

Office

District I - (575) 393-6161

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1220 S. St. Francis Dr., Santa Fe, NM

87505

State of New Mexico
Energy, Minerals and Natural ResourcesOIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

DHC-5279

Form C-103

Revised July 18, 2013

WELL API NO. 30-039-25568	
5. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>	
6. State Oil & Gas Lease No. E0-0347-0066	
7. Lease Name or Unit Agreement Name ROSA UNIT	
8. Well Number 24A	
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 <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 <u>E</u> : <u>1695'</u> feet from the <u>NORTH</u> line and <u>1165'</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.) 6505'	

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 checked="" type="checkbox"/>			
CLOSED-LOOP SYSTEM <input type="checkbox"/>			
OTHER: <input 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.

Pre-approved Pool Division Order R-11363.

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

Perforated Intervals:

Blanco Mesaverde: 5291' - 6104'

Basin Dakota: 7976' - 8135'

Fixed percentage allocation based upon production data 45% Blanco Mesaverde and 54% 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 commingle 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 Petroleum Engineer 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.

Prior to conducting the work, file a NOI with the workover procedure as a C-103G.



DOWNHOLE COMMINGLE PROCEDURE AND ALLOCATION-NMOCD (2023)

Rosa Unit 24A

30-039-25568

1695' FNL & 1165' FWL

Section 32, T31N, R05W

Rio Arriba, New Mexico

LAT: 36.858654° N LONG: -107.3907013° 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 as necessary.
3. Nipple down wellhead and nipple up BOP.
4. Release Mesaverde tubing string. Trip out of hole with Mesaverde tubing string and lay down.
5. Release Dakota tubing string. Trip out of hole with Dakota tubing string and lay down.
6. Run in hole with packer plucker to retrieve Model D Packer at 6250'. Trip out of hole with packer plucker assembly and string.
7. Run in hole with single 2-3/8" 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 from 2010 were used to determine allocations due to a failure that impacted production potential and cumulative allocation accuracy.

Cumulative Production

Total Production Rate	122 Mcfpd
Mesaverde Production Rate	56 Mcfpd
Dakota Production Rate	66 Mcfpd

