

Well Name: J L KEEL A	Well Location: T17S / R31E / SEC 7 / SESW / 32.8426431 / -103.9114521	County or Parish/State: EDDY / NM
Well Number: 3	Type of Well: INJECTION - ENHANCED RECOVERY	Allottee or Tribe Name:
Lease Number: NMLC029435A	Unit or CA Name:	Unit or CA Number:
US Well Number: 3001505091	Operator: LH OPERATING LLC	

Notice of Intent

Sundry ID: 2785007

Type of Submission: Notice of Intent	Type of Action: Workover Operations
Date Sundry Submitted: 04/15/2024	Time Sundry Submitted: 07:42
Date proposed operation will begin: 06/01/2024	

**Procedure Description:** 1. Move in rig up workover rig. Bleed off well head pressure. ND wellhead and NU BOP. 2. Unhook injection line and meter run. 3. ND wellhead and NU BOP. 4. Unset packer. Pull out of hole with tubing. Inspect tubing as pulling out of hole. 5. Send packer to shop for redress or replace with new packer based on condition. 6. Replace tubing as needed from visual inspection. 7. Pick up reconditioned or new packer and run in hole on the tubing while testing the tubing below the slips to 4500 psi (test tools to be coated). Replace tubing as needed. 8. Once on depth above perforations, circulate in packer fluid (corrosion inhibitor and biocide) mixed in fresh water. 9. Set packer. ND BOP and NU wellhead. Install meter run. 10. Notify NMOCD field representative to witness test. Perform mechanical integrity test. Return to water injection.

Surface Disturbance

Is any additional surface disturbance proposed?: No

Well Number: 3

Type of Well: INJECTION - ENHANCED  
RECOVERY

Allottee or Tribe Name:

Lease Number: NMLC029435A

Unit or CA Name:

Unit or CA Number:

US Well Number: 3001505091

Operator: LH OPERATING LLC

Conditions of Approval

Specialist Review

Workover\_or\_Vertical\_Deepen\_COA\_20240419193735.pdf

Operator

I certify that the foregoing is true and correct. 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. Electronic submission of Sundry Notices through this system satisfies regulations requiring a

Operator Electronic Signature: MICHAEL BURTON

Signed on: APR 15, 2024 07:41 AM

Name: LH OPERATING LLC

Title: Environmental Manager

Street Address: 3730 KIRBY DR SUITE 1200

City: HOUSTON

State: TX

Phone: (575) 499-5306

Email address: MIKE@LHOPERATING.COM

Field

Representative Name:

Street Address:

City:

State:

Zip:

Phone:

Email address:

BLM Point of Contact

BLM POC Name: JONATHON W SHEPARD

BLM POC Title: Petroleum Engineer

BLM POC Phone: 5752345972

BLM POC Email Address: jshepard@blm.gov

Disposition: Approved

Disposition Date: 04/19/2024

Signature: Jonathon Shepard

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.**

<b>SUBMIT IN TRIPLICATE - Other instructions on page 2</b>		5. Lease Serial No.
1. Type of Well <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		6. If Indian, Allottee or Tribe Name
2. Name of Operator		7. If Unit of CA/Agreement, Name and/or No.
3a. Address	3b. Phone No. (include area code)	8. Well Name and No.
4. Location of Well (Footage, Sec., T.,R.,M., or Survey Description)		9. API Well No.
		10. Field and Pool or Exploratory Area
		11. Country or Parish, State

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA				
TYPE OF SUBMISSION	TYPE OF ACTION			
<input 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 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 recompleate 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 perfonned 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 detennined that the site is ready for final inspection.)

