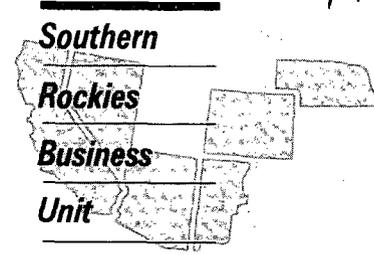


4-5-95

1178



March 15, 1995

Mr. William J. LeMay, Director
New Mexico Oil Conservation Division
2040 S. Pacheco Street
P. O. Box 6429
Santa Fe, NM 87504

RECEIVED

MAR 17 1995

Oil Conservation Division

**Application for Exception to Rule 303-A
Downhole Commingling
Jicarilla B #7 Well
1850' FNL, 1150' FEL, Section 16-T26N-R5W
Blanco Mesaverde, Tapacito Gallup and Basin Dakota Pools
Rio Arriba County, New Mexico**

Amoco Production Company hereby requests administrative approval to downhole commingle production from the Blanco Mesaverde, Tapacito Gallup and Basin Dakota Pools in the Jicarilla B #7 well referenced above. The Jicarilla B #7 well was originally a dual completion in the Dakota and Gallup. We have recently recompleted the well to the Mesaverde with all three zones open in the wellbore. The well is shut-in waiting on commingling approval. The three zones are expected to produce at a total commingled rate of about 150 mcf/d. The ownership (WI, RI, ORRI) of these pools is identical in this wellbore. Downhole commingling will offer an economical method of production while protecting against reservoir damage, waste of reserve and violation of correlative rights. Offset operators to this well will receive a copy of this application by certified mail. If there are any questions concerning this matter, please contact me at (303) 830-5072.

Sincerely,

J. W. Hawkins
J. W. Hawkins

Enclosures

cc: Wayne Branam
Steve Smethie

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

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

Offset Operators

Conoco
10 Desta Drive
Midland TX 79701-4515
Attn: Jerry Hoover

Meridian Oil Inc.
PO Box 4289
Farmington NM 87401
Attn: Alan Alexander

Southland Royalty
PO Box 4289
Farmington NM 87401

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: Jicarilla B
Well Number: 7
Well Location: 1850' FNL & 1150' FEL
Section 16, T26N-R5W
Rio Arriba County, New Mexico
Pools Commingled: Blanco Mesaverde
Tapacito Gallup
Basin Dakota

- (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.

Prior to recompletion, the Basin Dakota produced an average stabilized rate of 70 mcf/d and 0.2 bcpd. The Tapacito Gallup zone produced intermittently with an average rate of about 20 mcf/d and 1 bcpd. The Blanco Mesaverde zone tested at about 20 mcf/d but still needed to clean up from frac fluid. Additional testing of the commingled zones will be conducted to determine the initial rate for the Blanco Mesaverde.

- (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. (This requirement may be dispensed within the case of a newly completed or recently completed well which has little or no production history. However, a complete resume of the well's completion history including description of treating, testing, etc., of each zone, and a prognostication of future production from each zone shall be permitted.)

Blanco Mesaverde:	New Completion.
Tapacito Gallup Completion:	Historical production curve attached.
Basin Dakota Completion:	Historical production curve attached.

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

	BH Pressure	SI Tubing Press.	Fluid Level
Blanco Mesaverde Completion:	605 psi	560 psi	0'
Tapacito Gallup Completion:	612 psi	520 psi	93'
Basin Dakota Completion:	*1080 psi	*760 psi	

* pressures based on average of Jicarilla B-7, B-7E, and B-3 Dakota completions.

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

The fluids have no abnormal components that would prohibit commingling, or promote the creation of emulsions or scale (see attached produced gas and fluid analysis).

- (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:

Since the BTU content of the produced fluids are very similar, 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:

Based on the historical production trends with the Basin Dakota currently producing an average of about 70 mcf and 0.2 bcpd and the Tapacito Gallup currently producing an average of about 20 mcf and 1 bcpd, we propose an allocation factor using a fixed percentage for each zone. The Blanco Mesaverde zone will be determined after additional testing to aid in determination of the allocation factor

- (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. The offsetting operators listed on the attached sheet will receive a copy of this application by certified mail.