MV allocation = MV rate/total rate = 56/122 = **45%**

DK allocation = DK rate /total rate = 66/122 = **54%**

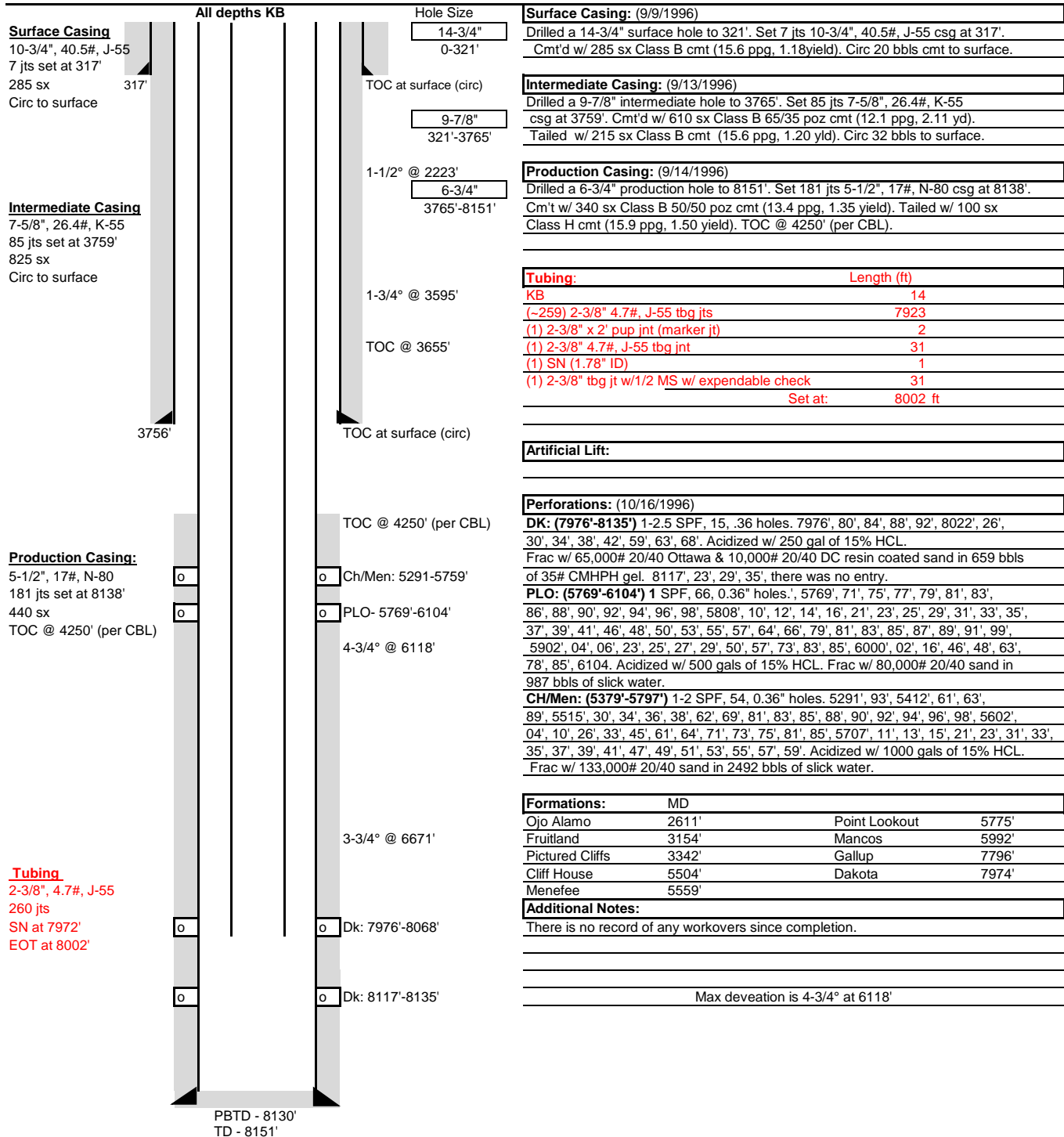


Wellbore Schematic

Well Name: Rosa Unit 024A
 Location: E-32-31N-05W 1695' FNL & 1165' FWL
 County: Rio Arriba, NM
 API #: 30-039-25568
 Co-ordinates: Lat 36.858654, Long -107.3907013 NAD83
 Elevations: GROUND: 6505'
 KB: 6519'
 PBTD: 8130'
 TD: 8151'

Date Prepared: 1/10/2023 Peace
 Reviewed By:
 Last Updated:
 Spud Date: 9/9/1996
 Completion Date: 10/31/1996
 Last Workover Date: N/A

