

DATE IN <u>2/14/00</u>	SUSPENSE <u>3/6/00</u>	ENGINEER <u>DC</u>	LOGGED <u>RN</u>	TYPE <u>DHC</u>
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ABOVE THIS LINE FOR DIVISION USE ONLY

**NEW MEXICO OIL CONSERVATION DIVISION**  
- Engineering Bureau -

*267*

**ADMINISTRATIVE APPLICATION COVERSHEET**

THIS COVERSHEET IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS

Application Acronyms:

[NSP-Non-Standard Proration Unit] [NSL-Non-Standard Location]  
[DD-Directional Drilling] [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]

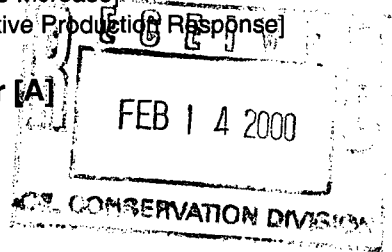
**TYPE OF APPLICATION - Check Those Which Apply for [A]**

[A] Location - Spacing Unit - Directional Drilling  
☐ NSL ☐ NSP ☐ DD ☐ 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



[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 if 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]

**INFORMATION / DATA SUBMITTED IS COMPLETE - Statement of Understanding**

I hereby certify that I, or personnel under my supervision, have read and complied with all applicable Rules and Regulations of the Oil Conservation Division. Further, I assert that the attached application for administrative approval is accurate and complete to the best of my knowledge and where applicable, verify that all interest (WI, RI, ORRI) is common. I further verify that all applicable API Numbers are included. I understand that any omission of data, information or notification is cause to have the application package returned with no action taken.

Note: Statement must be completed by an individual with supervisory capacity.

Lee R. White

Print or Type Name

*Lee R. White*  
Signature

Engineering Manager

Title

2/10/00

Date



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

(713) 296-6000

February 10, 2000

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:

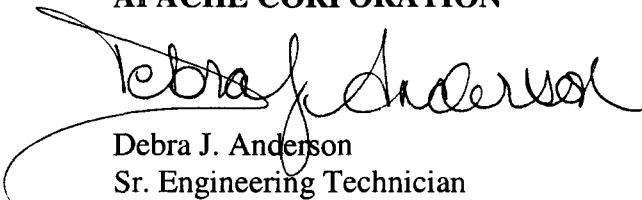
- 1) New Mexico - OCD Form C-107A
- 2) New Mexico - OCD Form C-102 for Penrose; Skelly (Grayburg) Pool
- 3) New Mexico - OCD Form C-102 for Eunice; San Andres Pool
- 4) Production Curve for the Owen 'B' # 7 in the Penrose; Skelly (Grayburg) Pool
- 5) Production Curve for offset well Mark Owen # 1 in 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: 69% Gas: 86%	Oil: % Gas: %	Oil: 31% Gas: 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 communized 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. NMOCD Reference Cases for Rule 303(C) Exceptions:

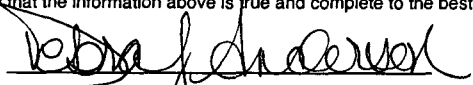
Order No.s

## 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

Certificate No.	RONALD J. EDSON	3239
	GARY EDSON	12641
	MACON McDONALD	12185

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

**DISTRICT IV**  
P.O. BOX 2025, SANTA FE, N.M. 87504-0205

Santa Fe, New Mexico 87504-2088

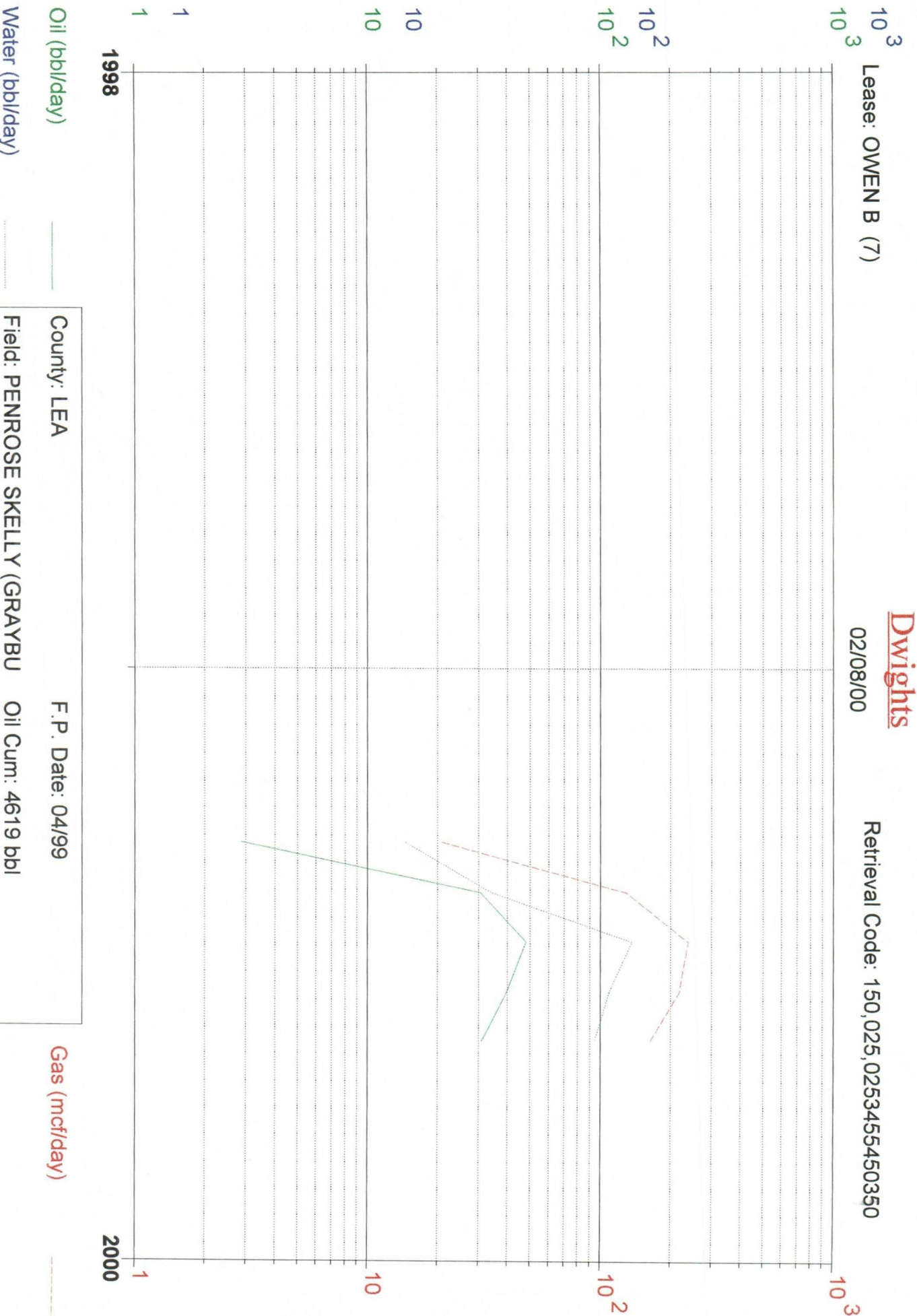
☐ AMENDED REPORT

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

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

U/L 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.						

