

Form 3160-5
(June 2019)UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM APPROVED
OMB No. 1004-0137
Expires: October 31, 2021**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.
NMSF078764
6. If Indian, Allottee or Tribe Name**SUBMIT IN TRIPLICATE - Other instructions on page 2**

1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other2. Name of Operator
LOGOS OPERATING LLC3a. Address
2010 AFTON PLACE
FARMINGTON, NM 874013b. Phone No. (include area code)
(505) 278-87204. Location of Well (Footage, Sec., T., R., M., or Survey Description)
SEC 30 T31N R05W NESW (K) 2317 FSL 947 FWL7. If Unit of CA/Agreement, Name and/or No.
NMNM078407E8. Well Name and No.
ROSA UNIT 658H9. API Well No.
30-039-3140610. Field and Pool or Exploratory Area
BASIN MANCOS11. 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				
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off	
☐ Subsequent Report	☐ Alter Casing	☐ Hydraulic Fracturing	☐ Reclamation	☐ Well Integrity	
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other	
	☒ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon		
	☐ Convert to Injection	☐ Plug Back	☐ 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 recompleat 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 recompleat in a new interval, a Form 3160-4 must be filed one 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.)

LLOGOS Operating request a change in plans for the following: OGOS Operating request a change in plans for the following:

Original bottom-hole location from 2639' FSL & 230' FWL to new **bottom hole location 2641' FSL & 170' FWL**Original TD @ 18,243" MD 6971' TVD to new **TD @ 17,215' MD 6971' TVD.**

Geology tops have been updated per changes. ology tops have been updated per changes.

Original KOP @ 5694" MD 5561' TVD to new **KOP @ 6351' MD 6350' TVD.**Original Landing point @ 7785" MD 6992" TVD to new **Landing point @ 7346' MD 6981' TVD.**Original 9.625" casing Intermediate @ 6514" MD to new **6235' MD**Original 5.5" casing Production @ 18,243" MD to new **17,215' MD**

Original 9.625" Intermediate & 5.5 Production cementing bbls and sacks have been updated per casing depth changesng bbls and sacks have been updated per casing depth changes.

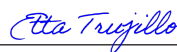
Attached: New C102, Operation and Directional Drill plans.

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

Etta Trujillo

Title Regulatory Specialist

Signature



Date 9/23/2021

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)

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

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

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

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

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-102
Revised August 1, 2011

Submit one copy to
Appropriate District Office

OIL CONSERVATION DIVISION

1220 South St. Francis Drive
Santa Fe, NM 87505

☒ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-039-31406	² Pool Code 97232	³ Pool Name BASIN MANCOS
⁴ Property Code 320608	⁵ Property Name ROSA UNIT	⁶ Well Number 658H
⁷ GRID No. 289408	⁸ Operator Name LOGOS OPERATING, LLC	⁹ Elevation 6394'

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
K	30	31N	5W	3	2317	SOUTH	947	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
L	26	31N	6W		2641	SOUTH	170	WEST	RIO ARriba

¹² Dedicated Acres 1649.96	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No. R-13457
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T31N R5W, Section 30 : Lots 1 - 4, E/2
T31N R6W, Section 25 : Lots 1 - 4, W/2 E/2, W/2
T31N R6W, Section 26 : Entire Section

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

17 OPERATOR CERTIFICATION
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.

Etta Trujillo 9/22/2021
Signature Date
Etta Trujillo
Printed Name
etrujillo@logosresourcesllc.com
E-mail Address

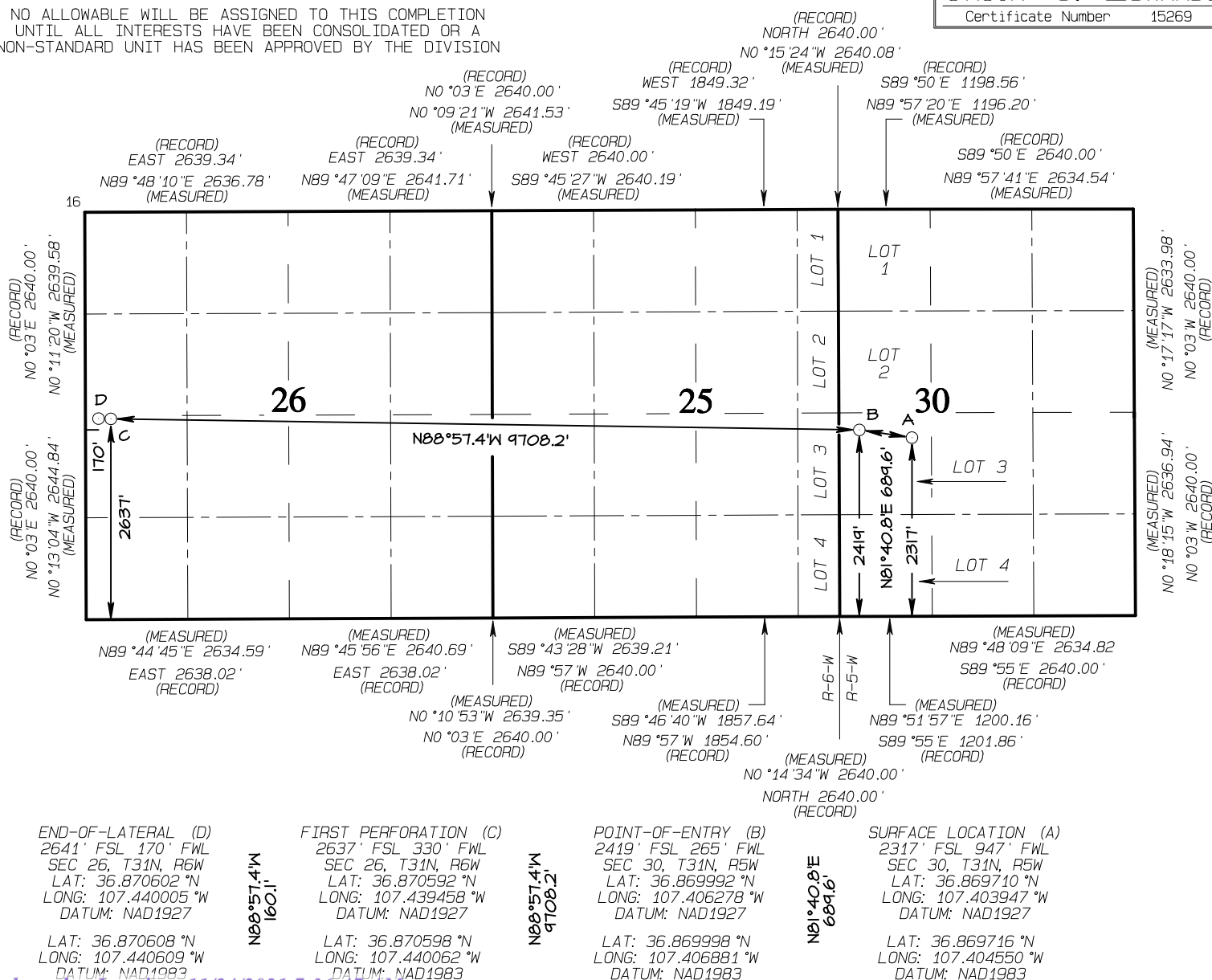
18 SURVEYOR CERTIFICATION
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

