

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

Amended 12235

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

12315 Proposed Alternative Method Permit or Closure Plan Application **CONS. DIV DIST. 3**

Type of action: ☐ Below grade tank registration
43-21165 ☐ 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

NOV 03 2014

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 AVENUE, BUILDING 7101 FARMINGTON NM 87401
Facility or well name: JICARILLA O 3E
API Number: 30-043-21165 OCD Permit Number:
U/L or Qtr/Qtr O Section 10 Township 22N Range 3W County: SANDOVAL
Center of Proposed Design: Latitude 36.146806° N Longitude 107.140858° W 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 ☐ Workover
☐ Permanent ☐ Emergency ☐ Cavitation ☐ P&A ☐ Multi-Well Fluid Management Low Chloride Drilling Fluid ☐ yes ☐ no
☒ Lined ☐ Unlined Liner type: Thickness 20 mil ☒ LLDPE ☐ HDPE ☐ PVC ☐ Other _____
☐ String-Reinforced
Liner Seams: ☒ Welded ☒ Factory ☐ Other _____ Volume: 8,000 bbl Dimensions: L 130 x W 60 x D 10

3.
☐ **Below-grade tank:** Subsection I of 19.15.17.11 NMAC
Volume: _____ bbl Type of fluid: _____
Tank Construction material: _____
☐ 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 _____

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

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

6.

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

☐ Screen ☐ Netting ☐ Other _____

☐ Monthly inspections (If netting or screening is not physically feasible)

7.

Signs: Subsection C of 19.15.17.11 NMAC

☐ 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers

☐ Signed in compliance with 19.15.16.8 NMAC

8.

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 300 feet of any other fresh water well or spring, in existence at the time of the initial application.

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

☐ Yes ☐ No

Within 100 feet of a wetland.

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

☐ Yes ☐ No

Temporary Pit Non-low chloride drilling fluid

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

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

☐ Yes ☐ No

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

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

☐ Yes ☐ No

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

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

☐ Yes ☐ No

Within 300 feet of a wetland.

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

☐ Yes ☐ No

Permanent Pit or Multi-Well Fluid Management Pit

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

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

☐ Yes ☐ No

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

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

☐ Yes ☐ No

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

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

☐ Yes ☐ No

Within 500 feet of a wetland.

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

☐ Yes ☐ No

10.

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

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

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

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

11.

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

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

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

- ☐ Hydrogeologic Data - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC
- ☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC

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

12.

Permanent Pits Permit Application Checklist: Subsection B of 19.15.17.9 NMAC

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

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

13.

Proposed Closure: 19.15.17.13 NMAC

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

- Type: ☐ Drilling ☐ 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	<input type="checkbox"/> Yes <input type="checkbox"/> No

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: Jonathan D. Kelly Approval Date: 11/5/2014

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: 06/19/14

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.

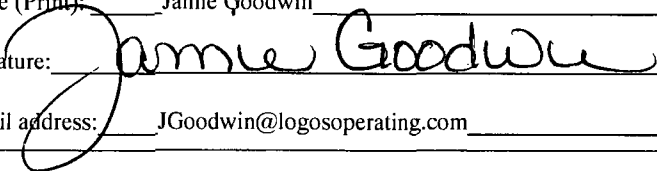
Closure Report Attachment Checklist: *Instructions: Each of the following items must be attached to the closure report. Please indicate, by a check mark in the box, that the documents are attached.*

- ☒ 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 36.146806° N Longitude 107.140858° W 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): Jamie GoodwinTitle: Regulatory TechnicianSignature: Date: 11/03/14e-mail address: JGoodwin@logosoperating.comTelephone: 505-330-9333

**Logos Operating, LLC
San Juan Basin
Closure Report**

**Lease Name: JICARILLA O 3E
API NO: 30-043-21165**

In accordance with Rule 19.15.17.12 NMAC the following information describes the closure requirements of temporary pits on Logos Operating, LLC (Logos) locations. This is Logos' standard procedure for all temporary pits. A Separate plan will be submitted for any temporary pit that does not conform to this plan.

All closure activities will include proper documentation and be available for review upon request and will be submitted to OCD within 60 days of the pit closure. Closure report will be filed on C-144 and incorporated the following:

- Detail on Capping and Covering, where applicable **(See report)**
- Plot Plan (Pit diagram) **(Included as an attachment)**
- Inspection reports **(Included as an attachment)**
- Sampling Results **(Included as an attachment)**
- C-105 **(Included as an attachment)**
- Copy of Deed Notice will be filed with County Clerk **(Not required on Federal, State or Tribal land as stated by FAQ dated October 30, 2008)**

General Plan

- 1 All free standing liquids will be removed at the start of the pit closure process from the pit and disposed of in a division-approved facility or recycle, reuse or reclaim the liquids in a manner that the appropriate division district office approves.

All recovered liquids were disposed of at Basin Disposal (permit #NM-01-005) and any sludge or soil required to be removed to facilitate closure was hauled to Envirotech Land Farm (Permit #NM-01-011) and JFJ Landfarm % IEI (Permit #NM-01-0010B).

- 2 The preferred method of closure for all temporary pits will be on-site burial, assuming that all criteria listed in sub-section (D) of 19.15.17.13 are met.

The pit was closed using onsite burial.

- 3 The surface owner shall be notified of Logos proposed closure plan using a means that provides proof of notice i.e., certified mail, return receipt requested.

**The closure process notification to the landowner was sent via certified mail. (See attached)
Due to confusion on surface owner notification the NMOCD was not notified. In the future Logos will notify the NMOCD of the Closure operation.**

- 4 Within 6 months of the Rig Off status occurring Logos will ensure that temporary pits are closed, re-contoured, and reseeded.

**The closure plan requirements were met due to rig move off date as noted on C-105. (See attached).
Pit closure extension to 7/16/14 was requested of the BIA per letter dated 3/5/14 and approved.**

- 5 Notice of Closure will be given to the Aztec Division office between 72 hours and one week of closure via email, or verbally, The notification of closure will include the following:

- i. Operator's name
- ii. Location by Unit Letter, Section, Township, and Range. Well name and API Number

Notification is attached.

- 6 Pit contents shall be mixed with non-waste containing, earthen material in order to achieve the solidification process. The solidification process will be accomplished using a combination of natural drying and mechanically mixing. Pit contents will be mixed with non-waste, earthen material to a consistency that is deemed a safe and stable. The mixing ratio shall not exceed 3 parts clean soil to 1 part pit contents.

Logos mixed the pit contents with non-waste containing, earthen material in order to achieve the solidification process. The solidification process was accomplished by using a combination of natural drying and mechanically mixing. Pit contents were mixed with non-waste, earthen material to a consistency that is deemed as safe and stable. The mixing ratio consisted of not more than 3 parts clean soil to 1 part pit contents.

- 7 A five point composite sample will be taken of the pit using sampling tools and all samples tested per 19.15.17.13(D)(5). In the event that the criteria are not met, all contents will be handled per 9.15.17.13(D)(7) i.e., Dig and haul.

A five point composite sample was taken of the pit using sampling tools and all samples tested per 19.15.17.13(D)(5). (Sample results attached).

Components	Tests Method	Limit (mg/Kg)	Results (ppm)
Benzene	EPA SW-846 8021B or 8015M	10	ND
BTEX	EPA SW-846 8021B or 8260B	50	0.87
TPH	EPA SW-846 418.1	2500	392
GRO/DRO	EPA SW-846 8015M	1000	156
Chlorides	EPA 300.0	40000	1370

- 8 Upon completion of solidification and testing, Logos will fold the outer edges of the trench liner to overlap the waste material in the pit area, then install a geomembrane cover over the waste material in the pit to prevent collections of infiltration water after the soil cover is in place; geomembrane a 20-mil, string reinforced, LLDPE liner, or equivalent complying with EPA SW-846 method 9090A requirements.

The pit material passed solidification and testing standards. Logos folded the outer edges of the trench liner to overlap the waste material in the pit area, then installed a geomembrane cover over the waste material and folded liner as per 19.15.17.13(8)(a)(b).

- 9 The pit area will be backfilled with compacted, non-waste containing, earthen material. A minimum of four feet of cover shall be achieved and the cover shall include one foot of suitable material to establish vegetation at the site, or the background thickness of topsoil, whichever is greater.

The pit area was then backfilled with compacted, non-waste containing, earthen material. More than four feet of cover was achieved and the cover included one foot of suitable material to establish vegetation at the site.

- 10 Re-contouring of location will match fit, shape, line, form and texture of the surrounding area. Re-shaping will include drainage control, prevent ponding, and prevent erosion. Natural drainages will be unimpeded and water bars and/or silt traps will be placed in areas where needed to prevent erosion on a large scale. Final re-contour shall have a uniform appearance with smooth surface, fitting the natural landscape.

The pit area was re-contoured to match fit, shape, line, form and texture of the surrounding area. Reshaping included drainage control, to prevent ponding and erosion. Natural drainages were unimpeded and water bars and/or silt traps were placed in areas where needed to prevent erosion on a large scale. Final re-contour has a uniform appearance with smooth surface, fitting the natural landscape.

