

Well Name: ROSA UNIT	Well Location: T31N / R6W / SEC 9 / NENW / 36.918581 / -107.470736	County or Parish/State: SAN JUAN / NM
Well Number: 550H	Type of Well: CONVENTIONAL GAS WELL	Allottee or Tribe Name:
Lease Number: NMSF078765	Unit or CA Name: ROSA UNIT	Unit or CA Number: NMNM78407E
US Well Number:	Operator: LOGOS OPERATING LLC	

Notice of Intent

Sundry ID: 2841148

Type of Submission: Notice of Intent Type of Action: Other

Date Sundry Submitted: 03/11/2025 Time Sundry Submitted: 08:12

Date proposed operation will begin: 04/01/2025

Procedure Description: LOGOS Operating request a change in plans for the following (based on KB elevation): New surface-hole location 935' FNL & 1925' FWL New bottom-hole location 400' FNL & 199' FWL New TD @ 14,254' (MD) 7,006' (TVD). Geology tops have been updated per changes. New KOP @ 6,348' MD 6314' TVD New Landing point @ 7,400' MD 7,002' TVD New 20" Conductor casing @ 320' MD New 13.375" Surface casing @ 3,467' MD New 9.625" Intermediate casing @ 6,349 MD New 5.5" Production casing @ 14,254' MD All cementing bbls and sacks have been update per casing depth changes. Attached: New C102, Operation and Directional Drill plans.

Surface Disturbance

Is any additional surface disturbance proposed?: No

NOI Attachments

Procedure Description

- Rosa_Unit_550H_Revised_Plat_03.05.2025_signed_20250313082603.pdf
- Logos__Rosa_Unit_550H_Plan_Data_Prelim_3_20250311081204.pdf
- Rosa_Unit_550H_Operations_Plan_4_string_Prelim3_03_07_2025_20250311081104.pdf

Received by OCD: 3/13/2025 1:03:06 PM

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Lease Number: NMSF078765	Unit or CA Name: ROSA UNIT	Unit or CA Number: NMNM78407E
US Well Number:	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: MAR 13, 2025 08:29 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:	Zip:
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: 03/13/2025
Signature: Kenneth Rennick	

Logos Operating LLC

Rio Arriba, NM (NAD83)

Rosa Unit 5

Rosa Unit 550H

OH

Plan: Prelim 3

Standard Planning Report

05 March, 2025

SDT
Planning Report

Database:	EDM 5000 Multi User Db	Local Co-ordinate Reference:	Well Rosa Unit 550H
Company:	Logos Operating LLC	TVD Reference:	6433.5+25 @ 6458.50usft (H&P 257)
Project:	Rio Arriba, NM (NAD83)	MD Reference:	6433.5+25 @ 6458.50usft (H&P 257)
Site:	Rosa Unit 5	North Reference:	True
Well:	Rosa Unit 550H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Prelim 3		

Project	Rio Arriba, NM (NAD83)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Western Zone		

Site	Rosa Unit 5				
Site Position:		Northing:	2,153,894.20 usft	Latitude:	36.918586
From:	Lat/Long	Easting:	2,829,074.91 usft	Longitude:	-107.470774
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "		

Well	Rosa Unit 550H					
Well Position	+N/-S	0.00 usft	Northing:	2,153,954.44 usft	Latitude:	36.918751
	+E/-W	0.00 usft	Easting:	2,829,119.11 usft	Longitude:	-107.470622
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	6,433.50 usft
Grid Convergence:		0.22 °				

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HRGM	1/31/2025	8.44	63.26	49,264.78019764

Design	Prelim 3				
Audit Notes:					
Version:		Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.00	0.00	0.00	270.21	

Plan Survey Tool Program	Date	3/5/2025			
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.00	14,253.72 Prelim 3 (OH)	MWD+HRGM+MS		
			MWD + HRGM + Multi-Station		

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00	
811.43	6.23	50.21	810.82	10.82	12.99	2.00	2.00	0.00	50.21	
6,347.75	6.23	50.21	6,314.45	395.24	474.54	0.00	0.00	0.00	0.00	
7,400.08	89.97	270.56	7,002.00	450.00	-159.02	9.00	7.96	-13.27	-139.48	RU 550 POE
14,118.72	89.97	270.56	7,005.92	515.70	-6,877.34	0.00	0.00	0.00	0.00	RU 550 FPP
14,253.72	89.97	270.56	7,006.00	517.02	-7,012.33	0.00	0.00	0.00	0.00	RU 550 PBHL

SDT

Planning Report

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Project:	Rio Arriba, NM (NAD83)	MD Reference:	6433.5+25 @ 6458.50usft (H&P 257)
Site:	Rosa Unit 5	North Reference:	True
Well:	Rosa Unit 550H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Prelim 3		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 2.00									
600.00	2.00	50.21	599.98	1.12	1.34	-1.34	2.00	2.00	0.00
700.00	4.00	50.21	699.84	4.47	5.36	-5.35	2.00	2.00	0.00
800.00	6.00	50.21	799.45	10.04	12.06	-12.02	2.00	2.00	0.00
811.43	6.23	50.21	810.82	10.82	12.99	-12.95	2.00	2.00	0.00
Start 5536.32 hold at 811.43 MD									
900.00	6.23	50.21	898.86	16.97	20.38	-20.32	0.00	0.00	0.00
1,000.00	6.23	50.21	998.27	23.92	28.71	-28.63	0.00	0.00	0.00
1,100.00	6.23	50.21	1,097.68	30.86	37.05	-36.94	0.00	0.00	0.00
1,200.00	6.23	50.21	1,197.09	37.80	45.39	-45.25	0.00	0.00	0.00
1,300.00	6.23	50.21	1,296.50	44.75	53.73	-53.56	0.00	0.00	0.00
1,400.00	6.23	50.21	1,395.91	51.69	62.06	-61.87	0.00	0.00	0.00
1,500.00	6.23	50.21	1,495.32	58.63	70.40	-70.18	0.00	0.00	0.00
1,600.00	6.23	50.21	1,594.73	65.58	78.74	-78.49	0.00	0.00	0.00
1,700.00	6.23	50.21	1,694.14	72.52	87.07	-86.81	0.00	0.00	0.00
1,800.00	6.23	50.21	1,793.55	79.47	95.41	-95.12	0.00	0.00	0.00
1,900.00	6.23	50.21	1,892.96	86.41	103.75	-103.43	0.00	0.00	0.00
2,000.00	6.23	50.21	1,992.37	93.35	112.08	-111.74	0.00	0.00	0.00
2,100.00	6.23	50.21	2,091.78	100.30	120.42	-120.05	0.00	0.00	0.00
2,200.00	6.23	50.21	2,191.19	107.24	128.76	-128.36	0.00	0.00	0.00
2,300.00	6.23	50.21	2,290.60	114.18	137.09	-136.67	0.00	0.00	0.00
2,400.00	6.23	50.21	2,390.01	121.13	145.43	-144.98	0.00	0.00	0.00
2,404.01	6.23	50.21	2,394.00	121.41	145.76	-145.32	0.00	0.00	0.00
Ojo Alamo									
2,500.00	6.23	50.21	2,489.42	128.07	153.77	-153.30	0.00	0.00	0.00
2,521.71	6.23	50.21	2,511.00	129.58	155.58	-155.10	0.00	0.00	0.00
Kirtland									
2,600.00	6.23	50.21	2,588.83	135.01	162.10	-161.61	0.00	0.00	0.00
2,700.00	6.23	50.21	2,688.24	141.96	170.44	-169.92	0.00	0.00	0.00
2,800.00	6.23	50.21	2,787.65	148.90	178.78	-178.23	0.00	0.00	0.00
2,900.00	6.23	50.21	2,887.06	155.85	187.11	-186.54	0.00	0.00	0.00
2,927.10	6.23	50.21	2,914.00	157.73	189.37	-188.79	0.00	0.00	0.00
Fruitland									
3,000.00	6.23	50.21	2,986.47	162.79	195.45	-194.85	0.00	0.00	0.00
3,040.77	6.23	50.21	3,027.00	165.62	198.85	-198.24	0.00	0.00	0.00
T/Coals									
3,100.00	6.23	50.21	3,085.88	169.73	203.79	-203.16	0.00	0.00	0.00
3,200.00	6.23	50.21	3,185.29	176.68	212.12	-211.47	0.00	0.00	0.00
3,238.94	6.23	50.21	3,224.00	179.38	215.37	-214.71	0.00	0.00	0.00
B/Coals									
3,300.00	6.23	50.21	3,284.70	183.62	220.46	-219.79	0.00	0.00	0.00
3,400.00	6.23	50.21	3,384.11	190.56	228.80	-228.10	0.00	0.00	0.00
3,416.99	6.23	50.21	3,401.00	191.74	230.21	-229.51	0.00	0.00	0.00
Pictured Cliffs									
3,500.00	6.23	50.21	3,483.52	197.51	237.13	-236.41	0.00	0.00	0.00
3,536.70	6.23	50.21	3,520.00	200.06	240.19	-239.46	0.00	0.00	0.00
Lewis									

