

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

16084  
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

**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: N Escavada Unit #329H  
API Number: 30-043-21287 OCD Permit Number: \_\_\_\_\_  
U/L or Qtr/Qtr I Section 10 Township 22N Range 7W County: Sandoval  
Center of Proposed Design: Latitude N36.1516833 Longitude W107.5582166 NAD: ☐ 1927 ☒ 1983  
Surface Owner: ☐ Federal ☐ State ☐ Private ☒ Tribal Trust or Indian Allotment

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: 120 bbl Type of fluid: Produced Water  
Tank Construction material: Double Wall, Double Bottom Steel  
☒ 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 \_\_\_\_\_ mil ☐ HDPE ☐ PVC ☐ Other \_\_\_\_\_

OCT 11 2012  
OIL CONS. DIV DIST 3

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 As per BLM specifications

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.

**Variances 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
- See Variance Request

☐ 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

☐ Yes ☐ No

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

- FEMA map

**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

☐ 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

**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

☐ 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



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 H<sub>2</sub>S, 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.<br>- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells   | <input type="checkbox"/> Yes <input type="checkbox"/> No<br><input type="checkbox"/> NA |
| Ground water is between 25-50 feet below the bottom of the buried waste<br>- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells   | <input type="checkbox"/> Yes <input type="checkbox"/> No<br><input type="checkbox"/> NA |
| Ground water is more than 100 feet below the bottom of the buried waste.<br>- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells  | <input type="checkbox"/> Yes <input type="checkbox"/> No<br><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).<br>- 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.<br>- 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.<br>- 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.<br>US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site   | <input type="checkbox"/> Yes <input type="checkbox"/> No                                |



<p>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.</p> <p>- Written confirmation or verification from the municipality; Written approval obtained from the municipality</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>Within the area overlying a subsurface mine.</p> <p>- Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>Within an unstable area.</p> <p>- Engineering measures incorporated into the design; NM Bureau of Geology &amp; Mineral Resources; USGS; NM Geological Society; Topographic map</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>Within a 100-year floodplain.</p> <p>- FEMA map</p>	<input type="checkbox"/> Yes <input type="checkbox"/> 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.*

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

17. **Operator Application Certification:**

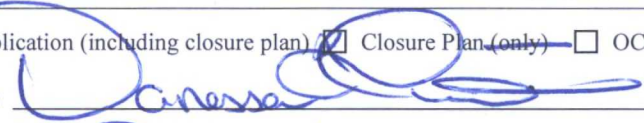
I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief.

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:  Approval Date: 10/12/2017

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: August 31, 2017

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.*

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

On-site Closure Location: Latitude N36.1516833 Longitude W107.5582166 NAD: ☐ 1927 ☐ 1983

**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: October 10, 2017

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**  
**N Escavada Unit #329H Temporary BGT (API #30-043-21287)**  
**Unit Letter I, Section 10, T22N, R07W**  
**Sandoval County, NM**

In accordance with Rule 19.15.17.13 NMAC, the following plan describes the general closure requirements of below-grade tanks (BGT) on WPX Energy Production Co, LLC (WPX) locations in the San Juan Basin of New Mexico. This is WPX's standard closure procedure for all BGTs regulated under Rule 19.15.17 NMAC and operated by WPX. For those closures which do not conform to this standard closure plan, a separate well/pit specific closure plan will be developed and utilized.

**Mr. Cory Smith, NMOCD, approved the WPX BGT closure plan on August 12, 2016 and December 20, 2016 amended form. (See Enclosed Form C-144 Amended)**

**Closure Notice:**

1. Prior to initiating any BGT Closure except in the case of an emergency, WPX will notify the surface owner of the intent to close the BGT by certified mail no later than 72 hours or 1 week before closure and a copy of this notification will be included in the closure report. In the case of an emergency, the surface owner of record will be notified as soon as practical.

Approved Variance: If the surface owner is of public entity (i.e.: BLM) WPX Energy Production, LLC will notify by email the intent to close the BGT in place of a certified mail letter. WPX Energy Production, LLC will request a read receipt of the email which will be equal and/ or equivalent notification as certified mail.

**WPX notified BLM, prior to BGT closure. The notification email is attached.**

**WPX notified BIA-FIMO, prior to BGT closure. The notification email is attached.**

**No representatives from BLM or BIA-FIMO were in attendance during the BGT closure sampling on August 31, 2017.**

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. The notification of closure will include the following:
  - a. Operators Name (WPX)
  - b. Well Name and API Number
  - c. Location (USTR)

**WPX sent notification to the District III Office via email on August 31, 2017. The notification is attached. The District III Office was advised of time and date of closure. No representatives from NMOCD were in attendance during BGT closure sampling on August 31, 2017.**

**Closure Method:**

3. All liquids will be removed from the BGT following cessation of operation. Produced water will be disposed at an NMOCD approved facility depending on the proximity of the BGT site. Facilities may include: Rosa Unit SWD #1 (Order: SWD-916, API: 30-039-27055), Rosa Unit SWD #2 (Order: SWD-1236-0, API: 30-039-30812), Jillson Fed. SWD #001 (Order: R10168/R10168A, API: 30-039-25465), Middle Mesa SWD #001 (Order: SWD-350-0, API: 30-045-27004) and/or Basin Disposal (Permit: NM-01-0005). Solids and sludges will be shoveled and /or vacuumed out for disposal at Envirotech (Permit Number NM-01-0011) or Industrial Ecosystems Inc (Permit Number NM-01-0010B).

**No liquids were present in the BGT at time of closure. Fluids had been removed prior to closure activities and disposed at NMOCD approved facility.**

4. WPX will obtain prior approval from NMOCD to dispose, recycle, reuse, or reclaim the BGT and provide documentation of the disposition of the BGT in the closure report. Steel materials will be recycled or

reused as approved by the Division. Fiberglass tanks will be empty, cut up or shredded, and EPA cleaned for disposal as solid waste. Liners materials will be cleaned without soils or contaminated material for disposal as solid waste. Fiberglass tanks and liner materials will meet the conditions of 19.15.35 NMAC. Disposal will be at a licensed disposal facility, such as San Juan Regional Landfill operated by Waste Management under NMED Permit SWM-052426.

**The BGT was moved from the location and taken to a WPX storage yard. (Note: permanent facilities are still in place)**

5. Any equipment associated with the BGT that is no longer required for some other purpose, following the closure will be removed from the location.

**All associated equipment was removed from the location.**

6. Following removal of the tank and any liner material, WPX will test the soils beneath the BGT as follows:

- a. At a minimum, a five-point composite sample will be taken to include any obvious stained or wet soils or any other evidence of contamination.
- b.

**A five-point composite sample (SC-1) was collected from beneath the BGT following BGT removal on August 31, 2017. No obvious stained soils were observed below the BGT.**

- c. The laboratory sample shall be analyzed for the constituents listed in Table I of 19.15.17.13.

**The sample was submitted to Hall Environmental Analysis Laboratory, Albuquerque, NM, for analysis of benzene, BTEX, TPH, and chlorides. The analytical laboratory report is attached.**

**Table 1: Closure Criteria for BGTs**

Components	Testing Methods <sup>(1)</sup>	Closure Limits <sup>(2)</sup> (mg/kg)	Results (mg/kg)
Benzene	EPA SW-846 Method 8021B or 8260B	10	ND ( less than 0.023)
BTEX	EPA SW-846 Method 8021B or 8260B	50	ND (less than 0.207)
TPH (GRO+DRO)	EPA SW-846 Method 8015M	1,000	ND (less than 14.5)
TPH (GRO+DRO+MRO)	EPA SW-846 Method 8015M	2,500	ND (less than 64.5)
Total TPH	EPA SW-846 Method 418.1	2,500	ND (less than 20)
Chlorides	EPA 300.0	20,000	58

<sup>(1)</sup> Or other test methods approved by the division

<sup>(2)</sup> Numerical limits or natural background level, whichever is greater (19.15.17.13 NMAC)

ND-Not Detected at the Reporting Limit

7. If the Division and/or WPX determine there is a release, WPX will comply with WPX will comply with 19.15.17.13.C.3b.

**Sampling results indicate no release occurred from the BGT.**

8. Upon completion of the tank removal, the excavation will be backfilled with non-waste earthen material compacted and covered with a minimum of one foot of top soil or background thickness whichever is



greater and to existing grade. The surface will be re-contoured to match the native grade and prevent ponding.

**The BGT location was backfilled with clean soil and compacted to minimize dust and erosion on August 31, 2017. The BGT location will be reclaimed when it is no longer needed for production operations.**

9. For those portions of the former BGT area no longer required for production activities, WPX will seed the disturbed areas the first favorable growing season after the BGT is covered. Seeding will be accomplished via drilling on the contour whenever practical, or by other Division-approved methods. WPX will notify the Division when reclamation and re-vegetation is complete.

Reclamation of the BGT shall be considered complete when:

- a. Vegetative cover reflects a life form ratio of +/- 50% of pre-disturbance levels
- b. Total percent plant cover of at least 70% of pre-disturbance levels  
(Excluding noxious weeds)

OR

- c. Pursuant to 19.15.17.13.H.5d WPX will comply with obligations imposed by other applicable federal or tribal agencies in which their re-vegetation and reclamation requirements provide equal or better protection of fresh water, human health and the environment.

