



5/22/96  
DHC-1248

**Southern**  
**Rockies**  
**Business**  
**Unit**

April 30, 1996

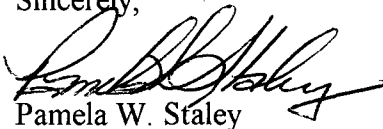
Mr. William J. LeMay, Director  
New Mexico Oil Conservation Division  
2040 S. Pacheco Street  
P. O. Box 6429  
Santa Fe, NM 87505

**Application for Exception to Rule 303-C - Downhole Commingling**  
**Ludwick A #1E Well**  
**Unit D Section 19-T30N-R10W**  
**Basin Dakota and Blanco Mesaverde Pools**  
**San Juan County, New Mexico**

Enclosed please find an administrative application form (C-107-A) and attachments for downhole commingling for the captioned well. By copy of this application by certified mail, return receipt requested, Amoco is notifying all offset operators in the formations captioned above as well as all affected interest owners if the ownership of those formations is not common. The Division Director may approve the proposed downhole commingling in the absence of a valid objection from any offset operator or any interest owner in those instances where ownership is not common in the zones to be commingled within 20 days after the receipt of the application if, in his opinion, waste will not result thereby, and correlative rights will not be violated.

Should there be questions concerning this matter, please contact me at (303) 830-5344.

Sincerely,

  
Pamela W. Staley

**Enclosures**

cc: Mike Kutas  
Patty Haefele  
Wellfile  
Proration File  
Frank Chavez, Supervisor  
NMOCD District III  
1000 Rio Brazos Road  
Aztec, NM 87410

Duane Spencer  
Bureau of Land Management  
1235 La Plata Hwy.  
Farmington, NM 87401

Amoco Production Company		P.O. Box 800 Denver, CO 80201	
Operator LUDWICK A	1E	Address D-19-30N-10W	San Juan
Lease	Well No.	Unit Ltr. - Sec Twp - Rge	County
Spacing Unit Lease Types: (check 1 or more)			
OGRID NO. 000778	Property Code 000812	API NO. 3004525467	Federal <input checked="" type="checkbox"/> State <input type="checkbox"/> (and/or) Fee <input type="checkbox"/>

The following facts are submitted in support of downhole commingling:	Upper Zone	Intermediate Zone	Lower Zone
1. Pool Name and Pool Code	BLANCO MESAVERDE 72319		BASIN DAKOTA 71599
2. Top and Bottom of Pay Section (Perforations)	4920' - 5385'		7188' - 7362'
3. Type of production (Oil or Gas)	GAS		GAS
4. Method of Production (Flowing or Artificial Lift)	FLOWING		FLOWING
5. Bottomhole Pressure Oil Zones - Artificial Lift: Gas & Oil - Flowing: All Gas Zones: Estimated Current Measured Current Estimated or Measured Original	a. (Current) 967 PSI (EST)	a.	a. 646 PSI
	b. (Original) 1297 PSI	b.	b. 2710 PSI
6. Oil Gravity (° API) or Gas BTU Content	1150 BTU / 53 DEG API		1138 BTU
7. Producing or Shut-In?	NEW		PRODUCING
Production Marginal? (yes or no)  • If Shut-In, give data 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 60 days)	NO		YES
	Date: Rates:	Date: Rates:	Date: Rates:
	(EST) Date: 250 MCFD Rates: 1 BCPD 1 BWPD	Date: Rates:	4/96 Date: 128 MCFD Rates: 0 BCPD 0 BWPD
8. Fixed Percentage Allocation Formula -% for each zone	Oil: % Gas %	Oil: % Gas %	Oil: % Gas %

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?  
If not, have all working, overriding, and royalty interests been notified by certified mail?  
Have all offset operators been given written notice of the proposed downhole commingling?

☒ Yes ☐ No  
☐ Yes ☐ No  
☒ Yes ☐ No
11. Will cross-flow occur? ☐ Yes ☒ No If yes, are fluids compatible, will the formations not be damaged, will any cross-flowed 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 SF-078194
15. 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. XX SEE ATTACHED
  - \* Notification list of all offset operators.
  - \* 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 REGULATORY AFFAIRS REP

DATE 4/23/96

TYPE OR PRINT NAME PAMELA W. STALEY

TELEPHONE NO. ( 303 ) 830-5344

**OFFSET WELLS USED TO ESTIMATE MESAVERDE PRODUCTION**  
**AVERAGE STABILIZED RATES FROM NEWER WELLS**

Schumacher 10A	P-18-30-10	225 MCFD
Sellers Federal LS #2M	30-30-10	200 MCFD

**ALLOCATION METHOD**

Allocation shall be established by testing the Mesaverde after frac and cleanup and before removing the bridge plug. Once that rate is established, the allocation will be set at the percentage contributed by the existing Dakota and the new rate established in the Mesaverde. We will forward those allocation percentages to you after the Mesaverde completion has been established.

