

DATE IN <u>3/2/98</u>	SUSPENSE <u>3/23/98</u>	ENGINEER <u>DC</u>	LOGGED BY <u>MV</u>	TYPE <u>DHC</u>
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ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION
- Engineering Bureau -

1887

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

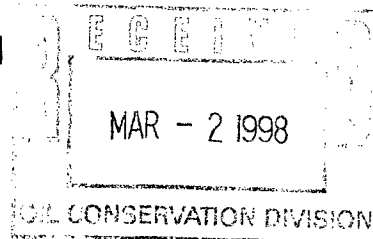
Check One Only for [B] and [C]

[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

2/24/98
Date

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 87505-8429

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 Houck Well No 2 Unit Ltr Sec Twp Rge Section 11, T29-N, R-10-W, A County San Juan
Spacing Unit Lease Types: (check 1 or more)
OGRID NO. 005073 Property Code _____ API NO. 30-045-25805 Federal ☒ State ☐ (and/or) Fee ☐

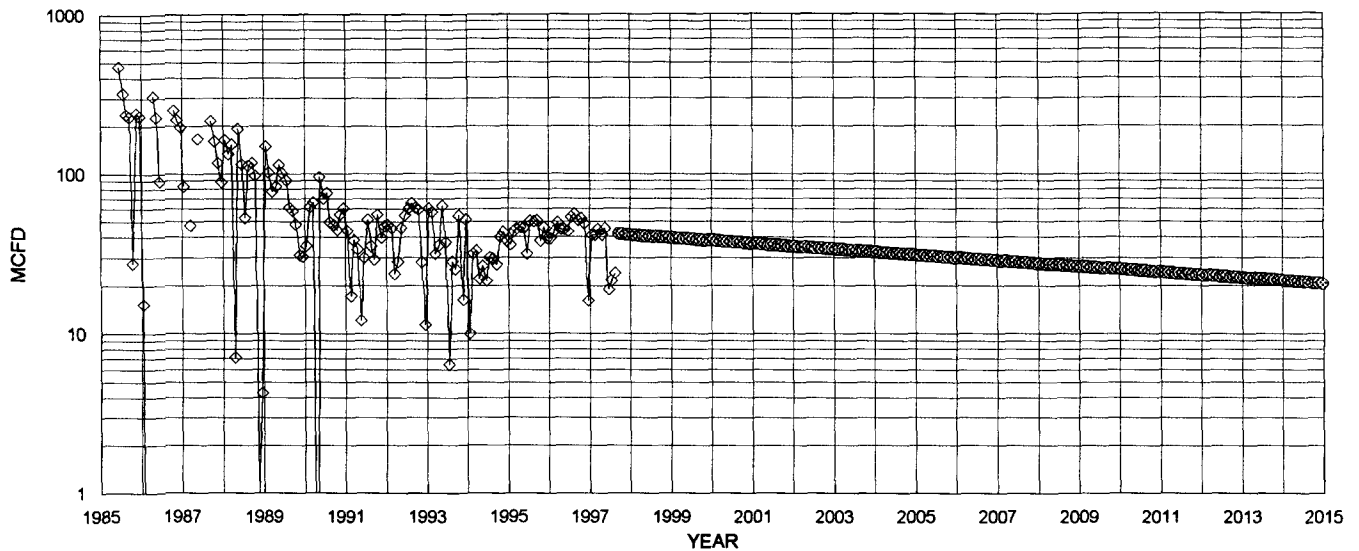
The following facts are submitted in support of downhole commingling:	Upper Zone	Intermediate Zone	Lower Zone
1. Pool Name and Pool Code	Blanco Mesaverde 72319		Basin Dakota 71599
2. TOP and Bottom of Pay Section (Perforations)	4255-4800'		6670-6764'
3. Type of production (Oil or Gas)	Gas		Gas
4. Method of Production (Flowing or Artificial Lift)	To Flow		Flowing
5. Bottomhole Pressure	a (Current)	a.	a.
Oil Zones - Artificial Lift: Estimated Current	432		501
Gas & Oil - Flowing: Measured Current	b (Original)	b.	b.
All Gas Zones: Estimated Or Measured Original	1195		1229
6. Oil Gravity (°API) or Gas BT Content	1200		
7. Producing or Shut-In?	To Be Completed		Producing
Production Marginal? (yes or no)	Yes		Yes
• If Shut-In give date and oil/gas/ water rates of last production	Date Rates	Date Rates	Date Rates
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)	Date Rates Production to be allocated by Subtraction - See Attached Table	Date Rates	Date Rates EST 1/98 41 MCFD, .1 BOPD, 0 BOPD
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? ☒ 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. NMOC Reference Cases for Rule 303(D) 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 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 2/24/98
TYPE OR PRINT NAME Kay Maddox TELEPHONE NO. (915) 686-5798

