



DHC 4-8-96

RCV'D 3-18-96 1222

Southern
Rockies
Business
Unit

March 13, 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
Romero Com #1 Well
1120' FSL & 790' FEL, Unit P Section 25-T26N-R6W
Blanco Mesaverde (Pool IDN 72319) and Otero Chacra (Pool IDN 82329) Pools
Rio Arriba County, New Mexico**

Amoco Production Company hereby requests administrative approval to downhole commingle production from the Blanco Mesaverde and Otero Chacra Pools in the Romero Com #1 well referenced above. The Romero Com #1 well was originally a dual completion in the Mesaverde and Chacra formations. This well has a marginal Chacra formation which is being produced dually with a marginal Mesaverde. If this well is left as a dual completion, the marginal zones will not be economic much longer. We plan to complete the well with both the Mesaverde and Chacra formations being downhole commingled in the wellbore. The two zones are expected to produce at a total commingled rate of about 289 MCFD with 5.46 BCPD due to the increased efficiencies of lifting liquids. Current production is 120 MCFD and 4.95 BCPD from the Mesaverde and 19 MCFD and 0.01 BCPD from the Chacra formation. The ownership (WI, RI, ORI) of these pools is not identical in this wellbore. Downhole commingling will offer an economical method of production while protecting against reservoir damage, waste of reserves and violation of correlative rights. Amoco is the only offset operator in both formations. All interest owners will also receive a copy of this application as their notice.

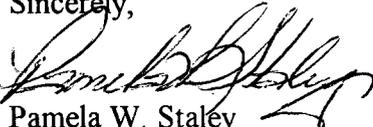
The allocation method that we plan to use for this commingled well is as follows. Since these formations have been producing for some time, we have a good historical representation of the production by formation. Based on historical production we recommend that the allocation for gas production be 86% from the Mesaverde formation and 14% from the Chacra formation. The Chacra has historically produced only a very small amount of liquids in this well (0.01 BCPD). The Mesaverde produces 5.45 BCPD. Based on that fact, we propose to allocate 99% of the liquid production to the Mesaverde formation and 1% to the Chacra. The actual commercial value of the commingled production will not be less than the sum of the values of the production from each of the common sources of supply.

Attached to aid in your review are plats showing the location of the well and offset wells in the same

formations, a historical production plot, recent production information and a C-102 for each formation. This spacing unit is on a federal lease (SF-080658) and a copy of the application will be sent to the BLM as required.

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

Sincerely,


Pamela W. Staley

Enclosures

cc: Steve Smethie
Patty Haeefe
Wellfile
Proration Files

Frank Chavez, Supervisor
NMOCD District III
1000 Rio Brazos Road
Aztec, NM 87410

Robert Kent
Bureau of Land Management
435 Montano NE
Albuquerque, NM 87107

Application for Exception to Rule 303: SEGREGATION OF PRODUCTION FROM POOLS

Requirements

- (1) Name and address of the operator:

Amoco Production Company
P.O. Box 800
Denver, CO 80201

- (2) Lease name, well number, well location, name of the pools to be commingled:

Lease Name: Romero Com
Well Number: #1
Well Location: 1120' FSL & 790' FEL
Unit P Section 25-T26N-R6W
Rio Arriba County, New Mexico

Pools Commingled: Otero Chacra
Blanco Mesaverde

- (3) A plat of the area showing the acreage dedicated to the well and the ownership of all offsetting leases.

Attached

- (4) A current (within 30 days) 24-hour productivity test on Division Form C-116 showing the amount of oil, gas and water produced from each zone.

The Mesaverde produced an average stabilized rate of 120 MCFD and 4.95 BCPD. The Chacra zone produced at an average rate of about 19 MCFD and 0.01 BCPD.

- (5) A production decline curve for both zones showing that for a period of at least one year a steady rate of decline has been established for each zone which will permit a reasonable allocation of the commingled production to each zone for statistical purposes.

Otero Chacra Completion: Historical production curve attached.
Blanco Mesaverde Completion: Historical production curve attached.

- (6) Estimated bottomhole pressure for each zone. A current (within 30 days) measured bottom hole pressure for each zone capable of flowing.

Bottomhole pressures were estimated from OCD Packer Leakage Tests. Shut-in bottomhole pressure in the Chacra formation is calculated to be 694 PSIG while estimated bottomhole pressure in the Mesaverde formation is 1095 PSIG. Therefore these pressures meet the pressure differential rule under article 303-C (b)(vi). See attached calculation and packer leakage test results.

