District 1 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.

Santa 1 C, 14141 87303 to the appropriate NWOCD District Office.
Pit, Below-Grade Tank, or
12238 <u>Proposed Alternative Method Permit or Closure Plan Application</u>
Type of action: Below grade tank registration RCUD SEP 30 '14
Permit of a pit or proposed alternative method
27-3117 \(\text{\text{Closure of a pit, below-grade tank, or proposed alternative method}\)
☐ 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.
Operator: LOGOS OPERATING, LLC OGRID #: 289408
Address: 4001 NORTH BUTLER AVENUE, BUILDING 7101 FARMINGTON NM 87401
Facility or well name: ENCHILADA 2X
API Number: 30-039-31194 OCD Permit Number: 11388
U/L or Qtr/QtrHSection16Township23NRange06WCounty: RIO ARRIBA
Center of Proposed Design: Latitude36.226636° NLongitude107.467927° 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: Thickness20mil ☐ 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: Thicknessmil
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)

☐ Alternate. Please specify

Four foot height, four strands of barbed wire evenly spaced between one and four feet

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)	
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	
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 acceptant material are provided below. Siting criteria does not apply to drying pads or above-grade tanks.	ptable source
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
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
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	☐ Yes ☐ No
 application. 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. 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
Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist: Subsection B of 19.15.17.9 N Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the doc 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 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. and 19.15.17.13 NMAC Previously Approved Design (attach copy of design) API Number: or Permit Number:	NMAC 15.17.9 NMAC
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 doc 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. 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	15.17.9 NMAC
Previously Approved Design (attach copy of design) API Number: or Permit Number:	

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 Falternative 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	Iluid Management Pit
Waste Excavation and Removal Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be 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 south provided below. Requests regarding changes to certain siting criteria require justifications and/or demonstrations of equivalency. In 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
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
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
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	
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance	Yes No

