

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

OCD-HOBBS

FORM APPROVED  
OMB NO. 1004-0135  
Expires: July 31, 2010

**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.*

HOBBS OCD

DEC 01 2014

**SUBMIT IN TRIPLICATE - Other instructions on reverse side.**

1. Type of Well <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other: INJECTION		5. Lease Serial No. NMLC032715
2. Name of Operator LEGACY RESERVES OPERATING LP - Mail: mstaelens@legacyp.com		6. If Indian, Allottee or Tribe Name
3a. Address 303 W WALL SUITE 1600 MIDLAND, TX 79702	3b. Phone No. (include area code) Ph: 281-465-8387 Ext: 224	7. If Unit or CA/Agreement, Name and/or No. 8910115840
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 19 T24S R37E NESW 1980FSL 1916FWL		8. Well Name and No. COOPER JAL UNIT 133
		9. API Well No. 30-025-11161-00-C1
		10. Field and Pool, or Exploratory JALMAT LANGLIE MATTIX
		11. County or Parish, and State LEA COUNTY, NM

**12. CHECK 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
	<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 shall 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 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

SEE ATTACHED PROCEDURE TO RUN A LINER. CURRENT AND PROPOSED WELLBORE DIAGRAMS ARE ALSO ATTACHED.

*processed post workover*

14. I hereby certify that the foregoing is true and correct. <b>Electronic Submission #254744 verified by the BLM Well Information System For LEGACY RESERVES OPERATING LP, sent to the Hobbs Committed to AFMSS for processing by LINDA JIMENEZ on 10/09/2014 (15LJ0098SE)</b>	
Name (Printed/Typed) MARTIN STAELENS	Title PRODUCTION ENGINEER
Signature (Electronic Submission)	Date 07/25/2014
<b>THIS SPACE FOR FEDERAL OR STATE OFFICE USE</b>	
Approved By _____	Title _____
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.	

**ACCEPTED FOR RECORD**  
NOV 24 2014  
BUREAU OF LAND MANAGEMENT  
CARLSBAD FIELD OFFICE

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

DEC 02 2014

**Field:**

**CJU #133**

Reservoir

Well ID Info:	CJU #133
API No:	30-025-11161
Spud Date:	9/20/1949

Hole Size:	11"
Surf. Csg:	8-5/8", 32# J-55
Set @	304'
Cement w/	125 sx Lone Star Reg + 50 sx Incor Quick-set
Circ:	Yes
TOC:	Surface

Shot 2 holes at 215' and circ cmt to surface (4/16/1986)

TOC: 225' (Temp Survey)  
 Sqz 250' - 340' leak w/ 500 sx (4/16/1986). Re-sqz w/ 50 sx.  
 Found leak 2-14-14 between 301'-333'

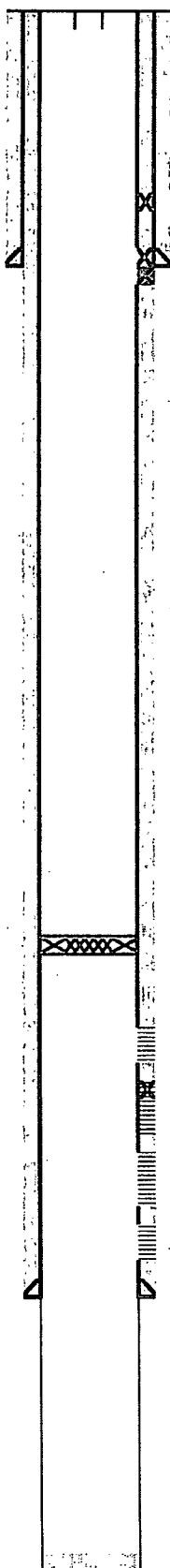
Hole Size:	7-3/8"
Prod. Csg:	5-1/2", 15.5# J-55
Set @	3320'
Cement:	700 sx w/ 3% gel + 250 sx regular + 50 sx Incor
Circ:	Yes
TOC:	Surface

	<b>Location:</b>
Footage:	1980 FSL & 1917 FWL
Section:	19 - 24S - 37E
Block:	
Survey:	
County:	Lea, New Mexico
Lat:	
Long:	
	<b>Elevations:</b>
GL:	3286
KB:	3296
KB Calc:	10
ck w/lco?	Yes

[illegible][illegible][illegible]

**Pumping Units:**

Updated: 5/5/14 M.L.S.