- (7) A description of the fluid characteristics of each zone showing that the fluids will not be incompatible in the wellbore.

The fluids in the Mesaverde have no abnormal components that would prohibit commingling, or promote the creation of emulsions or scale when commingled with the Chacra formation.

- (8) A computation showing that the value of the commingled production will not be less than the sum of the values of the individual streams:

The BTU content of the produced streams are very similar and as such, we would expect the commingled production to have the same value as the sum of the individual streams.

- (9) A formula for the allocation of production to each of the commingled zones and a description of the factors or data used in determining such formula:

The allocation method that we plan to use for this commingled well is as follows. Since these formations have been producing for some time, we have a good historical representation of the production by formation. Based on historical production we recommend that the allocation for gas production be 86% from the Mesaverde formation and 14% from the Chacra formation. The Chacra has historically produced only a very small amount of liquids in this well (0.01 BCPD). The Mesaverde produces 5.45 BCPD. Based on that fact, we propose to allocate 99% of the liquid production to the Mesaverde formation and 1% to the Chacra. The actual commercial value of the commingled production will not be less than the sum of the values of the production from each of the common sources of supply.

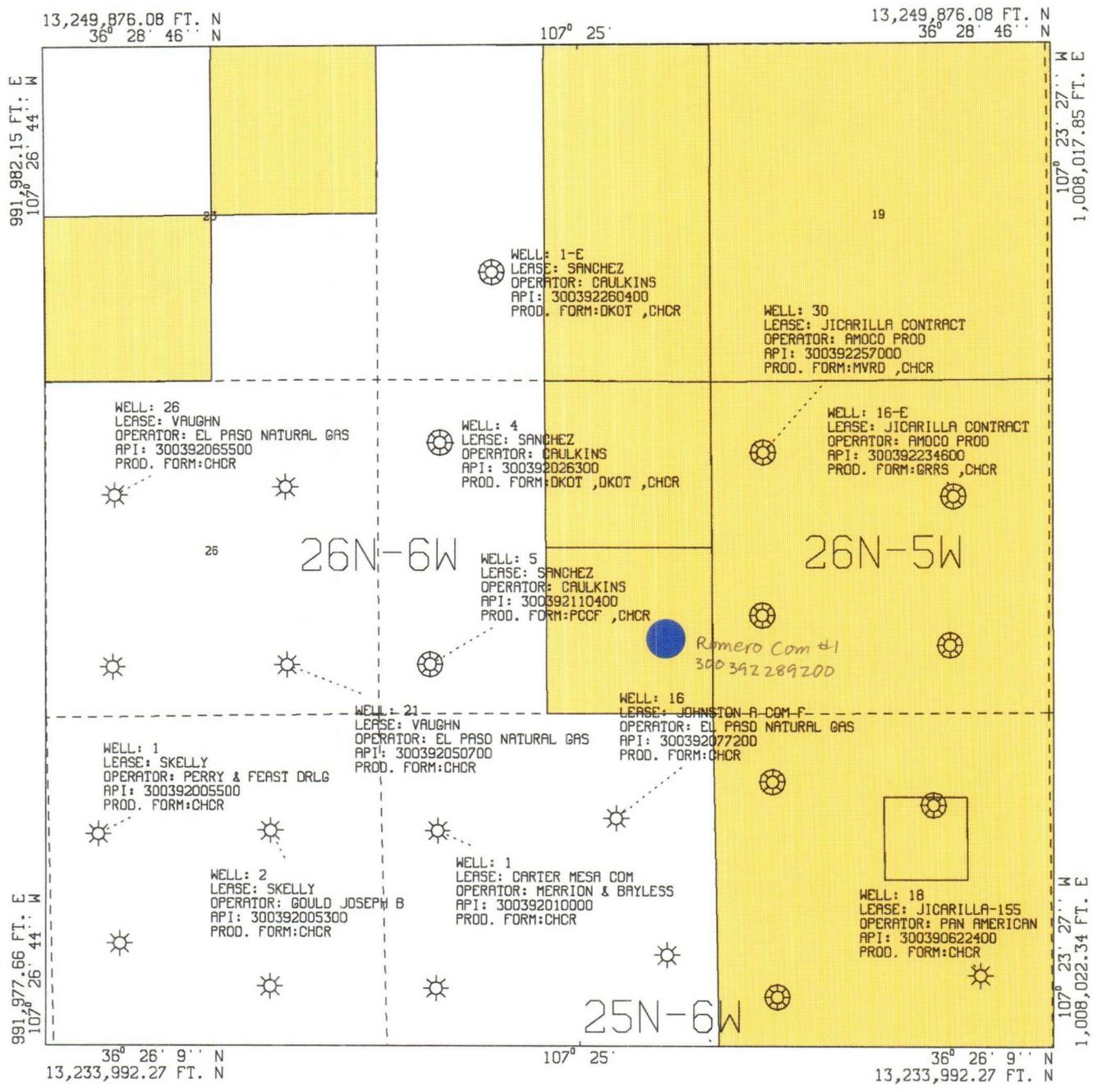
- (10) A statement that all offset operators and, in the case of a well on federal land, the United States Bureau of Land Management, have been notified in writing of the proposed commingling.