SDT

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Site:	Rosa Unit 5	North Reference:	True
Well:	Rosa Unit 550H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Prelim 3		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
3,600.00	6.23	50.21	3,582.93	204.45	245.47	-244.72	0.00	0.00	0.00	
3,700.00	6.23	50.21	3,682.34	211.39	253.81	-253.03	0.00	0.00	0.00	
3,800.00	6.23	50.21	3,781.74	218.34	262.14	-261.34	0.00	0.00	0.00	
3,900.00	6.23	50.21	3,881.15	225.28	270.48	-269.65	0.00	0.00	0.00	
4,000.00	6.23	50.21	3,980.56	232.23	278.82	-277.96	0.00	0.00	0.00	
4,100.00	6.23	50.21	4,079.97	239.17	287.15	-286.28	0.00	0.00	0.00	
4,200.00	6.23	50.21	4,179.38	246.11	295.49	-294.59	0.00	0.00	0.00	
4,300.00	6.23	50.21	4,278.79	253.06	303.83	-302.90	0.00	0.00	0.00	
4,400.00	6.23	50.21	4,378.20	260.00	312.16	-311.21	0.00	0.00	0.00	
4,500.00	6.23	50.21	4,477.61	266.94	320.50	-319.52	0.00	0.00	0.00	
4,600.00	6.23	50.21	4,577.02	273.89	328.84	-327.83	0.00	0.00	0.00	
4,675.42	6.23	50.21	4,652.00	279.12	335.13	-334.10	0.00	0.00	0.00	
Chacra										
4,700.00	6.23	50.21	4,676.43	280.83	337.17	-336.14	0.00	0.00	0.00	
4,800.00	6.23	50.21	4,775.84	287.77	345.51	-344.45	0.00	0.00	0.00	
4,900.00	6.23	50.21	4,875.25	294.72	353.85	-352.77	0.00	0.00	0.00	
5,000.00	6.23	50.21	4,974.66	301.66	362.18	-361.08	0.00	0.00	0.00	
5,100.00	6.23	50.21	5,074.07	308.61	370.52	-369.39	0.00	0.00	0.00	
5,127.09	6.23	50.21	5,101.00	310.49	372.78	-371.64	0.00	0.00	0.00	
U/Cliff House										
5,200.00	6.23	50.21	5,173.48	315.55	378.86	-377.70	0.00	0.00	0.00	
5,300.00	6.23	50.21	5,272.89	322.49	387.20	-386.01	0.00	0.00	0.00	
5,400.00	6.23	50.21	5,372.30	329.44	395.53	-394.32	0.00	0.00	0.00	
5,457.04	6.23	50.21	5,429.00	333.40	400.29	-399.06	0.00	0.00	0.00	
Cliff House										
5,500.00	6.23	50.21	5,471.71	336.38	403.87	-402.63	0.00	0.00	0.00	
5,502.30	6.23	50.21	5,474.00	336.54	404.06	-402.82	0.00	0.00	0.00	
Menefee										
5,600.00	6.23	50.21	5,571.12	343.32	412.21	-410.94	0.00	0.00	0.00	
5,700.00	6.23	50.21	5,670.53	350.27	420.54	-419.26	0.00	0.00	0.00	
5,723.61	6.23	50.21	5,694.00	351.91	422.51	-421.22	0.00	0.00	0.00	
Point Lookout										
5,800.00	6.23	50.21	5,769.94	357.21	428.88	-427.57	0.00	0.00	0.00	
5,900.00	6.23	50.21	5,869.35	364.15	437.22	-435.88	0.00	0.00	0.00	
6,000.00	6.23	50.21	5,968.76	371.10	445.55	-444.19	0.00	0.00	0.00	
6,100.00	6.23	50.21	6,068.17	378.04	453.89	-452.50	0.00	0.00	0.00	
6,200.00	6.23	50.21	6,167.58	384.99	462.23	-460.81	0.00	0.00	0.00	
6,238.65	6.23	50.21	6,206.00	387.67	465.45	-464.02	0.00	0.00	0.00	
Mancos										
6,300.00	6.23	50.21	6,266.99	391.93	470.56	-469.12	0.00	0.00	0.00	
6,347.75	6.23	50.21	6,314.45	395.24	474.54	-473.09	0.00	0.00	0.00	
Start DLS 9.00 TFO -139.48										
6,350.00	6.08	48.97	6,316.69	395.40	474.73	-473.27	9.00	-6.78	-55.24	
6,400.00	4.04	1.13	6,366.52	398.90	476.76	-475.29	9.00	-4.07	-95.67	
6,450.00	6.02	312.66	6,416.34	402.44	474.87	-473.39	9.00	3.95	-96.94	
6,500.00	9.82	294.65	6,465.86	406.00	469.06	-467.57	9.00	7.61	-36.04	
6,550.00	14.04	286.97	6,514.77	409.55	459.38	-457.87	9.00	8.44	-15.36	
6,600.00	18.39	282.83	6,562.77	413.07	445.88	-444.36	9.00	8.70	-8.28	
6,650.00	22.80	280.23	6,609.57	416.55	428.64	-427.11	9.00	8.82	-5.18	
6,700.00	27.24	278.45	6,654.86	419.95	407.78	-406.24	9.00	8.87	-3.57	
6,750.00	31.69	277.13	6,698.39	423.26	383.41	-381.86	9.00	8.91	-2.64	
6,800.00	36.16	276.11	6,739.87	426.46	355.70	-354.14	9.00	8.93	-2.04	
6,850.00	40.63	275.28	6,779.05	429.53	324.81	-323.24	9.00	8.94	-1.65	

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Well:	Rosa Unit 550H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Prelim 3		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
6,894.80	44.64	274.66	6,812.00	432.16	294.59	-293.00	9.00	8.95	-1.39
Black Top									
6,900.00	45.10	274.60	6,815.68	432.45	290.93	-289.35	9.00	8.95	-1.27
6,950.00	49.58	274.01	6,849.56	435.20	254.28	-252.68	9.00	8.96	-1.18
7,000.00	54.06	273.49	6,880.46	437.77	215.07	-213.46	9.00	8.96	-1.03
7,050.00	58.55	273.04	6,908.19	440.13	173.54	-171.93	9.00	8.97	-0.92
7,100.00	63.03	272.62	6,932.58	442.28	129.97	-128.34	9.00	8.97	-0.83
7,150.00	67.52	272.23	6,953.49	444.20	84.60	-82.97	9.00	8.97	-0.77
7,200.00	72.01	271.87	6,970.78	445.88	37.73	-36.10	9.00	8.97	-0.72
7,250.00	76.49	271.53	6,984.35	447.31	-10.36	12.00	9.00	8.98	-0.69
7,300.00	80.98	271.20	6,994.11	448.47	-59.37	61.01	9.00	8.98	-0.66
7,350.00	85.47	270.88	7,000.01	449.37	-109.00	110.65	9.00	8.98	-0.64
7,400.08	89.97	270.56	7,002.00	450.00	-159.02	160.67	9.00	8.98	-0.64
Start 6718.64 hold at 7400.08 MD									
7,500.00	89.97	270.56	7,002.06	450.98	-258.94	260.59	0.00	0.00	0.00
7,600.00	89.97	270.56	7,002.12	451.95	-358.93	360.59	0.00	0.00	0.00
7,700.00	89.97	270.56	7,002.18	452.93	-458.93	460.59	0.00	0.00	0.00
7,800.00	89.97	270.56	7,002.23	453.91	-558.92	560.58	0.00	0.00	0.00
7,900.00	89.97	270.56	7,002.29	454.89	-658.92	660.58	0.00	0.00	0.00
8,000.00	89.97	270.56	7,002.35	455.87	-758.91	760.58	0.00	0.00	0.00
8,100.00	89.97	270.56	7,002.41	456.84	-858.91	860.58	0.00	0.00	0.00
8,200.00	89.97	270.56	7,002.47	457.82	-958.90	960.58	0.00	0.00	0.00
8,300.00	89.97	270.56	7,002.53	458.80	-1,058.90	1,060.57	0.00	0.00	0.00
8,400.00	89.97	270.56	7,002.58	459.78	-1,158.90	1,160.57	0.00	0.00	0.00
8,500.00	89.97	270.56	7,002.64	460.76	-1,258.89	1,260.57	0.00	0.00	0.00
8,600.00	89.97	270.56	7,002.70	461.73	-1,358.89	1,360.57	0.00	0.00	0.00
8,700.00	89.97	270.56	7,002.76	462.71	-1,458.88	1,460.57	0.00	0.00	0.00
8,800.00	89.97	270.56	7,002.82	463.69	-1,558.88	1,560.57	0.00	0.00	0.00
8,900.00	89.97	270.56	7,002.88	464.67	-1,658.87	1,660.56	0.00	0.00	0.00
9,000.00	89.97	270.56	7,002.93	465.64	-1,758.87	1,760.56	0.00	0.00	0.00
9,100.00	89.97	270.56	7,002.99	466.62	-1,858.86	1,860.56	0.00	0.00	0.00
9,200.00	89.97	270.56	7,003.05	467.60	-1,958.86	1,960.56	0.00	0.00	0.00
9,300.00	89.97	270.56	7,003.11	468.58	-2,058.85	2,060.56	0.00	0.00	0.00
9,400.00	89.97	270.56	7,003.17	469.56	-2,158.85	2,160.55	0.00	0.00	0.00
9,500.00	89.97	270.56	7,003.23	470.53	-2,258.84	2,260.55	0.00	0.00	0.00
9,600.00	89.97	270.56	7,003.28	471.51	-2,358.84	2,360.55	0.00	0.00	0.00
9,700.00	89.97	270.56	7,003.34	472.49	-2,458.83	2,460.55	0.00	0.00	0.00
9,800.00	89.97	270.56	7,003.40	473.47	-2,558.83	2,560.55	0.00	0.00	0.00
9,900.00	89.97	270.56	7,003.46	474.45	-2,658.82	2,660.54	0.00	0.00	0.00
10,000.00	89.97	270.56	7,003.52	475.42	-2,758.82	2,760.54	0.00	0.00	0.00
10,100.00	89.97	270.56	7,003.58	476.40	-2,858.81	2,860.54	0.00	0.00	0.00
10,200.00	89.97	270.56	7,003.63	477.38	-2,958.81	2,960.54	0.00	0.00	0.00
10,300.00	89.97	270.56	7,003.69	478.36	-3,058.80	3,060.54	0.00	0.00	0.00
10,400.00	89.97	270.56	7,003.75	479.33	-3,158.80	3,160.53	0.00	0.00	0.00
10,500.00	89.97	270.56	7,003.81	480.31	-3,258.79	3,260.53	0.00	0.00	0.00
10,600.00	89.97	270.56	7,003.87	481.29	-3,358.79	3,360.53	0.00	0.00	0.00
10,700.00	89.97	270.56	7,003.93	482.27	-3,458.78	3,460.53	0.00	0.00	0.00
10,800.00	89.97	270.56	7,003.98	483.25	-3,558.78	3,560.53	0.00	0.00	0.00
10,900.00	89.97	270.56	7,004.04	484.22	-3,658.78	3,660.53	0.00	0.00	0.00
11,000.00	89.97	270.56	7,004.10	485.20	-3,758.77	3,760.52	0.00	0.00	0.00
11,100.00	89.97	270.56	7,004.16	486.18	-3,858.77	3,860.52	0.00	0.00	0.00
11,200.00	89.97	270.56	7,004.22	487.16	-3,958.76	3,960.52	0.00	0.00	0.00
11,300.00	89.97	270.56	7,004.28	488.13	-4,058.76	4,060.52	0.00	0.00	0.00
11,400.00	89.97	270.56	7,004.33	489.11	-4,158.75	4,160.52	0.00	0.00	0.00