All distances must be from the outer boundaries of the Section.

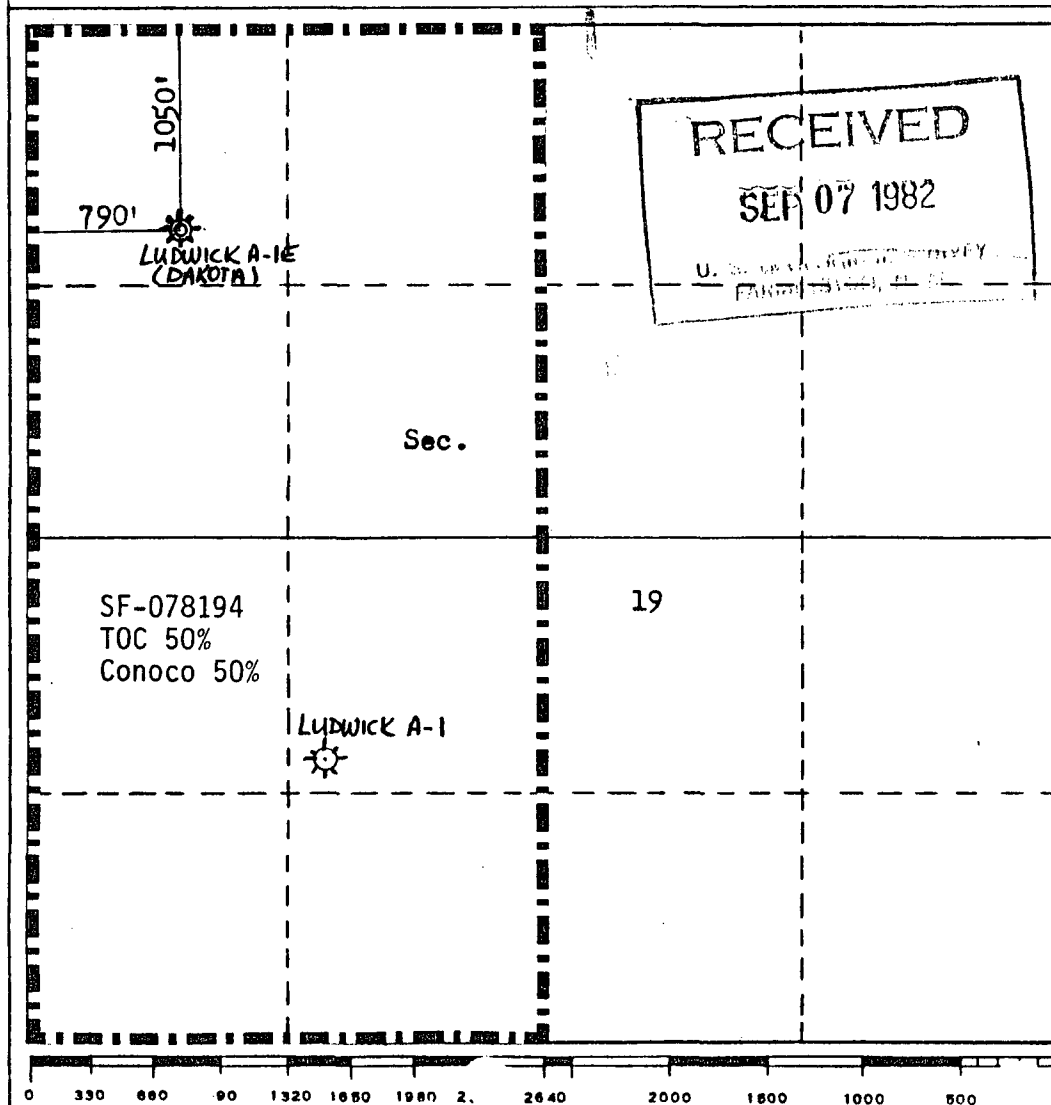
Operator <b>TENNECO OIL COMPANY</b>			Lease <b>LUDWICK "A"</b>		Well No. <b>1E</b>
Unit Letter <b>D</b>	Section <b>19</b>	Township <b>30N</b>	Range <b>10W</b>	County <b>San Juan</b>	
Actual Footage Location of Well: <b>1050</b> feet from the <b>North</b> line and <b>790</b> feet from the <b>West</b> line					
Ground Level Elev. <b>6307</b>	Producing Formation <b>Dakota</b>		Pool <b>Basin Dakota</b>		Dedicated Acreage: <b>320</b> Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☐ Yes ☐ No If answer is "yes," type of consolidation \_\_\_\_\_