BLM will receive a copy of this application by certified mail. Amoco is the only offset operator in both formations.

- (11) Referencing NMOCD Order No. 10470 Rule 303 (D) (11): In a case where there is diversity of ownership between the zones to be commingled (including working royalty, or overriding royalty interest), the applicant shall submit a statement that all such interest owners have been notified in writing of the proposed commingling.

All interest owners in the two formations will receive a copy of this application by certified mail.

PLOT 1 06.38.07 SAT 4 NOV, 1995 JOB-P1000402, ISSCO DISSPLA 10.0

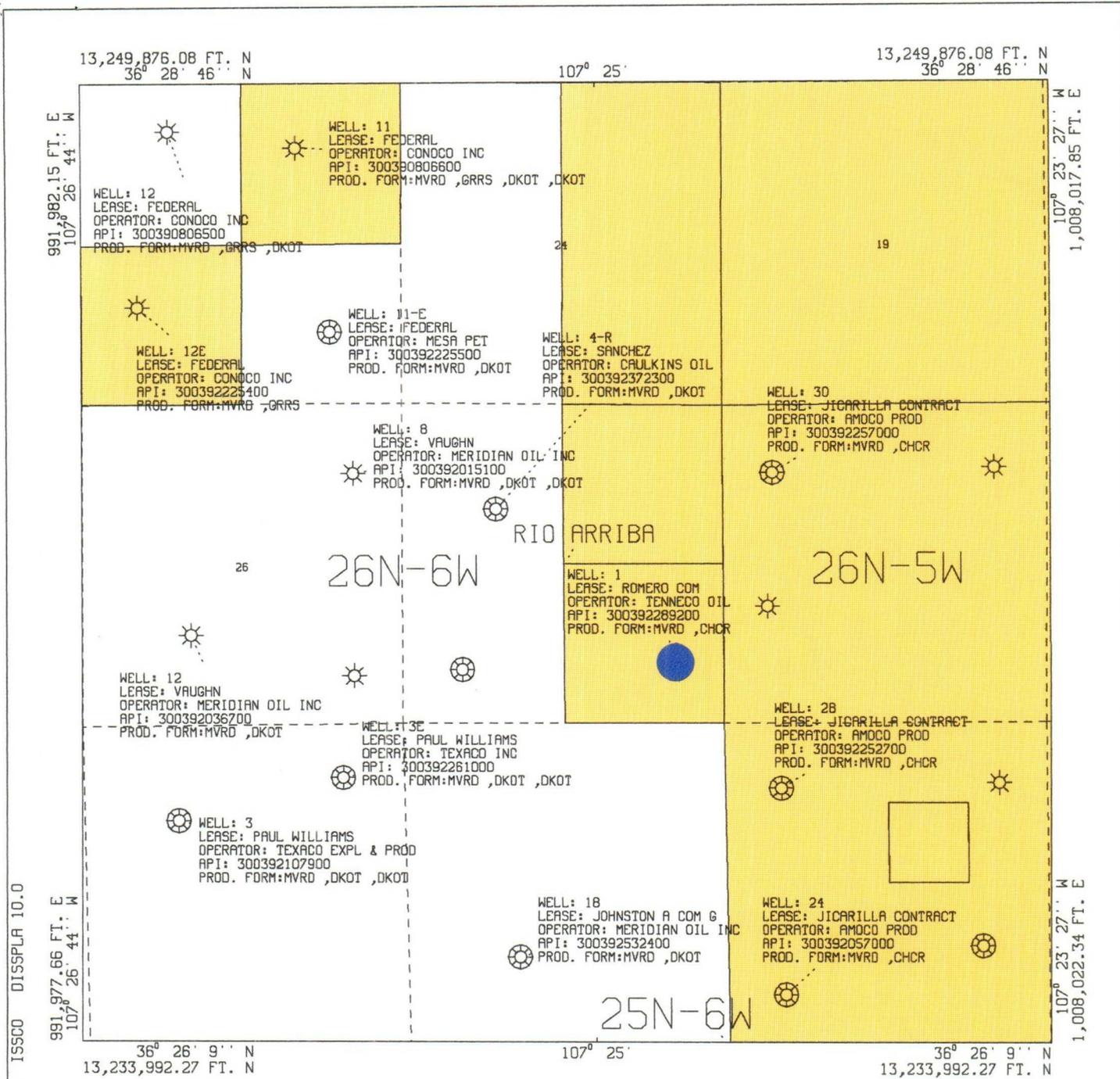


All geological and geophysical data, including the interpretation thereof, appearing on this map is the private and confidential property of Amoco Production Company. The publication or reproduction thereof without the written permission of said Company is strictly prohibited.

AMOCO PRODUCTION COMPANY
 PLAT MAP
 Romero Com #1 Sec 25-T26N-R06W CK
