

U.S. Department of the Interior BUREAU OF LAND MANAGEMENT

Sundry Print Reports
08/26/2025

Well Name: ROSA UNIT Well Location: T31N / R6W / SEC 15 / County or Parish/State: RIO

NWSE / 36.896862 / -107.44851 ARRIBA / NM

Well Number: 594H Type of Well: CONVENTIONAL GAS Allottee or Tribe Name:

WELL

Lease Number: NMSF078765 Unit or CA Name: ROSA UNIT Unit or CA Number:

NMNM78407E

US Well Number: 3003931480 Operator: LOGOS OPERATING LLC

Notice of Intent

Sundry ID: 2869753

Type of Submission: Notice of Intent

Type of Action: Other

Date Sundry Submitted: 08/26/2025 Time Sundry Submitted: 10:38

Date proposed operation will begin: 08/26/2025

Procedure Description: LOGOS Operating request to trial a lower density lead cement on the RU 594H – 9-5/8" Intermediate Stage 1. No changes to the tail slurry. See attached revised operations procedure.

Surface Disturbance

Is any additional surface disturbance proposed?: No

NOI Attachments

Procedure Description

 $Rosa_594H_Operations_Plan_WP1_4_string_11.0ppg_Lead_INT_Stg1_8.14.2025_20250826103748.pdf$

Page 1 of 2

eceived by OCD: 8/26/2025 11:25:03 AM Well Name: ROSA UNIT

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US Well Number: 3003931480

Operator: LOGOS OPERATING LLC

Operator

I certify that the foregoing is true and correct. Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction. Electronic submission of Sundry Notices through this system satisfies regulations requiring a

Operator Electronic Signature: ETTA TRUJILLO Signed on: AUG 26, 2025 10:39 AM

Name: LOGOS OPERATING LLC

Title: Regulatory Specialist

Street Address: 2010 AFTON PLACE

City: Farmington State: NM

Phone: (505) 324-4154

Email address: ETRUJILLO@LOGOSRESOURCESLLC.COM

Field

Representative Name:

Street Address:

City: State:

Phone:

Email address:

BLM Point of Contact

BLM POC Name: KENNETH G RENNICK **BLM POC Title:** Petroleum Engineer

BLM POC Phone: 5055647742 BLM POC Email Address: krennick@blm.gov

Disposition: Approved **Disposition Date:** 08/26/2025

Signature: Kenneth Rennick



LOGOS Operating, LLC Operations Plan

Note: This procedure will be adjusted onsite based upon actual conditions

Date:	8/14/2025	Pool:	Basin Mancos
Well Name:	Rosa Unit 594H	GL Elevation:	6,325'
Surface Location:	Sec 15, T31N, R6W 1701' FNL, 1751' FEL (36.897029° N, -107.447181° W – NAD83)	KB:	30'
Bottom Hole Location:	Sec 17, T31N, R6W 1553' FNL, 172' FWL (36.902496° N, -107.494700° W – NAD83)	Measured Depth:	20,878' (KB)
Lease Serial CA Serial	# NMSF078764 # NMNM78407E	County:	Rio Arriba

I. GEOLOGY

A. Formation Tops (Based on KB Elevation): Estimated top of important geological markers: SURFACE FORMATION – NACIMIENTO

NAME	MD	TVD	NAME	MD	TVD
OJO ALAMO	2442'	2400'	*POINT LOOKOUT	5801'	5663'
KIRTLAND	2560'	2514'	*MANCOS	6298'	6146'
*FRUITLAND	3034'	2975'	KICKOFF POINT	6491'	6333'
*PICTURED CLIFFS	3440'	3469'	LANDING POINT	7500'	6958'
LEWIS	3543'	3469'	TD	20878'	6900'
CHACRA	4696'	4589'			
*CLIFF HOUSE	5518'	5388'			
MENEFEE	5553'	5422'			

^{*} indicates depth at which anticipated water, oil, gas or other mineral bearing formations are expected to be encountered.

- B. MUD LOGGING PROGRAM: Mudlogger on location from KOP to TD.
- C. LOGGING PROGRAM: LWD GR from surface casing to TD.
- **D.** <u>NATURAL GAUGES:</u> Gauge any noticeable increases in gas flow. Record all gauges in Tour book and on morning reports.

II. DRILLING

A. MUD PROGRAM: LSND mud (WBM) will be used to drill the 26"/24" conductor hole. LSND (WBM) will be used to drill the 17-1/2" surface hole and 12-1/4" intermediate hole. A LSND (WBM) or (OBM) will be used to drill the 8-1/2" curve and lateral portion of the wellbore. Treat for lost circulation as necessary. Obtain 100% returns prior to cementing. Notify Engineering of any mud losses.

