Office State of New Mexico	DHC-5280 Form 6-103 of
District I – (575) 393-6161 Energy, Minerals and Natural Resources 1625 N. French Dr., Hobbs, NM 88240	Revised July 18, 2013 WELL API NO.
District II – (575) 748-1283 OH. CONSEDVATION DIVISION	30-039-26630
811 S. First St., Artesia, NM 88210 <u>District III</u> – (505) 334-6178 1220 South St. Francis Dr.	5. Indicate Type of Lease
1000 Rio Brazos Rd., Aztec, NM 87410	STATE FEE
District IV – (505) 476-3460 Santa Fe, INIVI 8/303 1220 S. St. Francis Dr., Santa Fe, NM	6. State Oil & Gas Lease No.
87505	E0-0347-0065
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	7. Lease Name or Unit Agreement Name
PROPOSALS.)	ROSA UNIT
1. Type of Well: Oil Well Gas Well Other	8. Well Number 24B
2. Name of Operator LOGOS OPERATING, LLC	9. OGRID Number 289408
3. Address of Operator 2010 AFTON PLACE, FARMINGTON NM 87401	10. Pool name or Wildcat BLANCO MESAVERDE / BASIN DAKOTA
4. Well Location	
	275' feet from the <u>WEST</u> line
Section 32 31N Township 05W Range	NMPM 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: SUBS	SEQUENT REPORT OF:
PERFORM REMEDIAL WORK PLUG AND ABANDON REMEDIAL WORK	
TEMPORARILY ABANDON	-
PULL OR ALTER CASING MULTIPLE COMPL CASING/CEMENT	
DOWNHOLE COMMINGLE 🛛	
CLOSED-LOOP SYSTEM	
OTHER: OTHER:	
13. Describe proposed or completed operations. (Clearly state all pertinent details, and of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Comproposed 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'	nd 470/ Dagin Daltata This is based amon the
Fixed percentage allocation based upon production data 53% Blanco Mesaverde an historic production of both the Mesaverde and Dakota production zones within the	
Commingling will not reduce the value of reserves.	wen.
Interest owners in the spacing unit have not been notified of the intent of the down	hole commingle per order R-12991.
interest owners in the spacing and have not occur nothing of the intent of the down	note commingto per order it 12551.
pud Date: Rig Release Date:	
hereby certify that the information above is true and complete to the best of my knowledge	e and belief.
SIGNATURE Ctta Trujillo TITLE Regulatory Specialist	DATE 2/6/2023
Type or print name <u>Etta Trujillo</u> E-mail address: <u>etrujillo@logosresourcesll</u> For State Use Only	lc.com PHONE: _(505) 324-4154
APPROVED BY: Dean R Millure TITLE Petroleum Engineer Conditions of Approval (if any):	DATE 02/22/2023

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.
- 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

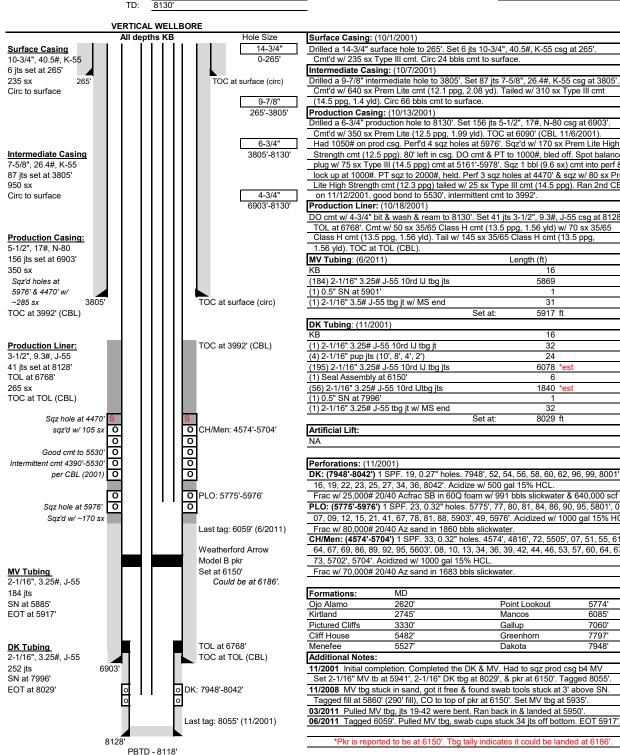
MV allocation = MV rate/total rate = 71/134 = **53**% DK allocation = DK rate /total rate = 63/134 = **47**%



