

DATE IN 06/03/13	SUSPENSE	ENGINEER PG	LOGGED IN 06-03-2013	TYPE DHC	APP NO. PAXIC 1315457573
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ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

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



ADMINISTRATIVE APPLICATION CHECKLIST

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

Application Acronyms:

[NSL-Non-Standard Location] **[NSP-Non-Standard Proration Unit]** **[SD-Simultaneous Dedication]**
[DHC-Downhole Commingling] **[CTB-Lease Commingling]** **[PLC-Pool/Lease Commingling]**
[PC-Pool Commingling] **[OLS - Off-Lease Storage]** **[OLM-Off-Lease Measurement]**
[WFX-Waterflood Expansion] **[PMX-Pressure Maintenance Expansion]**
[SWD-Salt Water Disposal] **[IPI-Injection Pressure Increase]**
[EOR-Qualified Enhanced Oil Recovery Certification] **[PPR-Positive Production Response]**

- [1] **TYPE OF APPLICATION** - Check Those Which Apply for [A]
- [A] Location - Spacing Unit - Simultaneous Dedication
☐ NSL ☐ NSP ☐ SD
- Check One Only for [B] or [C]
- [B] Commingling - Storage - Measurement
☒ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM
- [C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery
☐ WFX ☐ PMX ☐ SWD ☐ IPI ☐ EOR ☐ PPR
- [D] Other: Specify _____

30-026-38112
M&M S
Apache Corp.

- [2] **NOTIFICATION REQUIRED TO:** - Check Those Which Apply, or Does Not Apply
- [A] ☐ Working, Royalty or Overriding Royalty Interest Owners
- [B] ☐ Offset Operators, Leaseholders or Surface Owner
- [C] ☐ Application is One Which Requires Published Legal Notice
- [D] ☐ Notification and/or Concurrent Approval by BLM or SLO
U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office
- [E] ☐ For all of the above, Proof of Notification or Publication is Attached, and/or,
- [F] ☐ Waivers are Attached

- [3] **SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE.**

[4] **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

REESA HOLLAND FISHER
Print or Type Name

Reesa Holland Fisher
Signature

SR STAFF REG TECH
Title

5/31/2013
Date

M & M #5

Reesa.Holland@apachecorp.com
e-mail Address

District I
1625 N. French Drive, Hobbs, NM 88240

District II
1301 W. Grand Avenue, Artesia, NM 88210

District III
1000 Rio Brazos Road, Aztec, NM 87410

District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-107A
Revised June 10, 2003

Oil Conservation Division

1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

APPLICATION TYPE

☒ Single Well

☐ Establish Pre-Approved Pools

EXISTING WELLBORE

☒ Yes ☐ No

RECEIVED OGD

APPLICATION FOR DOWNHOLE COMMINGLING

2013 JUN 3 P 1:21

Apache Corporation 303 Veterans Airpark Lane Suite 3000 Midland TX 79705
Operator Address
M & M 005 C 24 20S 38E Lea
Lease Well No. Unit Letter-Section-Township-Range County
OGRID No. 873 Property Code 26475 API No. 30-025-38112 Lease Type: ☐ Federal ☐ State ☒ Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	Blinebry Oil & Gas (Oil) ✓	Warren; Tubb, East ✓	D-K; Abo ✓
Pool Code	6660 ✓	87085	15200 ✓
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	6032'-6135'	6532'-6759'	7126'-7469'
Method of Production (Flowing or Artificial Lift)	Artificial Lift	Artificial Lift	Artificial Lift
Bottomhole Pressure (Note: Pressure data will not be required if the bottom perforation in the lower zone is within 150% of the depth of the top perforation in the upper zone)			
Oil Gravity or Gas BTU (Degree API or Gas BTU)	38.2	37.4	39.0
Producing, Shut-In or New Zone	Producing	Producing	New Zone
Date and Oil/Gas/Water Rates of Last Production. (Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data.)	Date: See Attached Rates: See Attached	Date: See Attached Rates: See Attached	Date: See Attached Rates: See Attached
Fixed Allocation Percentage (Note: If allocation is based upon something other than current or past production, supporting data or explanation will be required)	Oil Gas 40 % 52 %	Oil Gas 29 % 31 %	Oil Gas 31 % 17 %

