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

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

Form C-144
Revised April 3, 2017

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

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

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

Trench #1

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: 2010 Afton Place, Farmington 87401
Facility or well name: Section 16D_#001 Burial Trench_ Rosa Unit # 540H, Rosa Unit# 542H, Rosa Unit# 544H Rosa Unit 546H, Rosa Unit # 550H Rosa Unit # 552H, Rosa Unit# 554H, Rosa Unit # 556H, Rosa Unit # 560H, Rosa Unit# 562H, Rosa Unit # 564H, Rosa Unit # 566H, Rosa Unit # 570H, Rosa Unit # 572H, Rosa Unit # 574H, Rosa Unit # 576H
API Number: See list OCD Permit Number: **Facility ID: [fJMB2220051571]**
U/L or Qtr/Qtr D Section 16 Township 31N Range 6W County: Rio Arriba
Center of Proposed Design: Latitude 36.903881 Longitude -107.476267 NAD83
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 **X Burial Trench/Drying Pad**
☐ Permanent ☐ Emergency ☐ Cavitation ☐ P&A ☐ Multi-Well Fluid Management Low Chloride Drilling Fluid ☒ yes ☐ no
☒ Lined ☐ Unlined Liner type: Thickness 30 mil ☒ LLDPE ☐ HDPE ☐ PVC ☐ Other
☒ String-Reinforced
Liner Seams: ☐ Welded ☐ Factory ☐ Other Volume: 36,180.19 bbl Dimensions: L 150 x W 150 x D 17'

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_____

6.

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

☐ Screen ☐ Netting ☐ Other_____

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

7.

Signs: Subsection C of 19.15.17.11 NMAC

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

☒ Signed in compliance with 19.15.16.8 NMAC

8.

Variances and Exceptions:

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

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

☐ Variance(s): Requests must be submitted to the appropriate division district for consideration of approval.

☐ Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

9.

Siting Criteria (regarding permitting): 19.15.17.10 NMAC

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

General siting

Ground water is less than 25 feet below the bottom of a low chloride temporary pit or below-grade tank. ☐ Yes ☐ No ☐ NA
- ☐ NM Office of the State Engineer - iWATERS database search; ☐ USGS; ☐ Data obtained from nearby wells

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

Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. **(Does not apply to below grade tanks)** ☐ Yes ☐ No
- Written confirmation or verification from the municipality; Written approval obtained from the municipality

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

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

Within a 100-year floodplain. **(Does not apply to below grade tanks)** ☐ Yes ☐ No
- FEMA map

Below Grade Tanks

Within 100 feet of a continuously flowing watercourse, significant watercourse, lake bed, sinkhole, wetland or playa lake (measured from the ordinary high-water mark). ☐ Yes ☐ No
- Topographic map; Visual inspection (certification) of the proposed site

Within 200 horizontal feet of a spring or a fresh water well used for public or livestock consumption;. ☐ Yes ☐ No
- NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site

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

Within 100 feet of a continuously flowing watercourse, or any other significant watercourse or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). (Applies to low chloride temporary pits.) ☐ Yes ☐ No
- Topographic map; Visual inspection (certification) of the proposed site

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

10.

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

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

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

☒ Previously Approved Design (attach copy of design) API Number: 30-039-31383 30-039-31384
Permit Number: pcs1912236653

11.

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

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

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

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

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

- ☐ Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC
- ☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☐ Climatological Factors Assessment
- ☐ Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Quality Control/Quality Assurance Construction and Installation Plan
- ☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- ☐ Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Nuisance or Hazardous Odors, including H_2S, Prevention Plan
- ☐ Emergency Response Plan
- ☐ Oil Field Waste Stream Characterization
- ☐ Monitoring and Inspection Plan
- ☐ Erosion Control Plan
- ☐ Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

13.
Proposed Closure: 19.15.17.13 NMAC
Instructions: Please complete the applicable boxes, Boxes 14 through 18, in regard to the proposed closure plan.

Type: ☒ Drilling ☐ Workover ☐ Emergency ☐ Cavitation ☐ P&A ☐ Permanent Pit ☐ Below-grade Tank ☐ Multi-well Fluid Management Pit ☐ Alternative

Proposed Closure Method: ☐ Waste Excavation and Removal
☐ Waste Removal (Closed-loop systems only)
☒ On-site Closure Method (Only for temporary pits and closed-loop systems)
☒ In-place Burial ☐ On-site Trench Burial
☐ Alternative Closure Method

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

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

15.
Siting Criteria (regarding on-site closure methods only): 19.15.17.10 NMAC
Instructions: Each siting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria require justifications and/or demonstrations of equivalency. Please refer to 19.15.17.10 NMAC for guidance.

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

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

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

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

17.
Operator Application Certification:

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

Name (Print): Vanessa Fields Title: Regulatory Manager

Signature: Date: 7/5/2022

e-mail address: vfields@logosresourcesllc.com Telephone: 505-320-1243

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

OCD Representative Signature: Jaclyn Burdine **Approval Date:** 07/19/2022

Title: Environmental Specialist-A **OCD Permit Number:** **Facility ID: [fJMB2220051571]**

19.
Closure Report (required within 60 days of closure completion): 19.15.17.13 NMAC

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

☐ **Closure Completion Date:**

20.
Closure Method:

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

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

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

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

22.

Operator Closure Certification:

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

Name (Print): _____ Title: _____

Signature: _____ Date: _____

e-mail address: _____ Telephone: _____

DISTRICT I
1625 N. French Dr., Hobbs, N.M. 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
DISTRICT II
811 S. First St., Artesia, N.M. 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
DISTRICT III
1000 Rio Brazos Rd., Aztec, N.M. 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (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	[2] Pool Code	[3] Pool Name	
[4] Property Code	[5] Property Name: SECTION 16D DRYING PAD/ BURIAL TRENCH #1		[6] Well Number
[7] OGRID No.: 289408	[8] Operator Name: LOGOS OPERATING, LLC		[9] Elevation: 6364'

