

DATE IN 9.7.11	SUSPENSE	ENGINEER WVT	LOGGED IN 9.7.11	TYPE DHC	APP NO. 1125030491
----------------	----------	--------------	------------------	----------	--------------------

ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

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



RECEIVED OCD

2011 SEP - 7 P 6:46

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 _____

[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 ENGR TECH
Title

8/31/2011
Date

Reesa.Holland@apachecorp.com
e-mail Address



August 31, 2011

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

RE: Application for Exception for Downhole Commingling
New Mexico S State #51 (API 30-025-37669)
Unit K, Sec 2 T22S R37E
Eunice; San Andres, South & Penrose Skelly; Grayburg Pools
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 nor will it reduce the value of the total remaining production. 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.

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.

Sincerely,

Reesa Holland
Sr. 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
Operator

303 Veterans Airpark Lane Suite 3000 Midland TX 79705
Address

New Mexico State S 051 K 2 22S 37E Lea
Lease Well No. Unit Letter-Section-Township-Range County

OGRID No. 873 Property Code 34816 API No. 30-025-37669 Lease Type: ☐ Federal ☒ State ☐ Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	Penrose Skelly; Grayburg		Eunice; San Andres, South
Pool Code	50350		24170
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	3750'-3831' (Act Perfs)		3917'- 4090' (Act 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)	35.9 API		34.4 API
Producing, Shut-In or New Zone	Producing		Shut-In (removing CIBP)
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: 5/2/2011 Rates: 12 BOPD 43 MCFPD 0 BWPD	Date: Rates:	Date: Est Rates: 11 BOPD 43 MCFPD 94 BWPD
Fixed Allocation Percentage (Note: If allocation is based upon something other than current or past production, supporting data or explanation will be required.)	Oil 52 % Gas 50 %	Oil % Gas %	Oil 48 % Gas 50 %

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 TITLE Sr. Engineering Tech DATE 8/31/2011

