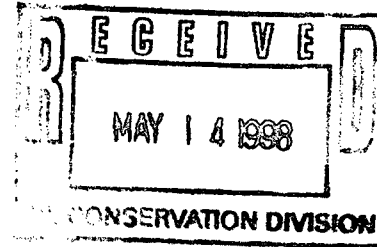




Mid-Continent Region
Exploration/Production

Conoco Inc.
10 Desta Drive, Suite 100W
Midland, TX 79705-4500
(915) 686-5400

April 16, 1998



Mr. David Catanach
New Mexico Oil Conservation Division
2040 S. Pacheco
Santa Fe, New Mexico 87504-2088

Re: Application for Downhole Commingling
Jackson #2E API # 30-045-24931
Section 33, T-29-N, R-9-W, B
San Juan County, New Mexico

Dear Mr. Catanach,

Reference is made to your letter dated March 20, 1998 (see attached) requesting additional information in support of our application to downhole commingle the subject well. When our application dated February 16, 1998, was prepared, we did not have access to all well records and were unaware that Amoco's Chacra/Dakota commingle was not only approved, but the work was completed in May, 1996. After further review of well records and the most recent production data, we feel it appropriate to modify baseline production as attached, but we still feel that the fixed allocation between the Chacra and Dakota should be changed. The attached well history details reason for the change in allocation.

If there are any additional questions concerning this application please call me at (915) 686-5798.

Sincerely yours,

Kay Maddox
Regulatory Agent

Brief Well History

The well was dually completed in the Chacra and Dakota zones in June, 1981 and first produced November, 1981. The Chacra zone had 1-1/4" tubing landed at 2687' (569' above the top perf). The Dakota was produced (2-3/8" tubing) from under a production packer at 6650' (16' above top perf). While this original wellbore configuration was far less than ideal for unloading liquids from the wellbore, the Chacra was less affected since it produces essentially liquid free. However, the Dakota produces at a high liquid ratio (0.022 bbl/MCF cumulative oil yield) and has been plagued by loading problems, particularly since 1989.

Inspection of the attached production curves shows that production was most stable from 1984-1989. During this time, production from the two zones was approximately equal (50% Chacra and 50% Dakota). After 1989, the Chacra produced consistently while Dakota production was very erratic, likely due to liquid loading.

Packer leakage test records indicate that sometime between 5/92 and 5/96, communication developed between the two zones. Production records indicate that the packer/tubing leak developed in 1994 as follows:

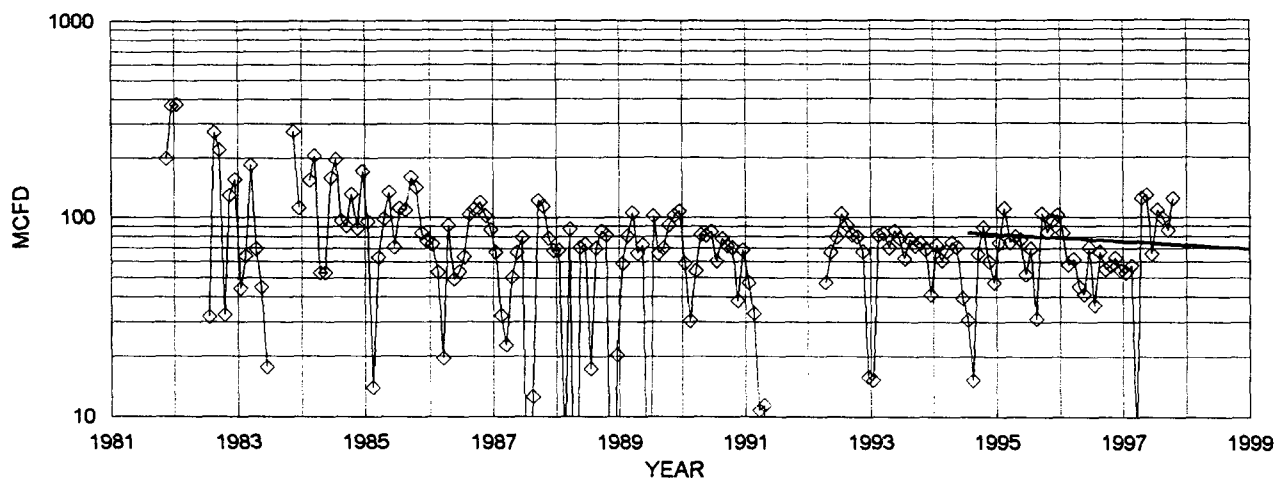
- 1) Prior to 10/94, the Chacra zone produced no oil (cumulative oil yield 0.000 bbl/mcf from 1981-10/94).
- 2) From 10/94 to 4/96 reported Chacra oil yield was 0.006 bbl/mcf, a significant increase.
- 3) Early in 1994, production from the Dakota dropped rapidly.

To correct the packer leakage test failure, Amoco sought and was granted approval to downhole commingle the well (Administrative Order DHC-1208 approved 4/4/96). Production was allocated based on a recent well test with the majority of the production allocated to the Chacra (57-43% split for oil and 63-37% split for gas). While Amoco followed the rules by allocating production based on a well test less than 30 days old, the test is suspect since communication between the two zones existed at the time of the test.