[10] Surface Location

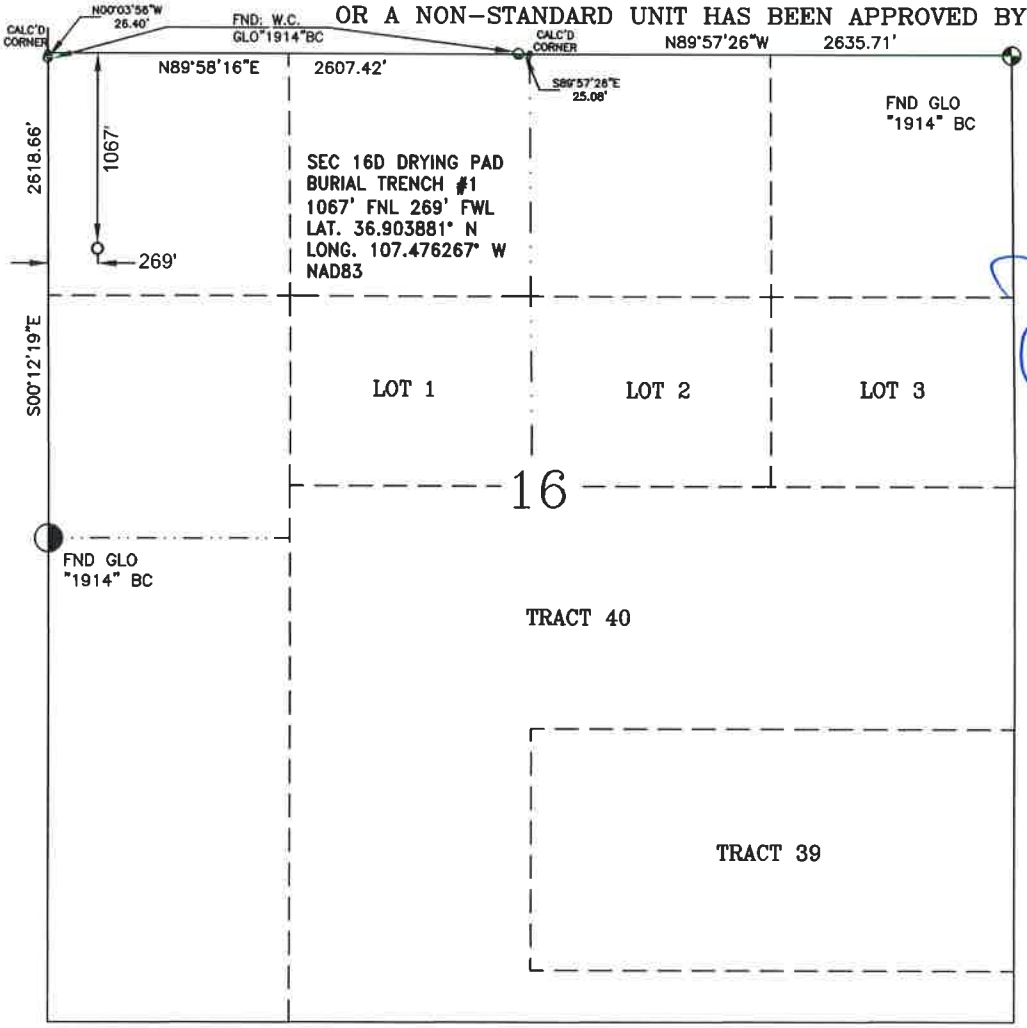
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	16	31-N	6-W		1067'	NORTH	269'	WEST	SAN JUAN

[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

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.

16 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 herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased 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 a working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Signature 7/6/2022 Date

Vanessa Fields
Printed Name

VFields@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.

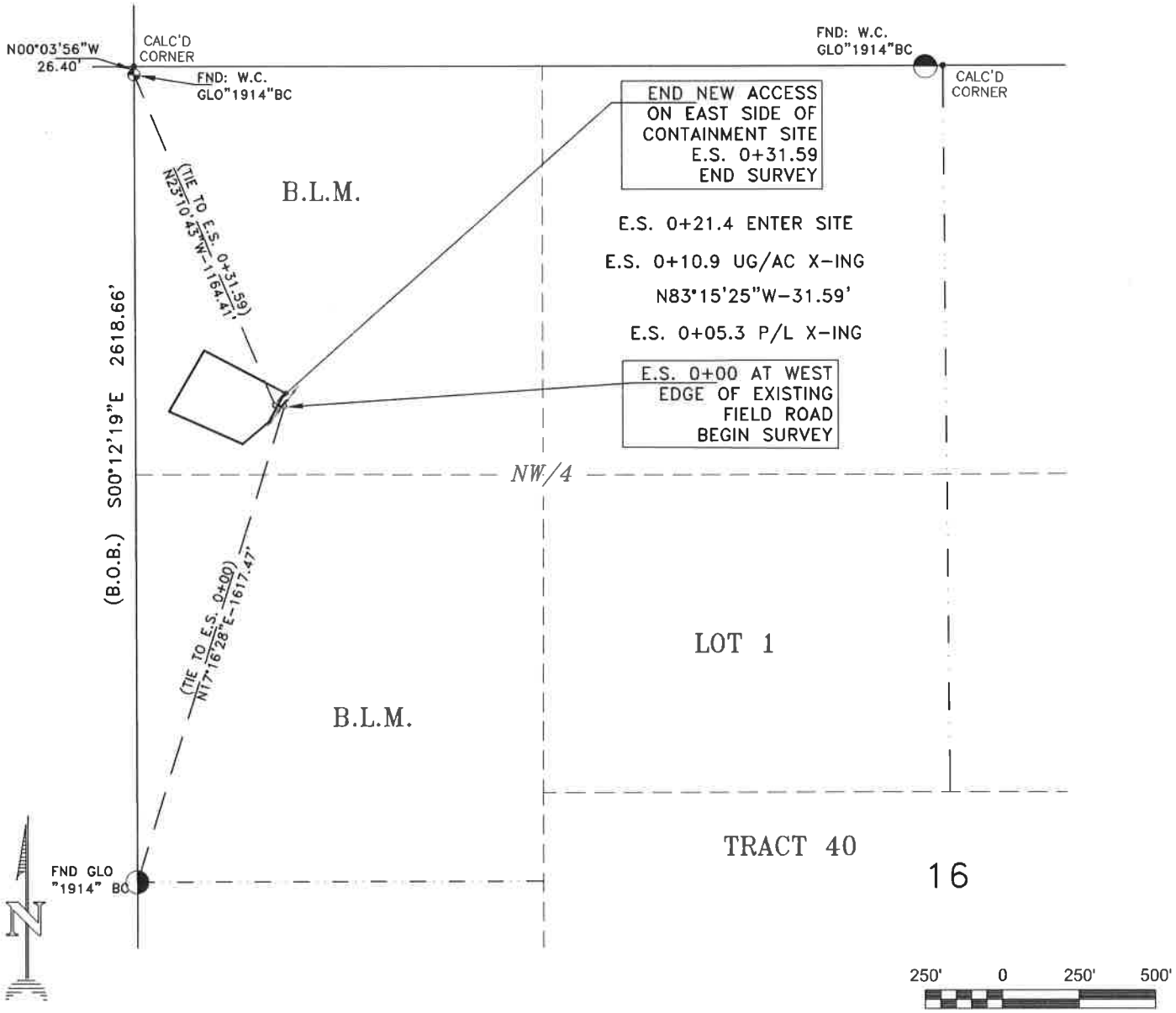
APRIL 26, 2022
Date of Survey

Signature and Seal of Professional Surveyor:

GLEN W. RUSSELL NEW MEXICO 15703 LICENSED PROFESSIONAL SURVEYOR

GLEN W. RUSSELL
Certificate Number 15703

PROPOSED ACCESS SURVEY FOR
LOGOS OPERATING, LLC
SECTION 16D RECYCLING CONTAIMENT
LOCATED IN THE NW/4 OF SEC. 16, T-31-N, R-6-W, N.M.P.M.
SAN JUAN COUNTY, NEW MEXICO



OWNERSHIP			
LOCATION	OWNER	STATION	FT./RODS
NW/4 S16, T31N, R6W	B.L.M.	E.S. 0+00 TO E.S. 0+31.59	31.59/1.91

BASIS OF BEARING: AS MEASURED BY GPS BETWEEN FOUND MONUMENTS AT THE NORTHWEST WITNESS CORNER AND THE WEST QUARTER CORNER OF SECTION 16, TOWNSHIP 31 NORTH, RANGE 6 WEST, N.M.P.M. SAN JUAN COUNTY, NEW MEXICO. BEARS S00°12'19"E A DISTANCE OF 2618.66' AS MEASURED BY G.P.S. LOCAL GRID NAD83.