ADDITIONAL DATA

Are all working, royalty and overriding royalty interests identical in all commingled zones? Yes ☒ No ☐
If not, have all working, royalty and overriding royalty interest owners been notified by certified mail? Yes ☐ No ☐

Are all produced fluids from all commingled zones compatible with each other? Yes ☒ No ☐

Will commingling decrease the value of production? Yes ☐ No ☒

If this well is on, or communitized with, state or federal lands, has either the Commissioner of Public Lands
or the United States Bureau of Land Management been notified in writing of this application? Yes ☐ No ☐

NMOCD Reference Case No. applicable to this well: _____

Attachments:

- C-102 for each zone to be commingled showing its spacing unit and acreage dedication.
- Production curve for each zone for at least one year. (If not available, attach explanation.)
- For zones with no production history, estimated production rates and supporting data.
- Data to support allocation method or formula.
- Notification list of working, royalty and overriding royalty interests for uncommon interest cases.
- Any additional statements, data or documents required to support commingling.

PRE-APPROVED POOLS

If application is to establish Pre-Approved Pools, the following additional information will be required:

- List of other orders approving downhole commingling within the proposed Pre-Approved Pools
- List of all operators within the proposed Pre-Approved Pools
- Proof that all operators within the proposed Pre-Approved Pools were provided notice of this application.
- Bottomhole pressure data.

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

SIGNATURE Reesa Holland Fisher TITLE Sr. Staff Regulatory Tech DATE 5/14/2013

TYPE OR PRINT NAME Reesa Holland Fisher TELEPHONE NO. (432) 818-1062

E-MAIL ADDRESS Reesa.Holland@apachecorp.com



May 13, 2013

Mr. Phillip Goetze
New Mexico Oil Conservation Division
Engineering Bureau
1220 South St Francis Drive
Santa Fe, New Mexico 87505

RE: Application for Exception to Rule 303-C – Downhole Commingling Amendment
M&M #5 API 30-025-38112
Unit C, Section 24, T20S, R38E
Blinbry Oil & Gas (Oil) 6660, Warren; Tubb, East 87085 & D-K; Abo (15200)
Lea County, New Mexico

Dear Mr. Goetze:

Enclosed please find form C-107A & attachments for amending DHC-HOB-186 downhole commingling the captioned well to include the Abo formation. The ownerships (WI, NRI and ORRI) of these pools are identical in this wellbore. The fluids from each of these pools are compatible as seen in other similar commingles in the area. Combining these fluids will not result in any damage to these pools. Commingling will improve the efficiency of present and future recovery operations. Cross flow will not be a problem due to having a production lift system capable of keeping the well pumped off thereby maximizing production. This commingling will not reduce the value of the total remaining production.

The allocation method used for this well was determined by analyzing the cumulative oil, gas and water production in a nine section area of review surrounding this well. Supporting documentation is shown on the attached spreadsheet. Production for active and inactive wells was grouped by pool in the area of review. The totals for each phase were then divided by the number of wells associated with this pool yielding an average. This average was used to determine the percentage allocation. The area of review used encompasses what has been accepted as a good statistical representation for allocation purposes. By using this allocation method all zones will be brought online in a more effective and efficient manner. This will in turn generate a higher productive rate and quicker revenue streams not only for the operator but for the State of New Mexico too.

If you need additional information or have any questions, please give me a call at (432) 818-1062 or send me an email at Reesa.Holland@apachecorp.com.