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

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	

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: SESW / 330 FSL / 1650 FWL / TWSP: 17S / RANGE: 31E / SECTION: 7 / LAT: 32.8426431 / LONG: -103.9114521 ( TVD: 0 feet, MD: 0 feet )

BHL: SESW / 330 FSL / 1650 FWL / TWSP: 17S / SECTION: / LAT: 0.0 / LONG: 0.0 ( TVD: 0 feet, MD: 0 feet )

## BUREAU OF LAND MANAGEMENT

Carlsbad Field Office  
620 East Greene Street  
Carlsbad, New Mexico 88220  
575-234-5972

### Conditions of Approval for Workover/Deepening of a Well

1. Notification: Contact the appropriate BLM office at least 24 hours prior to the commencing of any operations. For wells in Eddy County, call 575-361-2822. For wells in Lea County, call 575-689-5981
2. Blowout Preventers: A blowout preventer (BOP), as appropriate, shall be installed before commencing any operation. The BOP must be installed and maintained as per API and manufacturer recommendations. The minimum BOP requirement is a 2M system for a well not deeper than 9,100 feet, a 3M system for a well not deeper than 13,600 feet, or a 5M system for a well not deeper than 22,700 feet (all depths are for measured well depth).
3. Cement: Notify BLM if cement fails to circulate.
4. Subsequent Reporting: Within 30 days after work is completed, file a Subsequent Report (Form 3160-5) to BLM. The report should give in detail the manner in which the work was carried out. Show date work was completed. If producing a new zone, submit a Completion Report (Form 3160-4) with the Subsequent Report.
5. Trash: All trash, junk and other waste material shall be contained in trash cages or bins to prevent scattering and will be removed and deposited in an approved sanitary landfill. Burial on site is not permitted.
6. If well location is within the Timing Limitation Stipulation Area for Lesser Prairie-Chicken: From March 1<sup>st</sup> through June 15<sup>th</sup> annually, activities will be allowed except between the hours from 3:00 am and 9:00 am. Normal vehicle use on existing roads will not be restricted.



## Downhole Well Profile

Well Name: KEEL J L A 3 INJ

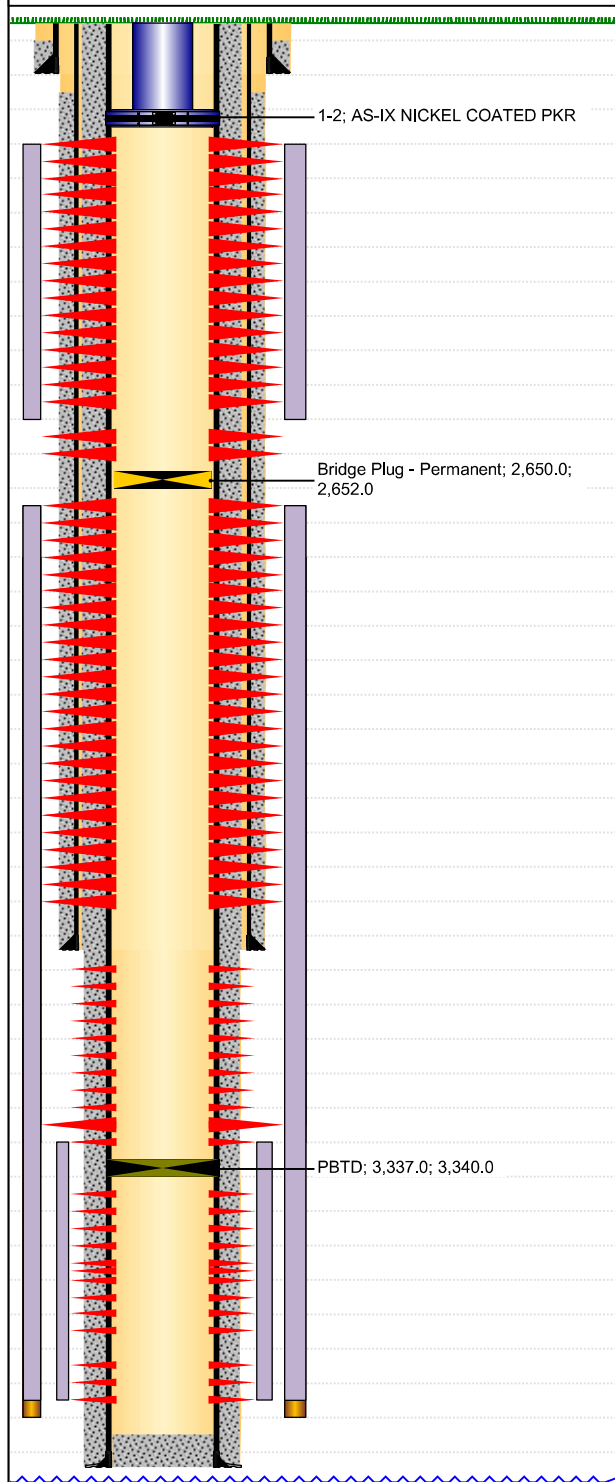
API/UWI 3001505091	Surface Legal Location	Field Name PBNM - PB-GRAYBURG WEST	Spud Date Notice Information	State/Province NM	Well Configuration Type
Original KB Elevation (ft) 3,719.00	KB-Tubing Head Distance (ft)	Initial Spud Date 4/20/1938 00:00	Rig Release Date	PBTD (All) (ftKB)	Total Depth All (TVD) (ftKB)