**The BGT location was backfilled with clean soil and compacted to minimize dust and erosion on August 31, 2017. The BGT location will be reclaimed when it is no longer needed for production operations.**

10. For those portions of the former BGT 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 to minimize dust and erosion on August 31, 2017. 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 (surface owner & NMOCD)
- Backfilling & Cover Installation
- Confirmation Sampling Analytical Results
- Disposal Facility Name(s) and Permit Number(s)
- Application Rate & Seeding techniques
- Photo Documentation of Reclamation

#### **Attachments:**

C-144 Closure Approval  
BLM Notification (email)  
BIA-FIMO Notification (email)  
NMOCD Notification (email)  
Figure 1. Topographic Location Map  
Figure 2. Aerial Site Map  
Laboratory Analytical Report  
Photograph log

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.

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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 (AMENDED GW DATA)  
☐ Closure plan only submitted for an existing permitted or non-permitted pit, below-grade tank, or proposed alternative method

**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: N Escavada Unit #329H  
API Number: 30-043-21287 OCD Permit Number: \_\_\_\_\_  
U/L or Qtr/Qtr 1 Section 10 Township 22N Range 7W County: Sandoval  
Center of Proposed Design: Latitude N36.1516833 Longitude W107.5582166 NAD: ☐ 1927 ☒ 1983  
Surface Owner: ☐ Federal ☐ State ☐ Private ☒ Tribal Trust or Indian Allotment

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: 120 bbl Type of fluid: Produced Water  
Tank Construction material: Double Wall, Double Bottom Steel  
☒ 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 \_\_\_\_\_ mil ☐ HDPE ☐ PVC ☐ Other \_\_\_\_\_

OIL CONS. DIV DIST. 3

NOV 18 2016

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 As per BLM specifications



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. **Variances 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
- See Variance Request

☐ 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

☐ Yes ☐ No

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

- FEMA map

**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

☐ 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

**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

☐ 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

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 H<sub>2</sub>S, 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	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within the area overlying a subsurface mine. - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within a 100-year floodplain. - FEMA map	<input type="checkbox"/> Yes <input type="checkbox"/> 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:**

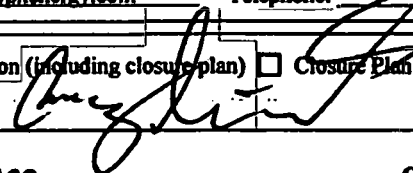
I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief.

Name (Print): Deborah Watson Title: Environmental Specialist

Signature:  Date: November 15, 2016

e-mail address: deborah.watson@wpenergy.com Telephone: 505-333-1880/ 505-386-9693

18. **OCD Approval:** ☒ Permit Application (including closure plan) ☐ Closure Plan (only) ☐ OCD Conditions (see attachment)

OCD Representative Signature:  Approval Date: 12/20/16

Title: Environmental Spec 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: \_\_\_\_\_

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 \_\_\_\_\_ Longitude \_\_\_\_\_ NAD: ☐ 1927 ☐ 1983

21

**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): \_\_\_\_\_ Title: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

e-mail address: \_\_\_\_\_ Telephone: \_\_\_\_\_



**Hydrogeological Report  
N Escavada Unit #329H  
N36.1516833, W107.5582166  
Regional Hydrological Context**

**Referenced Well Location:**

The referenced well and BGT are located on Navajo Indian Allotted lands located in Sandoval County, New Mexico. This site is positioned in the northeastern portion of the San Juan Basin, an asymmetrical syncline that extends from northwestern New Mexico into southwestern Colorado (Carson National Forest FEIS, 2008). Elevation of the referenced location is approximately 6,944 feet MSL.

**General Regional Groundwater Description:**

As a portion of the San Juan Basin, this region is underlain by sandstone aquifers of the Colorado Plateau. The primary aquifer of potential concern at this location is the Uinta-Animas Aquifer, composed primarily of Lower Tertiary rocks in the San Juan Basin. The aquifer consists of the San Jose Formation; the underlying Animas formation and its lateral equivalent, the Nacimiento formation; and the Ojo Alamo Sandstone. The thickness of the Uinta-Animas aquifer generally increases toward the central part of the basin. In this region, the maximum thickness of the aquifer is approximately 3500 feet (USGS, 2001). This aquifer contains fresh to moderately saline water.

Groundwater generally flows toward the San Juan River and its tributaries, where it becomes alluvial groundwater or is discharged to stream flow. Additional information regarding the hydrogeologic setting can be found in the provided references.

**Site Specific Information:**

**Surface Hydrology:**

The general region surrounding the BGT is characterized by rolling sagebrush flats that are segregated by ephemeral drainages. This area is located atop the tapering end of a mesa that has been shaped overtime by the Escavada wash to the west and Cañada Alemita wash to the southeast.

**1<sup>st</sup> Water Bearing Formation:**

San Jose, Tertiary

**Formation Thickness:**

Approximately 1,900 ft.

**Underlying Formation:**

Nacimiento, Tertiary

**Depth to Groundwater:**

Depth to water is estimated to be greater than 340 feet below the bottom of the BGT. Estimate is based on ground bed drilling log for the N Escavada Unit #329H, located on the same pad.

**References**

Allen, Erin. Undated. Colorado Plateau Aquifers.

<http://academic.emporia.edu/schulmem/hydro/TERM%20PROJECTS/2007/Allen/Aquifer.html>.

New Mexico Energy, Minerals and Natural Resources Department, Division of Mining and Minerals. Database. 2010. Internet accessed January 2010.

New Mexico Office of the State Engineer. 2016. iWaters database. Internet accessed August 2016.

New Mexico WQCC. 2005. State of New Mexico Water Quality Act and the Water Control Commission Regulations.

United States Department of Agriculture, Forest Service. 2008. Final Environmental Impact Statement for Surface Management of Gas Leasing and Development. Jicarilla Ranger District, Carson National Forest, Rio Arriba County, New Mexico.

United States Department of the Interior. Bureau of Land Management. 2003. Final Farmington Resource Management Plan and Final Environmental Impact Statement. Farmington Field Office, Farmington, New Mexico.

United States Geological Survey. 2001. Ground Water Atlas of the United States: Arizona, Colorado, New Mexico and Utah. USGS Publication HA 730-C.

**Siting Criteria Compliance Demonstrations  
N Escavada Unit #329H  
N36.1516833, W107.5582166**

**19.15.17.10. A.8 Siting Criteria – Below Grade Tanks**

- (a) *An operator shall not locate a Below Grade Tank within 100 feet of continuously flowing watercourse, significant water course, lakebed, sinkhole, wetland or playa lake.*

The BGT is not located within 100 feet of any continuously flowing water course, significant water course, lakebed, sinkhole, wetlands or playa lake as indicated on the attached topographic map (Figure 1).

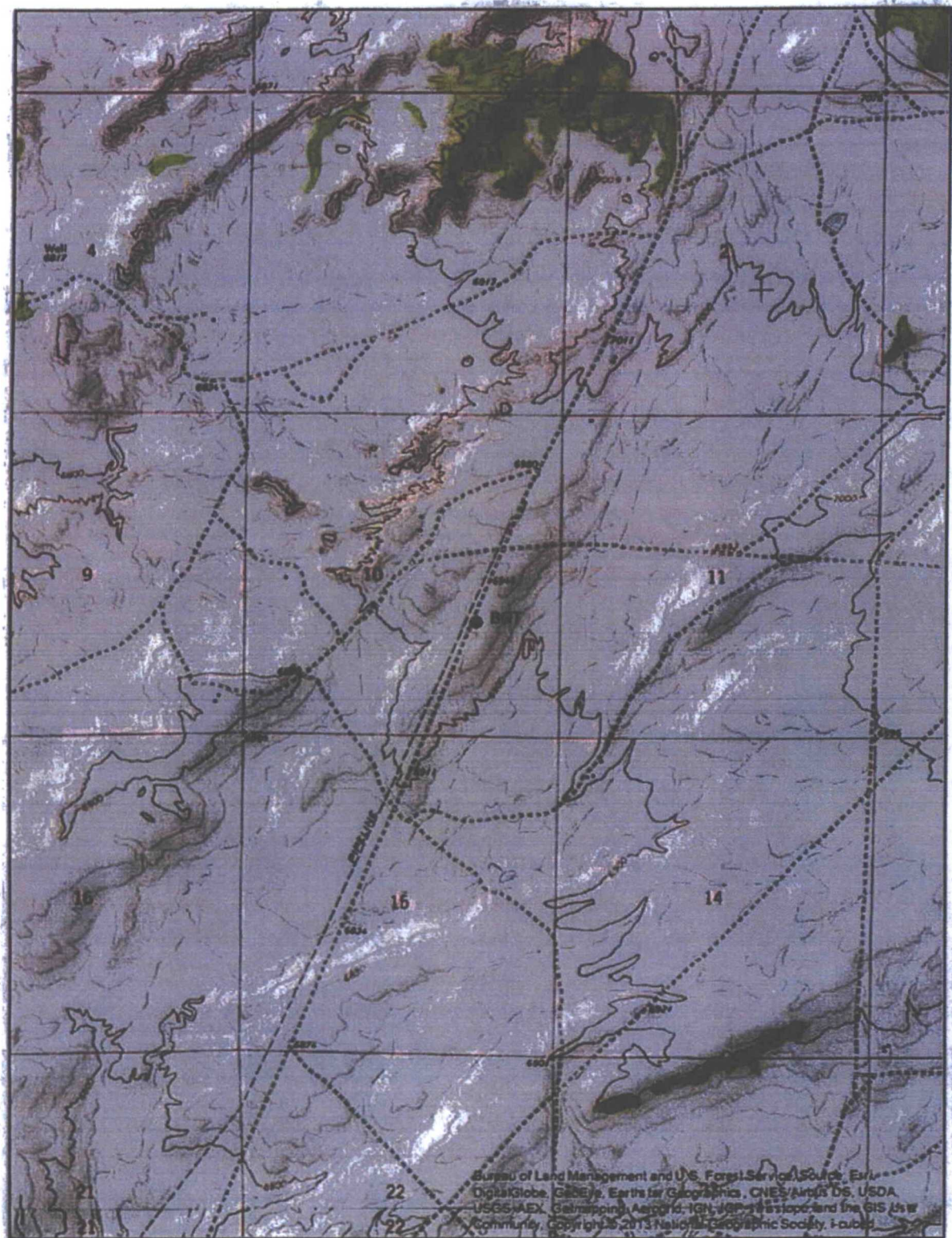
- (b) *An operator shall not locate a Below Grade Tank within 200 feet of a spring or a fresh water well used for public or livestock consumption.*

