

DATE IN <u>5/16/12</u>	SUSPENSE	ENGINEER <u>WUT</u>	LOGGED IN <u>5/16/12</u>	TYPE <u>DHC</u>	APP NO. <u>1213748451</u>
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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



Apache

Hansen State #12

ADMINISTRATIVE APPLICATION CHECKLIST

30-025-38563

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 _____

4-16-205-37E

DHC-4409A

[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
 Print or Type Name

Reesa Holland
 Signature

SR STAFF ENGR TECH
 Title

5/16/2012
 Date

Hansen State #12

Reesa.Holland@apachecorp.com
 e-mail Address



April 26, 2012

Mr. Will Jones
New Mexico Oil Conservation Division
1220 South Saint Francis Drive
Santa Fe, New Mexico 87505-4225

RE: Application for Exception to Rule 303-C – Downhole Commingling
Hansen State #12 API 30-025-39563
Unit H, Section 16, T20S, R37E
Weir; Drinkard (63840), Monument; Paddock (47080) & Monument; Tubb
(47090)
Lea County, New Mexico

Dear Mr. Jones;

Enclosed please find form C-107A 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 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 cursive script that reads "Reesa Holland".

Reesa Holland
Sr. Staff Engineering Technician

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

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

District III
1099 Elm Street Road, Arroyo, 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-107A
Revised June 10, 2003

APPLICATION TYPE
 Single Well
 Establish Pre-Approved Pools
EXISTING WELLBORE
 Yes No

APPLICATION FOR DOWNHOLE COMMINGLING

Apache Corporation 303 Veterans Airpark Lane Suite 3000 Midland TX 79705
Operator Address
Hansen State 012 H 16 20S 37E Lea
Lease Well No. Unit Letter-Section-Township-Range County
OGRID No. 873 Property Code 306601 API No. 30-025-39563 Lease Type: Federal State Fee

DHC-4508 4409-A

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	Monument; Paddock	Monument; Tubb	Weir; Drinkard
Pool Code	47080	47090	63840
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	5304'-5498' (Proposed)	6354'-6546' (Actual)	6690'-6792' (Proposed)
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)	N/A	N/A	N/A
Oil Gravity or Gas BTU (Degree API or Gas BTU)	36.5	36.5	36.5
Producing, Shut-In or New Zone	New	Producing	New
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: Rates: See Attached	Date: Rates: See Attached	Date: 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 57 % Gas 9 %	Oil 30 % Gas 54 %	Oil 13 % Gas 37 %

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

NMOC 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 TITLE Sr. Staff Engineering Tech DATE 5/16/2012

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

E-MAIL ADDRESS Reesa.Holland@apachecorp.com

District I
1625 N. French Dr., Hobbs, NM 88240
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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 October 12, 2005
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-025-39563		² Pool Code 47080		³ Pool Name Monument; Paddock	
⁴ Property Code 306601		⁵ Property Name Hansen State			⁶ Well Number 012
⁷ OGRID No. 873		⁸ Operator Name Apache Corporation: 303 Veterans Airpark Lane, Suite 3000 Midland, TX 79705			⁹ Elevation 3547' GL

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
H	16	20S	37E		1650	North	330	East	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	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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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>16</p>	<p>¹⁷ OPERATOR CERTIFICATION</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: <u>Reesa Holland</u> Date: <u>04/26/2012</u></p> <p>Printed Name: <u>Reesa Holland</u></p>
	<p>¹⁸ SURVEYOR CERTIFICATION</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>

District I
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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 October 12, 2005
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-025-39563		² Pool Code 63840	³ Pool Name Weir; Drinkard	
⁴ Property Code 306601	⁵ Property Name Hansen State		⁶ Well Number 012	
⁷ OGRID No. 873	⁸ Operator Name Apache Corporation: 303 Veterans Airpark Lane, Suite 3000 Midland, TX 79705		⁹ Elevation 3547' GL	

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					<p>Signature: <u>Reesa Holland</u> Date: <u>04/26/2012</u></p>	
					<p>Printed Name: <u>Reesa Holland</u></p>	
				<p>¹⁸ 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.</p>		
				<p>Date of Survey</p> <p>Signature and Seal of Professional Surveyor:</p>		
				<p>Certificate Number</p>		

Hansen State #12
 30-025-39563
 Apache Corp.