Sincerely,

Reesa Holland Fisher
Sr. Staff Regulatory Technician

Lease Name	Well Number	10DIGITAPI	Location	Cum Oil (BBL)			Cum Gas (MCF)			Cum Water (BBL)		
				Blinberry	Tubb	Abo	Blinberry	Tubb	Abo	Blinberry	Tubb	Abo
CROWN	1	3002520195	20S 38E 13B	2268	12991		7100	55158				
LINDA FEDERAL	1	3002524724	20S 38E 23K C NE SW	55650	88744		451850	502486		35850	29896	
TUBB WF	44	3002525459	20S 38E 26M	145896	60970		727644	319616		464925	2338	
TUBB WF	45	3002525488	20S 38E 26N	38241	37519		409057	303102		2266	5117	
TUBB WF	46	3002525562	20S 38E 26K	117940	65028		602360	241936		44765	4995	
TUBB WF	59	3002525567	20S 38E 26L	23726	22002		213235	577393		7777	4695	
LINDA FEDERAL	2	3002525758	20S 38E 23L	21522			186581			16681		
LINDA FEDERAL	3	3002525759	20S 38E 23E	3866			38006			2158		
LINDA FEDERAL	4	3002525760	20S 38E 23F	27012			176245			25588		
TUBB WF	48	3002525851	20S 38E 26F	89640	98123		508011	559128		5459	3416	
TUBB WF	49	3002525852	20S 38E 26J	47108	63715		244372	74134		10594	4511	
TUBB WF	55	3002525853	20S 38E 26G	66703	32659		328483	28046		37671	18375	
LLANO FEDERAL	1Y	3002525870	20S 38E 23M	73026			166670			266105		
TUBB WF	53	3002525916	20S 38E 26C	62576	111108		360115	331127		139540	6479	
TUBB WF	56	3002525917	20S 38E 26B	38771	69306		249798	47597		22789	15632	
LINDA FEDERAL	5	3002526043	20S 38E 23N SE SW	16587	45943		29058	236083		7425	28732	
TUBB WF	54	3002526125	20S 38E 26E	45904	38475		332466	63512		17197	10065	
BATTERY 1	57	3002526203	20S 38E 26D	86954			371081			28250		
TUBB WF	64	3002526206	20S 38E 26A	42883	15079		240571	30708		25133	11621	
TUBB WF	58	3002526246	20S 38E 26I	5493			66223			18973		
SIMS FEDERAL	1	3002527653	20S 38E 23O	54910	26759		191413	57925		36350	8385	
DK	1	3002530136	20S 38E 25A NE NE	27934	24507	36486	114593	96338	113966	38329	40109	7979
DK	2	3002530403	20S 38E 25H SE NE	22646	20419	51600	156916	119605	152554	59005	37204	29782
DK	3	3002530520	20S 38E 25B C NW NE		59444	21027		208937	61888		71432	25426
KYTE	1	3002530793	20S 38E 23J C NW SE	73239	2514	4053	286746	10395	34038	64496	8723	10069
HOUSE	1	3002531006	20S 38E 13D NW NW	33798	377		859407	15076		15436		
FEDERAL 24	1	3002531182	20S 38E 24M C SW SW	19958	73016		82609	565728		25581	32079	
KYTE	3	3002533427	20S 38E 23I C NE SE	37057	75432	50433	143957	401006	245285	25088	11197	42124
TUBB WF	317	3002533552	20S 38E 26F	61557			134866			264226		
DK	4	3002533577	20S 38E 25G C SW NE	20862	14413		116270	65903		44768	75346	
KYTE	4	3002533683	20S 38E 23H C SE NE	34537	20419	22746	282425	70802	50564	55976	45221	38183
PAYDAY	1	3002533706	20S 38E 24L	71622	89219		479237	680473		49246	39453	
FEDERAL 24	2	3002533779	20S 38E 24N C SE SW	28140	23455	7505	101401	124802	36443	22810	34001	29420
PAYDAY	2	3002533833	20S 38E 24K	32171			431623			40186		
NMFU FEDERAL	1	3002533836	20S 38E 23P C SE SE	25557	32174	3183	134493	129170	5082	34152	64754	11571
M & M	1	3002533837	20S 38E 24E	19314	37780		345746	680381		52264	52485	
M & M	2	3002533879	20S 38E 24F	47362			430757			34194		
M & M	3	3002533880	20S 38E 24D	43034			576837			30650		
DK	5	3002533890	20S 38E 25I NE NE SE			22697			71848			33264
KYTE	5	3002533927	20S 38E 23G C SW NE	21102	7896	98837	224846	58324	133845	39835	28935	33103
WARREN UNIT	144	3002533974	20S 38E 25C C NE NW	11644	24503		75348	167760		29178	44881	
WARREN UNIT	145	3002533975	20S 38E 25D C NW NW	11434	17673		38148	129379		48433	45898	
