

**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

State of New Mexico

Form C-101  
Revised November 14, 2012

Energy Minerals and Natural Resources

Oil Conservation Division

☐ AMENDED REPORT

1220 South St. Francis Dr.

Santa Fe, NM 87505

**HOBBS OCD**  
**MAY 15 2013**

**RECEIVED**

**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
3. Property Code 26475		4. API Number 30-025-38112
5. Property Name M & M		6. Well No. 005

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
C	24	20S	38E		330	North	2310	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

Pool Name D-K; Abo	Pool Code 15200
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Additional Well Information

11. Work Type A	12. Well Type O	13. Cable/Rotary R	14. Lease Type P	15. Ground Level Elevation 3574'
16. Multiple N	17. Proposed Depth 7700'	18. Formation Abo	19. Contractor	20. Spud Date 09/25/2006
Depth to Ground water		Distance from nearest fresh water well		Distance to nearest surface water

21. Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
S	12-1/4"	8-5/8"	24#	1570'	800 sx	
P	7-7/8"	5-1/2"	17#	7700'	1450 sx	

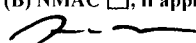

Casing/Cement Program: Additional Comments

Apache intends to perf the Abo per the attached procedure.

22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer

**Permit Expires 2 Years From Approval Date Unless Drilling Underway**

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 <input type="checkbox"/> and/or 19.15.14.9 (B) NMAC <input type="checkbox"/> , if applicable. Signature: 		OIL CONSERVATION DIVISION	
Printed name: Fatima Vasquez		Approved By: 	
Title: Regulatory Tech I		Title: Petroleum Engineer	
E-mail Address: Fatima.Vasquez@apachecorp.com		Approved Date: 05/16/13 Expiration Date: 05/16/15	
Date: 05/10/2013	Phone: (432) 818-1015	Conditions of Approval Attached	

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State of New Mexico  
Energy, Minerals & Natural Resources Department  
OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-102  
Revised August 1, 2011  
Submit one copy to appropriate  
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number 30-025-38112		<sup>2</sup> Pool Code 15200	<sup>3</sup> Pool Name D-K; Abo
<sup>4</sup> Property Code 26475	<sup>5</sup> Property Name M & M		<sup>6</sup> Well Number 005
<sup>7</sup> OGRID No. 873	<sup>8</sup> Operator Name Apache Corporation: 303 Veterans Airpark Lane, Suite 3000 Midland, TX 79705		<sup>9</sup> Elevation 3574' GR

<sup>10</sup> Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	24	20S	38E		330	North	2310	West	Lea

<sup>11</sup> Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

<sup>12</sup> Dedicated Acres 40.00	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No. DHC - 186-0
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No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

	<p><b><sup>17</sup> OPERATOR CERTIFICATION</b></p> <p><i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</i></p> <p>             Signature         </p> <p>05/10/2013 Date</p> <p>Fatima Vasquez Printed Name</p> <p>Fatima.Vasquez@apachecorp.com E-mail Address</p>
	<p><b><sup>18</sup> SURVEYOR CERTIFICATION</b></p> <p><i>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</i></p> <p>_____ Date of Survey</p> <p>_____ Signature and Seal of Professional Surveyor:</p> <p>_____ Certificate Number</p>

M &M #5

API # 30-025-38112

Sec 24, T20S, R38E

Elevation: 3574' KB, 3593' GL

TD: 7,700' PBTD: 7,653'

Casing Record: 8-1/2" 24# J-55 @ 1570' w/ 800 sxs  
5-1/2" 17# L-80 @ 7,700' w/ 1450 sxs.

Perfs: **Blinebry:** 6032-36; 6084-88; 6131-35 w/ 2 jspf (24 holes)  
**Tubb:** 6532-36; 6586-90; 6661-65; 6706-10; 6755-59 w/ 2 jspf (40 holes)

AFE: PA-13-3759

1. MIRU unit. Kill well as necessary. Unset pump. POOH w/ rods and pump.
2. ND WH. NU BOP. Release TAC. POOH w/ tubing and TAC.
3. RU reverse unit. PU 4-3/4" bit, bit sub, and 5-1/2" casing scraper on 2-7/8" tubing to be used as work string. RIH to PBTD at 7,653'. Circulate hole clean. POOH.
4. MIRU WL. RIH w/ perforating gun. Perforate the Abo at 7126-33; 7135-42; 7280-90; 7311-18; 7324-29; 7333-46; 7353-58; 7410-15; 7420-26; 7436-45; 7459-69 w/ 2 jspf using Connex 0.5" diameter BH charges (174 holes). TIH with perforator. **Correlate to Halliburton Spectral Density Dual Spaced Neutron log dated 10/6/2009.** RDMO WL.
5. PU and RIH w/ PKR-RBP straddle assembly on WS to 7,510'. Set RBP at 7,510'. TOH 2' and test RBP to 1000 psi. Release PKR. TOH and spot 400 gallons acid across Abo perforations and set PKR at  $\pm 7,075'$ .
6. MIRU Acid Services. Acidize the Abo down the tubing with 5,000 gallons 15% NEFE w/ additives using 300 ball sealers to divert spaced throughout the job as a max rate but do not exceed 6,000 psi treating pressure. Displace to bottom perf with 50.1 bbls of flush. Surge balls.
7. Release PRK and TIH to knock balls off perforations. TOH and set PKR at 7,075'.
8. RU swab equipment and recover load and swab test for fluid entry and oil cut. Report results to Midland. RD swab equipment. *If unproductive, Set CIBP above Abo @ 7,100'.*
9. Kill well if necessary. Release PKR and TOH.
10. RIH w/ production equipment as per the Hobbs office specifications. RDMOPU.
11. Return well to production and place into test for 10 days. Have chemical representative test fluids and put well on the appropriate chemical maintenance program.

GL=3593'  
KB=3574'  
Spud:9/25/06

## Apache Corporation – M & M #5

### Wellbore Diagram – Proposed

Date : 4/10/2013

API: 30-025-38112

#### Surface Location

R. Taylor



330' FNL & 2310' FWL,  
Lot C Sec 24, T20S, R38E, Lea County, NM

TOC @ 84'

#### Surface Casing

8-1/2" 24# J-55 @ 1570' w/ 800 sxs to surface

TAC @ TBD  
SN @TBD

12/06: Perf Blinebry @ 6032-36; 84-88; 6131-35 w/ 2 jspf (24 holes).  
Acidized w/ 2000 gal 15% HCl. Frac'd w/ 39k gal SS-25 w/ 82k#  
20/40 snd. 1000 gal 15% dumped down tubing.

12/06: Perf Tubb @ 6532-36; 86-90; 6661-65; 6706-10; 55-59 w/ 2  
jspf (40 holes). Acidized w/ 2000 gal 15% HCl. Frac'd w/ 65k gal  
SS-25 w/ 166k# 20/40 snd.

TBD: Perf Abo @ 7126-33; 7135-42; 7280-90; 7311-18; 7324-29;  
7333-46; 7353-58; 7410-15; 7420-26; 7436-45; 7459-69 w/ 2 jspf  
(174 holes). Acidize w/ 5000 gal 15% NEFE.

Hole Size  
=12 1/4"

Hole Size  
=7-7/8"

PBTD = 7,653'  
MD =7,700'

#### Production Casing

5-1/2" 17# J-55 & L-80 @ 7700' w/ 1450 sxs