

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

State of New Mexico  
Energy, Minerals and Natural Resources

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

<p><b>SUNDRY NOTICES AND REPORTS ON WELLS</b> (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.)</p> <p>1. Type of Well: Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/></p>		<p>WELL API NO. 30-015-32442</p>
<p>2. Name of Operator LEGACY RESERVES OPERATING LP</p>		<p>5. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/></p>
<p>3. Address of Operator P.O. BOX 10848 MIDLAND, TX 79702</p>		<p>6. State Oil &amp; Gas Lease No. B-3627</p>
<p>4. Well Location Unit Letter <u>L</u> : <u>1600</u> feet from the <u>SOUTH</u> line and <u>330</u> feet from the <u>WEST</u> line Section <u>36</u> Township <u>17S</u> Range <u>31E</u> NMPM County <u>EDDY</u></p>		<p>7. Lease Name or Unit Agreement Name ANTELOPE STATE</p>
<p>11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3826' RKB</p>		<p>8. Well Number 6</p>
<p>9. OGRID Number 240974</p>		<p>10. Pool name or Wildcat MALJAMAR GB SA</p>

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

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐  
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐  
PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐  
DOWNHOLE COMMINGLE ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐  
COMMENCE DRILLING OPNS. ☐ P AND A ☐  
CASING/CEMENT JOB ☐

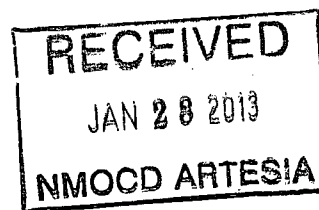
OTHER: ADD UPPER GRAYBURG PAY & RTP ☒

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---

ESTIMATED START DATE: 02/20/2013



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

*Blain Lewis*

TITLE

SENIOR ENGINEER

DATE

01/22/2013

Type or print name

BLAIN LEWIS

E-mail address:

*blewis@legacylp.com*

PHONE:

432-689-5200

For State Use Only

APPROVED BY:

*T.C. Shuard*

TITLE

*Geologist*

DATE

*1/29/2013*

Conditions of Approval (if any)

*Provide C105 subsequent to workover*

## PROCEDURE TO ADD UPPER GRAYBURG PAY

Antelope State #6

Maljamar Field

Eddy County, New Mexico

### Well Data:

KB 13' AGL

5-1/2", 17# casing at 4482' with 900 sx, DV tool at 3619', TOC at surface

Grayburg/San Andres perms: 3907'-4133', 4218'-4304'

Un-perf'd upper Grayburg pay: 3788'-3803'

Unknown downhole rods and tubing

Volumes: 5-1/2" csg x 3-1/2" tbg annulus = 0.0113 bbls/ft

5-1/2" csg = 0.0232 bbls/ft

3-1/2" tbg = 0.0087 bbls/ft

- 1) **Day one:** MIRU pulling unit. POH and visually inspect rods and pump in AFE to replace rods if necessary). NU BOP. POH with tubing in AFE to replace tubing if necessary). Unload 4000' of 3-1/2", 9.3#, N-80, EUE, 8R work string.
- 2) **Day two:** RIH with 4-3/4" bit, casing scraper and pick up 3-1/2" tubing. RIH to +/- 3900'. POH and lay down casing scraper and bit.
- 3) MIRU wireline unit. RIH with 3-1/8" slick gun, get on depth with Schlumberger GR/CBL log dated 12/27/02 and perf upper Grayburg with 1 SPF, premium charges from 3788'-3803' (15', 16 holes). POH and RDMO wireline unit.
- 4) **Day three:** RIH with RBP with ballsealer catcher, packer, SN and 3-1/2" tubing. Set RBP at +/- 3860'. MIRU acid equipment with 2,000 gallons 15% NEFE HCl, 30 - 7/8" RCN, 1.3 SG ballsealers and +/- 150 bbls 2% KCl water. Pull one joint, set packer at +/- 3830' and test RBP to 4,000 psig for 5 min. Release packer, pull 4 joints tubing, circulate hole with +/- 80 bbls 2% KCl water and reset packer at +/- 3700'. Test casing annulus to 500 psig for 15 min. and monitor throughout stimulations. RU to 3-1/2" tubing and treat Grayburg perms 3788'-3803' at 4-6 BPM and 4,000 psig maximum with 2,000 gals (47.6 bbls) 15% NEFE HCl with 30 ballsealers in ten 3-ball groups every +/- 4 bbls acid. Flush to bottom perf with 34.6 bbls 2% KCl water. Report ISIP and 5-10-15 min. SIP's. RDMO acid equipment and prepare to frac.
- 5) **Day four:** MIRU frac equipment as per upcoming recommendation. NU frac valve and frac down 3-1/2" tubing at 25-30 BPM, 4000 psig maximum. Flush to top perf with 34 bbls 2% KCl water. Report ISIP and 5-10-15 min. SIP's. RDMO frac equipment and leave well SI overnight.
- 6) **Day five:** Open and flow down to tank. ND frac valve. NU BOP. Release packer and POH laying down work string and packer.
- 7) RIH with BPMA, perf sub, SN, TAC and production tubing (hydrotest tubing in hole to 6,000 psig) to set bottom of BPMA above perms at +/- 3750', SN at +/- 3715' and TAC at +/- 3714'. ND BOP. NU wellhead.
- 8) **Day six:** RIH with 1.25" bore insert pump and rods, seat pump, space out and hang on pumping unit. Load and pressure test tubing. Put well on pump. RDMO pulling unit.