PROPOSED WELLBORE SCHEMATIC



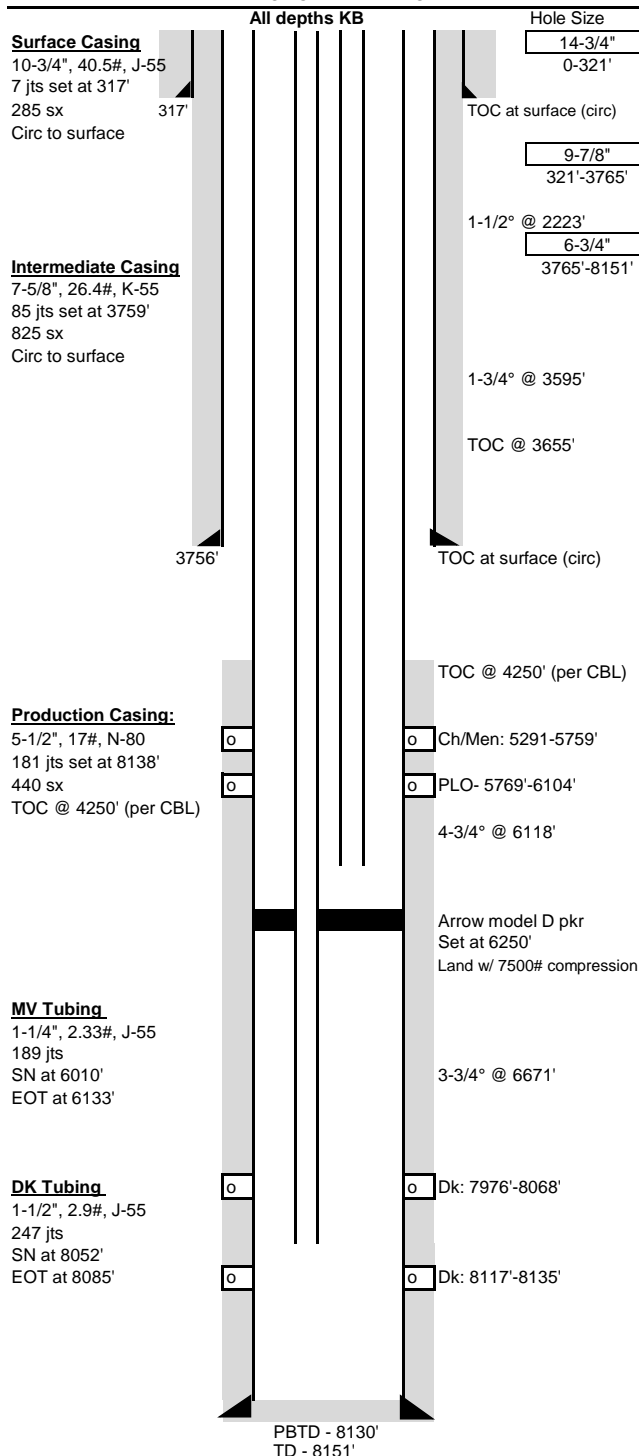


Wellbore Schematic

Well Name: Rosa Unit 024A
 Location: E-32-31N-05W 1695' FNL & 1165' FWL
 County: Rio Arriba, NM
 API #: 30-039-25568
 Co-ordinates: Lat 36.858654, Long -107.3907013 NAD83
 Elevations: GROUND: 6505'
 KB: 6519'
 PBDT: 8130'
 TD: 8151'

Date Prepared: 12/12/2022 Peace
 Reviewed By: 12/15/2022 Gomez
 Last Updated:
 Spud Date: 9/9/1996
 Completion Date: 10/31/1996
 Last Workover Date: N/A

DIRECTIONAL WELLBORE



Surface Casing: (9/9/1996)
 Drilled a 14-3/4" surface hole to 321'. Set 7 jts 10-3/4", 40.5#, J-55 csg at 317'.
 Cmt'd w/ 285 sx Class B cmt (15.6 ppg, 1.18yield). Circ 20 bbls cmt to surface.

Intermediate Casing: (9/13/1996)
 Drilled a 9-7/8" intermediate hole to 3765'. Set 85 jts 7-5/8", 26.4#, K-55 csg at 3759'. Cmt'd w/ 610 sx Class B 65/35 poz cmt (12.1 ppg, 2.11 yd).
 Tailed w/ 215 sx Class B cmt (15.6 ppg, 1.20 yld). Circ 32 bbls to surface.

Production Casing: (9/14/1996)
 Drilled a 6-3/4" production hole to 8151'. Set 181 jts 5-1/2", 17#, N-80 csg at 8138'.
 Cmt w/ 340 sx Class B 50/50 poz cmt (13.4 ppg, 1.35 yield). Tailed w/ 100 sx Class H cmt (15.9 ppg, 1.50 yield). TOC @ 4250' (per CBL).

