

Order Number

418

API Number

30-025-39651

Operator

Apache Corporation

County

Lea

Order Date

10-14-10

Well Name

Kool

Number

3

Location

B

UL

14

Sec

205

T (+Dir)

38E

R (+Dir)

Oil %

34%

Gas %

36%

Pool 1

6660

Blinberry Oil + Gas

Pool 2

78760

House Tubb

Pool 3

33250

House Drinkard

Pool 4

Comments:

DOWNHOLE COMMINGLE CALCULATIONS:

OPERATOR: Apache Corporation

DHC - HOB-0418
30-025-39651

PROPERTY NAME: Kool

WNULSTR: #3 - B-14-205-38E

SECTION I:

POOL NO. 1 Blinebry Oil + Gas ALLOWABLE AMOUNT
107 428 MCF

POOL NO. 2 House Tubb 142 284 MCF

POOL NO. 3 House Drinkard 142 284 MCF

POOL NO. 4 _____ MCF

POOL TOTALS 391 996

SECTION II:

POOL NO. 1 Blinebry Oil + Gas Oil Gas
34 36

POOL NO. 2 House Tubb 19 23

POOL NO. 3 House Drinkard $47 \times 391 = 41$
183.77

POOL NO. 4 _____ <184>

OIL

GAS

SECTION III:

$47\% \div 142 = 302.127$ <302>

SECTION IV:

$34\% \times 302 = 102.68$ <103>

$19\% \times 302 = 57.38$ <57>

$47\% \times 302 = 141.94$ <142>

RECEIVED

State of New Mexico

Energy, Minerals and Natural Resources

Form C-103

October 13, 2009

SEP 30 2010

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.

Santa Fe, NM 87505

WELL API NO.

30-025-39651

5. Indicate Type of Lease

STATE ☐ FEE ☒

6. State Oil & Gas Lease No.

7. Lease Name or Unit Agreement Name

Kool

8. Well Number 003

9. OGRID Number 873

10. Pool name or Wildcat

Blinebry oil & gas (oil)-House;Tubb-House;Drinkard

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 Ln. Midland, TX 79705

4. Well Location

Unit Letter B : 330 feet from the N line and 1850 feet from the E line

Section 14 Township 20S Range 38E NMPM County LEA

11. Elevation (Show whether DR, RKB, RT, GR, etc.)

3574' GR

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 ☐

SUBSEQUENT REPORT OF:

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

OTHER: Request DHC Blinebry/Tubb/Drinkard ☒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 intends to downhole commingle as follows: Per R-11363

Pool Names:

✓ Blinebry oil & gas (oil)-6660
 ✓ House-Tubb-Pool-78760
 ✓ Houese-Drinkard-Pool-33250

Actual Perforations:

6029-6500
 6603-6833
 6917-7084

The allocation method will be as follows based on offset production (See attached application for exception to Rule 303-C)

	Oil	Gas	Water
Blinc:	34%	36%	47%
Tubb:	19%	23%	22%
Drink:	47%	41%	31%

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

Spud Date: 7/28/2010

Rig Release Date: 8/4/2010

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

SIGNATURE Katie Kauffman TITLE Engineering Tech

DATE: 9/22/10

Type or print name Katie Kauffman

E-mail address: katie.kauffman@apachecorp.com

PHONE: 432.818.1065

For State Use Only

APPROVED BY:

TITLE

PETROLEUM ENGINEER

DATE

OCT 14 2010

Conditions of Approval (if any):

