

February 10, 2000

DHC-2675

Attn: David Catanach
State of New Mexico - Oil Conservation Division
2040 S. Pacheco
Santa Fe, New Mexico 87505

**Re: Application to Downhole Commingle
Owen 'B' No. 8
Penrose; Skelly (Grayburg) Pool (50350) and Eunice; San Andres Pool (24150)
Sec. 34, T21S - R37E
Lea County, New Mexico**

Apache Corporation would like to request administrative approval to downhole commingle the production from the referenced pools in our Owen 'B' # 8 well.

To support this request we submit the following:

- 1) New Mexico - OCD Form C-107A
- 2) New Mexico - OCD Form C-102 for Penrose; Skelly (Grayburg) Pool
- 3) New Mexico - OCD Form C-102 for Eunice; San Andres Pool
- 4) Production Curve for the Owen 'B' # 7 in the Penrose; Skelly (Grayburg) Pool
- 5) Production Curve for offset well Mark Owen # 1 in the Penrose; Skelly (Grayburg) Pool
- 6) Production Curve for offset well E O Carson # 23 in the Eunice; San Andres Pool
- 7) Allocation formula is based on current production

- 8) Copy of letter sent (by Certified Mail) to Offset operators within one-half mile of the Owen 'B' # 8
- 9) Well Bore Diagrams of current completion and proposed completion

If you have any questions or require additional information regarding this application, please contact me at 713-296-6338. Thank you.

Sincerely,

APACHE CORPORATION



Debra J. Anderson
Sr. Engineering Technician

Attachments

cc: New Mexico Oil Conservation Division
District I
1625 N. French Drive
Hobbs, New Mexico 88240

DISTRICT I
1625 N. French Drive, Hobbs, NM 88240
DISTRICT II
811 South First, Artesia, NM 88210
DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410
DISTRICT IV
2040 S. Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department
OIL CONSERVATION DIVISION
2040 S. Pacheco
Santa Fe, New Mexico 87505-6429

Form C-107A
Revised August 1999
APPROVAL PROCESS:
☒ Administrative
☐ Hearing
EXISTING WELLBORE
☒ Yes ☐ No

APPLICATION FOR DOWNHOLE COMMINGLING

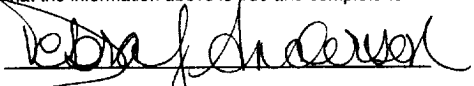
APACHE CORPORATION 2000 POST OAK BLVD., SUITE 100, HOUSTON, TEXAS 77056-4400
Operator Address
OWEN 'B' 8 N - 34 - 21S - 37E LEA
Lease Well No. Unit Ltr.-Sec-Twp-Rgn County
Spacing Unit Lease Types: (one or more)

OGRID NO. 000873 Property Code 22879 API No. 30-025-34774 ☐ Federal ☐ State ☒ Fee

The following facts are submitted in support of downhole commingling:	Upper Zone	Intermediate Zones	Lower Zone
1. Pool Name and Pool Code	PENROSE; SKELLY (GRAYBURG) 50350		EUNICE; SAN ANDRES 24150
2. Top and Bottom of Pay Section (Perforations)	3688 - 3763		3826 - 4022
3. Type of production (Oil or Gas)	OIL		OIL
4. Method of Production (Flowing or Artificial Lift)	ARTIFICIAL LIFT		ARTIFICIAL LIFT
5. Bottomhole Pressure Oil Zones - Artificial Lift: Estimated Current Gas & Oil - Flowing: Measured Current All Gas Zones: Estimated or Measured Original	a. (Current) 1150 b. (Original)	a. b.	a. 1350 b.
6. Oil Gravity (°API) or Gas BTU Content	36.8		37.1
7. Producing or Shut-In?	PRODUCING		SHUT-IN
Production Marginal? (Yes or No) ° If Shut-In, give 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 ° If Producing, give date and oil/gas/water rates of recent test (within 80 days)	YES Date: Rates: Date: 2/4/00 Rates: 43 x 143 x 120	Date: Rates: Date: Rates:	YES Date: 1/9/00 Rates: 19 x 23 x 55 Date: Rates:
8. Fixed Percentage Allocation Formula - % for each zone (total of %'s to equal 100%)	Oil: Gas: 68% 86%	Oil: Gas: % %	Oil: Gas: 31% 14%