The BGT is not located within 200 feet of a spring or a fresh water well used for public or livestock consumption, as indicated on the attached aerial photograph (Figure 2) and iWaters print outs.

- (c) *An operator shall not locate a Below Grade Tank where depth to groundwater is less than 25 feet from the bottom of the tank.*

Depth to groundwater is estimated to be greater than 340 feet below the bottom of the BGT based on the ground bed drilling log for the N Escavada Unit #329H.

Source of GW Data	Latitude/Longitude	Legal Description	Elevation (ft)	Distance from BGT	Depth to Water (ft bgs)	Data Source/Information
N Escavada Unit #329H	N36.146522, W107.561754	10-22N-7W		Same location	>340	Ground Bed Drilling Log (See Attached)
Unnamed wash	N36.144569, W107.559428		6,885	0.5 miles SSE	---	Elevation Differential
Unnamed wash	N36.149620, W107.564732		6,885	0.4 miles SW	---	Elevation Differential
Catholic Well S. Chaco UT #342H, 343H, 346H, 347H	N36.1724975, W107.5355842	02-22N-07W	7,034	1.9 mi NE	118 ft	Ground Bed Drilling Log (See Attached)
Cañada Alemita Wash	N36.10078, W107.585530	33-22N-07W	6,682	7033.81 mi SW	---	Elevation Differential
LWD 00014 POD1	N36.178723, W107.598839	32-23N-7W	6,854	2.92 mi NW	---	Livestock water declaration/surface water impoundment



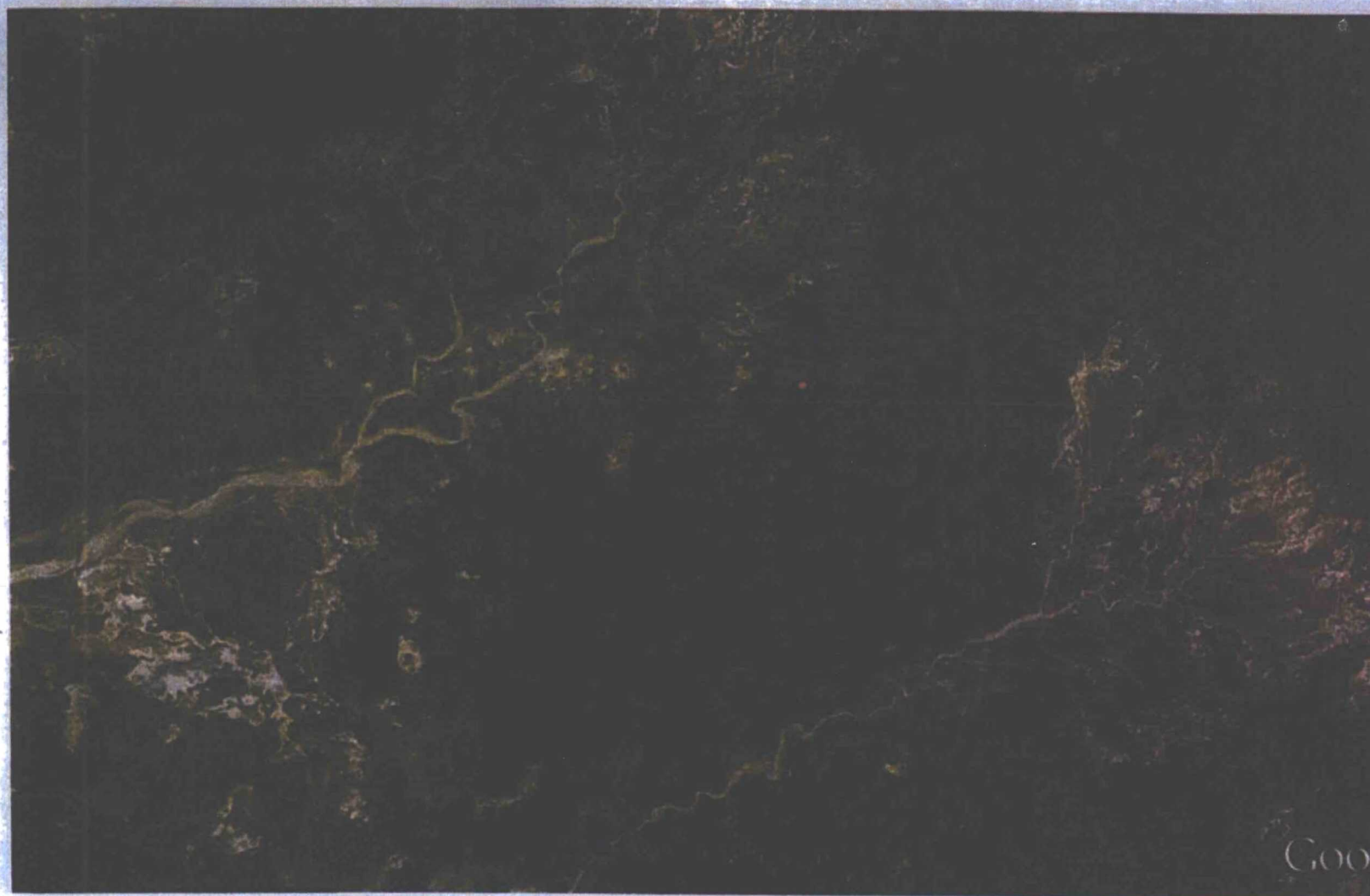
**Figure 1**  
**N Escavada Unit #329H**  
**Below Grade Tank**  
 Section 10, Township 22N, Range 07W  
 N36.1516833, W107.5582166  
 Sandoval County, NM  
 Scale 1:24,000





**Figure 2**  
**N Escavada Unit #329**  
**Below Grade Tank**  
Section 10, Township 22N, Range 07W  
N36.1516833, W107.5582166  
Sandoval County, NM





**Figure 3**  
**N Escavada Unit #329H**  
**Below Grade Tank**  
Section 10, Township 22N, Range 07W  
N36.1516833, W107.5582166  
Sandoval County, NM



## *New Mexico Office of the State Engineer* **Point of Diversion with Meter Attached**

No PODs found.

**UTMNAD83 Radius Search (in meters):**

**Easting (X): 269852.61**

**Northing (Y): 4003804.71**

**Radius: 4828**

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, reliability, usability, or suitability for any particular purpose of the data.

8/3/16 11:50 AM

Page 1 of 1

POINT OF DIVERSION WITH METER



---

*New Mexico Office of the State Engineer*  
**Water Column/Average Depth to Water**

---

No records found.

**UTMNAD83 Radius Search (in meters):**

**Easting (X):** 269852.61

**Northing (Y):** 4003804.71

**Radius:** 4828

---

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

---

8/3/16 11:47 AM

Page 1 of 1

WATER COLUMN/ AVERAGE  
DEPTH TO WATER



## New Mexico Office of the State Engineer Wells with Well Log Information

No wells found.

**UTMNAD83 Radius Search (in meters):**

Easting (X): 269852.61

Northing (Y): 4003804.71

Radius: 4828

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, reliability, usability, or suitability for any particular purpose of the data.

8/3/16 11:48 AM

Page 1 of 1

WELLS WITH WELL LOG II





## New Mexico Office of the State Engineer Wells Without Well Log Information

(A CLW##### in the  
POD suffix indicates the  
POD has been replaced  
& no longer serves a  
water right file.)

