

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 August 1, 2011

HOBBS OCD

AUG 07 2013

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.  
Santa Fe, NM 87505

WELL API NO. 30-025-38119
5. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input checked="" type="checkbox"/>
6. State Oil & Gas Lease No. B0-0934-0021
7. Lease Name or Unit Agreement Name New Mexico S State (34816)
8. Well Number 054
9. OGRID Number 873
10. Pool name or Wildcat Eunice; San Andres, South (24170)
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3366' GL

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 Lane, Suite 3000 Midland, TX 79705

4. Well Location

Unit Letter M : 950 feet from the South line and 980 feet from the West line  
Section 2 Township 22S Range 37E NMPM County Lea

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 ☐

OTHER: RECOMPLETE ☒

SUBSEQUENT REPORT OF:

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

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 requests approval to recomplete this well in the Grayburg and then commingle with the existing San Andres production, per the attached procedure. (NOI requesting DHC to follow.)

Condition of Approval for DHC -- Approval for Drilling Only.  
CANNOT produce multiple zones without the OCD Santa Fe  
office approval for Downhole Commingle of form C-107a

Spud Date:

9/25/2006

Rig Release Date:

10/03/2006

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 Tech

DATE 8/5/2013

Type or print name Reesa Holland Fisher

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

PHONE: 432/818-1062

For State Use Only

APPROVED BY:

[Signature]

TITLE

Petroleum Engineer

DATE

AUG 08 2013

Conditions of Approval (if any):

**NM State S #54**  
**Sec 2, T-22-S, R-37-E**  
**Lea County, New Mexico**

**GRAYBURG RECOMPLETION – 1 STAGE**

2-7/8" Tbg

2-7/8", 6.5#, J-55, 8rd EUE  
Capacity: 0.0058 bbl/ft = 0.2432 gal/ft  
Burst: 7,260 psig; 80% = 5,808 psig;  
Collapse: 7,680 psig; 80% = 6,144 psig;  
Yield: 99,960 lbs; 80% = 79,728 lbs

5-1/2" Csg

5-1/2", 17#, L-80  
Capacity: 0.0232 bbl/ft = 0.974 gal/ft  
Burst: 7,740 psig; 80% = 6,192 psig;  
Collapse: 6,390 psig; 80% = 5,112 psig;  
Yield: 397,000 lbs; 80% = 317,600 lbs;

Days 1-2

1. **POOH and Clean out:** MIRU PU. POOH rods and pump. NDWH. Unset TAC. NUBOP. Tag for fill. POOH 2-7/8" tbg. RIH w/ scraper to PBTD. POOH tbg and scraper. (Note: If drilling out fill is required, wait to do after frac.)
2. **Perf Grayburg:** MIRU WL. Perf Grayburg w/ 3-3/8" SDP-3375-411NT3 csg gun w/ 2 JSPF at 3636, 49, 60, 81-83, 3706-08, 12-14, 22-24, 31, 48-52, 63, 72, 78-82, 94, 99-01, 3814-16, 23-25, 27-29 (41 ft, 82 holes, 120 deg phasing)

Day 3

3. **Acidize Grayburg:** RIH w/ tbg, packer, and RBP (note: use a CBP if fill is required to be drilled out). Set RBP at 3,910'. Spot 7 bbls 15% HCl across perfs. PUH to 3,580'. Rev circulate 5 bbls 2% KCl and set packer. BD perfs and EIR w/ 2% KCl wtr. Acidize w/ 3,000 gal 15% HCl @ 7 bpm w/ 125 BS. Max pressure 5,500 psig. Flush w/ 32 bbls 2% KCl wtr (5 bbl overflush). Record ISIP and 5/10/15" SIP's. Run packer through perfs to knock off BS. POOH tbg and packer. Prep for frac.

Day 4

4. **Frac Grayburg:** Frac Grayburg from 3,636' – 3,829' @ ~40 bpm w/ 77,000 gal 30#, XL, 2% KCl wtr carrying 132,000 lbs 16/30 Ottawa RC sand w/ a 1-6 ppg stair step. Max pressure 6,000 psig. Flush w/ 81 bbls 2% KCl wtr (3 bbl underflush). Record ISIP and 5/10/15" SIP's.