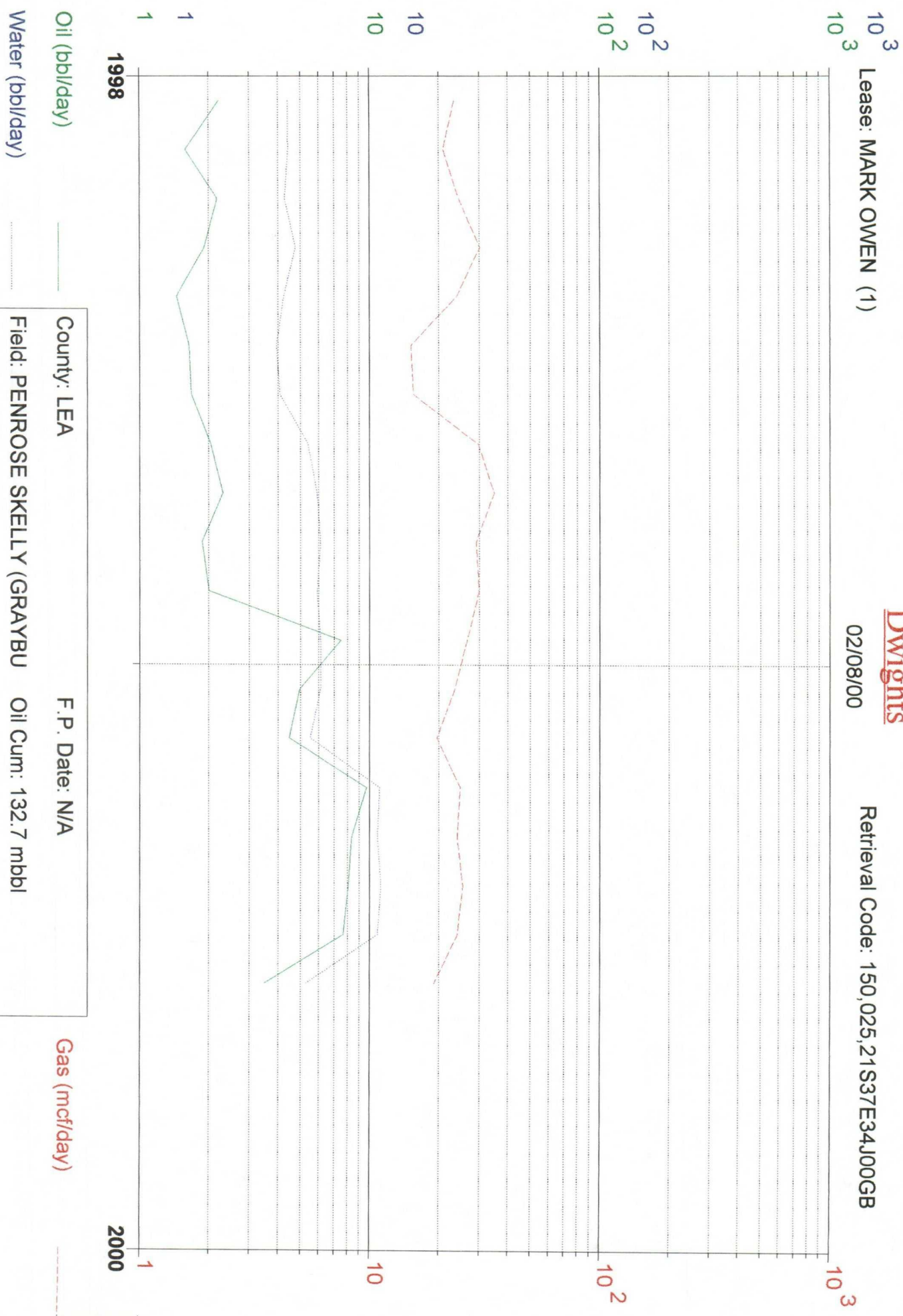
<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="width: 40%;"> <p>2180'</p> </div> <div style="width: 10%; text-align: center;"> <p>560'</p> </div> </div>	<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <p style="text-align: center; margin: 0;"><b>OPERATOR CERTIFICATION</b></p> <p style="font-size: small; margin: 5px 0;"><i>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</i></p> <div style="margin-top: 10px;"> </div> <p style="margin: 5px 0;">Debra J. Anderson</p> <p style="margin: 5px 0;">Sr. Engineering Technician</p> <p style="margin: 5px 0;">01/20/2000</p> </div> <div style="border: 1px solid black; padding: 5px;"> <p style="text-align: center; margin: 0;"><b>SURVEYOR CERTIFICATION</b></p> <p style="font-size: small; margin: 5px 0;"><i>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.</i></p> <p style="text-align: center; margin: 10px 0;">NOVEMBER 19, 1999</p> <div style="display: flex; justify-content: space-between; align-items: center;"> <div style="width: 60%;"> <p style="margin: 5px 0;">Date Surveyed</p> <p style="margin: 5px 0;">Signature &amp; Seal of Professional Surveyor</p> </div> <div style="width: 35%; text-align: right;"> <p>LMP</p> </div> </div> <div style="text-align: center; margin-top: 10px;"> </div> <div style="display: flex; justify-content: space-between; align-items: center; margin-top: 10px;"> <div style="width: 60%;"> <p style="margin: 5px 0;">Certificate No. RONALD J. EDSON</p> <p style="margin: 5px 0;">GARY EDSON</p> <p style="margin: 5px 0;">MASON McDONALD</p> </div> <div style="width: 35%; text-align: right;"> <p>3238</p> <p>12641</p> <p>12185</p> </div> </div> </div>
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County: LEA  
Field: PENROSE SKELLY (GRAYBU  
Reservoir: GRAYBURG  
Operator: APACHE CORP