SDT
Planning Report

Database:	EDM 5000 Multi User Db	Local Co-ordinate Reference:	Well Rosa Unit 550H
Company:	Logos Operating LLC	TVD Reference:	6433.5+25 @ 6458.50usft (H&P 257)
Project:	Rio Arriba, NM (NAD83)	MD Reference:	6433.5+25 @ 6458.50usft (H&P 257)
Site:	Rosa Unit 5	North Reference:	True
Well:	Rosa Unit 550H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Prelim 3		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
11,500.00	89.97	270.56	7,004.39	490.09	-4,258.75	4,260.51	0.00	0.00	0.00	
11,600.00	89.97	270.56	7,004.45	491.07	-4,358.74	4,360.51	0.00	0.00	0.00	
11,700.00	89.97	270.56	7,004.51	492.05	-4,458.74	4,460.51	0.00	0.00	0.00	
11,800.00	89.97	270.56	7,004.57	493.02	-4,558.73	4,560.51	0.00	0.00	0.00	
11,900.00	89.97	270.56	7,004.63	494.00	-4,658.73	4,660.51	0.00	0.00	0.00	
12,000.00	89.97	270.56	7,004.68	494.98	-4,758.72	4,760.50	0.00	0.00	0.00	
12,100.00	89.97	270.56	7,004.74	495.96	-4,858.72	4,860.50	0.00	0.00	0.00	
12,200.00	89.97	270.56	7,004.80	496.94	-4,958.71	4,960.50	0.00	0.00	0.00	
12,300.00	89.97	270.56	7,004.86	497.91	-5,058.71	5,060.50	0.00	0.00	0.00	
12,400.00	89.97	270.56	7,004.92	498.89	-5,158.70	5,160.50	0.00	0.00	0.00	
12,500.00	89.97	270.56	7,004.98	499.87	-5,258.70	5,260.50	0.00	0.00	0.00	
12,600.00	89.97	270.56	7,005.03	500.85	-5,358.69	5,360.49	0.00	0.00	0.00	
12,700.00	89.97	270.56	7,005.09	501.82	-5,458.69	5,460.49	0.00	0.00	0.00	
12,800.00	89.97	270.56	7,005.15	502.80	-5,558.68	5,560.49	0.00	0.00	0.00	
12,900.00	89.97	270.56	7,005.21	503.78	-5,658.68	5,660.49	0.00	0.00	0.00	
13,000.00	89.97	270.56	7,005.27	504.76	-5,758.67	5,760.49	0.00	0.00	0.00	
13,100.00	89.97	270.56	7,005.33	505.74	-5,858.67	5,860.48	0.00	0.00	0.00	
13,200.00	89.97	270.56	7,005.38	506.71	-5,958.66	5,960.48	0.00	0.00	0.00	
13,300.00	89.97	270.56	7,005.44	507.69	-6,058.66	6,060.48	0.00	0.00	0.00	
13,400.00	89.97	270.56	7,005.50	508.67	-6,158.66	6,160.48	0.00	0.00	0.00	
13,500.00	89.97	270.56	7,005.56	509.65	-6,258.65	6,260.48	0.00	0.00	0.00	
13,600.00	89.97	270.56	7,005.62	510.62	-6,358.65	6,360.47	0.00	0.00	0.00	
13,700.00	89.97	270.56	7,005.68	511.60	-6,458.64	6,460.47	0.00	0.00	0.00	
13,800.00	89.97	270.56	7,005.73	512.58	-6,558.64	6,560.47	0.00	0.00	0.00	
13,900.00	89.97	270.56	7,005.79	513.56	-6,658.63	6,660.47	0.00	0.00	0.00	
14,000.00	89.97	270.56	7,005.85	514.54	-6,758.63	6,760.47	0.00	0.00	0.00	
14,100.00	89.97	270.56	7,005.91	515.51	-6,858.62	6,860.47	0.00	0.00	0.00	
14,118.72	89.97	270.56	7,005.92	515.70	-6,877.34	6,879.18	0.00	0.00	0.00	
Start 135.00 hold at 14118.72 MD										
14,200.00	89.97	270.56	7,005.97	516.49	-6,958.62	6,960.46	0.00	0.00	0.00	
14,253.72	89.97	270.56	7,006.00	517.02	-7,012.33	7,014.18	0.00	0.00	0.00	
TD at 14253.72										

SDT
Planning Report

Database:	EDM 5000 Multi User Db	Local Co-ordinate Reference:	Well Rosa Unit 550H
Company:	Logos Operating LLC	TVD Reference:	6433.5+25 @ 6458.50usft (H&P 257)
Project:	Rio Arriba, NM (NAD83)	MD Reference:	6433.5+25 @ 6458.50usft (H&P 257)
Site:	Rosa Unit 5	North Reference:	True
Well:	Rosa Unit 550H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Prelim 3		

Design Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
RU 550 SHL	0.00	0.00	0.00	0.00	0.00	2,153,954.44	2,829,119.11	36.918751	-107.470622
- plan hits target center									
- Point									
RU 550 KOP	0.00	0.00	6,314.45	395.24	474.54	2,154,351.48	2,829,592.15	36.919837	-107.468999
- plan hits target center									
- Point									
RU 550 POE	0.00	0.00	7,002.00	450.00	-159.02	2,154,403.83	2,828,958.38	36.919987	-107.471166
- plan hits target center									
- Point									
RU 550 FPP	0.00	0.00	7,005.92	515.70	-6,877.34	2,154,443.98	2,822,239.86	36.920165	-107.494149
- plan hits target center									
- Point									
RU 550 PBHL	0.00	0.00	7,006.00	517.02	-7,012.33	2,154,444.78	2,822,104.87	36.920169	-107.494611
- plan hits target center									
- Point									

Formations					
Measured Depth	Vertical Depth				
(usft)	(usft)	Name	Lithology	Dip	Dip Direction
				(°)	(°)
2,404.01	2,394.00	Ojo Alamo		0.00	
2,521.71	2,511.00	Kirtland		0.00	
2,927.10	2,914.00	Fruitland		0.00	
3,040.77	3,027.00	T/Coals		0.00	
3,238.94	3,224.00	B/Coals		0.00	
3,416.99	3,401.00	Pictured Cliffs		0.00	
3,536.70	3,520.00	Lewis		0.00	
4,675.42	4,652.00	Chacra		0.00	
5,127.09	5,101.00	U/Cliff House		0.00	
5,457.04	5,429.00	Cliff House		0.00	
5,502.30	5,474.00	Menefee		0.00	
5,723.61	5,694.00	Point Lookout		0.00	
6,238.65	6,206.00	Mancos		0.00	
6,894.80	6,812.00	Black Top		0.00	

Plan Annotations				
Measured Depth	Vertical Depth	Local Coordinates		
(usft)	(usft)	+N/-S	+E/-W	Comment
		(usft)	(usft)	
500.00	500.00	0.00	0.00	Start Build 2.00
811.43	810.82	10.82	12.99	Start 5536.32 hold at 811.43 MD
6,347.75	6,314.45	395.24	474.54	Start DLS 9.00 TFO -139.48
7,400.08	7,002.00	450.00	-159.02	Start 6718.64 hold at 7400.08 MD
14,118.72	7,005.92	515.70	-6,877.34	Start 135.00 hold at 14118.72 MD
14,253.72	7,006.00	517.02	-7,012.33	TD at 14253.72

