

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No. 1004-0137  
Expires: October 31, 2014

DEC 27

**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.  
Jicarilla Apache Lease #417  
6. If Indian, Allottee or Tribe Name  
Jicarilla Apache Nation

**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  
4001 North Butler Avenue, Building 7101  
Farmington, NM 87401

3b. Phone No. (include area code)  
505-330-9333

7. If Unit of CA/Agreement, Name and/or No.

8. Well Name and No.  
Jicarilla O 3E

9. API Well No.  
30-043-21165

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
919' FSL, 1738' FEL  
Section 10, T22N, R3W, UL O

10. Field and Pool or Exploratory Area  
Lindrieth Gallup-Dakota, West

11. County or Parish, State  
Sandoval 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"/> Fracture Treat	<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 <u>Production Casing Squeeze</u>
	<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 recompleat 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 recompleat 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.)

CBL ran on 12/20/13 shows good cement from 4100' to 5910'. Logos Operating plans to squeeze the production casing per the attached procedure. Please see the attached current & proposed wellbore schematics which include the formation tops.

RCVD JAN 2 '14  
OIL CONS. DIV.  
DIST. 3

**CONDITIONS OF APPROVAL**  
Adhere to previously issued stipulations.

**BLM'S APPROVAL OR ACCEPTANCE OF THIS ACTION DOES NOT RELIEVE THE LESSEE AND OPERATOR FROM OBTAINING ANY OTHER AUTHORIZATION REQUIRED FOR OPERATIONS ON FEDERAL AND INDIAN LANDS**

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)

Tamra Sessions

Title Operations Technician

Signature

*Tamra Sessions*

Date 12/27/2013

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

Approved by

*William Tambekou*

Title

*Petroleum Engineer*

Date

*12/31/2013*

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

*FFO*

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)

NMOCDA




## CASING SQUEEZE PROCEDURE

### Jicarilla O #3E

919' FSL, 1738' FEL  
UL O, Section 10, T22N, R03W  
Sandoval County, New Mexico  
LAT: 36.14663° N LONG: 107.14088° W  
Lindrith Gallup-Dakota West

KG: Kristy Graham 12/27/2013 Prepare/Production Engineer  
Date

DG: \_\_\_\_\_ Approve/VP of Operations  
Date

JPM:  Approve/President  
Date

**PROJECT OBJECTIVE:**

Test casing, establish injection rate through casing shoe, perforate circulation holes, and complete casing squeeze.

**CAPACITIES**

Capacity Between 7-7/8" hole and 5-1/2" Casing: 0.03086 BBL/ft

Capacity of 2-7/8" Tubing: 0.00579 BBL/ft

Capacity of 5-1/2" Casing: 0.0232 BBL/ft

**WORKOVER PROCEDURE:**

Deliver to location the following equipment:

1.	~90' 2-7/8", 6.5#, J-55, EUE tubing to tag up
2.	Cast Iron Cement Retainer (CICR) for 5-1/2", 17#, P110 Casing
3.	Packer for 5-1/2", 17#, P110 Casing
4.	Rig pit with 2% KCl
5.	Chart Recorder for Pressure Test
6.	4-3/4" PDC bit to drill out cement
7.	Wireline Perforating Unit
8.	Dry Cement to be mixed for cement job (bring full load of dry cement) – Type III Premium Lite HS Blend Cement

1. Hold safety meeting. MIRU workover rig. Place fire and safety equipment in strategic locations. Comply with all LOGOS, Jicarilla, BLM and NMOCD rules and regulations.
2. Lay flow lines. Check and record casing pressure.
3. ND wellhead and NU BOP.

NOTE: Tubing is already in hole.

4. TIH with tubing to top of float collar at (6813') and circulate hole clean. (Tubing currently landed at 6780' KB)

Tubing Configuration in Hole: (208) Jts 2-7/8", (1) 2.25' Bit Sub, (1) 4-3/4" x 1.8' Tapered Mill

5. TOOH with tubing and mill and LD mill.
6. PU packer for 5-1/2", 17#, P110 casing. TIH and set packer at 6780'.
7. Load backside and pressure test casing to 1000 PSI for 30 minutes and record on chart. Report results to Engineer.

8. Establish water rate through packer and casing shoe at 2 BPM to verify the shoe is clear, record pressure, rate, and volume pumped.
9. TOOH with packer and LD packer.
10. Rig up wireline and TIH to perforate 2 holes with 0.38 charges phased at 180 degrees. Perforate at 5950' based on CBL depths.
11. TOOH with wireline and make sure all shots fired.
12. PU CICR and TIH and set CICR @ 6070'.
13. Establish circulation through CICR and casing shoe at 2 BPM prior to pumping cement. Contact engineer with established rate, pressure, and volume before pumping cement.
14. Mix and pump 42 bbls of Type III Premium Lite HS blend cement (169 sacks) with 1.38 yield and displace to top of float collar with 52 bbls of water to the top of the shoe.
15. Sting out of retainer and reverse the hole clean.
16. TOOH with entire tubing string and shut down for the day.
17. After letting cement setup overnight.
18. Pressure test casing to 1000 PSI on chart recorder and report results to Engineer.
19. Drill out cement and CICR to the top of float collar.
20. Circulate hole clean.
21. Pressure test casing to 500 PSI and report results to Engineer.
22. Rig up wireline and run CBL. TOOH with wireline.
23. Wait on Engineer for next plan of action to determine if additional squeezes are necessary.