M & M	4	3002534018	20S 38E 24C	42714			448858			38226		
SHARPS	1	3002534060	20S 38E 13M	40842			208916			51951		
SHARPS	2	3002534061	20S 38E 13N	34075			144333			36703		
FEDERAL 24	3	3002534103	20S 38E 24O S2 SW SE			43245			102827			48128
FEDERAL 24	4	3002534104	20S 38E 24P S2 SE SE	12987	269	1939	55092	589	5805	26048	7757	7836
KYTE	7	3002534107	20S 38E 23A SE NE NE	31377		5480	750266		32460	43695		23141
DK	6	3002534124	20S 38E 25P NE SE SE	17259	2385		34262	18303		37093	15488	
TERRY	1	3002534157	20S 38E 24G SW NE	14227	25413	17132	156385	16691	23004	37047	30457	46396
JOE CAMEL	1	3002534160	20S 38E 13K	37883	403		68179	2138		78449		
BULL DURHAM	1	3002534187	20S 38E 14P S2 SE SE	46916	11073		1106410			42105	22831	
FEDERAL 24	5	3002534199	20S 38E 24J C NW SE	15510	23148	21705	86083	294138	105977	14168	42052	12491
FEDERAL 24	6	3002534200	20S 38E 24I S2 NE SE	7882	3267	4643	30190	12093	18004	23339	9175	14416
JOE CAMEL	2	3002534211	20S 38E 13F SW SE NW	19882	4092		71033	6383		45628	1185	
CAPPS FEDERAL	1	3002534267	20S 38E 24B C NW NE	35789		22759	216223		116400	38872		35893
DIAMONDBACK	1	3002534274	20S 38E 14J NW SE	32717			210122			60996		
PEARL	1	3002534275	20S 38E 13J NW SE	12124		6239	40343		5987	31342		12351
LUCKY STRIKE	1	3002534285	20S 38E 14I NE SE	82403			1086586			68515		
CAPPS FEDERAL	2	3002534289	20S 38E 13O SW SE	41069	6662	53578	153339	42895	98621	52608	10150	22721
KYTE	8	3002534296	20S 38E 23B NW NE	21101	1810	151	350263	11616	61	40077	9007	1177
WARREN UNIT	146	3002534362	20S 38E 26P W2 SE SE	11666			333501			39801		
BULL DURHAM	2	3002534363	20S 38E 14O SW SE	37378	492		339467	3533		64931		
DK	7	3002534381	20S 38E 25J NW SE	15333			53510			38506		
CHESTERFIELD	1	3002534420	20S 38E 14H SE NE	27827	765		756846	113789		36636		
KYTE	9	3002534457	20S 38E 23C C NE NW	12514		13342	49269		46476	35374		13086
BUGLER	1	3002534506	20S 38E 13L NW NW SW	77815	1124		434807	172152		52054	1071	
PAIGE	1	3002534570	20S 38E 13P SE SE	7910		6870	15761		6698	20900		32877
VICEROY	1	3002534625	20S 38E 13E SW NW	34243			572392			75576		
PALL MALL	1	3002534634	20S 38E 14A NE NE	2284	909		3603	62711		680	2121	
KOOL	1	3002534642	20S 38E 14B NW NE	36951	729		352984	3353		36708	465	
ROITAN	1	3002534735	20S 38E 14G SW NE	23699	8339		583038	187839		53256		
TUBB WF	306	3002534838	20S 38E 26K SW NE SW	47955			102658			180139		
TUBB WF	315	3002534840	20S 38E 26F NE NW SW	52370			238847			125216		
MARLBORO	1	3002534968	20S 38E 14C S2 NE NW	2681		16412	21767		77531			22837
GINGER MC	1	3002535203	20S 38E 24A SW NE NE	3034		507	19095		1003	6883		3747
BEECHNUT	1	3002535241	20S 38E 14E SE SW NW	540			2239					
TUBB WF	147	3002535587	20S 38E 26O SE SW SE	43823			131829			94948		
WARREN UNIT	148	3002535772	20S 38E 25M SW SW	8467	31261	10058	6381	72323	113979	37974	19354	17938
GINGER MC	2	3002536638	20S 38E 24H SE NE	7173	1874	26641	27538	5286	86846	5375	4144	13634
BIG KICK	1	3002536745	20S 38E 13C W2 NE NW	20550	1686		270161	19900		2410		
JOE CAMEL	3	3002538033	20S 38E 13F NW SE NW	5521	2476		221929	185699		10894	2958	
M & M	5	3002538112	20S 38E 24C NE NE NW	47511	4279		47870	25761		9784	11794	
BULL DURHAM	3	3002538379	20S 38E 14P NE SE SE	6428	11150		104547	80162		813		
M & M	6	3002538380	20S 38E 24E SW SW NW	4879	5787		48030	132123		15968	12553	
PAYDAY	3	3002538381	20S 38E 24I SW NW SW	6826	5626		70195	42067		18421	3055	
KOOL	2	3002538439	20S 38E 14B SW NW NE	11402	1927		30588	56549		2828	5013	

