

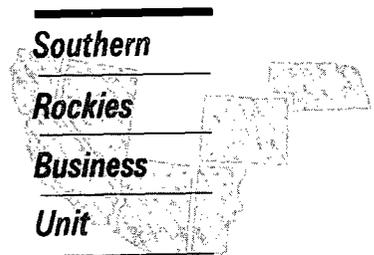
DHC 3.25.96



RECEIVED

MAR 4 1996

OIL CONSERVATION DIV.  
SANTA FE



February 26, 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  
Bruington LS #3 Well  
1625' FSL & 800' FWL, Unit G Section 6-T30N-R11W  
Blanco Mesaverde (Pool IDN 72319) and Aztec Pictured Cliffs (Pool IDN 71280) Pools  
San Juan County, New Mexico**

Amoco Production Company hereby requests administrative approval to downhole commingle production from the Blanco Mesaverde and Aztec Pictured Cliffs Pools in the Bruington LS #3 well referenced above. The Bruington LS #3 is currently a dual completion in the Mesaverde and Pictured Cliffs formations with the Pictured Cliffs temporarily abandoned. We plan to complete the well with both the Mesaverde and Pictured Cliffs formations being downhole commingled in the wellbore thereby returning the Pictured Cliffs to production. The two zones are expected to produce at a total commingled rate of about 34 MCFD with less than 1BCPD. The ownership (WI, RI,ORI) of these pools is not common 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. Offset operators to this well and all interest owners involved in the two formations will receive a copy of this application by certified mail.

The allocation method that we plan to use for this commingled well is as follows. Both formations historically produced at stabilized rates until the Pictured Cliffs became temporarily abandoned due to low productivity. We recommend that the Mesaverde and Pictured Cliffs formations gas and condensate be allocated based on historical rates. The Mesaverde is currently producing 32 MCFD with 0.03 BCPD while the Pictured Cliffs is historically produced at 2 MCFD with less than 1 BCPD. The recommended allocation percentages after downhole commingling would be set as a percentage of the total rate with the Mesaverde attributing 95% of gas production and 95 % of condensate production. The Pictured Cliffs would be allocated at 5% of gas production and 5 % of condensate production. 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 formation, a historical and recent production plot and a C-102 for each formation. This spacing unit is located on a federal lease (SF-078781) and we will send a copy of the application to the BLM as

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

Sincerely,



Pamela W. Staley

Enclosures

cc: Khanh Vu  
Gail Jefferson  
Proration File  
Well File

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

Duane Spencer  
Bureau of Land Management  
1235 La Plata Hwy.  
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: Bruington

Well Number: LS #3

Well Location: 1625' FSL & 800' FWL  
Unit G Section 6-T30N-R11W  
San Juan County, New Mexico

Pools Commingled: Blanco Mesaverde Pool (Pool IDN 72319)  
Aztec Pictured Cliffs Pool (Pool IDN 71280)

- (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 Blanco Mesaverde produced an average stabilized rate of 32 MCFD and 0.03 BCPD. The Aztec Pictured Cliffs zone historically produced at an average rate of about 2 MCFD and less than 1 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.

Aztec Pictured Cliffs 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 72 hour shut-in pressures during a packer leakage test for the well. Estimated bottomhole pressure in the Pictured Cliffs formation is 482 PSI while the estimated bottomhole pressure in the Mesaverde is 464 PSI. See attached calculations.

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

The two formations do not produce any fluids that are expected to prohibit commingling, or promote the creation of emulsions or scale.

- (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 gasses are very similar, we would expect the commingled production to have a similar 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. Both formations historically produced at stabilized rates until the Pictured Cliffs became temporarily abandoned due to low productivity. We recommend that the Mesaverde and Pictured Cliffs formations gas and condensate be allocated based on historical rates. The Mesaverde is currently producing 32 MCFD with 0.03 BCPD while the Pictured Cliffs is historically produced at 2 MCFD with less than 1 BCPD. The recommended allocation percentages after downhole commingling would be set as a percentage of the total rate with the Mesaverde attributing 95% of gas production and 95 % of condensate production. The Pictured Cliffs would be allocated at 5% of gas production and 5 % of condensate production. 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. The offsetting operators listed on the attached sheet will receive a copy of this application by certified mail.

- (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.