- 11 Notification will be sent to OCD when the reclaimed area is seeded.

Provision 11 was accomplished in accordance with NMOCD 19.15.17.13(5)(d) Notification will be sent to the OCD when re-vegetation is established.

- 12 Logos shall seed the distributed areas the first growing season after the operator closes the pit. Seeding will be accomplished via drilling on the contour whenever practical or by other division-approved methods. BLM or Forest Service stipulated seed mixed will be used on federal lands. Vegetative cover will be established that will reflect a life-form ratio of plus or minus fifty percent (50%) of pre-disturbance levels and will equal seventy (70%) of the native perennial vegetative cover (un-impacted) consisting of at least three native plant species, including at least one grass, but not including noxious weeds, and maintain that cover thorough two successive growing seasons. Repeat seeding or planting will be continued until successful vegetative growth occurs.

Provision 12 was accomplished in accordance with NMOCD 19.15.17.13(5)(d) Notification will be sent to the OCD when re-vegetation is established.

- 13 The temporary pit will be located with a steel marker, no less than four inches in diameter, cemented in a hole three feet deep in the center of the onsite burial. The marker will be flush with the ground to allow access of the active well pad and for safety concerns. The marker will include a threaded collar to be used for future abandonment. The top of the marker will contain a welded steel 12" square plate that indicates the onsite burial of the temporary pit. The plate will be easily removable and a four foot tall riser will be threaded into the top of the collar marker and welded around the base with the operator's information at the time of all wells on the pad are abandoned. The operator's information will include the following: Operator Name, Lease Name, Well Name and number, Unit Number, Section, Township, Range and an indicator that the marker is an onsite burial location.

Provision 13 was accomplished by installing a steel marker in the temporary pit, no less than four inches in diameter, cemented in a hole three feet deep in the center of the onsite burial. The marker is flush with the ground to allow access of the active well pad and for safety concerns. The top of the marker contains a welded steel 12" square plate that indicates the onsite burial of the temporary pit. The plate contains the following: Operator's name, Lease Name, Well Name and number, Unit Number, Section, Township, Range and an indicator that the marker is an onsite burial location.

The plate will be easily removable and a four foot tall riser will be threaded into the top of the collar marker and welded around the base with the following operator's information at the time of all wells on the pad are abandoned. The riser will also indicate that the marker is for an onsite burial location.

**Operator Name: LOGOS
Lease Name & Well Number: JICARILLA O 3E
Unit Letter: O
Section: 10
Township: 22N
Range: 3W
API#: 30-043-21165
OBL**

- 14 Logos inspected and documented daily and weekly reports on the above Temporary Pit. Logos inspected any liner breeches, fluid seeps or spills, HC's on top of temporary pit, free of miscellaneous solid waste or debris, discharge line integrity, fence integrity, any dead wildlife or livestock and inspection of the freeboard. Logos will provide maintained documentation of inspections upon request.

Inspection Start Date: 12/9/13

Inspection End Date: 6/11/14

NOTE: During start and end dates of temporary pit inspections liner tear and holes were noted and repaired during the weekly inspections. In the future Logos will maintain logs in accordance with OCD ruling 19.15.17.12(B)(3).

Tamra Sessions

From: Tamra Sessions
Sent: Friday, September 6, 2013 9:30 AM
To: Merldine Oka (merldineoka@jicarillaoga.com)
Cc: Isaac Julian (iajulian@yahoo.com); Kurt Sandoval (kurt.sandoval@bia.gov); Kristina Graham
Subject: SURFACE OWNER NOTIFICATION 09/06/13 - Temporary Pit - Jicarilla O 3E
Attachments: Jicarilla Pit Notice.docx

Please see our attached notice for temporary pit for the following new drill location:

Jicarilla O 3E
O – Sec 10 – T22N – R03W
919' FSL & 1738' FEL

Tamra Sessions
Logos Resources, LLC
Operations Technician
tsessions@logosresourcesllc.com
505-330-9333



4001 N. Butler Ave
Farmington, NM 87401
Phone: (505) 436-2627
Fax: (505) 832-3095

Date: September 6, 2013

To: Jicarilla Apache Nation

Re: Surface Owner Notification for On-Site Burial

Ms. Merldine Oka
Jicarilla Apache Nation
Oil and Gas Administration
#6 Dulce Rock Road
Dulce, NM 87528

Re: Jicarilla O 3E
O - Sec 10 - T22N - R03W
919' FSL & 1738' FEL

Dear Ms. Oka,

According to NMOCD rules, Logos Operating, LLC is notifying you that there will be a temporary pit on the subject well and that they intend to bury the drill cuttings in the reserve pit, assuming that they qualify as per Subsection D of 19.15.17.13 NMAC. No action is required on your part. If you have any questions, please do not hesitate to call me.

Regards,

Tamra Sessions

Tamra Sessions
Operations Technician

DISTRICT I

1000 E. Franklin St., Hobbs, N.M. 88240
Phone: (505) 393-6100 Fax: (505) 393-0700

DISTRICT II

314 S. First St., Artesia, N.M. 88203
Phone: (505) 746-1233 Fax: (505) 746-0700

DISTRICT III

1800 Rio Grande Rd., Arroyo, N.M. 87410
Phone: (505) 334-0170 Fax: (505) 334-0170

DISTRICT IV

1800 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3400 Fax: (505) 476-3400

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-102
Revised August 1, 2011

Submit one copy to appropriate
District Office

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number		*Pool Code	*Pool Name
		39189	Lindrith Gallup-Dakota, West
*Property Code	*Property Name		*Well Number
311962	JICARILLA O		3E
*OGRID No.	*Operator Name		*Elevation
289408	LOGOS RESOURCES, LLC		7072'

10 Surface Location

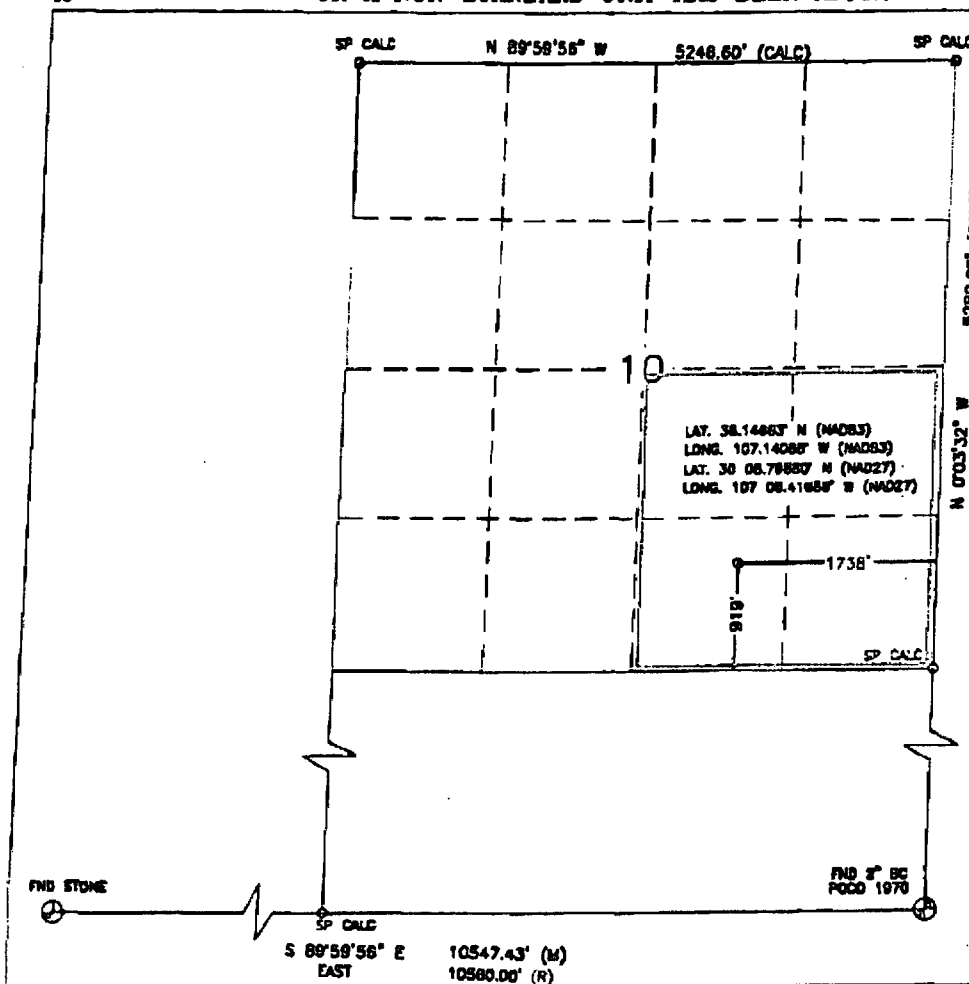
UL or lot no.	Section	Township	Range	Lot idn	Feet from the	North/South line	Feet from the	East/West line	County
0	10	22N	3W		919'	SOUTH	1738'	EAST	SANDOVAL

11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot idn	Feet from the	North/South line	Feet from the	East/West line	County
*Dedicated Acres		*Joint or InAD		*Consolidation Code		*Order No.			
160 acres									

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

18



17 OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or undivided mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Tamra Sessions 07/09/13
Signature Date

Tamra Sessions
Printed Name

tsessions@logosresourcesllc.com
E-mail Address

18 SURVEYOR CERTIFICATION

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 belief.