M & M #5
30-025-38112
Apache Corp.

Lease Name	Well Number	10DIGITAPI	Location	Cum Oil (BBL)			Cum Gas (MCF)			Cum Water (BBL)		
				Blinbry	Tubb	Abo	Blinbry	Tubb	Abo	Blinbry	Tubb	Abo
BIG KICK	2	3002538664	20S 38E 13C SE NE NW	12487	2134		42857			57121	25866	
HOUSE	2	3002538665	20S 38E 13D SE NW NW	6488	2970		47731	3396				
M & M	7	3002538666	20S 38E 24E NE SW NW	1481	2524		8270	15950		6131	8023	
PAYDAY	4	3002538667	20S 38E 24L	5360	11602		10842	66425		10434	11814	
LUCKY STRIKE	2	3002538688	20S 38E 14I SW NE SE	5836	2517		44327	15114				
BUGLER	2	3002538689	20S 38E 13L SW NW SW	10106	3395		106100	52862		17247	8758	
WARREN UNIT	324	3002539190	20S 38E 26H W2 SE NE	4306			7813			41764		
CROWN	2	3002539457	20S 38E 13	1787	809		4397	2246				
PALL MALL	2	3002539530	20S 38E 14	3619	1643		70695	36885		19531	6084	
CHESTERFIELD	2	3002539573	20S 38E 14	1452	659		136385	71158				
BUGLER	3	3002539648	20S 38E 13	1971	1079		7060	4390		13512	5792	
DIAMONDBACK	2	3002539649	20S 38E 14 NW SE	2501	1359		11168	6946				
KOOL	3	3002539651	20S 38E 14B NW NE	2039	1140		49279	31479		21633	10126	
CHESTERFIELD	3	3002539721	20S 38E 14H	759	345		75131	39205				
VICEROY	2	3002539752	20S 38E 13E	966	527		28954	19303		1774	760	
HOUSE	3	3002540019	20S 38E 13D	954	503		17448	11019				
LUCKY STRIKE	3	3002540020	20S 38E 14I	1449	817		12030	7690				
VICEROY	3	3002540021	20S 38E 13E	2167	1167		12952	8278		1723	704	
TOTALS				2,836,348	1,503,598	569,268	21,647,738	8,912,489	1,746,990	4,110,954	1,074,532	589,590
AVERAGES				27,807	20,597	21,895	212,233	125,528	67,192	45,175	18,851	22,677

Proposed Allocations	Oil	Gas	Water
Blinbry	40%	52%	52%
Tubb	29%	31%	22%
Abo	31%	17%	26%
TOTAL	100%	100%	100%