Wellbore Schematic

Well Name:	Rosa Unit 24B	
Location:	N-32-31N-05W 860' F	FSL & 1975' FWL
County:	Rio Arriba, NM	
API#:	30-039-26630	
Co-ordinates:	Lat 36.8512115, Long -1	107.3879242 NAD1983
Elevations:	GROUND:	6518'
	KB:	6534'
Depths (KB):	PBTD:	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



	Surface Casing: (10/1/2001)		
	Drilled a 14-3/4" surface hole to 265'. Set 6 jts	10-3/4", 40.5#, K-55 csg a	at 265'.
	Cmt'd w/ 235 sx Type III cmt. Circ 24 bbls cm	nt to surface.	
	Intermediate Casing: (10/7/2001)		
	Drilled a 9-7/8" intermediate hole to 3805'. Se	t 97 ito 7 5/9" 26 4# V 55	ong at 2005'
-1	Cmt'd w/ 640 sx Prem Lite cmt (12.1 ppg, 2.0		pe III CITIL
_	(14.5 ppg, 1.4 yld). Circ 66 bbls cmt to surfac	ce.	
	Production Casing: (10/13/2001)		
	Drilled a 6-3/4" production hole to 8130'. Set 1	156 jts 5-1/2", 17#, N-80 cs	g at 6903'.
	Cmt'd w/ 350 sx Prem Lite (12.5 ppg, 1.99 yl	d). TOC at 6090' (CBL 11/	6/2001).
	Had 1050# on prod csg. Perf'd 4 sqz holes a	nt 5976', Saz'd w/ 170 sx Pi	rem Lite High
_	Strength cmt (12.5 ppg). 80' left in csg. DO c		
	plug w/ 75 sx Type III (14.5 ppg) cmt at 5161		
	lock up at 1000#. PT sqz to 2000#, held. Per		
-	Lite High Strength cmt (12.3 ppg) tailed w/ 25		. Ran 2nd CBL
	on 11/12/2001, good bond to 5530', intermit	tent cmt to 3992'.	
	Production Liner: (10/18/2001)		
	DO cmt w/ 4-3/4" bit & wash & ream to 8130'.	Set 41 its 3-1/2", 9.3#, J-5	5 csg at 8128'.
	TOL at 6768'. Cmt w/ 50 sx 35/65 Class H c	mt (13.5 ppg. 1.56 yld) w/ 7	0 sx 35/65
	Class H cmt (13.5 ppg, 1.56 yld). Tail w/ 145	ev 35/65 Class H cmt (13	5 nna
		3X 00/00 Olass 11 cmt (10.	о рру,
	1.56 yld). TOC at TOL (CBL).		
	MV Tubing: (6/2011)	Length (ft)	
	KB	16	
	(184) 2-1/16" 3.25# J-55 10rd IJ tbg jts	5869	
	(1) 0.5" SN at 5901'	1	
	(1) 2-1/16" 3.5# J-55 tbg jt w/ MS end	31	
		Set at: 5917 ft	
	DK Tubing: (11/2001)		
	KB	16	
	(1) 2-1/16" 3.25# J-55 10rd IJ tbg jt	32	
	(4) 2-1/16" pup jts (10', 8', 4', 2')	24	
	(195) 2-1/16" 3.25# J-55 10rd IJ tbg jts	6078 *est	·
	(1) Seal Assembly at 6150'	6	
	(56) 2-1/16" 3.25# J-55 10rd IJtbg jts	1840 *es	l .
	(1) 0.5" SN at 7996'	1	
	(1) 2-1/16" 3.25# J-55 tbg jt w/ MS end	32	
		Set at: 8029 ft	
	Artificial Lift:		
	NA		•
	Perforations: (11/2001)		1
		101 50 51 50 50 00 00	00.00.00041
	DK: (7948'-8042') 1 SPF. 19, 0.27" holes. 794		96, 99, 8001,
	16, 19, 22, 23, 25, 27, 34, 36, 8042'. Acidize		
	Frac w/ 25,000# 20/40 Acfrac SB in 60Q foa	m w/ 991 bbls slickwater &	640,000 scf N2.
	PLO: (5775'-5976') 1 SPF. 23, 0.32" holes. 5	775', 77, 80, 81, 84, 86, 90	, 95, 5801', 05,
	07, 09, 12, 15, 21, 41, 67, 78, 81, 88, 5903',		
	Frac w/ 80,000# 20/40 Az sand in 1860 bbls		0 gui 10 /0 110L.
	CH/Men: (4574'-5704') 1 SPF. 33, 0.32" hole	0 4574' 4046' 70 5505'	07 51 55 61
	CH/Well: (45/4-5/04) 1 SPF. 33, 0.32 Hole	8. 4574 , 4616 , 72, 5505 , 1	07, 51, 55, 61,
	64, 67, 69, 86, 89, 92, 95, 5603', 08, 10, 13,		57, 60, 64, 67,
	73, 5702', 5704'. Acidized w/ 1000 gal 15% I	HCL.	
	Frac w/ 70,000# 20/40 Az sand in 1683 bbls	slickwater.	
			<u>.</u>
	Formations: MD		
	Ojo Alamo 2620'	Point Lookout	5774'
			6085'
		Mancos	
	Pictured Cliffs 3330'	Gallup	7060'
	Cliff House 5482'	Greenhorn	7797'
	Menefee 5527'	Dakota	7948'
	Additional Notes:		
	11/2001 Initial completion. Completed the DK	(& MV Had to saz prod os	a b4 MV
	Set 2-1/16" MV to at 5941', 2-1/16" DK tog a	t 8020' & pkr at 6150' Tag	g 27 IVI V
	11/2008 MV tbg stuck in sand, got it free & fo		
	TILZUUN IVIV IDA STUCK IN SANA AOT IT TREE & TO	und swad tools stuck at 3' a	above SN.
	T 150 (50 ca (5 - 7 - 7 - 7 - 7 - 7 - 7 - 7 - 7 - 7 -		0051
	Tagged fill at 5860' (290' fill), CO to top of pk 03/2011 Pulled MV tbg, jts 19-42 were bent. I	r at 6150'. Set MV tbg at 5	935'.

