

Order Number

496

API Number

30025-36689

Operator

Apache Corp

County

Lea

Order Date

7-3-2012

Well Name

White Owl

Number

1

Location

D

UL

2

Sec

205

T (+Dir)

38E

R (+Dir)

Oil %

18

Gas %

21

Pool 1

33230

House; Blinberry

Pool 2

78760

House; Tubb

12

26

Pool 3

33250

House; Drinkard

70

53

Pool 4

Comments:

Posted in RBDMS

7-3-2012

CHM

JUL 03 2012

30-025-36689
DHC-HOB-496

DOWNHOLE COMMINGLE CALCULATIONS:

OPERATOR: Apache Corporation

PROPERTY NAME: White Owl

WNULSTR: 1-D-2-205-38E

SECTION I:	ALLOWABLE AMOUNT
POOL NO. 1 <u>House; Blinebry</u>	<u>142</u> <u>284</u> MCF
POOL NO. 2 <u>House; Tubb</u>	<u>142</u> <u>284</u> MCF
POOL NO. 3 <u>House; Drinkard</u>	<u>142</u> <u>284</u> MCF
POOL NO. 4 _____	_____ MCF
POOL TOTALS	<u>426</u> <u>852</u>

SECTION II:	<u>Oil</u>	<u>Gas</u>
POOL NO. 1 <u>House; Blinebry</u>	<u>18%</u>	<u>21%</u>
POOL NO. 2 <u>House; Tubb</u>	<u>12%</u>	<u>26%</u>
POOL NO. 3 <u>House; Drinkard</u>	<u>70% x 426 = 298.2</u>	<u>53%</u>
POOL NO. 4 _____	<u>< 298 ></u>	

SECTION III:	<u>OIL</u>	<u>GAS</u>
<u>70% x 142 = 202.85</u>	<u>< 203 ></u>	

SECTION IV:	
<u>18% x 203 = 36.54</u>	<u>< 37 ></u>
<u>12% x 203 = 24.36</u>	<u>< 24 ></u>
<u>70% x 203 = 142.10</u>	<u>< 142 ></u>

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

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

WELL API NO. 30-025-36689
5. Indicate Type of Lease STATE ☐ FEE ☒
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name White Owl
8. Well Number 001
9. OGRID Number 873
10. Pool name or Wildcat House;Blinebry/House;Tubb/House;Drinkard
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3573' GL

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 Lane, Suite 3000 Midland, TX 79705

4. Well Location
Unit Letter D : 582 feet from the North line and 330 feet from the West line
Section 2 Township 20S Range 38E NMPM County Lea

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☐	COMMENCE DRILLING OPNS. ☐	P AND A ☐
PULL OR ALTER CASING ☐	MULTIPLE COMPL ☐	CASING/CEMENT JOB ☐	
DOWNHOLE COMMINGLE ☒			
OTHER: ☐		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 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Apache would like to DHC the following pools: **Per R-11363**

Pool Names:	Perforations:
✓ House; Blinebry 33230	Blinebry 5982'-6139'
✓ House; Tubb 78760	Tubb 6802'-6890'
✓ House; Drinkard 33250	Drinkard 6986'-7106'

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

	OIL	GAS	WATER
Blinebry	18%	21%	36%
Tubb	12%	26%	18%
Drinkard	70%	53%	46%

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

Spud Date: 09/01/2004 Rig Release Date: 07/12/2004

DHC-HOB-496

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

SIGNATURE Reesa Holland TITLE Sr. Staff Engr Tech DATE 06/29/2012

Type or print name Reesa Holland E-mail address: Reesa.Holland@apachecorp.com PHONE: 432/818-1062

For State Use Only

APPROVED BY: [Signature] TITLE PETROLEUM ENGINEER DATE JUL 03 2012
Conditions of Approval (if any):

JUL 03 2012



June 29, 2012

**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
White Owl #1
Unit D, Section 2, T20S, R38E
House; Blinbry, House; Tubb & House; Drinkard
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.

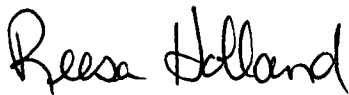
The allocation method used for this well was determined by analyzing the cumulative oil, gas and water production in a nine section area of review surrounding this well. Supporting documentation is shown on the attached spreadsheet. Production for active and inactive wells was grouped by pool in the 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) 818-1062.