Type

Des	Make	Model	WP (psi)	Service	WP Top (psi)	Bore Min (in)

Original Hole, 1/17/2024 12:22:50 PM

Vertical schematic (actual)



## Casing Strings

Csg Des	OD (in)	Wt/Len (lb/ft)	Grade	Top Thread	Set Depth (ftKB)
Surface	8 5/8	28.00			558.0
Intermediate	7	24.00			3,100.0
Production	4 1/2	11.60	J-55		3,575.0

## Perforations

Date	Top (ftKB)	Btm (ftKB)	Linked Zone
6/8/2021	1,942.0	1,945.0	Seven Rivers
6/8/2021	1,957.0	1,961.0	Seven Rivers
6/8/2021	1,969.0	1,972.0	Seven Rivers
6/8/2021	2,029.0	2,033.0	Seven Rivers
6/8/2021	2,065.0	2,068.0	Seven Rivers
6/8/2021	2,090.0	2,093.0	Seven Rivers
6/8/2021	2,135.0	2,139.0	Seven Rivers
6/8/2021	2,165.0	2,168.0	Seven Rivers
6/8/2021	2,281.0	2,284.0	Seven Rivers
9/1/1996	2,755.0	2,755.0	
9/1/1996	2,773.0	2,773.0	
9/1/1996	2,797.0	2,797.0	
9/1/1996	2,801.0	2,801.0	
9/1/1996	2,806.0	2,806.0	
9/1/1996	2,824.0	2,824.0	
9/1/1996	2,828.0	2,828.0	
9/1/1996	2,861.0	2,861.0	
9/1/1996	2,887.0	2,887.0	
9/1/1996	2,890.0	2,890.0	
9/1/1996	2,906.0	2,906.0	
9/1/1996	2,924.0	2,924.0	
9/1/1996	2,932.0	2,932.0	
9/1/1996	2,952.0	2,952.0	
9/1/1996	2,973.0	2,973.0	
9/1/1996	2,977.0	2,977.0	
9/1/1996	2,987.0	2,987.0	
9/1/1996	3,032.0	3,032.0	
9/1/1996	3,035.0	3,035.0	
9/1/1996	3,042.0	3,042.0	
9/1/1996	3,048.0	3,048.0	
9/1/1996	3,051.0	3,051.0	
9/1/1996	3,059.0	3,059.0	
9/1/1996	3,065.0	3,065.0	
9/1/1996	3,120.0	3,120.0	
9/1/1996	3,145.0	3,145.0	
9/1/1996	3,156.0	3,156.0	
9/1/1996	3,167.0	3,167.0	
9/1/1996	3,184.0	3,184.0	
9/1/1996	3,193.0	3,193.0	
9/1/1996	3,202.0	3,208.0	
9/1/1996	3,240.0	3,246.0	
8/29/1996	3,256.0	3,256.0	
8/29/1996	3,357.0	3,357.0	
8/29/1996	3,364.0	3,364.0	
8/29/1996	3,385.0	3,385.0	
8/29/1996	3,404.0	3,404.0	

