

HOBBS OCD

JUL 03 2013

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

OCD Hobbs

FORM APPROVED  
OMB NO. 1004-0137  
Expires: October 31, 2014

## WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5. Lease Serial No.  
NMNM-01135a. Type of Well ☒ Oil Well ☐ Gas Well ☐ Dry ☐ Other  
b. Type of Completion: ☒ New Well ☐ Work Over ☐ Deepen ☐ Plug Back ☐ Diff. Resrv.,  
Other: \_\_\_\_\_

6. If Indian, Allottee or Tribe Name

7. Unit or CA Agreement Name and No.

2. Name of Operator  
Apache Corporation (873)8. Lease Name and Well No.  
Lusk 34 Federal #2H (39355)3. Address 303 Veterans Airpark Ln., Ste. 3000  
Midland, TX 797053a. Phone No. (include area code)  
(432) 818-10159. API Well No.  
30-025-40693

4. Location of Well (Report location clearly and in accordance with Federal requirements)\*

330' FNL & 1715' FWL UL:C Sec:34 T:19S R:32E  
At surface10. Field and Pool or Exploratory  
Lusk; Bone Spring, South (41460)11. Sec., T., R., M., on Block and  
Survey or Area UL:C Sec:34 T:19S R:32E

At top prod. interval reported below

At total depth 327' FSL &amp; 1879' FWL Lot 2 Sec:34 T:19S R:32E

12. County or Parish

Lea

13. State

NM

14. Date Spudded  
08/28/201215. Date T.D. Reached  
10/19/201216. Date Completed  
☐ D & A ☒ Ready to Prod.17. Elevations (DF, RKB, RT, GL)\*  
3569'18. Total Depth: MD 14,055'  
TVD 9816'19. Plug Back T.D.: MD 14,000'  
TVD 9603'20. Depth Bridge Plug Set: MD  
TVD21. Type Electric & Other Mechanical Logs Run (Submit copy of each)  
HNGR/BHC/Hi-Res LL/CN/CAL22. Was well cored? ☐ No ☐ Yes (Submit analysis)  
Was DST run? ☐ No ☐ Yes (Submit report)  
Directional Survey? ☐ No ☒ Yes (Submit copy)

23. Casing and Liner Record (Report all strings set in well)

Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sk. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
26"	20"	106.5#		1072'		1710 sx Class C		Surface	
17-1/2"	13-3/8"	54.5#		3196'		2510 sx Class C		Surface	
12-1/2"	9-5/8"	36#		4512'		1730 sx Class C		Surface	
7-7/8"	5-1/2"	17#		14,053'		2100 sx Class H		Surface	

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)
2-7/8"	9310'	9310'						

25. Producing Intervals

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) Bone Springs	7479'		10,095'-13,948'	5 SPF	540	Producing
B)						
C)						
D)						

27. Acid, Fracture, Treatment, Cement Squeeze, etc.

Depth Interval	Amount and Type of Material
10,095'-13,948'	2856 bbl 15% HCL acid & 2,229,040# sand

DECLAMATION

DUE 10-26-13

28. Production - Interval A

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
02/26/13	05/01/13	24	→	233	416	674	37.6		Flowing
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
			→				1785	Producing	

ACCEPTED FOR RECORD

28a. Production - Interval B

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
			→						

JUN 29 2013

BUREAU OF LAND MANAGEMENT  
CARLSBAD FIELD OFFICE

\*(See instructions and spaces for additional data on page 2)

AUG 21 2013

ELG 8-21-2013

## 28b. Production - Interval C

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
			→						

## 28c. Production - Interval D

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
			→						

29. Disposition of Gas (*Solid, used for fuel, vented, etc.*)  
Sold

## 30. Summary of Porous Zones (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

## 31. Formation (Log) Markers

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top
					Meas. Depth
				Rustler Salt	977' 1200'
				B/Salt Yates	2650' 2800'
				Capitan Reef Delaware	3203' 4521'
				Bone Springs 1st BSPG sand	7479' 8603'
				2nd BSPG Sand	9175'

32. Additional remarks (include plugging procedure):

33. Indicate which items have been attached by placing a check in the appropriate boxes:

- ☒ Electrical/Mechanical Logs (1 full set req'd.)
 ☐ Geologic Report
 ☐ DST Report
 ☒ Directional Survey
 ☐ Sundry Notice for plugging and cement verification
 ☐ Core Analysis
 ☒ Other: OCD Forms C-102, C-104, Frac Disclosure

34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions)\*

Name (*please print*) Fatima Vasquez

Title Regulatory Tech I

Signature 

Date 05/03/2013

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

# Hydraulic Fracturing Fluid Product Component Information Disclosure

Last Fracture Date:	02/20/2013
State:	New Mexico
County:	Lea
API Number:	30-025-40693
Operator Name:	Apache Corp
Well Name and Number:	Lusk 34 Federal 2H
Longitude:	-103.75515
Latitude:	32.62322
Long/Lat Projection:	NAD27
Production Type:	Oil
True Vertical Depth (TVD):	9,802
Total Water Volume (gal)*:	2,484,002

