Form 3160-5
(June 2015)

OCD-HOBBS

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

HOBBS OCD
FEB 06 2018
RECEIVED

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

5. Lease Serial No.
NMNM03085

6. If Indian, Allottee or Tribe Name

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

1. Type of Well
☒ Oil Well ☐ Gas Well ☐ Other

8. Well Name and No.
LEA UNIT 17

2. Name of Operator
LEGACY RESERVES OPERATING LP

Contact: D. PATRICK DARDEN, PE
E-Mail: pdarden@legacylp.com

9. API Well No.
30-025-32794

3a. Address
303 W WALL ST SUITE 1800
MIDLAND, TX 79701

3b. Phone No. (include area code)
Ph: 432-689-5200 Ext: 5237

10. Field and Pool or Exploratory Area
LEA; DEVONIAN

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
Sec 13 T20S R34E SWSE 900 FSL 1756FEL

11. County or Parish, State
LEA CO COUNTY, NM

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Hydraulic Fracturing	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☒ Recomplete	☐ Other
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ 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 recomplete 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.

Lea Unit #17 Recomplete Well to Delaware Zone:

Plan on MIRU PU on ~Monday November 27, 2017.

Legacy proposes to recomplete Lea Unit #17 to the Delaware zone as follows:
- Set CR @ ~10,900' (TOF @ 10,950'). Est inj rate & press into CR. Attempt to pump & squeeze~ 150sx Class H cement below CR. Place 25sx cmt on top of CR.
- Set CIBP @ ~9545'. Place 25sx Class H cement on top of CIBP.
- Place balanced plug of 25sx Class H cement across top of Bone Spring (8274').
- Perf & test perspective Delaware pay zones fr/8150' to 7650'.

1st APPROVED

SEE ATTACHED FOR CONDITIONS OF APPROVAL

SUBJECT TO LIKE APPROVAL BY STATE

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

Electronic Submission #395221 verified by the BLM Well Information System
For LEGACY RESERVES OPERATING LP, sent to the Hobbs
Committed to AFMSS for processing by PRISCILLA PEREZ on 12/11/2017 ()

Name *(Printed/Typed)* D. PATRICK DARDEN, PE — Title SR ENGINEERING ADVISOR

Signature (Electronic Submission) — Date 11/16/2017

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By Paul R. Swartz 01/19/2018 — Title TPET — 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 BUREAU OF LAND MANAGEMENT CARLSBAD FIELD 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)

