

Submit a Copy To Appropriate District Office
 District I – (575) 393-6161
 1625 N. French Dr., Hobbs, NM 88240
 District II – (575) 748-1283
 811 S. First St., Artesia, NM 88210
 District III – (505) 334-6178
 1000 Rio Brazos Rd., Aztec, NM 87410
 District IV – (505) 476-3460
 1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
 Energy, Minerals and Natural Resources

Form C-103
 Revised July 18, 2013

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

WELL API NO. 30-039-23265
5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease No. NMSF078771
7. Lease Name or Unit Agreement Name ROSA UNIT
8. Well Number 098
9. OGRID Number 289408
10. Pool name or Wildcat MANCOS/DAKOTA

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)	
1. Type of Well: Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other	
2. Name of Operator LOGOS OPERATING LLC	
3. Address of Operator 2010 AFTON PLACE, FARMINGTON, NM 87401	
4. Well Location Unit Letter L : 1840 feet from the S line and 790 feet from the W line Section 23 Township 31N Range 6W NMPM NWSW County RIO ARRIBA	
11. Elevation (Show whether DR, RKB, RT, GR, etc.) GL: 6267	

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>	P AND A <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	MULTIPLE COMPL <input type="checkbox"/>	CASING/CEMENT JOB <input type="checkbox"/>	
DOWNHOLE COMMINGLE <input type="checkbox"/>			
CLOSED-LOOP SYSTEM <input type="checkbox"/>			
OTHER: WELLBORE ISOLATION <input checked="" type="checkbox"/>		OTHER: <input type="checkbox"/>	

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

LOGOS requests to conduct a wellbore isolation for subject well. Rosa Unit 098 is at risk for a catastrophic failure from the nearby Pad 29 completions. In order to preserve wellbore integrity and protect the remaining reserves of the well, it is recommended to isolate the wellbore. See attached procedure.

Logos is approved to isolate the well bore, but shall submit another NOI prior to removing the BP

Spud Date:

Rig Release Date:

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Dacye Shull TITLE Regulatory Technician DATE 09/29/2023

Type or print name Dacye Shull E-mail address: dshull@logosresourcesllc.com PHONE: (505) 787-2027

For State Use Only

APPROVED BY: Dean R. McClure TITLE Petroleum Engineer DATE 09/29/2023

Conditions of Approval (if any):

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. **NMSF078771**

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 LLC**3a. Address **2010 AFTON PLACE, FARMINGTON, NM 87401** 3b. Phone No. (include area code)
(505) 278-87204. Location of Well (Footage, Sec., T., R., M., or Survey Description)
SEC 23/T31N/R6W/NMP7. If Unit of CA/Agreement, Name and/or No.
ROSA UNIT, ROSA UNIT--DK/NMNM78407B, NMNM788. Well Name and No. **ROSA UNIT/98**9. API Well No. **3003923265**10. Field and Pool or Exploratory Area
BLANCO/Blanco Mesaverde11. Country or Parish, State
RIO ARRIBA/NM**12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION				
<input checked="" 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 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	
	<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	Wellbore Isolation	

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 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.)

LOGOS Operating requests to conduct a wellbore isolation for subject well due to nearby PAD 29 completions. Once offset completions are complete, LOGOS will mill out the bridge plug and down hole commingle the Basin Mancos and Basin Dakota per the attached procedure.

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)
DACYE SHULL / Ph: (505) 324-4145Title **REGULATORY TECH**

Signature (Electronic Submission)

Dacye Shull

Date

09/27/2023**THE SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by

KENNETH G RENNICK / Ph: (505) 564-7742 / ApprovedTitle **Petroleum Engineer**Date **09/27/2023**

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 **FARMINGTON**

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

Additional Information

Location of Well

0. SHL: NWSW / 1840 FSL / 790 FWL / TWSP: 31N / RANGE: 6W / SECTION: 23 / LAT: 36.88268 / LONG: -107.43803 (TVD: 0 feet, MD: 0 feet)