**TENTATIVE GRAYBURG SCHEDULE**

Volume (Gals)	Rate (BPM)	Sd Conc (ppg)	Total Sand (lbs)	Sd Mesh Size
28,000	40	0	0	Pad
15,000	40	1.0	15,000	16/30 Ottawa RCS
11,000	40	2.0	22,000	16/30 Ottawa RCS
9,000	40	3.0	27,000	16/30 Ottawa RCS
6,000	40	4.0	24,000	16/30 Ottawa RCS
4,000	40	5.0	20,000	16/30 Ottawa RCS

4,000	40	6.0	24,000	16/30 Ottawa RCS
3,402	40	0	0	Flush

**Note: Do not overflush.**

Day 5 (and 6, if necessary)

5. **Clean out sand w/ AFU:** SWI. RDMO frac equipment. MIRU AFU. OWU and blow down. TIH w/ tbg and retrieving head and clean out sand to RBP. Circulate hole clean. POOH w/ tbg and RBP. (Note: TIH w/ mill, SN, and tbg if CBP in hole.)
6. **Put on Production:** TIH w/ 2-7/8" prod string, pump, rods, and SN. Hang on, load and test, space out, put on production. Put into test separator.

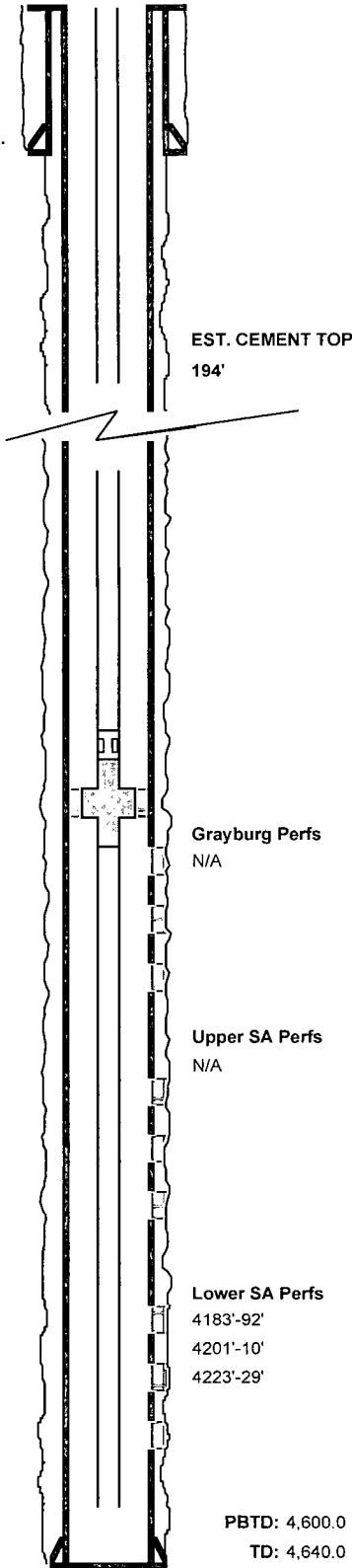
# Apache Corporation

NM State S #54

## WELL DIAGRAM (CURRENT CONFIGURATION)



SURF. CSG.  
393'



EST. CEMENT TOP  
194'

Grayburg Perfs  
N/A

Upper SA Perfs  
N/A

Lower SA Perfs  
4183'-92'  
4201'-10'  
4223'-29'

PBTD: 4,600.0  
TD: 4,640.0

WELL NAME: NM State S #54		API: 30-025-38119
LOCATION: 990' FSL & 990' FWL, Unit E, Sec. 2, T-22S, R-37E		COUNTY: Lea Co., NM
SPUD/TD DATE: 9/25/2006-10/2/2006		COMP. DATE: 11/15/2006
PREPARED BY: Matthew Mechtly		DATE: 6/10/2013
TD: 4,640.0	KB Elev. 3377.00	KB Dist. H
PBTD: 4,600.0	Ground Elev. 3366.00	KB to Ground

CASING/TUBING	SIZE (IN)	WEIGHT (LB/FT)	GRADE	DEPTHS (FT)	
Surface Casing	8-5/8"	24.00	J-55	0.00	393.00
Prod. Casing	5-1/2"	17.00	J-55	0.00	4,640.00
Open Hole					
Tubing	2-7/8"	6.50	J-55	0.00	4,318.50

### PRODUCTION TBG STRING

ITEM	DESCRIPTION	LENGTH (FT)	Depth (FT)
1	KB	11.00	11
2	(132) JTS 2-7/8" 6.5# J-55 TBG	4,287.13	4,298.13
3	(1) 2-7/8" BLAST JOINT	31.5	4,329.63
4	(1) 2-3/8" SEATED NIPPLE	1.10	4,330.73
5			4,330.73
6			4,330.73
7			4,330.73
8			4,330.73
9			4,330.73
10	EOT		4,330.73

