

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

State of New Mexico
Energy, Minerals & Natural Resources

Form C-104
Revised August 1, 2011

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Submit one copy to appropriate District Office

AMENDED REPORT

I. REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT

¹ Operator name and Address LOGOS Operating, LLC 2010 Afton Place Farmington, NM 87401		² OGRID Number 289408
		³ Reason for Filing Code/ Effective Date New Well
⁴ API Number 30 - 039-31419	⁵ Pool Name Basin Mancos	⁶ Pool Code 97232
⁷ Property Code 320608	⁸ Property Name Rosa Unit	⁹ Well Number 742H

II. 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
C	33	31N	5W		334	North	1682	West	Rio Arriba

¹¹ Bottom Hole Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
F	31	31N	5W	2	1611	North	180	West	Rio Arriba
¹² Lse Code F	¹³ Producing Method Code F	¹⁴ Gas Connection Date	¹⁵ C-129 Permit Number	¹⁶ C-129 Effective Date	¹⁷ C-129 Expiration Date				

III. Oil and Gas Transporters

¹⁸ Transporter OGRID	¹⁹ Transporter Name and Address	²⁰ O/G/W
373888	Harvest Four Corners, LLC 1755 Arroyo Dr. Bloomfield, NM 87413	G

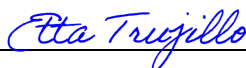
IV. Well Completion Data

17,088

²¹ Spud Date 4/14/2023	²² Ready Date 10/02/2023	²³ TD 17,260' MD / 7,031' TVD	²⁴ PBTD 17,135' MD / 7,031' TVD	²⁵ Perforations 7,645' MD / 17,092' MD 7,080'TVD / 7,031'TVD	²⁶ DHC, MC R-13457
²⁷ Hole Size	²⁸ Casing & Tubing Size	²⁹ Depth Set	³⁰ Sacks Cement		
26"	20", 94.0#, J-55	366'	764sx (156bbls, 879cf)		
17.5"	13-3/8", 61.0#, J-55	3594'	2700sx (847bbls, 4755cf)		
12.25"	9-5/8", 47.0#, L-80	6525'	2121sx (639bbls, 3587cf) DV tool @ 4,918'		
8.5"	5.5", 20.0#, HCP-110	17,226'	2468sx (724bbls, 4066cf) TOC @ 5,831'		
	2-7/8", 6.5#, J-55	pending			

V. Well Test Data

³¹ Date New Oil n/a	³² Gas Delivery Date 10/17/2023	³³ Test Date 10/17/2023	³⁴ Test Length 12hrs	³⁵ Tbg. Pressure n/a	³⁶ Csg. Pressure 1659
³⁷ Choke Size 14/64	³⁸ Oil n/a	³⁹ Water 29 30bbls	⁴⁰ Gas 401 Mcf		⁴¹ Test Method F

⁴² I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief. Signature: 	OIL CONSERVATION DIVISION Approved by: PATRICIA MARTINEZ
Printed name: Etta Trujillo	Title: PETROLEUM SPECIALIST
Title: Regulatory Specialist	Approval Date: 3/6/2024
E-mail Address: etrujillo@logosresourcesllc.com	
Date: 3/01/2024	Phone: (505) 324-4154



Request for Confidential "Tight Hole" Status

LOGOS Operating, LLC
Rosa Unit 742H
API# 30-039-31419
C Section 33 T31N R05W
Rio Arriba County, New Mexico

Per 19.15.7.16 WELL COMPLETION OR RECOMPLETION REPORT AND LOG (Form C-105): LOGOS Operating, LLC. Request the Division keep Form C-105 and all pertained documentation confidential as of 12/5/2023 for 90 days acceptance of the referenced documents.

Sincerely,

A handwritten signature in blue ink that reads "Etta Trujillo".

Etta Trujillo
Regulatory Specialist
Email: etrujillo@logosresourcesllc.com
Office: 505-324-4154
Cell: 505-258-2936

District I
1625 S. St. Francis Drive, Artesia, NM 88210
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

17 OPERATOR CERTIFICATION Page 3 of 26
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom-hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Signature: Etta Trujillo Date: 3/5/2024
Printed Name: Etta Trujillo
E-mail Address: etrujillo@logosresourcesllc.com

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

AMENDED REPORT

AS-DRILLED WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number 30-039-31419		2 Pool Code 97232		3 Pool Name BASIN MANCOS	
4 Property Code 320608		5 Property Name ROSA UNIT		6 Well Number 742H	
7 GRID No. 289408		8 Operator Name LOGOS OPERATING, LLC		9 Elevation 6492'	

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
C	33	31N	5W		334	NORTH	1682	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
F	31	31N	5W	2	1611	NORTH	180	WEST	RIO ARRIBA

12 Dedicated Acres 712.89	REFER TO DESCRIPTION BELOW	13 Joint or Infill	14 Consolidation Code	15 Order No. R-13457
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T31N R5W, Section 31 : Lots 1 & 2, NE/4
T31N R5W, Section 32 : N/2
T31N R5W, Section 33 : NW/4

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

18 SURVEYOR CERTIFICATION
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

Date Revised: MARCH 4, 2024
Date of Survey: APRIL 21, 2016

Signature and Seal of Professional Surveyor



JASON C. EDWARDS
Certificate Number 15269

BOTTOM HOLE LOCATION (D)

LAST TAKE POINT (C)

FIRST TAKE POINT (B)

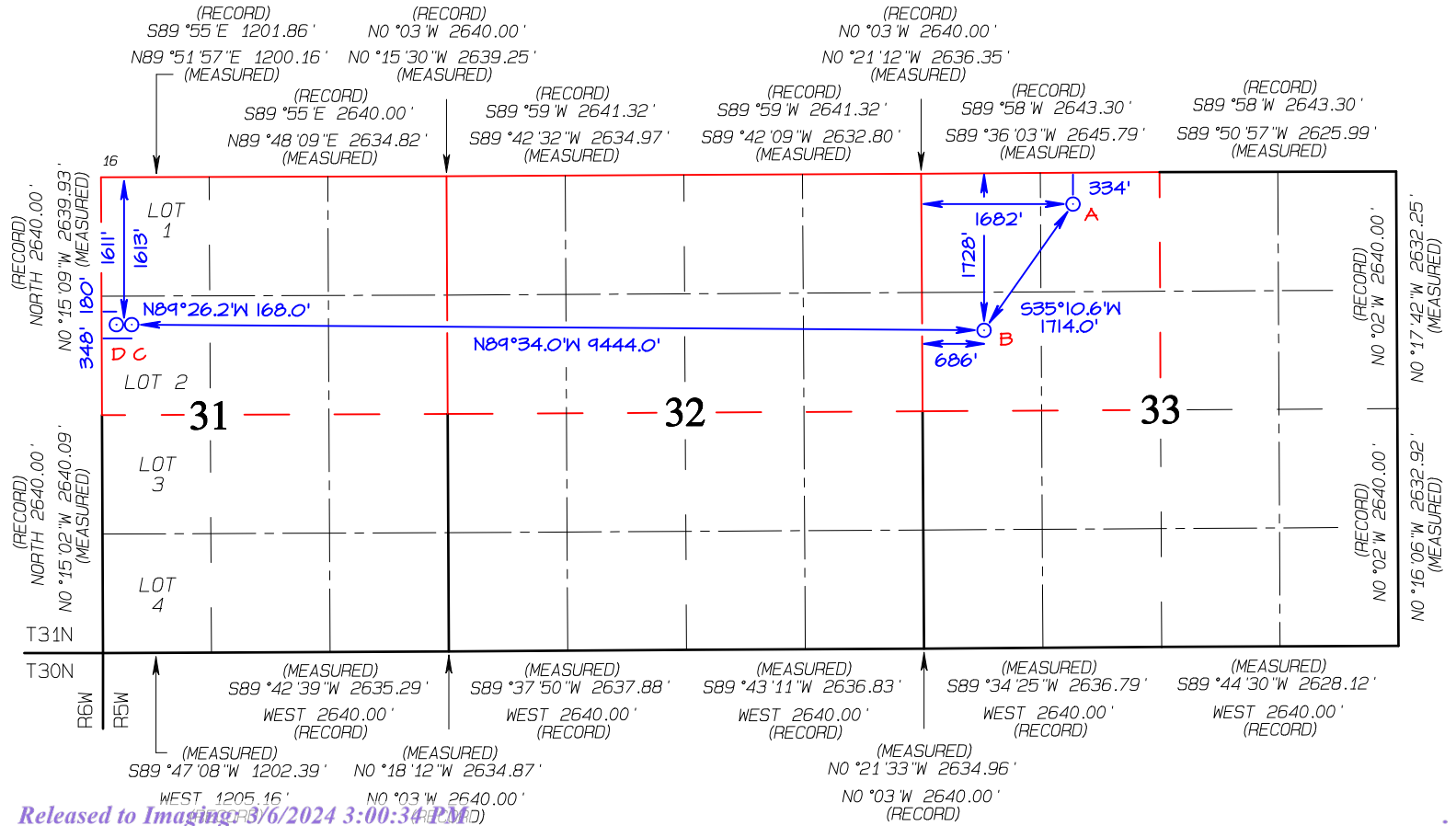
SURFACE LOCATION (A)

1611' FNL 180' FWL
SECTION 31, T31N, R5W
LAT 36.8589236°N
LONG -107.4065685°W
DATUM: NAD1927
LAT 36.8589298°N
LONG -107.4071715°W
DATUM: NAD1983

1613' FNL 348' FWL
SECTION 31, T31N, R5W
LAT 36.8589170°N
LONG -107.4059943°W
DATUM: NAD1927
LAT 36.8589232°N
LONG -107.4065973°W
DATUM: NAD1983

1728' FNL 686' FWL
SECTION 33, T31N, R5W
LAT 36.8586007°N
LONG -107.3737161°W
DATUM: NAD1927
LAT 36.8586070°N
LONG -107.3743182°W
DATUM: NAD1983

334' FNL 1682' FWL
SECTION 33, T31N, R5W
LAT 36.862435°N
LONG -107.370318°W
DATUM: NAD1927
LAT 36.862442°N
LONG -107.370920°W
DATUM: NAD1983



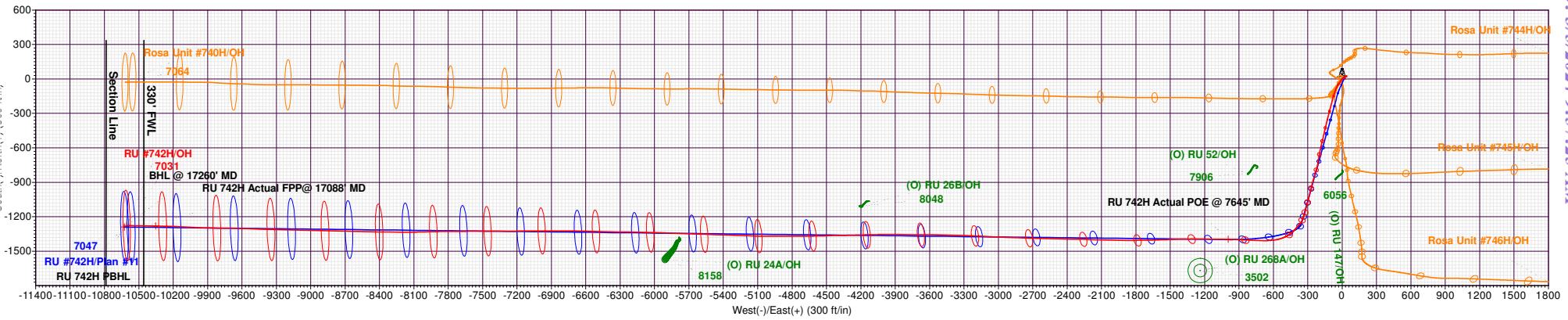


County: Rio Arriba, NM NAD83
 Site: Rosa Unit 31
 Well: Rosa Unit #742H
 Depth Reference: GL 6492' & RKB 30' @ 6522.00ft (H&P 530)
 Rig: H&P 530
 Plan: OH
 Job #: 15946