BHL: NWSW / 1840 FSL / 790 FWL / TWSP: 31N / SECTION: / LAT: 36.88268 / LONG: 107.43803 (TVD: 0 feet, MD: 0 feet)



DOWNHOLE COMMINGLE PROCEDURE AND ALLOCATION-NMOCD (2023)

Rosa Unit 98

30-039-23265

1840' FSL & 790' FWL

Section 23, T31N, R06W

Rio Arriba, New Mexico

LAT: 36.8829536° N LONG: -107.4384918° W

Mancos/Dakota

PROJECT OBJECTIVE:

Remove packer and set a bridge plug above the Mancos perforations and load the hole to protect the wellbore during offset completions. Once offset completions are complete, mill the bridge plug and downhole commingle Mancos and Dakota.

WORKOVER PROCEDURE:

1. Hold safety meeting. MIRU workover rig. Place fire and safety equipment in strategic locations. Comply with all LOGOS, BLM, and NMOCD rules and regulations.
2. Lay flow lines. Check and record casing and tubing pressures. Sell pressure down to line. Kill well if necessary.
3. Nipple down wellhead and nipple up BOP.
4. Pull tubing and packer out of hole and lay tubing down.
5. Set bridge plug within 50' of the Mancos perforations and load the hole with KCL water. SI well for offset completions.
6. Once offset completions are complete, trip in hole and mill the bridge plug.
7. Run in hole with single 2-3/8" production tubing string.
8. Return to production as a Mancos/Dakota commingle.

PRODUCTION ALLOCATION

Historic production data from both zones in this well was gathered and analyzed. Cumulative production is not an applicable allocation method in this case; therefore, production rates were used to determine production allocation.

Total Gas Production Rate	117 Mcfd
MC Gas Production Rate	17 Mcfd
DK Gas Production Rate	100 Mcfd