### PRODUCTION ROD STRING

ITEM	DESCRIPTION	LENGTH (FT)	Btm (FT)
1	(1) 7/8" X 1-1/2" X 26' POLISH ROD	26.00	26.0
2	(1) 7/8 X 4' SUB	4.00	30.0
3	(1) 7/8 X 4' SUB	6.00	36.0
4	(60) 7/8" KD RODS	1,500.00	1,536.0
5	(110) 3/4" KD RODS	2,750.00	4,286.0
6			4,286.0
7			4,286.0
8			4,286.0
9	(1) RHR YES.		4,286.0
10	(PUMP) S-A 425 2 X 1-1/2 X 24 RHBC	24.00	4,310.0

### SURFACE EQUIPMENT

PUMPING UNIT SIZE: S-A 425 2 X 1-1/2 X 24 RHBC	MOTOR HP: 30.00
PUMPING UNIT MAKE:	MOTOR MAKE:

### PERFORATIONS

Form.	Intervals	Density
Grayburg		
Upper SA		
Lower SA	4183'-92', 4201'-10', 4223'-29'	2JSPF

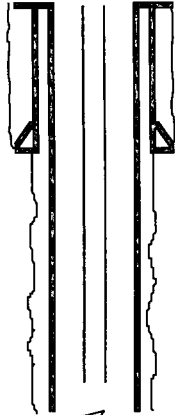
# Apache Corporation

NM State S #54

## WELL DIAGRAM (PROPOSED CONFIGURATION)



SURF. CSG.  
393'



EST. CEMENT TOP  
194'

Grayburg Perfs  
3636-3829

Upper SA Perfs  
N/A

Lower SA Perfs  
4183'-92'  
4201'-10'  
4223'-29'

PBTD: 4,600.0  
TD: 4,640.0

WELL NAME:		NM State S #54		API:		30-025-38119	
LOCATION:		990' FSL & 990' FWL, Unit E, Sec. 2, T-22S, R-37E		COUNTY:		Lea Co., NM	
SPUD/TD DATE:		9/25/2006-10/2/2006		COMP. DATE:		11/15/2006	
PREPARED BY:		Matthew Mechtly		DATE:		6/10/2013	
TD: 4,640.0		KB Elev. 3377.00		KB Dist. H			
PBTD: 4,600.0		Ground Elev. 3366.00		KB to Ground			
CASING/TUBING		SIZE (IN)	WEIGHT (LB/FT)	GRADE		DEPTHS (FT)	
Surface Casing		8-5/8"	24.00	J-55		0.00	393.00
Prod. Casing		5-1/2"	17.00	J-55		0.00	4,640.00
Open Hole							
Tubing		2-7/8"	6.50	J-55		0.00	4,287.13
PRODUCTION TBG STRING							
ITEM	DESCRIPTION					LENGTH (FT)	Depth (FT)
1	KB					11.00	11
2	(132) JTS 2-7/8" 6.5# J-55 TBG					4,287.13	4,298.13
3	(1) 2-7/8" BLAST JOINT					31.5	4,329.63
4	(1) 2-3/8" SEATED NIPPLE					1.10	4,330.73
5							4,330.73
6							4,330.73
7							4,330.73
8							4,330.73
9							4,330.73
10	EOT						4,330.73
PRODUCTION ROD STRING							
ITEM	DESCRIPTION					LENGTH (FT)	Btm (FT)
1	(1) 7/8" X 1-1/2" X 26' POLISH ROD					26.00	26.0
2	(1) 7/8 X 4' SUB					4.00	30.0
3	(57) 1-1/4" FIBERGLASS RODS					2,080.50	2,110.5
4	(40) 1" KD RODS					1,000.00	3,110.5
5	(39) 7/8" KD RODS					975.00	4,085.5
6	(8) 1-1/2" K-BARS (NO NECK)					200.00	4,285.5
7							4,285.5
8							4,285.5
9	(1) RHR YES.						4,285.5
10	(PUMP) S-A 425 2 X 1-1/2 X 24 RHBC					24.00	4,309.5
SURFACE EQUIPMENT							
PUMPING UNIT SIZE:				S-A 425 2 X 1-1/2 X 24 RHBC		MOTOR HP: 30.00	
PUMPING UNIT MAKE:				MOTOR MAKE:			
PERFORATIONS							
Form.	Intervals						Density
Grayburg	3636, 49, 60, 81-83, 3706-08, 12-14, 22-24, 31, 48-52, 63, 72, 78-82,						2JSPF
	94, 99-3801, 3814-16, 23-25, 27-29						
Upper SA							
Lower SA	4183'-92', 4201'-10', 4223'-29'						2JSPF