

Form 3160-5  
(June 2019)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM 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. **NMSF078773**

6. If Indian, Allottee or Tribe Name

**SUBMIT IN TRIPLICATE - Other instructions on page 2**

1. Type of Well

Oil Well  Gas Well  Other

2. Name of Operator **LOGOS OPERATING LLC**

3a. Address **2010 AFTON PLACE, FARMINGTON, NM 87401** 3b. Phone No. (include area code)  
**(505) 278-8720**

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
**SEC 33/T31N/R5W/NMP**

7. If Unit of CA/Agreement, Name and/or No.  
**ROSA UNIT--DK, ROSA UNIT--MV/NMNM78407A, NMP**

8. Well Name and No. **ROSA UNIT/147B**

9. API Well No. **3003926960**

10. Field and Pool or Exploratory Area  
**BLANCO MESAVERDE/BASIN DAKOTA**

11. 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	Drill out RBP / Return well to production	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> 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 recomplate 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 recompletion 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.)

Well was downhole commingled per DHC 5296 on 7/20/2023 and isolated with RBP @ 5061' due to PAD 31 completions.

LOGOS Operating, LLC request to remove bridge plug and return well to production as a Mesaverde/Dakota commingle. See attached operations procedure.

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)  
**ETTA TRUJILLO / Ph: (505) 324-4154**

Title **Regulatory Specialist**

Signature (Electronic Submission)

Date **10/17/2023**

**THE SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by

**MATTHEW H KADE / Ph: (505) 564-7736 / Approved**

Title **Petroleum Engineer**

Date **10/17/2023**

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: NWE / 940 FNL / 2255 FEL / TWSP: 31N / RANGE: 5W / SECTION: 33 / LAT: 36.860723 / LONG: -107.366336 ( TVD: 0 feet, MD: 0 feet )

BHL: SWNE / 1511 FNL / 2268 FEL / TWSP: 31N / RANGE: 5W / SECTION: 33 / LAT: 0.0 / LONG: 0.0 ( TVD: 0 feet, MD: 0 feet )

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5. Lease Serial No. NMSF078773

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**SUBMIT IN TRIPLICATE - Other instructions on page 2**

1. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other		7. If Unit of CA/Agreement, Name and/or No. NMNM78407A NMNM78407B
2. Name of Operator LOGOS Operating, LLC		8. Well Name and No. Rosa Unit 147B
3a. Address 2010 Afton Place, Farmington NM 87401	3b. Phone No. (include area code) 505-278-8720	9. API Well No. 30-039-26960
4. Location of Well (Footage, Sec., T.,R.,M., or Survey Description) Unit B, Section 33 T31N R05W 940' FNL & 2255' FEL		10. Field and Pool or Exploratory Area Blanco Mesaverde / Basin Dakota
		11. 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				
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<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 Drill out RBP / Return well to production	
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon		
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Well was downhole commingled per DHC 5296 on 7/20/2023 and isolated with RBP @ 5061' due to PAD 31 completions.

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14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed) Etta Trujillo		Title Regulatory Specialist
Signature 	Date 10/17/2023	

**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	

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(Instructions on page 2)



## DOWNHOLE COMMINGLE PROCEDURE AND ALLOCATION-NMOCD (2023)

**Rosa Unit 147B**  
**30-039-26960**  
**940' FNL & 2255' FEL**  
**Section 33, T31N, R05W**  
**Rio Arriba, New Mexico**  
**LAT: 36.8607216° N LONG: -107.3663025° W**  
**Mesaverde/Dakota**

### **PROJECT OBJECTIVE:**

Remove packer and set a bridge plug above the Mesaverde perforations and load hole to protect the wellbore during offset completions. Once offset completions are complete, remove bridge plug 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. 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 B Packer at 6209'. Trip out of hole with packer plucker assembly and string.
7. Set bridge plug within 50' of the Mesaverde perforations and load the hole with KCL water. SI well for offset completions.
8. Once offset completions are complete, trip in hole and remove the bridge plug.
9. Run in hole with single 2-1/16" production tubing string.
10. Return to production as a Mesaverde/Dakota commingle.

### **PRODUCTION ALLOCATION**

Historic production data from both zones in this well was gathered and analyzed. Cumulative production was used to determine allocations and allocations were verified with recent production history.