C-102 Submit Electronically Via OCD Permitting	State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION	Revised July 9, 2024	
		Submittal Type:	Initial Submittal ☒ Amended Report ☐ As Drilled

WELL LOCATION INFORMATION

API Number 30-045-38439	Pool Code 97232	Pool Name BASIN MANCOS
Property Code 320608	Property Name ROSA UNIT	Well Number 550H
OGRID No. 289408	Operator Name LOGOS OPERATING, LLC	Ground Level Elevation 6434'
Surface Owner: ☐ State ☐ Fee ☐ Tribal ☒ Federal		Mineral Owner: ☐ State ☐ Fee ☐ Tribal ☒ Federal

Surface Location (SHL)

UL	Section	Township	Range	Lot	Ft from the N/S	Ft from the E/W	Latitude	Longitude	County
C	9	31N	6W		935' NORTH	1925' WEST	36.918751° N	107.470622° W	SAN JUAN

Bottom Hole Location (BHL)

UL	Section	Township	Range	Lot	Ft from the N/S	Ft from the E/W	Latitude	Longitude	County
D	8	31N	6W		400' NORTH	199' WEST	36.920169° N	107.494611° W	SAN JUAN

Dedicated Acres PENETRATED SPACING UNIT; SEC 9: NE/NW & NW/NW (80 AC.); SEC 8: N/2 N/2 (160 AC.) = 240 ACRES	Infill or Defining Well Infill	Defining Well API	Overlapping Spacing Unit (Y/N) N	Consolidation Code Unitization
Order Numbers: R-13457		Well Setbacks are under Common Ownership: ☐ Yes ☒ No		

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Ft from the N/S	Ft from the E/W	Latitude	Longitude	County
C	9	31N	6W		540' NORTH	2399' WEST	36.919837° N	107.468999° W	SAN JUAN

Fist Take Point (FTP)

UL	Section	Township	Range	Lot	Ft from the N/S	Ft from the E/W	Latitude	Longitude	County
C	9	31N	6W		485' NORTH	1765' WEST	36.919987° N	107.471166° W	SAN JUAN

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Ft from the N/S	Ft from the E/W	Latitude	Longitude	County
D	8	31N	6W		402' NORTH	334' WEST	36.920165° N	107.494149° W	SAN JUAN

Unitized Area or Area of Uniform Interest ROSA	Spacing Unit Type ☒ Horizontal ☐ Vertical	Ground Floor Elevation
--	--	------------------------

OPERATOR CERTIFICATIONS

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and, if the well is a vertical or directional well, 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 a working interest or unleased mineral interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

If this well is a horizontal well, I further certify that this organization has received the consent of at least one lessee or owner of a working interest or unleased mineral interest in each tract (in the target pool or formation) in which any part of the well's completed interval will be located or obtained a compulsory pooling order from the division.

Etta Trujillo 3/13/2025
Signature Date

Etta Trujillo

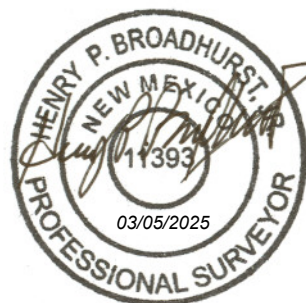
Printed Name

etrujillo@logosresourcesllc.com

E-mail Address

SURVEYOR CERTIFICATIONS

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.

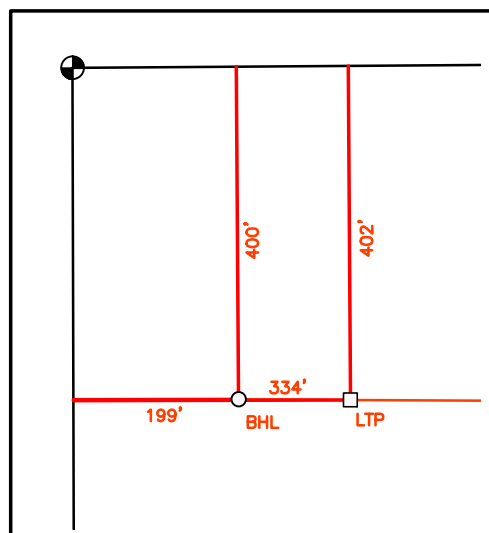
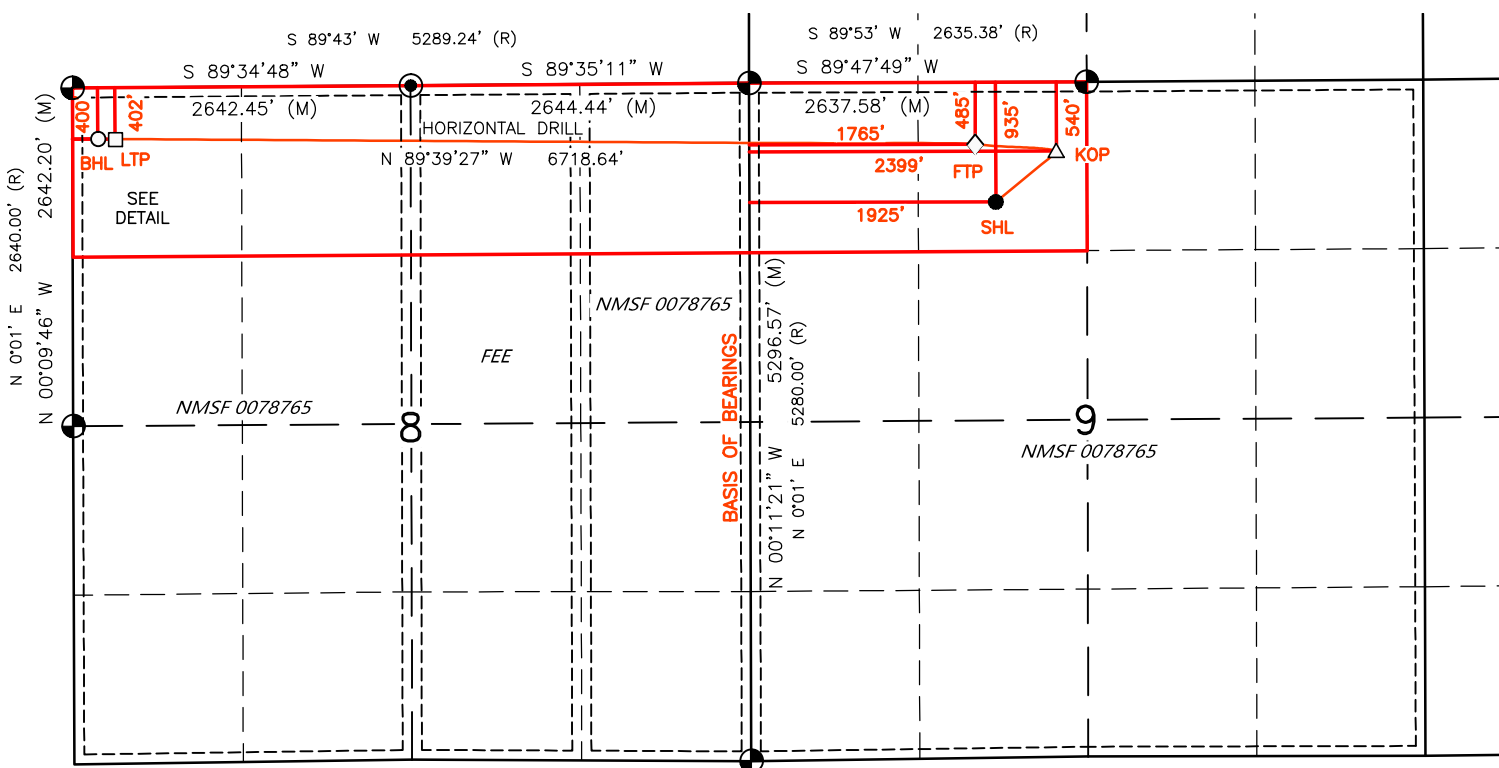


Signature and Seal of Professional Surveyor:

Certificate Number 11393	Date of Survey FEBRUARY 26, 2025
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Note: 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.