written confirmation or verification from the municipality; Writen approval obstained from the municipality yes No Within the area overlying a subsurface mine. writen confirmation or verification or map from the NM EMNRD-Mining and Mineral Division yes No Within an utsafels area. Butterface mine. writen confirmation or verification or map from the NM EMNRD-Mining and Mineral Division yes No Within an Ido-year Boochesty. Tip pagapitic map yes No No No No No No No N	1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1	
Within a unsolid erc. - Projecting measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society. Topographic map Within a 160-year floodplain. - EVAN map - On-Site Closure Plan Cheeklist: (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 discounsets are attached. - Sting Crieria Compliance Demonstrations—based upon the appropriate requirements of 19.15.17.13 NMAC - Prod of Sting Committed to based upon the appropriate requirements of 19.15.17.13 NMAC - Protocols and Plan of Temporary Pit 6r in-place burial of a dryling pash; based upon the appropriate requirements of 19.15.17.13 NMAC - Protocols and Plan of Temporary Pit 6r in-place burial of a dryling pash; based upon the appropriate requirements of 19.15.17.13 NMAC - Protocols and Plan of Temporary Pit 6r in-place burial of a dryling pash; based upon the appropriate requirements of 19.15.17.13 NMAC - Protocols and Plan of Temporary Pit 6r in-place burial of a dryling pash; based upon the appropriate requirements of 19.15.17.13 NMAC - Waste Material Sampling Plan to be absolute upon the appropriate requirements of 19.15.17.13 NMAC - Soli Cover Design; a based upon the appropriate requirements of 5 Subsection H of 19.15.17.13 NMAC - Soli Cover Design; a based upon the appropriate requirements of 5 Subsection H of 19.15.17.13 NMAC - Soli Cover Design; a based upon the appropriate requirements of 5 Subsection H of 19.15.17.13 NMAC - Soli Cover Design; a based upon the appropriate requirements of 5 Subsection H of 19.15.17.13 NMAC - Soli Cover Design; a based upon the appropriate requirements of 5 Subsection H of 19.15.17.13 NMAC - Soli Cover Design; a based upon the appropriate requirements of 5 Subsection H of 19.15.17.13 NMAC	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
Engineering measures incorporated into the design, NM Bureau of Geology & Mimeral Resources; USGS; NM Geological Society, Topographic map		Yes No
Engineering measures incorporated into the design, NM Bureau of Geology & Mimeral Resources; USGS; NM Geological Society, Topographic map	Within an unstable area	
Sins Citature Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be attached to the closure plan. Please indicate, byte check much in the locs, that the documents or a marked in the lock must be a fine for the comment of the proportion of the appropriate requirements of 19.15.17.10 NMAC Proto of Surface Owner Notice - based upon the appropriate requirements of Subsection Earl 19.15.17.13 NMAC Construction/Design Plan of Temporary Pit (for re-place burial of a drying pad) - based upon the appropriate requirements of Subsection R of 19.15.17.13 NMAC Construction/Design Plan of Temporary Pit (for re-place burial of a drying pad) - 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 Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC Subsection Plan - based upon the appropriate requirements of 19.15.17.13 NMAC Soul Cover Design - based upon the appropriate requirements of 19.15.17.13 NMAC Soul Cover Design - based upon the appropriate requirements of 19.15.17.13 NMAC Soul Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC Sire Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC Sire Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC Sire Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC Sire Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC Sire Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC Sire Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC Sire Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC Sire Reclamation Plan - based upon the appropriate requirem	- Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological	□ Ves □ No
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 Citeria Compliance Demonstrations: based upon the appropriate requirements of 19.15.17.13 NMAC Proof of Surface Owner Natice - based upon the appropriate requirements of 19.15.17.13 NMAC Construction Design Plan of Burial I reach (if applicately) based upon the appropriate requirements of Subsection K of 19.15.17.13 NMAC Construction Design Plan of Temporary Pit (for implace baird) of a drying pad) - Sead upon the Supportate requirements of 19.15.17.13 NMAC Construction Design Plan of Temporary Pit (for implace baird) of a drying pad) - Sead upon the propriate requirements of 19.15.17.13 NMAC Construction Design Plan of Temporary Pit (for implace baird) of a drying pad) - Sead upon the propriate requirements of 19.15.17.13 NMAC Size Reclamation Plan - based upon the appropriate requirements of 19.15.17.13 NMAC Soli Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC Size Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC Size Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC Size Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC Size Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC Size Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC Size Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC Size Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC Size Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC Size Reclamation Plan - based upon the appropriate requirements of Subsection		
On-Site Closure Plan Checklist: (19.15.17.18 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 Citica's Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.18 NMAC Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection 6 of 19.15.17.18 NMAC Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of Subsection K 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 Permix Number (for liquids, drilling utilis and drill custings or in case on-site closure standards cannot be achieved) Spin Cover Design - based upon the appropriate requirements of 19.15.17.13 NMAC Protocols and Procedure - based upon the appropriate requirements of 19.15.17.13 NMAC Protocols and Proto		
Operator Application Certification: 1 hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief. Name (Prim):	On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be attached to the closure plan 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. Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19. 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 cann 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	11 NMAC 15.17.11 NMAC
Name (Print):		
Name (Print):		of
Signature:	I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and ben	C1.
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 prior to implementing any 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: 3/25/14 20. 20. 20.	Name (Print): Title:	
OCD Approval: Permit Application (including closure plant) Closure Plan (only) OCD Conditions (see attachment) OCD Representative Signature: Approval Date: Ib/lb/2014 Title: OCD Permit Number: 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: 3/25/14 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 Closure 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 (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)	Signature: Date:	
OCD Approval: Permit Application (including closure plan) Closure Plan (only) OCD Conditions (see attachment) OCD Representative Signature: Approval Date: 10/16/201 Title: OCD Permit Number: OCD Permit Number: OCD Permit Number: OCD		
Title:	e-mail address: Telephone:	*****
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 Method: Closure Method: Haste Excavation and Removal On-Site Closure Method Alternative Closure Method Waste Removal (Closed-loop systems only) If different from approved plan, please explain. 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)	18	*****
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 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. 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 (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)	18. OCD Approval: Permit Application (including closure plan) Closure Plan (only) OCD Conditions (see attachment)	•
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 Method: 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. 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 (if applicable) Soil Backfilling and Cover Installation Re-vegetation Application Rates and Seeding Technique Site Reclamation (Photo Documentation)	OCD Approval: Permit Application (including closure plan) Closure Plan (only) OCD Conditions (see attachment) OCD Representative Signature: Approval Date: 10/16/	•
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. 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)	OCD Approval: Permit Application (including closure plan) Closure Plan (only) OCD Conditions (see attachment) OCD Representative Signature: Approval Date: 10/16/	•
Waste Excavation and Removal On-Site Closure Method Alternative Closure Method Waste Removal (Closed-loop systems only)	OCD Approval: Permit Application (including closure plan) Closure Plan (only) OCD Conditions (see attachment) OCD Representative Signature: Approval Date: 10/16/ Title: OCD Permit Number: 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 is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not section of the form until an approved closure plan has been obtained and the closure activities have been completed.	2019 the closure report.
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)	OCD Approval: Permit Application (including closure plant) Closure Plan (only) OCD Conditions (see attachment) OCD Representative Signature: Title: OCD Permit Number: 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 is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not section of the form until an approved closure plan has been obtained and the closure activities have been completed. Closure Completion Date: 3/25/14	2019 the closure report.
	OCD Approval: Permit Application (including closure plan) Closure Plan (only) OCD Conditions (see attachment) OCD Representative Signature: Approval Date: Dollo Title: OCD Permit Number: OCD Permit Number: 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 is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not section of the form until an approved closure plan has been obtained and the closure activities have been completed. Closure Completion Date: 3/25/14 OCIosure Method: Alternative Closure Method Maste Removal (Closed-location)	the closure report.

22. Operator Closure Certification:		
I hereby certify that the information and attachments submitted with this closure report belief. I also certify that the closure complies with all applicable closure requirements a		
Name (Print): Jamie Goodwin	Title:	Regulatory Tech
(and)		9/20/14
Signature: Comunication (Comunication)	Date:	130/17
e-mail address:/JGoodwin@logosoperating.com	_ Telephone: _	505-330-9333

Logos Operating, LLC San Juan Basin Closure Report

Lease Name: ENCHILADA 2X

API NO: 30-039-31194

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

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.

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 email. (See attached) (Well located on STATE LAND, certified mail is not required for Federal Land per BLM/OCD).

*Due to confusion on surface owner notification for State land, only the NMOCD was notified. In the future the State Land Office will be notified where the State is the surface owner.

*Variance Explanation: Rule 19.15.17.13 E. If the surface owner is a public entity (BLM/State/Tribal) then an email notification will be sent, of plans to close the temporary pit at least 72 hours, but no more than 1 week, prior to any closure operation. The notice will include the well name. API number, and location.

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

The closure plan requirements were met due to rig move off date as noted on C-105. (See attached).

- 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.

