

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

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

Revised July 18, 2013

WELL API NO. 30-039-26630	
5. Indicate Type of Lease STATE ☒ FEE ☐	
6. State Oil & Gas Lease No. E0-0347-0065	
7. Lease Name or Unit Agreement Name ROSA UNIT	
8. Well Number 24B	
9. OGRID Number 289408	
10. Pool name or Wildcat BLANCO MESAVERDE / BASIN 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 ☐ Gas Well ☒ Other ☐ 2. Name of Operator LOGOS OPERATING, LLC 3. Address of Operator 2010 AFTON PLACE, FARMINGTON NM 87401 4. Well Location Unit Letter <u>N</u> : <u>860'</u> feet from the <u>SOUTH</u> line and <u>1975'</u> feet from the <u>WEST</u> line Section <u>32</u> <u>31N</u> Township <u>05W</u> Range <u>NMPM</u> Rio Arriba County 11. Elevation (Show whether DR, RKB, RT, GR, etc.) 6518'	

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

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☐	COMMENCE DRILLING OPNS. ☐	P AND A ☐
PULL OR ALTER CASING ☐	MULTIPLE COMPL ☐	CASING/CEMENT JOB ☐	
DOWNHOLE COMMINGLE ☒			
CLOSED-LOOP SYSTEM ☐			
OTHER: ☐		OTHER: ☐	

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.

Pre-approved Pool Division Order R-11363.

Pools to be commingled: Blanco Mesaverde (72319) and Basin Dakota (71599).

Perforated Intervals:

Blanco Mesaverde: 4574' - 5976'

Basin Dakota: 7948' - 8042'

Fixed percentage allocation based upon production data 53% Blanco Mesaverde and 47% Basin Dakota. This is based upon the historic production of both the Mesaverde and Dakota production zones within the well.

Commingling will not reduce the value of reserves.

Interest owners in the spacing unit have not been notified of the intent of the downhole commingling per order R-12991.

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 Etta Trujillo TITLE Regulatory Specialist DATE 2/6/2023

Type or print name Etta Trujillo E-mail address: etrujillo@logosresourcesllc.com PHONE: (505) 324-4154

For State Use Only

APPROVED BY: Dean R. McClure TITLE DATE 02/22/2023

Conditions of Approval (if any):

CONDITIONS OF APPROVAL

If an alteration is made to the Well or a condition within the Well changes which may cause the allocation of production to the Pools as approved within this Permit to become inaccurate, then no later than sixty (60) days after that event, the Operator shall submit Form C-103 to the OCD Engineering Bureau describing the event and include a revised allocation plan. If OCD denies the revised allocation plan, this Permit shall terminate on the date of such action.

If the downhole commingling of the Pools reduces the value of the oil and gas production to less than if it had remained segregated, no later than sixty (60) days after the decrease in value has occurred the Operator shall submit a new downhole commingling application to OCD to amend this Permit to remove the pool that caused the decrease in value. If the Operator fails to submit a new application, this Permit shall terminate on the following day, and if OCD denies the application, this Permit shall terminate on the date of such action.

If a completed interval of the Well is altered from what is submitted within this application, then no later than sixty (60) days after the alteration, the Operator shall submit Form C-103 to the OCD Engineering Bureau detailing the alteration and completed interval.

Submit a NOI for the workover procedure prior to conducting work via a C103G.



DOWNHOLE COMMINGLE PROCEDURE AND ALLOCATION-NMOCD (2023)

Rosa Unit 24B
30-039-26630
860' FSL & 1975' FWL
Section 32, T31N, R05W
Rio Arriba, New Mexico
LAT: 36.8512115° N LONG: -107.3879242° W
Mesaverde/Dakota

PROJECT OBJECTIVE:

Remove packer and downhole commingle Mesaverde 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. Release Mesaverde tubing string. Scan out of hole with Mesaverde tubing string, laying down joints as necessary.
5. Release Dakota tubing string. Scan out of hole with Dakota tubing string, laying down joints as necessary.
6. Run in hole with packer plucker to retrieve Model B Packer at 6150'. Trip out of hole with packer plucker assembly and string.
7. Run in hole with single 2-1/16" production tubing string.
8. Return to production as a Mesaverde/Dakota commingle.