9. If allocation formula is based upon something other than current or past production, or is based upon some other method. submit attachments with supporting data and / or explaining method and providing rate projections or other required data.
10. Are all working, overriding and royalty interests identical in all commingled zones? ☒ Yes ☐ No
If not, have all working, overriding and royalty interests been notified by certified mail? ☐ Yes ☐ No
11. Will cross-flow occur? ☐ Yes ☒ No If yes, are fluids compatible, will the formations be undamaged, will any cross-flow production be recovered and will the allocation formula be reliable. ☐ Yes ☐ No (If No, attach explanation)
12. Are all produced fluids from all commingled zones compatible with each other? ☒ Yes ☐ No
13. Will the value of production be decreased by commingling? ☐ Yes ☒ No (If Yes, attach explanation)
14. If this well is on or communitized with state or federal lands, either the Commissioner of Public Lands or the United States Bureau of Land Management has been notified in writing of this application. ☐ Yes ☐ No
15. NMOC Reference Cases for Rule 303(C) Exceptions: Order No. s _____
16. 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, overriding, and royalty interests for uncommon interest cases.
° Any additional statements, data, or documents required to support commingling.

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

SIGNATURE  TITLE Sr. Engineering Technician DATE 2/10/00
TYPE OR PRINT NAME Debra J. Anderson TELEPHONE NO. 713-296-6338

DISTRICT I
P.O. Box 1060, Hobbs, NM 88241-1060

DISTRICT II
P.O. Drawer 10, Artesia, NM 88211-0710

DISTRICT III
1000 Rio Branson Rd., Artesia, NM 87410

DISTRICT IV
P.O. Box 2088, Santa Fe, N.M. 87504-2088

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised February 10, 1994
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025- 34774	Pool Code 50350	Pool Name Penrose; Skelly (Grayburg)
Property Code 22879	Property Name OWEN B	Well Number 8
OGED No. 873	Operator Name APACHE CORPORATION	Elevation 3435

