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

OIL CONS. DIV DIST. 3
AUG 01 2017

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

16013

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: Jair Battery/Jair #001 API Number: 30-043-20080 OCD Permit Number: _____
U/L or Qtr/Qtr H Section 07 Township 22N Range 5W County: Sandoval County
Center of Proposed Design: Latitude N36.153712 Longitude W107.395885 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: Metal
☐ Secondary containment with leak detection ☐ Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off
☒ Visible sidewalls and liner ☐ Visible sidewalls only ☐ Other _____
Liner type: Thickness 45 mil ☐ HDPE ☐ PVC ☐ Other LLDPE

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

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

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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. ☐ Yes ☒ No ☐ NA
- ☒ NM Office of the State Engineer - iWATERS database search; ☐ USGS; ☒ Data obtained from nearby wells
- See Variance Request

Ground water is less than 50 feet below the bottom of a Temporary pit, permanent pit, or Multi-Well Fluid Management pit . ☐ Yes ☐ No ☐ NA
NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells

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)** ☐ Yes ☐ No
- Written confirmation or verification from the municipality; Written approval obtained from the municipality

Within the area overlying a subsurface mine. **(Does not apply to below grade tanks)** ☐ Yes ☐ No
- Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division

Within an unstable area. **(Does not apply to below grade tanks)** ☐ Yes ☐ No
- Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map

Within a 100-year floodplain. **(Does not apply to below grade tanks)** ☐ Yes ☐ No
- 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). ☐ Yes ☒ No
- Topographic map; Visual inspection (certification) of the proposed site

Within 200 horizontal feet of a spring or a fresh water well used for public or livestock consumption;. ☐ Yes ☒ No
- 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.) ☐ Yes ☐ No
- Topographic map; Visual inspection (certification) of the proposed site

Within 300 feet from a occupied permanent residence, school, hospital, institution, or church in existence at the time of initial application. ☐ Yes ☐ No
- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image

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. ☐ Yes ☐ No
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_2S, 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	☐ Yes ☐ No ☐ 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	☐ Yes ☐ No ☐ 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	☐ Yes ☐ No ☐ 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	☐ 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 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	☐ Yes ☐ No
Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ 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

Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. - Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☐ No
Within the area overlying a subsurface mine. - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ☐ No
Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	☐ Yes ☐ No
Within a 100-year floodplain. - FEMA map	☐ Yes ☐ No

16.
On-Site Closure Plan Checklist: (19.15.17.13 NMAC) ***Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.***

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

17.
Operator Application Certification:

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

Name (Print): _____ Title: _____

Signature: _____ Date: _____

e-mail address: _____ Telephone: _____

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

OCD Representative Signature: _____ **Approval Date:** 8/11/2017

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:** 4/17/2015

20.
Closure Method:

☒ Waste Excavation and Removal ☐ On-Site Closure Method ☐ Alternative Closure Method ☐ Waste Removal (Closed-loop systems only)

☐ If different from approved plan, please explain.

21.
Closure Report Attachment Checklist: ***Instructions: Each of the following items must be attached to the closure report. Please indicate, by a check mark in the box, that the documents are attached.***

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

On-site Closure Location: Latitude _____ Longitude _____ NAD: ☐ 1927 ☐ 1983

22.

Operator Closure Certification:

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

Name (Print): Deborah Watson Title: Environmental Specialist

Signature: Deborah Watson Date: July 25, 2017

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

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
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1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources
Department
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1220 South St. Francis Dr.
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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

114666

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: **Logos Operating, LLC.** OGRID #: **289408**
Address: 4001 North Butler Ave, Building 7101, Farmington, NM 87401
Facility or well name: **Jair Battery**
API Number: Jair 1 – 30-043-20080 OCD Permit Number:
U/L or Qtr/Qtr H Section 07 Township 22N Range 05W County: Sandoval
Center of Proposed Design: Latitude 36.153712°N Longitude 107.395885°W NAD: ☐ 1927 ☒ 1983
Surface Owner: ☐ Federal ☐ State ☐ Private ☒ Tribal Trust or Indian Allotment

2.
RCVD NOV 21 '13
OIL CONS. DIV.
DIST. 3

☐ **Pit:** Subsection F, G or J of 19.15.17.11 NMAC
Temporary: ☐ Drilling ☐ 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: L_____ 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: Metal
☐ Secondary containment with leak detection ☐ Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off
☒ Visible sidewalls and liner ☐ Visible sidewalls only ☐ Other _____
Liner type: Thickness 45 mil ☐ HDPE ☐ PVC ☒ Other LLDPE

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

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

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State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised April 3, 2017

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company WPX Energy Production, LLC	Contact Deborah Watson
Address PO Box 640, Aztec NM 87410	Telephone No. 505-333-1880
Facility Name Jair #001	Facility Type Well Pad/Tank Battery

Surface Owner Jicarilla Apache	Mineral Owner Jicarilla Apache	API No.30-043-20080

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
H	07	22N	05W	1980	North	660	East	Sandoval

Latitude N36.153751 **Longitude** W107.395919 NAD83

NATURE OF RELEASE

Type of Release Produced water and crude oil	Volume of Release unknown	Volume Recovered unknown
Source of Release BGT	Date and Hour of Occurrence unknown	Date and Hour of Discovery 4/7/15.
Was Immediate Notice Given? ☐ Yes ☒ No ☐ Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*
N/A

Describe Cause of Problem and Remedial Action Taken.*

On 4/7/2015, a confirmation sample was collected from below the BGT during closure. Results for BTEX and TPH exceeded closure standards indicating that a release had occurred from the BGT.

Describe Area Affected and Cleanup Action Taken.*

- Facility was dismantled.
- Impacted soil was excavated from beneath the BGT and removed production tanks. Impacted soil was disposed of at the landfarm.
- The final excavation measured approximately 65 feet x 30 feet x 12 feet in depth. Approximately 2,520 cubic yards of impacted material was removed from the excavation
- Confirmation soils samples were collected from the base and sidewalls of the excavation on April 30, 2015.
- BTEX concentrations were reported below the applicable NMOCD RRAL in all confirmation samples. Concentrations of TPH (as DRO+GRO) were reported below the RRAL of 1,000 mg/kg in all confirmation samples except the east wall (1,171 mg/kg) and base (1,279 mg/kg). (See attached laboratory report)
- Due to safety concerns along the east wall and massive sandstone located at the base of the excavation, WPX requested alternative closure on May 5, 2015. Alternative closure included the application of potassium permanganate in lieu of further excavation which was not practical based on site conditions
- WPX received approval for alternative closure from NMOCD (May 7, 2015), Jicarilla Apache Environmental Protection Office (May 20, 2015), and Bureau of Indian Affairs, Jicarilla Agency (May 22, 2015). (See attached approvals)
- After receipt of agency approvals, potassium permanganate was applied to the open excavation. (See attached photographs)
- Backfilling of the open excavation began on June 1 and was completed on June 5, 2015.
- No further action required.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: Deborah Watson	OIL CONSERVATION DIVISION
Printed Name: Deborah Watson	Approved by Environmental Specialist:
Title: Environmental Specialist	Approval Date: 8/11/2017 Expiration Date:
E-mail Address: deborah.watson@wpxenergy.com	Conditions of Approval: — Attached ☐
Date: July 24, 2017 Phone: 505-330-1880	