MV Tubing: (11/1/1996)	Length (ft)
KB	14
(188) 1-1/4" 2.33# J-55 IJ tbj jts	6098
(1) SN @ 6010'	1
(1) 1-1/4" 2.33# J-55 Orange peel perf sub	20
Set at:	6133 ft

DK Tubing: (11/1/1996)	Length (ft)
KB	14
(1) 1-1/2" 2.9# J-55 tbj jt	32
(3) 1-1/2" pup jts (10', 10', 4')	24
(190) 1-1/2" 2.9# J-55 EUE tbj jts	6195
(1) Seal Assembly at 6209'	5
(55) 1-1/2" J-55 tbj jts	1782
(1) SN @ 8052'	1
(1) 1-1/2" 2.9# J-55 tbj jt	32
(1) 1/2 MS collar	0
Set at:	8085 ft

Artificial Lift:

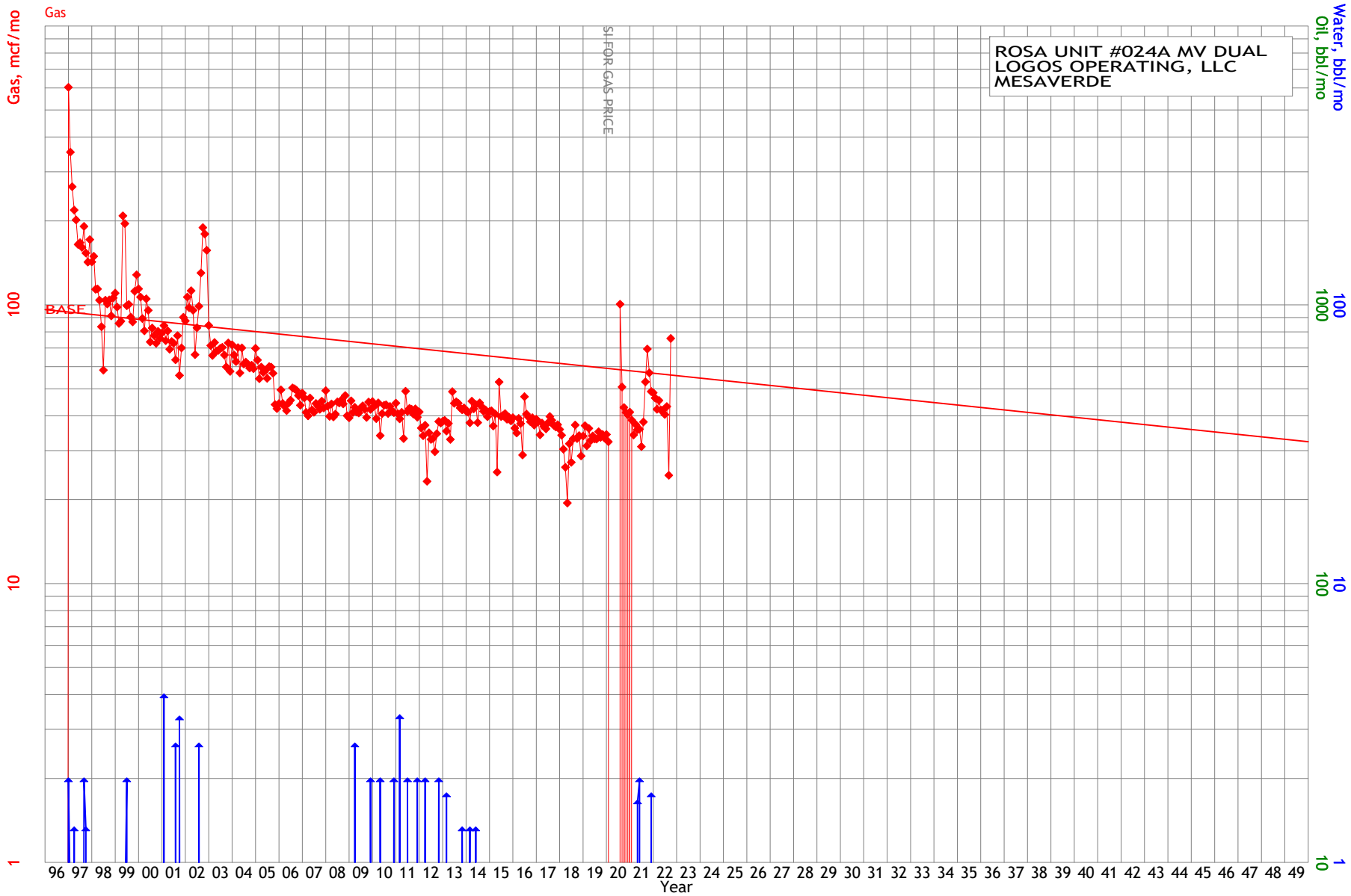
Perforations: (10/16/1996)
DK: (7976'-8135') 1-2.5 SPF, 15, .36 holes. 7976', 80', 84', 88', 92', 8022', 26', 30', 34', 38', 42', 59', 63', 68'. Acidized w/ 250 gal of 15% HCL.
 Frac w/ 65,000# 20/40 Ottawa & 10,000# 20/40 DC resin coated sand in 659 bbls of 35# CMHPH gel. 8117', 23', 29', 35', there was no entry.