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	SEE		
BTEX	EPA SW-846 8021B or 8260B	50	ATTACHED		
TPH	EPA SW-846 418.1	2500			
GRO/DRO	EPA SW-846 8015M	1000			
Chlorides	EPA 300.0	80000			

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 twp 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: ENCHILADA 2X

Unit Letter: H Section: 16 Township: 23N Range: 6W

API#: 30-039-31194

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: 9/13/13
Inspection End Date: 4/21/14

NOTE: During start and end dates of temporary pit inspections no issues found.

DISTRICT I 1625 N. French Dr., Hobbs, H.M. 68840 Phone: (675) 593-6161 Fax: (576) 393-0730 DISTRICT II 811 S. First St., Artonia, H.M. 68210 Phone: (575) 748-1883 Fax: (576) 748-9720 district iii 1000 Rio Brasos Rd., Asteo, H.M. 67410 Phone: (505) 334-6178 Par. (505) 334-6170 DISTRICT IV 1220 S. St. Francis Dr., Santa Po, HM 87806 Phone: (505) 478-3480 Pag: (505) 476-3462

State of New Mexico Energy, Minerals & Natural Resources Department

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

Form C-102 Revised August 1, 2011 Submit one copy to appropriate District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number	Pool Code		Pool Name	
30-039-31194	13379	COUNSELORS	GALLUP DAKOTA	
⁴ Property Code		• Well Number		
310188		2X		
†OGRID No.	······································	Operator Name		• Rievation
289408	LOGOS	6887'		

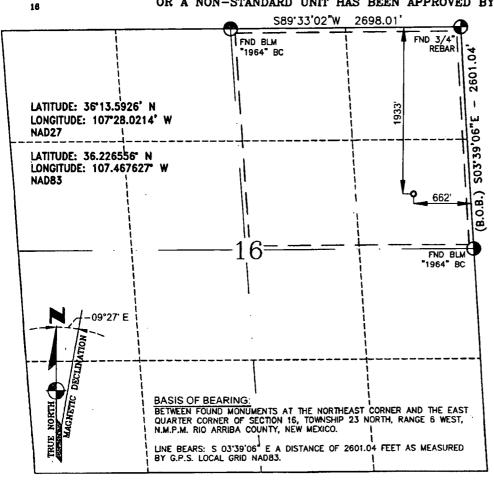
¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Fest from the	East/West line	County
H	16	23-N	6-W		1933	NORTH	662	EAST	RIO ARRIBA

11 Dattom Hale Ingetion If Different From Surface

			Bott	om Hole	Location i	i Dillerent Fro	om Surface		
UL or lot no.	Section	Township	Range	Lot Idn	Peet from the	North/South line	Feet from the	East/West line	County
İ		_	_			·		•	•
			L						
Dedicated Acre	8		19 Joint or	<u>hfill</u>	M Consolidation C	Code	¹⁵ Order No.		
			İ						

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



17 OPERATOR CERTIFICATION

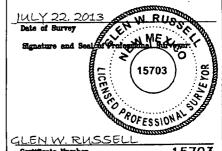
I hereby certify that the information contained hereis I hereby certify that the information contained herein is true and complete to the best of my innovicege and bellef, and that this organisation either owns a working interest or unleased mineral interest in the land including the proposed bottom hale location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or a working interest, or to a voluntary pooling agreement or a communery applies order hereityne miseral by the

Signature am

tsessions @ 1050s resources 110 B-mail Address · cum

18 SURVEYOR CERTIFICATION

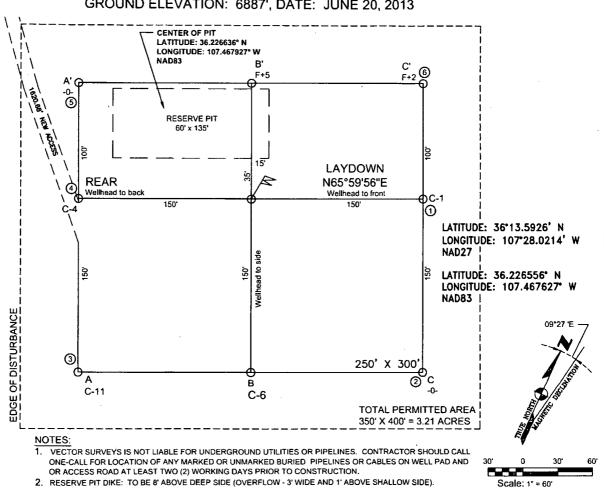
was plotted from field notes of actual ensures made by me or under my supervision, and that the same is true and correct to the best of my belief.



Certificate Number 15703

LOGOS OPERATING, LLC

ENCHILADA #2H, 1933' FNL & 662' FEL SECTION 16, T-23-N, R-6-W, NMPM, RIO ARRIBA COUNTY, NM GROUND ELEVATION: 6887', DATE: JUNE 20, 2013





Analytical Report

Report Summary

Client: Logos Operating, LLC

Chain Of Custody Number: 16539

Samples Received: 2/4/2014 7:35:00AM

Job Number: 12035-0044 Work Order: P402010

Project Name/Location: Enchilada #2X

Entire Report Reviewed By:

Date:

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.

2/7/14



PO Box 18

Flora Vista NM, 87415

Project Name:

Enchilada #2X

Project Number:

12035-0044

Project Manager:

Tiffany McIntosh

Reported: 07-Feb-14 15:31

Analyical Report for Samples

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
Drill Pit Composite	P402010-01A	Soil	02/03/14	02/04/14	Glass Jar, 4 oz.
Backfill Material Composite	P402010-02A	Soil	02/03/14	02/04/14	Glass Jar, 4 oz.