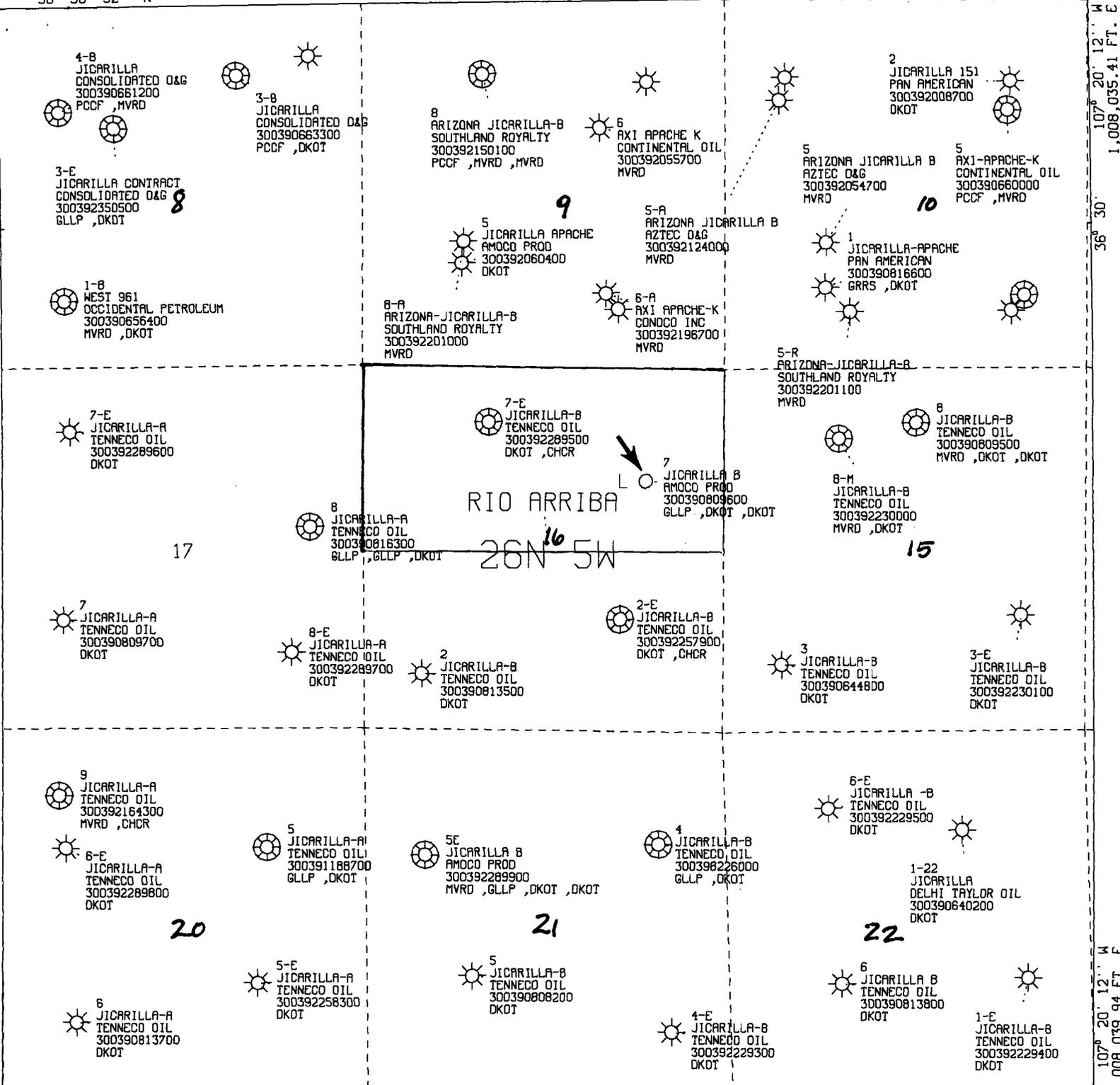
36° 30' 32" N

36° 30' 32" N

107° 20' 12" W
1,008,035.41 FT. E

36° 30'