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) \_\_\_\_\_

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

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

Name  
**Ken Russell**  
Position  
**Senior Production Analyst**  
Company  
**Tenneco Oil Company**  
Date  
**July 29, 1982**

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 knowledge and belief.

Date Surveyed  
**July 7, 1982**  
Registered Professional Engineer and/or Land Surveyor  
**Fred B. Kern Jr.**  
Certificate No.  
**3950**

District I  
PO-Box 1980, Hobbs, NM 88241-1980

District II  
811 South First, Artesia, NM 88210

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

District IV  
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION  
2040 South Pacheco  
Santa Fe, NM 87505

Form C-102

Revised October 18, 1994

Instructions on back

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-045-25467	Pool Code 72319	Pool Name Blanco Mesaverde
Property Code 000812	Property Name Ludwick A	Well Number 1E
OGRID No. 000778	Operator Name Amoco Production Company	Elevation 6307'

10 Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	19	30N	10W		1050	North	790	West	San Juan

11 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 320		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

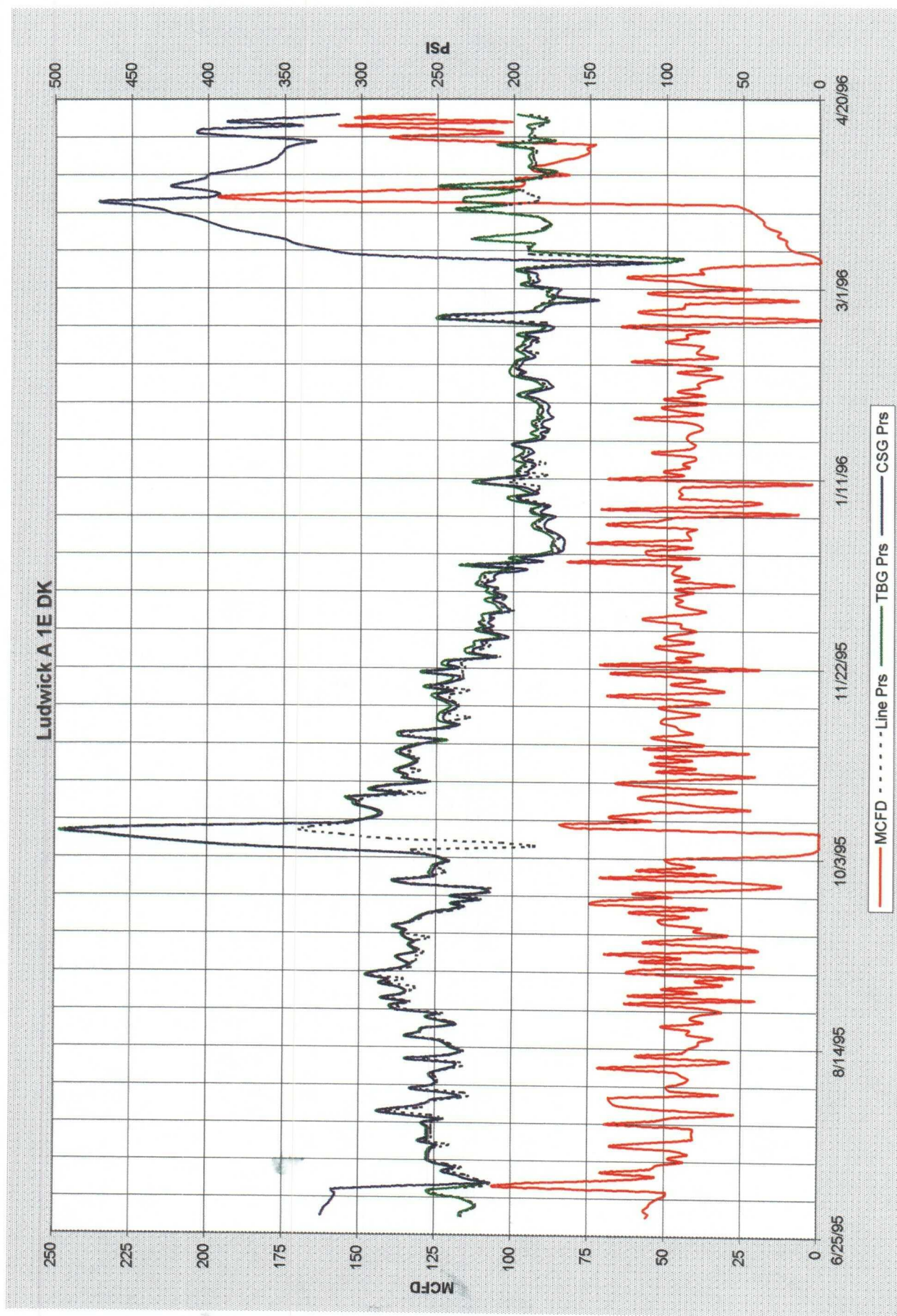
<div>16</div> <div>1050'</div> <div>790'</div>					<div>17 OPERATOR CERTIFICATION</div> <div>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief</div> <div><div>Patty Haeefe</div><div>Signature</div><div>Patty Haeefe</div><div>Printed Name</div><div>Staff Assistant</div><div>Title</div><div>4/16/96</div><div>Date</div></div>
					<div>18 SURVEYOR CERTIFICATION</div> <div>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.</div> <div>7/7/82</div> <div>Date of Survey</div> <div>Signature and Seal of Professional Surveyer:</div> <div>on file</div> <div>3950</div> <div>Certificate Number</div>