AUGUST 14, 2012

Date of Survey

Signature and Seal of Registered Surveyor

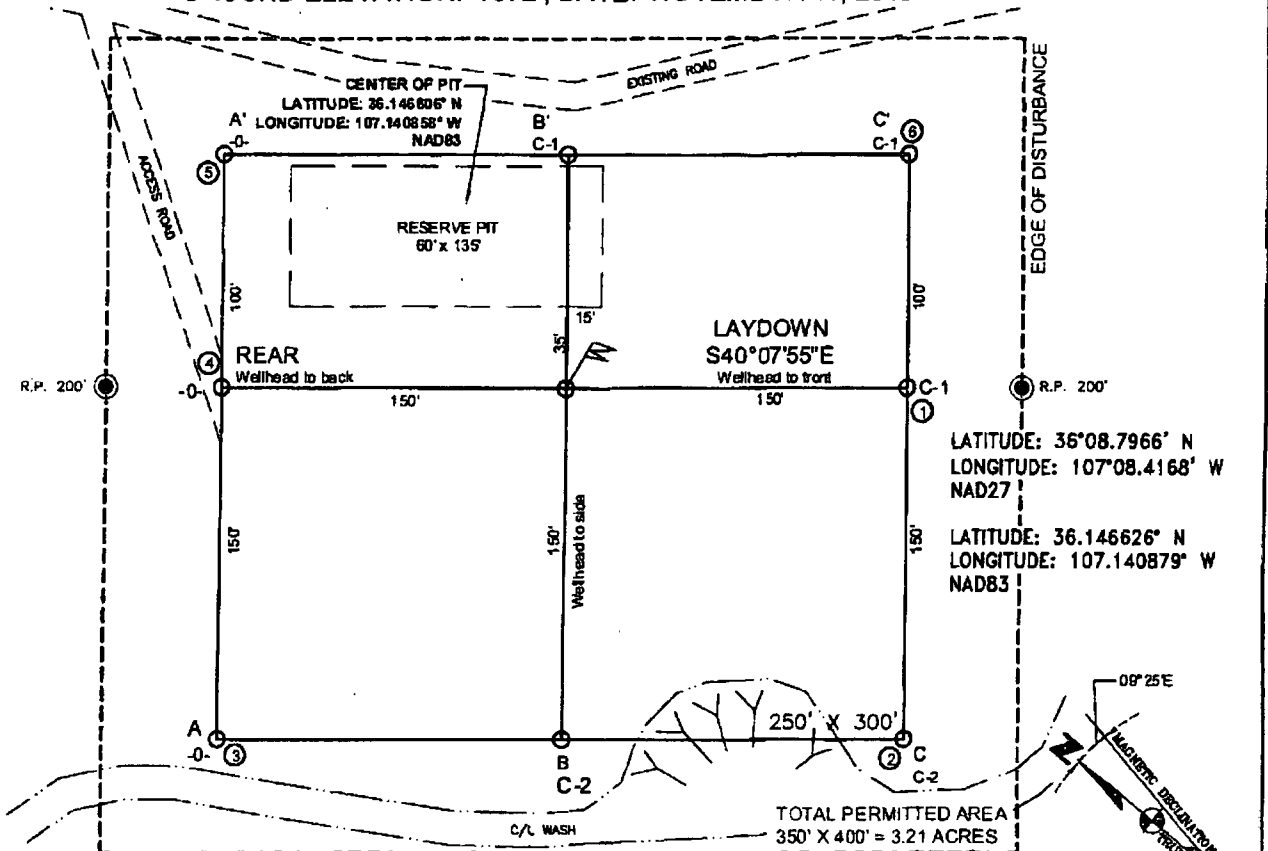
David Russell
DAVID RUSSELL
REGISTERED PROFESSIONAL LAND SURVEYOR
10201
Certificate Number 10201

LOGOS OPERATING, LLC

JICARILLA O #3E, 919' FSL & 1738' FEL

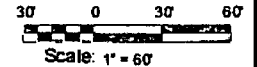
SECTION 10, T-22-N, R-3-W, NMPM, SANDOVAL COUNTY, NM

GROUND ELEVATION: 7072', DATE: NOVEMBER 11, 2013



NOTES:

1. VECTOR SURVEYS IS NOT LIABLE FOR UNDERGROUND UTILITIES OR PIPELINES. CONTRACTOR SHOULD CALL ONE-CALL FOR LOCATION OF ANY MARKED OR UNMARKED BURIED PIPELINES OR CABLES ON WELL PAD AND OR ACCESS ROAD AT LEAST TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION.
2. RESERVE PIT DIKE: TO BE 8" ABOVE DEEP SIDE (OVERFLOW - 3' WIDE AND 1' ABOVE SHALLOW SIDE).



Analytical Report

Report Summary

Client: Logos Operating, LLC

Chain Of Custody Number: 17472

Samples Received: 10/29/2014 8:27:00AM

Job Number: 12035-0069

Work Order: P410123

Project Name/Location: Jicarilla 0 #3E

Entire Report Reviewed By:



Date: 10/31/14

Tim Cain, Laboratory Manager

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

Logos Operating, LLC
PO Box 18
Flora Vista NM, 87415

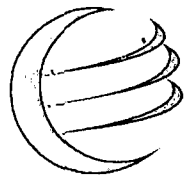
Project Name: Jicarilla 0 #3E
Project Number: 12035-0069
Project Manager: Sheena Leon

Reported:
31-Oct-14 15:34

Analytical Report for Samples

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
Drill Pit	P410123-01A	Soil	10/28/14	10/29/14	Glass Jar, 4 oz.

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



envirotech

Analytical Laboratory

Logos Operating, LLC
PO Box 18
Flora Vista NM, 87415

Project Name: Jicarilla 0 #3E
Project Number: 12035-0069
Project Manager: Sheena Leon

Reported:
31-Oct-14 15:34

Drill Pit P410123-01 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.10	mg/kg	1	1444019	10/29/14	10/29/14	EPA 8021B	
Toluene	0.11	0.10	mg/kg	1	1444019	10/29/14	10/29/14	EPA 8021B	
Ethylbenzene	0.14	0.10	mg/kg	1	1444019	10/29/14	10/29/14	EPA 8021B	
p,m-Xylene	0.43	0.20	mg/kg	1	1444019	10/29/14	10/29/14	EPA 8021B	
o-Xylene	0.19	0.10	mg/kg	1	1444019	10/29/14	10/29/14	EPA 8021B	
Total Xylenes	0.62	0.10	mg/kg	1	1444019	10/29/14	10/29/14	EPA 8021B	
Total BTEX	0.87	0.10	mg/kg	1	1444019	10/29/14	10/29/14	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		100 %		50-150	1444019	10/29/14	10/29/14	EPA 8021B	
Nonhalogenated Organics by 8015									
Gasoline Range Organics (C6-C10)	16.7	9.98	mg/kg	1	1444019	10/29/14	10/29/14	EPA 8015D	
Diesel Range Organics (C10-C28)	156	29.9	mg/kg	1	1444018	10/29/14	10/29/14	EPA 8015D	
Surrogate: o-Terphenyl		106 %		50-200	1444018	10/29/14	10/29/14	EPA 8015D	
Surrogate: 4-Bromochlorobenzene-FID		93.0 %		50-150	1444019	10/29/14	10/29/14	EPA 8015D	
Total Petroleum Hydrocarbons by 418.1									
Total Petroleum Hydrocarbons	392	35.0	mg/kg	1	1444025	10/29/14	10/29/14	EPA 418.1	

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



envirotech

Analytical Laboratory

Logos Operating, LLC
PO Box 18
Flora Vista NM, 87415

Project Name: Jicarilla 0 #3E
Project Number: 12035-0069
Project Manager: Sheena Leon

Reported:
31-Oct-14 15:34

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 1444019 - Purge and Trap EPA 5030A

Blank (1444019-BLK1)

Prepared & Analyzed: 29-Oct-14

Benzene	ND	0.002	mg/kg							
Toluene	ND	0.002	"							
Ethylbenzene	ND	0.002	"							
p,m-Xylene	ND	0.004	"							
o-Xylene	ND	0.002	"							
Total Xylenes	ND	0.002	"							
Total BTEX	ND	0.002	"							
Surrogate: 4-Bromochlorobenzene-PID	0.379		"	0.399		94.9	50-150			

LCS (1444019-BS1)