107° 20' 12" W
1,008,039.94 FT. E



36° 27' 54" N
13,244,568.12 FT. N

36° 27' 54" N
13,244,568.12 FT. N

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
 JICARILLA B #7
 MESAVERDE
 DAKOTA AND GALLUP OFFSET WELLS
 SCALE 1 IN. = 2,000 FT. FEB 28, 1995

POLYCONIC CENTRAL MERIDIAN - 107° 21' 50" W LON
SPHEROID - 6

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

Form C-102
 Revised February 21, 1987

OIL CONSERVATION DIVISION
 PO Box 2088
 Santa Fe, NM 87504-2088

Instructions on back
 Submit to Appropriate District Office
 State Lease - 4 Copies
 Fee Lease - 3 Copies

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 APT Number 30 039 08096		2 Pool Code 72319		3 Pool Name Blanco Mesaverde	
4 Property Code 000733		5 Property Name Jicarilla B			6 Well Number 7
7 OCRID No. 000778		8 Operator Name Amoco Production Company			9 Elevation 6610GR

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
H	16	26N	5W		1850	N	1150	E	RioArriba

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 1/2	13 Joint or Infill N	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				1850'	17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief  Signature A. WAYNE BRANAM Printed Name BUSINESS ANALYST Title Nov 28, 1994 Date
				1150'	
		Section 16			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. ON File Jun 28, 1966 Date of Survey Signature and Seal of Professional Surveyer: Certificate Number

**MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT**

Form C-102
Supersedes C-128
Effective 1-1-65

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

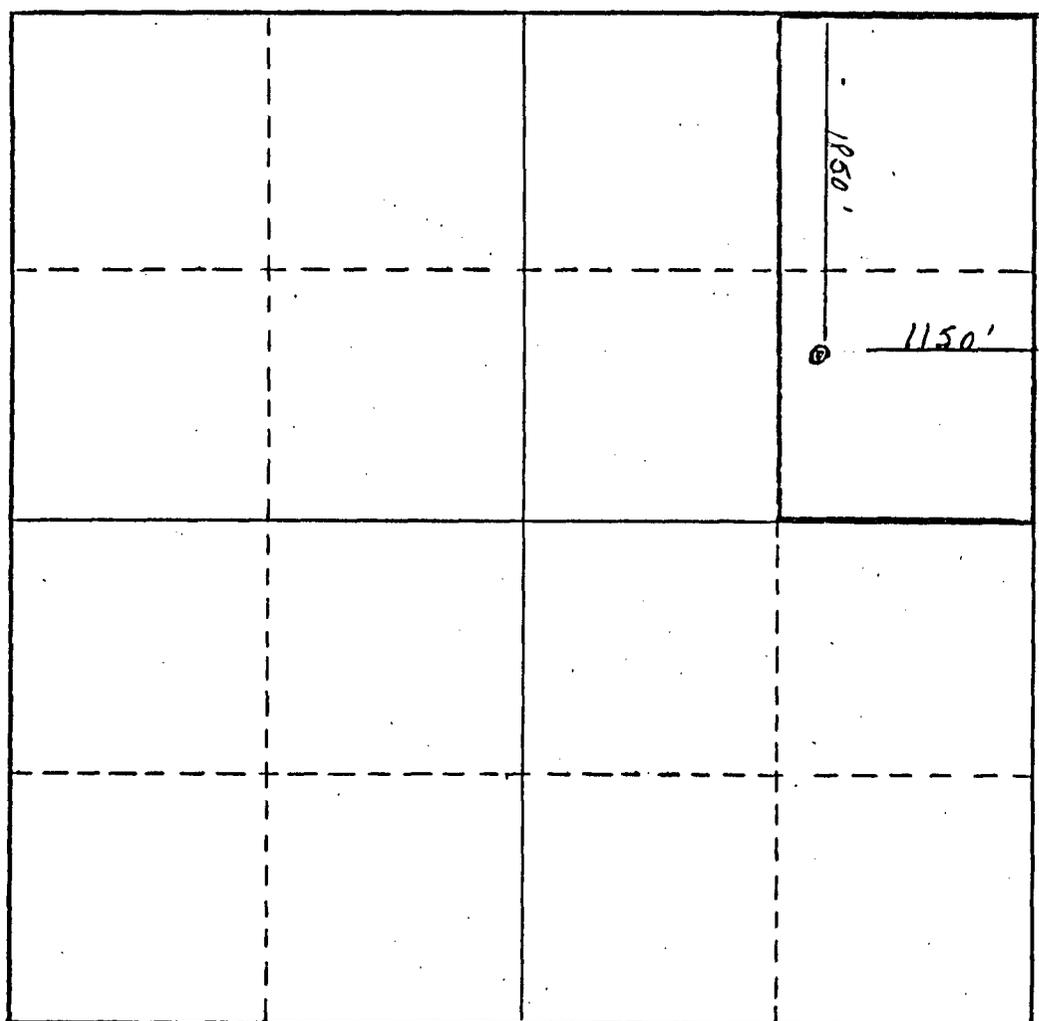
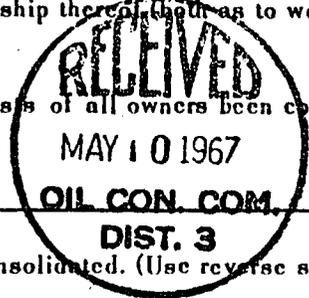
Operator Tenneco Oil Company		Lease Jicarilla "B"			Well No. 7		
Unit Letter H	Section 16	Township 26N	Range 5W	County Rio Arriba			
Actual Footage Location of Well:							
1850	feet from the	North	line and	1150	feet from the	East	line
Ground Level Elev. 6610 Gr.	Producing Formation Tapacito Gallup		Pool Tapacito Gallup		Dedicated Acreage: E/2 of NE 80 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.