PRODUCTION ALLOCATION

Historic production data from both zones in this well was gathered and analyzed. Production rates were used to determine allocations due to a failure that impacted production and cumulative allocation accuracy.

Cumulative Production

Total Expected Production Rate	134 Mcfpd
MV Production Rate	71 Mcfpd
DK Production Rate	63 Mcfpd

MV allocation = MV rate/total rate = 71/134 = **53%**

DK allocation = DK rate /total rate = 63/134 = **47%**

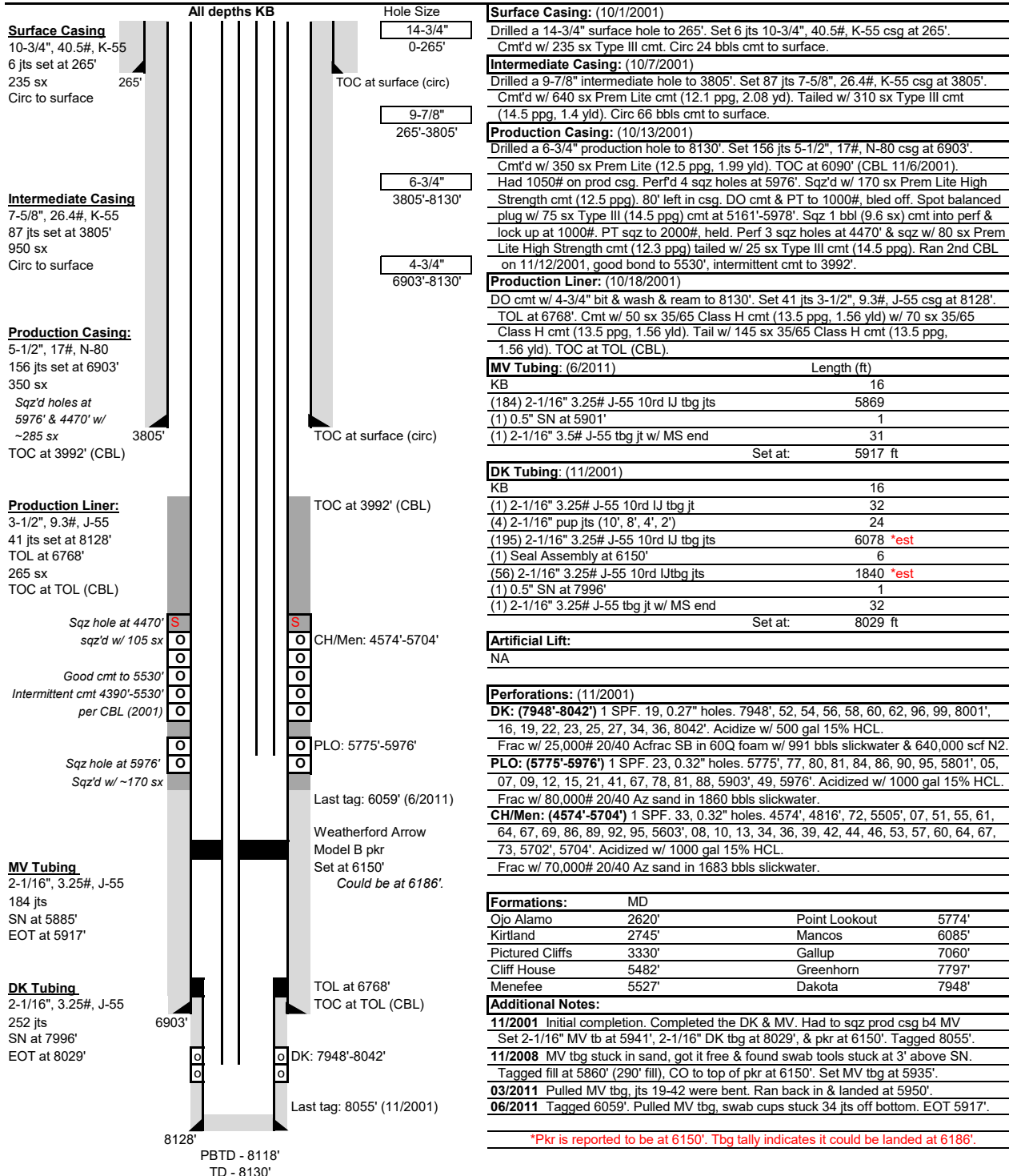


Wellbore Schematic

Well Name: Rosa Unit 24B
 Location: N-32-31N-05W 860' FSL & 1975' FWL
 County: Rio Arriba, NM
 API #: 30-039-26630
 Co-ordinates: Lat 36.8512115, Long -107.3879242 NAD1983
 Elevations: GROUND: 6518'
 KB: 6534'
 Depths (KB): PBDT: 8118'
 TD: 8130'

Date Prepared: 12/14/2022 Moss
 Reviewed By: 12/26/2022 Gomez
 Last Updated:
 Spud Date: 10/1/2001
 Completion Date: 11/22/2001
 Last Workover Date: 6/21/2011