Since the production allocation for DHC-1208 was based on suspect test data, we consider it more appropriate to use the earlier production history of the well to allocate production. Certainly no oil production should be allocated to the Chacra since the zone yielded no oil prior to communication with the Dakota and offset Chacra wells also produce no oil. We recommend that gas allocation be based on the data from 1984-1989, when production from both zones was relatively stable. The following allocation factors are obtained from this data:

Otero Chacra Pool	Oil 0%	Gas 50%
Basin Dakota Pool	Oil 100%	Gas 50%

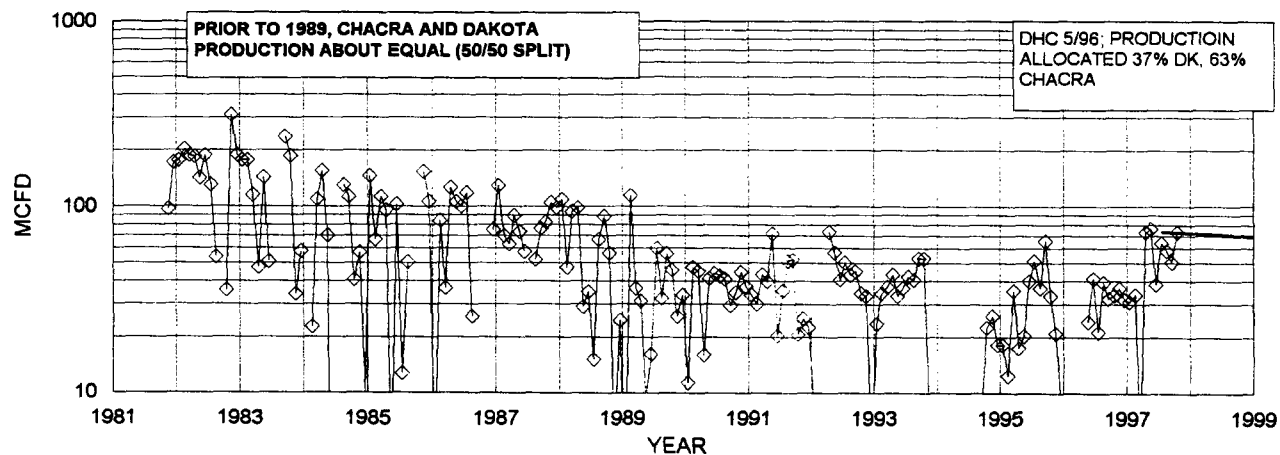
HELEN JACKSON 2E CHACRA PRODUCTION SECTION 33B-29N-09W



CHACRA HISTORICAL DATA: 1ST PROD: 11/81
 OIL CUM: 0.39 MBO
 GAS CUM: 421.0 MMCF
 OIL YIELD: 0.0009 BBL/MCF

CHACRA PROJECTED DATA
 1/1/98 Qi: 73 MCFD
 DECLINE RATE: 4.0% (EXPONENTIAL)

HELEN JACKSON 2E DAKOTA PRODUCTION SECTION 33B-29N-09W



DAKOTA HISTORICAL DATA 1ST PROD: 11/81
 OIL CUM: 7.1 MBO
 GAS CUM: 318.9 MMCF
 OIL YIELD: 0.0222 BBL/MCF

DAKOTA PROJECTED DATA
 1/1/98 Qi: 73 MCFD
 DECLINE RATE: 4.0% (EXPONENTIAL)

FIXED COMMINGLE ALLOCATION FACTORS:

	GAS	OIL
CHACRA	50%	0%
DAKOTA	50%	100%

GAS ALLOCATION BASED ON PROJECTED 1997 RATES
 OIL ALLOCATION BASED ON WEIGHTED CUM OIL YIELDS

NOTE: ALL PRODUCTION DATA FROM DWIGHTS ENERGY DATA

PREPARED BY: PDB

HELEN JACKSON 2E
33B-29N-09W

CHACRA AND DAKOTA FORECAST FOR SUBTRACTION COMMINGLE WITH MESAVERDE

(6-12/98 AVG)

YEAR	CHACRA MCFD	DAKOTA MCFD	TOTAL MCFD	CHACRA OIL; BOPD	DAKOTA OIL; BOPD
1998	71	71	143	0.00	1.58
1999	70	70	140	0.00	1.55
2000	67	67	134	0.00	1.49
2001	64	64	129	0.00	1.43
2002	62	62	124	0.00	1.37
2003	59	59	119	0.00	1.31
2004	57	57	114	0.00	1.26
2005	55	55	109	0.00	1.21
2006	52	52	105	0.00	1.16
2007	50	50	101	0.00	1.12
2008	48	48	97	0.00	1.07
2009	46	46	93	0.00	1.03
2010	45	45	89	0.00	0.99
2011	43	43	86	0.00	0.95
2012	41	41	82	0.00	0.91
2013	39	39	79	0.00	0.87
2014	38	38	76	0.00	0.84
2015	36	36	73	0.00	0.81
2016	35	35	70	0.00	0.77
2017	33	33	67	0.00	0.74
2018	32	32	64	0.00	0.71
2019	31	31	62	0.00	0.68
2020	30	30	59	0.00	0.66
2021	28	28	57	0.00	0.63
2022	27	27	55	0.00	0.61
2023	26	26	52	0.00	0.58
2024	25	25	50	0.00	0.56
2025	24	24	48	0.00	0.54
2026	23	23	46	0.00	0.51
2027	22	22	45	0.00	0.49
2028	21	21	43	0.00	0.47
2029	21	21	41	0.00	0.45
2030	20	20	39	0.00	0.44
2031	19	19	38	0.00	0.42

DATE IN 2/19/98	SUSPENSE 3/11/98	ENGINEER DC	LOGGED BY MW	TYPE DHC
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ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION

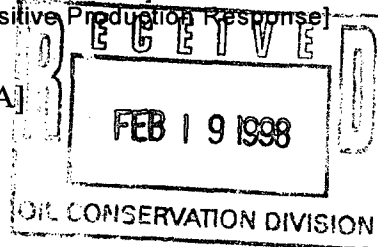
- Engineering Bureau -

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] and [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 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] 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 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.

