

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

State of New Mexico
Energy, Minerals and Natural Resources

Form C-103
Revised July 18, 2013

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

WELL API NO. 30-025-25255
5. Indicate Type of Lease STATE ☐ FEE ☒
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name Lou Worthan
8. Well Number 014
9. OGRID Number 873
10. Pool name or Wildcat Tubb/86440;Drnkd/19190;Wantz;Abo/62700

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG OR TO DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)	
1. Type of Well: Oil Well ☒ Gas Well ☐ Other ☐	
2. Name of Operator Apache Corporation	
3. Address of Operator 303 Veterans Airpark Lane, Suite 1000 Midland, TX 79705	
4. Well Location Unit Letter <u>A</u> : <u>520</u> feet from the <u>North</u> line and <u>330</u> feet from the <u>East</u> line Section <u>11</u> Township <u>22S</u> Range <u>37E</u> NMPM County <u>Lea</u>	
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3350' 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: ☐		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.

Apache would like to add Tubb pay and stimulate, per the attached procedure.

Spud Date:

3/12/1976

Rig Release Date:

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

SIGNATURE

Reesa Fisher

TITLE Sr. Staff Reg Analyst

DATE 10/23/2014

Type or print name Reesa Fisher

E-mail address: Reesa.Fisher@apachecorp.com

PHONE: (432) 818-1062

For State Use Only

APPROVED BY:

[Signature]

TITLE

Petroleum Engineer

DATE

10/27/14

Conditions of Approval (if any):

OCT 27 2014

[Signature]

AFE No: 11- 14- 4041

Lou Worthan #14
 API #: 30-025-25255
 520' FNL & 330' FEL
 Unit A, Sec 11, T-22S, R-37E
 Lea County, New Mexico

Add Tubb Pay & Stimulate

23 October 2014

Recommended Procedure:

1. MIRU pulling unit. POOH w/pump & rods. Install BOP. Rel TAC. TFF. TOOH w/tbg. If necessary, clean well out to +/-7140'.
2. PU & RIH w/6-1/8" bit and 7" x 23# csg scraper on 2-7/8" ws. RIH to +/-7100'. POOH.
3. RIH w/RBP, pkr and 2-7/8" ws. Set RBP @ +/-7100'. Set pkr @ +/-6700'.
 - a. Acidize the Lower Abo perms 6719'-7054' w/4,500 gals 15% HCL anti-sludge acid using rock salt to divert the acid in 3 stages. Flush to btm perf w/2% KCL.
 - b. Rel pkr & wash out salt. Rel RBP. Re-set RBP @ +/-6700' & pkr @ +/-6500'.
 - c. Acidize the Upper Abo perms 6556'-6684' w/2,000 gals 15% HCL anti-sludge acid using rock salt to divert the acid in 2 stages. Flush to btm perf w/2% KCL.
 - d. Rel pkr & wash out salt. Rel RBP. Re-set RBP @ +/-6350' & pkr @ +/-6150'.
 - e. Acidize the Upper Drinkard perms 6224'-94' w/1,600 gals 15% HCL anti-sludge acid using rock salt to divert the acid in 2 stages. Flush to btm perf w/2% KCL.
 - f. Rel pkr & wash out salt. Rel RBP. Re-set RBP @ +/-7100' & pkr @ +/-6150'.
 - g. Swab well until at least 200 bbls of the load is recovered or well swabs dry.
4. Rel pkr & RBP. POOH.
5. RU wireline truck. **NOTE: All perms picked from the Schlumberger Compensated Neutron / Formation Density log run April 8, 1976.**
 - a. Set CBP @ +/- 6150'.
 - b. Perf the Tubb II-III intervals @ 5949', 51', 53', 63', 65', 67', 69', 77', 83', 85', 87', 89', 91', 6001', 03', 05', 07', 09', 11', 17', 19', 31', 33', 35', 39', 41', 45', 51', 61' & 63' w/1 spf, 120 degree phasing. (Total = 30 shots).
 - c. RD wireline unit.
6. RIH w/7" pkr on 2-7/8" tbg. Set pkr @ +/-6100'. Pressure test CBP to 1000 psi via pkr.
7. Rel pkr & re-set @ +/-5920'.
 - a. Acidize the Tubb II-III perms w/4,200 gals 15% HCL anti-sludge acid using ball sealers as diversion. Flush to btm perf w/2% KCL. (If acid communicates up to the Upper Tubb perms, re-set pkr @ +/-5700' and continue with acid job). Flush to btm perf w/2% KCL.
 - b. Rel pkr & knock off balls. POOH w/2-7/8" ws & pkr.
8. RIH w/frac pkr on 3-1/2", L-80 ws. Hydrotest tbg in hole to at least 7000 psi.
 - a. Set pkr @ +/-5700'.
 - b. Frac the Tubb I-III perms w/150,000# 20/40 SLC (or equivalent) resin coated sand down 3-1/2" ws @ +/-30 BPM in 25# XL gel as per frac rec. Incorporate corrosion & scale inhibitors in frac system.
 - c. Rel pkr & POOH LD 3-1/2" ws & tools.
9. RIH w/6-1/8" bit on 2-7/8" ws. CO sand to CBP @ +/-6150'. Drill out CBP. Clean well out to +/-7140' PBTD. POOH LD 2-7/8" ws & bit.
10. RIH w/+/-288 jts of 2-3/8" prod tbg. Land SN @ +/-7070'. Set TAC @ +/-5700'.
11. RIH w/pmp and rods.
12. RTP Tubb/Drinkard/Abo and place well in test.