- FND 2.5" BC
GLO 1914
- FND NAIL AND
SCRIBED STONE



DETAIL

- SURFACE LOCATION (SHL) ●
935' FNL 1925' FWL
SEC. 9, T31N, R6W
LAT. 36.918751° N (NAD83)
LONG. 107.470622° W (NAD83)
- KICK OFF POINT (KOP) △
540' FNL 2399' FWL
SEC. 9, T31N, R6W
LAT. 36.919837° N (NAD83)
LONG. 107.468999° W (NAD83)
- FIRST TAKE POINT (FTP) ◇
485' FNL 1765' FWL
SEC. 9, T31N, R6W
LAT. 36.919987° N (NAD83)
LONG. 107.471166° W (NAD83)
- LAST TAKE POINT (LTP) □
402' FNL 334' FWL
SEC. 8, T31N, R6W
LAT. 36.920165° N (NAD83)
LONG. 107.494149° W (NAD83)
- BOTTOM HOLE LOCATION (BHL) ○
400' FNL 199' FWL
SEC. 8, T31N, R6W
LAT. 36.920169° N (NAD83)
LONG. 107.494611° W (NAD83)

ROSA UNIT #550H

SURFACE HOLE LOCATION NMSF 0078765
935' FNL, 1925' FWL
LOCATED IN THE NE/NW OF SECTION 9,
T31N, R6W, N.M.P.M., SAN JUAN COUNTY, NEW MEXICO
LATITUDE: 36.918751°N LONGITUDE: 107.470622°W (NAD83)

PPP-1 (FIRST TAKE POINT) NMSF 0078765
4850' FNL, 1765' FWL
LOCATED IN THE NE/NW OF SECTION 9,
T31N, R6W, N.M.P.M., SAN JUAN COUNTY, NEW MEXICO
LATITUDE: 36.919987°N LONGITUDE: 107.471166°W (NAD83)

PPP-2 NMSF 0078765
468' FNL, 1' FEL
LOCATED IN THE NE/NE OF SECTION 8,
T31N, R6W, N.M.P.M., SAN JUAN COUNTY, NEW MEXICO
LATITUDE: 36.920034°N LONGITUDE: 107.477205°W (NAD83)

PPP-3 FEE
451' FNL, 1322' FEL
LOCATED IN THE NW/NE OF SECTION 8,
T31N, R6W, N.M.P.M., SAN JUAN COUNTY, NEW MEXICO
LATITUDE: 36.920069°N LONGITUDE: 107.481729°W (NAD83)

PPP-4 NMSF 0078765
433' FNL, 2642' FWL
LOCATED IN THE NE/NW OF SECTION 8,
T31N, R6W, N.M.P.M., SAN JUAN COUNTY, NEW MEXICO
LATITUDE: 36.920104°N LONGITUDE: 107.486253°W (NAD83)

PPP-5 (LAST TAKE POINT) NMSF 0078765
402' FNL, 334' FWL
LOCATED IN THE NW/NW OF SECTION 8,
T31N, R6W, N.M.P.M., SAN JUAN COUNTY, NEW MEXICO
LATITUDE: 36.920165°N LONGITUDE: 107.494149°W (NAD83)

WELL FLAG

LATITUDE: 36.918751° N
LONGITUDE: 107.470622° W
DATUM: NAD83

LOGOS OPERATING, LLC

ROSA UNIT #550H

935' FNL & 1925' FWL
LOCATED IN THE NE/4 NW/4 OF SECTION 9,
T31N, R6W, N.M.P.M.,
SAN JUAN COUNTY, NEW MEXICO
GROUND ELEVATION: 6433', NAVD 88
FINISHED PAD ELEVATION: 6433.5', NAVD 88

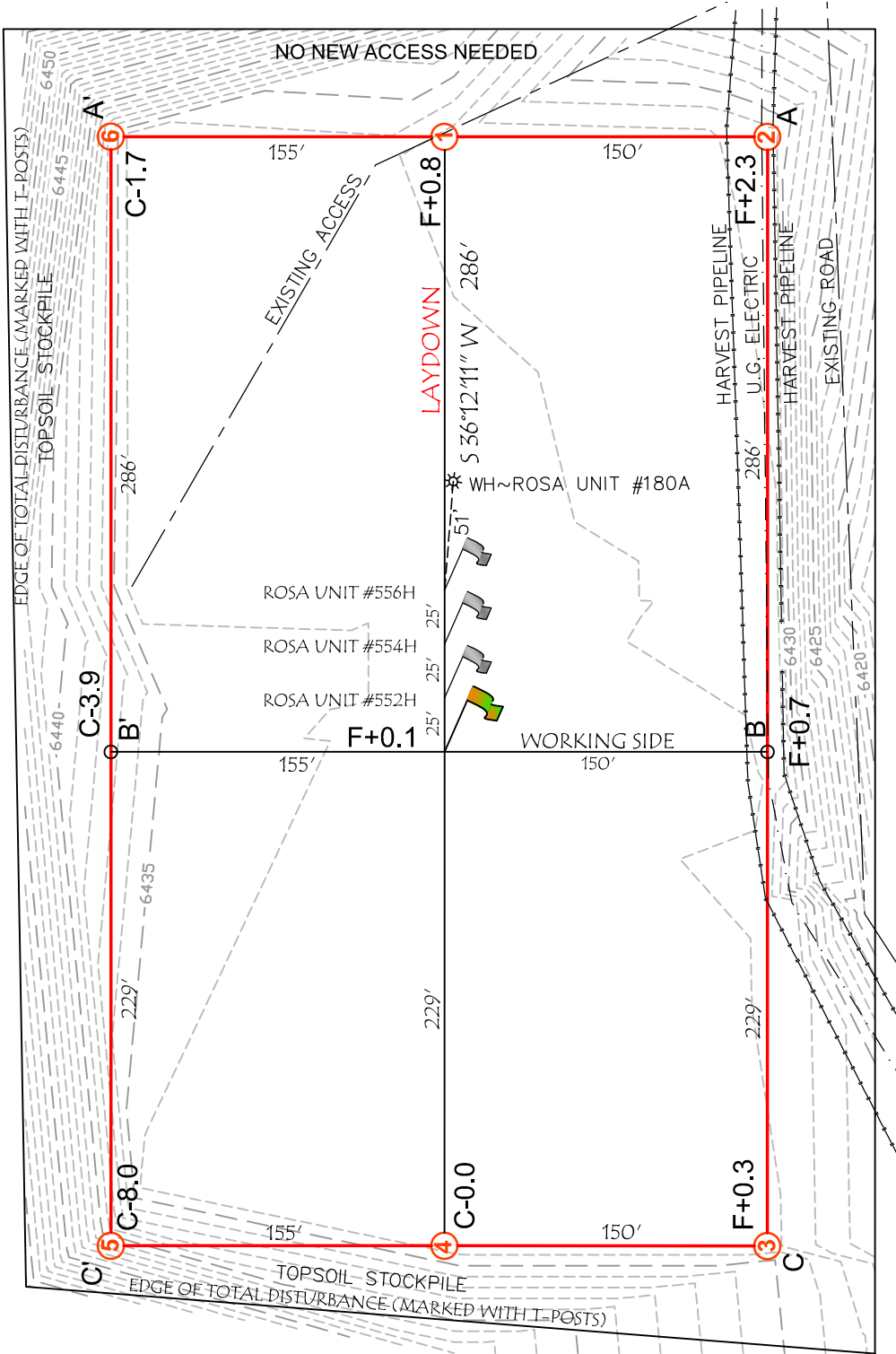
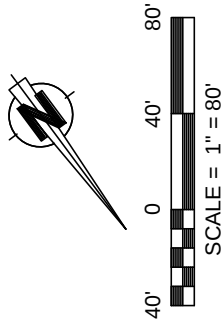
NOTES:

- 1.) BASIS OF BEARING: BETWEEN FOUND MONUMENTS AT THE SOUTHWEST CORNER AND THE NORTHWEST CORNER OF SECTION 9, TOWNSHIP 31 NORTH, RANGE 6 WEST, N.M.P.M. SAN JUAN COUNTY, NEW MEXICO. LINE BEARS: N 00°11'21" W A DISTANCE OF 156.6 FEET MEASURED BY GPS. AND BASED ON THE N.M.S.P. COORDINATE SYSTEM (WEST ZONE).
- 2.) LATITUDE, LONGITUDE AND ELLIPSOIDAL HEIGHT BASED ON AZTEC CORRS L1 PHASE CENTER. DISTANCES SHOWN ARE GROUND DISTANCES USING A TRAVERSE MERCATOR PROJECTION FROM A WGS84 ELLIPSOID, CONVERTED TO NAD83. NAVD88 ELEVATIONS AS PREDICTED BY GEOID03.
- 3.) LOCATION OF UNDERGROUND UTILITIES DEPICTED ARE APPROXIMATE. PRIOR TO EXCAVATION UNDERGROUND UTILITIES SHOULD BE FIELD VERIFIED. ALL CONSTRUCTION ACTIVITIES SHOULD BE FIELD VERIFIED WITH NEW MEXICO ONE-CALL AUTHORITIES AT LEAST 48 HOURS PRIOR TO CONSTRUCTION.
- 4.) T-POSTS HAVE BEEN SET TO DEFINE THE EDGE OF DISTURBANCE AREAS WHICH ARE 50' OFFSETS FROM THE EDGE OF THE STAKED WELL PAD.

SLOPES TO BE CONSTRUCTED TO MATCH THE ORIGINAL CONTOURS AS CLOSE AS POSSIBLE.

~ SURFACE OWNERSHIP ~
BUREAU OF LAND MANAGEMENT

TOTAL PERMITTED AREA
615' x 400' = 5.647 ACRES
SCALE: 1" = 80'
DATE: 02/27/25
DRAWN BY: GRR



CCI

CHENAULT CONSULTING INC.
4800 COLLEGE BLVD.,
SUITE 201
FARMINGTON, NM 87402
(505) 325-7707

NOTE:
CHENAULT CONSULTING, INC. 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, IN CONSTRUCTION ZONE AND/OR ACCESS ROAD AT LEAST TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION.