TD - 8130'



Proposed Wellbore Schematic

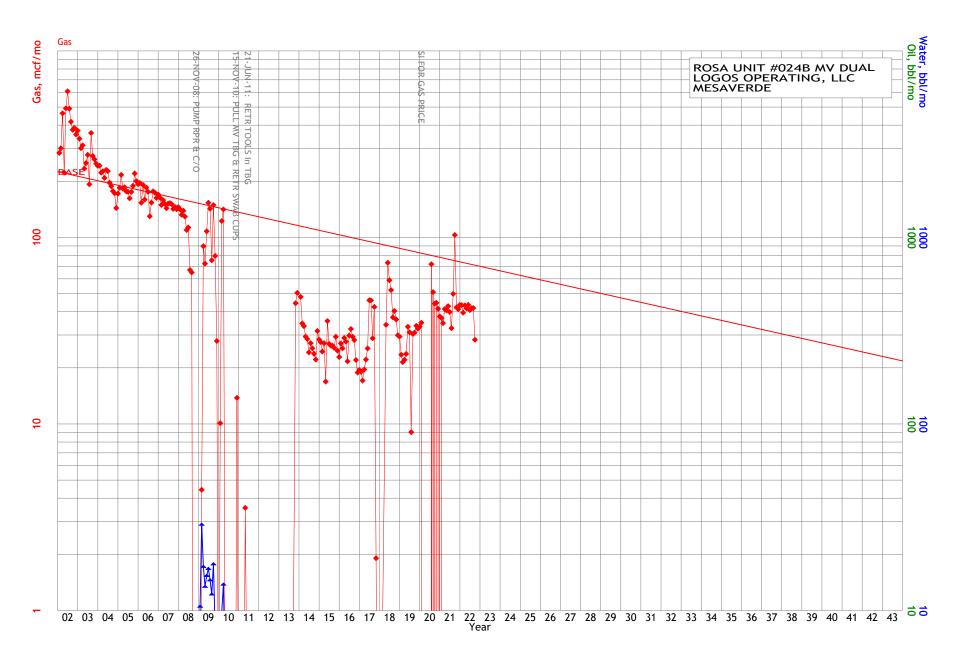
Well Name:	Rosa Unit 24B	
Location:	N-32-31N-05W 860' FS	SL & 1975' FWL
County:	Rio Arriba, NM	
API#:	30-039-26630	
Co-ordinates:	Lat 36.8512115, Long -10	7.3879242 NAD1983
Elevations:	GROUND:	6518'
	KB:	6534'
Depths (KB):	PBTD:	8118'
	TD:	0120'