G. A. Forth
Name **G. A. Forth**
Senior Production Clerk

Position
Tenneco Oil Company

Company
May 8, 1967

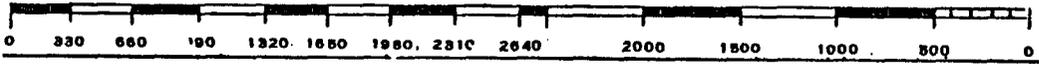
Date

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.



**NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACERAGE DEDICATION PLAT**

All distances must be from the outer boundaries of the Section

Operator <i>Amoco Production Company</i> TENNECO OIL COMPANY			Lease JICARILLA "B"			Well No. 7		
Unit Letter H	Section 16	Township 26 North	Range 5 West	County Rio Arriba				
Actual Footage Location of Well: 1850 feet from the North line and 1150 feet from the East line								
Ground Level Elev. 6610' ungraded	Producing Formation Basin Dakota			Pool Basin Dakota			Dedicated Acreage: 320 N/2 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 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.

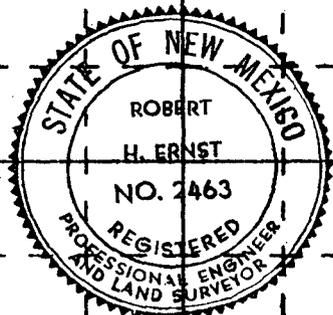
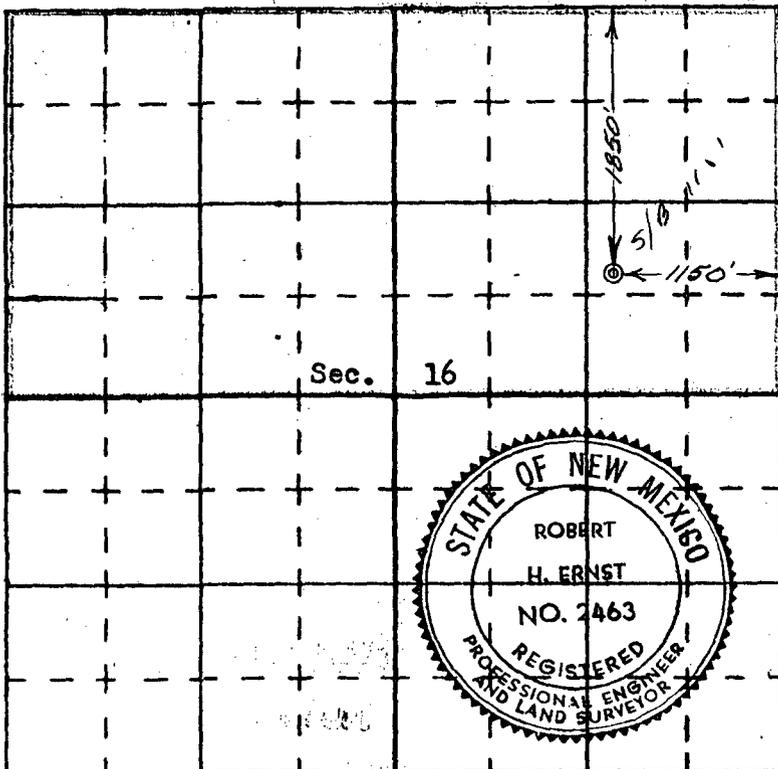
CERTIFICATION