MC allocation = MC rate/total rate = 17/117 = **15%**

DK allocation = DK rate/total rate = 100/117 = **85%**

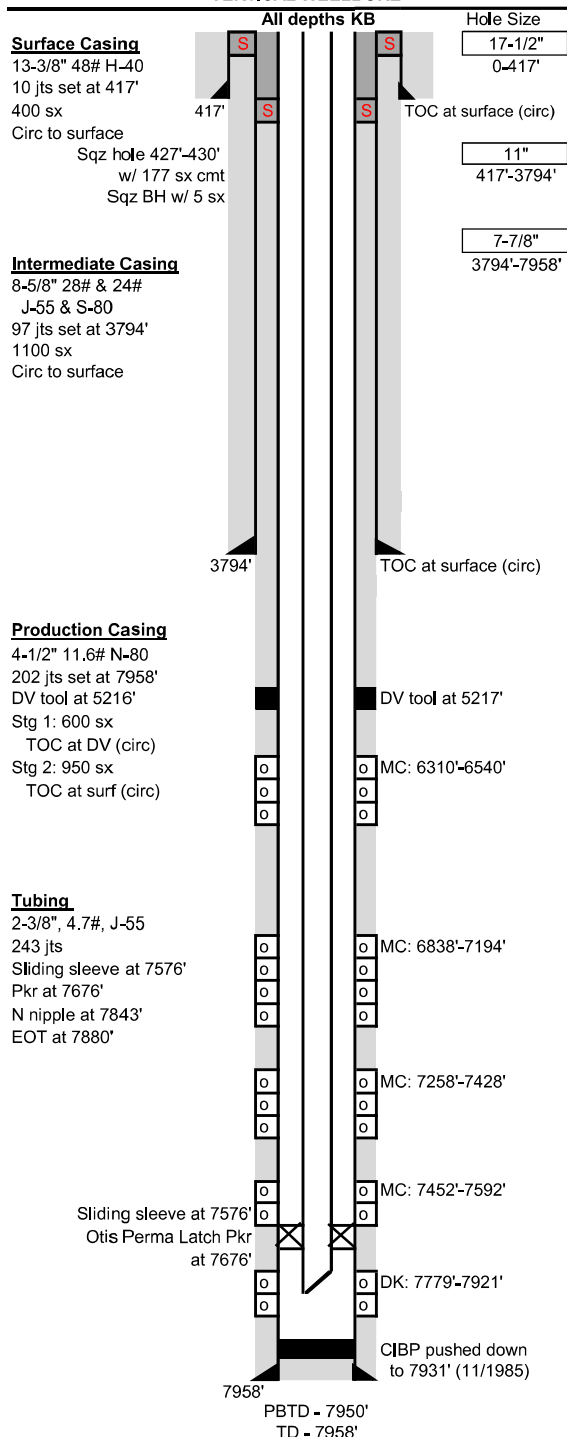


Wellbore Schematic

Well Name: Rosa Unit 098
 Location: L-23-31N-06W 1840' FSL & 790' FWL
 County: Rio Arriba, NM
 API #: 30-039-23265
 Co-ordinates: Lat 36.8829536, Long -107.4384918 NAD1983
 Elevations: GROUND: 6267'
 KB: 6279'
 PBD: 7950'
 TD: 7958'

Date Prepared: 7/10/2023 Moss
 Reviewed By: 7/11/2023 Peace
 Last Updated:
 Spud Date: 9/13/1983
 Completion Date: 12/21/1983
 Last Workover Date: 11/15/1985

VERTICAL WELLBORE





Proposed Wellbore

Well Name:	Rosa Unit 098		
Location:	L-23-31N-06W	1840' FSL & 790' FWL	
County:	Rio Arriba, NM		
API #:	30-039-23265		
Co-ordinates:	Lat 36.8829536, Long -107.4384918 NAD1983		
Elevations:	GROUND:	6267'	
	KB:	6279'	
Depths (KB):	PBTD:	7950'	
	TD:	7958'	

Date Prepared:	7/10/2023	Moss
Reviewed By:	7/11/2023	Peace
Last Updated:	7/18/2023	Peace
Spud Date:	9/13/1983	
Completion Date:	12/21/1983	
Last Workover Date:	9/7/2023	

VERTICAL WELLBORE

Wellbore Isolation

All depths KB		Hole Size
17-1/2"	0-417'	
11"	417'-3794'	
7-7/8"	3794'-7958'	

Surface Casing: (9/14/1983)	
Drilled a 17-1/2" surface hole to 417'. Set 10 jts 13-3/8", 48#, H-40 csg at 417'.	
Cmt'd w/ 400 sx Class B cmt (480 ft3, 15.6 ppg). Circ 20 bbls cmt to surface.	

Intermediate Casing: (10/5/1983)	
Drilled an 11" intermediate hole to 3794'. Set 97 jts 8-5/8" csg at 3794'. (15 jts 28# J-55, 70 jts 24# J-55, 12 jts 28# S-80). Cmt'd w/ 300 sx Class B 65/35 poz w/ 6% gel (12.2 ppg).	
Tailed w/ 600 sx Class B 50/50 poz w/ 6% gel (13.3 ppg) & 200 sx Class B cmt (15.6 ppg).	
Circ 40 bbls to surface.	

Production Casing: (10/25/1983)	
Drilled a 7-7/8" production hole to 7958'. Set 202 jts 4-1/2", 11.6#, N-80 csg at 7958'.	
DV tool at 5217'. Cmt stg 1 w/ 500 sx Class B 50/50 poz cmt (13.3 ppg) followed by 100 sx Class B neat cmt (15.6 ppg). Circ 20 bbls. Cmt'd Stg 2 w/ 850 sx Class B 65/35 poz cmt (12.2 ppg) followed by 100 sx Class B neat (15.6 ppg) cmt, Circ 20 bbls to surf.	
11/1985: Identified csg hole from 427'-430'. Sqz'd w/ 120 sx (140 ft3) Class B cmt, circ to surf.	
Hesitation sqz w/ another 57 sx (67ft). BH wouldn't hold pressure so sqz'd w/ 5 sx (5.9 ft3) cmt.	