Lease Name	Well Number	10DIGITAPI	Location	Cum Oil (BBL)			Cum Gas (MCF)			Cum Water (BBL)		
				Blinebry	Tubb	Drnkard	Blinebry	Tubb	Drnkard	Blinebry	Tubb	Drnkard
KOOL	2	3002538439	14B 20S 38E SW NW NE	7635	1236	711	14993	26272				
RHINO	2	3002538484	11N 20S 38E SE NE SW	8767	2411	4821	24434	16537				
MAGNOLIA	1	3002538660	11E 20S 38E NE SW NW	5227	5002	3698	75285	14601	15500	16414	2484	31568
DIXIE QUEEN	2	3002538661	11P 20S 38E NE SE SE	10569	2872	4644	52714	23903	45420			
HESTER 12	10	3002538662	12O 20S 38E NE SW SE	4008	378	2978	30270	8108	21627	25359	3421	8895
HESTER 12	11	3002538663	12P 20S 38E SW SE SE	1395	1262	2392	76027	75820	7286	6011	7979	4565
BIG KICK	2	3002538664	13C 20S 38E SE NE NW	8075	1349	3312	24003		61951	36029	15319	5105
HOUSE	2	3002538665	13D 20S 38E SE NW NW	4379	1942		32572	2478				
M & M	7	3002538666	24E 20S 38E NE SW NW	1125	1336		5540	6271		4430	3649	
PAYDAY	4	3002538667	24L 20S 38E	4057	8404		7694	43320		7469	7719	
LUCKY STRIKE	2	3002538688	14I 20S 38E SW NE SE	3805	1219		23261	6087				
BUGLER	2	3002538689	13L 20S 38E SW NW SW	5904	1420		53762	19422		12378	4081	
MELOT	2	3002538700	11C 20S 38E NW NE NW	14103	4561	1793	38275	6690	19502	14207	17876	13406
HESTER 12	9	3002538791	12K 20S 38E NE NE SW	1773	1119	4138	42955	5269	4820	19159	4947	10903
MAGNOLIA	2	3002539090	11D 20S 38E NE NW NW	1516	484	4066	57703	31471	85680	13918	2982	2982
DIXIE QUEEN	3	3002539451	11I 20S 38E	1286	332	2531	3934	1672	4229			
CROWN	2	3002539457	13B 20S 38E	548	249	449	1066	544	658			
MELOT	3	3002539458	11B 20S 38E	1207	313	2376	4719	2005	5073	10867	1996	9314
BLANKENSHIP	7	3002539488	12E 20S 38E				1641	696	1763	7829	1631	6849
MAGNOLIA	3	3002539489	11E 20S 38E	1026	265	2021	15722	6682	16900	9272	1702	7948
ARNOLD A	2	3002539490	11F 20S 38E	709	179	1332	7636	3245	8209	5480	1118	4585
CONE A	2	3002539491	12F 20S 38E	557	154	1209	2068	930	2171	2899	592	2426
PALL MALL	2	3002539530	14A 20S 38E	835	380	685	13499	7043	8804	5332	1661	1748
CHESTERFIELD	2	3002539573	14H 20S 38E	295	135	243	37717	19679	24598			
ARNOLD A	3	3002539636	11F 20S 38E NE SE NW	1134	284	2125	4038	1717	4342	7096	1449	5937
TOTALS				1,728,273	820,280	1,401,806	15,751,988	8,313,456	9,965,592	2,296,165	734,374	795,159
AVERAGES				18,584	10,383	25,959	165,810	107,967	188,030	27,335	12,447	17,670

Proposed Allocations	Oil	Gas	Water
Blinebry	34%	36%	47%
Tubb	19%	23%	22%
Drnkard	47%	41%	31%
TOTAL	100%	100%	100%

September 22, 2010

**Mr. Paul Kautz
New Mexico Oil Conservation Division
1625 N French Drive
Hobbs, New Mexico 88240**

**RE: Application for Exception to Rule 303-C – Downhole Commingling
Kool #003-API: 30-025-39654
Unit B, Sec 14, T-20-S, R-38-E
House-Tubb; House-Drinkard; Blinbry oil & gas (oil)
Lea County, New Mexico**

Dear Mr. Kautz,

Enclosed please find form C-103 and attachments for downhole commingling the captioned well. 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 main reason for using this method is based on economics and minimizing reservoir damage. Past completion practices had all three zones perforated and fracture stimulated during one full week. Each zone was isolated by a retrievable bridge plug to allow for production testing of each zone for allocation purposes. This testing period lasted as long as one month before a stabilized rate was observed thus allowing the next zone to be brought on and tested. During this time period the completion fluids used were still confined to the other reservoirs causing gel damage. It is a common practice to get these fluids out of the wellbore as soon as possible to help maximize productivity. On a cost basis it is more expensive to have a completion rig move in and out multiple times to bring on each new zone. Several other factors such as weather, other new completions and regulatory well work may interfere with these new wells.

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 432.818.1065.

Sincerely,

A handwritten signature in black ink that reads "Katie Kauffman". The signature is written in a cursive, flowing style.

**Katie Kauffman
Engineering Technician**