* Attach Additional Sheets If Necessary

NVF1722338404

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	☐ Yes ☒ No ☐ NA
Ground water is less than 50 feet below the bottom of a Temporary pit, permanent pit, or Multi-Well Fluid Management pit . NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☐ NA
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. **(Does not apply to below grade tanks)** - Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☐ No
Within the area overlying a subsurface mine. **(Does not apply to below grade tanks)** - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ☐ No
Within an unstable area. **(Does not apply to below grade tanks)** - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	☐ Yes ☐ No
Within a 100-year floodplain. **(Does not apply to below grade tanks)** - FEMA map	☐ Yes ☐ No
Below Grade Tanks	
Within 100 feet of a continuously flowing watercourse, significant watercourse, lake bed, sinkhole, wetland or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☒ No
Within 200 horizontal feet of a spring or a fresh water well used for public or livestock consumption;. - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☒ No
Temporary Pit using Low Chloride Drilling Fluid (maximum chloride content 15,000 mg/liter)	
Within 100 feet of a continuously flowing watercourse, or any other significant watercourse or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). (Applies to low chloride temporary pits.) - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 300 feet from a occupied permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No
Within 200 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 300feet of any other fresh water well or spring, in existence at the time of the initial application. NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☐ No

Within 100 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Temporary Pit Non-low chloride drilling fluid	
Within 300 feet of a continuously flowing watercourse, or any other significant watercourse, or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No
Within 500 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 1000 feet of any other fresh water well or spring, in the existence at the time of the initial application; - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 300 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Permanent Pit or Multi-Well Fluid Management Pit	
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No
Within 500 horizontal feet of a spring or a fresh water well used for domestic or stock watering purposes, in existence at the time of initial application. - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 500 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No

10.

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

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

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

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

11.

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

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

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

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

12.
Permanent Pits Permit Application Checklist: Subsection B of 19.15.17.9 NMAC
Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

- ☐ Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC
- ☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☐ Climatological Factors Assessment
- ☐ Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Quality Control/Quality Assurance Construction and Installation Plan
- ☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- ☐ Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Nuisance or Hazardous Odors, including H_2S, 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 ☐ 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	☐ Yes ☐ No ☐ 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	☐ Yes ☐ No ☐ 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	☐ Yes ☐ No ☐ 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	☐ 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 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	☐ Yes ☐ No
Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ 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
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance	

adopted pursuant to NMSA 1978, Section 3-27-3, as amended. - Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☐ No
Within the area overlying a subsurface mine. - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ☐ No
Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	☐ Yes ☐ No
Within a 100-year floodplain. - FEMA map	☐ Yes ☐ No

16.
On-Site Closure Plan Checklist: (19.15.17.13 NMAC) ***Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.***

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

17.
Operator Application Certification:

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

Name (Print): Tamra Sessions Title: Operations Technician

Signature: Tamra Sessions Date: 11-20-13

e-mail address: tsessions@logosresourcesllc.com Telephone: 505-330-9333

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

OCD Representative Signature: Jonathan D. Kelly **Approval Date:** 11/25/2013

Title: Compliance Officer **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

22.

Operator Closure Certification:

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

Name (Print): _____ Title: _____

Signature: _____ Date: _____

e-mail address: _____ Telephone: _____

Logos Operating, LLC
San Juan Basin
Variance Explanation

C-144 Item #5 Fencing

Per 19.15.17.11 D (3) *The operator shall fence any other pit or below-grade tank to exclude livestock with a 'four foot fence that has at least four strands of barbed wire' evenly spaced in the interval between one foot and four feet above ground level.*

Logos Operating has requested a variance on the fencing material and plans to use 4' hog wire with one strand of barbed wire on top.

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

(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) (In feet)

POD Number	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Twws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
SJ 00274 S-3		SA		4	4	16	22N	05W	287567	4001050*	4059	1313		
RG 59279		TA							283664	3997966	5743	103	42	61
SJ 01189		SJ		4	4	17	23N	05W	286267	4010899*	7467	675		
SJ 00274 S-2		SA		3	3	16	23N	05W	286665	4010877*	7552	600		
SJ 01201		SJ	2	2	3	34	22N	05W	288268	3996680*	7949	160	120	40
SJ 01506		SA	1	1	3	22	23N	06W	278535	4010015*	8688	280		

Average Depth to Water: **81 feet**
Minimum Depth: **42 feet**
Maximum Depth: **120 feet**

Record Count: 6

UTMNAD83 Radius Search (In meters):

Easting (X): 284454 **Northing (Y):** 4003655 **Radius:** 10000

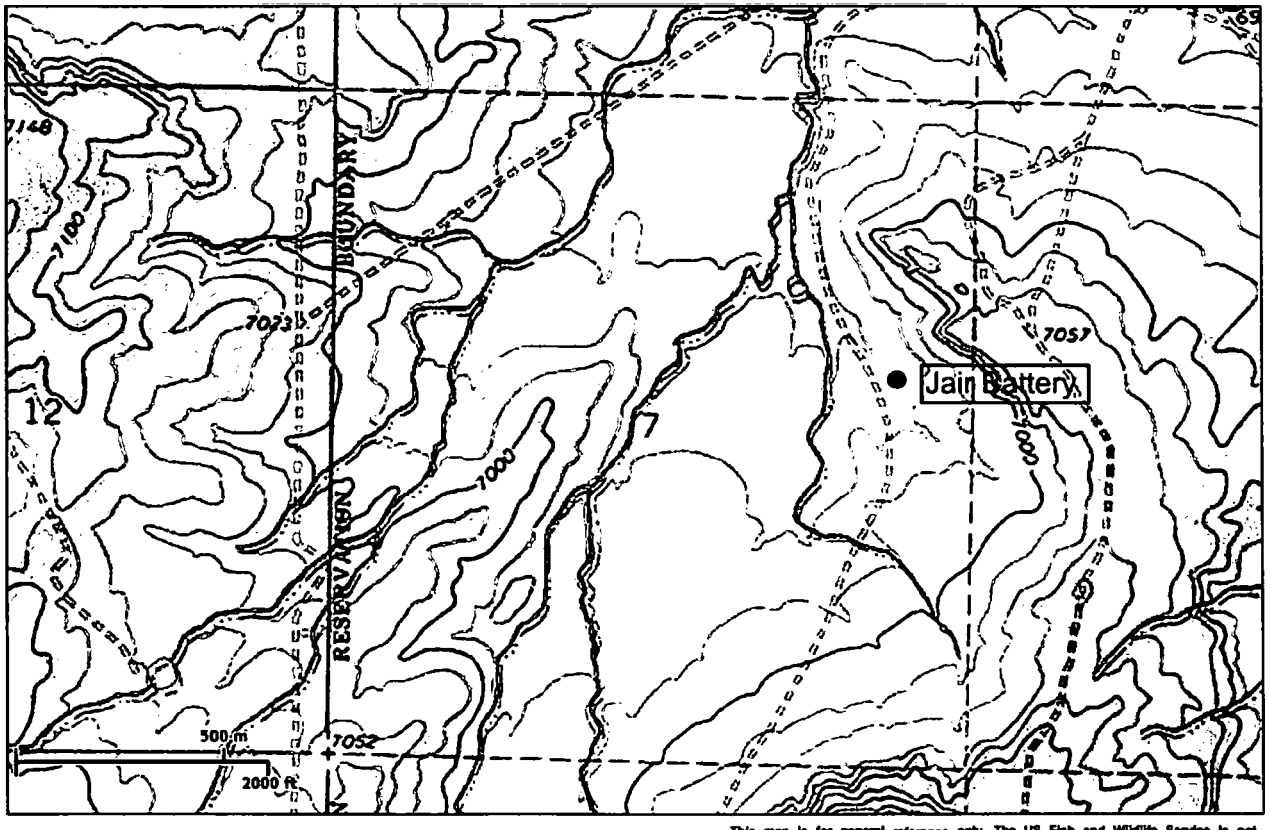
***UTM location was derived from PLSS - see Help**