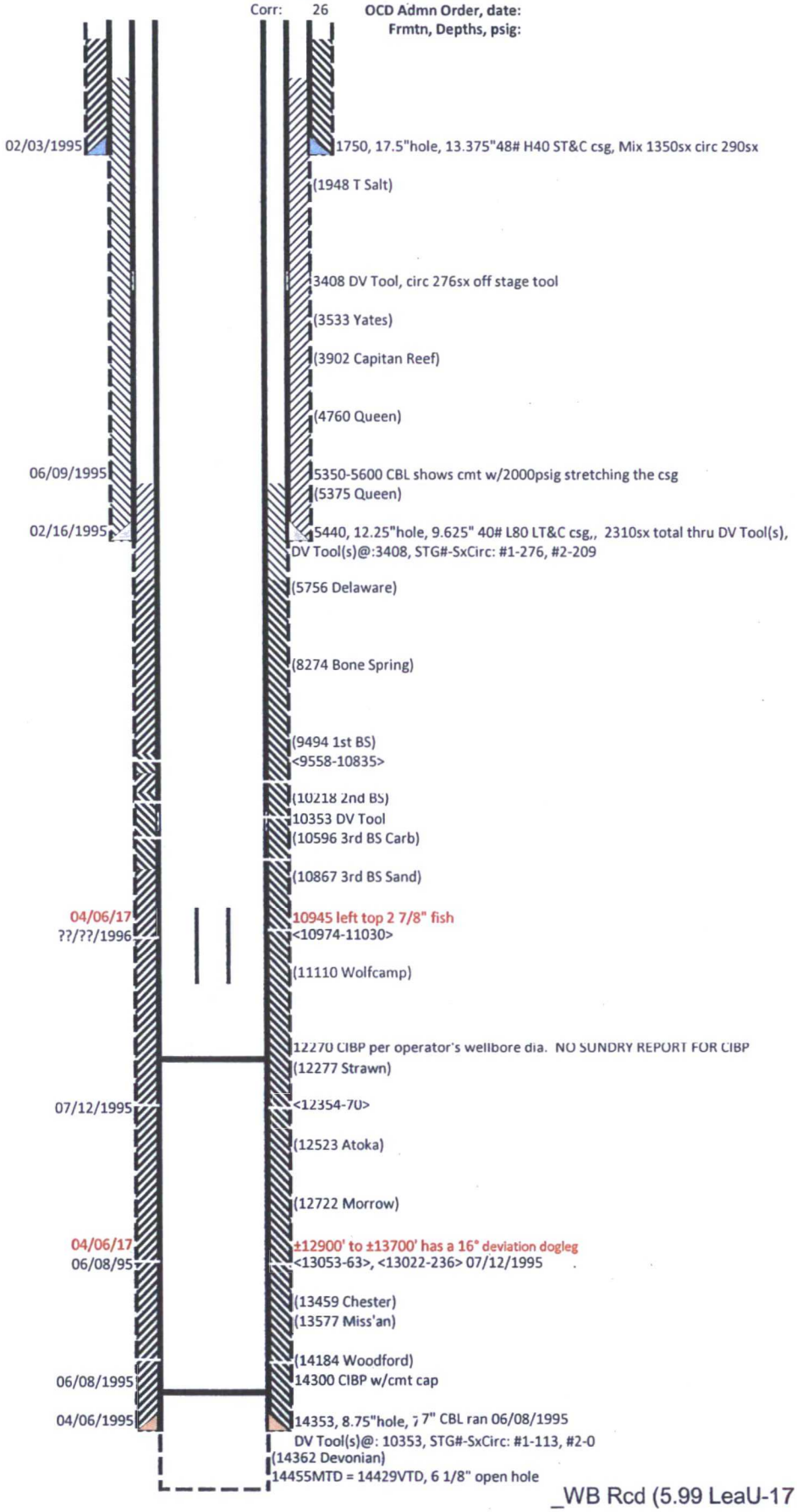
** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED **

M Brown OCD
2/7/2017

Operator: Legacy Reserves Operating, LP
Surface Lease: NM03085 **BHL:** NM03085
Case No: NM03085 **Lease Agreement**
Subsurface Concerns for Casing Designs: Cap KFC
Well Status: SI
Spud date: 2/3/1995
Plug'd Date:
Reentry Date: 01/00/00

Well: LEA UNIT-17
API: 3002532794
@ Srfce: T20S-R34E,13.900s1756e
@ M TD: T20S-R34E,13.900s1756e
Estate: P\F\F
CWDW, R of W:
OCD Admn Order, date:
Frmtn, Depths, psig:

KB: 3686
GL: 3660
Corr: 26



last updated: 01/18/2018

_WB Rcd (5.99 LeaU-17 2532794

Capitan Reef: Csg Design not restricted for Reef, production cement to cover casing 50 feet above Capitan Reef top.
Lesser Prairie-Chicken.

13 3/8	surface csg in a	17 1/2	inch hole.		Design Factors		SURFACE	
Segment	#/ft	Grade	Coupling	Joint	Collapse	Burst	Length	Weight
"A"	48.00	H 40	ST&C	3.83	0.94	0.6	1,750	84,000
w/8.4#/g mud, 30min Sfc Csg Test psig:	447		Tail Cmt	does	circ to sfc.	Totals:	1,750	84,000

Comparison of Proposed to Minimum Required Cement Volumes

Hole Size	Annular Volume	Proposed Sx Cmt	CuFt Cmt Proposed	Min Cu Ft	Excess % Cmt	Drilling Mud Wt	Calc MASP	Req'd BOPE	Min Dist Hole-Cplg
17 1/2	0.6946	1350	1791	1217	47	9.00	1686	2M	1.56

Collapse & Burst safety factors of this csg are below BLM approval standards.