VERTICAL WELLBORE



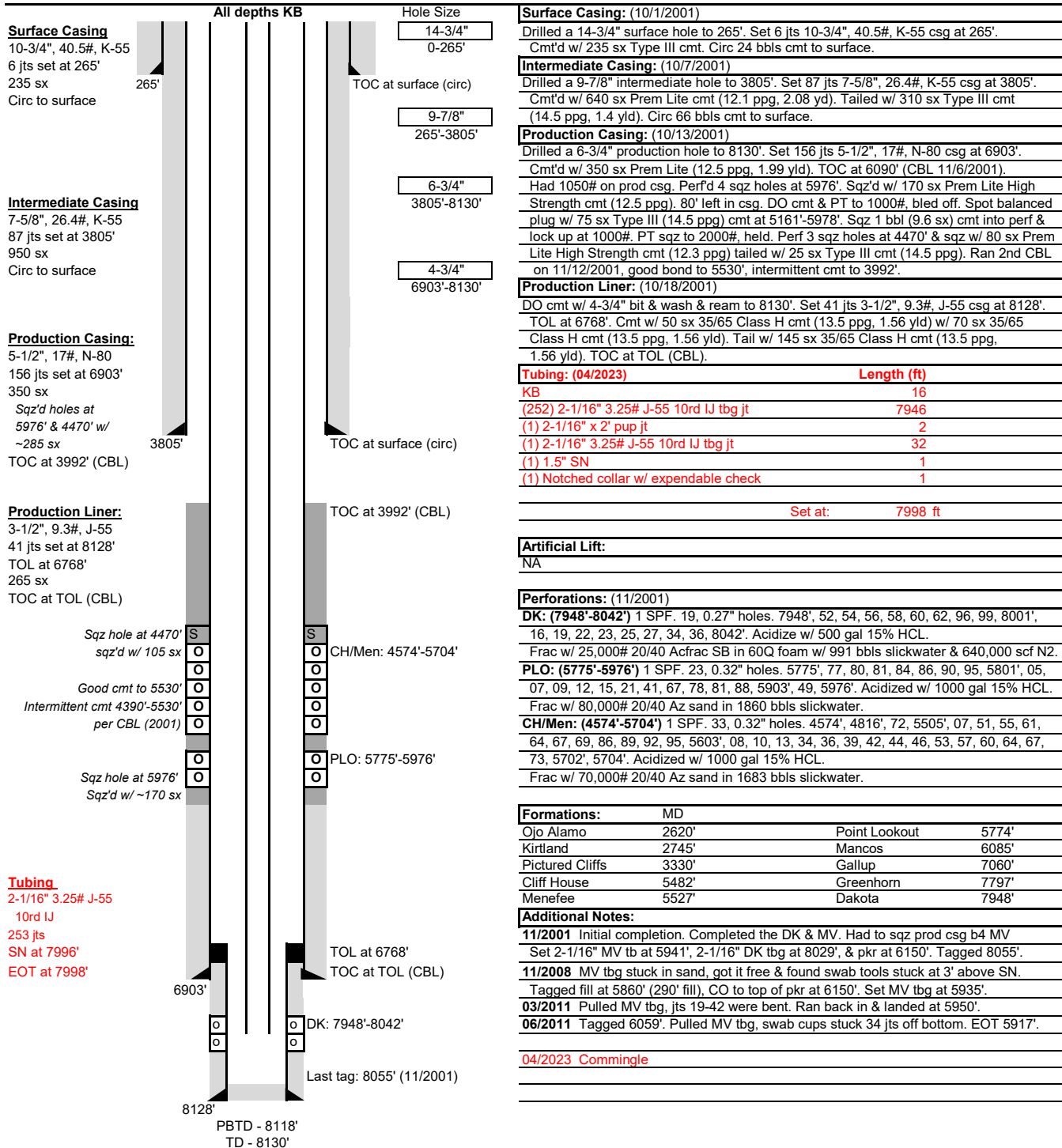


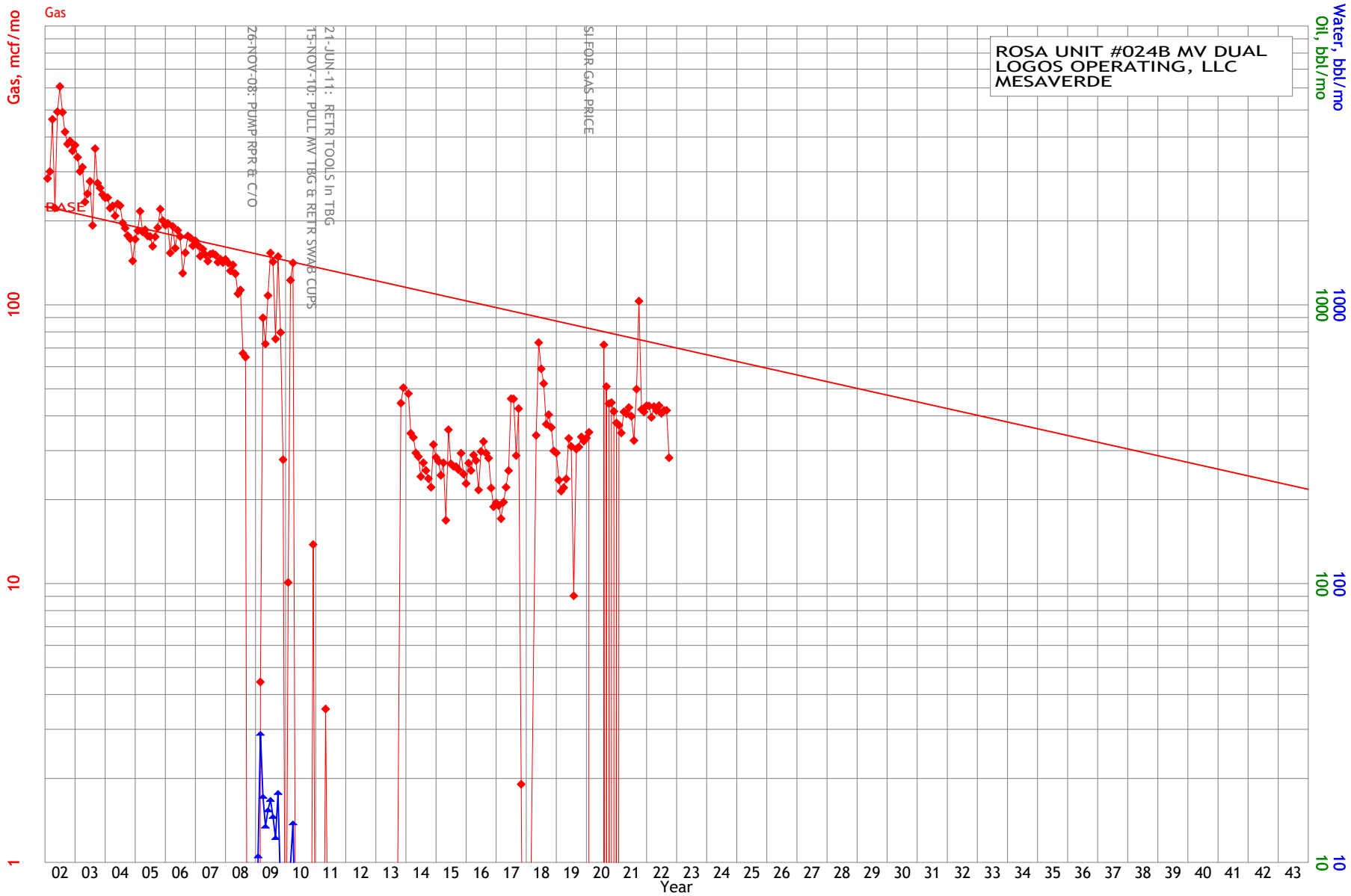