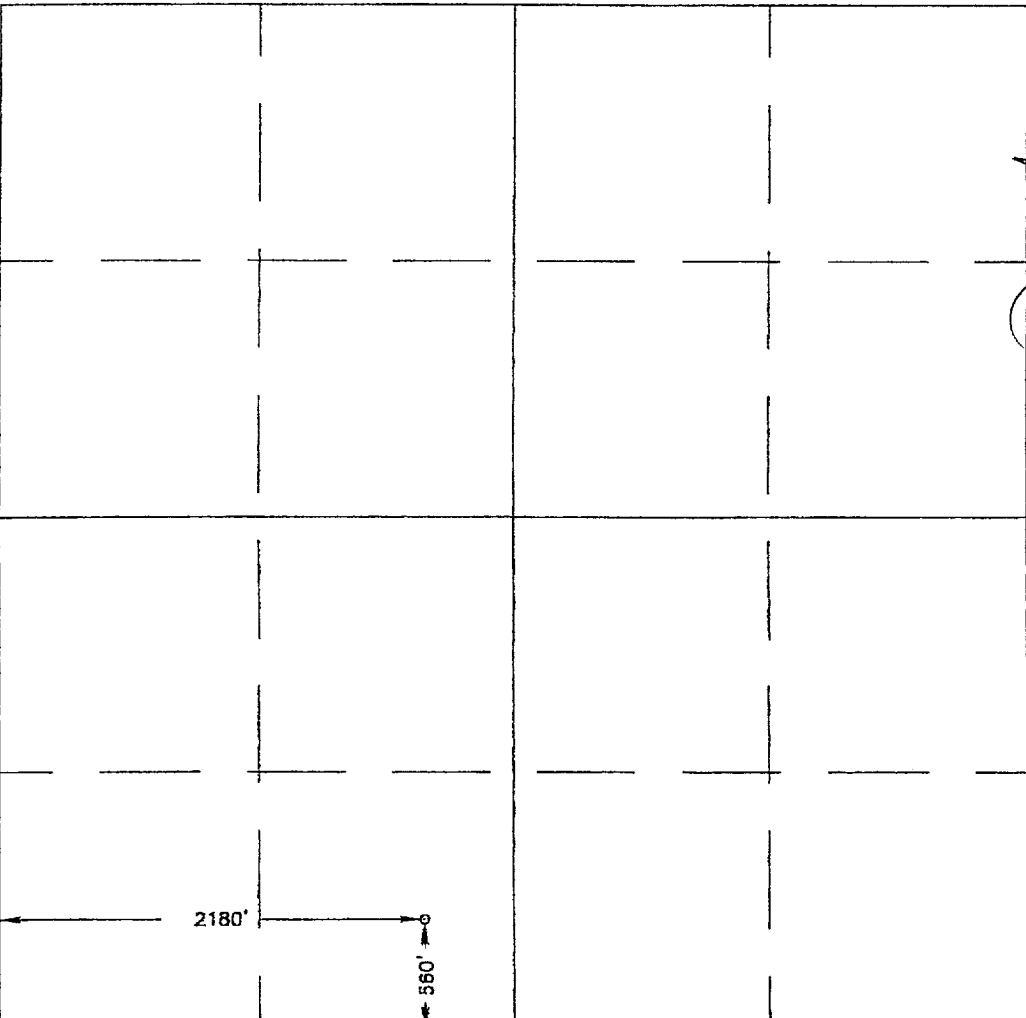
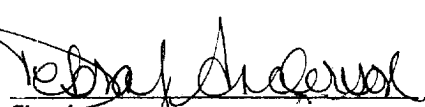
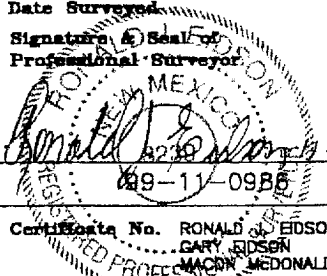
Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	34	21 S	37 E		560	SOUTH	2180	WEST	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

	OPERATOR CERTIFICATION I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.  Signature Debra J. Anderson Printed Name Sr. Engineering Technician Title 02/07/00 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. NOVEMBER 19, 1999 Date Surveyed Signature & Seal of Professional Surveyor  Certification No. RONALD J. EDSON 3238 GARY EDSON 12641 MAGNUS McDONALD 12185

DISTRICT I

P.O. Box 1980, Hobbs, NM 88241-1980

State of New Mexico

Energy, Minerals and Natural Resources Department

Form C-102

Revised February 10, 1994

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

DISTRICT II

P.O. Drawer 220, Artesia, NM 88211-0710

DISTRICT III

1800 Rio Brancos Rd., Aztec, NM 87410

DISTRICT IV

P.O. Box 2088, Santa Fe, N.M. 87504-2088

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025- 34774	Pool Code 24150	Pool Name Eunice; San Andres
Property Code 22879	Property Name OWEN B	Well Number 8
OGED No. 873	Operator Name APACHE CORPORATION	Elevation 3435

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	34	21 S.	37 E		560	SOUTH	2180	WEST	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.						