F.P. Date: 04/99  
Oil Cum: 4619 bbl  
Gas Cum: 23.47 mmcf  
Location: 34K 21S 37E

Lease: MARK OWEN (1)



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



10<sup>3</sup>  
10<sup>2</sup>  
10<sup>1</sup>  
Lease: E O CARSON (000023)

**Dwights**  
02/08/00

Retrieval Code: 250,025,21S37E33GPKSA

Oil (bbl/day)  
Water (bbl/day)

1  
1

1998

10  
10

10<sup>2</sup>  
10<sup>2</sup>

10<sup>3</sup>  
10<sup>3</sup>

County: LEA

Field: EUNICE (SAN ANDRES) SA

Reservoir: SAN ANDRES

Operator: TITAN RESOURCES I INC

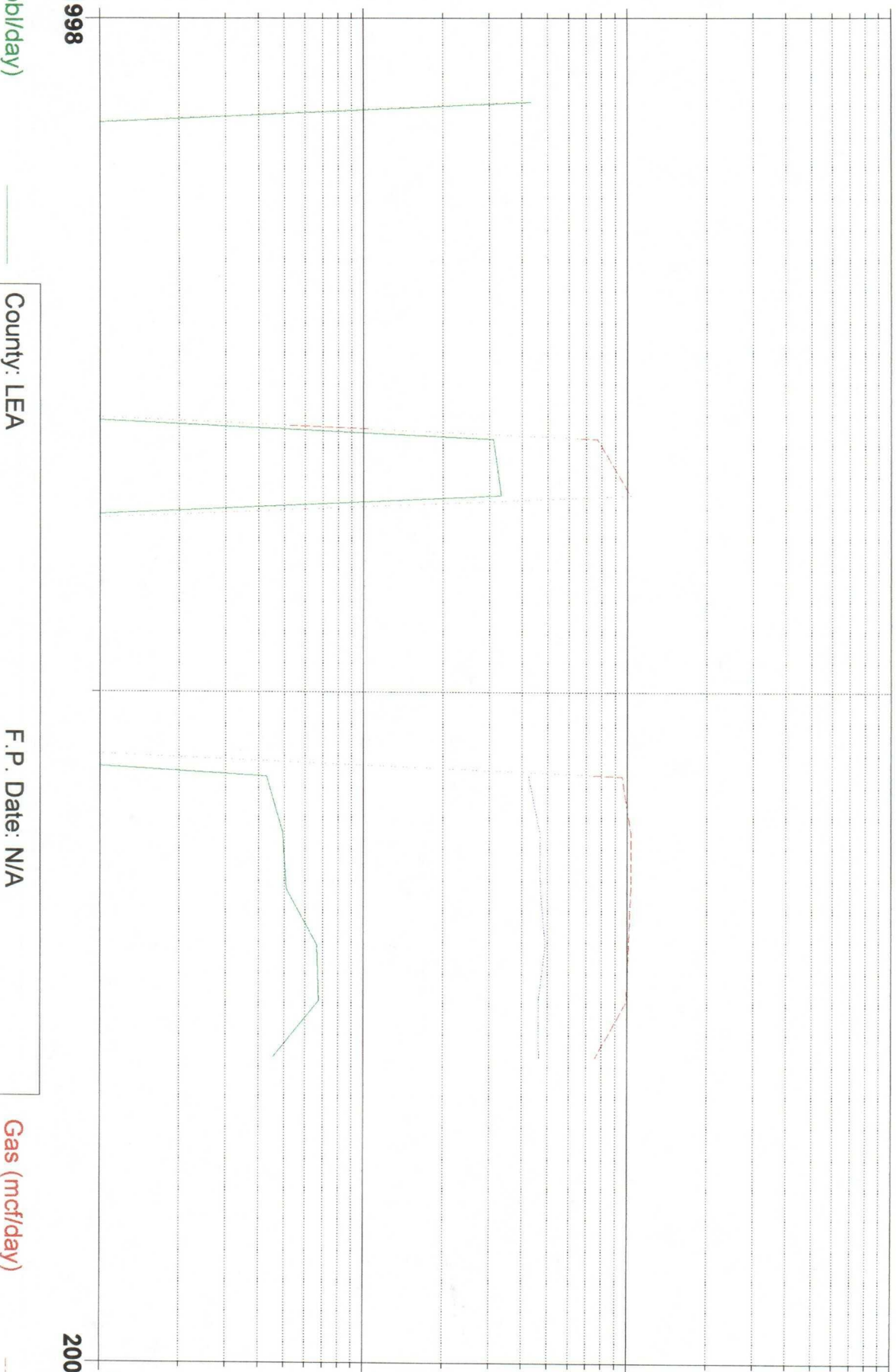
Gas (mcf/day)

