

MERIDIAN OIL

May 24, 1994

RECEIVED
MAY 25 1994

New Mexico Oil Conservation Division
Attn.: Mr. Ernie Busch & Mr. Frank Chavez
1000 Rio Brazos Road
Aztec, New Mexico 87410

OIL CON. DIV.
DIST. 3

RE: **Reuter # 2**
Unit L, Section 34, T27N, R06W
Final Commingle Allocation of Production

Dear Mr. Busch and Mr. Chavez:

Please reference the letter dated January 21, 1994 regarding the downhole commingle production allocation for the Reuter # 2. This is the finalized downhole commingled allocation formula for the Reuter # 2. The previous allocation formula was based upon production gauges and pressures taken during workover operations (August 1993), and the initial deliverability test performed August 13, 1993. The new allocation formula is based upon production history since the wells redelivery to EPNG on February 2, 1994. Original Dakota production decline modeling is honored in this allocation and some flush production was anticipated due to the shut-in. Previous data submitted is valid, although this adjustment should be the more accurate allocation.

Approval is requested of the following allocation:


South Blanco Tocito Pool:	Oil	75 %	Gas	30 %
Basin Dakota Pool:	Oil	25 %	Gas	70 %

The Reuter # 2 is currently flowing approximately 350 MCFD and 4 BOPD to EPNG. The Dakota is forecasted to produce approximately 245 MCFD and 1 BOPD, where in the Tocito produces the remainder 105 MCFD & 3 BOPD. Please see the attached Dakota Production decline forecast. Daily production numbers, acquired from chart readings & tank strappings, were utilized to determine this allocation. This allocation should be accurate within engineering reason.

Dakota:	Oil:	29,520 bbls	EUR	Gas:	4,889 MMCF	EUR
		25,020 bbls	CUM (85 %)		3,452 MMCF	CUM (71 %)
		4,500 bbls	Remaining		1,437 MMCF	Remaining

(Estimated from analogy wells/volumetrics):

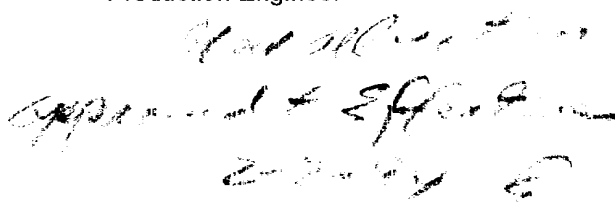
Tocito:	Oil:	13,600 bbls	EUR	Gas:	615 MMCF	EUR
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Thomas E. Mullins
Production Engineer