DATE OF SURVEY:	GWR	DRAWN BY:	GWR
SURVEY CREW:	4/20/22	DATE:	4/24/22

REV.	
1	
2	

I, GLEN W. RUSSELL, A NEW MEXICO REGISTERED PROFESSIONAL SURVEYOR CERTIFY THAT I CONDUCTED OR AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO.

GLEN W. RUSSELL DATE APRIL 25, 2022

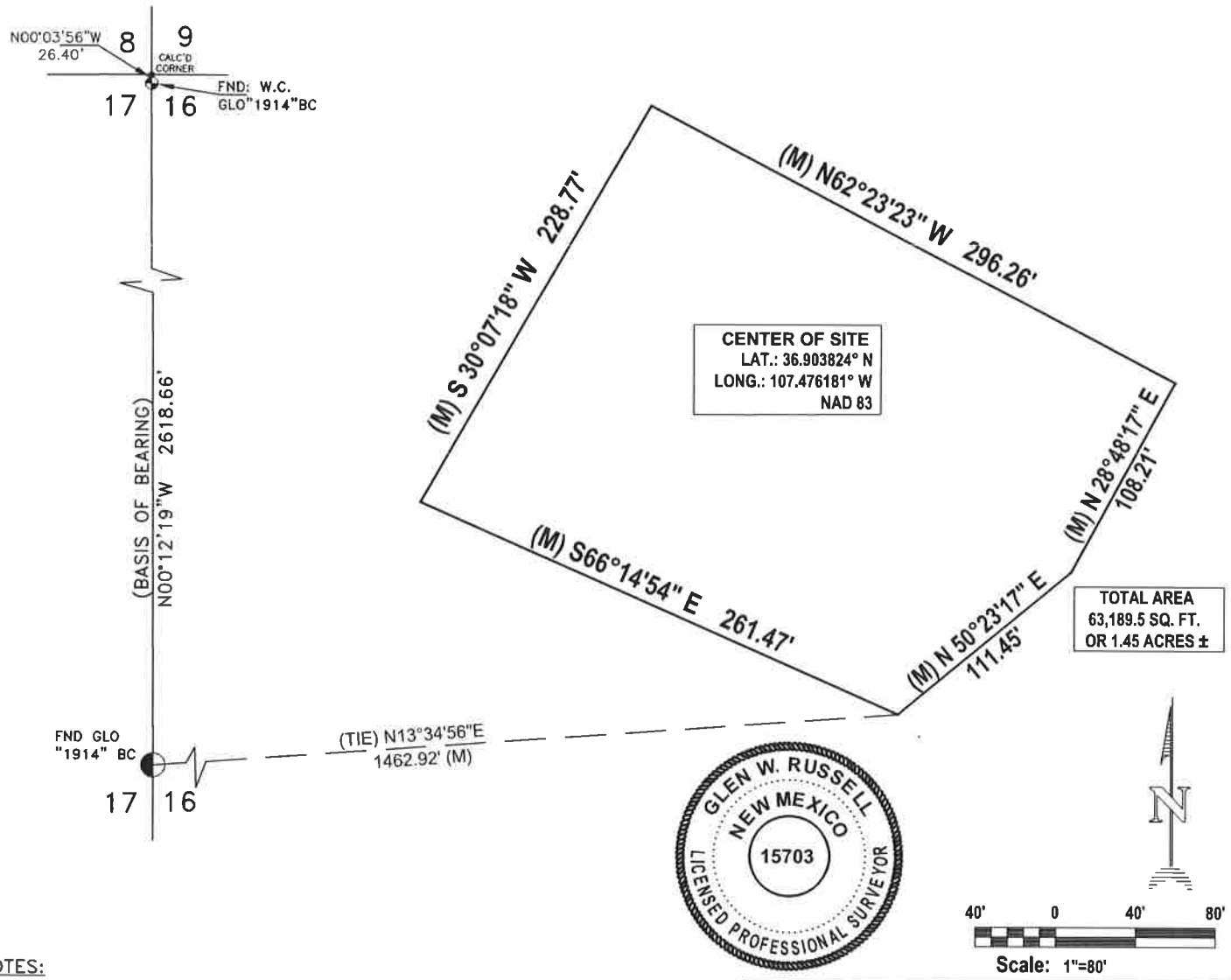
GLEN W. RUSSELL, PLS
NEW MEXICO L.S. #15703

GLEN W. RUSSELL NEW MEXICO 15703 LICENSED PROFESSIONAL SURVEYOR

VECTOR SURVEYS, LLC
Professional Land Surveys, Mapping,
GPS Surveys & Oil Field Services
122 N Wall Avenue, Farmington, NM 87401
Phone (505) 320-9595
E-Mail: vectorjr001@msn.com

WORK ORDER NO.:	LOGOS106	CAD FILE:	SEC16D RC_AR

LOGOS OPERATING, LLC
SECTION 16D RECYCLING CONTAIMENT
LOCATED IN THE
NW/4 SECTION 16, T-31-N, R-6-W, NMPM,
SAN JUAN COUNTY, NEW MEXICO



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.) THIS IS NOT A BOUNDARY SURVEY.

BASIS OF BEARING:

BETWEEN FOUND MONUMENTS AT THE WEST QUARTER CORNER AND THE NORTHWEST WITNESS CORNER OF SECTION 16, TOWNSHIP 31 NORTH, RANGE 6 WEST, N.M.P.M., SAN JUAN COUNTY, NEW MEXICO.

LINE BEARS N00°12'19"W A DISTANCE OF 2618.66 FEET AS MEASURED BY G.P.S. LOCAL GRID NAD 83.

I, GLEN W. RUSSELL, A NEW MEXICO REGISTERED PROFESSIONAL SURVEYOR CERTIFY THAT I CONDUCTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO.