Well Test History Report

Page 1 of 1
5/14/2013 10:30:50 am

Select By: Field

Display: All well tests between 04/01/2012 - 05/12/2013

Test Date	Effective Date	Measured Hours	Type	24 Hour Volumes					Ratios					Fluid Level
				Gr Liquid	OIL	GAS	WAT	LIFT	GOR	GLR	IGOR	IGLR	TGLR	
Field: HOUSE														
M & M #5 (TUBB)														
4/8/2012	4/8/2012	24	A	11	4	30	7	0	7,500	2,727	0	0	2,727	
5/2/2012	5/2/2012	24	A	11	4	30	7	0	7,500	2,727	0	0	2,727	
6/5/2012	6/5/2012	24	A	11	4	30	7	0	7,500	2,727	0	0	2,727	
7/13/2012	7/13/2012	24	A	13	4	26	9	0	6,500	2,000	0	0	2,000	
8/13/2012	8/13/2012	24	A	10	4	30	6	0	7,500	3,000	0	0	3,000	
9/10/2012	9/10/2012	24	A	12	4	25	8	0	6,250	2,083	0	0	2,083	
10/9/2012	10/9/2012	24	A	10	3	30	7	0	10,000	3,000	0	0	3,000	
11/8/2012	11/8/2012	24	A	10	3	27	7	0	9,000	2,700	0	0	2,700	
12/5/2012	12/5/2012	24	A	9	2	27	7	0	13,500	3,000	0	0	3,000	
1/16/2013	1/16/2013	24	A	9	2	27	7	0	13,500	3,000	0	0	3,000	
2/13/2013	2/13/2013	24	A	11	3	34	8	0	11,333	3,091	0	0	3,091	
3/10/2013	3/10/2013	24	A	12	3	34	9	0	11,333	2,833	0	0	2,833	
4/10/2013	4/10/2013	24	A	11	3	30	8	0	10,000	2,727	0	0	2,727	
Averages by Completion				11	3	29	7	0						

** All values are recorded using imperial units.

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 – Current

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 @ 5977'

SN @ 6792'

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.

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

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.

Production Casing

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

Hole Size
=12 1/4"

Hole Size
=7-7/8"

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

PNRM0703834134

C-103 Received 12-18-2006 —
DHC No. Assigned 2-6-2007

Order Number H08-0186		API Number 30-025-38112		Operator Apache Corporation		County Lea	
Order Date		Well Name M+M		Number 005		Location	
						C 24 20 S 38 E UL Sec T (+Dir) R (+Dir)	
Pool 1	06660	Blinebry Oil & Gas (Oil)		Oil % 26%	Gas % 87%		
Pool 2	87085	Warren Tubb, East		24%	13%		
Pool 3							
Pool 4							
Comments: Work completed effective _____ Work cancelled effective _____ Supplement _____							

Posted to
RBDmb
2-7-2007

B

DOWNHOLE COMMINGLE CALCULATIONS:

30-025-38112

OPERATOR: Apache Corporation

HOB-0186

PROPERTY NAME: M & M

WNULSTR: 5-C, 24-20-38

06660 SECTION I:
POOL NO. 1 Blinebry Oil+Gas (Oil) ALLOWABLE AMOUNT 107 ~~428~~ MCF 4000

87085 POOL NO. 2 Warren Tubb, East 142 852 MCF 6000

POOL NO. 3 _____ MCF

POOL NO. 4 _____ MCF

POOL TOTALS 249 1280

SECTION II:

POOL NO. 1 Blinebry Oil+Gas (Oil)

Oil

Gas

76% X 249 = 189.24

87%

POOL NO. 2 Warren Tubb, East

24%

13%

POOL NO. 3 _____

POOL NO. 4 _____

OIL

GAS

SECTION III:

107 ÷ 76% = 140.789 (141)

SECTION IV:

141 X 76% = 107.16 (107)

141 X 24% = 33.84 (34)

Submit 3 Copies To Appropriate District Office
District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Ave., Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
St. Francis Dr., Santa Fe, NM