TEM
attachments

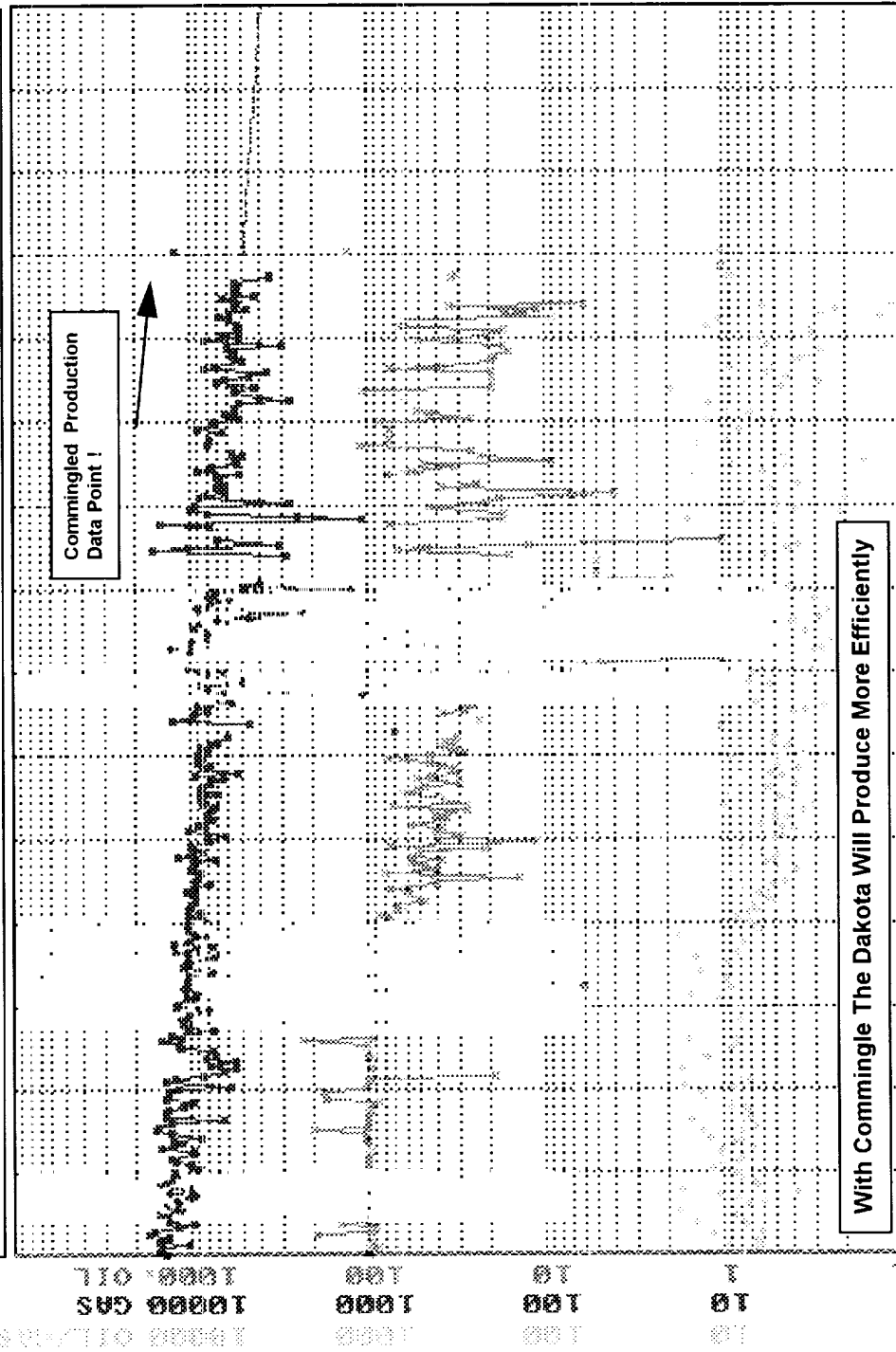
cc: Peggy Bradfield
Well File

Accounting
TDS



REUTER : 2 : 50582A-1

Prop: 12



GAS
Mcf/m
EUR= 4889656
Ref= 03/94
Cum= 3452081
Q = 4939.8
n = .0000
De= 3.799
Qab= 300.0
Rem= 1437575
Yrs= 72.333
Qmo= 4931.9
Act= .0

72 74 76 78 80 82 84 86 88 90 92 94 96 98 00 Major=GAS

Dakota Forecasted Production Profile From Existing Data

MERIDIAN OIL

JAN 13 1994

December 30, 1993

New Mexico Oil Conservation Division
Attn.: Mr. Frank T. Chavez
1000 Rio Brazos Road
Aztec, New Mexico 87410

OIL CON. DIV.
DIST. 3

RE: **Reuter # 2**
Unit L, Section 34, T27N, R06W
Rio Arriba County, New Mexico
Commingled Allocation of Production

Dear Mr. Chavez:

As per our phone conversation on December 20, 1993 in regards to the commingled production allocation formula for the South Blanco-Tocito and Basin Dakota; Meridian Oil requests an extended flow period of ninety (90) days in order to more accurately determine the oil production allocation for this well.

Approval was requested of the following allocation dated November 23, 1993.


South Blanco Tocito Pool:	Oil	25 %*	Gas	14 %
Basin Dakota Pool:	Oil	75 %*	Gas	86 %

* Oil Allocation is based upon the best information available, and should be reasonably accurate.

The deliverability test was performed on August 13, 1993, although the well has yet to be first delivered to El Paso Natural Gas. Since the Dakota has an extended production history of over thirty (30) years, since 1963, the oil allocation formula will be more accurately determined from a production test. Meridian Oil has submitted a recent C-104, and upon its approval would like to commence with sales of both gas and oil. In summary Meridian Oil requests the above Gas production allocation be approved at this time and the above Oil allocation be verified/finalized within ninety (90) days. Commingled production will occur upon Meridian's receipt of the approved C-104.


Thomas E. Mullins
Production Engineer

TEM
cc: Peggy Bradfield
Well File
Accounting


1-21-94

Approval To Turn Well ON! Jan 1-24-94
ORIGINAL TO WELL FILE

November 23, 1993

New Mexico Oil Conservation Division
Attn.: Mr. Frank T. Chavez
1000 Rio Brazos Road
Aztec, New Mexico 87410

RE: **Reuter # 2**
Unit L, Section 34, T27N, R06W
Rio Arriba County, New Mexico
Commingle Allocation of Production

Dear Mr. Chavez:

The subject well was approved for non-standard South Blanco-Tocito well location per Administrative Order NSL-3223 dated April 14, 1993, and downhole commingled production in the South Blanco-Tocito and Basin Dakota pools per Administrative Order DHC-878 dated February 24, 1993. The Tocito recompletion and commingle was performed per previous correspondence and completed on August 6, 1993. The well has been shut-in since this date.

