

HOBBS OCD

State of New Mexico

Form C-101
Revised July 18, 2013

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

MAR 04 2014 Energy Minerals and Natural Resources

RECEIVED

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

¹ Operator Name and Address Apache Corporation: 303 Veterans Airpark Lane, Suite 3000 Midland, TX 79705		² OGRID Number 873
⁴ Property Code 306627		³ APT Number 30-025-33541
³ Property Name Warn State AC 2		⁶ Well No. 026

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
E	06	18S	35E	5	2180	North	400	West	Lea

8. Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County

9. Pool Information

⁹ Pool Name Vacuum; Abo Reef	¹⁰ Pool Code 61780
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Additional Well Information

¹¹ Work Type A	¹² Well Type O	¹³ Cable/Rotary R	¹⁴ Lease Type S	¹⁵ Ground Level Elevation 3967'
¹⁶ Multiple N	¹⁷ Proposed Depth 11,497'	¹⁸ Formation L. Morrow	¹⁹ Contractor	²⁰ Spud Date 11/26/1996
Depth to Ground water		Distance from nearest fresh water well		Distance to nearest surface water

We will be using a closed-loop system in lieu of lined pits

21. Proposed Casing and Cement Program

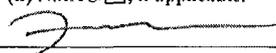
Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surface	17-1/2"	13-3/8"	48#	1382'	1250	
Intermediate	12-1/4"	9-5/8"	40#	5562'	2050	
Production	8-1/2"	5-1/2"	17#/20#	11,500'	2100	

Casing/Cement Program: Additional Comments

Apache would like to recomplete the Abo per the attached procedure.

22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer

²³ I hereby certify that the information given above is true and complete to the best of my knowledge and belief.
I further certify that I have complied with 19.15.14.9 (A) NMAC and/or 19.15.14.9 (B) NMAC , if applicable.
Signature: 

Printed name: Fatima Vasquez

Title: Regulatory Analyst II

E-mail Address: Fatima.Vasquez@apachecorp.com

Date: 03/04/2014

Phone: (432) 818-1015

OIL CONSERVATION DIVISION

Approved By:

Title:

Approved Date: 03/09/14

Expiration Date: 03/09/16

Conditions of Approval Attached

MAR 05 2014

Warn State AC 2 #26

API # 30-025-33541

Sec 5, T18S, R35E

Elevation: 3982' KB, 3967' GL

TD: 11,497'

PBTD: 9,220' CIBP @ 9,250

Casing Record: 13-3/8" 48# H-40 @ 1382 w/ 554 sxs

9-5/8" 36/40# @ 5562' w/ 1800 sxs

5-1/2" 17/20# L-80 @ 11,495' w/ 2100 sxs

Perfs: Wolfcamp: 9495-9526; 9547-9611; 9624-49; 9661-98 (Inactive)

Pennsylvanian: 10,007-023; 10,039-054; 10,054-069; 10,259-273; 10,306-317; 10,508-527; 10,527-546;
10,546-556 (Inactive)

