

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

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 Test Allowable	
⁴ API Number 30-039-31384	⁵ Pool Name Basin Mancos		⁶ Pool Code 97232
⁷ Property Code 320608	⁸ Property Name Rosa Unit		⁹ Well Number 654H

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
A	25	31N	6W	1	1053	FNL	298	FEL	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
M	21	31N	5W		73	FSL	1209	FWL	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

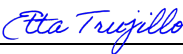
¹⁸ Transporter OGRID	¹⁹ Transporter Name and Address	²⁰ O/G/W G
373888	Harvest Four Corners, LLC 1755 Arroyo Dr. Bloomfield NM 87413	

IV. Well Completion Data

²¹ Spud Date	²² Ready Date	²³ TD	²⁴ PBTD	²⁵ Perforations	²⁶ DHC, MC
5/2/2019	~8/20/2021	18430 MD / 7027 TVD	18324 MD / 7023 TVD	~7500' MD / ~18283' MD ~6993' TVD / ~7019' TVD	R-13457A
²⁷ Hole Size		²⁸ Casing & Tubing Size	²⁹ Depth Set		³⁰ Sacks Cement
17-1/2"		13-3/8", 54.4#, J-55	327'		320sx (67bbbls - 378cf)
12-1/4"		9-5/8", 43.5#, N-80	6479'		1671sx (614bbbls- 3457cf) cmt plug - 641sx (120bbbls - 673cf)
8-1/2"		5 1/2", 20#, P-110	18406'		2180sx (607bbbls - 3401cf)
		~2 7/8", 6.5#, J-55	Not yet		

V. Well Test Data

³¹ Date New Oil	³² Gas Delivery Date	³³ Test Date	³⁴ Test Length	³⁵ Tbg. Pressure	³⁶ Csg. Pressure
	~8/20/2021				
³⁷ Choke Size	³⁸ Oil	³⁹ Water	⁴⁰ Gas		⁴¹ Test Method

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	
	Title: PETROLEUM SPECIALIST	
	Approval Date: 8/23/2021	
E-mail Address: etrujillo@logosresourcesllc.com		RT EXPIRES 11/20/2021
Date: 8/18/2021	Phone: 505-324-4154	



Logos Opersting LLC

Rio Arriba, NM NAD83

Rosa Unit 29

Rosa Unit #654H - Slot A2 (654H)