Above ground steel pits will be used for fluid and cuttings while drilling. In the unlikely event that a tank develops a leak, upon immediate visual discovery, the fluid would be transferred to another tank and contaminated soil would be removed and disposed. Any leaks, spills or other undesirable events will be reported in accordance with BLM NTL 3A. Rig crews will monitor the tanks at all times.



- B. BOP TESTING: The BOPE will be tested to 250 psi (Low) for 5 minutes and 3000 psi (High) for 10 minutes. Pressure test surface casing to 600 psi for 30 minutes and intermediate casing to 1500 psi for 30 minutes. Utilize a BOPE Testing Unit with a recording chart and appropriate test plug for testing. The drum brakes will be inspected and tested each tour. BOP equipment will be tested every 30 days, after any repairs are made to the BOP equipment, and after the BOP equipment is subjected to pressure. Annular preventers will be functionally operated at least once per week. Pipe and blind rams shall be activated each trip or but not more than once a day. The New Mexico Oil & Gas Conservation Commission and the BLM will be notified 24 hours in advance of testing of BOPE. All tests and inspections will be recorded and logged with time and results. A full BOP test will be conducted when initially installed for the first well on the pad or if seals subject to test pressure are broken, following related repairs and at a minimum of 30 day intervals. A BOPE Shell Test only will be conducted for subsequent wells on the pad when seals subject to pressure have not been broken or repaired and fall within the 30 day interval of first full test.
- C. GeoHazards: There are no Geohazards
- **D.** Maximum Anticipated Pressure: 6,958' TVD x 0.43 = 2,992 psi
- E. <u>H2S Concerns</u>: There is no record of any naturally occurring H2S in any formation in the Rosa Unit. No H2S is anticipated in this formation or this well.

III. MATERIALS

A. CASING EQUIPMENT:

CASING TYPE	OHSIZE (IN)	DEPTH (MD)	CSG SIZE	WEIGHT	GRADE	CONN
CONDUCTOR	26" or 24"	320' or greater (GL)	20"	94 LBS	J-55 or equiv	LTC/BTC
SURFACE	17.5"	3,490'	13.375"	54.5 LBS	J-55 or equiv	LTC/BTC
INTERMEDIATE	12.25"	6,373'	9.625"	43.5 LBS	N-80 or equiv	LTC/BTC
PRODUCTION	8.5"	20,878'	5.5"	20 LBS	P-110 or equiv	LTC/BTC

NOTE: All casing depths are approximate, based on KB elevation and will be based on drilling conditions +/- 50'. Weights, grades and connections will be based on availability and may vary but will be equivalent or greater.

B. FLOAT EQUIPMENT:

- 1. <u>CONDUCTOR CASING:</u> 20" cement nose guide shoe. Place float collar 1 joint above shoe. Run (1) standard centralizer on each of the bottom (3) joints of casing.
- 2. <u>SURFACE CASING</u>: 13-3/8" cement nose guide shoe with float. Place float collar one joint above the shoe. Install (1) centralizer on each of the bottom (3) joints and one standard centralizer every (3) joints to 2,500 ft. Run (1) centralizer at 2,500 ft., 2,000ft., 1,500 ft., 1,000 ft, and 500ft.
 - Casing will be kept fluid filled during drilling
- 3. INTERMEDIATE CASING: 9-5/8" cement float shoe. Place float collar one joint above the shoe. Install (1) centralizer on each of the bottom (3) joints and one standard centralizer every (3) joints to 2,500 ft. Run (1) centralizer at 2,500 ft., 2,300ft., 2,000ft., 1,500 ft., and 1,000 ft. Optional use of DV Tools (2) will be strategically placed above loss circulation zones anticipated in the Mesaverde and Fruitland Coal. Optional use of cancelation plugs for DV tools may be used if losses while cementing are not encountered. Optional use of an ICP may be used in conjunction with DV Tools.
- 4. <u>PRODUCTION CASING</u>: Run 5-1/2" casing with cement nose guide Float Shoe, 5-1/2" full or pup joints as necessary, Landing Collar, 5-1/2" full or pup joints as necessary, at least (1) one Toe Sleeve (Sliding Sleeve) positioned inside the applicable production area. Centralizer



during completion operations with frac stack installed.

C. <u>CEMENTING:</u>

(Note: Cement type and volumes may be adjusted onsite due to actual conditions and availability)

 CONDUCTOR: Casing shall be set at ~ 320'(GL) and cemented to surface. TOC at Surface.

