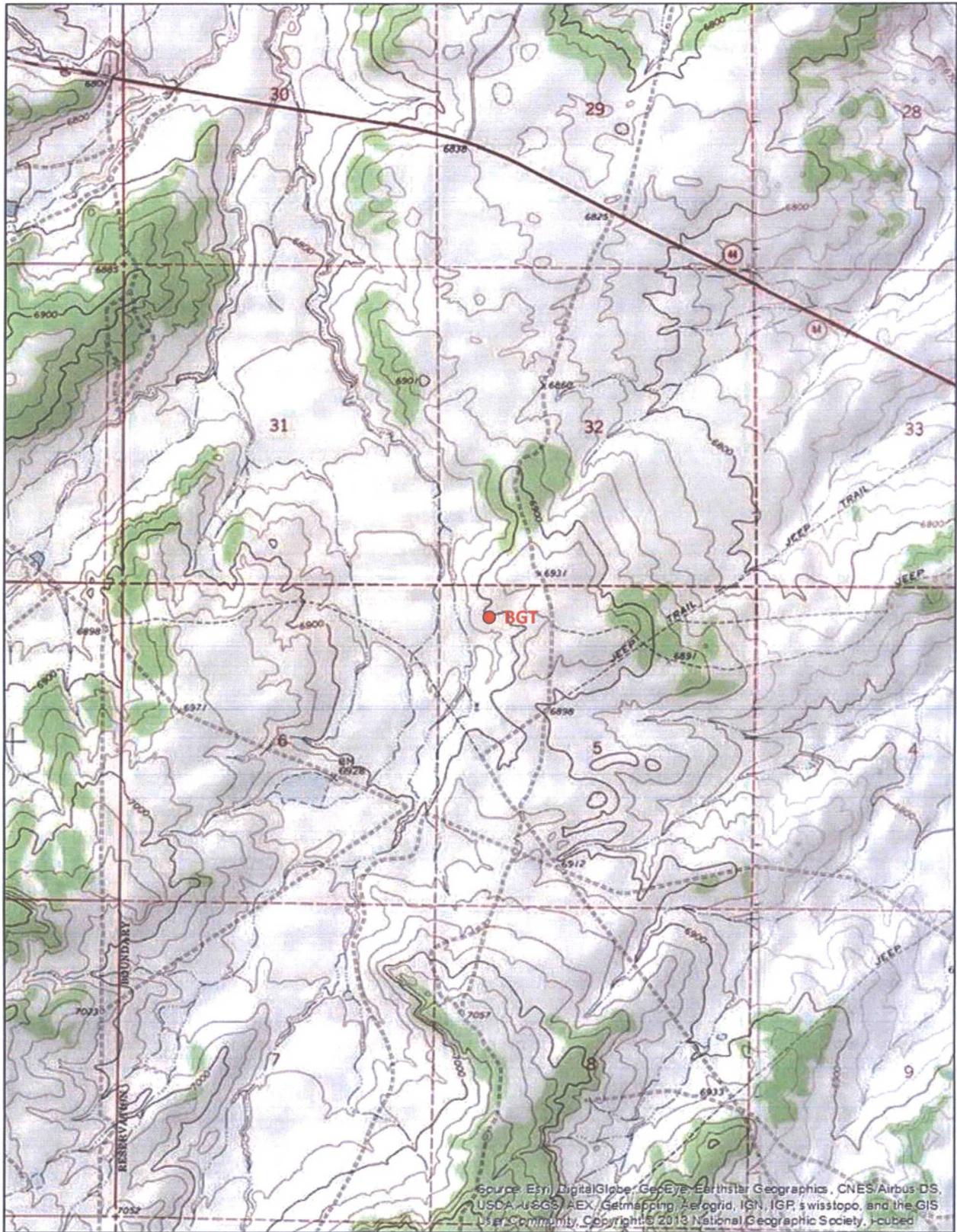


Figure 1. Topographic Map
Logos #601H Former BGT
Section 05, Township 22N, Range 05W
N36.17222, W107.39111
Sandoval County, NM
Scale 1:24,000



Figure 2. Aerial Site Map
Logos #601H Former BGT
Section 05, Township 22N, Range 05W
N36.17222, W107.39111
Sandoval County, NM



Analytical Report

Report Summary

Client: WPX Energy, Inc.

