<u>District I</u> 1625 N. French Dr., Hobbs, NM 88240 <u>District II</u> 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
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 nvironment. 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: 2010 Afton Place, Farmington 87401
Facility or well name:Section 25_Burial Trench_#005
Rosa Unit #740H Rosa Unit #742H Rosa Unit #745H Rosa Unit #756H
API Number: See above OCD Permit Number: [fSCW2309539607]
U/L or Qtr/QtrD Section25 Township31N Range6W County:Rio Arriba
Center of Proposed Design: Latitude36.874529
Surface Owner: N Federal N 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 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 200 x W 300 x D 20' 20' 20'
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
Line type. Thicknessinii IIDTE I VE Outer
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

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

 Within 100 feet of a wetland. US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site 	☐ Yes ☐ No
Temporary Pit Non-low chloride drilling fluid	
Within 300 feet of a continuously flowing watercourse, or any other significant watercourse, or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No
Within 500 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 1000 feet of any other fresh water well or spring, in the existence at the time of the initial application; - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 300 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Permanent Pit or Multi-Well Fluid Management Pit	
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No
Within 500 horizontal feet of a spring or a fresh water well used for domestic or stock watering purposes, in existence at the time of initial application.	☐ Yes ☐ No
- NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	
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 Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the deattached. 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 19.15.17.10 Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC Design Plan - based upon the appropriate requirements of 19.15.17.12 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: 30-039-31383 30-039-31384 Permit Number: pcs1912236653	ocuments are
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 deattached. Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC Departing 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	

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	
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 F	luid Management Pit
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)	
☐ Alternative Closure Method	
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	
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 sour provided below. Requests regarding changes to certain siting criteria require justifications and/or demonstrations of equivalency. F 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 E	MNRD-Mining and Mineral Division	on	☐ Yes ⊠ No
Within an unstable area.			
- Engineering measures incorporated into the design; NM Bu Society; Topographic map	reau of Geology & Mineral Resourc	ees; USGS; NM Geological	☐ Yes ⊠ No
Within a 100-year floodplain.			
- FEMA map			☐ Yes ⊠ No
On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructio by a check mark in the box, that the documents are attached. Siting Criteria Compliance Demonstrations - based upon the Proof of Surface Owner Notice - based upon the appropriate of Construction/Design Plan of Burial Trench (if applicable) based Construction/Design Plan of Temporary Pit (for in-place burically Protocols and Procedures - based upon the appropriate requires Confirmation Sampling Plan (if applicable) - based upon the Waste Material Sampling Plan - based upon the appropriate requirements Soil Cover Design - based upon the appropriate requirements Re-vegetation Plan - based upon the appropriate requirements Site Reclamation Plan - based upon the appropriate requirements.	appropriate requirements of 19.15.1 requirements of Subsection E of 19. sed upon the appropriate requirements of a drying pad) - based upon the ements of 19.15.17.13 NMAC appropriate requirements of 19.15.1 equirements of 19.15.17.13 NMAC ing fluids and drill cuttings or in cast of Subsection H of 19.15.17.13 NM s of Subsection H of 19.15.17.13 NM s of Subsection H of 19.15.17.13 NM s	7.10 NMAC 15.17.13 NMAC nts of Subsection K of 19.15.17. appropriate requirements of 19. 7.13 NMAC se on-site closure standards cann MAC MAC	11 NMAC 15.17.11 NMAC
17. Operator Application Certification:			
I hereby certify that the information submitted with this application	is true, accurate and complete to the	e best of my knowledge and beli	ef.
Name (Print):Vanessa Fields	Title: _Regulatory Manager _		
Signature: Vanessa Fields	Date:	_4/3/2023	
e-mail address: vfields@logosresourcesllc.com	Telephone:505-32	0-1243	
18. OCD Approval: X Permit Application (including closure plan)	Closure Plan (only) X OCD	Conditions (see attachment)	
OCD Representative Signature: Shelly Wells		Approval Date: <u>4/5/202</u>	23
Title: Environmental Specialist-A	OCD Permit Numb	per: Facility ID:[fSCW23	309539607]
19. Closure Report (required within 60 days of closure completion): Instructions: Operators are required to obtain an approved closur The closure report is required to be submitted to the division withis section of the form until an approved closure plan has been obtain	re plan prior to implementing any c n 60 days of the completion of the c	closure activities. Please do not been completed.	
20. Closure Method:			
Waste Excavation and Removal ☐ On-Site Closure Method ☐ If different from approved plan, please explain.	Alternative Closure Method	☐ Waste Removal (Closed-lo	oop systems only)
Closure Report Attachment Checklist: Instructions: Each of the 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 Plot Plan (for on-site closures and temporary pits) Confirmation Sampling Analytical Results (if applicable) Waste Material Sampling Analytical Results (required for on Disposal Facility Name and Permit Number Soil Backfilling and Cover Installation Re-vegetation Application Rates and Seeding Technique	land only)	to the closure report. Please in	dicate, by a check
Site Reclamation (Photo Documentation) On-site Closure Location: Latitude			