U.S. Fish and Wildlife Service

National Wetlands Inventory

Jair Battery (Jair 1)

Nov 20, 2013



Wetlands

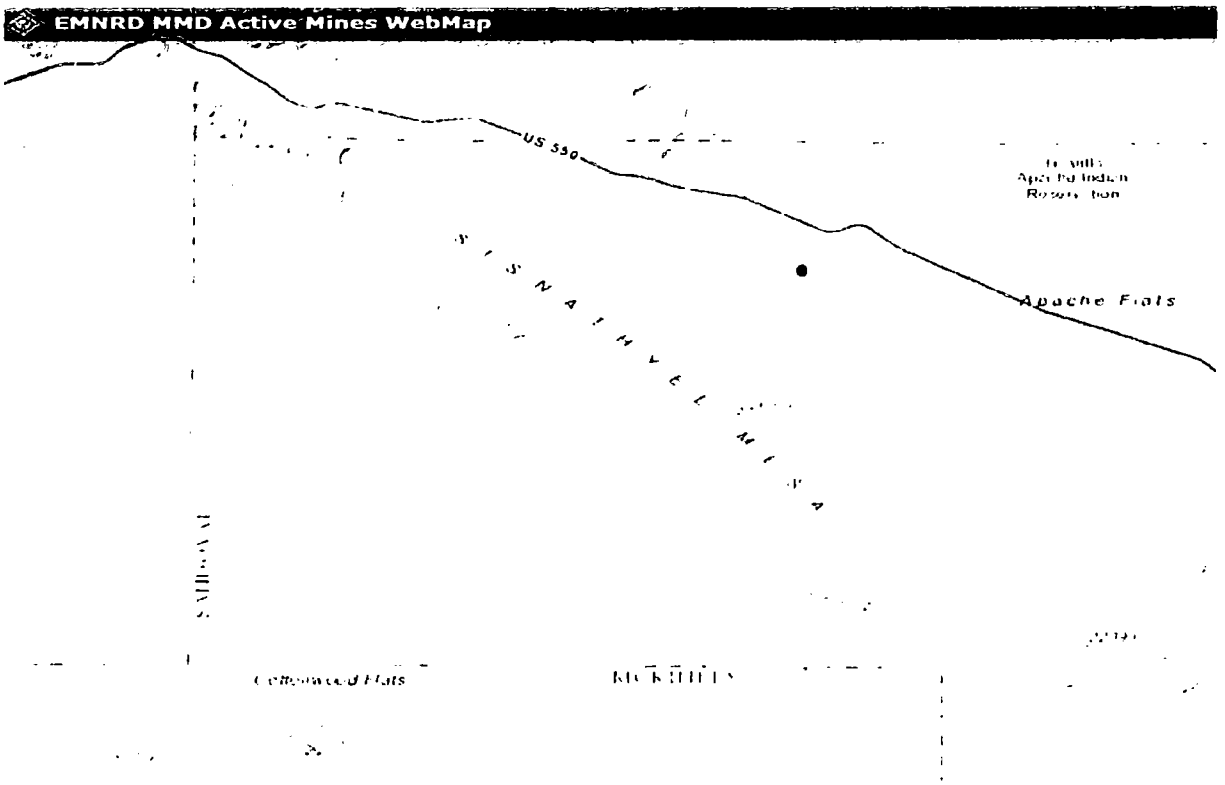
- Freshwater Emergent
- Freshwater Forested/Shrub
- Estuarine and Marine Deepwater
- Estuarine and Marine
- Freshwater Pond
- Lake
- Riverine
- Other

User Remarks:

UL H, Section 7, T22N, R05W

Jair Battery

Mines, Mills & Quarries Map JAIR BATTERY



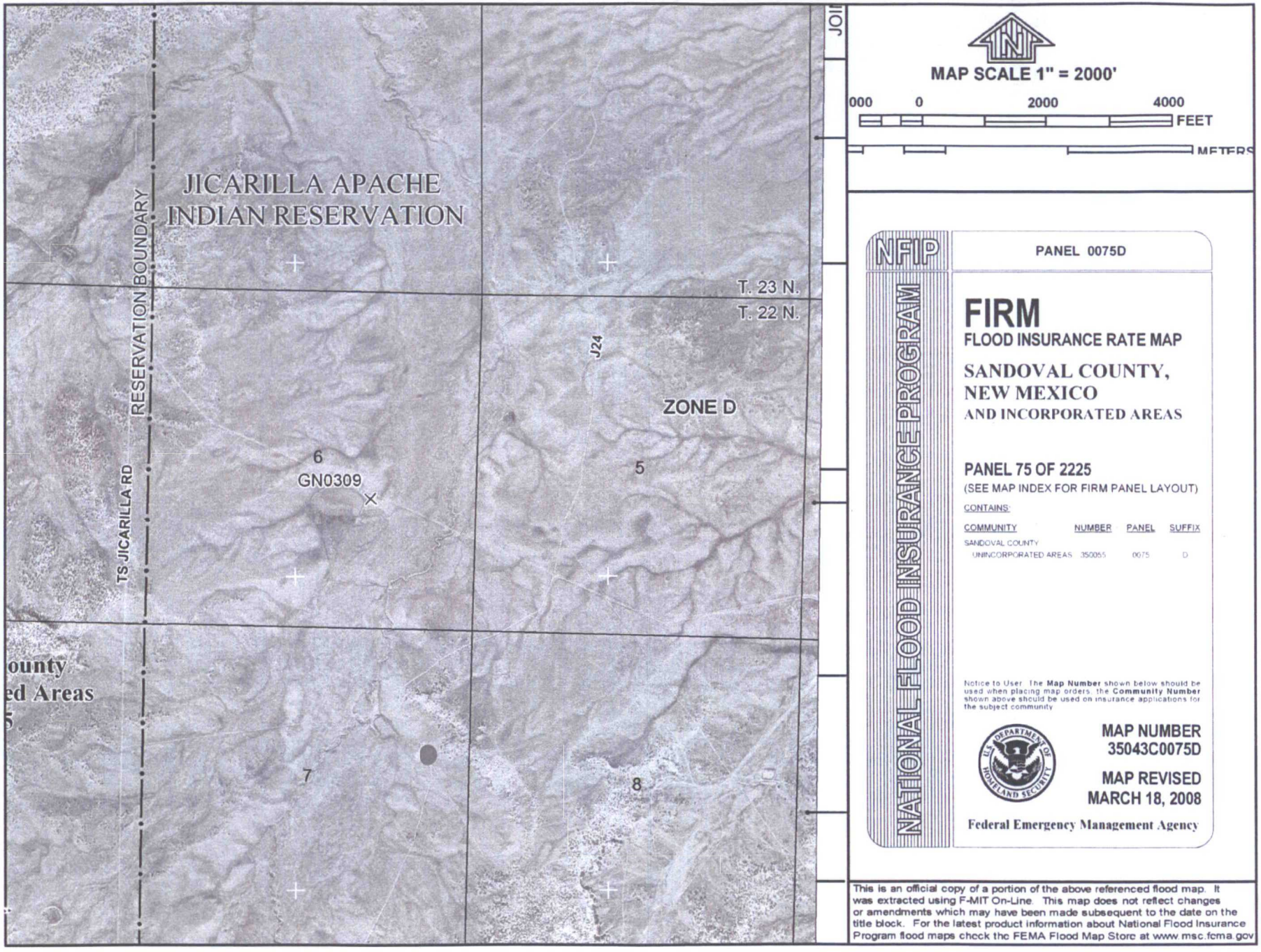
Jair Battery - Latitude 36.153712° N / Longitude 107.395885° W (NAD83)

