STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION
2040 S. PACHECO
SANTA FE, NEW MEXICO 87505
(505) 827-7131

AD - M

ADMINISTRATIVE ORDER DHC-1118

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

Attention: Mr. J.W. Hawkins

Jicarilla "B" Well No.7
Unit G, Section 16, Township 26 North, Range 5 West,
NMPM, Rio Arriba County, New Mexico.
Blanco Mesaverde, Tapacito Gallup (Associated), and
Basin Dakota (Prorated Gas) Pools

Dear Mr. Hawkins:

Reference is made to your recent application for an exception to Rule 303-A of the Division Rules and Regulations to permit the subject well to commingle production from both 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 two zones is hereby placed in abeyance.

In accordance with the provisions of Rule 303-C-4., total commingled oil production from the subject well shall not exceed 20 barrels per day, and total water production shall not exceed 40 barrels per day. 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.

In accordance with the provisions of Rule 303-C, the supervisor of the Aztec District Office of the Oil Conservation Division shall determine the proper allocation of production from the subject well following its completion.

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

Pursuant to Rule 303-C-5, the commingling authority granted by the order may be rescinded by the Division Director if, in his opinion, conservation is not being best served by such commingling.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 7th day of April, 1995.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

WILLIAM J. LEMAY
Director

S E A L

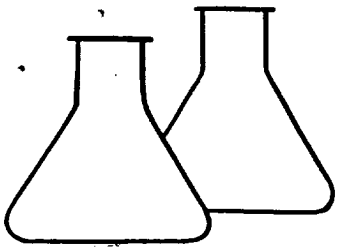
WJL/BES

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

Ernie Busch

From: Ernie Busch
To: David Catanach
Subject: AMOCO (DHC)
Date: Tuesday, March 28, 1995 8:18AM
Priority: High

JICARILLA B#7
H-16-26N-05W
RECOMMEND: APPROVAL



ENVIROTECH LABS

5796 US HIGHWAY 64-3014 • FARMINGTON, NEW MEXICO 87401
PHONE: (505) 632-0615 • FAX: (505) 632-1865

QUALITY ASSURANCE / QUALITY CONTROL

DOCUMENTATION

Southern Rockies Business Unit

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

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 mcfd. 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

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 mcfd and 0.2 bcpd. TheTapacito Gallup zone produced intermittently with an average rate of about 20 mcfd and 1 bcpd. The Blanco Mesaverde zone tested at about 20 mcfd 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 not 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 Jicarill 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:

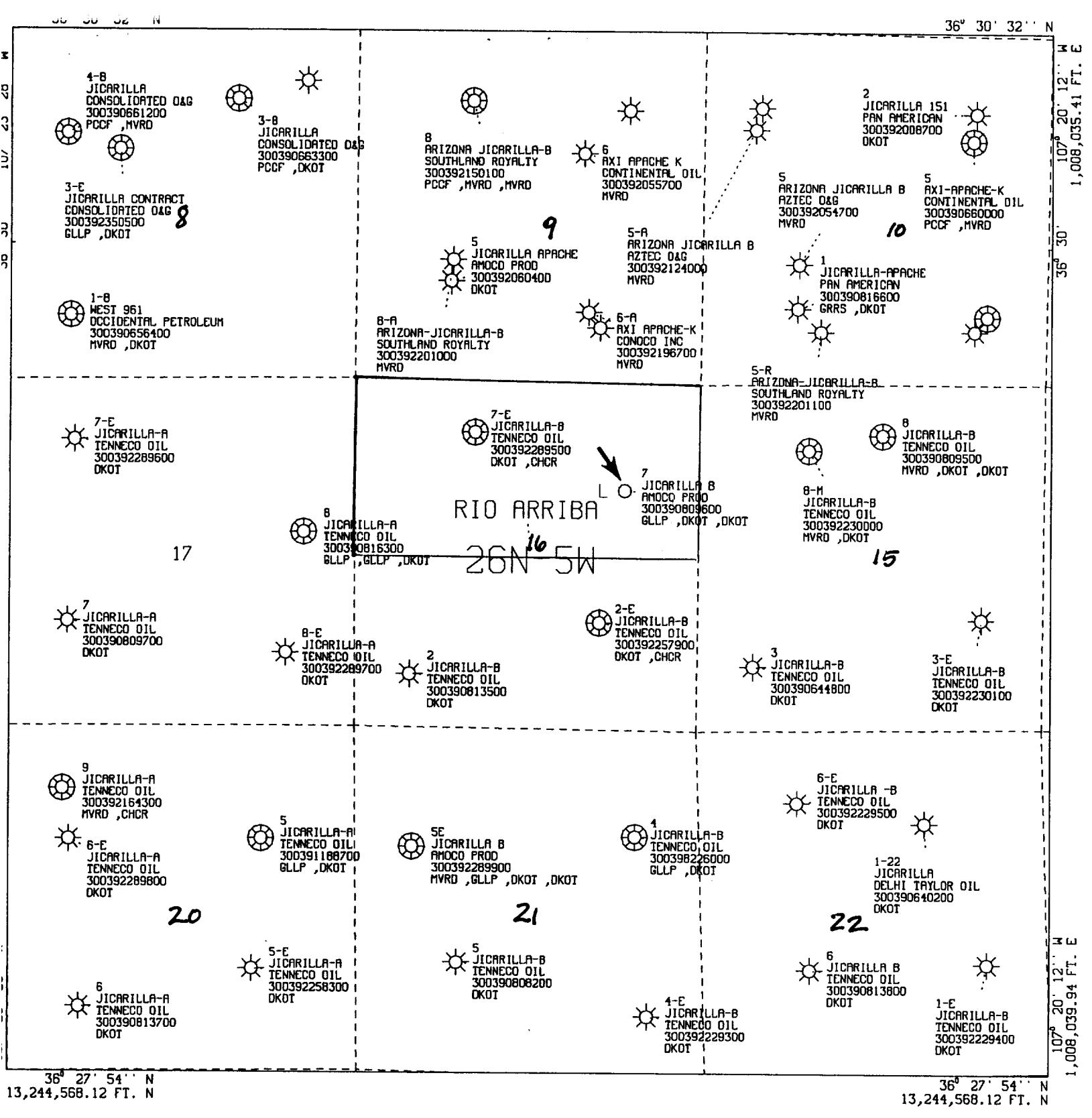
Since the BTU content of the produced fluids are very similar, we would expect the commingled production to have the same value as the sum of the individual streams.

(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 mcfdand 0.2 bcpd and the Tapacito Gallup currently producing an average of about 20 mcfd 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.



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

AMOCO PRODUCTION COMPANY
PLAT MAP
JICARILLA B #7
MESAVERDE
DAKOTA AND GALLUP OFFSET WELLS

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

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] API Number	[2] Pool Code	[3] Pool Name
30 039 08096	72319	Blanco Mesaverde

[4] Property Code	[5] Property Name	[6] Well Number
000733	Jicarilla B	7

[7] OGRID No.	[8] Operator Name	[9] Elevation
000778	Amoco Production Company	6610 GR