Lease Name	Well Number	10DIGITAPI	Location	Cum Oil (BBL)			Cum Gas (MCF)			Cum Water (BBL)		
				Paddock	Tub	Drinkard	Paddock	Tub	Drinkard	Paddock	Tub	Drinkard
T ANDERSON	3	3002506003	8K 20S 37E	171866			54074			540001		
HANSEN STATE	2	3002506007	8C 20S 37E NE NE NW	7366						586102		
BRITT B B	3	3002506008	8C 20S 37E	186163			36373			171099		
BERTIE WHITMIRE	6	3002506016	8B 20S 37E SW NW NE	316407			311856			1267031		
BERTIE WHITMIRE	7	3002506017	8G 20S 37E	245819			376902			529873		
BERTIE WHITMIRE	8	3002506018	8F 20S 37E	291699			390095			204925		
BERTHA J BARBER	10	3002506024	8E 20S 37E SW NW	37054			43018			1147032		
BERTHA J BARBER	13Y	3002506027	8E 20S 37E SW NW	420141			340929			1757647		
BERTHA J BARBER	15	3002506028	8D 20S 37E	234016			197768			327483		
BERTHA J BARBER	16	3002506029	8L 20S 37E	380018			519620			715976		
T ANDERSON	3	3002506030	8J 20S 37E	496703			293093			10462431		
T ANDERSON	3	3002506031	8J 20S 37E NW SE				714			35424		
GILLULY FEDERAL	1	3002506033	8M 20S 37E	57754			15699			3255		
L VAN ETTEN	3	3002506043	9N 20S 37E	18793			16761			12437		
L VAN ETTEN	8	3002506048	9P 20S 37E	235889			35998			32902		
L VAN ETTEN	9	3002506049	9L 20S 37E	20662			29003			128512		
BRITT B	9	3002506108	15J 20S 37E		261579	45473		3357547	729043		9450	14500
BRITT B	10	3002506109	15F 20S 37E SE NW		177763	2434		4173916	35808		23792	5748
BRITT B	11	3002506110	15N 20S 37E		210040			581763			127935	
BRITT B	12	3002506111	15E 20S 37E		192273			2396941			117649	
BRITT B	10	3002506112	15D 20S 37E	187648	25549		42986	818601			3188197	32700
BRITT B	14	3002506113	15L 20S 37E	30102	146459		147212	681426			128778	5307
SEMU BRITT	61	3002506114	15P 20S 37E			3970			279325			1467
SEMU TUBB	70	3002506115	15I 20S 37E		61629	166457		903198	3427477		66178	476621
STATE Q	1	3002506116	16J 20S 37E W2 NW SE	210485	59223		17474	220345			401647	28053
HANSEN STATE	3	3002506126	16A 20S 37E W2 NE NE	78528			32757	2337			2432	2450
HANSEN STATE	5	3002506128	16H 20S 37E		76711			208565			50047	
STATE I	1	3002506132	16N 20S 37E SW SE SW	92341			3492				438413	
STATE I	2	3002506133	16K 20S 37E	222117			8264				33876	
A	8	3002506237	22C 20S 37E	7216	72623		121691	479465			57925	1694
A	9	3002506238	22D 20S 37E NW NW	17	80649		348	878074			205	25150
BRITT B	18	3002520090	10N 20S 37E		115599			814171				10084
BRITT B	19	3002520112	15B 20S 37E	1407	170475		35689	569858			4183	33333
L VAN ETTEN	11	3002520217	9I 20S 37E C NE SE		68230			768554				12149
BRITT B	20	3002520299	10L 20S 37E SW NW SW	97977	165250		158375	914686			55802	8718
APACHE STATE Q	4	3002520358	16I 20S 37E C NE SE	162118	90226		9857	587491			123028	15157
A	10	3002520393	22B 20S 37E		103209			999932				45895
BARBER ADKINS B	1	3002520436	8D 20S 37E C NW NW		13620			163210				28047
HANSEN STATE	6	3002520535	16G 20S 37E E2 SW NE		23027			96987				5697
BRITT B	21	3002520549	10J 20S 37E		147475			1032844				17711
SEMU TUBB	84	3002520654	22A 20S 37E NE NE NE		208882			803055				7185
SEMU RLINEBRY TUBB	85	3002520655	15H 20S 37E		152781			754197				31550
E H B PHILLIPS B	1	3002520934	10F 20S 37E		203280			2112865				14857
E H B PHILLIPS B	2	3002520935	10G 20S 37E		86676	38591		928515	354448			12763
E H B PHILLIPS C	1	3002521052	10A 20S 37E		9777			28534				751
BRITT B	22	3002521064	10P 20S 37E		167448			775108				104939
LAUGHLIN	1	3002521652	9H 20S 37E		53957			462225				61699