22.	
Operator Closure Certification:	
	ents submitted with this closure report is true, accurate and complete to the best of my knowledge and th all applicable closure requirements and conditions specified in the approved closure plan.
Name (Print):	Title:
Signature:	Date:
e-mail address:	Telephone:

Received by OCD: 4/3/2023 3:08:11 PM1625 N. French Drive, Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

District II

811 S. First Street, Artesia, NM 88210 Phone: (575) 748-1283 Fax: (575) 748-9720 District III 1000 Rio Brazos Road, Aztec, NM 87410

Phone: (505) 334-6178 Fax: (505) 334-6170

District IV 1220 S. St. Francis Drive, Santa Fe, NM 87505 Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico Energy, Minerals & Natural Resources Department

Submit one copy to

Appropriate District Office

Revised August 1, 2011

For Page Toof 29

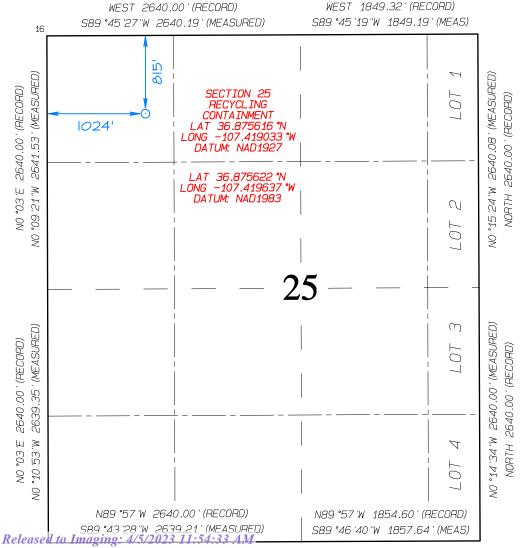
AMENDED REPORT

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ A	¹API Number		²Pool Code		le		³Pool Nam	е	
⁴Property	Code			⁵Prop(erty Name	lame ⁶ Well Number			
	SECTION 25 RECYCLING CONTAINMENT		SECTION 25 REC			CU	TTINGS PIT	005	
70GRID N	No.			*Opera	ator Name			°Ground Elevation	١
28940	289408		LOGOS OPE			LC		6390 '	
	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	25	31N	6W		815	NORTH	1024	WEST	RIO ARRIBA
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		-		l	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.		'
								R-13457	

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



Thereby 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 working interest, or to a voluntary pooling agreement or a compulsory pooling order beretofore entered by the division heretofore entered by the division Dacye Shull 03/28/2023 Date Signature Dacye Shull Printed Name dshull@logosresourcesllc.com E-mail Address 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. Date Revised: MARCH 26, 2023 Survey Date: JANUARY 16, 2023 Signature and Seal of Professional Surveyor EDWARDS JASON MEXICO ZEW

