

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB NO. 1004-0137  
Expires: January 31, 2018

**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.*

**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		5. Lease Serial No. JIC120
2. Name of Operator LOGOS OPERATING LLC Contact: MARIE E FLOREZ E-Mail: mflorez@logosresourcesllc.com		6. If Indian, Allottee or Tribe Name JICARILLA APACHE
3a. Address 2010 AFTON PLACE FARMINGTON, NM 87401	3b. Phone No. (include area code) Ph: 505-787-2218	7. If Unit or CA/Agreement, Name and/or No.
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 29 T26N R4W NWSW 1850FSL 1000FWL 36.455441 N Lat, 107.280226 W Lon		8. Well Name and No. JICARILLA 120 C 4
		9. API Well No. 30-039-06291-00-S1
		10. Field and Pool or Exploratory Area BLANCO P.C. SOUTH
		11. County or Parish, State RIO ARRIBA COUNTY, 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 checked="" type="checkbox"/> Recomplete	<input 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	

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.

LOGOS Operating request a recomplate into the Basin Fruitland Coal and downhole commingle with the Blanco P.C. South per the attached procedure and current wellbore diagram. This project was identified as a slow casing leak during a workover project on November 20, 2019. The commingle authorization has been filed with NMOCD. (see attached)

**NMOCD**  
**FEB 20 2020**  
**DISTRICT III**

14. I hereby certify that the foregoing is true and correct.

**Electronic Submission #498134 verified by the BLM Well Information System  
For LOGOS OPERATING LLC, sent to the Rio Puerco  
Committed to AFMSS for processing by ALBERTA WETHINGTON on 01/08/2020 (20AMW0018SE)**

Name (Printed/Typed) MARIE E FLOREZ	Title REGULATORY SPECIALIST
Signature (Electronic Submission)	Date 01/07/2020

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

Approved By <u>JOE KILLINS</u>	Title <u>PETROLEUM ENGINEER</u>	Date <u>01/08/2020</u>
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 <u>Rio Puerco</u>

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) **\*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\***

**NMOCD AI**

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**Jicarilla 120 C 4**  
**30-039-06291**

**1850' FSL & 1000' FWL**  
**Section 29, T26N, R04W**  
**Rio Arriba County, New Mexico**  
**Lat 36.455481° Long -107.279774°**  
**Fruitland Coal/Pictured Cliffs**

**PROJECT OBJECTIVE:**

LOGOS Operating, LLC ("LOGOS") is operating the subject well in accordance with New Mexico Regulations Section 19.15.2.8(B) which states, in pertinent part, that "Operators... shall conduct their operations in or related to... operating [and] producing... in a manner that prevents waste of oil and gas." By commingling production from Fruitland Coal and Pictured Cliffs completions in the Subject Well, LOGOS will prevent waste of portions of the remaining gas reserves and will maximize recovery of minerals without jeopardizing the royalty interests and leasehold interests. LOGOS Resources II, LLC, owns 100% of the leasehold estate in both the Fruitland Coal formation and the Pictured Cliffs formation. The Jicarilla Apache Nation owns 100% of the minerals in the Fruitland Coal formation and the Pictured Cliffs formation with identical royalty rates attributable to both formations.

**WORKOVER PROCEDURE:**

1. On November 20, 2019, a slow leak was identified in the production casing in the Fruitland Coal. The failure was isolated between 3252' and 3280' with the Fruitland top being at 3155' and the Pictured Cliffs top being at 3380'.
2. It was attempted to repair the leak using a micro-matrix cement and high pressure squeeze. Upon drilling out the cement, initial pressure tests with the rig pump indicated that the leak had successfully been repaired. An MIT was scheduled with the proper regulatory agencies.
3. Upon conducting a charted pressure test, the casing was pressured to 560 psi and bled off to 500 psi in 27 minutes. A second pressure test was conducted in which the casing was pressured up to 580 psi and bled off to 515 psi in 30 minutes. Both pressure tests have been determined as failures by regulatory agencies.
4. LOGOS Resources II, LLC, owns 100% of the leasehold estate in both the Fruitland Coal formation and the Pictured Cliffs formation. The Jicarilla Apache Nation owns 100% of the minerals in the Fruitland Coal formation and the Pictured Cliffs formation with identical royalty rates attributable to both formations.