Sincerely,

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

**Reesa Holland
Sr Staff Engr Technician**

Lease Name	Well Number	10DIGITAPI	Location	Cum Oil (BBL)			Cum Gas (MCF)			Cum Water (BBL)		
				Blnebr	Tubb	Drnkard	Blnebr	Tubb	Drnkard	Blnebr	Tubb	Drnkard
L D JONES	1	3002507722	1H 20S 38E SE NE	3476			186180			5043		
PHILLIPS HOUSE STATE	1	3002507725	2O 20S 38E			101875			481125			25440
STATE U	1	3002507727	2P 20S 38E			157611			97687			184324
ARNOLD A	1	3002507761	11F 20S 38E	1083	29526	670	3502	1366318		7287	5113	
HOUSE B	1	3002507764	11P 20S 38E		9855			118752				
BLANKENSHIP	1	3002507766	12E 20S 38E			54657			16638			7010
BLANKENSHIP	2	3002507767	12L 20S 38E	3906	20	134312	9570	42	1177187	2664	114	37126
BLANKENSHIP	3	3002507768	12M 20S 38E NE SW SW	5854	8772	39616	33275	47735	2435461	5515	15611	22235
CONE A	1	3002507770	12F 20S 38E		17024	206476		66408	237771		56554	84069
CONE B	1	3002507771	12J 20S 38E			239833			591551			69199
HESTER 12	3	3002507772	12O 20S 38E			150171			853402			32702
HESTER 12	2	3002507773	12N 20S 38E			82932			540453			17896
HESTER 12	1	3002512549	12K 20S 38E			97448			457760			16669
HOWSE C	1	3002522165	11H 20S 38E SE NE			26370			143078			6340
CONE B	2	3002525921	12G 20S 38E			398			86772			1460
WERTA FEDERAL	1	3002527696	35O 19S 38E SW SE	42930	14640	11778	211449	10262	24012	51813	10929	29470
L & M	1	3002528287	2L 20S 38E C S2 SW	1012	9634	250	9593	130756	1129	1344	579	392
FRANCES EVELYN	1	3002532163	35N 19S 38E SE SW	5470			61072			35070		
PICAYUNE	1	3002534734	11J 20S 38E C NW SE		14361	26692	1421	69324	382613			17895
DREESSEN	1	3002534857	1G 20S 38E C SW NE	2199			7175			23039		
HOWSER	1	3002534970	1J 20S 38E C NW SE	1371			28097			35934		
MERIT	1	3002535240	11O 20S 38E E2 SW SE		9513			597060			7380	
REDTAG	1	3002535333	2J 20S 38E NW NW SE	27129	4037	1133	73901	9920	9535	4764	2495	3351
MERIT II	1	3002535448	11G 20S 38E C SW NE	3456	16980	21816	15627	28441	151799		11887	19464
DUKES	1	3002535614	11K 20S 38E E2 NE SW		7818	32784		38544	139480		8390	26341
REDTAG	2	3002535630	2K 20S 38E NE NE SW	15566			870166			2596		
DIXIE QUEEN	1	3002536421	11P 20S 38E E2 SE SE		7394			517209				
WHITE OWL	1	3002536689	2 20S 38E NW NW NW	32868			122087			9450		
HESTER 12	6	3002536795	12N 20S 38E	26810	8095	12000	321996	182364	63501	28536	6751	5480
HESTER 12	4	3002536800	12O 20S 38E SW SW SE	15686	5185	4610	261423	122085	110725	42191		2688
PLOW BOY FEDERAL	1	3002536962	35J 19S 38E NW NW SE	21983			71622					
ROUND-UP	1	3002537100	35H 19S 38E SW SE NE			7181			13557			
SALEM	1	3002537316	3A 20S 38E SE NE NE	2954		8592	8535		25309	7032		3185
HESTER 12	8	3002538076	12K 20S 38E SW NE SW	12938	3926	3762	124569	88335	56020	9995	11277	4360
HESTER 12	5	3002538211	12P 20S 38E NW SE SE	18890	5669	11153	177646	79110	77564	38857	6211	481
HESTER 12	7	3002538369	12N 20S 38E NE SE SW	6328	7241	3148	57135	53793	32197	16097	8422	10379
MELOT	1	3002538370	11C 20S 38E SW NE NW	4895	6293	2792	45105	35080	20051	23409	22744	20737
BLANKENSHIP	4	3002538397	12L 20S 38E NE NW SW	2908	3129	6389	13057	21937	22245	12146	5023	3768
BLANKENSHIP	5	3002538399	12M 20S 38E SW SW SW	12393	4622	5787	42451	84653	254996	20446	4543	3409
BLANKENSHIP	6	3002538400	12L 20S 38E SW NW SW	6755	5428	1218	30669	1764	63545	8849	648	12080
RHINO	2	3002538484	11N 20S 38E SE NE SW	9305	2576	5152	26295	17884				
MAGNOLIA	1	3002538660	11E 20S 38E NE SW NW	5510	5349	3981	80835	15727	16867	16978	2618	33554
DIXIE QUEEN	2	3002538661	11P 20S 38E NE SE SE	11334	3090	5222	58416	26604	52023			
HESTER 12	10	3002538662	12O 20S 38E NE SW SE	4254	446	3510	33452	9793	26121	26377	3753	9758
HESTER 12	11	3002538663	12P 20S 38E SW SE SE	1523	1408	2701	80703	80800	7794	6526	8770	5099
MELOT	2	3002538700	11C 20S 38E NW NE NW	15029	4986	1960	42159	7569	22066	14693	19337	14502
HESTER 12	9	3002538791	12K 20S 38E NE NE SW	1908	1199	4536	46737	5588	5276	20019	5058	11525
MAGNOLIA	2	3002539090	11D 20S 38E NE NW NW	1741	555	4669	62616	34150	92974	15912	3409	3409
L & M	2	3002539450	2N 20S 38E	1185	849	6430	18698	23618	56095	9793	4895	17954
DIXIE QUEEN	3	3002539451	11I 20S 38E	1679	433	3303	6104	2595	6562			
MELOT	3	3002539458	11B 20S 38E	1494	386	2941	6254	2658	6724	13100	2406	11228
BLANKENSHIP	7	3002539488	12E 20S 38E	169	46	368	2254	957	2422	11812	2461	10335
MAGNOLIA	3	3002539489	11E 20S 38E	1348	348	2653	22270	9465	23939	11919	2188	10217
ARNOLD A	2	3002539490	11F 20S 38E	980	247	1842	11166	4745	12004	7193	1468	6018
CONE A	2	3002539491	12F 20S 38E	936	258	2029	3332	1498	3499	4342	887	3634
ARNOLD A	3	3002539636	11F 20S 38E NE SE NW	1644	411	3082	7445	3165	8005	9864	2015	8253
DIXIE QUEEN	4	3002539650	11I 20S 38E	860	223	1693	4104	1743	4410			
L & M	3	3002539652	2N 20S 38E	457	326	2485	2705	3416	8114	2325	1125	4050
MERIT	2	3002539653	11O 20S 38E	610	196	1372	6572	3380	8824	887	268	908
REDTAG	3	3002539655	2J 20S 38E	314	370	2165	1350	3013	6026	2625	1811	4617
TOTALS				341,140	222,864	1,515,548	3,310,790	3,928,260	8,936,908	566,442	247,140	823,011
AVERAGES				7,753	5,306	30,311	73,573	93,530	186,186	14,906	7,269	18,705