AROFESSIONAL CONTRACTOR OF THE PROPERTY OF THE

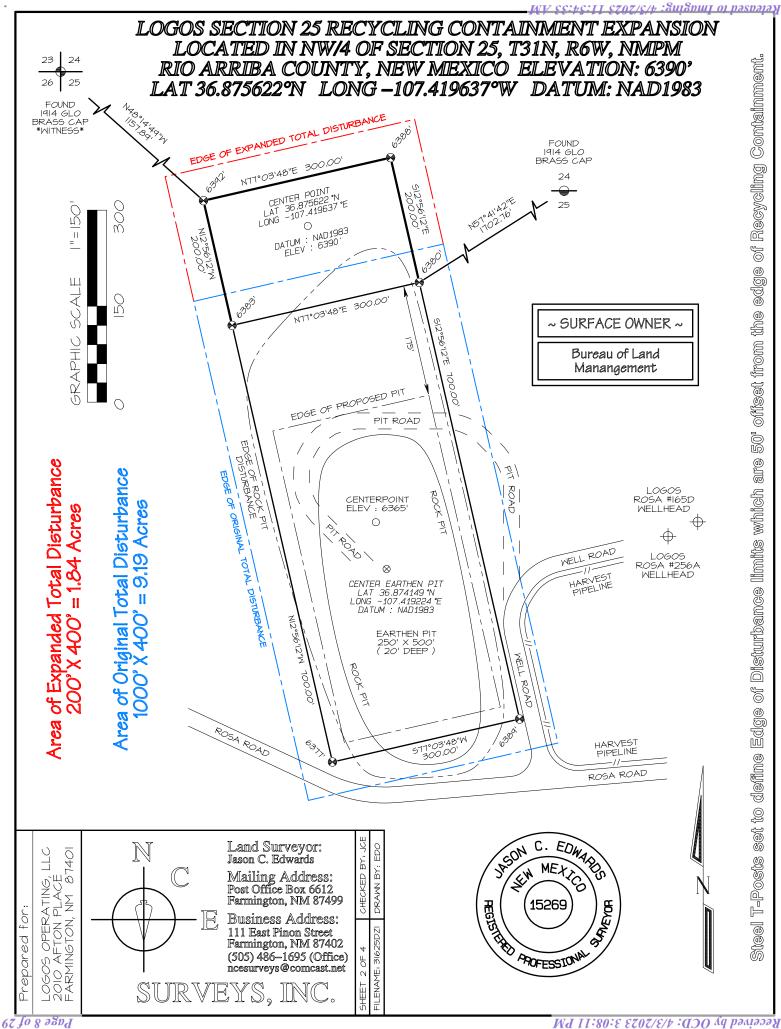
Certificate Number

SAMEYOR

DWARDS

15269

¹⁷ OPERATOR CERTIFICATION



LOGOS OPERATING, LLC SECTION 25 RECYCLING CONTAINMENT LOCATED IN NW/4 OF SECTION 25, T3IN, R6W, N.M.P.M. RIO ARRIBA COUNTY, NEW MEXICO SECTION 25 RECYCLING Rraw CONTAINMENT (EXPANSION) 6288 **EXISTING** ROADWAY SECTION 25 RECYCLING CONTAINMENT (ORIGINAL) ROSA ROAD 35 BM Jinny 31 TOPO NAMES: BANCOS MESA NW & GOMEZ RANCH + PRODUCING WELL ⊗ PLUGGED & ABANDONED WELL 67 fo 6 agnd Received by OCD: 4/3/2023 3:08:11 PM

Directions from the Intersection of US Hwy 550 & US Hwy 64 in Bloomfield, NM to LOGOS Operating, LLC Section 25 Recycling Containment Expansion 815' FNL & 1024' FWL, Section 25, T31N, R6W, N.M.P.M., Rio Arriba County, NM

Latitude <u>36.875622°N</u> Longitude -107.419637°W Datum: NAD1983

From the intersection of US Hwy 550 & US Hwy 64 in Bloomfield, NM, travel Easterly on US Hwy 64 for 38.0 miles to Mile Marker 102.3 to State Hwy 527 (Simms Hwy);