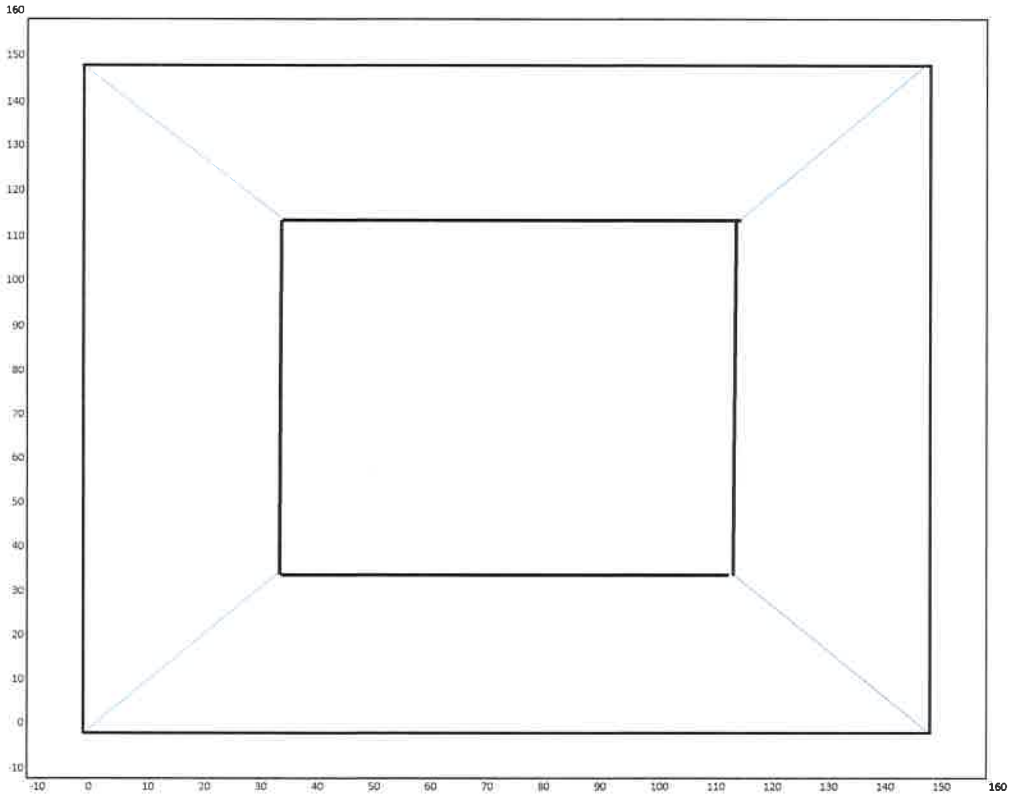
GLEN W. RUSSELL DATE APRIL 25, 2022

GLEN W. RUSSELL, PLS
NEW MEXICO L.S. #15703

DATE OF SURVEY:	4/20/22	DRAWN BY:	GWR
SURVEY CREW:	GWR	DATE:	4/24/22

VECTOR SURVEYS, LLC
Professional Land Surveys, Mapping,
GPS Surveys & Oil Field Services
122 N. Wall Avenue, Farmington, NM 87401
Phone (505) 320-9595
E-Mail: vectorgr001@msn.com

WORK ORDER NO.:	LOGOS106	CAD FILE:	SEC16D RC_SITE



Solids Burial Pit

Total Width (E-W)	296	Ft
Total Length (N-S)	229	Ft

Slope Dimensions

Pit Slopes (Rise to Run)	1.0	2.0

	Depth Below Drying Pad	Approximate depth below natural grade
Depth Southeast Side	20	20
Depth Adjacent to Drying Pad West	20	20
Depth Adjancent to Drying Pad East	20	20
Depth Southwest Side	20	20

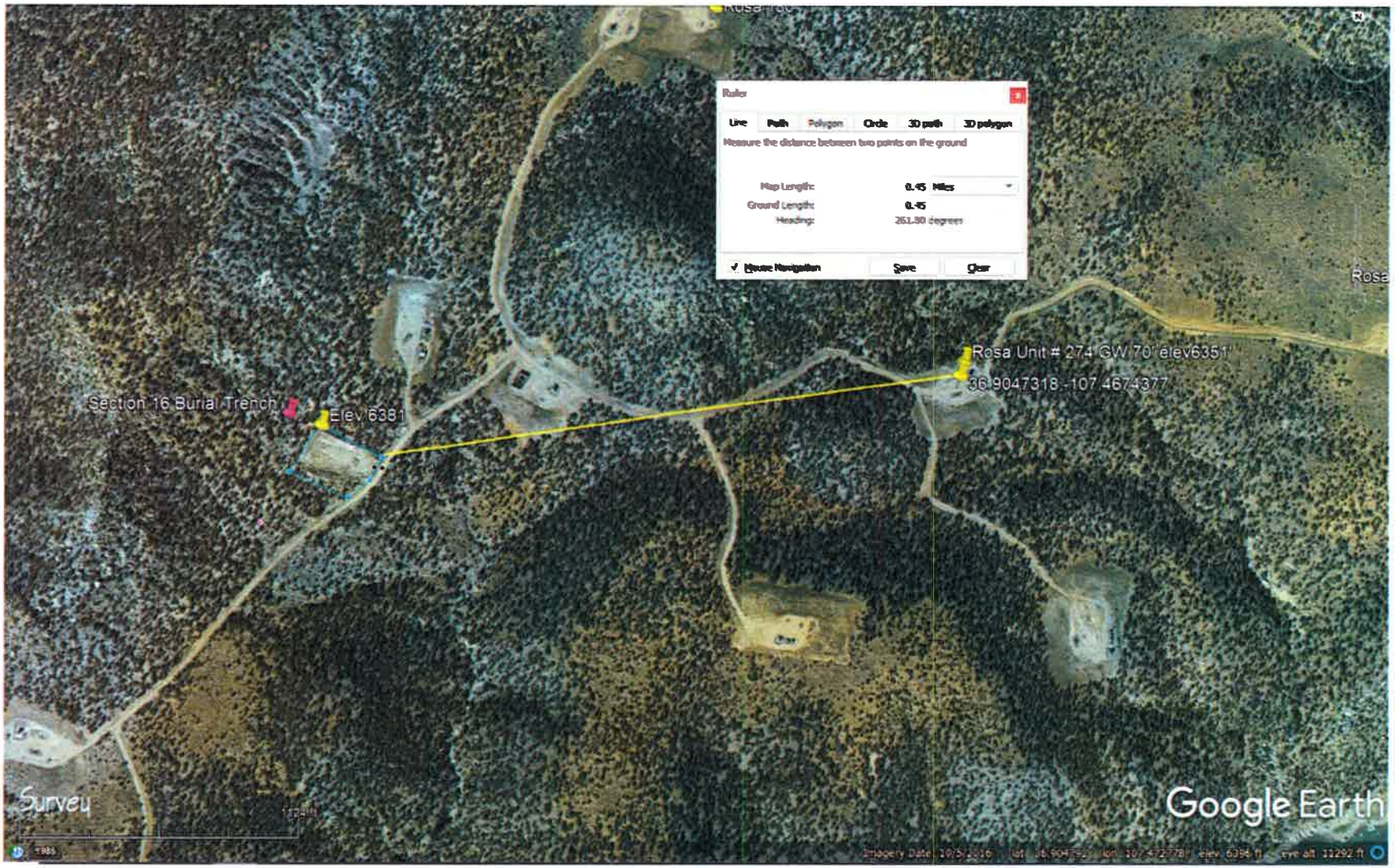
E-W Bottom Dimension South
E-W Bottom Dimension North
N-S Bottom Dimension