Flora Vista NM, 87415

Project Name:

Enchilada #2X

PO Box 18

Project Number:

12035-0044

Reported: 07-Feb-14 15:31

Project Manager:

Tiffany McIntosh

Drill Pit Composite P402010-01 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021				·					
Benzene	ND	0.05	mg/kg	ı	1406034	02/06/14	02/06/14	EPA 8021B	
Toluene	ND	0.05	mg/kg	1	1406034	02/06/14	02/06/14	EPA 8021B	
Ethylbenzene	ND	0.05	mg/kg	1	1406034	02/06/14	02/06/14	EPA 8021B	
p,m-Xylene	ND	0.05	mg/kg	1	1406034	02/06/14	02/06/14	EPA 8021B	
o-Xylene	ND	0.05	mg/kg	1	1406034	02/06/14	02/06/14	EPA 8021B	
Total Xylenes	ND	0.05	mg/kg	t	1406034	02/06/14	02/06/14	EPA 8021B	
Total BTEX	ND	0.05	mg/kg	1	1406034	02/06/14	02/06/14	EPA 8021B	
Surrogate: Bromochlorobenzene		90.7 %	80-	-120	1406034	02/06/14	02/06/14	EPA 8021B	
Surrogate: 1,3-Dichlorobenzene		82.5 %	80-	-120	1406034	02/06/14	02/06/14	EPA 8021B	
Nonhalogenated Organics by 8015									
Gasoline Range Organics (C6-C10)	ND	4.99	mg/kg	1	1406034	02/06/14	02/06/14	EPA 8015D	
Diesel Range Organics (C10-C28)	115	30.0	mg/kg	1	1406033	02/06/14	02/06/14	EPA 8015D	
Total Petroleum Hydrocarbons by 418.1									
Total Petroleum Hydrocarbons	1540	20.0	mg/kg	1	1406031	02/06/14	02/06/14	EPA 418.1	
Cation/Anion Analysis									
Chloride	895	9.82	mg/kg	ı	1406015	02/04/14	02/04/14	EPA 300.0	





PO Box 18

Flora Vista NM, 87415

Project Name:

Enchilada #2X

Project Number: Project Manager: 12035-0044

Tiffany McIntosh

Reported: 07-Feb-14 15:31

Backfill Material Composite P402010-02 (Solid)

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Cation/Anion Analysis				···					
Chloride	ND	9.88	mg/kg	1	1406015	02/04/14	02/04/14	EPA 300.0	





PO Box 18

Flora Vista NM, 87415

Project Name:

Enchilada #2X

Project Number: Project Manager:

Reporting

12035-0044

Tiffany McIntosh

Spike

Source

0/ DEC

Reported: 07-Feb-14 15:31

RPD

%REC

80-120

Volatile Organics by EPA 8021 - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 1406034 - Purge and Trap EPA	A 5030A									
Blank (1406034-BLK1)				Prepared &	Analyzed:	06-Feb-14				
Benzene	ND	0.05	mg/kg							
Foluene	ND	0.05	**			•				
Ethylbenzene	ND	0.05	**							
,m-Xylene	ND	0.05	"							
-Xylene	ND	0.05	**							
Total Xylenes	ND	0.05	n							
Total BTEX	ND	0.05	n							
Surrogate: 1,3-Dichlorobenzene	47.7		ug/L	50.0		95.4	80-120			
arrogate: Bromochlorobenzene	48.9		"	50.0		97.8	80-120			
Ouplicate (1406034-DUP1)	Sourc	e: P402008-	01	Prepared &	Analyzed:	06-Feb-14				
Benzene	0.38	0.05	mg/kg		0.38			0.0927	30	
oluene	1.03	0.05	11		1.04			0.776	30	
Ethylbenzene	0.31	0.05	11		0.32			1.63	30	
,m-Xylene	1.75	0.05			1.72			1.35	30	
-Xylene	0.46	0.05	"		0.48			3.71	30	
urrogate: 1,3-Dichlorobenzene	52.1		ug/L	50.0		104	80-120			
urrogate: Bromochlorobenzene	54.9		u	50.0		110	80-120			
1atrix Spike (1406034-MS1)	Sourc	e: P402008-	01	Prepared &	Analyzed:	06-Feb-14				
Benzene	47.7		ug/L	50.0	7.62	80.1	39-150			
olucne	56.4		"	50.0	20.7	71.4	46-148			
ihylbenzene	47.5		**	50.0	6.34	82.2	32-160			
,m-Xylene	105		"	100	34.4	70.9	46-148			
-Xylene	49.3		11	50.0	9.62	79.5	46-148			
urrogate: 1.3-Dichlorobenzene	45.2	<u> </u>	,,	50.0		90.4	80-120			

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

47.2

Surrogate: Bromochlorobenzene





PO Box 18

Flora Vista NM, 87415

Project Name:

Enchilada #2X

Project Number:

12035-0044

Project Manager:

Tiffany McIntosh

Reported: 07-Feb-14 15:31

Nonhalogenated Organics by 8015 - Quality Control

Envirotech Analytical Laboratory

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 1406033 - DRO Extraction EPA 3550C									,	
Blank (1406033-BLK1)				Prepared &	Analyzed:	06-Feb-14				
Diesel Range Organics (C10-C28)	ND	29.9	mg/kg							
Duplicate (1406033-DUP1)	Sour	ce: P402008-	01	Prepared &	. Analyzed:	06-Feb-14				
Diesel Range Organics (C10-C28)	222	59.9	mg/kg		179			21.3	30	
Matrix Spike (1406033-MS1)	Sour	ce: P402008-	01	Prepared &	: Analyzed:	06-Feb-14				
Diesel Range Organics (C10-C28)	336	31.6	mg/kg	263	179	59.7	75-125			SPKI





