LOGGED IN 7/17/06

APP NO. pTD 506 19 838355

ABOVE THIS LINE FOR DIVISION USE ONLY

# NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -1220 South St. Francis Drive, Santa Fe, NM 87505



Elaine.linton@apachecorp.com

e-mail Address

		ADMINISTRATIVE APP	PLICATION CHECKLIS	T
TH	IIS CHECKLIST IS M		CATIONS FOR EXCEPTIONS TO DIVISION RU T THE DIVISION LEVEL IN SANTA FE	LES AND REGULATIONS
Applic	[DHC-Dow	: dard Location] [NSP-Non-Standard hole Commingling] [CTB-Lease ol Commingling] [OLS - Off-Lease WFX-Waterflood Expansion] [PN [SWD-Salt Water Disposal] [	d Proration Unit] [SD-Simultaneous Commingling] [PLC-Pool/Lease C	ommingling] irement] n]
[1]	TYPE OF AF	PLICATION - Check Those Which Location - Spacing Unit - Simultan NSL NSP SD		
	Check [B]	One Only for [B] or [C]  Commingling - Storage - Measurer  DHC CTB PLC		
	[C]	Injection - Disposal - Pressure Incr	rease - Enhanced Oil Recovery D	
	[D]	Other: Specify		
[2]	NOTIFICAT [A]	ON REQUIRED TO: - Check Tho Working, Royalty or Overridi	ose Which Apply, or Does Not Apping Royalty Interest Owners	ly
	[B]	Offset Operators, Leaseholder	rs or Surface Owner	
	[C]	Application is One Which Re	quires Published Legal Notice	
	[D]	Notification and/or Concurrer U.S. Bureau of Land Management - Commiss		
	[E]	For all of the above, Proof of	Notification or Publication is Attache	ed, and/or,
	[F]	Waivers are Attached		
[3]		CURATE AND COMPLETE INF TION INDICATED ABOVE.	ORMATION REQUIRED TO PRO	OCESS THE TYPE
	al is <b>accurate</b> a		rmation submitted with this application ledge. I also understand that no action are submitted to the Division.	
	Note	Statement must be completed by an indiv	vidual with managerial and/or supervisory c	apacity.
Elaine Lir Print or	nton r Type Name	Signature Signature	Engineering Technician Title	7/14//2006 Date



July 14, 2006

Telephone (918) 491-4900 WWW.APACHECORP.COM

New Mexico Oil Conservation Division

Attn: William Jones

1220 South St. Francis Drive

Santa Fe, NM 87505

Re: Downhole Commingle the Apache Corporation

H. Corrigan No. 15 Well Section 4, T 22S, R 37E Lea County, New Mexico

2008

Apache Corporation as Operator of the referenced well respectfully requests administrative approval for downhole commingling and measurement of production.

Apache Corporation proposes to commingle the *Penrose Skelly; Grayburg* and *Eunies San Andres* pools. All interests are identical in both pools and commingling will not reduce the value of the individual pools.

Apache Corporation drilled the H. Corrigan No. 15 well in June 2005 and perforated the San Andres and Grayburg formations. Initial completion in July 2005, was in the Grayburg pool with a 7/24/2006 test at 77 BOPD & 261 MCFPD declining to 11 BO & 139 MCF on 11/23/2005. On January 15, 2006, we retrieved the RBP to test the San Andres pool. While initial tests did not show much improvement, over time, production has stabilized and tested on 5/10/2006 with 31 BOPD & 520 MCFPD. Based on this information, Apache Corporation files the enclosed C-107A so that we can continue to commingle both pools. The "Individual Well Test Report" in lieu of one year production curve is enclosed for your consideration. Production allocation will be based on subtraction of the Grayburg only test from the commingled Grayburg/San Andres test. Also enclosed is the "Allocation Based on Subtraction Method of Tests" providing the allocation percentages to each pool.

Should you require any additional information concerning this application, please do not hesitate to contact me or Clint Mills 918.491.4970.