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

E-MAIL ADDRESS Reesa.Holland@apachecorp.com

Lease Name	Well Number	10DIGITAPI	Location	Cum Oil (BBL)		Cum Gas (MCF)		Cum Water (BBL)	
				Grayburg	San Andres	Grayburg	San Andres	Grayburg	San Andres
EVA OWEN B	1	3002506996	34M 21S 37E	52692					
EVA OWEN B	2	3002506997	34L 21S 37E	48788					
EVA OWEN B	3	3002506998	34K 21S 37E	45840					
EVA OWEN B	4	3002506999	34N 21S 37E	35096					
OWEN B	5	3002507000	34L 21S 37E		11734		29651		32533
MARK OWEN	1	3002507001	34J 21S 37E C NW SE	163650		725764		297876	
MARK OWEN	2	3002507002	34O 21S 37E	66301		24431		3988	
MARK OWEN	6	3002507005	34J 21S 37E SW SW SE	36591		339232		206128	
MARSHALL COM	2	3002507012	34F 21S 37E SE NW	55197					
MARSHALL COM	1	3002507013	34E 21S 37E E2 SW NW	53817					
MARSHALL COM	3	3002507014	34D 21S 37E	36026					
MARSHALL COM	4	3002507015	34C 21S 37E	65714		60510			
MARK OWEN	3	3002507022	34I 21S 37E	18132		184260		110960	
ALICE PADDOCK	2	3002509939	1J 22S 37E C NW SE	995	248	12584	1063	10240	9742
NEW MEXICO S STATE	104	3002509954	2O 22S 37E		38935		98581		546928
NEW MEXICO S STATE C	4	3002509959	2M 22S 37E		86877		57074		3350047
R L BRUNSON TR 2	5	3002509972	2M 22S 37E	13722					
MARK	1	3002509974	3K 22S 37E NE SW	150731		1043797		787863	
BRUNSON	2	3002509979	3 22S 37E	83661		741383		197826	
MARK	2	3002509983	3L 22S 37E	98550		836337		45940	
OWEN A	2	3002509991	3G 22S 37E	6822		15812		65283	
MARK	3	3002509992	3F 22S 37E	94410		548016		384780	
MARK	3	3002509995	3H 22S 37E C SW NE	14568		245238		210404	
MARK	4	3002509996	3H 22S 37E	11056		58332		28314	
EVA OWEN	1	3002509999	3 22S 37E C NW NW	31171		61829		15623	
OWEN	2	3002510000	3C 22S 37E	12684					
EVA OWEN	3	3002510001	3 22S 37E NE NE NW	8601		93591		25205	
R L BRUNSON TR 2	3	3002510002	3M 22S 37E SW SW	120069		931869		130946	
R L BRUNSON TR 2	4	3002510003	3N 22S 37E SE SW	68089		3379182		15027	
OWEN A	1	3002510005	3E 22S 37E SW NW	57334					
ROLLON BRUNSON	5	3002510156	10G 22S 37E NE SW NE		17483		734024		435605
ROLLON BRUNSON	1	3002510159	10B 22S 37E	69368		61829		1691	
ROLLON BRUNSON	6	3002510162	10B 22S 37E NW NW NE	15126	1973	528679	2982	149481	2459
EAVES	1	3002510163	10A 22S 37E C NE NE		15393		554583		74611
SKELLY UNIT	167	3002510164	10H 22S 37E	75851		703412		745	
EAVES	4	3002510167	10H 22S 37E		64044		2168766		707969
EAVES	1	3002510169	10A 22S 37E	131154		484068		10353	
BRUNSON ARGO B	3	3002510170	10D 22S 37E	145876		850411		25381	
SKELLY UNIT	166	3002510171	10G 22S 37E	31615					
BRUNSON ARGO B	4	3002510172	10C 22S 37E	110870		706140		22275	
BRUNSON ARGO	5	3002510173	10F 22S 37E	36680					
BRUNSON ARGO	6	3002510174	10E 22S 37E	37625					
BAKER B	1	3002510182	10M 22S 37E	62044		176123		16420	
BAKER B	2	3002510183	10K 22S 37E	58342		213799		17418	
BAKER B	3	3002510184	10L 22S 37E	47312		168875		1670	
BAKER B	4	3002510185	10O 22S 37E C SW SE		6308		397474		64919
BAKER B	10	3002510190	10J 22S 37E		23273		492461		607882
BAKER B	12	3002510192	10K 22S 37E NE SW		11521		721548		330199
BAKER B	14	3002510194	10M 22S 37E		5559		320078		115730
LOU WORTHAM	1	3002510196	11D 22S 37E W2 NW NW	195335		1329434		201646	
LOU WORTHAM	3	3002510197	11C 22S 37E W2 NE NW	194539		1599789		552882	
LOU WORTHAM	4	3002510198	11F 22S 37E NE SE NW	141164		1524547		285214	
LOU WORTHAM	2	3002510200	11E 22S 37E NE SW NW	202848		1714045		214323	
S E LONG	2	3002510202	11J 22S 37E	13375		24704		49777	
S E LONG	8	3002510209	11J 22S 37E	2336		49102		29261	
LOU WORTHAM A	1	3002510210	11A 22S 37E	22578		107998		46939	
LOU WORTHAM C	4	3002510211	11H 22S 37E C SE NE		158397		869246		1327873
LOU WORTHAM	20	3002510216	11D 22S 37E NW NW		98704		736537		1285449
THOMAS LONG	1	3002510226	11L 22S 37E	87052		432131		2535	
THOMAS LONG	5	3002510229	11N 22S 37E C SE SW	2138		16656		18371	
ELLIOTT B 12	1	3002510232	12D 22S 37E		115902		312757		33194
ELLIOTT B-12-2	2	3002510234	12E 22S 37E		34894		217320		27174
HINTON	7	3002510240	12L 22S 37E		35607		1154364		315235
SKELLY UNIT	168	3002512574	10I 22S 37E	27933		190869		8744	
THOMAS LONG	6	3002520147	11K 22S 37E	71758		447890		279405	
NEW MEXICO S	25	3002520283	2N 22S 37E	8630		41646		21126	
NEW MEXICO S STATE	24	3002520390	2J 22S 37E S2 NW NE	2629		16467		12428	
LOU WORTHAM B	1	3002521785	11B 22S 37E	63283		317454		175297	
LOU WORTHAM C	3	3002522070	11A 22S 37E NE NE		168660		851772		1017059
LOU WORTHAM A	2	3002522134	11H 22S 37E W2 SE NE	15878		90665		80016	
LOU WORTHAM B	2	3002522135	11G 22S 37E W2 SW NE	44947		688637		199146	