Flora Vista NM, 87415

Project Name:

Enchilada #2X

PO Box 18

Project Number: Project Manager:

Reporting

12035-0044 Tiffany McIntosh

Spike

Source

%REC

Reported: 07-Feb-14 15:31

RPD

Nonhalogenated Organics by 8015 - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 1406034 - Purge and Trap EPA 5030A										
Blank (1406034-BLK1)				Prepared &	Analyzed:	06-Feb-14				
Gasoline Range Organics (C6-C10)	ND	4.98	mg/kg							
Duplicate (1406034-DUP1)	Sourc	e: P402008-	01	Prepared &	Analyzed:	06-Feb-14				
Gasoline Range Organics (C6-C10)	52.3	4.99	mg/kg		45.8			13.2	30	
Matrix Spike (1406034-MS1)	Source	e: P402008-	01	Prepared &	Analyzed:	06-Feb-14				
Gasoline Range Organics (C6-C10)	1.14		mg/L	0.450	0.92	49.2	75-125			SPKI





PO Box 18

Flora Vista NM, 87415

Project Name:

Enchilada #2X

Project Number:

12035-0044

Project Manager:

Tiffany McIntosh

Reported: 07-Feb-14 15:31

Total Petroleum Hydrocarbons by 418.1 - Quality Control

Envirotech Analytical Laboratory

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 1406031 - 418 Freon Extraction										
Blank (1406031-BLK1)				Prepared &	Analyzed:	06-Feb-14				
Total Petroleum Hydrocarbons	35.9	19.9	mg/kg							
Duplicate (1406031-DUP1)	Sour	ce: P402008-	01	Prepared &	Analyzed:	06-Feb-14				
Total Petroleum Hydrocarbons	2130	19.9	mg/kg		2790			26.9	30	
Matrix Spike (1406031-MS1)	Sour	ce: P402008-	D1	Prepared &	Analyzed:	06-Feb-14				
Total Petroleum Hydrocarbons	1180		mg/L	500	698	97.2	80-120			_





PO Box 18

Flora Vista NM, 87415

Project Name:

Enchilada #2X

Project Number:

12035-0044

Project Manager:

Tiffany McIntosh

Reported: 07-Feb-14 15:31

Cation/Anion Analysis - Quality Control

Envirotech Analytical Laboratory

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 1406015 - Anion Extraction EPA 300.0								- ···		
Blank (1406015-BLK1)				Prepared &	Analyzed:	04-Feb-14				
Chloride	ND	9.93	mg/kg							
LCS (1406015-BS1)				Prepared &	Analyzed:	04-Feb-14				
Chloride	503	9.96	mg/kg	498		101	90-110			
Matrix Spike (1406015-MS1)	Sour	ce: P402007-	01	Prepared &	Analyzed:	04-Feb-14				
Chloride	628	9.97	mg/kg	499	184	89.0	80-120			
Matrix Spike Dup (1406015-MSD1)	Sour	ce: P402007-	01	Prepared &	Analyzed:	04-Feb-14				
Chloride	626	9.93	mg/kg	497	184	89.1	80-120	0.233	20	





Project Name:

Enchilada #2X

PO Box 18

Project Number: Flora Vista NM, 87415 Project Manager: 12035-0044 Tiffany McIntosh

Reported: 07-Feb-14 15:31

Notes and Definitions

SPK1

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

DET

Analyte DETECTED

ND

Analyte NOT DETECTED at or above the reporting limit

NR

dry

Sample results reported on a dry weight basis

RPD

Relative Percent Difference



16539

CHAIN OF CUSTODY RECORD

Client: Logos Ope	rating	Pro	roject Name / Location: Enchilada #2X						. ANALYSIS / PARAMETERS													
Email results to: T. McIntos	~	- ∫Sa	mpler Name:						15)	8021)	260)											
Client Phone No.: 505 - 320 -		Cli	ent No.: 12035					TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion		TCLP with H/P	CO Table 910-1	18.1)	JIDE			G Cool	Sample Intact	
Sample No./ Identification	Sample Date	Sample Time	Lab No.	No./Voor of Con	tainers	нио3	eservat HCI	ive Cool	ТРН (М	BTEX (voc (I	RCRA	Cation	ICI	TCLP.	CO Tat	TPH (418.1)	CHLORIDE			Sample Cool	Sample
Drill Pit Composite	2/3/14	1225	P462010-01	1-40	z jar	1		X	X	X							X	X			下	区
Backfill Material Composite	1	1235	P402010-02			<u> </u>		1										X			X	X
			·			-															-	
						-																
					· · · · · · · · · · · · · · · · · · ·									\ <u> </u>			_					-
																			·			
	<u>.</u>							_									-				_	
																					-	
Relinquished by: (Signature)			<u> </u>	Date	Time	Reçe	ived t	y: (S	ignat	ure)							<u>]</u>	<u> </u>		Da	 .e 7	Time
Relinquished by: (Signature) Relinquieried by: (Signature)	Wdm	tosh		2/4/19	735	Rece	ived I			人(V	W	X	HC	<u> </u>					2/4/	4	1:35
					(n. a.			· 					<u> </u>									
Sample Matrix Soil Solid Sludge	Aqueous [Other []																			
☐ Sample(s) dropped off after	hours to se	cure drop o	off area.	多e	n V Ana	ire	ot	e	ck	1		ij.	3		15	. (e			3,5)	
5795 US Highway &	4 • Farminat	on. NM 874	01 • 505-632-0615 •															virot	ech-in			