Date Revised: SEPTEMBER 22, 2021
Survey Date: SEPTEMBER 3, 2015

Signature and Seal of Professional Surveyor



JASON C. EDWARDS
Certificate Number 15269



Released to Imaging: 11/24/2021 10:36:47 AM



Company: Logos Operating LLC
Project: Rio Arriba, NM NAD83
Site: Rosa Unit 30
Well: Rosa Unit #658H
Wellbore: OH
Design: Plan #3

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

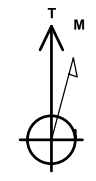


WELL DETAILS: Rosa Unit #658H

		GL 6394' @ 6394.00ft			
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	2136182.63	2848513.55	36.8697160	-107.4045499 A1 (658H)

Plan: Plan #3 (Rosa Unit #658H/OH)

Created By: Janie Collins Date: 9:31, September 22 2021



Azimuths to True North
Magnetic North: 10

Magnetic Field
Strength: 51652.71
Dip Angle: 63.83
Date: 12/31/2004
Model: IGRF2000

DESIGN TARGET DETAILS

Well	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
658H POE Rev 3	6981.00	102.80	-681.85	2136282.37	2847831.24	36.8699983	-107.4068809
658H BHL Rev 3	6971.00	326.77	-10547.57	2136462.03	2837964.64	36.8706080	-107.4406090
658H FPerf	6971.00	323.12	-10387.56	2136459.10	2838124.66	36.8705982	-107.4400620

SECTION DETAILS

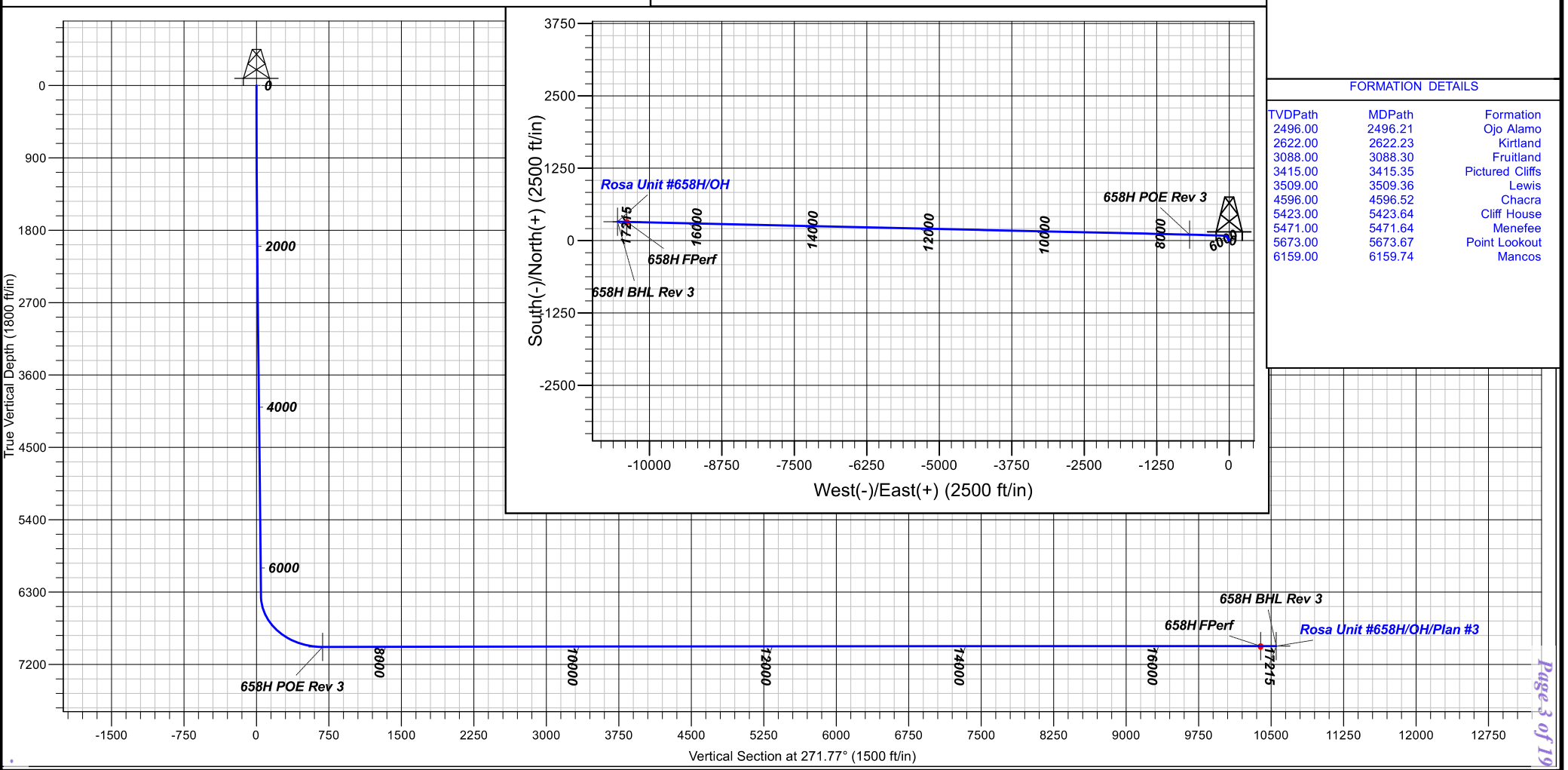
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1000.00	0.00	0.00	1000.00	0.00	0.00	0.00	0.00	0.00
1048.76	0.98	330.70	1048.76	0.36	-0.20	2.00	330.70	0.21
6350.74	0.98	330.70	6349.96	79.06	-44.36	0.00	0.00	46.79
7346.49	90.11	271.30	6981.00	102.80	-681.85	9.00	-59.40	684.71
17214.75	90.00	271.30	6971.00	326.77	-10547.57	0.00	180.00	10552.63

CASING DETAILS

TVD	MD	Name
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FORMATION DETAILS

TVDPath	MDPath	Formation
2496.00	2496.21	Ojo Alamo
2622.00	2622.23	Kirtland
3088.00	3088.30	Fruitland
3415.00	3415.35	Pictured Cliffs
3509.00	3509.36	Lewis
4596.00	4596.52	Chacra
5423.00	5423.64	Cliff House
5471.00	5471.64	Menefee
5673.00	5673.67	Point Lookout
6159.00	6159.74	Mancos



Received by OCB: 11/18/2021 06:43 PM



Logos Operating LLC

Rio Arriba, NM NAD83

Rosa Unit 30

Rosa Unit #658H - Slot A1 (658H)