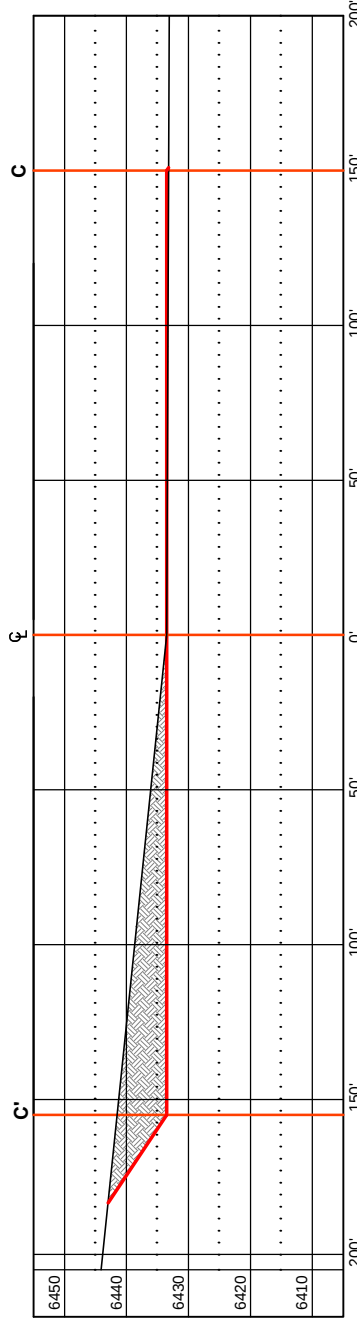
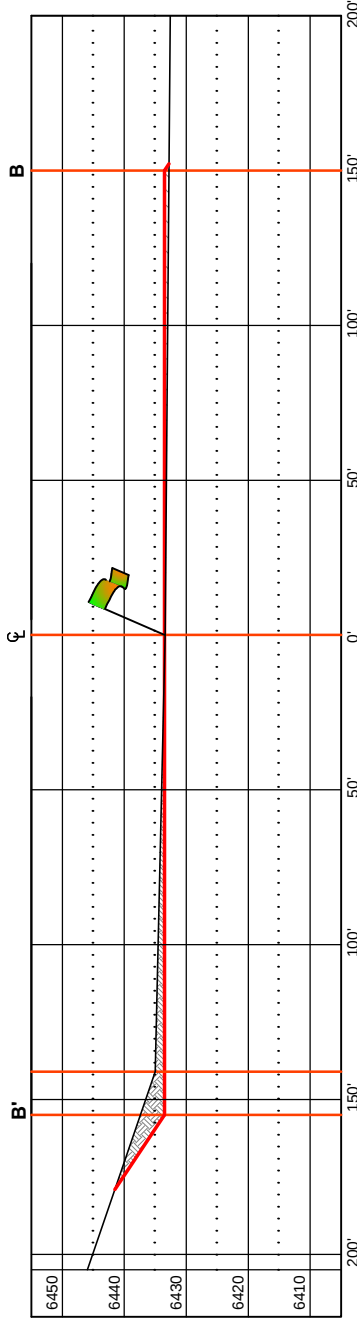
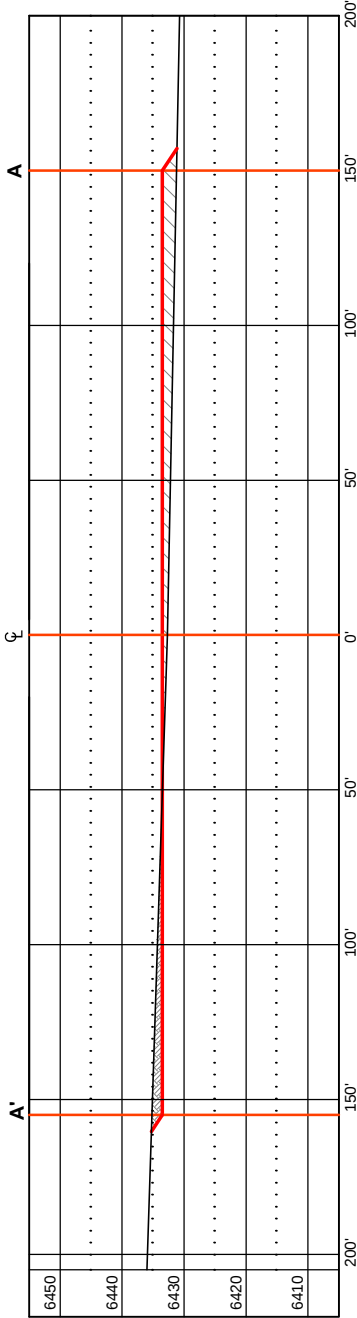
WELL FLAG

LATITUDE: 36.918751° N
LONGITUDE: 107.470622° W
DATUM: NAD83

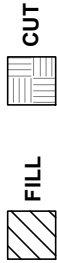
LOGOS OPERATING, LLC
ROSA UNIT #550H

935' FNL & 1925' FWL
LOCATED IN THE NE/4 NW/4 OF SECTION 9,
T31N, R6W, N.M.P.M.,
SAN JUAN COUNTY, NEW MEXICO
GROUND ELEVATION: 6433', NAVD 88
FINISHED PAD ELEVATION: 6433.5', NAVD 88

THIS DIAGRAM IS AN ESTIMATE
OF DIRT BALANCE AND IS NOT
INTENDED TO BE AN EXACT
MEASURE OF VOLUME



VERT. SCALE: 1" = 30'
HORZ. SCALE: 1" = 60'
DATE: 02/27/25
DRAWN BY: GRR



WELL FLAG

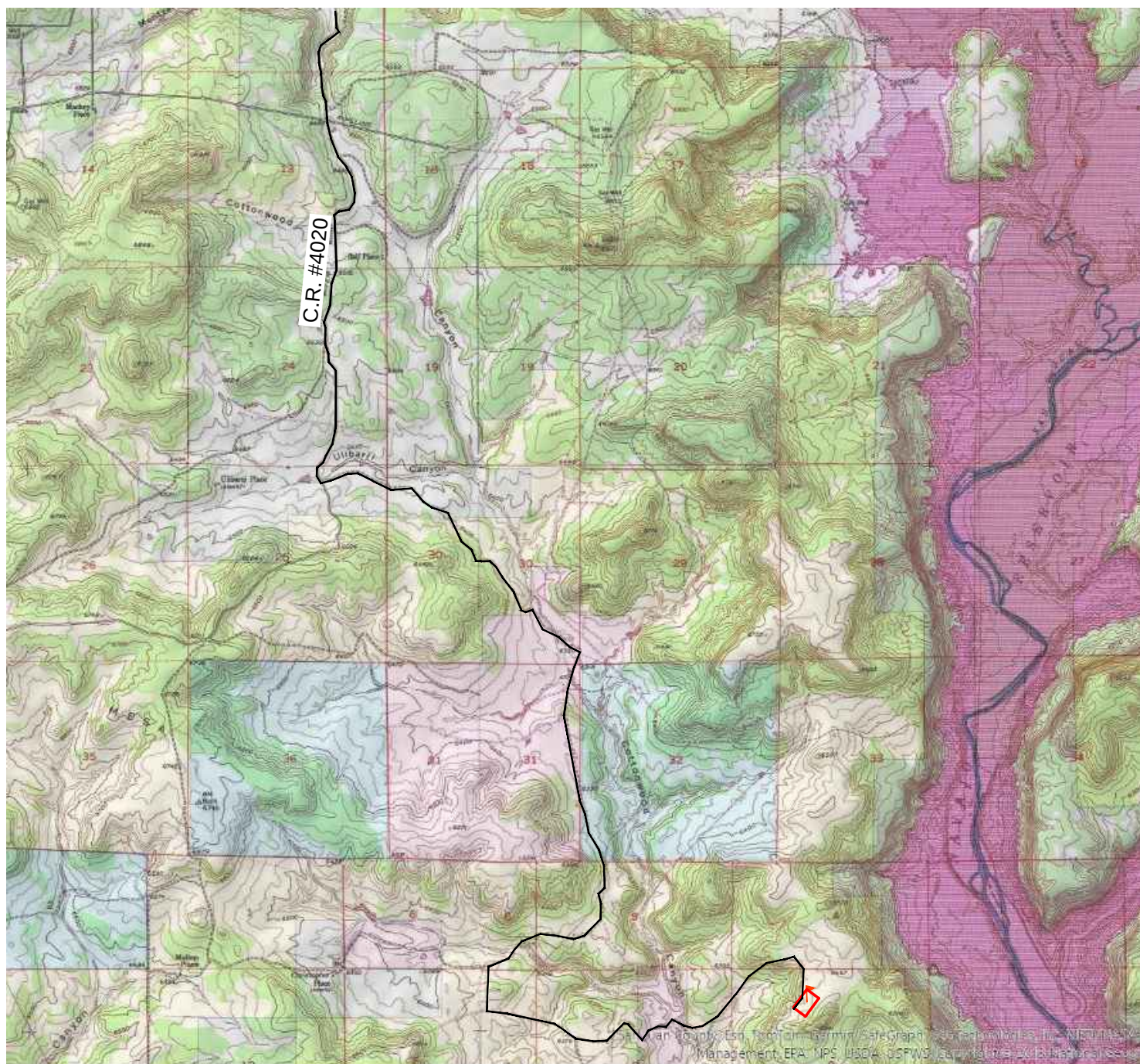
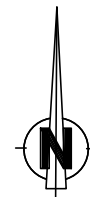
LATITUDE: 36.918751° N
 LONGITUDE: 107.470622° W
 DATUM: NAD83

LOGOS OPERATING, LLC**ROSA UNIT #550H**

935' FNL & 1925' FWL
 LOCATED IN THE NE/4 NW/4 OF SECTION 9,
 T31N, R6W, N.M.P.M.,
 SAN JUAN COUNTY, NEW MEXICO
 NO NEW ACCESS NEEDED

OWNERSHIP LEGEND

- BLM
- BOR
- FOREST
- ALLOTTED/TRIBAL
- PRIVATE
- STATE



U.S.G.S. QUAD: BANCOS MESA, NW

SCALE: 1" = 4000'

DATE: 02/27/25

DRAWN BY: GRR

Released to Imaging: 3/28/2025 2:38:13 PM

CCI

CHENAULT CONSULTING INC.