Kay Maddox
Print or Type Name

Kay Maddox
Signature

Regulatory Agent
Title

2/13/97
Date



Mid-Continent Region
Exploration/Production

Conoco Inc.
10 Desta Drive, Suite 100W
Midland, TX 79705-4500
(915) 686-5400

February 16, 1998

Oil Conservation Division
2040 S. Pacheco
Santa Fe, New Mexico 87504-2088

RE: Application To Downhole Commingle
Jackson #2E Section 33, T-29-N, R-9-W, B
API # 30-045-24931
Otero Chacra (82329), Blanco Mesaverde (72319),
Basin Dakota (71599)
San Juan County, New Mexico

Dear Sir,

Please find enclosed what we are calling an amended C-107A. Amoco Production Co. Filed for and received approval to downhole commingle the Chacra & Dakota, Order # DHC-1208 (see attached). Conoco, Inc. Has recently purchased this well and would like to downhole commingle the Mesaverde with the Chacra & Dakota. Conoco believes that the fixed percentage allocations that were granted to Amoco in the Chacra will only cause discrepancies. This belief is based on the production data submitted with the enclosed C-107A application. Therefore, we would like to amend DHC Order #1208 to the percentages stated in our application.

If you have any additional questions concerning this application please call me @ (915) 686-5798. Thank you very much.

Sincerely,

Kay Maddox
Regulatory Agent



NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

CORRECTED ADMINISTRATIVE ORDER DIIC-1208

Amoco Production Company
P.O. Box 800
Denver, Colorado 80201-0800

Attention: Ms. Pamela Staley

*Helen Jackson Well No.2E
Unit B, Section 33, Township 29 North, Range 9 West, NMPM,
San Juan County, New Mexico.
Otero Chacra (Gas - 82329) and
Basin Dakota (Prorated Gas - 71599) Pools*

Dear Ms. Staley:

Reference is made to your recent application for an exception to Rule 303.A. of the Division Rules and Regulations to permit the above described well to commingle production from the subject pools in the wellbore.

It appearing that the subject well qualifies for approval for such exception pursuant to the provisions of Rule 303.C., and that reservoir damage or waste will not result from such downhole commingling, and correlative rights will not be violated thereby, you are hereby authorized to commingle the production as described above and any Division Order which authorized the dual completion and required separation of the zones is hereby placed in abeyance.

The maximum amount of gas which may be produced daily from the well shall be determined by Division Rules and Regulations or by the gas allowable for each respective prorated pool as printed in the Division's San Juan Basin Gas Proration Schedule.

Assignment of allowable to the well and allocation of production from the well shall be on the following basis:

Otero Chacra Pool	Oil 57%	Gas 63%
Basin Dakota Pool	Oil 43%	Gas 37%

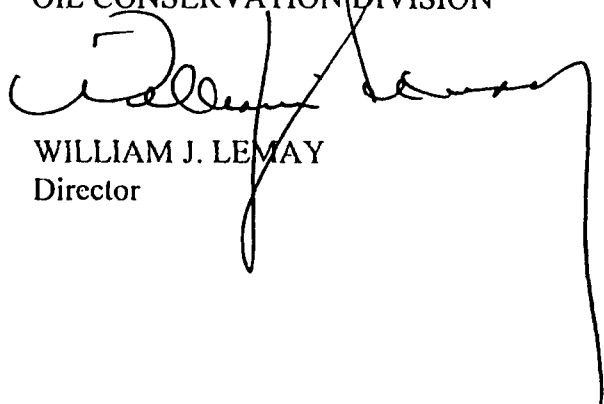
REMARKS: The operator shall notify the Aztec District Office of the Division upon implementation of the commingling process.

Administrative Order DHC-1208
Amoco Production Company
April 4, 1996
Page 2

Pursuant to Rule 303.H., the commingling authority granted herein may be rescinded by the Division Director if, in his opinion, conservation is not being best served by such commingling.

Approved at Santa Fe, New Mexico on this 4th day of April, 1996.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION



WILLIAM J. LEMAY
Director

S E A L

WJL/BES

cc: Oil Conservation Division - Aztec
Bureau of Land Management - Farmington



NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

ADMINISTRATIVE ORDER DIIC-1208

Amoco Production Company
P.O. Box 800
Denver, Colorado 80201-0800

Attention: Ms. Pamela Staley

*Helen Jackson Well No. 2E
Unit B, Section 33, Township 29 North, Range 9 West, NMPM,
San Juan County, New Mexico.
Otero Chacra (Gas - 82329) and
Basin Dakota (Prorated Gas - 71599) Pools*

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Basin Dakota Pool	Oil 57%	Gas 63%

REMARKS: The operator shall notify the Aztec District Office of the Division upon implementation of the commingling process.



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Farmington District Office
1235 La Plata Highway
Farmington, New Mexico 87401

March 12, 1996

IN REPLY REFER TO:

SF-079947 (DH Comm)
3162.3-2 (07327)

Pamela W. Staley
Amoco Production Company
P.O. Box 800 1670 Broadway
Denver, Colorado 80201

Dear Ms. Staley:

We have reviewed your application to commingle production downhole from the Basin Dakota and the Otero Chacra Pools in the following well:

**Helen Jackson #2E
1010' FNL, 1660' FEL, Section 33, T-29N, R-9W
San Juan County, New Mexico**

Production profiles from both formations were analyzed to determine if future allocation based on percentages would be equitable. Both formations have been declining at similar rates for the past year. Your Application and allocation method, are hereby approved as submitted, effective the date that actual commingling of production occurs. Approved allocation factors are:

Formation	Gas	Condensate
Basin Dakota	37% ✓	43% ✓
Otero Chacra	63% ✓	57% ✓

Under provisions of 43 CFR 3165.3, you may request an Administrative Review of the order(s) described above. Such request, including all supporting documents, must be filed in writing within 20 business days of receipt of this notice and must be filed with the State Director, Bureau of Land Management, P. O. Box 27115, Santa Fe, New Mexico 87502-0115. Such request shall not result in a suspension of the order(s) unless the reviewing official so determines. Procedures governing appeals from instructions, orders or decisions are contained in 43 CFR 3165.4 and 43 CFR 4.400 *et seq.*

If you have any questions regarding this correspondence, please contact Ray Hager at (505) 599-6366.