Objective: Re-complete to the Abo

AFE: 11-14-0619

1. MIRU unit. Kill well as necessary. Unload 2-7/8" N-80 WS. ND WH. NU BOP.
2. PU and RIH w/ bit, bit sub, and casing scrapper to PBTD at 9,250'. Test casing to 1000 psi. POOH.
3. MIRU WL. NU lubricator. PU and RIH with perforator and perforate the Abo from 8356-68; 8379-89; 8405-26; 8434-51; 8463-82; 8498-8512; 8561-69; 8613-25; 8642-60; 8668-94 w/ 2 jspf 120° phasing (314 holes). POOH with perf guns and rig down WL. **Correlate to Schlumberger Platform Express Compensated Neutron Litho Density/NGT log dated 1/13/1997.**
4. TIH w/ SN and RBP-PKR straddle assembly w/ ball catcher. Set RBP w/ ball catcher at \pm 8,760. TOH and set PKR above perfs at \pm 8,520'. *Open perforations above PKR.*
5. MIRU acid services. Acidize the Abo (8561-8694) down the tubing with 4,000 gallons 15% NEFE w/ additives dropping 200 ball sealers to divert evenly spaced throughout the job as a max rate but do not exceed 8,000 psi surface treating pressure. Displace to bottom perf with 55 bbls of flush. Release PKR, TIH and knock balls off. TOH and set PKR at 8,520'.
6. RU swab equipment and recover load and swab test for fluid entry and oil cut. Report results to Midland. RD swab equipment.
7. Kill well if necessary. TIH to RBP and ball catcher. Latch and release RBP. TOH w/ PKR-RBP and set RBP and ball catcher at \pm 8,550. Test RBP to 1000 psi. TOH w/ PKR and WS.
8. PU and RIH w/ SN and PKR. Set PKR above new perforations at \pm 8,300'. Test backside to 500 psi.
9. MIRU acid services. Acidize the Abo (8356-8512) down the tubing with 6,000 gallons 15% NEFE w/ additives dropping 280 ball sealers to divert evenly spaced throughout the job as a max rate but do not exceed 8,000 psi surface treating pressure. Displace to bottom perf with 53 bbls of flush. Release PKR and knock balls off. TOH and set PKR at 8,300'.
10. RU swab equipment and recover load and swab test for fluid entry and oil cut. Report results to Midland. RD swab equipment.
11. Kill well if necessary. TIH to RBP and ball catcher. Latch and release RBP. TOH w/ PKR-RBP assembly and WS.
 - a. If Abo is productive, place well on production in upper and lower Abo.

b. If Lower Abo is unproductive, TIH and set CIBP @ 8,520'. Place well on production in upper Abo.

12. RIH w/ 2-7/8" J-55 production tubing and rods as per the Monument office specification

13. RDMOPU. Set pumping unit. Return well to production and place into test for 10 days

Apache Corporation – Warn State AC 2 #26

GL=3967'

KB=3982'