Total Capacity	183,856.38	bbls
	1,032,277	cu. Ft.
	23.70	ac ft
Number of Wells	16	
Estimated Solids		cu. Ft

NORTH

LOGOS Resources II LLC	Solids Burial Pit	Trench #1
2010 Afton Place		
Farmington NM 87401	Section 16D Trench	Jul-22

Section 16 Depth to Groundwater 100’



#274 30-045-27963

=M-07-0238 (Rev 10-82)

WELL CASING

san juan repro Form 71

CATHODIC PROTECTION CONSTRUCTION REPORT

DAILY LOG

Drilling Log (Attach Hereto) ☐

Completion Date 5-17-93

CPS #	Well Name Line or Plant	Work Order #	Static	Ins Union Check
2394-W	ROSA UNIT #274	L179	600'S = 6.55 (M)	☐ Good ☐ Bad NONE

Location	Anode Size	Anode Type	Size Bit
B-16-31-06	2" x 60"	ANOTEC	7 7/8

Depth Drilled	Depth Logged	Drilling Rig Time	Total Lbs Coke Used	Lost Circulation Mat'l Used	No Sacks Mud Used
400'	386'				

	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10
Anode Depth	360'	350'	340'	330'	320'	310'	300'	285'	275'	26[illegible]
Anode Output (Amps)	4.0	4.3	3.7	3.8	4.0	4.4	4.1	4.1	4.4	4.0

	#11	#12	#13	#14	#15	#16	#17	#18	#19	#20
Anode Depth	255'	245'	235'	225'	210'					
Anode Output (Amps)	4.1	4.4	4.4	4.3	3.8					

Total Circuit Resistance			No 8 C.P. Cable Used	No. 2 C.P. Cable Used
Volts 11.91	Amps 19.5	Ohms .61		

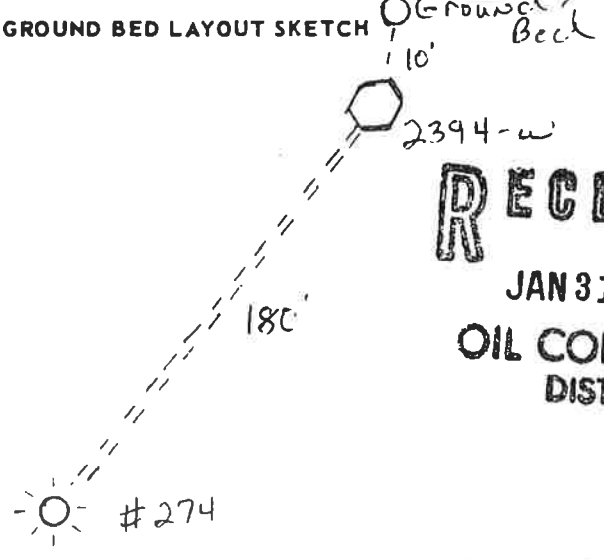
Remarks: 11/16 Set 59' of 8" PVC Casing, And Cemented WITH 13 SACKS. NO GAS, WATER, or Boulders Were ENCOUNTered During CASING. Drilled 400', Logged 386', Driller said water at 70', Took sample. Installed 386' of 1" PVC Vent pipe, perforated bottom 290'.

Rectifier Size: Solar V Solar A
Addn'l Depth
Depth Credit: 114'
Extra Cable: 210'
Ditch & 1 Cable: 190'
25 'Meter Pole: -
20' Meter Pole: -
10' Stub Pole: -

All Construction Completed

(Signature)

GROUND BED LAYOUT SKETCH



RECEIVED
JAN 31 1994
OIL CON. DIV.
DIST. 3

Well NOT TIED IN YET

New Mexico Office of the State Engineer
POD Reports and Downloads

Township: 31N Range: 06W Sections:

NAD27 X: Y: Zone: Search Radius:

County: Basin: Number:

Suffix:

Owner Name: (First) (Last) Non-Domestic

Domestic All

POD / Surface Data Report Avg Depth to Water Report Water Column Report

WATER COLUMN REPORT 02/20/2009

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

Number	Tws	Rng	Sec	q	q	q	Zone	X	Y	Depth Well	Depth Water	Water Column (in feet)
03685 POD1	31N	06W	07	1	2	4				460	310	150
00011	31N	06W	32							145D		

ord Count: 2

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

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters)

No records found.

PLSS Search:

Section(s): 16 **Township:** 31N **Range:** 06W

7/6/22 8:47 AM

WATER COLUMN/ AVERAGE DEPTH TO WATER

New Mexico Office of the State Engineer

Water Column/Average Depth to Water

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters)

No records found.

PLSS Search:

Section(s): 15 **Township:** 31N **Range:** 06W

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

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters)

No records found.

PLSS Search:

Section(s): 16 **Township:** 32N **Range:** 06W

Section 16 Burial Trench Topo Map

U.S. Fish and Wildlife Service

National Wetlands Inventory

Section 16

July 6, 2022

Wetlands

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

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

National Flood Hazard Layer FIRMette

FEMA

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) Zone A, V, A99
- With BFE or Depth Zone AE, AO, AH, VE, AR
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Area of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone
- Future Conditions 1% Annual Chance Flood Hazard Zone
- Area with Reduced Flood Risk due to Levee. See Notes. Zone
- Area with Flood Risk due to Levee Zone

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard Zone X
- Effective LOMRs
- Area of Undetermined Flood Hazard Zone

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 Cross Sections with 1% Annual Chance / Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximat point selected by the user and does not repres an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 7/6/2022 at 10:17 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

Coal Mines in New Mexico

7/6/2022, 8:44:07 AM

1:9,028

0 0.05 0.1 0.2 mi

0 0.07 0.15 0.3 km

National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp.

EMNRD MMD GIS Coordinator

NM Energy, Minerals and Natural Resources Department (http://gm.emnrd.maps.arcgis.com/apps/webappbuilder/index.html?id=7abfa2a422db42078d66a00a0ee8241a)

Siting Criteria Compliance Demonstration 19.15.17.10 NMAC

The proposed Section 16D #001 Burial trench will be to dispose the drill cutting for four to six wells from either Rosa Pad 3, Pad 5, or Pad 6 Pad 7.