Pueblo Alto Mine (Latitude 35.965174° N / Longitude 107.572704° W (NAD83) is closest to the Jair Battery @ approximately 18 miles away.

Data Source: New Mexico Active Mines, Feb 2012 spreadsheet
http://www.emnrd.state.nm.us/MMD/gismapminedata.html

Name	County	Commodities	Quads	LatitudeDDNAD83	LongitudeDDNAD83
El Segundo Mine	McKinley	Coal	Laguna Castillo, Orphan Annie Rock	35.65	107.85
Hard Rock Pile	McKinley	Red Dog	Window Rock	35.65	109.02
Jaramillo Humate Mine	McKinley	Humate	Ojo Encino Mesa	35.89	107.37
Jim Stephens Pit	McKinley	Red Dog, Scoria	Tse Bonita School	35.65	109.00
Lee Ranch Mine	McKinley	Coal	Cerro Alesna, El Dado, Piedra De La Aguila, San Lucas Dam	35.51	107.62
Prewitt - Elkins Material Source	McKinley	Aggregate	Bluewater	35.31	107.99
Pueblo Alto Mine	McKinley	Humate	Pueblo Alto Trading Post	35.97	107.57
San Antone Quarry	McKinley	Aggregate, Limestone	Thoreau NE	35.44	108.12
Star Lake Menefee Mine	McKinley	Humate	Star Lake	35.89	107.41
Star Lake Mesa Verde Mine	McKinley	Humate	Star Lake	35.87	107.48
U-Mate Mine	McKinley	Humate	Gallup West	35.55	108.84

Jair Battery / FEMA MAP



Logos Operating, LLC
Jair Battery (Jair 1)
Below Grade Tank Registration
Siting Criteria

1. According to the iWaters Database from the State Engineers Office, the closest known water well is 4059 meters (2.5miles) away in Section 16, T22N, R5W. The depth to ground water is not listed but the well was drilled to 1313'. A test water well was drilled on the Logos 7 with a water depth of 72' & elevation of 6880'. The Jair Battery with an elevation of 6959' is 79' higher. Therefore the ground water depth for the Jair Battery is 151'.

2. As shown on the attached topographic map and aerial photos, there are no continuously flowing watercourses within 100' of the well, or any significant watercourses, lakebeds, sinkholes or playa lakes within 100' of the well.

3. There are no permanent residences, schools, hospitals, institutions, or churches within 300' of the well.

4. There are no domestic water wells or springs within 200' of the well. See iWaters Database printout.

5. The well is not located within any municipal boundaries.

6. The well is not within 100' of any wetlands. See attached topographic map and aerial photos.

7. There are no subsurface mines in Section 7, T22N, R5W. See attached map from the NM EMNRD Mining and Mineral Division.

8. The Jair 1 is not located in an "unstable" area. The location is not over a mine and is not on the side of a hill.

9. The well is not located in a 100-year floodplain as visible on the topographic map and the FEMA Flood Insurance Rate Map.

Hydro geological report for Jair Battery (Jair 1)

Regional Hydro geological context:

The Jair 1 is located on federal land in Sandoval County, New Mexico. The well location is on the valley floor between two very minor drainages that run north and eventually drain into Largo Wash. The area around the location is mainly gently rolling sage brush covered hillsides of primarily dry, sandy soil with occasional boulders. Numerous small arroyos drain to the north.

A records search of the NM Office of the State Engineer – iWATERS database indicates that the closest known water well is 4059 meters (2.5miles) away in Section 16, T22N, R5W. The depth to ground water is not listed but the well was drilled to 1313'.

Geologic maps of the area indicate that the surface formation at the proposed well site is the San Jose formation. The San Jose Formation of Eocene age occurs in New Mexico and Colorado and its outcrop forms the land surface over much of the eastern half of the central basin. It overlies the Nacimiento Formation in the area generally south of the Colorado – New Mexico State line and overlies the Animas Formation in the area generally north of the State line.

The San Jose Formation was deposited in various fluvial-type environments. In general, the unit consists of an interbedded sequence of sandstone, siltstone and variegated shale. Thickness of the San Jose Formation generally increases from west to east (200 feet in the west and south to almost 2,700 feet in the center of the structural basin).

Ground water is associated with alluvial and fluvial sandstone aquifers. Thus, the occurrence of ground water is mainly controlled by the distribution of sandstone in the formation. The distribution of such sandstone is the result of original depositional extent plus any post-depositional modification, namely erosion and structural deformation. Transmissivity data for San Jose Formation are minimal. Values of 40 and 120 feet squared or measured discharge from 46 water wells completed in San Jose Formation ranges from 0.15 to 61 gallons per minute and the median is 5 gallons per minute. Most of the wells provide water for livestock and domestic use.

The San Jose Formation is a very suitable unit for recharge from precipitation because soils that form on the unity are sandy and highly permeable and therefore readily absorb precipitation. However, low annual precipitation, relatively high transpiration and evaporation rates, and deep dissection of the San Jose Formation by the San Juan River and its tributaries all tend to reduce the effective recharge of the unit.

Stone et al, 1983, Hydrogeology and Water Resources of the San Juan Basin, New Mexico Socorro, New Mexico Bureau of Mines and Mineral Resources Hydrologic Report 6, 70p

Site specific information:

Surface hydrology:	The site is located at the upper end of the Largo Wash drainage and is drained by a number of small intermittent drainages
1st water-bearing formation:	San Jose, tertiary
Formation thickness:	200 - 700 feet
Underlying formation:	Nacimiento, Tertiary
Depth to ground water:	~151'. Due to the elevation difference of greater than 79' between the Jair Battery (@ 6959') and the test water well on the Logos 7 (@ 6880') where the water depth is 72'. Therefore the depth to ground water is greater than 100' below the bottom of the pit.

