

## OIL CONSERVATION DIVISION

1220 South St. Francis Dr.

Santa Fe, NM 87505

WELL API NO.

30-025-39905

5. Indicate Type of Lease

STATE ☐FEE ☒

6. State Oil &amp; Gas Lease No.

7. Lease Name or Unit Agreement Name

WH LAUGHLIN

8. Well Number 012

9. OGRID Number 873

10. Pool name or Wildcat

MONUMENT; ABO, SOUTHWEST (96764)

## 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.)

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

2. Name of Operator

Apache Corporation

3. Address of Operator

303 Veterans Airpark Ln. Midland, TX 79705

4. Well Location

Unit Letter E: 1650 feet from the N line and 330 feet from the W lineSection 9 Township 20 S Range 37E NMPM County LEA

11. Elevation (Show whether DR, RKB, RT, GR, etc.)

3550' GR

## 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: PREF &amp; FRAC

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 CORPORATION PLANS TO PERF AND FRAC THE WH LAUGHLIN #012. PLEASE SEE THE ATTACHED PROCEDURE.

Spud Date: 01/03/2011

Rig Release Date: 01/20/2011

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

SIGNATURE

TITLE Sr.. Staff Regulatory Tech

DATE: 11/12-2012

Type or print name Bev Hatfield

E-mail address: Beverly.hatfield@apachecorp.com

PHONE: 432.818.1906

For State Use Only

APPROVED BY:

TITLE

DATE

Conditions of Approval (if any):

JAN 23 2012

JAN 17 2012



AFE No: TW- 10- 0424-C

**W H Laughlin #12**

API #: 30-025-39905

1650' FNL & 330' FWL

Section 9, Township 20S, Range 37E

Lea County, New Mexico

**Completion Procedure –Drinkard / Tubb / Blinebry**

**January 5, 2012**

**Recommended Procedure:**

**Note:** 5-1/2", 17#, J-55 & L-80 csg @ 7692' w/1,150 sx cmt (circ).  
(931' L-80 csg on top). Marker joint @ 5034-5055'.

**Burst L-80 @ 90% = 6966 psig**

**Burst J-55 @ 90% = 4788 psig**

**Abo Perfs: 6987-6992', 6996-7002', 7144-7148', 7153-7164', 7167-7174', 7178-7181', 7184-7192', 7194', 7196', 7205-7213'**

**Drinkard:**

1. MIRU PU. TOH with rods and pump. Kill well. ND WH. NU BOP. TOH with tubing.
2. MIRU wireline unit. Set 5-1/2" 10K composite plug @ 6950'. Load hole and pressure test CBP to 2000 psi. Perforate Drinkard formation @ 6818-6822', 6826-6832', 6858-6862', 6880-6884' and 6900-6904' w/2 spf, 120 deg phasing. Total = 54 shots.
3. TIH 2-7/8" tubing and packer. Spot acid over all perfs. Set packer @  $\pm 6720'$ . Acidize Drinkard interval with 5,000 gals 15% NEFE HCL acid and ball sealers. Add 1 drum of corrosion inhibitor & 2 drums scale inhibitor to acid mix.
4. Release packer & run through perfs to knock off balls. Reset packer as before.
5. Swab back load and test Drinkard zone. TOH with tubing and packer.

**Tubb:**

1. RU WL. Set 5-1/2" composite plug @  $\pm 6780'$ . Load hole and pressure test CBP to 2000 psi. ND BOP and WH. NU and test 5000 psi WH. Install BOP. Perforate Tubb formation @ 6448', 6450', 6452', 6470', 6472', 6478', 6489', 6496', 6498', 6500', 6502', 6522', 6524', 6526', 6528', 6532', 6544', 6545', 6562', 6564', 6566', 6572', 6574', 6576', 6584', 6590', 6592', 6594', 6632', 6652', 6654', 6656', 6658', 6660', 6662', 6664', 6686', 6688', 6690' and 6692' w/1 spf, 120 deg phasing. Total = 40 shots.
2. TIH 2-7/8" tubing and packer. Spot acid over all perfs. Set packer @  $\pm 6340'$ .
3. Acidize Tubb w/3,000 gals 15% HCL with ball sealers. Add 1 drum of corrosion inhibitor & 2 drums scale inhibitor to acid mix.
4. Release packer & run through perfs to knock off balls. TOH with tubing and packer.
5. ND BOP. NU 5K frac valve.