OH

Plan: Plan #3

Standard Planning Report

22 September, 2021





Lonestar Consulting, LLC

Planning Report



Database:	Grand Junction	Local Co-ordinate Reference:	Well Rosa Unit #658H - Slot A1 (658H)
Company:	Logos Operating LLC	TVD Reference:	GL 6394' @ 6394.00ft
Project:	Rio Arriba, NM NAD83	MD Reference:	GL 6394' @ 6394.00ft
Site:	Rosa Unit 30	North Reference:	True
Well:	Rosa Unit #658H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #3		

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

Site	Rosa Unit 30			
Site Position:		Northing:	2,136,112.13 usft	Latitude: 36.8695220
From:	Lat/Long	Easting:	2,848,540.75 usft	Longitude: -107.4044580
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in	Grid Convergence: 0.26 °

Well	Rosa Unit #658H - Slot A1 (658H)			
Well Position	+N/-S	70.62 ft	Northing:	2,136,182.63 usft
	+E/-W	-26.88 ft	Easting:	2,848,513.55 usft
Position Uncertainty		0.00 ft	Wellhead Elevation:	Ground Level: 6,394.00 ft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2000	12/31/2004	10.80	63.87	51,652.07569632

Design	Plan #3			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	271.77

Plan Survey Tool Program	Date	9/16/2021		
Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	17,214.75 Plan #3 (OH)	MWD+HDGM	
			OWSG MWD + HDGM	

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,048.76	0.98	330.70	1,048.76	0.36	-0.20	2.00	2.00	0.00	330.70	
6,350.74	0.98	330.70	6,349.97	79.06	-44.36	0.00	0.00	0.00	0.00	
7,346.49	90.11	271.30	6,981.00	102.80	-681.85	9.00	8.95	-5.97	-59.40	658H POE Rev 3
17,214.75	90.00	271.30	6,971.00	326.77	-10,547.57	0.00	0.00	0.00	180.00	658H BHL Rev 3



Lonestar Consulting, LLC

Planning Report



Database:	Grand Junction	Local Co-ordinate Reference:	Well Rosa Unit #658H - Slot A1 (658H)
Company:	Logos Operating LLC	TVD Reference:	GL 6394' @ 6394.00ft
Project:	Rio Arriba, NM NAD83	MD Reference:	GL 6394' @ 6394.00ft
Site:	Rosa Unit 30	North Reference:	True
Well:	Rosa Unit #658H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #3		

Planned 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
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,048.76	0.98	330.70	1,048.76	0.36	-0.20	0.21	2.00	2.00	0.00
1,100.00	0.98	330.70	1,099.99	1.12	-0.63	0.66	0.00	0.00	0.00
1,200.00	0.98	330.70	1,199.98	2.61	-1.46	1.54	0.00	0.00	0.00
1,300.00	0.98	330.70	1,299.96	4.09	-2.30	2.42	0.00	0.00	0.00
1,400.00	0.98	330.70	1,399.95	5.58	-3.13	3.30	0.00	0.00	0.00
1,500.00	0.98	330.70	1,499.93	7.06	-3.96	4.18	0.00	0.00	0.00
1,600.00	0.98	330.70	1,599.92	8.54	-4.79	5.06	0.00	0.00	0.00
1,700.00	0.98	330.70	1,699.90	10.03	-5.63	5.93	0.00	0.00	0.00
1,800.00	0.98	330.70	1,799.89	11.51	-6.46	6.81	0.00	0.00	0.00
1,900.00	0.98	330.70	1,899.87	13.00	-7.29	7.69	0.00	0.00	0.00
2,000.00	0.98	330.70	1,999.86	14.48	-8.13	8.57	0.00	0.00	0.00
2,100.00	0.98	330.70	2,099.85	15.97	-8.96	9.45	0.00	0.00	0.00
2,200.00	0.98	330.70	2,199.83	17.45	-9.79	10.33	0.00	0.00	0.00
2,300.00	0.98	330.70	2,299.82	18.93	-10.62	11.21	0.00	0.00	0.00
2,400.00	0.98	330.70	2,399.80	20.42	-11.46	12.08	0.00	0.00	0.00
2,500.00	0.98	330.70	2,499.79	21.90	-12.29	12.96	0.00	0.00	0.00
2,600.00	0.98	330.70	2,599.77	23.39	-13.12	13.84	0.00	0.00	0.00
2,700.00	0.98	330.70	2,699.76	24.87	-13.96	14.72	0.00	0.00	0.00
2,800.00	0.98	330.70	2,799.74	26.36	-14.79	15.60	0.00	0.00	0.00
2,900.00	0.98	330.70	2,899.73	27.84	-15.62	16.48	0.00	0.00	0.00
3,000.00	0.98	330.70	2,999.72	29.33	-16.45	17.35	0.00	0.00	0.00
3,100.00	0.98	330.70	3,099.70	30.81	-17.29	18.23	0.00	0.00	0.00
3,200.00	0.98	330.70	3,199.69	32.29	-18.12	19.11	0.00	0.00	0.00
3,300.00	0.98	330.70	3,299.67	33.78	-18.95	19.99	0.00	0.00	0.00
3,400.00	0.98	330.70	3,399.66	35.26	-19.79	20.87	0.00	0.00	0.00
3,500.00	0.98	330.70	3,499.64	36.75	-20.62	21.75	0.00	0.00	0.00
3,600.00	0.98	330.70	3,599.63	38.23	-21.45	22.63	0.00	0.00	0.00
3,700.00	0.98	330.70	3,699.61	39.72	-22.28	23.50	0.00	0.00	0.00
3,800.00	0.98	330.70	3,799.60	41.20	-23.12	24.38	0.00	0.00	0.00
3,900.00	0.98	330.70	3,899.58	42.68	-23.95	25.26	0.00	0.00	0.00
4,000.00	0.98	330.70	3,999.57	44.17	-24.78	26.14	0.00	0.00	0.00
4,100.00	0.98	330.70	4,099.56	45.65	-25.62	27.02	0.00	0.00	0.00
4,200.00	0.98	330.70	4,199.54	47.14	-26.45	27.90	0.00	0.00	0.00
4,300.00	0.98	330.70	4,299.53	48.62	-27.28	28.77	0.00	0.00	0.00
4,400.00	0.98	330.70	4,399.51	50.11	-28.12	29.65	0.00	0.00	0.00
4,500.00	0.98	330.70	4,499.50	51.59	-28.95	30.53	0.00	0.00	0.00
4,600.00	0.98	330.70	4,599.48	53.08	-29.78	31.41	0.00	0.00	0.00
4,700.00	0.98	330.70	4,699.47	54.56	-30.61	32.29	0.00	0.00	0.00
4,800.00	0.98	330.70	4,799.45	56.04	-31.45	33.17	0.00	0.00	0.00
4,900.00	0.98	330.70	4,899.44	57.53	-32.28	34.05	0.00	0.00	0.00
5,000.00	0.98	330.70	4,999.43	59.01	-33.11	34.92	0.00	0.00	0.00
5,100.00	0.98	330.70	5,099.41	60.50	-33.95	35.80	0.00	0.00	0.00
5,200.00	0.98	330.70	5,199.40	61.98	-34.78	36.68	0.00	0.00	0.00