C18P @ 2900'

Yates © 2976'

2982' - 3049'

Squeezed perfs 3053' - 3059'

3060' - 3155'

3182' - 3220'

7-F @ 3210'

3245' - 3278'

OH ID 4-3/4" OH Interval 3320'-3680'

Queen @ 354.4'

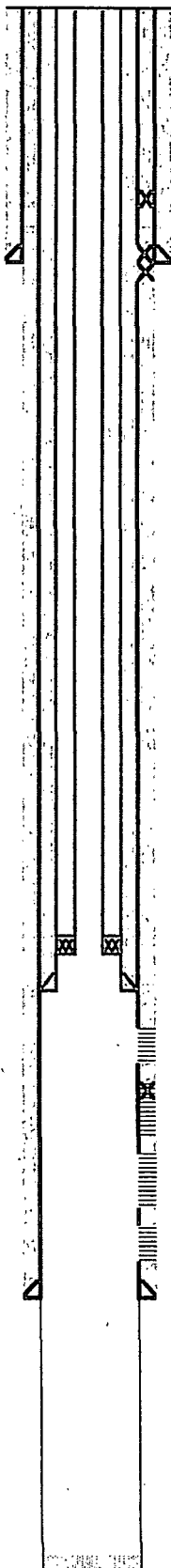
TOF @ 3670'

PBTD	<u>3670'</u>
TD	3680'

Field: **Cooper Jal Unit**

**CJU #133  
PROPOSED**

**Wellbore Diagram**



Reservoir: **Cooper Jal**

Well ID Info:	CJU #133
API No:	30-025-11161
Spud Date:	9/20/1949

Hole Size:	11"
Surf. Csg:	8-5/8", 32# J-55
Set @	304'
Cement w/	125 sx Lone Star Reg + 50 sx Incor Quick-set
Circ:	Yes
TOC:	Surface

Shot 2 holes at 215' and circ cmt to surface (4/16/1986)

TOC:	225' (Temp Survey)
Sqz 250' - 340' leak w/ 500 sx (4/16/1986). Re-sqz w/ 50 sx.	
Found leak 2-14-14 between 301'-333'	

Hole Size:	7-3/8"
Prod. Csg:	5-1/2", 15.5# J-55
Set @	3320'
Cement:	700 sx w/ 3% gel + 250 sx regular + 50 sx Incor
Circ:	Yes
TOC:	Surface

Hole Size:	4.950" (ID of 5.5" casing)
Liner:	4" - 9.5#, J-55 FJ Liner
Set @	2975'
Cement Lead:	Surface
Tall:	2500'

2-1/16" tbq w/ pkr set at 2,950'

Yates @ 2976'

2982' - 3049'

Squeezed perfs 3053' - 3059'

3060' - 3155'

3182' - 3220'

7-R @ 3210'

3245' - 3278'

OH ID 4-3/4" OH Interval 3320'-3680'

Queen @ 3544'

TOF @ 3670'

Location:	
Footage:	1980 FSL & 1917 FWL
Section:	19 - 24S - 37E
Block:	
Survey:	
County:	Lea, New Mexico
Lat:	
Long:	
Elevations:	
GL:	3286
KB:	3296
KB Calc:	10
ck w/log?	Yes

Date	History
18-Oct-49	Initial completion: 3053' - 3110' (Yates). Acct'd w/ 1,000 gals. IP = 52 bopd, 0 bwppd. & 55.7 Mcf/gpd (flowing)
9-Jul-53	Frac w/ 6,000 gals lse oil & 4,500#s sand
24-Jul-54	DO cmt 3241' - 3320' & CO open hole. Frac OH w/ 10,000 gals lse oil & 10,000# sand. Dual complete w/ pkr at 3,133'
1-Aug-55	Sqz perfs at 3,053' - 3,110' w/ 100 sx. Frac OH w/ 20,000 gals lse oil & 20,000# sand. Perf 3182' - 3220' & 3245' - 3278'. Isolate & frac perfs w/ 20,000 gals lse oil & 20,000# sand. Dual Complete w/ pkr at 3295'.
5-Jun-74	CO fill to 3680' & perf 3060' - 3155'. Convert to Injector.
16-Apr-86	Found HIC at 250' - 340'. Sqz csg w/ 500 sx Class C. Acidize perfs at 3060' - 3278' w/ 5000 gals 15% NEFE & 1000# RS. Perf at 215' and pumped 100 sx cmt - circ to cellar. Failed MIT - found leak at 270' - 330'. Re-squeeze w/ 50 sx (Hesitation sqz).
22-Mar-94	CO fill 3647' - 3680' & perf 2982' - 3049' w/ 2 SPF. RIH w/ 2 3/8" IPC tbq & pkr. Set pkr @ 2929'. Initiated injection @ 672 bwppd, TP=vacuum.
1-Oct-94	Change well name to Cooper Jal Unit #133. (previous #'s 240 and 310)
14-Feb-02	Tag fill at 3,429' with slickline.
7-Nov-05	Tag fill at 3,434' with slickline.
21-Apr-09	Ran Injection Profile. Place well on inj. Rate/Press: 585 bwppd/684#
17-May-12	CO fill to 3570' - could not make any more hole. Failed MIT. Well tested with RBP at 2,948', but would not test with pkr.
14-Feb-14	Found leak in casing between 301'-333'