4800 COLLEGE BLVD.
 SUITE 201
 FARMINGTON, NM 87402
 (505) 325-7707

LOGOS OPERATING, LLC
ROSA UNIT #550H
LOCATED IN THE NE/4 NW/4 OF SECTION 9,
T31N, R6W, N.M.P.M.,
SAN JUAN COUNTY, NEW MEXICO

DIRECTIONS

- 1) FROM THE INTERSECTION OF HIGHWAY 172 & HIGHWAY 151 IN IGNACIO, CO, GO EAST ON HIGHWAY 151 FOR 12.0 MILES TO COUNTY ROAD #330.
- 2) TURN RIGHT ON COUNTY ROAD #330 FOR 1.9 MILES TO COUNTY ROAD #4020.
- 3) TURN RIGHT ONTO COUNTY ROAD #4020 AND GO 3.9 MILES TO A DIRT ROAD ON THE LEFT.
- 4) TURN LEFT OFF OF COUNTY ROAD #4020 AND GO 1.7 MILES TO A DIRT ROAD ON THE RIGHT.
- 5) TURN RIGHT AND GO 2.0 MILES TO A DIRT ROAD ON THE LEFT.
- 6) TURN LEFT AND GO 0.2 MILES TO A DIRT ROAD ON THE LEFT.
- 7) TURN LEFT AND GO 2.0 MILES TO A DIRT ROAD ON THE LEFT.
- 9) TURN LEFT AND GO TO THE EXISTING ROSA UNIT #180A WELL PAD

WELL FLAG LOCATED AT LAT. 36.918751° N, LONG. 107.470622° W (NAD 83).

DATE: 02/27/25

DRAWN BY: GRR

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FARMINGTON, NM 87402
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WELL FLAG

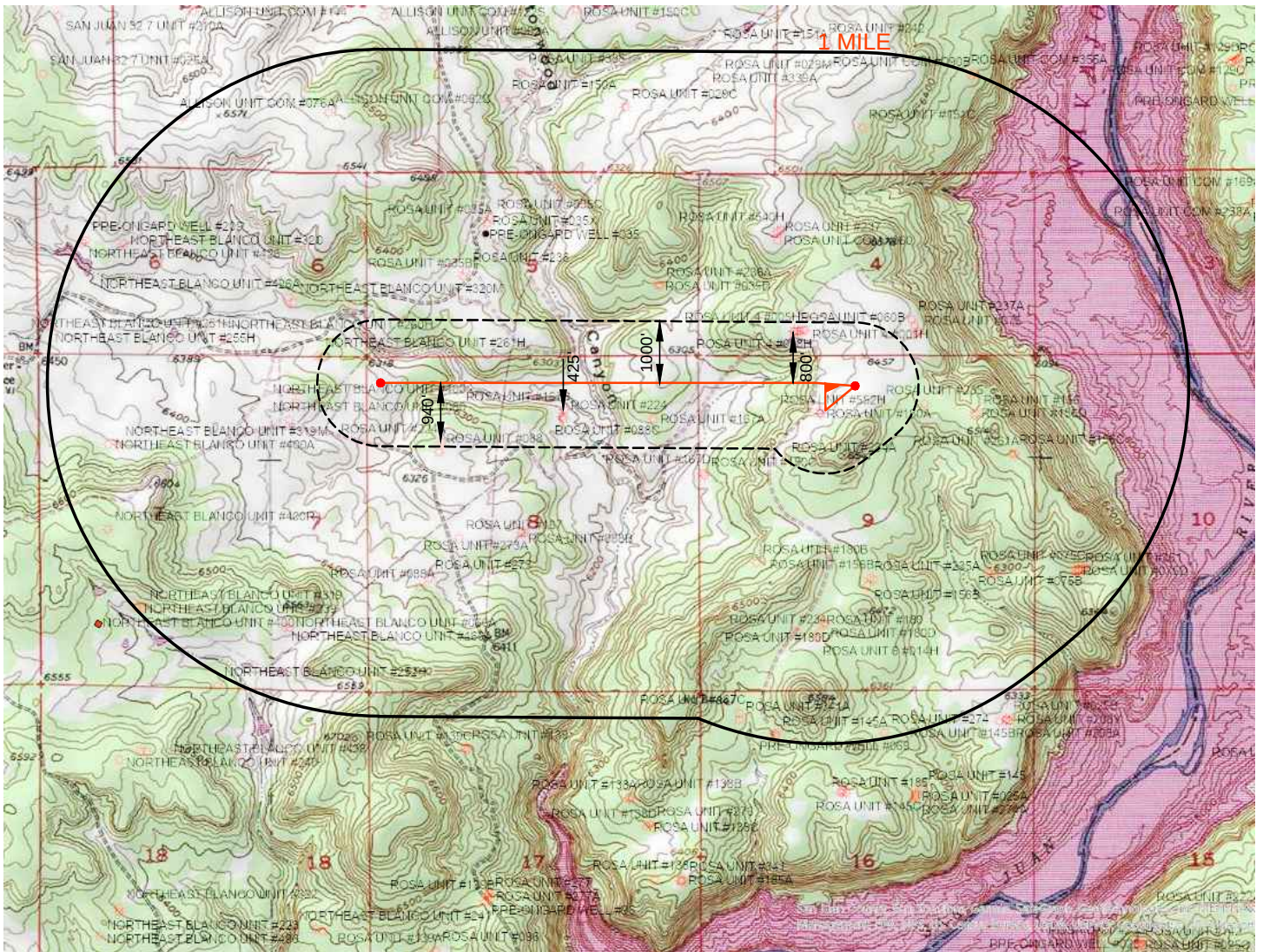
LATITUDE: 36.918751° N
 LONGITUDE: 107.470622° W
 DATUM: NAD83

LOGOS OPERATING, LLC**ROSA UNIT #550H**

935' FNL & 1925' FWL
 LOCATED IN THE NE/4 NW/4 OF SECTION 9,
 T31N, R6W, N.M.P.M.,
 SAN JUAN COUNTY, NEW MEXICO

WELL LOCATION MAP**WELL LEGEND**

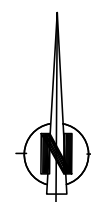
- GAS
- ABANDONED GAS
- INJECTION
- ABANDONED
- OIL
- ABANDONED OIL
- SALT WATER INJECTION
- ABANDONED SALT WATER INJ



DATE: 02/27/25

DRAWN BY: GRR

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0 .25 .5
 SCALE = 1" = 1/2 MILE

CCI**CHENAULT CONSULTING INC.**

4800 COLLEGE BLVD.
 SUITE 201
 FARMINGTON, NM 87402
 (505)-325-7707



LOGOS Operating, LLC Operations Plan

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

Date:	March 6th, 2025	Pool:	Basin Mancos
Well Name:	Rosa Unit 550H	GL Elevation:	6,434'
Surface Location:	Sec 9, T31N, R6W 935' FNL, 1925' FWL (36.918751° N, -107.470622° W – NAD83)	KB:	25'
Bottom Hole Location:	Sec 8, T31N, R6W 400' FNL, 199' FWL (36.920169° N, -107.494611° W – NAD83)	Measured Depth:	14,254' (KB)
Lease Serial CA Serial	# NMSF078765 # 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	2404'	2394'	*POINT LOOKOUT	5724'	5694'
KIRTLAND	2522'	2511'	*MANCOS	6239'	6206'
*FRUITLAND	2927'	2914'	KICKOFF POINT	6348'	6314'
*PICTURED CLIFFS	3417'	3401'	LANDING POINT	7400'	7002'
LEWIS	3537'	3520'	TD	14,254'	7006'
CHACRA	4675'	4652'			
*CLIFF HOUSE	5457'	5429'			
MENEFEE	5502'	5474'			

* 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. NATURAL GAUGES: 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 **1500 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:** 7,006' TVD x 0.43 = 3,013 psi
- E. H2S Concerns:** 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	OH SIZE (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"	3,467'	13.375"	54.5 LBS	J-55 or equiv	LTC/BTC
INTERMEDIATE	12.25"	6,349'	9.625"	43.5 LBS	N-80 or equiv	LTC/BTC
PRODUCTION	8.5"	14,254	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. CONDUCTOR CASING:** 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. SURFACE CASING:** 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 cancellation 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. PRODUCTION CASING:** 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 program will be determined by wellbore conditions. Production casing to be pressure tested



during completion operations with frac stack installed.