Prepared & Analyzed: 29-Oct-14

Benzene	19.7	0.10	mg/kg	20.0		98.6	75-125			
Toluene	20.0	0.10	"	20.0		100	70-125			
Ethylbenzene	20.3	0.10	"	20.0		102	75-125			
p,m-Xylene	41.1	0.20	"	40.0		103	80-125			
o-Xylene	20.3	0.10	"	20.0		102	75-125			
Surrogate: 4-Bromochlorobenzene-PID	0.399		"	0.400		99.9	50-150			

Matrix Spike (1444019-MS1)

Source: P410117-01

Prepared & Analyzed: 29-Oct-14

Benzene	19.4	0.10	mg/kg	20.0	ND	97.3	75-125			
Toluene	19.9	0.10	"	20.0	ND	99.4	70-125			
Ethylbenzene	20.0	0.10	"	20.0	ND	100	75-125			
p,m-Xylene	40.4	0.20	"	39.9	ND	101	80-125			
o-Xylene	20.0	0.10	"	20.0	ND	100	75-125			
Surrogate: 4-Bromochlorobenzene-PID	0.399		"	0.399		99.9	50-150			

Matrix Spike Dup (1444019-MSD1)

Source: P410117-01

Prepared & Analyzed: 29-Oct-14

Benzene	20.2	0.10	mg/kg	20.0	ND	101	75-125	4.14	15	
Toluene	20.7	0.10	"	20.0	ND	104	70-125	4.21	15	
Ethylbenzene	20.9	0.10	"	20.0	ND	104	75-125	4.40	15	
p,m-Xylene	42.2	0.20	"	40.0	ND	106	80-125	4.39	15	
o-Xylene	20.9	0.10	"	20.0	ND	104	75-125	4.38	15	
Surrogate: 4-Bromochlorobenzene-PID	0.405		"	0.400		101	50-150			

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

Logos Operating, LLC
 PO Box 18
 Flora Vista NM, 87415

 Project Name: Jicarilla 0 #3E
 Project Number: 12035-0069
 Project Manager: Sheena Leon

Reported:
 31-Oct-14 15:34

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 1444018 - DRO Extraction EPA 3550M
Blank (1444018-BLK1)

Prepared: 29-Oct-14 Analyzed: 30-Oct-14

Diesel Range Organics (C10-C28)	ND	25.0	mg/kg							
Surrogate: o-Terphenyl	38.6		"	40.0		96.6	50-200			

LCS (1444018-BS1)

Prepared & Analyzed: 29-Oct-14

Diesel Range Organics (C10-C28)	463	25.0	mg/kg	499		92.6	38-132			
Surrogate: o-Terphenyl	39.9		"	40.0		99.8	50-200			

Matrix Spike (1444018-MS1)

Source: P410117-01

Prepared & Analyzed: 29-Oct-14

Diesel Range Organics (C10-C28)	507	39.9	mg/kg	499	53.5	90.9	38-132			
Surrogate: o-Terphenyl	43.4		"	39.9		109	50-200			

Matrix Spike Dup (1444018-MSD1)

Source: P410117-01

Prepared & Analyzed: 29-Oct-14

Diesel Range Organics (C10-C28)	540	40.0	mg/kg	500	53.5	97.4	38-132	6.33	20	
Surrogate: o-Terphenyl	42.7		"	40.0		107	50-200			

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

Logos Operating, LLC
PO Box 18
Flora Vista NM, 87415

Project Name: Jicarilla 0 #3E
Project Number: 12035-0069
Project Manager: Sheena Leon

Reported:
31-Oct-14 15:34

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 1444019 - Purge and Trap EPA 5030A

Blank (1444019-BLK1)

Prepared & Analyzed: 29-Oct-14

Gasoline Range Organics (C6-C10)	ND	0.20	mg/kg							
Surrogate: 4-Bromochlorobenzene-FID	0.347		"	0.399		86.9	50-150			

LCS (1444019-BS1)

Prepared & Analyzed: 29-Oct-14

Gasoline Range Organics (C6-C10)	286	9.99	mg/kg	292		98.1	80-120			
Surrogate: 4-Bromochlorobenzene-FID	0.363		"	0.400		90.8	50-150			

Matrix Spike (1444019-MS1)

Source: P410117-01

Prepared & Analyzed: 29-Oct-14

Gasoline Range Organics (C6-C10)	283	9.98	mg/kg	291	ND	97.3	75-125			
Surrogate: 4-Bromochlorobenzene-FID	0.363		"	0.399		91.0	50-150			

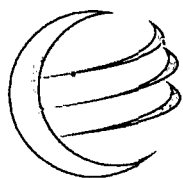
Matrix Spike Dup (1444019-MSD1)

Source: P410117-01

Prepared & Analyzed: 29-Oct-14

Gasoline Range Organics (C6-C10)	297	9.99	mg/kg	292	ND	102	75-125	4.80	15	
Surrogate: 4-Bromochlorobenzene-FID	0.370		"	0.400		92.5	50-150			

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



envirotech

Analytical Laboratory

Logos Operating, LLC
PO Box 18
Flora Vista NM, 87415

Project Name: Jicarilla 0 #3E
Project Number: 12035-0069
Project Manager: Sheena Leon

Reported:
31-Oct-14 15:34

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 1444025 - 418 Freon Extraction

Blank (1444025-BLK1)

Prepared & Analyzed: 29-Oct-14

Total Petroleum Hydrocarbons ND 34.9 mg/kg

Duplicate (1444025-DUP1)

Source: P410123-01

Prepared & Analyzed: 29-Oct-14

Total Petroleum Hydrocarbons 416 35.0 mg/kg 392 5.98 30

Matrix Spike (1444025-MS1)

Source: P410123-01

Prepared & Analyzed: 29-Oct-14

Total Petroleum Hydrocarbons 2310 34.9 mg/kg 2010 392 95.2 80-120

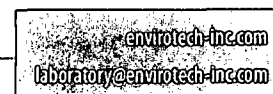
Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.

5796 US Highway 64, Farmington, NM 87401

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

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

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



Logos Operating, LLC
PO Box 18
Flora Vista NM, 87415

Project Name: Jicarilla 0 #3E
Project Number: 12035-0069
Project Manager: Sheena Leon

Reported:
31-Oct-14 15:34

Notes and Definitions

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

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

CHAIN OF CUSTODY RECORD

17472


Client: Loops Operating			Project Name / Location: Juarula O #3E			ANALYSIS / PARAMETERS														
Email results to: S. Leon			Sampler Name: S. Leon			TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion	RCI	TCLP with H/P	CO Table 910-1	TPH (418.1)	CHLORIDE			Sample Cool	Sample Intact	
Client Phone No.:			Client No.: 12035-0009																	
Sample No./ Identification	Sample Date	Sample Time	Lab No.	No./Volume of Containers	Preservative															
					HNO ₃	HCl	(M)													
Drill Pit	10/28/14	12:00	P410123-01	14 to 20 gal jar			X	X	X											
Relinquished by: (Signature) <i>Sheema Leon</i>					Date	Time	Received by: (Signature) <i>Gene Zagon</i>										Date	Time		
Relinquished by: (Signature)							Received by: (Signature)													
Sample Matrix																				
Soil <input checked="" type="checkbox"/> Solid <input type="checkbox"/> Sludge <input type="checkbox"/> Aqueous <input type="checkbox"/> Other <input type="checkbox"/>																				
<input type="checkbox"/> Sample(s) dropped off after hours to secure drop off area. <div style="text-align: center; font-size: 2em; margin-top: 10px;"><i>BUSH</i></div>					 envirotech 3.7 Analytical Laboratory															
5795 US Highway 64 • Farmington, NM 87401 • 505-632-0615 • Three Springs • 65 Mercado Street, Suite 115, Durango, CO 81301 • laboratory@envirotech-inc.com																				

Table 1, Summary of Analytical Results
 Logos Operating, LLC
 Jicarilla O #3E
 Drill Pit Closure and Backfill Material Sampling Report
 Sandoval County, New Mexico
 Project Number 12035-0046

Sample Description	Sample Number	Date	TPH USEPA Method 418.1 (ppm)	TPH USEPA Method 8015 (ppm)	Benzene USEPA Method 8021 (ppm)	BTEX USEPA Method 8021 (ppm)	Chlorides USEPA Method 300.0 (ppm)
NMOCD/RCRA Standards	NA	NA	2500	1000	.10	50	80000
Drill Pit Composite	1	1/29/2014	17900	13100	6.57	61.2	1370
NMOCD/RCRA Standards	NA	NA	NA	NA	NA	NA	600
Backfill Material Composite	2	1/29/2014	NS	NS	NS	NS	19.0

NS = Not Sampled

ND = Non-Detect at Stated Method's Detection Limit

* Values in **BOLD** above regulatory standards



Analytical Report

Report Summary

Client: Logos Operating, LLC

Chain Of Custody Number: 16580

Samples Received: 1/29/2014 4:29:00PM

Job Number: 12035-0046

Work Order: P401089

Project Name/Location: Jicarilla 0 #3E

Entire Report Reviewed By:

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

Date: 2/5/14

Tim Cain, Laboratory Manager

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





Logos Operating, LLC
PO Box 18
Flora Vista NM, 87415

Project Name: Jicarilla 0 #3E
Project Number: 12035-0046
Project Manager: Tiffany McIntosh

Reported:
05-Feb-14 14:15

Analytical Report for Samples

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
Drill Pit Composite	P401089-01A	Soil	01/29/14	01/29/14	Glass Jar, 4 oz.
Backfill Material Composite	P401089-02A	Soil	01/29/14	01/29/14	Glass Jar, 4 oz.