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

	TD: <u>8130'</u>		_
	VERTICAL WELLBO	ORE	
	All depths KB	Hole Size	Surface Casing: (10/1/2001)
Surface Casing		14-3/4"	Drilled a 14-3/4" surface hole to 265'. Set 6 jts 10-3/4", 40.5#, K-55 csg at 265'.
10-3/4", 40.5#, K-55		0-265'	Cmt'd w/ 235 sx Type III cmt. Circ 24 bbls cmt to surface.
6 jts set at 265'			Intermediate Casing: (10/7/2001)
235 sx 265'		TOC at surface (circ)	Drilled a 9-7/8" intermediate hole to 3805'. Set 87 jts 7-5/8", 26.4#, K-55 csg at 3805'. Cmt'd w/ 640 sx Prem Lite cmt (12.1 ppg, 2.08 yd). Tailed w/ 310 sx Type III cmt
Circ to surface		9-7/8"	(14.5 ppg, 1.4 yld). Circ 66 bbls cmt to surface.
		265'-3805'	Production Casing: (10/13/2001)
		203-3603	Drilled a 6-3/4" production hole to 8130'. Set 156 jts 5-1/2", 17#, N-80 csg at 6903'.
			Cmt'd w/ 350 sx Prem Lite (12.5 ppg, 1.99 yld). TOC at 6090' (CBL 11/6/2001).
		6-3/4"	Had 1050# on prod csg. Perf'd 4 sqz holes at 5976'. Sqz'd w/ 170 sx Prem Lite High
Intermediate Casing		3805'-8130'	Strength cmt (12.5 ppg). 80' left in csg. DO cmt & PT to 1000#, bled off. Spot balanced
7-5/8", 26.4#, K-55			plug w/ 75 sx Type III (14.5 ppg) cmt at 5161'-5978'. Sqz 1 bbl (9.6 sx) cmt into perf &
87 jts set at 3805'			lock up at 1000#. PT sqz to 2000#, held. Perf 3 sqz holes at 4470' & sqz w/ 80 sx Prem
950 sx			Lite High Strength cmt (12.3 ppg) tailed w/ 25 sx Type III cmt (14.5 ppg). Ran 2nd CBL
Circ to surface		4-3/4"	on 11/12/2001, good bond to 5530', intermittent cmt to 3992'.
		6903'-8130'	Production Liner: (10/18/2001)
			DO cmt w/ 4-3/4" bit & wash & ream to 8130'. Set 41 jts 3-1/2", 9.3#, J-55 csg at 8128'.
Production Cosing:			TOL at 6768'. Cmt w/ 50 sx 35/65 Class H cmt (13.5 ppg, 1.56 yld) w/ 70 sx 35/65 Class H cmt (13.5 ppg, 1.56 yld). Tail w/ 145 sx 35/65 Class H cmt (13.5 ppg,
Production Casing:			Class H cmt (13.5 ppg, 1.56 yld). Tall W/ 145 sx 35/65 Class H cmt (13.5 ppg, 1.56 yld). TOC at TOL (CBL).
5-1/2", 17#, N-80 156 jts set at 6903'			Tubing: (04/2023) Length (ft)
350 sx			KB 16
Sqz'd holes at			(252) 2-1/16" 3.25# J-55 10rd IJ tbg jt 7946
5976' & 4470' w/			(1) 2-1/16" x 2' pup jt 2
~285 sx 3805'		TOC at surface (circ)	(1) 2-1/16" 3.25# J-55 10rd IJ tbg jt 32
TOC at 3992' (CBL)			(1) 1.5" SN 1
(,			(1) Notched collar w/ expendable check
Production Liner:		TOC at 3992' (CBL)	Set at: 7998 ft
3-1/2", 9.3#, J-55			Artificial Lift:
41 jts set at 8128' TOL at 6768'			NA
265 sx			IVA
TOC at TOL (CBL)			Perforations: (11/2001)
100 at 102 (022)			DK: (7948'-8042') 1 SPF. 19, 0.27" holes. 7948', 52, 54, 56, 58, 60, 62, 96, 99, 8001',
Sqz hole at 4470'	s I I	3	16, 19, 22, 23, 25, 27, 34, 36, 8042'. Acidize w/ 500 gal 15% HCL.
sqz'd w/ 105 sx		O CH/Men: 4574'-5704'	Frac w/ 25,000# 20/40 Acfrac SB in 60Q foam w/ 991 bbls slickwater & 640,000 scf N2.
· · · · · · · · · · · · · · · · · · ·		<u></u>	PLO: (5775'-5976') 1 SPF. 23, 0.32" holes. 5775', 77, 80, 81, 84, 86, 90, 95, 5801', 05,
Good cmt to 5530'	<u> </u>	<u>o</u>	07, 09, 12, 15, 21, 41, 67, 78, 81, 88, 5903', 49, 5976'. Acidized w/ 1000 gal 15% HCL.
Intermittent cmt 4390'-5530'	<u> </u>	<u>o</u>	Frac w/ 80,000# 20/40 Az sand in 1860 bbls slickwater.
per CBL (2001)	<u> </u>	0	CH/Men: (4574'-5704') 1 SPF. 33, 0.32" holes. 4574', 4816', 72, 5505', 07, 51, 55, 61,
Ī			64, 67, 69, 86, 89, 92, 95, 5603', 08, 10, 13, 34, 36, 39, 42, 44, 46, 53, 57, 60, 64, 67,
	0 [O PLO: 5775'-5976'	73, 5702', 5704'. Acidized w/ 1000 gal 15% HCL.
.,	0 [0	Frac w/ 70,000# 20/40 Az sand in 1683 bbls slickwater.
Sqz'd w/ ~170 sx			T
			Formations: MD
			Ojo Alamo 2620' Point Lookout 5774'
			Kirtland 2745' Mancos 6085' Pictured Cliffs 3330' Gallup 7060'
Tubing			Cliff House 5482' Greenhorn 7797'
2-1/16" 3.25# J-55			Menefee 5527' Dakota 7948'
10rd IJ			Additional Notes:
253 jts			11/2001 Initial completion. Completed the DK & MV. Had to sqz prod csg b4 MV
SN at 7996'		TOL at 6768'	Set 2-1/16" MV tb at 5941', 2-1/16" DK tbg at 8029', & pkr at 6150'. Tagged 8055'.
EOT at 7998'		TOC at TOL (CBL)	11/2008 MV tbg stuck in sand, got it free & found swab tools stuck at 3' above SN.
690	03'		Tagged fill at 5860' (290' fill), CO to top of pkr at 6150'. Set MV tbg at 5935'.
			03/2011 Pulled MV tbg, jts 19-42 were bent. Ran back in & landed at 5950'.
		DK: 7948'-8042'	06/2011 Tagged 6059'. Pulled MV tbg, swab cups stuck 34 jts off bottom. EOT 5917'.
	0 0		
			04/2023 Commingle
		ast tag: 8055' (11/2001)	
8	128'		
0	PBTD - 8118'		