## Hydraulic Fracturing Fluid Composition:

Trade Name	Supplier	Purpose	Ingredients	Chemical Abstract Service Number (CAS #)	Maximum Ingredient Concentration in Additive (% by mass)**	Maximum Ingredient Concentration in HF Fluid (% by mass)**	Comments
Water	Operator	Carrier	Water	7732-18-5	100.00%	85.53761%	
HCl, 10.1 - 15%	Baker Hughes	Acidizing	Hydrochloric Acid	7647-01-0	15.00%	0.71868%	
			Water	7732-18-5	85.00%	4.07254%	
Superset-W, 330 gl tote	Baker Hughes	Activator	Methanol	67-56-1	50.00%	0.02311%	
			Poly (Oxyethylene) Nonylphenol Ether	9016-45-9	50.00%	0.02311%	
Alpha 125	Baker Hughes	Biocide	Glutaraldehyde	111-30-8	30.00%	0.00688%	SmartCare Product
Clay Master-5C (Tote)	Baker Hughes	Clay Control	Oxyakylated Amine Quat	138879-94-4	60.00%	0.05402%	
CI-14	Baker Hughes	Corrosion Inhibitor	Fatty Acids	Trade Secret	10.00%	0.00072%	
			Olefin	Trade Secret	5.00%	0.00036%	
			Polyoxyalkylenes	Trade Secret	30.00%	0.00216%	
			Propargyl Alcohol	107-19-7	5.00%	0.00036%	
MaxPerm-20A, 265 gallon tote	Baker Hughes	Friction Reducer	Aliphatic Hydrocarbon	Trade Secret	30.00%	0.02464%	SmartCare Product
			Oxyalkylated Alcohol	Trade Secret	5.00%	0.00411%	
Ferrotrol 280L , 330 gl tote	Baker Hughes	Iron Control	2-Mercaptoethanol	60-24-2	100.00%	0.01619%	
			Ammonium Hydroxide	1336-21-6	5.00%	0.00081%	
			Cupric Chloride	7447-39-4	5.00%	0.00081%	
NE-13	Baker Hughes	Non-emulsifier	Benzyl Chloride	100-44-7	0.30%	0.00003%	
			Isopropanol	67-63-0	40.00%	0.00377%	

**Hydraulic Fracturing Fluid Composition:**

Trade Name	Supplier	Purpose	Ingredients	Chemical Abstract Service Number (CAS #)	Maximum Ingredient Concentration in Additive (% by mass)**	Maximum Ingredient Concentration in HF Fluid (% by mass)**	Comments
			Quaternary Ammonium Compounds	Trade Secret	30.00%	0.00283%	
Sand, White, 20/40	Baker Hughes	Proppant	Crystalline Silica (Quartz)	14808-60-7	100.00%	6.75921%	
Sand, White, 40/70	Baker Hughes	Proppant	Crystalline Silica (Quartz)	14808-60-7	100.00%	0.74324%	
Super LC, 20/40	Baker Hughes	Proppant	Hexamethylenetetramine	1009-7-0	0.01%	0.00017%	
			P/F Resin	9003-35-4	5.00%	0.08692%	
			Silicon Dioxide (Silica Sand)	14808-60-7	97.00%	1.68626%	
InFlo 250G, 330 gl tote	Baker Hughes	Surfactant	Methanol	67-56-1	30.00%	0.02548%	
			Mixture of Surfactants	Trade Secret	50.00%	0.04246%	
			Water	7732-18-5	30.00%	0.02548%	
Ingredients shown above are subject to 29 CFR 1910.1200(i) and appear on Material Safety Data Sheets (MSDS). Ingredients shown below are Non-MSDS.							
			Anionic Terpolymer	Trade Secret		0.0492806732%	
			EDTA	64-02-8		0.0000410672%	
			Ethoxylated Amine	NP-488032_2			
			Formaldehyde	50-00-0		0.0000718626%	
			Hydrochloric Acid	7647-01-0		0.0000718626%	
			Inorganic Salt	7647-14-5		0.0041067228%	
			Methanol	67-56-1		0.0072436197%	
			Modified Thiorea Polymer	68527-49-1		0.0005030382%	
			Oxyalkylated Fatty Acid Derivative	Trade Secret		0.0041067228%	
			Polyol Ester	Trade Secret		0.0041067228%	
			Water	7732-18-5		0.0685029956%	

\* Total Water Volume sources may include fresh water, produced water, and/or recycled water

\*\* Information is based on the maximum potential for concentration and thus the total may be over 100%

All component information listed was obtained from the supplier's Material Safety Data Sheets (MSDS). As such, the Operator is not responsible for inaccurate and/or incomplete information. Any questions regarding the content of the MSDS should be directed to the supplier who provided it. The Occupational Safety and Health Administration's (OSHA) regulations govern the criteria for the disclosure of this information. Please note that Federal Law protects "proprietary", "trade secret", and "confidential business information" and the criteria for how this information is reported on an MSDS is subject to 29 CFR 1910.1200(i) and Appendix D.