Submit 1 Copy To Appropriate District Office
District I – (575) 393-6161
1625 N. French Dr., Hobbs, NM 88240
District II – (575) 748-1283
811 S. First St., Artesia, NM 88210
District III – (505) 334-6178
1000 Rio Brazos Rd., Aztec, NM 87410
District IV – (505) 476-3460
1220 S. St. Francis Dr., Santa Fe, NM 87505

HOBBS OCD
MAR 10 2014
RECEIVED

State of New Mexico
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-103
Revised July 18, 2013

WELL API NO. 30-025-09561

5. Indicate Type of Lease STATE ☐ FEE ☒

6. State Oil & Gas Lease No. 312454

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

7. Lease Name or Unit Agreement Name: COOPER JAL UNIT

1. Type of Well: Oil Well ☐ Gas Well ☐ Other INJECTOR

8. Well Number 234

2. Name of Operator: LEGACY RESERVES OPERATING LP

9. OGRID Number: 240974

3. Address of Operator: PO BOX 10848, MIDLAND, TX 79702

10. Pool name or Wildcat: JALMAT; TANSILL-YATES-7RIVERS

4. Well Location
Unit Letter O : 330 feet from the SOUTH line and 1650 feet from the EAST line
Section 13 Township 24S Range 36E NMPM County LEA

11. Elevation *(Show whether DR, RKB, RT, GR, etc.)*: 3315' GL

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

| NOTICE OF INTENTION TO: | | | | SUBSEQUENT REPORT OF: | | | |
|---|---|---|---|---|---|---|---|
| PERFORM REMEDIAL WORK | ☐ | PLUG AND ABANDON | ☐ | REMEDIAL WORK | ☐ | ALTERING CASING | ☐ |
| TEMPORARILY ABANDON | ☐ | CHANGE PLANS | ☐ | COMMENCE DRILLING OPNS. | ☐ | P AND A | ☐ |
| PULL OR ALTER CASING | ☐ | MULTIPLE COMPL | ☐ | CASING/CEMENT JOB | ☐ | | |
| DOWNHOLE COMMINGLE | ☐ | | | | | | |
| CLOSED-LOOP SYSTEM | ☒ | | | | | | |
| OTHER: DEEPEN & RUN LINER | | | ☒ | OTHER: | | | ☐ |

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

---SEE ATTACHED PROCEDURE ALONG WITH CURRENT AND PROPOSED WELLBORE DIAGRAMS---

MAR 13 2014

Spud Date: Rig Release Date:

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Laura Pina TITLE REGULATORY TECH DATE 03/06/2014

Type or print name LAURA PINA E-mail address: lpina@legacylp.com PHONE: 432-689-5200

**For State Use Only**

APPROVED BY: Maley Brown TITLE Compliance Officer DATE 3/12/2014

Conditions of Approval (if any):

R-4020

**CONDITION OF APPROVAL:** *Operator shall give the OCD District Office 24 hour notice before running the MIT test and chart.*

**PROCEDURE TO WORKOVER**
**Cooper Jal Unit #234 WIW**
**API: 30-025-09561**
**Lea County, New Mexico**
**2/25/2014**
**AFE#: 214020**

## WELL SUMMARY & OBJECTIVE:

The subject well was an active water injector in the Cooper Jal Unit, until a hole in the casing was discovered in November 2013. The hole was isolated and found to be from 414 ft. to 429 ft. After an unsuccessful attempt to establish injection, 4 holes were perforated at 440 ft. and the well was squeezed with cement. Once the cement was drilled out inside the casing, a 500 psi pressure test resulted in the squeeze breaking down and fluid coming around the wellhead.
This AFE will provide funds to deepen the well through the Queen and acid stimulate the 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.
4. PU 4-3/4" bit, drill collars and 2-7/8" WS.
5. RIH & tag top of cement at +/- 2905' (above CIBP @ 2940'). Circulate hole.
6. Drill out cement and CIBP. Push to PBTD of 3,228'.
7. Drill new hole from 3,228' to 3,780'.
8. At new TD of 3,780', circulate hole clean and POOH.
9. PU treating pkr on WS. RIH and set pkr at +/- 2,900'.
10. 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 top perf with 2%KCL water