The Dakota formation within this wellbore has cumulative production of 3,465 MMCF and 24.9 MBO. A seven (7) day pressure bomb run January 19, 1993 indicated the Dakota to have a 600 psi bottom-hole pressure. An additional seven (7) day pressure bomb run August 18, 1993 indicated the commingled bottom-hole pressure to be 718 psi. This pressure information when combined with the workover production pitot gauges of 108 MCFD for the Tocito, and 752 MCFD for the commingled Tocito-Dakota are utilized in determination of the gas allocation formula. Attached are the above mentioned pressure data as well as a copy of the deliverability test performed on August 13, 1993 and previous correspondence.

Approval of the following production allocation is requested.

90 Days.

South Blanco Tocito Pool:	Oil	25 %*	Gas	14 %
Basin Dakota Pool:	Oil	75 %*	Gas	86 %

* Oil Allocation is based upon best information available, and should be reasonably accurate.



Thomas E. Mullins
Production Engineer

TEM
attachments
cc: Peggy Bradfield
Well File

cc: Jla
JEM



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION



BRUCE KING
GOVERNOR

ANITA LOCKWOOD
CABINET SECRETARY

MAF 1993
PROD. ENGINEERING

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

ADMINISTRATIVE ORDER DHC-878

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

Attention: Arden L. Walker, Jr.

*Reuter Well No. 2
Unit L, Section 34, Township 27 North, Range 6 West, NMPM,
Rio Arriba County, New Mexico.
South Blanco Tocito and Basin Dakota Pools*

Dear Mr. Walker:

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 50 barrels per day, and total water production shall not exceed 100 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.

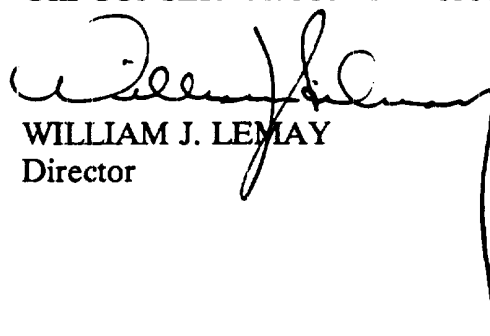
In accordance with the provisions of Rule 303-C, the supervisor of the Aztec District Office of the Oil Conservation Division shall determine the proper allocation of production from the subject well following its completion.

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 24th day of February, 1993.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION



WILLIAM J. LEMAY
Director

S E A L

WJL/BES/amg

cc: Oil Conservation Division - Aztec



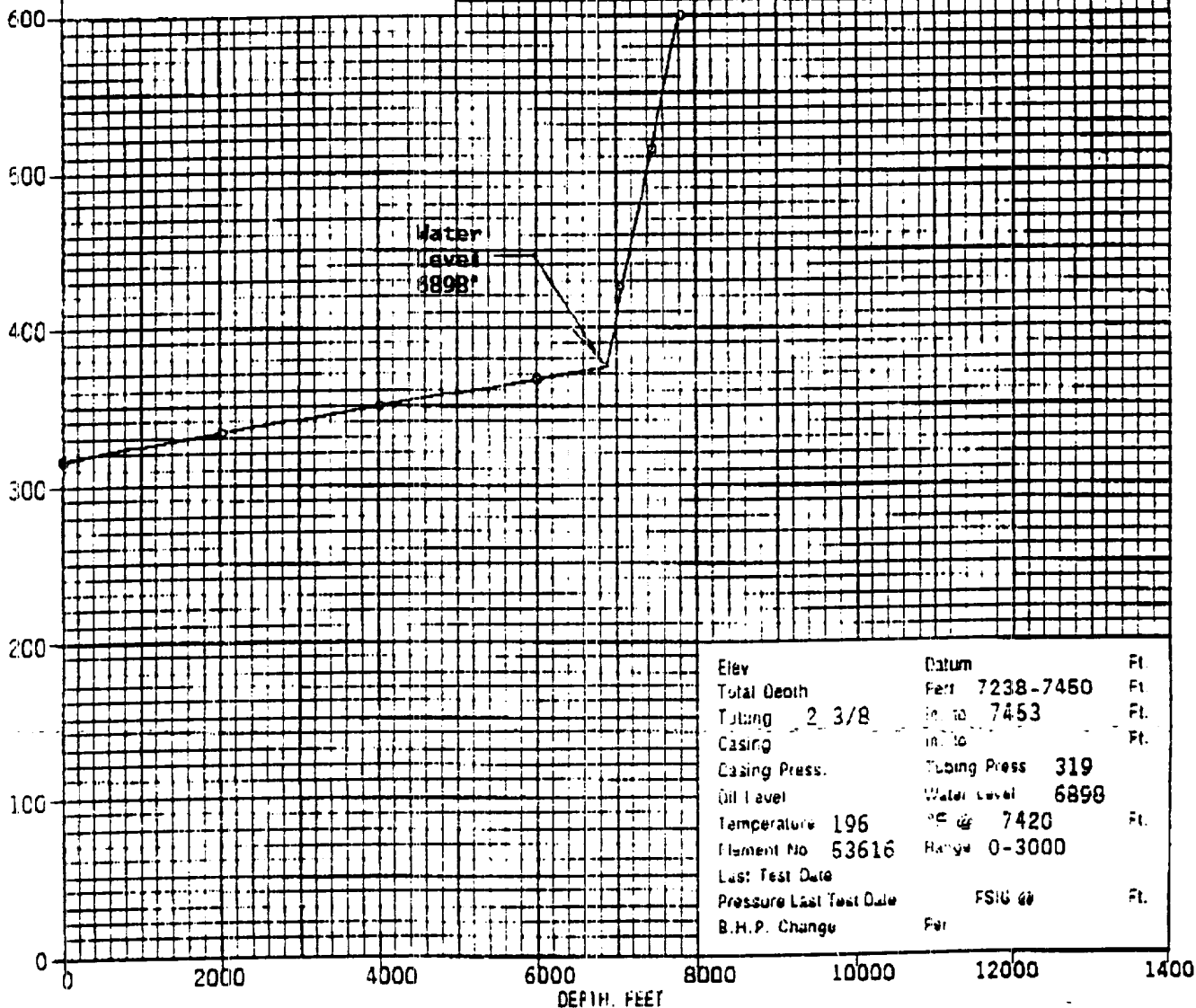


Company MERIDIAN OIL INC. Lease REUTER Well No. 2
Field BASIN DAKOTA County RIO ARRIBA State NEW MEXICO
Formation DAKOTA Test Date JANUARY 19, 1993

Status of Well Shut-in 170 hours

DEPTH	PRESSURE	GRADIENT
Feet	Psig	Psi/Ft.
0	318	
2000	333	0.008
4000	350	0.009
6000	367	0.009
7020	428	0.060
7220	514	0.430
7420	600	0.430

PRESSURE POUNDS PER SQUARE INCH GAUGE



MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test Initial X Annual Special x Test Date 8/13/93
Company MERIDIAN OIL INC. Connection MOI
Pool BASIN/GALLUP Formation DAKOTA/TOTOCITO Unit
Completion Date 8/6/93 Total Depth TVD Plug Back TD Elevation Farm or Lease Name
Csg. Size Wt. d MD 7439 6508 REUTER
4.500 11.6# Set At 7540 ret. bp To Well No. 2
Tbg. Size Wt. d Set At Perfs 6764 To 7470 Unit Sec. Twn. Rge.
2.375 4.7# 1.995 7404 L SEC 34-T27N-R06E

Type Well-Single-Bradenhead-G.G. or G.O. Multiple Packer Set At County RIO AR
Prod Thru TBG Resv Temp °F TEMP F° Mean Ann T °F Baro. Press. Pd 12.2 State NEW M
L H Gg 0.65/67 %CO2 1.2290 %N2 7.7220 Prover Meter Run Taps

NO. Prover Orifice
Line X Size
SI 2" .750
1. 108 63.5 379 1 hr
2. 100 64.1 367 2 hr
3. 94 66.1 334 ACTUALPSI 3 hr
4. =W30
5.

FLOW DATA
Press. p.s.i.g. Diff. hw Temp. °F
TUBING DATA
Press. p.s.i.g. Temp. °F
CASING DATA
Press. p.s.i.g. Temp. °F
Duration of Flow

NO. Coefficient (24 Hour) 9.604 -- Vhw Pm Pressure Pm Flow Temp. Factor Ft 0.9942 Gravity Factor Fg 1.2340 Super Comp. Fpv 1.008 Rate of Q, Mc 1
1. 106.2
2.
3.
4.
5.

NO. Pr Temp. °R Tr Z Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
1. 0.1588 525.77 1.328 0.843 A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
2. Specific Gravity Separator Gas _____
3. Specific Gravity Flowing Fluid _____
4. Critical Pressure _____ P.S.I. _____ P.S.I.A.
5. Critical Temperature _____ R

Pc 573.20 Pc2 328558.24 (1) Pc2 (2) Pc2 ln
NO. Pt2 Pw Pw2 Pc2 - Pw2 Pc2 - R = 1.5743 |Pc2-Rw2|=
1. 346.20 119854.44
2. 208703.80
3. AOF = Q |Pc2-Rw2| = 1772.62
4.
5.

Absolute Open Flow Mcfd@ 15.025 1.773 Angle of Slope Slope, n

Remarks: PRODUCED 3 BBLS OIL, NO WATER

Approved By Division

Conducted By: TIM CUMMINS

Checked By: LARY E