NEW MEXICO OIL CONSERVATION COMMISSION

WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Supersedes C-128
Effective 1-1-65

All distances must be from the outer boundaries of the Section.

Operator	Lease	Well No.
Delaware Apache Corporation	Jair	1

Unit Letter	Section	Township	Range	County
H	7	22 North	5 West	Sandoval

Actual Footage Location of Well:
1980 feet from the North line and 660 feet from the East line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
6959	~~Gallup~~ MV	Venado-Mesaverde	80 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

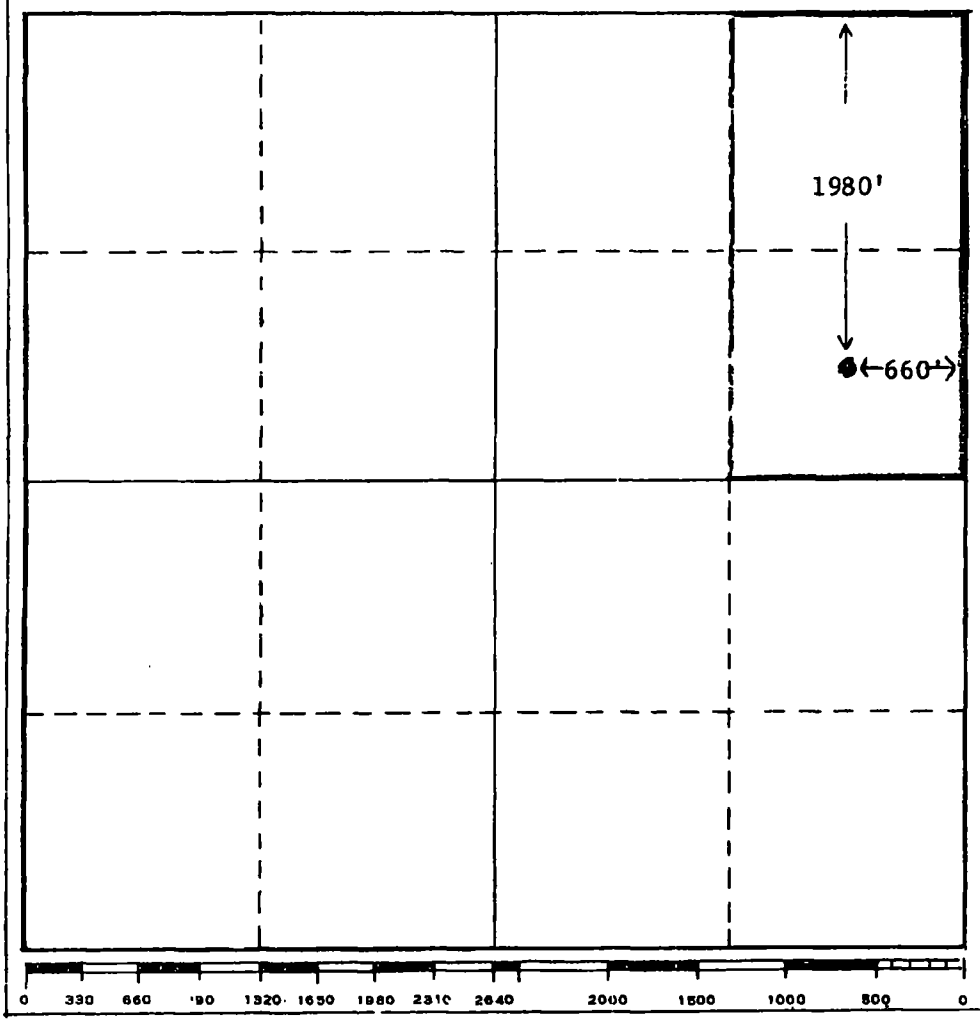
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling. etc?

☐ Yes ☐ No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name
L.D.Somers

Position
Regional Production Manager

Company
Delaware Apache Corporation

Date
February 3, 1972

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed
November 2, 1971

Registered Professional Engineer and/or Land Surveyor

E. V. Echohawk

Certificate No.
3602

LOGOS
RESOURCES LLC

Logos Operating
Below Grade Tank Design and Construction Plan

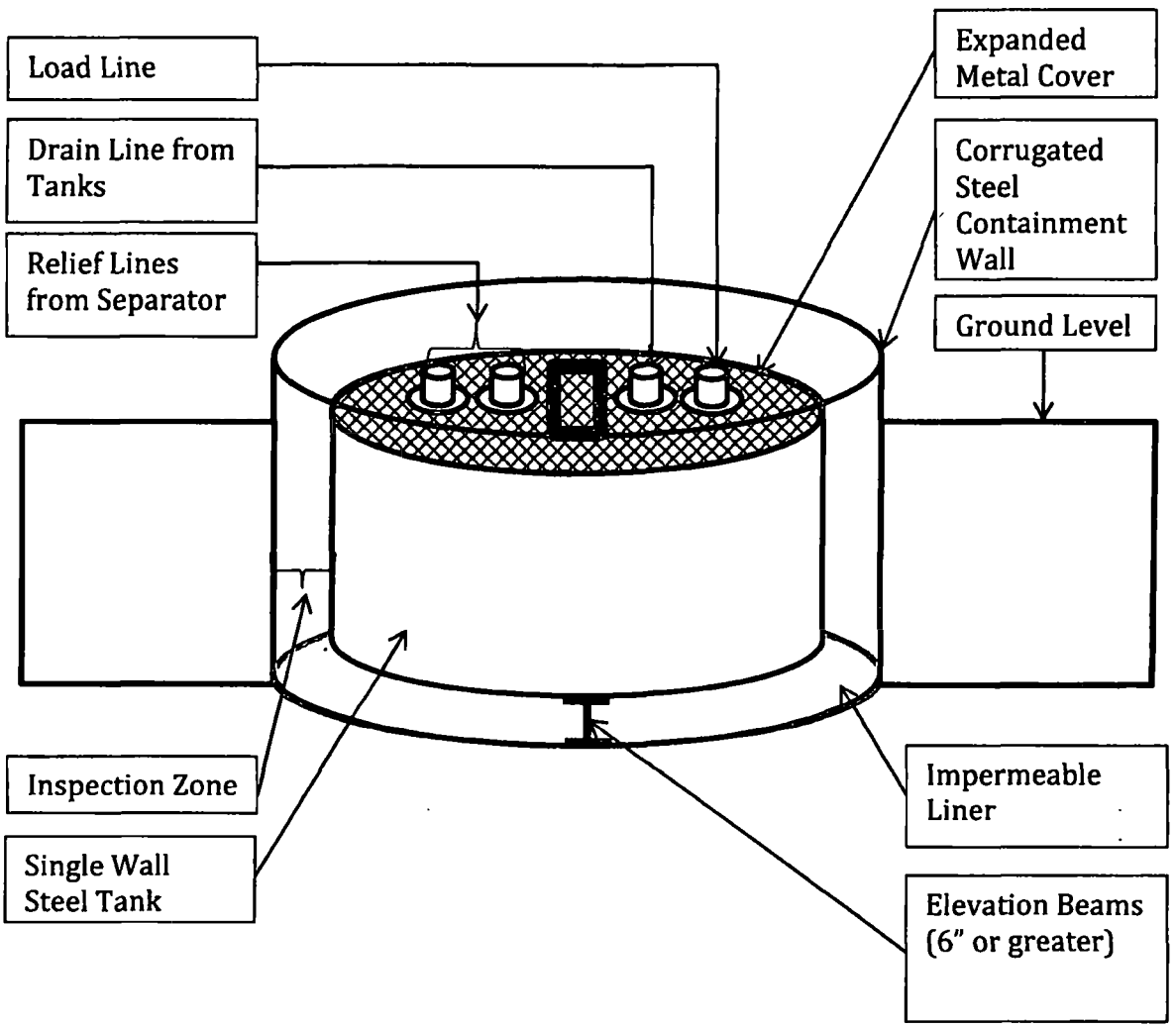
In accordance with NMAC 19.15.17, the following information describes the design and construction plan for below grade tanks (BGT) for Logos Operating, LLC (Logos). This is a standard design and construction plan for Logos.