Tubing Detail (top to bottom)			
Joints	Description	Footage	Depth
94	2-1/16" 4.7#, IPC, J-55, 8rd EUE	2,945	2,945
	2-1/16" x 4", coated AS-1X Packer	5	2,950

Rod Detail (top to bottom)			
Rods	Description	Footage	Depth

Pumping Unit:  
Updated: 7/15/14 MLS

PBTD 3670'  
TD 3680'

**PROCEDURE TO WORKOVER**  
**Cooper Jal Unit #133 WIW**  
**API: 30-025-11161**  
**Lea County, New Mexico**  
**5/8/2014**  
**AFE#: 214062**

**WELL SUMMARY & OBJECTIVE:**

The subject well was an active water injector in the Cooper Jal Unit. The last injection into this well was performed in December, 2012 due to a casing leak. In February 2014, the hole in the casing was found to be from 301 ft. to 333 ft. Due to previous casing leaks and squeeze attempts, the best solution appears to be to run a liner.

This AFE will provide funds to clean out the well to PBTD and acid stimulate the existing perforations and open hole. A 4" Flush Joint Liner will then be ran and cemented. Once a Mechanical Integrity Test is achieved, the well will be returned to Water Injection.

**PROCEDURE**

1. Test anchors prior to moving in Pulling Unit.
2. Hold pre job safety meeting and MIRU PU.
3. Kill well if necessary. ND tree, NU BOP & POOH w/ tbg in well (should only be 1 joint).
4. PU 4-3/4" bit, drill collars and 2-7/8" WS.
5. RIH & tag CIBP @ 2900'. Circulate hole.
6. Drill out CIBP. Push to PBTD of 3,670'. If possible, push to TD of 3,680'.
7. Circulate hole clean and POOH.
8. PU treating pkr on WS. RIH and set pkr at +/- 2,900'.
9. MIRU service company and acidize down tubing with 10,000 gals of 15% HCL acid and 10,000 lbs of rock salt. Pump acid and rock salt at 5 to 10 BPM with a max surface treating pressure of 4500 psig. Pump acid stages alternating acid and rock salt in brine water.
  - a. Pump 1000 gals acid
  - b. Pump 700#'s rock salt in brine water
  - c. Pump 1500 gals acid
  - d. Pump rock salt stage and increase or decrease rock salt based on pressure response of previous diversion stage.
  - e. Pump 2000 gals acid
  - f. Pump rock salt stage. Choose rock salt volume based on pressure response
  - g. Pump 2500 gals acid
  - h. Pump rock salt stage. Choose rock salt volume based on pressure response
  - i. Pump 3000 gals acid
  - j. Displace acid to PBTD with 2%KCL water

10. Obtain 5, 10, & 15 minute SIP's and flow back load if well has surface pressure. RDMO acid company.
11. If no flow back, RU swab and swab back load.
12. Unset pkr. POOH and LD pkr.
13. RIH w/ WS with notch collar and clean out rock salt to PBTD.
14. POOH and PU CIBP.
15. RIH, set CIBP at 2,975' (via wireline) and POOH. This will set the liner as close as possible to the top perfs @ 2,982'.
16. MIRU csg crew and run 4" 11.0 #/ft J-55 Flush Joint Liner ID 3.476", Drift 3.351", Collapse 8,410 psi, Burst 6,300 psi. Tag CIBP & PU 1'.
17. RDMO csg crew and MIRU cementers. Cement liner w/270 sx Class C cement, mixed at 14.8 ppg, 1.32 cuft/sk, 6.32 gals water/sk circulating cement to surface per cement proposal.
18. ND BOP, cut csg and install wellhead. NU BOP onto new wellhead. WO cement 24 hrs.
19. PU 3-1/8" bit & RIH. Drill out Float Equipment & CIBP. Continue in hole to PBTD.
20. POOH & LD bit and WS.
21. PU 4" x 2-1/16" Injection Packer, 2-1/16" tubing, and hydrotest in the hole to +/- 2,950' (shallowest depth packer can be set is within 100' of upper perfs - 2,982').
22. Circulate packer fluid around backside and test packer.
23. ND BOP & NU tree.
24. Test packer to 500 psi for 30 minutes, to ensure it will pass MIT.
25. RDMO PU.
26. Perform MIT. Upon approval from NMOCD, return well to injection.

PREPARED BY: \_\_\_\_\_ DATE: \_\_\_\_\_

APPROVED BY: \_\_\_\_\_ DATE: \_\_\_\_\_