ST2

Design: ST2

Standard Survey Report

16 July, 2021



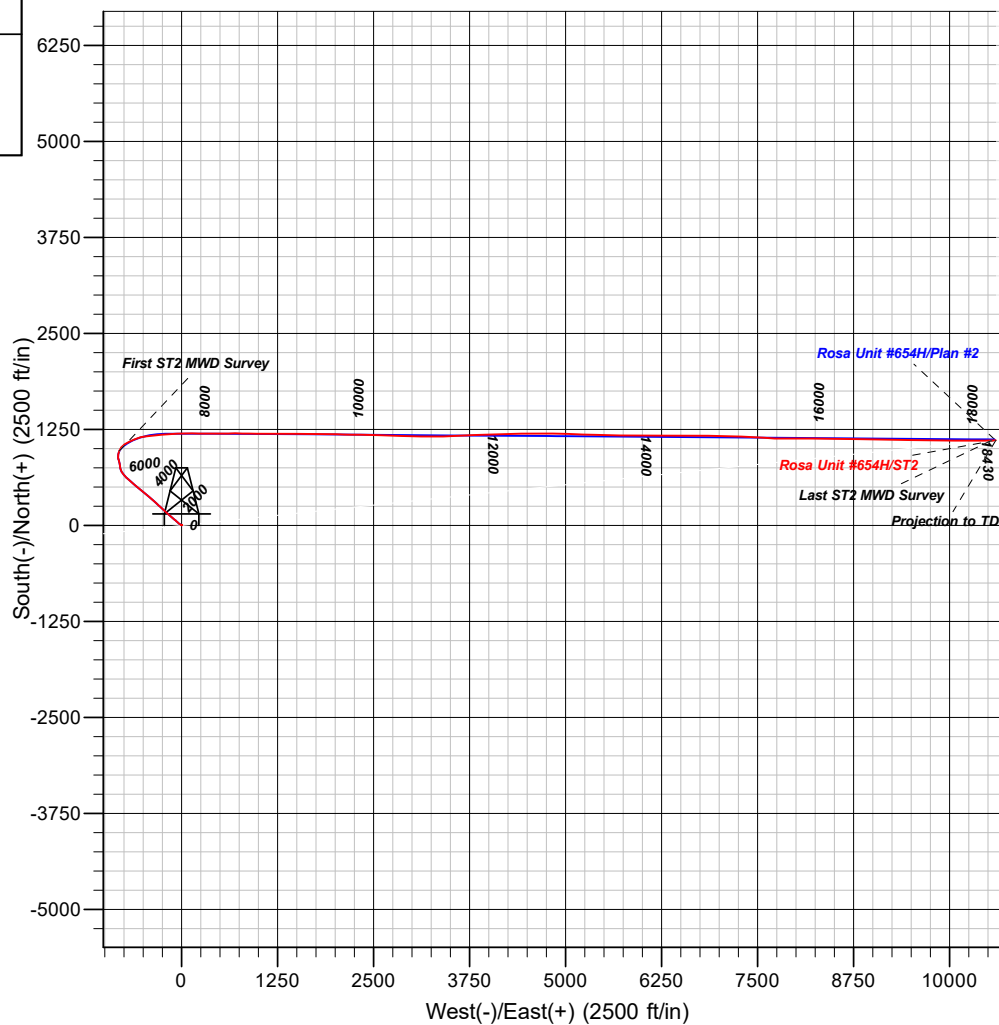
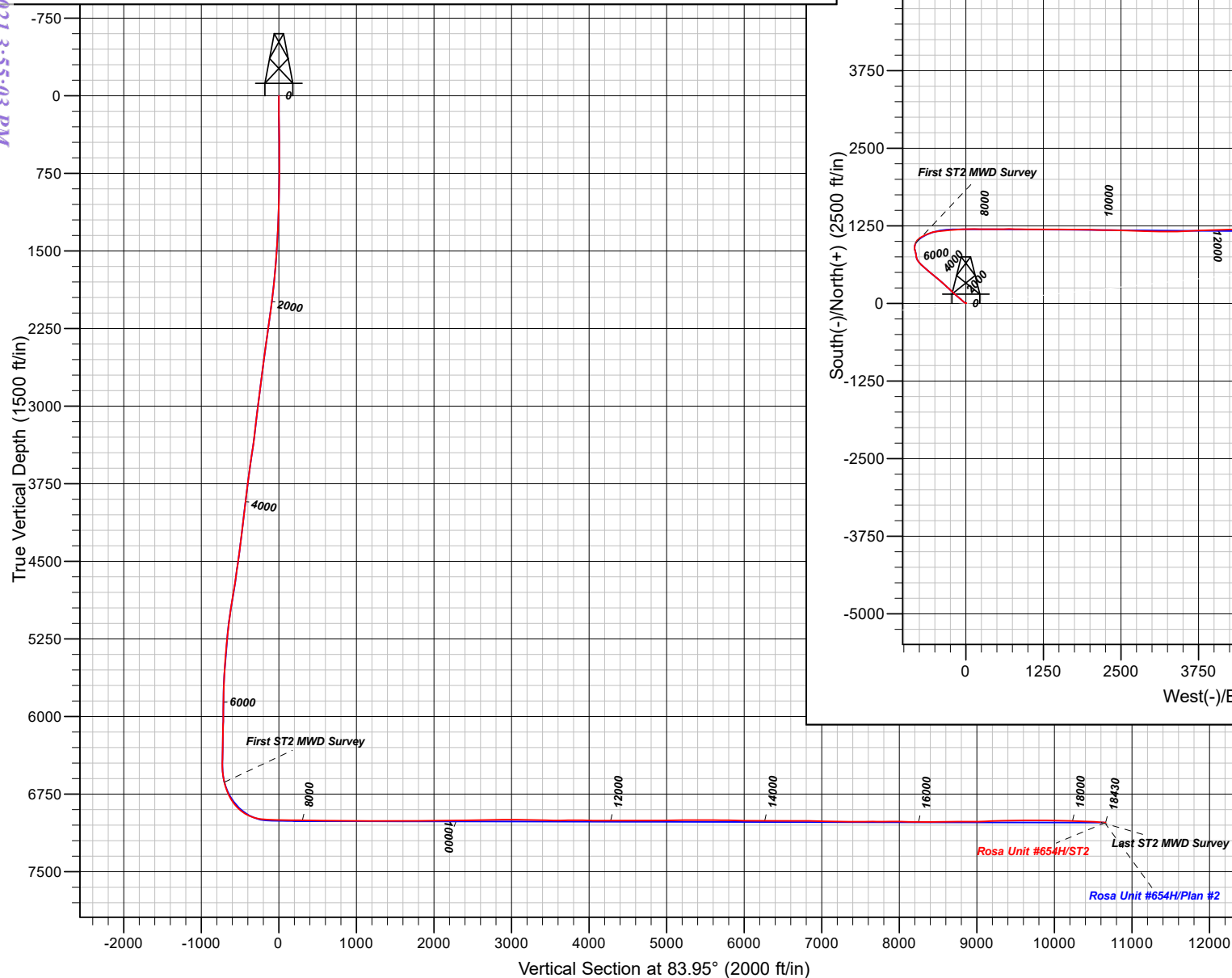


Company Name: Logos Operating LLC
 Project: Rio Arriba, NM NAD83
 Site: Rosa Unit 29
 Well: Rosa Unit #654H
 Wellbore: ST2