General Plan in Accordance with 19.15.17.11

1. Logos will design and construct a BGT to contain liquids and solids that is designed to prevent contamination of fresh water and protect public health and the environment.
2. The location of the BGT will be at a battery or well location which contains proper upright signs (in compliance with 19.15.16.8 NMCA).
3. The BGT will be contained within the operating berm and will be protected with fencing to deter unauthorized access. The BGT will have an expanded metal cover.
4. The BGT will be constructed out of steel which is resistant to the particular contents and resistant to damage from sunlight. The pit will be painted to minimize rust and corrosion.
5. The foundation will be level, free of rocks, debris, sharp edges or irregularities to prevent punctures, cracks, indentations of the liner or tank bottom.
6. The BGT will be designed and constructed to prevent surface water run-on from entering the tank. The corrugated steel wall surrounding the pit will be above grade and will prevent water from running into the BGT.
7. The BGT will have a single wall that is capable of being inspected. The BGT will have a corrugated steel wall barrier that prevents the ground from collapsing around the BGT and allows for the BGT to be thoroughly inspected by providing a direct sight line to the BGT bottom and to the BGT impermeable liner.
8. The BGT will be set on beams, six inches or greater, on the liner in way that will protect the bottom of the BGT from sharp objects.
9. The BGT will only be used under manual conditions to drain tank bottoms or to relieve pressure off of separators. Fluid will not be continuously pumped into this tank, therefore, this design is based on 19.15.17.11.I.4.c. The BGT's are located at batteries that have primary water tanks so that the BGT is not used as a primary water pit, it is only used as a drain pit.
10. An impermeable liner will be installed below the BGT so that any leak in the BGT will flow to a visible point on top of the impermeable liner.

LOGOS
RESOURCES LLC

Logos Operating
Below Grade Tank Design



LOGOS
RESOURCES LLC

Logos Operating
Below Grade Tank Operation and Maintenance Plan

In accordance with NMAC 19.15.17, the following information describes the operation and maintenance plan for below grade tanks (BGT) for Logos Operating, LLC (Logos). This is a standard procedure for Logos.

General Plan in Accordance with 19.15.17.12

1. Logos will operate and maintain the BGT to contain liquids and solids while maintaining the integrity of the liner, BGT, and corrugated steel wall. The operation and maintenance are plan are designed to prevent contamination of fresh water and protect public health and safety.
2. Logos will not store or discharge hazardous waste into the BGT.
3. If the BGT develops a leak, Logos will remove all of the fluids from the BGT within 48 hours and notify the appropriate division office pursuant to 19.15.29 NMAC. Logos will immediately take the BGT out of service until it is properly repaired or replaced.
4. The BGT will be operated and designed to prevent the collection of surface water run-on.
5. The BGT will be bounded by a corrugated steel wall which will contain an unanticipated release. The BGT and corrugated steel wall are also located inside of the berm which will act as a secondary containment barrier in the event of an unanticipated release.
6. Logos will not allow the BGT to overflow or collect surface water run on.
7. Logos will remove any measurable layer of oil from the BGT.
8. The BGT will be inspected at least monthly and the integrity will be documented annually with records maintained for at least 5 years.
9. The BGT will be operated with adequate freeboard to prevent overtopping of the BGT.

LOGOS
RESOURCES LLC

Logos Operating
Below Grade Tank Closure Plan

In accordance with NMAC 19.15.17.13, the following information describes the closure plan for below grade tanks (BGT) for Logos Operating, LLC (Logos).

General Plan in Accordance with 19.15.17.13

1. Logos will obtain approval of a closure plan prior to commencing closure operations.
2. Logos will close the BGT by first removing all contents and liners and disposing the contents at an approved facility as necessary.
3. The soils beneath the BGT will be tested as follows:
    a. A five point composite sample including any obvious staining shall be taken under BGT and will be analyzed for constituents listed in Table I of 19.15.17.13 NMAC.
    b. Based on the results of the soil test, Logos will obtain approval prior to completing any necessary additional delineation for closure. If the soil tests are at or below the standards of closure, Logos will proceed with closure.

Components	Tests Method	Limit (mg/Kg)
Benzene	EPA SW-846 8021B or 8015M	10
BTEX	EPA SW-846 8021B or 8260B	50
TPH	EPA SW-846 418.1	2500
GRO/DRO	EPA SW-846 8015M	1000
Chlorides	EPA 300.0	10,000

4. Logos will notify the surface owner by certified mail, return receipt requested, of plans to close the BGT with at least 72 hour notice, but no more than 1 week, prior to any closure operation. The notice will include the well name, API number, and location.
5. Logos will notify the appropriate district office verbally and in writing with at least 72 hours of notice but no more than 1 week. The notice will include well name and API number as well as the location containing unit letter, section, township, and range.
6. Logos will submit a closure report on form C-144 within 60 days of closure completion. The closure report will contain back filling details, capping and covering where applicable, all necessary attachments, certification that all information contained in the report is correct and that the operator has complied with all applicable closure requirements to the best of its knowledge.

7. Logos will remove liquids and sludge from the BGT within 60 days of cessation of operations and dispose of those at a division approved facility.
8. Within 6 months of cessation of operations, Logos will remove the BGT and all associated equipment associated with only the BGT. Equipment that is required for other purposes will remain in place.
9. Upon closing of the BGT, Logos will reclaim the unused BGT location to a safe and stable condition that blends with the surrounding undisturbed area as provided in Paragraph 2 of subsection H of 19.15.17.13 as well as recontouring the area in accordance with paragraph 5 in subsection H of 19.15.17.13 NMAC. The soil cover will be constructed to prevent ponding of water and erosion of the cover material.
10. Areas needed for production operations will be compacted, stabilized, and maintained to minimize dust and erosion as much as practicable.
11. The reclamation of the BGT area will contain a uniform vegetative cover that reflects a life-form ratio of plus or minus fifty (50%) of pre-disturbance levels and a total percent plant cover of at least seventy (70%) of pre-disturbance levels, excluding noxious weeds. The re-vegetation and reclamation obligations imposed by other applicable federal or tribal agencies that manage the lands will supersede these provisions and govern the obligations.
12. Logos will notify the division when reclamation and re-vegetation is complete.