Sincerely,

Duane Spencer
Team Leader, Petroleum Management

DISTRICT I
P.O. Box 1980, Hobbs, NM 88241 1980

DISTRICT II
811 South First St. Artesia NM 88210 2835

DISTRICT III
1000 Rio Brazos Rd. Aztec, NM 87410 1693

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

2040 S. Pacheco
Santa Fe, New Mexico 87505-6429

Form C-107-A
New 3-12-96

APPROVAL PROCESS:
☒ Administrative ☐ Hearing

EXISTING WELLBORE
☒ YES ☐ NO

APPLICATION FOR DOWNHOLE COMMINGLING

Operator Conoco Inc. Address 10 Desta Dr. Ste 100W, Midland, Tx. 79705-4500

Lease Jackson Well No 2E Unit Ltr Sec Twp Rge Section 33, T-29-N, R-9-W, B County San Juan

OGRID NO. 005073 Property Code ?? API NO. 30-045-24931 Spacing Unit Lease Types: (check 1 or more)
Federal ☒ State ☐ (and/or) Fee ☐

The following facts are submitted in support of downhole commingling:	Upper Zone	Intermediate Zone	Lower Zone
1. Pool Name and Pool Code	Otero Chacra 82329	Blanco Mesaverde 72319	Basin Dakota 71599
2. TOP and Bottom of Pay Section (Perforations)	3256-3392'	4130-4916'	6666-6832'
3. Type of production (Oil or Gas)	Gas	Gas	Gas
4. Method of Production (Flowing or Artificial Lift)	Flowing	To Flow	Flowing
5. Bottomhole Pressure Oil Zones - Artificial Lift: Gas & Oil - Flowing: All Gas Zones: Estimated Current Measured Current Estimated Or Measured Original	a (Current) 563	a. 475	a. 715
	b(Original) 868	b. 1175	b. 2423
6. Oil Gravity (°API) or Gas BT Content	1185	1335	1268
7. Producing or Shut-In?	Producing	To Be Completed	Producing
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, date and oil/gas/water rates of recent test (within 60 days)	Yes	Yes	Yes
	Date Rates	Date Rates	Date Rates
	Date Rates Est 1/98 57 MCFD, .05 BOPD, 0 BWPD	Date Rates Production by subtraction See Attached table	Date Rates Est 1/98 98 MCFD, 1.29 BOPD, 0 BWPD
8. Fixed Percentage Allocation Formula - % or each zone	oil: % Gas %	oil: % Gas %	oil: % Gas %

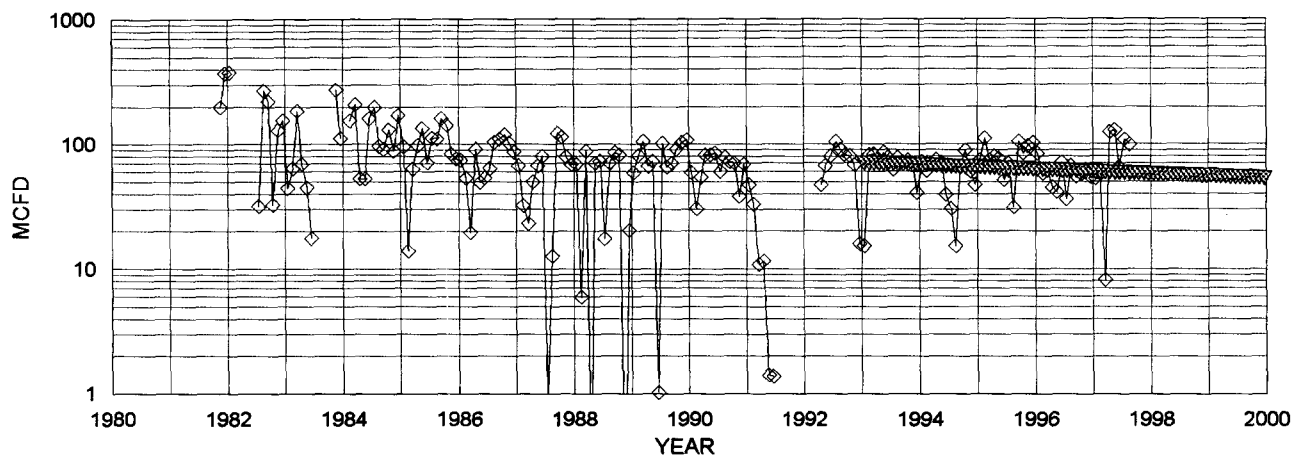
9. If allocation formula is based upon something other than current or past production, or is based upon some other method, submit attachments with supporting data and/or explaining method and providing rate projections or other required data.
10. Are all working, overriding, and royalty interests identical in all commingled zones? ☒ Yes ☐ No
If not, have all working, overriding, and royalty interests been notified by certified mail? ☒ Yes ☐ No
Have all offset operators been given written notice of the proposed downhole commingling? ☒ 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 others ☒ 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. NMOCD Reference Cases for Rule 303(D) Exceptions: ORDER NO(S). DHC 1208 Chacra/DK
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 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 Kay Maddox TITLE Regulatory Agent DATE February 13, 1998