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

Harold C. Nichols
Name
Sr. Production Clerk
Position
Tenneco Oil Company
Company
August 16, 1966
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.

28 June 1966
Date Surveyed
Robert H. Ernst
Registered Professional Engineer
and/or Land Surveyor
Robert H. Ernst
N. Mex. PE & LS 2463



Lease: JICARILLA B

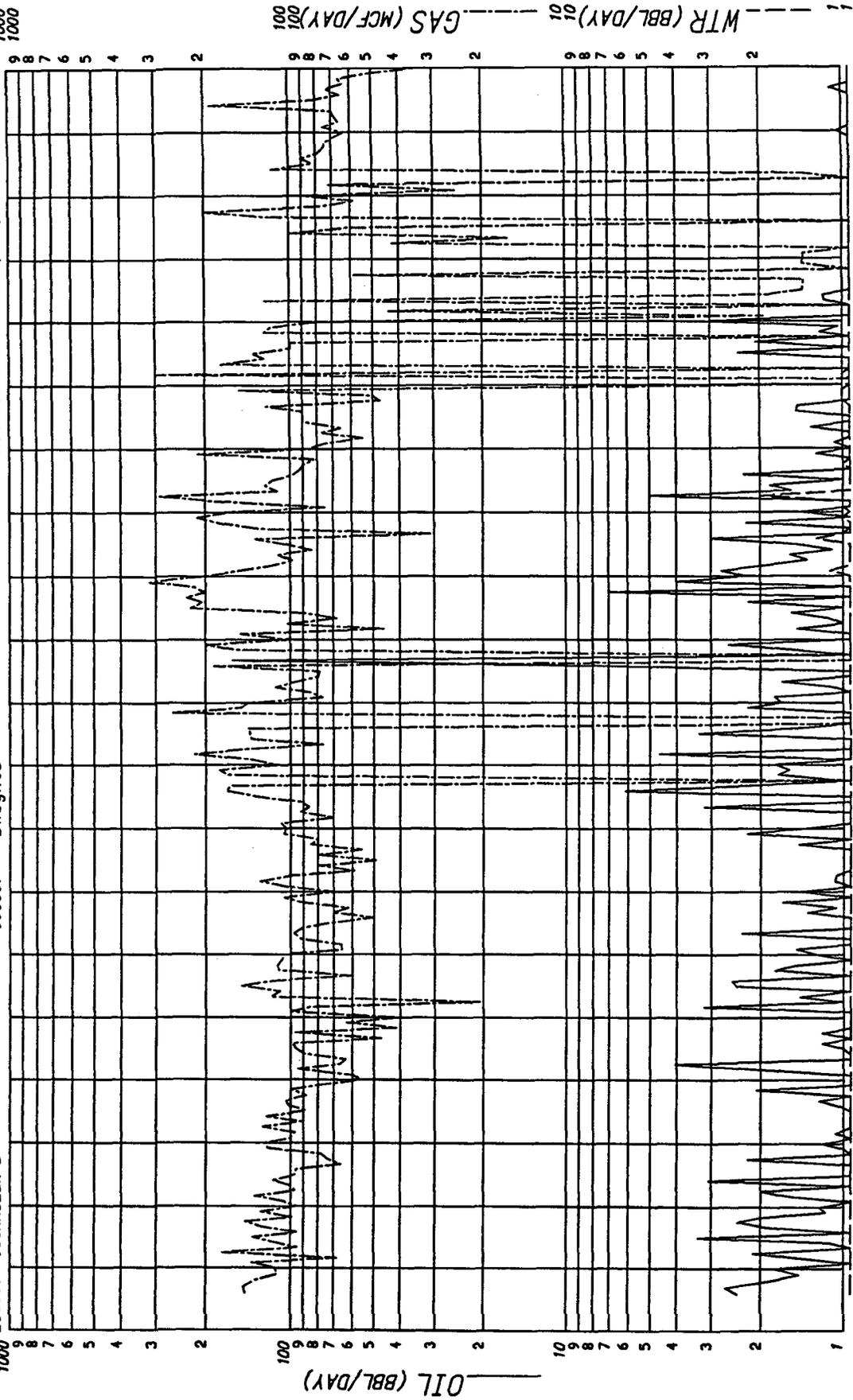
000007

Dwights

Retrieval Code: 251,039,26N05M16H00DK

1000

1000



65-
Annual
Data

County: RIO ARRIBA
 Field: BASIN (DAKOTA) DK
 Reservoir: DAKOTA
 Operator: AMOCO PRODUCTION CO
 Oil Cum: 13829 Gas Cum: 913533
 Location: T8H 26N 5W