State of New Mexico
Energy, Minerals and Natural Resources

Form C-103
May 27, 2004

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

WELL API NO.	30-025-38112
5. Indicate Type of Lease STATE ☐ FEE ☒	
6. State Oil & Gas Lease No. N/A	
7. Lease Name or Unit Agreement Name M & M	
8. Well Number	5
9. OGRID Number	00873
10. Pool name or Wildcat Blinebry Oil & Gas (Oil) / Warren; Tubb, East	

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 6120 S Yale Ave, Suite 1500 Tulsa, OK 74136-4224	
4. Well Location Unit Letter <u>C</u> : 330 feet from the <u>North</u> line and 2310 feet from the <u>West</u> line Section <u>24</u> Township <u>20S</u> Range <u>38E</u> NMPM County <u>Lea</u>	
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3,574'	
Pit or Below-grade Tank Application ☐ or Closure ☐	
Pit type _____ Depth to Groundwater _____ Distance from nearest fresh water well _____ Distance from nearest surface water _____	
Pit Liner Thickness: _____ mil Below-Grade Tank: Volume _____ bbls; Construction Material _____	

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. ☐

SUBSEQUENT REPORT OF:

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

OTHER: ☐

OTHER: DHC: Blinebry / Tubb ☒

3. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Pursuant to Division Order R-11363

Pool Names: Blinebry Oil & Gas (Oil) 6660
Warren: Tubb, East 87085

Perforations:

BLINEBRY 6032-36', 6084-88', 6131-35' 2 JSPF
TUBB 6532-36', 6586-90', 6661-65', 6706-10', 6755-59' 2 JSPF

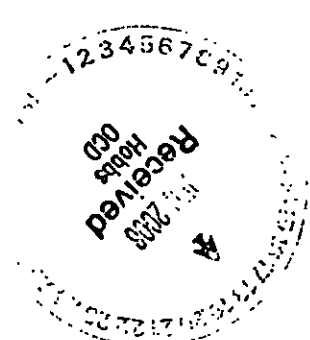
The allocation method will be as follows:

Blinebry	19 BO	76%	100 MCF	87%	63 BW	63%
Tubb	6 BO	24%	15 MCF	13%	37 BW	37%
TOTAL	25 BO	100%	115 MCF	100%	100 BW	100%

Downhole commingling will not reduce the value of these pools.
Ownership is the same for each of these pools.

DHC Order No:

HOB-0186



I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOC guidelines ☐, a general permit ☐ or an (attached) alternative OCD-approved plan ☐.

SIGNATURE

S. Mackay

TITLE Engineering Tech

DATE 12/13/2006

or print name Sophie Mackay

E-mail address: sophie.mackay@apachecorp.com telephone No. (918)491-4864

For State Use Only

APPROVED BY:

Chris Williams

TITLE

DATE FEB 06 2007

Conditions of Approval (if any):

DISTRICT I

1623 N. FREEDOM DR., BOHNS, NM 86240

DISTRICT II

1301 W. GRAND AVENUE, ARTESIA, NM 86210

DISTRICT III

Rio Brazos Rd., Artec, NM 87410

DISTRICT IV

1220 S. ST. FRANCIS DR., SANTA FE, NM 87505

State of New Mexico

Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

1220 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 87505

Form C-102

Revised October 12, 2005

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-025-38112	Pool Code 6660	Pool Name Blinebry Oil & Gas (OIL)
Property Code 26475	Property Name M & M	Well Number 5
OCRID No. 873	Operator Name APACHE CORPORATION	Elevation 3574'

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	20-S	38-E		330	NORTH	2310	WEST	LEA

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
Dedicated Acres 40	Joint or Infill	Consolidation Code	Order No.						