Chain Of Custody Number: 16904

Samples Received: 2/16/2015 4:25:00PM

Job Number: 04108-0136

Work Order: P502051

Project Name/Location: BGT Removal Logos
601H

Entire Report Reviewed By:

A handwritten signature in black ink, appearing to read 'Tim Cain', is written over a horizontal line.

Date: 2/19/15

Tim Cain, Laboratory Manager

The results in this report apply to the samples submitted to Envirotech's Analytical Laboratory and were analyzed in accordance with the chain of custody document supplied by you, the client, and as such are for your exclusive use only. The results in this report are based on the sample as received unless otherwise noted. Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc. If you have any questions regarding this analytical report, please don't hesitate to contact Envirotech's Laboratory Staff.

5796 US Highway 64, Farmington, NM 87401

Ph (505) 632-0615 Fx (505) 632-1865

Three Springs - 65 Mercado Street, Suite 115, Durango, CO 81301

Ph (970) 259-0615 Fr (800) 362-1879

envirotech-inc.com
laboratory@envirotech-inc.com



WPX Energy, Inc. PO Box 21218 Tulsa OK, 74121-1358	Project Name: BGT Removal Logos 601H Project Number: 04108-0136 Project Manager: Vanessa Fields	Reported: 19-Feb-15 09:26
----------------------------------------------------------	-------------------------------------------------------------------------------------------------------	------------------------------

Analytical Report for Samples

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
36.172222-107.391111	P502051-01A	Soil	02/10/15	02/16/15	Glass Jar, 4 oz.

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.

5796 US Highway 64, Farmington, NM 87401

Ph (505) 632-0615 Fx (505) 632-1865

Three Springs - 65 Mercado Street, Suite 115, Durango, CO 81301

Ph (970) 259-0615 Fr (800) 362-1879

envirotech-inc.com
laboratory@envirotech-inc.com



WPX Energy, Inc. PO Box 21218 Tulsa OK, 74121-1358	Project Name: BGT Removal Logos 601H Project Number: 04108-0136 Project Manager: Vanessa Fields	Reported: 19-Feb-15 09:26
----------------------------------------------------------	-------------------------------------------------------------------------------------------------------	------------------------------

36.172222-107.391111
P502051-01 (Solid)

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Volatile Organics by EPA 8021									
Benzene	ND	0.10	mg/kg	1	1508009	02/17/15	02/17/15	EPA 8021B	
Toluene	ND	0.10	mg/kg	1	1508009	02/17/15	02/17/15	EPA 8021B	
Ethylbenzene	ND	0.10	mg/kg	1	1508009	02/17/15	02/17/15	EPA 8021B	
p,m-Xylene	ND	0.20	mg/kg	1	1508009	02/17/15	02/17/15	EPA 8021B	
o-Xylene	ND	0.10	mg/kg	1	1508009	02/17/15	02/17/15	EPA 8021B	
Total Xylenes	ND	0.10	mg/kg	1	1508009	02/17/15	02/17/15	EPA 8021B	
Total BTEX	ND	0.10	mg/kg	1	1508009	02/17/15	02/17/15	EPA 8021B	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		99.7 %		50-150	1508009	02/17/15	02/17/15	EPA 8021B	
Nonhalogenated Organics by 8015									
Gasoline Range Organics (C6-C10)	ND	9.97	mg/kg	1	1508009	02/17/15	02/17/15	EPA 8015D	
Diesel Range Organics (C10-C28)	31.0	25.0	mg/kg	1	1508012	02/17/15	02/17/15	EPA 8015D	
<i>Surrogate: o-Terphenyl</i>		120 %		50-200	1508012	02/17/15	02/17/15	EPA 8015D	
<i>Surrogate: 4-Bromochlorobenzene-FID</i>		99.2 %		50-150	1508009	02/17/15	02/17/15	EPA 8015D	
Total Petroleum Hydrocarbons by 418.1									
Total Petroleum Hydrocarbons	76.0	35.0	mg/kg	1	1508017	02/17/15	02/17/15	EPA 418.1	
Cation/Anion Analysis									
Chloride	ND	9.88	mg/kg	1	1508015	02/17/15	02/17/15	EPA 300.0	