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

5796 US Highway 64, Farmington, NM 87401

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

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

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



Logos Operating, LLC
 PO Box 18
 Flora Vista NM, 87415

 Project Name: Jicarilla 0 #3E
 Project Number: 12035-0046
 Project Manager: Tiffany McIntosh

 Reported:
 05-Feb-14 14:15

Drill Pit Composite
P401089-01 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	6.57	0.05	mg/kg	1	1405012	01/30/14	02/04/14	EPA 8021B	
Toluene	22.1	0.05	mg/kg	1	1405012	01/30/14	02/04/14	EPA 8021B	
Ethylbenzene	5.54	0.05	mg/kg	1	1405012	01/30/14	02/04/14	EPA 8021B	
p,m-Xylene	18.4	0.05	mg/kg	1	1405012	01/30/14	02/04/14	EPA 8021B	
o-Xylene	8.72	0.05	mg/kg	1	1405012	01/30/14	02/04/14	EPA 8021B	
Total Xylenes	27.1	0.05	mg/kg	1	1405012	01/30/14	02/04/14	EPA 8021B	
Total BTEX	61.2	0.05	mg/kg	1	1405012	01/30/14	02/04/14	EPA 8021B	
Surrogate: Bromochlorobenzene		127 %		80-120	1405012	01/30/14	02/04/14	EPA 8021B	S-02
Surrogate: 1,3-Dichlorobenzene		142 %		80-120	1405012	01/30/14	02/04/14	EPA 8021B	S-02
Nonhalogenated Organics by 8015									
Gasoline Range Organics (C6-C10)	177	4.98	mg/kg	1	1405012	01/30/14	02/04/14	EPA 8015D	
Diesel Range Organics (C10-C28)	13100	29.9	mg/kg	1	1405013	01/30/14	02/03/14	EPA 8015D	
Total Petroleum Hydrocarbons by 418.1									
Total Petroleum Hydrocarbons	17900	200	mg/kg	10	1405016	01/30/14	01/30/14	EPA 418.1	
Cation/Anion Analysis									
Chloride	1370	9.92	mg/kg	1	1405017	01/30/14	01/30/14	EPA 300.0	

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



Logos Operating, LLC
PO Box 18
Flora Vista NM. 87415

Project Name: Jicarilla 0 #3E
Project Number: 12035-0046
Project Manager: Tiffany McIntosh

Reported:
05-Feb-14 14:15

Backfill Material Composite
P401089-02 (Solid)

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Cation/Anion Analysis									
Chloride	19.0	9.87	mg/kg	1	1405017	01/30/14	01/30/14	EPA 300.0	

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

5796 US Highway 64, Farmington, NM 87401

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

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

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





Logos Operating, LLC
PO Box 18
Flora Vista NM, 87415

Project Name: Jicarilla 0 #3E
Project Number: 12035-0046
Project Manager: Tiffany McIntosh

Reported:
05-Feb-14 14:15

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 1405012 - Purge and Trap EPA 5030A

Blank (1405012-BLK1)

Prepared: 29-Jan-14 Analyzed: 03-Feb-14

Benzene	ND	0.05	mg/kg							
Toluene	ND	0.05	"							
Ethylbenzene	ND	0.05	"							
p,m-Xylene	ND	0.05	"							
o-Xylene	ND	0.05	"							
Total Xylenes	ND	0.05	"							
Total BTEX	ND	0.05	"							

Surrogate: 1,3-Dichlorobenzene	41.4		ug/L	50.0		82.7	80-120			
Surrogate: Bromochlorobenzene	45.4		"	50.0		90.8	80-120			

Duplicate (1405012-DUP1)

Source: P401086-01

Prepared: 29-Jan-14 Analyzed: 03-Feb-14

Benzene	ND	0.50	mg/kg	ND					30	
Toluene	9.90	0.50	"	10.2				3.13	30	
Ethylbenzene	4.00	0.50	"	4.00				0.166	30	
p,m-Xylene	45.0	0.50	"	44.8				0.417	30	
o-Xylene	12.0	0.50	"	12.0				0.337	30	

Surrogate: 1,3-Dichlorobenzene	53.7		ug/L	50.0		107	80-120			
Surrogate: Bromochlorobenzene	58.6		"	50.0		117	80-120			

Matrix Spike (1405012-MS1)

Source: P401086-01

Prepared: 29-Jan-14 Analyzed: 03-Feb-14

Benzene	45.3		ug/L	50.0	ND	90.5	39-150			
Toluene	68.5		"	50.0	20.4	96.2	46-148			
Ethylbenzene	57.2		"	50.0	7.99	98.5	32-160			
p,m-Xylene	181		"	100	89.6	91.5	46-148			
o-Xylene	71.2		"	50.0	24.1	94.3	46-148			

Surrogate: 1,3-Dichlorobenzene	54.9		"	50.0		110	80-120			
Surrogate: Bromochlorobenzene	59.9		"	50.0		120	80-120			

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

5796 US Highway 64, Farmington, NM 87401

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

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

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





Logos Operating, LLC
PO Box 18
Flora Vista NM, 87415

Project Name: Jicarilla 0 #3E
Project Number: 12035-0046
Project Manager: Tiffany McIntosh

Reported:
05-Feb-14 14:15

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 1405012 - Purge and Trap EPA 5030A										
Blank (1405012-BLK1)				Prepared: 29-Jan-14 Analyzed: 03-Feb-14						
Gasoline Range Organics (C6-C10)	ND	5.00	mg/kg							
Duplicate (1405012-DUP1)				Source: P401086-01 Prepared: 29-Jan-14 Analyzed: 03-Feb-14						
Gasoline Range Organics (C6-C10)	446	49.9	mg/kg		442			0.854	30	
Matrix Spike (1405012-MS1)				Source: P401086-01 Prepared: 29-Jan-14 Analyzed: 03-Feb-14						
Gasoline Range Organics (C6-C10)	1.31		mg/L	0.450	0.88	94.4	75-125			

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

5796 US Highway 64, Farmington, NM 87401

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

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

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





Logos Operating, LLC	Project Name:	Jicarilla 0 #3E	Reported:
PO Box 18	Project Number:	12035-0046	05-Feb-14 14:15
Flora Vista NM, 87415	Project Manager:	Tiffany McIntosh	

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 1405013 - DRO Extraction EPA 3550C

Blank (1405013-BLK1)

Prepared: 29-Jan-14 Analyzed: 30-Jan-14

Diesel Range Organics (C10-C28) ND 30.0 mg/kg

Duplicate (1405013-DUP1)

Source: P401086-01

Prepared: 29-Jan-14 Analyzed: 30-Jan-14

Diesel Range Organics (C10-C28) 9060 30.0 mg/kg 9070 0.0775 30

Matrix Spike (1405013-MS1)

Source: P401086-01

Prepared: 29-Jan-14 Analyzed: 30-Jan-14

Diesel Range Organics (C10-C28) 8560 31.6 mg/kg 263 9070 NR 75-125 SPK1

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

5796 US Highway 64, Farmington, NM 87401

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

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

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





Logos Operating, LLC	Project Name:	Jicarilla 0 #3E	Reported: 05-Feb-14 14:15
PO Box 18	Project Number:	12035-0046	
Flora Vista NM, 87415	Project Manager:	Tiffany McIntosh	

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 1405016 - 418 Freon Extraction										
Blank (1405016-BLK1)				Prepared & Analyzed: 30-Jan-14						
Total Petroleum Hydrocarbons	20.0	20.0	mg/kg							
Duplicate (1405016-DUP1)				Source: P401089-01 Prepared & Analyzed: 30-Jan-14						
Total Petroleum Hydrocarbons	23700	199	mg/kg		17900			28.0	30	
Matrix Spike (1405016-MS1)				Source: P401089-01 Prepared & Analyzed: 30-Jan-14						
Total Petroleum Hydrocarbons	6600		mg/L	500	4480	425	80-120			SPK1

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

5796 US Highway 64, Farmington, NM 87401

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

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

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





Logos Operating, LLC	Project Name:	Jicarilla 0 #3E	Reported: 05-Feb-14 14:15
PO Box 18	Project Number:	12035-0046	
Flora Vista NM, 87415	Project Manager:	Tiffany McIntosh	

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 1405017 - Anion Extraction EPA 300.0										
Blank (1405017-BLK1)				Prepared & Analyzed: 30-Jan-14						
Chloride	ND	9.96	mg/kg							
LCS (1405017-BS1)				Prepared & Analyzed: 30-Jan-14						
Chloride	505	9.94	mg/kg	497		102	90-110			
Matrix Spike (1405017-MS1)				Source: P401089-02 Prepared & Analyzed: 30-Jan-14						
Chloride	547	9.95	mg/kg	498	19.0	106	80-120			
Matrix Spike Dup (1405017-MSD1)				Source: P401089-02 Prepared & Analyzed: 30-Jan-14						
Chloride	552	9.87	mg/kg	494	19.0	108	80-120	0.949	20	

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





Logos Operating, LLC
PO Box 18
Flora Vista NM, 87415

Project Name: Jicarilla 0 #3E
Project Number: 12035-0046
Project Manager: Tiffany McIntosh

Reported:
05-Feb-14 14:15

Notes and Definitions

SPK1 The spike recovery for this QC sample is outside of control limits.