Table 1, Summary of Analytical Results Logos Operating, LLC Enchilada #2X

Drill Pit Closure and Backfill Material Sampling Report Rio Arriba County, New Mexico Project Number 12035-0044

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	2/3/2014	1540	115	ND	ND	895
NMOCD/RCRA Standards	NA	NA	NA *	NA	NA	NA	600

NS

NS

NS

NS

ND

NS = Not Sampled

Backfill Material Composite

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

2

2/3/2014

^{*} Values in **BOLD** above regulatory standards

Two Copies																	orm C-105	
District I 1625 N. French Dr	., Hobbs, ì	NM 88240)	En	ergy,	Minerals and	d Na	atural l	Re	sources	ł	1. WELL A	API :	NO.	R	evised A	ugust 1, 2011	
District II 811 S. First St., Ar District III	tesia, NM	88210			Oi	l Conserva	tion	Divis	sio	n		30-039-311	94					
1000 Rio Brazos R District IV	d., Aztec,	NM 87410	0		12	20 South S	t. Fr	ancis	D	r.	2. Type of Lease ✓ STATE ☐ FEE ☐ FED/INDIAN							
1220 S. St. Francis	Dr., Santa	Fe, NM 8	37505			Santa Fe, N	NM	87505	5		Ī	3. State Oil & E-1207	Gas					
WELL	COMP	LETIC	ON OR	RECC	MPL	ETION RE	POF	RT AN	ND	LOG	\neg	L-1207	, , , , , , , , , , , , , , , , , , ,		E	3.47 T	Marian Jares	
4. Reason for fil	ing:	<u>-</u>		.,								5. Lease Name ENCHILADA		Init Agre	ement l	Vame		
☐ COMPLET	ION REI	PORT (F	Fill in boxes	s#1 throu	igh #31	for State and Fed	e well	s only)			ŀ	6. Well Numb		Х				
C-144 CLO #33; attach this a	nd the pla	TTACHI at to the (MENT (Fi C-144 closu	ll in boxe	s #1 thi	rough #9, #15 Da rdance with 19.1	ate Rig 5.17.	g Release 13.K NM	ed a	and #32 and/o	r							
7. Type of Comp ✓ NEW	pletion: WELL [□ WOR	KOVER [DEEPI	ENING	□PLUGBACI	к 🗆	DIFFER	REN	NT RESERVO	OIR	OTHER_			_			
8. Name of Oper LOGOS OPERA		.C										9. OGRID 289408					, , , , , , , , , , , , , , , , , , , ,	
10. Address of O 4001 North Butle	perator		ng 7101 Far	mington,	NM 87	401					i	11. Pool name	or W	ildcat				
12.Location	Unit Ltr	Se	ction	Towns	hip	Range	Lot		-	Feet from the	e	N/S Line	Feet	from the	e E/W	Line	County	
Surface:																		
вн:		<u> </u>												. ,				
13. Date Spudde			Reached	09/2	3/13	Released	<u> </u>					(Ready to Prod	uce)	i	RT, GR,	etc.)	and RKB,	
18. Total Measur	red Depth	of Well		19. I	Plug Ba	ck Measured Dep	oth		20.	Was Direction	nal	Survey Made?		21. Ty	pe Elec	tric and O	her Logs Run	
22. Producing In	terval(s),	of this co	ompletion -	Top, Bot	tom, N	ame				•								
23.					CAS	ING REC	OR	D (Re	pc	ort all stri	ng							
CASING SI	ZE	WE	EIGHT LB.	FT.	ļ	DEPTH SET		ŀ	Ю	LE SIZE		CEMENTING	G RE	CORD	A	MOUNT	PULLED	
											_							
										-								
24.		<u> </u>			LIN	ER RECORD					25.	<u> </u>	HRD	NG REC	ORD			
SIZE	TOP		BC	TTOM	LIIV	SACKS CEM	ENT	SCRE	EN		SIZ			EPTH SE		PACK	ER SET	
													_			.		
26. Perforation	record (i	nterval s	size and nu	ımher)		<u> </u>		27 Δ	Ci	D SHOT F	'R /	ACTURE, CEI	MEN	IO2 TI	IFF7F	FTC	<u> </u>	
20. Terroration	i iccoia (i	iitei vai,	onze, una m	imocry						NTERVAL	IC	AMOUNT A						
							DDA	ODU	<u> </u>	CION		1						
Date First Produc	ction		Produc	tion Met	hod (Fle	owing, gas lift, pa						ÿell Status (Prod.	or Shut-	-in)			
Date of Test	Hour	s Tested		oke Size		Prod'n For		Oil - E	3bl	Č	ias	- MCF	W	ater - Bb	1	Gas - C	Dil Ratio	
Bute of Yest	noun					Test Period												
Flow Tubing Press.	Casir	ig Pressu	I	lculated i our Rate	24-	Oil - Bbl.		Ga	as -	MCF		Water - Bbl.		Oil Gr	avity - A	API - (Cor	r.)	
29. Disposition o	f Gas (So	ld, used j	for fuel, ver	ited, etc.)	l								30. T	est Witn	essed B	y		
31. List Attachm	ents											<u> </u>						
32. If a temporar	v pit was	used at t	he well, att	ach a plat	with th	e location of the	temp	orary pit		Acrt a us	-/	\						
33. If an on-site b	-									ATTACHE	<i>.</i>	<u>, </u>						
I hereby certi	f. 11 1	ha info	nmation	hours	n hat	Latitude 3	6.226	636N	0.0	Longitude 10	7.4	67927W N	IAD	1927 19	83X	nd holio	c	
Signature Signature	iy inai t V~	ne injoi			Printe		-			le Regulato			шу					
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	<i>U</i> 11	لسال ا شمارین	Magagag			c Junio Good	. vv 111		. 11	regulate	Ji y	1 0011		9/2	5/.L	s S	555Pc	
E-mail Addre	ss 1000	ouwin(a	giogosop	erating.	COIII									1/0	$\frac{\sqrt{I}}{I}$			