5. Because it is neither economically nor mechanically feasible to conduct additional attempts at shutting off the slow leak discussed in Item No. 1, LOGOS sought advice from both the NMOCD and the Jicarilla Oil and Gas Administration regarding the best process to avoid waste of Pictured Cliffs reserves. Considering advice from both agencies, LOGOS is applying for permission to downhole commingle production from the Fruitland Coal and Pictured Cliffs formations and thereby avoiding premature plugging and abandonment of the subject well.
6. The bridge plug used to isolate perforations during the casing repair will be removed, the tubing will be landed, and the well will be shut in pending approval of the downhole commingle.
7. Upon approval of the DHC, Logos will return the well to production.

**PRODUCTION ALLOCATION**

Historically, the well has produced only from the Pictured Cliffs formation. However, based on a minor casing leak that has developed within portion of the wellbore traversing the Fruitland Coal formation, it is anticipated that ~1 % of future wellbore production will be contributed by the FC zone.

**Cumulative Production**

Total production from well	925.330 MMcf
Total PC production	925.330 MMcf
Total FC production	0 MMcf

PC allocation = 99%

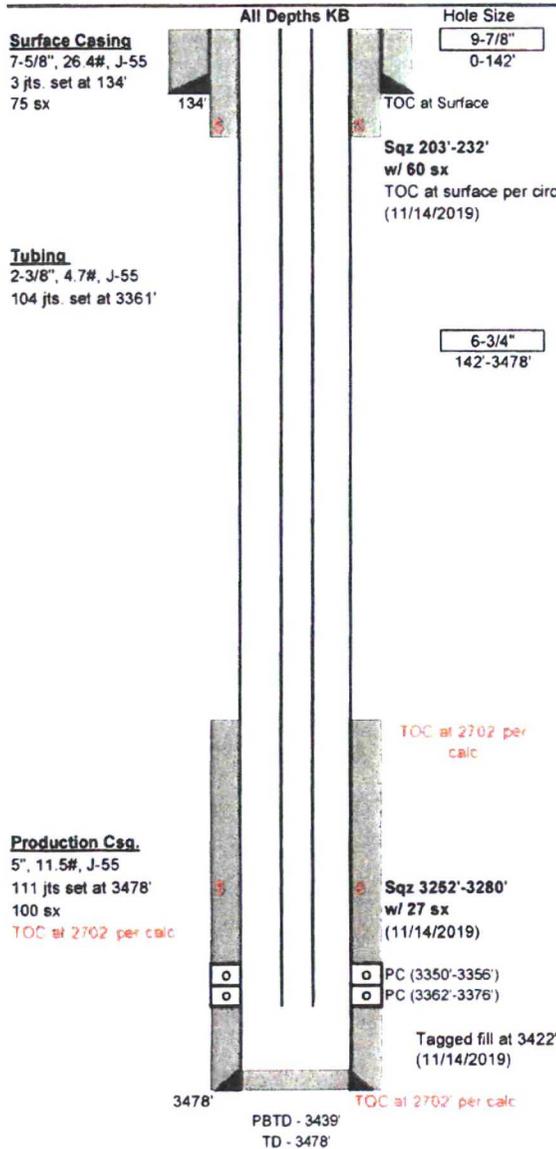
FC allocation = 1%



**Wellbore Schematic**

Well Name: Jicarilla 120 C 004  
 Location: Sec 29, T26N, R04W 1850' FSL & 1000' FWL  
 County: Rio Arriba  
 API #: 30-039-06291  
 Co-ordinates: Lat: 36.455481 Long: -107.279774  
 Elevations: GROUND: 6785'  
 KB: 6795'  
 Depths (KB): PBDT: 3439'  
 TD: 3478'