- 9) Optimize production rate by adjusting SPM or pump size as necessary. After testing new production interval, move PU back on well, clean out sand fill above RBP, recover RBP and commingle all GB/SA perfs. NOTE: Perfs 3907'-4304' will likely add 3-4 BOPD, 10-15 MCFPD and +/- 100 BWPD so will need to design for lifting +/- 150 BPD total fluid when all perfs are commingled.

**ESTIMATED COSTS:**

Pulling unit – 8 days	-----
Stimulation services	-----
Wireline services	-----
Rental tools	-----
Contract labor	\$ 15,000
4400' rod string	\$ 15,000
4400' 2-3/8" tbg	\$ 15,000
Misc. equipment	\$ 0,000
5% contingencies	\$ 0,000
TOTAL	

PREPARED BY: Blain Lewis Date: 01/16/13

# CURRENT WELLBORE DIAGRAM

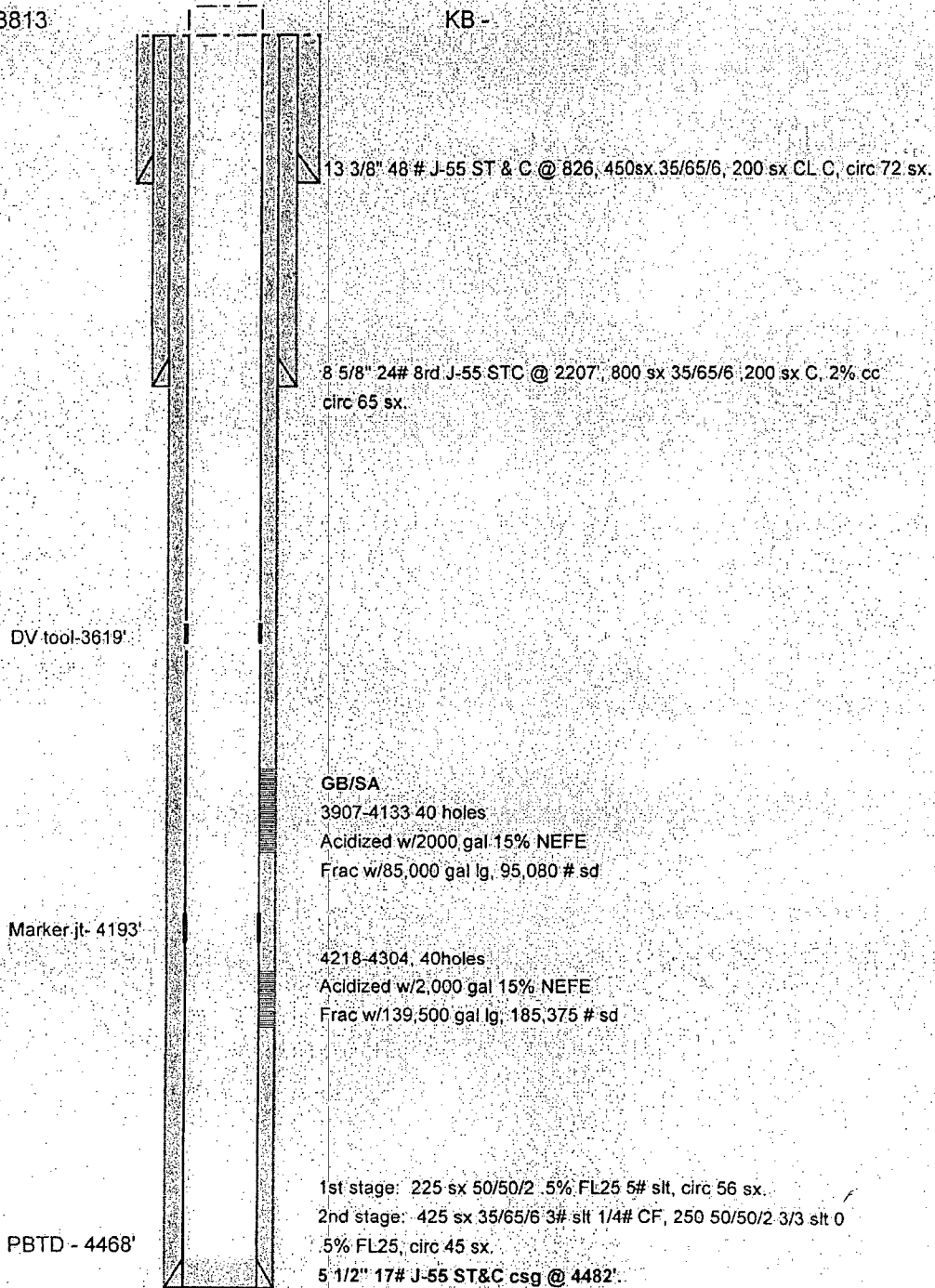
Lease & Well #

Antelope State # 6

SPUD - 8/24/02

Elevation - 3813

KB -



# PROPOSED WELLBORE DIAGRAM

Lease & Well #

Antelope State # 6

SPUD -8/24/02

Elevation - 3813

KB -