Spud:11/26/96

Wellbore Diagram – Current

Date : 2/4/2014

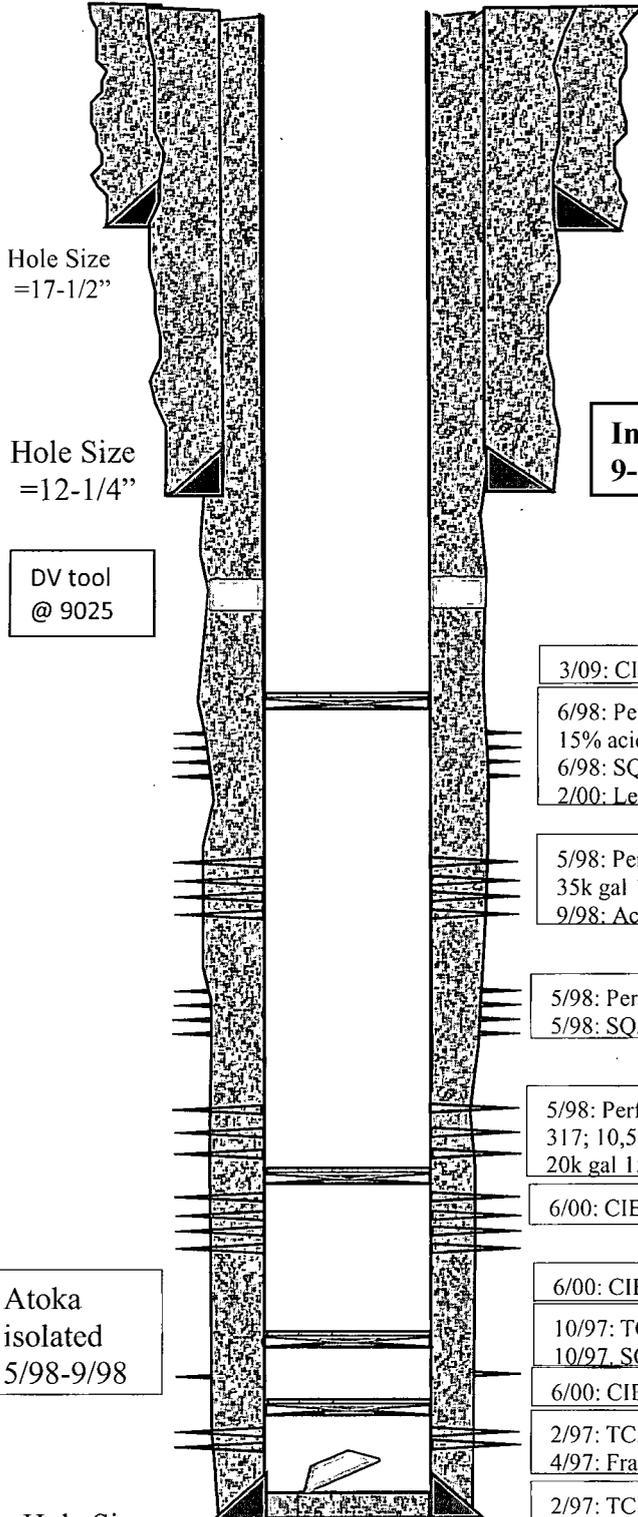
API: 30-025-33541

Surface Location

R. Taylor



2180' FNL & 400' FWL,
Lot E Sec 6, T18S, R35E, Lea County, NM



Hole Size
=17-1/2"

Hole Size
=12-1/4"

DV tool
@ 9025

Atoka
isolated
5/98-9/98

Hole Size
=8-1/2"

PBDT =11423 '
MD =11497'

Surface Casing

13-3/8" 48# H-40 @ 1382' w/ 554 sxs to surface

Intermediate Casing

9-5/8" 36/40# L-80/K-55 @ 5562' w/ 1800 sxs to surface

3/09: CIBP @ 9,250 w/ 30' of cmt on top

6/98: Perf @ 9330-37; 9348-58; 9366-83; 9401-17; 9421-52 w/ 2 jspf. Acidized w/ 20k gal 15% acid.

6/98: SQZ'd w/ 500 sxs cmt

2/00: Leak @ 9320-9417 SQZ'd w/ 100 sxs

5/98: Perf Wolfcamp @ 9495-9526; 9547-9611; 9624-49; 9661-98 w/ 2 jspf. Acidized w/ 35k gal 15% acid.

9/98: Acidize w/ 1500 gal 15% acid w/ 110 gal scale inhibitor.

5/98: Perf Wolfcamp @ 9752-9954 w/ 2 jspf. Acidized w/ 15k gal 15% acid.

5/98: SQZ w/ 400 sxs cmt

5/98: Perf Upper Pennsylvanian @ 10,007-23; 10,039-054; 10,054-069; 10,259-273; 10,306-317; 10,508-527; 10,527-546; 10,546-556 w/ 2 jspf 60° phasing. (238 holes). Acidized w/ 20k gal 15% acid.

6/00: CIBP @ 10,450 w/ 5' of cmt

6/00: CIBP @ 11,030 w/ 2 sxs cmt

10/97: TCP perforate Strawn @ 11080-90 w/ 6 spf 60° phasing.

10/97: SQZ'd w/ 25 sxs cmt.

6/00: CIBP @ 11,121 w/ 2 sxs cmt

2/97: TCP perforate Atoka 11,152-11,205 (53')

4/97: Frac w/ 10,500 gal Hyborgel G4195 w/ 35k# introprop plus.