Lonestar Consulting, LLC

Planning Report



Database:	Grand Junction	Local Co-ordinate Reference:	Well Rosa Unit #658H - Slot A1 (658H)
Company:	Logos Operating LLC	TVD Reference:	GL 6394' @ 6394.00ft
Project:	Rio Arriba, NM NAD83	MD Reference:	GL 6394' @ 6394.00ft
Site:	Rosa Unit 30	North Reference:	True
Well:	Rosa Unit #658H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #3		

Planned 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)
5,300.00	0.98	330.70	5,299.38	63.47	-35.61	37.56	0.00	0.00	0.00
5,400.00	0.98	330.70	5,399.37	64.95	-36.44	38.44	0.00	0.00	0.00
5,500.00	0.98	330.70	5,499.35	66.44	-37.28	39.32	0.00	0.00	0.00
5,600.00	0.98	330.70	5,599.34	67.92	-38.11	40.19	0.00	0.00	0.00
5,700.00	0.98	330.70	5,699.32	69.40	-38.94	41.07	0.00	0.00	0.00
5,800.00	0.98	330.70	5,799.31	70.89	-39.78	41.95	0.00	0.00	0.00
5,900.00	0.98	330.70	5,899.30	72.37	-40.61	42.83	0.00	0.00	0.00
6,000.00	0.98	330.70	5,999.28	73.86	-41.44	43.71	0.00	0.00	0.00
6,100.00	0.98	330.70	6,099.27	75.34	-42.27	44.59	0.00	0.00	0.00
6,200.00	0.98	330.70	6,199.25	76.83	-43.11	45.47	0.00	0.00	0.00
6,300.00	0.98	330.70	6,299.24	78.31	-43.94	46.34	0.00	0.00	0.00
6,350.74	0.98	330.70	6,349.97	79.06	-44.36	46.79	0.00	0.00	0.00
6,400.00	5.00	280.94	6,399.16	79.84	-46.68	49.13	9.00	8.17	-101.01
6,500.00	13.96	274.68	6,497.69	81.65	-63.01	65.51	9.00	8.95	-6.26
6,600.00	22.94	273.29	6,592.46	83.76	-94.55	97.10	9.00	8.99	-1.40
6,700.00	31.94	272.65	6,681.11	86.10	-140.53	143.13	9.00	9.00	-0.64
6,800.00	40.94	272.27	6,761.48	88.63	-199.81	202.46	9.00	9.00	-0.38
6,900.00	49.94	272.01	6,831.58	91.27	-270.93	273.63	9.00	9.00	-0.26
7,000.00	58.93	271.81	6,889.68	93.97	-352.15	354.89	9.00	9.00	-0.20
7,100.00	67.93	271.64	6,934.36	96.65	-441.46	444.24	9.00	9.00	-0.17
7,200.00	76.93	271.50	6,964.51	99.26	-536.66	539.48	9.00	9.00	-0.15
7,300.00	85.93	271.36	6,979.40	101.72	-635.41	638.26	9.00	9.00	-0.14
7,346.49	90.11	271.30	6,981.00	102.80	-681.85	684.71	9.00	9.00	-0.13
7,400.00	90.11	271.30	6,980.89	104.02	-735.35	738.22	0.00	0.00	0.00
7,500.00	90.11	271.30	6,980.70	106.29	-835.32	838.21	0.00	0.00	0.00
7,600.00	90.11	271.30	6,980.50	108.56	-935.30	938.21	0.00	0.00	0.00
7,700.00	90.11	271.30	6,980.31	110.83	-1,035.27	1,038.21	0.00	0.00	0.00
7,800.00	90.11	271.30	6,980.12	113.10	-1,135.25	1,138.20	0.00	0.00	0.00
7,900.00	90.11	271.30	6,979.93	115.36	-1,235.22	1,238.20	0.00	0.00	0.00
8,000.00	90.11	271.30	6,979.74	117.63	-1,335.19	1,338.20	0.00	0.00	0.00
8,100.00	90.11	271.30	6,979.55	119.90	-1,435.17	1,438.19	0.00	0.00	0.00
8,200.00	90.10	271.30	6,979.37	122.17	-1,535.14	1,538.19	0.00	0.00	0.00
8,300.00	90.10	271.30	6,979.19	124.44	-1,635.12	1,638.19	0.00	0.00	0.00
8,400.00	90.10	271.30	6,979.01	126.71	-1,735.09	1,738.18	0.00	0.00	0.00
8,500.00	90.10	271.30	6,978.83	128.98	-1,835.06	1,838.18	0.00	0.00	0.00
8,600.00	90.10	271.30	6,978.65	131.25	-1,935.04	1,938.18	0.00	0.00	0.00
8,700.00	90.10	271.30	6,978.48	133.52	-2,035.01	2,038.17	0.00	0.00	0.00
8,800.00	90.10	271.30	6,978.31	135.79	-2,134.99	2,138.17	0.00	0.00	0.00
8,900.00	90.10	271.30	6,978.14	138.06	-2,234.96	2,238.16	0.00	0.00	0.00
9,000.00	90.10	271.30	6,977.97	140.33	-2,334.94	2,338.16	0.00	0.00	0.00
9,100.00	90.09	271.30	6,977.81	142.60	-2,434.91	2,438.16	0.00	0.00	0.00
9,200.00	90.09	271.30	6,977.64	144.87	-2,534.88	2,538.15	0.00	0.00	0.00
9,300.00	90.09	271.30	6,977.48	147.14	-2,634.86	2,638.15	0.00	0.00	0.00
9,400.00	90.09	271.30	6,977.32	149.41	-2,734.83	2,738.15	0.00	0.00	0.00
9,500.00	90.09	271.30	6,977.16	151.68	-2,834.81	2,838.14	0.00	0.00	0.00
9,600.00	90.09	271.30	6,977.01	153.95	-2,934.78	2,938.14	0.00	0.00	0.00
9,700.00	90.09	271.30	6,976.85	156.22	-3,034.75	3,038.14	0.00	0.00	0.00
9,800.00	90.09	271.30	6,976.70	158.49	-3,134.73	3,138.13	0.00	0.00	0.00
9,900.00	90.09	271.30	6,976.55	160.76	-3,234.70	3,238.13	0.00	0.00	0.00
10,000.00	90.08	271.30	6,976.40	163.02	-3,334.68	3,338.13	0.00	0.00	0.00
10,100.00	90.08	271.30	6,976.26	165.29	-3,434.65	3,438.12	0.00	0.00	0.00
10,200.00	90.08	271.30	6,976.11	167.56	-3,534.62	3,538.12	0.00	0.00	0.00
10,300.00	90.08	271.30	6,975.97	169.83	-3,634.60	3,638.11	0.00	0.00	0.00
10,400.00	90.08	271.30	6,975.83	172.10	-3,734.57	3,738.11	0.00	0.00	0.00