Conductor - 20"	Тор	Footage	Cement (ft3/ft) Annular Capacity	Excess (30%)	Total (ft3)	Total (bbl)	Slurry Yield (ft3/sk)	Sacks Cement	Density (PPG)
Type G	-	320	0.9599	1.3	449	80	1.10	408	15.8
Type III		320	0.9599	1.3	449	80	1.39	323	14.6

24" hole

Set Depth (GL)

320

2. <u>SURFACE</u>: Casing shall be kept fluid-filled while running into the hole to meet BLM minimum collapse requirements. The surface casing will be cemented in 1 stage. If cement does not circulate to the surface, a CBL will be run to determine TOC.

Surface - 13-3/8"	Тор	Footage	Cement (ft3/ft) Annular Capacity	Excess (30%)	Total (ft3)	Total (bbl)	Slurry Yield (ft3/sk)	Sacks Cement	Density (PPG)
Stage 1 Tail	2,890	600	0.6947	1.3	575	102	1.10	523	15.8
Stage 1 Lead - OH	320	2,570	0.6947	1.3	2,321	413	1.90	1222	12.4
Stage 2 Lead - Cased	-	320	1.019	1	326	58	1.90	172	12.4
		•	•	•	3,222	574		1916	

Set Depth

3489.87

3. INTERMEDIATE: Casing shall be kept fluid filled while running in to the hole to meet BLM minimum collapse requirements. The intermediate casing will be cemented in 2 or 3 stages using DV/STAGE tools in order to reduce cement losses and maximize cement coverage. Operator proposes optional DV tools and optional ICP's above anticipated loss circulation zones in the Mesaverde and in the Fruitland coal. If losses are not observed during the second stage a cancelation plug will be pumped and the remaining cement will be pumped during stage 2. If cement does not circulate to the DV tool(s) or to surface, a CBL will be run to determine

Intermediate - 9-5/8"	Тор	Footage	Cement (ft3/ft) Annular Capacity	Excess (30%)	Total (ft3)	Total (bbl)	Slurry Yield (ft3/sk)	Sacks Cement	Density (PPG)
Stage 1 Tail	5,807	500	0.3132	1.3	220	39	1.160	190	15.8
Stage 1 Lead	3,490	2,317	0.3132	1.3	943	168	2.729	346	11.0
Stage 1 Lead - Cased	-	3,490	0.3627	1	1,266	225	2.729	464	11.0
Contingency					1,163	433		535	
Stage 2 Tail	4,175	600	0.3132	1.3	244	44	1.760	139	13.5
Stage 2 Lead	3,393	782	0.3132	1.3	318	57	2.665	119	11.8
Stage 2 Lead - Cased	3,293	100	0.3627	1	36	6	2.665	14	11.8
Stage 2 Totals					599	107		272	
Int 2 Totals					1,762	539		807	
Contingency									
Stage 3 Tail	3,493	75	0.3132	1.3	31	5	1.76	17	13.5
Stage 3 Tail - Cased	2,993	500	0.3490	1	175	31	1.76	99	13.5
Stage 3 Lead - Cased	-	2,993	0.3490	1	1,045	186	2.660	393	12.5
Contingency Stage 3 Tot	Contingency Stage 3 Totals 1,250 223 509								

Set Depth Released to Imaging: 8/28/2025 11:19:08 AM



TOC. Calculations based on 30% excess for open hole and cement to surface. Actual excess pumped will be determined by well conditions.

4. <u>PRODUCTION</u>: Casing will be cemented in 1 stage with 100' of cement overlap above intermediate shoe. A CBL, or alternatively, a Temperature Survey will be used to determine TOC.

Production - 5-1/2"	Тор	ft	Cement (ft3/ft) Annular Capacity	Excess (15%)	Total (ft3)	Total (bbl)	Slurry Yield (ft3/sk)	Sacks Cement	Density (PPG)
Cased Lead	6,273	100	0.2531	1	25	5	1.98	13	13.2
Open Hole Lead	6,373	14,504	0.2291	1.15	3,827	682	1.98	1,933	13.2
			•		3,852	686		1,945	

Set depth

20877.88

Calculations based on 15% excess for open hole and 100' overlap into intermediate casing. Actual volumes will vary.

Cement calculations are used for volume estimation. Well conditions will dictate final cement job design. Actual volumes will be calculated and determined by conditions onsite. All cement slurries will meet or exceed minimum BLM and New Mexico Oil Conservation Division requirements. Slurries used will be the slurries listed above or equivalent slurries depending on service provider selected. Cement yields may change depending on slurries selected. All waiting on cement times shall be a minimum of 8 hours or adequate to achieve a minimum of 500 psi compressive strength at the casing shoe prior to drilling out.