2000

10

10<sup>2</sup>

10<sup>3</sup>



**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

(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,

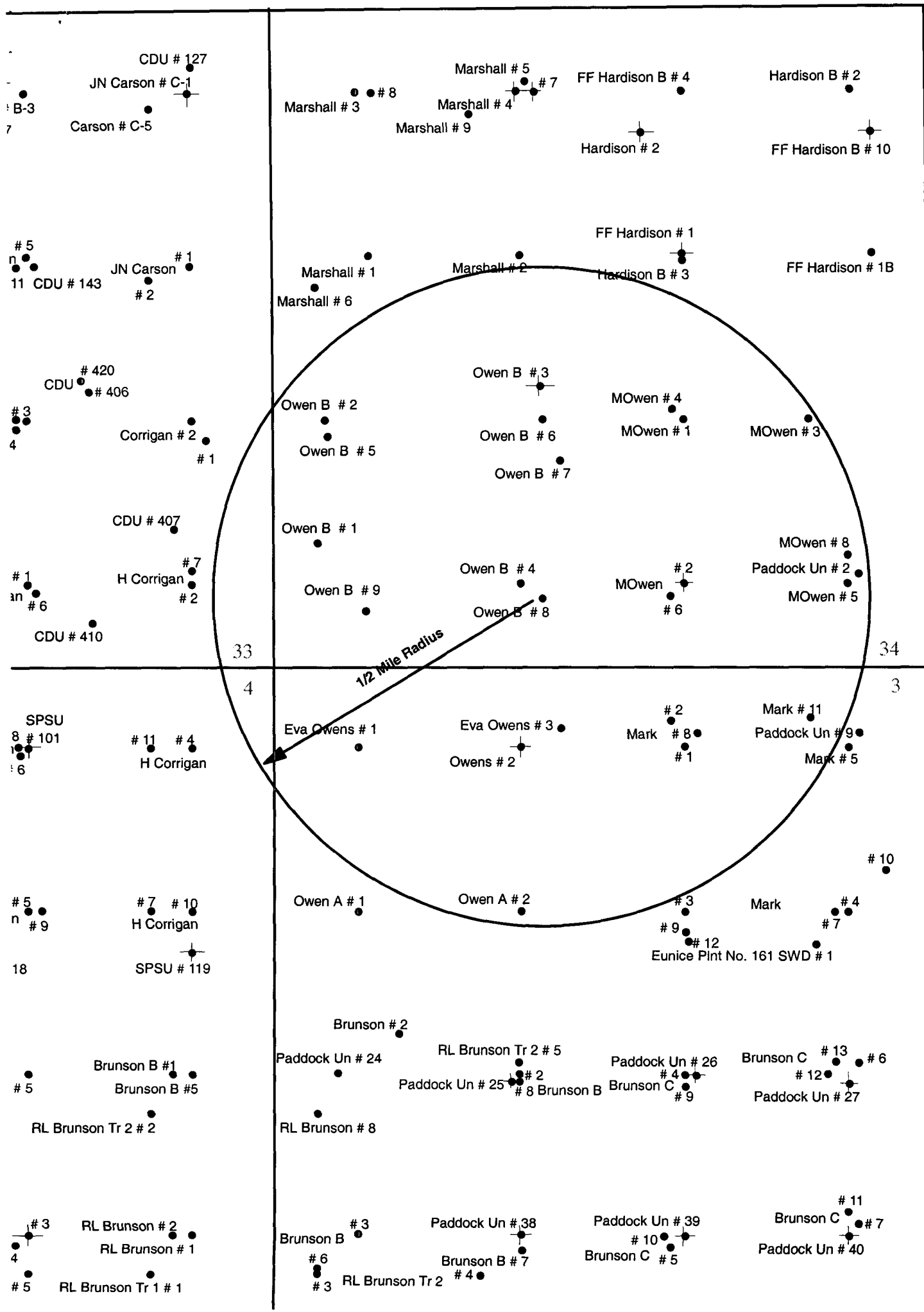
**APACHE CORPORATION**

A handwritten signature in black ink, appearing to read "Debra J. Anderson", written over a horizontal line.

Debra J. Anderson  
Sr. Engineering Technician

Attachments

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



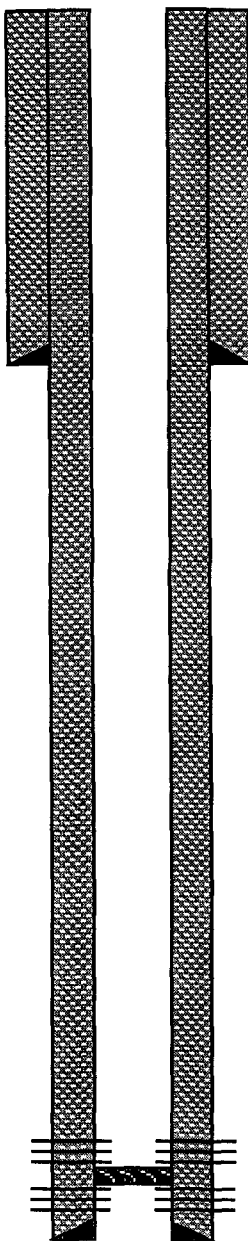
Well: Owen 'B' # 8  
Pool: Penrose; Skelly (Grayburg)  
