

**MERIDIAN OIL**

September 7, 1994

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

*Well File*

**RECEIVED**  
SEP - 9 1994  
**OIL CON. DIV.**  
DIST. 3

RE: **Sharp # 1**  
Unit D, Section 18, T28N, R08W  
San Juan County, New Mexico  
Administrative Order DHC-1024

Please reference the attached Administrative Order DHC-1024 regarding the downhole commingle of production from the Blanco-Mesaverde and Undesignated Otero-Chacra pools in the Sharp # 1 wellbore. This letter submittal includes the final production allocation for this wellbore.

**Approval is requested of the following allocation:**

Blanco Mesaverde Pool:	Oil	100	%	Gas	78	%
Undesignated Otero-Chacra Pool:	Oil	0	%	Gas	22	%

The sidetrack and completion operation was completed on August 17, 1994. The Chacra interval had a production gauge of 370 MCFD, while the entire well had a production gauge of 1,644 MCFD. Since no oil production is anticipated from the Chacra interval, and the recorded gauges are similar to other area completions, this allocation should be accurate within engineering reason. Included is a copy of the recent deliverability test performed August 25, 1994. The 7-day shut-in surface casing pressure was 632 psi.

*Thomas E. Mullins*

Thomas E. Mullins  
Production Engineer

TEM

attachments

cc: Peggy Bradfield  
TDS

Accounting  
LLB

Well File

**OIL CONSERVATION DIVISION  
P.O. BOX 2088  
SANTA FE, NEW MEXICO 87501**

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STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT

**OIL CON. DIV.**  
DIST. 3

**MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL**

<b>Operator</b> Meridian Oil, Inc.					<b>Lease or Unit Name</b> SHARP				
<b>Type Test</b> <input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special					<b>Test Date</b> 08-25-94		<b>Well No.</b> 1		
<b>Completion Date</b> 08-18-94		<b>Total Depth</b> 4,810		<b>TVD</b> MD	<b>Plug Back TD</b>		<b>Elevation</b> 5,774		<b>Unit Letter - Sec. - TWN - RNG</b> D-18-028N-008W
<b>Csg. Size</b> 4 500	<b>Wt.</b> 11	<b>d</b> 4.052	<b>Set At</b> 4,840	<b>Perforations:</b> From 3,137 To 3,276				<b>County</b> SAN JUAN	
<b>Tbg. Size</b> 2 375	<b>Wt.</b> 4.7	<b>d</b> 1.995	<b>Set At</b> 4,755	<b>Perforations:</b> From                      To				<b>Pool</b> OTERO / BLANCO	
<b>Type Well - Single - Bradenhead - G.G. or G.O. Multiple</b> COMMINGLED					<b>Packer Set At</b>				<b>Formation</b> CHACRA / MESAVERDE
<b>Prod Thru</b> Tubing		<b>Resv Temp °F</b>		<b>Mean Ann T °F</b>		<b>Baro. Press. Pd</b> 12.20		<b>Connection</b>	
<b>L</b>	<b>H</b>	<b>Gg</b> 0.700	<b>% CO2</b> 0.000	<b>% N2</b> 0.000	<b>% H2S</b>	<b>Prover</b>		<b>Meter Run</b>	<b>Taps</b>

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. hw	Temp. F°	Press. p.s.i.g.	Temp. F°	Press. p.s.i.g.		Temp. F°
SI	2		0.750				380		632		S.I.
1.							179	60	557		1 Hour
2.							170	60	540		2 Hours
3.							165	60	525		3 Hours
4.											
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure Pm	Flow Temp. Factor Ft	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1.	11.000		177.2	1.0000	1.1952	1.0000	2,329.74
2.							
3.							
4.							
5.							

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

NO.	Pc	Pc2	Pw	Pw2	Pc2 - Pw2
1.	644.20	414.993.64	537.20	288,583.84	126,409.80
2.					
3.					
4.					
5.					

(1)  $\frac{Pc2}{Pc2 - Pw2} = 3.2829$

AOF = Q  $\left[ \frac{Pc2}{Pc2 - Pw2} \right]^n = 5,682.02$

(2)  $\left[ \frac{Pc2}{Pc2 - Pw2} \right]^n = 2.4389$

<b>Absolute Open Flow</b> 5,682      Mcfd @ 15.025	<b>Angle of Slope</b> _____	<b>Slope, n</b> 0.75
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**Remarks:** \_\_\_\_\_

<b>Approved By Division</b>	<b>Conducted By:</b> JOE GOLDING	<b>Calculated By:</b> TANYA ATCITTY	<b>Checked By:</b> LARY BYARS
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STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION



BRUCE KING  
GOVERNOR

ANITA LOCKWOOD  
CABINET SECRETARY

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

**ADMINISTRATIVE ORDER DHC-1024**

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

RECEIVED  
SEP - 9 1994

Attention: Travis D. Stice

OIL CON. DIV.  
DIST. 3

*Sharp Well No. 1  
Unit D, Section 18, Township 28 North, Range 8 West, NMPM,  
San Juan County, New Mexico.  
Blanco-Mesaverde and Undesignated Otero-Chacra Pools*

Dear Mr. Stice:

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.

*Administrative Order DHC-1024*

*Meridian Oil, Inc.*

*August 2, 1994*

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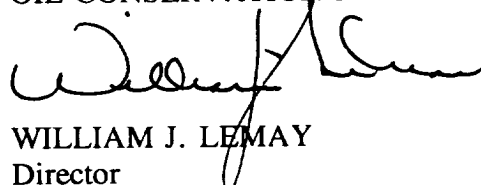
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FURTHER: The operator shall notify the Aztec District Office of the Division upon implementation of the commingling process.

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 2nd day of August, 1994.

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION

  
WILLIAM J. LEMAY  
Director

S E A L

WJL/DRC/amg

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