TYPE OR PRINT NAME Kay Maddox TELEPHONE NO. (915) 686-5798

JACKSON 2E CHACRA PRODUCTION
SECTION 33B-29N-09W

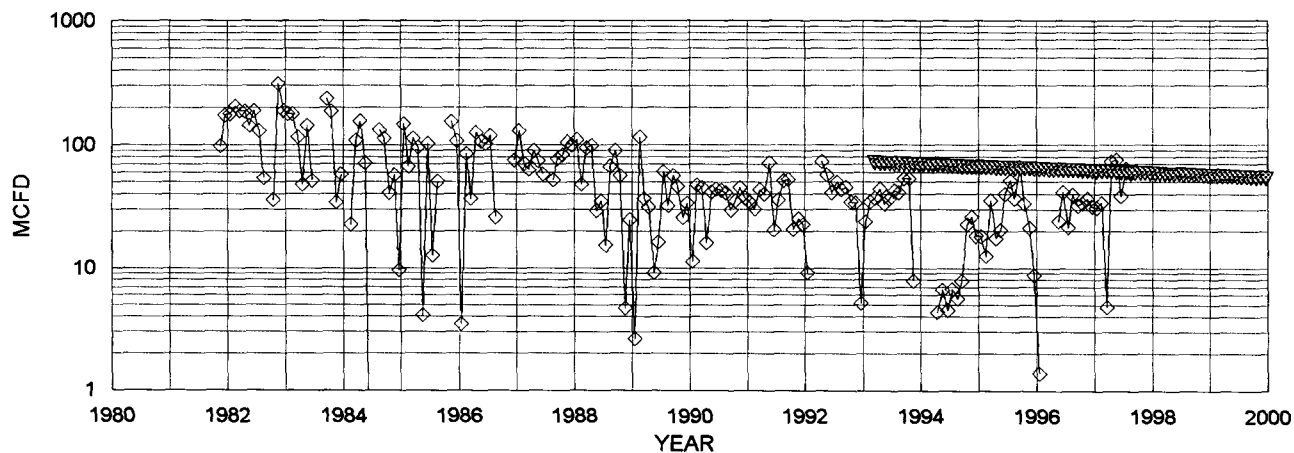


◇ CHACRA MCFD ▽ FIT MCFD

CHACRA HISTORICAL DATA: **1ST PROD: 11/81**
OIL CUM: **0.37 MBO**
GAS CUM: **414.6 MMCF**
OIL YIELD: **0.0009 BBL/MCF**

CHACRA PROJECTED DATA
1/1/98 Qi: 57 MCFD
DECLINE RATE: 4.0% (EXPONENTIAL)

JACKSON 2E DAKOTA PRODUCTION
SECTION 33B-29N-09W



◇ DAKOTA MCFD ▽ FIT MCFD

DAKOTA HISTORICAL DATA **1ST PROD: 11/81**
OIL CUM: **7.1 MBO**
GAS CUM: **315.1 MMCF**
OIL YIELD: **0.0224 BBL/MCF**

DAKOTA PROJECTED DATA
1/1/98 Qi: 58 MCFD
DECLINE RATE: 4.0% (EXPONENTIAL)

FIXED COMMINGLE ALLOCATION FACTORS:

	GAS	OIL
CHACRA	50%	4%
DAKOTA	50%	96%

GAS ALLOCATION BASED ON PROJECTED 1998 RATES
OIL ALLOCATION BASED ON WEIGHTED CUM OIL YIELDS

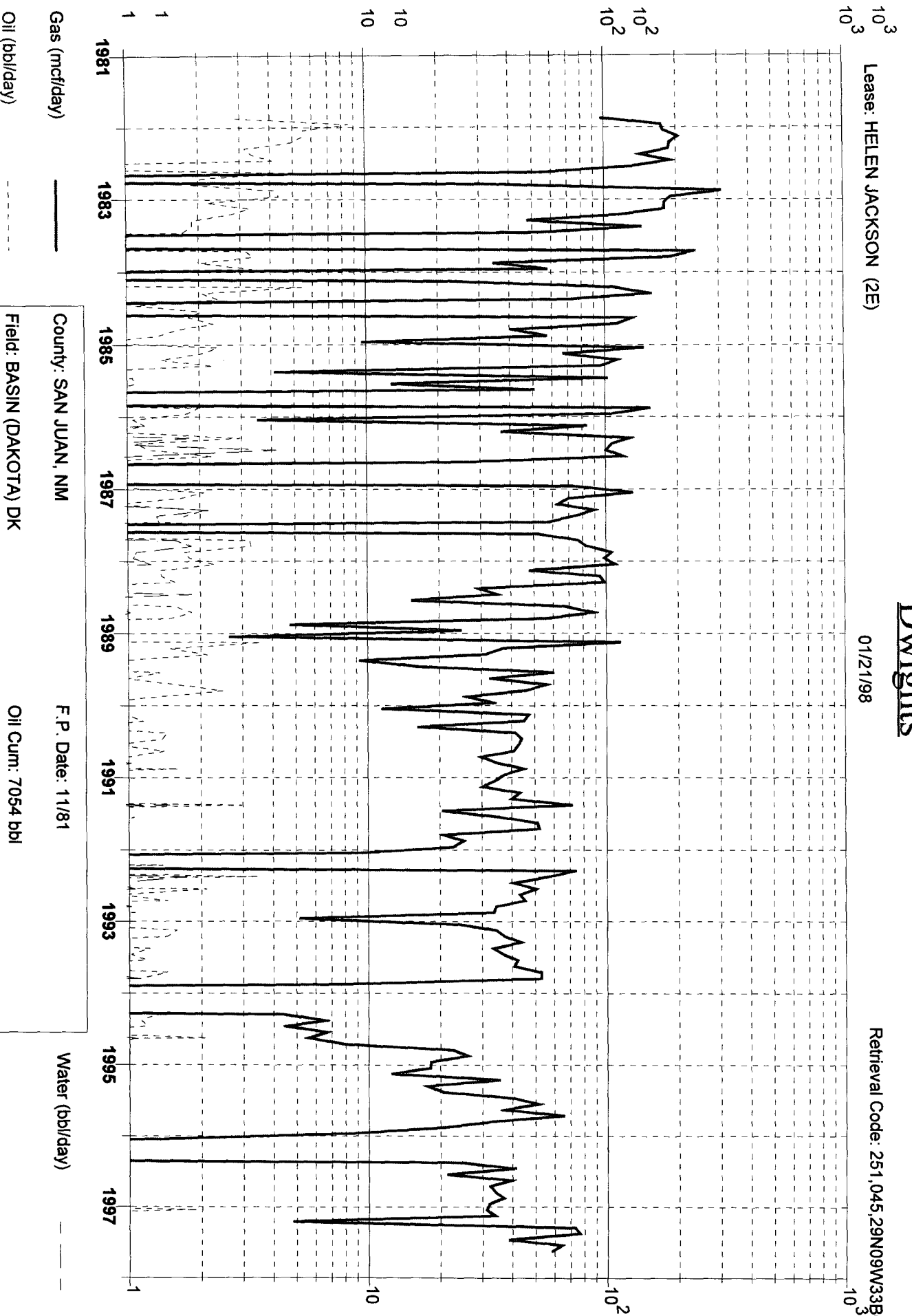
NOTE: ALL PRODUCTION DATA FROM DWIGHTS ENERGYDATA

Dwights

Lease: HELEN JACKSON (2E)