(R=POD has  
been replaced,  
O=orphaned,  
C=the file is  
closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest)

(NAD83 UTM in meters)

POD Number	Code	Subbasin	County	Source	q	q	q	Sec	Tws	Rng	X	Y	Distance
LWD 00014 POD1			SJ		2	4	3	32	23N	07W	266278	4006902*	4729

Record Count: 1

### UTMNAD83 Radius Search (in meters):

Easting (X): 269852.61

Northing (Y): 4003804.71

Radius: 4828

\*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

8/3/16 11:49 AM

Page 1 of 1

WELLS WITHOUT WELL LOG INFORMATION

# Ground Bed Drilling Log

Company: WPX Energy Well: North Escamela UT#329H Date: 10-12-2016  
 Location: Sic 10 T 32 N R 7 W State: New Mexico Rig: Stacy #1  
 Ground Bed Depth: 340' Water Depth: 0 Diameter: 10"  
 Fuel: 88 gal. Latitude: 36.146522 Longitude: -107.561754

## **DEPTH**

## **FORMATION**

## **OTHER**

<u>0-60</u>	Sand Stone, Shale, Sand w/ Shale w/ Sand	<u>PVC</u>
<u>60-100</u>	Sand Stone, Shale, Sand w/ Shale w/ Sand	
<u>100-140</u>	Sand Stone, Shale, Sand w/ Shale w/ Sand	
<u>140-190</u>	Sand Stone, Shale, Sand w/ Shale w/ Sand	
<u>190-250</u>	Sand Stone, Shale, Sand w/ Shale w/ Sand	
<u>250-300</u>	Sand Stone, Shale, Sand w/ Shale w/ Sand	
<u>300-340</u>	Sand Stone, Shale, Sand w/ Shale w/ Sand	
	Sand Stone, Shale, Sand w/ Shale w/ Sand	
	Sand Stone, Shale, Sand w/ Shale w/ Sand	
	Sand Stone, Shale, Sand w/ Shale w/ Sand	

## **GROUNDWATER DEPTH LOG**

Company: WPX Energy		Location: North Escamela UT#329H	
		Lat/Long: 36.146522/-107.561754	
		Elevation:	
Probe type: Powerwell Sucker			
Casing Installation Method:		Push	
Required Test Depths 90', 55', & 105' unless otherwise requested			
Date	Time	Depth	Comments
10-12-16	10 am	30'	drilled 30'
	11 am	30'	tested no water
	11:30	55'	drilled to 55'
	12:30	55'	tested No water
	1:45	105'	drilled to 105'
	2:45	105'	tested No water set 60' casing
10-13-16	8:30 am	105'	No water
	11:45	340'	finished anode bed

30

# Ground Bed Drilling Log

1 call 2015 36 2357

Company: WPX Energy

Well: S Chaco UT #346H

Date: 9/15/15

Location: Sec. 2 T22N R7W

State: NM

Rig: Stony #1

Ground Bed Depth: 360'

Water Depth: 120'

Diameter: 10"

Fuel: 98 gal.

Latitude: 36.1724975

Longitude: -107.5355842

## DEPTH

## FORMATION

## OTHER

<u>0-60</u>	<u>Sand Stone, Shale, Sand w/ Shale w/ Sand</u>	<u>PVC</u>
<u>60-100</u>	<u>Sand Stone, Shale, Sand w/ Shale w/ Sand</u>	
<u>100-180</u>	<u>Sand Stone, Shale, Sand w/ Shale w/ Sand</u>	
<u>180-240</u>	<u>Sand Stone, Shale, Sand w/ Shale w/ Sand</u>	
<u>240-300</u>	<u>Sand Stone, Shale, Sand w/ Shale w/ Sand</u>	
<u>300-360</u>	<u>Sand Stone, Shale, Sand w/ Shale w/ Sand</u>	
	<u>Sand Stone, Shale, Sand w/ Shale w/ Sand</u>	
	<u>Sand Stone, Shale, Sand w/ Shale w/ Sand</u>	
	<u>Sand Stone, Shale, Sand w/ Shale w/ Sand</u>	
	<u>Sand Stone, Shale, Sand w/ Shale w/ Sand</u>	
	<u>Sand Stone, Shale, Sand w/ Shale w/ Sand</u>	
	<u>Sand Stone, Shale, Sand w/ Shale w/ Sand</u>	

GROUNDWATER DEPTH LOG			
Company: <u>WPX Energy</u>		Location:	
Probe type:			
Date	Time	Depth	Comments
<u>9-15-15</u>	<u>8am</u>	<u>40'</u>	<u>drilled 40'</u>
	<u>9am</u>	<u>40'</u>	<u>test: No water</u>
	<u>9:30</u>	<u>60'</u>	<u>Drilled 60'</u>
	<u>10:30</u>	<u>60'</u>	<u>test: No water Set PVC</u>
	<u>11:45</u>	<u>115'</u>	<u>Drilled to 115'</u>
	<u>1pm</u>	<u>115'</u>	<u>test: No water</u>
	<u>2:15</u>	<u>120'</u>	<u>Drilled to 120' water</u>
<u>9-16-15</u>	<u>7:30</u>	<u>118'</u>	<u>test water @ 118'</u>
	<u>12:30</u>	<u>360'</u>	<u>Finish annular bed</u>

WPX Energy Production, LLC requests the following variances:

1. The BGT will be protected from run on by being installed upon a top felt rock shield with an overlay of 30 mil rubber liner attached to the sidewalls of the inside of the containment berm. The 30 mil rubber liner will provide equal and/or better protection in the prevention of contamination of fresh water and protecting public health and the environment. (See enclosed photo)
2. A 48-inch-tall, galvanized, no climb field fence with top rail will be constructed around the BGT to protect livestock/wildlife as specified by the federal Surface Management Agency or, if not federal land/minerals; which will provide equal and/or better protection of a fence while preventing contamination of fresh water, protecting public health and the environment. (See enclosed photo)
3. If the surface owner is of public entity (i.e.: BLM) WPX Energy Production, LLC will notify by email the intent to close the BGT in place of a certified mail letter. WPX Energy Production, LLC will request a read receipt of the email which will be equal and/or equivalent notification as certified mail.

Thank you,



Deborah Watson  
Environmental Specialist

**WPX Energy Company, LLC**  
**San Juan Basin: New Mexico Assets**  
**Production BGT: Buried Double-Wall Steel Tank**  
**Design and Construction Plan**

In accordance with Rule 19.15.17 NMAC, the following plan describes the general design and construction (D&C) of Below Grade Tanks (BGT) using buried double-wall steel tanks on WPX Energy Co, LLC (WPX) locations in the San Juan Basin of New Mexico. For those BGT which do not conform to this standard plan, a separate well-specific D&C plan will be developed and utilized.

**General Plan Requirements:**

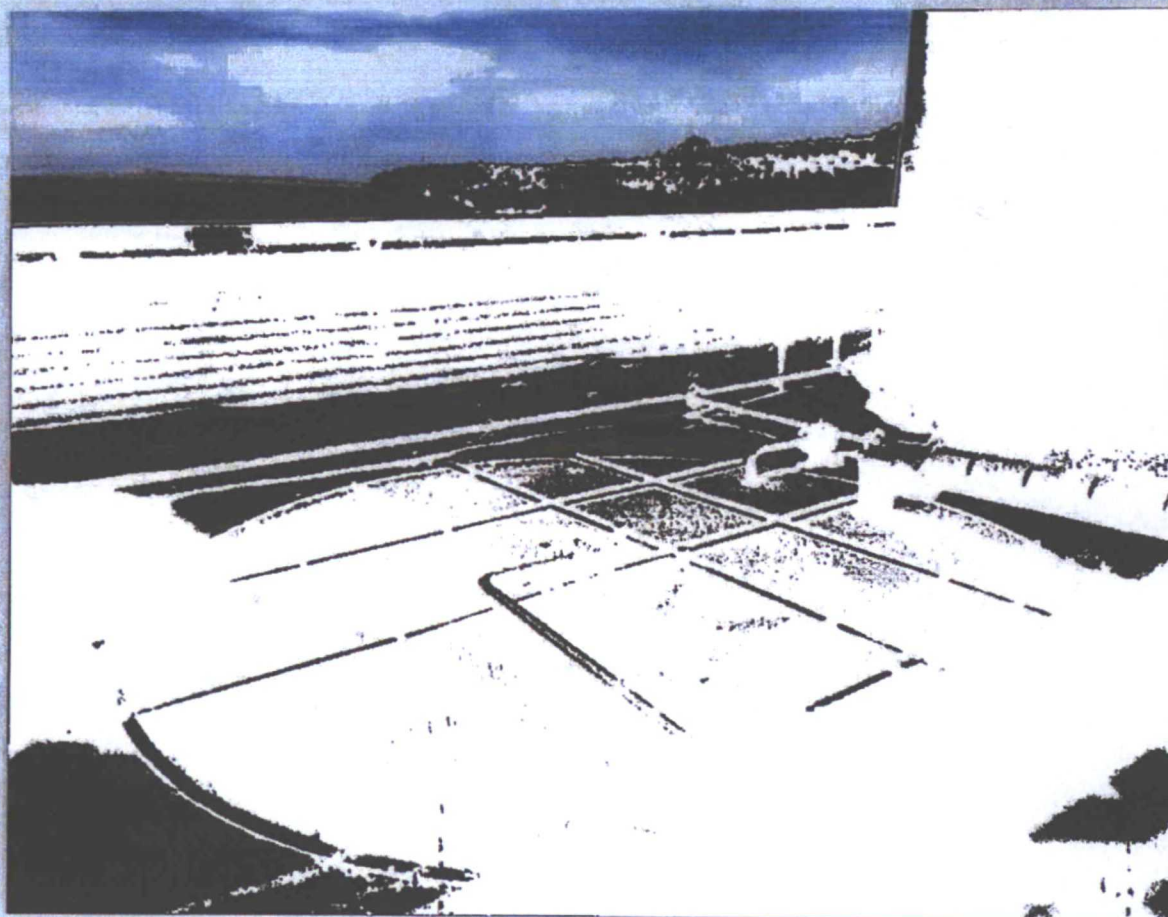
1. WPX will post a well sign in accordance with the federal Surface Management Agency and rule NMAC 19.15.17.11.C
2. As a variance, a 48-inch-tall, galvanized, no-climb field fence with top rail will be constructed around the BGT to protect livestock/wildlife as specified by the federal Surface Management Agency or, if not federal land/minerals, NMOCD rule 17 requirements. See Attached Design/photo.
3. The buried BGT will be constructed of steel with double-walls and double-bottom, welded following appropriate API and industry codes, coated with an epoxy based paint, covered with a steel #9 mesh screen, and equipped with an EFM to monitor high liquid levels and automatically shut off liquid discharges. A solid riser pipe will be installed between the interstitial spaces of the double-walls to allow monthly inspection to determine tank integrity.
4. WPX will design and construct a BGT to contain liquids associated with the dehydration and compression of produced natural gas, which will be resistant to ultra violet light and the contents of the tank to prevent contamination of fresh water resources and protect public health and the environment.
5. The BGT foundation will be level and free of rocks, debris, sharp edges or irregularities and have a firm compacted bottom and sidewalls that are stable for the soil conditions.
6. The BGT will be protected from run on by being installed within the impervious secondary containment provided by the AST tanks on location. See attached Design (Same as Fence)
7. The BGT will be placed in the excavation such that there is 30 mil rubber liner overlay between the surrounding soils and the tank top see attached design.
8. A solid riser pipe will be installed to allow withdrawal of liquids by suction. The riser will draw from the bottom of the BGT, capped when not in use and sloped to the BGT to allow drainage of liquids not collected during withdrawal operations.