Regards,

Elaine Lintor

**Engineering Technician** 

918.491.5362

cc: New Mexico Oil Conservation Division

Attn: Donna Mull 1625 N. French Drive Hobbs, NM 88240

# District I

1625 N. French Drive, Hobbs, NM 88240

District II

1301 W. Grand Avenue, Artesia, NM 88210

District III
1000 Ric Brazos Road, Aztec, NM 87410

**District IV** 

E-MAIL ADDRESS elaine.linton@apachecorp.com

# 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

X Single Well

\_Establish Pre-Approved Pools **EXISTING WELLBORE** 

### APPLICATION FOR DOWNHOLE COMMINGLING

1220 S. St. Francis Dr., Squaret, INM 6/303			WIGEE	DH C	<del>- 3</del>	74	ζ	,1	
Apache Corporation		612	20 South Yal	e, Suite 1500 Tul	ر [sa, O	سا 74130 K	5-4224		
Operator		A	ddress						
H CORRIGAN	15		I, SEC 4, T 2				LEA		
Lease	Well No.		-Section-Towns				Count	•	
OGRID No. 00873 Property Co	ode_26470	API No. 30-0	025-37264	Lease Type	e:	_Federa	ılStat	te X Fee	
DATA ELEMENT	UPPE	R ZONZE	INTERM	MEDIATE ZONE	5	I	LOWER ZO	ONE	
Pool Name	Penrose Skelly	; Grayburg o				Eunice;	San Andre	s ol L	
Pool Code	50350 🗸					24150	<u> </u>		
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)									
Method of Production (Flowing or Artificial Lift)	Artificial Lift					Artificia	l 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)									
Oil Gravity or Gas BTU (Degree API or Gas BTU)	34.7 API	•				33.6 AP	I		
Producing, Shut-In or New Zone	Producing					Produci	ng w/ inten	t to SI	
Date and Oil/Gas/Water Rates of Last Production. (Note: For new zones with no production history, applicant shall be required to attach production	Date: 11/23/2	2005	Date:			Date:	05/10/200	)6	
estimates and supporting data.)	Rates: 11BO/	/139MCF/201BV	V Rates:			Rates:	20BO/381	IMCF/509BV	
Fixed Allocation Percentage (Note: If allocation is based upon something other	Oil	Gas	Oil	Gas		Oil	ı	Gas	
than current or past production, supporting data or explanation will be required.)	35 %	6 27 %		%	%	65	%	73 %	
	<u></u>	ADDITIO	NAL DATA						
Are all working, royalty and overriding If not, have all working, royalty and or		s identical in all co	mmingled zon	es?			YesX Yes	No	
Are all produced fluids from all comm	ningled zones com	patible with each	other?				YesX		
Will commingling decrease the value	of production?						Yes	NoX_	
If this well is on, or communitized wit or the United States Bureau of Land M					s		YesX	No	
NMOCD Reference Case No. applicab	ole to this well: _	LANGUA			· · · · -				
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-APPRO	OVED POO	LS	_				
If application i	s to establish Pre-	-Approved Pools,	the following	additional informat	ion wi	ll be requ	iired:		
List of other orders approving downlook List of all operators within the propose Proof that all operators within the propose Bottomhole pressure data.	ed Pre-Approved	Pools							
I hereby certify that the informatio	n above is true :	and complete to	the best of m	y knowledge and	belief	F.			
SIGNATURE Eller	e Lento	TITLE 1	Engineering '	Technician		_DATE_	07/14/200	16	
TYPE OR PRINT NAME Elaine I	Linton		TI	ELEPHONE NO.	(	) (	918)491-53	362	

#### DISTRICT I 1625 N. FRENCE DR., HOBBS, NM 88240

Energy, Minerals and Natural Resources Department

State of New Mexico

DISTRICT II 1301 W. GRAND AVENUE, ARTESIA, NM 88210

OIL CONSERVATION DIVISION 1220 SOUTH ST. FRANCIS DR. Santa Fe, New Mexico 87505

Form C-102 Revised JUNE 10, 2003 Submit to Appropriate District Office State Lease - 4 Copies Fee Lease - 3 Copies