 Rio Arriba New Mexico
 SCALE 1 IN. = 2,500 FT. NOV 4, 1995

HORIZONTAL DATUM NAD27

HAB10004--RUN#95308061635



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AMOCO PRODUCTION COMPANY
PLAT MAP
Romero Com #1 Sec 25-T26N-R06W MV
Rio Arriba New Mexico
SCALE 1 IN. = 2,500 FT. NOV 4, 1995

HORIZONTAL DATUM NAD27

PLOT 1 06.44.07 SAT 4 NOV, 1995 ISSCO DISSPLA 10.0

HFB10011--RUN#95308061950

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

Form C-107
Revised 10-1-78

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

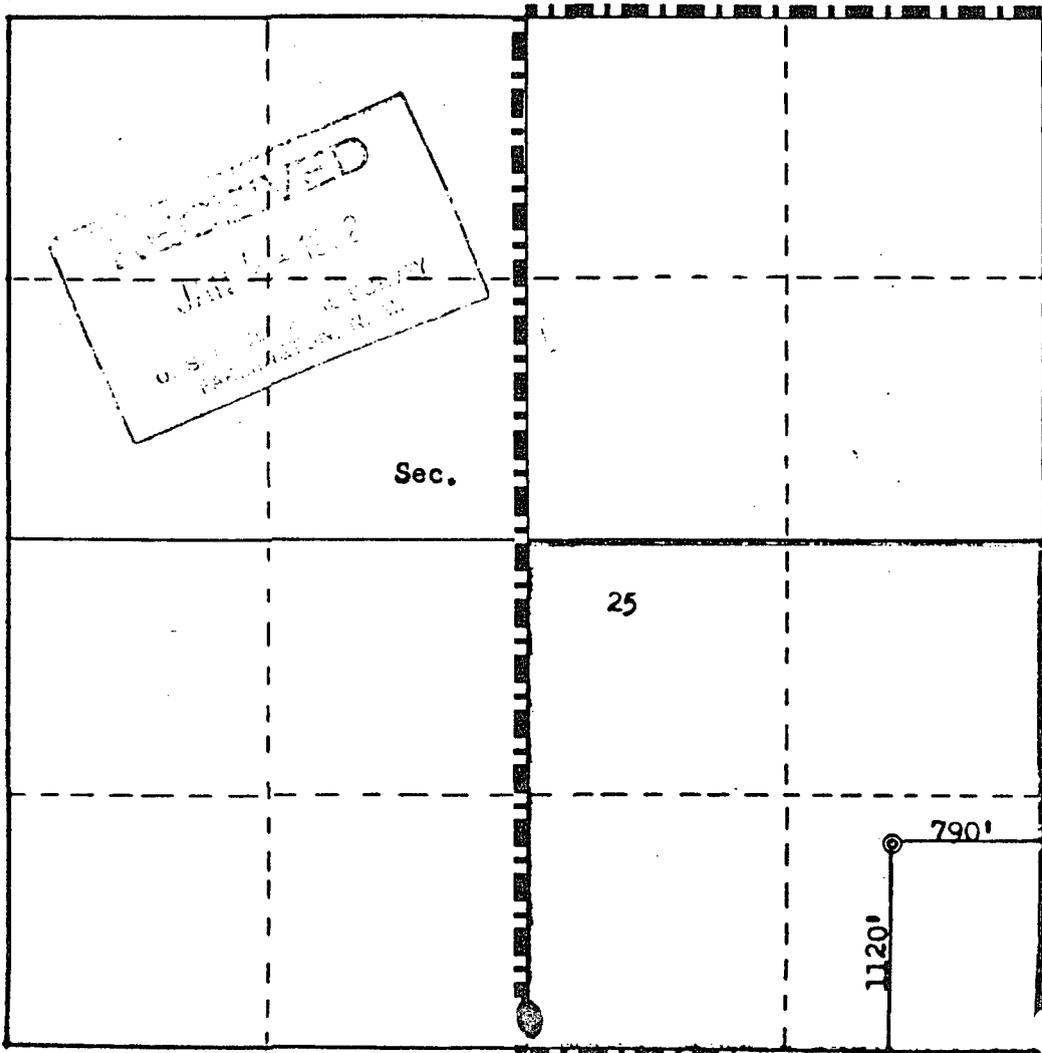
Operator TENNECO OIL COMPANY		Lease ROMERO COM		Well No. 1
Unit Letter P	Section 25	Township 26N	Range 6W	County Rio Arriba
Actual Footage Location of Well: 1120 feet from the South line and 790 feet from the East line				
Ground Level Elev: 6568	Producing Formation Mesaverde/Chacra	Pool Und. Mesaverde/Chacra	Dedicated Acreage: 320/160 Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hachure 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.

