

DATE IN 4-26-10	SUSPENSE	ENGINEER W.J.	LOGGED IN 4-26-10	TYPE PHC	APP NO. 1011652927
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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*  
*Eugene Wood #15*

**ADMINISTRATIVE APPLICATION CHECKLIST**

30-025-39723

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

4272

**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 \_\_\_\_\_

[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

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 2010 APR 26 A 11:28

[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.

Sophie Mackay  
 Print or Type Name

*S. Mackay*  
 Signature

Engineering Technician  
 Title

04/22/2010  
 Date

sophie.mackay@apachecorp.com  
 e-mail Address



**April 22, 2010**

**William Jones  
New Mexico Oil Conservation Division  
1220 South St. Francis Drive  
Santa Fe, New Mexico 87505**

**RE: Application for Exception to Rule 303-C – Downhole Commingling  
Eugene Wood #15  
Unit B, Section 22, T-22-S, R-37-E  
Langlie Mattix; 7 RVR-S-Q-Grayburg (37240) & Eunice; San Andres, Southwest (24180)  
Lea County, New Mexico**

**Dear Mr. Jones,**

Enclosed please find form an administrative application form (C-107A) and attachments for downhole commingling the Grayburg and San Andres in the Eugene Wood #13. Apache intends to produce both zones together with an expected rate of 50 BOPD, 100 MCFPD, 200 BWPD. The ownerships (WI, NRI and ORRI) of these pools are identical in this wellbore. Downhole commingling in this manner will offer an economic method of production while protecting against reservoir damage, waste of reserves and violation of correlative rights. This is a private well.

This well has not yet been completed. 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 (918) 491-4864.

Sincerely,

A handwritten signature in cursive script that reads "Sophie Mackay".

**Sophie Mackay  
Engineering Technician**

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

APPLICATION FOR DOWNHOLE COMMINGLING

Apache Corporation 6120 S Yale Ave, Suite 1500, Tulsa, OK 74136-4224  
Operator Address  
Eugene Wood 015 B 22 22S 37E Lea  
Lease Well No. Unit Letter-Section-Township-Range County  
OGRID No. 873 Property Code 26466 API No. 30-025-39723 Lease Type: ☐ Federal ☐ State ☒ Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	Langlie Mattix; 7 RVRS-Q-GB		Eunice; San Andres, Southwest
Pool Code	37240		24180
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	3646' - 3875' (Est Perf)		3914' - 4078' (Est Perf)
Method of Production (Flowing or 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)	NA		NA
Oil Gravity or Gas BTU (Degree API or Gas BTU)	36 API		35 API
Producing, Shut-In or New Zone	New Zone		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: Est Rates: 42 BOPD 110 BWPD 55 MCFPD	Date: Rates:	Date: Est Rates: 8 BOPD 90 BWPD 45 MCFPD
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 85 % 55 %	Oil Gas % %	Oil Gas 15 % 45 %

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 S. Mackay TITLE Engineering Technician DATE 04/22/2010  
TYPE OR PRINT NAME Sophie Mackay TELEPHONE NO. (918) 491-4864  
E-MAIL ADDRESS sophie.mackay@apachecorp.com

## DISTRICT I

1625 N. French Dr., Hobbs, NM 58240

## DISTRICT II

1301 W. Grand Avenue, Artesia, NM 88210

## DISTRICT III

1000 Rio Brazos Rd., Aztec, NM 87410

## DISTRICT IV

1820 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals and Natural Resources DepartmentForm C-102  
Revised October 12, 2005

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

## OIL CONSERVATION DIVISION

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

## WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-025-39723	Pool Code 37240	Pool Name Langlie Mattix; 7 RVRS - Q - GB
Property Code 26466	Property Name EUGENE WOOD	Well Number 15
OGRIID No. 873	Operator Name APACHE CORPORATION	Elevation 3361'

## Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	22	22 S	37 E		990	NORTH	1710	EAST	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

<p><b>SURFACE LOCATION</b> Lat - N 32°22'54.95" Long - W 103°08'52.35" NMSPCE- N 504705.868 E 907295.020 (NAD-83)</p>	<p><b>OPERATOR CERTIFICATION</b></p> <p>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 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.</p> <p><i>S. Mackay</i> 4/22/2010 Signature Date</p> <p>Sophie Mackay Printed Name</p>
	<p><b>SURVEYOR CERTIFICATION</b></p> <p>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 Surveyed: 4/22/2010 Signature &amp; Seal of Professional Surveyor</p>
	<p>Certificate No. Gary L. Jones 7977</p> <p>BASIN SURVEYS</p>

