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
SEP 05 2013
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. 30-025-38149	
5. Indicate Type of Lease STATE ☐ FEE ☑	
6. State Oil & Gas Lease No. N/A	
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 North Monument G/SA Unit
1. Type of Well: Oil Well ☑ Gas Well ☐ Other	8. Well Number 346
2. Name of Operator Apache Corporation	9. OGRID Number 873
3. Address of Operator 303 Veterans Airpark Lane, Suite 3000 Midland, TX 79705	10. Pool name or Wildcat Eunice Monument; G-SA (23000)
4. Well Location Unit Letter E : 1330 feet from the North line and 1310 feet from the West line Section 05 Township 20S Range 37E NMPM County Lea	
	11. Elevation *(Show whether DR, RKB, RT, GR, etc.)* 3559' GR

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

NOTICE OF INTENTION TO:		SUBSEQUENT RE
PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK
TEMPORARILY ABANDON ☐	CHANGE PLANS ☐	COMMENCE DRILLI
PULL OR ALTER CASING ☐	MULTIPLE COMPL ☐	CASING/CEM
DOWNHOLE COMMINGLE ☐		
CLOSED-LOOP SYSTEM ☑		
OTHER: Workover ☑		☐

After work is done the forms required are:
C-103 Subsequent report with dates and what was done.
C-105 Completion report
C-104 Request for Allowable & Authorization to Transport

13. Describe proposed or completed operations. (Clearly state all pe , including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. ach wellbore diagram of proposed completion or recompletion.

Apache would like to DO CIBP's, squeeze existing perfs in two stages, re-perforate and acidize the middle Grayburg per the attached procedure.

Spud Date: 10/30/2006 Rig Release Date: 11/04/2006

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

SIGNATURE _____ TITLE Regulatory Tech II DATE 09/03/2013

Type or print name Fatima Vasquez E-mail address: Fatima.Vasquez@apachecorp.com PHONE: (432) 818-1015

For State Use Only

APPROVED BY: Mark Whitaker TITLE Compliance Officer DATE 09-13-2013

Conditions of Approval (if any):

SEP 16 2013

NMGSAU #346
API # 30-025-38149
Sec 5, T20S, R37E
Elevation: 3570' KB, 3558' GL
TD: 3,993'
PBTD: 3,961'
Casing Record: 8-5/8" 24# J-55 @ 392' w/ 175
5-1/2" 17# J-55 @ 2,993' w/ 625 sxs

Perfs: Grayburg: 3744-56; 62-74; 78-90; 3804-18; 40-50; 56-64; 76-86; 3914-19 (83 holes) SQZ'd
Grayburg: 3876-80; 92-95; 3914-19 (24 holes).
Grayburg: 3766-69; 80-86 (20 holes).
Grayburg: 3636-40; 59-63; 72-78; 3694-3700 (44 holes)

Objective: DO CIBP's, squeeze existing perfs in two stages, re-perforate and acidize the middle Grayburg. RTP