LIST OF ADDRESSES FOR OFFSET OPERATORS  
Bruington LS #3

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

<b>ESTIMATED BOTTOMHOLE PRESSURES</b>							
<b>Bruington LS #3</b>							
<b>PC</b>	PERFORATIONS	TOP	2323	BOTTOM	2390	MIDPERF	2357
<b>MV</b>	PERFORATIONS	TOP	4538	BOTTOM	4692	MIDPERF	4615
	Jun-94	SHUT-IN PRESSURES					
		<b>PC</b>	=	411	PSIG		
		<b>MV</b>	=	326	PSIG		
	GRADIENT	= 0.3 PSI/FT					
		<b>PC BHP =</b>	411	PSIG +	2357	X 0.03 PSI/FT	
			=	482	PSI		
		<b>MV BHP =</b>	326	PSIG +	4615	X 0.03 PSI/FT	
			=	464	PSI		

36° 51' 46" N

36° 51' 46" N

31N-12W

31N-11W

BETA DEVELOPMENT CO  
1 STATE GAS UNIT A 1  
GRAS, DKOT  
300451006200

TEXACO INC  
1 STATE UNIT-M  
DKOT  
300451017300

AZTEC O&G  
1 THURSTON  
PCCF  
300452034900

EL PASO NATURAL GAS  
1 THURSTON  
MVRD  
300451015100

EL PASO NATURAL GAS  
17 HEATON  
DKOT  
300451014400

EL PASO NATURAL GAS  
1 YAGER POOLED UNIT  
MVRD  
300451005200

SPATTER N  
1 S COONS  
300451009600

TENNECO OIL  
3 HEATON LS  
MVRD  
300451005500

EL PASO NATURAL GAS  
13 HEATON  
PCCF  
300451008700

PAN AMERICAN  
1 SCOTT GAS UNIT  
DKOT  
300450999100

WEAB W R  
1 FEE  
300450999600

SOUTHLAND ROYALTY  
23 GRENIER 23  
GRRS  
300452302100

AMOCO PROD  
3A BRUINGTON LS  
MVRD, FRLD, DKOT  
300452597000

SOUTHWEST PROD  
2 RHODA ABRAMS  
DKOT  
300450992100

MCKAY PAYNE & ZACHRY  
1 MAXWELL  
PCCF  
300450991800

TOM BOLACK  
NO 1  
TOMMY BOLACK  
QLLP, DKOT  
300452457500

EL PASO NATURAL GAS  
1-F BOLACK  
PCCF, FRLD  
300450986500

EL PASO NATURAL GAS  
2 YAGER POOL UT  
MVRD  
300450998100

EL PASO NATURAL GAS  
3 UNITE B P  
PCCF, MVRD  
300450986600

EL PASO NATURAL GAS  
3-B STOREY  
PNLK, MVRD  
300451323100

CARR WILLIAM P  
1 ABRAMS  
PCCF  
300450986300

MEX-COLORADO  
1 MILLER  
300450988100

EL PASO NATURAL GAS  
4 BRUINGTON POOL UNIT  
DKOT  
300451311500

SAN JUAN

SOUTHWEST PROD  
1 RHODA ADAMS  
DKOT  
300450981300

30N-12W

30N-11W

C & E OPERATORS  
12-A FEE  
PCCF, MVRD  
300452533400

CARR WILLIAM P  
1 MCGRATH  
PCCF  
300450971700

CARR WILLIAM P  
1 JONES  
PCCF  
300450971100

CARR WILLIAM P  
1 BIRD  
PCCF  
300450971000

CARR WILLIAM P  
1 HARRIMAN  
PCCF  
300450976500

TEXACO INC  
1 L M BARTON  
MVRD, DKOT  
300450971500

CARR WILLIAM P  
1 JENSEN  
PCCF  
300450967400

CARR WILLIAM P  
1 UTIEN  
PCCF  
300450967300

MOYA J J  
1 JONES  
PCCF  
300450966700

FLORENCE M  
1 FLORENCE POOL UNIT  
PCCF  
300450967600

CARR WILLIAM P  
1 OLIVER  
PCCF  
300450966600

SOUTHWEST PROD  
1 KATE STANDAGE  
DKOT  
300450964800

SOUTHWEST PROD  
1 NELL HALL  
DKOT  
300450961900

MANANA GAS  
1 CHARLIE  
PCCF  
300452286900

SOUTHWEST PROD  
1 GLENN SWIRE  
DKOT  
300450960600

36° 49' 9" N  
13,373,535.69 FT. N

36° 49' 9" N  
13,373,535.69 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  
Bruington LS 3  
Offset Wells  
SCALE 1 IN. = 2,000 FT. APR 28, 1995