01/21/98

Retrieval Code: 251,045,29N09W33B00DK



Gas (mcf/day)

Oil (bbl/day)

County: SAN JUAN, NIM

Field: BASIN (DAKOTA) DK

Reservoir: DAKOTA

Operator: AMOCO PRODUCTION CO

F.P. Date: 11/81

Oil Cum: 7054 bbl

Gas Cum: 315.1 mmcf

Location: 33B 29N 9W

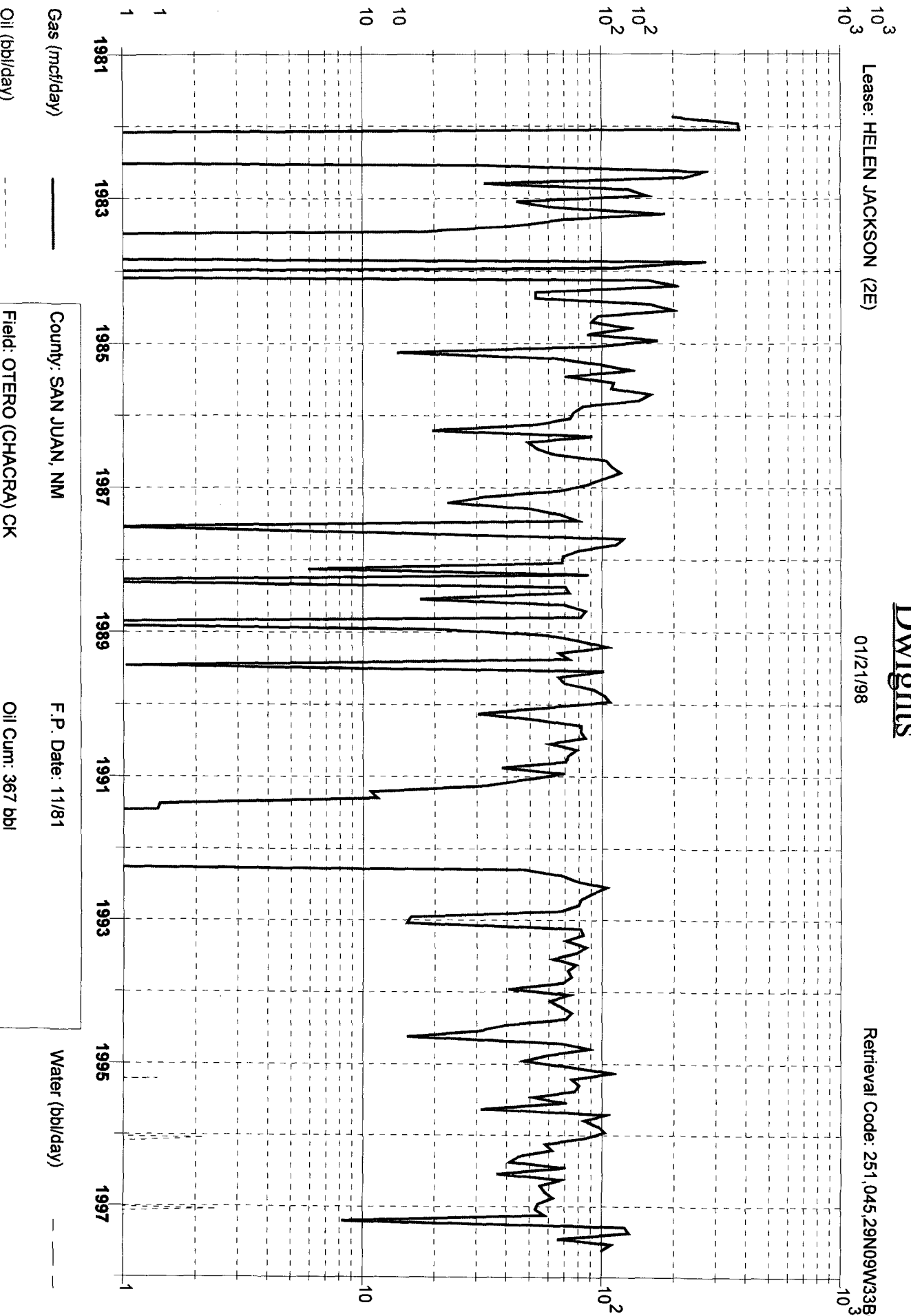
Water (bbl/day)

Dwights

Lease: HELEN JACKSON (2E)

01/21/98

Retrieval Code: 251,045,29N09W33B00CK



County: SAN JUAN, NM

F.P. Date: 11/81

Field: OTERO (CHACRA) CK

Oil Cum: 367 bbl

Reservoir: CHACRA

Gas Cum: 414.6 mmcf

Operator: AMOCO PRODUCTION CO

Location: 33B 29N 9W

Conoco, Inc.
10 Desta Dr Ste 100W
Midland, TX 79705

Re: Application to Downhole Commingle C-107A
Jackson #2E, Section 33, T-29-N, R-9-W, B
San Juan County, New Mexico

Notification Of Offset Operators:

Amoco
PO Box 800
Denver, CO 80201

Burlington Resources
PO Box 4289
Farmington, NM 87499

West Largo Corp.
6638 W. Ottawa Ave STE 100
Littleton, Co 80123

S&G Interests
811 Dallas STE 1505
Houston, TX 77002

D.J. Simmons
PO Box 1469
Farmington, NM 87499

Koch Exploration Co.
PO Box 2256
Wichita, KA 67201

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

District II
PO Drawer DD, Artesia, NM 88211-0719

District III
1000 Rio Brazos Rd. Aztec, NM 87410

District IV
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION

PO Box 2088
Santa Fe, NM 87504-2088

Revised February 21, 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 30-045-24931	2 Pool Code 72319	3 Pool Name Blanco Mesaverde
4 Property Code	5 Property Name Jackson	6 Well Number #2E
7 OGRID No. 005073	8 Operator Name Conoco Inc., 10 Desta Drive, Ste. 100W, Midland, TX 79705-4500	9 Elevation 5902'

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
B	33	29N	9W		1010	North	1660	East	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

12 Dedicated Acres 320	13 Joint or Infill	14 Consolidation Code	15 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

16 	17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief Signature Printed Name Kay Maddox Title Regulatory Agent Date February 13, 1998	
	18 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. Date of Survey Signature and Seal of Professional Surveyor:	
	Certificate Number	

All distances must be from the outer boundaries of the Section

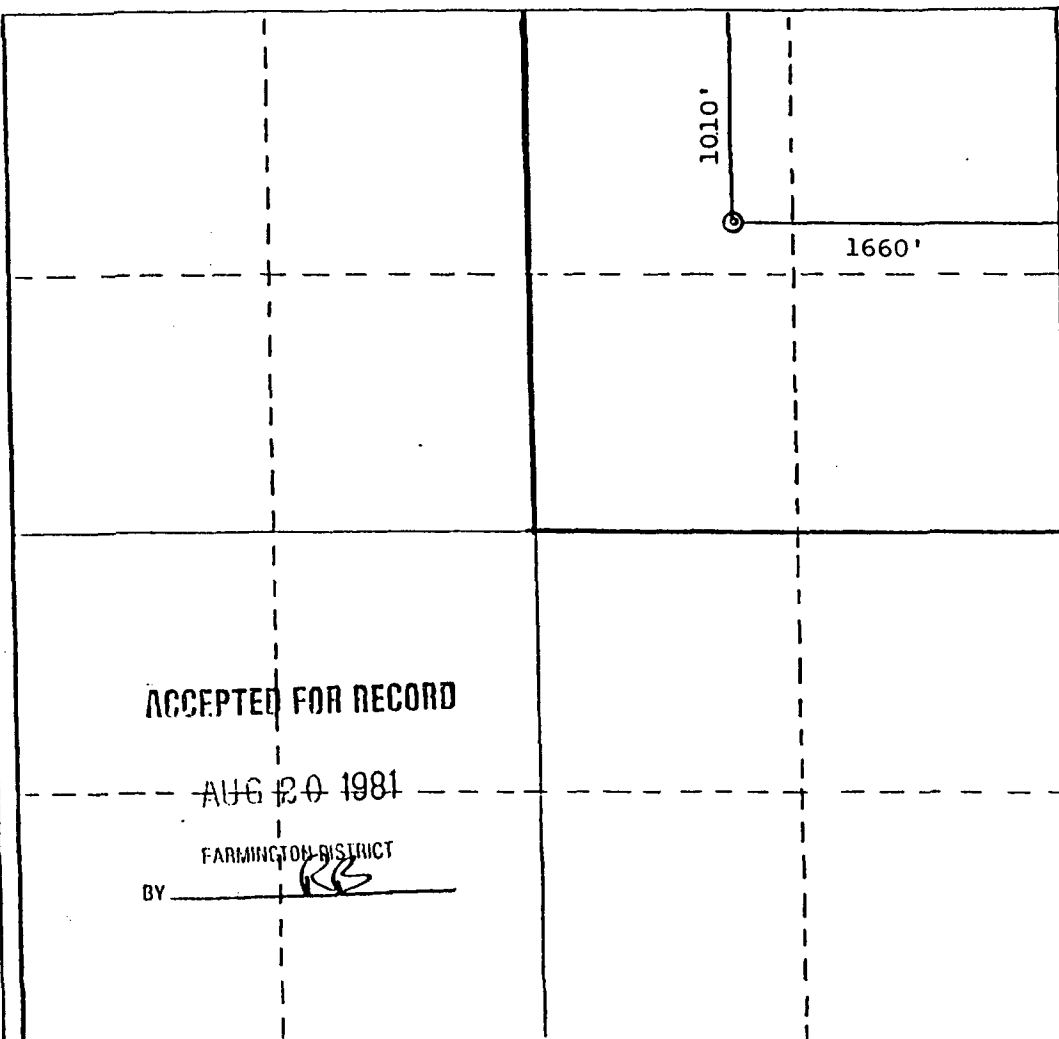
Operator Tenneco Oil Company			Lease Jackson		Well No. 2E
Unit Letter B	Section 33	Township 29N	Range 9W	County San Juan	
Actual Footage Location of Well:					
1010 feet from the North line and		1660 feet from the East line			
Ground Level Elev: 5902'	Producing Formation Dakota/Chacra		Pool Dakota/hacra		Dedicated Acreage: 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.

[Signature]

Name

Production Analyst

Position

Tenneco Oil Company

Company

8/3/81

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

Registered Professional Engineer
and/or Land Surveyor

Certificate No.