S-02 The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.

DET Analyte DETECTED

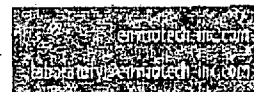
ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

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



CHAIN OF CUSTODY RECORD

10/10

Client: <u>Logos Operating</u>			Project Name / Location: <u>Jicarilla #3E</u>			ANALYSIS / PARAMETERS														
Email results to: <u>T. McIntosh/S. Leon</u>			Sampler Name: <u>T. McIntosh/S. Leon</u>			TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion	RCI	TCLP with H/P	CO Table 910-1	TPH (418.1)	CHLORIDE				Sample Cool	Sample Intact
Client Phone No.: <u>505-320-0430</u>			Client No.: <u>12035-0040</u>																	
Sample No. / Identification	Sample Date	Sample Time	Lab No.	No. / Volume of Containers	Preservative															
					HNO ₃	HCl	Other													
<u>Drill Bit Composite</u>	<u>11/29/14</u>	<u>11:23</u>	<u>P401089-01</u>	<u>1-4 0.2 jar</u>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>						<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<u>Backfill Material Composite</u>	<u>11/29/14</u>	<u>11:30</u>	<u>P401089-02</u>	<u>1-4 0.2 jar</u>			<input checked="" type="checkbox"/>								<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Relinquished by: (Signature) <u>[Signature]</u>					Date	Time	Received by: (Signature) <u>[Signature]</u>										Date	Time		
Relinquished by: (Signature) <u>[Signature]</u>							Received by: (Signature) <u>[Signature]</u>													
Sample Matrix																				
Soil <input type="checkbox"/> Solid <input checked="" type="checkbox"/> Sludge <input checked="" type="checkbox"/> Aqueous <input type="checkbox"/> Other <input type="checkbox"/>																				
<input type="checkbox"/> Sample(s) dropped off after hours to secure drop off area.																				



envirotech
Analytical Laboratory

10.3 10.4

Submit To Appropriate District Office Two Copies District I 1625 N. French Dr., Hobbs, NM 88240 District II 811 S. First St., Artesia, NM 88210 District III 1000 Rio Brazos Rd., Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505	State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505	Form C-105 Revised August 1, 2011 1. WELL API NO. 30-043-21165 2. Type of Lease <input type="checkbox"/> STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/> FED/INDIAN 3. State Oil & Gas Lease No. JICARILLA APACHE LEASE # 417
--	---	--

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

4. Reason for filing: <input type="checkbox"/> COMPLETION REPORT (Fill in boxes #1 through #31 for State and Fee wells only) <input checked="" type="checkbox"/> C-144 CLOSURE ATTACHMENT (Fill in boxes #1 through #9, #15 Date Rig Released and #32 and/or #33; attach this and the plat to the C-144 closure report in accordance with 19.15.17.13.K.NMAC)						5. Lease Name or Unit Agreement Name JICARILLA O 6. Well Number: 3E					
7. Type of Completion: <input checked="" type="checkbox"/> NEW WELL <input type="checkbox"/> WORKOVER <input type="checkbox"/> DEEPENING <input type="checkbox"/> PLUGBACK <input type="checkbox"/> DIFFERENT RESERVOIR <input type="checkbox"/> OTHER											
8. Name of Operator LOGOS OPERATING, LLC								9. OGRID 289408			
10. Address of Operator 4001 North Butler Avenue, Building 7101 Farmington, NM 87401								11. Pool name or Wildcat			
12. Location	Unit Ltr	Section	Township	Range	Lot	Feet from the	N/S Line	Feet from the	E/W Line	County	
Surface:											
BH:											
13. Date Spudded		14. Date T.D. Reached		15. Date Rig Released 12/21/13		16. Date Completed (Ready to Produce)			17. Elevations (DF and RKB, RT, GR, etc.)		
18. Total Measured Depth of Well			19. Plug Back Measured Depth			20. Was Directional Survey Made?			21. Type Electric and Other Logs Run		
22. Producing Interval(s), of this completion - Top, Bottom, Name											

23. CASING RECORD (Report all strings set in well)					
CASING SIZE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED

24. LINER RECORD					25. TUBING RECORD		
SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN	SIZE	DEPTH SET	PACKER SET

26. Perforation record (interval, size, and number)	27. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC.	
	DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED

28. PRODUCTION							
Date First Production		Production Method (Flowing, gas lift, pumping - Size and type pump)				Well Status (Prod. or Shut-in)	
Date of Test	Hours Tested	Choke Size	Prod'n For Test Period	Oil - Bbl	Gas - MCF	Water - Bbl.	Gas - Oil Ratio
Flow Tubing Press.	Casing Pressure	Calculated 24-Hour Rate	Oil - Bbl.	Gas - MCF	Water - Bbl.	Oil Gravity - API - (Corr.)	
29. Disposition of Gas (Sold, used for fuel, vented, etc.)						30. Test Witnessed By	

31. List Attachments			
32. If a temporary pit was used at the well, attach a plat with the location of the temporary pit. SEE ATTACHED			
33. If an on-site burial was used at the well, report the exact location of the on-site burial			
Latitude 36.146806N		Longitude 107.140858W	
NAD 1927		1983X	

I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief

Signature	Printed Name Tamra Sessions	Title Operations Technician	Date 9/22/14
-----------	-----------------------------	-----------------------------	--------------

E-mail Address tsessions@logosresourcesllc.com



Pit Closure Form:

Date: 6-19-14

Well Name: JICARILLA O 3E

Footages: 919' FSL & 1738' FEL Unit Letter: O

Section: 10, T-22N, R-3W, County: SANDOVAL State: NM

Contractor Closing Pit: WSS

Construction Inspector: _____

Inspector Signature: Wayne [Signature]

Date: 6-19-14

Tamra Sessions

From: Tamra Sessions
Sent: Wednesday, March 5, 2014 9:49 AM
To: Kurt Sandoval (kurt.sandoval@bia.gov)
Cc: Mike, Deedra; Marlana Reval (marlena.reval@bia.gov); Wayne Ritter
Subject: FW: Jicarilla Pit Closure Extension_Jicarilla O 3E_03-05-14
Attachments: Jicarilla Pit closure ext letter scan.pdf

Sorry, corrected well name in body of letter.

Tamra
505-330-9333

From: Tamra Sessions
Sent: Wednesday, March 5, 2014 9:47 AM
To: Kurt Sandoval (kurt.sandoval@bia.gov)
Cc: Mike, Deedra; Marlana Reval (marlena.reval@bia.gov); Wayne Ritter
Subject: Jicarilla Pit Closure Extension_Jicarilla O 3E_03-05-14

Please see attached letter, with location and date information, requesting pit closure extension for the Jicarilla O 3E.

Tamra Sessions
Logos Resources, LLC
Operations Technician
tsessions@logosresourcesllc.com
505-330-9333



4001 N. Butler Blvd. Bldg 7101
Farmington, NM 87401
Phone: (505) 436-2626
Fax: (505) 832-3095

March 5, 2014

BIA Jicarilla Agency
P.O. Box 167
Dulce, NM 87528

**RE: Pit Closure Extension – Jicarilla O 3E well - Jicarilla Lease 417
UL O, Section 10, T22N, R03W; API 30-043-21165**

Dear Mr. Kurt Sandoval,

Logos Operating is requesting a pit closure extension of 90 days. Due to unusual seasonal rains/snow and now due to freezing conditions and ice in the pit, we will not meet the original timeline and would like to request an extension.

The completion date was 01/17/14 and the required 90 day closure date is 04/17/14. The 90 day pit closure extension will end on 07/16/14.

Very truly yours,

A handwritten signature in black ink, appearing to read "Tamra Sessions", is written over the typed name.