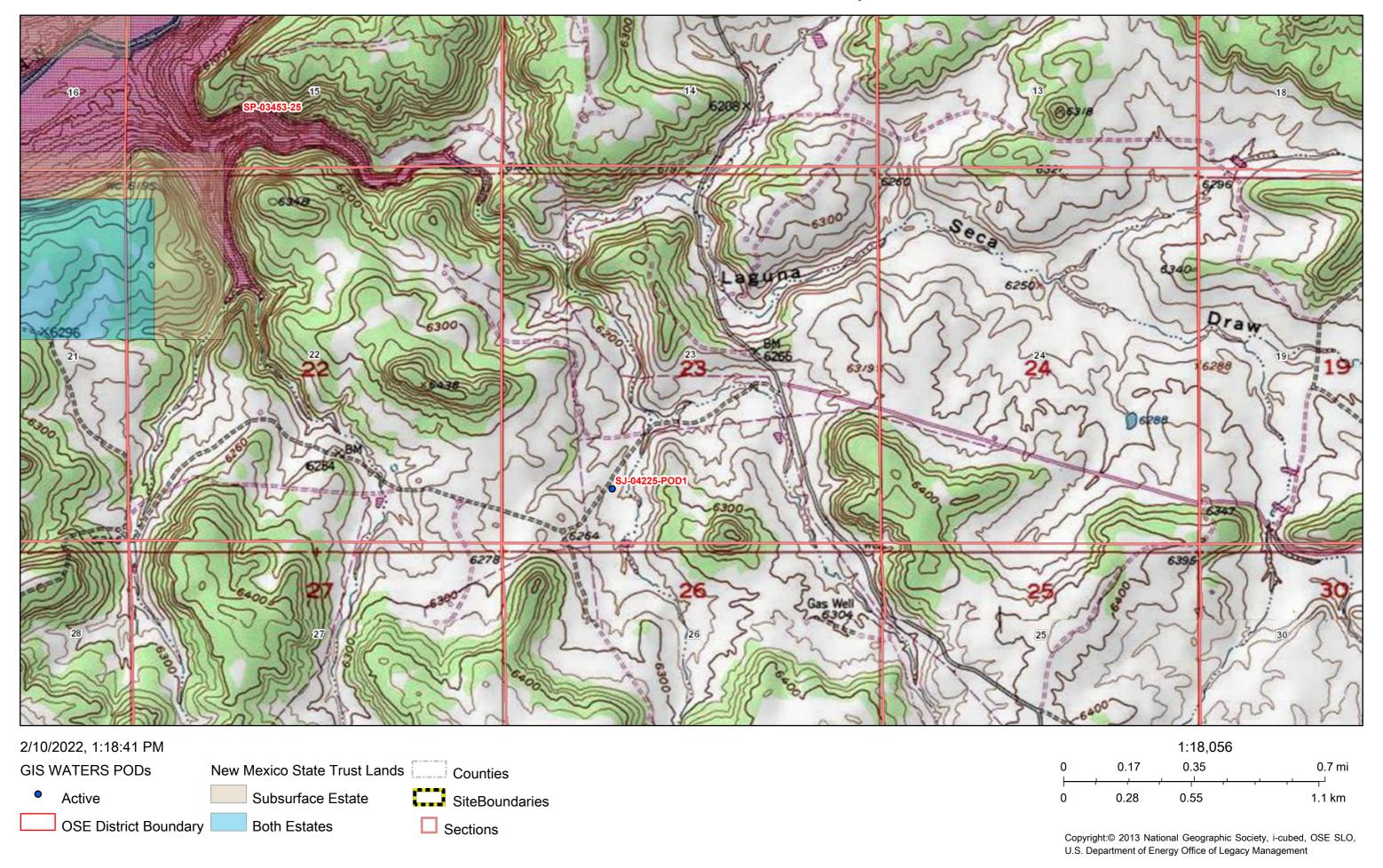
Go Left (North-westerly) on State Hwy 527 (Simms Hwy) for 7.9 miles to Rosa Road @ La Jara Station;

Go Right (Northerly) on Rosa Road for 6.5 miles to fork in roadway;

Go Left (Northerly) which is straight remaining on Rosa Road for 4.2 miles to fork in road;

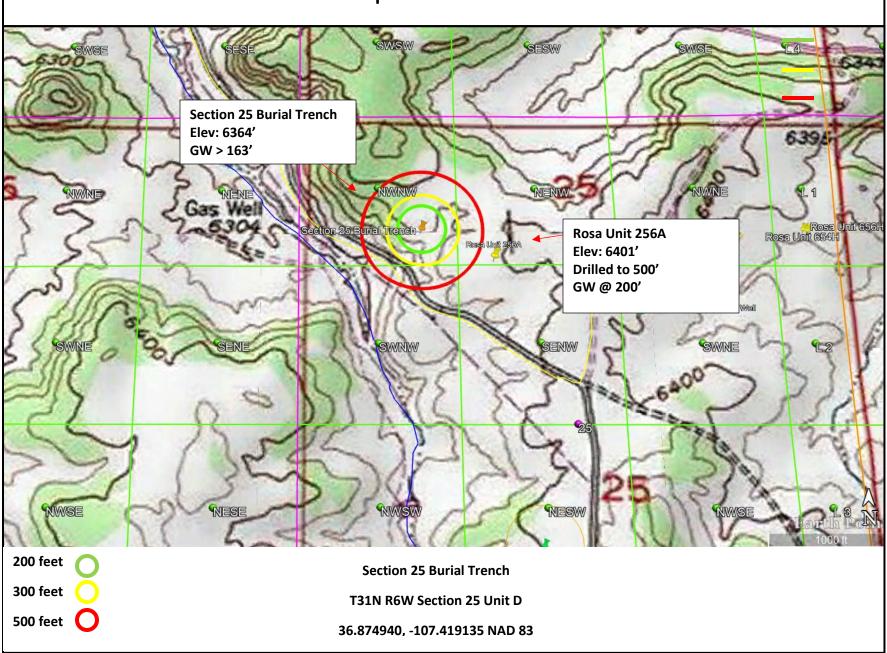
Go Right (Northerly) exiting Rosa Road for 0.1 miles to Section 25 Recycling Containment Expansion.