0 330 660 990 1320 1650 1980 231 640 2000 1500 1000 500

OPERATOR

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

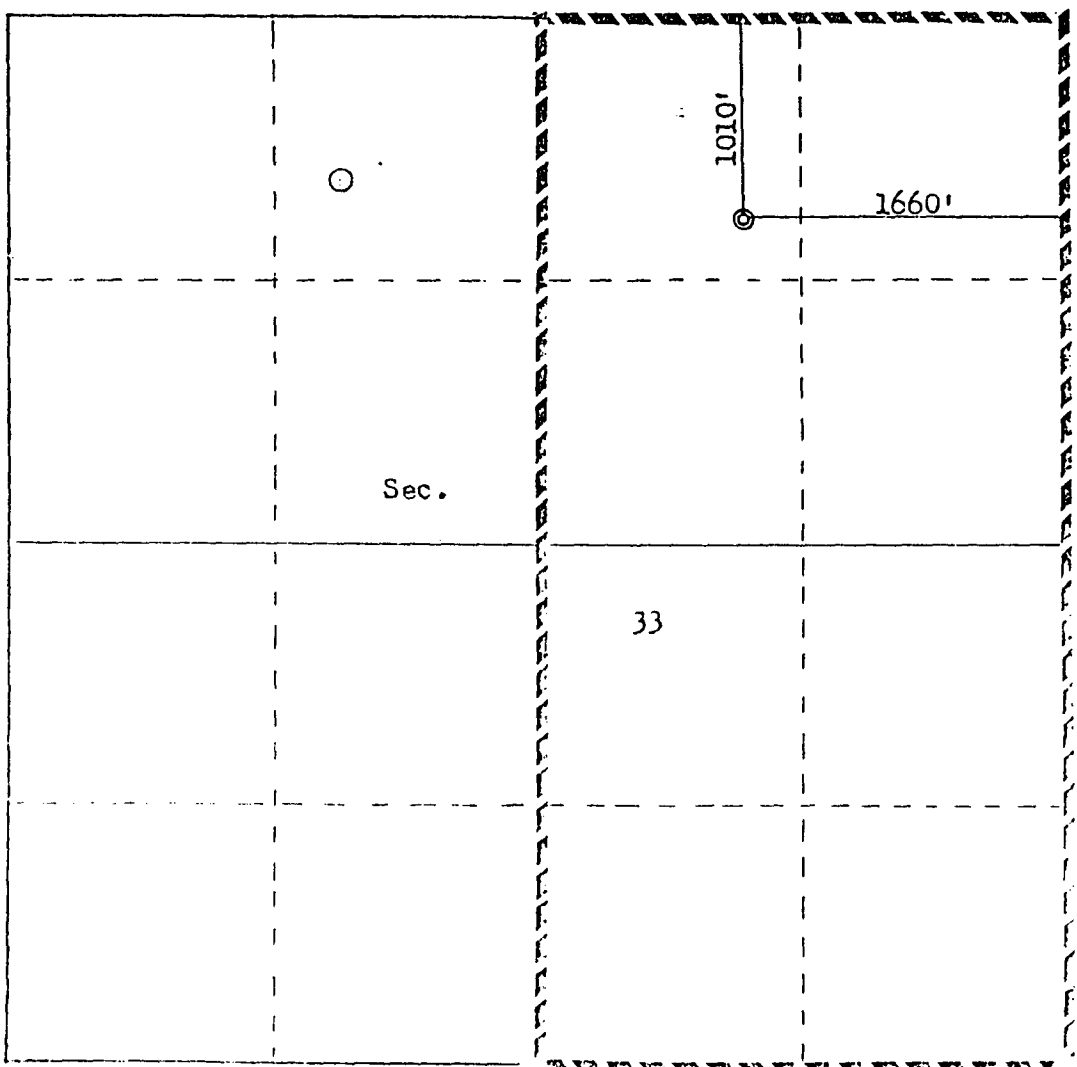
Operator TENNECO OIL COMPANY			Lease JACKSON		Well No. 2E
Well Letter B	Section 33	Township 29N	Range 9W	County San Juan	
Actual Footage Location of Well:					
1610	feet from the North	line and	1660	feet from the East	line
Gravel Level Below 5902	Producing Formation Dakota	Pool Basin Dakota	Dedicated Acreage: 529 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.



Scale: 1" = 300'

CERTIFICATION	
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.	
<i>R. A. Mishler</i>	
Name	R. A. Mishler
Position	Sr. Production Analyst
Company	Tenneco Oil Company
Date	February 5, 1981
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	February 5, 1981
Professional Engineer and Land Surveyor	
<i>Fred B. Kern</i>	
Fred B. Kern	
Certificate No.	3250
FEB 12 1981	

PREPARED BY: PMS

JACKSON 2E: CHACRA AND DAKOTA FORECAST FOR SUBTRACTION COMMINGLE WITH MESAVERDE
33B-29N-09W

YEAR	CHACRA MCFD	DAKOTA MCFD	TOTAL MCFD	CHACRA OIL; BOPD	DAKOTA OIL; BOPD
1998	56	57	114	0.0	1.3
1999	55	56	111	0.0	1.3
2000	53	54	107	0.0	1.2
2001	51	52	103	0.0	1.2
2002	49	50	98	0.0	1.1
2003	47	48	95	0.0	1.1
2004	45	46	91	0.0	1.0
2005	43	44	87	0.0	1.0
2006	41	42	84	0.0	0.9
2007	40	40	80	0.0	0.9
2008	38	39	77	0.0	0.9
2009	37	37	74	0.0	0.8
2010	35	36	71	0.0	0.8
2011	34	34	68	0.0	0.8
2012	32	33	65	0.0	0.7
2013	31	32	63	0.0	0.7
2014	30	30	60	0.0	0.7
2015	29	29	58	0.0	0.7
2016	28	28	56	0.0	0.6
2017	26	27	53	0.0	0.6
2018	25	26	51	0.0	0.6
2019	24	25	49	0.0	0.6
2020	23	24	47	0.0	0.5
2021	22	23	45	0.0	0.5
2022	22	22	44	0.0	0.5
2023	21	21	42	0.0	0.5
2024	20	20	40	0.0	0.5
2025	19	19	39	0.0	0.4
2026	18	19	37	0.0	0.4
2027	18	18	35	0.0	0.4
2028	17	17	34	0.0	0.4
2029	16	16	33	0.0	0.4
2030	16	16	31	0.0	0.4
2031	15	15	30	0.0	0.3