WELL DETAILS: Rosa Unit #654H

+NESW	Northing	Easting	Latitude	Longitude	
0.000.00	2138089.14	2847260.68	36.8749680	-107.4088040	A2 (654H)



Design: ST2 (Rosa Unit #654H/ST2)

Created By: Janie Collins Date: 11:10, July 16 2021

PROJECT DETAILS: Rio Arriba, NM NAD83

Geodetic System: US State Plane 1983
 Datum: North American Datum 1983
 Ellipsoid: GRS 1980
 Zone: New Mexico Western Zone

System Datum: Mean Sea Level
 Local North: True



Company:	Logos Operating LLC	Local Co-ordinate Reference:	Well Rosa Unit #654H - Slot A2 (654H)
Project:	Rio Arriba, NM NAD83	TVD Reference:	GL 6372' & RKB 25' @ 6397.00ft
Site:	Rosa Unit 29	MD Reference:	GL 6372' & RKB 25' @ 6397.00ft
Well:	Rosa Unit #654H	North Reference:	True
Wellbore:	ST2	Survey Calculation Method:	Minimum Curvature
Design:	ST2	Database:	EDM_16.0

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 29			
Site Position:		Northing:	2,138,126.53 usft	Latitude:	36.8750715
From:	Map	Easting:	2,847,195.58 usft	Longitude:	-107.4090261
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in		

Well	Rosa Unit #654H - Slot A2 (654H)					
Well Position	+N/-S	0.00 ft	Northing:	2,138,089.14 usft	Latitude:	36.8749680
	+E/-W	0.00 ft	Easting:	2,847,260.69 usft	Longitude:	-107.4088040
Position Uncertainty		0.00 ft	Wellhead Elevation:	0.00 ft	Ground Level:	6,372.00 ft
Grid Convergence:		0.25 °				

Wellbore	ST2				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM2021_FILE	6/27/2021	8.67	63.37	49,671.70000000

Design	ST2				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	6,760.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
	0.00	0.00	0.00	83.95	

Survey Program	Date	7/16/2021			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
359.00	5,101.00	Survey #1 - Surface MWD Survey (OH)	MWD+HDGM	OWSG MWD + HDGM	
5,279.00	6,760.00	Survey #1 - MWD Survey (ST1)	MWD+HDGM	OWSG MWD + HDGM	
6,808.00	18,430.00	Survey #1 - MWD Survey (ST2)	MWD+HDGM	OWSG MWD + HDGM	

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
359.00	1.62	13.80	358.95	4.93	1.21	1.72	0.45	0.45	0.00	
454.00	1.89	14.51	453.91	7.75	1.92	2.73	0.29	0.28	0.75	
549.00	1.01	36.92	548.88	9.94	2.82	3.85	1.09	-0.93	23.59	
645.00	0.66	190.55	644.87	10.07	3.23	4.27	1.70	-0.36	160.03	
740.00	1.32	206.65	739.86	8.55	2.63	3.52	0.75	0.69	16.95	
836.00	1.10	234.23	835.84	7.03	1.39	2.12	0.64	-0.23	28.73	
931.00	0.83	204.88	930.82	5.87	0.36	0.98	0.58	-0.28	-30.89	



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Site:	Rosa Unit 29	MD Reference:	GL 6372' & RKB 25' @ 6397.00ft
Well:	Rosa Unit #654H	North Reference:	True
Wellbore:	ST2	Survey Calculation Method:	Minimum Curvature
Design:	ST2	Database:	EDM_16.0