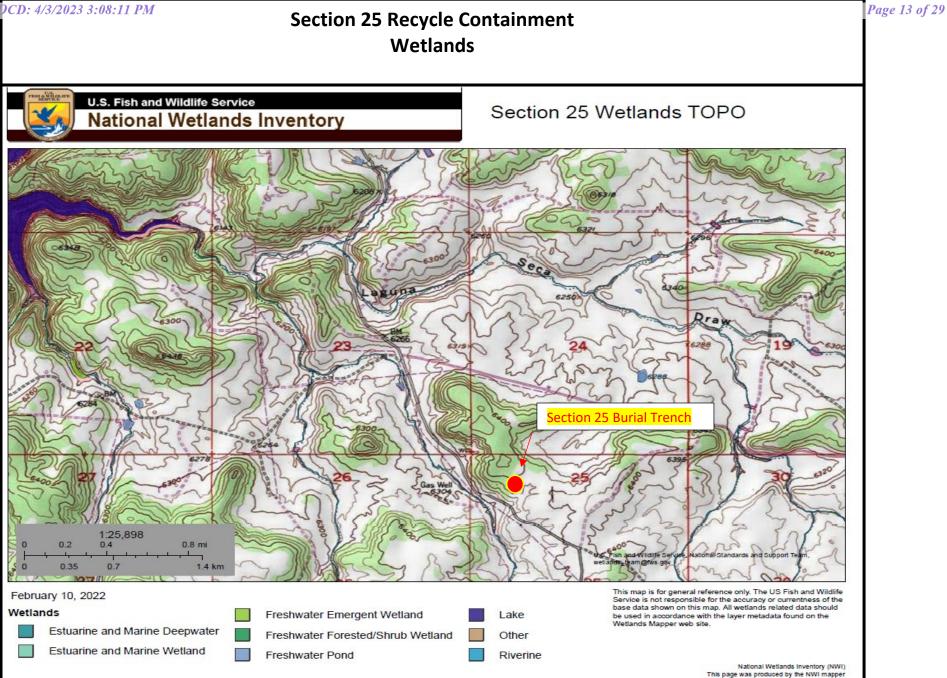
OSE POD Locations Map



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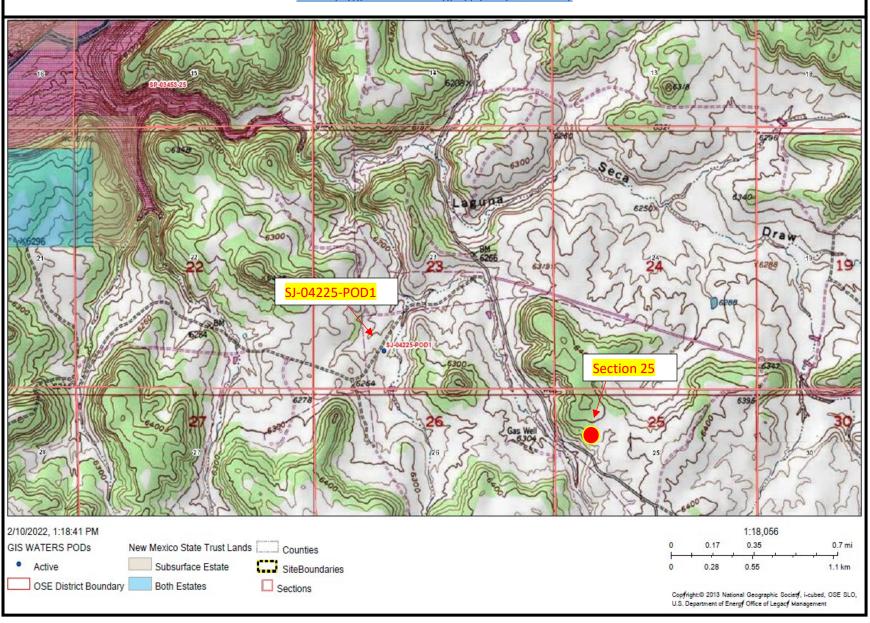
Section 25 Recycling Containment TOPO Map with Groundwater