AFE: PA-13-4358

1. MIRU unit. Check pressure on well.
2. ND WH. NU BOP. Rack 2-7/8" J-55 tubing to be used as work string.
3. PU and RIH w/ 4-3/4" bit, bit sub and drill collars on WS to CIBP @ 3,580'.
4. RU reverse unit. Break circulation and DO CIBP and cement to CIBP @ 3,860'. Continue to DO CIBP @ 3,860', or push to PBTD @ 3,961. Circulate hole clean. POOH.
5. PU and RIH w/ RBP and set ± 3,830'. Dump 2 sxs sand on top of RBP. POOH.
6. PU and RIH w/ CICR on WS and set @ ± 3,700'. Sting into CICR.
7. MIRU cement Service Company. Establish injection rate into perforations. Pump cement as dictated by injection rate. Hesitate squeeze perforations per Monument office recommendations. Displace to CICR with 21 bbls flush.
8. Sting out of CICR and POOH w/ WS. WOC.
9. PU and RIH w/ 4-3/4" bit, bit sub and drill collars on WS. Tag CICR. RU reverse unit and break circulation. Drill out CICR and cement to RBP at 3,830'. Test casing squeeze to 1000 psi. *If squeeze does not test, repeat squeeze process.* POOH.
10. PU and RIH w/ retrieving head and retrieve RBP @ 3,830'. POOH.
11. PU and RIH w/ CICR on WS and set at ± 3,830'. Sting into CICR.
12. MIRU cement Service Company. Establish injection rate into perforations. Pump cement as dictated by injection rate. Hesitate squeeze perforations per Monument office recommendations. Displace to CICR with 22 bbls flush.
13. Sting out of CICR and POOH w/ WS. WOC.
14. PU and RIH w/ 4-3/4" bit, bit sub and drill collars on WS. Tag CICR. RU reverse unit and break circulation. Drill out CICR and cement to 3,870'. Record PBTD. Test casing squeeze to 1000 psi. *If squeeze does not test, repeat squeeze process.* POOH.

15. MIRU WL. RIH w/ perforator and perforate the Grayburg at 3744-52; 3770-80; 3803-18; 3828-44 w/ 2 jspf 120° phasing (98 holes). TOH w/ perf guns. **Correlate to Halliburton Spectral Density Dual Spaced Neutron Spectral Gamma Ray log dated 11/4/2006.** RDMO WL.

16. TIH w/ SN and PKR assembly. Set PKR above perfs at ± 3,685'. Test backside to 500 psi.

17. MIRU acid services. Acidize the Grayburg (3,744-3,844) down the tubing with 2500 gallons 15% NEFE w/ additives using 200 ball sealers to divert evenly spaced throughout the job as a max rate but do not exceed 4,000 psi surface treating pressure. Displace to bottom perf with 25 bbls of flush. Release PKR and knock balls off. TOH and set PKR at 3,690'.

18. RU swab equipment and recover load and swab test for fluid entry and oil cut. Report results to Midland. RD swab equipment.

19. Kill well if necessary. TOH w/ PKR and WS.

    a. If Grayburg is productive, continue to step 20.

    b. If Grayburg is unproductive, TIH and set CIBP @ 3,685'w/ 2 sxs cement on top. TA well. RDMOPU.