**WPX Energy Company, LLC**  
**San Juan Basin: New Mexico Assets**  
**Production BGT: Buried Double-Wall Steel Tank**  
**Operations and Maintenance Plan**

In accordance with Rule 19.15.17 NMAC, the following plan describes the general operations and maintenance (O&M) of production Below Grade Tanks (BGT) on WPX Energy Co, LLC (WPX) locations in the San Juan Basin of New Mexico. For those BGT which do not conform to this standard O&M plan, a separate well specific O&M plan will be developed and utilized.

1. WPX will inspect the BGT monthly for leaks and damage. Electronic copies of the inspections will be kept at the WPX San Juan Basin office for a minimum of five years following completion. Copies of the inspections will be available to NMOCD upon request.
2. Any oil or hydrocarbon collecting on the BGT will be removed. Saleable condensate will be returned to the sales tank. Slop oil from compression will be recycled with Safety Kleen, Farmington, NM or Hydropure, Aztec, NM (No Permit Required).
3. WPX will only allow produced liquids meeting the RCRA exemption for O&G wastes to be stored in the BGT. WPX will not discharge or store any hazardous waste as defined under RCRA 40CFR 261 and 19.15.2.7.H.3 NMAC in any BGT.
4. WPX shall maintain sufficient freeboard for to prevent overflow. Discharges to the BGT will be shutoff automatically if the high-level alarm is triggered from the EFM or manually if the EFM is not functional.
5. The Steel fencing around the perimeter of the BGT shall be maintained as protection from run-on.
6. Produced water will be disposed by evaporation or transport any of the following NMOCD approved facilities depending on the well location: Basin Disposal, Inc in Bloomfield, New Mexico (Permit # NM-01-005), WPX Energy Rosa Unit SWD #001 (Order # SWD-916), WPX Energy Rosa Unit SWD #002 (Order # SWD-1236), Burlington Resources Jillson SWD#1 (Permit #R10168A), or other NMOCD approved water disposal facilities.
7. If the tank integrity is compromised:
  - a. All discharges will be shut off to the BGT.
  - b. All liquids will be removed as soon as possible but no later than 24 hours after discovery.
  - c. WPX will notify and report to NMOCD in accordance to 19.15.29 NMAC and all other applicable agency's as require.



**WPX Energy Company, LLC**  
**San Juan Basin: New Mexico Assets**  
**Production BGT: Buried Double-Wall Steel Tank**  
**Closure Plan**

In accordance with Rule 19.15.17.13 NMAC, the following plan describes the general closure requirements of below-grade tanks (BGT) on WPX Energy Co, LLC (WPX) locations in the San Juan Basin of New Mexico. This is WPX's standard closure procedure for all BGTs regulated under Rule 19.15.17 NMAC and operated by WPX. For those closures which do not conform to this standard closure plan, a separate BGT specific closure plan will be developed and utilized.

**Closure Conditions and Timing for BGT:**

- Within 60 days of cessation of operation WPX will:
  - Remove all liquids and sludge and dispose in a division approved manner
- Within 72 Hrs or 1 week prior to closure WPX will:
  - Give notice to Surface owners by certified mail. For public entities by email as specified on the variance page.
  - Give notice to District Division verbally and in writing/email
- Within 6 months of cessation of operation WPX will:
  - Remove BGT and dispose, recycle, reuse, or reclaim in a division approved manner
  - Remove unused onsite equipment associated with the BGT
- Within 60 Days of Closure WPX will:
  - Send the District Division a Closure Report per 19.15.17.13.F

**General Plan Requirements:**

1. Prior to initiating any BGT Closure except in the case of an emergency, WPX will notify the surface owner of the intent to close the BGT by certified mail no later than 72 hours or 1 week before closure and a copy of this notification will be included in the closure report. In the case of an emergency, the surface owner of record will be notified as soon as practical.
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. The notification of closure will include the following:
  - a. Operators Name (WPX)
  - b. Well Name and API Number
  - c. Location (USTR)
3. All liquids will be removed from the BGT following cessation of operation. Produced water will be disposed at an NMOCD approved facility depending on the proximity of the BGT site. Facilities may include: Rosa Unit SWD #1 (Order: SWD-916, API: 30-039-27055), Rosa Unit SWD #2 (Order: SWD-1236-0, API: 30-039-30812), Jillson Federal SWD #001 (Order: R10168/R10168A, API: 30-039-25465), Middle Mesa SWD #001 (Order: SWD-350-0, API: 30-045-27004) and/or Basin Disposal (Permit: NM-01-0005).
4. Solids and sludge's will be shoveled and /or vacuumed out for disposal at Envirotech (Permit Number NM-01-0011) or Industrial Ecosystems Inc (Permit Number NM-01-0010B).



5. WPX will obtain prior approval from NMOCD to dispose, recycle, reuse, or reclaim the BGT and provide documentation of the disposition of the BGT in the closure report. Steel materials will be recycled or reused as approved by the Division. Fiberglass tanks will be empty, cut up or shredded, and EPA cleaned for disposal as solid waste. Liners materials will be cleaned without soils or contaminated material for disposal as solid waste. Fiberglass tanks and liner materials will meet the conditions of 19.15.35 NMAC. Disposal will be at a licensed disposal facility, such as San Juan Regional Landfill operated by Waste Management under NMED Permit SWM-052426.
6. Any equipment associated with the BGT that is no longer required for some other purpose, following the closure will be removed from the location.
7. Following removal of the tank and any liner material, WPX will test the soils beneath the BGT as follows:
  - a. At a minimum, a five-point composite sample will be taken to include any obvious stained or wet soils or any other evidence of contamination.
  - b. The laboratory sample shall be analyzed for the constituents listed in Table I of 19.15.17.13

Depth below bottom of pit to groundwater less than 10,000 mg/l TDS	Constituent	Method	Limit
≤50 feet	Chloride	EPA 300.0	600 mg/kg
	TPH	EPA SW-846 Method 418.1	100 mg/kg
	BTEX	EPA SE-846 Method 8021B or 8015M	50 mg/kg
	Benzene	EPA SW-846 Method 8021B or 8015M	10 mg/kg

Depth below bottom of pit to groundwater less than 10,000 mg/l TDS	Constituent	Method	Limit
51 feet-100 feet	Chloride	EPA 300.0	10,000 mg/kg
	TPH	EPA SW-846 Method 418.1	2,500 mg/kg
	GRO+DRO	EPA SW-846 Method 8015M	1,000 mg/kg
	BTEX	EPA SE-846 Method 8021B or 8015M	50 mg/kg
	Benzene	EPA SW-846 Method 8021B or 8015M	10 mg/kg



Depth below bottom of pit to groundwater less than 10,000 mg/l TDS	Constituent	Method	Limit
>100 feet	Chloride	EPA 300.0	20,000 mg/kg
	TPH	EPA SW-846 Method 418.1	2,500 mg/kg
	GRO+DRO	EPA SW-846 Method 8015M	1,000 mg/kg
	BTEX	EPA SE-846 Method 8021B or 8015M	50 mg/kg
	Benzene	EPA SW-846 Method 8021B or 8015M	10 mg/kg

<sup>(1)</sup> Or other test methods approved by the division

<sup>(2)</sup> Numerical limits or natural background level, whichever is greater  
(19.15.17.13 MAC-Ro, 19.15.17.13 NMAC 3/28/2013)

8. If the Division and/or WPX determine there is a release, WPX will comply with 19.15.17.13.C.3b.
9. Upon completion of the tank removal, the excavation will be backfilled with non-waste earthen material compacted and covered with a minimum of one foot of top soil or background thickness whichever is greater and to existing grade. The surface will be re-contoured to match the native grade and prevent ponding.