[10] Surface Location

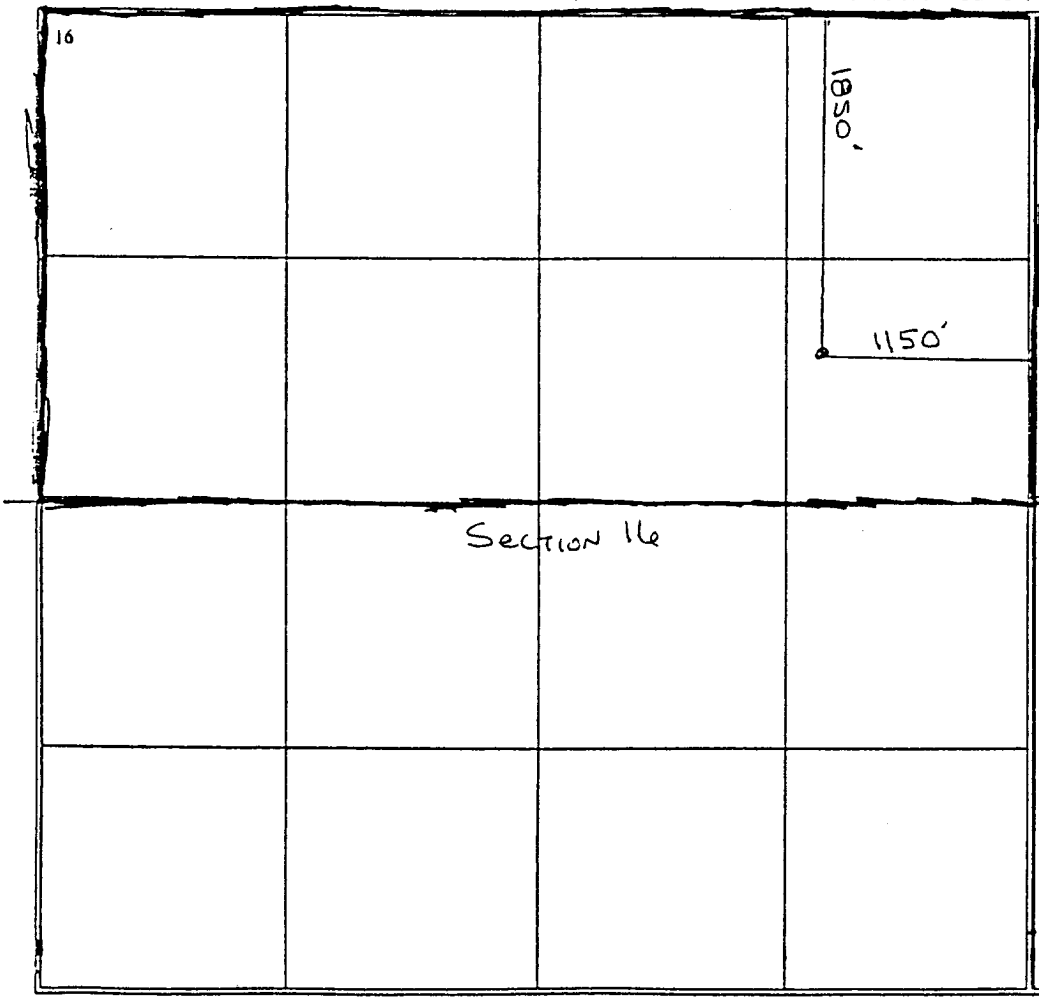
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	16	26N	5W		1850	N	1150	E	Rio Arriba

[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	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
320 N/2	N		

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



[17] OPERATOR CERTIFICATION

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

A. Wayne Branam
Signature
A. Wayne Branam
Printed Name
Business Analyst
Title
Nov 28, 1994
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.

On File Jun 29, 1966
Date of Survey

Signature and Seal of Professional Surveyer:

Certificate Number

NEW 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	Lease	Well No.
Tenneco Oil Company	Jicarilla "B"	7

Unit Letter	Section	Township	Range	County
H	16	26N	5W	Rio Arriba

Actual Footage Location of Well: 1850 feet from the North line and 1150 feet from the East line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
6610 Gr.	Tapacito Gallup	Tapacito Gallup	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).