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

21. RDMOPU. Set PU. Space out. Return well to production and place into test for 10 days.

Apache Corporation – NMGSAU #346

Wellbore Diagram – Current Status

GL=3558'
KB=3570'
Spud: 10/30/06

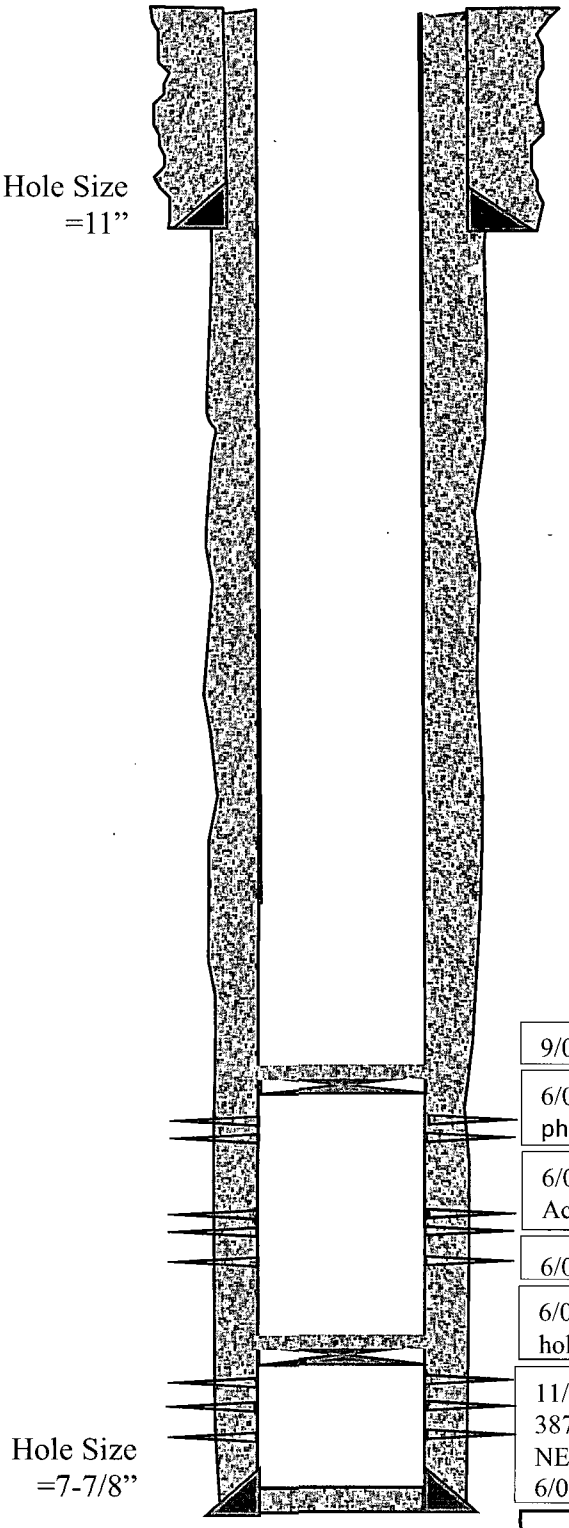
Date : 8/14/2013

API: 30-025-38149

R. Taylor

Surface Location

1330' FNL & 1310' FWL,
Sec 5, T20S, R37E, Lea County, NM



Surface Casing
8-5/8" 24# J-55 @ 392' w/ 175 sx to surface

9/07: Set CIBP @ 3580 w/ 2 sxs cmt on top. Well TA'd

6/07: Perf Grayburg @ 3636-40; 3659-63; 3672-78; 3694-3700 w/ 2 jsp 120° phasing (44 holes). Acidized w/ 1000 gal 15% NEFE acid. Swab black water

6/07: Perf Grayburg @ 3766-69; 3780-86 w/ 2 jspf w/ 120° phasing (20 holes). Acidized w/ 1000 gal 15% NEFE acid. Swab black water

6/07: Set CIBP @ 3840'w/ CIBP on top. Pushed to 3860'?

6/07: Perf Grayburg @ 3876-80; 3892-95; 3914-19 w/ 2 jspf w/ 120° phasing (24 holes). Acidized w/ 1000 gal 15% NEFE acid. Swab black water

11/06 Perf Grayburg @ 3744-56; 3762-74; 3778-90; 3804-18; 3840-50; 3856-64; 3876-86; 3914-19 w/ 1 jspf w/ 0° phasing (83 holes). Acidized w/ 4000 gal 15% NEFE acid
6/07: SQZ'd w/ 47 bbls cmt

Production Casing
5-1/2" 17# J-55 @ 3993' w/ 625 sxs to surface

PBTD = 3961'
TD =3993'