Watson, Debbie

From: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>
Sent: Thursday, July 27, 2017 7:10 AM
To: Watson, Debbie
Subject: [EXTERNAL] FW: BGT Tank Removal Jair Battery #001 72 Hour Notice

Cory Smith
Environmental Specialist
Oil Conservation Division
Energy, Minerals, & Natural Resources
1000 Rio Brazos, Aztec, NM 87410
(505)334-6178 ext 115
cory.smith@state.nm.us

From: Fields, Vanessa [mailto:Vanessa.Fields@wpxenergy.com]
Sent: Friday, March 20, 2015 1:58 PM
To: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>
Subject: Re: BGT Tank Removal Jair Battery #001 72 Hour Notice

That is correct, not sure what happened to the 2 in the email. Sounds good thank you.

On Mar 20, 2015, at 1:54 PM, "Smith, Cory, EMNRD" <Cory.Smith@state.nm.us> wrote:

> Vanessa,
>
> Just so I know I have the correct well site is the API# 30-043-20080
>
> If so, There is an Approved BGT Registration for a 45 BBL tank, Please follow the approved closure plan for closure.
>
> Thank you,
>
> Cory
>
> ---
>
> **From:** Fields, Vanessa [mailto:Vanessa.Fields@wpxenergy.com]
> **Sent:** Friday, March 20, 2015 9:43 AM
> **To:** Smith, Cory, EMNRD; BryceHammond@jicarillaoga.com
> **Cc:** Bradshaw, Rob
> **Subject:** BGT Tank Removal Jair Battery #001 72 Hour Notice
> **Importance:** High
>
> Cory,

We need to take the following below grade tank out of service, and would like to close this existing BGT. We request your review to allow closure. The removal of the BGT is scheduled for Tuesday March 24, 2015 at 8:00.

Well Site	API	SEC	TWN	RNG
Jair #001	30-043-0080	H		
07	22N	05W		

Please let me know if you have any questions and/or concerns.

Thank you,

Vanessa Fields
Environmental Specialist
Office# 505-333-1880
Fax# 505-333-1805
Cell# 505-419-6219
vanessa.fields@wpxenergy.com
<image001.jpg>

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Analytical Laboratory

Analytical Report

Report Summary

Client: WPX Energy, Inc.

Chain Of Custody Number:

Samples Received: 4/9/2015 2:37:00PM

Job Number: 04108-0136

Work Order: P504033

Project Name/Location: Jair Tank Battery BGT Removal

Entire Report Reviewed By: _____ Date: 4/13/15

Tim Cain, Laboratory Manager

5796 US Highway 64, Farmington, NM 87401 Ph (505) 632-0615 Fx (505) 632-1865
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envirotech-inc.com
laboratory@envirotech-inc.com

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Analytical Laboratory

WPX Energy, Inc.	Project Name:	Jair Tank Battery BGT Removal	
PO Box 21218	Project Number:	04108-0136	**Reported:**
Tulsa OK, 74121-1358	Project Manager:	Vanessa Fields	13-Apr-15 15:42

Analyical Report for Samples

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
Jair Tank Battery	P504033-01A	Soil	04/07/15	04/09/15	Glass Jar, 4 oz.

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laboratory@envirotech-inc.com

WPX Energy, Inc.	Project Name:	Jair Tank Battery BGT Removal	
PO Box 21218	Project Number:	04108-0136	**Reported:**
Tulsa OK, 74121-1358	Project Manager:	Vanessa Fields	13-Apr-15 15:42

Jair Tank Battery

P504033-01 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	**7.91**	0.10	mg/kg	1	1515031	04/10/15	04/10/15	EPA 8021B	
Toluene	**10.1**	0.10	mg/kg	1	1515031	04/10/15	04/10/15	EPA 8021B	
Ethylbenzene	**13.3**	0.10	mg/kg	1	1515031	04/10/15	04/10/15	EPA 8021B	
p,m-Xylene	**45.5**	0.20	mg/kg	1	1515031	04/10/15	04/10/15	EPA 8021B	
o-Xylene	**13.9**	0.10	mg/kg	1	1515031	04/10/15	04/10/15	EPA 8021B	
Total Xylenes	**59.4**	0.10	mg/kg	1	1515031	04/10/15	04/10/15	EPA 8021B	
Total BTEX	**90.8**	0.10	mg/kg	1	1515031	04/10/15	04/10/15	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		*102 %*		*50-150*	*1515031*	*04/10/15*	*04/10/15*	*EPA 8021B*	
Nonhalogenated Organics by 8015									
Gasoline Range Organics (C6-C10)	**822**	9.98	mg/kg	1	1515031	04/10/15	04/10/15	EPA 8015D	
Diesel Range Organics (C10-C28)	**4170**	24.9	mg/kg	1	1515030	04/10/15	04/10/15	EPA 8015D	
Surrogate: o-Terphenyl		*202 %*		*50-200*	*1515030*	*04/10/15*	*04/10/15*	*EPA 8015D*	*Surr1*
Surrogate: 4-Bromochlorobenzene-FID		*80.2 %*		*50-150*	*1515031*	*04/10/15*	*04/10/15*	*EPA 8015D*	
Total Petroleum Hydrocarbons by 418.1									
Total Petroleum Hydrocarbons	**7670**	350	mg/kg	10	1515033	04/10/15	04/10/15	EPA 418.1	
Cation/Anion Analysis									
Chloride	**80.4**	9.97	mg/kg	1	1515032	04/10/15	04/10/15	EPA 300.0	

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WPX Energy, Inc.	Project Name:	Jair Tank Battery BGT Removal	
PO Box 21218	Project Number:	04108-0136	**Reported:**
Tulsa OK, 74121-1358	Project Manager:	Vanessa Fields	13-Apr-15 15:42