Lonestar Consulting, LLC

Planning Report



Database:	Grand Junction	Local Co-ordinate Reference:	Well Rosa Unit #658H - Slot A1 (658H)
Company:	Logos Operating LLC	TVD Reference:	GL 6394' @ 6394.00ft
Project:	Rio Arriba, NM NAD83	MD Reference:	GL 6394' @ 6394.00ft
Site:	Rosa Unit 30	North Reference:	True
Well:	Rosa Unit #658H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #3		

Planned 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)
10,500.00	90.08	271.30	6,975.69	174.37	-3,834.55	3,838.11	0.00	0.00	0.00
10,600.00	90.08	271.30	6,975.56	176.64	-3,934.52	3,938.10	0.00	0.00	0.00
10,700.00	90.08	271.30	6,975.43	178.91	-4,034.50	4,038.10	0.00	0.00	0.00
10,800.00	90.07	271.30	6,975.29	181.18	-4,134.47	4,138.10	0.00	0.00	0.00
10,900.00	90.07	271.30	6,975.16	183.45	-4,234.44	4,238.09	0.00	0.00	0.00
11,000.00	90.07	271.30	6,975.04	185.72	-4,334.42	4,338.09	0.00	0.00	0.00
11,100.00	90.07	271.30	6,974.91	187.99	-4,434.39	4,438.09	0.00	0.00	0.00
11,200.00	90.07	271.30	6,974.79	190.26	-4,534.37	4,538.08	0.00	0.00	0.00
11,300.00	90.07	271.30	6,974.66	192.53	-4,634.34	4,638.08	0.00	0.00	0.00
11,400.00	90.07	271.30	6,974.54	194.80	-4,734.31	4,738.08	0.00	0.00	0.00
11,500.00	90.07	271.30	6,974.43	197.07	-4,834.29	4,838.07	0.00	0.00	0.00
11,600.00	90.07	271.30	6,974.31	199.34	-4,934.26	4,938.07	0.00	0.00	0.00
11,700.00	90.06	271.30	6,974.20	201.61	-5,034.24	5,038.07	0.00	0.00	0.00
11,800.00	90.06	271.30	6,974.08	203.88	-5,134.21	5,138.06	0.00	0.00	0.00
11,900.00	90.06	271.30	6,973.97	206.15	-5,234.19	5,238.06	0.00	0.00	0.00
12,000.00	90.06	271.30	6,973.87	208.42	-5,334.16	5,338.06	0.00	0.00	0.00
12,100.00	90.06	271.30	6,973.76	210.69	-5,434.13	5,438.05	0.00	0.00	0.00
12,200.00	90.06	271.30	6,973.66	212.95	-5,534.11	5,538.05	0.00	0.00	0.00
12,300.00	90.06	271.30	6,973.55	215.22	-5,634.08	5,638.05	0.00	0.00	0.00
12,400.00	90.06	271.30	6,973.46	217.49	-5,734.06	5,738.04	0.00	0.00	0.00
12,500.00	90.06	271.30	6,973.36	219.76	-5,834.03	5,838.04	0.00	0.00	0.00
12,600.00	90.05	271.30	6,973.26	222.03	-5,934.00	5,938.03	0.00	0.00	0.00
12,700.00	90.05	271.30	6,973.17	224.30	-6,033.98	6,038.03	0.00	0.00	0.00
12,800.00	90.05	271.30	6,973.08	226.57	-6,133.95	6,138.03	0.00	0.00	0.00
12,900.00	90.05	271.30	6,972.99	228.84	-6,233.93	6,238.02	0.00	0.00	0.00
13,000.00	90.05	271.30	6,972.90	231.11	-6,333.90	6,338.02	0.00	0.00	0.00
13,100.00	90.05	271.30	6,972.81	233.38	-6,433.88	6,438.02	0.00	0.00	0.00
13,200.00	90.05	271.30	6,972.73	235.65	-6,533.85	6,538.01	0.00	0.00	0.00
13,300.00	90.05	271.30	6,972.65	237.92	-6,633.82	6,638.01	0.00	0.00	0.00
13,400.00	90.05	271.30	6,972.57	240.19	-6,733.80	6,738.01	0.00	0.00	0.00
13,500.00	90.04	271.30	6,972.49	242.46	-6,833.77	6,838.00	0.00	0.00	0.00
13,600.00	90.04	271.30	6,972.41	244.73	-6,933.75	6,938.00	0.00	0.00	0.00
13,700.00	90.04	271.30	6,972.34	247.00	-7,033.72	7,038.00	0.00	0.00	0.00
13,800.00	90.04	271.30	6,972.26	249.27	-7,133.70	7,137.99	0.00	0.00	0.00
13,900.00	90.04	271.30	6,972.19	251.54	-7,233.67	7,237.99	0.00	0.00	0.00
14,000.00	90.04	271.30	6,972.13	253.81	-7,333.64	7,337.99	0.00	0.00	0.00
14,100.00	90.04	271.30	6,972.06	256.08	-7,433.62	7,437.98	0.00	0.00	0.00
14,200.00	90.04	271.30	6,972.00	258.35	-7,533.59	7,537.98	0.00	0.00	0.00
14,300.00	90.04	271.30	6,971.93	260.62	-7,633.57	7,637.98	0.00	0.00	0.00
14,400.00	90.03	271.30	6,971.87	262.88	-7,733.54	7,737.97	0.00	0.00	0.00
14,500.00	90.03	271.30	6,971.82	265.15	-7,833.51	7,837.97	0.00	0.00	0.00
14,600.00	90.03	271.30	6,971.76	267.42	-7,933.49	7,937.97	0.00	0.00	0.00
14,700.00	90.03	271.30	6,971.71	269.69	-8,033.46	8,037.96	0.00	0.00	0.00
14,800.00	90.03	271.30	6,971.65	271.96	-8,133.44	8,137.96	0.00	0.00	0.00
14,900.00	90.03	271.30	6,971.60	274.23	-8,233.41	8,237.96	0.00	0.00	0.00
15,000.00	90.03	271.30	6,971.56	276.50	-8,333.39	8,337.95	0.00	0.00	0.00
15,100.00	90.03	271.30	6,971.51	278.77	-8,433.36	8,437.95	0.00	0.00	0.00
15,200.00	90.02	271.30	6,971.47	281.04	-8,533.33	8,537.95	0.00	0.00	0.00
15,300.00	90.02	271.30	6,971.42	283.31	-8,633.31	8,637.94	0.00	0.00	0.00
15,400.00	90.02	271.30	6,971.38	285.58	-8,733.28	8,737.94	0.00	0.00	0.00
15,500.00	90.02	271.30	6,971.34	287.85	-8,833.26	8,837.93	0.00	0.00	0.00
15,600.00	90.02	271.30	6,971.31	290.12	-8,933.23	8,937.93	0.00	0.00	0.00
15,700.00	90.02	271.30	6,971.27	292.39	-9,033.21	9,037.93	0.00	0.00	0.00
15,800.00	90.02	271.30	6,971.24	294.66	-9,133.18	9,137.92	0.00	0.00	0.00