Proposed Allocations	Oil	Gas	Water
Blnebr	18%	21%	36%
Tubb	12%	26%	18%
Drnkard	70%	53%	46%
TOTAL	100%	100%	100%

White Owl #1

API # 30-025-36689

Sec 2, T20S, R38E

Elevation: 3590' KB, 3573' GL

TD: 7,741'

PBTD: 5,557'

Casing Record: 13-3/8" 48# @ 127' w/ 200 sxs
8-5/8" 24# J-55 @ 1636' w/ 725 sxs
5-1/2" 17# N-80 @ 7,741' w/ 1710 sxs

Perfs: Blinebry: 5,982-6,139 (Open)

Tubb: 6,802-6,890 (Behind CIBP @6,231')

Drinkard: 6,986-7,106 (Behind CBP @ 6,920')

Objective: Drill out plugs and commingle zones

AFE: PA-12-4015

1. MIRU unit. Kill well as necessary. Unseat pump. POOH W/ rods and pump.
2. ND WH. NU BOP. Release TAC. POOH w/ tubing and TAC.
3. RIH w/ retrieving head and 5-1/2" casing scraper and tag fill @ 6,231'. Wash to RBP at 6400' and retrieve RBP. POOH.
4. RIH w/ 4-3/4" bit and 5-1/2" scraper and tag CBP @ 6,920'. Drill out CBP. Continue in hole to PBTD at 7,557'. Circulate bottoms up twice. POOH.
5. RIH W/ 2-7/8" production tubing to bottom perfs. Spot 1000 gal 15% NEFE HCL across all perfs from 5982'-7106'. Dump 500 gallons 200 gallons 15% NEFE down backside.
6. RU swab equipment and recover load and swab test perfs for fluid entry and oil cut. Report results to Midland. RD swab equipment.
7. RIH w/ production tbg and rods as per the Monument office specification.
8. RDMOPU. Return well to production in Blinebry, Tubb, and Drinkard. Place into test for 10 days.