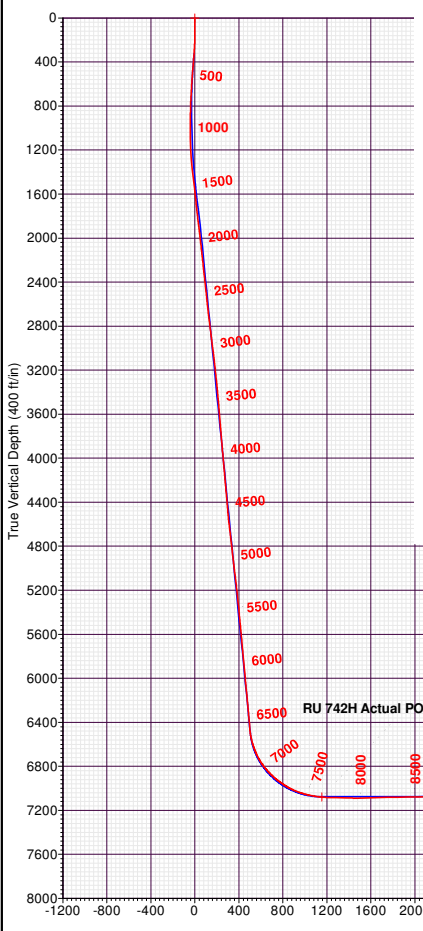
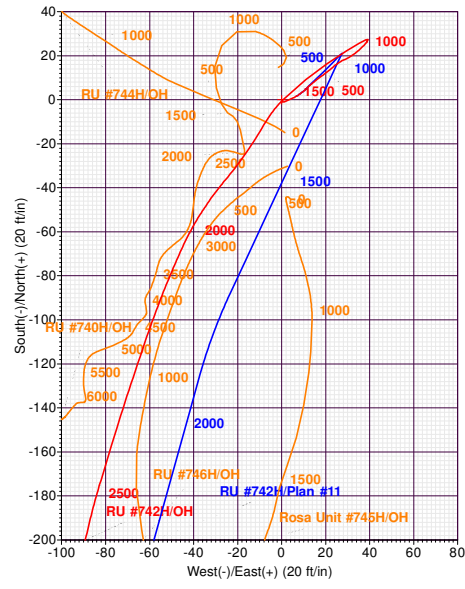
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Received by OCD: 3/5/2024 9:57:25 AM



ANNOTATIONS									
MD	Inc	Azi	TVD	+N-S	+E-W	VSect	Departure	Annotation	
7645.00	84.84	271.19	7079.54	-1396.17	-994.17	1155.14	2097.56	RU 742H Actual POE @ 7645' MD	
17088.00	89.96	270.96	7031.23	-1279.19	-10433.50	10511.61	11539.66	RU 742H Actual FPP @ 17088' MD	
17260.00	90.03	270.95	7031.10	-1276.65	-10605.48	10682.04	11711.66	BHL @ 17260' MD	

DESIGN TARGET DETAILS							
Name	TVD	+N-S	+E-W	Northing	Easting	Latitude	Longitude
RU 742H SHL	0.00	0.00	0.00	2133580.34	2858363.38	36.8624420	-107.3709200
RU 724H Actual FPP	7031.07	-1280.94	-10353.52	2132249.29	2848016.21	36.8589183	-107.4063102
RU 724H BHL	7031.10	-1276.65	-10605.48	2132252.35	2847764.23	36.8589298	-107.4071715
RU 742H PBHL	7047.00	-1290.08	-10623.91	2132238.84	2847745.87	36.8588929	-107.4072345
RU 724H Actual POE	7079.54	-1396.17	-994.17	2132179.38	2857375.99	36.8586070	-107.3743182



T M
 Azimuths to True North
 Magnetic North: 8.49°

Magnetic Field
 Strength: 49476.0nT
 Dip Angle: 63.28°
 Date: 4/2/2023
 Model: HRGM

TOTAL CORRECTION: 8.49°

Logos Operating LLC

Rio Arriba, NM NAD83

Rosa Unit 31

Rosa Unit #742H - Slot A2

OH

Design: OH

Standard Survey Report

01 December, 2023

SDT Survey Report

Company: Logos Operating LLC	Local Co-ordinate Reference: Well Rosa Unit #742H - Slot A2
Project: Rio Arriba, NM NAD83	TVD Reference: GL 6492' & RKB 30' @ 6522.00ft (H&P 530)
Site: Rosa Unit 31	MD Reference: GL 6492' & RKB 30' @ 6522.00ft (H&P 530)
Well: Rosa Unit #742H	North Reference: True
Wellbore: OH	Survey Calculation Method: Minimum Curvature
Design: OH	Database: EDM 5000 Multi User Db

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 31		
Site Position:	Northing: 2,133,595.07 usft	Latitude: 36.8624824
From: Map	Easting: 2,858,361.84 usft	Longitude: -107.3709251
Position Uncertainty: 0.00 ft	Slot Radius: 13-3/16 "	

Well Rosa Unit #742H - Slot A2		
Well Position +N/-S 0.00 ft	Northing: 2,133,580.34 usft	Latitude: 36.8624420
+E/-W 0.00 ft	Easting: 2,858,363.39 usft	Longitude: -107.3709200
Position Uncertainty 0.00 ft	Wellhead Elevation: ft	Ground Level: 6,492.00 ft
Grid Convergence: 0.28 °		

Wellbore OH					
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
	HRGM	4/2/2023	(°) 8.49	(°) 63.28	(nT) 49,475.96611451

Design OH				
Audit Notes:				
Version: 1.0	Phase: ACTUAL	Tie On Depth: 0.00		
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(ft)	(ft)	(ft)	(°)
	0.00	0.00	0.00	263.08

Survey Program		Date 12/1/2023		
From	To	Survey (Wellbore)		
(ft)	(ft)			
		Tool Name		
		Description		
100.00	320.00	Survey #1 (OH)	A020Ga_GYRO-NS	OWSG Gyrocompass Gyro
394.00	17,194.00	Survey #2 (OH)	MWD+HDGM	OWSG MWD + HDGM
17,260.00	17,260.00	Survey #3 (OH)	Project	Projection

Survey										
Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Vertical Section	Dogleg Rate	Build Rate	Turn Rate	
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100usft)	(°/100usft)	(°/100usft)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
100.00	0.61	176.78	100.00	-0.53	0.03	0.03	0.61	0.61	0.00	
200.00	1.23	82.19	199.99	-0.92	1.12	-1.00	1.42	0.62	-94.59	
300.00	4.08	62.63	299.87	0.86	5.35	-5.41	2.95	2.85	-19.56	
320.00	4.64	59.89	319.82	1.60	6.68	-6.82	2.99	2.80	-13.70	
394.00	5.35	45.22	393.54	5.53	11.72	-12.30	1.97	0.96	-19.82	
458.00	5.83	54.46	457.23	9.52	16.48	-17.51	1.59	0.75	14.44	
549.00	4.68	49.19	547.85	14.63	23.05	-24.65	1.37	-1.26	-5.79	

SDT
Survey Report

Company:	Logos Operating LLC	Local Co-ordinate Reference:	Well Rosa Unit #742H - Slot A2
Project:	Rio Arriba, NM NAD83	TVD Reference:	GL 6492' & RKB 30' @ 6522.00ft (H&P 530)
Site:	Rosa Unit 31	MD Reference:	GL 6492' & RKB 30' @ 6522.00ft (H&P 530)
Well:	Rosa Unit #742H	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000 Multi User Db

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
640.00	3.53	66.33	638.62	18.18	28.43	-30.41	1.83	-1.26	18.84	
731.00	3.14	52.10	729.47	20.84	32.96	-35.23	1.00	-0.43	-15.64	
918.00	1.54	36.43	916.30	26.01	38.49	-41.35	0.91	-0.86	-8.38	
1,009.00	0.44	359.85	1,007.29	27.34	39.22	-42.23	1.34	-1.21	-40.20	
1,100.00	1.31	246.25	1,098.28	27.27	38.27	-41.27	1.69	0.96	-124.84	
1,192.00	3.03	238.78	1,190.21	25.59	35.22	-38.05	1.89	1.87	-8.12	
1,284.00	5.50	240.02	1,281.95	22.12	29.32	-31.78	2.69	2.68	1.35	
1,378.00	6.94	234.26	1,375.40	16.56	20.81	-22.65	1.67	1.53	-6.13	
1,473.00	7.76	231.51	1,469.62	9.21	11.13	-12.16	0.94	0.86	-2.89	
1,568.00	8.47	226.39	1,563.67	0.39	1.05	-1.09	1.07	0.75	-5.39	
1,665.00	9.42	210.03	1,659.50	-11.41	-8.10	9.42	2.79	0.98	-16.87	
1,854.00	9.28	220.01	1,846.00	-36.47	-25.64	29.85	0.86	-0.07	5.28	
1,949.00	10.86	213.78	1,939.54	-49.78	-35.54	41.28	2.02	1.66	-6.56	
2,043.00	11.59	205.03	2,031.75	-65.70	-44.46	52.05	1.97	0.78	-9.31	
2,138.00	12.85	202.12	2,124.59	-84.13	-52.48	62.23	1.48	1.33	-3.06	
2,232.00	13.76	199.24	2,216.07	-104.37	-60.10	72.23	1.20	0.97	-3.06	
2,327.00	14.42	198.42	2,308.21	-126.26	-67.56	82.28	0.73	0.69	-0.86	
2,422.00	15.05	197.15	2,400.09	-149.27	-74.93	92.37	0.75	0.66	-1.34	
2,516.00	15.28	196.83	2,490.81	-172.79	-82.12	102.34	0.26	0.24	-0.34	
2,611.00	16.88	192.93	2,582.10	-198.21	-88.83	112.06	2.03	1.68	-4.11	
2,705.00	17.42	194.72	2,671.92	-225.12	-95.46	121.88	0.80	0.57	1.90	
2,800.00	18.13	195.35	2,762.38	-253.13	-102.98	132.73	0.77	0.75	0.66	
2,894.00	17.95	194.95	2,851.76	-281.23	-110.59	143.67	0.23	-0.19	-0.43	
2,989.00	20.20	193.29	2,941.54	-311.34	-118.14	154.79	2.44	2.37	-1.75	
3,083.00	19.69	194.78	3,029.90	-342.44	-125.91	166.25	0.77	-0.54	1.59	
3,178.00	17.67	193.98	3,119.89	-371.91	-133.48	177.31	2.14	-2.13	-0.84	
3,272.00	16.73	193.20	3,209.69	-398.93	-140.01	187.06	1.03	-1.00	-0.83	
3,367.00	17.22	193.50	3,300.55	-425.92	-146.42	196.67	0.52	0.52	0.32	
3,462.00	15.29	192.05	3,391.75	-451.84	-152.32	205.65	2.08	-2.03	-1.53	
3,556.00	14.14	193.84	3,482.66	-475.11	-157.65	213.74	1.32	-1.22	1.90	
3,641.00	13.50	192.51	3,565.20	-494.88	-162.28	220.73	0.84	-0.75	-1.56	
3,749.00	13.71	192.77	3,670.17	-519.67	-167.84	229.23	0.20	0.19	0.24	
3,844.00	13.18	194.96	3,762.57	-541.11	-173.13	237.06	0.77	-0.56	2.31	
3,938.00	13.80	193.82	3,853.97	-562.35	-178.57	245.02	0.72	0.66	-1.21	
4,033.00	14.19	192.33	3,946.15	-584.73	-183.76	252.88	0.56	0.41	-1.57	
4,128.00	14.68	192.50	4,038.15	-607.86	-188.86	260.72	0.52	0.52	0.18	
4,222.00	15.60	192.15	4,128.89	-631.84	-194.09	268.81	0.98	0.98	-0.37	
4,317.00	16.39	189.95	4,220.21	-657.53	-199.10	276.87	1.05	0.83	-2.32	
4,411.00	17.71	189.43	4,310.08	-684.70	-203.73	284.74	1.41	1.40	-0.55	
4,506.00	17.31	188.46	4,400.68	-712.93	-208.18	292.56	0.52	-0.42	-1.02	
4,600.00	16.61	190.22	4,490.59	-739.99	-212.62	300.23	0.92	-0.74	1.87	
4,695.00	17.01	194.96	4,581.53	-766.78	-218.62	309.41	1.50	0.42	4.99	
4,789.00	16.22	196.72	4,671.61	-792.63	-225.94	319.80	1.00	-0.84	1.87	

SDT
Survey Report

Company:	Logos Operating LLC	Local Co-ordinate Reference:	Well Rosa Unit #742H - Slot A2
Project:	Rio Arriba, NM NAD83	TVD Reference:	GL 6492' & RKB 30' @ 6522.00ft (H&P 530)
Site:	Rosa Unit 31	MD Reference:	GL 6492' & RKB 30' @ 6522.00ft (H&P 530)
Well:	Rosa Unit #742H	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000 Multi User Db