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>OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>Debra J. Anderson</i> Signature</p> <p>Debra J. Anderson Printed Name</p> <p>Sr. Engineering Technician Title</p> <p>01/20/2000 Date</p>	
	<p>SURVEYOR CERTIFICATION</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>NOVEMBER 19, 1999</p> <p>Date Surveyed _____ LMP</p> <p>Signature & Seal of Professional Surveyor</p> <p><i>Ronald J. Euson</i> RONALD J. EUSON 8238 89-11-0985</p> <p>Certificate No. RONALD J. EUSON 3238 GARY RIDSON 12641 WACON McDONALD 12185</p>	

10³
10³
Lease: OWEN B (7)

Dwights
02/08/00

Retrieval Code: 150,025,0253455450350

10³

10²
10²
10²

10²

10
10
10

10

1
1
1

1

1998

2000

Oil (bbl/day)

County: LEA

F.P. Date: 04/99

Gas (mcf/day)

Water (bbl/day)

Field: PENROSE SKELLY (GRAYBU

Oil Cum: 4619 bbl

Reservoir: GRAYBURG

Gas Cum: 23.47 mmcf

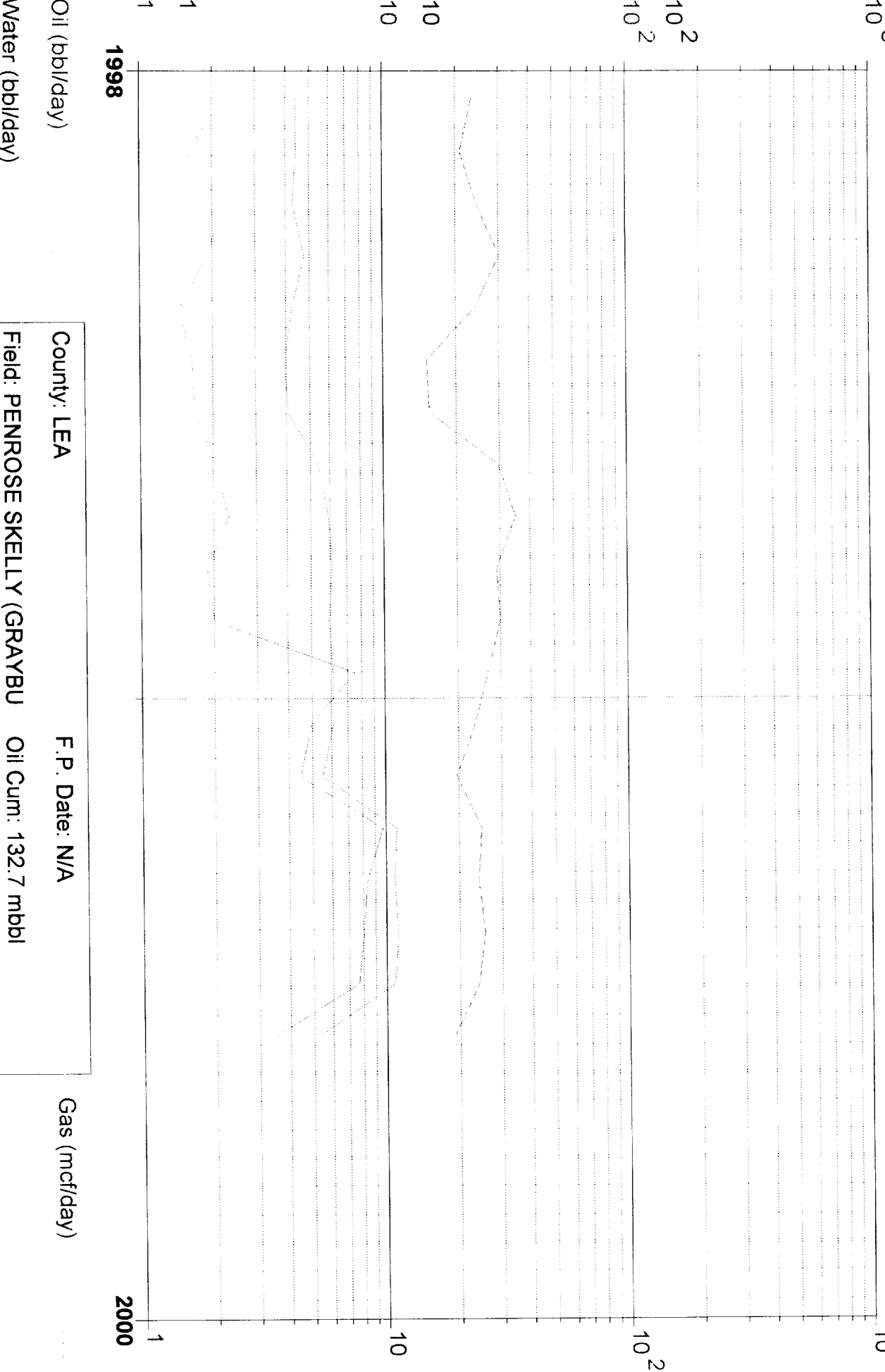
Operator: APACHE CORP

Location: 34K 21S 37E

10³
10³
Lease: MARK OWEN (1)

Dwights
02/08/00

Retrieval Code: 150,025,21S37E34J00GB



County: LEA	F.P. Date: N/A
Field: PENROSE SKELLY (GRAYBU	Oil Cum: 132.7 mbbl
Reservoir: GRAYBURG	Gas Cum: 386.4 mmcf
Operator: CHEVRON U S A INC	Location: 34J 21S 37E

10³
10³ Lease: E O CARSON (000023)

Dwights
02/08/00

Retrieval Code: 250,025,21S37E33GPKSA

10³
10³

10²