Date Prepared: 3/31/2017  
 Last Updated: 12/11/2019 Dickens  
 Spud Date: 5/12/1957  
 Completion Date: 5/30/1957  
 Last Workover Date: 11/14/2019



**Surface Casing: (5/12/1957)**  
 Drilled a 9-7/8" surface hole to 142'. Set 3 jts 7-5/8", 26.4#, J-55 casing at 134'.  
 Cemented w/ 75 sx reg cmt + 2% CaCl2  
 Circ to surface

**Production Casing: (5/18/1957)**  
 Drilled a 6-3/4" production hole to 3478'. Set 111 jts 5", 11.5#, J-55 casing at 3478'.  
 Cemented w/ 100 sx reg cmt  
 TOC at 2702' per calc assuming 16 yield & 75% efficiency

\*\* 2019 Casing repair, squeezed 203'-232' w/ 60 sx cmt, TOC of sqz at surface per circulation. Squeezed 3155'-3282' w/ 27 sx.

Tubing: (5/28/1957)	Length (ft)
KB	10.00
(1) 2-3/8" tbg jt	31.00
(2) 2-3/8" pup jts (8', 10')	18.00
(103) 2-3/8" J-55 tbg jts	3291.90
(1) 2-3/8" Marker jt (8')	8.00
(1) SN at 3360'	1.10
(1) Muleshoe collar	1.00

Set at: 3361.00 ft

**Rods:**  
 NA

**Pumping Unit**  
 NA

**Perforations:**  
 (5/27/1957) Pictured Cliffs: (3350'-3356') & (3362'-3376') w/ 6 SPF  
 Frac w/ 41,985 gal H2O & 30,000# 20/40 sand

**Formations:**

Ojo Alamo-	2906'
Kirtland-	3007'
Fruitland-	3155'
Pictured Cliffs-	3330'
Lewis-	3395'

**Additional Notes:**  
 11/14/2019- Casing Repair, leaks from 203'-232' and 3252'-3280' were squeezed. Tagged fill at 3422'

\*\*Well has a maximum deviation of 1-1/4 degrees @ 2790'

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 Road, Aztec, NM 87410  
Phone (505) 334-6178 Fax (505) 334-6170  
District IV  
1220 S St Francis Dr., Santa Fe, NM 87505  
Phone (505) 476-3460 Fax (505) 476-3462

State of New Mexico  
Energy, Minerals & Natural Resources Department  
OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-102  
Revised August 1, 2011  
Submit one copy to appropriate  
District Office

AMENDED REPORT  
**NMOC**

WELL LOCATION AND ACREAGE DEDICATION PLAT

MAR 05 2020

DISTRICT III

<sup>1</sup> API Number 30-039-06291		<sup>2</sup> Pool Code 71629		<sup>3</sup> Pool Name Basin Fruitland Coal	
<sup>4</sup> Property Code 316608		<sup>5</sup> Property Name Jicarilla 120 C			<sup>6</sup> Well Number 004
<sup>7</sup> OGRID No. 289408		<sup>8</sup> Operator Name LOGOS Operating, LLC			<sup>9</sup> Elevation 6785

<sup>10</sup> Surface Location

U/L or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	29	26N	04W		1850	FSL	1000	FWL	Rio Arriba

<sup>11</sup> Bottom Hole Location If Different From Surface

U/L or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

<sup>12</sup> Dedicated Acres S/2 320	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.
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No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

<p><sup>16</sup></p>	<p><b><sup>17</sup> OPERATOR CERTIFICATION</b> I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p><i>Marie E. Florez</i> Signature 1/7/2020 Date</p> <p>Marie E. Florez Printed Name</p> <p><a href="mailto:mflorez@logosresourcesllc.com">mflorez@logosresourcesllc.com</a> E-mail Address</p>
	<p><b><sup>18</sup> SURVEYOR CERTIFICATION</b> I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</p> <p>April 11, 1957 Date of Survey</p> <p>Signature and Seal of Professional Surveyor: Original survey by Ernest V. Echohawk Reg. Land Surveyor, N. Mex., Reg No. 1545</p> <p>Certificate Number</p>