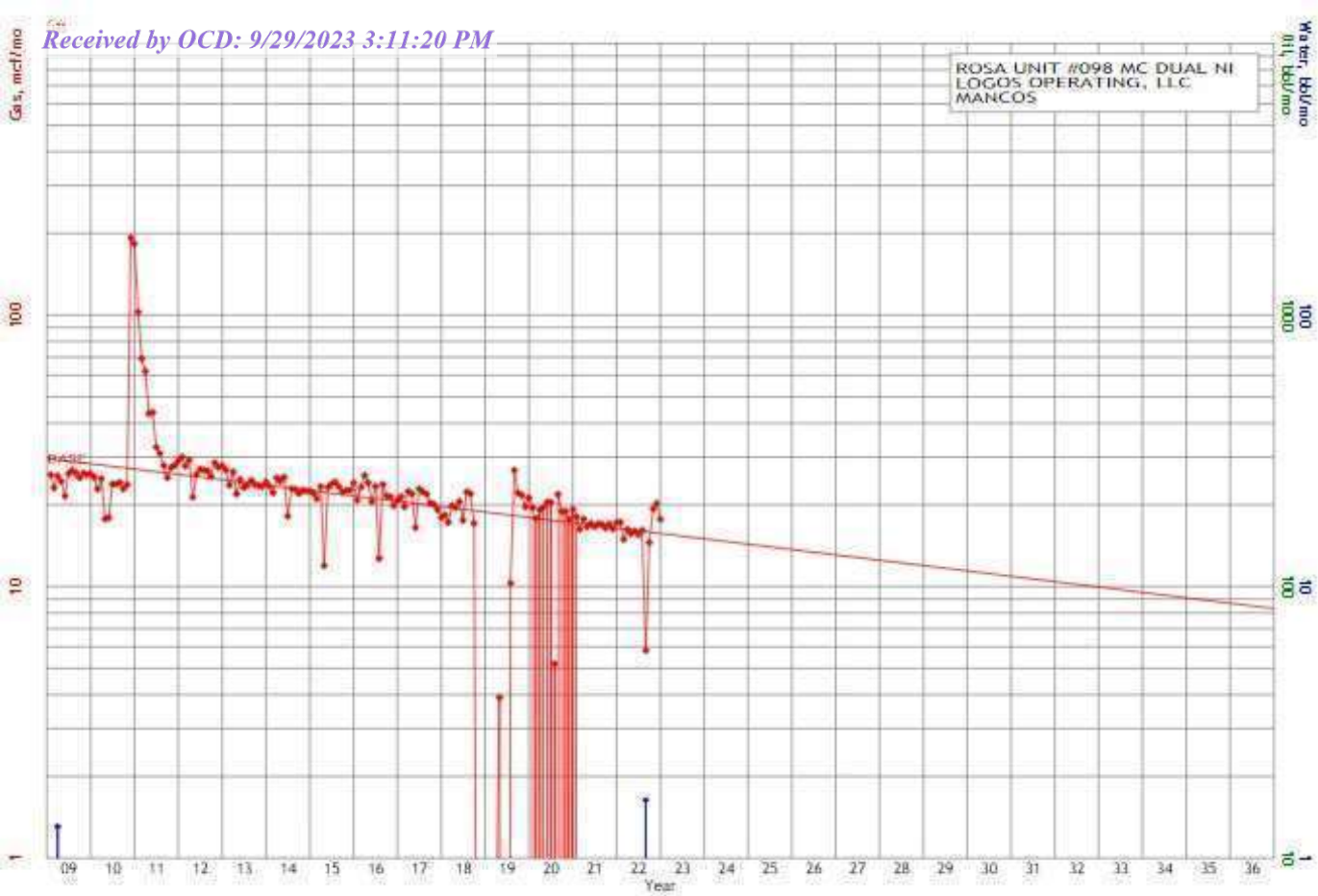
Tubing:	Length (ft)
KB	12
(189) 2-3/8" 4.7# J-55 8rd tbq jts	6192
(1) S Nipple at 6194'	1
(1) 2-3/8" tbq jt w/ 1/2 MS w/ exp check	31
Set at:	6236 ft