State: NM

F.P. Date 01-67

Date: 09-20-94

Lease: JICARILLA B

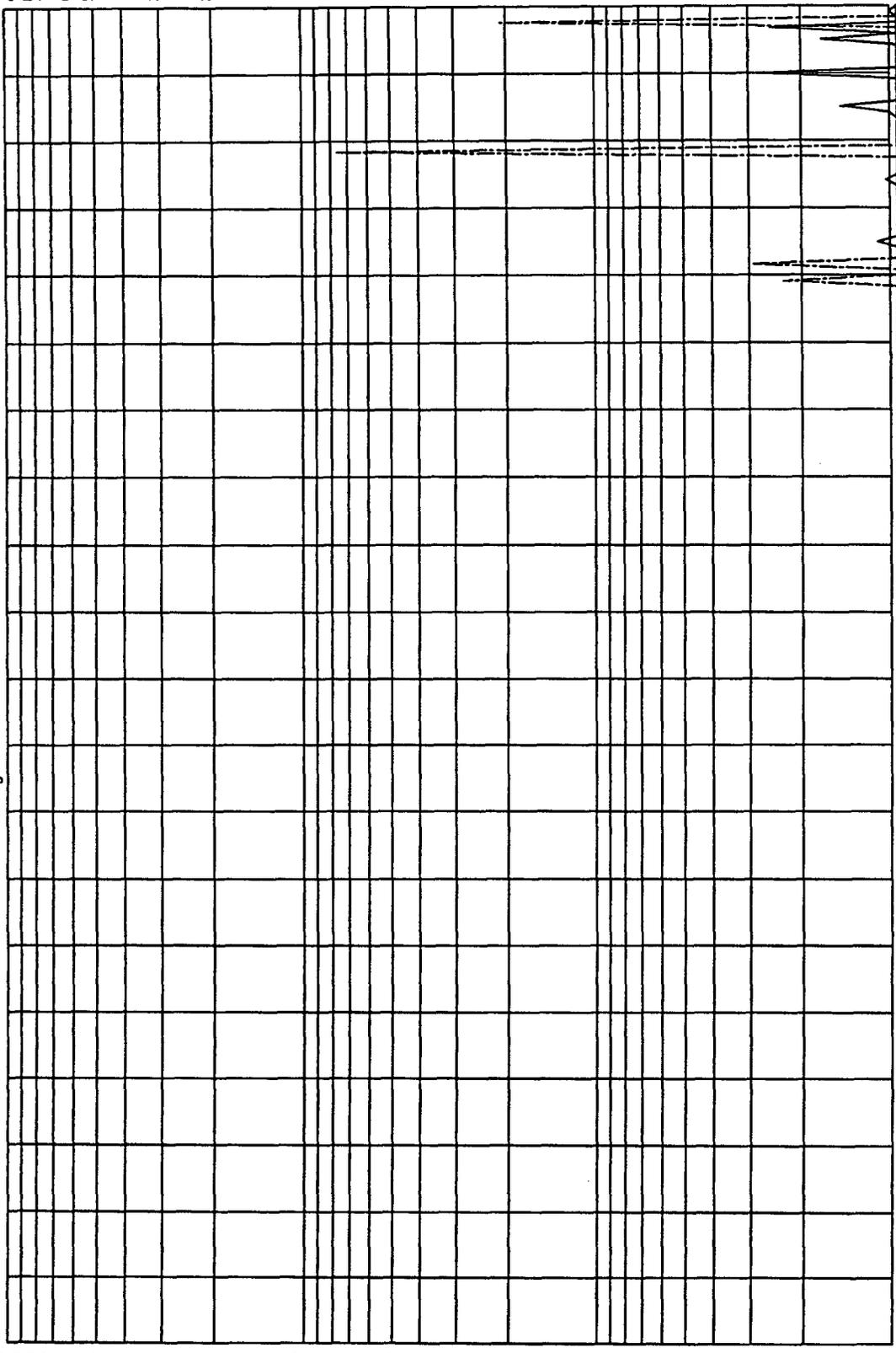
000007

Dwights

Retrieval Code: 151,039,26N05W16H00GP

1000

1000



65-
Annual
Data

County: RIO ARRIBA State: NM
 Field: TAPACITO (GALLUP) GP
 Reservoir: GALLUP
 Operator: AMOCO PRODUCTION CO
 Oil Cum: 3270 Gas Cum: 3157
 Location: 16H 26N 5W

F.P. Date

Date: 09-20-94

JICARILLA B 7
Sec. 16-T26N-R5W
Rio Arriba County, New Mexico
Cliff House Recompletion Summary

1. The wellbore was shut-in and surface pressure data for both the Dakota and Gallup completions were obtained. The estimated bottomhole pressure for the Dakota formation is approximately 1500 psi and the estimated bottomhole pressure for the Gallup formation is approximately 600 psi.
2. The model D packer set at 7290', between the Dakota and Gallup formations, was milled up and removed from the wellbore.
3. A retrievable bridge plug (RBP) was set at 6000' to isolate, the Dakota and Gallup completions from the Mesaverde Cliff House recompletion fluids and frac pressures.
4. The casing was pressure tested to 3000 psi successfully.
5. A cement bound log was run over the Mesaverde Cliff House recompletion interval. The top of cement was identified at 5010', which was below the top of the Mesaverde Cliff House zone.