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
4,884.00	17.18	196.55	4,762.60	-818.79	-233.76	330.71	1.01	1.01	-0.18	
4,978.00	15.51	196.46	4,852.80	-844.15	-241.27	341.22	1.78	-1.78	-0.10	
5,073.00	15.78	195.67	4,944.28	-868.77	-248.36	351.23	0.36	0.28	-0.83	
5,167.00	18.41	196.19	5,034.12	-895.34	-255.95	361.96	2.80	2.80	0.55	
5,357.00	16.61	193.73	5,215.31	-950.54	-270.77	383.32	1.02	-0.95	-1.29	
5,452.00	16.39	193.56	5,306.40	-976.76	-277.13	392.80	0.24	-0.23	-0.18	
5,546.00	16.08	193.29	5,396.65	-1,002.32	-283.23	401.93	0.34	-0.33	-0.29	
5,703.00	14.81	193.29	5,547.98	-1,043.01	-292.85	416.38	0.81	-0.81	0.00	
5,766.00	14.50	193.73	5,608.93	-1,058.51	-296.57	421.94	0.52	-0.49	0.70	
5,829.00	14.28	194.04	5,669.95	-1,073.71	-300.33	427.50	0.37	-0.35	0.49	
5,892.00	14.19	195.05	5,731.02	-1,088.70	-304.22	433.17	0.42	-0.14	1.60	
5,955.00	14.02	195.58	5,792.12	-1,103.51	-308.27	438.98	0.34	-0.27	0.84	
6,018.00	14.02	196.37	5,853.24	-1,118.18	-312.47	444.92	0.30	0.00	1.25	
6,143.00	14.02	193.65	5,974.52	-1,147.42	-320.31	456.22	0.53	0.00	-2.18	
6,206.00	13.40	193.12	6,035.72	-1,161.95	-323.77	461.41	1.00	-0.98	-0.84	
6,269.00	12.48	199.53	6,097.13	-1,175.47	-327.70	466.94	2.70	-1.46	10.17	
6,332.00	12.00	201.56	6,158.69	-1,187.98	-332.38	473.09	1.02	-0.76	3.22	
6,395.00	11.51	201.38	6,220.37	-1,199.92	-337.08	479.20	0.78	-0.78	-0.29	
6,476.00	10.42	201.03	6,299.89	-1,214.29	-342.66	486.46	1.35	-1.35	-0.43	
6,584.00	9.35	201.80	6,406.29	-1,231.55	-349.42	495.26	1.00	-0.99	0.71	
6,642.00	9.30	203.58	6,463.52	-1,240.22	-353.04	499.90	0.50	-0.09	3.07	
6,737.00	18.81	218.97	6,555.60	-1,259.21	-365.78	514.83	10.67	10.01	16.20	
6,831.00	26.40	221.31	6,642.32	-1,286.73	-389.14	541.34	8.13	8.07	2.49	
6,925.00	34.23	223.51	6,723.40	-1,321.66	-421.19	577.36	8.41	8.33	2.34	
7,020.00	40.57	235.95	6,798.94	-1,358.42	-465.29	625.57	10.36	6.67	13.09	
7,114.00	45.40	250.82	6,867.87	-1,386.62	-522.41	685.67	11.92	5.14	15.82	
7,209.00	52.68	261.64	6,930.20	-1,403.28	-591.94	756.69	11.50	7.66	11.39	
7,303.00	59.10	269.48	6,982.95	-1,409.09	-669.41	834.30	9.71	6.83	8.34	
7,398.00	68.35	271.74	7,024.96	-1,408.12	-754.49	918.64	9.97	9.74	2.38	
7,493.00	75.58	273.65	7,054.35	-1,403.84	-844.65	1,007.64	7.85	7.61	2.01	
7,587.00	81.79	273.18	7,072.79	-1,398.36	-936.62	1,098.27	6.62	6.61	-0.50	
7,645.00	84.84	271.19	7,079.54	-1,396.17	-994.17	1,155.14	6.26	5.25	-3.44	
RU 742H Actual POE @ 7645' MD										
7,681.00	86.73	269.96	7,082.19	-1,395.81	-1,030.07	1,190.74	6.26	5.26	-3.41	
7,775.00	88.92	270.20	7,085.76	-1,395.68	-1,123.99	1,283.96	2.34	2.33	0.26	
7,870.00	88.89	270.50	7,087.57	-1,395.10	-1,218.98	1,378.18	0.32	-0.03	0.32	
7,964.00	89.90	269.42	7,088.57	-1,395.16	-1,312.97	1,471.50	1.57	1.07	-1.15	
8,058.00	91.92	268.62	7,087.07	-1,396.77	-1,406.94	1,564.97	2.31	2.15	-0.85	
8,153.00	91.48	268.67	7,084.25	-1,399.02	-1,501.87	1,659.49	0.47	-0.46	0.05	
8,248.00	90.94	267.51	7,082.25	-1,402.18	-1,596.79	1,754.10	1.35	-0.57	-1.22	
8,342.00	90.98	269.32	7,080.67	-1,404.78	-1,690.74	1,847.68	1.93	0.04	1.93	
8,437.00	90.71	268.76	7,079.27	-1,406.37	-1,785.71	1,942.15	0.65	-0.28	-0.59	
8,532.00	91.21	270.81	7,077.68	-1,406.73	-1,880.70	2,036.48	2.22	0.53	2.16	
8,626.00	90.77	270.66	7,076.06	-1,405.52	-1,974.67	2,129.63	0.49	-0.47	-0.16	

SDT
Survey Report

Company:	Logos Operating LLC	Local Co-ordinate Reference:	Well Rosa Unit #742H - Slot A2
Project:	Rio Arriba, NM NAD83	TVD Reference:	GL 6492' & RKB 30' @ 6522.00ft (H&P 530)
Site:	Rosa Unit 31	MD Reference:	GL 6492' & RKB 30' @ 6522.00ft (H&P 530)
Well:	Rosa Unit #742H	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000 Multi User Db

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
8,721.00	90.74	272.08	7,074.80	-1,403.25	-2,069.64	2,223.63	1.49	-0.03	1.49	
8,816.00	90.54	272.17	7,073.74	-1,399.73	-2,164.56	2,317.44	0.23	-0.21	0.09	
8,910.00	91.72	270.85	7,071.89	-1,397.25	-2,258.51	2,410.40	1.88	1.26	-1.40	
9,005.00	91.52	271.11	7,069.20	-1,395.63	-2,353.46	2,504.46	0.35	-0.21	0.27	
9,099.00	91.25	271.51	7,066.93	-1,393.48	-2,447.41	2,597.47	0.51	-0.29	0.43	
9,194.00	90.67	270.43	7,065.34	-1,391.87	-2,542.38	2,691.55	1.29	-0.61	-1.14	
9,288.00	90.71	270.90	7,064.21	-1,390.78	-2,636.36	2,784.72	0.50	0.04	0.50	
9,383.00	90.14	272.50	7,063.50	-1,387.96	-2,731.32	2,878.64	1.79	-0.60	1.68	
9,477.00	90.00	271.82	7,063.39	-1,384.42	-2,825.25	2,971.47	0.74	-0.15	-0.72	
9,572.00	89.90	272.33	7,063.47	-1,380.98	-2,920.18	3,065.30	0.55	-0.11	0.54	
9,666.00	89.70	272.96	7,063.80	-1,376.64	-3,014.08	3,157.99	0.70	-0.21	0.67	
9,761.00	89.36	273.14	7,064.58	-1,371.59	-3,108.95	3,251.55	0.40	-0.36	0.19	
9,856.00	90.20	272.03	7,064.94	-1,367.30	-3,203.85	3,345.24	1.47	0.88	-1.17	
9,950.00	89.93	272.28	7,064.84	-1,363.77	-3,297.78	3,438.07	0.39	-0.29	0.27	
10,045.00	89.16	270.73	7,065.59	-1,361.28	-3,392.74	3,532.04	1.82	-0.81	-1.63	
10,139.00	90.54	271.03	7,065.84	-1,359.83	-3,486.73	3,625.16	1.50	1.47	0.32	
10,234.00	90.34	270.95	7,065.11	-1,358.19	-3,581.71	3,719.26	0.23	-0.21	-0.08	
10,328.00	90.00	269.90	7,064.83	-1,357.49	-3,675.70	3,812.48	1.17	-0.36	-1.12	
10,423.00	89.90	270.77	7,064.91	-1,356.94	-3,770.70	3,906.72	0.92	-0.11	0.92	
10,517.00	89.46	271.22	7,065.44	-1,355.31	-3,864.69	3,999.82	0.67	-0.47	0.48	
10,611.00	90.00	269.70	7,065.88	-1,354.55	-3,958.68	4,093.04	1.72	0.57	-1.62	
10,706.00	89.93	268.52	7,065.94	-1,356.03	-4,053.67	4,187.51	1.24	-0.07	-1.24	
10,800.00	90.17	268.93	7,065.86	-1,358.12	-4,147.64	4,281.06	0.51	0.26	0.44	
10,895.00	90.27	268.31	7,065.49	-1,360.41	-4,242.61	4,375.61	0.66	0.11	-0.65	
10,990.00	90.17	269.22	7,065.13	-1,362.45	-4,337.59	4,470.14	0.96	-0.11	0.96	
11,084.00	89.93	268.37	7,065.04	-1,364.43	-4,431.57	4,563.68	0.94	-0.26	-0.90	
11,179.00	89.80	268.37	7,065.27	-1,367.13	-4,526.53	4,658.27	0.14	-0.14	0.00	
11,273.00	90.37	269.26	7,065.13	-1,369.08	-4,620.51	4,751.80	1.12	0.61	0.95	
11,368.00	90.10	269.27	7,064.74	-1,370.29	-4,715.50	4,846.25	0.28	-0.28	0.01	
11,462.00	90.13	270.27	7,064.55	-1,370.67	-4,809.50	4,939.60	1.06	0.03	1.06	
11,557.00	88.92	269.51	7,065.34	-1,370.85	-4,904.49	5,033.93	1.50	-1.27	-0.80	
11,651.00	89.36	270.26	7,066.75	-1,371.04	-4,998.48	5,127.25	0.92	0.47	0.80	
11,746.00	89.36	271.43	7,067.81	-1,369.64	-5,093.46	5,221.38	1.23	0.00	1.23	
11,840.00	89.33	272.32	7,068.88	-1,366.57	-5,187.40	5,314.26	0.95	-0.03	0.95	
11,935.00	89.02	271.96	7,070.25	-1,363.02	-5,282.33	5,408.07	0.50	-0.33	-0.38	
12,030.00	90.00	271.80	7,071.06	-1,359.90	-5,377.27	5,501.95	1.05	1.03	-0.17	
12,124.00	90.20	272.09	7,070.90	-1,356.71	-5,471.22	5,594.82	0.37	0.21	0.31	
12,219.00	90.10	272.29	7,070.65	-1,353.08	-5,566.15	5,688.62	0.24	-0.11	0.21	
12,313.00	90.91	271.87	7,069.82	-1,349.67	-5,660.08	5,781.46	0.97	0.86	-0.45	
12,408.00	90.44	271.59	7,068.70	-1,346.80	-5,755.03	5,875.37	0.58	-0.49	-0.29	
12,502.00	90.27	272.24	7,068.12	-1,343.66	-5,848.98	5,968.26	0.71	-0.18	0.69	
12,597.00	89.90	271.78	7,067.98	-1,340.33	-5,943.92	6,062.11	0.62	-0.39	-0.48	
12,691.00	91.01	271.95	7,067.23	-1,337.27	-6,037.86	6,155.00	1.19	1.18	0.18	

SDT
Survey Report

Company:	Logos Operating LLC	Local Co-ordinate Reference:	Well Rosa Unit #742H - Slot A2
Project:	Rio Arriba, NM NAD83	TVD Reference:	GL 6492' & RKB 30' @ 6522.00ft (H&P 530)
Site:	Rosa Unit 31	MD Reference:	GL 6492' & RKB 30' @ 6522.00ft (H&P 530)
Well:	Rosa Unit #742H	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000 Multi User Db