POLYCONIC CENTRAL MERIDIAN - 108° 1' 52" W LON  
SPHEROID - 6

NEW MEXICO  
OIL CONSERVATION COMMISSION

Form C-128

WELL LOCATION AND/OR GAS PRORATION PLAT

DATE JANUARY 15, 1957

OPERATOR EL PASO NATURAL GAS COMPANY LEASE BRINGTON POOL UNIT SF 078781

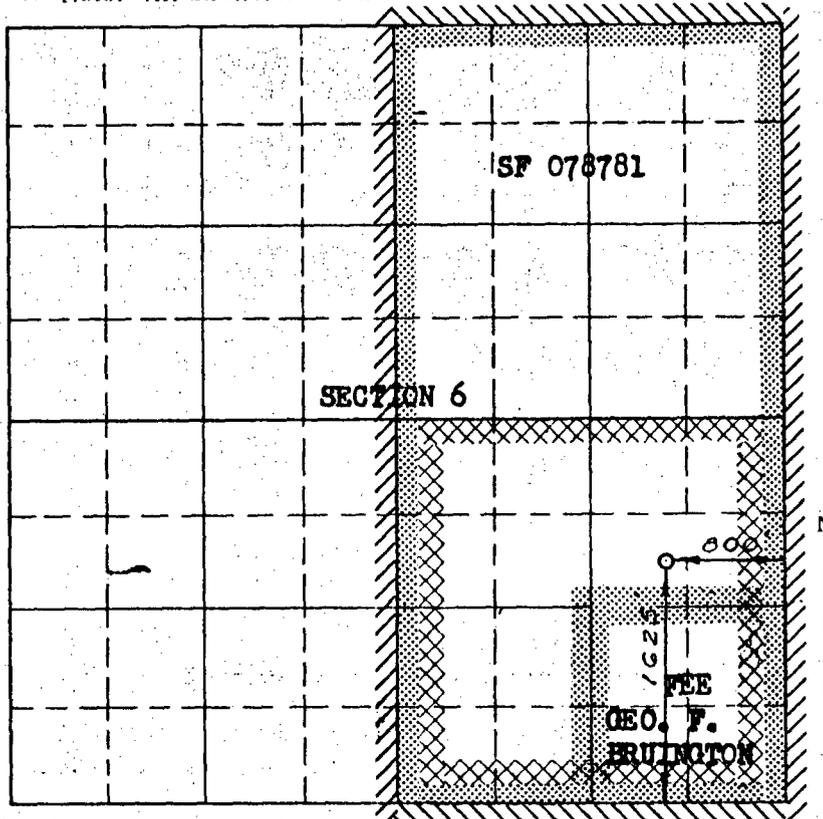
WELL NO. 3 (PM) SECTION 6 TOWNSHIP 30-N RANGE 11-W NMPM

LOCATED 1625 FEET FROM SOUTH LINE 800 FEET FROM EAST LINE

SAN JUAN COUNTY, NEW MEXICO G.L. ELEVATION 5873

NAME OF PRODUCING FORMATION P.C. & M.V. POOL AZTEC EXTEN. - PC DEDICATED ACREAGE 157.12 - 100 ACRES (PC)  
320.12 AC. (MV)  
314.26 (1881 PLAT)

Note: All distances must be from outer boundaries of section.



Scale 4 inches equal 1 mile

RECEIVED  
JAN 17 1957  
U. S. GEOLOGICAL SURVEY  
FARMINGTON, NEW MEXICO

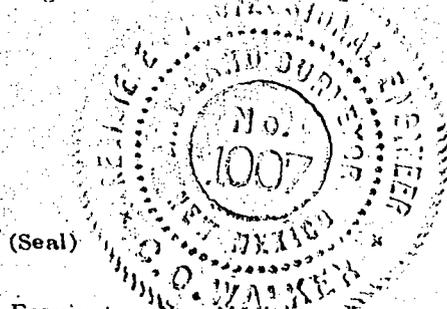
NOTE

This section of form is to be used for gas wells only

This is to certify that the above plat was prepared from field notes of actual surveys made by me or under my supervision and that the same are true and correct to the best of my knowledge and belief.