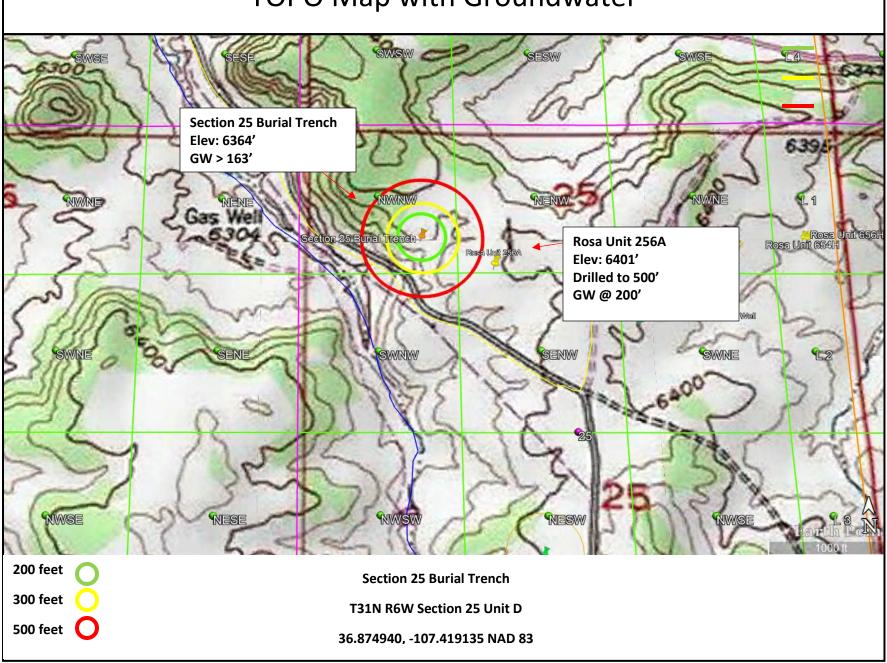
New Mexico Office of the State Engineer Water Column/Average Depth to Water

TOPOhttps://gis.ose.state.nm.us/gisapps/ose pod locations/



Received by OCD: 4/3/2023 3:08:11 PM

Section 25 Recycling Containment TOPO Map with Groundwater





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

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a

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

closed)

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

(quarters are smallest to largest) (NAD83 UTM in meters)

X

282900

(In feet)

POD

Sub- Q Q Q

Water DistanceDepthWellDepthWater Column

POD Number SJ 04225 POD1

water right file.)

Code basin County 64 16 4 Sec Tws Rng
SJ RA 4 3 23 31N 06W

Y 4084335

263 320

60 2

Average Depth to Water:

60 feet

Minimum Depth:

60 feet

Maximum Depth:

60 feet

Record Count: 1

UTMNAD83 Radius Search (in meters):

Easting (X): 282932

Northing (Y): 4084597

Radius: 5000

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

12/21/21 8:24 AM

WATER COLUMN/ AVERAGE DEPTH TO

WATER

Received by OCD: 4/3/2023 3:08:11 PM Page 17 of 29

Section 25 Recycling Containment Aerial Map



Section 25 Burial Trench

T31N R6W Section 25 Unit D

36.874940, -107.419135 NAD 83

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Section 25 Recycling Containment Aerial Map