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
12,786.00	90.84	271.33	7,065.70	-1,334.55	-6,132.81	6,248.93	0.68	-0.18	-0.65	
12,880.00	90.68	270.43	7,064.45	-1,333.11	-6,226.79	6,342.05	0.97	-0.17	-0.96	
12,975.00	90.84	270.76	7,063.19	-1,332.12	-6,321.78	6,436.22	0.39	0.17	0.35	
13,070.00	91.01	270.61	7,061.66	-1,330.99	-6,416.76	6,530.38	0.24	0.18	-0.16	
13,164.00	91.45	272.43	7,059.64	-1,328.49	-6,510.70	6,623.33	1.99	0.47	1.94	
13,259.00	90.40	270.06	7,058.11	-1,326.43	-6,605.66	6,717.35	2.73	-1.11	-2.49	
13,354.00	89.50	271.56	7,058.19	-1,325.09	-6,700.64	6,811.48	1.84	-0.95	1.58	
13,449.00	89.26	270.23	7,059.22	-1,323.60	-6,795.62	6,905.59	1.42	-0.25	-1.40	
13,543.00	90.54	269.96	7,059.38	-1,323.45	-6,889.62	6,998.89	1.39	1.36	-0.29	
13,638.00	90.34	269.56	7,058.65	-1,323.85	-6,984.62	7,093.24	0.47	-0.21	-0.42	
13,732.00	90.44	270.13	7,058.01	-1,324.10	-7,078.61	7,186.58	0.62	0.11	0.61	
13,827.00	90.10	268.78	7,057.57	-1,325.00	-7,173.61	7,280.99	1.47	-0.36	-1.42	
13,921.00	91.11	269.49	7,056.57	-1,326.42	-7,267.59	7,374.46	1.31	1.07	0.76	
14,015.00	91.55	269.64	7,054.39	-1,327.14	-7,361.56	7,467.83	0.49	0.47	0.16	
14,110.00	90.30	271.46	7,052.86	-1,326.22	-7,456.54	7,562.01	2.32	-1.32	1.92	
14,205.00	90.98	268.99	7,051.80	-1,325.85	-7,551.52	7,656.26	2.70	0.72	-2.60	
14,299.00	90.71	268.85	7,050.41	-1,327.62	-7,645.50	7,749.76	0.32	-0.29	-0.15	
14,394.00	90.94	269.95	7,049.04	-1,328.62	-7,740.48	7,844.17	1.18	0.24	1.16	
14,488.00	90.67	269.22	7,047.72	-1,329.30	-7,834.47	7,937.55	0.83	-0.29	-0.78	
14,583.00	90.30	268.89	7,046.92	-1,330.87	-7,929.45	8,032.03	0.52	-0.39	-0.35	
14,677.00	90.24	268.37	7,046.47	-1,333.11	-8,023.42	8,125.59	0.56	-0.06	-0.55	
14,772.00	89.76	269.08	7,046.47	-1,335.23	-8,118.40	8,220.13	0.90	-0.51	0.75	
14,867.00	90.30	271.07	7,046.42	-1,335.10	-8,213.39	8,314.42	2.17	0.57	2.09	
14,961.00	90.00	270.64	7,046.18	-1,333.70	-8,307.38	8,407.55	0.56	-0.32	-0.46	
15,056.00	89.70	270.10	7,046.43	-1,333.09	-8,402.38	8,501.79	0.65	-0.32	-0.57	
15,150.00	90.44	272.36	7,046.31	-1,331.07	-8,496.35	8,594.83	2.53	0.79	2.40	
15,245.00	90.27	271.56	7,045.72	-1,327.82	-8,591.29	8,688.69	0.86	-0.18	-0.84	
15,339.00	90.13	270.90	7,045.40	-1,325.80	-8,685.27	8,781.74	0.72	-0.15	-0.70	
15,434.00	90.07	270.67	7,045.23	-1,324.50	-8,780.26	8,875.88	0.25	-0.06	-0.24	
15,528.00	90.27	271.45	7,044.95	-1,322.76	-8,874.24	8,968.97	0.86	0.21	0.83	
15,623.00	89.80	270.94	7,044.89	-1,320.78	-8,969.22	9,063.02	0.73	-0.49	-0.54	
15,717.00	90.71	271.52	7,044.47	-1,318.76	-9,063.20	9,156.06	1.15	0.97	0.62	
15,812.00	90.40	271.31	7,043.55	-1,316.42	-9,158.16	9,250.06	0.39	-0.33	-0.22	
15,906.00	90.71	271.49	7,042.64	-1,314.12	-9,252.13	9,343.06	0.38	0.33	0.19	
16,001.00	90.68	272.22	7,041.49	-1,311.05	-9,347.07	9,436.94	0.77	-0.03	0.77	
16,096.00	90.64	271.45	7,040.40	-1,308.00	-9,442.02	9,530.83	0.81	-0.04	-0.81	
16,190.00	90.98	271.86	7,039.07	-1,305.29	-9,535.97	9,623.77	0.57	0.36	0.44	
16,285.00	90.84	270.94	7,037.56	-1,302.97	-9,630.93	9,717.76	0.98	-0.15	-0.97	
16,379.00	90.77	271.24	7,036.24	-1,301.18	-9,724.90	9,810.83	0.33	-0.07	0.32	
16,473.00	90.71	271.00	7,035.03	-1,299.34	-9,818.88	9,903.90	0.26	-0.06	-0.26	
16,568.00	90.81	271.63	7,033.77	-1,297.16	-9,913.84	9,997.91	0.67	0.11	0.66	
16,662.00	90.77	272.72	7,032.47	-1,293.60	-10,007.76	10,090.72	1.16	-0.04	1.16	
16,757.00	90.37	272.56	7,031.52	-1,289.22	-10,102.66	10,184.39	0.45	-0.42	-0.17	

SDT
Survey Report

Company:	Logos Operating LLC	Local Co-ordinate Reference:	Well Rosa Unit #742H - Slot A2
Project:	Rio Arriba, NM NAD83	TVD Reference:	GL 6492' & RKB 30' @ 6522.00ft (H&P 530)
Site:	Rosa Unit 31	MD Reference:	GL 6492' & RKB 30' @ 6522.00ft (H&P 530)
Well:	Rosa Unit #742H	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000 Multi User Db

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
16,851.00	90.03	271.73	7,031.20	-1,285.70	-10,196.59	10,277.22	0.95	-0.36	-0.88	
16,946.00	90.10	271.84	7,031.09	-1,282.74	-10,291.54	10,371.12	0.14	0.07	0.12	
17,041.00	89.83	271.32	7,031.15	-1,280.12	-10,386.51	10,465.08	0.62	-0.28	-0.55	
17,088.00	89.96	270.96	7,031.23	-1,279.19	-10,433.50	10,511.61	0.81	0.28	-0.76	
RU 742H Actual FPP@ 17088' MD										
17,136.00	90.10	270.60	7,031.20	-1,278.53	-10,481.49	10,559.18	0.81	0.28	-0.76	
17,194.00	90.03	270.95	7,031.14	-1,277.75	-10,539.49	10,616.66	0.62	-0.12	0.60	
17,260.00	90.03	270.95	7,031.10	-1,276.65	-10,605.48	10,682.04	0.00	0.00	0.00	
BHL @ 17260' MD										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
RU 742H SHL - hit/miss target - Shape - actual wellpath hits target center - Point	0.00	0.00	0.00	0.00	0.00	2,133,580.34	2,858,363.39	36.8624420	-107.3709200	
RU 724H Actual FPP - actual wellpath hits target center - Point	0.00	0.00	7,031.08	-1,280.94	-10,353.52	2,132,249.29	2,848,016.21	36.8589183	-107.4063103	
RU 724H BHL - actual wellpath hits target center - Point	0.00	0.00	7,031.10	-1,276.65	-10,605.48	2,132,252.35	2,847,764.24	36.8589298	-107.4071715	
RU 742H PBHL - actual wellpath misses target center by 27.80ft at 17260.00ft MD (7031.10 TVD, -1276.65 N, -10605.48 E) - Point	0.00	0.00	7,047.00	-1,290.08	-10,623.91	2,132,238.84	2,847,745.87	36.8588929	-107.4072345	
RU 724H Actual POE - actual wellpath hits target center - Point	0.00	0.00	7,079.54	-1,396.17	-994.17	2,132,179.38	2,857,375.99	36.8586070	-107.3743183	

Design Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment	
		+N/-S (ft)	+E/-W (ft)		
7,645.00	7,079.54	-1,396.17	-994.17	RU 742H Actual POE @ 7645' MD	
17,088.00	7,031.23	-1,279.19	-10,433.50	RU 742H Actual FPP@ 17088' MD	
17,260.00	7,031.10	-1,276.65	-10,605.48	BHL @ 17260' MD	

Checked By: _____ Approved By: _____ Date: _____

Logos Operating LLC

Rio Arriba, NM NAD83

Rosa Unit 31

Rosa Unit #742H - Slot A2

OH

Design: OH

Survey Report - Geographic

01 December, 2023

SDT Survey Report - Geographic

Company: Logos Operating LLC	Local Co-ordinate Reference: Well Rosa Unit #742H - Slot A2
Project: Rio Arriba, NM NAD83	TVD Reference: GL 6492' & RKB 30' @ 6522.00ft (H&P 530)
Site: Rosa Unit 31	MD Reference: GL 6492' & RKB 30' @ 6522.00ft (H&P 530)
Well: Rosa Unit #742H	North Reference: True
Wellbore: OH	Survey Calculation Method: Minimum Curvature
Design: OH	Database: EDM 5000 Multi User Db

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 31		
Site Position:	Northing: 2,133,595.07 usft	Latitude: 36.8624824
From: Map	Easting: 2,858,361.84 usft	Longitude: -107.3709251
Position Uncertainty: 0.00 ft	Slot Radius: 13-3/16 "	Grid Convergence: 0.28 °

Well Rosa Unit #742H - Slot A2		
Well Position +N/-S 0.00 ft	Northing: 2,133,580.34 usft	Latitude: 36.8624420
+E/-W 0.00 ft	Easting: 2,858,363.39 usft	Longitude: -107.3709200
Position Uncertainty 0.00 ft	Wellhead Elevation: ft	Ground Level: 6,492.00 ft

Wellbore OH					
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HRGM	4/2/2023	8.49	63.28	49,475.96611451

Design OH					
Audit Notes:					
Version: 1.0	Phase: ACTUAL	Tie On Depth: 0.00			
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
	0.00	0.00	0.00	263.08	

Survey Program		Date 12/1/2023
From (ft)	To (ft)	Survey (Wellbore)
100.00	320.00	Survey #1 (OH)
394.00	17,194.00	Survey #2 (OH)
17,260.00	17,260.00	Survey #3 (OH)
		Tool Name
		A020Ga_GYRO-NS
		MWD+HDGM
		Project
		Description
		OWSG Gyrocompass Gyro
		OWSG MWD + HDGM
		Projection

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
0.00	0.00	0.00	0.00	0.00	0.00	2,133,580.34	2,858,363.39	36.8624420	-107.3709200	
100.00	0.61	176.78	100.00	-0.53	0.03	2,133,579.81	2,858,363.42	36.8624405	-107.3709199	
200.00	1.23	82.19	199.99	-0.92	1.12	2,133,579.43	2,858,364.52	36.8624395	-107.3709162	
300.00	4.08	62.63	299.87	0.86	5.35	2,133,581.23	2,858,368.73	36.8624443	-107.3709018	
320.00	4.64	59.89	319.82	1.60	6.68	2,133,581.97	2,858,370.06	36.8624464	-107.3708972	
394.00	5.35	45.22	393.54	5.53	11.72	2,133,585.92	2,858,375.08	36.8624572	-107.3708800	
458.00	5.83	54.46	457.23	9.52	16.48	2,133,589.94	2,858,379.82	36.8624681	-107.3708637	
549.00	4.68	49.19	547.85	14.63	23.05	2,133,595.08	2,858,386.37	36.8624822	-107.3708413	
640.00	3.53	66.33	638.62	18.18	28.43	2,133,598.66	2,858,391.73	36.8624919	-107.3708229	
731.00	3.14	52.10	729.47	20.84	32.96	2,133,601.34	2,858,396.25	36.8624992	-107.3708074	

SDT

Survey Report - Geographic

Company:	Logos Operating LLC	Local Co-ordinate Reference:	Well Rosa Unit #742H - Slot A2
Project:	Rio Arriba, NM NAD83	TVD Reference:	GL 6492' & RKB 30' @ 6522.00ft (H&P 530)
Site:	Rosa Unit 31	MD Reference:	GL 6492' & RKB 30' @ 6522.00ft (H&P 530)
Well:	Rosa Unit #742H	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000 Multi User Db