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
1,026.00	1.67	265.61	1,025.80	5.14	-1.31	-0.76	1.53	0.88	63.93
1,121.00	2.68	294.08	1,120.74	5.94	-4.72	-4.06	1.53	1.06	29.97
1,217.00	3.60	300.50	1,216.59	8.38	-9.36	-8.43	1.02	0.96	6.69
1,312.00	4.97	301.56	1,311.32	12.05	-15.44	-14.08	1.44	1.44	1.12
1,407.00	6.37	305.25	1,405.86	17.25	-23.25	-21.30	1.52	1.47	3.88
1,502.00	7.47	306.48	1,500.16	23.96	-32.52	-29.81	1.17	1.16	1.29
1,597.00	8.39	310.87	1,594.26	32.17	-42.73	-39.10	1.16	0.97	4.62
1,692.00	9.67	313.32	1,688.08	42.18	-53.77	-49.03	1.41	1.35	2.58
1,788.00	10.81	313.77	1,782.55	53.94	-66.14	-60.09	1.19	1.19	0.47
1,883.00	12.35	312.72	1,875.61	66.99	-80.04	-72.53	1.64	1.62	-1.11
1,978.00	13.71	309.38	1,968.16	81.03	-96.20	-87.13	1.64	1.43	-3.52
2,073.00	15.16	309.72	2,060.16	96.11	-114.46	-103.69	1.53	1.53	0.36
2,169.00	15.42	311.05	2,152.76	112.51	-133.74	-121.14	0.45	0.27	1.39
2,263.00	15.29	310.87	2,243.41	128.83	-152.54	-138.11	0.15	-0.14	-0.19
2,359.00	15.21	312.19	2,336.03	145.57	-171.44	-155.14	0.37	-0.08	1.38
2,454.00	14.85	312.37	2,427.78	162.14	-189.67	-171.52	0.38	-0.38	0.19
2,549.00	14.81	312.45	2,519.61	178.54	-207.62	-187.65	0.05	-0.04	0.08
2,645.00	14.77	312.19	2,612.43	195.04	-225.74	-203.93	0.08	-0.04	-0.27
2,740.00	14.99	312.63	2,704.25	211.50	-243.75	-220.10	0.26	0.23	0.46
2,836.00	14.85	312.37	2,797.01	228.19	-261.98	-236.47	0.16	-0.15	-0.27
2,930.00	14.85	313.25	2,887.87	244.57	-279.65	-252.32	0.24	0.00	0.94
3,024.00	14.28	312.19	2,978.85	260.61	-297.01	-267.89	0.67	-0.61	-1.13
3,119.00	13.62	313.51	3,071.05	276.17	-313.81	-282.95	0.77	-0.69	1.39
3,213.00	13.32	313.25	3,162.46	291.21	-329.72	-297.19	0.33	-0.32	-0.28
3,308.00	13.32	312.01	3,254.91	306.04	-345.82	-311.64	0.30	0.00	-1.31
3,403.00	14.46	310.96	3,347.13	321.14	-362.91	-327.04	1.23	1.20	-1.11
3,497.00	15.60	310.87	3,437.91	337.10	-381.33	-343.68	1.21	1.21	-0.10
3,591.00	15.78	309.73	3,528.41	353.54	-400.72	-361.23	0.38	0.19	-1.21
3,685.00	15.29	310.43	3,618.97	369.75	-419.98	-378.67	0.56	-0.52	0.74
3,780.00	14.85	309.47	3,710.71	385.61	-438.92	-395.83	0.53	-0.46	-1.01
3,875.00	13.36	309.99	3,802.84	400.40	-456.72	-411.98	1.57	-1.57	0.55
3,969.00	12.39	309.91	3,894.47	413.85	-472.78	-426.53	1.03	-1.03	-0.09
4,064.00	11.82	309.38	3,987.36	426.56	-488.12	-440.44	0.61	-0.60	-0.56
4,158.00	12.26	307.44	4,079.29	438.74	-503.48	-454.44	0.64	0.47	-2.06
4,252.00	13.18	307.71	4,170.99	451.36	-519.89	-469.42	0.98	0.98	0.29
4,346.00	13.23	311.49	4,262.50	465.04	-536.42	-484.42	0.92	0.05	4.02
4,441.00	13.93	311.22	4,354.85	479.78	-553.17	-499.52	0.74	0.74	-0.28
4,535.00	15.69	311.14	4,445.72	495.60	-571.25	-515.84	1.87	1.87	-0.09
4,629.00	16.04	312.10	4,536.14	512.67	-590.46	-533.14	0.47	0.37	1.02
4,724.00	14.99	309.64	4,627.68	529.31	-609.66	-550.48	1.30	-1.11	-2.59
4,818.00	15.25	309.64	4,718.42	544.95	-628.54	-567.60	0.28	0.28	0.00
4,912.00	17.09	309.11	4,808.70	561.55	-648.78	-585.98	1.96	1.96	-0.56
5,007.00	18.28	310.96	4,899.21	580.12	-670.86	-605.98	1.39	1.25	1.95



Lonestar Consulting

Survey Report



Company:	Logos Operating LLC	Local Co-ordinate Reference:	Well Rosa Unit #654H - Slot A2 (654H)
Project:	Rio Arriba, NM NAD83	TVD Reference:	GL 6372' & RKB 25' @ 6397.00ft
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Wellbore:	ST2	Survey Calculation Method:	Minimum Curvature
Design:	ST2	Database:	EDM_16.0

