

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

DHC-3654

Apache Corporation

6120 South Yale, Suite 1500 Tulsa, OK 74136-4224

Operator

Address

New Mexico S State

43

L, Sec 2, T 22S, R 37E

Lea

Lease

Well No.

Unit Letter-Section-Township-Range

County

OGRID No. 00873 Property Code 34816 API No. 30-025-37335 Lease Type: ☐ Federal ☒ State ☐ Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	Penrose Skelly; Grayburg		UNDES Eunice; San Andres, South
Pool Code	50350		24170
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	3562 - 3805' perforated		3914 - 4296' perforated
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		33.6° API
Producing, Shut-In or New Zone	Producing		Producing w/ intent 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 estimates and supporting data.)	Date: 12/29/2005 Rates: 45BO/118MCF/267BW	Date: Rates:	Date: 01/10/2006 Rates: 45BO/192MCF/333BW
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 50 % 38 %	Oil Gas % %	Oil Gas 50 % 62 %

ADDITIONAL DATA

Are all working, royalty and overriding royalty interests identical in all commingled zones?
If not, have all working, royalty and overriding royalty interest owners been notified by certified mail?

Yes ☒ No ☐
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 Elaine Linton TITLE Engineering Technician DATE 02/21/2006

TYPE OR PRINT NAME Elaine Linton TELEPHONE NO. () (918)491-5362

E-MAIL ADDRESS elaine.linton@apachecorp.com

DATE IN <u>2/22/06</u>	SUSPENSE	ENGINEER <u>WILL</u>	LOGGED IN <u>2/23/06</u>	TYPE <u>DHC</u>	APP NO. <u>PTD506-05439190</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



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.

Elaine Linton

Print or Type Name

Elaine Linton

Signature

Engineering Technician

Title

2/21/2006

Date

elaine.linton@apachecorp.com
 e-mail Address

2006 FEB 22 PM 1 15

TWO WARREN PLACE / SUITE 1500 / 6120 SOUTH YALE / TULSA, OK 74136-4224



WWW.APACHECORP.COM

(918) 491-4900

(918) 491-4853 (FAX)

(918) 491-4854 (FAX)

February 21, 2006

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

Re: *Downhole Commingle the Apache Corporation
New Mexico S State No. 43 Well
Section 2, T 22S, R 37E
Lea County, New Mexico*

2006 FEB 22 PM 1:15

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 Eunice; San Andres, South* pools. All interests are identical in both pools and commingling will not reduce the value of the individual pools.

Apache Corporation drilled the New Mexico S State No. 43 well in August to 2005 and perforated the *San Andres* and *Grayburg* formations. Initial completion in September 2005, was in the *Grayburg* pool which tested at 78 BOPD & 195 MCFPD declining to 45 BO & 118 MCF in December 2005. On January 5, 2006, we retrieved the RBP to test the *San Andres*. Initial test of commingled production is 90 BOPD & 310 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.

Apache Corporation has made notification of the proposed commingling to the State Land Office by copy of this letter with Form C-107A and attachments.



6120 SOUTH YALE / SUITE 1500 / TULSA, OK 74136-4224

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

Should you require any additional information concerning this application, please do not hesitate to contact me or Rick Crist 918.491.4800.

Regards,

A handwritten signature in cursive script that reads "Elaine Linton".

Elaine Linton
Engineering Technician
918.491.5362

cc:

New Mexico State Land Office
Attn: Amy Atchley
P.O. Box 1148
Santa Fe, New Mexico 87504-1148

New Mexico Oil Conservation Division
Attn: Donna Mull
1625 N. French Drive
Hobbs, NM 88240

NEW MEXICO STATE S #43

Allocation Based on Subtraction Method of Tests

	<u>Test Date</u>	<u>BO</u>	<u>%</u>	<u>MCF</u>	<u>%</u>	<u>BW</u>	<u>%</u>	<u>GOR</u>
Grayburg	12/29/2005	45	50	118	38	267	45	2,622
San Andres	1/10/2006	45	50	192	62	333	56	4,267
		90	100	310	100	600	100	3,444

San Andres Subtraction

Grayburg/San Andres Combined	1/10/2006	90		310		600		
Minus Grayburg Only	12/29/2005	45		118		267		
San Andres		45		192		333		

APACHE CORPORATION - Permian Basin

Individual Well Test Report

Well: NEW MEXICO STATE /S/ #43

Reservoir: GRAYBURG-SAN ANDR

Well Status: po-p

<i>Date</i>	<i>BOPD</i>	<i>BWPD</i>	<i>MCFPD</i>	<i>Date</i>	<i>BOPD</i>	<i>BWPD</i>	<i>MCFPD</i>
9/18/2005	67	388	160				
9/19/2005	77	240	162				
9/20/2005	78	230	195				
10/8/2005	45	281	159				
10/9/2005	52	281	151				
10/16/2005	17	289	145				
10/17/2005	50	254	138				
11/9/2005	31	271	125				
11/14/2005	70	104	68				
12/29/2005	45	267	118				
1/10/2006	90	600	310				
1/12/2006	88	426	419				
1/27/2006	80	370	312				
1/31/2006	40	418	271				
2/4/2006	73	409	279				
2/9/2006	66	415	290				