IV. COMPLETION

A. CBL

CBLs and/or Temperature Surveys will be performed as needed or required to determine cement top if cement is not circulated.

B. PRESSURE TEST

C. Pressure test 5-1/2" casing to 0.22 psi/ft * 6,958' TVD = 1531 psi for 30 minutes. Increase pressure to Open RSI sleeves.

D. STIMULATION

Stimulate with sand and water. Isolate stages with flow through or dissolvable frac plugs. Drill out frac plugs and flowback lateral.

E. PRODUCTION TUBING

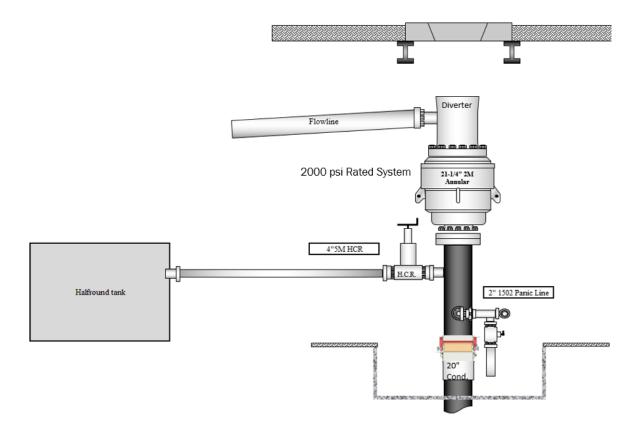
2-7/8", 6.5#, J-55 or L-80, EUE tubing will be run once volumes and pressures dictate. Due to the extremely high initial flow rates and pressures seen in offset wells, tubing will be installed once it is safe to do so, typically 12-36 months after completion.

*NOTE: Although this horizontal well may be drilled past the applicable setbacks, an unorthodox location application is not required because the completed interval in this well, as defined by 19.15.16.7 8(1) NMAC, will be entirely within the applicable setbacks. This approach complies with all applicable rules, including 19.15.16.14 A(3) NMAC, 19.15.16.14 8(2) NMAC, 19.15.16.15 8(2)NMAC, and 19.15.16.15. 8(4) NMAC.



BOP Equipment

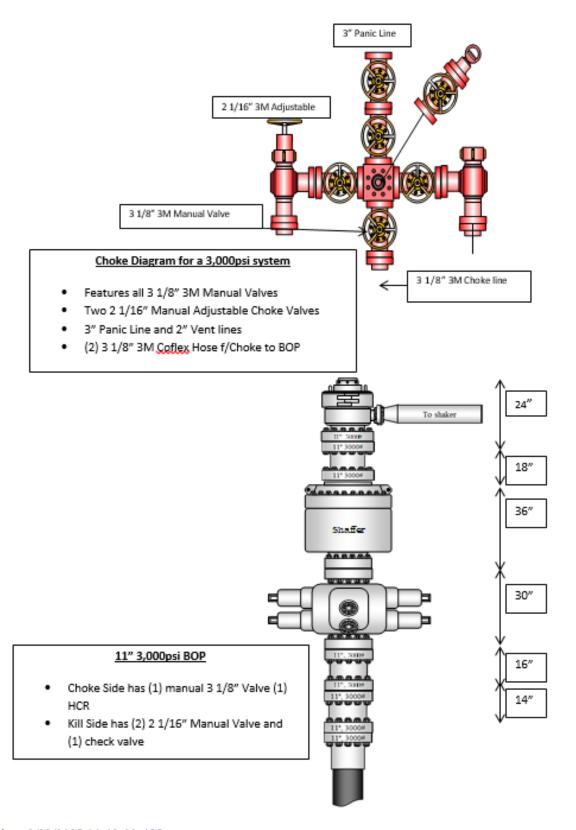
Surface Hole Diverter:





BOP:

3M 11" B.O.P.E Diagram



Sante Fe Main Office Phone: (505) 476-3441

General Information Phone: (505) 629-6116

Online Phone Directory https://www.emnrd.nm.gov/ocd/contact-us

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

CONDITIONS

Action 499353

CONDITIONS

Operator:	OGRID:
LOGOS OPERATING, LLC	289408
2010 Afton Place	Action Number:
Farmington, NM 87401	499353
	Action Type:
	[C-103] NOI Change of Plans (C-103A)

CONDITIONS

	Created By	Condition	Condition Date
Ī	ward.rikala	Any previous COA's not addressed within the updated COA's still apply.	8/28/2025