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Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
5,101.00	17.84	310.78	4,988.58	599.19	-692.90	-625.89	0.47	-0.47	-0.19	
5,279.00	13.45	318.43	5,159.96	632.51	-727.30	-656.59	2.72	-2.47	4.30	
5,373.00	10.63	319.13	5,251.88	647.25	-740.23	-667.89	3.00	-3.00	0.74	
5,468.00	11.12	318.61	5,345.18	660.75	-752.02	-678.19	0.53	0.52	-0.55	
5,562.00	11.73	321.33	5,437.31	675.01	-763.99	-688.59	0.87	0.65	2.89	
5,656.00	12.35	326.60	5,529.25	690.86	-775.49	-698.36	1.34	0.66	5.61	
5,751.00	12.74	333.28	5,621.99	708.70	-785.79	-706.72	1.58	0.41	7.03	
5,845.00	14.19	342.95	5,713.41	728.97	-793.83	-712.58	2.84	1.54	10.29	
5,940.00	15.50	352.00	5,805.25	752.68	-799.02	-715.24	2.80	1.38	9.53	
6,034.00	15.34	349.98	5,895.87	777.36	-802.93	-716.52	0.60	-0.17	-2.15	
6,129.00	14.37	350.16	5,987.69	801.35	-807.13	-718.17	1.02	-1.02	0.19	
6,223.00	12.26	348.67	6,079.16	822.64	-811.08	-719.86	2.27	-2.24	-1.59	
6,318.00	9.32	344.89	6,172.47	839.96	-815.07	-722.00	3.18	-3.09	-3.98	
6,412.00	6.77	340.93	6,265.54	852.54	-818.87	-724.45	2.77	-2.71	-4.21	
6,524.00	5.84	335.75	6,376.86	863.98	-823.36	-727.72	0.97	-0.83	-4.63	
6,620.00	20.79	355.96	6,470.05	885.56	-826.59	-728.65	16.08	15.57	21.05	
6,715.00	29.31	4.84	6,556.07	925.63	-825.81	-723.66	9.78	8.97	9.35	
6,760.00	29.99	21.32	6,595.24	947.12	-820.79	-716.39	18.14	1.51	36.63	
6,808.00	33.49	20.83	6,636.06	970.68	-811.71	-704.88	7.31	7.29	-1.03	
6,904.00	37.44	36.74	6,714.40	1,018.94	-784.77	-673.01	10.43	4.11	16.57	
6,999.00	40.12	57.21	6,788.76	1,058.83	-741.58	-625.85	13.74	2.82	21.55	
7,094.00	48.82	66.01	6,856.55	1,090.03	-683.01	-564.33	11.21	9.16	9.26	
7,190.00	60.95	65.39	6,911.67	1,122.32	-611.59	-489.90	12.65	12.64	-0.65	
7,285.00	67.68	76.20	6,952.92	1,150.19	-530.88	-406.70	12.45	7.08	11.38	
7,380.00	78.66	83.24	6,980.41	1,166.22	-441.58	-316.21	13.55	11.56	7.41	
7,476.00	85.86	86.22	6,993.34	1,174.93	-346.93	-221.16	8.11	7.50	3.10	
7,570.00	88.64	85.87	6,997.85	1,181.41	-253.27	-127.34	2.98	2.96	-0.37	
7,666.00	88.02	86.05	7,000.65	1,188.17	-157.55	-31.44	0.67	-0.65	0.19	
7,761.00	89.25	87.54	7,002.91	1,193.48	-62.73	63.41	2.03	1.29	1.57	
7,856.00	89.17	86.58	7,004.22	1,198.35	32.13	158.26	1.01	-0.08	-1.01	
7,952.00	90.31	90.71	7,004.65	1,200.62	128.08	253.91	4.46	1.19	4.30	
8,047.00	89.69	91.85	7,004.65	1,198.49	223.06	348.13	1.37	-0.65	1.20	
8,143.00	89.65	90.18	7,005.21	1,196.79	319.04	443.40	1.74	-0.04	-1.74	
8,238.00	89.34	90.00	7,006.04	1,196.65	414.03	537.85	0.38	-0.33	-0.19	
8,334.00	89.17	89.21	7,007.29	1,197.31	510.02	633.37	0.84	-0.18	-0.82	
8,429.00	89.03	89.30	7,008.78	1,198.54	605.00	727.96	0.18	-0.15	0.09	
8,520.00	88.99	89.79	7,010.36	1,199.26	695.99	818.51	0.54	-0.04	0.54	
8,615.00	89.56	91.11	7,011.56	1,198.52	790.97	912.89	1.51	0.60	1.39	
8,709.00	90.83	91.02	7,011.24	1,196.77	884.95	1,006.16	1.35	1.35	-0.10	
8,804.00	90.70	90.06	7,009.97	1,195.88	979.94	1,100.52	1.02	-0.14	-1.01	
8,898.00	90.35	90.23	7,009.11	1,195.64	1,073.94	1,193.97	0.41	-0.37	0.18	
8,993.00	89.87	90.14	7,008.93	1,195.33	1,168.94	1,288.41	0.51	-0.51	-0.09	
9,087.00	89.21	90.94	7,009.68	1,194.45	1,262.93	1,381.78	1.10	-0.70	0.85	
9,182.00	88.77	90.12	7,011.36	1,193.57	1,357.91	1,476.14	0.98	-0.46	-0.86	