Volatile Organics by EPA 8021 - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1515031 - Purge and Trap EPA 5030A										
Blank (1515031-BLK1)				Prepared: 10-Apr-15 Analyzed: 13-Apr-15						
Benzene	ND	0.10	mg/kg							
Toluene	ND	0.10	"							
Ethylbenzene	ND	0.10	"							
p,m-Xylene	ND	0.20	"							
o-Xylene	ND	0.10	"							
Total Xylenes	ND	0.10	"							
Total BTEX	ND	0.10	"							
Surrogate: 4-Bromochlorobenzene-PID	*0.422*		"	*0.399*		*106*	*50-150*			
LCS (1515031-BS1)				Prepared: 10-Apr-15 Analyzed: 13-Apr-15						
Benzene	19.8	0.10	mg/kg	20.0		99.1	75-125			
Toluene	18.2	0.10	"	20.0		91.0	70-125			
Ethylbenzene	18.5	0.10	"	20.0		92.6	75-125			
p,m-Xylene	38.9	0.20	"	39.9		97.3	80-125			
o-Xylene	19.1	0.10	"	20.0		95.9	75-125			
Surrogate: 4-Bromochlorobenzene-PID	*0.464*		"	*0.399*		*116*	*50-150*			
Matrix Spike (1515031-MS1)	**Source: P504033-01**			Prepared: 10-Apr-15 Analyzed: 13-Apr-15						
Benzene	26.0	0.10	mg/kg	20.0	7.91	90.3	75-125			
Toluene	25.4	0.10	"	20.0	10.1	76.6	70-125			
Ethylbenzene	31.1	0.10	"	20.0	13.3	88.9	75-125			
p,m-Xylene	83.9	0.20	"	40.0	45.5	96.0	80-125			
o-Xylene	33.3	0.10	"	20.0	13.9	96.9	75-125			
Surrogate: 4-Bromochlorobenzene-PID	*0.460*		"	*0.400*		*115*	*50-150*			
Matrix Spike Dup (1515031-MSD1)	**Source: P504033-01**			Prepared: 10-Apr-15 Analyzed: 13-Apr-15						
Benzene	25.3	0.10	mg/kg	20.0	7.91	87.0	75-125	2.60	15	
Toluene	25.6	0.10	"	20.0	10.1	77.3	70-125	0.541	15	
Ethylbenzene	31.6	0.10	"	20.0	13.3	91.7	75-125	1.78	15	
p,m-Xylene	82.6	0.20	"	40.0	45.5	92.7	80-125	1.55	15	
o-Xylene	32.6	0.10	"	20.0	13.9	93.7	75-125	1.91	15	
Surrogate: 4-Bromochlorobenzene-PID	*0.467*		"	*0.400*		*117*	*50-150*			

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WPX Energy, Inc.	Project Name:	Jair Tank Battery BGT Removal	
PO Box 21218	Project Number:	04108-0136	**Reported:**
Tulsa OK, 74121-1358	Project Manager:	Vanessa Fields	13-Apr-15 15:42

Nonhalogenated Organics by 8015 - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1515031 - Purge and Trap EPA 5030A										
Blank (1515031-BLK1)				Prepared: 10-Apr-15 Analyzed: 13-Apr-15						
Gasoline Range Organics (C6-C10)	ND	9.98	mg/kg							
Surrogate: 4-Bromochlorobenzene-FID	*0.372*		"	*0.399*		*93.1*	*50-150*			
LCS (1515031-BS1)				Prepared: 10-Apr-15 Analyzed: 13-Apr-15						
Gasoline Range Organics (C6-C10)	257	9.98	mg/kg	266		96.7	80-120			
Surrogate: 4-Bromochlorobenzene-FID	*0.406*		"	*0.399*		*102*	*50-150*			
Matrix Spike (1515031-MS1)	**Source: P504033-01**			Prepared: 10-Apr-15 Analyzed: 13-Apr-15						
Gasoline Range Organics (C6-C10)	1580	10.0	mg/kg	266	822	284	75-125			E
Surrogate: 4-Bromochlorobenzene-FID	*0.485*		"	*0.400*		*121*	*50-150*			
Matrix Spike Dup (1515031-MSD1)	**Source: P504033-01**			Prepared: 10-Apr-15 Analyzed: 13-Apr-15						
Gasoline Range Organics (C6-C10)	1580	9.99	mg/kg	266	822	285	75-125	0.0935	15	E
Surrogate: 4-Bromochlorobenzene-FID	*0.506*		"	*0.400*		*127*	*50-150*			

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WPX Energy, Inc.	Project Name:	Jair Tank Battery BGT Removal	
PO Box 21218	Project Number:	04108-0136	**Reported:**
Tulsa OK, 74121-1358	Project Manager:	Vanessa Fields	13-Apr-15 15:42

Total Petroleum Hydrocarbons by 418.1 - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1515033 - 418 Freon Extraction										
Blank (1515033-BLK1)				Prepared & Analyzed: 10-Apr-15						
Total Petroleum Hydrocarbons	ND	35.0	mg/kg							
Duplicate (1515033-DUP1)		Source: P504033-01		Prepared & Analyzed: 10-Apr-15						
Total Petroleum Hydrocarbons	8070	350	mg/kg		7670			5.10	30	
Matrix Spike (1515033-MS1)		Source: P504033-01		Prepared & Analyzed: 10-Apr-15						
Total Petroleum Hydrocarbons	11200	349	mg/kg	2030	7670	175	80-120			SPK1

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WPX Energy, Inc.	Project Name:	Jair Tank Battery BGT Removal	
PO Box 21218	Project Number:	04108-0136	**Reported:**
Tulsa OK, 74121-1358	Project Manager:	Vanessa Fields	13-Apr-15 15:42

Cation/Anion Analysis - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1515032 - Anion Extraction EPA 300.0										
Blank (1515032-BLK1)				Prepared & Analyzed: 10-Apr-15						
Chloride	ND	9.91	mg/kg							
LCS (1515032-BS1)				Prepared & Analyzed: 10-Apr-15						
Chloride	511	9.85	mg/kg	492		104	90-110			
Matrix Spike (1515032-MS1)	**Source: P504033-01**			Prepared & Analyzed: 10-Apr-15						
Chloride	592	9.97	mg/kg	499	80.4	103	80-120			
Matrix Spike Dup (1515032-MSD1)	**Source: P504033-01**			Prepared & Analyzed: 10-Apr-15						
Chloride	598	9.92	mg/kg	496	80.4	104	80-120	0.990	20	

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WPX Energy, Inc.	Project Name:	Jair Tank Battery BGT Removal	
PO Box 21218	Project Number:	04108-0136	**Reported:**
Tulsa OK, 74121-1358	Project Manager:	Vanessa Fields	13-Apr-15 15:42

Notes and Definitions

Surr1	Surrogate recovery was outside quality control limits.
SPK1	The spike recovery is outside of quality control limits.
E	Analyte was present at a concentration greater than the calibration curve upper limit.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

Rush

CHAIN OF CUSTODY RECORD

17432

Client:	Project Name / Location:
WPX Energy	BGT Air Tank Battery Removal
Email results to:	Sampler Name:
Vanessa.Fields@wpxenergy.com	Robert Jordan
Client Phone No.:	Client No.:
505.419-6219	04108-0136

Sample No./ Identification	Sample Date	Sample Time	Lab No.	No./Volume of Containers	Preservative HNO_3	Preservative HCl	Preservative Ice	TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion	RCI	TCLP with H/P	CO Table 910-1	TPH (418.1)	CHLORIDE			Sample Cool	Sample Intact
Rotair Tank Battery	4/1/15	11:30am	P504033-01	1 4oz			✓	X	X							X	X			✓	✓

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
	4/9/15	2:37		04/9/15	14:37
Relinquished by: (Signature)			Received by: (Signature)		

Sample Matrix

Soil ☑ Solid ☐ Sludge ☐ Aqueous ☐ Other ☐ _____

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

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Analytical Laboratory

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