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
918.00	1.54	36.43	916.30	26.01	38.49	2,133,606.53	2,858,401.75	36.8625134	-107.3707885	
1,009.00	0.44	359.85	1,007.29	27.34	39.22	2,133,607.87	2,858,402.47	36.8625171	-107.3707860	
1,100.00	1.31	246.25	1,098.28	27.27	38.27	2,133,607.80	2,858,401.52	36.8625169	-107.3707892	
1,192.00	3.03	238.78	1,190.21	25.59	35.22	2,133,606.10	2,858,398.49	36.8625123	-107.3707996	
1,284.00	5.50	240.02	1,281.95	22.12	29.32	2,133,602.60	2,858,392.60	36.8625027	-107.3708198	
1,378.00	6.94	234.26	1,375.40	16.56	20.81	2,133,597.00	2,858,384.12	36.8624874	-107.3708489	
1,473.00	7.76	231.51	1,469.62	9.21	11.13	2,133,589.60	2,858,374.48	36.8624673	-107.3708820	
1,568.00	8.47	226.39	1,563.67	0.39	1.05	2,133,580.74	2,858,364.43	36.8624431	-107.3709165	
1,665.00	9.42	210.03	1,659.50	-11.41	-8.10	2,133,568.89	2,858,355.34	36.8624106	-107.3709477	
1,854.00	9.28	220.01	1,846.00	-36.47	-25.64	2,133,543.74	2,858,337.93	36.8623418	-107.3710077	
1,949.00	10.86	213.78	1,939.54	-49.78	-35.54	2,133,530.39	2,858,328.09	36.8623052	-107.3710415	
2,043.00	11.59	205.03	2,031.75	-65.70	-44.46	2,133,514.43	2,858,319.25	36.8622615	-107.3710720	
2,138.00	12.85	202.12	2,124.59	-84.13	-52.48	2,133,495.96	2,858,311.32	36.8622109	-107.3710994	
2,232.00	13.76	199.24	2,216.07	-104.37	-60.10	2,133,475.68	2,858,303.80	36.8621553	-107.3711255	
2,327.00	14.42	198.42	2,308.21	-126.26	-67.56	2,133,453.75	2,858,296.44	36.8620952	-107.3711510	
2,422.00	15.05	197.15	2,400.09	-149.27	-74.93	2,133,430.71	2,858,289.18	36.8620320	-107.3711762	
2,516.00	15.28	196.83	2,490.81	-172.79	-82.12	2,133,407.16	2,858,282.11	36.8619674	-107.3712007	
2,611.00	16.88	192.93	2,582.10	-198.21	-88.83	2,133,381.70	2,858,275.52	36.8618975	-107.3712237	
2,705.00	17.42	194.72	2,671.92	-225.12	-95.46	2,133,354.76	2,858,269.02	36.8618236	-107.3712463	
2,800.00	18.13	195.35	2,762.38	-253.13	-102.98	2,133,326.71	2,858,261.63	36.8617467	-107.3712721	
2,894.00	17.95	194.95	2,851.76	-281.23	-110.59	2,133,298.58	2,858,254.16	36.8616695	-107.3712981	
2,989.00	20.20	193.29	2,941.54	-311.34	-118.14	2,133,268.43	2,858,246.76	36.8615868	-107.3713239	
3,083.00	19.69	194.78	3,029.90	-342.44	-125.91	2,133,237.29	2,858,239.14	36.8615014	-107.3713504	
3,178.00	17.67	193.98	3,119.89	-371.91	-133.48	2,133,207.78	2,858,231.71	36.8614204	-107.3713763	
3,272.00	16.73	193.20	3,209.69	-398.93	-140.01	2,133,180.74	2,858,225.31	36.8613462	-107.3713986	
3,367.00	17.22	193.50	3,300.55	-425.92	-146.42	2,133,153.72	2,858,219.03	36.8612721	-107.3714205	
3,462.00	15.29	192.05	3,391.75	-451.84	-152.32	2,133,127.77	2,858,213.26	36.8612009	-107.3714407	
3,556.00	14.14	193.84	3,482.66	-475.11	-157.65	2,133,104.47	2,858,208.04	36.8611370	-107.3714589	
3,641.00	13.50	192.51	3,565.20	-494.88	-162.28	2,133,084.68	2,858,203.50	36.8610827	-107.3714748	
3,749.00	13.71	192.77	3,670.17	-519.67	-167.84	2,133,059.87	2,858,198.06	36.8610146	-107.3714938	
3,844.00	13.18	194.96	3,762.57	-541.11	-173.13	2,133,038.40	2,858,192.88	36.8609557	-107.3715118	
3,938.00	13.80	193.82	3,853.97	-562.35	-178.57	2,133,017.13	2,858,187.54	36.8608973	-107.3715304	
4,033.00	14.19	192.33	3,946.15	-584.73	-183.76	2,132,994.73	2,858,182.46	36.8608359	-107.3715482	
4,128.00	14.68	192.50	4,038.15	-607.86	-188.86	2,132,971.58	2,858,177.48	36.8607723	-107.3715656	
4,222.00	15.60	192.15	4,128.89	-631.84	-194.09	2,132,947.57	2,858,172.36	36.8607065	-107.3715835	
4,317.00	16.39	189.95	4,220.21	-657.53	-199.10	2,132,921.85	2,858,167.48	36.8606359	-107.3716006	
4,411.00	17.71	189.43	4,310.08	-684.70	-203.73	2,132,894.66	2,858,162.97	36.8605613	-107.3716165	
4,506.00	17.31	188.46	4,400.68	-712.93	-208.18	2,132,866.41	2,858,158.66	36.8604837	-107.3716317	
4,600.00	16.61	190.22	4,490.59	-739.99	-212.62	2,132,839.33	2,858,154.35	36.8604094	-107.3716468	
4,695.00	17.01	194.96	4,581.53	-766.78	-218.62	2,132,812.51	2,858,148.49	36.8603358	-107.3716673	
4,789.00	16.22	196.72	4,671.61	-792.63	-225.94	2,132,786.62	2,858,141.29	36.8602648	-107.3716924	
4,884.00	17.18	196.55	4,762.60	-818.79	-233.76	2,132,760.43	2,858,133.60	36.8601930	-107.3717191	
4,978.00	15.51	196.46	4,852.80	-844.15	-241.27	2,132,735.03	2,858,126.20	36.8601233	-107.3717448	
5,073.00	15.78	195.67	4,944.28	-868.77	-248.36	2,132,710.38	2,858,119.24	36.8600557	-107.3717690	
5,167.00	18.41	196.19	5,034.12	-895.34	-255.95	2,132,683.77	2,858,111.77	36.8599827	-107.3717950	
5,357.00	16.61	193.73	5,215.31	-950.54	-270.77	2,132,628.51	2,858,097.23	36.8598311	-107.3718456	
5,452.00	16.39	193.56	5,306.40	-976.76	-277.13	2,132,602.26	2,858,090.99	36.8597591	-107.3718673	
5,546.00	16.08	193.29	5,396.65	-1,002.32	-283.23	2,132,576.66	2,858,085.01	36.8596889	-107.3718882	
5,703.00	14.81	193.29	5,547.98	-1,043.01	-292.85	2,132,535.93	2,858,075.60	36.8595771	-107.3719210	
5,766.00	14.50	193.73	5,608.93	-1,058.51	-296.57	2,132,520.41	2,858,071.95	36.8595345	-107.3719338	
5,829.00	14.28	194.04	5,669.95	-1,073.71	-300.33	2,132,505.19	2,858,068.27	36.8594928	-107.3719466	
5,892.00	14.19	195.05	5,731.02	-1,088.70	-304.22	2,132,490.18	2,858,064.45	36.8594516	-107.3719599	
5,955.00	14.02	195.58	5,792.12	-1,103.51	-308.27	2,132,475.35	2,858,060.47	36.8594109	-107.3719738	
6,018.00	14.02	196.37	5,853.24	-1,118.18	-312.47	2,132,460.66	2,858,056.34	36.8593706	-107.3719881	
6,143.00	14.02	193.65	5,974.52	-1,147.42	-320.31	2,132,431.38	2,858,048.64	36.8592903	-107.3720149	

SDT

Survey Report - Geographic

Company:	Logos Operating LLC	Local Co-ordinate Reference:	Well Rosa Unit #742H - Slot A2
Project:	Rio Arriba, NM NAD83	TVD Reference:	GL 6492' & RKB 30' @ 6522.00ft (H&P 530)
Site:	Rosa Unit 31	MD Reference:	GL 6492' & RKB 30' @ 6522.00ft (H&P 530)
Well:	Rosa Unit #742H	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000 Multi User Db

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
6,206.00	13.40	193.12	6,035.72	-1,161.95	-323.77	2,132,416.84	2,858,045.25	36.8592504	-107.3720267	
6,269.00	12.48	199.53	6,097.13	-1,175.47	-327.70	2,132,403.30	2,858,041.38	36.8592133	-107.3720402	
6,332.00	12.00	201.56	6,158.69	-1,187.98	-332.38	2,132,390.77	2,858,036.76	36.8591789	-107.3720562	
6,395.00	11.51	201.38	6,220.37	-1,199.92	-337.08	2,132,378.80	2,858,032.12	36.8591461	-107.3720723	
6,476.00	10.42	201.03	6,299.89	-1,214.29	-342.66	2,132,364.41	2,858,026.62	36.8591066	-107.3720913	
6,584.00	9.35	201.80	6,406.29	-1,231.55	-349.42	2,132,347.12	2,858,019.94	36.8590592	-107.3721144	
6,642.00	9.30	203.58	6,463.52	-1,240.22	-353.04	2,132,338.43	2,858,016.35	36.8590354	-107.3721268	
6,737.00	18.81	218.97	6,555.60	-1,259.21	-365.78	2,132,319.37	2,858,003.71	36.8589832	-107.3721703	
6,831.00	26.40	221.31	6,642.32	-1,286.73	-389.14	2,132,291.74	2,857,980.48	36.8589077	-107.3722502	
6,925.00	34.23	223.51	6,723.40	-1,321.66	-421.19	2,132,256.66	2,857,948.60	36.8588117	-107.3723597	
7,020.00	40.57	235.95	6,798.94	-1,358.42	-465.29	2,132,219.68	2,857,904.68	36.8587107	-107.3725105	
7,114.00	45.40	250.82	6,867.87	-1,386.62	-522.41	2,132,191.20	2,857,847.70	36.8586333	-107.3727057	
7,209.00	52.68	261.64	6,930.20	-1,403.28	-591.94	2,132,174.21	2,857,778.26	36.8585875	-107.3729434	
7,303.00	59.10	269.48	6,982.95	-1,409.09	-669.41	2,132,168.03	2,857,700.81	36.8585715	-107.3732082	
7,398.00	68.35	271.74	7,024.96	-1,408.12	-754.49	2,132,168.59	2,857,615.73	36.8585742	-107.3734990	
7,493.00	75.58	273.65	7,054.35	-1,403.84	-844.65	2,132,172.43	2,857,525.55	36.8585859	-107.3738072	
7,587.00	81.79	273.18	7,072.79	-1,398.36	-936.62	2,132,177.46	2,857,433.56	36.8586010	-107.3741216	
7,645.00	84.84	271.19	7,079.54	-1,396.17	-994.17	2,132,179.38	2,857,375.99	36.8586070	-107.3743183	
RU 742H Actual POE @ 7645' MD										
7,681.00	86.73	269.96	7,082.19	-1,395.81	-1,030.07	2,132,179.56	2,857,340.09	36.8586080	-107.3744410	
7,775.00	88.92	270.20	7,085.76	-1,395.68	-1,123.99	2,132,179.24	2,857,246.17	36.8586083	-107.3747620	
7,870.00	88.89	270.50	7,087.57	-1,395.10	-1,218.98	2,132,179.36	2,857,151.18	36.8586099	-107.3750867	
7,964.00	89.90	269.42	7,088.57	-1,395.16	-1,312.97	2,132,178.84	2,857,057.19	36.8586097	-107.3754080	
8,058.00	91.92	268.62	7,087.07	-1,396.77	-1,406.94	2,132,176.78	2,856,963.23	36.8586053	-107.3757292	
8,153.00	91.48	268.67	7,084.25	-1,399.02	-1,501.87	2,132,174.07	2,856,868.32	36.8585991	-107.3760537	
8,248.00	90.94	267.51	7,082.25	-1,402.18	-1,596.79	2,132,170.44	2,856,773.41	36.8585904	-107.3763781	
8,342.00	90.98	269.32	7,080.67	-1,404.78	-1,690.74	2,132,167.39	2,856,679.47	36.8585833	-107.3766993	
8,437.00	90.71	268.76	7,079.27	-1,406.37	-1,785.71	2,132,165.34	2,856,584.51	36.8585789	-107.3770239	
8,532.00	91.21	270.81	7,077.68	-1,406.73	-1,880.70	2,132,164.52	2,856,489.53	36.8585779	-107.3773486	
8,626.00	90.77	270.66	7,076.06	-1,405.52	-1,974.67	2,132,165.27	2,856,395.55	36.8585812	-107.3776698	
8,721.00	90.74	272.08	7,074.80	-1,403.25	-2,069.64	2,132,167.08	2,856,300.58	36.8585874	-107.3779944	
8,816.00	90.54	272.17	7,073.74	-1,399.73	-2,164.56	2,132,170.15	2,856,205.63	36.8585970	-107.3783189	
8,910.00	91.72	270.85	7,071.89	-1,397.25	-2,258.51	2,132,172.17	2,856,111.68	36.8586038	-107.3786400	
9,005.00	91.52	271.11	7,069.20	-1,395.63	-2,353.46	2,132,173.33	2,856,016.72	36.8586083	-107.3789646	
9,099.00	91.25	271.51	7,066.93	-1,393.48	-2,447.41	2,132,175.03	2,855,922.76	36.8586141	-107.3792857	
9,194.00	90.67	270.43	7,065.34	-1,391.87	-2,542.38	2,132,176.17	2,855,827.79	36.8586185	-107.3796103	
9,288.00	90.71	270.90	7,064.21	-1,390.78	-2,636.36	2,132,176.81	2,855,733.80	36.8586215	-107.3799316	
9,383.00	90.14	272.50	7,063.50	-1,387.96	-2,731.32	2,132,179.17	2,855,638.83	36.8586292	-107.3802561	
9,477.00	90.00	271.82	7,063.39	-1,384.42	-2,825.25	2,132,182.26	2,855,544.88	36.8586389	-107.3805772	
9,572.00	89.90	272.33	7,063.47	-1,380.98	-2,920.18	2,132,185.24	2,855,449.93	36.8586484	-107.3809017	
9,666.00	89.70	272.96	7,063.80	-1,376.64	-3,014.08	2,132,189.12	2,855,356.01	36.8586602	-107.3812227	
9,761.00	89.36	273.14	7,064.58	-1,371.59	-3,108.95	2,132,193.72	2,855,261.13	36.8586741	-107.3815469	
9,856.00	90.20	272.03	7,064.94	-1,367.30	-3,203.85	2,132,197.54	2,855,166.21	36.8586858	-107.3818713	
9,950.00	89.93	272.28	7,064.84	-1,363.77	-3,297.78	2,132,200.62	2,855,072.26	36.8586955	-107.3821924	
10,045.00	89.16	270.73	7,065.59	-1,361.28	-3,392.74	2,132,202.66	2,854,977.29	36.8587023	-107.3825170	
10,139.00	90.54	271.03	7,065.84	-1,359.83	-3,486.73	2,132,203.64	2,854,883.29	36.8587063	-107.3828383	
10,234.00	90.34	270.95	7,065.11	-1,358.19	-3,581.71	2,132,204.83	2,854,788.30	36.8587107	-107.3831629	
10,328.00	90.00	269.90	7,064.83	-1,357.49	-3,675.70	2,132,205.07	2,854,694.31	36.8587126	-107.3834842	
10,423.00	89.90	270.77	7,064.91	-1,356.94	-3,770.70	2,132,205.16	2,854,599.31	36.8587141	-107.3838089	
10,517.00	89.46	271.22	7,065.44	-1,355.31	-3,864.69	2,132,206.34	2,854,505.32	36.8587186	-107.3841302	
10,611.00	90.00	269.70	7,065.88	-1,354.55	-3,958.68	2,132,206.64	2,854,411.32	36.8587206	-107.3844515	
10,706.00	89.93	268.52	7,065.94	-1,356.03	-4,053.67	2,132,204.70	2,854,316.34	36.8587165	-107.3847762	
10,800.00	90.17	268.93	7,065.86	-1,358.12	-4,147.64	2,132,202.16	2,854,222.38	36.8587107	-107.3850974	
10,895.00	90.27	268.31	7,065.49	-1,360.41	-4,242.61	2,132,199.41	2,854,127.42	36.8587044	-107.3854220	
10,990.00	90.17	269.22	7,065.13	-1,362.45	-4,337.59	2,132,196.90	2,854,032.45	36.8586987	-107.3857467	