Lonestar Consulting, LLC

Planning Report



Database:	Grand Junction	Local Co-ordinate Reference:	Well Rosa Unit #658H - Slot A1 (658H)
Company:	Logos Operating LLC	TVD Reference:	GL 6394' @ 6394.00ft
Project:	Rio Arriba, NM NAD83	MD Reference:	GL 6394' @ 6394.00ft
Site:	Rosa Unit 30	North Reference:	True
Well:	Rosa Unit #658H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #3		

Planned 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)	
15,900.00	90.02	271.30	6,971.21	296.93	-9,233.15	9,237.92	0.00	0.00	0.00	
16,000.00	90.02	271.30	6,971.18	299.20	-9,333.13	9,337.92	0.00	0.00	0.00	
16,100.00	90.01	271.30	6,971.16	301.47	-9,433.10	9,437.91	0.00	0.00	0.00	
16,200.00	90.01	271.30	6,971.13	303.74	-9,533.08	9,537.91	0.00	0.00	0.00	
16,300.00	90.01	271.30	6,971.11	306.01	-9,633.05	9,637.91	0.00	0.00	0.00	
16,400.00	90.01	271.30	6,971.09	308.28	-9,733.03	9,737.90	0.00	0.00	0.00	
16,500.00	90.01	271.30	6,971.07	310.55	-9,833.00	9,837.90	0.00	0.00	0.00	
16,600.00	90.01	271.30	6,971.06	312.81	-9,932.97	9,937.90	0.00	0.00	0.00	
16,700.00	90.01	271.30	6,971.04	315.08	-10,032.95	10,037.89	0.00	0.00	0.00	
16,800.00	90.01	271.30	6,971.03	317.35	-10,132.92	10,137.89	0.00	0.00	0.00	
16,900.00	90.01	271.30	6,971.02	319.62	-10,232.90	10,237.89	0.00	0.00	0.00	
17,000.00	90.00	271.30	6,971.01	321.89	-10,332.87	10,337.88	0.00	0.00	0.00	
17,100.00	90.00	271.30	6,971.00	324.16	-10,432.85	10,437.88	0.00	0.00	0.00	
17,200.00	90.00	271.30	6,971.00	326.43	-10,532.82	10,537.88	0.00	0.00	0.00	
17,214.75	90.00	271.30	6,971.00	326.77	-10,547.57	10,552.63	0.00	0.00	0.00	

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
658H FPerf	0.00	0.00	6,971.00	323.12	-10,387.56	2,136,459.10	2,838,124.66	36.8705982	-107.4400620
- hit/miss target									
- Shape									
- plan misses target center by 0.01ft at 17054.71ft MD (6971.01 TVD, 323.13 N, -10387.56 E)									
- Point									
658H BHL Rev 3	0.00	0.00	6,971.00	326.77	-10,547.57	2,136,462.03	2,837,964.64	36.8706080	-107.4406091
- plan hits target center									
- Point									
658H POE Rev 3	0.00	0.00	6,981.00	102.80	-681.85	2,136,282.37	2,847,831.24	36.8699983	-107.4068810
- plan hits target center									
- Point									

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
2,496.21	2,496.00	Ojo Alamo		0.00	0.00	
2,622.23	2,622.00	Kirtland		0.00	0.00	
3,088.30	3,088.00	Fruitland		0.00	0.00	
3,415.35	3,415.00	Pictured Cliffs		0.00	0.00	
3,509.36	3,509.00	Lewis		0.00	0.00	
4,596.52	4,596.00	Chacra		0.00	0.00	
5,423.64	5,423.00	Cliff House		0.00	0.00	
5,471.64	5,471.00	Menefee		0.00	0.00	
5,673.67	5,673.00	Point Lookout		0.00	0.00	
6,159.74	6,159.00	Mancos		0.00	0.00	



Lonestar Consulting, LLC
Planning Report



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Company:	Logos Operating LLC	TVD Reference:	GL 6394' @ 6394.00ft
Project:	Rio Arriba, NM NAD83	MD Reference:	GL 6394' @ 6394.00ft
Site:	Rosa Unit 30	North Reference:	True
Well:	Rosa Unit #658H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #3		

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment	
		+N/-S (ft)	+E/-W (ft)		
1,000.00	1,000.00	0.00	0.00	Start Build 2.00	
1,048.76	1,048.76	0.36	-0.20	Start 5301.97 hold at 1048.76 MD	
6,350.74	6,349.97	79.06	-44.36	Start DLS 9.00 TFO -59.40	
7,346.49	6,981.00	102.80	-681.85	Start Drop 0.00	
17,214.75	6,971.00	326.77	-10,547.57	TD at 17214.75	



LOGOS Operating, LLC Operations Plan

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

Date:	September 22, 2021	Pool:	Basin Mancos
Well Name:	Rosa Unit 658H	GL Elevation:	6,394'
Surface Location:	Sec 30, T31N, R5W 2317 FSL, 947 FWL (36.869716° N, 107.404550° W – NAD83)	Measured Depth:	17,215' (GL)
Bottom Hole Location:	Sec 26, T31N, R6W 2641 FSL, 170 FWL (36.870608° N, 107.440609° W – NAD83)	County:	Rio Arriba

Lease Serial #NMSF078764, CA Serial #NMNM78407E

I. GEOLOGY

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

NAME	MD	TVD	NAME	MD	TVD
OJO ALAMO	2,496'	2,496'	*POINT LOOKOUT	5,674'	5,673'
KIRTLAND	2,622'	2,622'	*MANCOS	6,160'	6,159'
*FRUITLAND	3,088'	3,088'	KICKOFF POINT	6,351'	6,350'
*PICTURED CLIFFS	3,415'	3,415'	LANDING POINT	7,346'	6,981'
LEWIS	3,509'	3,509'			
CHACRA	4,597'	4,596'			
*CLIFF HOUSE	5,424'	5,423'			
MENEFEE	5,472'	5,471'	TD	17,215'	6,971'

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

B. MUD LOGGING PROGRAM: Mudlogger on location from KOP to TD.

C. LOGGING PROGRAM: LWD GR from surface casing to TD.

D. NATURAL GAUGES: Gauge any noticeable increases in gas flow. Record all gauges in Tour book and on morning reports.

II. DRILLING

A. MUD PROGRAM: LSND mud (WBM) will be used to drill the 17-1/2" surface hole as well as the 12-1/4" directional vertical hole. A LSND (WBM) or (OBM) will be used to drill the 8-3/4" curve and lateral portion of the wellbore. Treat for lost circulation as necessary. Obtain 100% returns prior to cementing. Notify Engineering of any mud losses.