DISTRICT III 1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV 1220 S. ST. FRANCIS DR., SANTA PR., NM 87505	WELL LOCATION AND	ACREAGE DEDICATION PLAT	☐ AMENDED REPORT
API Number	Pool Code	Pool Name	
30-025-37264	50350	Penrose Skelly; Grayburg	
Property Code	Pr	operty Name	Well Number
26470	н	CORRIGAN	15
OGRID No.	Ор	erator Name	Elevation
00873	APACHE	3449'	

#### Surface Location

UL or lat No.	Section	Township	Range	lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Н	4	22-S	37-E		1890	NORTH	990	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 o	r Infill C	onsolidation (	Code Or	der No.	<u> </u>			<u> </u>
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

LOT 4	LOT 3	LOT 2	LOT 1	OPERATOR CERTIFICATION  I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.
39.91 AC	39.86 AC	39.80 AC	39.75 AC	Ellewe Lenton
	GEODETIC CO NAD 27 Y=51951 X=86137 LAT.=32°25'. LONG.=103°09	NME 4.7 N '5.8 E 22.13" N	990'	Elaine Linton  Printed Name Engineering Technician  Title July 14, 2006  Date  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 supervison and that the same is true and correct to the best of my belief.  DECEMBER 15, 2004  Date Surveyed  DEL Signature & Seal of Professional Surveyor  O4.11.1669  Certificate No. GARY EIDSON 12841

### DISTRICT I 1625 N. FRENCH DR., HOBBS, NM 88240

# State of New Mexico

Energy, Minerals and Natural Resources Department

DISTRICT II 1301 W. GRAND AVENUE, ARTESIA, NM 88210

DISTRICT IV

OIL CONSERVATION DIVISION 1220 SOUTH ST. FRANCIS DR.

Pool Code

24150

DISTRICT III 1000 Rio Brazos Rd., Aztec, NM 87410

1220 S. ST. FRANCIS DR., SANTA PE, NM 87505 API Number

30-025-37264

Property Code

Santa Fe, New Mexico 87505

WELL LOCATION AND ACREAGE DEDICATION PLAT

Property Name

Eunice; San Andres

Form C-102 Revised JUNE 10, 2003 Submit to Appropriate District Office State Lease - 4 Copies Fee Lease - 3 Copies