11. Obtain 5, 10, & 15 minute SIP's and flow back load if well has surface pressure. RDMO acid company.
12. If no flow back, RU swab and swab back load.
13. Unset pkr. POOH and LD pkr.
14. RIH w/ WS with notch collar and clean out rock salt to 3,780'.
15. POOH and PU CIBP.
16. RIH, set CIBP at +/- 2,970' and POOH.
17. MIRU csg crew and run 4" Flushed Joint Liner. Tag CIBP & PU 1'.
18. RDMO csg crew and MIRU cementers. Cement liner, circulating cement to surface per cement proposal.
19. ND BOP, cut csg and install wellhead. NU BOP onto new wellhead. WO cement 24 hrs.
20. PU 3-1/8" bit & RIH. Drill out Float Equipment & CIBP. Continue in hole to 3,780'.
21. POOH & LD bit and WS.
22. PU 4" x 2-3/8" Injection Packer and hydrotest in the hole to +/- 2,900' (shallowest depth packer can be set is within 100' of open hole – 2,985').
23. Circulate packer fluid around backside and test packer.
24. ND BOP & NU tree.
25. Test packer to 500 psi for 30 minutes, to ensure it will pass MIT.
26. RDMO PU.
27. Perform MIT. Upon approval from NMOCD, return well to injection.

PREPARED BY:_____ DATE:_____

APPROVED BY:_____ DATE:_____

**Field:** Cooper Jal Unit

# CJU #234

| | Location: |
|---|---|
| Footage: | 330 FSL & 1650 FEL |
| Section: | 13, T-24S, R-36E |
| Block: | |
| Survey: | |
| County: | Lea, New Mexico |
| Lat: | |
| Long: | |
| | **Elevations:** |
| GL: | 3,315' |
| KB: | 3,325' |
| KB Calc: | 10' |
| ck w/log? | n/a |

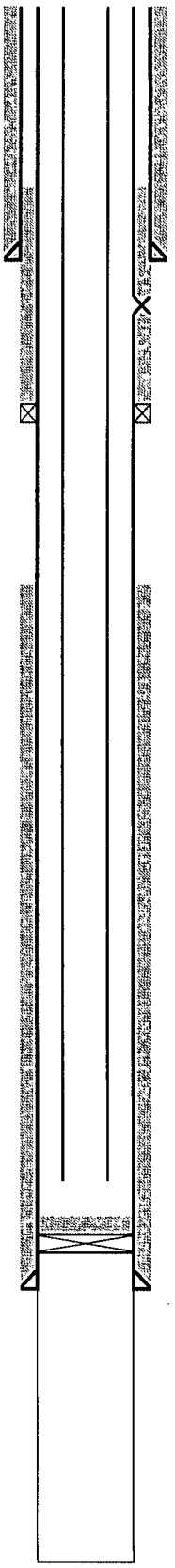
| Date | History |
|---|---|
| 6-Jun-50 | Initial completion interval: (Yates/7 RVRS OH) 2,985 - 3,228': No |
| | stimulation. IP = 48 bopd, 0 bwopd, & 54 Mcfgpd (flowing) |
| 1-Jun-65 | TA'd well. |
| 1-Aug-71 | Convert to injector. C/O to 3150' (hole continued to cave in and bridge). |
| 1-Sep-81 | Ran injection profile. Fill tagged at 3101'. Did not C/O fill. |
| 4-Feb-02 | RIH with 1 1/4" x 5' sinker bar and tagged at 2,980'. |
| 2-May-02 | RIH w/ CT & tag at 2985'. CO to 2989' - could not CO deeper. |
| 9-Nov-05 | RIH with 1 1/4" x 5' sinker bar and tagged at 2,973'. |
| 25-Jan-11 | CO to TD w/ 4-3/4" bit - recovered oil & paraffin. Acidize w/ 10,000 gal |
| | 15% 90/10 acid & 17,500# RS. RWTI. |
| 14-Mar-12 | Repair HIT / pkr leak. |
| 15-Nov-13 | Found Hole in csg at 414' - 429'. Perf 4 holes at 440' & cmt sqz to 500#. |
| | Tag cmt at 20' & DO. Broke out of cmt at 448'. Test to 500 psi and broke |
| | back with fluid coming around wellhead. |

| | Tubing Detail (top to bottom) | | |
|---|---|---|---|
| Joints | Description | Footage | Depth |
| 92 | 2-3/8" 4.7#, IPC, J-55, 8rd EUE | 2,890 | 2,890 |

| | Rod Detail (top to bottom) | | |
|---|---|---|---|
| Rods | Description | Footage | Depth |

Pumping Unit:
**Updated:** 12/9/13 MCB

Wellbore Diagram



**PBTD** 3228'
**TD** 3228'

Reservoir: Cooper Jal

| Well ID Info: | CJU #234 |
|---|---|
| API No: | 30-025-09561 |
| Spud Date: | 6/6/1950 |