Tamra Sessions
Operations Technician
Logos Resources, LLC



IN REPLY REFER TO:
Energy & Minerals Management

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF INDIAN AFFAIRS
JICARILLA AGENCY
P.O. BOX 167
DULCE, NEW MEXICO 87528



MAR 5 2014

Ms. Tamra Sessions
Logos Resources, LLC
4001 North Butler Boulevard, Building 7101
Farmington, New Mexico 87401

Dear Ms. Sessions:

This is in response to your request, dated **March 5, 2014**, for permission to perform work on the following location, which is on Tribal Surface:

Lease No. 417, Jicarilla O #3E:

Located in Section 10, Township 22 North, Range 3 West, N.M.P.M. Rio Arriba County, New Mexico (API No. 30-043-21165).

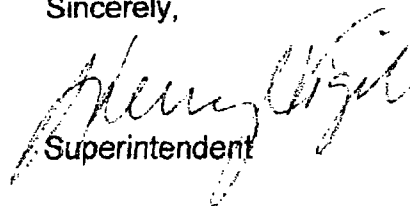
Scope of Work:

Notice of 90-day pit closure extension ending July 16, 2014, due to inclement weather conditions.

The Bureau of Indian Affairs, Jicarilla Agency, hereby grant Logos Resources, LLC and its contractor's permission to perform work of the above indicated location. Please submit an affidavit of completion and/or final report when completed.

If you should have any questions or concerns, please contact Mr. Kurt Sandoval, Acting Realty Officer, at (575) 759-3936.

Sincerely,


Superintendent

cc: Jicarilla Oil and Gas Administration

Tamra Sessions

From: Tamra Sessions
Sent: Friday, May 9, 2014 10:58 AM
To: 'Cascindra Willie'
Cc: Bryce Hammond (brycehammond@jicarillaoga.com); Mike, Deedra
Subject: FW: Jicarilla O 3E_Pit Closure 72hr Notice
Attachments: Jicarilla Pit Closure 72hr Noitce scan.pdf

Cascindra here is a copy of the letter we are mailing to the BLA.

Tamra
505-330-9333

From: Tamra Sessions
Sent: Friday, May 9, 2014 10:53 AM
To: Jonathan Kelly (jonathan.kelly@state.nm.us)
Cc: brandon.powell@state.nm.us; Wayne Ritter
Subject: Jicarilla O 3E_Pit Closure 72hr Notice

Logos Operating is giving 72hr notice of plans to start temporary pit closure operations on Wednesday 05/14/14. Bureau of Indian Affairs Jicarilla Agency is being notified via certified mail. Please contact Wayne Ritter at 505-320-0436 for any questions or concerns. Thank you.

*Jicarilla O 3E
API 30-043-21165
O – Sec 10 – T22N – R03W
Jicarilla Apache Lease #417*

Tamra Sessions
Logos Resources, LLC
Operations Technician
tsessions@logosresourcesllc.com
(c) 505-330-9333
(o) 505-436-3790 ext 103



4001 N. Butler Ave
Farmington, NM 87401
Phone: (505) 436-2627
Fax: (505) 832-3095

Date: May 9, 2014

To: Bureau of Indian Affairs Jicarilla Agency

Re: Surface Owner Notification for Temporary Pit Closure

Bureau of Indian Affairs
Jicarilla Agency
P.O. Box 167
Dulce, NM 87528

Re: Jicarilla O 3E
API #30-043-21165
UL O, Section 10, T22N, R03W

Dear Mr. Kurt Sandoval,

According to NMOCD rules, Logos Operating, LLC is notifying you that temporary pit closure operations will begin on May 14, 2014 on the Jicarilla O 3E. Drill cuttings will be buried in the reserve pit, as they qualify as per Subsection D of 19.15.17.13 NMAC. No action is required on your part. If you have any questions, please do not hesitate to contact me.

Regards,

Tamra Sessions
Operations Technician
tsessions@logosresourcesllc.com
505-330-9333

SENDER: COMPLETE THIS SECTION		COMPLETE THIS SECTION ON DELIVERY	
<ul style="list-style-type: none"> Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. 		<p>A. Signature <input checked="" type="checkbox"/> <i>[Signature]</i> <input type="checkbox"/> Agent <input type="checkbox"/> Addressee</p>	
<p>1. Article Addressed to:</p> <p>BTA Jicarilla Agency P.O. Box 167 Dulce, NM 87528</p>		<p>B. Received by (Printed Name) <i>[Signature]</i></p> <p>C. Date of Delivery 5-12-14</p>	
<p>2. Article Number (Transfer from service label)</p> <p>7013 2250 0001 2785 5453</p>		<p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: <input type="checkbox"/> No</p>	
<p>PS Form 3811, February 2004</p>		<p>3. Service Type <input checked="" type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.</p>	
<p>Domestic Return Receipt</p>		<p>4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes</p>	

U.S. Postal Service	
CERTIFIED MAIL RECEIPT	
(Domestic Mail Only; No Insurance Coverage Provided)	
For delivery information visit our website at www.usps.com	
DULCE NM 87528	
Postage	\$ 0.49
Certified Fee	\$3.30
Return Receipt Fee (Endorsement Required)	\$2.70
Restricted Delivery Fee (Endorsement Required)	\$0.00
Total Postage & Fees	\$ 6.49
<p>0401</p> <p>03 JUN 6 11AM</p> <p>Postmark Here</p> <p>05/09/2014</p>	
<p>Sent to: BTA - Jicarilla Agency</p> <p>Street, Apt. No., or PO Box No.: P.O. Box 167</p> <p>City, State, ZIP+4: Dulce NM 87528</p>	

ES45 5822 1000 0522 ET02

102595-02-M-1540



Reclamation Form:

Date: 6-23-14

Well Name: JICARILLA O 3E

Footages: 919' FSL & 1738' FEL Unit Letter: O

Section: 10, T-22N, R-3W, County: SANDOVAL State: NM

Reclamation Contractor: WSS

Reclamation Start Date: 5-14-14

Reclamation Complete Date: 6-23-14

Road Completion Date: 6-23-14

Seeding Date: 8-17-14

PIT MARKER STATUS

(When Required) Picture of Marker set needed

Date Marker Placed: 7-1-14

Latitude: 36.146806

Longitude: 107.140858

Date Pit Manifold Removed: NA

Construction Inspector Signature: Wayne P...

Date Inspected: 6-23-14



LOGOS OPERATING, LLC.