#### **Cumulative Production**

Cumulative production from well	2028.5 MMcf
Cumulative MV production	667.8 MMcf
Cumulative DK production	1360.7 MMcf

MV allocation = MV cumulative/total cumulative = 667.8/2028.5 = **32.9%**

DK allocation = DK cumulative /total cumulative = 1360.7/2028.5 = **67.1%**

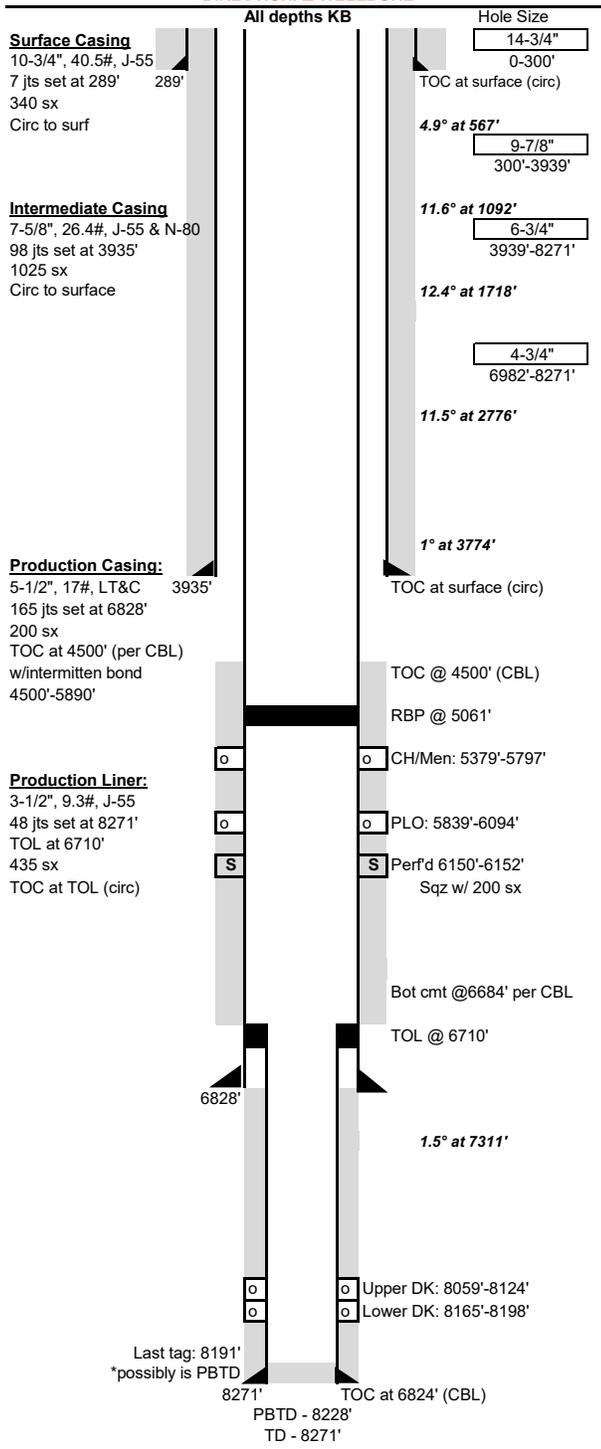


**Isolation Wellbore Schematic**

Well Name: Rosa Unit 147B  
 Location: B-33-31N-05W 940' FNL & 2255' FEL  
 County: Rio Arriba, NM  
 API #: 30-039-26960  
 Co-ordinates: Lat 36.8607216, Long -107.3663025 NAD83  
 Elevations: GROUND: 6513'  
 KB: 6513'  
 PBDT: 8228'  
 TD: 8271'  
 Depths (KB):

Date Prepared: 11/30/2022 Peace  
 Reviewed By: 12/5/2022 Moss  
 Last Updated:  
 Spud Date: 6/4/2004  
 Completion Date: 9/26/2004  
 Last Workover Date: 7/14/2023

**DIRECTIONAL WELLBORE**



**Surface Casing: (6/5/2004)**  
 Drilled a 14-3/4" surface hole to 300'. Set 7 jts 10-3/4", 40.5#, J-55 csg at 289'.  
 Cmt'd w/ 340 sx Type III cmt (14.5 ppg, 1.41yd). Circ 40 bbls cmt to surface.