For those portions of the former BGT area no longer required for production activities, WPX will seed the disturbed areas the first favorable growing season after the BGT is covered. Seeding will be accomplished via drilling on the contour whenever practical, or by other Division-approved methods. WPX will notify the Division when reclamation and re-vegetation is complete.

Reclamation of the BGT shall be considered complete when:

- a. Vegetative cover reflects a life form ratio of +/- 50% of pre disturbance levels
- b. Total percent plant cover of at least 70% of pre-disturbance levels  
(Excluding noxious weeds)

OR

- c. Pursuant to 19.15.17.13.H.5d WPX will comply with obligations imposed by other applicable federal or tribal agencies in which their re-vegetation and reclamation requirements provide equal or better protection of fresh water, human health and the environment.

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

#### 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. The Report will include the following:

- Proof of Closure Notice (surface owner & NMOCD)
- Backfilling & Cover Installation
- Confirmation Sampling Analytical Results
- Disposal Facility Name(s) and Permit Number(s)
- Application Rate & Seeding techniques
- Photo Documentation of Reclamation

## Watson, Debbie

---

**From:** Watson, Debbie  
**Sent:** Monday, August 28, 2017 8:23 AM  
**To:** annette.ahill@bia.gov; Fields, Vanessa, EMNRD; 'Smith, Cory, EMNRD'; 'Thomas, Leigh'  
**Cc:** Comer, Chad  
**Subject:** BGT Closure Notification N Escavada #329H

Tracking:	Recipient	Delivery	Read
	annette.ahill@bia.gov		
	Fields, Vanessa, EMNRD		
	'Smith, Cory, EMNRD'		
	'Thomas, Leigh'		
	Comer, Chad	Delivered: 8/28/2017 8:23 AM	Read: 8/28/2017 8:29 AM

WPX will be closing the temporary facility BGT at the N Escavada #329H on Thursday, August 31 at 10:00 AM.

**Operator:** WPX Energy Production, LLC

**Well Name and API Number:** N Escavada #329H (30-043-21287)

**BGT Location:** N36.15168, W107.55822

**Location:** Unit Letter I, Section 10, Township 22N, Range 7W, Sandoval County, NM

**Lease #:** NO-G-1312-1809

**BGT Removal and sampling:** Thursday, August 31, 2017 at 10:00 AM

Please contact me with any questions.

Thank you,

Debbie

Deborah Watson  
Environmental Specialist  
PO Box 640 | Aztec, NM 87410  
office 505.333.1880 | cell 505.386.9693 | fax 505.333.1805  
[deborah.watson@wpxenergy.com](mailto:deborah.watson@wpxenergy.com)



*If you have received this message in error, please reply to advise the sender of the error and then immediately delete this message.  
Thank you.*

Watson, Debbie

---

**From:** Microsoft Outlook  
**To:** annette.ahill@bia.gov  
**Sent:** Monday, August 28, 2017 8:23 AM  
**Subject:** Relayed: BGT Closure Notification N Escavada #329H

**Delivery to these recipients or groups is complete, but no delivery notification was sent by the destination server:**

[annette.ahill@bia.gov](mailto:annette.ahill@bia.gov) ([annette.ahill@bia.gov](mailto:annette.ahill@bia.gov))

Subject: BGT Closure Notification N Escavada #329H



**Watson, Debbie**

---

**From:** Microsoft Outlook  
**To:** Fields, Vanessa, EMNRD; Smith, Cory, EMNRD  
**Sent:** Monday, August 28, 2017 8:23 AM  
**Subject:** Relayed: BGT Closure Notification N Escavada #329H

**Delivery to these recipients or groups is complete, but no delivery notification was sent by the destination server:**

Fields, Vanessa, EMNRD (Vanessa.Fields@state.nm.us)

Smith, Cory, EMNRD (Cory.Smith@state.nm.us)

Subject: BGT Closure Notification N Escavada #329H

**Watson, Debbie**

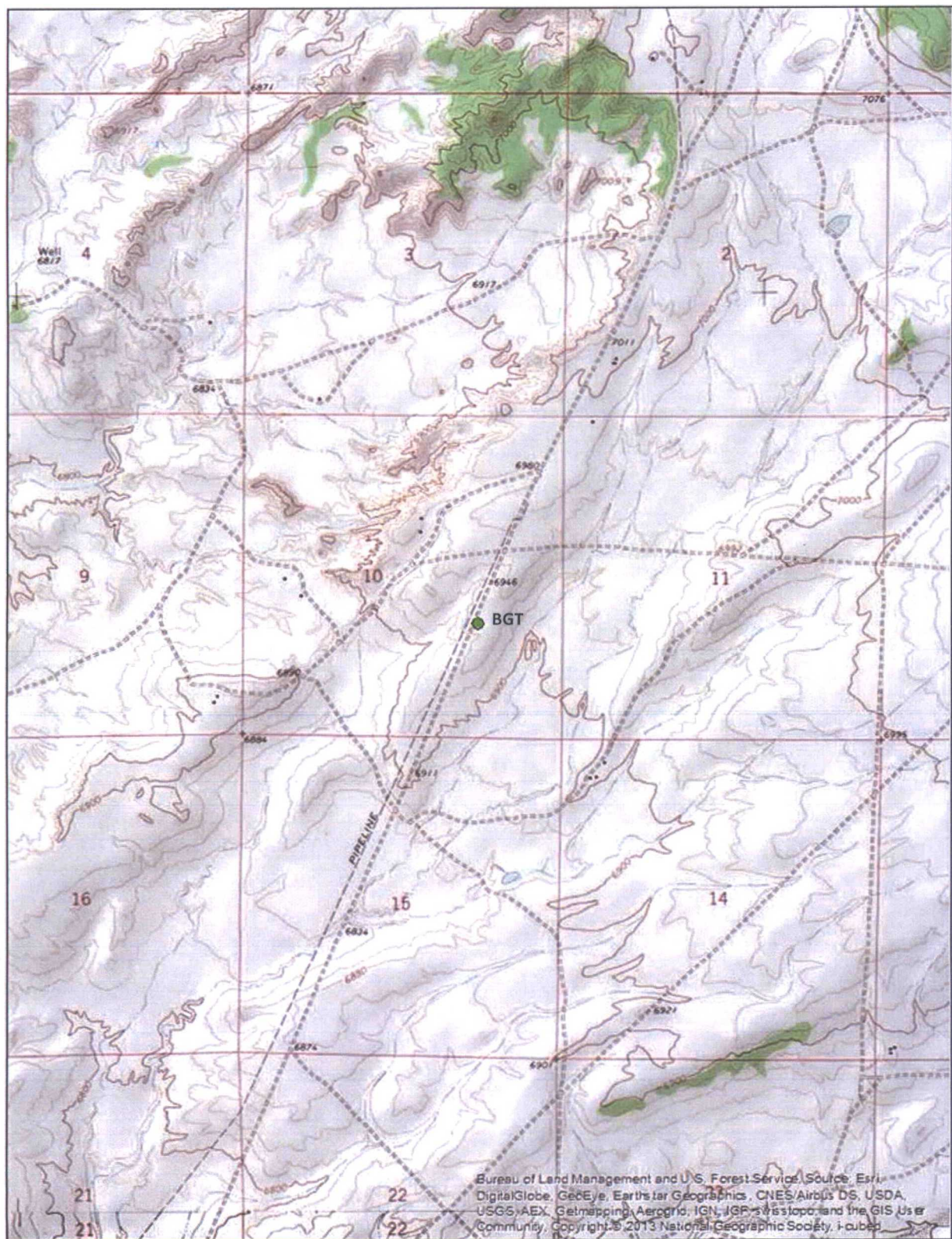
---

**From:** Microsoft Outlook  
**To:** Thomas, Leigh  
**Sent:** Monday, August 28, 2017 8:23 AM  
**Subject:** Relayed: BGT Closure Notification N Escavada #329H

**Delivery to these recipients or groups is complete, but no delivery notification was sent by the destination server:**

[Thomas, Leigh \(l1thomas@blm.gov\)](mailto:l1thomas@blm.gov)