BRITT PHILLIPS	1	3002521653	10E 20S 37E		24175			1093722				5219
L VAN ETTEN	12	3002521773	9O 20S 37E NW SW SE	111661	3536		13373	1009082			62230	125654
V LAUGHLIN	4	3002521926	9A 20S 37E		39976			172669				7415
GILLULY B FEDERAL	13	3002522707	22G 20S 37E			14372			37217			81333
APACHE STATE Q	5	3002524822	16O 20S 37E		104387							26852
APACHE STATE Q	6	3002525108	16P 20S 37E		113590			17732				36971
T ANDERSON	4	3002525292	8I 20S 37E	32393	1781		72723	8000			1205614	19238
A	17	3002525864	21B 20S 37E	31743	1360		5195	6731			821725	328
A	18	3002525865	21A 20S 37E	53115	556		222770	16135			370891	2457
A	20	3002525937	21H 20S 37E		724			6841				30423
BRITT B	26	3002526486	15M 20S 37E	21230	50138		62131	226691			64562	131770
BRITT B	27	3002526941	15G 20S 37E			45786			546219			24467
ANDERSON	1	3002529962	8Q 20S 37E SW SE	29638	12260		32290	29946			117897	101798
BRITT B	28	3002530470	15K 20S 37E NE NE SW		13864	10937		244821	443163			58944
GENERAL G STATE	3	3002530865	16D 20S 37E NW NW NW		2515			59419				45665
L VAN ETTEN	13	3002531727	9K 20S 37E SE NE SW		621			368786				2997
L VAN ETTEN	14	3002532518	9M 20S 37E NE SW SW	29342	1564		7473	197064				18214
L VAN ETTEN	16	3002532881	9L 20S 37E		340			440				43241
L VAN ETTEN	17	3002532896	9K 20S 37E	44900			27764				113359	
E H B PHILLIPS B	3	3002533015	10C 20S 37E C NE NW		1134			8299				1168
W H LAUGHLIN	7	3002533141	9E 20S 37E		40963			421441				98457
STATE CC 16	1	3002533284	16C 20S 37E	3852	1986		76758	63910			9779	6887
L VAN ETTEN	18	3002533349	9J 20S 37E	129608			23952				38601	
BRITT B	32	3002533906	10M 20S 37E			130113			692932			227893
THEODORE ANDERSON	12	3002534021	8P 20S 37E SE SE SE	1798		2053	2220			3662	9716	9224
LAUGHLIN	2	3002534067	9G 20S 37E SW SW NE	412	10625		5045	122756			1371	33382
APACHE STATE Q	7	3002534162	16J 20S 37E NE NW SE	16338	11191		31221	23333			17043	16302
W H LAUGHLIN	8	3002534341	9F 20S 37E NW SE NW			2543			10643			95345
BRITT B	34	3002534444	10M 20S 37E SW SW	251361			30768				321833	
L VAN ETTEN	3	3002534528	9 20S 37E SE SW SE	1913	1530	191	999	106	1327	2664	2664	2664
STATE I	4	3002534954	16N 20S 37E NW SE SW		4055			25960				12730
LAUGHLIN B	1	3002536147	8A 20S 37E		49742	3446		247347	10376			25422
BERTIE WHITMIRE	11	3002536331	8B 20S 37E W2 NW NE		47758			177109				77669
COOPER B	2	3002536529	8H 20S 37E SE NE		3307			16594				27301
V LAUGHLIN	5	3002536675	9D 20S 37E		5497			15942				3794
APACHE STATE Q	3	3002537267	16P 20S 37E NE SE SE		27302	19101		208957	173920			25787
HANSEN STATE	12	3002539563	16H 20S 37E		85			1364				
HANSEN STATE	14	3002539635	16B 20S 37E NW NE		229			11016				3643
T ANDERSON	5	3002539900	8N 20S 37E		130	39		391	76			123
APACHE STATE Q	9	3002539906	16I 20S 37E		241	595		1853	2827			6714
W H LAUGHLIN	11	3002539909	9F 20S 37E			1718			16859			1159
LAUGHLIN	5	3002540207	9G 20S 37E			20	494	1943	2915			281

Hansen State #12
 30-025-39563
 Apache Corp.

Lease Name	Well Number	10DIGITAPI	Location	Cum Oil (BBL)			Cum Gas (MCF)			Cum Water (BBL)		
				Paddock	Tubb	Drinkard	Paddock	Tubb	Drinkard	Paddock	Tubb	Drinkard
TOTALS				5,187,927	3,503,253	488,313	3,872,902	31,302,638	6,770,237	25,626,460	1,793,186	1,038,864
AVERAGES				117,907	61,461	27,129	90,067	539,701	376,124	569,477	31,459	57,715

Proposed Allocations	Oil	Gas	Water
Paddock	57%	9%	86%
Tubb	30%	54%	5%
Drinkard	13%	37%	9%
TOTAL	100%	100%	100%