Pit Closure Form:
Date: 3/25/14
Well Name: ENCHILADA 2X
Footages: 1933' FNL & 662' FEL Unit Letter: H
Section: <u>16</u> , T- <u>23</u> N, R-06W, County: <u>RIO ARRIBA</u> State: <u>NM</u>
Contractor Closing Pit:
Construction Inspector: Wayne Ritter
Inspector Signature: Wante B
Date: 3-28-14

Jamie Goodwin

From:

Tamra Sessions

Sent:

Monday, March 10, 2014 8:24 AM

To:

brandon.powell@state.nm.us; Jonathan Kelly (jonathan.kelly@state.nm.us)

Cc:

Wayne Ritter

Subject:

Enchilada 2X_Pit Closure 72hr notice

ENCHILADA 2X State Lease E-1207 API #30-039-31194 UL H, Section 16, T23N, R06W

Logos Operating is giving 72hr notice of plans to start temporary pit closure operations on Wednesday, March 12, 2014.

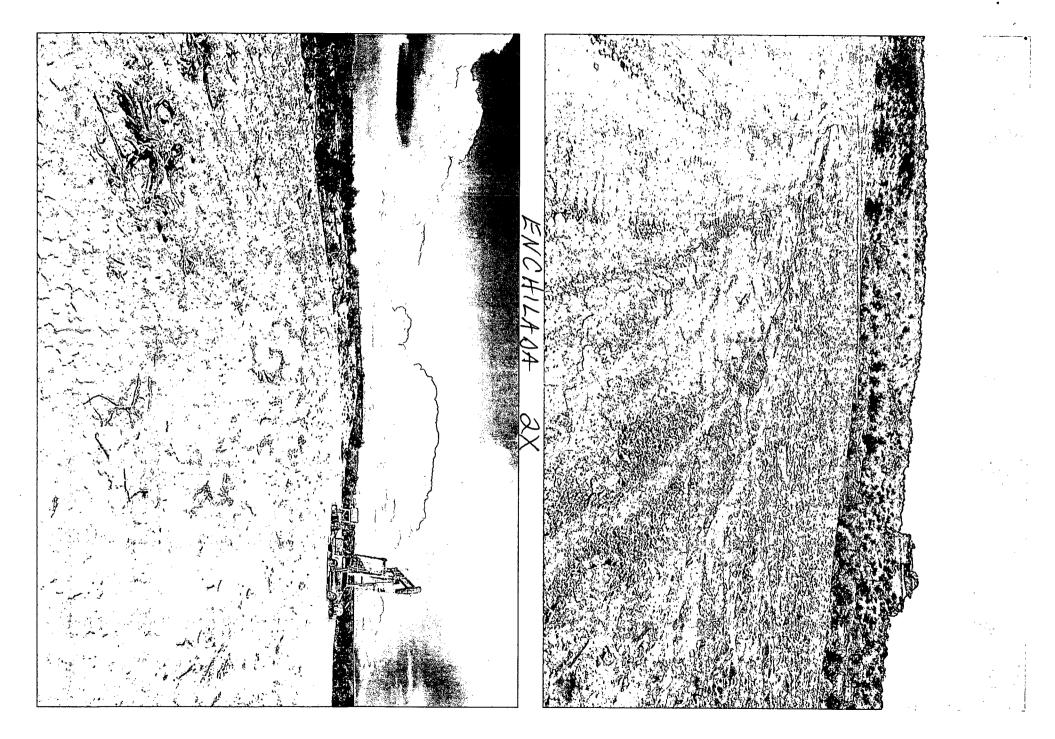
Tamra Sessions Logos Resources, LLC Operations Technician tsessions@logosresourcesllc.com 505-330-9333



Reclamation Form:
Date: <u>9/2/14</u>
Well Name: <u>ENCHILADA 2X</u>
Footages: <u>1933' FNL & 662' FEL</u> Unit Letter: <u>H</u>
Section: 16, T- <u>23N</u> , R- <u>06W</u> , County: <u>RIO ARRIBA</u> State: <u>NM</u>
Reclamation Contractor: ACE
Reclamation Start Date: 3/12/14
Reclamation Complete Date:3 <u>/aゅ/14</u>
Road Completion Date: 3 126 14
Seeding Date: $\frac{9/3/14}{}$
PIT MARKER STATUS
(When Required) Picture of Marker set needed
Date Marker Placed: <u>% 기식 / 1 니</u>
Latitude: 36.226636N
Longitude: 107. 467927W
Date Pit Manifold Removed: N/A
Construction Inspector Signature: Lague Att
Date Inspected: 9-2-14







			Temporary Pit Weekly Inspection Form										
WELL NAME:	ENCHILADA 2X			API NO:	30-039-31194								
LEGALS:	Section:	16	Township:	23N	Range:	6W							
Drilling RD Date:	9/23/2013												