**Hole Size:** 11"
**Surf. Csg:** 8 5/8" - 28#, J-55
**Set @** 304'
**Cement w/** 125 sxs
**Circ:** Yes
**TOC:** Surface

**TOC:** 85' (Calc)

Found Hole in Csg f/ 414' - 429' - 11/15/2013

DV Tool at 1161' (Cement w/ 200 sx)

**TOC:** 1930' (Calc)

Open Ended Tbg at 2,890'

CIBP at 2940' w/ cmt to 2905'

Yates @ 2988'
**Hole Size:** 7 7/8"
**Prod. Csg:** 5 1/2" - 14#, J-55
**Set @** 2985'
**Cement:** 200 sxs
**DV Tool:** 200 sxs

7-R @ 3212'

Queen @ 3585'

**Field:** Cooper Jal Unit

| | Location: |
|---|---|
| Footage: | 330 FSL & 1650 FEL |
| Section: | 13, T-24S, R-36E |
| Block: | |
| Survey: | |
| County: | Lea, New Mexico |
| Lat: | |
| Long: | |
| | **Elevations:** |
| GL: | 3,315' |
| KB: | 3,325' |
| KB Calc: | 10' |
| ck w/log? | n/a |

| Date | History |
|---|---|
| 6-Jun-50 | Initial completion interval: (Yates/7 RVRS OH) 2,985 - 3,228'. No |
| | stimulation. IP = 48 bopd, 0 bwopd, & 54 Mcfgpd (flowing) |
| 1-Jun-65 | TA'd well. |
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| | 15% 90/10 acid & 17,500# RS. RWTI. |
| 14-Mar-12 | Repair HIT / pkr leak. |
| 15-Nov-13 | Found Hole in csg at 414' - 429'. Perf 4 holes at 440' & cmt sqz to 500#. |
| | Tag cmt at 20' & DO. Broke out of cmt at 448'. Test to 500 psi and broke |
| | back with fluid coming around wellhead. |

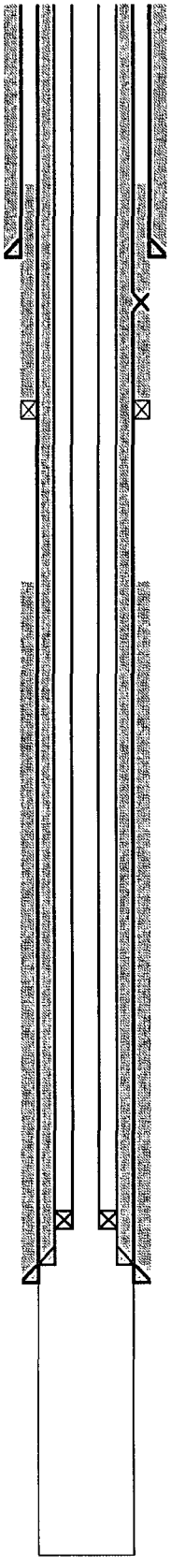
| | Tubing Detail (top to bottom) | | |
|---|---|---|---|
| Joints | Description | Footage | Depth |
| 92 | 2-3/8" 4.7#, IPC, J-55, 8rd EUE | 2,890 | 2,890 |
| | 2-3/8" x 4", coated AS-1X Pkr | 10 | 2,900 |

| | Rod Detail (top to bottom) | | |
|---|---|---|---|
| Rods | Description | Footage | Depth |

Pumping Unit:
**Updated:** 2/25/14 MLS

## CJU #234

**PROPOSED**
Wellbore Diagram



**PBTD** 3780'
**TD** 3780'

Reservoir: Cooper Jal

| Well ID Info: | CJU #234 |
|---|---|
| API No: | 30-025-09561 |
| Spud Date: | 6/6/1950 |

**Hole Size:** 11"
**Surf. Csg:** 8 5/8" - 28#, J-55
**Set @** 304'
**Cement w/** 125 sxs
**Circ:** Yes
**TOC:** Surface

**TOC:** 85' (Calc)

Found Hole in Csg f/ 414' - 429' - 11/15/2013

DV Tool at 1161' (Cement w/ 200 sx)

**TOC:** 1930' (Calc)

**Hole Size:** 5.012"
***Prod. Csg:*** *4" - 9.5#, J-55 FJ Liner*
**Set @** 2969'
**Cement Lead:** Surface
**Tail:** 2400'

**2-3/8" tbg w/ pkr set at 2,900'**

Yates @ 2988'
**Hole Size:** 7 7/8"
**Prod. Csg:** 5 1/2" - 14#, J-55
**Set @** 2985'
**Cement Lead:** 200 sxs
**DV Tool:** 200 sxs

7-R @ 3212'

Queen @ 3585'