Pad 3	Pad 5	Pad 6	Pad 7
RosaUnit #540H	Rosa Unit #550H	Rosa Unit #560H	Rosa Unit #570H
Rosa Unit #542H	RosaUnit #552H	Rosa Unit #562H	Rosa Unit # 572H
RosaUnit #544H	Rosa Unit#554H	Rosa Unit# 564H	Rosa Unit # 574H
Rosa Unit #546H	Rosa Unit #556H	Rosa Unit #566H	Rosa Unit # 576H

The proposed Section 16D #001 burial trench site is not located in an unstable area. The location is not over a mine and as indicated on the Mines, Mills and Quarries Map, the Section 16D burial was an existing rock quarry shown on figure 3. The location of the Section 16D burial trench is not located within 100 feet of a continuously flowing watercourse, is not 200 feet of any other significant watercourse or lakebed, sinkhole, playa lake and is not within 300 feet of a spring or private, domestic fresh water well used for domestic or stock watering purposes shown on figure 2. The location is not located within 300 feet of a wet land shown in figure 5. The location is not within a 10-year floodplain area as indicated on the FEMA map.

Regional Hydrological Context

Referenced Well Location:
The referenced well and pit is located on Bureau of Reclamation lands in San Juan County, New Mexico. This site is positioned in the northeastern portion of the San Juan Basin, an asymmetrical syncline that extends from northwestern New Mexico into southwestern Colorado (Carson National Forest FEIS, 2008). Elevation of the referenced well is approximately 6324 feet MSL.

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

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

Site Specific Information:

Surface Hydrology:	The pit is located on a mid-elevation southwestern facing mesa, approximately ¼ mile west, northwest of the San Juan River Arm of Navajo Reservoir.
1st Water Bearing Formation:	San Jose, Tertiary
Formation Thickness:	Approximately 1,900 ft.
Underlying Formation:	Nacimiento, Tertiary
Depth to Groundwater:	Depth to groundwater is estimated at greater than 100 feet bgs.

References:

Allen, Erin. Undated. Colorado Plateau Aquifers. http://academic.emporia.edu/schulmem/hydro/TERM%20PROJECTS/2007/Allen/Aquifer.html.

New Mexico Energy, Minerals and Natural Resources Department, Division of Mining and Minerals. Database. 2009. Internet accessed June 2009.

New Mexico Office of the State Engineer. 2009. iWaters database. Internet accessed June 2009.

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

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

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

United States Geological Survey. 2001. Ground Water Atlas of the United States: Arizona, Colorado, New Mexico and Utah. USGS Publication HA 730-C; http://capp.water.usgs.gov.

Design and Construction Plan

The Drying pad and Burial Trench will be located on the northeast side of the rock quarry. Plates 1 and 2 describe the design of the drying pad and burial trenches proposed for this project. LOGOS Operating, LLC will provide 72-hour notification prior to lining to allow staff the opportunity to inspect the liner foundation.

Currently, the design consists of a single drying pad location to the west of the burial trench. The burial trench will contain the discharges of closed-loop system drilling solids from Rosa Drill Program. The discharges of closed-loop system drilling solids will be on drying pad until all discharges are collected and pass paint filter test. Once the material is ready to be buried, the burial trench will be dug and lined as per NMAC 19.15.17.11.K. LOGOS Operating, LLC will provide 72-hour notification prior to lining to allow staff the opportunity to inspect the liner foundation.

Construction/Design Plan of Drying Pad and Burial Trenches

Stockpiling of topsoil:
LOGOS will stockpile the topsoil to the north of the proposed drying and burial trench for use as the final cover or fill at the time of closure.

Signs:
LOGOS will post an upright sign not less than 12 inches by 24 inches with lettering not less than two inches in height in a conspicuous place on the fence surrounding the drying pad and burial trench. The operator shall post the sign in a manner and location such that a person can easily read the legend. The sign shall provide the following information: the operator's name, the location of the site by quarter-quarter or unit letter, section, township, and range; and emergency telephone numbers.

Fencing:
LOGOS shall fence or enclose in a manner that deters unauthorized access to the drying pad and burial trench site, shall maintain the fences in good repair and exclude livestock with a four-foot fence that has at least four strands of barbed wire evenly spaced in the interval between one foot and four feet above ground level provided all the criteria in 19.15.17.11 (D) (1) (2) (3) are met.

Earthwork:
In accordance with rule 19.15.17.11 NMAC, the drying pad and burial trench will adhere to appropriate prescriptive mandates. LOGOS will construct the pad and trench with properly constructed foundation and interior slopes of a firm, un and smooth unyielding base and free of rocks, debris, sharp edges, or irregularities to prevent any rupture or tear to the liner. This will require dragging the area adjacent to the proposed trench to proposed trench to form the drying pad. In areas where the trench is mainly rock, smooth foundations for the liners may require importing material that relatively free of rocks from suitable location to form the liner foundations and/or geotextile material between the earthen foundation and the liner.

The drying pad to the west of the burial trench will slope slightly east to west. A liner will be placed on top of the of the drying pad with the liner overlaying into the burial trench. LOGOS will utilize a shell shaker blender to ensure all liquids are removed prior to placing on the drying pad. The remaining fluids will be allowed to evaporate on the drying pad or disposed.

Liner Installation:
Burial trench: The geomembrane liner shall consist of 30-mil string reinforced LLDPE which exceeds the specification of the division district office. LOGOS shall notify the division's Santa Fe office at least 72 hours prior to the liner's installation.
Drying Pad: The liner shall consist of 30-mil LLDPE or could be as robust as 60-mil HDPE in accordance with rule 19.15.17.13 NMAC (K) (1-6). Sumps will be added to facilitate the collection of liquids derived from drill cuttings. A berm will be placed to prevent run-on of surface water or fluids. No anchor trench adjacent to the burial trench. Instead, the liner will extend 10 to 20 feet over the liner that forms facing the wall of the burial trench. May spread 1 to 3 feet of earth material over the liner.

Design and Construct:
Solids from the closed loop system will be unloaded from east to west on the drying pad. LOGOS will ensure the area will be graded relatively flat but sloping slightly toward the west. The trench shall have properly constructed foundation and side walls consisting of a firm, unyielding base, smooth and free of rocks, debris, sharp edges, or irregularities to prevent the liner's rupture or tear.

Geotextile is required under the liner where needed to reduce localized stress-strain or protuberances that may otherwise compromise the liner's integrity.

LOGOS will ensure the following method in accordance with 19.15.17.11 NMAC:

- Minimize liner seams and orient them up and down, not across, a slope.
- Use factory welded seams where possible.
- Prior to field seaming, shall overlap liners four to six inches and orient liner seams parallel to the line of maximum slope, i.e., oriented along, not across the slope.
- Minimize the number of field seams in corner and irregularly shaped areas.
- Utilize qualified personnel to perform field welding and testing.
- Install sufficient liner material to reduce stress-strain on the liner.
- Ensure that the outer edges of all liners are secured for the deposit of the excavated waste material into the trench.
- Anchor the edges of all liners in the bottom of a compacted earth-filled trench. The anchor trench shall be a least 18 inches deep, unless anchoring to encountered bedrock provides equivalent anchoring.
- Ensure that the liner is protected from any fluid force or mechanical damage at any point of discharge into or suction from the lined drying pad and burial trench.