Don H. Morrison

Name
Production Analyst

Position
Tenneco Oil Company

Company
10-13-81

Date

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
October 1, 1981

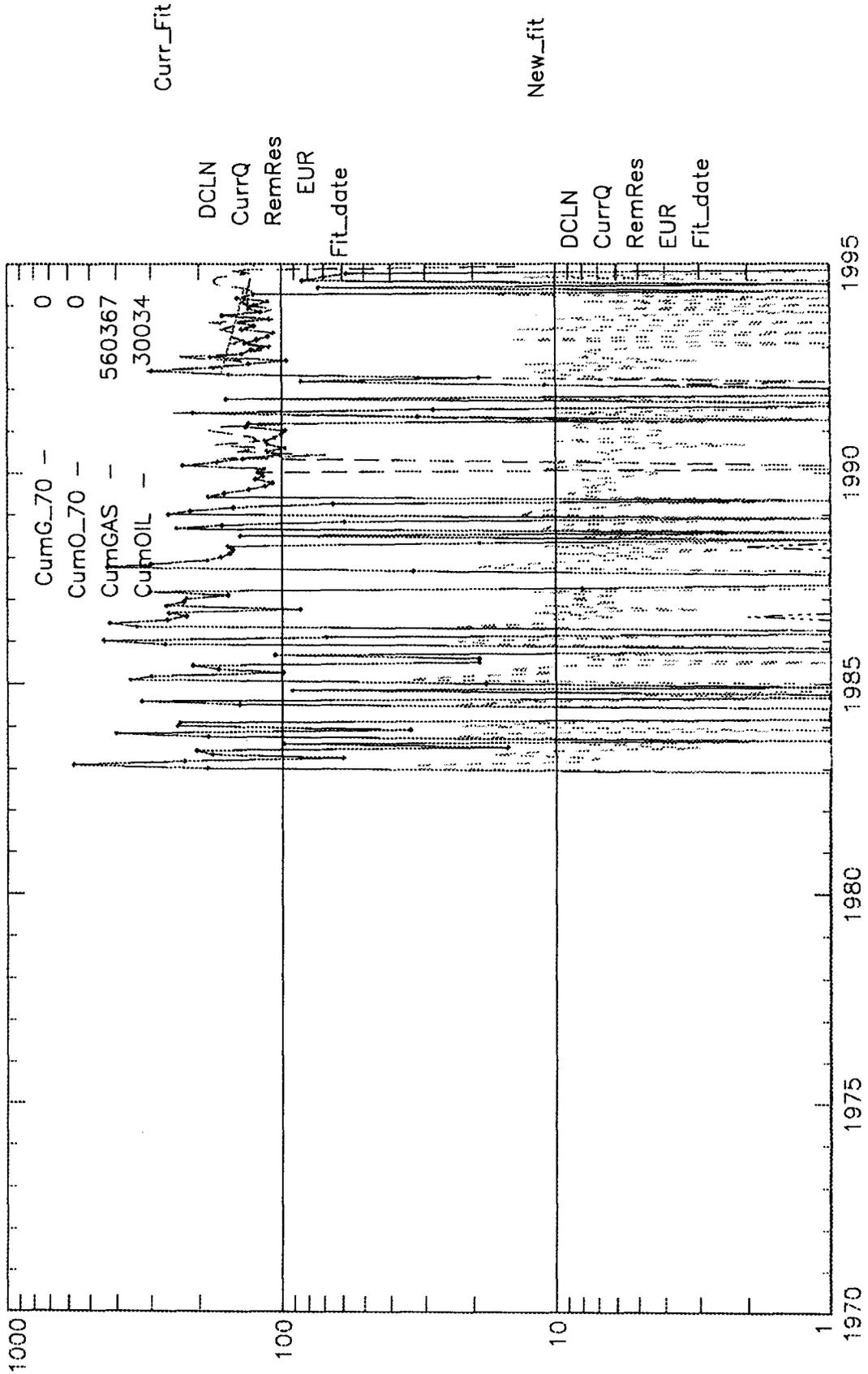
Registered Professional Engineer and Land Surveyor