Attachment C-107A
New Mexico S State No. 43
Offset Operators

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

Chevron USA Inc.
15 Smith Road
Midland, TX 79705

Oxy USA Inc.
P.O. Box 50205
Midland, TX 79710-0250

Targa Midstream Services
1000 Louisiana, Suite 5800
Houston, TX 77002

TWO WARREN PLACE / SUITE 1500 / 6120 SOUTH YALE / TULSA, OK 74136-4224



WWW.APACHECORP.COM

(918) 491-4900
(918) 491-4853 (FAX)
(918) 491-4854 (FAX)

February 21, 2006

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

Re: *Downhole Commingle the Apache Corporation
New Mexico S State No. 43 Well
Section 2, T 22S, R 37E
Lea County, New Mexico*

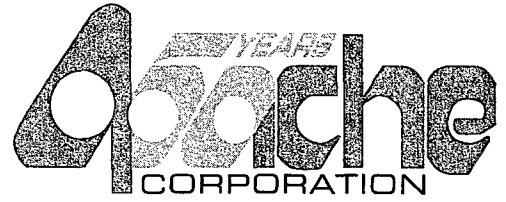
Apache Corporation has submitted an application to Downhole Commingle (C-107A) production for the referenced well. Apache Corporation intends to commingle production from the *Penrose Skelly; Grayburg and Eunice; San Andres, South* pools. As required by the Oil Conservation Division (OCD), attached to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

TWO WARREN PLACE / SUITE 1500 / 6120 SOUTH YALE / TULSA, OK 74136-4224



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February 21, 2006

Targa Midstream Services
1000 Louisiana, Suite 5800
Houston, TX 77002

Re: *Downhole Commingle the Apache Corporation
New Mexico S State No. 43 Well
Section 2, T 22S, R 37E
Lea County, New Mexico*

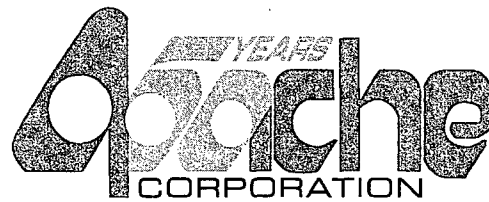
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Elaine Linton
Engineering Technician
918.491.5362

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WWW.APACHECORP.COM

(918) 491-4900

(918) 491-4853 (FAX)

(918) 491-4854 (FAX)

February 21, 2006

Oxy USA Inc.
P.O. Box 50205
Midland, TX 79710-0250

Re: *Downhole Commingle the Apache Corporation
New Mexico S State No. 43 Well
Section 2, T 22S, R 37E
Lea County, New Mexico*

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Regards,

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Elaine Linton
Engineering Technician
918.491.5362

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WWW.APACHECORP.COM

(918) 491-4900
(918) 491-4853 (FAX)
(918) 491-4854 (FAX)

February 21, 2006

Chevron USA Inc.
15 Smith Road
Midland, TX 79705

Re: *Downhole Commingle the Apache Corporation
New Mexico S State No. 43 Well
Section 2, 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, South* 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

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 III
1000 Rio Brazos Rd., Aztec, NM 87410

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 IV
1220 S. ST. FRANCIS DR., SANTA FE, NM 87505

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-025-37335	Pool Code 24170	Pool Name Eunice; San Andres, South
Property Code 34816	Property Name NEW MEXICO STATE S	Well Number 43
OGRID No. 00873	Operator Name APACHE CORPORATION	Elevation 3372'

Surface Location

UL or lot No. L	Section 2	Township 22-S	Range 37-E	Lot Idn	Feet from the 2140	North/South line SOUTH	Feet from the 950	East/West line WEST	County LEA
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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 80	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

LOT 4	LOT 3	LOT 2	LOT 1
39.78 AC	39.76 AC	39.76 AC	39.74 AC
GEODETIC COORDINATES NAD 27 NME Y=518357.8 N X=868603.4 E LAT.=32°25'09.90" N LONG.=103°08'19.81" W			
950'			
2140'			

OPERATOR CERTIFICATION

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

Elaine Linton
Signature
Elaine Linton
Printed Name
Engineering Technician
Title
February 6, 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 supervision, and that the same is true and correct to the best of my belief.

DECEMBER 17, 2004

Date Surveyed DEL
Signature & Seal of Professional Surveyor
GARY EDISON 12/28/04
04.11.1666
Certificate No. GARY EDISON 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

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 FE, NM 87505

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-025-37335	Pool Code 50350	Pool Name Penrose Skelly; Grayburg
Property Code 34816	Property Name NEW MEXICO STATE S	Well Number 43
OGRID No. 00873	Operator Name APACHE CORPORATION	Elevation 3372'

Surface Location

UL or lot No. L	Section 2	Township 22-S	Range 37-E	Lot Idn	Feet from the 2140	North/South line SOUTH	Feet from the 950	East/West line WEST	County LEA
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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.						

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OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

LOT 4 39.78 AC	LOT 3 39.76 AC	LOT 2 39.76 AC	LOT 1 39.74 AC
GEODETC COORDINATES NAD 27 NME Y=518357.8 N X=868603.4 E LAT.=32°25'09.90" N LONG.=103°08'19.81" W			
950' 2140'			
OPERATOR CERTIFICATION I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief. Signature <u>Elaine Linton</u> Elaine Linton Printed Name Engineering Technician Title February 6, 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 supervision, and that the same is true and correct to the best of my belief. DECEMBER 17, 2004 Date Surveyed Signature & Seal of Professional Surveyor GARY EDSON 04.11.1666 Certificate No. GARY EDSON 12641			