9 5/8	casing inside the	13 3/8	casing.	_	Design Factors		2nd Casing	
Segment	#/ft	Grade	Coupling	Joint	Collapse	Burst	Length	Weight
"A"	40.00	L 80	LT&C	3.34	1.07	0.89	5,440	217,600
w/8.4#/g mud, 30min Sfc Csg Test psig:	1,500					Totals:	5,440	217,600

The cement volume(s) proposed may achieve a top 0 feet from surface.

Hole Size	Annular Volume	Proposed Sx Cmt	CuFt Cmt Proposed	Min Cu Ft	Excess DVT Cmt	Drilling Mud Wt	Calc MASP	Req'd BOPE	Min Dist Hole-Cplg
12 1/4	0.3132	2310	4402	1833	O K	10.20	3329	5M	0.81

Collapse & Burst safety factors of this csg are below BLM approval standards.

7	casing inside the	9 5/8		_	Design Factors		3rd Casing	
Segment	#/ft	Grade	Coupling	Joint	Collapse	Burst	Length	Weight
"A"	26.00	L 80	LT&C	¿	1.26	1.12	9,480	246,480
"B"	29.00	L 80	LT&C	4.00	1.08	1.26	4,873	141,317
w/8.4#/g mud, 30min Sfc Csg Test psig:	-551					Totals:	14,353	387,797
B Segment Design Factors would be:					4.15	1.08	if it were a vertical wellbore.	

The cement volume(s) proposed may achieve a top 0 feet from surface.

Hole Size	Annular Volume	Proposed Sx Cmt	CuFt Cmt Proposed	Min Cu Ft	Excess DVT Cmt	Drilling Mud Wt	Calc MASP	Req'd BOPE	Min Dist Hole-Cplg
8 3/4	0.1503	5185	8726	2212	Check	8.70			0.55

Joint & Collapse safety factors of this csg are below BLM approval standards.

_WB Rcd (6.00 LeaU-17 2532794

Conditions of Approval

Legacy Reserves Operating, LP
Lea Unit - 17, API 3002532794
T20S-R34E, Sec 13, 900FSL & 1756FEL
January 18, 2018

1. **Begin wellbore operations within 90 days of these conditions of approval for the processed Electronic Submission #382110 notice of intent or request an extension.**
2. **Operator is required to have the BLM approved NOI procedure with applicable conditions of approval on location during this workover operation.**
3. **Conditions of Approval reflect a procedure based on available documentation for this wellbore. The BLM workover witness and NOI approver may adjust operations so as not to hinder achievable abandonment requirements.**
4. Due to being within the Lesser Prairie Chicken habitat, this workover activity will be restricted to the hours of 9:00am through 3:00am for the period of March 1 through June 15.
5. **The Unit agreement for this well (NM70976b) does not include the Delaware pay. Operator is removing well from the unitized formation. Operator shall remove "Unit" from the well name via sundry, and or rename well to produce on a lease basis.**
6. Subject to like approval by the New Mexico Oil Conservation Division.
7. Before adding, replacing, or repairing casing or a liner, prior BLM approval of the design is required. Use notice of intent Form 3160-5.
8. A closed loop system is required. The operator shall properly dispose of drilling/circulating contents at an authorized disposal site. Tanks are required for all operations, no excavated pits.
9. Surface disturbance beyond the existing pad shall have prior BLM approval.
10. Functional H_2S monitoring equipment shall be on location.
11. Blow Out Prevention Equipment 5000 (5M) to be used. All BOPE and workover procedures shall establish fail safe well control. Ram(s) for the work string(s) used is required equipment. Manual BOP closure system including a blind ram and pipe ram(s) designed to close on all (hand wheels or automatic locking devices) equipment installed regardless of BOP design. Function test the installed BOPE to 500psig when well conditions allow. Related equipment, (choke manifolds, kill trucks, gas vent or flare lines, etc.) employed when needed for reasonable well control requirements.
12. All waste (i.e. trash, salts, chemicals, sewage, gray water, etc.) created during work over operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area. Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