**Contacts**

Kristy Graham – Production Engineer  
Office (505) 436-2627  
Cell (505) 402-6361

David Gonzales - Vice President of Operations  
Office (505) 436-2626  
Cell (505) 215-8215

Wayne Ritter – Production Manager  
Cell (505) 320-0436

Ron Coffee – Consultant  
Cell (505) 320-1009

Larry Candelaria – Consultant  
Cell (505) 330-7065 or (713) 493-0957

Art Sullivan – Production Foreman  
Cell (505) 320-1983

Dave McWilliams – WSS Construction and Lybrook Yard Owner  
Cell (505) 320-1515  
Cell (505) 635-1581

Blue Jet– Wireline Perforating  
Cell (505) 320-0172



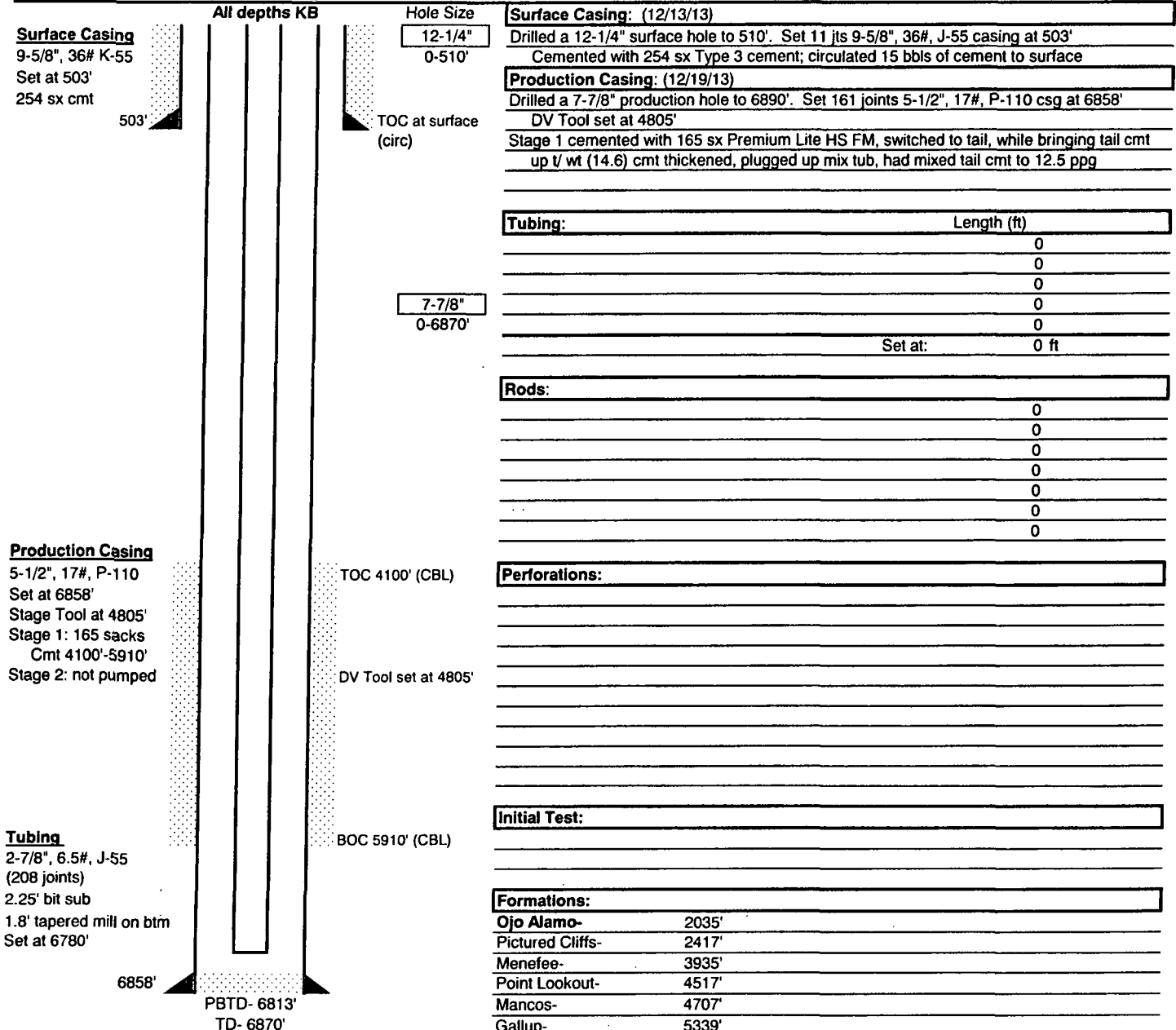
RESOURCES-LLC

## Wellbore Schematic

Well Name: Jicarilla O #3E  
Location: 919' FSL, 1738' FEL, Section 10, T22N, R03W  
County: Sandoval  
API #: 30-043-21165  
Co-ordinates: LAT: 36.14863° N LONG: 107.14088° W  
Elevations: GROUND: 7072'  
KB: 7087'  
PBTD: 6813'  
TD: 6870'  
Depths (KB):

Date Prepared: 12/27/2013  
Last Updated: 12/27/2013  
Spud Date: 12/11/2013  
Completion Date:  
Last Workover Date:

## Current Wellbore Configuration





RESOURCES, LLC

## Wellbore Schematic

Well Name: Jicarilla O #3E  
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Last Updated: 12/27/2013  
Spud Date: 12/11/2013  
Completion Date:  
Last Workover Date:

## Proposed Wellbore Configuration