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WPX Energy, Inc. PO Box 21218 Tulsa OK, 74121-1358	Project Name: BGT Removal Logos 601H Project Number: 04108-0136 Project Manager: Vanessa Fields	Reported: 19-Feb-15 09:26
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Volatile Organics by EPA 8021 - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1508009 - Purge and Trap EPA 5030A

Blank (1508009-BLK1)		Prepared: 16-Feb-15 Analyzed: 18-Feb-15								
Benzene	ND	0.10	mg/kg							
Toluene	ND	0.10	"							
Ethylbenzene	ND	0.10	"							
p,m-Xylene	ND	0.20	"							
o-Xylene	ND	0.10	"							
Total Xylenes	ND	0.10	"							
Total BTEX	ND	0.10	"							
Surrogate: 4-Bromochlorobenzene-PID	0.326		"	0.395		82.6	50-150			

LCS (1508009-BS1)		Prepared: 16-Feb-15 Analyzed: 18-Feb-15								
Benzene	17.5	0.10	mg/kg	19.8		88.4	75-125			
Toluene	17.2	0.10	"	19.8		87.2	70-125			
Ethylbenzene	17.2	0.10	"	19.8		87.1	75-125			
p,m-Xylene	34.1	0.20	"	39.5		86.2	80-125			
o-Xylene	16.7	0.10	"	19.8		84.4	75-125			
Surrogate: 4-Bromochlorobenzene-PID	0.341		"	0.395		86.3	50-150			

Matrix Spike (1508009-MS1)		Source: P502047-01		Prepared: 16-Feb-15 Analyzed: 18-Feb-15						
Benzene	18.0	0.10	mg/kg	19.7	ND	91.5	75-125			
Toluene	26.6	0.10	"	19.7	0.32	133	70-125			SPK1
Ethylbenzene	22.3	0.10	"	19.7	0.99	108	75-125			
p,m-Xylene	80.2	0.20	"	39.4	19.8	153	80-125			SPK1
o-Xylene	27.9	0.10	"	19.7	5.12	116	75-125			
Surrogate: 4-Bromochlorobenzene-PID	0.382		"	0.394		96.9	50-150			

Matrix Spike Dup (1508009-MSD1)		Source: P502047-01		Prepared: 16-Feb-15 Analyzed: 18-Feb-15						
Benzene	17.1	0.10	mg/kg	19.7	ND	86.8	75-125	5.33	15	
Toluene	24.5	0.10	"	19.7	0.32	123	70-125	8.11	15	
Ethylbenzene	22.8	0.10	"	19.7	0.99	111	75-125	2.35	15	
p,m-Xylene	52.1	0.20	"	39.3	19.8	82.0	80-125	42.5	15	D1
o-Xylene	20.2	0.10	"	19.7	5.12	76.8	75-125	31.9	15	D1
Surrogate: 4-Bromochlorobenzene-PID	0.261		"	0.393		66.3	50-150			