Artificial Lift:	
NA	

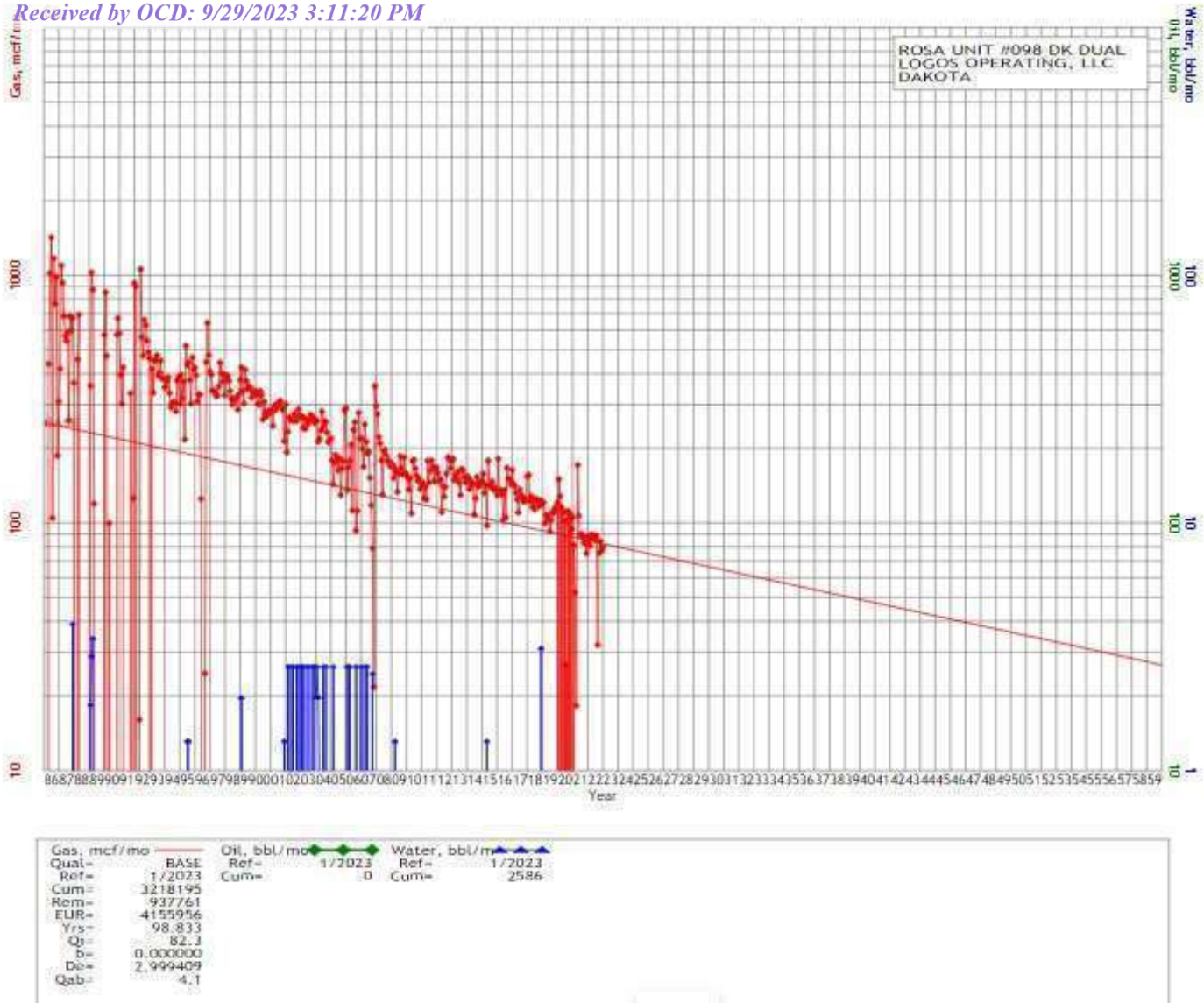
Perforations: (12/1983)	
DK: (7779'-7921') 2 SPF, 80, 0.38" holes. 7779'-7797', 7827'-7838', 7868'-7872', & 7914'-7921'. Frac w/ 205,000# 20/40 sand in 95,000 gal 50# x-link gel	
MC: (7452'-7592') 1 SPF, 140, 0.38" holes. Frac'd this zone multiple times. 1st frac: H2O frac w/ 50,000 gal 30# x-link gel. 2nd frac: 32,680# of 20/40 sand in 26,340 gal 30# gel. Screened out at 6200 psi.	
MC: (7258'-7428') 1 SP2F, 86, 0.38" holes. Frac w/ 65,000# 20/40 sand in 95,000 gal 50# x-link gel.	
MC: (6838'-7194') 1 SP2F, 108, 0.39" holes. 6838'-6862', 6864'-6886', 6888'-6910', 6912'-6934' 6936'-6958', 6960'-6982', 6983'-7003', 7010'-7026', 7028'-7050', 7052'-7074' & at 1 SP2F, 55, 0.29" holes. 7076'-7098', 7100'-7122', 7124'-7146', 7148'-7170, & 7172'-7194'. Frac w/ 150,000# 20-40 sand in 165,000 gal 50# x-link gel.	
MC: (6310'-6540') 1 SP2F, 105 , 0.39" holes. 6310'-6324', 6326'-6348', 6350'-6372', 6374'-6396', 6398'-6416', 6420'-6444', 6446'-6468', 6470'-6492', 6494'-6516', 6518'-6540'. Frac w/ 64,000# 20/40 sand in 89,572 gal 50# x-link gel.	