## DISTRICT I

1625 N. French Dr., Hobbs, NM 58240

## DISTRICT II

1301 W. Grand Avenue, Artesia, NM 58210

## DISTRICT III

1000 Elmo 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 DepartmentForm C-102  
Revised October 12, 2005

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State Lease - 4 Copies

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## OIL CONSERVATION DIVISION

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

## WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-025-39723	Pool Code 24180	Pool Name Eunice; San Andres, Southwest
Property Code 26466	Property Name EUGENE WOOD	Well Number 15
OGRID No. 873	Operator Name APACHE CORPORATION	Elevation 3361'

## Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	22	22 S	37 E		990	NORTH	1710	EAST	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

<p><b>SURFACE LOCATION</b> Lat - N 32°22'54.95" Long - W 103°08'52.35" NMSPCE- N 504705.668 E 907295.020 (NAD-83)</p>	<p><b>OPERATOR CERTIFICATION</b></p> <p>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 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.</p> <p><i>S. Mackay</i> 4/22/2010 Signature Date Sophie Mackay Printed Name</p>
	<p><b>SURVEYOR CERTIFICATION</b></p> <p>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 Surveyed Signature &amp; Seal of Professional Surveyor</p>
	<p>Certificate No. Gary L. Jones 7977</p>
	<p>BASIN SURVEYS</p>