2/97: TCP guns 11,341-11,423

Production Casing

5-1/2" 17/20# L-80 @ 11495' w/ 2100 sxs

Apache Corporation – Warn State AC 2 #26

GL=3967'
KB=3982'
Spud:11/26/96

Wellbore Diagram – Proposed

Date : 2/17/2014

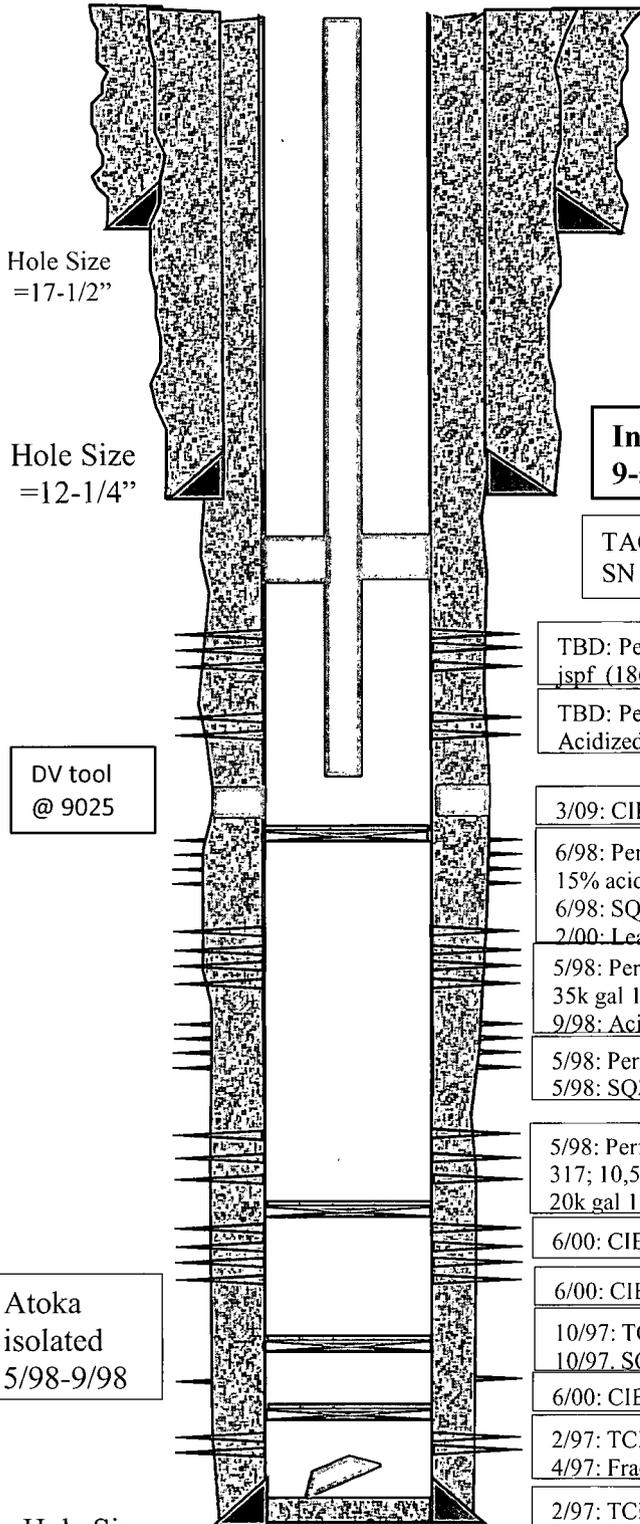
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PBTD =11423 '
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Surface Casing

13-3/8" 48# H-40 @ 1382' w/ 554 sxs to surface

Intermediate Casing

9-5/8" 36/40# L-80/K-55 @ 5562' w/ 1800 sxs to surface

TAC @ TBD
SN @ TBD

TBD: Perf Abo Stage II @ 8356-68; 8379-89; 8405-26; 8434-51; 8463-82; 8498-8512 w/ 2 jspf (186 holes). Acidized w/ 6000 gal 15% NEFE

TBD: Perf Abo Stage I @ 8561-69; 8613-25; 8642-60; 8668-94 w/ 2 jspf (128 holes). Acidized w/ 4000 gal 15% NEFE

3/09: CIBP @ 9,250 w/ 30' of cmt on top

6/98: Perf @ 9330-37; 9348-58; 9366-83; 9401-17; 9421-52 w/ 2 jspf. Acidized w/ 20k gal 15% acid.

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