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

	GEODETIC COORDINATES NAD 27 NME Y=571375.2 N X=879130.1 E LAT.=32.564792° N LONG.=103.102749° W	OPERATOR CERTIFICATION I hereby certify that the information 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 mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. <i>Sophie Mackay</i> 12/13/2006 Signature Date Sophie Mackay Printed Name
	SURVEYOR CERTIFICATION 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. JUNE 26, 2006 Date Surveyed MR Signature: <i>Ronald E. Edson</i> Professional Surveyor <i>Ronald E. Edson</i> 6/27/06 06.11.1035 Certificate No. GARY EDSON 12041 RONALD E. EDSON 3239	
	Received 6/27/06 Hobbs	

DISTRICT I

1625 W. FRENCH DR., DUNSMO, NM 86240

DISTRICT II

1301 W. GRAND AVENUE, ARTESIA, NM 86210

DISTRICT III

160 Brazos Rd., Aztec, NM 87410

DISTRICT IV

1220 S. ST. FRANCIS DR., SANTA FE, NM 87505

State of New Mexico

Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

1220 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 87505

Form C-102

Revised October 12, 2005

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-025-38112		Pool Code 87085	Pool Name Warren; Tubb, East
Property Code 26475	Property Name M & M		Well Number 5
OGRID No. 873	Operator Name APACHE CORPORATION		Elevation 3574'

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	20-S	38-E		330	NORTH	2310	WEST	LEA

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

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
40			

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

	GEODETIC COORDINATES NAD 27 NME Y=571375.2 N X=879130.1 E LAT.=32.564792° N LONG.=103.102749° W	OPERATOR CERTIFICATION I hereby certify that the information 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 mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. <i>S. Mackay</i> 12/13/06 Signature Date Sophie Mackay Printed Name
	SURVEYOR CERTIFICATION 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. JUNE 26, 2006 Date Surveyed MR Signature & Seal of Professional Surveyor <i>Gary K. Edson</i> 7/7/06 06.11.1035	Certificate No. GARY EDSON 12841 BONALD J. EDSON 3239
	Received 12/13/06	

DISTRICT I
1023 N. FRANCES DR., UDDERS, NM 85240

DISTRICT II
1501 V. GRAND AVENUE, ARTESIA, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV
1220 S. ST. FRANCIS DR., SANTA FE, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION
1220 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 87505

Form C-102
Revised October 12, 2005
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-025-38112	Pool Code 15200	Pool Name D-K ADD
Property Code 26475	Property Name M & M	Well Number 5
OGRID No. 873	Operator Name APACHE CORPORATION	Elevation 3574'

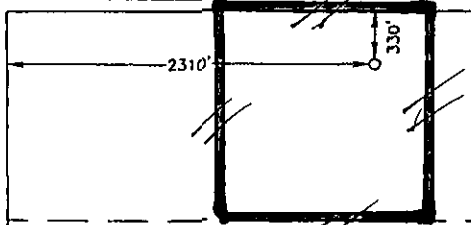
Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	24	20-S	38-E		330	NORTH	2310	WEST	LEA

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
Dedicated Acres 40	Joint or Infill	Consolidation Code	Order No.						

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

	GEODETIC COORDINATES NAD 27 NME Y=571375.2 N X=879130.1 E LAT.=32.564792° N LONG.=103.102749° W	OPERATOR CERTIFICATION I hereby certify that the information 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 mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. <i>Lana Williams</i> 9/5/06 Signature Date Lana Williams Printed Name
		SURVEYOR CERTIFICATION 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. JUNE 26, 2006 Date Surveyed MR Signature of Registered Professional Surveyor <i>Ronald J. Einson</i> 7/7/06 1206411.1035 Certificate No. GARY EINSON 12041 RONALD J. EINSON 3239



May 29, 2013

State of New Mexico
OIL CONSERVATION DIVISION
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

Re: Application for Down Hole Commingling (Identical Ownership)
M & M #5
Township 20 South, Range 38 East
Section 24: NE/4 NW/4
Lea County, NM

Ladies and Gentlemen:

Identical ownership (working, royalty and overriding royalty owners) exists as to all formations underlying the M & M #5 in the following described lands:

Township 20 South, Range 38 East
Section 24: NE/4 NW/4
Lea County, NM

If you have any question regarding the aforementioned, please do not hesitate contacting the undersigned at (432) 818-1871.

Sincerely,
APACHE CORPORATION

Casey Addison
Landman
(432) 818-1190 Fax
casey.addison@apachecorp.com