13. Notify BLM 575-393-3612 Lea Co as work begins. Some procedures witnessed. If there is no response, leave a voice mail with the API#, workover purpose, and a call back phone number.
14. The BLM PET witness is to run tbg tally and agree to cement volumes and placement. Sample each plug for cement curing time and tag and/or pressure test as requested by BLM PET witness.
15. **This procedure is subject to the next three numbered paragraphs.**
16. Set cement plugs to cover a minimum of 100ft plus 10ft for every 1,000ft from the bottom of the plug, rounding the number of necessary sacks up to the nearest 5 sacks. Never use less than 25sx. Examples: A cement plug set at 8000 in 7" casing would require a min of 35sx. A 25sx plug in 5 ½" casing should cover 250ft, which may exceed 100ft plus 10ft per 1000ft.
17. Class H > 7500ft & C < 7500ft) cement plugs(s) will be necessary. For any plug that requires a tag or pressure test a minimum WOC time of 4 hours(C) & 8 hours(H) is recommended. Formation isolation plugs of Class "C" to be mixed 14.8#/gal, 1.32 ft^3/sx, 6.3gal/sx water and "H" to be mixed 16.4#/gal, 1.06ft^3/sx, 4.3gal/sx water.
18. Minimum requirement for mud placed between plugs is 25 sacks of salt water gel per 100 barrels in 9 lb/gal brine.
19. **Continue fishing operations abandoned 04/06/2017.**
20. **Remove all restrictions within the 7" casing and tag and record the 6 1/8" open hole PBTD.**
21. **Set a min 50sx Class "H" balanced plug on the PBTD, WOC and tag the plug with tbg at 14280' or above isolating the Devonian formation and covering the 7" csg shoe.**
22. **Set a CIBP within 100'above the top Morrow perf of 13022'. Set a min 75sx Class "H" balanced plug on the CIBP, WOC and tag the plug with tbg at 12660' or above covering the Morrow formation top at 12722'.**
23. **Set a CIBP within 100'above the top Strawn perf of 12354'. Set a min 45sx Class "H" balanced plug on the CIBP, WOC and tag the plug with tbg at 12130' or above covering the Strawn formation top at 12277'.**
24. **Set a min 45sx Class "H" balanced plug from 11170' to cover the Wolfcamp formation. WOC and tag the plug with tbg at 10955' or above covering the Wolfcamp formation top of 1110'.**
25. **Set a CIBP within 100'above the top Bone Spring perf of 9558'. Set a min 40sx Class "H" balanced plug on the CIBP, WOC and tag the plug with tbg at 9370' or above covering the 1st Bone Spring sand at 9494'.**
26. **Set a min 40sx Class "H" balanced plug from 8370' over the Bone Spring formation top at 8274'. WOC and tag the plug with tbg at 8170' or above covering the Bone Spring top.**
27. After setting the top plug and before perforating, **perform a charted casing integrity test** of 800psig minimum. Document the pressure test on a one hour full rotation calibrated (within 6 months) recorder chart registering within 35 to 85 per cent of its full range. **Verify all annular casing vents plumbed to the surface and open during this pressure test. Call BLM 575-393-3612 Lea Co. and arrange for a BLM witness of that pressure test.** Include a copy of the chart with the subsequent sundry for this workover.

28. File **subsequent sundry** Form 3160-**5** within 30 days of workover procedures. Include (dated daily) descriptions of the well work, i.e. procedure descriptions and setting depths of each plug in the subsequent sundry.
29. The subsequent report is to include stimulation injection pressures. Report maximum/minimum injection rate (BPM) and max/min stimulation injection pressures.
30. Submit a (BLM Form 3160-**5** subsequent report describing (dated daily) all wellbore activity and the Mechanical Integrity Test. File intermediate Form 3160-**5** within 30 days of any interrupted workover procedures and a complete workover subsequent sundry.
31. A BLM Well Recompletion Form 3160-4 and a NMOCD Form C-102 "Well Location and Acreage Dedication Plat" with updated information is necessary with the subsequent package when recompletion changes a well's Pool designation.
32. File intermediate **subsequent sundry** Form 3160-**5** within 30 days of any interrupted workover procedures and a complete workover subsequent sundry.

An inactive/shut-in well bore is a non-producing completion that is capable of "beneficial use" i.e. production in **paying quantities** or of service use.

33. Should "beneficial use" not be achieved submit for BLM approval a plan for plug and abandonment.