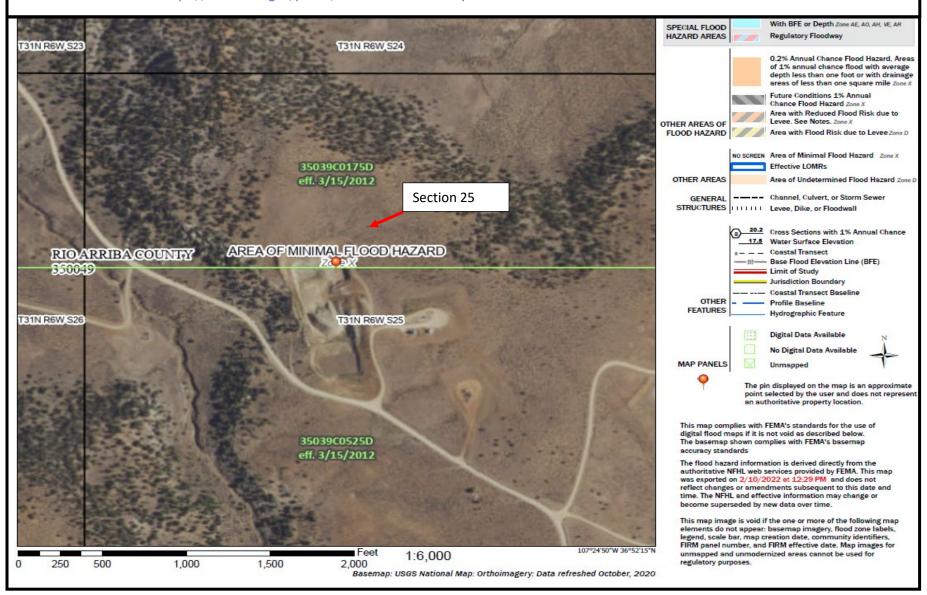
Section 25 Burial Trench

T31N R6W Section 25 Unit D

36.874940, -107.419135 NAD 83

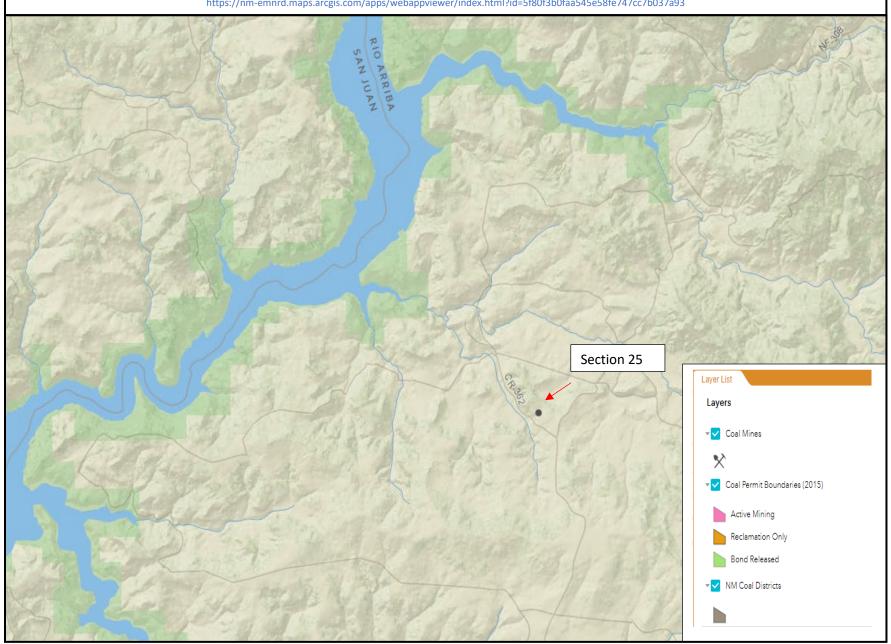
Section 25 Recycling Containment FEMA Flood Map

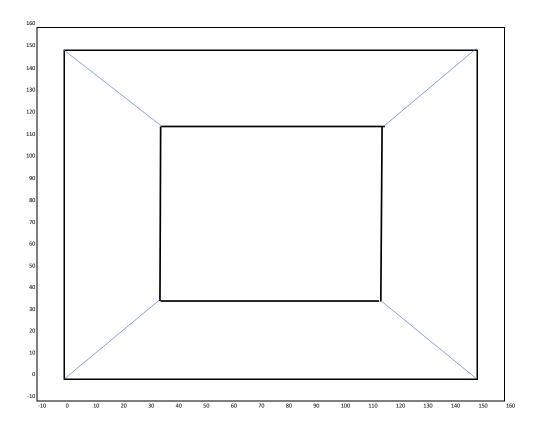
https://msc.fema.gov/portal/search?AddressQuery=-107.436259%2C36.882759#searchresultsanchor



Section 25 Recycling Containment Mines, Mills & Quarries

https://nm-emnrd.maps.arcgis.com/apps/webappviewer/index.html?id=5f80f3b0faa545e58fe747cc7b037a93





Solids Burial Pit

Total Width (E-W) 300 Ft
Total Length (N-S) 200 Ft

Slope Dimensions

Pit Slopes (Rise to Run) 1.0 2.0

Depth Southeast Side Depth Adjacent to Drying Pad West Depth Adjancent to Drying Pad East Depth Southwest Side

Depth Below	Approximate depth below
Drying Pad	natural grade
20	20
20	20
20	20
20	20