10²

10²
10²

10
10

10
10

1
1

1
1

1998

Oil (bbl/day)

Water (bbl/day)

County: LEA

Field: EUNICE (SAN ANDRES) SA

Reservoir: SAN ANDRES

Operator: TITAN RESOURCES I INC

F.P. Date: N/A

Oil Cum: 36.47 mbbl

Gas Cum: 652.3 mmcf

Location: 33G 21S 37E

Gas (mcf/day)

2000

1

10

10²

10³

**Owen 'B' No. 8 Downhole Commingle Application
Offset Operators**

Chevron USA Inc.
P O Box 1150
Midland, Texas 79702
Certified Rcpt. # Z 142 208 184

Exxon Co. USA
P O Box 4707
Houston, Texas 77210
Certified Rcpt. # Z 142 208 185

John H Hendrix Corporation
110 N. Marienfeld, Suite 400
Midland, Texas 79702-3040
Certified Rcpt. # Z 142 208 186

2000 POST OAK BOULEVARD / SUITE 100 / HOUSTON, TEXAS 77056-4400


CORPORATION

(713) 296-6000

February 10, 2000

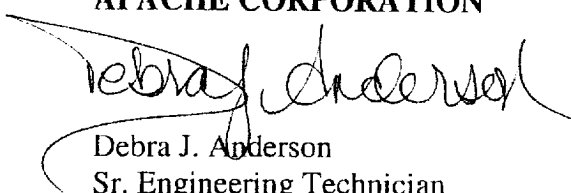
Offset Operators

**Re: Application to Downhole Commingle
Owen 'B' No. 8
Penrose; Skelly (Grayburg) Pool (50350) and Eunice; San Andres Pool (24150)
Sec. 34, T21S - R37E
Lea County, New Mexico**

Attached please find a copy of an Application to Downhole Commingle production from the referenced pools in the Owen 'B' # 8 well that Apache Corporation has filed with the New Mexico Oil Conservation Division. If you have an objection to this application, you must notify the OCD in writing within 20 days from the date of this letter. Thank you.