Operating and Maintenance Plan

In accordance with rule 19.15.17.12 the following information describes the operation and maintenance of the burial trench and drying pad.

General Plan:

- LOGOS shall operate and maintain the burial trench and drying pad to contain minimal liquids and solids and maintain the integrity of the liner, prevent contamination of fresh water, and protect public health and the environment.
- LOGOS shall recycle, reuse, reclaim or dispose of all drilling fluids of such liquids at a division approved facility.
- LOGOS shall not discharge into or store any hazardous waste in the burial trench or drying pad.
- If liner's integrity is compromised above the liquids surface, then LOGOS shall repair the damage within 48 hours of discovery or seek a variance from notify Santa Fe Division district office.
- If a leak develops or if any penetration of the liner occurs below the liquids surface, then LOGOS shall remove all liquid above the damage or leak within 48 hours of discovery, notify Santa Fe Division office pursuant to 19.15.29 NMAC and repair the damage or replace the liner.
- LOGOS will ensure discharge of solids does not damage the liner by erosion or any impact while unloading the solids.
- LOGOS will protect from run-off by constructing and maintaining diversion ditches and berms around burial trench as necessary.
- LOGOS will ensure only fluids or mineral solids generated during the drilling, completion or workover process be discharged into the burial trench.
- LOGOS will maintain the drying pad and burial trench free of miscellaneous solid waste or debris.
- LOGOS will remove any visible or measurable layer of oil from the surface of the drying pad although the presence of oil is highly unlikely.
- During and after drilling operations until closed, LOGOS will inspect the drying pad and burial trench weekly to ensure compliance. Inspections will be logged and available to the Santa Fe division district office.
- LOGOS will be utilizing a shell shaker blender for the solids prior to adding on the drying pad. Minimal drilling fluids will be in trench and will ensure solids are free of liquid prior to transferring into burial trench. As suggested above, the protocol for unloading solids to the drying pad and transfer to the burial trench:
    - Trucks off load the solids from the closed loop system onto 1 to 3 feet of dry earth material that overlays the liner of the drying pad area.
    - These solids remain on the dry earth until the material passes the paint filter test
    - Using a loader or other appropriate equipment, the closed loop solids will be transferred into the burial trench as will moist earth from beneath the footprint of the solids pile.
    - Dry earth will be replaced on the drying pad area as required after the transfer to the burial trench
- Any fluids will be removed from the surface of the burial trench within 60 days from the date that the last drilling or workover rig associated with the drying pad/burial trench permit is released. The operator will note the date of this release upon Form C-105 or C-103 upon well or workover completion.

Burial Trench and Drying Pad Closure Plan

In accordance with Rule 19.15.17.13 NMAC the following plan describes the general in-place closure requirements of burial trenches/drying pad on LOGOS Operating, LLC location in the San Juan Basin of New Mexico. This is LOGOS's standard procedure for all burial trenches/drying pads to be utilized for the drilling, completion and/or workovers of oil and gas wells operated by LOGOS. For those burial trenches/drying pads which do not conform to this standard closure plan, a separate closure plan will be developed and utilized.
The wastes in the burial trench are destined for burial at the location proposed, which is in the same unit where the drilling wastes are generated.
The operator will not begin closure operations without approval of the closure plan submitted with the permit application.

All closure activities will include proper documentation and will be submitted to NMOCD within 60 days of the pit closure. Closure report will be filed on C-144 and will include the following:

- Details on Capping and Covering, where applicable (See report)
- Plot plan (Pit Diagram) (included as an attachment)
- Inspection Log (included as an attachment)
- Notification Documentation (included as an attachment)
- Sampling Results (included as an attachment)
- Copy of Deed Notice will be filed with the County Clerk
    - **(Not required on Federal, State or Federal Tribal Land as stated by FAQ dated October 30, 2008).**

General Plan:

1. Prior to closure LOGOS shall remove all free liquids reasonably achievable from the prior drying pad and dispose of such liquids at a division approved facility.
2. The preferred method of closure for all temporary pits will be on-site closure by in-place burial/drying pad, provided all the criteria in 19.15.17.13.D are met.
3. The surface owner shall be notified by (certified mail, return receipt or via email) requested that LOGOS's plans closure of operations.
4. Within 6 months of the rig-off status occurring LOGOS will ensure that the temporary pit and/or burial trench/drying pad is closed.
5. Notice of Closure will give to the division district office verbally and/ or in writing at least 72 hours, but not more than one week, prior to closure operations. The notification of Closure will include the following: Operator's Name, Well Name and API number and Location (USTR).
6. Pit contents shall be achieved by mixing with non-waste containing, earthen material. The solidification process will be accomplished use a combination of natural drying and mechanical mixing. Pit contents will be mixed with non-waste, earthen material to a consistency that is deemed safe and stable. The mixing ratio shall not exceed 3 parts non-waste to 1 part pit contents.
7. A five and eight-point composite sample will be taken of the pit using sampling tools and all samples tested per parameters listed in Table II of 19.15.17.13 NMAC. In the event that the criteria are not met (See Table I), all contents will be handled per 19.15.17.13 Subsection C (i.e dig and haul to a division-approved facility.) Approval to haul will be requested of the division district office prior to initiation.

Table II Closure Criteria for Burial Trenches and Drying Pad Waste Left in Place in Temporary Pits		5-Point and 8 Point	
Depth below bottom of pit to GW < than 10,000 mg/l TDS	**Constituent**	**Method ***	**Limit****
➢ **51-100 feet**	Chloride	EPA Method 300.0	40,000 mg/kg
	TPH	EPA SW-846 Method 418.1	2,500 mg/kg
	GRO+DRO	EPA SW-846 Method 8015M	1,000 mg/kg
	BTEX	EPA SW-846 Method 8021 B or 8260B	50 mg/kg
	Benzene	EPA SW-846 Method 8021B or 8015M	10 mg/kg
	Paint Filter Test		