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Nonhalogenated Organics by 8015 - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1508009 - Purge and Trap EPA 5030A										
Blank (1508009-BLK1)				Prepared: 16-Feb-15 Analyzed: 18-Feb-15						
Gasoline Range Organics (C6-C10)	ND	9.87	mg/kg							
Surrogate: <i>4-Bromochlorobenzene-FID</i>	0.328		"	0.395		83.0	50-150			
LCS (1508009-BS1)				Prepared: 16-Feb-15 Analyzed: 18-Feb-15						
Gasoline Range Organics (C6-C10)	272	9.88	mg/kg	288		94.1	80-120			
Surrogate: <i>4-Bromochlorobenzene-FID</i>	0.332		"	0.395		84.0	50-150			
Matrix Spike (1508009-MS1)				Source: P502047-01		Prepared: 16-Feb-15 Analyzed: 18-Feb-15				
Gasoline Range Organics (C6-C10)	1100	9.84	mg/kg	287	361	256	75-125			SPK1
Surrogate: <i>4-Bromochlorobenzene-FID</i>	0.435		"	0.394		111	50-150			
Matrix Spike Dup (1508009-MSD1)				Source: P502047-01		Prepared: 16-Feb-15 Analyzed: 18-Feb-15				
Gasoline Range Organics (C6-C10)	1100	9.83	mg/kg	287	361	259	75-125	0.583	15	SPK1
Surrogate: <i>4-Bromochlorobenzene-FID</i>	0.535		"	0.393		136	50-150			

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WPX Energy, Inc. PO Box 21218 Tulsa OK, 74121-1358	Project Name: BGT Removal Logos 601H Project Number: 04108-0136 Project Manager: Vanessa Fields	Reported: 19-Feb-15 09:26
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Nonhalogenated Organics by 8015 - Quality Control
Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1508012 - DRO Extraction EPA 3550M										
Blank (1508012-BLK1) Prepared: 16-Feb-15 Analyzed: 17-Feb-15										
Diesel Range Organics (C10-C28)	ND	24.9	mg/kg							
Surrogate: <i>o</i> -Terphenyl	43.0		"	39.8		108	50-200			
LCS (1508012-BS1) Prepared: 16-Feb-15 Analyzed: 17-Feb-15										
Diesel Range Organics (C10-C28)	538	24.7	mg/kg	494		109	38-132			
Surrogate: <i>o</i> -Terphenyl	49.9		"	39.5		126	50-200			
Matrix Spike (1508012-MS1) Source: P502025-01 Prepared: 16-Feb-15 Analyzed: 17-Feb-15										
Diesel Range Organics (C10-C28)	596	30.0	mg/kg	500	ND	119	38-132			
Surrogate: <i>o</i> -Terphenyl	58.0		"	40.0		145	50-200			
Matrix Spike Dup (1508012-MSD1) Source: P502025-01 Prepared: 16-Feb-15 Analyzed: 17-Feb-15										
Diesel Range Organics (C10-C28)	633	30.0	mg/kg	500	ND	127	38-132	5.93	20	
Surrogate: <i>o</i> -Terphenyl	58.0		"	40.0		145	50-200			

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Total Petroleum Hydrocarbons by 418.1 - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1508017 - 418 Freon Extraction

Blank (1508017-BLK1)		Prepared & Analyzed: 17-Feb-15								
Total Petroleum Hydrocarbons	ND	35.0	mg/kg							
Duplicate (1508017-DUP1)		Source: P502051-01 Prepared & Analyzed: 17-Feb-15								
Total Petroleum Hydrocarbons	64.0	35.0	mg/kg		76.0			17.2	30	
Matrix Spike (1508017-MS1)		Source: P502051-01 Prepared & Analyzed: 17-Feb-15								
Total Petroleum Hydrocarbons	2050	34.9	mg/kg	2020	76.0	97.8	80-120			

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Cation/Anion Analysis - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1508015 - Anion Extraction EPA 300.0

Blank (1508015-BLK1)				Prepared & Analyzed: 17-Feb-15						
Chloride	ND	9.83	mg/kg							
LCS (1508015-BS1)				Prepared & Analyzed: 17-Feb-15						
Chloride	469	9.91	mg/kg	495		94.6	90-110			
Matrix Spike (1508015-MS1)				Source: P502051-01		Prepared & Analyzed: 17-Feb-15				
Chloride	474	9.90	mg/kg	495	ND	95.9	80-120			
Matrix Spike Dup (1508015-MSD1)				Source: P502051-01		Prepared & Analyzed: 17-Feb-15				
Chloride	474	9.83	mg/kg	492	ND	96.4	80-120	0.0568	20	