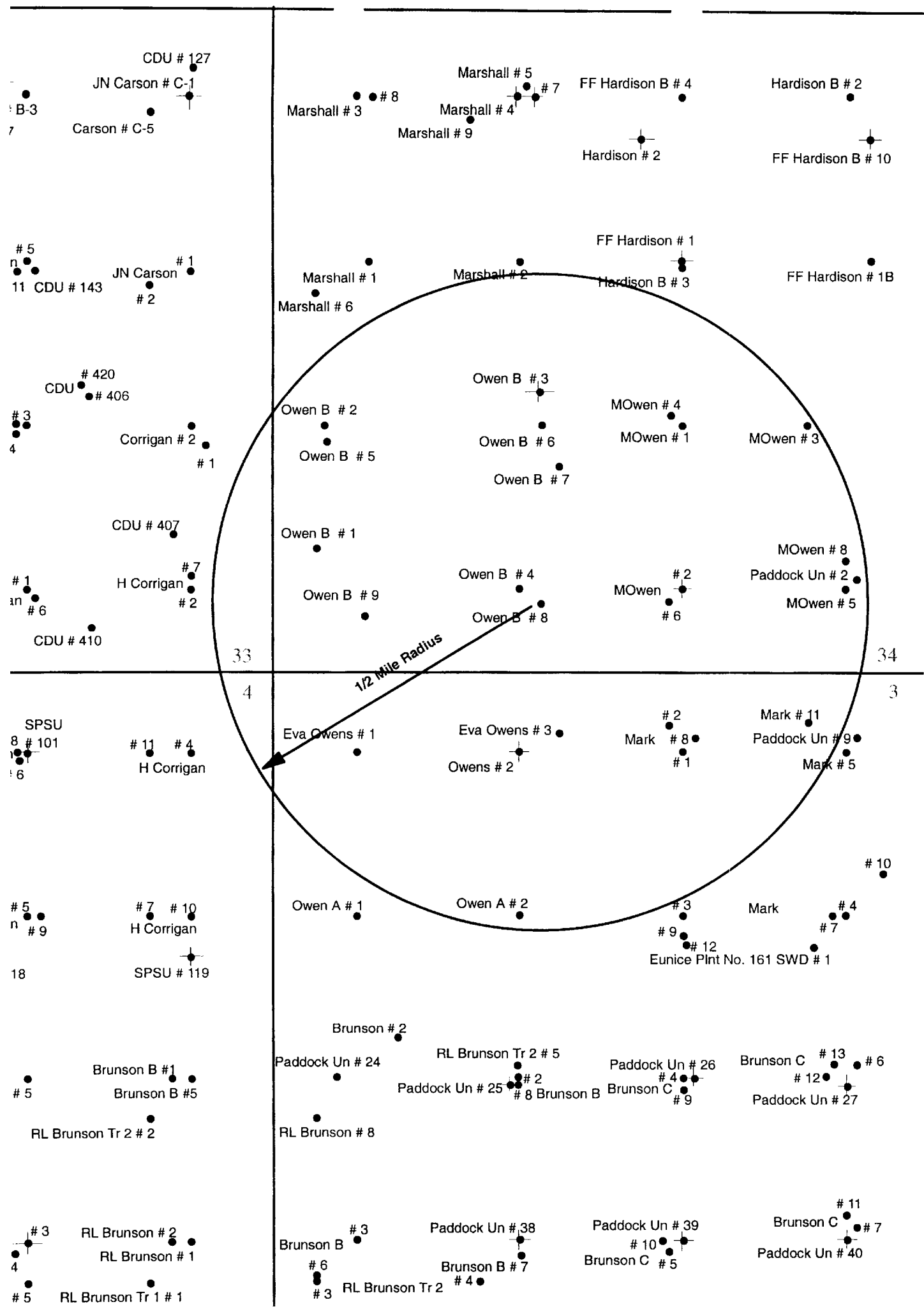
Sincerely,

APACHE CORPORATION


Debra J. Anderson
Sr. Engineering Technician

Attachments

cc: New Mexico Oil Conservation Division
2040 S. Pacheco
Santa Fe, New Mexico 87505