PLO: (5769'-6104') 1 SPF, 66, 0.36" holes. 5769', 71', 75', 77', 79', 81', 83', 86', 88', 90', 92', 94', 96', 98', 5808', 10', 12', 14', 16', 21', 23', 25', 29', 31', 33', 35', 37', 39', 41', 46', 48', 50', 53', 55', 57', 64', 66', 79', 81', 83', 85', 87', 89', 91', 99', 5902', 04', 06', 23', 25', 27', 29', 50', 57', 73', 83', 85', 6000', 02', 16', 46', 48', 63', 78', 85', 6104'. Acidized w/ 500 gals of 15% HCL. Frac w/ 80,000# 20/40 sand in 987 bbls of slick water.
CH/Men: (5379'-5797') 1-2 SPF, 54, 0.36" holes. 5291', 93', 5412', 61', 63', 89', 5515', 30', 34', 36', 38', 62', 69', 81', 83', 85', 88', 90', 92', 94', 96', 98', 5602', 04', 10', 26', 33', 45', 61', 64', 71', 73', 75', 81', 85', 5707', 11', 13', 15', 21', 23', 31', 33', 35', 37', 39', 41', 47', 49', 51', 53', 55', 57', 59'. Acidized w/ 1000 gals of 15% HCL.
 Frac w/ 133,000# 20/40 sand in 2492 bbls of slick water.