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Notes and Definitions

- SPK1 The spike recovery for this QC sample is outside of control limits.
- D1 Duplicates or Matrix Spike Duplicates Relative Percent Difference exceeds control limits.
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference

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Push

CHAIN OF CUSTODY RECORD

16904

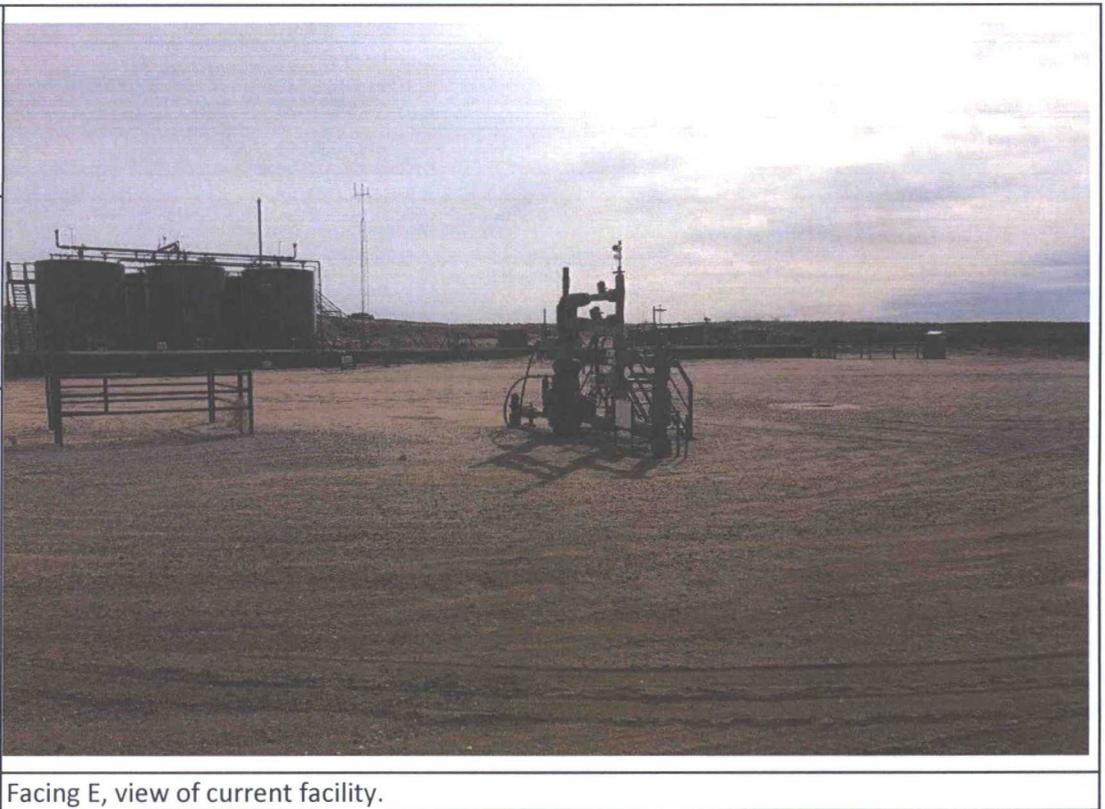
Client: WPK Energy		Project Name / Location: BC-T Removal Logos 60H			ANALYSIS / PARAMETERS														
Email results to: Vanessa.Fields@wpxenergy.com		Sampler Name: Robert Bradshaw			TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion	RCI	TCLP with H/P	CO Table 910-1	TPH (418.1)	CHLORIDE	Sample Cool	Sample Intact			
Client Phone No.: 505-419-6219		Client No.: 04108-0136																	
Sample No./ Identification	Sample Date	Sample Time	Lab No.	No./Volume of Containers	Preservative			TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion	RCI	TCLP with H/P	CO Table 910-1	TPH (418.1)	CHLORIDE	Sample Cool	Sample Intact
					HNO ₃	HCl													
36. P72222-107.391111	2/10/15	12:00	P502051-01	1.402				XX								XX		YY	YY
Relinquished by: (Signature) 				Date	Time	Received by: (Signature) 				Date	Time								
Relinquished by: (Signature)				2/10/15	16:23	Received by: (Signature)				2/10/15	16:23								
Sample Matrix Soil <input checked="" type="checkbox"/> Solid <input type="checkbox"/> Sludge <input type="checkbox"/> Aqueous <input type="checkbox"/> Other <input type="checkbox"/>																			

