

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

HOBS OCD
MAY 15 2013

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		4. OGRID Number 873
		5. API Number 30-025-38112
4. Property Code 26475	3. 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

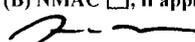
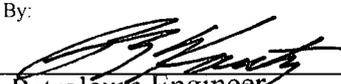
Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
S	12-1/4"	8-5/8"	24#	1570'	800 sx	
P	7-7/8"	5-1/2"	17#	7700'	1450 sx	

Casing/Cement Program: Additional Comments

Apache intends to perf the Abo per the attached procedure.

22. Proposed Blowout Prevention Program

Type	Working Pressure	Permit Expires 2 Years From Approved 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	
	Approved By: 	
Printed name: Fatima Vasquez	Title: Petroleum Engineer	
Title: Regulatory Tech I	Approved Date: 05/16/13	Expiration Date: 05/16/15
E-mail Address: Fatima.Vasquez@apachecorp.com		
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

HOBBS OCD
MAY 15 2013
RECEIVED

WELL LOCATION AND ACREAGE DEDICATION PLAT

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

¹⁰ 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

¹¹ 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

¹² Dedicated Acres 40.00	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ 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.

¹⁶ 	¹⁷ OPERATOR CERTIFICATION <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>	
		05/10/2013
	Signature	Date
	Printed Name Fatima Vasquez	
	E-mail Address Fatima.Vasquez@apachecorp.com	
	¹⁸ SURVEYOR CERTIFICATION <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>	
	Date of Survey	
	Signature and Seal of Professional Surveyor:	
	Certificate Number	

M &M #5

API # 30-025-38112

Sec 24, T20S, R38E

Elevation: 3574' KB, 3593' GL

TD: 7,700' PBD: 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 PBD 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.

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

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

Hole Size
=12 1/4"

Hole Size
=7-7/8"