Lease Name	Well Number	10DIGITAPI	Location	Cum Oil (BBL)		Cum Gas (MCF)		Cum Water (BBL)	
				Grayburg	San Andres	Grayburg	San Andres	Grayburg	San Andres
NEW MEXICO S STATE	26	3002523211	2L 22S 37E		153				
LOU WORTHAM C	1	3002523422	11B 22S 37E NE NW NE		293690		924852		1554458
BRUNSON C	9	3002523425	3J 22S 37E	95892		346211		103450	
LOU WORTHAM C	2	3002523473	11G 22S 37E NW SW NE		153611		579879		1120996
BRUNSON C	10	3002523486	3O 22S 37E	76145		352529		74866	
BRUNSON C	11	3002523523	3P 22S 37E	110326		407270		101145	
BRUNSON C	12	3002523549	3I 22S 37E	83563		370966		139419	
LOU WORTHAM	5	3002523606	11C 22S 37E SW NE NW		308352		1065152		433903
LOU WORTHAM	6	3002523756	11E 22S 37E SW SW NW		56999		1878747		180946
MARK	9	3002524584	3G 22S 37E	88504		1373462		274833	
MARK OWEN	7	3002525130	35N 21S 37E E2 SE SW	5036	395	38636	7154	27968	33096
S E LONG	9	3002525322	11J 22S 37E NW SE		6574		238312		303078
MARK	10	3002525785	3H 22S 37E NE SE NE	81354		791769		229816	
MARK	11	3002526051	3 22S 37E NW NE NE	38795		214554		72897	
MARK OWEN	8	3002526053	34P 21S 37E N2 SE SE	71594		774427		523246	
EAVES	7	3002526212	10H 22S 37E SE SE NE	7897		77209		19441	
LOU WORTHAM	19	3002528617	11F 22S 37E S2 SE NW	4455	19920	70275	111516	10318	97277
MARK OWEN	9	3002529468	35L 21S 37E NW SW	9831		57747		33292	
LONG	1	3002530432	11L 22S 37E NW SW		48610		1665076		2574973
LONG	2	3002530530	11M 22S 37E NW SW SW		17262		713612		1118663
BRUNSON ARGO	25	3002533964	10F 22S 37E		4111		367918		451643
OWEN B	7	3002534554	34K 21S 37E NE SW	46893		470124		157551	
OWEN B	8	3002534774	34N 21S 37E SE SE SW	17556	7790	228290	60116	90828	43651
OWEN B	9	3002534775	34M 21S 37E SE SW SW	29180	7595	244455	143533	134660	45476
A B BAKER	7	3002535134	10P 22S 37E NW SE SE	23234		458789		296676	
A B BAKER	8	3002535135	10I 22S 37E		14789		439043		123734
OWEN B	10	3002535638	34M 21S 37E			1847		1416	
R L BRUNSON TR 2	6	3002536316	3M 22S 37E NE SW SW	7461		162007		8527	
LOU WORTHAM	7	3002536329	11E 22S 37E NE SW NW		17536		186857		59580
LOU WORTHAM	8	3002536330	11D 22S 37E NE NW NW		65590		75864		568123
LOU WORTHAM	9	3002536536	11C 22S 37E NE NE NW		24550		153143		347316
LOU WORTHAM	10	3002536537	11F 22S 37E NE SE NW		16487		146534		123859
R L BRUNSON TR 2	7	3002536925	3K 22S 37E SE NE SW	8767		126340		21296	
MARK OWEN	10	3002537186	34O 21S 37E SE SW SE	25097		324350		38239	
MARK OWEN	9	3002537189	34J 21S 37E SE NW SE	27452		313225		85226	
NEW MEXICO S STATE	42	3002537245	2 22S 37E SW NW NW		139718		220781		307539
OWEN B	11	3002537322	34N 21S 37E NW SE SW	21950		245974		58719	
NEW MEXICO S STATE	44	3002537324	2J 22S 37E	25666	265	90056		1451623	68564
NEW MEXICO S STATE	43	3002537335	2L 22S 37E NE NW SW	34044	14211	206507	86487	246282	138011
NEW MEXICO S STATE	45	3002537336	2N 22S 37E SW SE SW	1999		37955		343303	
MARK	13	3002537385	3C 22S 37E SE NE	17641		205611		68469	
BRUNSON	7	3002537401	3L 22S 37E SE NW SW		74663		454039		246570
MARK OWEN	10	3002537533	35M 21S 37E S2 SW SW	18316	644	128767	93271	258590	120075
BRUNSON	6	3002537539	3L 22S 37E NW NW SW	27876	1749	356523	68389	102417	209698
WALTER LYNCH	11	3002537555	1E 22S 37E E2 SW NW	1040					
WALTER LYNCH	12	3002537556	1F 22S 37E N2 SE NW		43	206	982		22878
NEW MEXICO S STATE	46	3002537603	2 22S 37E NE NW NW	7025	6032	45800	49193	28473	49866
NEW MEXICO S STATE	47	3002537607	2E 22S 37E	1703	5376	7014	156271	2864	40849
NEW MEXICO S STATE	48	3002537608	2F 22S 37E	1598	14906	8115	98970	5004	111036
NEW MEXICO S STATE	49	3002537609	2F 22S 37E SE SE NW		16122		18993		283874
MARK OWEN	15	3002537649	35K 21S 37E SW NE SW	20375		60181			
MARK OWEN	17	3002537653	35N 21S 37E SW SE SW	10394	197	71285	15856	146763	110951
NEW MEXICO S STATE	50	3002537668	2E 22S 37E SE SW NW		42989		27726		223735
NEW MEXICO S STATE	51	3002537669	2K 22S 37E NW NE SW		8914		62087		9640
NEW MEXICO S STATE	52	3002537670	2K 22S 37E SE NE SW	6049		38663		4864	
NEW MEXICO S STATE	53	3002537671	2L 22S 37E SW NW SW		26502		22495		144840
NEW MEXICO S STATE	54	3002538119	2M 22S 37E NE SW SW		11324		22827		150716
NEW MEXICO S STATE	56	3002538120	2 22S 37E SW NE NW		10325		11929		760978
LOU WORTHAM 11	1	3002538218	11G 22S 37E SE SW NE	4134		116518		29469	
LOU WORTHAM 11	3	3002538236	11B 22S 37E SE NW NE	7369		72498		26434	
MARK OWEN	11	3002538333	34I 21S 37E SE SE SE	10447		106935		292626	
ROLLON BRUNSON	7	3002538335	10G 22S 37E NE SW NE	8519		257210		38730	
EAVES	8	3002538384	10A 22S 37E NW NE NE	8120		177743		20180	
ROLLON BRUNSON	8	3002538385	10G 22S 37E SE SW NE	10285		194747		20443	
EAVES	9	3002538851	10H 22S 37E NE SE NE	4110		96436		9331	
NEW MEXICO S STATE	55	3002539013	2M 22S 37E	1554	2274	10249	17545		30642
NEW MEXICO S STATE	59	3002539014	2O 22S 37E		1804		5270		16777
MARK OWEN	16	3002539601	35K 21S 37E	223		1628		8535	
A B BAKER	11	3002539604	10P 22S 37E	225	316	3218	5960	1087	5885
TOTALS				4,478,287	2,337,900	31,531,858	19,916,660	10,568,263	22,518,504
AVERAGES				45,235	41,748	362,435	368,827	127,328	409,427