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9,275.00	90.53	89.62	7,011.92	1,193.78	1,450.90	1,568.64	1.97	1.89	-0.54
9,370.00	89.38	91.20	7,012.00	1,193.10	1,545.89	1,663.03	2.06	-1.21	1.66
9,464.00	91.14	89.79	7,011.57	1,192.29	1,639.88	1,756.41	2.40	1.87	-1.50
9,559.00	91.19	90.76	7,009.64	1,191.83	1,734.86	1,850.81	1.02	0.05	1.02
9,653.00	90.66	91.11	7,008.12	1,190.30	1,828.84	1,944.10	0.68	-0.56	0.37
9,748.00	90.70	90.76	7,007.00	1,188.75	1,923.82	2,038.39	0.37	0.04	-0.37
9,842.00	90.22	90.67	7,006.24	1,187.57	2,017.81	2,131.73	0.52	-0.51	-0.10
9,936.00	89.38	92.08	7,006.57	1,185.32	2,111.78	2,224.94	1.75	-0.89	1.50
10,031.00	91.05	90.41	7,006.21	1,183.25	2,206.75	2,319.17	2.49	1.76	-1.76
10,125.00	91.14	90.50	7,004.42	1,182.51	2,300.73	2,412.54	0.14	0.10	0.10
10,218.00	90.79	91.90	7,002.85	1,180.56	2,393.69	2,504.78	1.55	-0.38	1.51
10,313.00	90.66	91.81	7,001.65	1,177.49	2,488.63	2,598.87	0.17	-0.14	-0.09
10,407.00	90.48	91.81	7,000.71	1,174.52	2,582.58	2,691.99	0.19	-0.19	0.00
10,501.00	91.01	90.94	6,999.49	1,172.26	2,676.54	2,785.19	1.08	0.56	-0.93
10,596.00	90.40	91.38	6,998.32	1,170.34	2,771.52	2,879.43	0.79	-0.64	0.46
10,690.00	89.87	92.08	6,998.10	1,167.50	2,865.47	2,972.56	0.93	-0.56	0.74
10,785.00	89.74	92.08	6,998.42	1,164.05	2,960.41	3,066.61	0.14	-0.14	0.00
10,880.00	89.08	92.25	6,999.40	1,160.46	3,055.34	3,160.63	0.72	-0.69	0.18
10,976.00	89.25	89.88	7,000.80	1,158.68	3,151.30	3,255.87	2.47	0.18	-2.47
11,071.00	89.43	89.00	7,001.90	1,159.61	3,246.29	3,350.43	0.95	0.19	-0.93
11,166.00	88.51	90.67	7,003.60	1,159.88	3,341.27	3,444.91	2.01	-0.97	1.76
11,261.00	89.34	88.83	7,005.39	1,160.30	3,436.25	3,539.40	2.12	0.87	-1.94
11,356.00	91.19	86.72	7,004.95	1,163.98	3,531.17	3,634.18	2.95	1.95	-2.22
11,450.00	90.26	87.42	7,003.76	1,168.79	3,625.03	3,728.03	1.24	-0.99	0.74
11,544.00	90.04	86.63	7,003.51	1,173.67	3,718.91	3,821.89	0.87	-0.23	-0.84
11,639.00	89.34	88.12	7,004.02	1,178.02	3,813.80	3,916.72	1.73	-0.74	1.57
11,734.00	88.42	87.60	7,005.88	1,181.56	3,908.72	4,011.48	1.11	-0.97	-0.55
11,828.00	90.70	87.60	7,006.60	1,185.50	4,002.62	4,105.28	2.43	2.43	0.00
11,923.00	89.96	89.09	7,006.06	1,188.24	4,097.58	4,199.99	1.75	-0.78	1.57
12,017.00	89.47	88.56	7,006.52	1,190.17	4,191.56	4,293.65	0.77	-0.52	-0.56
12,112.00	89.12	87.42	7,007.69	1,193.50	4,286.49	4,388.41	1.26	-0.37	-1.20
12,206.00	90.79	89.53	7,007.77	1,196.00	4,380.45	4,482.11	2.86	1.78	2.24
12,301.00	90.48	89.62	7,006.71	1,196.71	4,475.44	4,576.64	0.34	-0.33	0.09
12,391.00	90.79	88.91	7,005.72	1,197.86	4,565.43	4,666.25	0.86	0.34	-0.79
12,485.00	89.96	90.41	7,005.10	1,198.42	4,659.42	4,759.78	1.82	-0.88	1.60
12,581.00	89.91	88.91	7,005.21	1,198.99	4,755.42	4,855.30	1.56	-0.05	-1.56
12,675.00	90.04	92.08	7,005.25	1,198.18	4,849.40	4,948.67	3.38	0.14	3.37
12,770.00	90.13	90.32	7,005.11	1,196.19	4,944.38	5,042.91	1.86	0.09	-1.85
12,864.00	90.66	93.48	7,004.46	1,193.07	5,038.31	5,135.99	3.41	0.56	3.36
12,959.00	90.79	91.90	7,003.26	1,188.62	5,133.19	5,229.88	1.67	0.14	-1.66
13,053.00	90.31	92.52	7,002.36	1,184.99	5,227.12	5,322.90	0.83	-0.51	0.66
13,148.00	90.18	91.55	7,001.95	1,181.62	5,322.06	5,416.95	1.03	-0.14	-1.02
13,242.00	89.78	91.20	7,001.98	1,179.36	5,416.03	5,510.16	0.57	-0.43	-0.37