Location: 560' FSL & 2180' FWL  
Unit N, Section 34, Township 21S, Range 37E  
API#: 30-025-34774

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



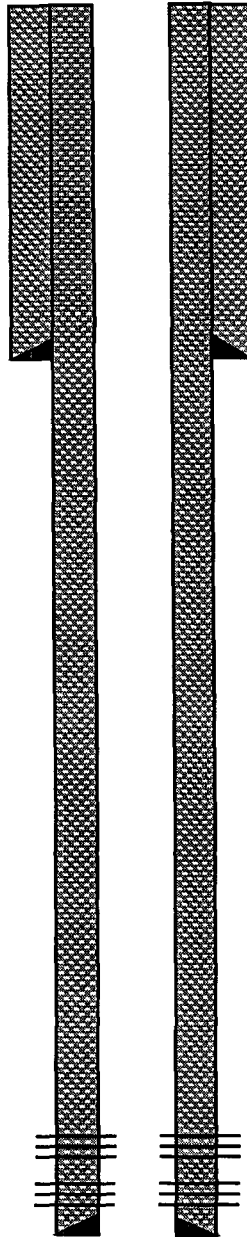
**Surface Casing:** 12-1/4" Hole  
8-5/8" 24# CSA 1103'  
Cement w / 435 sx  
Circulated to Surface

**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



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

**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

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

TD @ 4050'  
PBD @ 4043'