

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.

Carlsbad Field Office
Artesia

Case Serial No.
NMNM88134

SUBMIT IN TRIPLICATE - Other instructions on page 2		6. If Indian, Allottee or Tribe Name
1. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		7. If Unit or CA/Agreement, Name and/or No.
2. Name of Operator DEVON ENERGY PRODUCTION COMPANY Contact: ERIN WORKMAN Email: Erin.workman@dvn.com		8. Well Name and No. H B 11 FEDERAL 4
3a. Address 333 WEST SHERIDAN AVENUE OKLAHOMA, OK 73102	3b. Phone No. (include area code) Ph: 405-552-7970	9. API Well No. 30-015-29625-00-S1
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 11 T24S R29E NWNW 510FNL 560FWL		10. Field and Pool or Exploratory Area E PIERCE CROSSING
		11. County or Parish, State EDDY 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 checked="" 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 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.

Devon Energy Production Company, LP respectfully requests approval to prepare wellbore for pressure injection and perforate & pump DFIT in Leonard B Formation per the attached procedures.

ATTACHMENTS: HB 11 Fed 4 Perf & DFIT Procedure

Thanks,

RECEIVED

JUL 23 2019

DISTRICT II-ARTESIA O.C.D.

RECEIVED

JUL 23 2019

DISTRICT II-ARTESIA O.C.D.

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

**Electronic Submission #469992 verified by the BLM Well Information System
For DEVON ENERGY PRODUCTION COMPANY LP, sent to the Carlsbad
Committed to AFMSS for processing by PRISCILLA PEREZ on 06/24/2019 (19PP2549SE)**

Name (Printed/Typed) ERIN WORKMAN	Title REGULATORY COMPLIANCE PROF.
Signature (Electronic Submission)	Date 06/20/2019

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By /s/ Jonathon Shepard

Title **Petroleum Engineer**
Carlsbad Field Office

JUN 25 2019
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.

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 ****

H B 11 Fed 4 Perf & DFIT Procedure



Well Name: H B 11 Fed 4, Eddy County, NM
WBS #: P&A Expense
Cost Center #: 1007080701

API #: 300-152-9625
Procedure Date: 6/17/2019
Author: Sheldon Moos

Current Well Status	
Fluid in Wellbore: Packer Fluid Prepped for T&A	Cased and cemented. CIBP & CMT @ 7,932'. 2-7/8" tbg hung off.
Objectives:	
<ul style="list-style-type: none"> Prepare wellbore for pressure injection Perforate & pump DFIT in Leonard B formation 	

Wellbore Schematic								
Size	Depth (MD)	Weight lb/ft	Grade, Thr	ID in	Drift in	Burst psi	Collapse psi	Capacity bbl/ft
8-5/8"	3,009'	32	J-55, BTC	7.921	7,796	3,930	2,530	0.0610
5-1/2"	0-6,080'	15.5	K-55, LT&C	4.950	4.825	4,810	4,040	0.0238
5-1/2"	0-8,505'	17	K-55, LT&C	4.892	4.767	5,320	4,910	0.0232

Devon Energy is committed to providing a safe working environment for all personnel. A safety meeting will be held prior to commencing each operation in order to define/clarify objectives, roles and responsibilities, identify all potential risk/hazards and establish a work procedure that is safe and environmentally sound. Meetings are to be documented on the reports returned to Devon.

PERFORM SAFETY CHECKS AND SAFETY MEETING

Perform safety meeting prior to rigging up ANY equipment on location. Discuss the job procedure and objective with all personnel on location. Document the safety meeting on the report sent to Devon. Make note of all potential risks/hazards, and clearly identify an emergency route and emergency vehicle. Whenever the scope of the job changes, discuss possible safety risks associated with the new task. Also make note of any new or inexperienced personnel on location. Ensure proper Personal Protective Equipment (PPE) is used during the job. Minimums are hard hats, steel toes, and safety glasses.

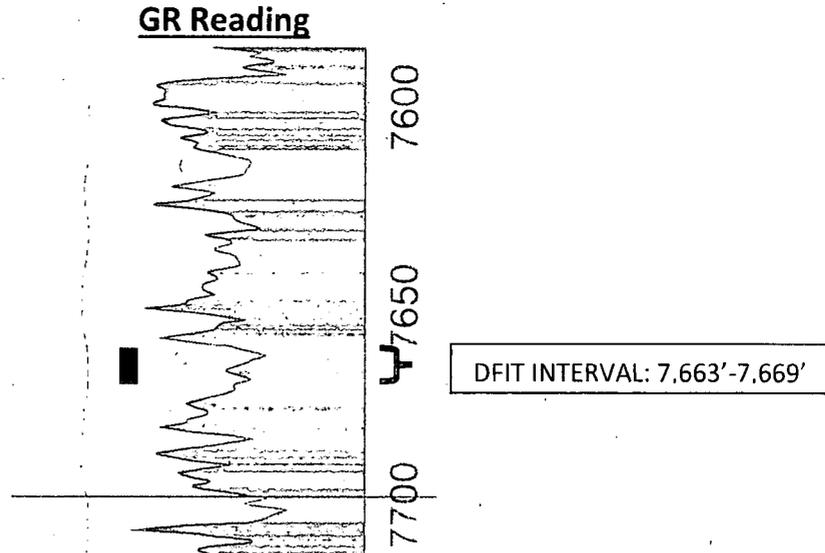
PROCEDURE

1. MIRU workover unit
2. ND tree and NU 5K BOP's, pressure test to appropriate high and low pressures.
3. Please ensure all fluid used during procedure is clean 2%KCl/Inhibited (Approx: 8.4ppg)
4. Record all casing pressures, monitor, and report any anomalies
5. Prepare well bore to remove tubing:
 - a. Check pressure and blow down any trapped pressure
 - b. Circulate inhibited 2% KCL – ensure all packer fluid is removed and replaced
 - c. Trip out of hole with all tubing, 2-7/8", laydown and send to yard for inspection and storage