OK Wells Sec. 19-T30N-R10W

**Ludwick A 1E**

<p>(13)</p> <p>+ Hampton 4 So. Roy. 70; 2047000</p> <p>+ Nye 14E So. Roy. 68; 404204</p> <p>+ Nye 14 So. Roy. 40; 685085</p> <p>+ Hampton 4m So. Roy. 190; 642404</p>	<p>(18)</p> <p>+ Schumacher 3 Little Curtis J 0; 541662</p> <p>+ Schumacher 11 MOI 35; 852168</p>	<p>(17)</p> <p>+ Schumacher 12 MOI 70; 885032</p>
<p>(24)</p> <p>Cedar Hill 1 MOI 30; 5262000</p> <p>+ Aztec Fed. 1 MOI 20; 6488000</p>	<p>(19)</p> <p>Ludwick A1E APC 50; 283826</p> <p>+ Ludwick A1 APC 9; 4232000</p>	<p>(20)</p> <p>Gage 3m + Conoco 50; 337657</p> <p>+ Gage 3 Conoco 100; 561517</p> <p>+ Gage Com 1 APC 80; 710681</p> <p>+ Gage Com 1E APC 50; 268404</p>
<p>(25)</p> <p>Davis A Fed. 1 Conoco 450; 2589000</p> <p>+ Nye 15 So. Roy. 100; 956534</p>	<p>(30)</p> <p>+ Sellers LS 2 APC 100; 2202000</p> <p>+ Sellers LS 6 APC 70; 1053000</p> <p>+ Sellers LS 2m APC 75; 35021</p>	<p>(29)</p> <p>+ Ludwick LS 17 APC 35; 867278</p> <p>+ Ludwick LS 20 APC 40; 769842</p>
<p>+</p>	<p>+</p>	

# LUDWKA1E Chart 1





# Dwights

Lease: LUDWICK A 00001E

Retrieval Code: 251,045,30N10W19D00DK

04/17/96

3  
10  
3  
10

3  
10

2  
10  
2  
10  
10  
10

2  
10  
10  
10

1  
1

1

1983 1985 1987 1989 1991 1993 1995

Gas (mcf/day)

County: SAN JUAN, NM

F.P. Date: 10/83

Oil (bbl/day)

Water (bbl/day)