8. Upon achieving all applicable waste stabilization, fold the outer edges of the trench liner to overlap the waste material in the trench prior to the installation of the geomembrane cover, install a geomembrane cover over the waste material in the lined trench.
9. Upon completion of solidification and testing, the pit area will be backfilled with soil cover for burial in-place or burial trench/drying pad consists of four feet non-waste containing, uncontaminated earthen material. The soil cover shall include either the background thickness of topsoil or one-foot suitable material to establish vegetation at the site, whichever is greater.
10. Re-contouring of area will match fit, shape, line, form, and texture of the surrounding. Re-shaping will include drainage control, prevent ponding, and minimize erosion. Natural drainages will be unimpeded and stormwater Best Management Practices (BMPs) will be used to aid in soil stabilization and protection surface water quality.
11. Notification will be sent to the Division District office when the reclaimed area is seeded.
12. LOGOS shall seed the disturbed areas the first growing season after the pit and/or burial trench/drying pad is closed. Seeding will be accomplished vis drilling on the contour whenever practical or by other division-approved methods. BLM or Forest Service stipulated seed mixes will be used on federal lands. Vegetative cover will equal 70% of the native perennial vegetative cover (un-impacted) consisting of at least three native plant species, including at least on grass, but not including noxious weeds, and maintain the cover through two successive growing seasons. Repeat seeding or planting will be continue until successful vegetative growth occurs.
13. LOGOS shall place a steel marker at the center of the onsite burial/drying pad. The steel marker shall be not less than four inches in diameter and shall be cemented in a three-foot deep hole at a minimum. The marker will be flush with the ground to allow access and 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/drying pad. 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 LOGOS information. The information will include Operator Name, Well Name and number, Unit, Section, Township Range, and an indicator that the marker is an onsite burial location.

From: Burdine, Jaclyn, EMNRD
To: Vanessa Fields
Subject: RE: SECTION 16D BURIAL TRENCH #1 [fJMB2220051571]. Conditions of Approval
Date: Tuesday, July 19, 2022 3:55:00 PM

Ms. Fields,

After review one more condition needs to be added to this approved plan. I have also updated this into the E-permitting system as well.

- [289408] LOGOS OPERATING, LLC shall verify that the SECTION 16D BURIAL TRENCH #1 [fJMB2220051571] is not maintaining any liquids. If rain or run-off water gets into the SECTION 16D BURIAL TRENCH #1 [fJMB2220051571], [289408] LOGOS OPERATING, LLC will remove said water/liquids from the trench within a 72-hour timeframe.

Jaclyn Burdine ● Environmental Specialist-Advanced – Administrative Permitting Program
EMNRD - Oil Conservation Division
1220 S. St. Francis Drive | Santa Fe, NM 87505
505.469.6769 Jaclyn.Burdine1@state.nm.us
http://www.emnrd.nm.gov/ocd

From: Burdine, Jaclyn, EMNRD
Sent: Tuesday, July 19, 2022 3:01 PM
To: Vanessa Fields <vfields@logosresourcesllc.com>
Cc: Enviro, OCD, EMNRD <OCD.Enviro@state.nm.us>
Subject: SECTION 16D BURIAL TRENCH #1 [fJMB2220051571]. Conditions of Approval

SECTION 16D BURIAL TRENCH #1 [fJMB2220051571]. Conditions of Approval

Ms. Fields,

NMOCD has reviewed and approved the [C-144] Temporary Pit Plan permit, Application ID# 123261, and related documents submitted by [289408] LOGOS OPERATING, LLC on July 6, 2022, for SECTION 16D BURIAL TRENCH #1 [fJMB2220051571] in Unit Letter D, Section 16, Township 31N, Range 06W, Rio Arriba County, New Mexico. This application is approved with the following conditions of approval:

- [289408] LOGOS OPERATING, LLC shall use the facility identification number [fJMB2220051571] in all communications with NMOCD regarding the SECTION 23K BURIAL TRENCH #1 FACILITY ID [fJMB2218740686]Pit.

- [289408] LOGOS OPERATING, LLC must maintain, operate and close the SECTION 16D BURIAL TRENCH #1 [fJMB2220051571] as per all the requirements in NMAC 19.15.17. PITS, CLOSED-LOOP SYSTEMS, BELOW-GRADE TANKS AND SUMPS.

- The design and construction plan, included in the Application, is approved. [289408] LOGOS OPERATING, LLC shall design and construct SECTION 16D BURIAL TRENCH #1 [fJMB2220051571] as described in the approved plan.

- [289408] LOGOS OPERATING, LLC shall apply for a permit modification for any change to the design and construction plan.

- 19.15.17.13.E. Closure notice. [289408] LOGOS OPERATING, LLC shall notify the surface owner by certified mail, return receipt requested that the operator plans closure operations at least 72 hours, but not more than one week, prior to any closure operation. Notice shall include well name, API number and location. Evidence of mailing of the notice to the address of the surface owner in the county tax records is sufficient to demonstrate compliance with this requirement.

- The closure plan, included in the Application, is approved. [289408] LOGOS OPERATING, LLC shall close the Pit as described in the approved plan, as per all the requirements in NMAC 19.15.17:

    - **19.15.17.13. CLOSURE AND SITE RECLAMATION REQUIREMENTS**
    - Closure report and burial identification:
      Within 60 days of closure completion, [289408] LOGOS OPERATING, LLC shall submit a closure report on form C-144, with necessary attachments to document all closure activities including sampling results; information required by 19.15.17 NMAC; and details on back-filling, capping and covering, where applicable.
      In the closure report, the operator shall certify that all information in the report and attachments is correct, and that the operator has complied with all applicable closure requirements and conditions specified in the approved closure plan.
      If the operator used a temporary pit, the operator shall provide a plat of the pit location on form C-l 05 within 60 days of closing the temporary pit.

    - [289408] LOGOS OPERATING, LLC shall place a steel marker at the center of an onsite burial. The steel marker shall be not less than four inches in diameter and shall be cemented in a three-foot deep hole at a minimum. The steel marker shall extend at least four feet above mean ground level and at least three feet below ground level. The operator's name, lease name and well number and location, including unit letter, section, township and range, and that the marker designates an onsite burial location shall be welded, stamped or otherwise permanently engraved into the metal of the steel marker.

- [289408] LOGOS OPERATING, LLC shall apply for a permit modification for any change to the closure plan.

Please let me know if you any additional questions or concerns.

Sincerely,

Jaclyn Burdine● Environmental Specialist-Advanced – Administrative Permitting Program
EMNRD - Oil Conservation Division
1220 S. St. Francis Drive | Santa Fe, NM 87505
505.469.6769 Jaclyn.Burdine1@state.nm.us
http://www.emnrd.nm.gov/ocd

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 123261

CONDITIONS

Operator: LOGOS OPERATING, LLC 2010 Afton Place Farmington, NM 87401	OGRID: 289408
	Action Number: 123261
	Action Type: [C-144] Temporary Pit Plan (C-144T)

CONDITIONS

Created By	Condition	Condition Date
jburdine	NMOCD has reviewed and approved the [C-144] Temporary Pit Plan permit, Application ID# 123261, and related documents submitted by [289408] LOGOS OPERATING, LLC on July 6, 2022, for SECTION 16D BURIAL TRENCH #1 [fJMB2220051571] in Unit Letter D, Section 16, Township 31N, Range 06W, Rio Arriba County, New Mexico. The application is approved with conditions	7/19/2022