**Intermediate Casing: (6/18/2004)**  
 Drilled a 9-7/8" intermediate hole to 3939'. Set 98 jts 7-5/8", 26.4#, J-55 & N-80 csg at 3935'. Cmt'd w/ 925 sx Type III 65/35 poz cmt (12.1 ppg, 2.11 yd). Tailed w/ 100 sx Type III cmt (14.5 ppg, 1.4 yld). Circ 150 bbls to surface.

**Production Casing: (6/23/2004)**  
 Drilled a 6-3/4" production hole to 8271'. Ran ~165 jts 5-1/2", 17#, N-80 csg, got stuck at 6848' & couldn't est injection. Perf'd csg 6150-6152' 4 SPF. Cmt'd w/ 200 sx perm lite. (12.3 ppg, 2.15 yld). TOC @ 4500' w/ intermittent bond from 4500' to 5890' per CBL.  
**Used 41.5' jt length to estimate number of csg jts.**

**Production Liner: (7/5/2004)**  
 Drilled 4-3/4" liner hole to 8271'. Set 48 jts 3-1/2", 9.3# J-55 csg at 8271'. TOL at 6710'. Cmt w/ 50 sx (12 ppg, 2.29 yld). Tailed in w/ 385 sx perm lite. (12.3 ppg, 2.15 yld) TOL was original at 6710', after cmt TOL tagged at 6676'. TOC @ 6824'

**Tubing:**  
 Pulled for wellbore Isolation (7/2023)

**Artificial Lift:**  
 Plunger lift

**Perforations: (8/2004)**  
**Lower DK: (8165'-8198')** 3 SPF 0.21, 36" holes. 8165', 69', 75', 86', 90', 94', 98.  
**Upper DK: (8059'-8124')** 3 SPF, 21, 0.29" holes. 8059', 65', 73', 8108', 11', 20', 24'. Acidize both upper and lower DK w/1000 gals 15% HCL & 70 bio-balls.  
 Frac w/ 69,000# 20/40 Econoprop sand in 60Q XL N2 foam.  
**PLO: (5839'-6094')** 1 SPF, 43, 0.33" holes. 5839', 41', 50', 53', 56', 60', 64', 68', 72', 76', 79', 82', 89', 93', 97', 5900', 07', 11', 19', 22', 25', 28', 32', 37', 41', 44', 51', 54', 64', 73', 76', 89', 6001', 08', 19', 32', 35', 42', 51', 63', 68', 83', 94'.  
 Acidized w/ 1000 gals 15% HCL & 62 bio-balls (recovered 18 balls. Frac w/ 9800# 14/30 Lite Prop & 40,000# 20/40 Brady sand in 2674 bbls of slickwater.  
**CH/Men: (5379'-5797')** 1 SPF, 40, 0.33" holes. 5379', 83', 92', 97', 5408', 26', 5516', 25', 32', 46', 59', 75', 92', 98', 5602', 11', 14', 21', 23', 36', 64', 67', 70', 73', 75', 77', 85', 87', 89', 92', 94', 5711', 13', 52', 61', 64', 67', 70', 94', 97'. Acidized w/ 1000 gals 15% HCL & 60 bio-balls. Frac w/ 9800# 14/30 Lite Prop & 40,000# 20/40 Brady sand in 2338 bbls slickwater.

**Formations:**

MD	
Pictured Cliffs	3443' Menefee 5676'
Lewis	3719' Point Lookout 5861'
Cliff House	5626' Gallup 7156'
	Dakota 8056'

**Additional Notes:**  
 7/2023- Wellbore Isolation- LD MV & DK 2-1/16" strings, sent to cave for storage.  
 TIH w/ pkr plucker to model D pkr at 6209'. TOOH w/ pkr. TIH w/ 5-1/2" RBP, set at 5061', loaded well w/ 16 bbls pkr fluid, PT from RBP to surface to 1000psi for 20mins, good test. LD workstring & drill collars. Top off well w/ pkr fluid.