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

ROSA UNIT 658H



- B. BOP TESTING:** The BOPE will be tested to **250 psi (Low) for 5 minutes** and **1500 psi (High) for 10 minutes**. Pressure test surface casing to **600 psi for 30 minutes** and intermediate casing to **1500 psi for 30 minutes**. Utilize a BOPE Testing Unit with a recording chart and appropriate test plug for testing. The drum brakes will be inspected and tested each tour. BOP equipment will be tested every 30 days, after any repairs are made to the BOP equipment, and after the BOP equipment is subjected to pressure. Annular preventers will be functionally operated at least once per week. Pipe and blind rams shall be activated each trip or but not more than once a day. The New Mexico Oil & Gas Conservation Commission and the BLM will be notified 24 hours in advance of testing of BOPE. **All tests and inspections will be recorded and logged with time and results.** A full BOP test will be conducted when initially installed for the first well on the pad or if seals subject to test pressure are broken, following related repairs and at a minimum of 30 day intervals. A BOPE Shell Test only will be conducted for subsequent wells on the pad when seals subject to pressure have not been broken or repaired and fall within the 30 day interval of first full test.

III. MATERIALS

A. CASING EQUIPMENT:

CASING TYPE	OHSIZE (IN)	DEPTH (MD)	CSG SIZE	WEIGHT	GRADE	CONN
SURFACE	17.5"	320' or greater	13.375"	54.5 LBS	J-55 or equiv	BTC
INTERMEDIATE	12.25"	6,235' (6,234' TVD)	9.625"	43.5 LBS	N-80 or equiv	LTC/BTC
PRODUCTION	8.5"	17,215' (6,971' DVD)	5.5"	20 LBS	P-110 or equiv	LTC/BTC

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

B. FLOAT EQUIPMENT:

- SURFACE CASING:** 13-3/8" notched regular pattern guide shoe. Run (1) standard centralizer on each of the bottom (3) joints of Surface Casing.
- INTERMEDIATE CASING:** 9-5/8" cement nose guide shoe with a self-fill insert float. Place float collar one joint above the shoe. Install (1) centralizer on each of the bottom (3) joints and one standard centralizer every (3) joints to 2,500 ft. Run (1) centralizer at 2,500 ft., 2,300ft., 2,000ft., 1,500 ft., and 1,000 ft. Optional use of DV Tools (2) will be strategically placed above loss circulation zones anticipated in the Mesaverde and Fruitland Coal. Optional use of cancellation plugs for DV tools may be used if losses while cementing are not encountered.
- PRODUCTION CASING:** Run 5-1/2" casing with cement nose guide Float Shoe, 5-1/2" full or pup joints as necessary, Landing Collar, 5-1/2" full or pup joints as necessary, at least (1) one Toe Sleeve (Sliding Sleeve) positioned inside the applicable production area. Centralizer program will be determined by wellbore conditions. Production casing to be pressure tested during completion operations with frac stack installed.

C. CEMENTING:

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

- SURFACE:** Casing shall be set at ~ 320' and cemented to surface. TOC at Surface. 263 sks of 15.8 ppg, 1.18 cuft/sk yield Type Neat G, 30% excess.



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

	Top (ft)	Footage (ft)	Cement (ft3/ft) Annular Capacity	Excess (30%)	Total (ft3)	Total (bbl)	Slurry Yield (ft3/sk)	Density (PPG)	Sacks Cement
Stage 1 Tail	5,764	471	0.31318	1.3	209	37	1.15	182	15.8
Stage 1 Lead	4,647	1,117	0.31318	1.3	455	81	2.30	198	12.3
					664	118		380	
Stage 2 Tail	3,715	932	0.31318	1.3	379	68	1.50	253	13.5
Stage 2 Lead	3,118	597	0.31318	1.3	243	43	2.30	106	12.3
					623	111		359	
Stage 3 Tail	2,468	650	0.31318	1.3	265	47	1.99	133	12.8
Stage 3 Lead	320	2,148	0.31318	1.3	875	156	2.53	346	12
Stage 3 Lead	-	320	0.36268	1	116	21	2.53	46	12
					1,255	224		525	
All Stage Totals					2,542	453		1,263	2,542

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

3. **PRODUCTION:** Production casing will be cemented in 1 stage with at least 100' of cement overlap above intermediate shoe. A CBL, or alternatively, a Temperature Survey will be used to determine TOC.

	Top (ft)	Footage (ft)	Cement (ft3/ft) Annular Capacity	Excess (15%)	Total (ft3)	Total (bbl)	Slurry Yield (ft3/sk)	Density (PPG)	Sacks Cement
Cased Lead	6,135	100	0.2531	1	25	5	1.56	16	13
Open Hole Lead	6,235	10,980	0.2291	1.15	2,903	517	1.56	1,861	13
					2,929	522		1,877	

Calculations based on 15% excess for open hole and 150' overlap into intermediate casing. Actual volumes will vary.

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

IV. **COMPLETION**

A. **CBL**

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

B. **PRESSURE TEST**

- C. With frac stack installed on wellhead, pressure test 5-1/2" casing to 1550 psi (0.22 psi/ft * 6,981' TVD)

ROSA UNIT 658H



for 30 minutes. Increase pressure to Open RSI sleeves.