Proposed Wellbore Schematic

Well Name: Rosa Unit 24B
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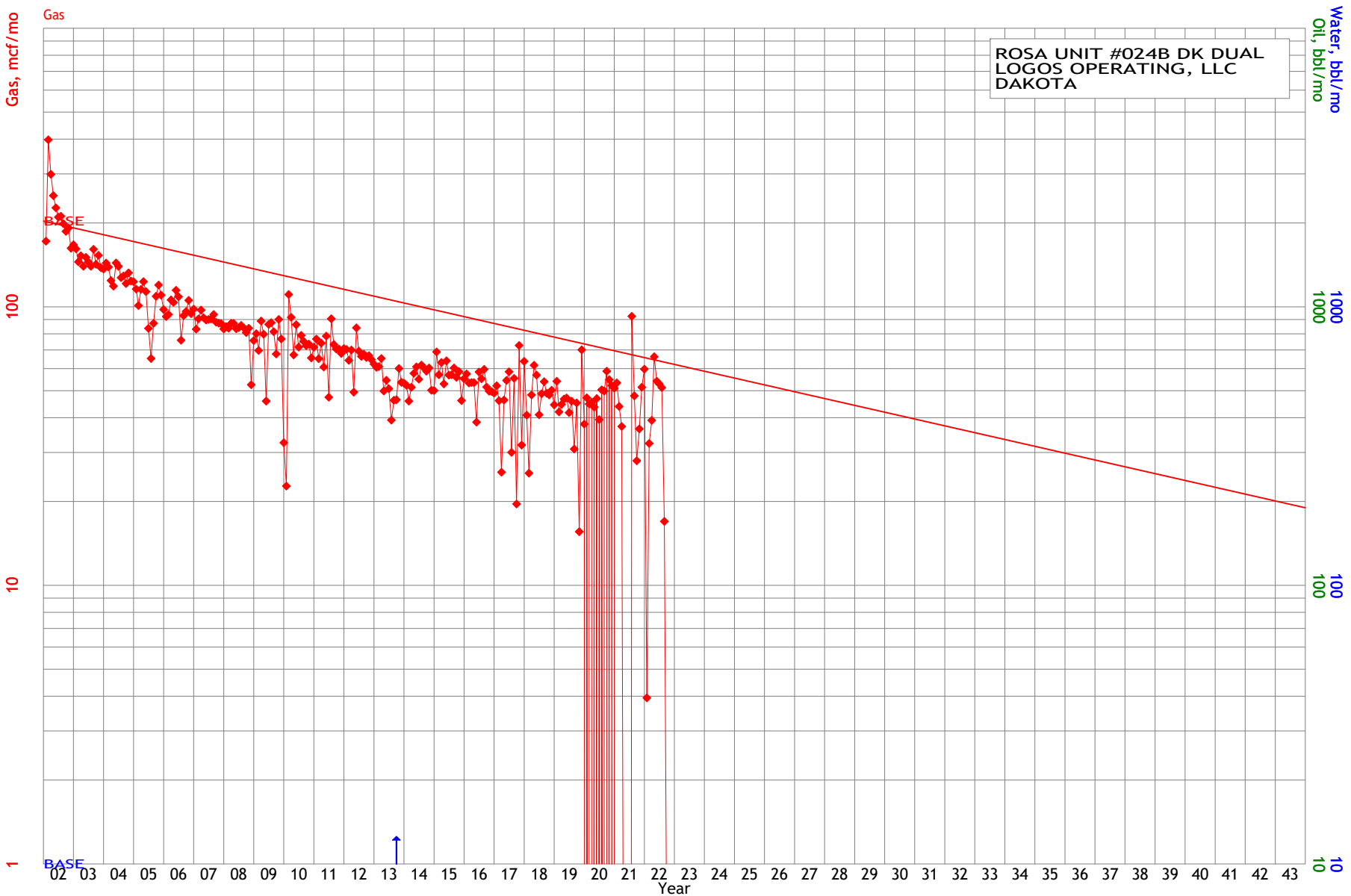
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VERTICAL WELLBORE