The 3-1/2" liner was originally set at 6710', but after cmt'g, it was tagged at 6676'.  
 PBDT was originally at 8228', but 8191' was tagged after cmt'g.  
**It is possible that 8191' is PBDT.**

**Max deviation is 12.4° at 1718'. Maximum DLS 3.69 at 567'**

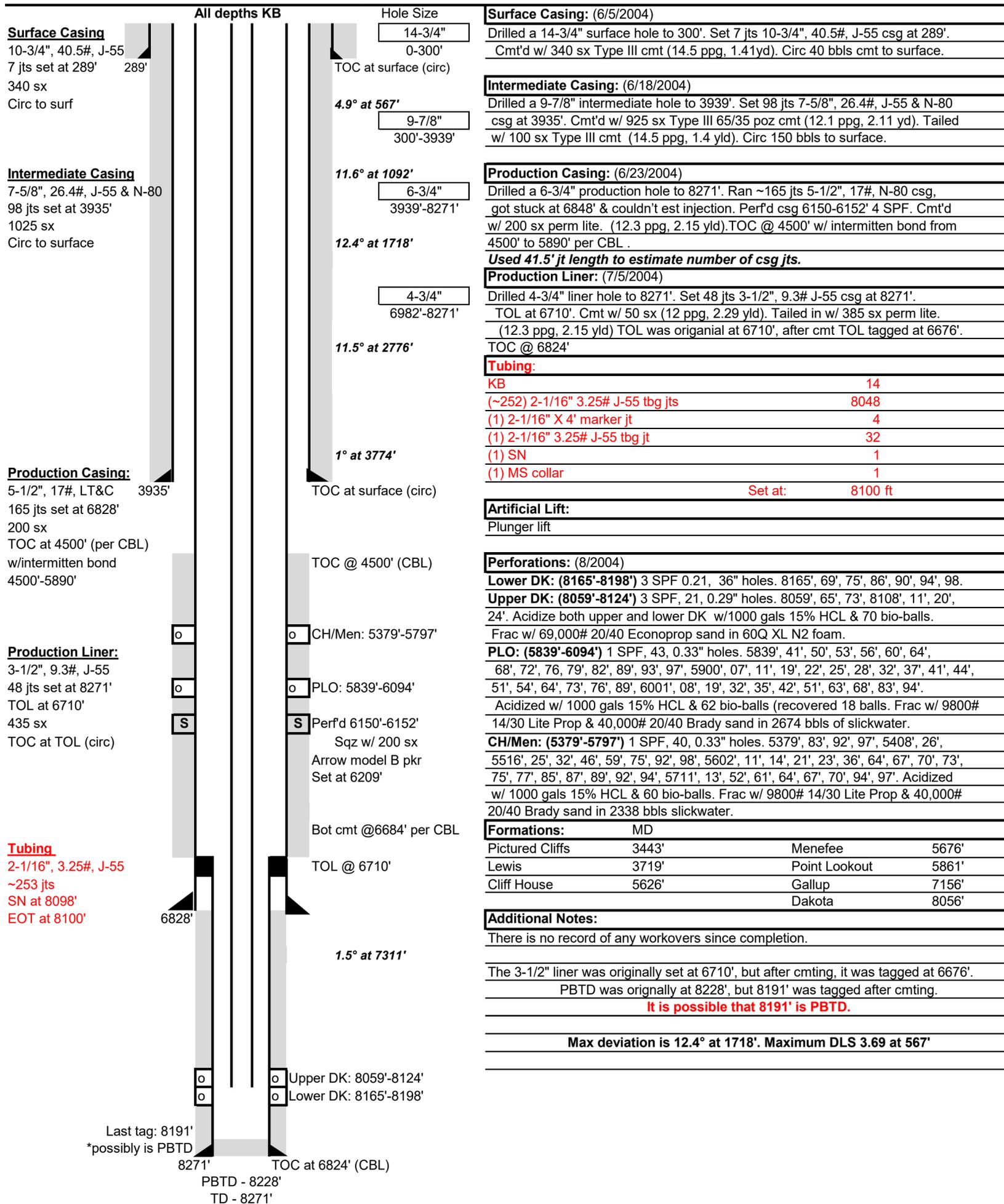


**Wellbore Schematic**

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 TD: 8271'

Date Prepared: 11/30/2022 Peace  
 Reviewed By: 12/5/2022 Moss  
 Last Updated:  
 Spud Date: 6/4/2004  
 Completion Date: 9/26/2004  
 Last Workover Date: N/A

**PROPOSED WELLBORE SCHEMATIC**



**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 276620

**CONDITIONS**

Operator: LOGOS OPERATING, LLC 2010 Afton Place Farmington, NM 87401	OGRID: 289408
	Action Number: 276620
	Action Type: [C-103] NOI Workover (C-103G)

**CONDITIONS**

Created By	Condition	Condition Date
dmcclore	None	11/7/2023