Field: BASIN (DAKOTA) DK

Oil Cum: 1176 bbl

Reservoir: DAKOTA

Gas Cum: 283.8 mmcf

Operator: AMOCO PRODUCTION CO

Location: 19D 30N 10W



MV wells Sec 19-T30N-R10W

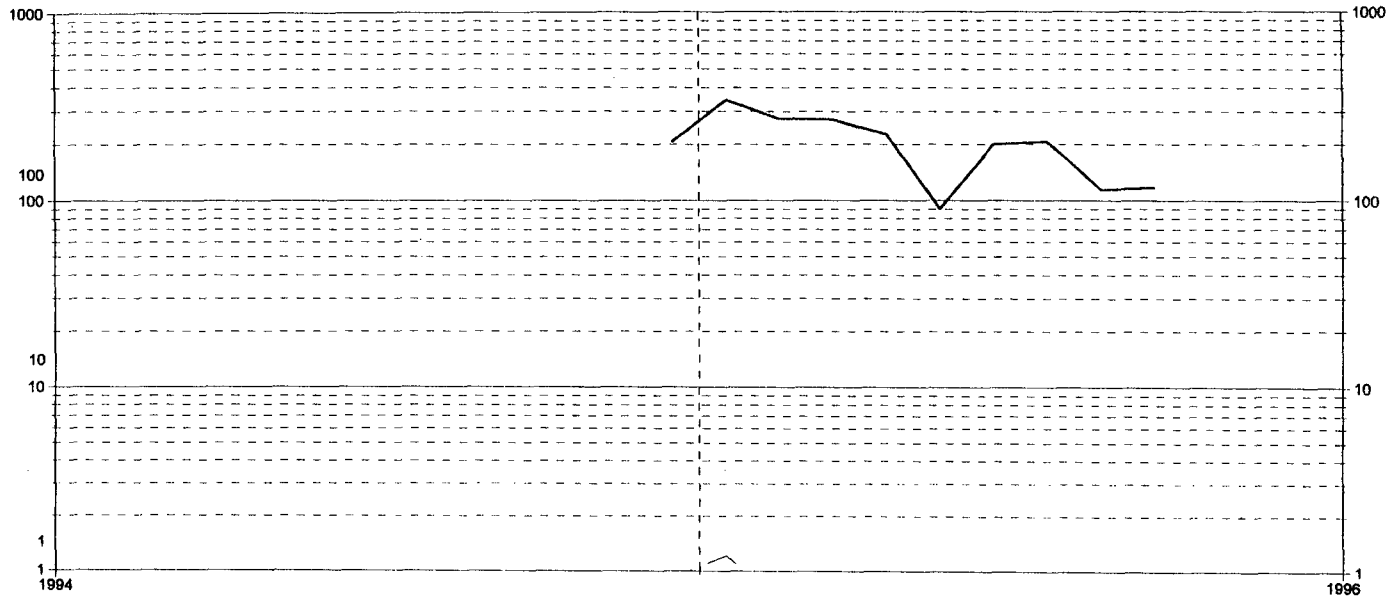
# Ludwick A 1E

<p>(13)</p> <p>+ Hampton 5 So. Roy. 0; 480340</p> <p>+ Nye 14E So. Roy. 45; 494379</p> <p>Hampton 4m So. Roy. 40; 267092</p> <p>+ Nye 14A So. Roy. 45; 236605</p>	<p>(18)</p> <p>+ Schumacher 1A Texaco 140; 659051</p> <p>+ Schumacher 10 moI 125; 1279000</p> <p>+ Schumacher 1 Texaco 70; 755318</p> <p>+ Schumacher 10A moI 60; 606798</p>	<p>(17)</p> <p>+ Schumacher 1A moI 100; 752005</p> <p>+ Schumacher 1 moI 70; 703453</p> <p>+ Schumacher 9A moI 65; 537856</p> <p>+ Schumacher 9 moI 280; 919676</p>
<p>(24)</p> <p>+ Lloyd 2 moI 150; 434365</p> <p>+ Murphy Com 3 moI 17; 759627</p>	<p>(19)</p> <p>△ Ludwick A 1E (DK)</p> <p>+ Ludwick LS 11 APC 40; 632865</p> <p>+ Ludwick LS 12 APC 40; 774122</p>	<p>(20)</p> <p>+ Gage 3m Conoco 60; 365894</p> <p>+ Gage 3 Conoco 60; 447351</p> <p>+ Stewart LS 5 APC 55; 905449</p>
<p>(25)</p> <p>+ Payne 8 moI 9; 475504</p>	<p>(30)</p> <p>+ Sellers LS 1 APC 45; 517470</p> <p>+ Sellers LS 2m APC 120; 62396</p>	<p>(29)</p> <p>+ Ludwick LS 10 APC 0; 200267</p> <p>+ Ludwick LS 9 APC 39; 574531</p>