JICARILLA O #3E

JICARILLA APACHE LEASE #417

API #30-043-21165

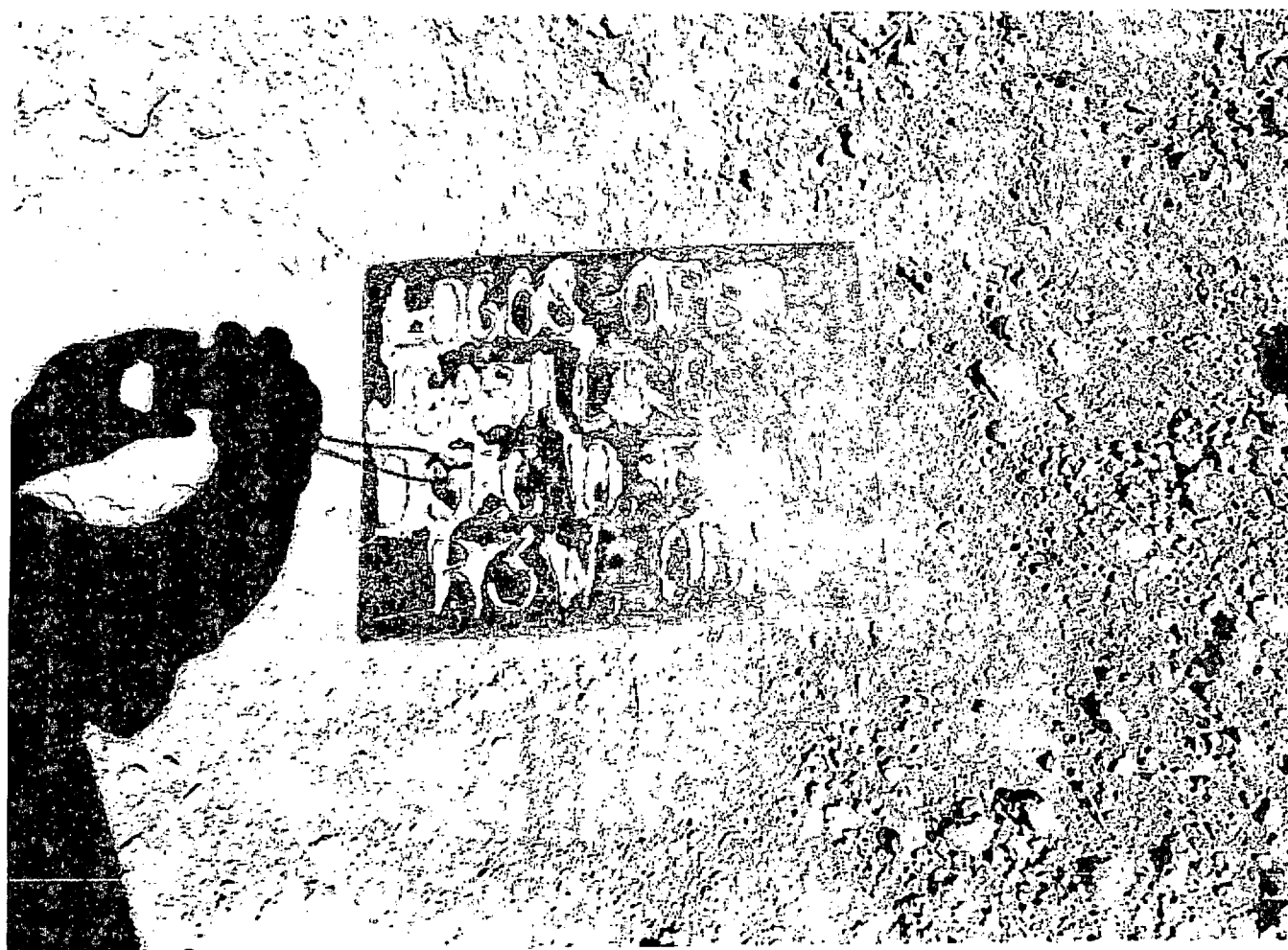
919' FSL 1738' FEL

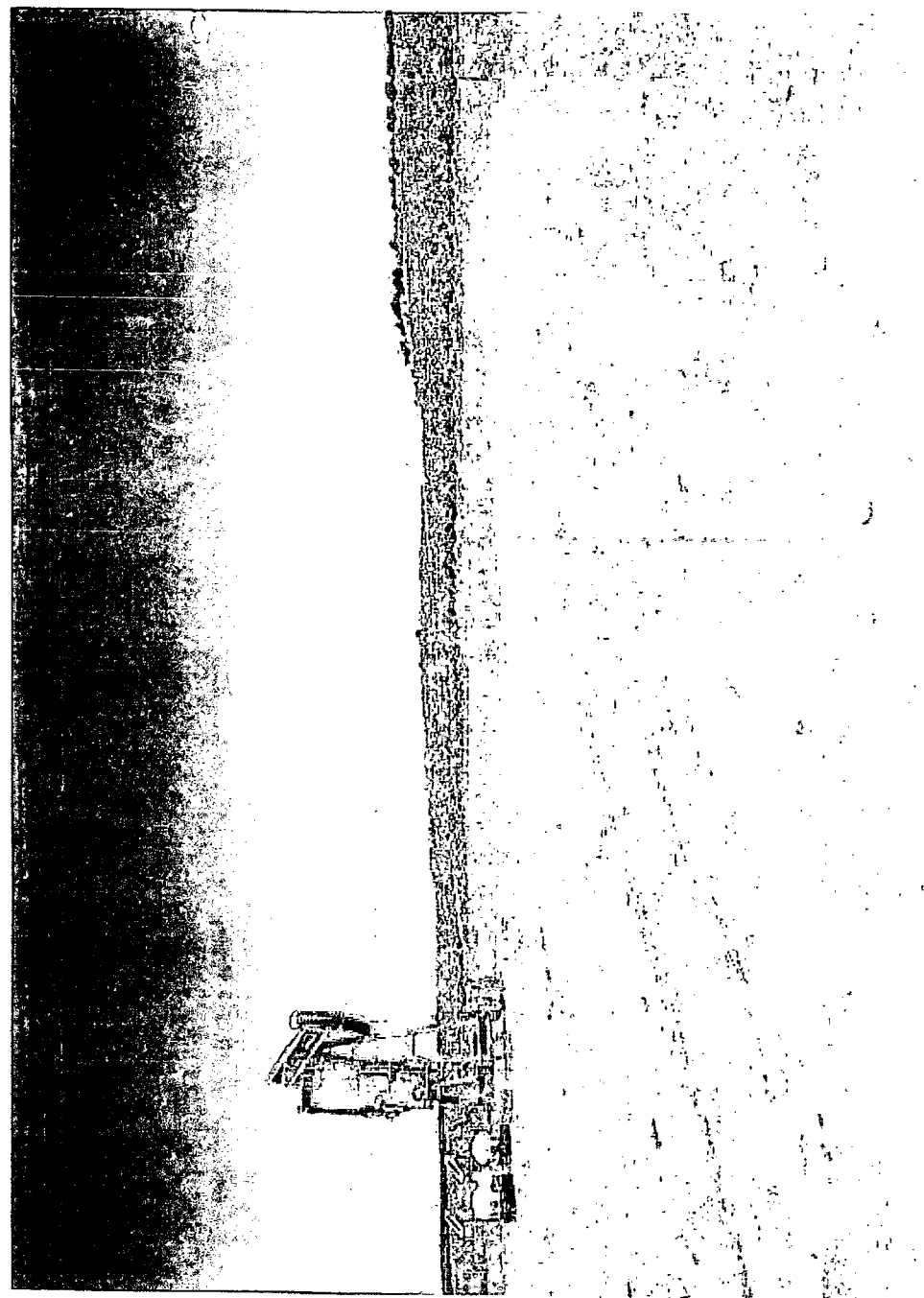
0-SEC. 10-T22N-R3W

SANDOVAL COUNTY, NM

OFFICE # 505-436-2627

AFTER HRS #866-598-6220





Temporary Pit Weekly Inspection Form

WELL NAME: RICARILLA O 3E API NO: 30-043-21165
 LEGALS: Section: 10 Township: 22N Range: 3W
 Drilling RD Date: 12/21/2013

Inspector's Name	RAMSEY HATALIE	RAMSEY HATALIE	RAMSEY HATALIE	RAMSEY HATALIE	RAMSEY HATALIE	RAMSEY HATALIE	RAMSEY HATALIE	RAMSEY HATALIE	RAMSEY HATALIE	RAMSEY HATALIE	RAMSEY HATALIE	RAMSEY HATALIE
WEEK #	1	2	3	4	5	6	7	8	9	10	11	12
DATE	01/01/14	01/10/14	01/14/14	02/29/14	03/03/14	03/24/14	04/05/14	04/12/14	04/22/14	04/28/14	05/13/14	05/19/14
Well sign on location (Y/N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Any liner breeches (Y/N)	N	Y	Y	N	N	Y	Y	N	N	N	N	N
Any fluid seeps/spills (Y/N)	N	N	N	N	N	N	N	N	N	N	N	N
HC's on top of temp. pit (Y/N)	N	N	N	N	N	N	N	N	N	N	N	N
Temp pit free of misc. Solid												
Waste/Debris (Y/N)	LEARANCE/	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Discharge Line Integrity Good (Y/N)	N	N	N	N	N	N	N	N	N	N	N	N
Fence Integrity Good (Y/N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Any Dead Wildlife/Stock (Y/N)	N	N	N	N	N	N	N	N	N	N	N	N
Freeboard to be 2' or > Est. (ft)	Y (8')	Y (8')	Y (8')	Y (12')	Y (10')	Y (8')	Y (8')	Y (8')	Y (10')	Y (12')	Y (8')	Y (8')
Was the OCO contacted (Y/N)	N	N	N	N	N	N	N	N	N	N	N	N
Pictures taken (Y/N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Comments:	8' CLEARANCE	8' CLEARANCE/LINER ON NORTHEAST OF PIT TORN @ 2 PLACES BUT STILL HAS CLEARANCE ABOUT 5' FROM FLUID LEVEL	8' CLEARANCE/NORTHEAST CORNER PIT HAS HOLE IN IT, IT HAS ABOUT 5' CLEARANCE FROM HOLE TO TOP OF FLUID	12' CLEARANCE	10' CLEARANCE	8' CLEARANCE/NORTHEAST SIDE ABOUT 20 YRDS, 2 HOLES, ITS ABOUT 2' FROM TOP AND STILL HAVE 6' CLEARANCE	8' CLEARANCE/NE OF PIT ABOUT 20 YRDS THERE IS A HOLE, BUT IT STILL HAS 6' CLEARANCE BEFORE IT REACHES LIQUID	8' CLEARANCE/HAD HOLE IN IT, CLEAN IT & PATCH BOTH HOLES	10' CLEARANCE	12' CLEARANCE	8' CLEARANCE	8' CLEARANCE

[illegible]



4001 N. Butler Ave
Farmington, NM 87401
Phone: (505) 436-2627
Fax: (505) 832-3095

Date: October 30, 2014

OIL CONS. DIV DIST. 3

To: NMOCD

NOV 03 2014

Re: Closure Permit #12235
Jicarilla O 3E
API 30-043-21165

Dear NMOCD,

Logos Operating, LLC (289408) has reviewed their information regarding your email request dated 10/20/14 for general issues encountered on our submitted closure report.

- No copy of NMOCD Closure Notification included with permit.
 - Please find attached explanation on NMOCD Pit Closure notification.
- Please see attached copy of the TPH 418.1, TPH8015, and BTEX 8021 Environmental Sample Result. Witnessed 10/28/14 by NMOCD.

Regards,

A handwritten signature in black ink that reads "Jamie Goodwin". The signature is fluid and cursive, with the first name "Jamie" and last name "Goodwin" clearly distinguishable.

Jamie Goodwin
Regulatory Technician