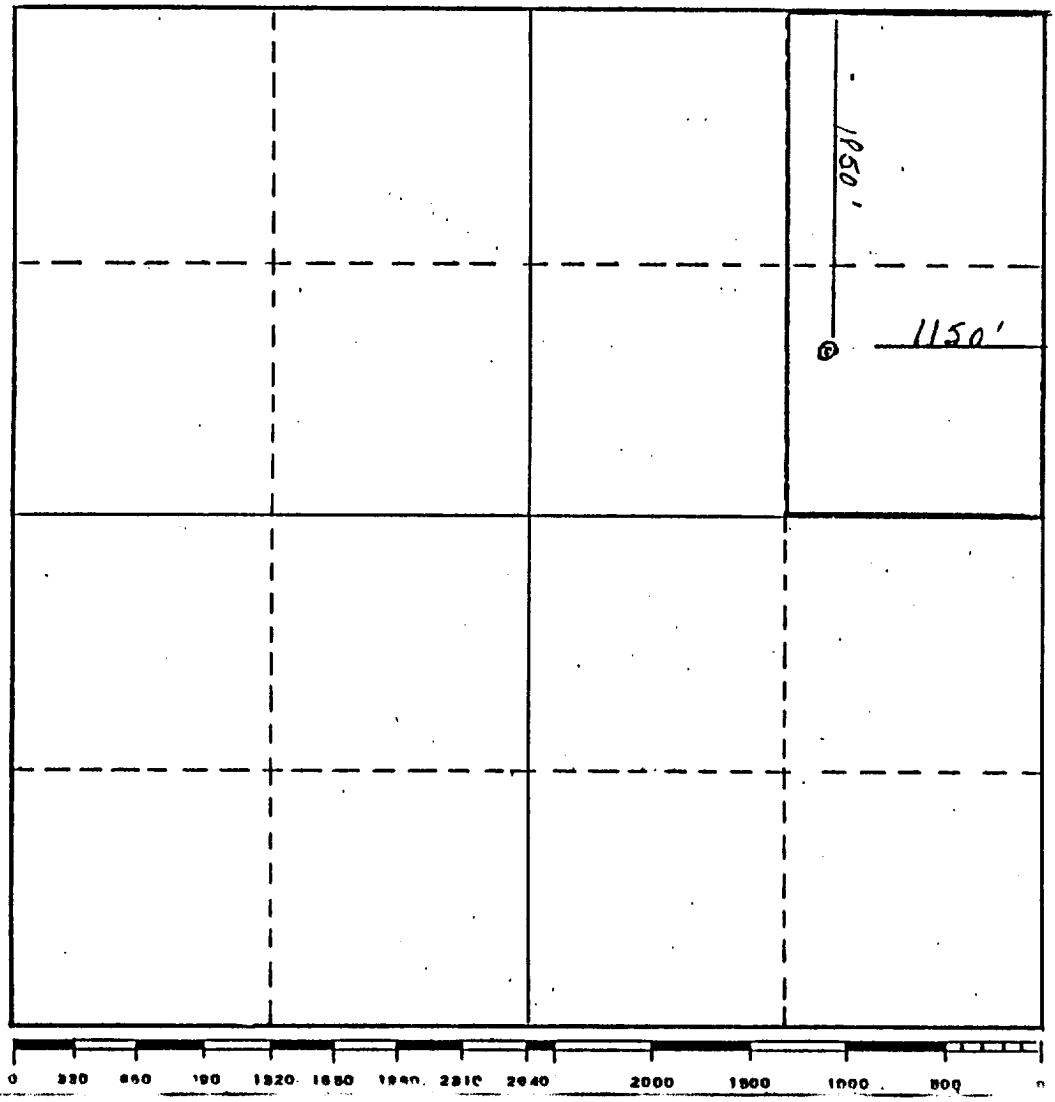
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling. etc?

☐ 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.

RECEIVED
MAY 10 1967
OIL CON. COM.
DIST. 3



CERTIFICATION

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

Name: O. A. Ford
Position: Senior Production Clerk
Company: Tenneco Oil Company
Date: May 8, 1967

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	Lease	Well No.
~~TENNECO OIL COMPANY~~ Amoco Production Company	JICARILLA "B"	7

Unit Letter	Section	Township	Range	County
H	16	26 North	5 West	Rio Arriba

Actual Footage Location of Well: 1850 feet from the North line and 1150 feet from the East line

Ground Level Elev.	Producing Formation	Pool	Dedicated Avereage:
6610' ungraded	Basin Dakota	Basin Dakota	320 N/2 Acres