Pool Name

☐ AMENDED REPORT

Well Number

Juc		Well Number							
	<u> </u>						1 0773		
Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County	
4	22-S	37-E		1890	NORTH	990	EAST	LE/	
	<del>1</del>	Bottom	Hole Lo	cation If Diffe	rent From Sur	face	· · · · · · · · · · · · · · · · · · ·	L	
Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	Count	
Joint o	or Infill   C	onsolidation	Code Or	rder No.		<u></u>		L	
WABLE V	VILL BE A	SSIGNED '	ro THIS	COMPLETION (	JNTIL ALL INTER	RESTS HAVE BI	EEN CONSOLIDA	ATED	
	OR A	NON-STAN	DARD UN	NIT HAS BEEN	APPROVED BY	THE DIVISION			
	LO	Т 3		LOT 2	LOT 1	OPERATO	OR CERTIFICAT	ION	
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				1		3 1	_	ete to th	
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					186	I Sala	en Kinto	<u> </u>	
39.91 AC 39.86 AC				39.80 AC	39.75 AC	Signature			
	G	EODETIC C	) OORDINATI	ES					
1		NAD 2	7 NME	1					
			,		990'—	Title			
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						<del> </del>		DEL	
						Professionar	Seal of Surveyor		
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						Bary 4	120411 : 42	23/04	
				[		Certificate N		126	
			•	1		11 77.50.50	OFFISE OF THE STATE OF THE STAT		
	Section 4 Section  Joint	Section Township 4 22-S  Section Township  Joint or Infill C  WABLE WILL BE A OR A  LO  39.8	Section   Township   Range	Section Township Range 1.0t Idn  4 22-S 37-E  Bottom Hole Lo  Section Township Range Lot Idn  Joint or Infill Consolidation Code On  WABLE WILL BE ASSIGNED TO THIS OR A NON-STANDARD UN  LOT 3  Joint of Infill Consolidation Code On  RANGE ASSIGNED TO THIS OR A NON-STANDARD UN  LOT 3  LOT 3  LOT 3  LAT.=32*25*22.13"	H CORRIGORPO OPERATOR NAME APACHE CORPO Surface Local Section Township Range Lot Idn Feet from the 1890  Bottom Hole Location If Difference Digital Properties of the Infill Consolidation Code Order No.  WABLE WILL BE ASSIGNED TO THIS COMPLETION IN OR A NON-STANDARD UNIT HAS BEEN LOT 3 LOT 2    Comparison of the Infill Consolidation Code	H CORRIGAN  Operator Name APACHE CORPORATION  Surface Location  Section Township Range Lot Idn Feet from the North/South line  Bottom Hole Location If Different From Surface Location  Township Range Lot Idn Feet from the North/South line  Joint or Infill Consolidation Code Order No.  VABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTEROR A NON-STANDARD UNIT HAS BEEN APPROVED BY  LOT 3 LOT 2 LOT 1  LOT 3 LOT 2 LOT 1  AND 27 NME  Y=519514.7 N  X=861375.8 E  LAT.=32'25'22.13" N	APACHE CORPORATION  Section Township Bange Lot idn Feet from the North/South line Peet from the NORTH 990  Bottom Hole Location if Different From Surface  Section Township Bange Lot idn Feet from the North/South line Peet from the North Inc Peet from the North Inc Peet from the North Inc Peet from the North/South line Peet from the North/S	APACHE CORPORATION  Surface Location  Section Township Bange Lot Idn Peet from the 1890 EAST  Bottom Hole Location if Different From Surface  Section Township Bange Lot Idn Peet from the North/South line Peet from the Rast/West line  Joint or Inful Consolidation Code Order No.  WABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDION OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION  LOT 3  LOT 2  LOT 2  LOT 1  JOHN THE DIVISION  OPERATOR CERTIFICAT  I hereby certify the the incombined have for my knowledge and billet;  LAT. = 32 25 22 .13" N  LONG. = 103 709 43.97" W  SURVEYOR CERTIFICAT  J hereby crifty that the usell location that the same to supervision and find the same to supervision. The same to supervision and find the same to supervision. Surveyord  December 12. 200 Date Surveyed  Signature  SURVEYOR CERTIFICAT  J hereby certify that the usell location that the same to supervision and find the same to supervision. The same to supervision and find the same to supervision and find the same to supervision. The same to supervision and find the same to supervision. The same to supervision and find the same to supervision. The same to supervision and find the same to supervision.	

# **APACHE CORPORATION - Permian Basin**

Individual Well Test Report

Well: CORRIGAN, H #15

Reservoir: GRAYBURG-SAN ANDR

Well Status:

ро-р

Date	BOPD	BWPD	MCFPD	Date	BOPD	<b>BWPD</b>	MCFP
7/7/2005	74	194	189	2/26/	2006 9	430	272
18/2005	74	194	189	2/27/	2006 11	464	276
19/2005	57	155	189	3/4/2	2006 11	465	266
20/2005	63	151	194	3/8/	2006 11	482	269
21/2005	64	166	228	3/13/	2006 15	555	286
22/2005	65	163	229	3/15/	2006 13	502	318
24/2005	77	183	261	3/27/	2006 11	450	268
25/2005	56	140	207	4/4/	2006 14	542	310
26/2005	57	144	201	4/8/	2006 15	583	310
30/2005	56	166	199	4/13/2	2006 12	513	314
31/2005	50	134	192	5/5/	2006 12	460	330
/2/2005	46	131	199	5/10/	2006 31	710	520
/4/2005	40	119	200	5/11/	2006 28	625	495
/6/2005	40	120	200	5/14/	2006 19	580	479
/7/2005	36	110	180	5/16/	2006 18	556	472
/8/2005	37	126	201	5/17/	2006 18	582	474
/9/2005	31	109	173	5/20/	2006 15	494	468
0/2005	33	125	202	5/21/	2006 15	541	467
1/2005	26	97	159	5/22/	2006 14	504	461
3/2005	28	114	182	5/23/	2006 15	526	463
5/2005	28	109	169	5/27/	2006 15	560	464
6/2005	24	101	60	6/3/	2006 14	502	446
7/2005	25	109	174	6/4/	2006 14	490	446
17/2005	16	220	164	6/8/	2006 13	508	441
14/2005	14	201	159	6/13/	2006 13	500	330
14/2005	13	199	141	6/17/	2006 12	469	310
23/2005	11	201	139	6/18/	2006 13	496	429
25/2005	20	35	169	6/19/	2006 13	498	430
29/2005	13	31	211	6/20/	2006 14	540	438
14/2006	18	764	299	6/25/	2006 11	514	250
18/2006	16	730	278	L			
25/2006	11	666	341				
29/2006	14	613	293				
14/2006	3	436	145				
20/2006	6	511	159				
24/2006	13	512	292				
25/2006	8	500	290				