**HOUCK 2 DAKOTA PRODUCTION
SECTION 11A-29N-10W**



◇ DAKOTA MCFD ◇ FIT MCFD

DAKOTA HISTORICAL DATA		1ST PROD: 01/85		DAKOTA PROJECTED DATA	
OIL CUM:	1.3 MBO			1/1/98 Qi:	41 MCFD
GAS CUM:	298.8 MMCF			DECLINE RATE:	4.00% (EXPONENTIAL)
OIL YIELD:	0.0043 BBL/MCF			OIL YIELD:	0.0030 BBL/MCF, LAST 3 YEARS

PRODUCTION FORECAST FOR SUBTRACTION METHOD COMMINGLE ALLOCATION

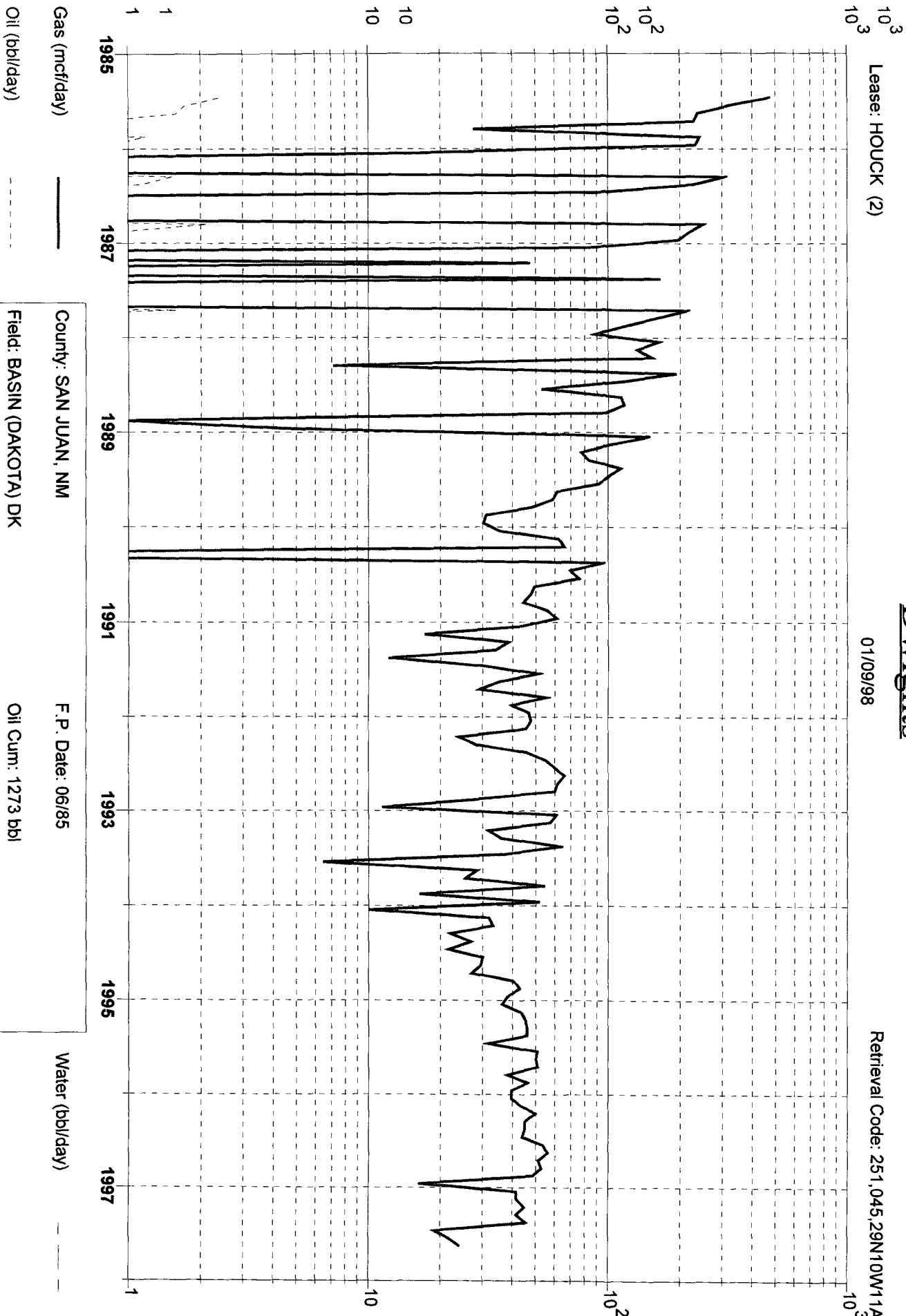
YEAR	MID-YEAR AVG MCFD	MID-YEAR AVG BOPD
1998	41	0.12
1999	39	0.12
2000	37	0.11
2001	36	0.11
2002	34	0.10
2003	33	0.10
2004	32	0.10
2005	31	0.09
2006	29	0.09
2007	28	0.08
2008	27	0.08
2009	26	0.08
2010	25	0.07
2011	24	0.07
2012	23	0.07
2013	22	0.07
2014	21	0.06
2015	20	0.06
2016	19	0.06
2017	19	0.06
2018	18	0.05
2019	17	0.05
2020	17	0.05
2021	16	0.05
2022	15	0.05
2023	15	0.04
2024	14	0.04
2025	13	0.04
2026	13	0.04
2027	12	0.04