Present

WELL DATA SHEET

Last Update: 5-12-14

Lease Name: Lou Worthan #14

API No: 30-025-25255

Location: S20N/330E
UNA Sec 11, T-22S, R-37E

County: Lea ST: NM

Spud Date: 3-12-76 Well Elev: 3350' GL 11' KB

TD Date: 4-8-76 Completion Date: 5-6-76

TD: 7540' PBTD: 7140' TOC: 5400' (COL)

Csg Size: 9 5/8" Wt: 32⁰ Grd: H-40 Dpth: 1265' Cmt: 650 sk (Circ)

Producing Formation: Tubb/Drinkard/Abbo

Perfs: From 5788' to 5898' 2/spf 6556' to 7054' 2 spf
6224' to 94' 2/spf to

IP: _____ BOPD _____ BWPD _____ MCF/D

Comments: _____

Tubb

5788,
5800, 34, 46, 57, 66,
5870, 77, 94, 98

Drinkard

6224, 26, 41, 44,
6246, 48, 66, 68,
6271, 74, 76, 78,
6292, 94

Abbo

6556-60, 65-69,
6580-84,
6608-14, 21-24,
6655-66, 80-84,
6719-27, 36-42,
6747-51, 55-62,
6768-84, 93-97,
6802-05, 08-10,
6816-18, 66-70,
6881-84,
6957-59, 64-68,
6969-71, 75-77,
6978-79,
7011-13, 43-45,
7052-54

Well Equipment:

Pumping Unit: Oilwell 228-246-B6

Motor Type: _____ HP: _____ POC: _____

Tbg: 228' Jts 2 1/8" Size 3-55 Grade

MA @ 7102' SN @ 7070' TAC @ ? (9-16-04)

Rods: 88-7/8" + 185-3/4" + 10-7/8"

Pump: 2" x 1 1/4" x 1" (9-17-04)

Csg Size: 7" Wt: 23⁰ Grd: K-55 Dpth: 7540' Cmt: 1112 sk

7501, 03, 07, 09,
7511, 13, 15, DV tool e 4510' w/1568 sk (Circ)

TD: 7540'

DV e 4510'
w/1568 sk
(Circ) POC
111

5400'
111

CEBP-7140'

Granite Wash

7174, 76, 78, 84,
7186, 88, 90,
7289, 93, 97,
7301, 05, 09, 13,
7317, 21, 25, 29,
7397, 99

Proposed

WELL DATA SHEET

Last Update: 5-12-14

Lease Name: Lou Worthen #14

API No: 30-025-25255

Location: 520N/330E
Unit A Sec 11, T-22S, R-37E

County: Lea ST: NM

Spud Date: 8-12-76 Well Elev: 3350' GL 11' KB

TD Date: 4-8-76 Completion Date: 5-6-76

TD: 7540' PBTD: 7140' TOC: 5400' (COL)

Csg Size: 9 5/8" Wt: 32^a Grd: H-40 Dpth: 1265' Cmt: 650 sk (Circ)

Producing Formation: Tubb/Drinkard/Albo

Perfs: From 5788' to 5898' 2/spf 6556' to 7054' 2/spf
6224' to 99' 2/spf 5949' to 6063' 1/spf

IP: _____ BOPD _____ BWPD _____ MCF/D

Comments: _____

Tubb

5788,
5800, 34, 46, 57, 66,
5870, 77, 94, 98

5949, 51, 53, 63,
5965, 67, 69, 77,
5983, 85, 87, 89, 91,
6001, 03, 05, 07,
6009, 11, 17, 19,
6031, 33, 35, 39,
6041, 45, 51, 61, 63

Drinkard

6224, 26, 41, 44,
6246, 48, 66, 68,
6271, 74, 76, 78,
6292, 94

Albo

6556-60, 65-69,
6580-84,
6608-14, 21-24,
6655-66, 80-84,
6719-27, 36-48,
6747-51, 55-62,
6768-84, 93-97,
6802-05, 08-10,
6816-18, 66-70,
6881-84,
6957-59, 64-68,
6969-71, 75-77,
6978-79,
7011-13, 43-45,
7052-54

Well Equipment:

Pumping Unit: Oilwell 228-246-86

Motor Type: _____ HP: _____ POC: _____

Tbg: 228' Jts 2 3/8" Size 3.75" Grade 3.75"

MA @ 7102' SN @ 7070' TAC @ ? (9-16-04)

Rods: 8 5/8" x 105' 3 1/2" x 10-48"

Pump: 2" x 1 1/4" x 1" (9-17-04)

Csg Size: 7" Wt: 23^a Grd: N-80 Dpth: 7540' Cmt: 1112 sk

7501, 03, 07, 09,
7511, 13, 15, DV tool c 4510' w/1568' sk (Circ)

TD: 7540'

DV 4510'
w/1568' sk
(Circ) TOC

5400'
TOC

7 1/4"

CEBP-7140'

Granite Wash

7174, 76, 78, 84,
7186, 88, 90,
7289, 93, 97,
7301, 05, 09, 13,
7317, 21, 25, 74,
7397, 99