6. RU frac equipment. Load hole with 10# gel slick water. Frac the Tubb interval w/100,000# 20/40 Ottawa sand (2-6 ppg ramp) and 40,000# 20/40 SLC resin coated sand (6 ppg hold) down 5-1/2" csg @ 50 BPM in 30# XL gel as per frac recommendation. Maximum treating pressure = 4800 psi.
7. Spot 1,500 gals 15% HCL across Blinebry interval 6146 - 6356' during Tubb frac flush.
8. RIH and set composite plug above the Tubb interval @  $\pm 6420'$ . Pressure test CBP to 2000 psi.

**Blinebry:**

1. Perforate Blinebry formation @ 6146', 6148', 6150', 6196', 6198', 6200', 6218', 6220', 6222', 6230', 6232', 6234', 6240', 6242', 6268', 6270', 6276', 6278', 6280', 6294', 6296', 6305', 6307', 6309', 6318', 6320', 6324', 6326', 6328', 6338', 6340', 6342', 6348', 6350', 6352', 6354' and 6356' w/1 SPF, 120 deg phasing. Total 37 shots.
2. Acidize Blinebry w/3,000 gals 15% HCL w/ball sealers. Add 1 drum of corrosion inhibitor & 2 drums scale inhibitor to acid mix. RIH w/junk basket to knock off balls.
3. Frac the Blinebry interval w/100,000# 20/40 Ottawa sand (2-6 ppg ramp) and 40,000# 20/40 SLC resin coated sand (6 ppg hold) down 5-1/2" csg @ 50 BPM in 30# XL gel as per frac recommendation. Maximum treating pressure = 4800 psi.
4. RIH w/2-7/8" tbg and bit. Drill out plugs and clean out to 6950' PBD. Commingle Blinebry, Tubb and Drinkard production.
5. RIH w/production tubing. Land SN @  $\pm 6900'$ . RIH w/1-1/2" pump & rods.
6. Place well on test.
7. Produce BTD for 4-6 weeks, then drill out CBP at 6950' and commingle with Abo.

Prepared by:



Gary C. Timmermann

1/5/2012

**Weatherford®**

**PHOTO DENSITY  
COMPENSATED NEUTRON  
SPECTRAL GAMMA RAY**

COMPANY **APACHE CORPORATION**  
WELL **WH LAUGHLIN #12**  
FIELD **MONUMENT**  
PROVINCE/COUNTY **LEA**  
COUNTRY/STATE **U.S.A. / NEW MEXICO**  
LOCATION **1650' FNL & 330' FWL  
SEC. 9, T20S, RGE. 37E**



SEC 9	TWP 20S	RGE 37E	Other Services DUAL LATEROLOG MICRO LATEROLOG COMPENSATED SONIC
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API Number 30-025-39905  
Permit Number

Permanent Datum G.L., Elevation 3550 feet	Elevations:	feet
Log Measured From K.B. @ 11 FEET above Permanent Datum	KB	3561.00
Drilling Measured From K.B.	DF	3560.00
	GL	3550.00

Date	19-JAN-2011		
Run Number	ONE		
Depth Driller	7692.00	feet	
Depth Logger	7690.00	feet	
First Reading	7640.00	feet	
Last Reading	100.00	feet	
Casing Driller	4800.00	feet	
Casing Logger	4786.00	feet	
Bit Size	7.875	inches	
Hole Fluid Type	CHEM.		
Density / Viscosity	8.40 lb/USg	29.00 sec/qt	
PH / Fluid Loss	10.00	20.00 ml/30Min	
Sample Source	FLOWLINE		
Rm @ Measured Temp	0.60 @ 75.0	ohm-m	
Rmf @ Measured Temp	0.44 @ 75.0	ohm-m	
Rmc @ Measured Temp	0.72 @ 75.0	ohm-m	
Source Rmf / Rmc	CALC.	CALC.	
Rm @ BHT	0.40 @ 112.0	ohm-m	
Time Since Circulation	6 HOURS		
Max Recorded Temp	112.00	deg F	
Equipment Name	COMPACT		
Equipment / Base	13270	ODESSA	
Recorded By	JOHN WELLS		
Witnessed By	ROBERT JOHNSON VIA E-MAIL		
SO#	3528488		

**REMARKS**

ANNULAR HOLE VOLUME CALCULATED FOR 5.5" CASING

2.71 GICC DENSITY MATRIX USED TO CALCULATE POROSITY.

ALL INTERVALS LOGGED AND SCALED PER CUSTOMER'S REQUEST.

SERVICE ORDER #: 3528488

RIG: capstar #18

ENGINEER: JOHN WELLS

OPERATOR: RUBIN VILLDGAS

BOREHOLE SIZE AND RUGOSITY AFFECTING LOG QUALITY

THANK YOU FOR USING WEATHERFORD.