Dwights

Lease: HOUCK (2)

01/09/98

Retrieval Code: 251,045,29N10W11A00DK



Gas (mcf/day)

Oil (bbl/day)

Water (bbl/day)

County: SAN JUAN, NM

Field: BASIN (DAKOTA) DK

Reservoir: DAKOTA

Operator: AMOCO PRODUCTION CO

F.P. Date: 06/85

Oil Cum: 1273 bbl

Gas Cum: 298.8 mmcf

Location: 11A 29N 10W

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

P. O. BOX 2088

ANTA FE, NEW MEXICO 87501

Form C-107
Revised 10-1-70

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

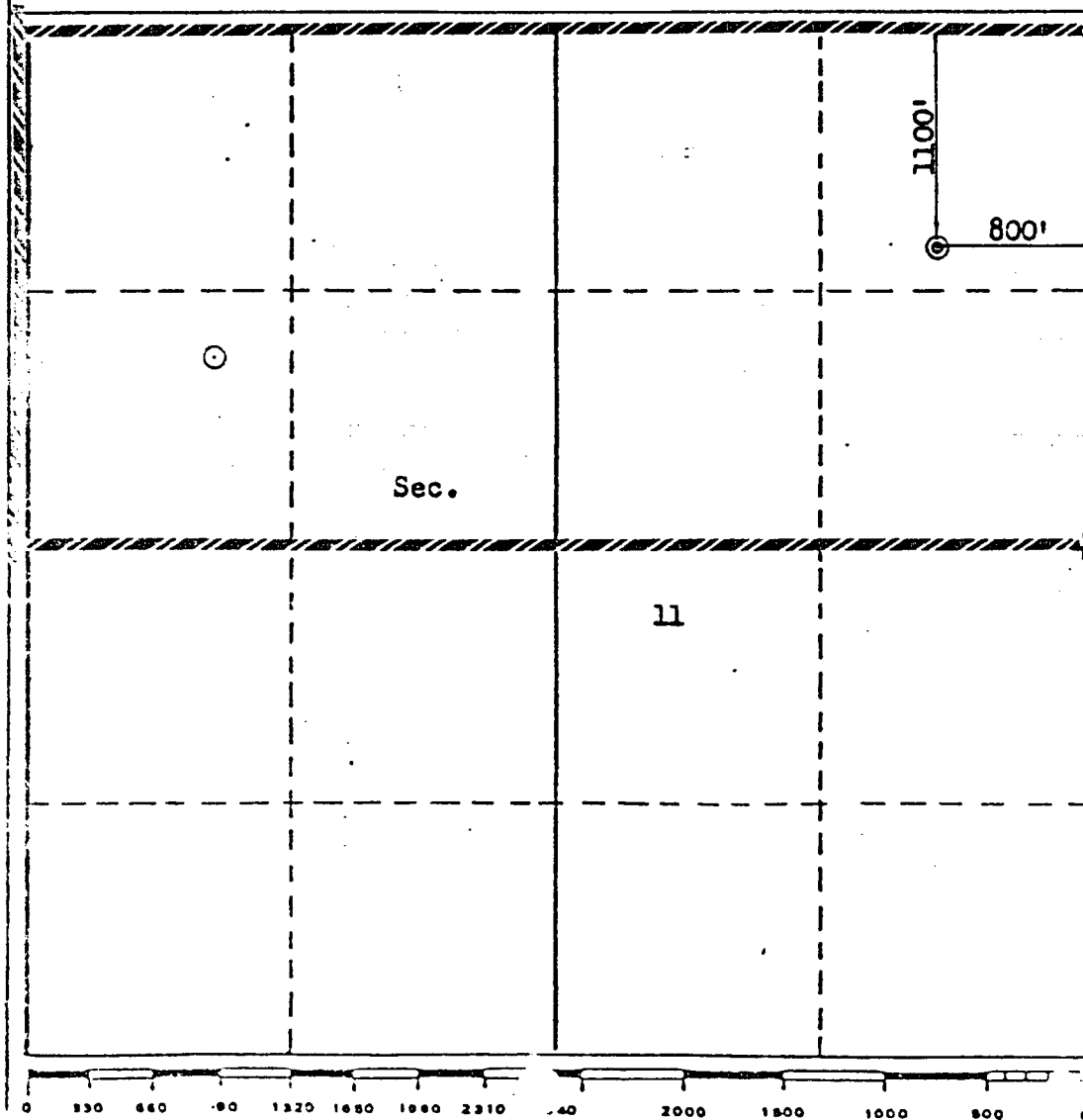
Operator TENNECO OIL COMPANY			Lease HOUCK		Well No. 2E
Unit Letter A	Section 11	Township 29N	Range 10W	County San Juan	
Actual Section Location of Well: 1100 feet from the North line and 800 feet from the East line					
Ground Level Elev. 5933	Producing Formation Dakota		Pool Basin Dakota	Dedicated Acreage: 320 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.



1100' 800'

CERTIFICATION

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

Name

R. A. Mishler

Position

Sr. Production Analyst

Company

Tenneco Oil Company

Date

February 4, 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

August 28, 1980

Registered Professional Engineer
and/or Land Surveyor

Fred B. Karp Jr.

Certificate No. 3950

3950

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 30-045-25805		2 Pool Code 72319		3 Pool Name Blanco Mesaverde	
4 Property Code		5 Property Name Houck			6 Well Number 2
7 OGRID No. 005073		8 Operator Name Conoco Inc., 10 Desta Drive, Ste. 100W, Midland, TX 79705-4500			9 Elevation 5833'

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
A	11	29N	10W		1100	North	800	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.
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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

Kay Maddox
Signature

Kay Maddox

Printed Name

Regulatory Agent

Title

2/24/98

Date

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

Houck #2
Section 11, T-29-N, R-10-W, A
API # 30-045-25805
San Juan County, New Mexico

RE: Downhole Commingle Application C-107A

Notification of Offset Operators:

Burlington Resources
PO Box 4289
Farmington, NM 87499

Amoco
PO Box 800
Denver, CO 80201

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