Date Surveyed DECEMBER 21, 1956

G. O. Walker  
Registered Professional Engineer and/or Land Surveyor



1. Is this well a Dual Comp.  
Yes  No
2. If the answer to Question 1 is yes, are there any other dually completed wells within the dedicated acreage.  
Yes  No

Name Original Signed D. L. Elsworth  
Position Petroleum Engineer  
Representing El Paso Natural Gas  
Address Box 997, Farmington, N.M.

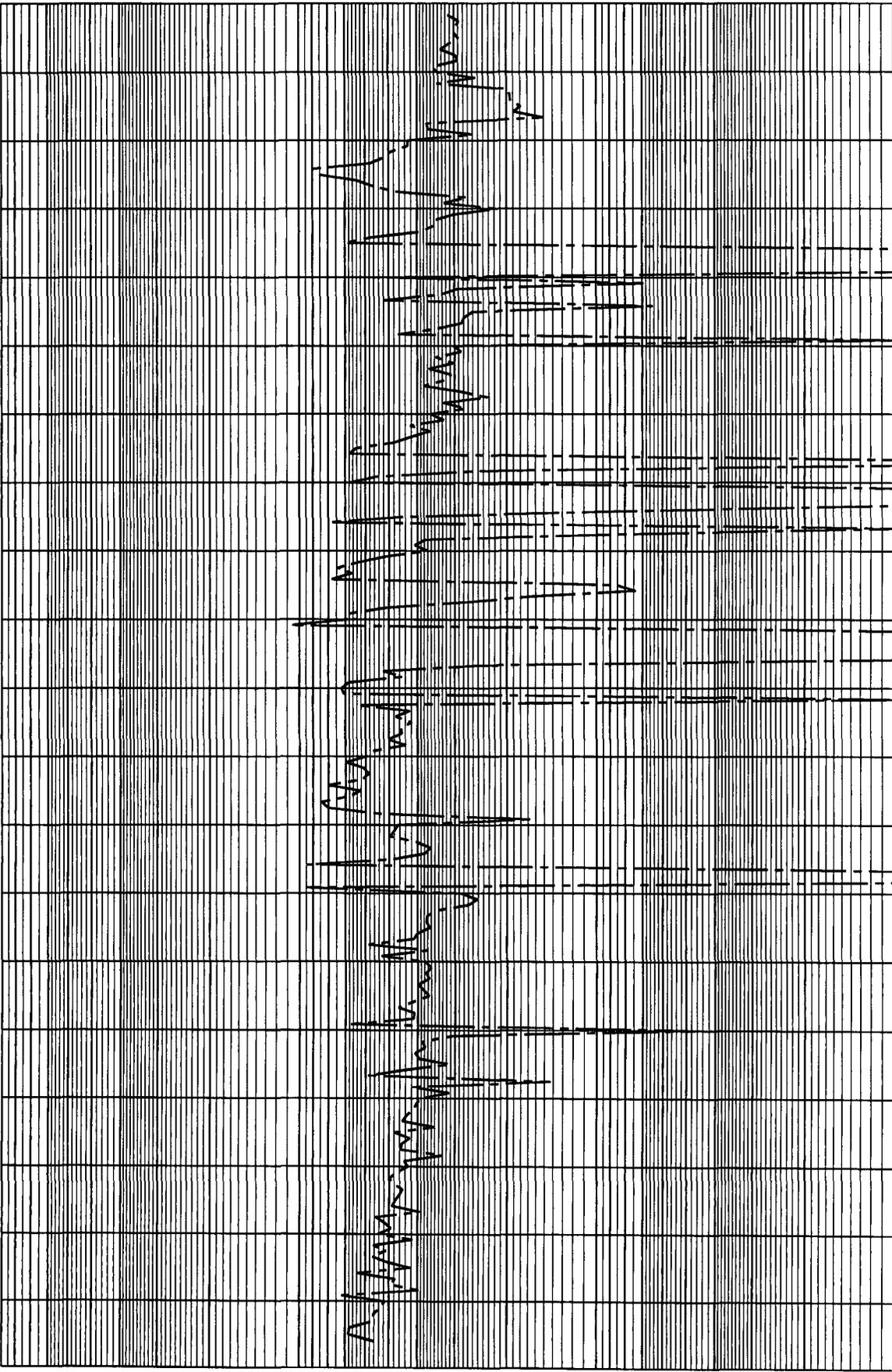
1000 Lease: BRUINGTON LS

000003

Dwights

Retrieval Code: 251, 045, 30N11W06100MV

1000



67- Annual Data

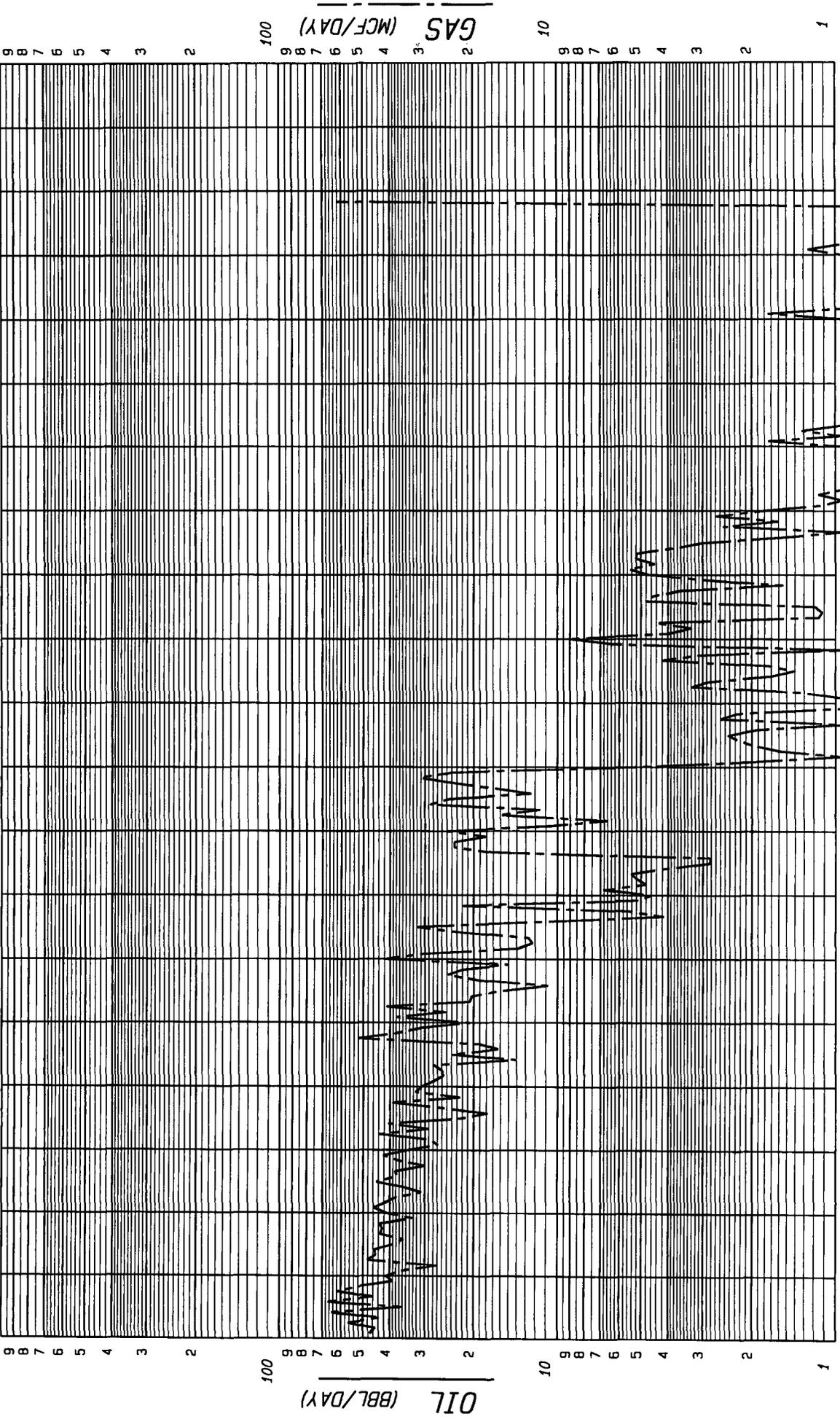
9 8 7 6 5 4 3 2 1 9 8 7 6 5 4 3 2 10 9 8 7 6 5 4 3 2 1

County: SAN JUAN  
 Field: BLANCO (MESAVERDE) MV  
 Reservoir: MESAVERDE  
 Operator: AMOCO PRODUCTION CO  
 Oil Cum: 48 Gas Cum: 748870  
 Location: 61\_30N\_11W State: NM