6. Cement squeeze hole were shot at 4840' and squeezed with 100 sacks of class B cement to isolate the top of the Mesaverde Cliff House zone.
7. The Mesaverde Cliff House zone was perforated with 4 shots per foot from 4854'-4890', and 4910'-4920'.
8. A frac liner was set over the cement squeeze holes at 4840'.
9. The Mesaverde Cliff House perforations from 4854'-4920' were fracture stimulated with nitrogen and 109,000 pounds of 16/30 sand.
10. The frac was flowed back for 2 days to allow the completion to clean up.
11. The frac liner was removed and the wellbore was circulated clean to 5706'.
12. The completion was flow tested for 7 days. Results are listed below:

Date	Test Hours	Choke Size Inch	Tbg	Flowing Csg	MCFD	BWPD	BOPD
			Back Press Psi				
1/22/95	24	32/64	0	20	220	67	0
1/23/95	24	32/64	0	18	200	30	0
1/24-25/95 Shut-in over the weekend for 48 hours							
1/26/95	24	-	100	335	22	30	0
1/27/95	24	-	100	350	19	25	0
1/28/95	24	-	90	320	17	25	0
1/29/95	24	-	80	310	18	20	0
1/30/95	24	-	75	265	18	10	0

13. The wellbore was cleaned out and the RBP at 6000' was removed.
14. The wellbore was cleaned out to 7582' with nitrogen.
15. Tubing (2-1/16) was landed at 7357'. Waiting for downhole commingle approval.