Fred B. Kern
Fred B. Kern

Certificate No. _____

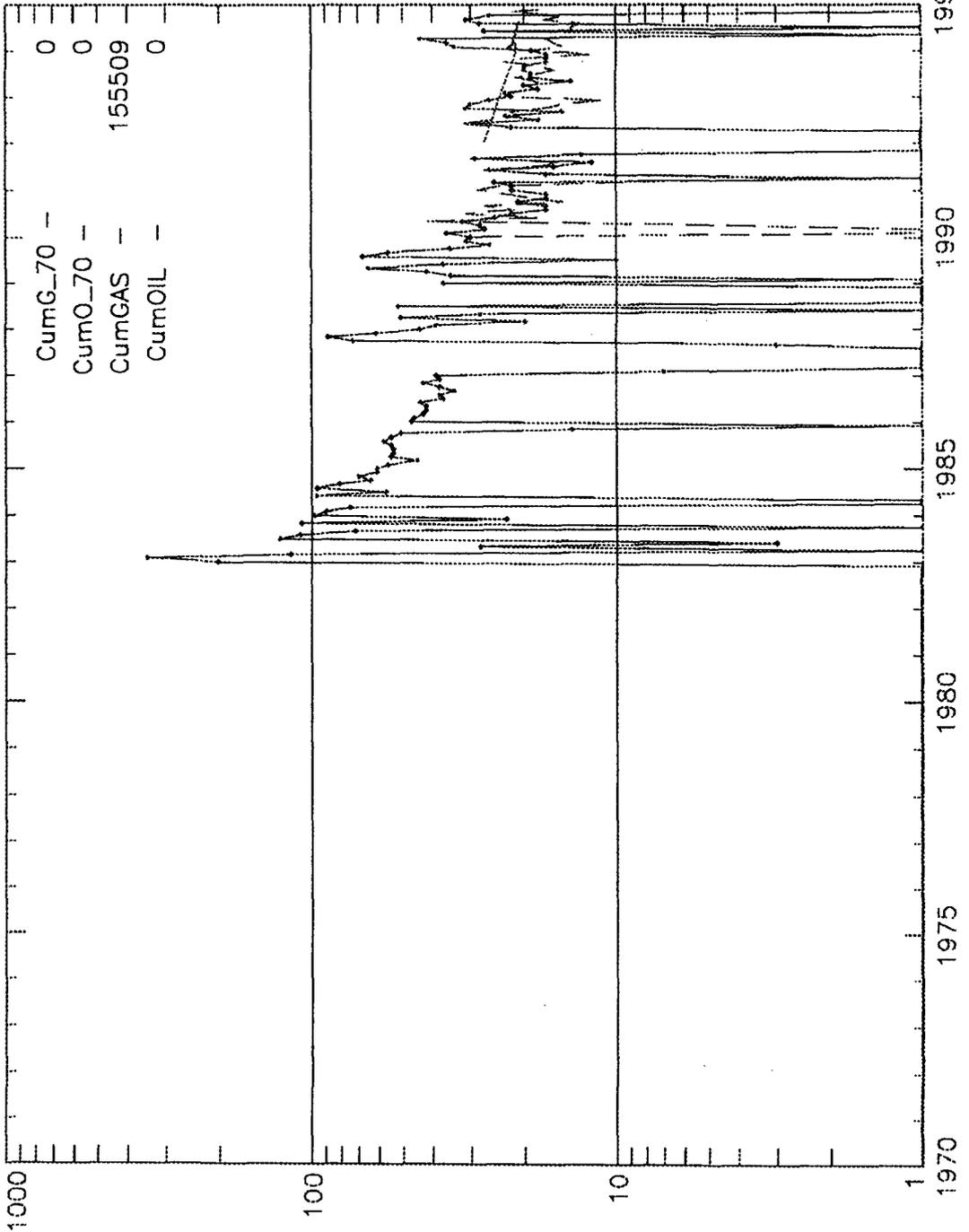
Engr: zhab0b

ROMERO COM 1 Operator- AMOCO PRODUCTION CO
300392289200MV P252606-001 MV APC_WI - 0.41667000



Engr: zhab0b

ROMERO COM 1 Operator-- AMOCO PRODUCTION CO
300392289200CK P252606-001 CK APC_WI - 0.38889000



Curr_Fit

New_fit

DCLN
CurrQ
RemRes
EUR
Fit_date

DCLN
CurrQ
RemRes
EUR
Fit_date

91 Test

av

STATE OF NEW MEXICO
ENERGY and MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

This form is not to
be used for reporting
packer leakage tests
in Southeast New Mexico

NORTHWEST NEW MEXICO PACKER-LEAKAGE TEST

Operator Amoco Production Co. Lease Romero Com Well No. 001
Location of Well: Unit P Sec. 25 Twp. 26 Rge. 06 County Rio Arriba

	NAME OF RESERVOIR OR POOL	TYPE OF PROD. (Oil or Gas)	METHOD OF PROD. (Flow or Art. Lift)	PROD. MEDIUM (Tbg. or Cag.)
Upper Completion	<u>Chacra</u>			
Lower Completion	<u>Mesa Verde</u>			

PRE-FLOW SHUT-IN PRESSURE DATA

Upper Completion	Hour, date shut-in	Length of time shut-in	SI press. psig	Stabilized? (Yes or No)
			<u>392</u>	<u>Yes</u>