F.P. Date 02-58

Date: 02-13-96

1000 Lease: BRUINGTON LS 000003 Dwigths Retrieval Code: 251, 045, 30N11W06I00PC 1000



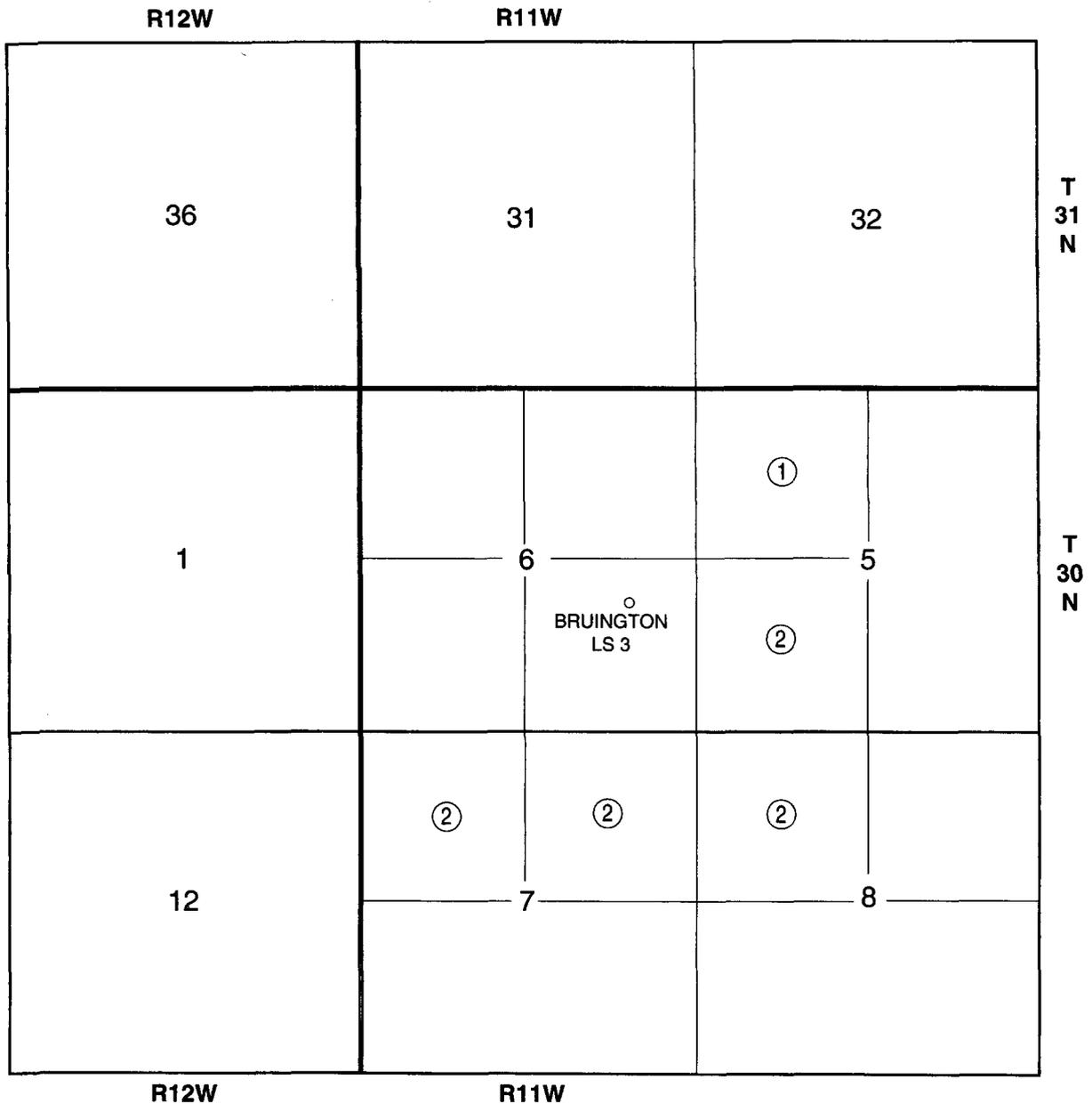
70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89

County: SAN JUAN State: NM  
Field: AZTEC (PICTURED CLIFFS) PC  
Reservoir: PICTURED CLIFFS  
Operator: AMOCO PRODUCTION CO  
Oil Cum: 0 Gas Cum: 305979  
Location: 6L 30N 11W

Date: 02-13-96

F.P. Date 02-58

**Amoco Production Company**  
 Offset Operator Plat  
 Bruington LS 3  
 T30N-R11W Sec. 6  
 Blanco Pictured Cliffs Formation



- ① Amoco Production Company
- ② Meridian Oil Production Inc.