1. Outline the acerage dedicated to the subject well by colored pencil or hachure marks on the plat below.

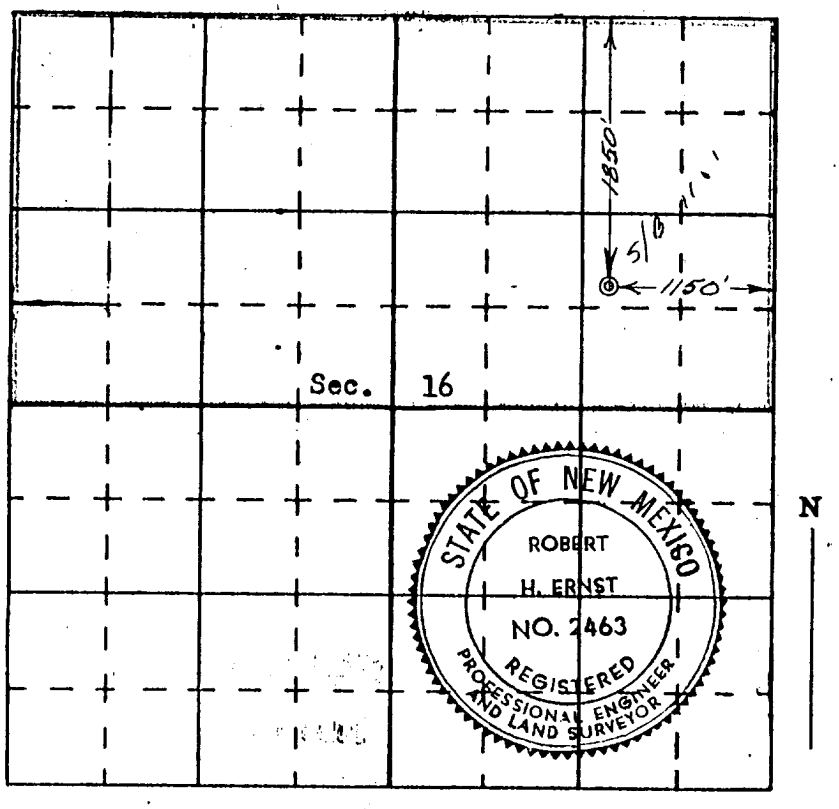
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty),

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.