Subject: BGT Closure Notification N Escavada #329H



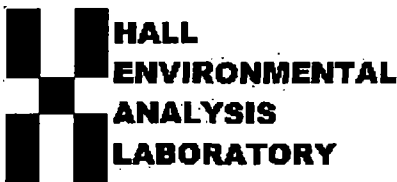
**Figure 1**  
**N Escavada Unit #329H**  
**Below Grade Tank**  
 Section 10, Township 22N, Range 07W  
 N36.1516833, W107.5582166  
 Sandoval County, NM  
 Scale 1:24,000





**Figure 2**  
**N Escavada Unit #329H**  
**Below Grade Tank**  
 Section 10, Township 22N, Range 07W  
 N36.1516833, W107.5582166  
 Sandoval County, NM





Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

September 14, 2017

Debbie Watson  
WPX Energy  
721 S Main Ave  
Aztec, NM 87410  
TEL: (505) 333-1880  
FAX

RE: N Escavada Unit 329H Temp BGT

OrderNo.: 1709005

Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 1 sample(s) on 9/1/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

**Analytical Report**

Lab Order 1709005

Date Reported: 9/14/2017

**Hall Environmental Analysis Laboratory, Inc.****CLIENT:** WPX Energy**Client Sample ID:** SC-1 BGT**Project:** N Escavada Unit 329H Temp BGT**Collection Date:** 8/31/2017 10:40:00 AM**Lab ID:** 1709005-001**Matrix:** SOIL**Received Date:** 9/1/2017 8:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 418.1: TPH</b>							Analyst: <b>MAB</b>
Petroleum Hydrocarbons, TR	ND	20		mg/Kg	1	9/12/2017	33791
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	58	30		mg/Kg	20	9/11/2017 1:11:57 PM	33778
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	9/6/2017 9:50:44 AM	33701
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	9/6/2017 9:50:44 AM	33701
Surr: DNOP	76.8	70-130		%Rec	1	9/6/2017 9:50:44 AM	33701
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	9/5/2017 4:11:14 PM	33670
Surr: BFB	89.3	54-150		%Rec	1	9/5/2017 4:11:14 PM	33670
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.023		mg/Kg	1	9/5/2017 4:11:14 PM	33670
Toluene	ND	0.046		mg/Kg	1	9/5/2017 4:11:14 PM	33670
Ethylbenzene	ND	0.046		mg/Kg	1	9/5/2017 4:11:14 PM	33670
Xylenes, Total	ND	0.092		mg/Kg	1	9/5/2017 4:11:14 PM	33670
Surr: 4-Bromofluorobenzene	97.8	66.6-132		%Rec	1	9/5/2017 4:11:14 PM	33670

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1709005

14-Sep-17

Client: WPX Energy

Project: N Escavada Unit 329H Temp BGT

Sample ID	MB-33778	SampType:	mbk		TestCode:	EPA Method 300.0: Anlons				
Client ID:	PBS	Batch ID:	33778		RunNo:	45542				
Prep Date:	9/8/2017	Analysis Date:	9/11/2017		SeqNo:	1443846	Units:	mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-33778		SampType:	lcs		TestCode:	EPA Method 300.0: Anlons				
Client ID:	LCSS		Batch ID:	33778		RunNo:	45542				
Prep Date:	9/8/2017		Analysis Date:	9/11/2017		SeqNo:	1443847		Units:	mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Chloride	14	1.5	15.00	0	91.1	90	110				

## Qualifiers:

- |   |   |
|---|---|
| * Value exceeds Maximum Contaminant Level.              | B Analyte detected in the associated Method Blank           |
| D Sample Diluted Due to Matrix                          | E Value above quantitation range                            |
| H Holding times for preparation or analysis exceeded    | J Analyte detected below quantitation limits                |
| ND Not Detected at the Reporting Limit                  | P Sample pH Not In Range                                    |
| PQL Practical Quantitative Limit                        | RL Reporting Detection Limit                                |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1709005

14-Sep-17

Client: WPX Energy  
Project: N Escavada Unit 329H Temp BGT

Sample ID	MB-33791	SampType:	MBLK	TestCode:	EPA Method 418.1: TPH					
Client ID:	PBS	Batch ID:	33791	RunNo:	45551					
Prep Date:	9/11/2017	Analysis Date:	9/12/2017	SeqNo:	1444460	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	ND	20								

Sample ID	LCS-33791	SampType:	LCS	TestCode:	EPA Method 418.1: TPH					
Client ID:	LCSS	Batch ID:	33791	RunNo:	45551					
Prep Date:	9/11/2017	Analysis Date:	9/12/2017	SeqNo:	1444461	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	98	20	100.0	0	97.5	80.5	126			

Sample ID	LCSD-33791	SampType:	LCSD	TestCode:	EPA Method 418.1: TPH					
Client ID:	LCSS02	Batch ID:	33791	RunNo:	45551					
Prep Date:	9/11/2017	Analysis Date:	9/12/2017	SeqNo:	1444462	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	96	20	100.0	0	96.5	80.5	126	1.08	20	

## Qualifiers:

- |   |   |
|---|---|
| * Value exceeds Maximum Contaminant Level.              | B Analyte detected in the associated Method Blank           |
| D Sample Diluted Due to Matrix                          | E Value above quantitation range                            |
| H Holding times for preparation or analysis exceeded    | J Analyte detected below quantitation limits                |
| ND Not Detected at the Reporting Limit                  | P Sample pH Not In Range                                    |
| PQL Practical Quantitative Limit                        | RL Reporting Detection Limit                                |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |



# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1709005

14-Sep-17

Client: WPX Energy

Project: N Escavada Unit 329H Temp BGT

Sample ID	MB-33701	SampType:	MBLK	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	33701	RunNo:	45428					
Prep Date:	9/5/2017	Analysis Date:	9/6/2017	SeqNo:	1439205	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.6		10.00		86.4	70	130			

Sample ID	LCS-33701	SampType:	LCS	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	33701	RunNo:	45428					
Prep Date:	9/5/2017	Analysis Date:	9/6/2017	SeqNo:	1439474	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	44	10	50.00	0	88.6	73.2	114			
Surr: DNOP	4.5		5.000		90.3	70	130			

Sample ID	1709005-001AMS	SampType:	MS	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	SC-1 BGT	Batch ID:	33701	RunNo:	45428					
Prep Date:	9/5/2017	Analysis Date:	9/6/2017	SeqNo:	1440007	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	40	9.2	46.00	0	86.7	55.8	122			
Surr: DNOP	3.7		4.600		80.9	70	130			

Sample ID	1709005-001AMSD	SampType:	MSD	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	SC-1 BGT	Batch ID:	33701	RunNo:	45428					
Prep Date:	9/5/2017	Analysis Date:	9/6/2017	SeqNo:	1440008	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	44	9.7	48.59	0	90.8	55.8	122	10.1	20	
Surr: DNOP	4.1		4.859		83.9	70	130	0	0	

## Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Detection Limit  
W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1709005

14-Sep-17

Client: WPX Energy  
Project: N Escavada Unit 329H Temp BGT

Sample ID	MB-33682	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBS	Batch ID:	33682	RunNo:	45408					
Prep Date:	9/1/2017	Analysis Date:	9/5/2017	SeqNo:	1439055	Units:	%Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	820		1000		82.4	54	150			

Sample ID	LCS-33682	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSS	Batch ID:	33682	RunNo:	45408					
Prep Date:	9/1/2017	Analysis Date:	9/5/2017	SeqNo:	1439056	Units:	%Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	910		1000		90.9	54	150			

Sample ID	MB-33670	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBS	Batch ID:	33670	RunNo:	45409					
Prep Date:	9/1/2017	Analysis Date:	9/5/2017	SeqNo:	1439100	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	890		1000		89.0	54	150			

Sample ID	LCS-33670	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSS	Batch ID:	33670	RunNo:	45409					
Prep Date:	9/1/2017	Analysis Date:	9/5/2017	SeqNo:	1439101	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	103	76.4	125			
Surr: BFB	990		1000		99.0	54	150			

## Qualifiers:

- |   |   |
|---|---|
| * Value exceeds Maximum Contaminant Level.              | B Analyte detected in the associated Method Blank           |
| D Sample Diluted Due to Matrix                          | E Value above quantitation range                            |
| H Holding times for preparation or analysis exceeded    | J Analyte detected below quantitation limits                |
| ND Not Detected at the Reporting Limit                  | P Sample pH Not In Range                                    |
| PQL Practical Quantitative Limit                        | RL Reporting Detection Limit                                |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1709005

14-Sep-17

Client: WPX Energy

Project: N Escavada Unit 329H Temp BGT

Sample ID	MB-33682	SampType:	MBLK	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	PBS	Batch ID:	33682	RunNo:	45408					
Prep Date:	9/1/2017	Analysis Date:	9/5/2017	SeqNo:	1439078	Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.3		1.000		128	66.6	132			

Sample ID	LCS-33682	SampType:	LCS	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	LCSS	Batch ID:	33682	RunNo:	45408					
Prep Date:	9/1/2017	Analysis Date:	9/5/2017	SeqNo:	1439079	Units:	%Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.3		1.000		128	66.6	132			