	Ramsey	Ramsey	Ramsey	Ramsey	Ramsey	Ramsey	Ramsey	Ramsey	Ramsey	Ramsey	Ramsey	Ramsey
Inspector's Name	Hatalie				1							Hatalie
WEEK#	1	2	 			6	7		9		11	12
DATE	09/30/13			10/28/13	<u> </u>	11/11/13	11/18/13		12/02/13	12/09/13	12/16/13	12/23/13
Well sign on location	32,00,20	20, 2 1, 25	10/21/13	10, 20, 13	11/01/13	- 11/11/13	11/10/13	11, 20, 13	12,02,13	12,03,13	12, 10, 13	12,23,13
(Y/N)	Υ	Y	Υ	Υ	Y	Υ	Υ	Y	Υ	Υ	Υ	Υ
Any liner breeches												
(Y/N)	N	N	N	N	N	N	N	l _N	N	N	N	N
Any fluid seeps/spills												
(Y/N)	N	N	N	N	N	N	N	N	Ν	N	N	Ν
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) Discharge Line	Υ	Υ	Υ	Υ	Υ	Y	Υ	Υ	Υ	Υ	Υ	Υ
Integrity Good (Y/N)	l _v	V	Y	v	l _v	Υ	Y		Y		lv	v
Fence Integrity Good	T	<u> </u>	Υ	Υ	ΙΥ	Y	Y	Υ	Y	Υ	Y	Υ
(Y/N)	ly	ly	l _v	Y	l _v	y	l _Y	lγ	v	lγ	v	lγ
Any Dead Wildlife/				•		'	<u>'</u>	'	'	<u>'</u>	'	'
Stock (Y/N)	N	N	N	N	N	N	N	N	N	N	N	N
Freeboard to be 2' or								<u> </u>				
> Est. (ft)	N	N	N	N	N	Υ	Y (6')	Y (5')	Y (9')	Y (8')	Y (8')	Y (8')
Was the OCD		.	[,,	l	 	[<u> </u>		l	l	l	
contacted (Y/N)	N	N	Υ	N	N	N	N	N	N	N	N	N
Pictures taken (Y/N)	Y	l _v	_v	N	l _Y	V	l _Y	_Y	V V	γ .	l _v	_v
rictares taken (1714)	<u>'</u>		r	IV		1	-	1		T ,	-	' -
	 											-
	 											
										l		
												-
	ļ					,						
Comments:												
		_, , ,		_,	Back Flash &						1	
		Flowback	Flowback	Flowback	Mud from	8' Ground						
		fluid in pit	fluid and mud	liquid in the	well head in	level to top						
	N/A	only	in pit	pit	pit	footer	L 6' Clearance	5' Clearance	L 9' Clearance	1.8' Clearance	1.8' clearance	8' Clearance

			Temporary Pit Weekly Inspection Form							
WELL NAME:	ENCHILADA 2X			API NO:	30-039-31194					
LEGALS:	Section:	16	Township:		Range:	6W	\dashv			
Drilling RD Date:	9/23/2013						<u>-</u> -			

	TE		,	,	r					,	, 	
.	Ramsey		Ramsey			Ramsey				Ramsey	Ramsey	
Inspector's Name	Hatalie	Hatalie			Hatalie		Hatalie	Hatalie	Hatalie		Hatalie	
WEEK #	13											24
DATE	12/30/13	01/04/14	01/07/14	01/14/14	01/26/14	02/15/14	03/03/14	03/25/14	04/01/14	04/13/14	04/21/14	
Well sign on location												-
(Y/N)	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	
Any liner breeches												
(Y/N)	N	N	N	N	N	N	N	N	N	N	N	
Any fluid seeps/spills												
(Y/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	
Temp pit free of misc.												
Solid		Ì										
Waste/Debris(Y/N)	Υ	Υ	Y	Υ	Y	ļγ	Υ	N	N	N	N	
Discharge Line	-											
Integrity Good (Y/N)	Υ	Υ	Υ	Υ	Υ	Υ	N _	N	N	N	N	
Fence Integrity Good												
(Y/N)	Υ	Υ	Υ	Υ	Υ	Υ	Υ	N	N	N	N	
Any Dead Wildlife/												
Stock (Y/N) Freeboard to be 2' or	N	N	N	N	N	N	N	N	N	N	N	
> Est. (ft)	V (81)	V (4.51)	V (4.21)	V (4.21)	V (4.21)), (4.51)		l <u>.</u> .		l	 	
Was the OCD	Y (8')	Y (15')	Y (13')	Y (13')	Y (13')	Y (15')	Y (13')	N	N	N	N	
contacted (Y/N)	N	N	N	N		l _N	.	N	N	١,,	N	
contacted (1/N)	14	111	IN	-	N ·	IN .	N	IN .	IN .	N		
Pictures taken (Y/N)	v	lv	v	l _v	v	l _v	lγ	V	v	Y	_Y	
rictares taken (1711)	·	'	'				<u> </u>				<u> </u>	
												
		-				-						
		-		<u> </u>								
							 	 				
Mar	, e											
		1				ľ		1		1		
Common outs												
Comments:							l					
								Crew		Completion		
								Working on	Pit	of pit back fill		
	8' Clearance	15' Clearance	13' Clearance	13' Clearance	13' Clearance	15' Clearance	13' Clearance			finished	Completion	
		25 Cicarance	15 Cicarance	15 Cicarance	15 Cicarance	13 Cicarance	15 Cicarance	Lackining bit	Completion	illianed	Completion	



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

Fax: (505) 832-3095

Date: September 30, 2014

To: NMOCD

Re: Pit Closure Filings for WPX

Dear NMOCD,

Logos Operating, LLC (289408) is filing this pit closure report on behalf of the new operator, WPX Energy Production, LLC (120782), as part of a transition service agreement between Logos and WPX.

Regards,

Jarnie Goodwin

Regulatory Technician