Lower Completion	Hour, date shut-in	Length of time shut-in	SI press. psig	Stabilized? (Yes or No)
			<u>683</u>	<u>Yes</u>

FLOW TEST NO. 1

Commenced at (hour, date)*				Zone producing (Upper or Lower):	
TIME (hour, date)	LAPSED TIME SINCE*	PRESSURE		PROD. ZONE TEMP.	REMARKS
		Upper Completion	Lower Completion		
<u>1/20/92</u>		<u>391</u>	<u>682</u>		<u>SI Both zones</u>
<u>1/21/92</u>		<u>391</u>	<u>682</u>		
<u>1/22/92</u>		<u>392</u>	<u>683</u>		
<u>1/23/92</u>		<u>389</u>	<u>684</u>		<u>Flow lower zone</u>
<u>1/24/92</u>		<u>391</u>	<u>686</u>		<u>Purchaser Down 5" diam line Freeze</u>
<u>1/25/92</u>		<u>390</u>	<u>674</u>		

Production rate during test

Oil: _____ BOPD based on _____ Bbls. in _____ Hours. _____ Grav. _____ GOR _____

Gas: _____ MCFPD; Tested thru (Orifice or Meter): _____

MID-TEST SHUT-IN PRESSURE DATA

Upper Completion	Hour, date shut-in	Length of time shut-in	SI press. psig	Stabilized? (Yes or No)
Lower Completion	Hour, date shut-in	Length of time shut-in	SI press. psig	Stabilized? (Yes or No)

RECEIVED

FEB 5 1992

(Continue on reverse side)