# H. CORRIGAN #15

# Allocation Based on Subtraction Method of Tests

Grayburg San Andres	<u>Test Date</u> 11/23/2005 5/10/2006	11 20 31	<u>%</u> 35 <u>65</u> 100	MCF 139 381 <b>520</b>	% 27 <u>73</u> <b>100</b>	<u>BW</u> 201 509 <b>710</b>	<u>%</u> 28 <u>72</u> <b>100</b>	GOR 12,636 19,050 <b>16,774</b>
San Andres Subtraction								
Grayburg/San Andres Combined	5/10/2006	31		520		710		
Minus Grayburg Only	11/23/2005	11		139_		201	_	
San Andres		20		381		509	}	

Attachment C-107A H. Corrigan No. 15 Well Offset Operators

BEC Corporation P.O. Box 1392 Midland, TX 79702

Chesapeake Operating, Inc. P.O. Box 11050 Midland, TX 79702-8050

Range Operating New Mexico, Inc. 777 Main Street
Suite 800
Fort Worth, TX 76102

Zia Energy, Inc. 2203 Timberloch Place, Suite 229 The Woodlands, TX 77380



July 14, 2006

Telephone (918) 491-4900 WWW.APACHECORP.COM

BEC Corporation P.O. Box 1392 Midland, TX 79702

Re:

Downhole Commingle the Apache Corporation

H. Corrigan No. 15 Well Section 4, T 22S, R 37E Lea County, New Mexico

Apache Corporation has submitted an application to Downhole Commingle (C-107A) production for the referenced well. Apache Corporation intends to commingle production from the *Penrose Skelly; Grayburg* and *Eunice; San Andres* pools. As required by the Oil Conservation Division (OCD), attached to this letter is a copy of the application submitted to the OCD for notification.

If you have any questions, please do not hesitate to contact me.

Regards,

Elaine Linton

Engineering Technician

918.491.5362

cc:

 ✓ New Mexico Oil Conservation Division Attn: William Jones 1220 South St. Francis Drive Santa Fe, NM 87505



July 14, 2006

Telephone (918) 491-4900 WWW.APACHECORP.COM

Chesapeake Operating, Inc. P.O. Box 11050 Midland, TX 79702-8050

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Elaine Linton

**Engineering Technician** 

918.491.5362

cc:

 ✓ New Mexico Oil Conservation Division Attn: William Jones
 1220 South St. Francis Drive Santa Fe, NM 87505



July 14, 2006

Telephone (918) 491-4900 WWW.APACHECORP.COM

Range Operating New Mexico, Inc. 777 Main Street
Suite 800
Fort Worth, TX 76102

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Elaine Linton

**Engineering Technician** 

918.491.5362

cc:

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



July 14, 2006

Telephone (918) 491-4900 WWW.APACHECORP.COM

Zia Energy, Inc. 2203 Timberloch Place, Suite 229 The Woodlands, TX 77380

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Elaine Linton

**Engineering Technician** 

918.491.5362

CC

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