SDT

Survey Report - Geographic

Company:	Logos Operating LLC	Local Co-ordinate Reference:	Well Rosa Unit #742H - Slot A2
Project:	Rio Arriba, NM NAD83	TVD Reference:	GL 6492' & RKB 30' @ 6522.00ft (H&P 530)
Site:	Rosa Unit 31	MD Reference:	GL 6492' & RKB 30' @ 6522.00ft (H&P 530)
Well:	Rosa Unit #742H	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000 Multi User Db

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
11,084.00	89.93	268.37	7,065.04	-1,364.43	-4,431.57	2,132,194.47	2,853,938.49	36.8586933	-107.3860679	
11,179.00	89.80	268.37	7,065.27	-1,367.13	-4,526.53	2,132,191.31	2,853,843.54	36.8586858	-107.3863925	
11,273.00	90.37	269.26	7,065.13	-1,369.08	-4,620.51	2,132,188.91	2,853,749.57	36.8586804	-107.3867137	
11,368.00	90.10	269.27	7,064.74	-1,370.29	-4,715.50	2,132,187.23	2,853,654.59	36.8586770	-107.3870384	
11,462.00	90.13	270.27	7,064.55	-1,370.67	-4,809.50	2,132,186.40	2,853,560.59	36.8586759	-107.3873597	
11,557.00	88.92	269.51	7,065.34	-1,370.85	-4,904.49	2,132,185.76	2,853,465.60	36.8586754	-107.3876844	
11,651.00	89.36	270.26	7,066.75	-1,371.04	-4,998.48	2,132,185.11	2,853,371.62	36.8586748	-107.3880057	
11,746.00	89.36	271.43	7,067.81	-1,369.64	-5,093.46	2,132,186.05	2,853,276.63	36.8586786	-107.3883304	
11,840.00	89.33	272.32	7,068.88	-1,366.57	-5,187.40	2,132,188.67	2,853,182.67	36.8586870	-107.3886515	
11,935.00	89.02	271.96	7,070.25	-1,363.02	-5,282.33	2,132,191.76	2,853,087.73	36.8586967	-107.3889759	
12,030.00	90.00	271.80	7,071.06	-1,359.90	-5,377.27	2,132,194.42	2,852,992.77	36.8587052	-107.3893005	
12,124.00	90.20	272.09	7,070.90	-1,356.71	-5,471.22	2,132,197.15	2,852,898.82	36.8587140	-107.3896216	
12,219.00	90.10	272.29	7,070.65	-1,353.08	-5,566.15	2,132,200.32	2,852,803.87	36.8587239	-107.3899461	
12,313.00	90.91	271.87	7,069.82	-1,349.67	-5,660.08	2,132,203.28	2,852,709.92	36.8587332	-107.3902672	
12,408.00	90.44	271.59	7,068.70	-1,346.80	-5,755.03	2,132,205.69	2,852,614.96	36.8587410	-107.3905917	
12,502.00	90.27	272.24	7,068.12	-1,343.66	-5,848.98	2,132,208.37	2,852,521.00	36.8587496	-107.3909129	
12,597.00	89.90	271.78	7,067.98	-1,340.33	-5,943.92	2,132,211.25	2,852,426.04	36.8587587	-107.3912374	
12,691.00	91.01	271.95	7,067.23	-1,337.27	-6,037.86	2,132,213.85	2,852,332.08	36.8587670	-107.3915585	
12,786.00	90.84	271.33	7,065.70	-1,334.55	-6,132.81	2,132,216.11	2,852,237.12	36.8587744	-107.3918831	
12,880.00	90.68	270.43	7,064.45	-1,333.11	-6,226.79	2,132,217.10	2,852,143.14	36.8587784	-107.3922043	
12,975.00	90.84	270.76	7,063.19	-1,332.12	-6,321.78	2,132,217.63	2,852,048.15	36.8587810	-107.3925290	
13,070.00	91.01	270.61	7,061.66	-1,330.99	-6,416.76	2,132,218.30	2,851,953.16	36.8587841	-107.3928537	
13,164.00	91.45	272.43	7,059.64	-1,328.49	-6,510.70	2,132,220.34	2,851,859.21	36.8587909	-107.3931748	
13,259.00	90.40	270.06	7,058.11	-1,326.43	-6,605.66	2,132,221.94	2,851,764.25	36.8587965	-107.3934993	
13,354.00	89.50	271.56	7,058.19	-1,325.09	-6,700.64	2,132,222.83	2,851,669.25	36.8588001	-107.3938240	
13,449.00	89.26	270.23	7,059.22	-1,323.60	-6,795.62	2,132,223.85	2,851,574.27	36.8588041	-107.3941487	
13,543.00	90.54	269.96	7,059.38	-1,323.45	-6,889.62	2,132,223.55	2,851,480.27	36.8588045	-107.3944700	
13,638.00	90.34	269.56	7,058.65	-1,323.85	-6,984.62	2,132,222.69	2,851,385.28	36.8588033	-107.3947947	
13,732.00	90.44	270.13	7,058.01	-1,324.10	-7,078.61	2,132,221.98	2,851,291.28	36.8588025	-107.3951160	
13,827.00	90.10	268.78	7,057.57	-1,325.00	-7,173.61	2,132,220.62	2,851,196.30	36.8588000	-107.3954407	
13,921.00	91.11	269.49	7,056.57	-1,326.42	-7,267.59	2,132,218.74	2,851,102.32	36.8587960	-107.3957619	
14,015.00	91.55	269.64	7,054.39	-1,327.14	-7,361.56	2,132,217.58	2,851,008.35	36.8587940	-107.3960832	
14,110.00	90.30	271.46	7,052.86	-1,326.22	-7,456.54	2,132,218.03	2,850,913.37	36.8587964	-107.3964078	
14,205.00	90.98	268.99	7,051.80	-1,325.85	-7,551.52	2,132,217.94	2,850,818.39	36.8587974	-107.3967325	
14,299.00	90.71	268.85	7,050.41	-1,327.62	-7,645.50	2,132,215.72	2,850,724.43	36.8587925	-107.3970537	
14,394.00	90.94	269.95	7,049.04	-1,328.62	-7,740.48	2,132,214.26	2,850,629.45	36.8587896	-107.3973784	
14,488.00	90.67	269.22	7,047.72	-1,329.30	-7,834.47	2,132,213.12	2,850,535.46	36.8587877	-107.3976996	
14,583.00	90.30	268.89	7,046.92	-1,330.87	-7,929.45	2,132,211.10	2,850,440.49	36.8587833	-107.3980243	
14,677.00	90.24	268.37	7,046.47	-1,333.11	-8,023.42	2,132,208.40	2,850,346.53	36.8587771	-107.3983455	
14,772.00	89.76	269.08	7,046.47	-1,335.23	-8,118.40	2,132,205.82	2,850,251.57	36.8587712	-107.3986702	
14,867.00	90.30	271.07	7,046.42	-1,335.10	-8,213.39	2,132,205.49	2,850,156.57	36.8587715	-107.3989949	
14,961.00	90.00	270.64	7,046.18	-1,333.70	-8,307.38	2,132,206.43	2,850,062.58	36.8587752	-107.3993161	
15,056.00	89.70	270.10	7,046.43	-1,333.09	-8,402.38	2,132,206.59	2,849,967.58	36.8587768	-107.3996409	
15,150.00	90.44	272.36	7,046.31	-1,331.07	-8,496.35	2,132,208.15	2,849,873.60	36.8587823	-107.3999621	
15,245.00	90.27	271.56	7,045.72	-1,327.82	-8,591.29	2,132,210.94	2,849,778.64	36.8587912	-107.4002866	
15,339.00	90.13	270.90	7,045.40	-1,325.80	-8,685.27	2,132,212.50	2,849,684.66	36.8587966	-107.4006078	
15,434.00	90.07	270.67	7,045.23	-1,324.50	-8,780.26	2,132,213.34	2,849,589.66	36.8588001	-107.4009325	
15,528.00	90.27	271.45	7,044.95	-1,322.76	-8,874.24	2,132,214.63	2,849,495.67	36.8588048	-107.4012538	
15,623.00	89.80	270.94	7,044.89	-1,320.78	-8,969.22	2,132,216.15	2,849,400.68	36.8588102	-107.4015784	
15,717.00	90.71	271.52	7,044.47	-1,318.76	-9,063.20	2,132,217.71	2,849,306.70	36.8588156	-107.4018997	
15,812.00	90.40	271.31	7,043.55	-1,316.42	-9,158.16	2,132,219.60	2,849,211.72	36.8588220	-107.4022243	
15,906.00	90.71	271.49	7,042.64	-1,314.12	-9,252.13	2,132,221.44	2,849,117.75	36.8588282	-107.4025455	
16,001.00	90.68	272.22	7,041.49	-1,311.05	-9,347.07	2,132,224.05	2,849,022.79	36.8588366	-107.4028700	
16,096.00	90.64	271.45	7,040.40	-1,308.00	-9,442.02	2,132,226.64	2,848,927.83	36.8588448	-107.4031946	
16,190.00	90.98	271.86	7,039.07	-1,305.29	-9,535.97	2,132,228.90	2,848,833.87	36.8588522	-107.4035157	