Formations:	MD
Pictured Cliffs	3100'
Greenhorn	7592'
Mesaverde	5277'
Dakota	7823'
Gallup	6310'

Additional Notes:	
12/1983 Initial completion. Perf'd & stim'd MC & DK. CO to PBTD 7950'. Set pkr at 7691' & sliding sleeve at 7590'-7593'. Single 2-3/8" tbq string landed at 7929'.	
11/1985 Csg Repair, Couldn't release packer at 7691'. Chem cut tbq at 6566'. Jarred pkr free w/ 62k # & pull fish consisting of tbq, sliding sleeve, & pkr. Set BP at 6184' & isolated csg holes between 427'-430'. Sqz w/ 177 sx cmt. DO cmt & PT csg to 1050 psig, held. PT BH to 550 psig pressured up immediately. Sqz'd BH w/ 5 sx cmt. PT csg again to 2200#, held. PT BH to 400#, held. DO BP & pushed down to 7931'. Ran 2-3/8" tbq w/ pkr & sliding sleeve. EOT at 7880'.	
9/2023 Wellbore Isolation. Set CBP @ 6260'. Landed TBG @ 6236'.	



Gas, mcf/mo	Oil, bbl/mo	Water, bbl/mo
Qual= BASE	Ref= 1/2023	Ref= 1/2023
Ref= 1/2023	Cum= 0	Cum= 92
Cum= 121638		
Rem= 123350		
EUR= 244988		
Yrs= 85.083		
Q1= 15.7		
b= 0.000000		
De= 4.444900		
Qab= 0.3		



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

CONDITIONS

Action 270870

CONDITIONS

Operator: LOGOS OPERATING, LLC 2010 Afton Place Farmington, NM 87401	OGRID: 289408
	Action Number: 270870
	Action Type: [C-103] NOI Workover (C-103G)

CONDITIONS

Created By	Condition	Condition Date
dmcclure	Logos is approved to isolate the well bore, but shall submit another NOI prior to removing the BP	9/29/2023