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

Total Capacity 168,074.21 bbls

943,667 cu. Ft. 21.66 ac ft

Number of Wells 16

Estimated Solids 16000 cu. Ft

NORTH

LOGOS Resources II LLC	Solids Burial Pit	Trench #5
2010 Afton Place		
Farmington NM 87401	Section 25 #5 Trench	Mar-23

Hydrogeological Report for Section 25 Burial Trench

The proposed burial trench site is located in the southeast portion of the Colorado Plateau, on the northern San Juan Basin. The area of the project is characterized by high mesas cut by numerous arroyos and canyons, North of the project area is Navajo Lake, a reservoir that flooded a deep canyon of the San Juan River. The project area lies within the Laguna Seca drainage, a northwest-to west flowing dry arroyo and canyon system about 6 miles in length. Laguna Seca Mesa, the highest mesa within the drainage basin, is 6779 feet (SE ¼ Section 20 T31N R5W) and the water level elevation of the Navajo Lake ranges between 6030-6050 feet above sea level (asl) throughout the year. Thus, the total relief within the Laguna Seca Drainage is about 750 Feet.

The Trench location lies on an outcrop of the Eocene (Tertiary) San Jose Formation, a fluvial unit composed of more than 2000 feet of sandstone and conglomerate interbedded with mudstone. The San Jose formation overlies the Nacimiento Formation to the south and west and the Animas Formation to the northeast. The Llaves (predominantly sandstone) and/or Tapicitos (predominantly mudstone) Members of the San Jose crop out in the vernal area of the Trench, as they do around the Navajo Lakeⁱ. Many authors report inter-bedding of sandstone and mudstone units complicate mapping efforts.

Site Geology

The trench is located on an outcrop the Eocene San Jose Formation, Specifically the "persistent sheet sandstone" of the Llaves Member that characterizes the adjacent tree-covered hills of the general area. Beneath the site location are interbedded sandstone and mudrock units as described in the previous section of this application. The schematic cross-section below presents the driller's logs from five cathodic protection wells located on the southern border of Figure 2. This cross-section clearly shows the discontinuous nature of the fluvial sandstones that compose the Regina and Llaves Members of the San Jose Formation. The cross-section also shows that groundwater elevation decreases, in general, from east to west, from the higher mesas toward Navajo Lake. Note that that the elevation of the former rock quarry into which the trench will be constructed lies at an elevation of about 6380 feet.

https://geoinfo.nmt.edu/publications/water/hr/6/HR6.pdf

Siting Criteria Compliance Demonstration 19.15.17.10 NMAC

The proposed Section 25 burial trench # 5 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 25 burial was an existing rock quarry shown on figure 3. The location of the Section 25 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 figure 4. A test well was drilled to 500 feet April 28, 2005, on the Rosa Unit 256A in Section 25 Township 31N Range 6W and per the drilling log indicated water zone depth at 200 feet of wet sand, therefore the groundwater depth is greater than 163' shown in figure 2. There is one iwater data point SJ-04225 POD1 located in Section 23 Township 31N Range 6W indicated on the iwater map figure 1. The hydro geologic analysis indicates the groundwater depth of the San Jose formation will create a stable are for this location.



Design and Construction Plan

The Drying pad and Burial Trench #5 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, 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.
 - o 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 even 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 Table II 5-Point and 8 Point					
Depth below bottom of pit to GW < than 10,000 mg/l TDS	Constituent	Method *	Limit**		
	Chloride	EPA Method 300.0	80,000 mg/kg		
> 100 Feet	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. Reshaping 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.

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1625 N. French Dr., Hobbs, NM 88240
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District II 811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720

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

CONDITIONS

Action 203555

CONDITIONS

Operator:	OGRID:
LOGOS OPERATING, LLC	289408
2010 Afton Place	Action Number:
Farmington, NM 87401	203555
	Action Type:
III	[C-144] Temporary Pit Plan (C-144T)

CONDITIONS

Created B	y Condition	Condition Date
scwells	NMOCD has reviewed and approved the [C-144] Temporary Pit Plan permit, Application ID# 203555, and related documents submitted by [289408] LOGOS OPERATING, LLC on April 3, 2023 for SECTION 25 BURIAL TRENCH #005 [fSCW2309539607] in Unit Letter D, Section 25, Township 31N, Range 06W, Rio Arriba County, New Mexico. This application is approved with conditions in email sent today.	4/5/2023