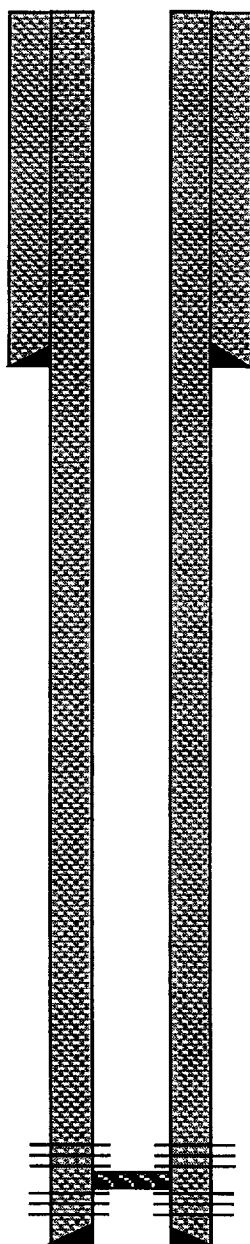
Well: Owen 'B' # 8
Pool: Penrose; Skelly (Grayburg)
Location: 560' FSL & 2180' FWL
Unit N, Section 34, Township 21S, Range 37E
API#: 30-025-34774

Current Status: Active Oil
Penrose; Skelly (Grayburg)

Penrose; Skelly (Grayburg) Perfs:
3688-92, 3712-34, 42-63
4" - 191 Holes

RBP @ 3800'

Eunice; San Andres Perfs:
3826-38, 88-92, 3952-54, 86-88,
4011-22
4" - 129 Holes



Surface Casing: 12-1/4" Hole
8-5/8" 24# CSA 1103'
Cement w / 435 sx
Circulated to Surface

Production Casing: 7-7/8" Hole
5-1/2" 17# CSA 4050'
Cement w / 725 sx
Circulated to Surface

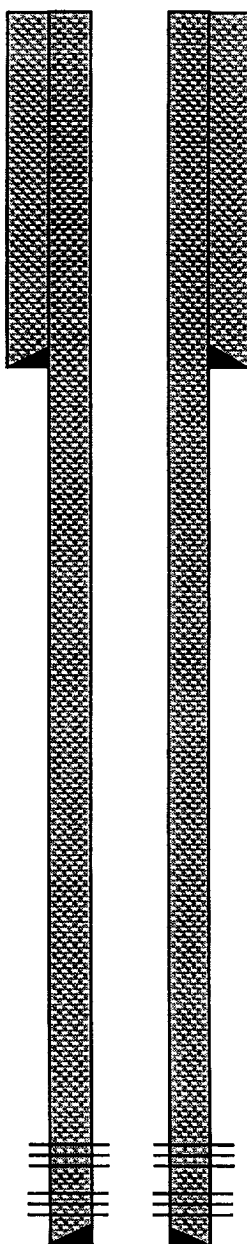
TD @ 4050'
PBTD @ 4043'

Well: Owen 'B' # 8
Pool: Penrose; Skelly (Grayburg) / Eunice; San Andres
Location: 560' FSL & 2180' FWL
Unit N, Section 34, Township 21S, Range 37E
API#: 30-025-34774

Proposed Status: Active Oil
Downhole Commingle
Penrose; Skelly (Grayburg) &
Eunice; San Andres Pools

Penrose; Skelly (Grayburg) Perfs:
3688-92, 3712-34, 42-63
4" - 191 Holes

Eunice; San Andres Perfs:
3826-38, 88-92, 3952-54, 86-88,
4011-22
4" - 129 Holes



Surface Casing: 12-1/4" Hole
8-5/8" 24# CSA 1103'
Cement w / 435 sx
Circulated to Surface

Production Casing: 7-7/8" Hole
5-1/2" 17# CSA 4050'
Cement w / 725 sx
Circulated to Surface

TD @ 4050'
PBD @ 4043'