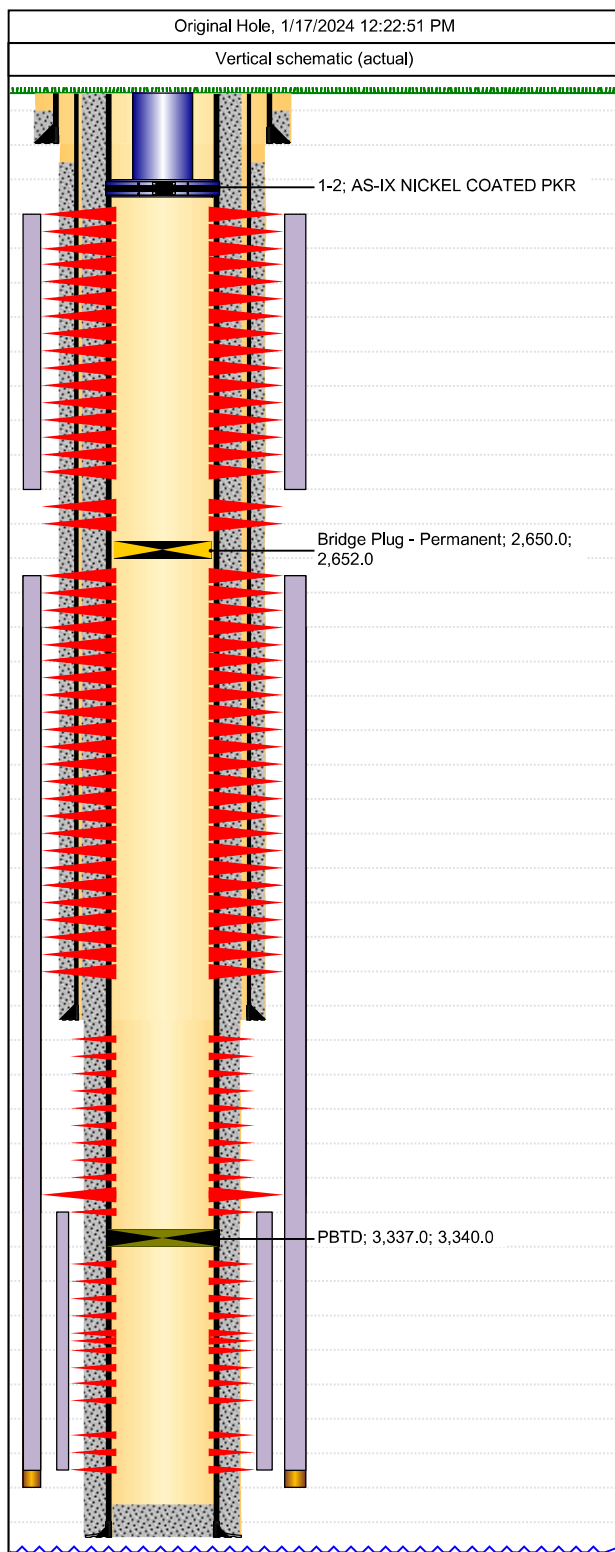




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## Perforations

Date	Top (ftKB)	Btm (ftKB)	Linked Zone
8/29/1996	3,417.0	3,417.0	
8/29/1996	3,433.0	3,433.0	
8/29/1996	3,453.0	3,453.0	
8/29/1996	3,467.0	3,467.0	
8/29/1996	3,477.0	3,477.0	
8/29/1996	3,513.0	3,513.0	
8/29/1996	3,522.0	3,522.0	
8/29/1996	3,533.0	3,533.0	
8/29/1996	3,545.0	3,545.0	

## Tubing Strings

Tubing Description Tubing - Production	Run Date 6/9/2021		String Length (ft) 1,866.00	Set Depth (ftKB) 1,866.0			
Item Des	Jts	Make	Model	OD (in)	Wt (lb/ft)	Grade	Len (ft)
2 3/8 EUE 8 RD J-55 IPC TBG	60		T&C Upset	2 3/8	4.60	J-55	1,860 .00
AS-IX NICKEL COATED PKR	1	Baker		4 1/2			6.00

## Rod Strings

Rod Description		Run Date		String Length (ft)		Set Depth (ftKB)	
Item Des	Jts	Make	Model	OD (in)	Wt (lb/ft)	Grade	Len (ft)



**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 336456

CONDITIONS

Operator: LH Operating, LLC 3730 Kirby Drive Houston, TX 77098	OGRID: 329319
	Action Number: 336456
	Action Type: [C-103] NOI Workover (C-103G)

CONDITIONS

Created By	Condition	Condition Date
mgebremichael	None	4/29/2024