C. CEMENTING:

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

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

Conductor - 20"	Top	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. SURFACE: 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"	Top	Footage	Cement (ft3/ft) Annular Capacity	Excess (30%)	Total (ft3)	Total (bbl)	Slurry Yield (ft3/sk)	Sacks Cement	Density (PPG)
Stage 1 Tail	2,867	600	0.6947	1	450	80	1.160	388	15.8
Stage 1 Lead - OH	320	2,547	0.6947	1.25	2,212	394	2.665	830	11.8
Stage 2 Lead - Cased	-	320	1.019	1.25	408	73	2.665	153	11.8
					3,070	547		1371	

Set Depth 3467

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"	Top	Footage	Cement (ft3/ft) Annular Capacity	Excess (30%)	Total (ft3)	Total (bbl)	Slurry Yield (ft3/sk)	Sacks Cement	Density (PPG)
Stage 1 Tail	5,849	500	0.3132	1.3	220	39	1.160	190	15.8
Stage 1 Lead	4,750	1,098	0.3132	1.3	447	80	2.665	168	11.8
					667	119		357	
Stage 2 Tail	4,150	600	0.3132	1.3	244	44	1.760	139	13.5
Stage 2 Lead	3,367	783	0.3132	1.3	319	57	2.665	120	11.8
Stage 2 Lead - Cased	3,267	100	0.3627	1	36	6	2.665	14	11.8
Stage 2 Totals					600	107		272	
Int 2 Totals					1,267	226		630	
Contingency									
Stage 3 Tail	3,467	75	0.3132	1.3	31	5	1.76	17	13.5
Stage 3 Tail - Cased	2,967	500	0.3490	1	175	31	1.75	100	13.5
Stage 3 Lead - Cased	-	2,967	0.3490	1	1,035	184	2.660	389	11.8
Contingency Stage 3 Totals					1,241	221		506	

Set Depth 6349



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

4. **PRODUCTION:** 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"	Top	ft	Cement (ft3/ft) Annular Capacity	Excess (15%)	Total (ft3)	Total (bbl)	Slurry Yield (ft3/sk)	Sacks Cement	Density (PPG)
Cased Lead	6,249	100	0.2531	1	25	5	1.98	13	13.2
Open Hole Lead	6,349	7,905	0.2291	1.15	2,088	372	1.98	1,055	13.2
					2,113	376		1,067	

Set depth 14253.72

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 * 7,006' TVD = 1542 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**

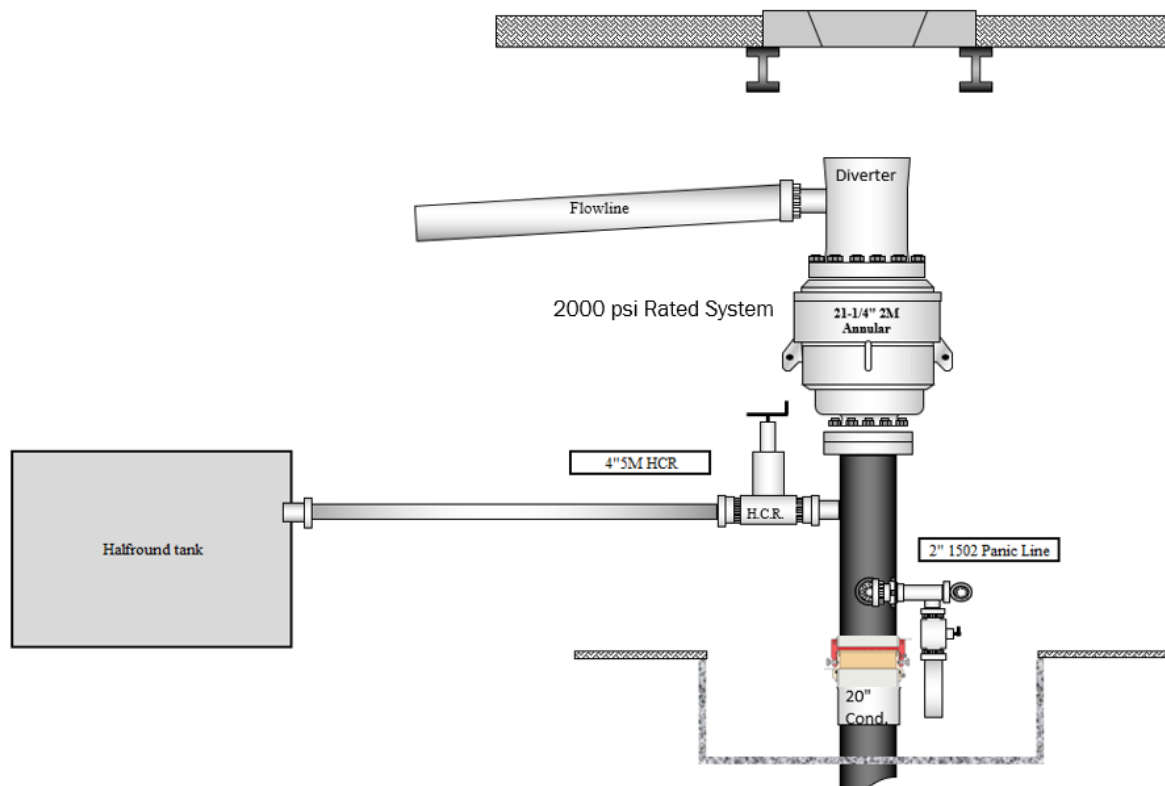
2-7/8", 6.5#, J-55 or L-80, EUE tubing will be run once volumes and pressures dictate. Due to the extremely high initial flow rates and pressures seen in offset wells, tubing will be installed once it is safe to do so, typically 12-36 months after completion.

*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

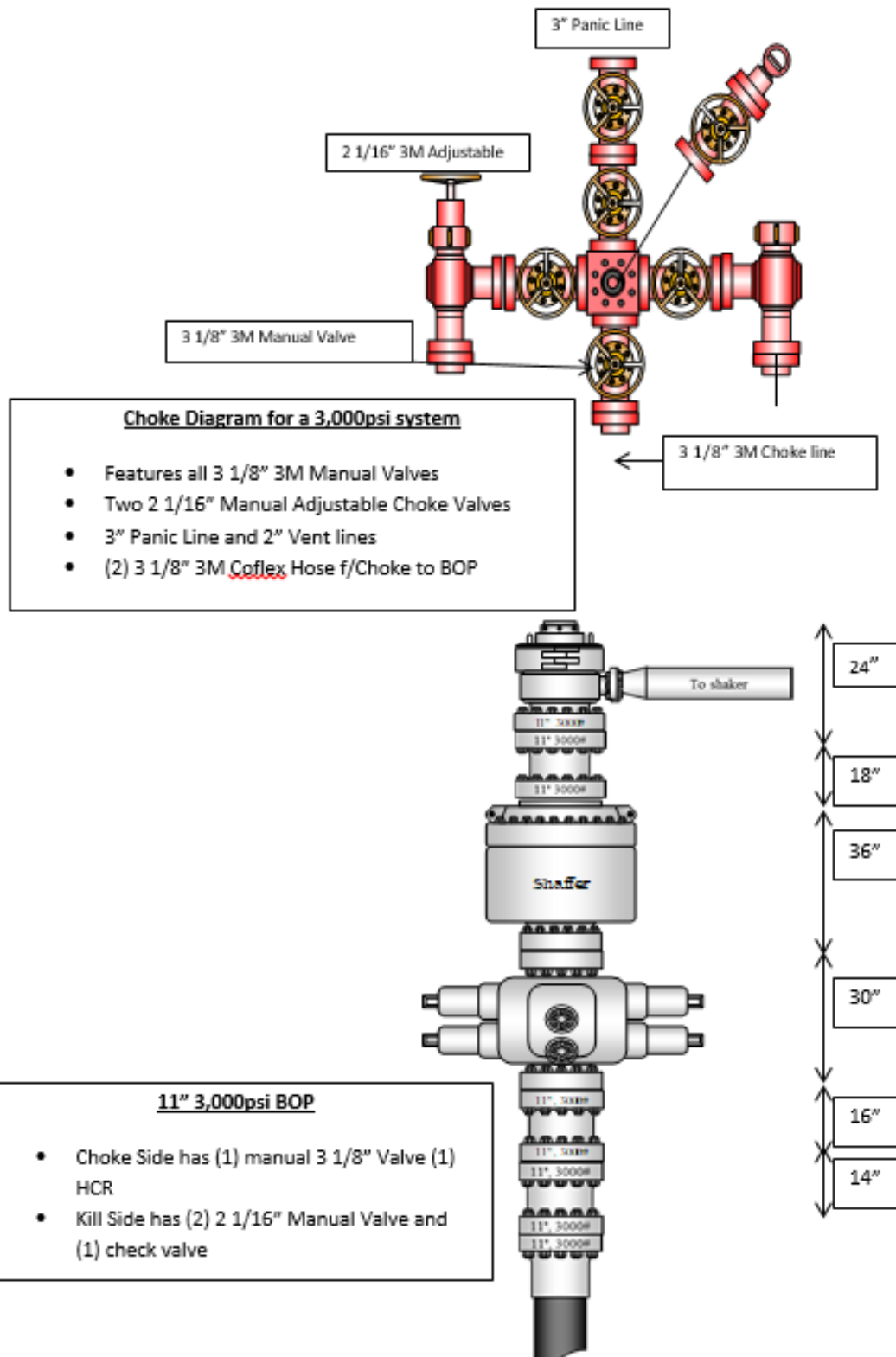
Surface Hole Diverter:





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 442266

CONDITIONS

Operator: LOGOS OPERATING, LLC 2010 Afton Place Farmington, NM 87401	OGRID: 289408
	Action Number: 442266
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
ward.rikala	Any previous COA's not addressed within the updated COA's still apply.	3/28/2025