Company:	Logos Operating LLC	Local Co-ordinate Reference:	Well Rosa Unit #654H - Slot A2 (654H)
Project:	Rio Arriba, NM NAD83	TVD Reference:	GL 6372' & RKB 25' @ 6397.00ft
Site:	Rosa Unit 29	MD Reference:	GL 6372' & RKB 25' @ 6397.00ft
Well:	Rosa Unit #654H	North Reference:	True
Wellbore:	ST2	Survey Calculation Method:	Minimum Curvature
Design:	ST2	Database:	EDM_16.0

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
13,337.00	89.30	91.38	7,002.75	1,177.22	5,511.00	5,604.38	0.54	-0.51	0.19	
13,431.00	89.65	91.20	7,003.61	1,175.11	5,604.97	5,697.61	0.42	0.37	-0.19	
13,526.00	89.43	90.32	7,004.37	1,173.85	5,699.96	5,791.93	0.95	-0.23	-0.93	
13,621.00	89.17	91.02	7,005.53	1,172.74	5,794.95	5,886.27	0.79	-0.27	0.74	
13,717.00	88.73	90.85	7,007.29	1,171.17	5,890.92	5,981.54	0.49	-0.46	-0.18	
13,811.00	90.18	89.71	7,008.18	1,170.71	5,984.91	6,074.96	1.96	1.54	-1.21	
13,905.00	89.87	89.00	7,008.14	1,171.77	6,078.90	6,168.54	0.82	-0.33	-0.76	
14,001.00	88.99	89.71	7,009.10	1,172.85	6,174.89	6,264.11	1.18	-0.92	0.74	
14,096.00	90.04	90.85	7,009.90	1,172.39	6,269.88	6,358.53	1.63	1.11	1.20	
14,191.00	89.65	90.67	7,010.16	1,171.13	6,364.87	6,452.86	0.45	-0.41	-0.19	
14,287.00	90.57	90.58	7,009.98	1,170.08	6,460.87	6,548.20	0.96	0.96	-0.09	
14,382.00	89.78	90.23	7,009.69	1,169.41	6,555.86	6,642.60	0.91	-0.83	-0.37	
14,477.00	89.78	90.23	7,010.05	1,169.03	6,650.86	6,737.03	0.00	0.00	0.00	
14,573.00	89.43	90.67	7,010.71	1,168.27	6,746.86	6,832.41	0.59	-0.36	0.46	
14,694.00	89.65	88.56	7,011.68	1,169.08	6,867.84	6,952.81	1.75	0.18	-1.74	
14,790.00	88.90	91.20	7,012.90	1,169.29	6,963.83	7,048.28	2.86	-0.78	2.75	
14,885.00	87.89	92.87	7,015.56	1,165.91	7,058.72	7,142.29	2.05	-1.06	1.76	
14,980.00	90.00	91.81	7,017.31	1,162.04	7,153.62	7,236.25	2.49	2.22	-1.12	
15,075.00	90.00	91.81	7,017.31	1,159.04	7,248.57	7,330.36	0.00	0.00	0.00	
15,170.00	89.17	92.17	7,018.00	1,155.74	7,343.51	7,424.42	0.95	-0.87	0.38	
15,265.00	90.83	93.40	7,018.00	1,151.12	7,438.40	7,518.29	2.17	1.75	1.29	
15,360.00	90.48	93.75	7,016.91	1,145.20	7,533.20	7,611.95	0.52	-0.37	0.37	
15,456.00	89.25	94.63	7,017.14	1,138.18	7,628.95	7,706.41	1.58	-1.28	0.92	
15,550.00	90.57	90.67	7,017.28	1,133.84	7,722.82	7,799.31	4.44	1.40	-4.21	
15,645.00	90.44	89.71	7,016.45	1,133.52	7,817.82	7,893.74	1.02	-0.14	-1.01	
15,739.00	89.69	90.14	7,016.34	1,133.65	7,911.82	7,987.23	0.92	-0.80	0.46	
15,834.00	89.21	89.97	7,017.25	1,133.56	8,006.81	8,081.69	0.54	-0.51	-0.18	
15,928.00	88.95	89.71	7,018.76	1,133.82	8,100.80	8,175.18	0.39	-0.28	-0.28	
16,023.00	89.78	91.02	7,019.81	1,133.21	8,195.79	8,269.58	1.63	0.87	1.38	
16,119.00	89.60	90.67	7,020.33	1,131.80	8,291.78	8,364.88	0.41	-0.19	-0.36	
16,214.00	90.83	90.32	7,019.98	1,130.98	8,386.77	8,459.26	1.35	1.29	-0.37	
16,309.00	90.83	91.11	7,018.60	1,129.79	8,481.75	8,553.59	0.83	0.00	0.83	
16,392.00	90.40	90.90	7,017.71	1,128.34	8,564.74	8,635.95	0.58	-0.52	-0.25	
16,487.00	90.22	91.02	7,017.20	1,126.74	8,659.72	8,730.24	0.23	-0.19	0.13	
16,581.00	89.77	90.73	7,017.20	1,125.31	8,753.71	8,823.56	0.57	-0.48	-0.31	
16,675.00	89.43	90.83	7,017.86	1,124.03	8,847.70	8,916.89	0.38	-0.36	0.11	
16,770.00	91.81	91.14	7,016.83	1,122.40	8,942.67	9,011.16	2.53	2.51	0.33	
16,865.00	91.84	91.14	7,013.81	1,120.51	9,037.60	9,105.36	0.03	0.03	0.00	
16,960.00	91.61	91.00	7,010.95	1,118.73	9,132.54	9,199.59	0.28	-0.24	-0.15	
17,054.00	91.21	91.07	7,008.64	1,117.04	9,226.50	9,292.84	0.43	-0.43	0.07	
17,148.00	90.70	91.09	7,007.07	1,115.26	9,320.47	9,386.10	0.54	-0.54	0.02	
17,243.00	90.87	90.97	7,005.77	1,113.56	9,415.45	9,480.37	0.22	0.18	-0.13	
17,337.00	90.27	90.96	7,004.83	1,111.97	9,509.43	9,573.66	0.64	-0.64	-0.01	