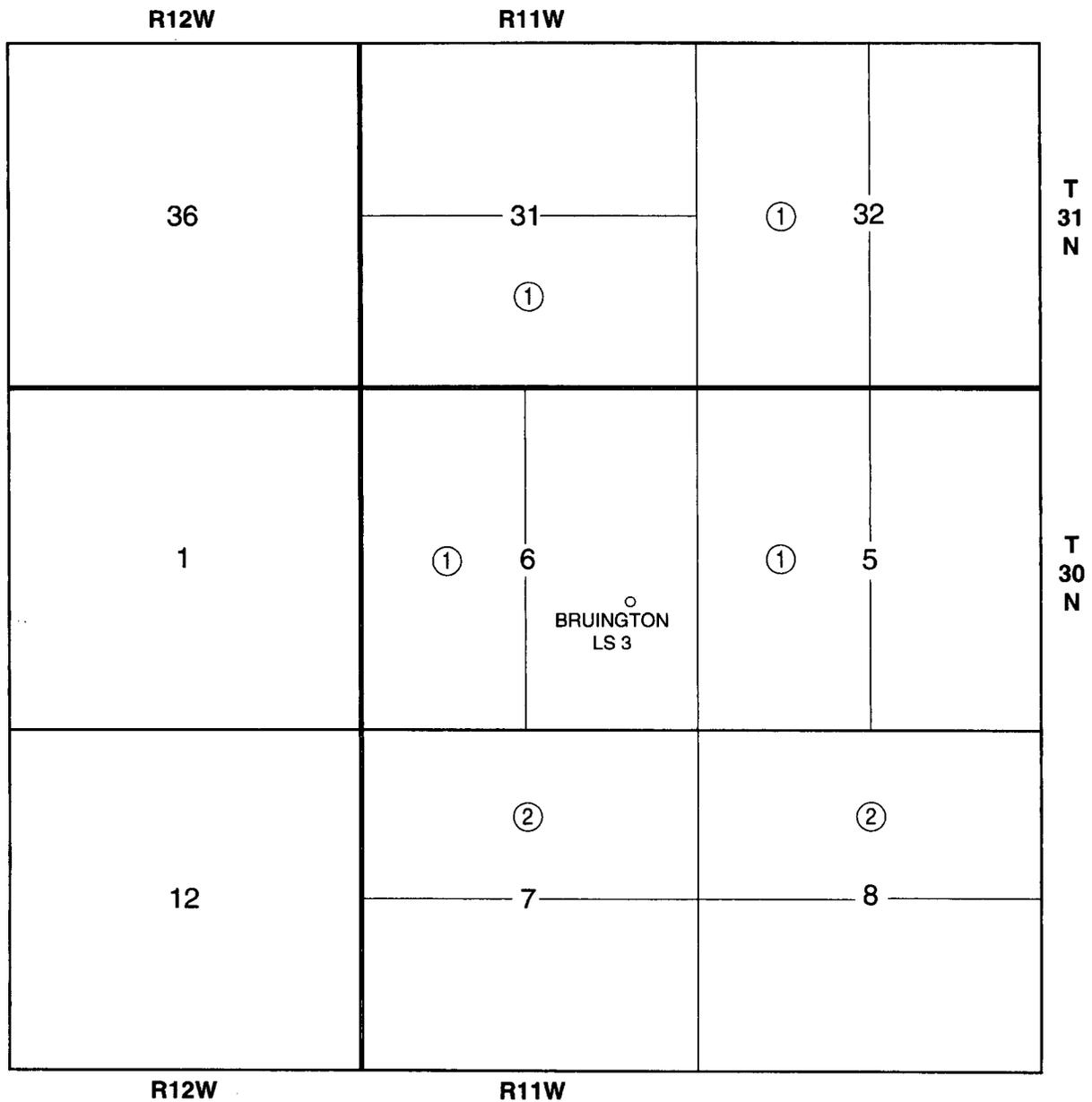
**Amoco Production Company**

Offset Operator Plat

Bruington LS 3

T30N-R11W Sec. 6

Blanco Mesaverde Formation



① Amoco Production Company

② Meridian Oil Production Inc.