Formations:	MD	Point Lookout	5775'
Ojo Alamo	2611'	Mancos	5992'
Fruitland	3154'	Gallup	7796'
Pictured Cliffs	3342'	Dakota	7974'
Cliff House	5504'		
Menefee	5559'		

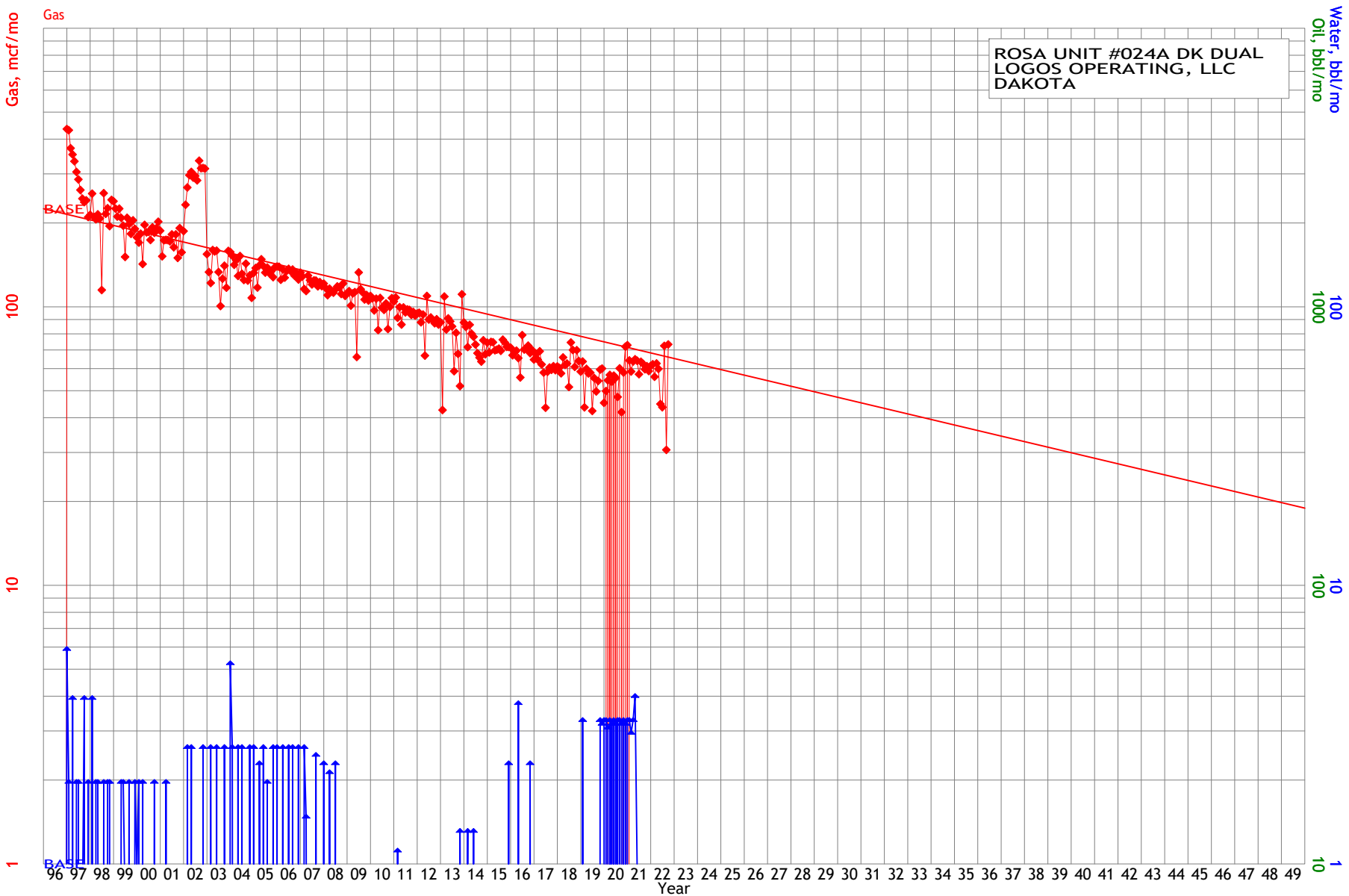
Additional Notes:

There is no record of any workovers since completion.

Max deviation is 4-3/4" at 6118'