SDT

Survey Report - Geographic

Company:	Logos Operating LLC	Local Co-ordinate Reference:	Well Rosa Unit #742H - Slot A2
Project:	Rio Arriba, NM NAD83	TVD Reference:	GL 6492' & RKB 30' @ 6522.00ft (H&P 530)
Site:	Rosa Unit 31	MD Reference:	GL 6492' & RKB 30' @ 6522.00ft (H&P 530)
Well:	Rosa Unit #742H	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000 Multi User Db

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
16,285.00	90.84	270.94	7,037.56	-1,302.97	-9,630.93	2,132,230.76	2,848,738.90	36.8588585	-107.4038403	
16,379.00	90.77	271.24	7,036.24	-1,301.18	-9,724.90	2,132,232.09	2,848,644.92	36.8588633	-107.4041615	
16,473.00	90.71	271.00	7,035.03	-1,299.34	-9,818.88	2,132,233.47	2,848,550.94	36.8588683	-107.4044827	
16,568.00	90.81	271.63	7,033.77	-1,297.16	-9,913.84	2,132,235.19	2,848,455.96	36.8588742	-107.4048074	
16,662.00	90.77	272.72	7,032.47	-1,293.60	-10,007.76	2,132,238.30	2,848,362.03	36.8588839	-107.4051284	
16,757.00	90.37	272.56	7,031.52	-1,289.22	-10,102.66	2,132,242.22	2,848,267.11	36.8588958	-107.4054528	
16,851.00	90.03	271.73	7,031.20	-1,285.70	-10,196.59	2,132,245.28	2,848,173.16	36.8589054	-107.4057739	
16,946.00	90.10	271.84	7,031.09	-1,282.74	-10,291.54	2,132,247.78	2,848,078.20	36.8589134	-107.4060984	
17,041.00	89.83	271.32	7,031.15	-1,280.12	-10,386.51	2,132,249.94	2,847,983.22	36.8589205	-107.4064230	
17,088.00	89.96	270.96	7,031.23	-1,279.19	-10,433.50	2,132,250.65	2,847,936.23	36.8589230	-107.4065837	
RU 742H Actual FPP@ 17088' MD										
17,136.00	90.10	270.60	7,031.20	-1,278.53	-10,481.49	2,132,251.07	2,847,888.23	36.8589248	-107.4067477	
17,194.00	90.03	270.95	7,031.14	-1,277.75	-10,539.49	2,132,251.58	2,847,830.23	36.8589269	-107.4069460	
17,260.00	90.03	270.95	7,031.10	-1,276.65	-10,605.48	2,132,252.35	2,847,764.24	36.8589298	-107.4071715	
BHL @ 17260' MD										

Design Targets										
Target Name	- hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
RU 742H SHL	- actual wellpath hits target center	0.00	0.00	0.00	0.00	0.00	2,133,580.34	2,858,363.39	36.8624420	-107.3709200
RU 724H Actual FPP	- actual wellpath hits target center	0.00	0.00	7,031.08	-1,280.94	-10,353.52	2,132,249.29	2,848,016.21	36.8589183	-107.4063103
RU 724H BHL	- actual wellpath hits target center	0.00	0.00	7,031.10	-1,276.65	-10,605.48	2,132,252.35	2,847,764.24	36.8589298	-107.4071715
RU 742H PBHL	- actual wellpath misses target center by 27.80ft at 17260.00ft MD (7031.10 TVD, -1276.65 N, -10605.48 E)	0.00	0.00	7,047.00	-1,290.08	-10,623.91	2,132,238.84	2,847,745.87	36.8588929	-107.4072345
RU 724H Actual POE	- actual wellpath hits target center	0.00	0.00	7,079.54	-1,396.17	-994.17	2,132,179.38	2,857,375.99	36.8586070	-107.3743183

Design Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment	
		+N/-S (ft)	+E/-W (ft)		
7,645.00	7,079.54	-1,396.17	-994.17	RU 742H Actual POE @ 7645' MD	
17,088.00	7,031.23	-1,279.19	-10,433.50	RU 742H Actual FPP@ 17088' MD	
17,260.00	7,031.10	-1,276.65	-10,605.48	BHL @ 17260' MD	

Checked By: _____ Approved By: _____ Date: _____

Form 3160-5
(June 2019)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED OMB
No. 1004-0137 Expires:
December 31, 2024

SUNDRY NOTICES AND REPORTS ON WELLS
Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

5. Lease Serial No. NMSF078773

6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE - Other instructions on page 2

1. Type of Well

Oil Well Gas Well Other

2. Name of Operator
LOGOS OPERATING, LLC

3a. Address 2010 AFTON PLACE
FARMINGTON, NM 87401

3b. Phone No. (include area code)
(505) 278-8720

4. Location of Well (Footage, Sec., T.,R.,M., or Survey Description)
SEC 33 T31N R05W NENW (C) 334' FNL 1682' FWL

7. If Unit of CA/Agreement, Name and/or No.

8. Well Name and No.
ROSA UNIT 742H

9. API Well No. 30-039-31419

10. Field and Pool or Exploratory Area
BLANCO MANCOS

11. Country or Parish, State
RIO ARRIBA COUNTY, NM

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION				
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off	
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Hydraulic Fracturing	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity	
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other Completions	
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon		
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal		

413. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

8/4/2023 - MIRU WL. Run CBL (TOC @ 5831'). RDMO

8/11/2023 - RU. Open toe sleeves @ 17,040' & 17,088' (48perfs). RU Frac.

9/11/2023 - Frac'd stage 1 w/229,999 lbs Proppant, 100mesh, 40/70 sand, 6,127bbl slickwater. Standby for offset wells. Set CFP @ 17025'. Pressure to 6160psi.

Perf'd 17,010' - 16,852' w/6 SPF, .38" Dia, 60 phasing. Total of 48 perfs. POOH WL. Frac'd stage 2 w/472,893 lbs Proppant, 100mesh, 40/70 sand, 12,629bbls slickwater.

9/12 - 9/28/2023 - Perf intervals @ 16,822' - 7,645' w/6 SPF, .38" Dia, 60 phasing. Total of 2,040 perfs.. Frac'd w/22,076,254 lbs Proppant, 100mesh & 40/70 sand, 594,539bbls slickwater. RIH set kill plug @ 7604'. PT to 6500psi. Test good. RD WL. RDMO.

9/29 - 10/02/2023 - MIRU CTU. NU BOP. Good test. RIH w/2-3/8" CT and drillout BHA. DO kill plug @ 7,604'. Circulate, CO & DO composite frac plugs. POOH w/2-3/8" CT and drill out BHA. ND frac stack and moved to Rosa Unit 740H.

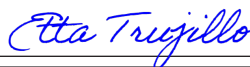
Per the approved operations plan, the 2-7/8", 6.5#, J-55, EUE tubing will be run once volumes and pressures decline and could be close to a year after the well is brought online.

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)

Etta Trujillo

Title Regulatory Specialist

Signature



Date 11/30/2023

THE SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

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.

(Instructions on page 2)

GENERAL INSTRUCTIONS

This form is designed for submitting proposals to perform certain well operations and reports of such operations when completed as indicated on Federal and Indian lands pursuant to applicable Federal law and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local area or regional procedures and practices, are either shown below, will be issued by or may be obtained from the local Federal office.

SPECIFIC INSTRUCTIONS

Item 4 - Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult the local Federal office for specific instructions.

Item 13: Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by the local Federal office. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to the top of any tubing left in the hole; method of closing top of well and date well site conditioned for final inspection looking for approval of the abandonment. If the proposal will involve **hydraulic fracturing operations**, you must comply with 43 CFR 3162.3-3, including providing information about the protection of usable water. Operators should provide the best available information about all formations containing water and their depths. This information could include data and interpretation of resistivity logs run on nearby wells. Information may also be obtained from state or tribal regulatory agencies and from local BLM offices.

NOTICES

The privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 351 et seq., 25 U.S.C. 396; 43 CFR 3160.

PRINCIPAL PURPOSE: The information is used to: (1) Evaluate, when appropriate, approve applications, and report completion of subsequent well operations, on a Federal or Indian lease; and (2) document for administrative use, information for the management, disposal and use of National Resource lands and resources, such as: (a) evaluating the equipment and procedures to be used during a proposed subsequent well operation and reviewing the completed well operations for compliance with the approved plan; (b) requesting and granting approval to perform those actions covered by 43 CFR 3162.3-2, 3162.3-3, and 3162.3-4; (c) reporting the beginning or resumption of production, as required by 43 CFR 3162.4-1(c) and (d) analyzing future applications to drill or modify operations in light of data obtained and methods used.

ROUTINE USES: Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions in connection with congressional inquiries or to consumer reporting agencies to facilitate collection of debts owed the Government.

EFFECT OF NOT PROVIDING THE INFORMATION: Filing of this notice and report and disclosure of the information is mandatory for those subsequent well operations specified in 43 CFR 3162.3-2, 3162.3-3, 3162.3-4.

The Paperwork Reduction Act of 1995 requires us to inform you that:

The BLM collects this information to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.

Response to this request is mandatory.

The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

BURDEN HOURS STATEMENT: Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Collection Clearance Officer (WO-630), 1849 C St., N.W., Mail Stop 401 LS, Washington, D.C. 20240

Form 3160-5
(June 2019)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED OMB
No. 1004-0137 Expires:
December 31, 2024

SUNDRY NOTICES AND REPORTS ON WELLS
**Do not use this form for proposals to drill or to re-enter an
abandoned well. Use Form 3160-3 (APD) for such proposals.**

5. Lease Serial No. NMSF078773

6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE - Other instructions on page 2

1. Type of Well

Oil Well Gas Well Other

7. If Unit of CA/Agreement, Name and/or No.
NMNM78407E

8. Well Name and No.
ROSA UNIT 742H

2. Name of Operator
LOGOS OPERATING, LLC

9. API Well No. 30-039-31419

3a. Address 2010 AFTON PLACE
FARMINGTON, NM 87401

3b. Phone No. (include area code)
(505) 278-8720

10. Field and Pool or Exploratory Area
BASIN MANCOS

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
SEC 33 T31N R05W NENW (C) 334' FNL 1682' FWL

11. Country or Parish, State
RIO ARRIBA COUNTY, NM

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input checked="" type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Hydraulic Fracturing	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

First delivery date: 10/17/2023
TP: 0 CP: 1645
Initial MCF: 386 MCF

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)

Etta Trujillo

Title Regulatory Specialist

Signature

Date 10/30/2023

THE SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

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

(Instructions on page 2)

From: blm-afmss-notifications@blm.gov
To: [Etta Trujillo](#)
Subject: Well Name: ROSA UNIT, Well Number: 742H, Notification of Well Completion Acceptance
Date: Monday, December 4, 2023 10:15:04 AM

The Bureau of Land Management

Notice of Acceptance for Well Completion Report

- Operator Name: **LOGOS OPERATING LLC**
- Well Name: **ROSA UNIT**
- Well Number: **742H**
- US Well Number: **3003931419**
- Well Completion Report Id: **WCR2023120490344**

This notification is automatically generated. Please do not reply to this message as this account is not monitored.