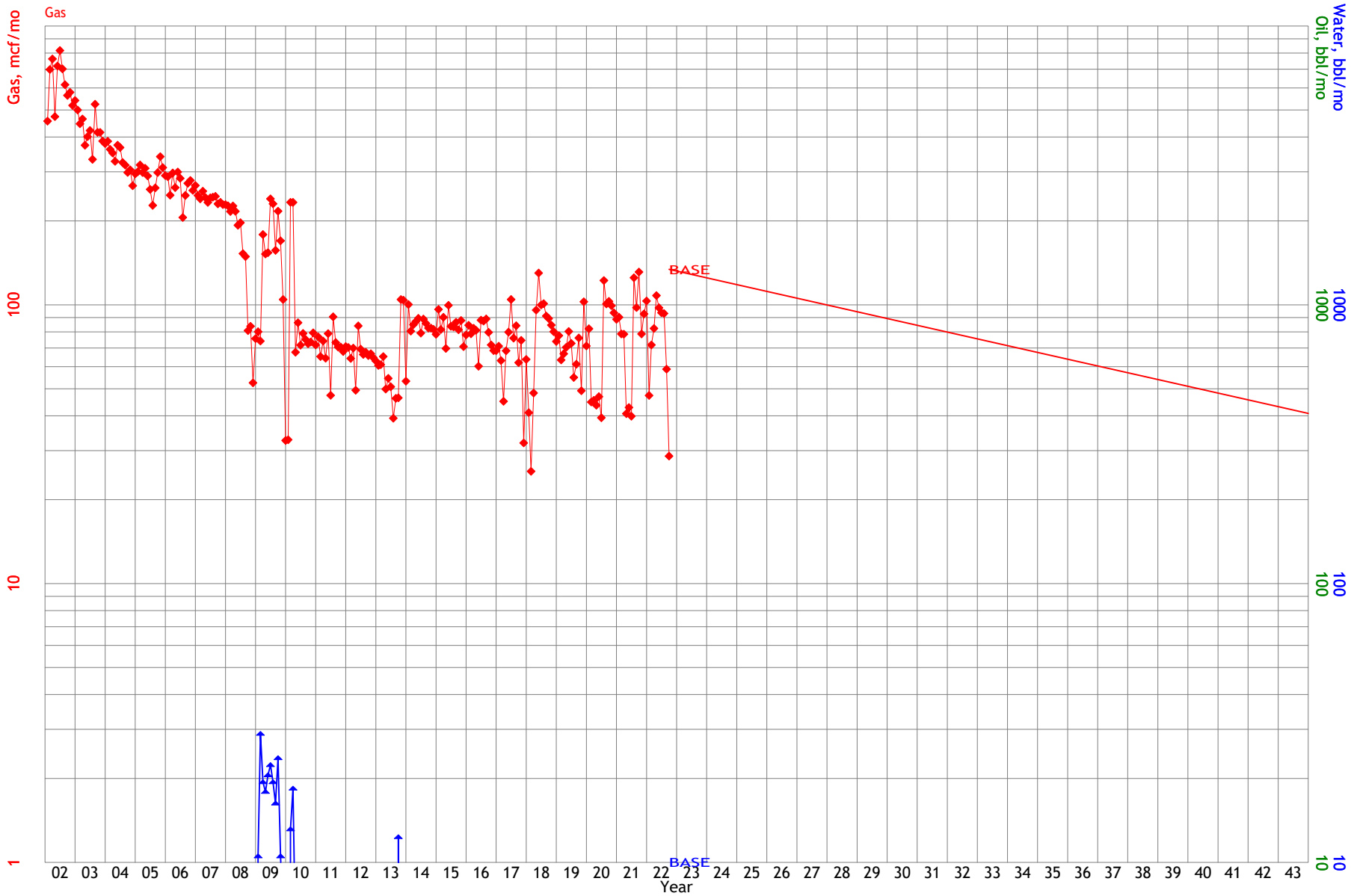




Gas, mcf/mo	—	Oil, bbl/mo	◆◆◆	Water, bbl/m	▲▲▲
Qual=	BASE	Ref=	10/2022	Ref=	10/2022
Cum=	667820	Cum=	0	Cum=	6823
Rem=	464050				
EUR=	1131870				
Yrs=	96.750				
Qi=	71.0				
b=	0.000000				
De=	5.407000				
Qab=	0.3				



Gas, mcf/mo	—	Oil, bbl/mo	◆◆◆	Water, bbl/m	—
Qual=	BASE	Ref=	10/2022	Qual=	BASE
Ref=	10/2022	Cum=	0	Ref=	10/2022
Cum=	593819			Cum=	5707
Rem=	405517			Rem=	120
EUR=	999336			EUR=	5827
Yrs=	93.250			Yrs=	56.417
Qi=	63.0			Qi=	0.1
b=	0.000000			b=	0.000000
De=	5.484800			De=	19.598158
Qab=	0.3			Qab=	0.0



Gas, mcf/mo	—	Oil, bbl/mo	◆◆◆	Water, bbl/m	—
Calc=	BASE	Ref=	10/2022	Calc=	BASE
Ref=	10/2022	Cum=	0	Ref=	10/2022
Cum=	1261639			Cum=	12530
Rem=	869583			Rem=	120
EUR=	2131222			EUR=	12650
Yrs=	96.750			Yrs=	56.417

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CONDITIONS

Action 183138

CONDITIONS

Operator: LOGOS OPERATING, LLC 2010 Afton Place Farmington, NM 87401	OGRID: 289408
	Action Number: 183138
	Action Type: [C-107] Down Hole Commingle (C-107A)

CONDITIONS

Created By	Condition	Condition Date
dmcclure	Submit a NOI for the workover procedure prior to conducting work via a C103G.	2/22/2023
dmcclure	If an alteration is made to the Well or a condition within the Well changes which may cause the allocation of production to the Pools as approved within this Permit to become inaccurate, then no later than sixty (60) days after that event, the Operator shall submit Form C-103 to the OCD Engineering Bureau describing the event and include a revised allocation plan. If OCD denies the revised allocation plan, this Permit shall terminate on the date of such action.	2/22/2023
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dmcclure	If a completed interval of the Well is altered from what is submitted within this application, then no later than sixty (60) days after the alteration, the Operator shall submit Form C-103 to the OCD Engineering Bureau detailing the alteration and completed interval.	2/22/2023