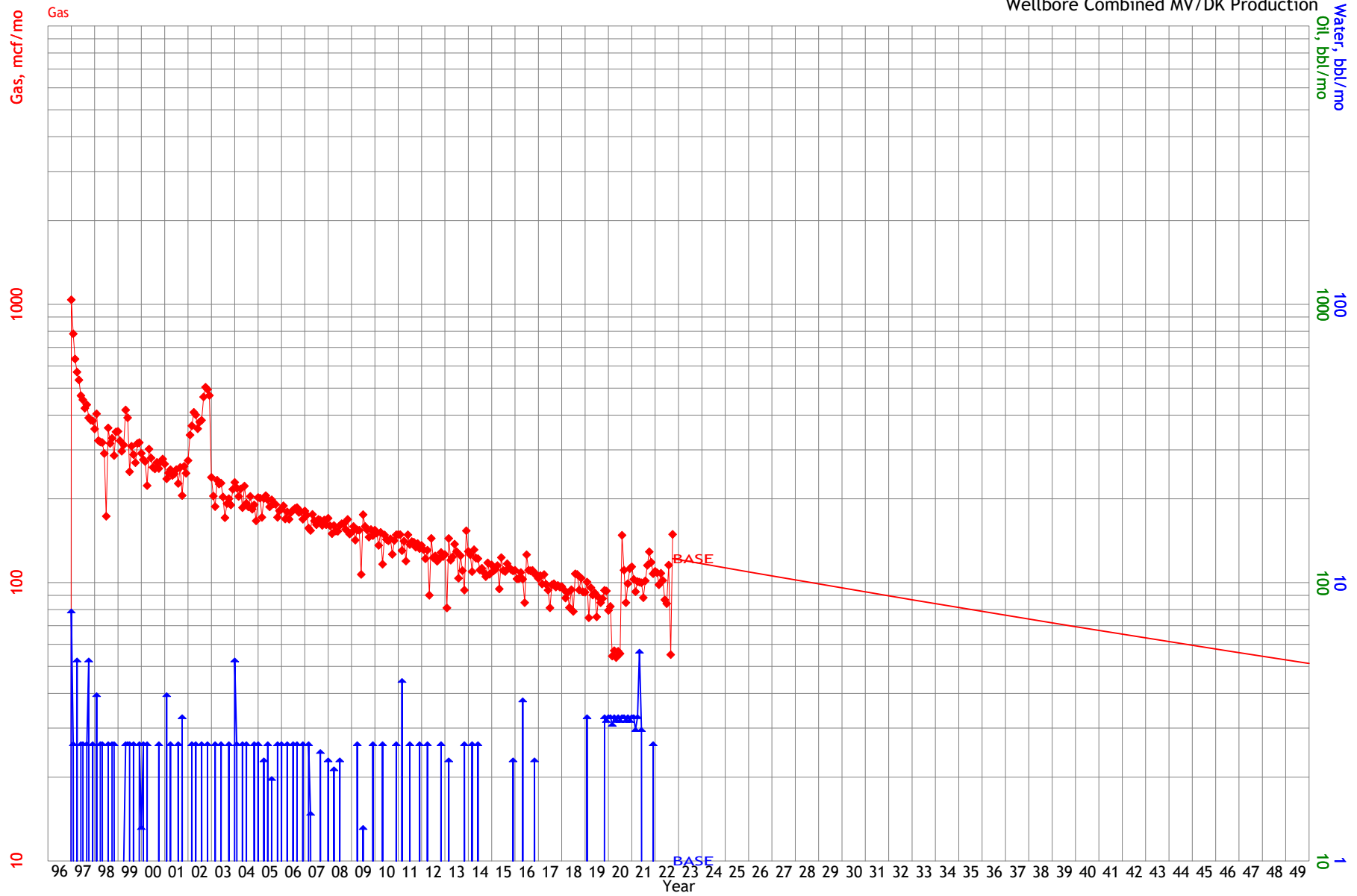


Gas, mcf/mo	—	Oil, bbl/mo	◆◆◆	Water, bbl/m	▲▲▲
Qual=	BASE	Ref=	10/2022	Ref=	10/2022
Ref=	10/2022	Cum=	0	Cum=	2019
Cum=	579815				
Rem=	877568				
EUR=	1457383				
Yrs=	100.000				
Qi=	56.0				
b=	0.000000				
De=	2.000000				
Qab=	7.4				



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=	1161588			Cum=	6407
Rem=	520294			Rem=	6288
EUR=	1681882			EUR=	12695
Yrs=	100.000			Yrs=	74.833
Qi=	66.0			Qi=	0.4
b=	0.000000			b=	0.000000
De=	4.479300			De=	2.000000
Qab=	0.7			Qab=	0.1

Wellbore Combined MV/DK Production



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=	1741403			Cum=	8426
Rem=	1397863			Rem=	6290
EUR=	3139266			EUR=	14716
Yrs=	100.000			Yrs=	74.833

District I

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 Phone:(575) 393-6161 Fax:(575) 393-0720

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District III

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 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 183118

CONDITIONS

Operator: LOGOS OPERATING, LLC 2010 Afton Place Farmington, NM 87401	OGRID: 289408
	Action Number: 183118
	Action Type: [C-107] Down Hole Commingle (C-107A)

CONDITIONS

Created By	Condition	Condition Date
dmcclure	Prior to conducting the work, file a NOI with the workover procedure as a C-103G.	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
dmcclure	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.	2/22/2023
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