D. STIMULATION

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

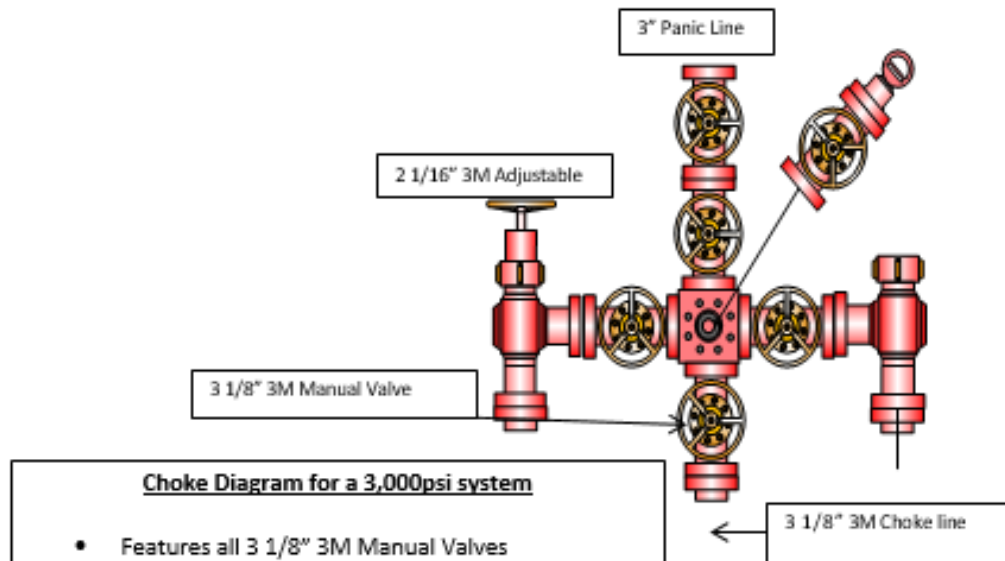
E. PRODUCTION TUBING

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

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

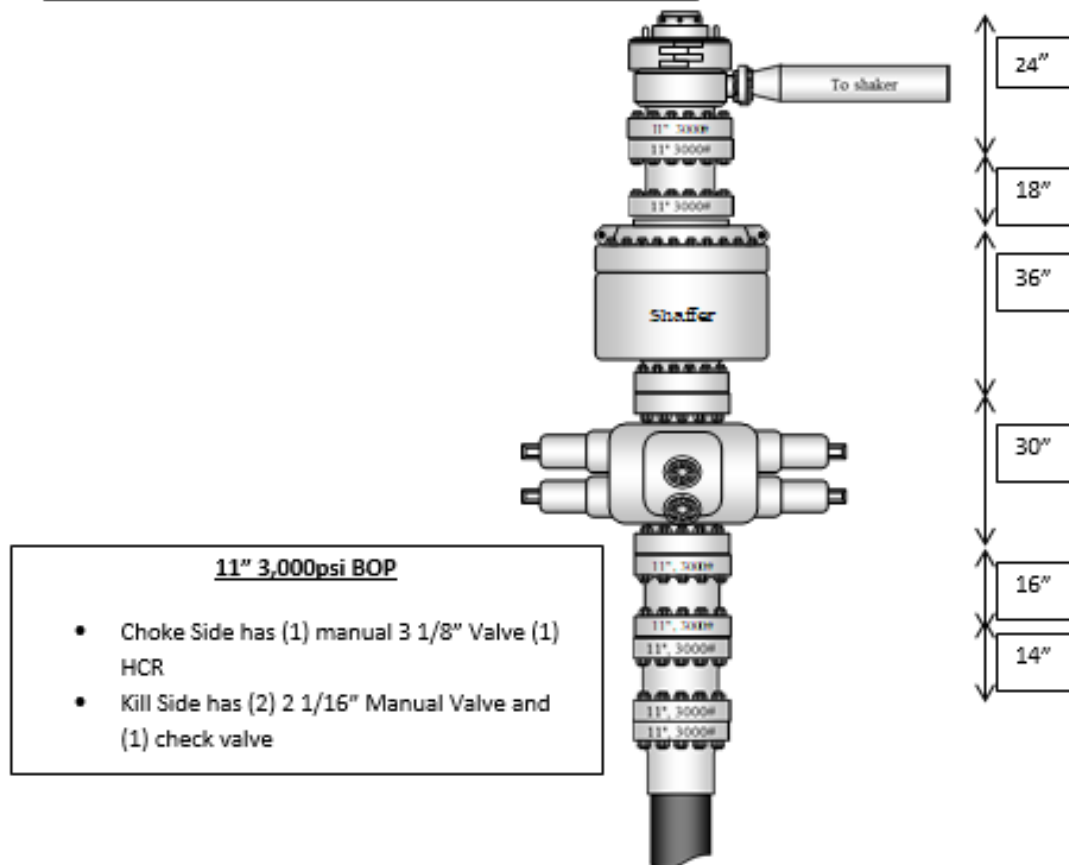


3M 11" B.O.P.E Diagram



Choke Diagram for a 3,000psi system

- Features all 3 1/8" 3M Manual Valves
- Two 2 1/16" Manual Adjustable Choke Valves
- 3" Panic Line and 2" Vent lines
- (2) 3 1/8" 3M ~~Coflex~~ Hose f/Choke to BOP



ROSA UNIT 658H

Well Name: ROSA UNIT	Well Location: T31N / R5W / SEC 30 / LOT 3 /	County or Parish/State:
Well Number: 658H	Type of Well: CONVENTIONAL GAS WELL	Allottee or Tribe Name:
Lease Number: NMSF078764	Unit or CA Name:	Unit or CA Number:
US Well Number:	Well Status: Approved Application for Permit to Drill	Operator: LOGOS OPERATING LLC

Notice of Intent

Sundry ID: 2635732

Type of Submission: Notice of Intent

Type of Action: Other

Date Sundry Submitted: 09/23/2021

Time Sundry Submitted: 12:38

Date proposed operation will begin: 09/23/2021

Procedure Description: LOGOS Operating request a change in plans for the following: Original bottom-hole location from 2639' FSL & 230' FWL to new bottom hole location 2641' FSL & 170' FWL Original TD @ 18,243" MD 6971' TVD to new TD @ 17,215' MD 6971' TVD. Geology tops have been updated per changes. Original KOP @ 5694" MD 5561' TVD to new KOP @ 6351' MD 6350' TVD. Original Landing point @ 7785" MD 6992" TVD to new Landing point @ 7346' MD 6981' TVD. Original 9.625" casing Intermediate @ 6514" MD to new 6235' MD Original 5.5" casing Production @ 18,243" MD to new 17,215' MD Original 9.625" Intermediate & 5.5 Production cementing bbls and sacks have been updated per casing depth changes. Attached: New C102, Operation and Directional Drill plans.

Surface Disturbance

Is any additional surface disturbance proposed?: No

NOI Attachments

Procedure Description

3160_5_Rosa_Unit_658H_Change_in_plans_20210922_20210923123706.pdf

Well Name: ROSA UNIT	Well Location: T31N / R5W / SEC 30 / LOT 3 /	County or Parish/State:
Well Number: 658H	Type of Well: CONVENTIONAL GAS WELL	Allottee or Tribe Name:
Lease Number: NMSF078764	Unit or CA Name:	Unit or CA Number:
US Well Number:	Well Status: Approved Application for Permit to Drill	Operator: LOGOS OPERATING LLC

Operator Certification

I certify that the foregoing is true and correct. Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction. Electronic submission of Sundry Notices through this system satisfies regulations requiring a submission of Form 3160-5 or a Sundry Notice.

Operator Electronic Signature: ETTA TRUJILLO	Signed on: SEP 23, 2021 12:37 PM
Name: LOGOS OPERATING LLC	
Title: Regulatory Specialist	
Street Address: 2010 AFTON PLACE	
City: Farmington	State: NM
Phone: (505) 324-4154	
Email address: ETRUJILLO@LOGOSRESOURCESLLC.COM	

Field Representative

Representative Name:		
Street Address:		
City:	State:	Zip:
Phone:		
Email address:		

BLM Point of Contact

BLM POC Name: KENNETH G RENNICK	BLM POC Title: Petroleum Engineer
BLM POC Phone: 5055647742	BLM POC Email Address: krennick@blm.gov
Disposition: Approved	Disposition Date: 11/18/2021
Signature: Kenneth Rennick	

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District IV

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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

COMMENTS

Action 62555

COMMENTS

Operator: LOGOS OPERATING, LLC 2010 Afton Place Farmington, NM 87401	OGRID: 289408
	Action Number: 62555
	Action Type: [C-103] NOI Change of Plans (C-103A)

COMMENTS

Created By	Comment	Comment Date
kpickford	KP GEO Review 11/23/2021	11/23/2021

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Santa Fe, NM 87505

CONDITIONS

Action 62555

CONDITIONS

Operator: LOGOS OPERATING, LLC 2010 Afton Place Farmington, NM 87401	OGRID: 289408
	Action Number: 62555
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
kpickford	Adhere to previous NMOCD Conditions of Approval	11/23/2021