ERNST ENGINEERING CO.
DURANGO, COLORADO

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

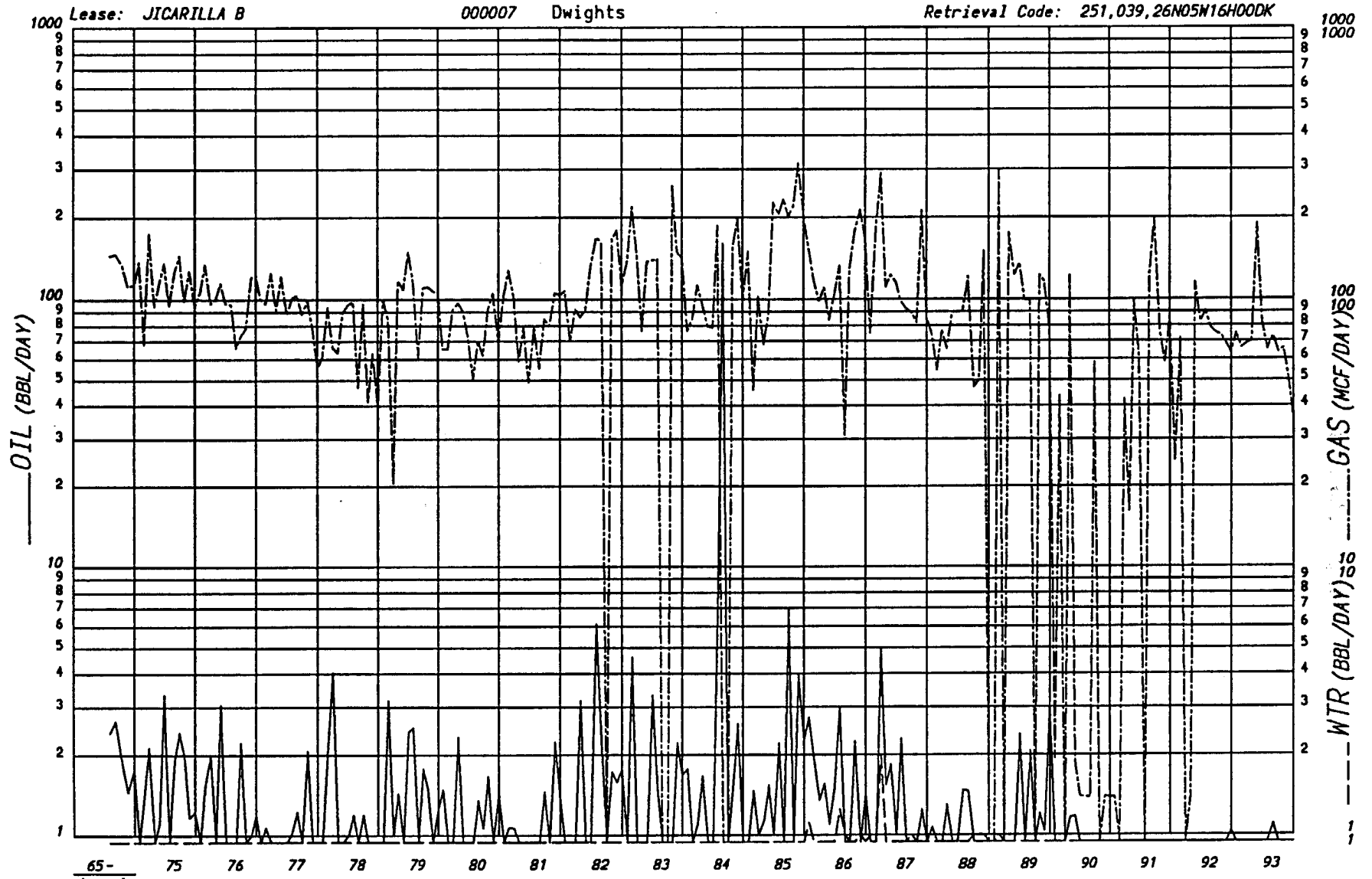
August 16, 1966
Date

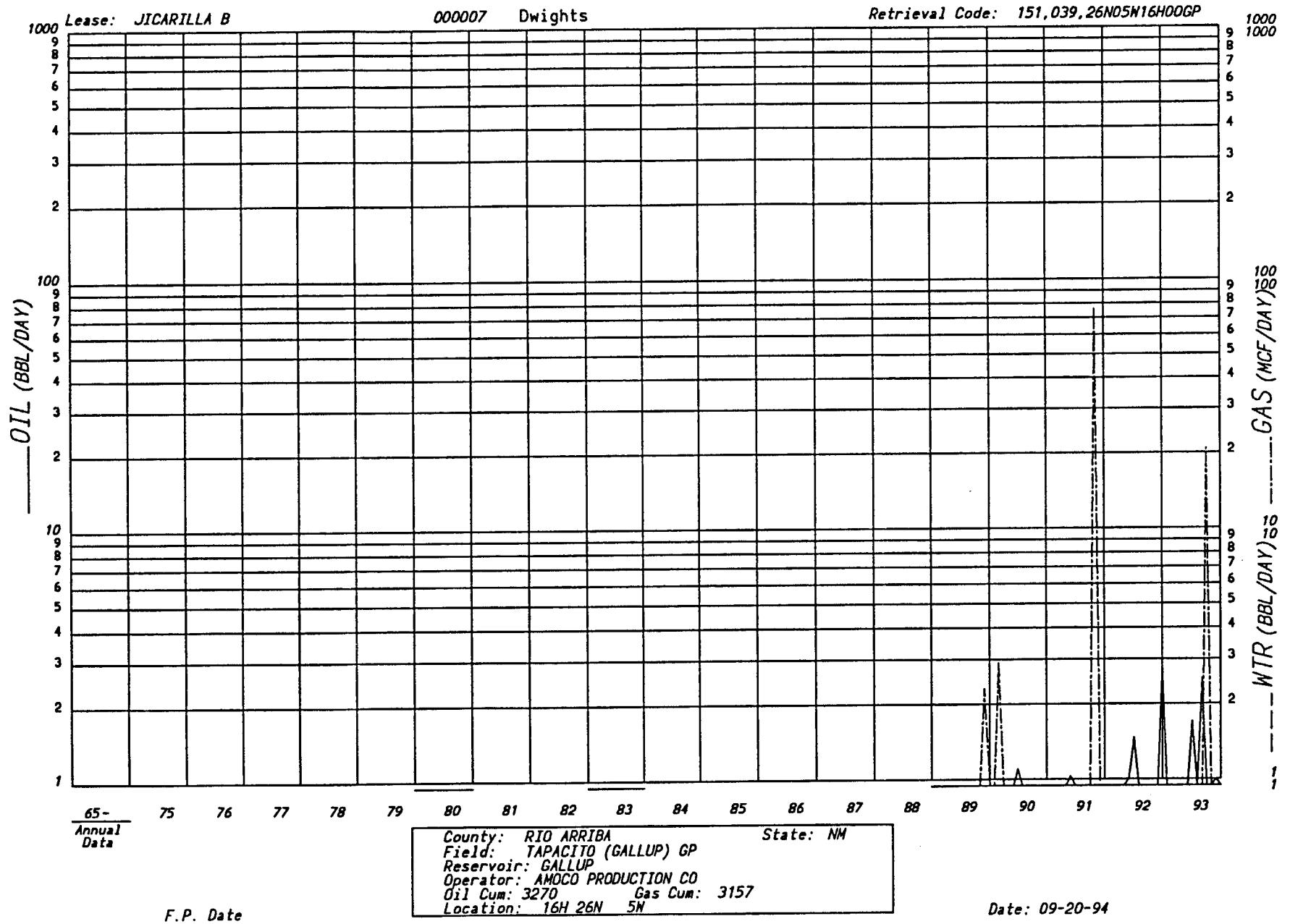
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