GL=3573'
KB=3590'
Spud:6/16/04

Apache Corporation – White Owl #1

Wellbore Diagram – Proposed

Date : 6/25/2012

API: 30-025-36689

Surface Location

R. Taylor



582' FNL & 330' FWL,
Lot D Sec 2, T20S, R38E, Lea County, NM

Surface Casing

13-3/8" 48# @ 127' w/ 200 sxs to surface

Intermediate Casing

8-5/8" 24# J-55 @ 1636' w/ 725 sxs

TAC @ TBD'
SN @ TBD'

TBD: Spot 1200 gal 15% NEFE HCL across all perfs

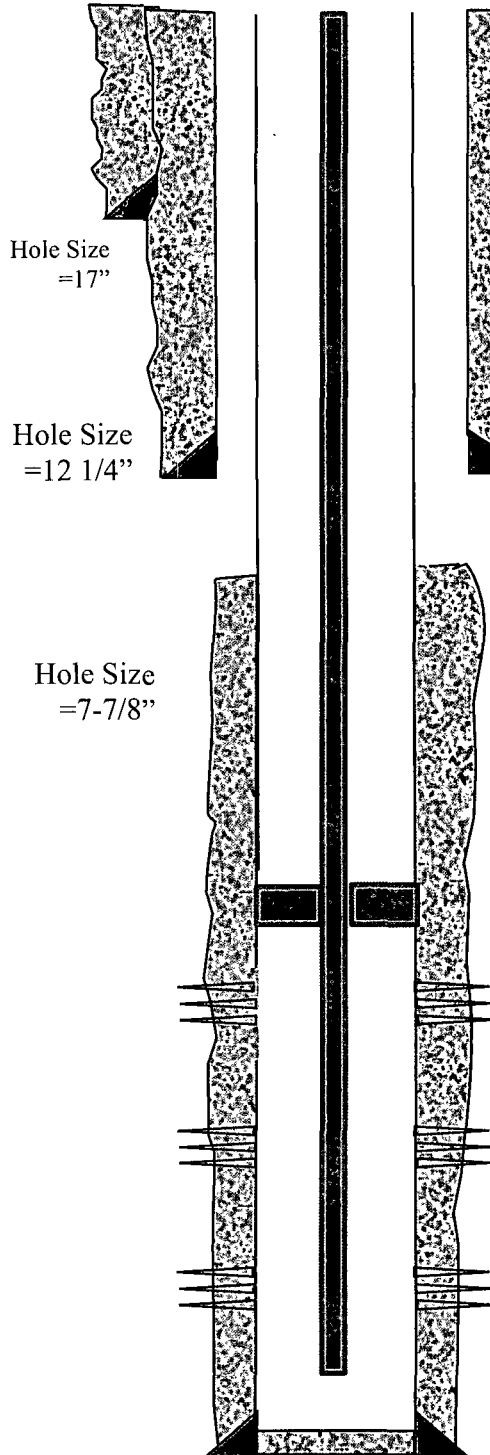
9/04: Perf Blinebry @ 5982-86; 6042-47; 6068-84; 6134-39 w/ 4 jspf.
Acidized w/ 4000 gal 20% AS290. Frac'd w/ 60k gal gelled w/ 807
SCF N2 w/ 90k# 20/40 snd & 30k# 20/40 PropNet

9/04: Perf Tubb @ 6802-08; 6818-20; 6827-30; 6835-38; 6843-49;
6858-60; 6885-90 w/ 4 jspf. Acidized w/ 3000 gal 20% AS290. Frac'd
w/ 30k gal 2% KCL w/ 52k# 20/40 snd.

8/04: Perf Drinkard @ 6986-94; 7062-70; 7082-86; 7100-06 w/ 4 jspf.
Acidized w/ 3000 gal 15% NEFE. Frac'd w/ 42k gal 30Q 15 & 20%
SXE w/ 20k# 20/40 snd.

Production Casing

5-1/2" 17# N-80 @ 7741' w/ 1710 sxs to surface



PBTD = 7,557'
MD = 7,741'