Sample ID	MB-33670	SampType:	MBLK	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	PBS	Batch ID:	33670	RunNo:	45409					
Prep Date:	9/1/2017	Analysis Date:	9/5/2017	SeqNo:	1439126	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.97		1.000		97.2	66.6	132			

Sample ID	LCS-33670	SampType: LCS			TestCode: EPA Method 8021B: Volatiles					
Client ID:	LCSS	Batch ID: 33670			RunNo: 45409					
Prep Date:	9/1/2017	Analysis Date: 9/5/2017			SeqNo: 1439127		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.89	0.025	1.000	0	88.6	80	120			
Toluene	0.93	0.050	1.000	0	92.6	80	120			
Ethylbenzene	0.95	0.050	1.000	0	94.8	80	120			
Xylenes, Total	2.8	0.10	3.000	0	94.9	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		102	66.6	132			

## Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified



Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: www.hallenvironmental.com

## Sample Log-In Check List

Client Name: WPX ENERGY

Work Order Number: 1709005

RcptNo: 1

Received By: Erin Melendrez

9/1/2017 8:00:00 AM

Completed By: Ashley Gallegos

9/1/2017 9:16:06 AM

Reviewed By:

*[Signature]*

09/01/17

*[Signature]*  
*[Signature]*

### Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☒
2. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
3. How was the sample delivered? Courier

### Log In

4. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
5. Were all samples received at a temperature of  $>0^{\circ}\text{C}$  to  $8.0^{\circ}\text{C}$ ? Yes ☒ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☒ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
9. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
10. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒
11. Were any sample containers received broken? Yes ☐ No ☒
12. Does paperwork match bottle labels?  
(Note discrepancies on chain of custody) Yes ☒ No ☐
13. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
14. Is it clear what analyses were requested? Yes ☒ No ☐
15. Were all holding times able to be met?  
(If no, notify customer for authorization.) Yes ☒ No ☐

# of preserved  
bottles checked  
for pH:

(<2 or >12 unless noted)

Adjusted? \_\_\_\_\_

Checked by: \_\_\_\_\_

### Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:	_____	Date:	_____
By Whom:	_____	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	_____		
Client Instructions:	_____		

17. Additional remarks:

### 18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.4	Good	Yes			



<b>Chain-of-Custody Record</b>		Turn-Around Time:	
Client: WPX Energy Production		<input checked="" type="checkbox"/> Standard <input type="checkbox"/> Rush	
Mailing Address: 721 S. Main Aztec NM 87410		Project Name: N. Escavada Unit # 329H Temp. BGT	
Phone #: 505.333.1880		Project #:	
email or Fax#: deborah.watson@wpxenergy.com		Project Manager:	
QA/QC Package: <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Level 4 (Full Validation)		D Watson	
Accreditation: <input type="checkbox"/> NELAP <input type="checkbox"/> Other		Sampler: D Watson	
<input type="checkbox"/> EDD (Type)		On Ice: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
		Sample Temperature: 34	

☒ **Standard**      ☐ **Rush**

**Project Name:**

N. Escavada Unit # 329H Temp. BGT

Project #:

**Project Manager:**

D Watson

Sampler: D Watson

On Ice: ☒ Yes ☐ No

Sample Temperature: 3.6

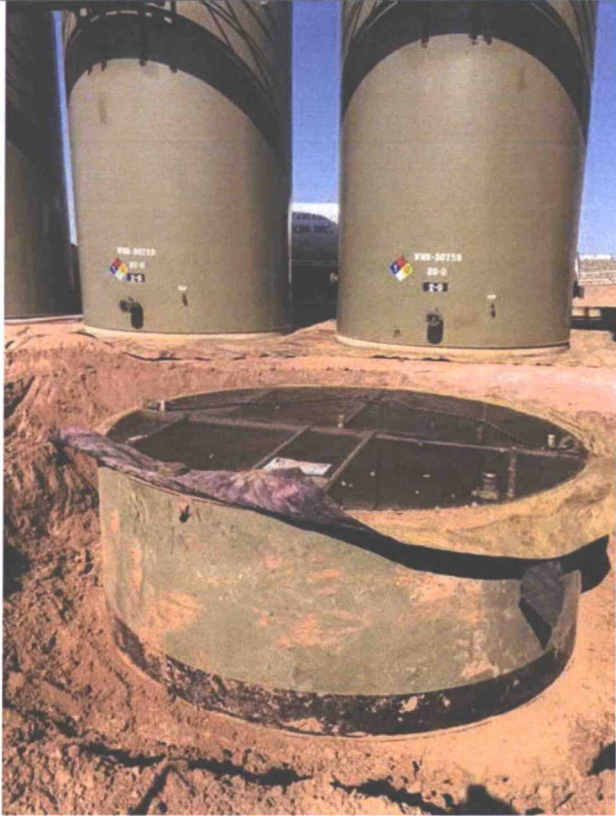
[illegible]

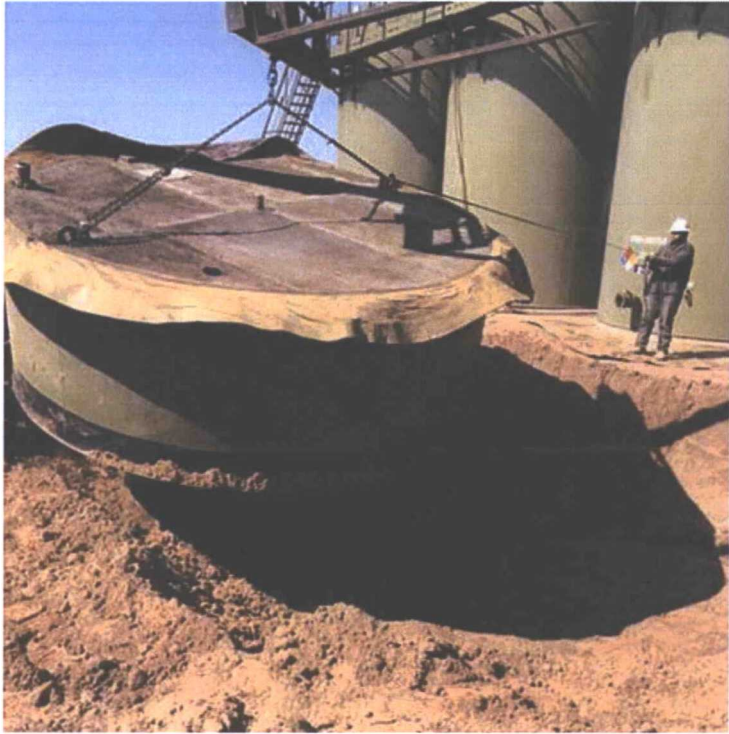
Date:	Time:	Relinquished by:	Received by:	Date	Time
8/31/17	1433	Delvon Watson	[Signature]	8/31/17	1433
Date:	Time:	Relinquished by:	Received by:	Date	Time
8/31/17	1856	Christine Watson	[Signature]	09/01/17	0800

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

**Photograph Log**  
**N Escavada Unit #329H Temporary BGT Closure Report**  
**WPX Energy**

WPX Energy	
Photograph 1	
Site Name: N Escavada Unit #329H BGT Closure	
Date Photo Taken: August 31, 2017	
BGT Location: N36.1516833, W107.5582166  I-10-22N-07W Sandoval County, New Mexico	
Photo Taken by: Deborah Watson	Description: BGT prior to removal.


WPX Energy	
Photograph 2	
Site Name: N Escavada Unit #329H BGT Closure	
Date Photo Taken: August 31, 2017	
BGT Location: N36.1516833, W107.5582166  I-10-22N-07W Sandoval County, New Mexico	
Photo Taken by: Deborah Watson	Description: BGT being removed.




# Photograph Log


## N Escavada Unit #329H Temporary BGT Closure Report


WPX Energy

WPX Energy	
Photograph 3	
Site Name: N Escavada Unit #329H BGT Closure	
Date Photo Taken: August 31, 2017	
BGT Location: N36.1516833, W107.5582166  I-10-22N-07W Sandoval County, New Mexico	
Photo Taken by: Deborah Watson	Description: Soil beneath BGT following removal.

WPX Energy	
Photograph 4	
Site Name: N Escavada Unit #329H BGT Closure	
Date Photo Taken: September 22, 2017	
BGT Location: N36.1516833, W107.5582166  I-10-22N-07W Sandoval County, New Mexico	
Photo Taken by: Deborah Watson	Description: Wellhead sign.

**Photograph Log**  
**N Escavada Unit #329H Temporary BGT Closure Report**  
**WPX Energy**

WPX Energy		
Photograph 5		
Site Name: N Escavada Unit #329H BGT Closure		
Date Photo Taken: September 22, 2017		
BGT Location: N36.1516833, W107.5582166  I-10-22N-07W Sandoval County, New Mexico		
Photo Taken by: Deborah Watson	Description: Facing W, looking at former BGT location following backfill and compaction.	

WPX Energy		
Photograph 6		
Site Name: N Escavada Unit #329H BGT Closure		
Date Photo Taken: September 22, 2017		
BGT Location: N36.1516833, W107.5582166  I-10-22N-07W Sandoval County, New Mexico		
Photo Taken by: Deborah Watson	Description: Facing NNW, looking at former BGT location following backfill and compaction.	