H B 11 Fed 4 Perf & DFIT Procedure

6. MI/RU eline, 5k lubricator, wireline BOP, and other equipment:

- a. *Prepare to perforate casing
- b. Make up 6ft X 3-1/8" guns, 6 shots per foot, 60deg phasing, 36holes (Charge: Titan, EXP-3323-423T)
 - i. Verify tool dimension and lengths prior to running. Ensure no constraints.
- c. RIH with guns and shoot perfs @ 7,663'-7,669' MD, match eline GR to the follow log:



- d. POOH, load wellbore with inhibited 2% KCl
- e. Monitor fluid level over night to ensure reservoir zone can hold fluid
- f. **IF WELL BLEEDS OFF, CALL OK ENGINEER (Sheldon Moos, 210-323-7512) and DISCUSS

7. *Prepare to run 10k, AS1X Arrowset Packer, 5-1/2" (K55, 15.5/17#) X 2-7/8" (needs to hold DFIT pressure)

- a. Make up packer assembly on surface with on/off connection
- b. RIH with 2-7/8", 7.9#, P110, PH6 work string including packer and on/off tool and set @ 7,600ft
- c. Land tubing and install 10k production tree and dual valves for gauges and pumping access.
- d. Pressure up backside to 500psi and hold.
- e. DO NOT PUMP ON TUBING SIDE

Pump DFIT:

1. Check and record pressure on 8-5/8" x 5-1/2" casing and backside pressure, report in WV.
2. Devon PIC to verify tubing head valves are closed and wellbore is isolated from rate/pressure on surface
3. Please ensure all fluid used during procedure is clean 2%KCl/Inhibited (Approx: 8.4ppg)
4. RU 10K iron and pumps (right side of tree, w/ dual valves) on the flow cross. **Must be able to achieve 9,500psi at 10bpm.**
 - a) Pressure test all lines and connections on surface to 10,000psi. Ensure no leaks.
 - b) Test pump trucks to open top to ensure adequate rates and which gears are appropriate for DFIT design.
5. Install 1 RDS gauge on flow cross (opposite of pump side, may need to remove VR plug). Also, rig up RDS flow meter on pump outlet to measure flow rate, ensure meter accuracy.
 - a) Ensure RDS rep is present to install gauge/meter/monitoring station. Verify all is working.
 - b) Data stream needs to be as follows: 1 second for 1st 5 days, every 15seconds after that

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- c) Ensure batteries are fully charged prior to operation
- 6. Pressure test gauge connections and lines to 10,000psi for 10 min to ensure there are no leaks on the gauge/flange connections. Make sure that pressure does not bleed off more than 5 psi/min for the final 5 minutes.
- 7. After a good test, bleed off all pressure and open up both frac valves (gauge should now be reading production tubing pressure). Devon PIC to ensure gauge is open to wellbore. Check RDS gauge to make sure gauge is open to the well, reading correct pressures, and is recording.
- 8. Prior to start, notify engineer in OKC to observe job within RDS site. Sheldon Moos @ 210-323-7512.
- 9. DO NOT EXCEED 80% of casing, or 3,000psi
- 10. Slowly roll pump to fill wellbore prior to start.
- 11. Bring 1 pump online to 5bpm. Hold 5bpm for 1minute max or/ unless formation break is observed. Then, increase pump rate to 10bpm with second pump. HOLD rate for 2.5 minutes.
 - a) The exact rate isn't as important as holding the rate constant. 10 bpm is the goal, but (+)(-) 1bpm will not alter the results significantly.
 - b) Use one pump to reach the initial 5bpm. Bring the second pump online for ramp to 10bpm.
 - c) We do not want to exceed 40 bbls pumped on the DFIT.
 - d) If during the ramp to 10bpm we pressure out, immediately shut down and close wing valves. DFIT will be over.
- 12. After holding rate for 2.5 minutes, step down the rate as follows:
 - a) Step down to 7.5bpm for 15 seconds. Again, exact rate is NOT as important as holding the rate constant once stepping down.
 - b) Step down to 5bpm for 15 seconds.
 - c) Set down to 3bpm for 15 seconds.
 - d) After the final step down, shut down the pumps and immediately close BOTH wing valves on flow cross connected to the pump in side. **DO NOT CLOSE WING VALVES ON GAUGE MONITORING SIDE!!!**
- 13. RD pump company from flow cross.
- 14. Remove all valve handles that could shut off gauges and place a sign on wellhead stating "TEST IN PROGRESSS, DO NOT OPERATE VALVES OR HAMMER ON WELLHEAD."
- 15. Email pump data to sheldon.moos@dvn.com. RDS should supply pump rate data.
- 16. Leave gauges on wellhead until OKC confirms that adequate pressure data has been collected.

APPENDIX

Contacts:

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 575-393-3612
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 1st through June 15th annually, abandonment 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.