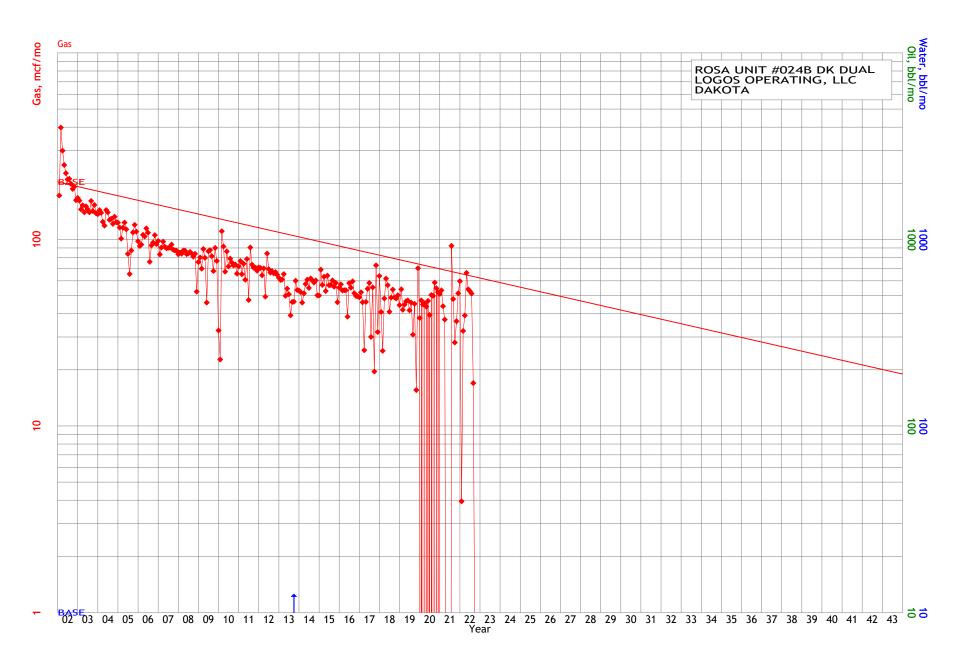
PBTD - 8118' TD - 8130'