Lonestar Consulting

Survey Report



Company:	Logos Operating LLC	Local Co-ordinate Reference:	Well Rosa Unit #654H - Slot A2 (654H)
Project:	Rio Arriba, NM NAD83	TVD Reference:	GL 6372' & RKB 25' @ 6397.00ft
Site:	Rosa Unit 29	MD Reference:	GL 6372' & RKB 25' @ 6397.00ft
Well:	Rosa Unit #654H	North Reference:	True
Wellbore:	ST2	Survey Calculation Method:	Minimum Curvature
Design:	ST2	Database:	EDM _16.0

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
17,433.00	90.03	90.57	7,004.58	1,110.69	9,605.42	9,668.98	0.48	-0.25	-0.41	
17,528.00	89.70	90.40	7,004.80	1,109.89	9,700.41	9,763.36	0.39	-0.35	-0.18	
17,624.00	89.60	90.50	7,005.39	1,109.13	9,796.41	9,858.75	0.15	-0.10	0.10	
17,718.00	89.33	90.69	7,006.27	1,108.16	9,890.40	9,952.11	0.35	-0.29	0.20	
17,814.00	89.50	90.48	7,007.25	1,107.18	9,986.39	10,047.46	0.28	0.18	-0.22	
17,909.00	89.06	90.41	7,008.44	1,106.44	10,081.38	10,141.84	0.47	-0.46	-0.07	
18,004.00	88.62	90.50	7,010.37	1,105.69	10,176.36	10,236.21	0.47	-0.46	0.09	
18,099.00	88.36	90.18	7,012.87	1,105.12	10,271.32	10,330.59	0.43	-0.27	-0.34	
18,194.00	88.33	89.67	7,015.61	1,105.25	10,366.28	10,425.03	0.54	-0.03	-0.54	
18,290.00	87.49	88.90	7,019.11	1,106.44	10,462.21	10,520.55	1.19	-0.88	-0.80	
18,370.00	86.44	87.59	7,023.35	1,108.89	10,542.06	10,600.21	2.10	-1.31	-1.64	
18,430.00	86.44	87.59	7,027.08	1,111.41	10,601.89	10,659.98	0.00	0.00	0.00	

Design Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
6,808.00	6,636.06	970.68	-811.71	First ST2 MWD Survey	
18,370.00	7,023.35	1,108.89	10,542.06	Last ST2 MWD Survey	
18,430.00	7,027.08	1,111.41	10,601.89	Projection to TD	

Checked By: _____ Approved By: _____ Date: _____

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 42822

ACKNOWLEDGMENTS

Operator: LOGOS OPERATING, LLC 2010 Afton Place Farmington, NM 87401	OGRID: 289408
	Action Number: 42822
	Action Type: [C-104] Completion Packet (C-104C)

ACKNOWLEDGMENTS

☒	I hereby certify that the required Water Use Report has been, or will be, submitted for this wells completion.
☒	I hereby certify that the required FracFocus disclosure has been, or will be, submitted for this wells completion.

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

COMMENTS

Action 42822

COMMENTS

Operator: LOGOS OPERATING, LLC 2010 Afton Place Farmington, NM 87401	OGRID: 289408
	Action Number: 42822
	Action Type: [C-104] Completion Packet (C-104C)

COMMENTS

Created By	Comment	Comment Date
kpickford	KP GEO Review 8/23/2021	8/23/2021

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CONDITIONS

Action 42822

CONDITIONS

Operator: LOGOS OPERATING, LLC 2010 Afton Place Farmington, NM 87401	OGRID: 289408
	Action Number: 42822
	Action Type: [C-104] Completion Packet (C-104C)

CONDITIONS

Created By	Condition	Condition Date
plmartinez	RT C-104 EXPIRES 11/20/2021.	8/23/2021