New Mexico S State #51
 API 30-025-37669
 Apache Corp.

				Cum Oil (BBL)	Cum Gas (MCF)	Cum Water (BBL)							
Lease Name	Well Number	10DIGITAPI	Location	Grayburg	San Andres	Grayburg	San Andres	Grayburg	San Andres				
Proposed Allocations	Oil	Gas	Water										
Grayburg	52%	50%	24%										
San Andres	48%	50%	76%										
TOTAL	100%	100%	100%										

Well Test History Report

Select By: Field

Display: All well tests between 03/01/2011 - 08/29/2011

Page 1 of 1
8/31/2011 1:31:21 pm

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: PENROSE-SKELLY														
NEW MEXICO STATE /S/ #51 (GRAYBURG)														
3/11/2011	3/11/2011	24	A	14	3	41	11	0	13,667	2,929	0	0	2,929	
4/23/2011	4/23/2011	24	A	19	14	59	5	0	4,214	3,105	0	0	3,105	
5/2/2011	5/2/2011	24	A	12	12	43	0	0	3,583	3,583	0	0	3,583	
6/11/2011	6/11/2011	24	A	10	10	44	0	0	4,400	4,400	0	0	4,400	
7/7/2011	7/7/2011	24	A	9	9	45	0	0	5,000	5,000	0	0	5,000	
8/4/2011	8/4/2011	24	A	20	5	91	15	0	18,200	4,550	0	0	4,550	
Averages by Completion				14	9	54	5	0						

** All values are recorded using imperial units.



August 31, 2011

State Land Office
Commissioner of Public Lands
PO Box 1148
Santa Fe, NM 87504-1148

Mr. Pete Martinez:

Attached is a copy of the Administrative Application to downhole commingle two zones in the following well:

New Mexico State S #51 30-025-37669 UL K, Sec 2, T22S, R37E

Also included is a \$30.00 check to cover the filing fee for this well.

Please let me know if you require any additional information.

Sincerely,

A handwritten signature in cursive script that reads "Reesa Holland".

Reesa Holland
Sr. Engineering Tech

Attachments