28 June 1966
Date Surveyed

Robert H. Ernst
Registered Professional Engineer and/or Land Surveyor

Robert H. Ernst
N. Mex. PE & LS 2463
Certificate No.


Lease: JICARILLA B
000007 Dwights
Retrieval Code: 251,039,26N05W16H00DK
OIL (BBL/DAY)
GAS (MCF/DAY)
WTR (BBL/DAY)
65-
Annual Data
75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93
County: RIO ARRIBA State: NM
Field: BASIN (DAKOTA) DK
Reservoir: DAKOTA
Operator: AMOCO PRODUCTION CO
Oil Cum: 13829 Gas Cum: 913533
Location: 16H 26N 5W
F.P. Date 01-67
Date: 09-20-94


Lease: JICARILLA B
000007 Dwights
Retrieval Code: 151,039,26N05W16H00GP
OIL (BBL/DAY)
GAS (MCF/DAY)
WTR (BBL/DAY)
1000
100
10
1
65-
Annual Data
75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93
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 Back Press Psi	Flowing Csg Psi	MCFD	BWPD	BOPD
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.

GAS ANALYSIS SERVICE

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

:ASE : JICARILLA B 7 CASING 01/29/1995
'N.NO. : ~ Cliff House ~ Gallup 12300-16570

\TE 01/27/95 12/26/94
)N NR. AMO50186 AMO42048

:TROGEN	0.731	0.388
)2	0.289	0.370
:THANE	83.594	78.498
'HANE	8.625	9.790
(OPANE	4.121	6.061
-BUTANE	0.760	1.293
-BUTANE	1.009	2.106
-PENTANE	0.344	0.760
-PENTANE	0.227	0.478
:XANES	0.300	0.256
'U	1203.1	1300.0
'M	4.3486	5.9390
'.GRAV.	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	1.008	
pH	7.42	
Resisitivity	.696@ 68^0	
Iron(Fe)	10	Milligrams per Liter
Potassium(K)	450	" "
Sodium(Na)	785	" "
Calcium(Ca)	51	" "
Magnesium(Mg)	72	" "
Chlorides(Cl)	200	" "
Sulfates(SO_4)	480	" "
Carbonates(CO_3)	0	" "
Bicarbonates(HCO_3)	2379	" "
Total Dissolved Solids	4427	" "

By TERESA WHITE

Title LAB TECH

Location FARMINGTON