Submit To Appropriate District Office Two Copies District I 1625 N. French Dr., Hobbs, NM 88240 District II 811 S. First St., Artesia, NM 88210 District III 1000 Rio Brazos Rd., Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505	State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505	Form C-105 Revised April 3, 2017 1. WELL API NO. 30-039-31419 2. Type of Lease <input type="checkbox"/> STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/> FED/INDIAN 3. State Oil & Gas Lease No.
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WELL COMPLETION OR RECOMPLETION REPORT AND LOG

4. Reason for filing: <input checked="" type="checkbox"/> COMPLETION REPORT (Fill in boxes #1 through #31 for State and Fee wells only) <input type="checkbox"/> C-144 CLOSURE ATTACHMENT (Fill in boxes #1 through #9, #15 Date Rig Released and #32 and/or #33; attach this and the plat to the C-144 closure report in accordance with 19.15.17.13.K NMAC)	5. Lease Name or Unit Agreement Name ROSA UNIT 6. Well Number: 742H
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7. Type of Completion:
 NEW WELL WORKOVER DEEPENING PLUGBACK DIFFERENT RESERVOIR OTHER

8. Name of Operator LOGOS OPERATING, LLC 10. Address of Operator 2010 AFTON PLACE, FARMINGTON, NM 87401	9. OGRID 289408 11. Pool name or Wildcat BASIN MANCOS
--	--

12. Location	Unit Ltr	Section	Township	Range	Lot	Feet from the	N/S Line	Feet from the	E/W Line	County
Surface:	C	33	31N	R05W		334'	FNL	1682'	FWL	RIO ARRIBA
BH:	F	31	31N	R05W	2	1611'	FNL	180'	FWL	RIO ARRIBA

13. Date Spudded 4/14/2023	14. Date T.D. Reached 5/19/2023	15. Date Rig Released 5/29/2023	16. Date Completed (Ready to Produce) 10/2/2023	17. Elevations (DF and RKB, RT, GR, etc.) 6492'
18. Total Measured Depth of Well 17,260' MD / 7,031' TVD		19. Plug Back Measured Depth 17,135' MD / 7,031' TVD	20. Was Directional Survey Made? Y	21. Type Electric and Other Logs Run CBL

22. Producing Interval(s), of this completion - Top, Bottom, Name
 BASIN MANCOS (7080' - 7031') TVD

23. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
20"	94.0#	366' (GL)	26"	764 sks	Circ 12bbls to surface
13-3/8"	61.0#	3594'	17.5"	2700 sks	Circ 186bbls to surface
9-5/8"	47.0#	6525'	12.25"	2121 sks	TOC @ 2900' (CBL) DV tool @ 4918'
5-1/2"	20.0#	17,226'	8.5"	2468 sks	TOC @ 5831' (CBL)

24. LINER RECORD				25. TUBING RECORD			
SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN	SIZE	DEPTH SET	PACKER SET
					Pending		

26. Perforation record (interval, size, and number) 17,088 17,092' MD to 7,645' MD, 0.38" , 6SPF, 2136 total holes	27. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC. <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>DEPTH INTERVAL</th> <th>AMOUNT AND KIND MATERIAL USED</th> </tr> </thead> <tbody> <tr> <td>17,092' MD - 7,645' MD</td> <td>Frac'd 51 stages of 23,779,146lb Proppant, 100# mesh & 40/70 sand. 613,295bbls of slickwater.</td> </tr> <tr> <td>17,088</td> <td></td> </tr> </tbody> </table>	DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED	17,092' MD - 7,645' MD	Frac'd 51 stages of 23,779,146lb Proppant, 100# mesh & 40/70 sand. 613,295bbls of slickwater.	17,088	
DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED						
17,092' MD - 7,645' MD	Frac'd 51 stages of 23,779,146lb Proppant, 100# mesh & 40/70 sand. 613,295bbls of slickwater.						
17,088							

28. PRODUCTION

Date First Production 10/17/2023		Production Method (<i>Flowing, gas lift, pumping - Size and type pump</i>) Flowing			Well Status (<i>Prod. or Shut-in</i>) Producing		
Date of Test 10/17/2023	Hours Tested 12hrs	Choke Size 14/64	Prod'n For Test Period n/a	Oil - Bbl n/a	Gas - MCF 401 mcf	Water - Bbl. 29 bbls	Gas - Oil Ratio n/a
Flow Tubing Press. n/a	Casing Pressure 1659	Calculated 24-Hour Rate	Oil - Bbl. n/a	Gas - MCF 850 mcf	Water - Bbl. 696 bbls	Oil Gravity - API - (<i>Corr.</i>) n/a	

29. Disposition of Gas (<i>Sold, used for fuel, vented, etc.</i>) SOLD	30. Test Witnessed By
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31. List Attachments

32. If a temporary pit was used at the well, attach a plat with the location of the temporary pit.	33. Rig Release Date:
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34. If an on-site burial was used at the well, report the exact location of the on-site burial:

Latitude _____ Longitude _____ NAD83

I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief

Signature Printed Name Etta Trujillo Title Regulatory Specialist Date 12/04/2023

E-mail Address etrujillo@logosresourcesllc.com

INSTRUCTIONS

This form is to be filed with the appropriate District Office of the Division not later than 20 days after the completion of any newly-drilled or deepened well and not later than 60 days after completion of closure. When submitted as a completion report, this shall be accompanied by one copy of all electrical and radio-activity logs run on the well and a summary of all special tests conducted, including drill stem tests. All depths reported shall be measured depths. In the case of directionally drilled wells, true vertical depths shall also be reported. For multiple completions, items 11, 12 and 26-31 shall be reported for each zone.

INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE

Southeastern New Mexico		Northwestern New Mexico	
T. Anhy	T. Canyon	T. Ojo Alamo 2709	T. Penn A"
T. Salt	T. Strawn	T. Kirtland 2836	T. Penn. "B"
B. Salt	T. Atoka	T. Fruitland 3213	T. Penn. "C"
T. Yates	T. Miss	T. Pictured Cliffs 3626	T. Penn. "D"
T. 7 Rivers	T. Devonian	T. Cliff House 5715	T. Leadville
T. Queen	T. Silurian	T. Menefee 5756	T. Madison
T. Grayburg	T. Montoya	T. Point Lookout 5954	T. Elbert
T. San Andres	T. Simpson	T. Mancos 6453	T. McCracken
T. Glorieta	T. McKee	T. Gallup	T. Ignacio Otzte
T. Paddock	T. Ellenburger	Base Greenhorn	T. Granite
T. Blinebry	T. Gr. Wash	T. Dakota	
T. Tubb	T. Delaware Sand	T. Morrison	
T. Drinkard	T. Bone Springs	T. Todilto	
T. Abo	T.	T. Entrada	
T. Wolfcamp	T.	T. Wingate	
T. Penn	T.	T. Chinle	
T. Cisco (Bough C)	T.	T. Permian	

OIL OR GAS SANDS OR ZONES

No. 1, from.....to..... No. 3, from.....to.....
 No. 2, from.....to..... No. 4, from.....to.....

IMPORTANT WATER SANDS

Include data on rate of water inflow and elevation to which water rose in hole.

No. 1, from.....to.....feet.....
 No. 2, from.....to.....feet.....
 No. 3, from.....to.....feet.....

LITHOLOGY RECORD (Attach additional sheet if necessary)

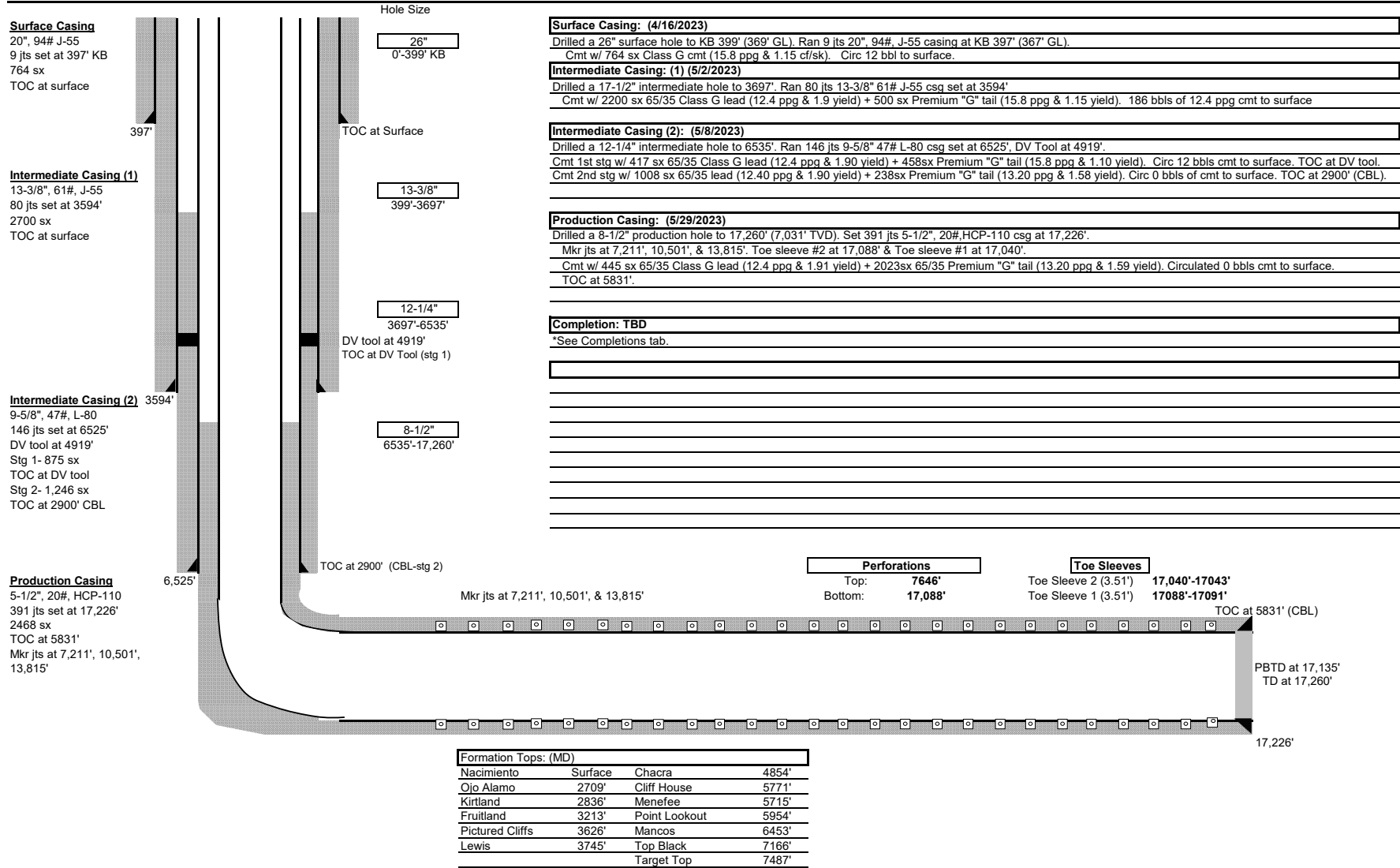
From	To	Thickness In Feet	Lithology	From	To	Thickness In Feet	Lithology



Well Name: Rosa Unit 742H
 Location: C - Sec 33, T31N, R05W, 334' FNL, 1682' FWL
 County: Rio Arriba
 API #: 30-039-31419
 Co-ordinates: 36.862321, -107.370875 NAD83
 Operator: LOGOS Operating, LLC

Wellbore Schematic
 Ground Elevation: 6492'
 KB Elevation: 6522'
 TD (TVD): 7,031'
 TD (MD): 17,260'
 PBTD: 17,135'

Prepared By: 6/16/2023 Peace
 Reviewed By: 9/8/2023 chr
 Last Updated: 9/8/2023 Peace
 Spud Date: 4/14/2023
 Completion Date:
 Last Workover Date: N/A



District I
 1625 N. French Dr., Hobbs, NM 88240
 Phone:(575) 393-6161 Fax:(575) 393-0720

District II
 811 S. First St., Artesia, NM 88210
 Phone:(575) 748-1283 Fax:(575) 748-9720

District III
 1000 Rio Brazos Rd., Aztec, NM 87410
 Phone:(505) 334-6178 Fax:(505) 334-6170

District IV
 1220 S. St Francis Dr., Santa Fe, NM 87505
 Phone:(505) 476-3470 Fax:(505) 476-3462

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

ACKNOWLEDGMENTS

Action 320225

ACKNOWLEDGMENTS

Operator: LOGOS OPERATING, LLC 2010 Afton Place Farmington, NM 87401	OGRID: 289408
	Action Number: 320225
	Action Type: [C-104] Tight Hole Completion Packet (C-104CT)

ACKNOWLEDGMENTS

<input checked="" type="checkbox"/>	I hereby certify that the required Water Use Report has been, or will be, submitted for this wells completion.
<input checked="" type="checkbox"/>	I hereby certify that the required FracFocus disclosure has been, or will be, submitted for this wells completion.

District I
 1625 N. French Dr., Hobbs, NM 88240
 Phone:(575) 393-6161 Fax:(575) 393-0720

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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 320225

CONDITIONS

Operator: LOGOS OPERATING, LLC 2010 Afton Place Farmington, NM 87401	OGRID: 289408
	Action Number: 320225
	Action Type: [C-104] Tight Hole Completion Packet (C-104CT)

CONDITIONS

Created By	Condition	Condition Date
plmartinez	File 3160-4 Completion Report within 10 days to NMOCD after BLM approval.	3/6/2024