1115 Farmington Avenue
Farmington, N.M. 87401
(505) 325-6622

Analysis No. AMO42049
Cust. No. 12300-16575

WELL/LEASE INFORMATION

Company : AMOCO PRODUCTION COMPANY Source :
Well Name : JICARILLA B - #7 Pressure : 630 PSIG
County : Sample Temp. : N/A DEG.F
State : Well Flowing : NO
Location : Date Sampled : 12/26/94
Fld/Formation : DAKOTA Sampled By : L & L
Cust. Stn.No. : Foreman/Engr : MIKE ROWLAND

Remarks:

ANALYSIS

COMPONENT	MOLE %	GPM
NITROGEN	0.245	0.0000
CO2	1.003	0.0000
METHANE	80.002	0.0000
ETHANE	12.697	3.3964
PROPANE	4.363	1.2024
I-BUTANE	0.469	0.1534
N-BUTANE	0.680	0.2144
I-PENTANE	0.220	0.0805
N-PENTANE	0.125	0.0453
HEXANES	0.196	0.0855
TOTAL	100.000	5.1779

COMPRESSIBILITY FACTOR (1/Z) 1.0033
BTU/CU.FT. (DRY) CORRECTED FOR (1/Z) 1210.5
BTU/CU.FT. (WET) CORRECTED FOR (1/Z) 1189.5
REAL SPECIFIC GRAVITY 0.6988

ANALYSIS RUN AT 14.730 PSIA & 60 DEGREES F

CYLINDER # : 015
CYLINDER PRESSURE : 96 PSIG
RUN DATE : 12/28/94
ANALYSIS RUN BY : LISA CLAYTON



AMOCO PRODUCTION COMPANY
WELL ANALYSIS COMPARISON

WELL : JICARILLA B 7

CASING

01/29/1995
12300-16570

WELL NO. : *Cliff House* *Galley*

DATE 01/27/95 12/26/94
WELL NR. AMO50186 AMO42048

NITROGEN	0.731	0.388
O2	0.289	0.370
METHANE	83.594	78.498
ETHANE	8.625	9.790
PROPANE	4.121	6.061
ISOBUTANE	0.760	1.293
N-BUTANE	1.009	2.106
ISOPENTANE	0.344	0.760
N-PENTANE	0.227	0.478
HEXANES	0.300	0.256

WCU	1203.1	1300.0
WPM	4.3486	5.9390
WPGRAV.	0.6881	0.7478

HALLIBURTON ENERGY SERVICES
FIELD LABORATORY
WESTERN AREA

LABORATORY ANALYSIS

To: AMOCO Date: 01-31-95

Submitted by: MIKE ROWLAND Date Rec. 01-31-95

Well No. JICARILLA B-7 Location: SEC16-26N-5W

Sample Mark Cliff House Attention: _____

Specific Gravity	<u>1.008</u>		
pH	<u>7.42</u>		
Resisitvity	<u>.696@ 68⁰</u>		
Iron(Fe)	<u>10</u>	Milligrams per Liter	
Potassium(K)	<u>450</u>	"	"
Sodium(Na)	<u>785</u>	"	"
Calcium(Ca)	<u>51</u>	"	"
Magnesium(Mg)	<u>72</u>	"	"
Chlorides(Cl)	<u>200</u>	"	"
Sulfates(SO ₄)	<u>480</u>	"	"
Carbonates(CO ₃)	<u>0</u>	"	"
Bicarbonates(HCO ₃)	<u>2379</u>	"	"
Total Dissolved Solids	<u>4427</u>	"	"

By TERESA WHITE

Title LAB TECH

Location FARMINGTON

NOTICE: This report is limited to the described sample tested. Any person using or relying on this report agrees that Halliburton shall not be liable for any loss or damage whether due to act or omission resulting from such report or its use.