Lease Name	Well Number	10DIGITAL	Location	Cum Oil (BBL)		Cum Gas (MCF)		Cum Water (BBL)	
				Grayburg	San Andres	Grayburg	San Andres	Grayburg	San Andres
HUGH	1	3002510257	14D 22S 37E	2207		5224		11017	
HUGH	3	3002510259	14B 22S 37E	13244		299179		453254	
E W WALDEN	6	3002510275	15N 22S 37E	75293		131150		15	
ELLIOTT A 15	1	3002510276	15P 22S 37E	89639		128067		751	
ELLIOTT A 15	2	3002510278	15O 22S 37E	129125		333187		218092	
E W WALDEN	1	3002510285	15E 22S 37E	68666		445297		35635	
E W WALDEN	5	3002510286	15M 22S 37E	74162		206164		18919	
E W WALDEN	4	3002510287	15K 22S 37E C NE SW	76445		46847			
E W WALDEN	6	3002510288	15N 22S 37E C SE SW	75293		131150			
ELLIOTT FEDERAL	1	3002510289	15G 22S 37E C SW NE	52554		101691		1828	
E W WALDEN	2	3002510292	15F 22S 37E	56433		109196			
E W WALDEN	2	3002510295	15C 22S 37E	114251		965790		198282	
E W WALDEN	3	3002510297	15L 22S 37E	57540		119404			
ELLIOTT A 15	1	3002510298	15J 22S 37E	113967		677320		456417	
ELLIOTT B 15	2	3002510299	15A 22S 37E	110317		631288		181737	
ELLIOTT B 15	3	3002510300	15B 22S 37E	109209		1157579		165415	
E W WALDEN	1	3002510303	15D 22S 37E	160218		1006516		64099	
R E COLE	1	3002510310	16O 22S 37E SW SE	77841		393971		424101	
R E COLE	2	3002510311	16N 22S 37E SE SW	60099		302558		1015513	
R E COLE	3	3002510312	16M 22S 37E SW SW					3278	
R E COLE NCT A	1	3002510313	16P 22S 37E	201573		392406		67846	
R E COLE NCT A	2	3002510314	16L 22S 37E	49863		64403		6289	
R E COLE NCT A	3	3002510315	16I 22S 37E	147322		448678		271471	
R E COLE NCT A	5	3002510318	16I 22S 37E NE NE SE	21467	2405	233241	95263	137775	28424
R E COLE NCT A	6	3002510319	16B 22S 37E		2972		366711		216763
COLE STATE	1	3002510321	16A 22S 37E	117840	18923	367935	1056565	5260	146965
COLE STATE	2	3002510322	16D 22S 37E	107089		320575		226	
COLE STATE	3	3002510323	16C 22S 37E	105960		445041		7842	
COLE STATE	4	3002510324	16E 22S 37E	79457		497312		12759	
COLE STATE	5	3002510325	16H 22S 37E	74464		523230		5363	
R E COLE B STATE	6	3002510326	16B 22S 37E	33962					
FERRELL	1	3002510421	22O 22S 37E	17297					
BOYD	1	3002510432	23L 22S 37E	10999					
R E COLE A	20	3002521238	16K 22S 37E	31243		249082		39352	
HUGH	10	3002521625	14E 22S 37E SW SW NW	68824		513485		363667	
R E COLE NCT A	8	3002522109	16K 22S 37E	40100	1950	329315	162890	90525	17978
COLE STATE	10	3002522163	16E 22S 37E		6736		610679		198983
E W WALDEN	7	3002522185	15L 22S 37E N2 NW SW	83725		1262389		602248	
R E COLE NCT A	11	3002522382	16J 22S 37E C NW SE	54108	6460	612260	307792	69502	132331
HUGH	9	3002522393	14D 22S 37E NW NW	35540		220054		75726	
COLE STATE	12	3002522486	16D 22S 37E SW NW NW		4395		642146		142221
HUGH	11	3002522625	14F 22S 37E SE NW	63113		565492		455870	
ELLIOTT B 15 2	2	3002522634	15H 22S 37E	53113		945609		83825	
ELLIOTT 16 FEDERAL	2	3002522755	15G 22S 37E SW NE	41375		894549		591752	
HUGH	12	3002522910	14C 22S 37E NE NW	40890		322433		412991	
E W WALDEN	8	3002522983	15K 22S 37E N2 NE SW	68297		1030360		698866	
E W WALDEN	9	3002523165	15F 22S 37E NW SE NW	53619		1361405		458087	
E W WALDEN	10	3002523166	15E 22S 37E SW NW	57557		1553775		1046258	
HUGH	13	3002523275	14D 22S 37E NW NW		117005		886711		2080290
COLE STATE	14	3002523828	16F 22S 37E		6509		809685		436712
E W WALDEN	11	3002524603	15M 22S 37E N2 SW SW	92080		1752561		1624609	
R E COLE NCT A	15	3002524763	16L 22S 37E E2 NW SW	1325	8660	27622	336749	18206	169538
R E COLE NCT A	17	3002525356	16P 22S 37E SW SE SE	26958	12316	54512	223855	74291	82752
R E COLE	3	3002525689	16M 22S 37E NE SW SW	12156		190106		1465	
R E COLE NCT A	21	3002526474	16B 22S 37E	3459		111207		8252	
E W WALDEN	12	3002527756	15F 22S 37E SW SE NW	21526	7195	450680	179539	206128	187878
E W WALDEN	13	3002527956	15K 22S 37E SW NE SW	55029		1133083		223247	
E W WALDEN	14	3002528204	15N 22S 37E SE SE SW	48895		1048175		497354	
HUGH	16Y	3002528595	14E 22S 37E NE SW NW	16550	5731	191862	128865	93483	78015
COLE STATE	7	3002533681	16H 22S 37E		9715		764967		20823
COLE STATE	8	3002534856	16G 22S 37E SW SW NE		13268		665423		99962
COLE STATE	15	3002536024	16C 22S 37E W2 NE NW		3459		388982		76720
COLE STATE	17	3002537399	16F 22S 37E NE SE NW		3902		340230		86342
COLE STATE	19	3002537400	16G 22S 37E NE SW NE		13508		309440		44958
R E COLE	4	3002537489	16N 22S 37E SE SE SW	7742		103999		81885	
E W WALDEN	15	3002537509	15D 22S 37E SE NW NW	81	2131		101562	263	9268
COLE STATE	16	3002537721	16D 22S 37E NE NW NW	7939	1567	186117	280508	112100	12191
COLE STATE	20	3002537722	16H 22S 37E NE SE NE	5521	832	77097	70312	31582	4124
COLE STATE	18	3002537827	16A 22S 37E NW NE NE		7911		272770		47317

Lease Name	Well Number	10DIGITAPI	Location	Cum Oil (BBL)		Cum Gas (MCF)		Cum Water (BBL)	
				Grayburg	San Andres	Grayburg	San Andres	Grayburg	San Andres
COLE STATE	23	3002537828	16E 22S 37E NE SW NW	4251	2892	132947	195318	9862	85472
HUGH	17	3002537855	14D 22S 37E SW NW NW	2563	945	53661	63978	70390	64607
ELLIOTT B 15	8	3002537889	15H 22S 37E SE SE NE	4926		84105		29289	
OLLIE J BOYD 23	1	3002538217	23C 22S 37E NW NE NW		180				492
TOTALS				3,486,301	261,567	25,942,341	9,260,940	11,834,259	4,471,126
AVERAGES				58,105	10,463	463,256	385,873	219,153	178,845

Proposed Allocations	Oil	Gas	Water
Grayburg	85%	55%	55%
San Andres	15%	45%	45%
TOTAL	100%	100%	100%