OIL CONSERVATION DIVISION  
NORTHWEST NEW MEXICO PACKER-LEAKAGE TEST

I-6-30-11

Operator: AMOCO PRODUCTION COMPANY Lease/Well #: BRUINGTON LS 003  
Meter #: 71881 RTU: 0-000-00 County: SAN JUAN

	NAME RESERVOIR OR POOL	TYPE PROD	METHOD PROD	MEDIUM PROD
UPR COMP	BRUINGTON LS 003 APC 71880	GAS	FLOW	TBG
LWR COMP	BRUINGTON LS 003 BMV 71881	GAS	FLOW	TBG

PRE-FLOW SHUT-IN PRESSURE DATA

	Hour/Date Shut-In	Length of Time Shut-In	SI Press. PSIG	Stabilized
UPR COMP	06/15/94	72	411	no
LWR COMP	06/15/94	72	326	yes

FLOW TEST DATE NO. 1

Commenced at (hour, date)\* 9:20 AM 6-15-94 Zone Producing (Upr/Lwr) Lwr

TIME (hour, date)	LAPSED TIME SINCE*	PC PRESSURE MV		Prod Temp.	REMARKS
		Upper	Lower		
06/15/94	Day 1	BLINDED 397	315		Both Zones SI
06/16/94	Day 2	429	475		Both Zones SI
06/17/94	Day 3	429	475		Both Zones SI
06/18/94	Day 4	411	326		flowed lower zone
06/19/94	Day 5	409	324		
06/20/94	Day 6	428	316		"

Production rate during test  
Oil: \_\_\_\_\_ BOPD based on \_\_\_\_\_ BBLs in \_\_\_\_\_ Hrs \_\_\_\_\_ Grav \_\_\_\_\_ GOR \_\_\_\_\_  
Gas: \_\_\_\_\_ MFCPD: Tested thru (Orifice or Meter): METER  
MID-TEST SHUT-IN PRESSURE DATA

	Hour, Date SI	Length of Time SI	SI Press. PSIG	Stabilized (yes/no)
UPR COMP	BLINDED			
LWR COMP	9:20 A.M. - 6-15-94	50 HOURS	475"	316"

(Continue on reverse side)

RECEIVED  
JUN 21 1994  
OIL CONSERVATION DIVISION

69896900 00001 ZJAM63 69896900 00001 ZJAM63  
617000 00 710000 01  
AMOCO PRODUCTION COMPANY MINERALS MANAGEMENT SERVICE  
P O BOX 591 ROYALTY MANAGEMENT PROGRAM  
TULSA OK 74102-0591 PO BOX 5810 TA  
DENVER CO 80217-5810

69896900 00001 ZJAM63 69896900 00001 ZJAM63  
718152 00 923286 00  
GRACE A BRUNTINGTON ESTATE W L PETERS  
LEONA OLIVER, GUARDIAN MARY PETERS MCCULLEY ATTY IN FACT  
C/O JOSEPH F BURNS ATTY-AT-LAW 441 LONGLEAF ROAD  
109 SOUTH MESA VERDE SHREVEPORT LA 71106-1221  
AZTEC NM 87410-2142

69881100 00001 ZJAM63 69896900 00001 ZJAM63  
616847 00 449599 00  
WILLIAM P CARR PAUL SLAYTON  
8333 DOUGLAS SUITE 950 P O BOX 2035  
DALLAS TX 75225-5811 ROSWELL NM 88202-2035

69896900 00001 ZJAM63 69896900 00001 ZJAM63  
603416 25 923248 00  
CONOCO INC MARY ELIZABETH WALKER LIFE ESTATE  
P O BOX 951063 1617 SOUTH COLUMBIA DRIVE  
DALLAS TX 75395-1063 WEST COLUMBIA TX 77486-3607

69896900 00001 ZJAM63 69896900 00001 ZJAM63  
926370 00 923042 00  
EL PASO PRODUCTION COMPANY MARTHE PETERS WERLLA  
P O BOX 840656 PETER CLAUDE JACOBSEN ATTY IN FACT  
DALLAS TX 75284-0656 3724 CRESTLINE ROAD  
FORT WORTH TX 76107-3334

69896900 00001 ZJAM63  
924825 00  
HAZEL L GENTLE  
1117 SOUTH MICHIGAN  
ROSWELL NM 88201-4339

69896900 00001 ZJAM63  
491769 00  
HANSON MCBRIDE PETROLEUM COMPANY  
A/W RUIDOSO STATE BANK  
ATTN T A ANDERSON  
P O DRAWER B  
RUIDOSO NM 88345-7505

69896900 00001 ZJAM63  
922999 00  
MARY MCCULLEY  
441 LONGLEAF DRIVE  
SHREVEPORT LA 71106-1221