OIL CON. DIV.
DIST. 3,

LIST OF OFFSET OPERATORS
ROMERO COM #1

CHACRA OFFSET OPERATORS

NE/4 SEC 25-T26N-R6W - NO CHACRA WELL
NW/4 SEC 25-T26N-R6W -CAULKINS OIL COMPANY
SW/4 SEC 25-T26N-R6W -CAULKINS OIL COMPANY
NW/4 SEC 30-T26N-R5W - AMOCO PRODUCTION COMPANY
SW/4 SEC 30-T26N-R5W - AMOCO PRODUCTION COMPANY
NE/4 SEC 36-T26N-R6W - MERIDIAN OIL INC
NW/4 SEC 36-T26N-R6W - MERIDIAN OIL INC
NW/4 SEC 31-T26N-R5W - AMOCO PRODUCTION COMPANY

MESAVERDE OFFSET OPERATORS

NE/4 SEC 25-T26N-R6W - NO MESAVERDE WELL
NW/4 SEC 25-T26N-R6W -CAULKINS OIL COMPANY
SW/4 SEC 25-T26N-R6W -CAULKINS OIL COMPANY
NW/4 SEC 30-T26N-R5W - AMOCO PRODUCTION COMPANY
SW/4 SEC 30-T26N-R5W - AMOCO PRODUCTION COMPANY
NE/4 SEC 36-T26N-R6W - NO MESAVERDE WELL
NW/4 SEC 36-T26N-R6W - NO MESAVERDE WELL
NW/4 SEC 31-T26N-R5W - AMOCO PRODUCTION COMPANY

OFFSET OPERATOR ADDRESSES

- 1 Caulkins Oil Co.
1600 Broadway, Suite 2100
Denver, Co 80202

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

69874600 00001
617000 00
AMOCO PRODUCTION COMPANY
P O BOX 591
TULSA

ZJAM63 69874600 00001
128111 00
MCHUGH COMPANIES
650 S CHERRY ST STE 1225
DENVER

ZJAM63
CO 80222-1894

69874600 00001
122708 00
JOE DAN BEACH
P O BOX 11863
ALBUQUERQUE

ZJAM63 69874600 00001
137226 00
MARIE MCKINNON
10502 MORNING STAR
ALBUQUERQUE

ZJAM63
NM 87111-7540

69874600 00001
137225 00
HOWARD C BEACH
P O BOX 2198
COTTONWOOD

ZJAM63 69874600 00001
273665 00
PROFESSIONAL TITLE AGENCY INC
319 SEVENTH STREET NW SUITE B
ALBUQUERQUE

ZJAM63
NM 87102-2009

69874600 00001
900903 00
LINDA MURIEL ADKINS
2916 SO MORAIN PL
KENNEWICK

ZJAM63 69874600 00001
710000 01
MINERALS MANAGEMENT SERVICE
ROYALTY MANAGEMENT PROGRAM
PO BOX 5810 TA
DENVER

ZJAM63
CO 80217-5810

69874600 00001
213549 00
EDGAR ALFRED AND EVELYN BORING SR
TRUSTEES UNDER TRUST AGREEMENT DATED
MARCH 20 1985
P O BOX 829
BAYFIELD

ZJAM63 69935200 00001
497361 46
MERIDIAN OIL PRODUCTION INC
P O BOX 840656
DALLAS

ZJAM63
TX 75284-0656

69874600 00001
603416 25
CONOCO INC
P O BOX 951063
DALLAS

ZJAM63 69874600 00001
900905 00
JANICE EUGENIA ROBERTSON
P O BOX 497
PERALTA

ZJAM63
NM 87042-0497

69874600 00001
926370 00
EL PASO PRODUCTION COMPANY
P O BOX 840656
DALLAS

ZJAM63 69874600 00001
149889 00
ROMERO FAMILY LIMITED PARTNERSHIP
P O BOX 5155
SANTA FE

ZJAM63
NM 87502-5155

69874600 00001
900904 00
MYRA LOUDENE JONES
3915 S ALDON
TUCSON

ZJAM63 69874600 00001
137224 00
BILLIE LEE SCHRODER
P O BOX 11863
ALBUQUERQUE

ZJAM63
NM 87192-0863

MYRA LOUDENE JONES
3915 S ALDON
TUCSON, AZ 85706

ALICIA V ROMERO
GENERAL PARTNER
ROMERO FAMILY LTD PARTNERSHIP
P O BOX 5155
SANTA FE, NM 87502