# Dwights

Lease: SELLERS FEDERAL LS 002M

Retrieval Code: 251,045,045290807231



County: SAN JUAN

State: NM

F.P. Date: 12/94

Date: 04/08/96

Field: BLANCO (MESAVERDE) MV

Oil Cum: 138 bbl

Reservoir: MESAVERDE

Gas Cum: 62396 mcf

Water (bbl/day)

Operator: AMOCO PRODUCTION CO

Location: 30 30N 10W

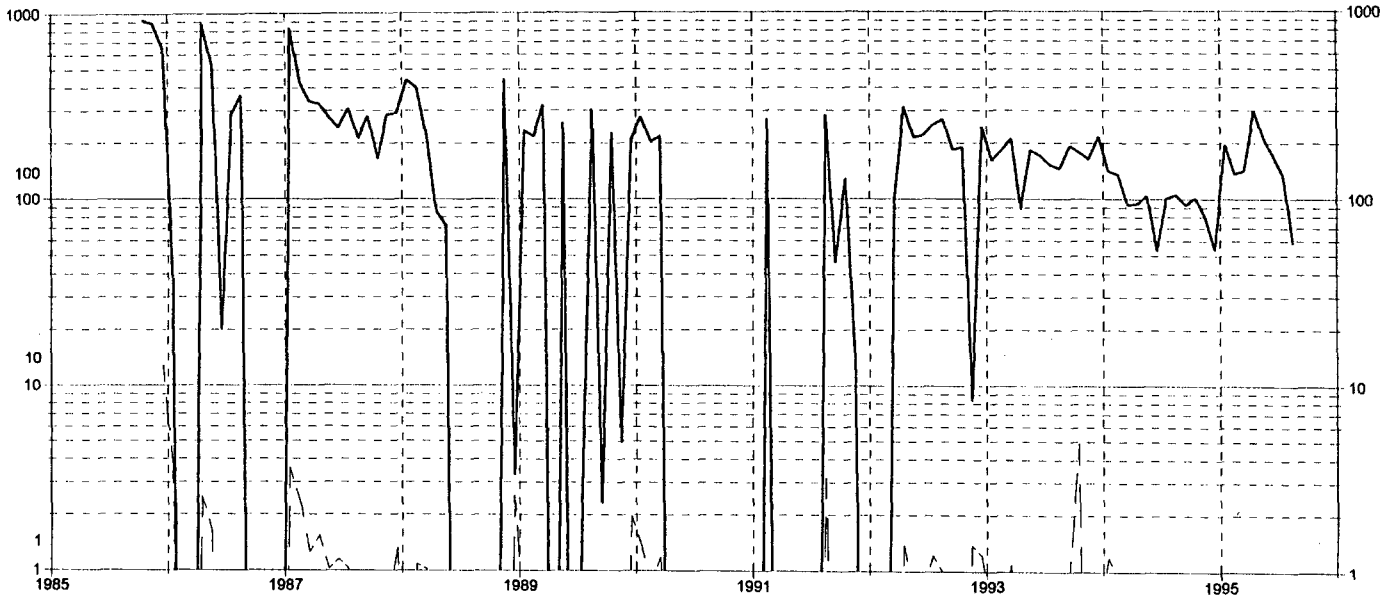
Gas (mcf/day)

Oil (bbl/day)

# Dwights

Lease: SCHUMACHER 00010A

Retrieval Code: 251,045,30N10W18P00M



County: SAN JUAN

State: NM

F.P. Date: 10/85

Date: 04/05/96

Field: BLANCO (MESAVERDE) MV

Oil Cum: 2687 bbl

Reservoir: MESAVERDE

Gas Cum: 606798 mcf

Water (bbl/day)

Operator: MERIDIAN OIL INC

Location: 18P 30N 10W

Gas (mcf/day)

Oil (bbl/day)

**OFFSET OPERATORS**  
**LUDWICK A #1E**

Meridian Oil, Inc.  
P.O. Box 4289  
Farmington, NM 87499

Texaco E&P Inc.  
P.O. Box 2100  
Denver, Colorado 80201