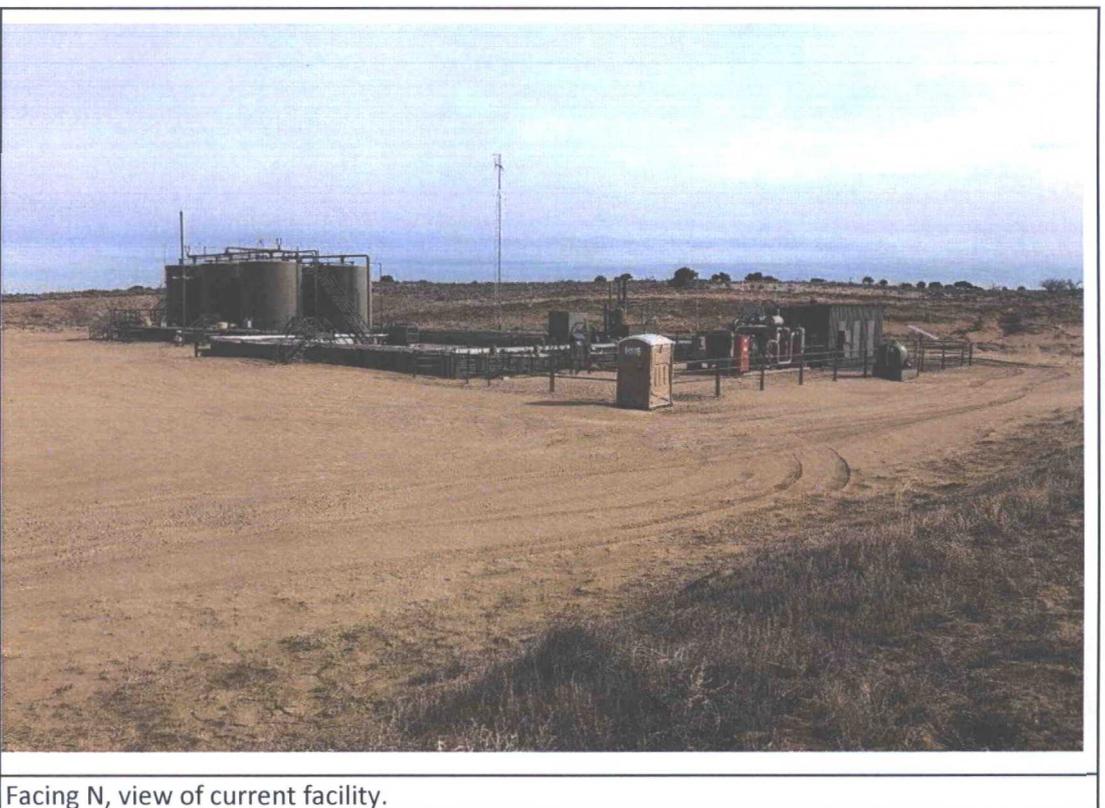
Sample(s) dropped off after hours to secure drop off area.



9.42

WPX Energy Production, LLC
Photograph Documentation
BGT Closure Report Logos #601H

<p>WPX Energy Production, LLC</p>	
<p>Logos #601H</p>	
<p>05-22N-05W Sandoval County, New Mexico</p>	
<p>Date: March 20, 2018</p>	
<p>Photograph #1</p>	
<p>Description</p>	<p>Facing E, view of current facility.</p>

<p>WPX Energy Production, LLC</p>	
<p>Logos #601H</p>	
<p>05-22N-05W Sandoval County, New Mexico</p>	
<p>Date: March 20, 2018</p>	
<p>Photograph #2</p>	
<p>Description</p>	<p>Facing N, view of current facility.</p>