Received by OCD: 2/22/2023 3:53:52 PM



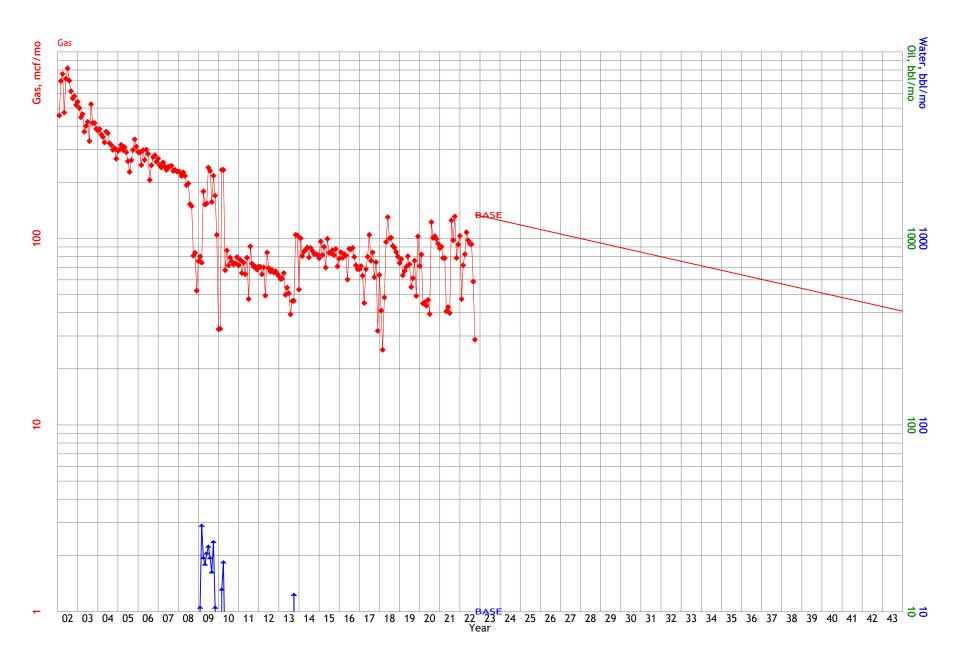


Received by OCD: 2/22/2023 3:53:52 PM



Gas, mct		Oil, bbl/	mo◆◆◆	Water,	bbl/m ——
Qual=	BASE	Ref=	10/2022	Qual=	BASE
Qual= 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
_				~	

Received by OCD: 2/22/2023 3:53:52 PM



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

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

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**

COMMENTS

Action 189541

COMMENTS

Operator:	OGRID:
LOGOS OPERATING, LLC	289408
2010 Afton Place	Action Number:
Farmington, NM 87401	189541
	Action Type:
	[IM-SD] Admin Order Support Doc (ENG) (IM-AAO)

COMMENTS

Created By		Comment Date
dmcclure	Approved under Action ID: 183138	2/22/2023

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

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 189541

CONDITIONS

Operator:	OGRID:
LOGOS OPERATING, LLC	289408
2010 Afton Place	Action Number:
Farmington, NM 87401	189541
	Action Type:
	[IM-SD] Admin Order Support Doc (ENG) (IM-AAO)

CONDITIONS

Created By		Condition Date
dmcclure	None	2/22/2023