Apache Corporation – NMGSAU #346

Wellbore Diagram – Proposed Status

GL=3558'
KB=3570'
Spud: 10/30/06

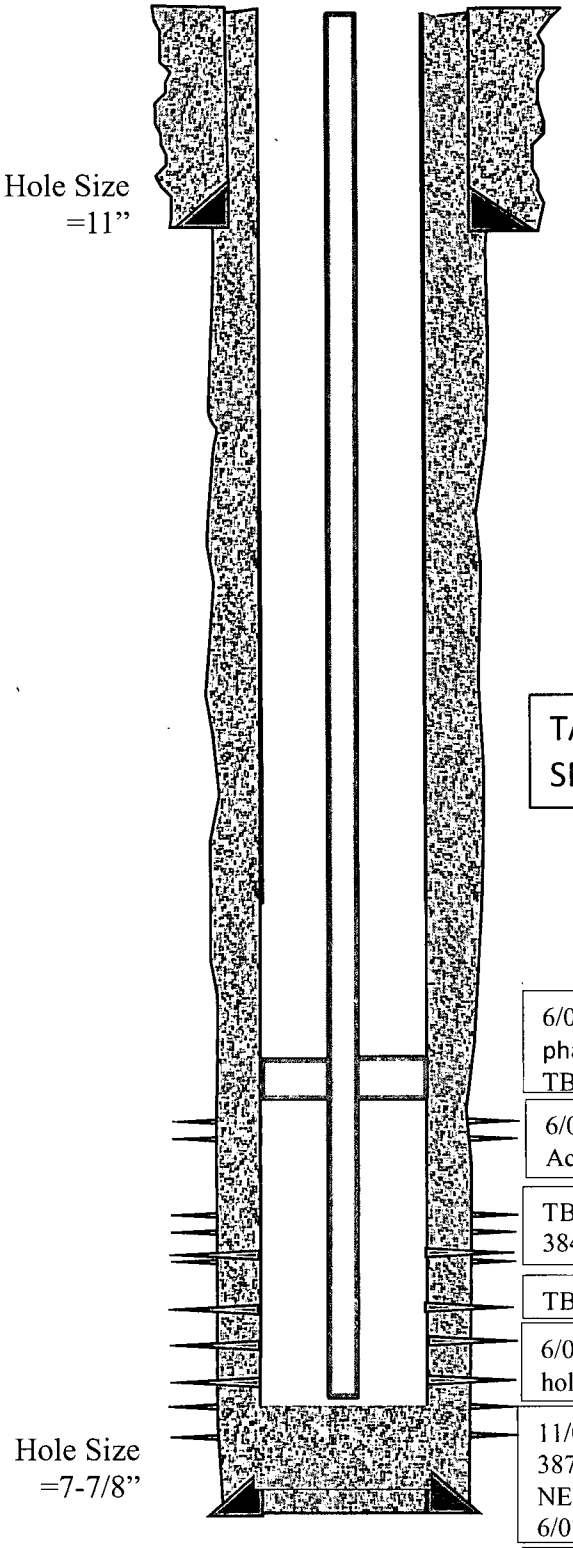
Date : 8/27/2013

API: 30-025-38149

R. Taylor

Surface Location

1330' FNL & 1310' FWL,
Sec 5, T20S, R37E, Lea County, NM



Surface Casing
8-5/8" 24# J-55 @ 392' w/ 175 sx to surface

TAC @ TBD'
SN @ TBD'

6/07: Perf Grayburg @ 3636-40; 3659-63; 3672-78; 3694-3700 w/ 2 jsp 120° phasing (44 holes). Acidized w/ 1000 gal 15% NEFE acid. Swab black water
TBD: SQZ perfs 3636-3786 w/ XX sxs cmt.

6/07: Perf Grayburg @ 3766-69; 3780-86 w/ 2 jspf w/ 120° phasing (20 holes). Acidized w/ 1000 gal 15% NEFE acid. Swab black water

TBD: CMT drilled to 3870'. Grayburg perf @ 3744-52; 3770-80; 3803-3818; 3828-3844 w/ 2 jspf (98 holes). Acidized w/ 2500 gal 15% NEFE

TBD: Set CICR @ 3830'. SQZ perfs 3876-3919 w/ XX sxs cmt.

6/07: Perf Grayburg @ 3876-80; 3892-95; 3914-19 w/ 2 jspf w/ 120° phasing (XX holes). Acidized w/ 1000 gal 15% NEFE acid. Swab black water.

11/06 Perf Grayburg @ 3744-56; 3762-74; 3778-90; 3804-18; 3840-50; 3856-64; 3876-86; 3914-19 w/ 1 jspf w/ 0° phasing (XX holes). Acidized w/ 4000 gal 15% NEFE acid
6/07: SQZ'd w/ 47 bbls cmt

PBTD = 3870'
TD =3993'

Production Casing
5-1/2" 17# J-55 @ 3993' w/ 625 sxs to surface